

## **Appendix 8**

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### **Traffic Impact Assessment**

Reference number CHK50873110

**PROPOSED AMENDMENTS TO AN APPROVED SCHEME  
(APPLICATION NO. A/YL-MP/344) FOR  
COMPREHENSIVE RESIDENTIAL DEVELOPMENT TO  
INCLUDE A WETLAND RESTORATION AREA AT LOTS 50  
S.A AND 77 IN D.D. 101, WO SHANG WAI, MAI PO,  
YUEN LONG  
TRAFFIC IMPACT ASSESSMENT**





| IDENTIFICATION TABLE        |                                                                                                                                                                                                                            |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Client/Project owner</b> | Profit Point Enterprises Limited                                                                                                                                                                                           |
| <b>Project</b>              | Proposed Amendments to an Approved Scheme (Application No. A/YL-MP/344) for Comprehensive Residential Development to Include a Wetland Restoration Area at Lots 50 S.A and 77 in D.D. 101, Wo Shang Wai, Mai Po, Yuen Long |
| <b>Study</b>                | Traffic Impact Assessment                                                                                                                                                                                                  |
| <b>Type of document</b>     | final Report_v1                                                                                                                                                                                                            |
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| <b>Reference number</b>     | CHK50873110                                                                                                                                                                                                                |

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# 1. INTRODUCTION

## 1.1 Background

- 1.1.1 The subject site is located in Lots 77 and 50 S.A in D.D.101, Wo Shang Wai, Mai Po, Yuen Long. It is sited on the north of Royal Palms and Palm Springs residential developments. **Drawing 2.1** shows the location of the subject site.
- 1.1.2 The site falls within an area zoned as “Other Specified Uses” annotated “Comprehensive Development to include Wetland Restoration Area” (“OU(CDWRA)”) on the Approved Mai Po and Fairview Park Outline Zoning Plan (OZP) No. S/YL-MP/8. The previous Section 16 Planning Application (Application no. A/YL-MP/344) was approved with conditions with domestic plot ratio of 0.4 on 16 February 2024 for a proposed house development with 789 houses.
- 1.1.3 According to the latest development schedule of San Tin Technopole (STT), the first population intake will start from Year 2031, while the bulk population intake of the Main Phase will start from Year 2034, around the same planned completion year of the Mass Transit Railway (MTR) Northern Link (NOL). The relevant site formation and engineering infrastructure (road works) for STT Development Phase 1 (under PWP Item Nos. 7899CL and 7852CL-2 (Part)) was gazetted on 1 March 2024 and these road works are planned for completion by Year 2031 and the proposed development traffic is expected to be served by the new STT Phase 1 road network (the gazetted new roads) with full road network completion by design year 2034.
- 1.1.4 A planning application is made under section 16 of the Town Planning Ordinance, to propose amendments to the previously approved scheme under application No. A/YL-MP/344, which was approved for a comprehensive residential development, including a Wetland Restoration Area (WRA), with filling and excavation of land. The proposed amendment relates to the approved layout of the residential portion, with no change to the plot ratio and gross floor area. Majority of the basement car parking spaces are relocated to ground level for cost-effectiveness and ease of implementation. No change is proposed to the already completed WRA. This traffic impact assessment is to investigate the potential traffic impact on the adjacent local road network and transport facilities in support of the subject s.16 application.

## 1.2 Study Objectives

- 1.2.1 The objectives of this TIA study are summarised as follows:
  - Present the proposed development schedule and its internal transport provisions;
  - Review the current traffic conditions in the vicinity;
  - Estimate the traffic generation/attraction of the proposed development;
  - Produce traffic forecasts for the local road network at the adopted design year;
  - Investigate the traffic impact on the local road network upon operation of the proposed development; and,
  - Suggest any traffic improvement measures, if considered necessary, to alleviate the potential traffic problem.

## 1.3 Report Structure

1.3.1 Following this introductory chapter, there are five further chapters;

- Chapter 2 – Proposed Development, introduces the proposed development scheme;
- Chapter 3 – Existing Traffic Context, reviews the current traffic condition in the vicinity;
- Chapter 4 – Traffic Forecasting, describes the traffic forecasting methodology;
- Chapter 5 – Traffic Impact Assessment, describes the assessments conducted;
- Chapter 6 – Conclusions, summarises and concludes the study findings.

## 2. PROPOSED DEVELOPMENT

### 2.1 Proposed Development Schedule

2.1.1 Under the current proposed MLP, the number of residential units will decrease from 789 in the approved scheme in Section 16 application to 649. The current scheme will provide 649 units with average house size of 127.8 m<sup>2</sup>.

2.1.2 **Table 2.1** summarises the changes of the previous approved and current proposed scheme.

**Table 2.1 Comparison of Flat Mix in Previous Approved Scheme and Current Proposed Scheme**

|                     | Previous Approved MLP<br>(Application no. A/YL-MP/344) | Current Proposed MLP  | Difference           |
|---------------------|--------------------------------------------------------|-----------------------|----------------------|
| Domestic GFA        | 82,963 m <sup>2</sup>                                  | 82,963 m <sup>2</sup> | Nil                  |
| Domestic Plot Ratio | 0.4                                                    | 0.4                   | Nil                  |
| No. of Units        | 789 Units                                              | 649 Units             | -140 Units           |
| Average House Size  | 105.1 m <sup>2</sup>                                   | 127.8 m <sup>2</sup>  | +22.7 m <sup>2</sup> |

2.1.3 As indicated in **Table 2.1**, the current proposed MLP has a decrease of 140 units with the same domestic GFA and plot ratio and leading to an increase of average house size.

2.1.4 It is anticipated that the proposed development will be completed by year 2028.

### 2.2 Vehicular Access

2.2.1 Same as the previous approved scheme, the development vehicular access is off the local access road, Mai Po South Road connecting to Castle Peak Road - Mai Po, which is abutting the site. The location of the vehicular access is illustrated in **Drawing 2.1**. With the gazetted new roads for STT to be completed on or before Year 2031, it is anticipated that the development traffic will mainly access via Fairview Park Boulevard Interchange and the new Shek Wu Wai Interchange, Road L11 onto Castle Peak Road – San Tin and Castle Peak Road - Mai Po, with minority of traffic heading to/from Sheung Shui, as indicated in **Drawing 3.1**.

### 2.3 Internal Transport Facility

2.3.1 The provision of the internal transport facilities in the current proposed MLP is determined based on the latest Hong Kong Planning Standards and Guidelines (HKPSG). **Table 2.2** summarises the proposed provision of the internal transport facilities for the current proposed MLP, as shown in **Drawing 2.2**.

**Table 2.2 Proposed Provision of the Internal Transport Facilities**

| Internal Transport Facilities        | Previous Approved<br>MLP (Application no.<br>A/YL-MP/344) – 789 Units                       |                    | Current Proposed MLP – 649 Units |                                                                                             |                    |
|--------------------------------------|---------------------------------------------------------------------------------------------|--------------------|----------------------------------|---------------------------------------------------------------------------------------------|--------------------|
|                                      | Proposed Requirement                                                                        | Proposed Provision | Parameters                       | Proposed Requirement under HKPSG                                                            | Proposed Provision |
| <b>Residential Parking Provision</b> |                                                                                             |                    |                                  |                                                                                             |                    |
| Residential Carparking Space         | 2 spaces per house                                                                          | 1,578              | 649 Houses                       | 2 spaces per house <sup>(1)</sup>                                                           | 1,298              |
|                                      | Sub -total                                                                                  | 1,578              |                                  | Sub-total                                                                                   | 1,298              |
| Visitor Parking Space                | 5 spaces                                                                                    | 5                  | -                                | 5 spaces                                                                                    | 5                  |
| Accessible Parking Space             | 6 accessible car parking space for car parking space in lot above 450 by Building Authority | 6                  | 1,303 private car parking spaces | 6 accessible car parking space for car parking space in lot above 450 by Building Authority | 6                  |
| Motorcycle Parking Space             | 37 spaces                                                                                   | 37                 | 649 Houses                       | 1 motorcycle parking space per 100 - 150 flats                                              | 37 <sup>(2)</sup>  |
| Loading/unloading Bay                | 1 bay per 800 units                                                                         | 1                  | 649 Houses                       | 1 bay per 800 units <sup>(3)</sup>                                                          | 1                  |

Remarks: (1) Assume 2 parking spaces per house;  
(2) 37 spaces are required under approved land exchange application, which is larger than HKPSG requirement; and,  
(3) As stated in TIA of previous approved S.16 planning application No. A/YL-MP/344, under land lease SC (22)a, the provision of loading/unloading bay is at the rate of one space for every 800 residential units.

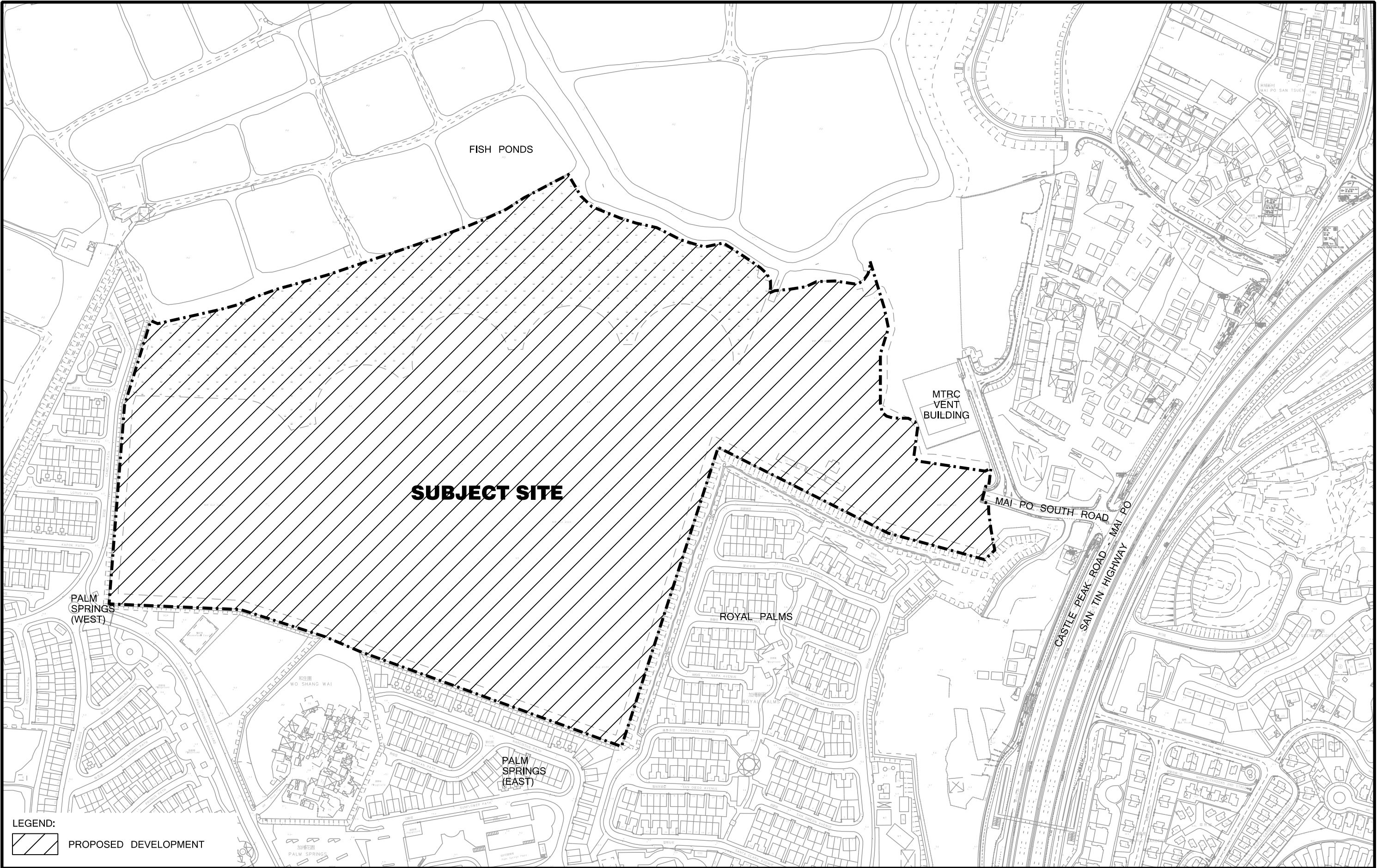
2.3.2 Since the average flat size of the proposed development is over 70 sqm, there will be nil provision of the bicycle parking spaces.

2.3.3 The actual carparking provisions may be subject to agreement by the authority.

2.3.4 Most of the parking spaces would be proposed on ground level. The actual allocation of related parking provision would be reviewed in later detailed design stage. Drop-bar gate will be provided within the site for access control. Sufficient waiting spaces between the drop-bar gate and public road will be provided for vehicle queueing within the development. The location of the drop-bar gate will be provided at later detailed design stage.



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LEGEND:  
 PROPOSED DEVELOPMENT

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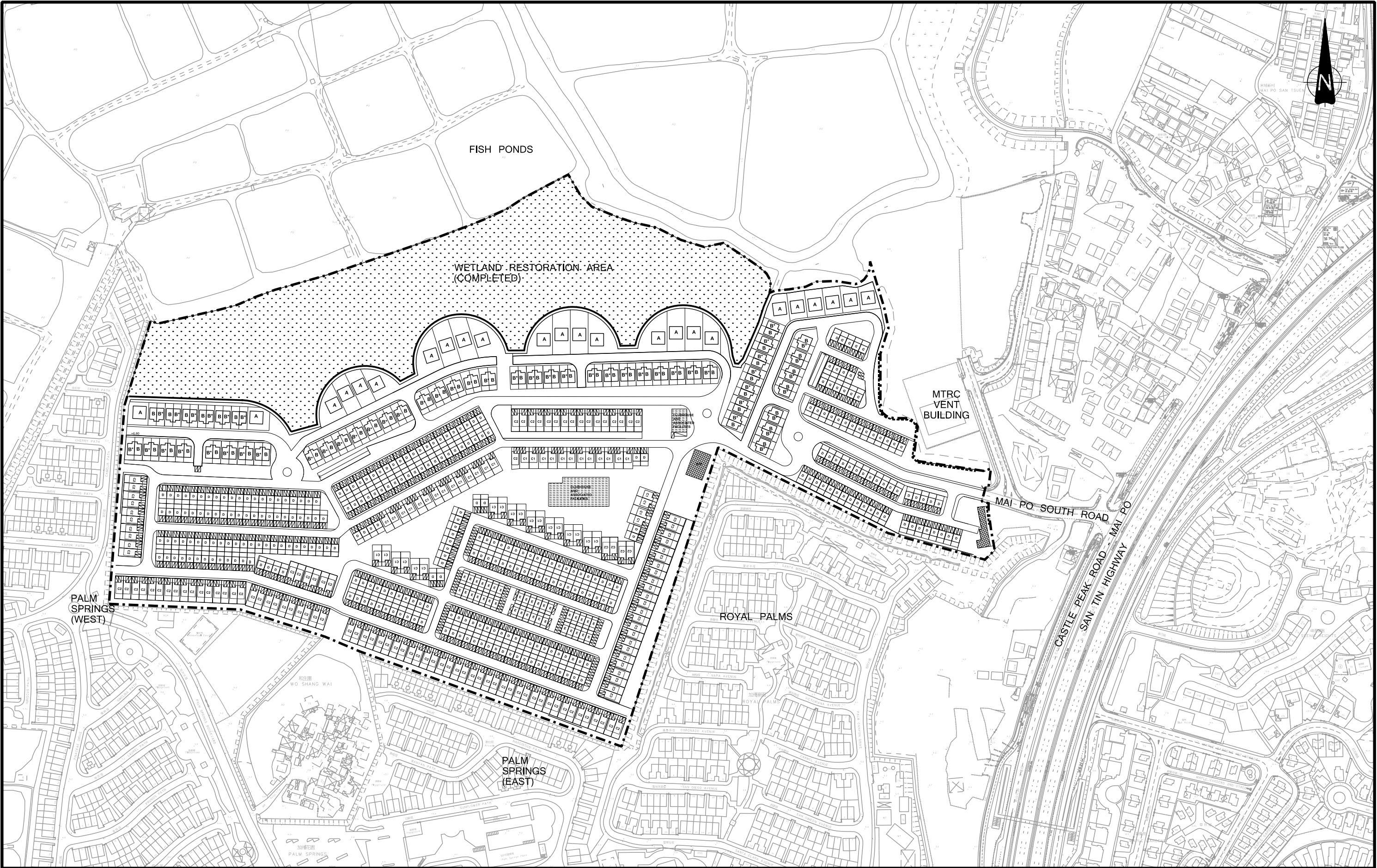
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|-------------------------------------------------------------------------------------------------------------------------|
| PROPOSED COMPREHENSIVE RESIDENTIAL<br>DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101,<br>WO SHANG WAI, MAI PO, YUEN LONG |

| Drawing Title |          |             |     |       |        |
|---------------|----------|-------------|-----|-------|--------|
| SITE LOCATION |          |             |     |       |        |
| Designed      | MYC      | Checked     | CFC | Scale | N.T.S. |
| Date          | MAY 2025 | Drawing No. | 2.1 | Rev.  | -      |





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| Rev. | Description | Checked | Date |

Project Title

PROPOSED COMPREHENSIVE RESIDENTIAL  
DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101,  
WO SHANG WAI, MAI PO, YUEN LONG

|                             |            |         |          |
|-----------------------------|------------|---------|----------|
| Drawing Title               |            |         |          |
| PROPOSED MASTER LAYOUT PLAN |            |         |          |
| Designed                    | MYC        | Checked | CFC      |
| Scale                       | 1:3000(A3) | Date    | JUL 2025 |
| Drawing No.                 | 2.2        | Rev.    | -        |



### 3. EXISTING TRAFFIC CONTEXT

#### 3.1 Surrounding Road Network

- 3.1.1 As indicated in **Drawing 2.1**, the site is bounded by Mai Po South Road to the east, fishponds to the north and Royal Palms & Palm Springs residential development to the south. The development traffic from San Tin Highway to Mai Po South Road connecting the site are either via Castle Peak Road – Mai Po Section from the south or Castle Peak Road – San Tin Section from the north.
- 3.1.2 Subject to the project of San Tin Technopole, the proposed road network will be upgraded to provide better linkage and strengthen future connectivity for developments located at the North and South of the San Tin Highway. At the existing Shek Wu Wai Interchange (SWWI), apart from improvement of existing slip roads at its western side connecting to San Tin Highway, a pair of new slip roads is proposed at the eastern side of SWWI to facilitate traffic movement. Also, the existing junction of Castle Peak Road – San Tin / Shek Wu Wai Road would be upgraded from priority junction to 4-arm signalized junction. With the above consideration of enhanced road network, the future ingress and egress routes of the subject site are illustrated in **Drawing 3.1**.
- 3.1.3 San Tin Highway is a dual 3-lane expressway. It forms a section of Route 9 of the strategic highway network connecting Fanling Highway in the north and Yuen Long Highway/Tai Lam Tunnel in the south.
- 3.1.4 San Tam Road and Castle Peak Road - Mai Po are both single 2-lane carriageways running parallel to San Tin Highway serving the adjacent local developments.
- 3.1.5 Mai Po South Road is about 7.3m wide with 2m footpaths on both sides. It mainly serves as an access to MTRC ventilation building.
- 3.1.6 The existing nearby road network is subject to major changes upon completion of the new roads planned under STT project, with new roads connecting to the future upgraded Shek Wu Wai Interchange.

#### 3.2 Current Junction Operational Performance

- 3.2.1 With the consideration of the road network upgrade due to San Tin Technopole project, a total of 11 local junctions and 6 screenlines, as indicated in **Drawing 3.2**, have been identified for assessment purpose in this study. For the strategic road San Tin Highway, as there will be upcoming planned transport infrastructures and enhanced railway network, including the Northern Metropolis Highway and the Northern Link, the traffic condition and efficiency would be significantly improved in the strategic level. The identified junctions are listed in **Table 3.1**, and their existing layouts are shown in **Drawings 3.3 to Drawings 3.14**.

**Table 3.1 Identified Local Key Junctions and Road Links**

| Ref. <sup>(1)</sup> | Junction/Road Links                                          | Type                      | Drawing No. |
|---------------------|--------------------------------------------------------------|---------------------------|-------------|
| A1                  | Shek Wu Wai Road / San Tin Highway Slip Road <sup>(2)</sup>  | Priority                  | 3.3         |
| A2                  | Shek Wu Wai Road / Mai Po Lung Road <sup>(2)</sup>           | Priority                  | 3.4         |
| B                   | Castle Peak Road – San Tin / Shek Wu Wai Road <sup>(2)</sup> | Priority                  | 3.5         |
| C                   | Castle Peak Road – Mai Po/San Tam Road                       | Priority                  | 3.6         |
| D                   | Castle Peak Road – Mai Po/Palm Springs Boulevard             | Priority                  | 3.7         |
| E                   | Castle Peak Road – Mai Po/Geranium Path                      | Priority                  | 3.8         |
| F                   | Castle Peak Road – Tam Mi/Yau Pok Road                       | Priority                  | 3.9         |
| G                   | Castle Peak Road – Tam Mi/Kam Pok Road                       | Priority                  | 3.10        |
| H                   | Fairview Park Interchange                                    | Roundabout                | 3.11        |
| I                   | Castle Peak Road – Mai Po/Mai Po South Road                  | Priority                  | 3.12        |
| J                   | Castle Peak Road – San Tin/Kwun Tung Road <sup>(3)</sup>     | Priority                  | 3.13        |
| K                   | San Tin Interchange <sup>(3)</sup>                           | Roundabout                | 3.14        |
| Screenline L1       | Mai Po South Road                                            | Single 2-lane carriageway | 3.2         |
| Screenline L2       | Castle Peak Road – Mai Po (South to Mai Po South Road)       | Single 2-lane carriageway | 3.2         |
| Screenline L3       | Castle Peak Road – Mai Po (North to Mai Po South Road)       | Single 2-lane carriageway | 3.2         |
| Screenline L4       | Castle Peak Road – Tam Mi                                    | Single 2-lane carriageway | 3.2         |
| Screenline L5       | San Tin Highway                                              | Dual 3-lane expressway    | 3.2         |

Remarks: (1) Refer to **Drawing 3.2** for junction reference;  
(2) Junctions will be upgraded by San Tin Technopole project; and,  
(3) Subject to the planned road network, the traffic flow induced by subject site would not pass through the concerned junctions in the Design Year of 2031.

### Traffic Surveys

- 3.2.2 A series of manual classified traffic surveys have been conducted at the identified junctions to establish the current traffic condition in the vicinity. The surveys were carried out during the morning and evening peak hour periods on a typical weekday in April 2024. The observed traffic data indicates that the morning peak hour and evening peak hour occurred from 8:00am to 9:00am and 5:00pm to 6:00pm. The observed peak periods are adopted for forecasting and assessment purposes in this study.
- 3.2.3 Subject to previous TD comment, since the observed traffic flow in traffic survey in a typical weekday in April 2024 was considered under normal traffic condition, the traffic flow in arm G in Fairview Park Interchange under previous approved Planning Application A/YL-MP/344 was adopted in the assessment in conservative approach. The observed peak hour traffic flows are shown in **Drawing 3.15**.
- 3.2.4 Junction capacity and Volume/Capacity Ratio (V/C Ratio) assessments have been conducted for the identified junctions and road links with respect to the observed traffic flows to evaluate their current operational performance during the weekday peak hours and the results are as shown in **Table 3.2** and **Table 3.3**. The junction calculation sheets are attached in **Annex A**.

**Table 3.2 Current Junction Operational Performance**

| Ref. <sup>(1)</sup> | Junction                                          | RC/RFC <sup>(2)</sup> |         |
|---------------------|---------------------------------------------------|-----------------------|---------|
|                     |                                                   | AM Peak               | PM Peak |
| A1                  | Shek Wu Wai Road/ San Tin Highway Slip Road       | 0.38                  | 0.38    |
| A2                  | Shek Wu Wai Road/ Mai Po Lung Road                | 0.48                  | 0.29    |
| B                   | Castle Peak Road – San Tin/ Shek Wu Wai Road      | 0.75                  | 0.63    |
| C                   | Castle Peak Road – Mai Po/ San Tam Road           | 0.21                  | 0.13    |
| D                   | Castle Peak Road – Mai Po/ Palm Springs Boulevard | 0.56                  | 0.31    |
| E                   | Castle Peak Road – Mai Po/ Geranium Path          | 0.02                  | 0.02    |
| F                   | Castle Peak Road – Tam Mi/ Yau Pok Road           | 0.03                  | 0.03    |
| G                   | Castle Peak Road – Tam Mi/ Kam Pok Road           | 0.12                  | 0.10    |
| H                   | Fairview Park Interchange                         | 0.56                  | 0.64    |
| I                   | Castle Peak Road – Mai Po/ Mai Po South Road      | 0.01                  | 0.02    |
| J                   | Castle Peak Road – San Tin/Kwun Tung Road         | 0.54                  | 0.72    |
| K                   | San Tin Interchange                               | 0.49                  | 0.41    |

Remarks: (1) Refer to **Drawing 3.2** for junction reference; and,  
(2) RC = reserve capacity, RFC = ratio of flow to capacity.

**Table 3.3 Current Road Links Performance**

| Ref. <sup>(1)</sup> | Road Link                 | Directions | Design Capacity, (veh/hr) | Design Capacity, (pcu/hr) <sup>(4)</sup> | 2024 Traffic Flow     |       |                    |      |
|---------------------|---------------------------|------------|---------------------------|------------------------------------------|-----------------------|-------|--------------------|------|
|                     |                           |            |                           |                                          | Traffic Flow (pcu/hr) |       | V/C <sup>(5)</sup> |      |
|                     |                           |            |                           |                                          | AM                    | PM    | AM                 | PM   |
| L1                  | Mai Po South Road         | EB         | 700 <sup>(2)</sup>        | 910                                      | 0                     | 10    | 0.00               | 0.01 |
|                     |                           | WB         | 700 <sup>(2)</sup>        | 910                                      | 15                    | 10    | 0.02               | 0.01 |
| L2                  | Castle Peak Road – Mai Po | NB         | 700 <sup>(2)</sup>        | 910                                      | 185                   | 210   | 0.20               | 0.23 |
|                     |                           | SB         | 700 <sup>(2)</sup>        | 910                                      | 185                   | 155   | 0.20               | 0.17 |
| L3                  | Castle Peak Road – Mai Po | NB         | 700 <sup>(2)</sup>        | 910                                      | 240                   | 240   | 0.26               | 0.26 |
|                     |                           | SB         | 700 <sup>(2)</sup>        | 910                                      | 490                   | 235   | 0.54               | 0.26 |
| L4                  | Castle Peak Road – Tam Mi | NB         | 700 <sup>(2)</sup>        | 910                                      | 420                   | 390   | 0.46               | 0.43 |
|                     |                           | SB         | 700 <sup>(2)</sup>        | 910                                      | 475                   | 350   | 0.52               | 0.38 |
| L5                  | San Tin Highway           | NB         | 4,700 <sup>(3)</sup>      | 6,100                                    | 4,720                 | 4,280 | 0.77               | 0.70 |
|                     |                           | SB         | 4,700 <sup>(3)</sup>      | 6,100                                    | 4,630                 | 4,635 | 0.76               | 0.76 |

Remarks: (1) Refer to **Drawing 3.2** for key road links;  
(2) By TPDM Volume 2 Chapter 2 Table 2.4.1.1, design flow of a 2-lane single carriageway will be taken as 1400 veh/hr for two-way traffic, which implies 700 veh/hr for one-way direction;  
(3) By TPDM Volume 2 Chapter 2 Table 2.4.1.1, design flow of a 3-lane dual expressway will be taken as 4700 veh/hr for one-way direction;  
(4) PCU factor of 1.3 adopted; and,  
(5) V/C = volume to capacity ratio.

3.2.5 The results in **Table 3.2** and **Table 3.3** have indicated that all identified junctions and road links are currently operating with ample capacity during the typical weekday morning and evening peak hours.

### 3.3 Nearby Public Transport

3.3.1 The current road-based public transport services are available at Castle Peak Road and San Tam Road, with service stops located within 500-metre walking distance from the subject site, as shown in **Drawing 3.16** and as summarized in **Table 3.4** below.

**Table 3.4 Existing Nearby Public Transport Services**

| Route No.                     | Destination                                                                   | Frequency (min)         |
|-------------------------------|-------------------------------------------------------------------------------|-------------------------|
| <b>Franchised Bus</b>         |                                                                               |                         |
| 76K                           | Sheung Shui (Ching Ho) – Long Ping Estate                                     | 20 - 30                 |
| <b>Green Minibus (GMB)</b>    |                                                                               |                         |
| 75                            | Yuen Long (Fook Hong Street) – Lok Ma Chau Spur Line PTI                      | 10 - 20                 |
| 76                            | Yuen Long (Fook Hong Street) – Siu Hom Tsuen                                  | 15 - 20                 |
| 78                            | Lok Ma Chau (San Tin) PTI – Pat Heung Road (near Tai Lam Bus-Bus Interchange) | 20 - 25                 |
| <b>Public Light Bus (PLB)</b> |                                                                               |                         |
| 17                            | Sheung Shui – Yuen Long                                                       | Flexible <sup>(1)</sup> |

Remarks: (1) Peak hour frequency is observed to be 3-5 minutes.

#### Public Transport Utilization

3.3.2 A traffic survey was also conducted on a typical weekday in April 2024 to identify the peak hour public transport utilization at the existing nearest bus stops near Royal Palms at Castle Peak Road and Maple Garden at San Tam Road. The survey results are summarized in **Table 3.5**.

**Table 3.5 Observed Peak Hour Public Transport Utilization**

| Bound                          | Mode         | Route No. | Observed No. of Vehicles | Total Service Capacity (pax) <sup>(1)</sup> | Observed Occupancy (pax) | Occupancy Rate (%) |
|--------------------------------|--------------|-----------|--------------------------|---------------------------------------------|--------------------------|--------------------|
| <b>AM Peak (07:00 – 09:00)</b> |              |           |                          |                                             |                          |                    |
| Yuen Long                      | Bus          | 76K       | 5                        | 450                                         | 119                      | 26%                |
|                                | GMB          | 75        | 12                       | 198                                         | 166                      | 84%                |
|                                |              | 76        | 5                        | 83                                          | 68                       | 82%                |
|                                |              | 78        | 4                        | 76                                          | 30                       | 39%                |
|                                | PLB          | 17        | 49                       | 817                                         | 579                      | 71%                |
|                                | <b>Total</b> |           |                          | <b>1,624</b>                                | <b>962</b>               | <b>59%</b>         |
| Sheung Shui / San Tin          | Bus          | 76K       | 4                        | 360                                         | 47                       | 13%                |
|                                | GMB          | 75        | 14                       | 233                                         | 157                      | 67%                |
|                                |              | 76        | 4                        | 67                                          | 45                       | 67%                |
|                                |              | 78        | 5                        | 92                                          | 42                       | 46%                |
|                                | PLB          | 17        | 41                       | 674                                         | 449                      | 67%                |
|                                | <b>Total</b> |           |                          | <b>1,426</b>                                | <b>740</b>               | <b>52%</b>         |

| PM Peak (17:30 – 19:30) |       |     |    |       |       |     |
|-------------------------|-------|-----|----|-------|-------|-----|
| Yuen Long               | Bus   | 76K | 4  | 360   | 135   | 38% |
|                         | GMB   | 75  | 18 | 309   | 297   | 96% |
|                         |       | 76  | 6  | 96    | 70    | 73% |
|                         |       | 78  | 4  | 76    | 32    | 42% |
|                         | PLB   | 17  | 43 | 718   | 653   | 91% |
|                         | Total |     |    | 1,559 | 1,187 | 76% |
| Sheung Shui / San Tin   | Bus   | 76K | 6  | 540   | 47    | 9%  |
|                         | GMB   | 75  | 10 | 172   | 139   | 81% |
|                         |       | 76  | 6  | 96    | 92    | 96% |
|                         |       | 78  | 4  | 76    | 33    | 43% |
|                         | PLB   | 17  | 40 | 667   | 535   | 80% |
|                         | Total |     |    | 1,551 | 846   | 55% |

Remarks: (1) The bus carrying capacity is assumed to be taken at 75% of 120, which equals to 90.

- 3.3.3 From **Table 3.5**, it can be noted that the passenger demands are mostly served by KMB 76K, GMB 75 and PLB 17. The bus service has an extensive service coverage running between Yuen Long and Sheung Shui, however its service level is still relatively low at a peak hour frequency of 20-30 minutes. For the PLB 17, it is a public light bus service with no designated routing, headway and fares.
- 3.3.4 Based on the number of boarding and alighting passengers from the survey, it is noted that the directional split of local residents in the vicinity is about 65% towards Yuen Long and 35% towards Sheung Shui in AM peak periods, while 68% towards Yuen Long and 32% towards Sheung Shui in PM peak periods.

### 3.4 Pedestrian Flow and Queuing Space Assessment

3.4.1 A pedestrian flows survey was also conducted on a typical weekday in October 2024, the operational performance of identified footpaths and concerned queuing area of bus stops at Castle Peak Road – Mai Po and San Tam Road in term of average flow of Level of Services (LOS), as stipulated in Highway Capacity Manual 2000 and Transport Planning & Design Manual (TPDM), has been assessed. The peak hour pedestrian flows in 2024 are shown in **Drawing 3.17**, and the results are summarized in below **Table 3.6** and **Table 3.7**.

**Table 3.6 2024 Observed Level-Of-Service Assessment**

| Ref.<br>(1) | Actual<br>Width<br>(m) | Effective<br>Width<br>(m) (2) | 2024 Observed Peak<br>Hourly Flow<br>(ped/hr) |    | 2024 Observed Peak<br>Flow Rate<br>(ped/min/m) (3) |      | LOS (4) |    |
|-------------|------------------------|-------------------------------|-----------------------------------------------|----|----------------------------------------------------|------|---------|----|
|             |                        |                               | AM                                            | PM | AM                                                 | PM   | AM      | PM |
| Fp1         | 2.1                    | 1.1                           | 11                                            | 9  | 0.17                                               | 0.14 | A       | A  |
| Fp2         | 2.3                    | 1.3                           | 20                                            | 41 | 0.26                                               | 0.53 | A       | A  |
| Fp3         | 1.5                    | 0.5                           | 22                                            | 37 | 0.73                                               | 1.23 | A       | A  |
| Fp4         | 1.7                    | 0.7                           | 5                                             | 6  | 0.12                                               | 0.14 | A       | A  |

Remarks: (1) Refer to **Drawing 3.17** for locations and operational performance of identified footpaths;  
(2) Effective width for footpath = Actual width – 1.0m dead width (0.5m dead width on one side of footpath);  
(3) Peak flow rate = Peak hourly flow ÷ 60 ÷ effective width; and,  
(4) Refer to TPDM Vol.6 Chapter 10 Chapter 10.5.2.

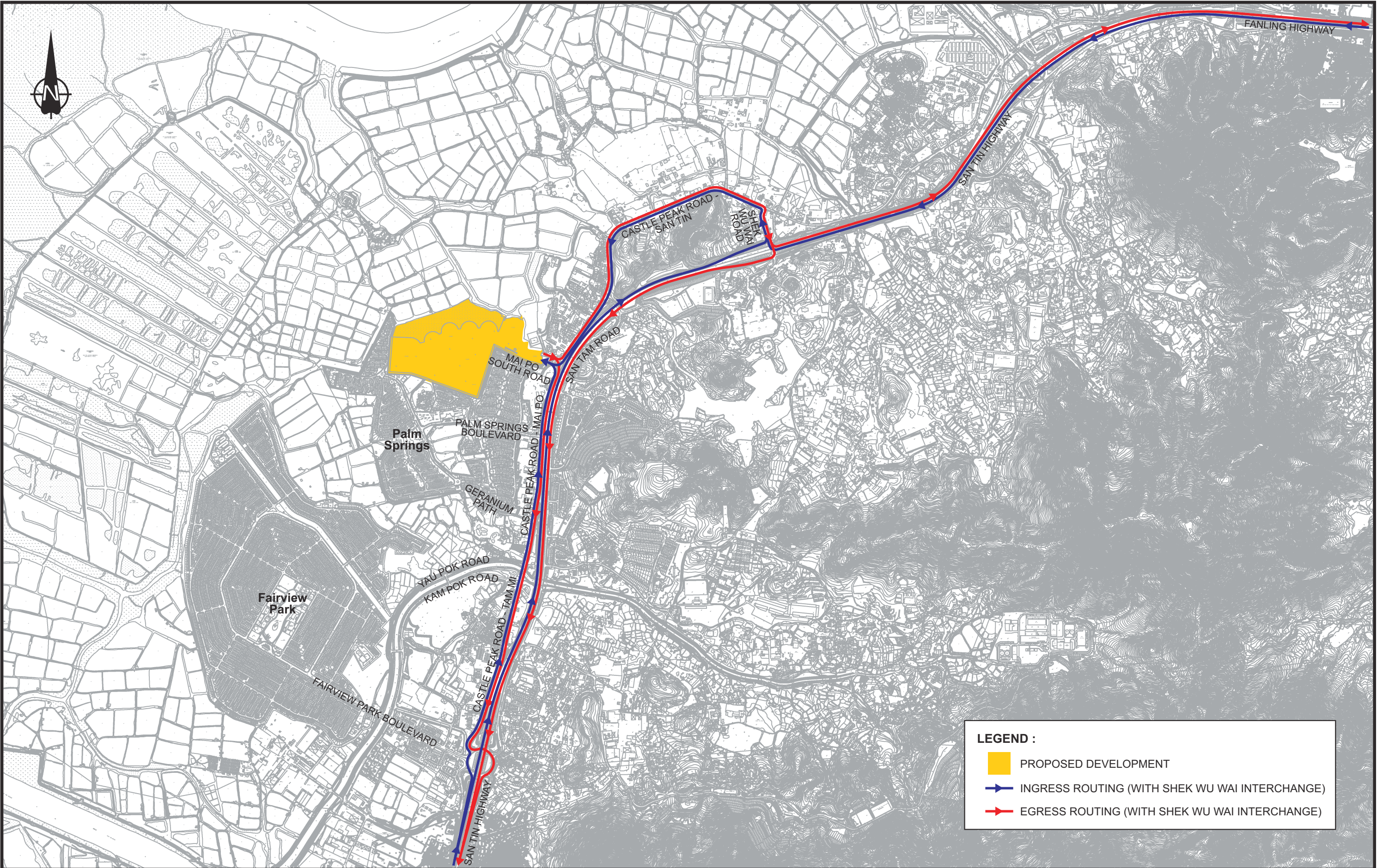
**Table 3.7 2024 Observed Queuing Area Level-Of-Service Assessment at Bus Stops**

| Ref. (1)                                             | 2024 Observed<br>Peak Hourly<br>Passenger Flow at<br>Bus Stop<br>(pax/hr) | 2024 Observed<br>Maximum Queue<br>at Queuing Area<br>(pax) | Queuing Area<br>(m <sup>2</sup> ) | Avg. Queuing<br>Space (m <sup>2</sup> /p) | LOS (3) |
|------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------|-----------------------------------|-------------------------------------------|---------|
| Maple Garden<br>Bus Stop – Yuen<br>Long Bound (SB)   | 2                                                                         | 1<br>(i.e. 2/60x25)                                        | 5.8                               | 5.8                                       | A       |
| Palm Springs Bus<br>Stop – Sheung<br>Shui Bound (NB) | 2                                                                         | 1<br>(i.e. 2/60x25)                                        | 20.3                              | 20.3                                      | A       |

Remarks: (1) Refer to **Drawing 3.17** for locations of identified queuing area;  
(2) Average Queuing Space = Queuing Area ÷ (Maximum Queue); and,  
(3) Refer to HCM2000, EXHIBIT 11-9.

3.4.2 As shown in **Table 3.6** and **3.7**, the identified footpaths and queuing area at concerned bus stops are currently operating with adequate spare capacities during the typical weekday morning and evening peak hours.





LEGEND :

PROPOSED DEVELOPMENT

INGRESS ROUTING (WITH SHEK WU WAI INTERCHANGE)

EGRESS ROUTING (WITH SHEK WU WAI INTERCHANGE)

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Project Title

PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT  
LOTS 50 S.A. AND 77 IN D.D.101, WO SHANG WAI,  
MAI PO, YUEN LONG

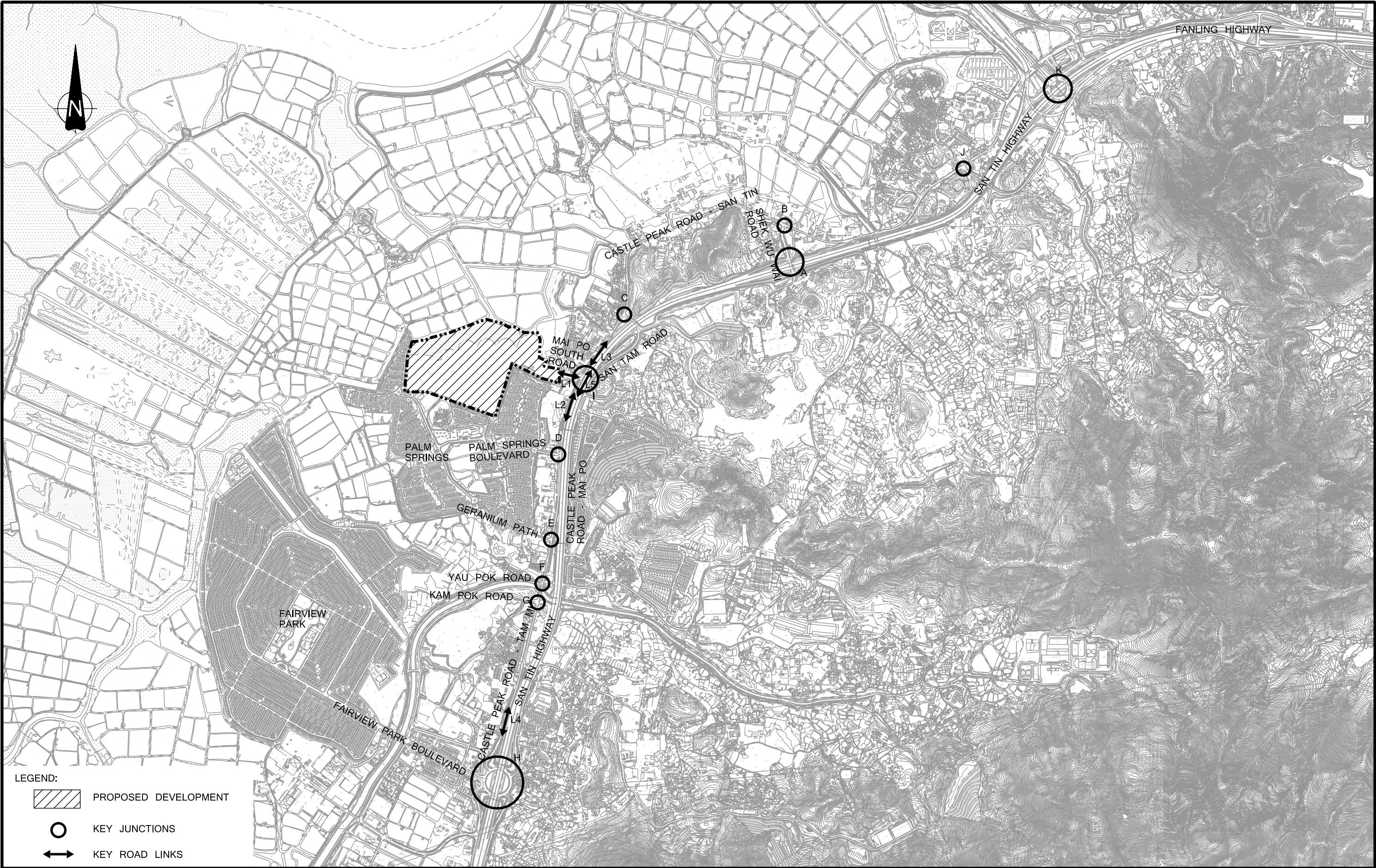
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SYSTRA

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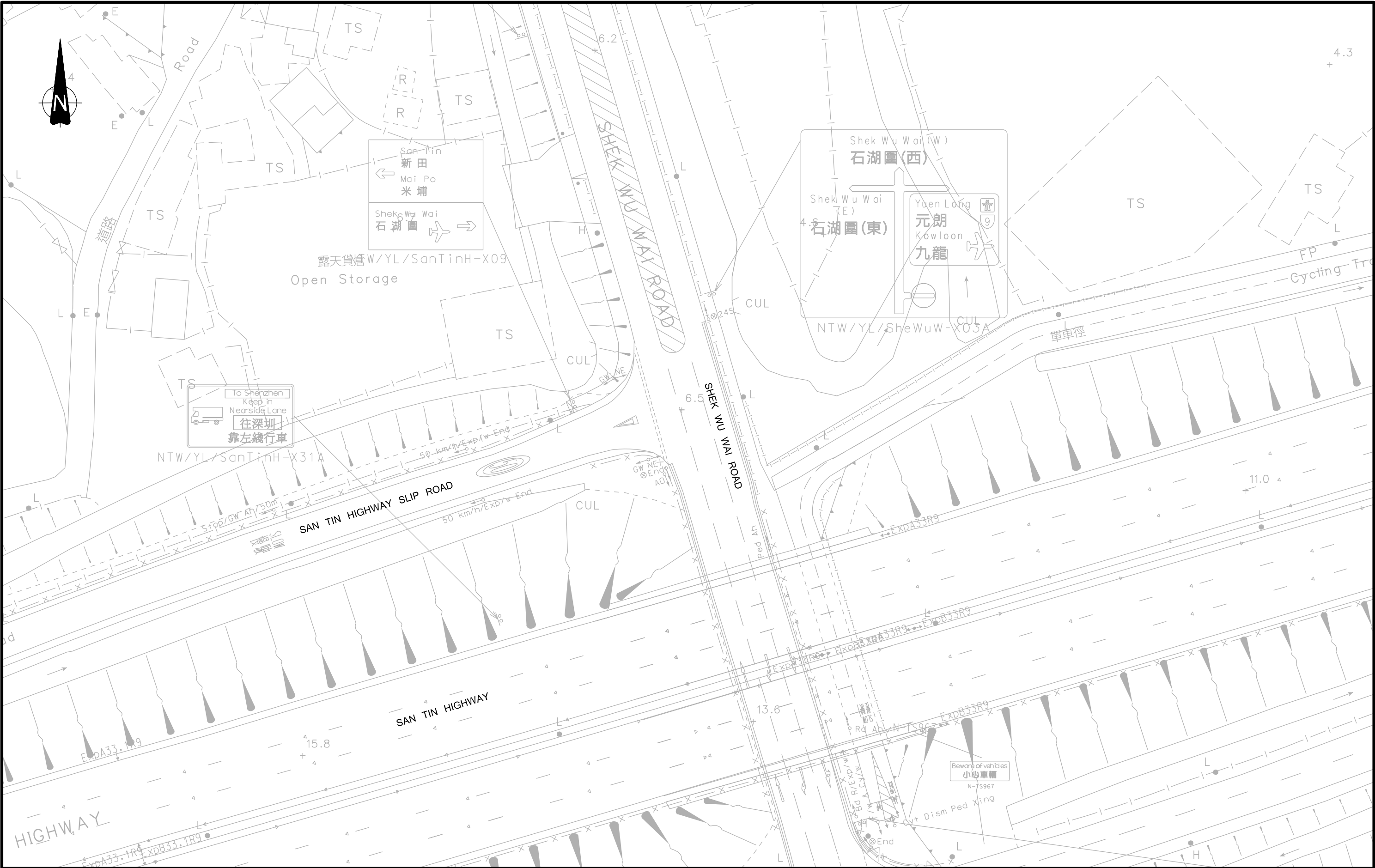
PROPOSED COMPREHENSIVE RESIDENTIAL  
DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101,  
WO SHANG WAI, MAI PO, YUEN LONG

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| KEY JUNCTIONS AND ROAD LINKS |        |         |          |
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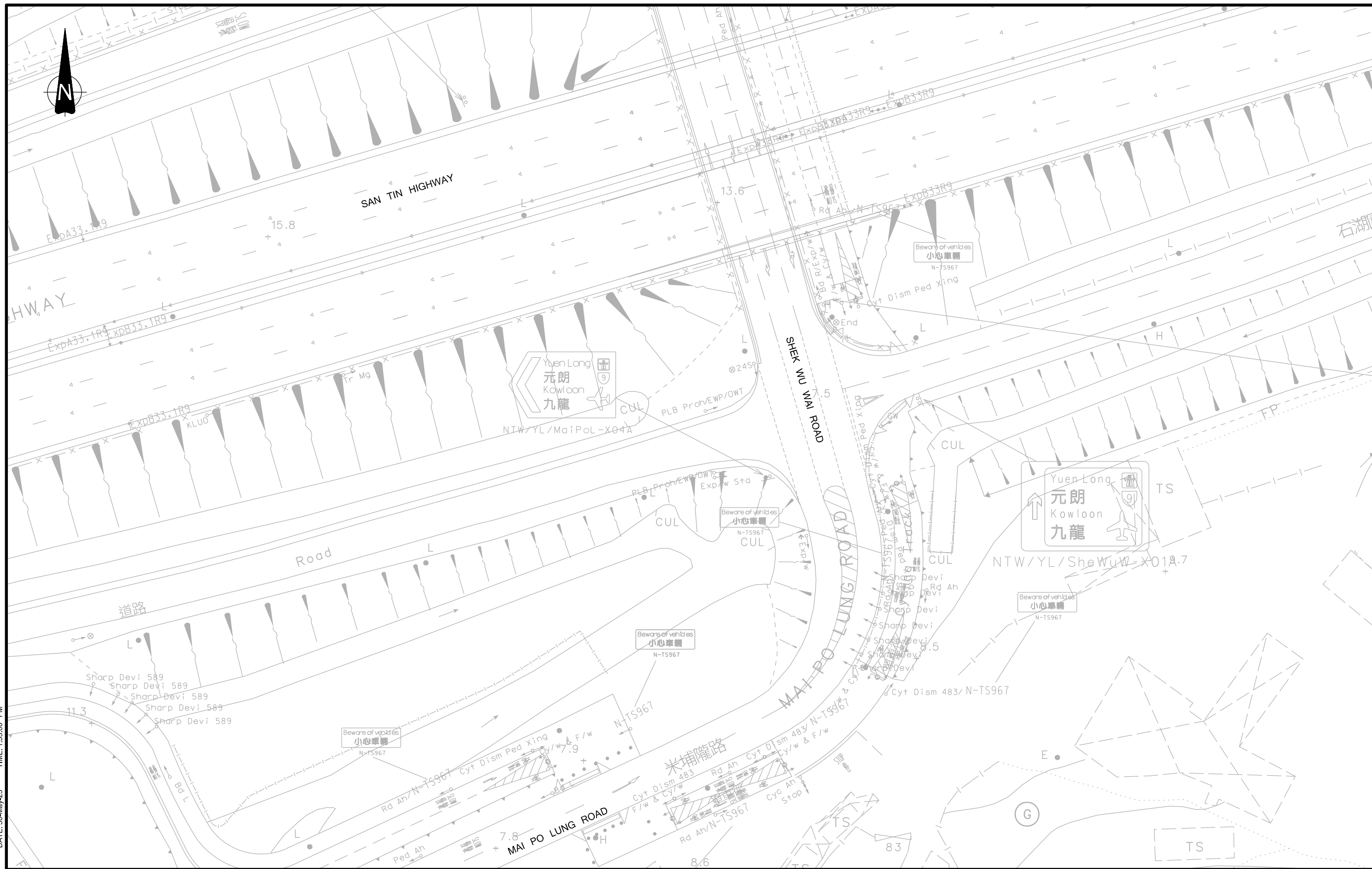


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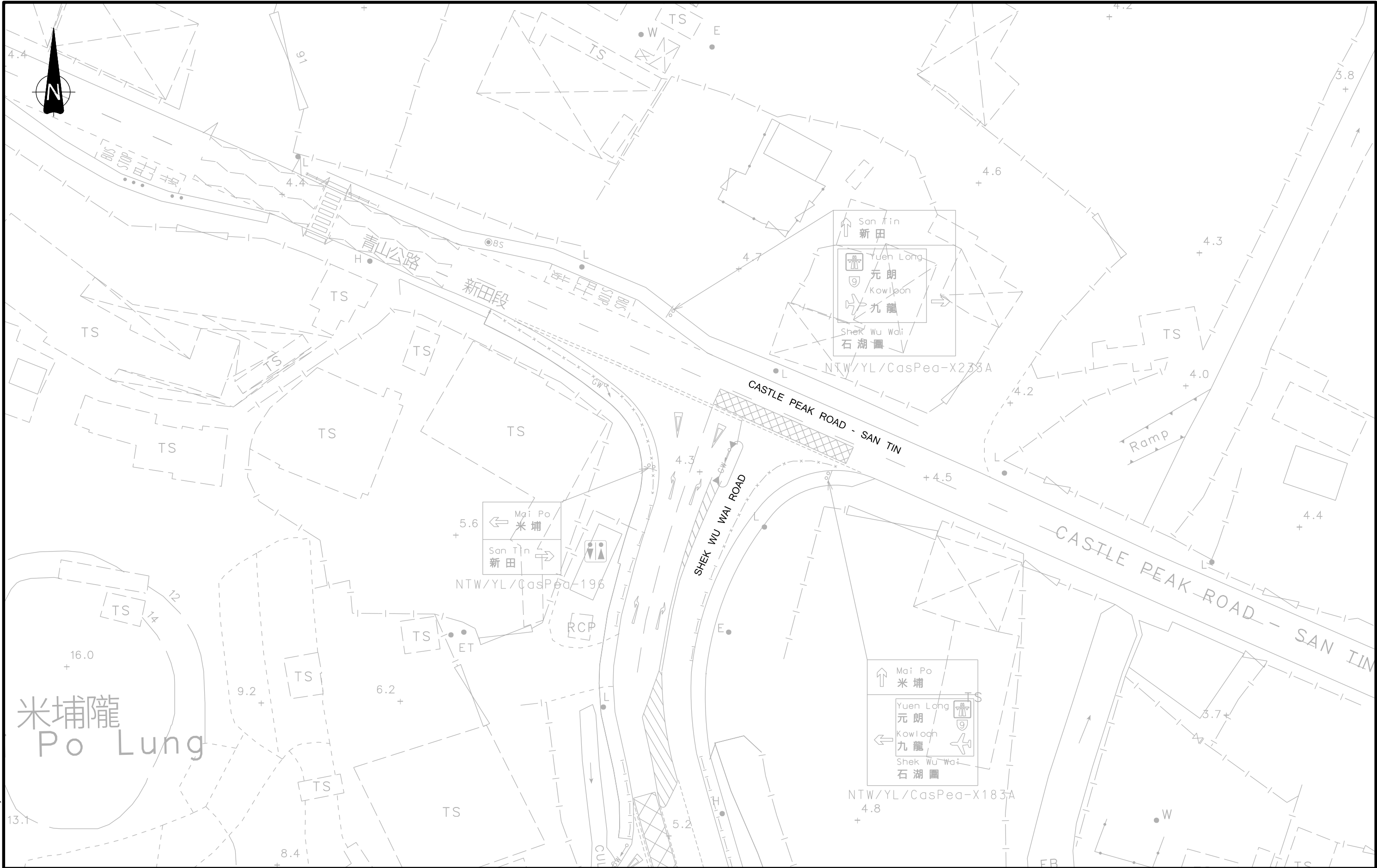
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| EXISTING JUNCTION LAYOUT OF SHEK WU WAI ROAD /<br>SAN TIN HIGHWAY SLIP ROAD (A1) |     |         |     |       |           |      |          |             |     |      |   |
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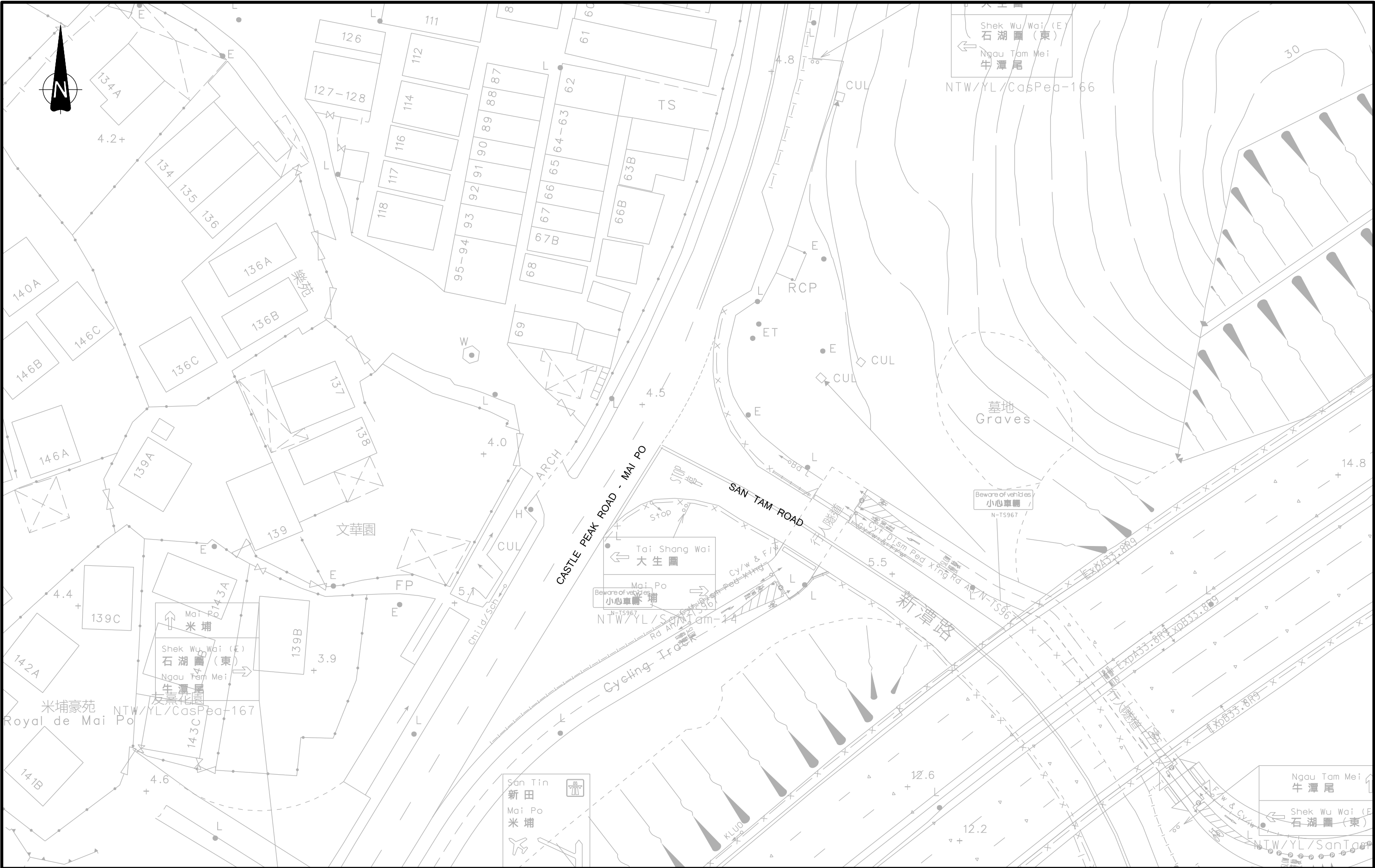
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| PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101, WO SHANG WAI, MAI PO, YUEN LONG |

| Drawing Title                                                                 |          |             |     |       |           |
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| EXISTING JUNCTION LAYOUT OF CASTLE PEAK ROAD - SAN TIN / SHEK WU WAI ROAD (B) |          |             |     |       |           |
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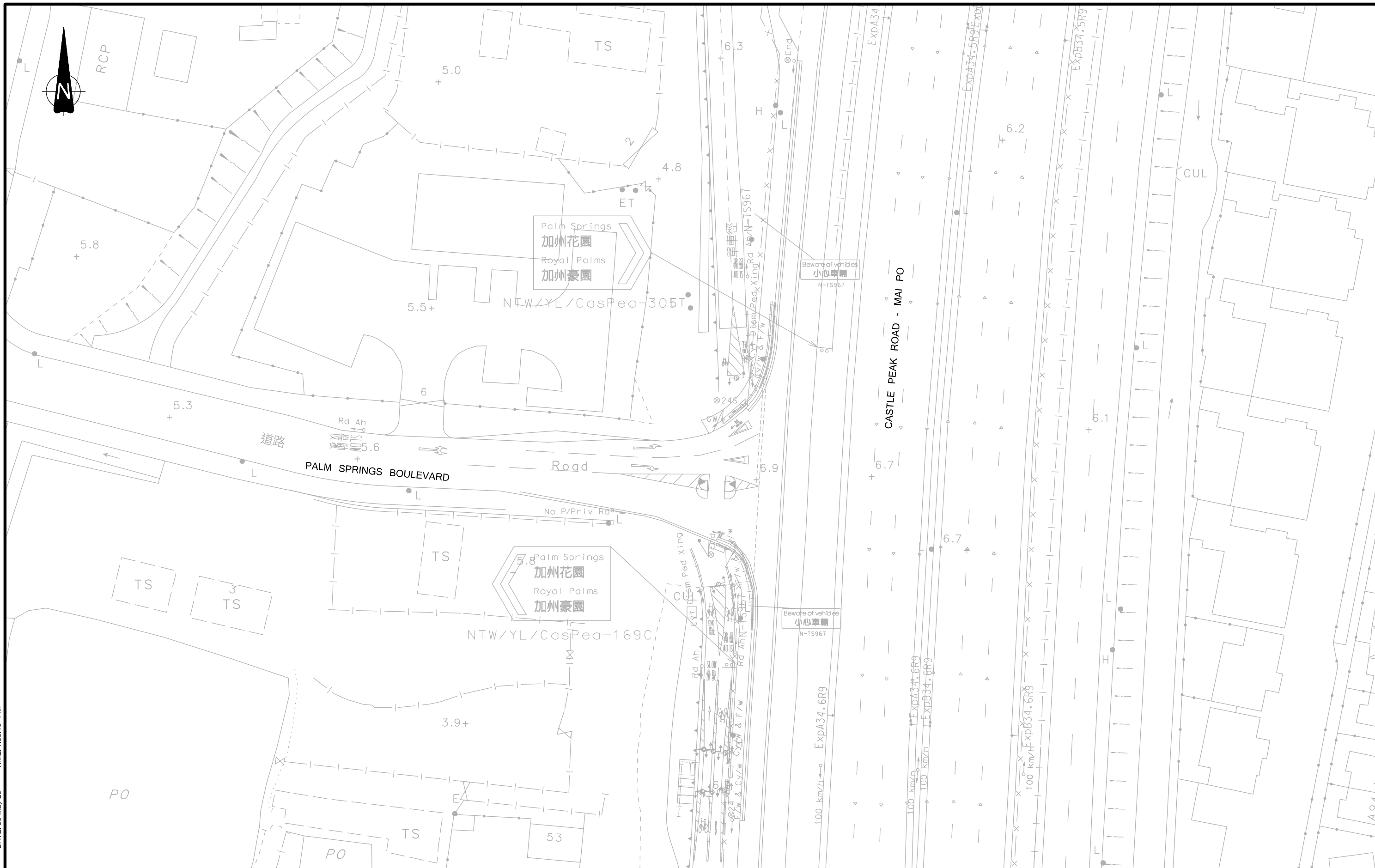
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PROPOSED COMPREHENSIVE RESIDENTIAL  
DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101,  
WO SHANG WAI, MAI PO, YUEN LONG

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| Drawing Title                                                               |           |         |          |
| EXISTING JUNCTION LAYOUT OF CASTLE PEAK ROAD -<br>MAI PO / SAN TAM ROAD (C) |           |         |          |
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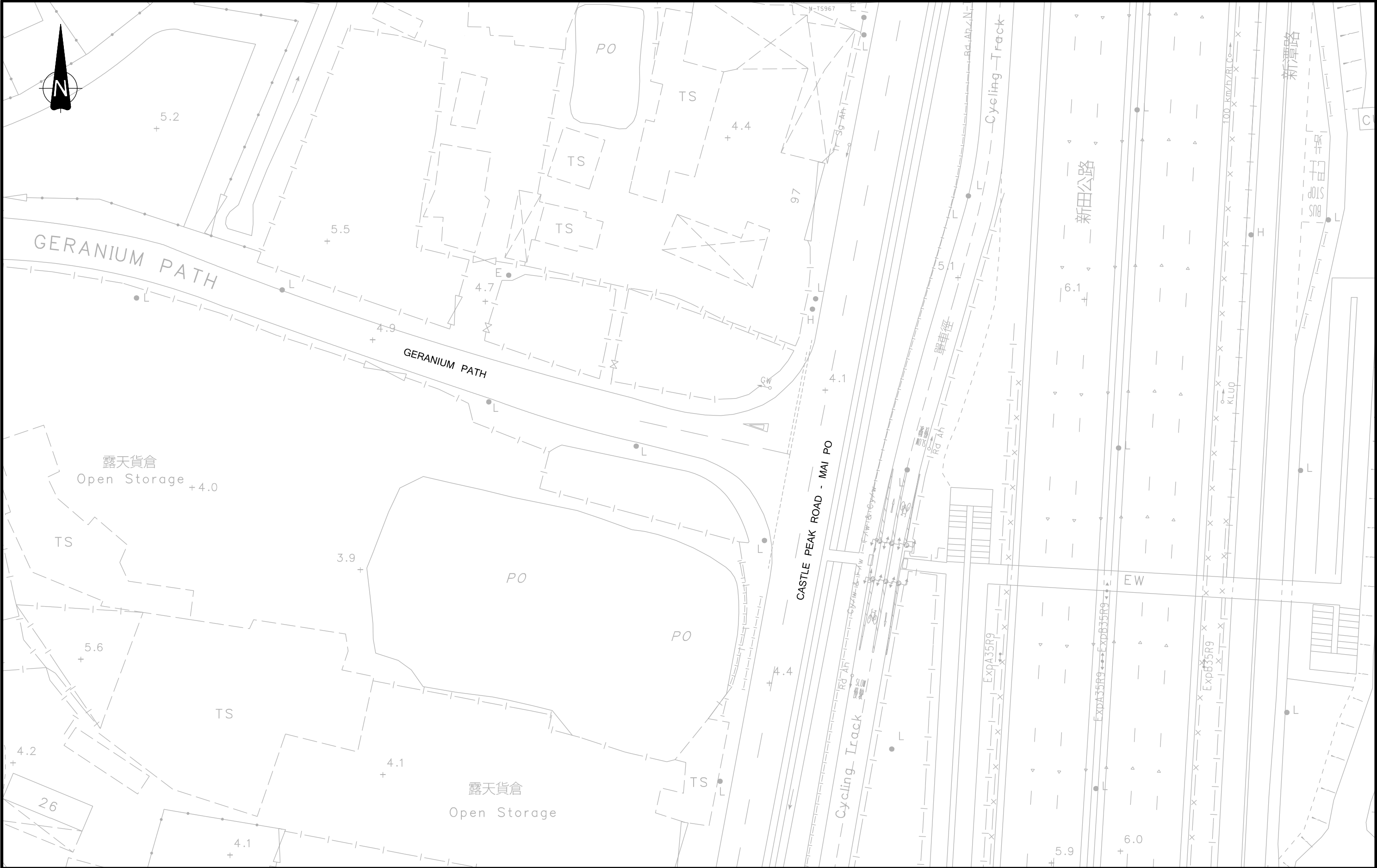






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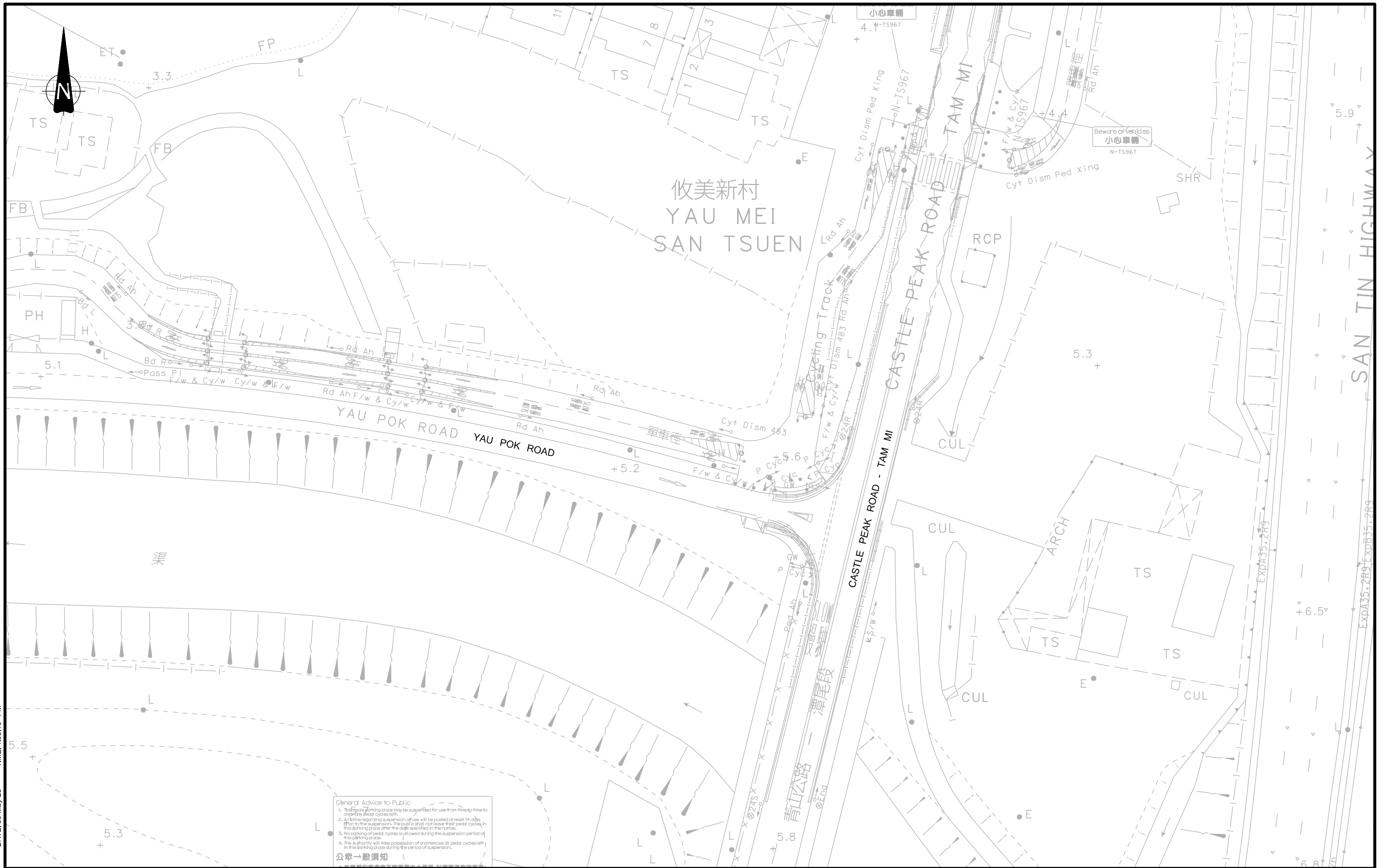
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Project Title

PROPOSED COMPREHENSIVE RESIDENTIAL  
DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101,  
WO SHANG WAI, MAI PO, YUEN LONG

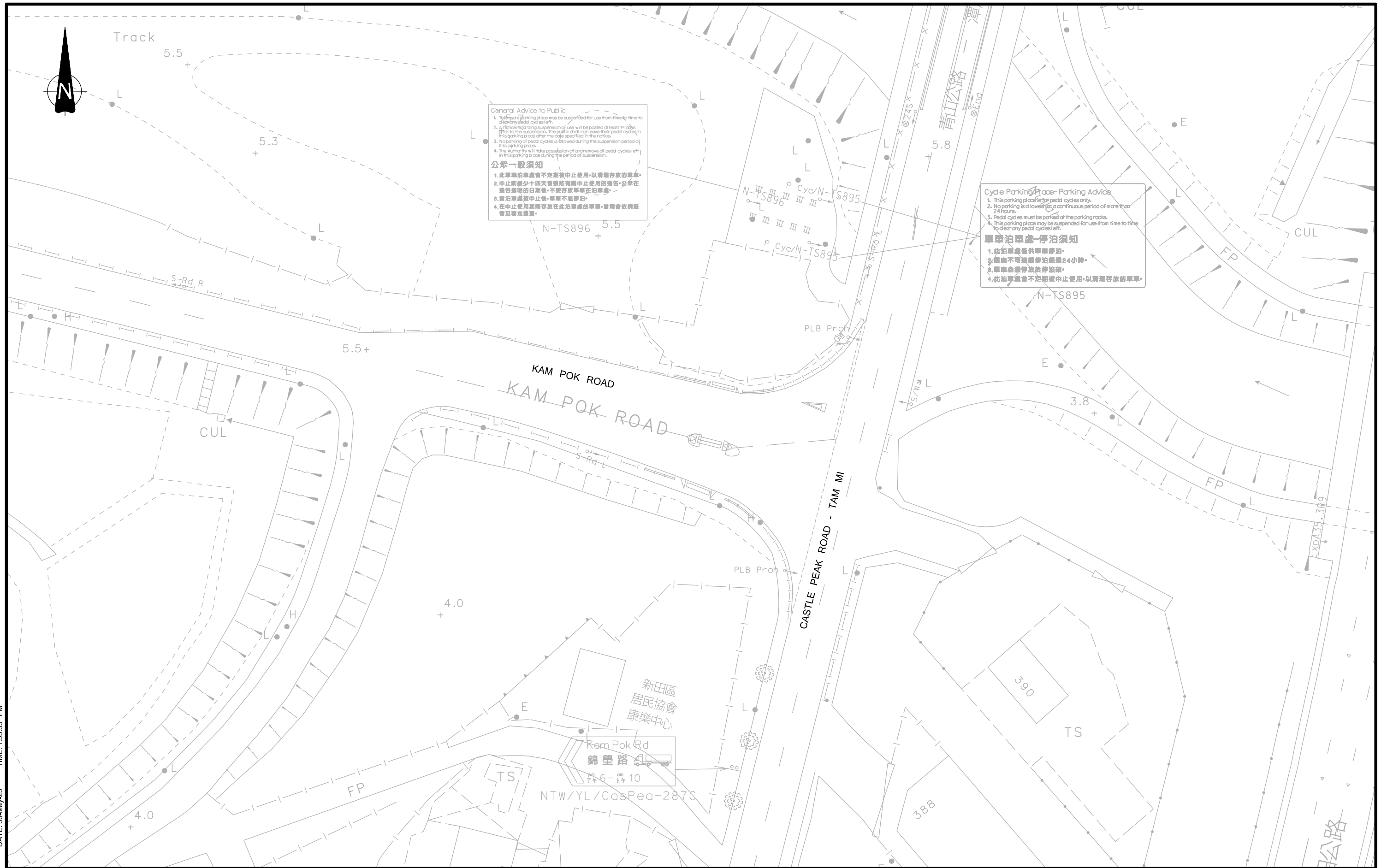
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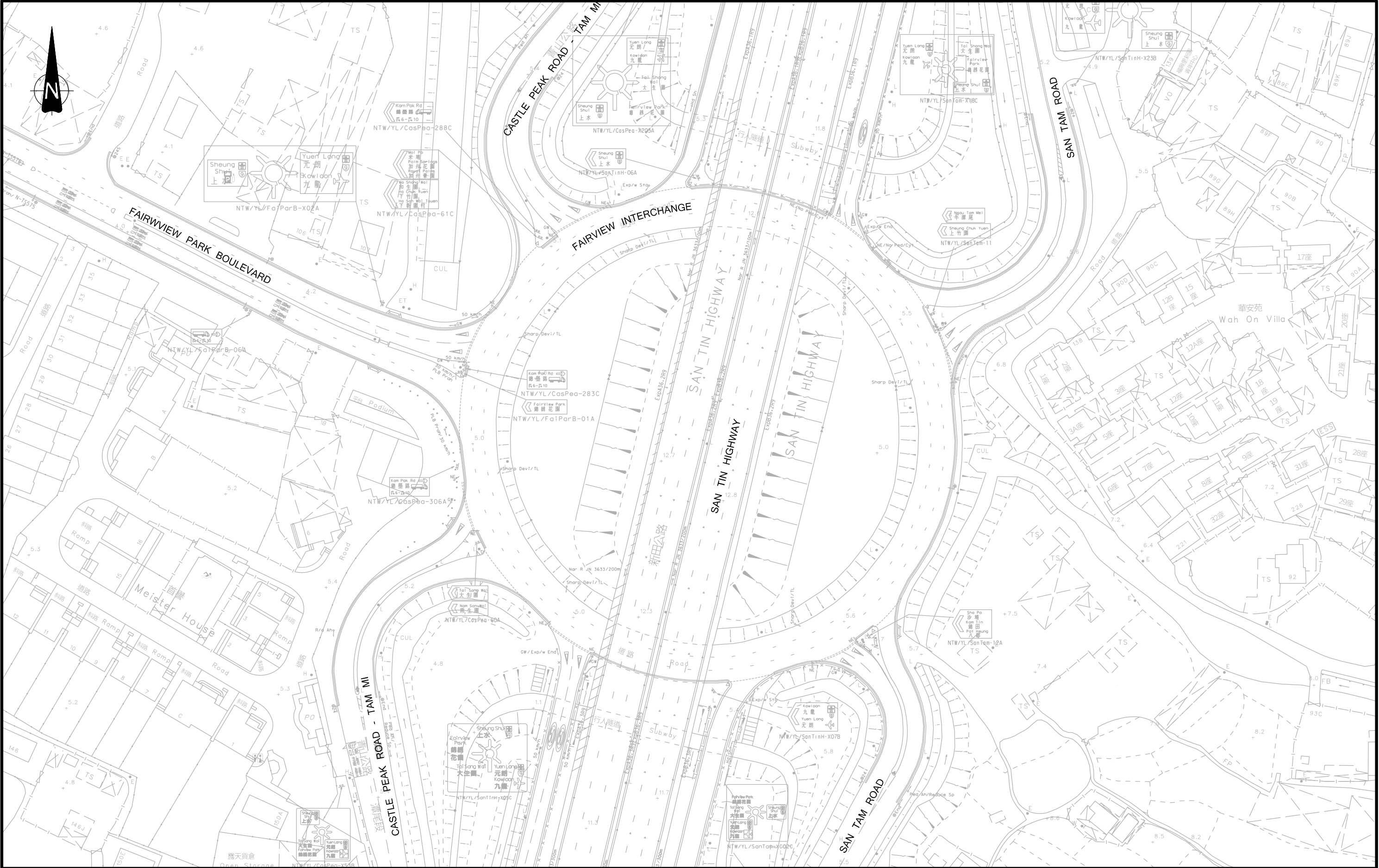


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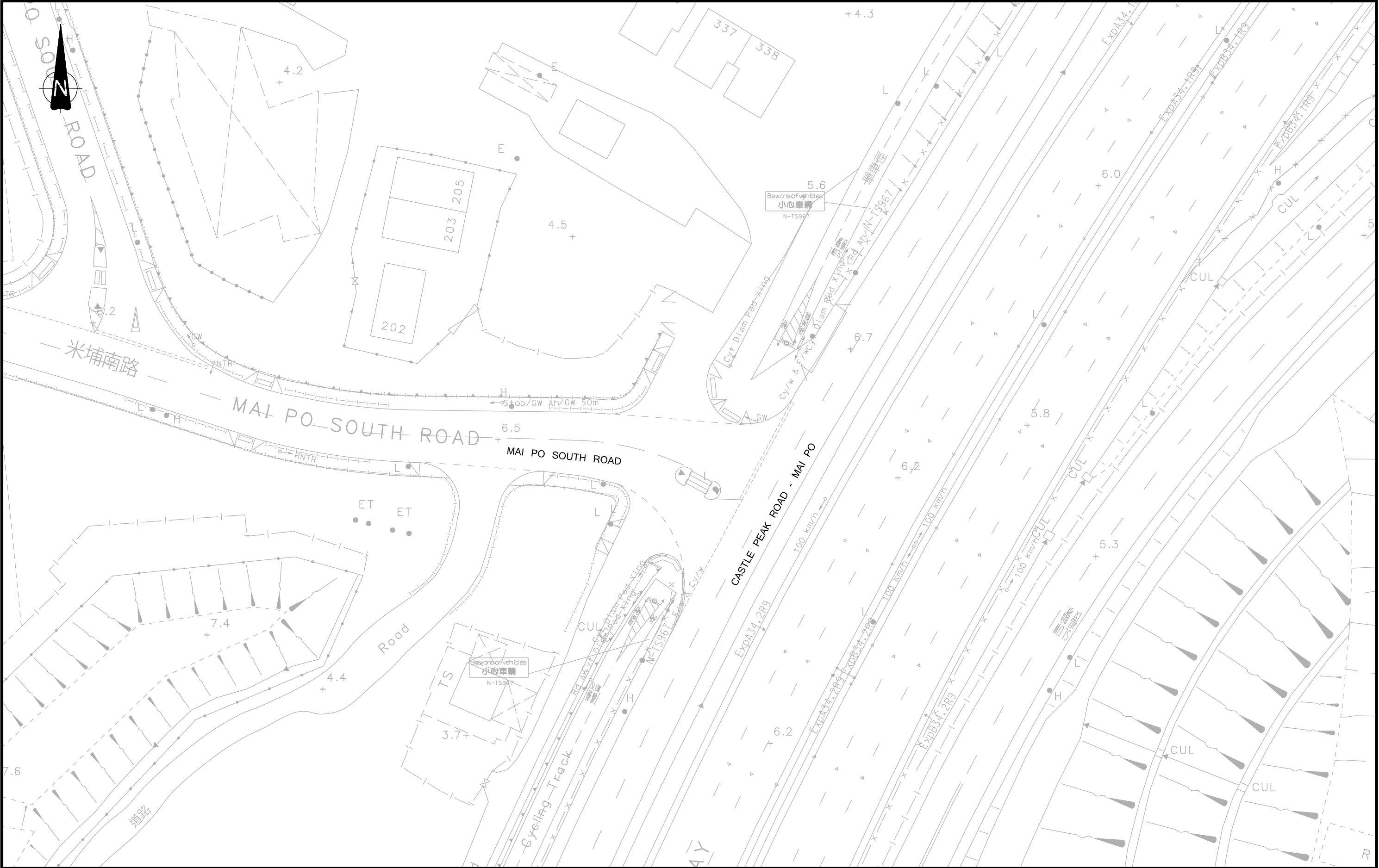
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| PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101, WO SHANG WAI, MAI PO, YUEN LONG |

|                                                              |     |         |     |       |            |      |          |             |      |      |   |
|--------------------------------------------------------------|-----|---------|-----|-------|------------|------|----------|-------------|------|------|---|
| Drawing Title                                                |     |         |     |       |            |      |          |             |      |      |   |
| EXISTING JUNCTION LAYOUT OF FAIRVIEW<br>PARK INTERCHANGE (H) |     |         |     |       |            |      |          |             |      |      |   |
| Designed                                                     | MYC | Checked | CFC | Scale | 1:1000(A3) | Date | MAY 2025 | Drawing No. | 3.11 | Rev. | - |





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Project Title

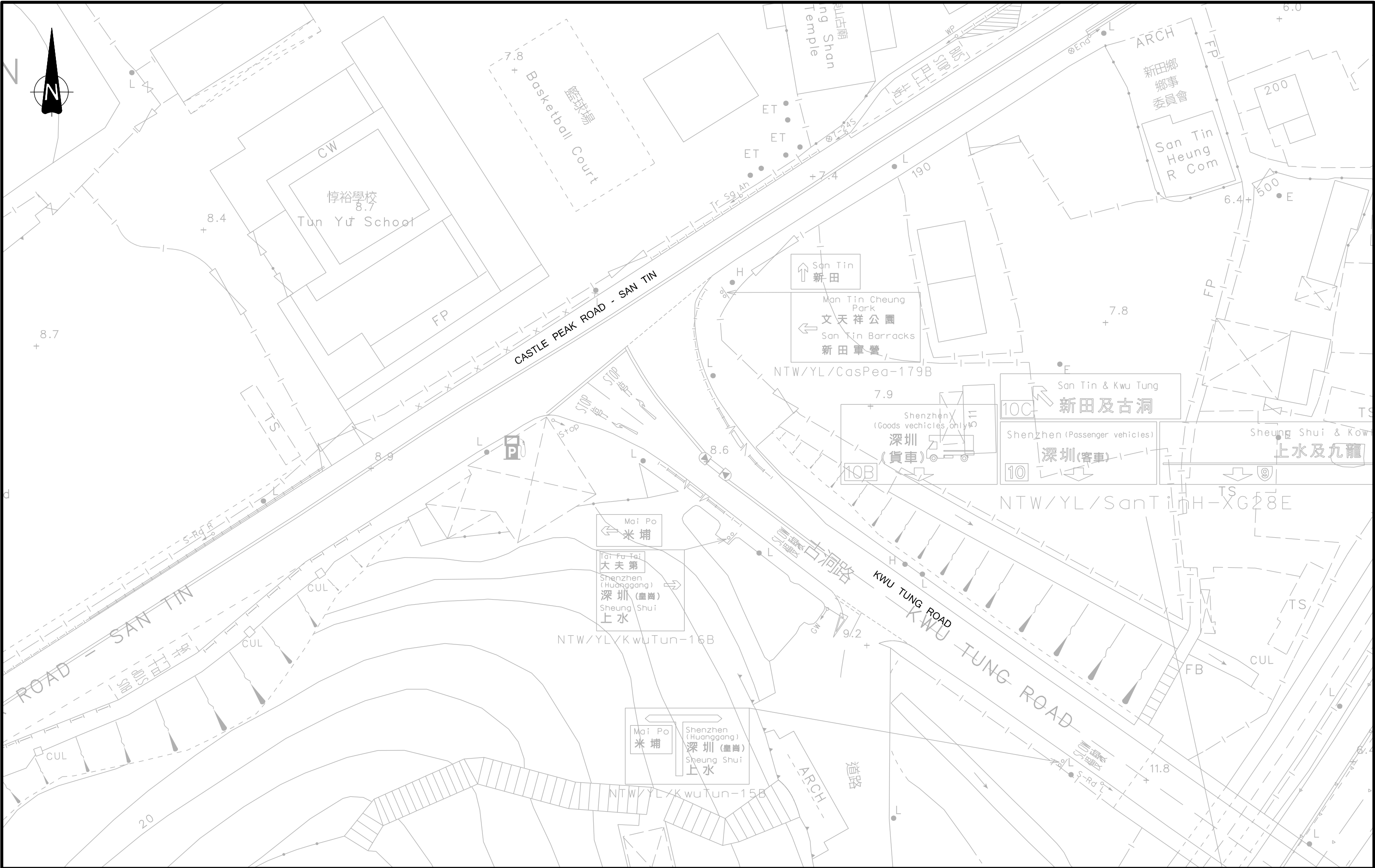
PROPOSED COMPREHENSIVE RESIDENTIAL  
DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101,  
WO SHANG WAI, MAI PO, YUEN LONG

|                                                                                  |                |                    |                  |
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| Drawing Title                                                                    |                |                    |                  |
| EXISTING JUNCTION LAYOUT OF CASTLE PEAK ROAD -<br>MAI PO / MAI PO SOUTH ROAD (I) |                |                    |                  |
| Designed<br>MYC                                                                  | Checked<br>CFC | Scale<br>1:500(A3) | Date<br>MAY 2025 |
| Drawing No.<br>3.12                                                              |                | Rev.<br>-          |                  |





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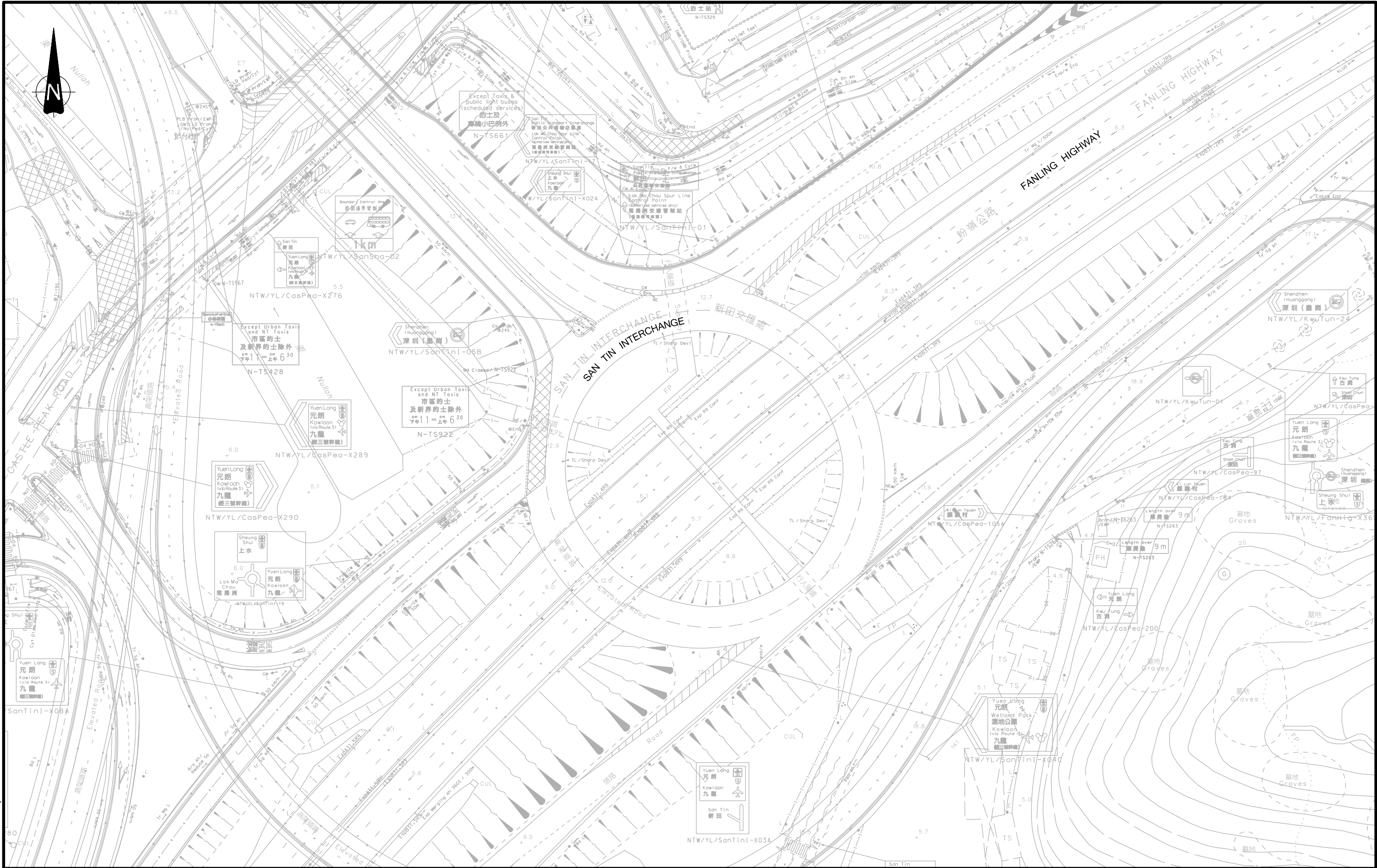
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Project Title

PROPOSED COMPREHENSIVE RESIDENTIAL  
DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101,  
WO SHANG WAI, MAI PO, YUEN LONG

| Drawing Title                                                                |     |         |          |             |
|------------------------------------------------------------------------------|-----|---------|----------|-------------|
| EXISTING JUNCTION LAYOUT OF CASTLE PEAK ROAD-<br>SAN TIN / KWU TUNG ROAD (J) |     |         |          |             |
| Designed                                                                     | MYC | Checked | CFC      | Scale       |
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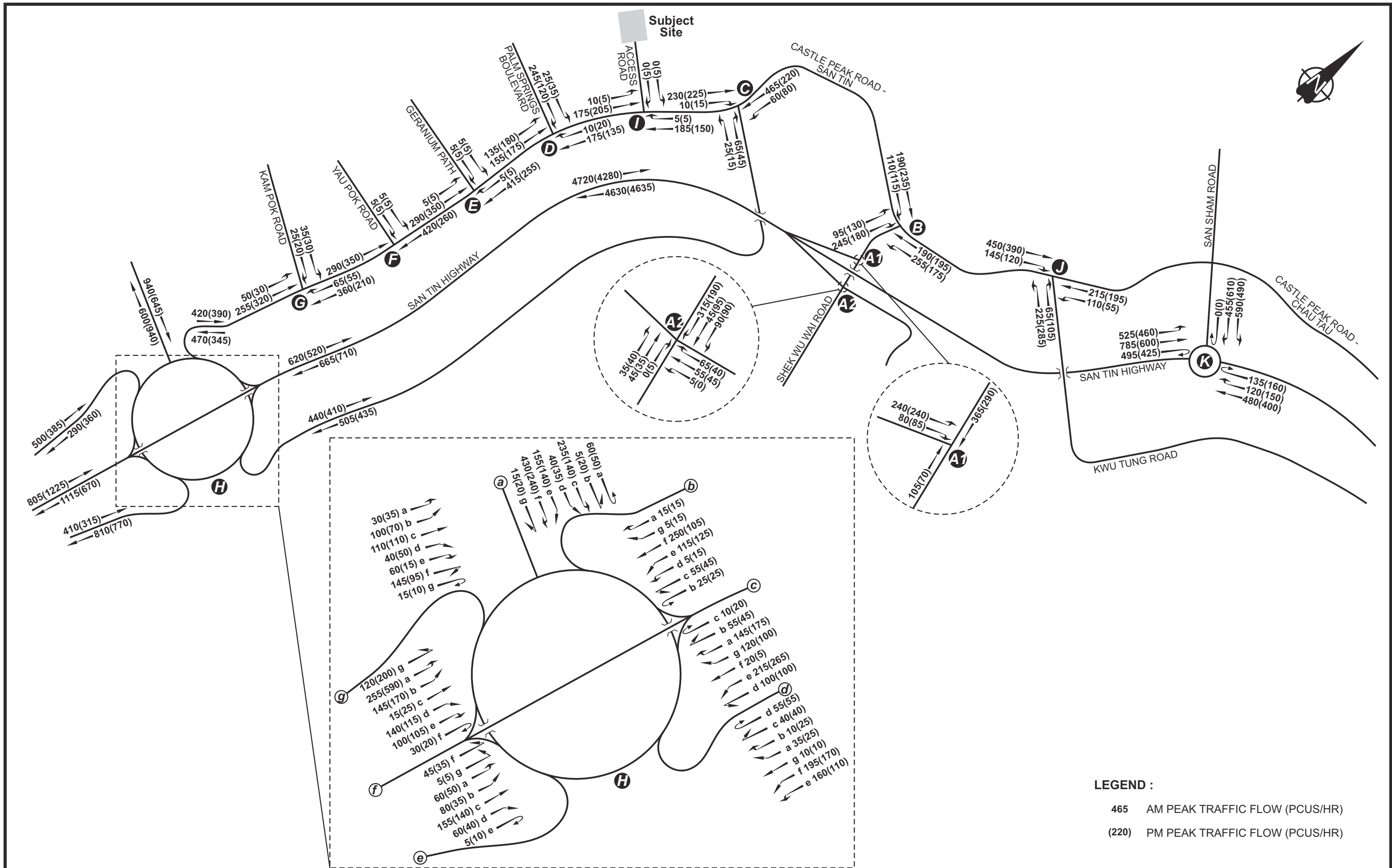
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| Project Title                                                                                                           |
| PROPOSED COMPREHENSIVE RESIDENTIAL<br>DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101,<br>WO SHANG WAI, MAI PO, YUEN LONG |

|                                                     |     |         |     |       |            |      |          |             |      |      |   |
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| Drawing Title                                       |     |         |     |       |            |      |          |             |      |      |   |
| EXISTING JUNCTION LAYOUT OF SAN TIN INTERCHANGE (K) |     |         |     |       |            |      |          |             |      |      |   |
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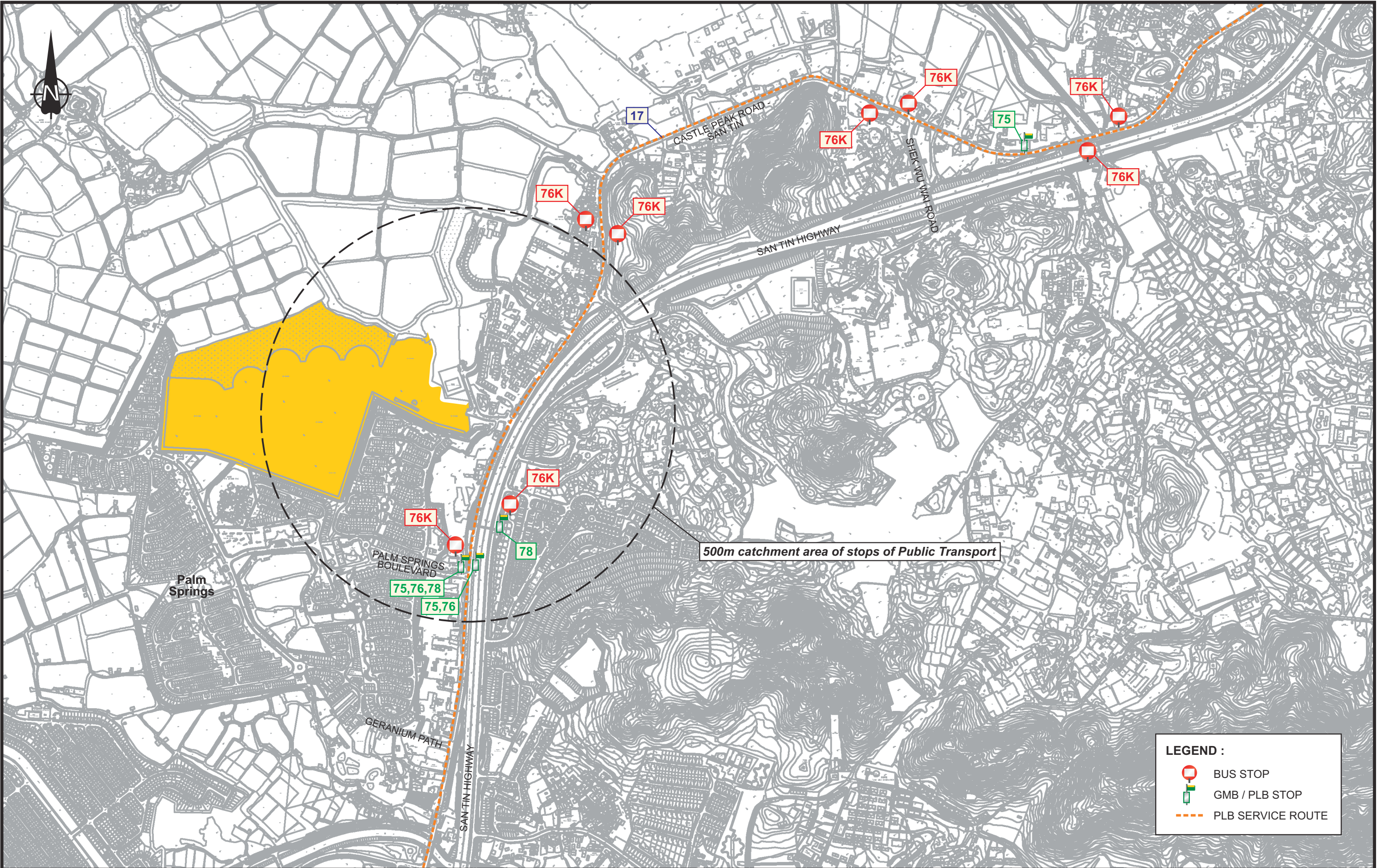
LEGEND :

465 AM PEAK TRAFFIC FLOW (PCUS/HR)

(220) PM PEAK TRAFFIC FLOW (PCUS/HR)

|      |             |         |      |                                                                                                                                              |                                                  |                |              |                  |                     |           |  |                                                                                       |
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| -    | -           | -       | -    | Project Title<br><br>PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT<br>LOTS 50 S.A. AND 77 IN D.D.101, WO SHANG WAI,<br>MAI PO, YUEN LONG | Drawing Title<br><br>2024 OBSERVED TRAFFIC FLOWS |                |              |                  |                     |           |  |  |
| -    | -           | -       | -    |                                                                                                                                              |                                                  |                |              |                  |                     |           |  |                                                                                       |
| -    | -           | -       | -    |                                                                                                                                              |                                                  |                |              |                  |                     |           |  |                                                                                       |
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| Rev. | Description | Checked | Date |                                                                                                                                              | Designed<br>MYC                                  | Checked<br>CFC | Scale<br>NTS | Date<br>MAY 2025 | Drawing No.<br>3.15 | Rev.<br>- |  |                                                                                       |





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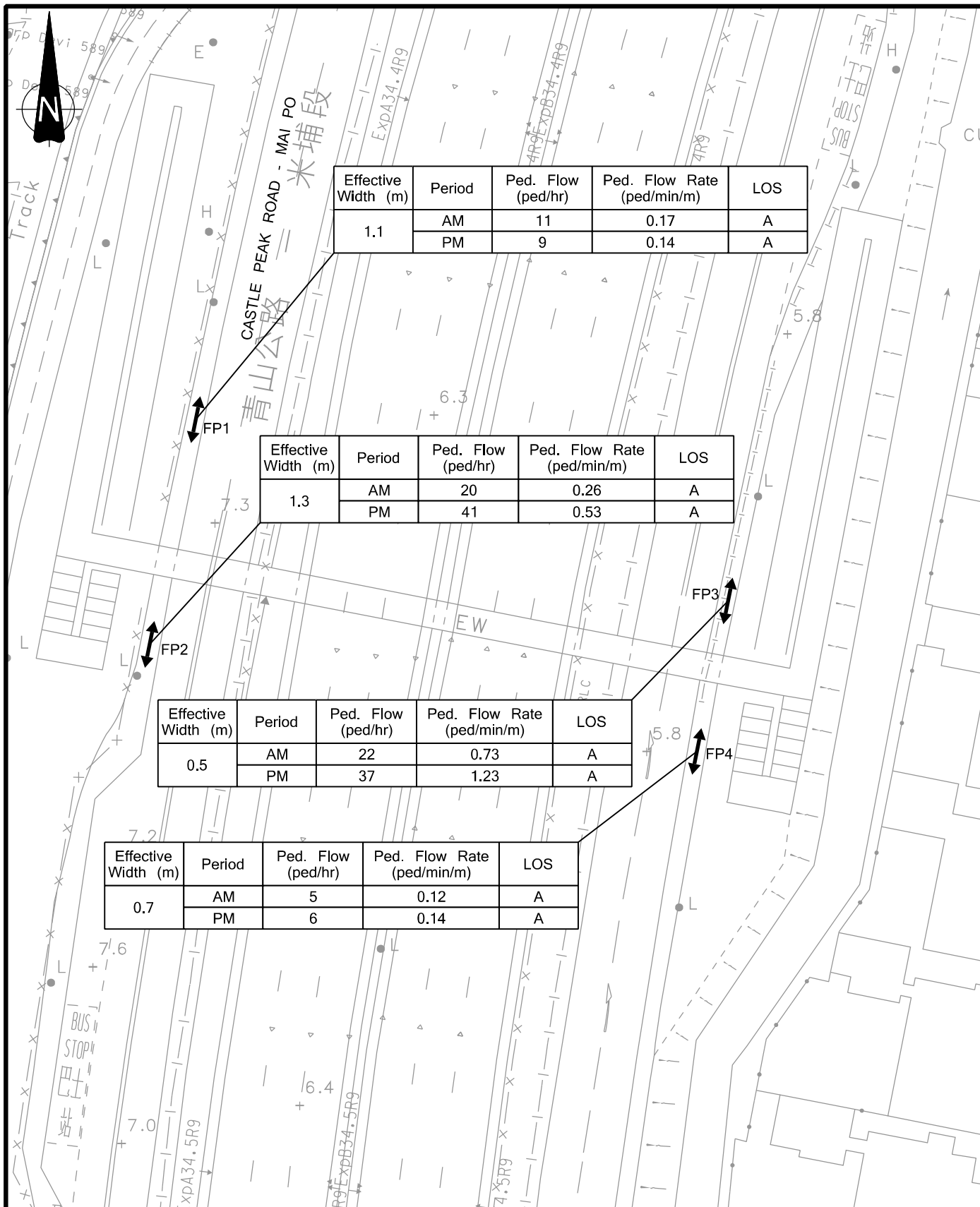
Project Title

PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT  
LOTS 50 S.A. AND 77 IN D.D.101, WO SHANG WAI,  
MAI PO, YUEN LONG

|                                                |     |         |     |       |     |      |          |
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| Drawing Title                                  |     |         |     |       |     |      |          |
| CURRENT PROVISION OF PUBLIC TRANSPORT SERVICES |     |         |     |       |     |      |          |
| Designed                                       | MYC | Checked | CFC | Scale | NTS | Date | MAY 2025 |
| Drawing No.                                    |     |         |     |       |     | 3.16 | Rev.     |
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|                                               |             |         |      |                                                                                                                   |             |         |          |
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| Rev.                                          | Description | Checked | Date | Rev.                                                                                                              | Description | Checked | Date     |
| Project Title                                 |             |         |      | PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101, WO SHANG WAI, MAI PO, YUEN LONG |             |         |          |
| Drawing Title                                 |             |         |      | SYSTRA MVA                                                                                                        |             |         |          |
| YEAR 2024 OBSERVED PEAK HOUR PEDESTRIAN FLOWS |             |         |      |                                                                                                                   |             |         |          |
| Designed                                      | MYC         | Checked | CFC  | Scale                                                                                                             | N.T.S.(A4)  | Date    | MAY 2025 |
| Drawing No.                                   |             | 3.17    |      | Rev.                                                                                                              |             | -       |          |

## 4. TRAFFIC FORECAST

### 4.1 Design Year

- 4.1.1 The tentative operation year of the proposed development is by 2028. Hence, the design year of 2031, three years upon operation, has been adopted for traffic forecast and assessment purposes.

### 4.2 Reference Traffic Forecast

#### Planning Application of Y/YL-MP/10

- 4.2.1 In order to produce the traffic forecast for the strategic highway and other local road links at the design year of 2031, reference has been made to the nearby on-going planning application, Y/YL-MP/10 for proposed development in various lots and adjacent Government Land in DD 104, Yuen Long, N.T.. Subject to review of the traffic flow in Year 2031 and the accounted planned development in the TIA report of Y/YL-MP/10, further adjustment has been made to produce the 2031 Reference traffic flow for the assessment purpose.

#### San Tin Technopole

- 4.2.2 The large-scale development of San Tin Technopole (STT) will be constructed and intake by different phases, as illustrated in **Annex B** and **Annex C**. The summary will be as shown in **Table 4.1**.

**Table 4.1 Phasing of San Tin Technopole**

| Phases <sup>(1)</sup> | Proposed Commencement of Works | Proposed Intake Year |
|-----------------------|--------------------------------|----------------------|
| Initial Phase         | Year 2024                      | Year 2031            |
| Main Phase            | Year 2026                      | Year 2034            |
| Remaining Phase       | Year 2032                      | Year 2039            |

Remarks: (1) Source from EIA study of First Phase Development of the New Territories North – San Tin / Lok Ma Chau Development Node - Investigation.

- 4.2.3 The development trips in “Initial Phase” would be considered in the assessment of Year 2031. The related development schedules and estimated traffic generations are summarized in below **Table 4.2**.



**Table 4.2 Development Trips of San Tin Technopole Adopted in Assessment**

| Ref. <sup>(1)</sup>                | Development Schedule                     | Parameters                                                                    | Trip Generations (pcu/hr) |                     |                     |                    |
|------------------------------------|------------------------------------------|-------------------------------------------------------------------------------|---------------------------|---------------------|---------------------|--------------------|
|                                    |                                          |                                                                               | AM Peak                   |                     | PM Peak             |                    |
|                                    |                                          |                                                                               | Gen                       | Att                 | Gen                 | Att                |
| San Tin Technopole (Initial Phase) | Information and Technology (I&T) Section | (64,000 Employment)                                                           | 1137 <sup>(2)</sup>       | 1636 <sup>(2)</sup> | 1050 <sup>(2)</sup> | 785 <sup>(2)</sup> |
|                                    | Logistics & Storage and Workshop         | (Approximate 380,000m <sup>2</sup> )                                          | 351 <sup>(3)</sup>        | 526 <sup>(3)</sup>  | 512 <sup>(3)</sup>  | 398 <sup>(3)</sup> |
|                                    | Public Housing                           | Approximate 6,695 units (Average house/flat size of about 50 m <sup>2</sup> ) | 416 <sup>(4)</sup>        | 285 <sup>(4)</sup>  | 199 <sup>(4)</sup>  | 268 <sup>(4)</sup> |
|                                    | Private Housing                          | Approximate 5,150 units (Average house/flat size of about 60 m <sup>2</sup> ) | 214 <sup>(5)</sup>        | 73 <sup>(5)</sup>   | 81 <sup>(5)</sup>   | 142 <sup>(5)</sup> |

Remarks: (1) Source from EIA study of First Phase Development of the New Territories North – San Tin / Lok Ma Chau Development Node - Investigation;  
(2) Based on 120,000 I&T employment in TPB Land Use Proposal; average daily mechanised home-based work trips per employed person of 1.41 trips, peak hour percentage to daily total trips of 12%, distribution of boardings by transport mode (LRT, tram and ferry excluded) in TCS 2011 (87.4% of PT trips and 12.6% of PC/Taxi trips); and assumed capacity of franchised bus, PLB, shuttle bus and PC;  
(3) Based on site area measurement, plot ratio of 2/ 5 in RODP, and traffic generation and attraction rates for industrial building in TPDM;  
(4) Based on site area measurement, plot ratio of 6.5 in RODP, assumed average flat size of 50 m<sup>2</sup>, consideration of new flat units about 50,000-54,000 in TPB land use proposal, and traffic generation and attraction rates for subsidised housing: HOS/PSPS in TPDM; and,  
(5) Based on site area measurement, plot ratio of 6 in RODP, assumed average flat size of 60 m<sup>2</sup>, consideration of new flat units about 50,000 - 54,000 in TPB land use proposal, and traffic generation and attraction rates for private housing: high-density/R(A) in TPDM.

#### Development Proposal of Ngau Tam Mei

4.2.4 The Government has recently disclosed the broad development proposal of Ngau Tam Mei (NTM) under Legislative Council Paper (No. CB(1)1487/2024(04). It is proposed to reserve land in NTM for use of post-secondary education institutions (self-sustained UniTown) with integrated residential neighbourhood. The first population intake is expected to take place gradually from Year 2034 onwards to tally with the commissioning of NOL Main Line.

4.2.5 According to the broad land use concept plan, NTM is expected to be served by the new Northern Metropolis (NM) Highway, while direct road connections/interchange are proposed to San Tin Highway and STT. Besides, upon NOL opening by Year 2034, MTR Ngau Tam Mei Station is expected to attract and shift some of the existing road traffic into railway, it is anticipated that the traffic conditions along San Tam Road and the existing Fairview Park Boulevard Interchange will be largely improved. As the NTM development proposal is still in the conceptual stage without detailed land use planning and development parameters, it will not be considered in this TIA Study.

#### Other Planned/Committed Developments

4.2.6 Apart from San Tin Technopole, there are also a number of other planned/committed developments located in the vicinity that are expected to be completed by year 2031. The Proposed temporary light public housing development (in various lots in D.D. 104 and adjoining government land, Yau Pok Road, Yuen Long) is excluded in the assessment due to its

anticipated completion year (2024/2025), and the proposed 5-year operation period. The development schedules of these developments and estimated traffic generations are summarized in **Table 4.3** and the locations of these developments are indicated in **Drawing 4.1**.

**Table 4.3 Other Planned/Committed Developments**

| Ref. <sup>(1)</sup> | Developments Location; Application No.                                                                                                                                                                                                | Parameters                                                             | Trip Generations (pcu/hr) |                    |                    |                    |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------|--------------------|--------------------|--------------------|
|                     |                                                                                                                                                                                                                                       |                                                                        | AM Peak                   |                    | PM Peak            |                    |
|                     |                                                                                                                                                                                                                                       |                                                                        | Gen                       | Att                | Gen                | Att                |
| 1                   | Lots 3152, 3153 RP, 3156 S.B and 4805 in D.D. 104 and Adjoining Government Land (GL), Kam Pok Road, Mai Po, Yuen Long, Y/YL-MP/10                                                                                                     | 2,322 units<br>(average flat size of about 42.4 m <sup>2</sup> )       | 167 <sup>(3)</sup>        | 99 <sup>(3)</sup>  | 67 <sup>(3)</sup>  | 86 <sup>(3)</sup>  |
|                     |                                                                                                                                                                                                                                       | Public Transport                                                       | 28 <sup>(3)</sup>         | 28 <sup>(3)</sup>  | 28 <sup>(3)</sup>  | 28 <sup>(3)</sup>  |
|                     |                                                                                                                                                                                                                                       | Retail (2,363 m <sup>2</sup> )                                         | 6 <sup>(3)</sup>          | 6 <sup>(3)</sup>   | 8 <sup>(3)</sup>   | 9 <sup>(3)</sup>   |
|                     |                                                                                                                                                                                                                                       | Kindergarten (6 Classrooms)                                            | 47 <sup>(3)</sup>         | 47 <sup>(3)</sup>  | 2 <sup>(3)</sup>   | 2 <sup>(3)</sup>   |
|                     |                                                                                                                                                                                                                                       | Neighbourhood Elderly Centre (NEC)                                     | 10 <sup>(3)</sup>         | 10 <sup>(3)</sup>  | 10 <sup>(3)</sup>  | 10 <sup>(3)</sup>  |
| 2                   | Proposed House development in various lots in D.D. 104 and adjoining government land, Mai Po, Yuen Long, A/YL-MP/287                                                                                                                  | 65 units<br>(average flat size of about 116 m <sup>2</sup> )           | 15                        | 8                  | 7                  | 10                 |
| 3                   | Various Lots in D.D. 104 and adjoining Government Land, Wing Kei Tsuen, Nam Sang Wai, Yuen Long, Y/YL-NSW/7                                                                                                                           | 1,997 units<br>(average flat size of about 49 m <sup>2</sup> )         | 143                       | 85                 | 57                 | 74                 |
|                     |                                                                                                                                                                                                                                       | Retail (900 m <sup>2</sup> )                                           | 2                         | 2                  | 3                  | 3                  |
|                     |                                                                                                                                                                                                                                       | Kindergarten / Child Care Centre (2,200 m <sup>2</sup> )               | 10 <sup>(2)</sup>         | 10 <sup>(2)</sup>  | 10 <sup>(2)</sup>  | 10 <sup>(2)</sup>  |
| 4                   | Sha Po Public Housing Development, N/A                                                                                                                                                                                                | 16,300 units                                                           | 1,385                     | 1,155              | 850                | 1,020              |
| 5                   | Lots 8 RP (Part), 8 S.A RP, 12, 13, 14 S.B ss.2, 14 S.B RP, 14 S.C RP, 16, 17, 31 S.B RP, 33 RP, 36 RP, 45, 55 S.A and 1740 S.A RP in D.D.107 and Adjoining Government Land, West of Castle Peak Road – Tam Mi, Yuen Long, Y/YL-NSW/8 | 6,825 units<br>(Average Flat Size 37.5 m <sup>2</sup> )                | 491 <sup>(3)</sup>        | 291 <sup>(3)</sup> | 196 <sup>(3)</sup> | 253 <sup>(3)</sup> |
|                     |                                                                                                                                                                                                                                       | Retail (3,950m <sup>2</sup> )                                          | 10 <sup>(3)</sup>         | 10 <sup>(3)</sup>  | 13 <sup>(3)</sup>  | 15 <sup>(3)</sup>  |
|                     |                                                                                                                                                                                                                                       | GIC Facilities (2 nos.)                                                | 10 <sup>(3)</sup>         | 10 <sup>(3)</sup>  | 10 <sup>(3)</sup>  | 10 <sup>(3)</sup>  |
|                     |                                                                                                                                                                                                                                       | Kindergarten (8 Classrooms)                                            | 25 <sup>(3)</sup>         | 25 <sup>(3)</sup>  | 1 <sup>(3)</sup>   | 1 <sup>(3)</sup>   |
| 6                   | Lots 1910 RP (Part) and 1743 S.C RP (Part) in D.D. 107 and Adjoining Government Land, West of Castle Peak Road – Tam Mi, Yuen Long, Y/YL-NSW/9                                                                                        | 3,115 units<br>(Average Flat Size 37.2 m <sup>2</sup> )                | 224 <sup>(3)</sup>        | 133 <sup>(3)</sup> | 90 <sup>(3)</sup>  | 116 <sup>(3)</sup> |
|                     |                                                                                                                                                                                                                                       | Retail (3,900 m <sup>2</sup> )                                         | 9 <sup>(3)</sup>          | 10 <sup>(3)</sup>  | 13 <sup>(3)</sup>  | 14 <sup>(3)</sup>  |
|                     |                                                                                                                                                                                                                                       | 1 School                                                               | 7 <sup>(3)</sup>          | 30 <sup>(3)</sup>  | 1 <sup>(3)</sup>   | 1 <sup>(3)</sup>   |
|                     |                                                                                                                                                                                                                                       | Kindergarten (8 Classrooms)                                            | 25 <sup>(3)</sup>         | 25 <sup>(3)</sup>  | 1 <sup>(3)</sup>   | 1 <sup>(3)</sup>   |
|                     |                                                                                                                                                                                                                                       | Relocated Soy Sauce Factory (13,700 m <sup>2</sup> )                   | 0 <sup>(3)</sup>          | 4 <sup>(3)</sup>   | 10 <sup>(3)</sup>  | 2 <sup>(3)</sup>   |
| 7                   | Various Lots in D.D. 103 and D.D. 115, Tung Shing Lei, Nam Sang Wai, Yuen Long, YL-NSW/293                                                                                                                                            | 3,556 units<br>(assumed average flat size of about 44 m <sup>2</sup> ) | 255                       | 151                | 102                | 132                |
|                     |                                                                                                                                                                                                                                       | 9 Houses<br>(assumed average house size of 120 m <sup>2</sup> )        | 2                         | 1                  | 1                  | 1                  |
|                     |                                                                                                                                                                                                                                       | Retail (5,358 m <sup>2</sup> )                                         | 12                        | 13                 | 17                 | 19                 |

| Ref. <sup>(1)</sup> | Developments Location; Application No.                                                                                                                                                                                                                                                                                       | Parameters                                                                  | Trip Generations (pcu/hr) |                   |                   |                   |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------|-------------------|-------------------|-------------------|
|                     |                                                                                                                                                                                                                                                                                                                              |                                                                             | AM Peak                   |                   | PM Peak           |                   |
|                     |                                                                                                                                                                                                                                                                                                                              |                                                                             | Gen                       | Att               | Gen               | Att               |
| 8                   | Ho Chau Road, Yuen Long, New Territories (near Tung Shing Lei) (Various lots in D.D. 115 and adjoining Government land), LSPS/002                                                                                                                                                                                            | Private Housing 1,261 units (average flat size of about 40 m <sup>2</sup> ) | 91                        | 54                | 37                | 47                |
|                     |                                                                                                                                                                                                                                                                                                                              | Public Housing 1,868 units (average flat size of about 50 m <sup>2</sup> )  | 117                       | 80                | 56                | 75                |
|                     |                                                                                                                                                                                                                                                                                                                              | Retail 3,045 m <sup>2</sup>                                                 | 7                         | 8                 | 10                | 11                |
| 9                   | Lots 592 S.C ss.1 S.A, 592 S.C ss.4 and 1252 S.C in D.D. 115, Nam Sang Wai, Yuen Long, A/YL-NSW/274                                                                                                                                                                                                                          | 1,518 units (average flat size of About 46 m <sup>2</sup> )                 | 109                       | 65                | 43                | 56                |
|                     |                                                                                                                                                                                                                                                                                                                              | Retail / Commercial (1,800 m <sup>2</sup> )                                 | 4                         | 4                 | 6                 | 6                 |
|                     |                                                                                                                                                                                                                                                                                                                              | Wellness Centre                                                             | 10 <sup>(2)</sup>         | 10 <sup>(2)</sup> | 10 <sup>(2)</sup> | 10 <sup>(2)</sup> |
|                     |                                                                                                                                                                                                                                                                                                                              | Special Child Care Centre                                                   | 10 <sup>(2)</sup>         | 10 <sup>(2)</sup> | 10 <sup>(2)</sup> | 10 <sup>(2)</sup> |
| 10                  | Lot 4823 in D.D. 104, Ngau Tam Mei, Yuen Long, Y/YL-NTM/9                                                                                                                                                                                                                                                                    | 5,400 m <sup>2</sup> GFA Elderly Care Home 142 Beds                         | 10 <sup>(2)</sup>         | 10 <sup>(2)</sup> | 10 <sup>(2)</sup> | 10 <sup>(2)</sup> |
| 11                  | Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, A/YL-KTN/604                                                                                                                                                                                                              | 3,891 units (average flat size of about 46 m <sup>2</sup> )                 | 279                       | 165               | 111               | 144               |
|                     |                                                                                                                                                                                                                                                                                                                              | Eating Place/Shop and Services (5,500 m <sup>2</sup> )                      | 13                        | 13                | 17                | 20                |
|                     |                                                                                                                                                                                                                                                                                                                              | Social Welfare Facility (788 m <sup>2</sup> )                               | 10 <sup>(2)</sup>         | 10 <sup>(2)</sup> | 10 <sup>(2)</sup> | 10 <sup>(2)</sup> |
| 12                  | Phase 2 Development of Lots 1783 (Part), 1784 RP, 1788 RP, 1789 RP, 1790 RP (Part), 1791 RP, 1795 (Part), 1796 (Part), 1797 (Part), 1836 (Part), 1927 S.A and 1927 RP (Part) in D.D. 107 and Adjoining Government Land, Kam Tin, Yuen Long, A/YL-KTN/663                                                                     | 1,154 units (average flat size of about 43 m <sup>2</sup> )                 | 83                        | 49                | 33                | 43                |
| 13                  | Lot 2206 in D.D. 109, Kam Tai Road, Kam Tin, Yuen Long, A/YL-KTN/791                                                                                                                                                                                                                                                         | 330 units (average house/flat size of about 39 m <sup>2</sup> )             | 24                        | 14                | 9                 | 12                |
| 14                  | Lots 3054 S.A RP (Part), 3200 RP (Part), 3200 S.A RP, 3201 RP (Part), 3202 (Part), 3203 RP, 3204 RP, 3205 RP, 3156 RP, 3211 RP, 3212 RP, 3213 RP, 3214 S.A, 3 214 S.B, 3215, 3216, 3217, 3218 RP (Part), 3250 S.B ss.23 RP (Part), 3250 S.B ss.33 RP (Part) in D.D. 104, and Adjoining Government Land, Yuen Long, Y/YL-MP/3 | 106 Houses (average house size of about 163 m <sup>2</sup> )                | 30                        | 19                | 18                | 26                |
|                     |                                                                                                                                                                                                                                                                                                                              | Retail 607 m <sup>2</sup>                                                   | 2                         | 2                 | 2                 | 3                 |
| 15                  | Lot 1071 in D.D. 103, Ha Ko Po Tsuen, Kam Tin, Yuen Long, A/YL-KTN/964                                                                                                                                                                                                                                                       | 615 units (average flat size of about 38 m <sup>2</sup> )                   | 45                        | 27                | 18                | 23                |
|                     |                                                                                                                                                                                                                                                                                                                              | Retail 1,165 m <sup>2</sup>                                                 | 3                         | 3                 | 4                 | 5                 |
| 16                  | Lots 870 S.A, 870 RP, 877 RP, 878 S.A, 878 S.B, 878 S.C, 878 S.D, 878 S.E, 878 S.F, 878 RP and 892 in D.D. 115 and Adjoining                                                                                                                                                                                                 | 90 units (senior hostel, average flat size of about 66 m <sup>2</sup> )     | 7                         | 4                 | 3                 | 4                 |



| Ref. <sup>(1)</sup> | Developments Location; Application No.                                                                                                                                                                                                                                     | Parameters                                                                  | Trip Generations (pcu/hr) |                   |                   |                   |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------|-------------------|-------------------|-------------------|
|                     |                                                                                                                                                                                                                                                                            |                                                                             | AM Peak                   |                   | PM Peak           |                   |
|                     |                                                                                                                                                                                                                                                                            |                                                                             | Gen                       | Att               | Gen               | Att               |
|                     | Government Land, Tung Shing Lei, Nam Sang Wai, Yuen Long, A/YL-NSW/303                                                                                                                                                                                                     | 5,400 m <sup>2</sup><br>residential care home for the elderly<br>127 Beds   | 10 <sup>(2)</sup>         | 10 <sup>(2)</sup> | 10 <sup>(2)</sup> | 10 <sup>(2)</sup> |
| 17                  | Lots 879, 880 S.A ss.1, 880 S.B ss.1, 881 to 885, 889 RP (Part), 891 (Part), 1318, 1326 and 1344 in D.D. 115 and Adjoining Government Land, Au Tau, Nam Sang Wai, Yuen Long, A/YL-NSW/292                                                                                  | 9,178.9 m <sup>2</sup><br>residential care home for the elderly<br>530 Beds | 23 <sup>(3)</sup>         | 27 <sup>(3)</sup> | 21 <sup>(3)</sup> | 27 <sup>(3)</sup> |
| 18                  | Proposed Comprehensive Development Scheme to include Wetland Restoration Proposal and Proposed Filling of Ponds/Land and Excavation of Land in "OU(CDWRA)" Zone at Various Lots in D.D. 104, North of Kam Pok Road East, Pok Wai, Yuen Long, New Territories, A/YL-NSW/314 | 90 units<br>(average flat size of about 227 m <sup>2</sup> )                | 28 <sup>(3)</sup>         | 21 <sup>(3)</sup> | 21 <sup>(3)</sup> | 31 <sup>(3)</sup> |

Remarks: (1) Refer to **Drawing 4.2** for development locations;  
(2) Assume Nominal Trips of 10 pcu/hr; and,  
(3) Trips generation from project's TIA report.

4.2.7 Based on the above, the year 2031 reference traffic flows, as shown in **Drawing 4.2** are produced according to the following:

Year 2031 reference traffic flows: Review of Year 2034 Reference Traffic Flows from Y/YL-MP/10 + Adjustment of Growth Rate and other Planned/Committed Development Trip Generation

### 4.3 Development Traffic Generations

#### Trip Generation of Proposed Scheme

4.3.1 The proposed development will provide 649 units and the related trip generations of the residential units are estimated in accordance with the relevant trip rates as tabulated in the Transport Planning Design Manual (TPDM). **Table 4.4** summarises the trip rates of the proposed development.

**Table 4.4 Estimated Trip Rates of Proposed Development**

|                                                                                   | Trip Generations |        |         |        |
|-----------------------------------------------------------------------------------|------------------|--------|---------|--------|
|                                                                                   | AM Peak          |        | PM Peak |        |
|                                                                                   | Gen              | Att    | Gen     | Att    |
| <b>Residential Trip Rate (pcu/hr/flat)</b>                                        |                  |        |         |        |
| R(A), Average flat size = 70m <sup>2</sup> per unit,<br>Mean rate, for 36 units   | 0.0888           | 0.0515 | 0.0356  | 0.0480 |
| R(B), Average flat size = 100m <sup>2</sup> per unit,<br>Mean rate, for 315 units | 0.1961           | 0.1116 | 0.0955  | 0.1321 |
| R(B), Average flat size = 120m <sup>2</sup> per unit,<br>Mean rate, for 122 units | 0.2325           | 0.1461 | 0.134   | 0.1662 |
| R(B), Average flat size = 140m <sup>2</sup> per unit,<br>Mean rate, for 48 units  | 0.2689           | 0.1805 | 0.1725  | 0.2004 |
| R(C), Average flat size = 180m <sup>2</sup> per unit,<br>Mean rate, for 104 units | 0.2772           | 0.1769 | 0.1635  | 0.2394 |
| R(C), Average flat size = 300m <sup>2</sup> per unit,<br>Mean rate, for 24 units  | 0.3252           | 0.2609 | 0.2835  | 0.4074 |

4.3.2 The resulting trip generations of the proposed development are summarized in **Table 4.5**.

**Table 4.5 Estimated Trip Generation of Proposed Development**

|                                                          | Trip Generations |           |           |            |
|----------------------------------------------------------|------------------|-----------|-----------|------------|
|                                                          | AM Peak          |           | PM Peak   |            |
|                                                          | Gen              | Att       | Gen       | Att        |
| <b>Residential Trips<sup>(1)</sup></b>                   |                  |           |           |            |
| 36 units with an average flat size of 70m <sup>2</sup>   | 3                | 2         | 1         | 2          |
| 315 units with an average flat size of 100m <sup>2</sup> | 62               | 35        | 30        | 42         |
| 122 units with an average flat size of 120m <sup>2</sup> | 28               | 18        | 16        | 20         |
| 48 units with an average flat size of 140m <sup>2</sup>  | 13               | 9         | 8         | 10         |
| 104 units with an average flat size of 180m <sup>2</sup> | 29               | 18        | 17        | 25         |
| 24 units with an average flat size of 300m <sup>2</sup>  | 8                | 6         | 7         | 10         |
| <b>Total (pcu/hr):</b>                                   | <b>143</b>       | <b>88</b> | <b>79</b> | <b>109</b> |

Remarks: (1) By referring to **Table 4.4**.

4.3.3 As indicated in **Table 4.5**, the proposed development would generate a two-way total of 231 pcu/hr and 188 pcu/hr during the weekday morning and evening peak hour periods respectively. The development trip distributions are shown in **Drawing 4.3**.

#### Public Transport Trips

4.3.4 With reference to TD's Travel Characteristics Survey (TCS) 2011, the public transport demands for the Rezoning Site was estimated with reference to the average daily mechanised trips, the peak hour factor of mechanised trips and public transport modal share, with the assumptions of 90% inbound/outbound trips during AM and PM peak hours respectively. Based on the above assumptions, the public transport demands for the proposed development are estimated in **Table 4.6**.

**Table 4.6 Estimated Trip Generation of Approved Development**

| Index | Parameter                                                | Formula         | Result   |
|-------|----------------------------------------------------------|-----------------|----------|
| (a)   | Proposed No. of Units                                    | -               | 649      |
| (b)   | Average Domestic Household Size                          | -               | 2.8      |
| (c)   | Estimated Total Population                               | (a)*(b)         | 1,817    |
| (d)   | Average Daily Mechanised Trips per Person <sup>(1)</sup> | -               | 1.83     |
| (e)   | Peak Hour Percentage of Daily Total <sup>(2)</sup>       | -               | 12%      |
| (f)   | Assumed Percentage of Major Outbound Trips in Peak Hour  | -               | 90%      |
| (g)   | Estimated Peak Hour Trips by Proposed Development        | (c)*(d)*(e)*(f) | 360      |
| (h)   | Major Public Transport Modal Share <sup>(3)</sup>        | -               | 82%      |
| (i)   | Estimated Peak Hour Public Transport Demand              | (g)*(h)         | 296      |
| (j)   | Estimated Passenger using Franchised Bus                 | (i)*100%        | 296      |
| (k)   | - Yuen Long Bound Demand [AM Peak (PM peak)]             | 65% (68%)       | 192(201) |
| (l)   | - San Tin/Sheung Shui Bound Demand [AM Peak (PM peak)]   | 35% (32%)       | 104(95)  |

Remarks: (1) With reference to Table E.2 in TCS 2011;  
(2) Peak hour percentage to daily total, with reference to Para. 3.3.7 in TCS 2011; and,  
(3) Refer to Appendix A.3 in TCS 2011 for all transport modes excluding private car and taxi.

4.3.5 From **Table 4.6**, it is estimated that there will be one-way of approx. 296 pax/hr of public transport demand generated from the proposed residential development during the peak hour. It is assumed that the induces 100% of the induced PT trips would adopt Franchised Bus in the assessment, in conservative approach.

4.3.6 The estimated overall public transport demands at Year 2031 are summarized in **Table 4.7**.

**Table 4.7 Estimated Year 2031 Public Transport Demands**

| Peak Hour | Bound               | Average Peak Hour Service Capacity (pax) | Estimated Year 2031 Occupancy (pax) <sup>(1)</sup> | Additional Passenger Demands (pax) <sup>(2)</sup> | Overall Passenger Demands (pax) | Occupancy Rate (%) |
|-----------|---------------------|------------------------------------------|----------------------------------------------------|---------------------------------------------------|---------------------------------|--------------------|
| AM Peak   | Yuen Long           | 812                                      | 517                                                | 192                                               | 709                             | 87%                |
|           | San Tin/Sheung Shui | 713                                      | 397                                                | 104                                               | 501                             | 70%                |
| PM Peak   | Yuen Long           | 780                                      | 637                                                | 95                                                | 732                             | 94%                |
|           | San Tin/Sheung Shui | 776                                      | 455                                                | 201                                               | 656                             | 85%                |

Remarks: (1) +1.0% annual growth rate is applied to the average observed peak hour PT trips to estimate Year 2031 demand; and,  
(2) Refer to **Table 4.6**.

4.3.7 From **Table 4.7**, it can be shown that the demand for public transport service for Yuen Long bound at AM peak and San Tin/Sheung Shui bound at PM peak would increase upon occupation of the proposed residential development. The detailed arrangement of public transport service enhancement such as frequency improvement of the existing services will be subject to actual passenger demand and further review with the corresponding public transport operators and government departments, if necessary.



### Trip Generation of Approved Scheme

- 4.3.8 In the approved scheme, the development will provide 789 houses with an average flat size of approximately 105.1 m<sup>2</sup>. The trip generations of the approved development are summarised in **Table 4.8**.

**Table 4.8 Estimated Trip Generation of Approved Development**

|                                          | Trip Generations |        |         |        |
|------------------------------------------|------------------|--------|---------|--------|
|                                          | AM Peak          |        | PM Peak |        |
|                                          | Gen              | Att    | Gen     | Att    |
| Trip Rates (pcu/units/hr) <sup>(1)</sup> | 0.1961           | 0.1116 | 0.0955  | 0.1321 |
| No. of House Unit                        | 789              |        |         |        |
| Trips (pcu/hr)                           | 155              | 88     | 75      | 104    |

Remarks: (1) Trip Rates extracted from TPDM for private housing: low-density R(B) with average flat sizes of 100m<sup>2</sup>.

- 4.3.9 The net difference of the trip generation between the approved and proposed schemes is summarised in **Table 4.9**. As shown in **Table 4.9**, the trip generation of the current proposed scheme would be smaller in AM peak periods and slightly larger in PM peak periods, compared with the previous approved scheme.

**Table 4.9 Net Difference of Trip Generations between the Approved and Proposed Schemes**

|                           | Trip Generations (pcu/hr) |     |         |     |
|---------------------------|---------------------------|-----|---------|-----|
|                           | AM Peak                   |     | PM Peak |     |
|                           | Gen                       | Att | Gen     | Att |
| Approved Scheme [A]       | 155                       | 88  | 75      | 104 |
| Proposed Scheme [B]       | 143                       | 88  | 79      | 109 |
| Trip Difference [B] – [A] | -12                       | 0   | +4      | +5  |

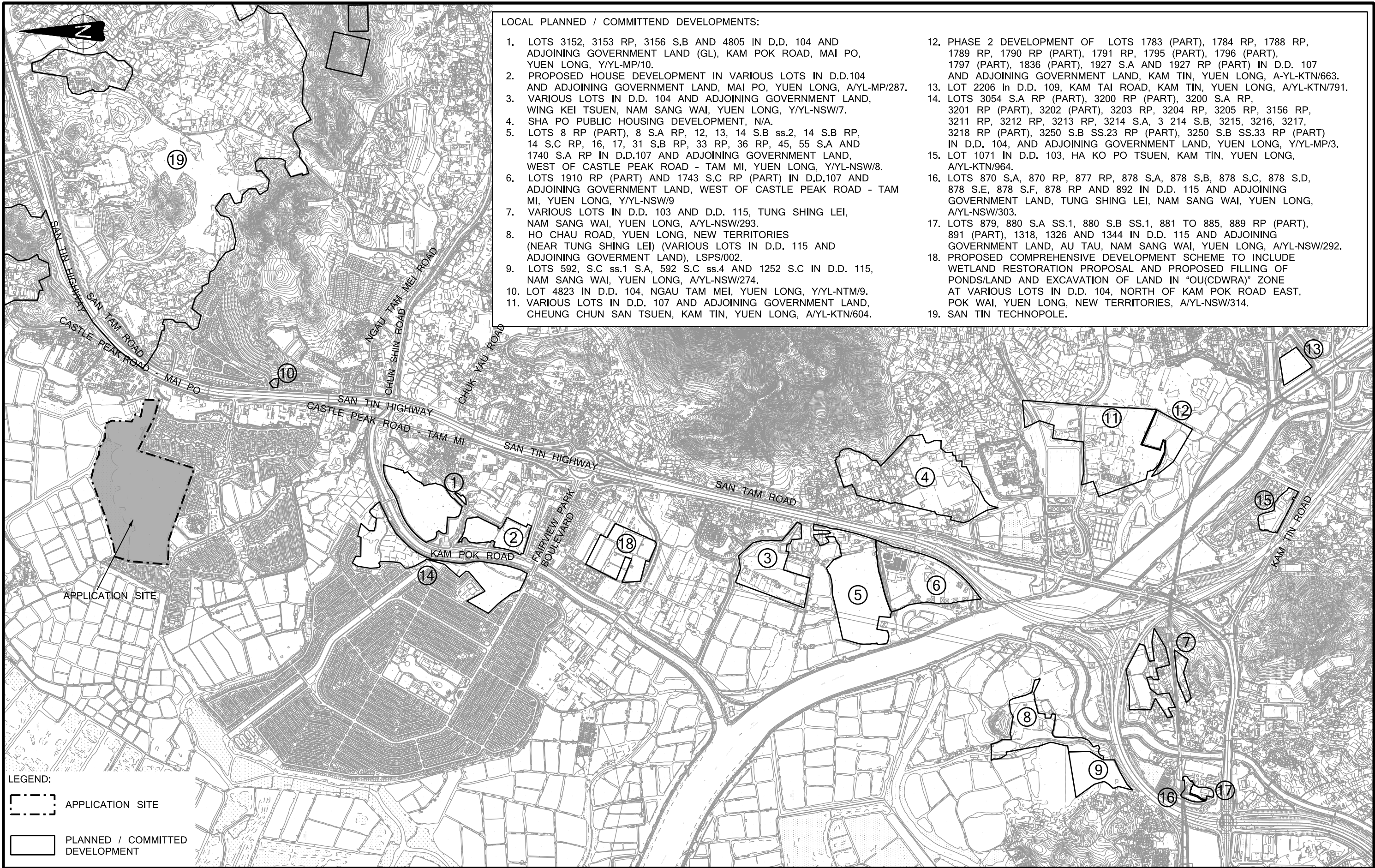
## 4.4 Traffic Forecast Data

- 4.4.1 Based on the above, the year 2031 design flows, as shown in **Drawing 4.4** are produced according to the following.

Year 2031 Design Case = Year 2031 Reference Case + Proposed Development Trip Generation

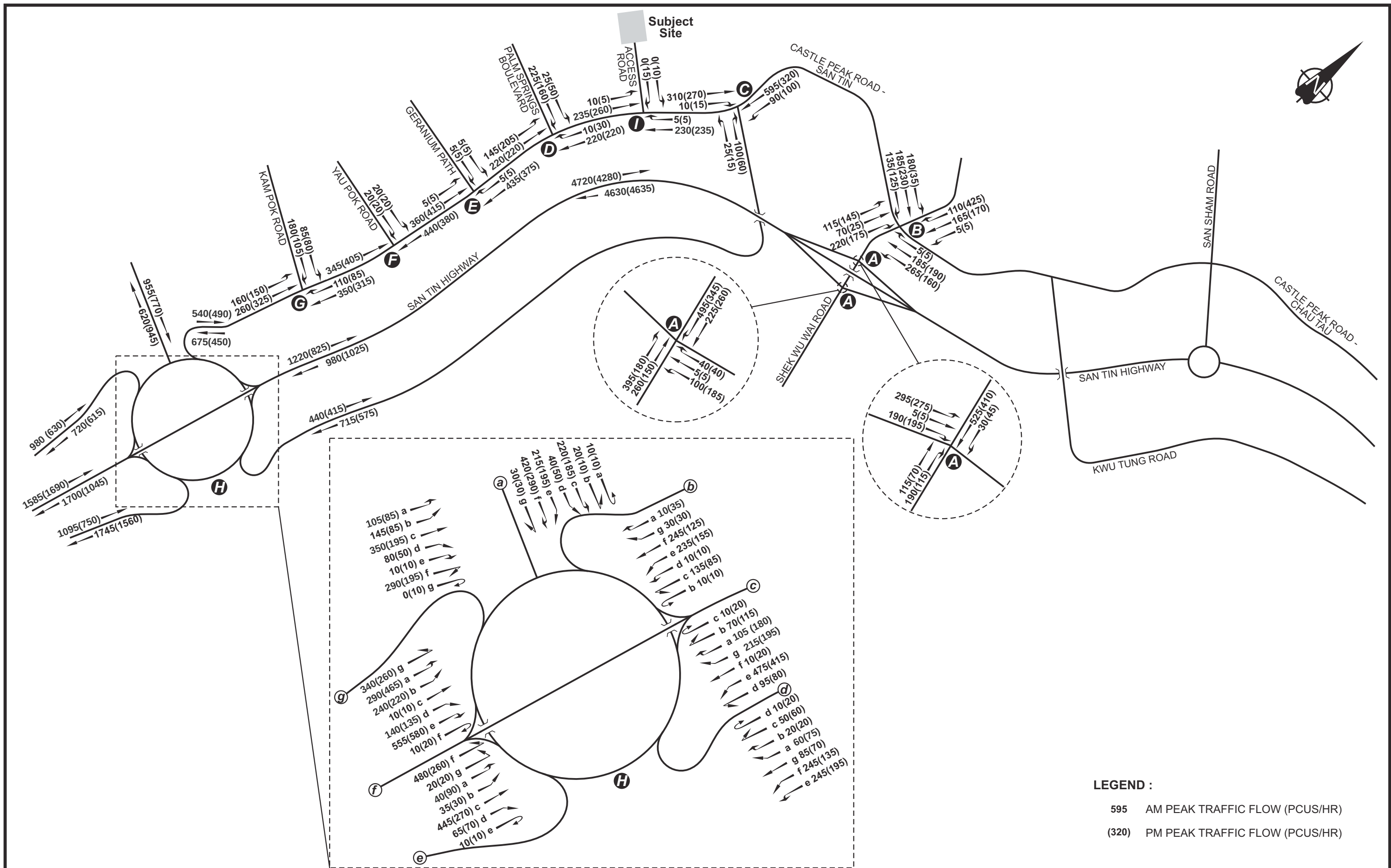


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|      |             |         |      |                                                                                                                                              |                                                                      |                |                     |                  |                           |           |                                                                                       |
|------|-------------|---------|------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------|---------------------|------------------|---------------------------|-----------|---------------------------------------------------------------------------------------|
| -    | -           | -       | -    | Project Title<br><br>PROPOSED COMPREHENSIVE RESIDENTIAL<br>DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101,<br>WO SHANG WAI, MAI PO, YUEN LONG | Drawing Title<br><br><b>LOCAL PLANNED AND COMMITTED DEVELOPMENTS</b> |                |                     |                  |                           |           |  |
| -    | -           | -       | -    |                                                                                                                                              |                                                                      |                |                     |                  |                           |           |                                                                                       |
| -    | -           | -       | -    |                                                                                                                                              |                                                                      |                |                     |                  |                           |           |                                                                                       |
| -    | -           | -       | -    |                                                                                                                                              |                                                                      |                |                     |                  |                           |           |                                                                                       |
| Rev. | Description | Checked | Date |                                                                                                                                              | Designed<br>MYC                                                      | Checked<br>CFC | Scale<br>N.T.S.(A3) | Date<br>MAY 2025 | Drawing No.<br><b>4.1</b> | Rev.<br>- |                                                                                       |





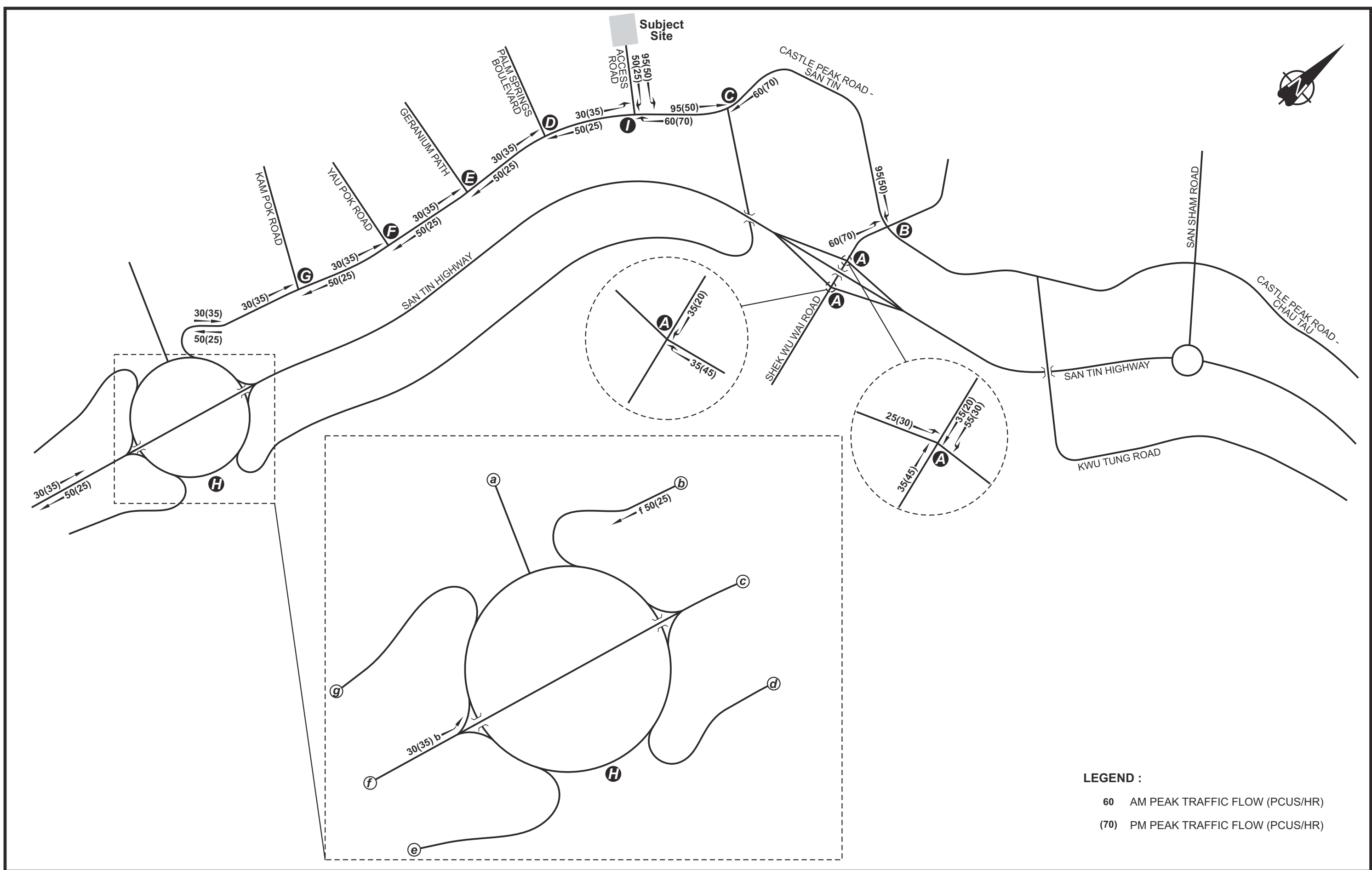
|      |             |         |      |
|------|-------------|---------|------|
| -    | -           | -       | -    |
| -    | -           | -       | -    |
| -    | -           | -       | -    |
| -    | -           | -       | -    |
| Rev. | Description | Checked | Date |

|                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------|
| Project Title                                                                                                           |
| PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT<br>LOTS 50 S.A. AND 77 IN D.D.101, WO SHANG WAI,<br>MAI PO, YUEN LONG |

|                              |     |         |     |       |     |      |          |             |     |      |   |
|------------------------------|-----|---------|-----|-------|-----|------|----------|-------------|-----|------|---|
| Drawing Title                |     |         |     |       |     |      |          |             |     |      |   |
| 2031 REFERENCE TRAFFIC FLOWS |     |         |     |       |     |      |          |             |     |      |   |
| Designed                     | MYC | Checked | CFC | Scale | NTS | Date | JUL 2025 | Drawing No. | 4.2 | Rev. | - |





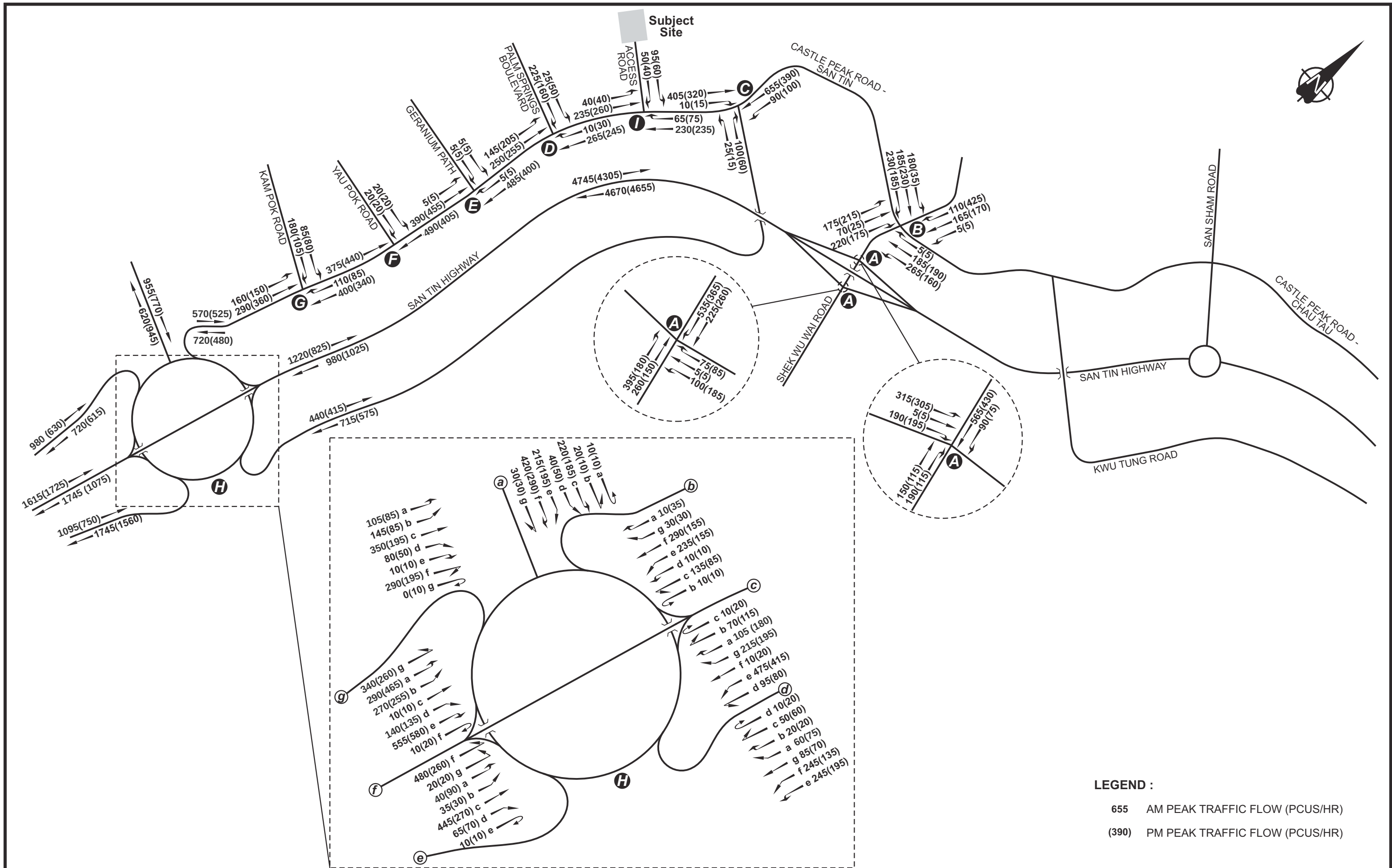


LEGEND :

60 AM PEAK TRAFFIC FLOW (PCUS/HR)

(70) PM PEAK TRAFFIC FLOW (PCUS/HR)

|      |             |         |      |                                                                                                                                              |                                                |     |         |     |       |     |      |                                                                                       |             |     |      |   |
|------|-------------|---------|------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|---------|-----|-------|-----|------|---------------------------------------------------------------------------------------|-------------|-----|------|---|
| -    | -           | -       | -    | Project Title<br><br>PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT<br>LOTS 50 S.A. AND 77 IN D.D.101, WO SHANG WAI,<br>MAI PO, YUEN LONG | Drawing Title<br><br>DEVELOPMENT TRAFFIC FLOWS |     |         |     |       |     |      |  |             |     |      |   |
| -    | -           | -       | -    |                                                                                                                                              |                                                |     |         |     |       |     |      |                                                                                       |             |     |      |   |
| -    | -           | -       | -    |                                                                                                                                              |                                                |     |         |     |       |     |      |                                                                                       |             |     |      |   |
| -    | -           | -       | -    |                                                                                                                                              |                                                |     |         |     |       |     |      |                                                                                       |             |     |      |   |
| Rev. | Description | Checked | Date |                                                                                                                                              |                                                |     |         |     |       |     |      |                                                                                       |             |     |      |   |
|      |             |         |      |                                                                                                                                              | Designed                                       | MYC | Checked | CFC | Scale | NTS | Date | JUL 2025                                                                              | Drawing No. | 4.3 | Rev. | - |



|      |             |         |      |
|------|-------------|---------|------|
| -    | -           | -       | -    |
| -    | -           | -       | -    |
| -    | -           | -       | -    |
| -    | -           | -       | -    |
| Rev. | Description | Checked | Date |

Project Title

PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT  
LOTS 50 S.A. AND 77 IN D.D.101, WO SHANG WAI,  
MAI PO, YUEN LONG

|                           |     |         |     |       |     |      |          |
|---------------------------|-----|---------|-----|-------|-----|------|----------|
| Drawing Title             |     |         |     |       |     |      |          |
| 2031 DESIGN TRAFFIC FLOWS |     |         |     |       |     |      |          |
| Designed                  | MYC | Checked | CFC | Scale | NTS | Date | JUL 2025 |
| Drawing No.               |     |         |     |       |     | 4.4  | Rev. -   |



## 5. TRAFFIC IMPACT ASSESSMENT

### 5.1 Year 2031 Junction Operational Performance

5.1.1 To investigate the traffic impact of the proposed development on the surrounding road network at the design year 2031, operational performance of the identified key local junctions has been assessed based on the planned junction layouts (for junction A and B) and existing layout for both 2031 reference and design cases. The assessment results for the year 2031 reference and design cases are summarised in **Table 5.1**. The junction calculation sheets are attached in **Annex A**.

**Table 5.1 Year 2031 Junction Operational Performance**

| Ref. <sup>(1)</sup> | Junction                                                        | RC/RFC <sup>(2)</sup> |         |                  |         |
|---------------------|-----------------------------------------------------------------|-----------------------|---------|------------------|---------|
|                     |                                                                 | 2031 Reference Case   |         | 2031 Design Case |         |
|                     |                                                                 | AM Peak               | PM Peak | AM Peak          | PM Peak |
| A                   | Shek Wu Wai Road / San Tin Highway Slip Road <sup>(3)</sup>     | >100%                 | >100%   | >100%            | >100%   |
| B                   | Shek Wu Wai Road / Road D3 / Road L11 / Road L12 <sup>(4)</sup> | 98%                   | 44%     | 93%              | 44%     |
| C                   | Castle Peak Road – Mai Po/San Tam Road                          | 0.34                  | 0.17    | 0.36             | 0.18    |
| D                   | Castle Peak Road – Mai Po/Palm Springs Boulevard                | 0.54                  | 0.45    | 0.56             | 0.46    |
| E                   | Castle Peak Road – Mai Po/Geranium Path                         | 0.02                  | 0.02    | 0.02             | 0.02    |
| F                   | Castle Peak Road – Tam Mi/Yau Pok Road                          | 0.10                  | 0.11    | 0.11             | 0.11    |
| G                   | Castle Peak Road – Tam Mi/Kam Pok Road                          | 0.62                  | 0.42    | 0.64             | 0.43    |
| H                   | Fairview Park Interchange                                       | 1.24                  | 1.01    | 1.27             | 1.04    |
| I                   | Castle Peak Road – Mai Po/Mai Po South Road                     | 0.01                  | 0.05    | 0.25             | 0.18    |

Remarks: (1) Refer to **Drawing 3.2** for junction reference;  
(2) RC = reserve capacity, RFC = ratio of flow to capacity;  
(3) Refer to **Drawing 5.1** for junction reference; and,  
(4) Refer to **Drawing 5.2** for junction reference.

5.1.2 The anticipated trip generations of the current proposed scheme would be smaller in AM peak periods and slightly larger in PM peak periods, compared with the previous approved scheme. The assessment results in **Table 5.1** indicated that the majority of identified key junctions would operate with ample capacity in year 2031, except for Junction H, which will be operated over capacity.

5.1.3 For Junction H, with reference to the Preliminary Technical Review on Site Formation and Infrastructure Works for Proposed Public Housing Developments at Sha Po, Shap Pat Heung and Tai Kei Leng, Yuen Long – Feasibility Study under Agreement No. CE 10/2020 (CE) and the planning application Y/YL-MP/10, there will be a planned junction improvement scheme for Fairview Park Interchange, as illustrated in **Drawing 5.3**. It is proposed to widen the entry lanes at Fairview Park Boulevard, Castle-Peak Road – Tam Mi, San Tam Road and the slip road from San Tin Highway northbound and southbound. In addition, an additional exclusive left-turn lane is proposed at San Tin Highway northbound for the traffic to Castle Peak Road – Tam Mi southbound. Nonetheless, should there be any delay whatsoever such that the abovementioned junction improvement works at Junction H are not in place, the applicant would take up the responsibility to carry out the related junction improvement works instead.



**Table 5.2 Year 2031 Junction Operational Performance (With Improvement)**

| Ref. | Junction                                 | RC/RFC <sup>(2)</sup> |         |                  |         |
|------|------------------------------------------|-----------------------|---------|------------------|---------|
|      |                                          | 2031 Reference Case   |         | 2031 Design Case |         |
|      |                                          | AM Peak               | PM Peak | AM Peak          | PM Peak |
| H    | Fairview Park Interchange <sup>(1)</sup> | 0.71                  | 0.75    | 0.72             | 0.76    |

Remarks: (1) Refer to **Drawing 5.3** for junction reference; and,  
(2) RC = reserve capacity, RFC = ratio of flow to capacity.

5.1.4 **Table 5.2** indicates that with the junction improvement schemes, Junction H will be operating within capacity in Year 2031.

5.1.5 The road link performance for identified road links was conducted as summarised in **Table 5.3**.

**Table 5.3 Year 2031 Road Links Performance**

| Ref. <sup>(1)</sup> | Road Link                 | Directions | Design Capacity (veh/hr) | Design Capacity (pcu/hr) <sup>(5)</sup> | 2031 Reference Case   |       |                    |      | 2031 Design Case      |       |                    |      |
|---------------------|---------------------------|------------|--------------------------|-----------------------------------------|-----------------------|-------|--------------------|------|-----------------------|-------|--------------------|------|
|                     |                           |            |                          |                                         | Traffic Flow (pcu/hr) |       | V/C <sup>(6)</sup> |      | Traffic Flow (pcu/hr) |       | V/C <sup>(6)</sup> |      |
|                     |                           |            |                          |                                         | AM                    | PM    | AM                 | PM   | AM                    | PM    | AM                 | PM   |
| L1                  | Mai Po South Road         | EB         | 700 <sup>(2)</sup>       | 910                                     | 0                     | 25    | 0.00               | 0.03 | 145                   | 100   | 0.16               | 0.11 |
|                     |                           | WB         | 700 <sup>(2)</sup>       | 910                                     | 15                    | 10    | 0.02               | 0.01 | 105                   | 115   | 0.12               | 0.13 |
| L2                  | Castle Peak Road – Mai Po | NB         | 700 <sup>(2)</sup>       | 910                                     | 245                   | 265   | 0.27               | 0.29 | 275                   | 300   | 0.30               | 0.33 |
|                     |                           | SB         | 700 <sup>(2)</sup>       | 910                                     | 230                   | 250   | 0.25               | 0.27 | 280                   | 275   | 0.31               | 0.30 |
| L3                  | Castle Peak Road – Mai Po | NB         | 700 <sup>(2)</sup>       | 910                                     | 320                   | 285   | 0.35               | 0.31 | 415                   | 335   | 0.46               | 0.37 |
|                     |                           | SB         | 700 <sup>(2)</sup>       | 910                                     | 620                   | 335   | 0.68               | 0.37 | 680                   | 405   | 0.75               | 0.45 |
| L4                  | Castle Peak Road – Tam Mi | NB         | 700 <sup>(2)</sup>       | 910                                     | 540                   | 490   | 0.59               | 0.54 | 570                   | 525   | 0.63               | 0.58 |
|                     |                           | SB         | 700 <sup>(2)</sup>       | 910                                     | 675                   | 450   | 0.74               | 0.49 | 720                   | 480   | 0.79               | 0.53 |
| L5                  | San Tin Highway           | NB         | 4700 <sup>(4)</sup>      | 6,100                                   | 4,720                 | 4,280 | 0.77               | 0.70 | 4,745                 | 4,305 | 0.78               | 0.70 |
|                     |                           | SB         | 4700 <sup>(4)</sup>      | 6,100                                   | 4,630                 | 4,635 | 0.76               | 0.76 | 4,670                 | 4,655 | 0.76               | 0.76 |

Remarks: (1) Refer to **Drawing 3.2** for key road links;  
(2) By TPDM Volume 2 Chapter 2 Table 2.4.1.1, design flow of a 2-lane single carriageway will be taken as 1400 veh/hr for two-way traffic, which implies 700 veh/hr for one-way direction;  
(3) By TPDM Volume 2 Chapter 2 Table 2.4.1.1, design flow of a dual 3-lane single carriageway for PD will be taken as 4200 veh/hr for one-way direction;  
(4) By TPDM Volume 2 Chapter 2 Table 2.4.1.1, design flow of a 3-lane dual expressway will be taken as 4700 veh/hr for one-way direction;  
(5) PCU factor of 1.3 adopted; and,  
(6) V/C = volume to capacity ratio.

5.1.6 The assessment results in **Table 5.3** indicate that all identified key road links would operate with ample capacity in year 2031 upon completion of the proposed development.

5.1.7 Therefore, it is anticipated that the proposed development would not cause any significant traffic impact to the road network.

## 5.2 Year 2031 Pedestrian Flow and Queuing Space Assessment

5.2.1 For the growth rate of pedestrian flow, references have been made to the latest “Projections of Population Distribution 2023-2031” as published by Pland’s Working Group on Population Distribution Projections in March 2024. The available projected population for the local Tertiary Planning Unit (TPU) in the vicinity, as shown in **Drawing 5.4**, are referenced to derive the annual growth rates as summarised in **Table 5.4**.

**Table 5.4 Projected Populations of Selected Tertiary Planning Units**

| Tertiary Planning Unit (TPU) | Projected Population |               | Growth Rate (p.a.) |
|------------------------------|----------------------|---------------|--------------------|
|                              | 2021                 | 2027          | 21/27              |
| 541                          | 19,100               | 19,900        | +0.7%              |
| 542                          | 12,500               | 11,700        | -1.1%              |
| 543 & 546                    | 3,300                | 5,000         | +7.2%              |
| 544                          | 3,500                | 3,200         | -1.5%              |
| <b>Total</b>                 | <b>38,400</b>        | <b>39,800</b> | <b>+0.6%</b>       |

5.2.2 As shown in **Table 5.4**, the projected population planning data suggest that the annual growth rate between Year 2021 and Year 2027 is +0.6% when considering the local TPUs. In conservative approach, +1.0% per annum is adopted for the background pedestrian growth of the local pedestrian flow from Year 2024 to Year 2031, and the consideration of the induced pedestrian trips for franchised bus demand of **Table 4.7**.

5.2.3 The peak hour pedestrian flows in Year 2031 under both reference and design scenarios are shown in **Drawing 5.5** and **5.6**, and the results of the operational performance of identified footpaths and concerned queuing area of bus stops are summarized in **Table 5.5** and **5.6**.

**Table 5.5 2031 Level-Of-Service Assessment**

| Ref.<br>(1) | Actual<br>Width<br>(m) | Effective<br>Width<br>(m) (2) | 2031<br>Reference<br>Peak Hourly<br>Flow<br>(ped/hr) (3) |    | 2031<br>Reference<br>Peak Flow<br>Rate<br>(ped/min/m) (4) |      | LOS (5) |    | 2031 Design<br>Peak Hourly<br>Flow<br>(ped/hr) (6) |     | 2031 Design<br>Peak Flow<br>Rate<br>(ped/min/m) (4) |      | LOS (5) |    |
|-------------|------------------------|-------------------------------|----------------------------------------------------------|----|-----------------------------------------------------------|------|---------|----|----------------------------------------------------|-----|-----------------------------------------------------|------|---------|----|
|             |                        |                               | AM                                                       | PM | AM                                                        | PM   | AM      | PM | AM                                                 | PM  | AM                                                  | PM   | AM      | PM |
|             |                        |                               |                                                          |    |                                                           |      |         |    |                                                    |     |                                                     |      |         |    |
| Fp1         | 2.1                    | 1.1                           | 12                                                       | 10 | 0.18                                                      | 0.15 | A       | A  | 308                                                | 306 | 4.67                                                | 4.64 | A       | A  |
| Fp2         | 2.3                    | 1.3                           | 21                                                       | 44 | 0.27                                                      | 0.56 | A       | A  | 125                                                | 245 | 1.60                                                | 3.14 | A       | A  |
| Fp3         | 1.5                    | 0.5                           | 24                                                       | 40 | 0.80                                                      | 1.33 | A       | A  | 216                                                | 135 | 7.20                                                | 4.50 | A       | A  |
| Fp4         | 1.7                    | 0.7                           | 5                                                        | 6  | 0.12                                                      | 0.14 | A       | A  | 5                                                  | 6   | 0.12                                                | 0.14 | A       | A  |

Remarks: (1) Refer to **Drawing 5.5** and **Drawing 5.6** for locations and operational performance of identified footpaths;  
(2) Effective width for footpath = Actual width – 1.0m dead width (0.5m dead width on one side of footpath);  
(3) Reference pedestrian flow = Year 2024 peak hour pedestrian flows\*(1+adopted growth rate of 1.0%)<sup>10</sup>;  
(4) Peak flow rate = Peak hourly flow ÷ 60 ÷ effective width;  
(5) Refer to TPDM Vol.6 Chapter 10 Chapter 10.5.2; and,  
(6) Design pedestrian flow = Reference pedestrian flow + induced pedestrian trips for franchised bus demand.

**Table 5.6 2031 Queuing Area Level-Of-Service Assessment for Bus Stops**

| Ref.                                           | Queuing Area (m <sup>2</sup> ) | 2031 Reference                                     |                                     |                                                       |                    | 2031 Design                                        |                                     |                                        |                    |
|------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------------------------|--------------------|----------------------------------------------------|-------------------------------------|----------------------------------------|--------------------|
|                                                |                                | Passenger Flow at Bus Stop (pax/hr) <sup>(1)</sup> | Maximum Queue at Queuing Area (pax) | Avg. Queuing Space (m <sup>2</sup> /p) <sup>(2)</sup> | LOS <sup>(3)</sup> | Passenger Flow at Bus Stop (pax/hr) <sup>(4)</sup> | Maximum Queue at Queuing Area (pax) | Avg. Queuing Space (m <sup>2</sup> /p) | LOS <sup>(3)</sup> |
| Maple Garden Bus Stop – Yuen Long Bound (SB)   | 5.8                            | 3                                                  | 2<br>(i.e. 3/60x25)                 | 2.9                                                   | A                  | 195                                                | 82<br>(i.e. 195/60x25)              | 0.07                                   | F                  |
| Palm Springs Bus Stop – Sheung Shui Bound (NB) | 20.3                           | 3                                                  | 2<br>(i.e. 3/60x25)                 | 10.2                                                  | A                  | 107                                                | 45<br>(i.e. 107/60x25)              | 0.45                                   | F                  |

Remarks: (1) Reference pedestrian flow = Year 2024 peak hour passenger flows\*(1+adopted growth rate of 1.0%)<sup>10</sup>;  
(2) Average Queuing Space = Queuing Area ÷ (Maximum Queue);  
(3) Refer to HCM2000, EXHIBIT 11-9; and,  
(4) Design pedestrian flow = Reference pedestrian flow + induced pedestrian trips for franchised bus demand.

5.2.4 As shown in **Table 5.5** and **5.6**, the results indicate that the identified footpaths are operating with adequate spare capacities to cater for the future demand during the peak hours under reference and design scenarios. However, the LOS of queuing area at bus stop would be operated with LOS F under the Year 2031 design scenario.

5.2.5 Therefore, it is proposed to widen the queuing area at both concerned bus stops to allow the LOS queuing area to reach LOS C, (i.e. the average pedestrian space = 0.6 m<sup>2</sup>/p). The queuing area assessment under both 2031 reference and design scenarios are shown in **Table 5.7**, and the propose widening scheme is illustrated in **Drawing 5.7**. The proposed widening works would be undertaken by the applicant.



**Table 5.7 2031 Queuing Area Level-Of-Service Assessment for Bus Stops (With Widening)**

| Ref.                                           | Queuing Area (m <sup>2</sup> ) | 2031 Reference                                     |                                     |                                                       |                    | 2031 Design                                        |                                     |                                        |                    |
|------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------------------------|--------------------|----------------------------------------------------|-------------------------------------|----------------------------------------|--------------------|
|                                                |                                | Passenger Flow at Bus Stop (pax/hr) <sup>(1)</sup> | Maximum Queue at Queuing Area (pax) | Avg. Queuing Space (m <sup>2</sup> /p) <sup>(2)</sup> | LOS <sup>(3)</sup> | Passenger Flow at Bus Stop (pax/hr) <sup>(4)</sup> | Maximum Queue at Queuing Area (pax) | Avg. Queuing Space (m <sup>2</sup> /p) | LOS <sup>(3)</sup> |
| Maple Garden Bus Stop – Yuen Long Bound (SB)   | 49.2<br>(5.8+43.4)             | 3                                                  | 2<br>(i.e. 3/60x25)                 | 24.9                                                  | A                  | 195                                                | 82<br>(i.e. 195/60x25)              | 0.6                                    | C                  |
| Palm Springs Bus Stop – Sheung Shui Bound (NB) | 27.0<br>(20.3+6.7)             | 3                                                  | 2<br>(i.e. 3/60x25)                 | 13.5                                                  | A                  | 107                                                | 45<br>(i.e. 107/60x25)              | 0.6                                    | C                  |

Remarks: (1) Reference pedestrian flow = Year 2024 peak hour passenger flows\*(1+adopted growth rate of 1.0%)<sup>10</sup>;  
(2) Average Queuing Space = Queuing Area ÷ (Maximum Queue);  
(3) Refer to HCM2000, EXHIBIT 11-9; and,  
(4) Design pedestrian flow = Reference pedestrian flow + induced pedestrian trips for franchised bus demand.

5.2.6 **Table 5.7** indicates that with the widening scheme, the LOS of the identified queuing area at bus stops would be operating within capacity in Year 2031.

## 5.3 Sensitivity Assessment

### Assessment 1: Existing Junction Layout for Junction A and Junction B in Design Year 2031

- 5.3.1 The layout of Junction A (Shek Wu Wai Road / San Tin Highway Slip Road) and Junction B (Shek Wu Wai Road / Road D3 / Road L11 / Road L12) has assumed to be modified as per the proposed road network under San Tin Technopole. In case there is delay on the proposed road work under San Tin Technopole, the junction operational performance for Junction A and Junction B based on the existing junction layout under Design scenario is also assessed. However, as the junction improvement works are mostly to accommodate the development of STT, therefore the STT related traffic trips would also be excluded in the sensitivity assessment. The assessment results for the year 2031 reference and design cases based on existing junction layouts of Junctions A and B are summarised in **Table 5.8**. The junction calculation sheets are attached in **Annex D**.

**Table 5.8 Year 2031 Junction Operational Performance for Junction A and B**

| Ref. <sup>(1)</sup> | Junction                                     | RC/RFC <sup>(2)</sup> in Sensitivity Test |         |                  |         |
|---------------------|----------------------------------------------|-------------------------------------------|---------|------------------|---------|
|                     |                                              | 2031 Reference Case                       |         | 2031 Design Case |         |
|                     |                                              | AM Peak                                   | PM Peak | AM Peak          | PM Peak |
| A1                  | Shek Wu Wai Road/ San Tin Highway Slip Road  | 0.41                                      | 0.40    | 0.43             | 0.44    |
| A2                  | Shek Wu Wai Road/ Mai Po Lung Road           | 0.52                                      | 0.31    | 0.57             | 0.34    |
| B                   | Castle Peak Road – San Tin/ Shek Wu Wai Road | 0.81                                      | 0.70    | 0.91             | 0.78    |

Remarks: (1) Refer to **Drawing 3.2** for junction reference; and,  
(2) RC = reserve capacity, RFC = ratio of flow to capacity.

- 5.3.2 The assessment results in **Table 5.8** indicated that the Junction A1 and A2 would operate with ample capacity in year 2031, based on the existing junction layout, except for Junction B, which would be operated over capacity.
- 5.3.3 For Junction B, the existing priority junction is proposed to be upgraded into a roundabout junction with cautionary crossings proposed to the east of the junction. The proposed improved layout of Junction B, which will be constructed subject to further review of San Tin Technopole's project, is illustrated in **Drawing 5.8**. Nonetheless, should there be any delay on the proposed road works under San Tin Technopole, the applicant would take up the responsibility to carry out the related junction improvement works at Junction B.

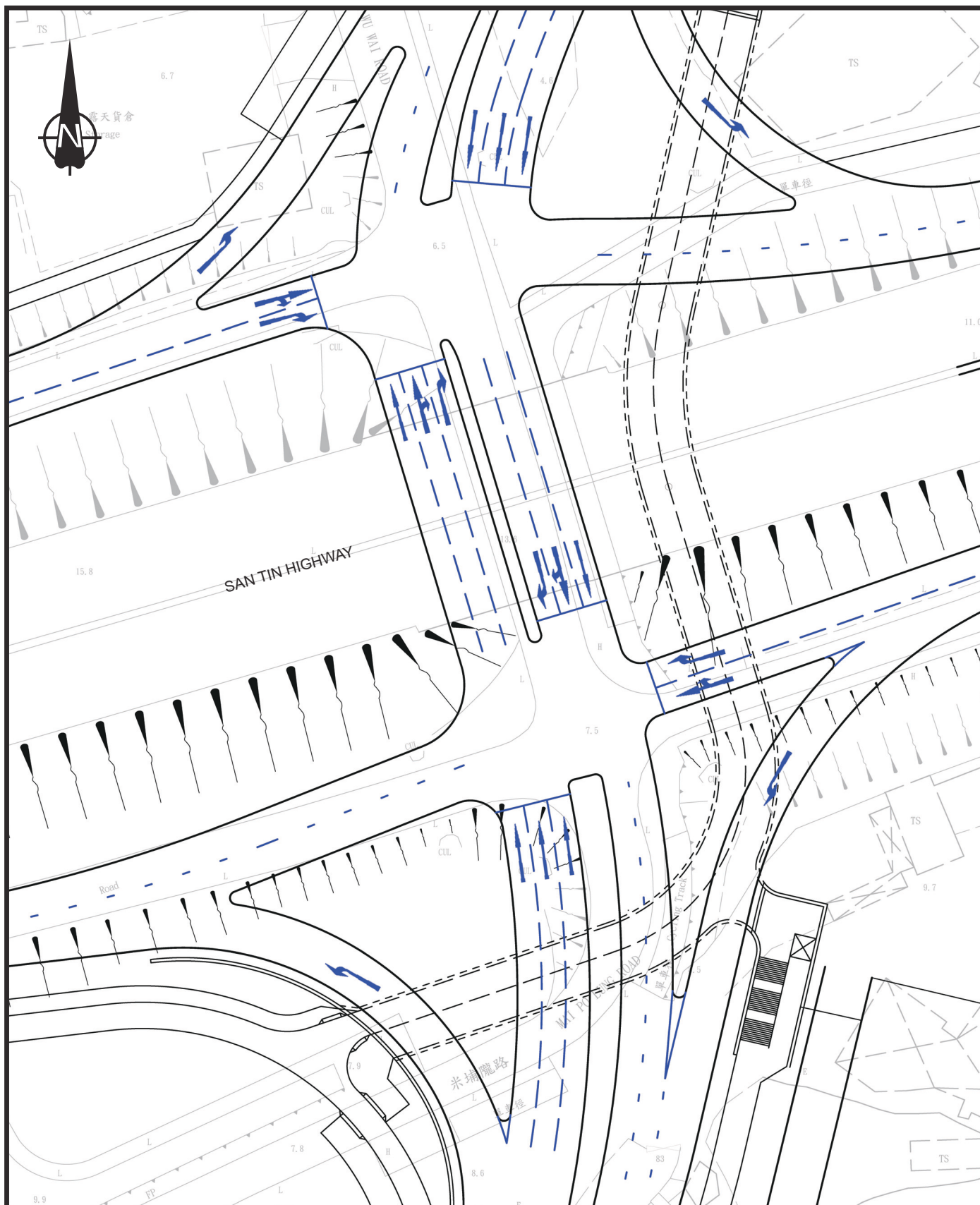
**Table 5.9 Year 2031 Junction Operational Performance for Junction B (With Improvement)**

| Ref. <sup>(1)</sup> | Junction                                     | RC/RFC <sup>(2)</sup> in Sensitivity Test |         |                  |         |
|---------------------|----------------------------------------------|-------------------------------------------|---------|------------------|---------|
|                     |                                              | 2031 Reference Case                       |         | 2031 Design Case |         |
|                     |                                              | AM Peak                                   | PM Peak | AM Peak          | PM Peak |
| B                   | Castle Peak Road – San Tin/ Shek Wu Wai Road | 0.39                                      | 0.35    | 0.42             | 0.39    |

Remarks: (1) Refer to **Drawing 3.2** for junction reference; and,  
(2) RC = reserve capacity, RFC = ratio of flow to capacity.

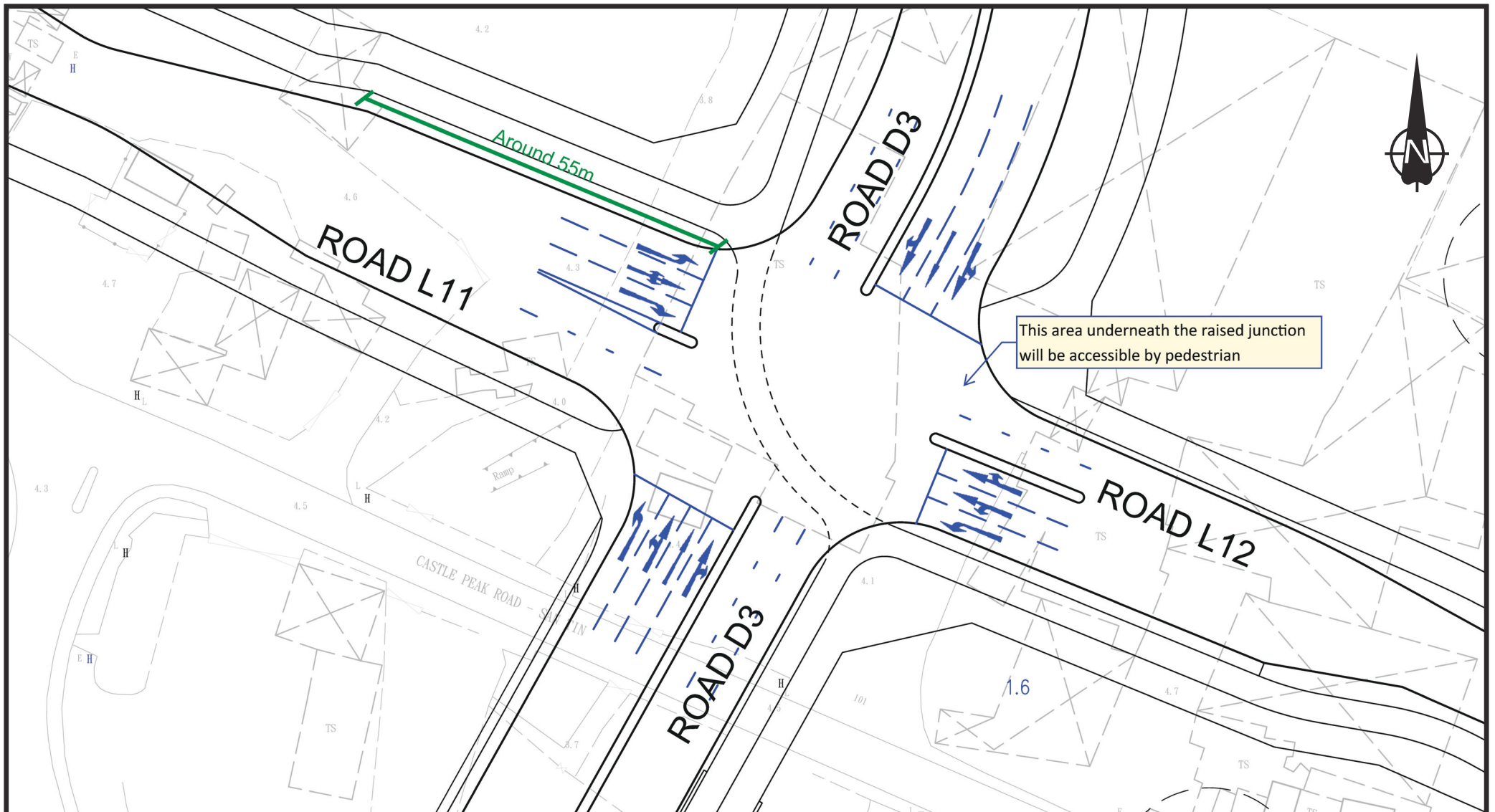
5.3.4 **Table 5.9** indicates that with the junction improvement schemes, Junction B would be operating within capacity in Year 2031. Nevertheless, the junction improvement scheme for Junction B would be assessed based on a hypothetical approach in the sensitivity test, as the proposed road works related to STT should be in place.





|               |             |         |      |                                                                                                                      |             |         |          |
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| -             | -           | -       | -    | -                                                                                                                    | -           | -       | -        |
| Rev.          | Description | Checked | Date | Rev.                                                                                                                 | Description | Checked | Date     |
| Project Title |             |         |      | PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT<br>LOTS 50 S.A. AND 77 IN D.D.101, WO SHANG WAI, MAI PO, YUEN LONG |             |         |          |
| Drawing Title |             |         |      | <b>PLANNED JUNCTION IMPROVEMENT LAYOUT OF<br/>SHEK WU WAI ROAD / SAN TIN HIGHWAY SLIP ROAD (A)</b>                   |             |         |          |
| Designed      | MYC         | Checked | CFC  | Scale                                                                                                                | NTS         | Date    | MAY 2025 |
| Drawing No.   |             | 5.1     |      | Rev.                                                                                                                 |             | -       |          |



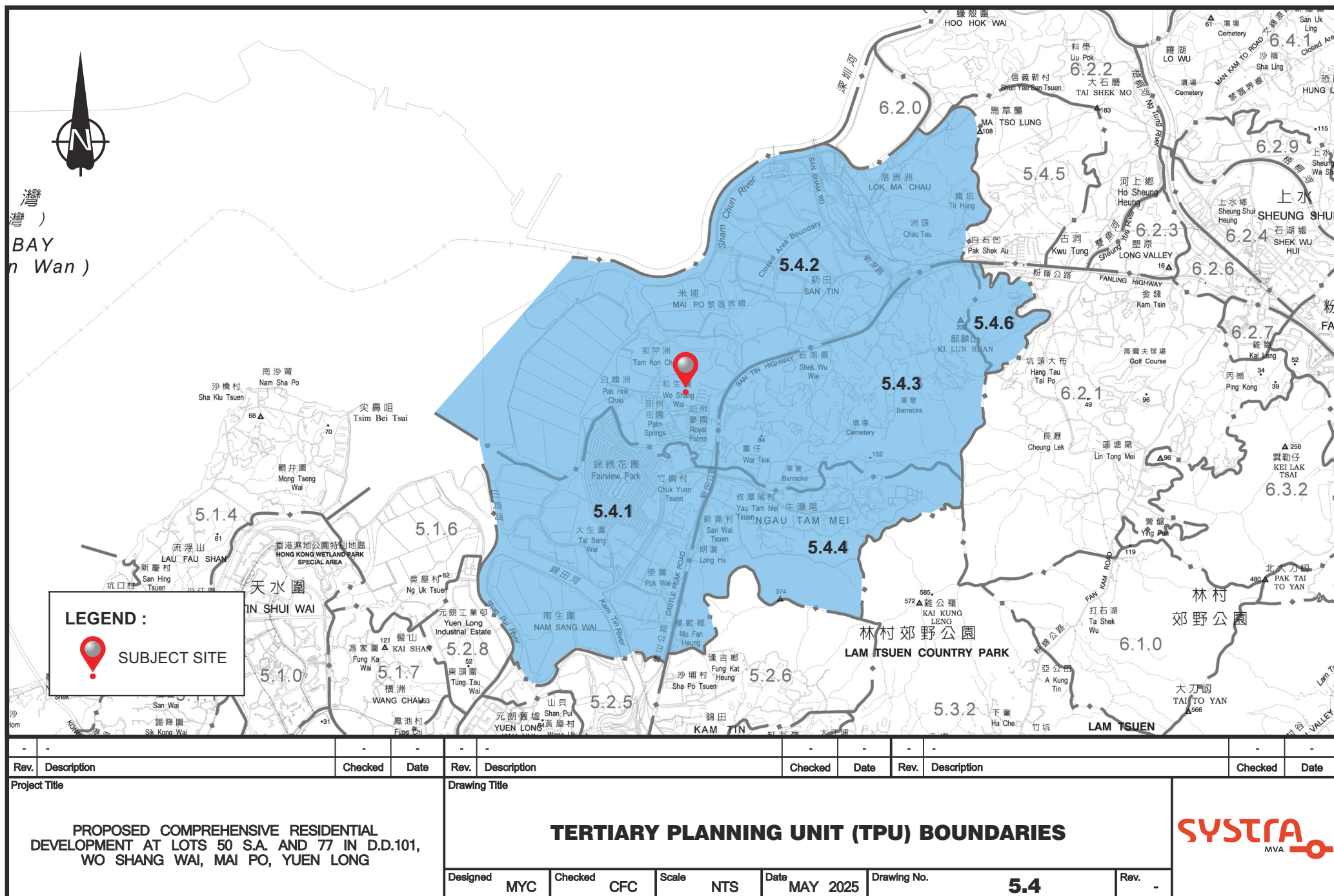


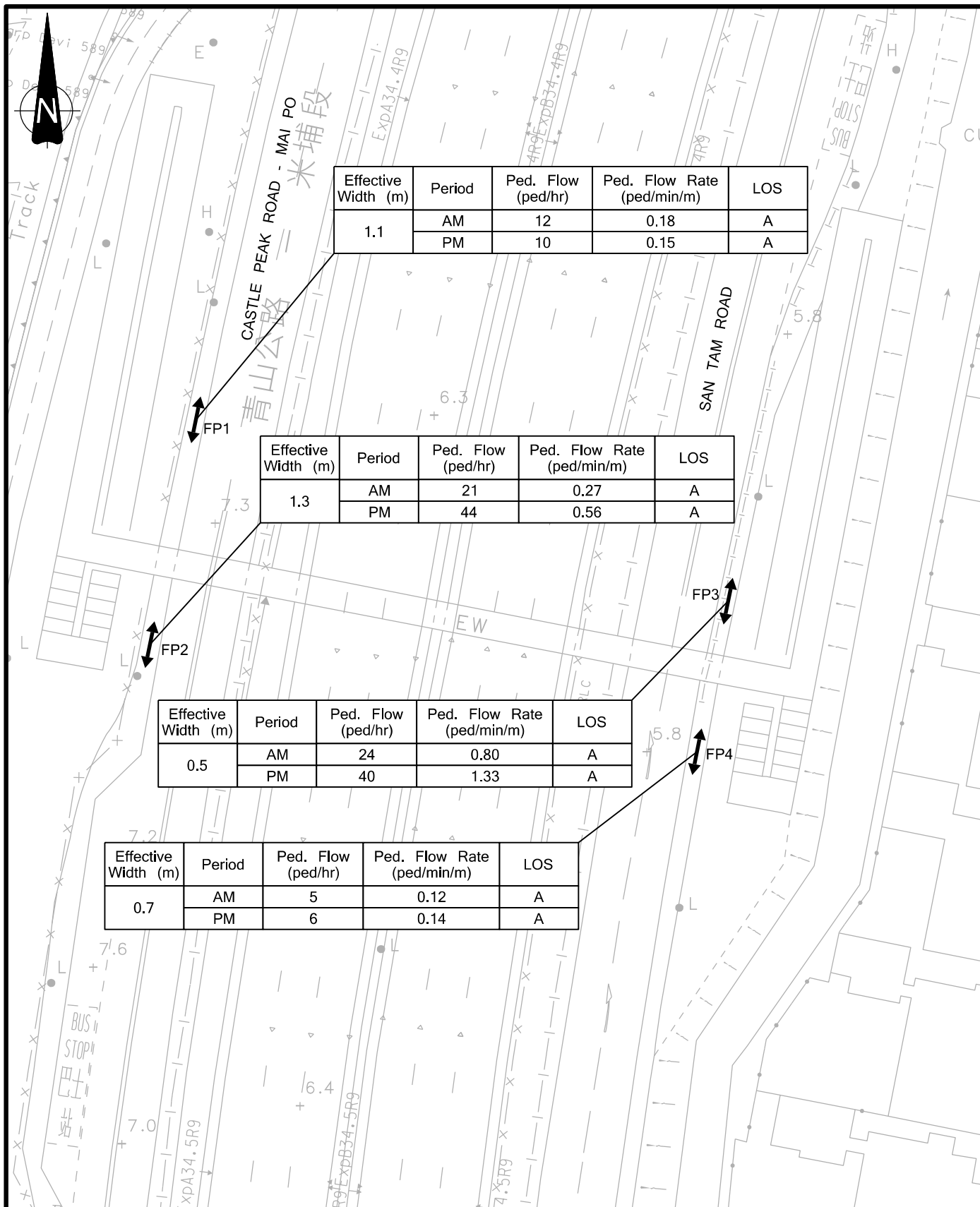
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| Project Title                                                                                                     |             |         |      | Drawing Title                                                                               |             |         |          |             |             |         |  |  |
| PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT LOTS 50 S.A. AND 77 IN D.D.101, WO SHANG WAI, MAI PO, YUEN LONG |             |         |      | PLANNED JUNCTION IMPROVEMENT LAYOUT OF SHEK WU WAI ROAD / ROAD D3 / ROAD L11 / ROAD L12 (B) |             |         |          |             |             |         |                                                                                       |  |
| Designed                                                                                                          | MYC         | Checked | CFC  | Scale                                                                                       | NTS         | Date    | MAY 2025 | Drawing No. | 5.2         | Rev.    |                                                                                       |  |



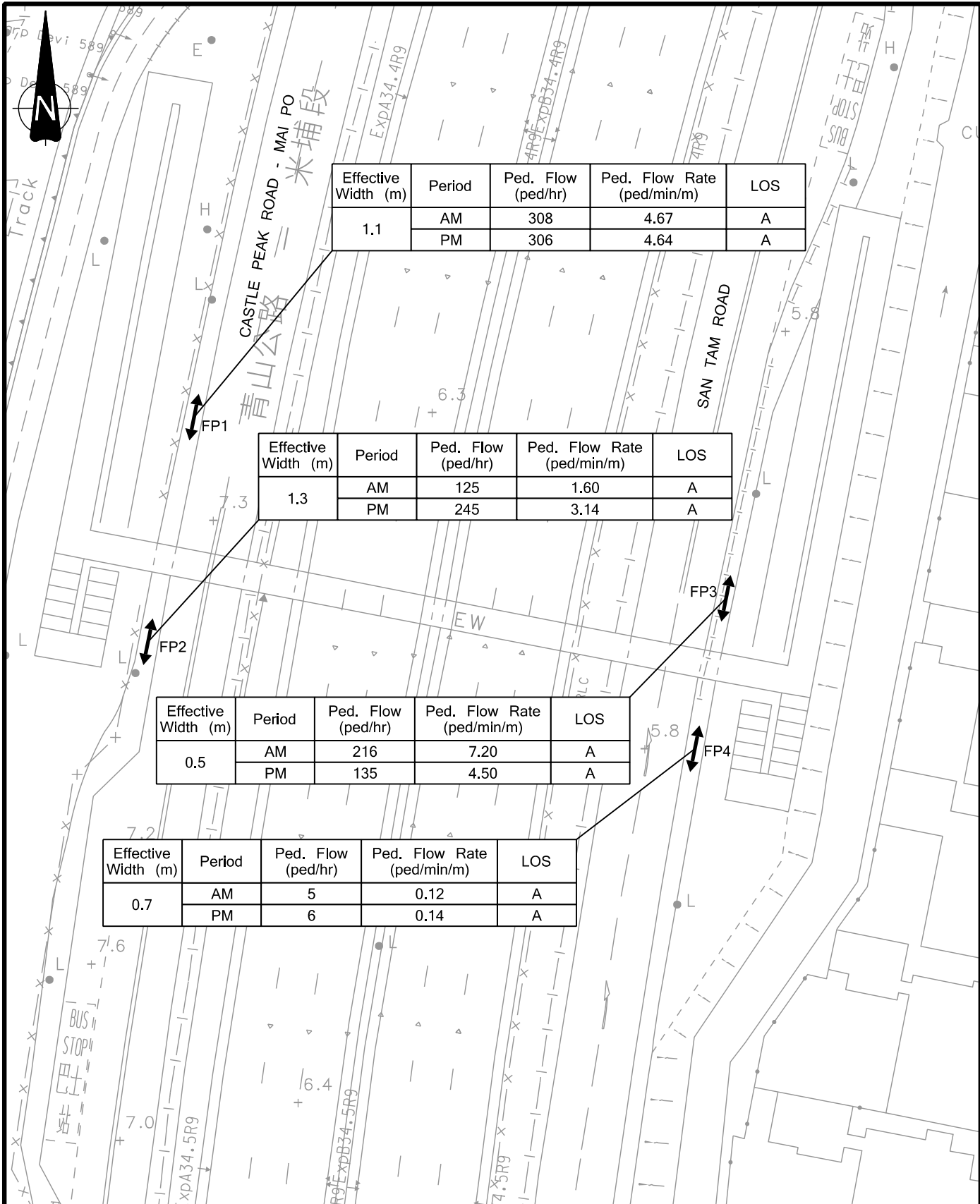








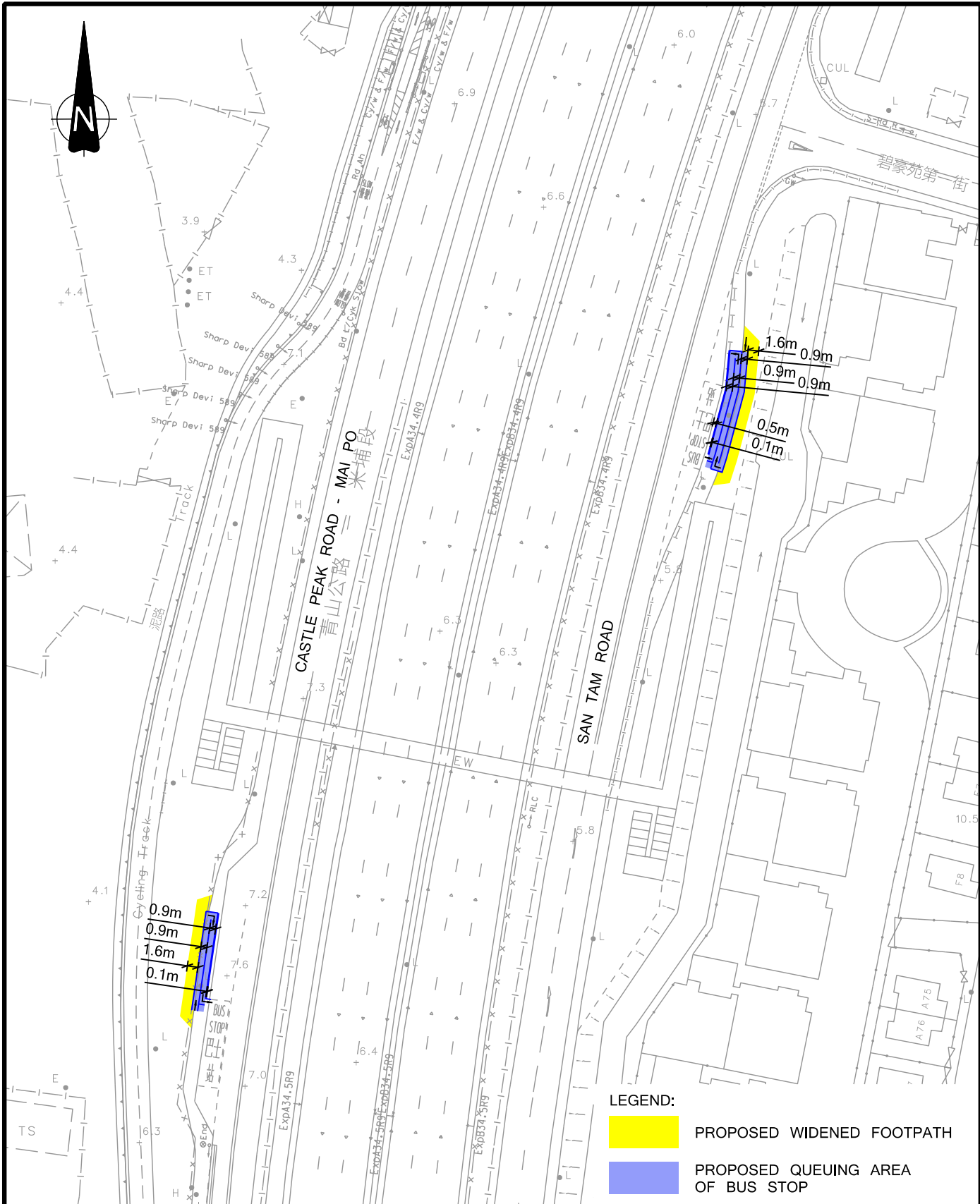
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| Rev.                                           | Description | Checked | Date | Rev.                                                                                                              | Description | Checked | Date     |
| Project Title                                  |             |         |      | PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101, WO SHANG WAI, MAI PO, YUEN LONG |             |         |          |
| Drawing Title                                  |             |         |      | SYSTRA MVA                                                                                                        |             |         |          |
| YEAR 2031 REFERENCE PEAK HOUR PEDESTRIAN FLOWS |             |         |      |                                                                                                                   |             |         |          |
| Designed                                       | MYC         | Checked | CFC  | Scale                                                                                                             | N.T.S.(A4)  | Date    | MAY 2025 |
| Drawing No.                                    |             | 5.5     |      | Rev.                                                                                                              |             | -       |          |



|                                             |             |         |      |       |             |                                  |          |
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| Rev.                                        | Description | Checked | Date | Rev.  | Description | Checked                          | Date     |
| Project Title                               |             |         |      |       |             | <div>SYSTRA</div> <div>MVA</div> |          |
| Drawing Title                               |             |         |      |       |             |                                  |          |
| YEAR 2031 DESIGN PEAK HOUR PEDESTRIAN FLOWS |             |         |      |       |             |                                  |          |
| Designed                                    | MYC         | Checked | CFC  | Scale | N.T.S.(A4)  | Date                             | JUL 2025 |
| Drawing No.                                 |             | 5.6     |      | Rev.  |             | -                                |          |



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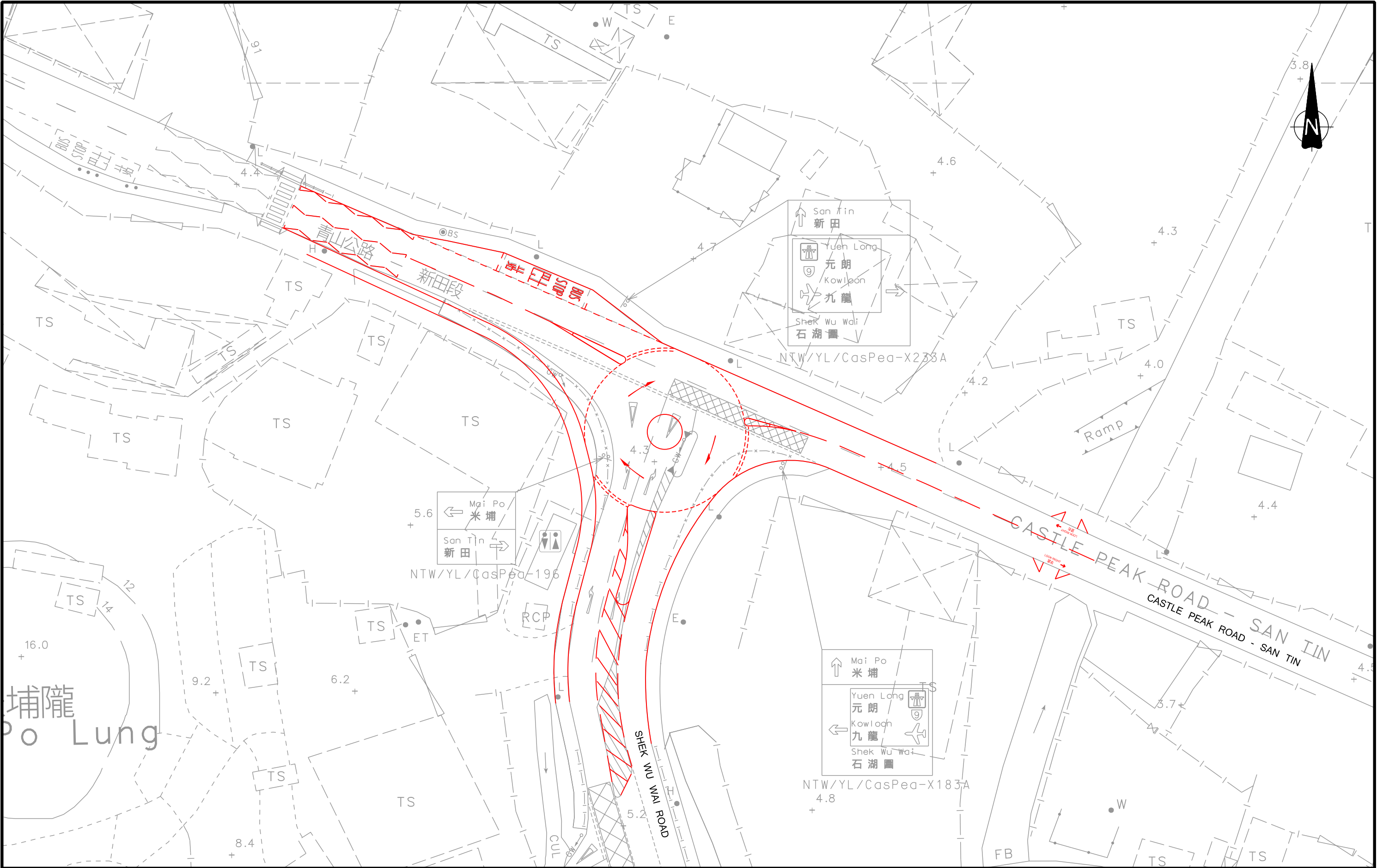
LEGEND:

PROPOSED WIDENED FOOTPATH

PROPOSED QUEUING AREA OF BUS STOP

|                                |             |         |     |         |           |                                                                                                                   |             |             |     |         |      |
|--------------------------------|-------------|---------|-----|---------|-----------|-------------------------------------------------------------------------------------------------------------------|-------------|-------------|-----|---------|------|
| -                              |             | -       |     | -       |           | -                                                                                                                 |             | -           |     | -       |      |
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| Project Title                  |             |         |     |         |           | PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101, WO SHANG WAI, MAI PO, YUEN LONG |             |             |     |         |      |
| Drawing Title                  |             |         |     |         |           | <div>SYSTRA</div> <div>MVA</div>                                                                                  |             |             |     |         |      |
| PROPOSED WIDENING OF BUS STOPS |             |         |     |         |           |                                                                                                                   |             |             |     |         |      |
| Designed                       | MYC         | Checked | CFC | Scale   | 1:800(A4) | Date                                                                                                              | JUL 2025    | Drawing No. | 5.7 | Rev.    | -    |

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Project Title

PROPOSED COMPREHENSIVE RESIDENTIAL  
DEVELOPMENT AT LOT 50 S.A. AND 77 IN D.D. 101,  
WO SHANG WAI, MAI PO, YUEN LONG

|                                                                                            |           |         |          |
|--------------------------------------------------------------------------------------------|-----------|---------|----------|
| Drawing Title                                                                              |           |         |          |
| INDICATIVE JUNCTION IMPROVEMENT LAYOUT OF<br>CASTLE PEAK ROAD - SAN TIN / SHEK WU WAI ROAD |           |         |          |
| Designed                                                                                   | LTY       | Checked | CFC      |
| Scale                                                                                      | 1:500(A3) | Date    | MAY 2025 |
| Drawing No.                                                                                | 5.8       | Rev.    | -        |



## 6. CONCLUSION

### 6.1 Summary

- 6.1.1 The previous Section 16 Planning Application (Application no. A/YL-MP/344) was approved with conditions with domestic plot ratio of 0.4 on 16 February 2024 for a proposed house development with 789 houses. A planning application is made under section 16 of the Town Planning Ordinance, to propose amendments to the previously approved scheme under application No. A/YL-MP/344, which was approved for a comprehensive residential development, including a Wetland Restoration Area (WRA), with filling and excavation of land. The application site falls within an area zoned as “Other Specified Uses” annotated “Comprehensive Development to include Wetland Restoration Area” (“OU(CDWRA)”) on the approved Mai Po and Fairview Park Outline Zoning Plan (OZP) No. S/YL-MP/8. The proposed amendment relates to the approved layout of the residential portion, with no change to the plot ratio and gross floor area. Majority of the basement car parking spaces are relocated to ground level for cost-effectiveness and ease of implementation. No change is proposed to the already completed WRA.
- 6.1.2 Same to the previous approved scheme, the development vehicular access is off the local access road, Mai Po South Road connecting to Castle Peak Road - Mai Po.
- 6.1.3 The provision of the internal transport facilities in the current proposed MLP is determined in accordance with the latest updated HKPSG requirements.
- 6.1.4 Traffic surveys have been conducted to establish the current traffic condition, the public transport utilization and footpath condition in the vicinity of the subject site.
- 6.1.5 The tentative operation year of proposed development is 2028. Thus, the design year of 2031 is adopted for traffic forecast and assessment purposes.
- 6.1.6 Subject to the project of San Tin Technopole, the proposed road network will be upgraded to provide better linkage and strengthen future connectivity for developments located at the North and South of the San Tin Highway.
- 6.1.7 Public transport service capacity has also been assessed upon the completion of the proposed development. The assessment results suggest that the public transport service capacity in the vicinity could serve the additional passenger demands. The public transport service enhancement and shuttle bus service provision will be subject to further review in later stage, if necessary.
- 6.1.8 Operational performance of the identified local junctions and road link capacity have been assessed based on the anticipated year 2031 traffic flows and the upgrade road junctions of San Tin Technopole project. The anticipated trip generation of the current proposed scheme would be smaller in AM peak periods and slightly larger in PM peak periods, compared with the previous approved scheme. The assessment results as shown in **Table 5.1** revealed that the majority of key junctions will operate with ample capacity upon completion of the proposed development. With the planned junction improvement at Fairview Park Interchange (Junction H), the results indicate that all the identified junctions and road links would be operated within capacity in Year 2031.



- 6.1.9 Operational performance of pedestrian flows and queuing space assessment have been assessed based on the anticipated year 2031 pedestrian flows, subject to the induced pedestrian trips for additional franchised bus demand. With the proposed widening of existing queuing area at concerned bus stops, the LOS of the identified road link and queuing area at bus stops would be operating within capacity in Year 2031.
- 6.1.10 Therefore, it is anticipated that the proposed development would not cause any significant traffic impact to the road network.
- 6.1.11 A sensitivity test is also included in the assessment. In conservative hypothetical approach, with certain proposed junction improvements, the assessed junctions would be operated within capacity in Year 2031.

## 6.2 Conclusion

- 6.2.1 In conclusion, the traffic impact assessment has demonstrated that the traffic generated by the proposed development can be absorbed by the nearby road network. Hence, it can be concluded that the proposed development is considered acceptable in traffic terms.

# **ANNEX A – DETAIL OF JUNCTION CALCULATION SHEETS**

Calculation Spreadsheets  
for  
2024 Observed Scenario



### Priority Junction Capacity Calculation

Job Title:

Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long

Junction:

Shek Wu Wai Road / San Tin Highway Slip Road ( A1 )

Scheme:

Observe

Year:

2024

Job No.:

CHK50873110

Ref. No.:

2024O

Rev.:

-

ARM A:

Shek Wu Wai Road

ARM B:

San Tin Highway Slip Road

ARM C:

Shek Wu Wai Road

AM

(PM)

365

(290)

0

(0)

ARM C

AM

(PM)

105

(70)

0

(0)

ARM A

AM

(PM)

240

(240)

80

(85)

Minor ARM B

GEOMETRY

Major road width

W

7.20

Lane widths

w(b-a)

8.30

Central Reserve width

Wcr

0.00

w(b-c)

8.30

2 Lane Minor Arm (Y/N)

N

w(c-b)

0.00

Visibilities

Vr(b-a)

20

Calculated

D

1.21

VI(b-a)

20

E

1.31

Vr(b-c)

20

F

0.59

Vr(c-b)

Y

0.75

ANALYSIS

TRAFFIC FLOWS

q(c-a)

q(c-b)

q(a-b)

q(a-c)

q(b-a)

q(b-c)

f

Factor

1

1

1

1

CAPACITIES

Q(b-a)

Q(b-c)

Q(c-b)

Q(b-ac)

646

937

420

842

673

949

425

857

RFC's

b-a

b-c

c-b

b-ac

0.124

0.256

0.000

0.380

0.126

0.253

0.000

0.379

Worst RFC

0.380

0.379

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

$Y = 1-0.0345W$

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

Capacity of combined streams

- in accordance with TPDM V2.4

T.P.D.M.V.2.4

Appendix 1

Calculated by:

MYC

Date:

Jun-25

Checked by:

CFC

Priority Junction Capacity Calculation

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|-------------|----------------------|-------|---------|-------|-----------------|--|----|----|---|----|----|---|----|------|----|----|----|----|-----|-----|----|------|---|---|----|----|----|----|----|------|---|---|---|---|---|---|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Junction: Shek Wu Wai Road / Mai Po Lung Road ( A2 )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |         |              |             |                      |       |         |       | Ref. No.: 2024O |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Scheme: Observe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |              |             |                      |       |         |       | Ref. No.:       |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Year: 2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |              |             | Job No.: CHK50873110 |       |         |       | Rev.: -         |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| ARM A: Mai Po Lung Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| ARM B: San Tin Highway Slip Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| ARM C: Shek Wu Wai Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| ARM D: Shek Wu Wai Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| <div><div><div><div><div>Shek Wu Wai Road</div><div><div><div>Minor Arm D</div><table><tr><td>65</td><td>55</td><td>5</td></tr><tr><td>40</td><td>45</td><td>0</td></tr></table><div>AM (PM)</div></div></div><div><div>ARM C</div><table><tr><td>AM</td><td>(PM)</td></tr><tr><td>90</td><td>90</td></tr><tr><td>45</td><td>95</td></tr><tr><td>315</td><td>190</td></tr></table><div>Shek Wu Wai Road</div></div><div><div>ARM A</div><table><tr><td>AM</td><td>(PM)</td></tr><tr><td>0</td><td>5</td></tr><tr><td>40</td><td>30</td></tr><tr><td>35</td><td>40</td></tr></table><div>Mai Po Lung Road</div></div><div><div>Minor ARM B</div><table><tr><td>AM</td><td>(PM)</td></tr><tr><td>0</td><td>0</td></tr><tr><td>0</td><td>0</td></tr><tr><td>0</td><td>0</td></tr></table></div></div></div></div></div> |         |              |             |                      |       |         |       |                 |  | 65 | 55 | 5 | 40 | 45 | 0 | AM | (PM) | 90 | 90 | 45 | 95 | 315 | 190 | AM | (PM) | 0 | 5 | 40 | 30 | 35 | 40 | AM | (PM) | 0 | 0 | 0 | 0 | 0 | 0 |
| 65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 55      | 5            |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 45      | 0            |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| AM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (PM)    |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| 90                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 90      |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 95      |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| 315                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 190     |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| AM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (PM)    |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 5       |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 30      |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| 35                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 40      |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| AM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (PM)    |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0       |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0       |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0       |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| GEOMETRY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |              |             | ARM B                |       |         | ARM D |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Major road width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | W       | 10.30        | Lane widths | w(b-a)               | 0.00  | w(b-a)  | 5.40  |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Central Reserve width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Wcr     | 0.00         |             | w(b-c)               | 0.00  | w(b-c)  | 5.40  |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |              |             | w(c-b)               | 3.50  | w(c-b)  | 3.30  |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Visibilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Vr(b-a) | 0            | Vr(d-c)     | 30                   | D     | 0.53    | D     | 0.99            |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | VI(b-a) | 0            | VI(d-c)     | 30                   | E     | 0.59    | E     | 1.06            |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Vr(b-c) | 0            | Vr(d-a)     | 25                   | F     | 0.91    | F     | 0.89            |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Vr(c-b) | 40           | Vr(a-d)     | 30                   | Y     | 0.64    | Y     | 0.64            |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |              |             | Arm B                |       |         | Arm D |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| ANALYSIS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         | AM PEAK      |             | (PM) PEAK            |       | AM PEAK |       | (PM) PEAK       |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| TRAFFIC FLOWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | q(c-a)  | 50           | 95          | q(a-c)               | 40    | 30      |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | q(c-b)  | 315          | 190         | q(a-d)               | 0     | 5       |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | q(a-b)  | 35           | 40          | q(c-d)               | 90    | 90      |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | q(a-c)  | 105          | 70          | q(c-a)               | 45    | 95      |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | q(b-a)  | 0            | 0           | q(d-c)               | 120   | 85      |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | q(b-c)  | 0            | 0           | q(d-a)               | 5     | 0       |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | f       | 0.00         | 0.00        | f                    | 0.04  | 0.00    |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| CAPACITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Q(b-a)  | 259          | 282         | Q(d-c)               | 598   | 586     |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q(b-c)  | 420          | 425         | Q(d-a)               | 773   | 761     |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q(c-b)  | 652          | 658         | Q(a-d)               | 634   | 624     |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q(b-ac) | 259          | 282         | Q(d-ca)              | 604   | 586     |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q(c-a)  | 930          | 1280        | Q(a-c)               | 1800  | 1786    |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| RFC's                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | b-a     | 0.000        | 0.000       | d-c                  | 0.201 | 0.145   |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | b-c     | 0.000        | 0.000       | d-a                  | 0.006 | 0.000   |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | c-b     | 0.483        | 0.289       | a-d                  | 0.000 | 0.008   |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | b-ac    | 0.000        | 0.000       | d-ca                 | 0.207 | 0.145   |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | c-a     | 0.054        | 0.074       | a-c                  | 0.022 | 0.017   |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |              | AM          | (PM)                 |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Worst RFC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |              | 0.483       | 0.289                |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Where VI and Vr are visibility distances to the left or right of the respective streams                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Y = 1-0.0345W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| f = proportion of minor traffic turning left                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Capacity of combined streams                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| - in accordance with TPDM V2.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |              |             |                      |       |         |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |
| Calculated by: MYC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |         | Date: Jun-25 |             | Checked by:          |       | CFC     |       |                 |  |    |    |   |    |    |   |    |      |    |    |    |    |     |     |    |      |   |   |    |    |    |    |    |      |   |   |   |   |   |   |

T.P.D.M.V.2.4  
Appendix 1

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |                                                                                                                   |             |           |             |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------------------------------------|-------------|-----------|-------------|-----|
| Job Title:                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         | Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |             |           |             |     |
| Junction:                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         | Shek Wu Wai Road/ Mai Po Lung Road (B)                                                                            |             | Ref. No.: | 2024O       |     |
| Scheme:                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         | Observe                                                                                                           |             | Ref. No.: |             |     |
| Year:                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2024    | Job No.:                                                                                                          | CHK50873110 |           | Rev.:       | -   |
| ARM A:                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         | Castle Peak Road - San Tin                                                                                        |             |           |             |     |
| ARM B:                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         | Shek Wu Wai Road                                                                                                  |             |           |             |     |
| ARM C:                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         | Castle Peak Road - San Tin                                                                                        |             |           |             |     |
| <div><div>ARM C</div><div><div><div>AM</div><div>(PM)</div></div><div><div>190</div><div>(235)</div></div><div><div>110</div><div>(115)</div></div></div><div><div>AM</div><div>(PM)</div></div><div><div>95</div><div>(130)</div></div><div><div>250</div><div>(180)</div></div><div>Minor ARM B</div></div> <div><div>ARM A</div><div><div>AM</div><div>(PM)</div></div><div><div>190</div><div>(195)</div></div><div><div>260</div><div>(175)</div></div></div> |         |                                                                                                                   |             |           |             |     |
| GEOMETRY                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                                                                                                   |             |           |             |     |
| Major road width                                                                                                                                                                                                                                                                                                                                                                                                                                                   | W       | 6.50                                                                                                              | Lane widths | w(b-a)    | 4.20        |     |
| Central Reserve width                                                                                                                                                                                                                                                                                                                                                                                                                                              | Wcr     | 0.00                                                                                                              |             | w(b-c)    | 4.20        |     |
| 2 Lane Minor Arm (Y/N)                                                                                                                                                                                                                                                                                                                                                                                                                                             |         | N                                                                                                                 |             | w(c-b)    | 3.60        |     |
| Visibilities                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Vr(b-a) | 30                                                                                                                | Calculated  | D         | 0.90        |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | VI(b-a) | 30                                                                                                                |             | E         | 0.98        |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Vr(b-c) | 40                                                                                                                |             | F         | 0.91        |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Vr(c-b) | 30                                                                                                                |             | Y         | 0.78        |     |
| ANALYSIS                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                                                                                                   |             |           |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |                                                                                                                   | AM PEAK     |           | (PM) PEAK   |     |
| TRAFFIC FLOWS                                                                                                                                                                                                                                                                                                                                                                                                                                                      | q(c-a)  |                                                                                                                   | 190         | 235       |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | q(c-b)  |                                                                                                                   | 110         | 115       |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | q(a-b)  |                                                                                                                   | 260         | 175       |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | q(a-c)  |                                                                                                                   | 190         | 195       |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | q(b-a)  |                                                                                                                   | 250         | 180       |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | q(b-c)  |                                                                                                                   | 95          | 130       |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | f       |                                                                                                                   | 0.28        | 0.42      |             |     |
| CAPACITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Q(b-a)  | Factor                                                                                                            | 418         | 416       |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Q(b-c)  | 1                                                                                                                 | 646         | 654       |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Q(c-b)  | 1                                                                                                                 | 565         | 586       |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Q(b-ac) | 1                                                                                                                 | 463         | 491       |             |     |
| RFC's                                                                                                                                                                                                                                                                                                                                                                                                                                                              | b-a     |                                                                                                                   | 0.598       | 0.433     |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | b-c     |                                                                                                                   | 0.147       | 0.199     |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | c-b     |                                                                                                                   | 0.195       | 0.196     |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | b-ac    |                                                                                                                   | 0.745       | 0.631     |             |     |
| Worst RFC                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         |                                                                                                                   | 0.745       | 0.631     |             |     |
| Where VI and Vr are visibility distances to the left or right of the respective streams<br>D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))<br>E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))<br>F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))<br>Y = 1-0.0345W<br>f = proportion of minor traffic turning left<br>Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)<br>Capacity of combined streams<br>- in accordance with TPDM V2.4 |         |                                                                                                                   |             |           |             |     |
| Calculated by:                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         | MYC                                                                                                               | Date:       | Jun-25    | Checked by: | CFC |



### Priority Junction Capacity Calculation

Job Title:

Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long

Junction:

Castle Peak Road Mai Po / San Tam Road ( C )

Scheme:

Observe

Year:

2024

Job No.:

CHK50873110

Ref. No.:

2024O

Rev.:

-

ARM A:

Castle Peak Road - Mai Po

ARM B:

San Tam Road

ARM C:

Castle Peak Road - Mai Po

ARM C

AM

(PM)

230

(225)

10

(15)

AM

(PM)

465

(220)

60

(80)

AM

(PM)

25

(15)

65

(45)

Minor ARM B

GEOMETRY

|                        |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 8.30 | Lane widths | w(b-a) | 3.20 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 3.20 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 4.10 |
| Visibilities           | Vr(b-a) | 50   | Calculated  | D      | 0.85 |
|                        | VI(b-a) | 70   |             | E      | 0.90 |
|                        | Vr(b-c) | 50   |             | F      | 0.98 |
|                        | Vr(c-b) | 50   |             | Y      | 0.71 |

ANALYSIS

|               |         |        |         |  |           |
|---------------|---------|--------|---------|--|-----------|
|               |         |        | AM PEAK |  | (PM) PEAK |
| TRAFFIC FLOWS | q(c-a)  |        | 230     |  | 225       |
|               | q(c-b)  |        | 10      |  | 15        |
|               | q(a-b)  |        | 60      |  | 80        |
|               | q(a-c)  |        | 465     |  | 220       |
|               | q(b-a)  |        | 65      |  | 45        |
|               | q(b-c)  |        | 25      |  | 15        |
|               | f       |        | 0.28    |  | 0.25      |
| CAPACITIES    | Q(b-a)  | Factor | 392     |  | 444       |
|               | Q(b-c)  | 1      | 555     |  | 610       |
|               | Q(c-b)  | 1      | 594     |  | 651       |
|               | Q(b-ac) | 1      | 427     |  | 476       |
| RFC's         | b-a     |        | 0.166   |  | 0.101     |
|               | b-c     |        | 0.045   |  | 0.025     |
|               | c-b     |        | 0.017   |  | 0.023     |
|               | b-ac    |        | 0.211   |  | 0.126     |
| Worst RFC     |         |        | 0.211   |  | 0.126     |

Where VI and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)\*Q(b-a)/(1-f)\*Q(b-c)+f\*Q(b-a)

T.P.D.M.V.2.4

Appendix 1

Capacity of combined streams

- in accordance with TPDM V2.4

Calculated by:

MYC

Date:

Jun-25

Checked by:

CFC

### Priority Junction Capacity Calculation

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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                                            |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
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------------------------------------------------|--|--|--|--|--|----------------|--|-----|-------|--------|-------------|--|--|--|--|--|-----|
| Job Title:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |       |                      |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  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                                            |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
| Junction:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | Castle Peak Road Mai Po / Palm Springs Boulevard ( D )                                                            |       | Ref. No.: 2024O      |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  |          |  |  |  |  |  |  |  |  |  |         |  |  |  |  |  |           |  |               |  |        |     |     |  |  |  |        |    |    |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |        |    |    |  |  |  |   |      |      |  |            |  |        |     |     |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |         |     |     |  |       |  |     |       |       |  |  |  |     |       |       |  |  |  |     |       |       |  |  |  |      |       |       |  |           |  |  |       |       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
| Scheme:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Observe                                                                                                           |       | Ref. No.:            |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  |          |  |  |  |  |  |  |  |  |  |         |  |  |  |  |  |           |  |               |  |        |     |     |  |  |  |        |    |    |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |        |    |    |  |  |  |   |      |      |  |            |  |        |     |     |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |         |     |     |  |       |  |     |       |       |  |  |  |     |       |       |  |  |  |     |       |       |  |  |  |      |       |       |  |           |  |  |       |       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
| Year:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | 2024                                                                                                              |       | Job No.: CHK50873110 |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  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                                            |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
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             |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  |          |  |  |  |  |  |  |  |  |  |         |  |  |  |  |  |           |  |               |  |        |     |     |  |  |  |        |    |    |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |        |    |    |  |  |  |   |      |      |  |            |  |        |     |     |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |         |     |     |  |       |  |     |       |       |  |  |  |     |       |       |  |  |  |     |       |       |  |  |  |      |       |       |  |           |  |  |       |       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
| ARM A:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Castle Peak Road - Mai Po                                                                                         |       |                      |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  |          |  |  |  |  |  |  |  |  |  |         |  |  |  |  |  |           |  |               |  |        |     |     |  |  |  |        |    |    |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |        |    |    |  |  |  |   |      |      |  |            |  |        |     |     |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |         |     |     |  |       |  |     |       |       |  |  |  |     |       |       |  |  |  |     |       |       |  |  |  |      |       |       |  |           |  |  |       |       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
| ARM B:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Palm Springs Boulevard                                                                                            |       |                      |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  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| ARM C:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Castle Peak Road - Mai Po                                                                                         |       |                      |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  |          |  |  |  |  |  |  |  |  |  |         |  |  |  |  |  |           |  |               |  |        |     |     |  |  |  |        |    |    |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |        |    |    |  |  |  |   |      |      |  |            |  |        |     |     |  |  |  |        |     |     |  |  |  |        |     |     |  |  |  |         |     |     |  |       |  |     |       |       |  |  |  |     |       |       |  |  |  |     |       |       |  |  |  |      |       |       |  |           |  |  |       |       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
| <div><div>ARM C</div><div><div><div>AM</div><div>(PM)</div></div><div><div>175</div><div>(135)</div></div><div><div>10</div><div>(20)</div></div></div><div><div><div>AM</div><div>(PM)</div></div><div><div>155</div><div>(175)</div></div><div><div>135</div><div>(180)</div></div></div><div><div><div>AM</div><div>(PM)</div></div><div><div>25</div><div>(35)</div></div><div><div>245</div><div>(120)</div></div></div><div>Minor ARM B</div></div> <tr><td colspan="6">GEOMETRY</td></tr> <tr><td colspan="2">Major road width</td><td>W</td><td>7.00</td><td colspan="2">Lane widths</td></tr> <tr><td colspan="2">Central Reserve width</td><td>Wcr</td><td>0.00</td><td colspan="2">w(b-a)</td></tr> <tr><td colspan="2">2 Lane Minor Arm (Y/N)</td><td></td><td>N</td><td colspan="2">w(b-c)</td></tr> <tr><td colspan="2">Visibilities</td><td>Vr(b-a)</td><td>30</td><td colspan="2">w(c-b)</td></tr> <tr><td colspan="2"></td><td>VI(b-a)</td><td>30</td><td colspan="2">Calculated</td></tr> <tr><td colspan="2"></td><td>Vr(b-c)</td><td>30</td><td colspan="2">D</td></tr> <tr><td colspan="2"></td><td>Vr(c-b)</td><td>30</td><td colspan="2">E</td></tr> <tr><td colspan="2"></td><td></td><td></td><td colspan="2">F</td></tr> <tr><td colspan="2"></td><td></td><td></td><td colspan="2">Y</td></tr> <tr><td colspan="6">ANALYSIS</td></tr> <tr><td colspan="2"></td><td colspan="2"></td><td colspan="2">AM PEAK</td></tr> <tr><td colspan="2"></td><td colspan="2"></td><td colspan="2">(PM) PEAK</td></tr> <tr><td colspan="2">TRAFFIC FLOWS</td><td>q(c-a)</td><td>175</td><td colspan="2">135</td></tr> <tr><td colspan="2"></td><td>q(c-b)</td><td>10</td><td colspan="2">20</td></tr> <tr><td colspan="2"></td><td>q(a-b)</td><td>135</td><td colspan="2">180</td></tr> <tr><td colspan="2"></td><td>q(a-c)</td><td>155</td><td colspan="2">175</td></tr> <tr><td colspan="2"></td><td>q(b-a)</td><td>245</td><td colspan="2">120</td></tr> <tr><td colspan="2"></td><td>q(b-c)</td><td>25</td><td colspan="2">35</td></tr> <tr><td colspan="2"></td><td>f</td><td>0.09</td><td colspan="2">0.23</td></tr> <tr><td colspan="2">CAPACITIES</td><td>Q(b-a)</td><td>471</td><td colspan="2">465</td></tr> <tr><td colspan="2"></td><td>Q(b-c)</td><td>653</td><td colspan="2">643</td></tr> <tr><td colspan="2"></td><td>Q(c-b)</td><td>574</td><td colspan="2">558</td></tr> <tr><td colspan="2"></td><td>Q(b-ac)</td><td>483</td><td colspan="2">496</td></tr> <tr><td colspan="2">RFC's</td><td>b-a</td><td>0.520</td><td colspan="2">0.258</td></tr> <tr><td colspan="2"></td><td>b-c</td><td>0.038</td><td colspan="2">0.054</td></tr> <tr><td colspan="2"></td><td>c-b</td><td>0.017</td><td colspan="2">0.036</td></tr> <tr><td colspan="2"></td><td>b-ac</td><td>0.559</td><td colspan="2">0.313</td></tr> <tr><td colspan="2">Worst RFC</td><td></td><td>0.559</td><td colspan="2">0.313</td></tr> <tr><td colspan="6">Where VI and Vr are visibility distances to the left or right of the respective streams<br/>D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))<br/>E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))<br/>F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))<br/>Y = 1-0.0345W<br/>f = proportion of minor traffic turning left<br/>Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)<br/>Capacity of combined streams<br/>- in accordance with TPDM V2.4</td></tr> <tr><td colspan="2">Calculated by:</td><td>MYC</td><td>Date:</td><td>Jun-25</td><td>Checked by:</td></tr> <tr><td colspan="2"></td><td></td><td></td><td></td><td>CFC</td></tr> |  |                                                                                                                   |       |                      |             | GEOMETRY |  |  |  |  |  | Major road width |  | W | 7.00 | Lane widths |  | Central Reserve width |  | Wcr | 0.00 | w(b-a) |  | 2 Lane Minor Arm (Y/N) |  |  | N | w(b-c) |  | Visibilities |  | Vr(b-a) | 30 | w(c-b) |  |  |  | VI(b-a) | 30 | Calculated |  |  |  | Vr(b-c) | 30 | D |  |  |  | Vr(c-b) | 30 | E |  |  |  |  |  | F |  |  |  |  |  | Y |  | ANALYSIS |  |  |  |  |  |  |  |  |  | AM PEAK |  |  |  |  |  | (PM) PEAK |  | TRAFFIC FLOWS |  | q(c-a) | 175 | 135 |  |  |  | q(c-b) | 10 | 20 |  |  |  | q(a-b) | 135 | 180 |  |  |  | q(a-c) | 155 | 175 |  |  |  | q(b-a) | 245 | 120 |  |  |  | q(b-c) | 25 | 35 |  |  |  | f | 0.09 | 0.23 |  | CAPACITIES |  | Q(b-a) | 471 | 465 |  |  |  | Q(b-c) | 653 | 643 |  |  |  | Q(c-b) | 574 | 558 |  |  |  | Q(b-ac) | 483 | 496 |  | RFC's |  | b-a | 0.520 | 0.258 |  |  |  | b-c | 0.038 | 0.054 |  |  |  | c-b | 0.017 | 0.036 |  |  |  | b-ac | 0.559 | 0.313 |  | Worst RFC |  |  | 0.559 | 0.313 |  | Where VI and Vr are visibility distances to the left or right of the respective streams<br>D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))<br>E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))<br>F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))<br>Y = 1-0.0345W<br>f = proportion of minor traffic turning left<br>Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)<br>Capacity of combined streams<br>- in accordance with TPDM V2.4 |  |  |  |  |  | Calculated by: |  | MYC | Date: | Jun-25 | Checked by: |  |  |  |  |  | CFC |
| GEOMETRY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| Major road width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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                                            |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
| Central Reserve width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Wcr                                                                                                               | 0.00  | w(b-a)               |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  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                                            |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
| 2 Lane Minor Arm (Y/N)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                   | N     | w(b-c)               |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  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                                            |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
| Visibilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | Vr(b-a)                                                                                                           | 30    | w(c-b)               |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | VI(b-a)                                                                                                           | 30    | Calculated           |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  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| CAPACITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| RFC's                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | b-a                                                                                                               | 0.520 | 0.258                |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | b-c                                                                                                               | 0.038 | 0.054                |             |          |  |  |  |  |  |                  |  |   |      |             |  |                       |  |     |      |        |  |                        |  |  |   |        |  |              |  |         |    |        |  |  |  |         |    |            |  |  |  |         |    |   |  |  |  |         |    |   |  |  |  |  |  |   |  |  |  |  |  |   |  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| Worst RFC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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                                            |  |  |  |  |  |                |  |     |       |        |             |  |  |  |  |  |     |
| Where VI and Vr are visibility distances to the left or right of the respective streams<br>D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))<br>E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))<br>F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))<br>Y = 1-0.0345W<br>f = proportion of minor traffic turning left<br>Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)<br>Capacity of combined streams<br>- in accordance with TPDM V2.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| Calculated by:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| Job Title:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         | Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |             |           |             |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| Junction:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         | Castle Peak Road Mai Po / Geranium Path ( E )                                                                     |             | Ref. No.: | 2024O       |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| Scheme:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         | Observe                                                                                                           |             | Ref. No.: |             |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| Year:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2024    | Job No.:                                                                                                          | CHK50873110 |           | Rev.:       | -        |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| ARM A:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         | Castle Peak Road - Mai Po                                                                                         |             |           |             |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| ARM B:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         | Geranium Path                                                                                                     |             |           |             |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| ARM C:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         | Castle Peak Road - Mai Po                                                                                         |             |           |             |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| <div><div>ARM C</div><div><div><div>AM</div><div>(PM)</div></div><div><div>415</div><div>(255)</div></div><div><div>5</div><div>(5)</div></div></div><div><div><div>5</div><div>(5)</div></div><div><div>5</div><div>(5)</div></div></div><div><div>Minor ARM B</div></div><div><div>AM</div><div>(PM)</div></div><div><div>5</div><div>(5)</div></div><div><div>5</div><div>(5)</div></div></div> <div><div>ARM A</div></div> <div><div>AM</div><div>(PM)</div></div> <div><div>290</div><div>(350)</div></div> <div><div>5</div><div>(5)</div></div> <tr><td colspan="6">GEOMETRY</td></tr> <tr><td>Major road width</td><td>W</td><td>7.00</td><td>Lane widths</td><td>w(b-a)</td><td>3.00</td></tr> <tr><td>Central Reserve width</td><td>Wcr</td><td>0.00</td><td></td><td>w(b-c)</td><td>3.00</td></tr> <tr><td>2 Lane Minor Arm (Y/N)</td><td></td><td>N</td><td></td><td>w(c-b)</td><td>3.60</td></tr> <tr><td>Visibilities</td><td>Vr(b-a)</td><td>50</td><td>Calculated</td><td>D</td><td>0.82</td></tr> <tr><td></td><td>VI(b-a)</td><td>30</td><td></td><td>E</td><td>0.88</td></tr> <tr><td></td><td>Vr(b-c)</td><td>50</td><td></td><td>F</td><td>0.93</td></tr> <tr><td></td><td>Vr(c-b)</td><td>50</td><td></td><td>Y</td><td>0.76</td></tr> <tr><td colspan="6">ANALYSIS</td></tr> <tr><td colspan="3"></td><td colspan="2">AM PEAK</td><td>(PM) PEAK</td></tr> <tr><td>TRAFFIC FLOWS</td><td>q(c-a)</td><td></td><td>415</td><td></td><td>255</td></tr> <tr><td></td><td>q(c-b)</td><td></td><td>5</td><td></td><td>5</td></tr> <tr><td></td><td>q(a-b)</td><td></td><td>5</td><td></td><td>5</td></tr> <tr><td></td><td>q(a-c)</td><td></td><td>290</td><td></td><td>350</td></tr> <tr><td></td><td>q(b-a)</td><td></td><td>5</td><td></td><td>5</td></tr> <tr><td></td><td>q(b-c)</td><td></td><td>5</td><td></td><td>5</td></tr> <tr><td></td><td>f</td><td></td><td>0.50</td><td></td><td>0.50</td></tr> <tr><td>CAPACITIES</td><td>Q(b-a)</td><td>Factor</td><td>386</td><td></td><td>395</td></tr> <tr><td></td><td>Q(b-c)</td><td>1</td><td>584</td><td></td><td>570</td></tr> <tr><td></td><td>Q(c-b)</td><td>1</td><td>619</td><td></td><td>603</td></tr> <tr><td></td><td>Q(b-ac)</td><td>1</td><td>465</td><td></td><td>467</td></tr> <tr><td>RFC's</td><td>b-a</td><td></td><td>0.013</td><td></td><td>0.013</td></tr> <tr><td></td><td>b-c</td><td></td><td>0.009</td><td></td><td>0.009</td></tr> <tr><td></td><td>c-b</td><td></td><td>0.008</td><td></td><td>0.008</td></tr> <tr><td></td><td>b-ac</td><td></td><td>0.022</td><td></td><td>0.021</td></tr> <tr><td>Worst RFC</td><td></td><td></td><td>0.022</td><td></td><td>0.021</td></tr> <tr><td colspan="6">Where VI and Vr are visibility distances to the left or right of the respective streams<br/>D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))<br/>E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))<br/>F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))<br/>Y = 1-0.0345W<br/>f = proportion of minor traffic turning left<br/>Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)<br/>Capacity of combined streams<br/>- in accordance with TPDM V2.4</td></tr> <tr><td colspan="2">Calculated by:</td><td>MYC</td><td>Date:</td><td>Jun-25</td><td>Checked by:</td><td>CFC</td></tr> |         |                                                                                                                   |             |           |             | GEOMETRY |  |  |  |  |  | Major road width | W | 7.00 | Lane widths | w(b-a) | 3.00 | Central Reserve width | Wcr | 0.00 |  | w(b-c) | 3.00 | 2 Lane Minor Arm (Y/N) |  | N |  | w(c-b) | 3.60 | Visibilities | Vr(b-a) | 50 | Calculated | D | 0.82 |  | VI(b-a) | 30 |  | E | 0.88 |  | Vr(b-c) | 50 |  | F | 0.93 |  | Vr(c-b) | 50 |  | Y | 0.76 | ANALYSIS |  |  |  |  |  |  |  |  | AM PEAK |  | (PM) PEAK | TRAFFIC FLOWS | q(c-a) |  | 415 |  | 255 |  | q(c-b) |  | 5 |  | 5 |  | q(a-b) |  | 5 |  | 5 |  | q(a-c) |  | 290 |  | 350 |  | q(b-a) |  | 5 |  | 5 |  | q(b-c) |  | 5 |  | 5 |  | f |  | 0.50 |  | 0.50 | CAPACITIES | Q(b-a) | Factor | 386 |  | 395 |  | Q(b-c) | 1 | 584 |  | 570 |  | Q(c-b) | 1 | 619 |  | 603 |  | Q(b-ac) | 1 | 465 |  | 467 | RFC's | b-a |  | 0.013 |  | 0.013 |  | b-c |  | 0.009 |  | 0.009 |  | c-b |  | 0.008 |  | 0.008 |  | b-ac |  | 0.022 |  | 0.021 | Worst RFC |  |  | 0.022 |  | 0.021 | Where VI and Vr are visibility distances to the left or right of the respective streams<br>D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))<br>E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))<br>F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))<br>Y = 1-0.0345W<br>f = proportion of minor traffic turning left<br>Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)<br>Capacity of combined streams<br>- in accordance with TPDM V2.4 |  |  |  |  |  | Calculated by: |  | MYC | Date: | Jun-25 | Checked by: | CFC |
| GEOMETRY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |                                                                                                                   |             |           |             |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| Major road width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | W       | 7.00                                                                                                              | Lane widths | w(b-a)    | 3.00        |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| Central Reserve width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Wcr     | 0.00                                                                                                              |             | w(b-c)    | 3.00        |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| 2 Lane Minor Arm (Y/N)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         | N                                                                                                                 |             | w(c-b)    | 3.60        |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| Visibilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Vr(b-a) | 50                                                                                                                | Calculated  | D         | 0.82        |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | VI(b-a) | 30                                                                                                                |             | E         | 0.88        |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
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| ANALYSIS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |                                                                                                                   |             |           |             |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
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| TRAFFIC FLOWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | q(c-a)  |                                                                                                                   | 415         |           | 255         |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | q(a-c)  |                                                                                                                   | 290         |           | 350         |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | q(b-a)  |                                                                                                                   | 5           |           | 5           |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | q(b-c)  |                                                                                                                   | 5           |           | 5           |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | f       |                                                                                                                   | 0.50        |           | 0.50        |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| CAPACITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Q(b-a)  | Factor                                                                                                            | 386         |           | 395         |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Q(b-c)  | 1                                                                                                                 | 584         |           | 570         |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Q(c-b)  | 1                                                                                                                 | 619         |           | 603         |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Q(b-ac) | 1                                                                                                                 | 465         |           | 467         |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| RFC's                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | b-a     |                                                                                                                   | 0.013       |           | 0.013       |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | b-c     |                                                                                                                   | 0.009       |           | 0.009       |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | c-b     |                                                                                                                   | 0.008       |           | 0.008       |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | b-ac    |                                                                                                                   | 0.022       |           | 0.021       |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| Worst RFC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |                                                                                                                   | 0.022       |           | 0.021       |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| Where VI and Vr are visibility distances to the left or right of the respective streams<br>D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))<br>E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))<br>F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))<br>Y = 1-0.0345W<br>f = proportion of minor traffic turning left<br>Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)<br>Capacity of combined streams<br>- in accordance with TPDM V2.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                                                                                                                   |             |           |             |          |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |
| Calculated by:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |         | MYC                                                                                                               | Date:       | Jun-25    | Checked by: | CFC      |  |  |  |  |  |                  |   |      |             |        |      |                       |     |      |  |        |      |                        |  |   |  |        |      |              |         |    |            |   |      |  |         |    |  |   |      |  |         |    |  |   |      |  |         |    |  |   |      |          |  |  |  |  |  |  |  |  |         |  |           |               |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |        |  |     |  |     |  |        |  |   |  |   |  |        |  |   |  |   |  |   |  |      |  |      |            |        |        |     |  |     |  |        |   |     |  |     |  |        |   |     |  |     |  |         |   |     |  |     |       |     |  |       |  |       |  |     |  |       |  |       |  |     |  |       |  |       |  |      |  |       |  |       |           |  |  |       |  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |                |  |     |       |        |             |     |



### Priority Junction Capacity Calculation

Job Title:

Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long

Junction:

Castle Peak Road Tam Mi / Yau Pok Road ( F )

Scheme:

Observe

Year:

2024

Job No.:

CHK50873110

Ref. No.:

2024O

Rev.:

-

ARM A:

Castle Peak Road - Tam Mi

ARM B:

Yau Pok Road

ARM C:

Castle Peak Road - Tam Mi

AM

(PM)

420

(260)

0

(0)

ARM C

AM

(PM)

290

(350)

0

(0)

ARM A

AM

(PM)

5

(5)

5

(5)

Minor ARM B

GEOMETRY

Major road width

W

6.50

Lane widths

w(b-a)

1.88

Central Reserve width

Wcr

0.00

w(b-c)

1.88

2 Lane Minor Arm (Y/N)

N

w(c-b)

0.00

Visibilities

Vr(b-a)

16

VI(b-a)

31

Vr(b-c)

16

Vr(c-b)

0

Calculated

D

0.70

E

0.76

F

0.59

Y

0.78

ANALYSIS

TRAFFIC FLOWS

q(c-a)

q(c-b)

q(a-b)

q(a-c)

q(b-a)

q(b-c)

f

Factor

1

1

1

1

AM PEAK

(PM) PEAK

420

260

0

0

0

0

290

350

5

5

5

5

0.50

0.50

CAPACITIES

Q(b-a)

Q(b-c)

Q(c-b)

Q(b-ac)

330

501

389

398

338

488

379

400

RFC's

b-a

b-c

c-b

b-ac

0.015

0.010

0.000

0.025

0.015

0.010

0.000

0.025

Worst RFC

0.025

0.025

Where VI and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)\*Q(b-a)/(1-f)\*Q(b-c)+f\*Q(b-a)

Capacity of combined streams

- in accordance with TPDM V2.4

Calculated by:

MYC

Date:

Jun-25

Checked by:

CFC

T.P.D.M.V.2.4

Appendix 1

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long                                                                                                                                                                                                                                                                                                                                       |                      |                   |
| Junction: Castle Peak Road Tam Mi / Kam Pok Road ( G )                                                                                                                                                                                                                                                                                                                                                                                                             |                      | Ref. No.: 2024O   |
| Scheme: Observe                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      | Ref. No.:         |
| Year: 2024                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Job No.: CHK50873110 | Rev.: -           |
| ARM A: Castle Peak Road - Tam Mi                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |                   |
| ARM B: Kam Pok Road                                                                                                                                                                                                                                                                                                                                                                                                                                                |                      |                   |
| ARM C: Castle Peak Road - Tam Mi                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |                   |
| <div><div>ARM C</div><div><div><div><div>AM</div><div>(PM)</div></div><div><div>360</div><div>(210)</div></div><div><div>65</div><div>(55)</div></div></div><div><div><div>35</div><div>(30)</div></div><div><div>25</div><div>(20)</div></div></div><div>Minor ARM B</div><div><div>AM</div><div>(PM)</div></div></div><div><div><div>255</div><div>(320)</div></div><div><div>50</div><div>(30)</div></div></div><div>ARM A</div></div>                          |                      |                   |
| GEOMETRY                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |                   |
| Major road width                                                                                                                                                                                                                                                                                                                                                                                                                                                   | W                    | 7.00              |
| Central Reserve width                                                                                                                                                                                                                                                                                                                                                                                                                                              | Wcr                  | 0.00              |
| 2 Lane Minor Arm (Y/N)                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | N                 |
| Visibilities                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Vr(b-a)              | 50                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | VI(b-a)              | 35                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Vr(b-c)              | 50                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Vr(c-b)              | 50                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Calculated           | D                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      | E                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      | F                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      | Y                 |
| ANALYSIS                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |                   |
| TRAFFIC FLOWS                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                      | AM PEAK (PM) PEAK |
| q(c-a)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | 360 210           |
| q(c-b)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | 65 55             |
| q(a-b)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | 50 30             |
| q(a-c)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | 255 320           |
| q(b-a)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | 25 20             |
| q(b-c)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | 35 30             |
| f                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      | 0.58 0.60         |
| CAPACITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                      |                   |
| Q(b-a)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | 398 410           |
| Q(b-c)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | 618 604           |
| Q(c-b)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | 610 599           |
| Q(b-ac)                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                      | 502 508           |
| RFC's                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                      |                   |
| b-a                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                      | 0.063 0.049       |
| b-c                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                      | 0.057 0.050       |
| c-b                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                      | 0.107 0.092       |
| b-ac                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      | 0.120 0.098       |
| Worst RFC                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                      | 0.120 0.098       |
| Where VI and Vr are visibility distances to the left or right of the respective streams<br>D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))<br>E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))<br>F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))<br>Y = 1-0.0345W<br>f = proportion of minor traffic turning left<br>Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)<br>Capacity of combined streams<br>- in accordance with TPDM V2.4 |                      |                   |
| Calculated by: MYC                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Date: Jun-25         | Checked by: CFC   |

Roundabout Capacity Calculation

|                                                                                                                              |      |                         |         |                      |                |                |                 |                 |       |      |
|------------------------------------------------------------------------------------------------------------------------------|------|-------------------------|---------|----------------------|----------------|----------------|-----------------|-----------------|-------|------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |      |                         |         |                      |                |                |                 |                 |       |      |
| Junction: Fairview Park Interchange ( H )                                                                                    |      |                         |         |                      |                |                |                 | Ref. No.: 2024O |       |      |
| Scheme: Observe                                                                                                              |      |                         |         |                      |                |                |                 | Ref. No.:       |       |      |
| Year: 2024                                                                                                                   |      |                         |         | Job No.: CHK50873110 |                |                |                 | Rev.: -         |       |      |
| AM                                                                                                                           |      | PM                      |         |                      |                |                |                 |                 |       |      |
| ARM A:                                                                                                                       |      | Fairview Park Boulevard |         |                      |                |                |                 |                 |       |      |
| ARM B:                                                                                                                       |      | Castle Peak Rd E        |         |                      |                |                |                 |                 |       |      |
| ARM C:                                                                                                                       |      | NTCR E                  |         |                      |                |                |                 |                 |       |      |
| ARM D:                                                                                                                       |      | San Tam Rd E            |         |                      |                |                |                 |                 |       |      |
| ARM E:                                                                                                                       |      | San Tam Rd W            |         |                      |                |                |                 |                 |       |      |
| ARM F:                                                                                                                       |      | NTCR W                  |         |                      |                |                |                 |                 |       |      |
| ARM G:                                                                                                                       |      | Castle Peak Rd W        |         |                      |                |                |                 |                 |       |      |
| <div><div></div><div>A</div><div>G</div><div>B</div><div>C</div><div>D</div><div>E</div><div>F</div></div>                   |      |                         |         |                      |                |                |                 |                 |       |      |
| GEOMETRY                                                                                                                     |      |                         |         |                      |                |                |                 |                 |       |      |
| ARM                                                                                                                          | v    | e                       | L       | r                    | D              | Phi            | S               |                 |       |      |
| A                                                                                                                            | 7.00 | 11.00                   | 14      | 22                   | 142            | 35             | 0.46            |                 |       |      |
| B                                                                                                                            | 5.50 | 10.50                   | 15      | 20                   | 142            | 35             | 0.53            |                 |       |      |
| C                                                                                                                            | 5.50 | 8.50                    | 7.5     | 23                   | 142            | 30             | 0.64            |                 |       |      |
| D                                                                                                                            | 6.75 | 8.50                    | 10      | 20                   | 142            | 25             | 0.28            |                 |       |      |
| E                                                                                                                            | 6.00 | 8.00                    | 9.5     | 20                   | 142            | 35             | 0.34            |                 |       |      |
| F                                                                                                                            | 6.50 | 9.00                    | 15      | 25                   | 142            | 40             | 0.27            |                 |       |      |
| G                                                                                                                            | 5.50 | 6.00                    | 7       | 22                   | 142            | 30             | 0.11            |                 |       |      |
| AM FLOWS                                                                                                                     |      |                         |         |                      |                |                |                 |                 |       |      |
| from \ to                                                                                                                    | A    | B                       | C       | D                    | E              | F              | G               | Circ            | Entry | Exit |
| A                                                                                                                            | 60   | 5                       | 235     | 40                   | 155            | 430            | 15              | 1395            | 940   | 605  |
| B                                                                                                                            | 15   | 25                      | 55      | 5                    | 115            | 255            | 5               | 1915            | 475   | 420  |
| C                                                                                                                            | 145  | 55                      | 10      | 100                  | 220            | 20             | 120             | 1770            | 670   | 620  |
| D                                                                                                                            | 35   | 10                      | 40      | 55                   | 160            | 200            | 10              | 2000            | 510   | 440  |
| E                                                                                                                            | 60   | 80                      | 155     | 60                   | 5              | 45             | 5               | 1695            | 410   | 815  |
| F                                                                                                                            | 260  | 145                     | 15      | 140                  | 100            | 30             | 120             | 980             | 810   | 1125 |
| G                                                                                                                            | 30   | 100                     | 110     | 40                   | 60             | 145            | 15              | 1500            | 500   | 290  |
| PM FLOWS                                                                                                                     |      |                         |         |                      |                |                |                 |                 |       |      |
| from \ to                                                                                                                    | A    | B                       | C       | D                    | E              | F              | G               | Circ            | Entry | Exit |
| A                                                                                                                            | 50   | 20                      | 140     | 35                   | 140            | 240            | 20              | 1220            | 645   | 945  |
| B                                                                                                                            | 15   | 25                      | 45      | 15                   | 125            | 110            | 15              | 1475            | 350   | 390  |
| C                                                                                                                            | 180  | 45                      | 20      | 105                  | 265            | 5              | 105             | 1305            | 725   | 520  |
| D                                                                                                                            | 25   | 25                      | 40      | 55                   | 110            | 170            | 10              | 1615            | 435   | 415  |
| E                                                                                                                            | 50   | 35                      | 140     | 40                   | 10             | 35             | 5               | 1280            | 315   | 770  |
| F                                                                                                                            | 590  | 170                     | 25      | 115                  | 105            | 20             | 200             | 920             | 1225  | 675  |
| G                                                                                                                            | 35   | 70                      | 110     | 50                   | 15             | 95             | 10              | 1780            | 385   | 365  |
| CALCULATIONS                                                                                                                 |      |                         |         |                      |                |                |                 |                 |       |      |
| ARM                                                                                                                          | K    | X <sub>2</sub>          | M       | F                    | t <sub>D</sub> | f <sub>c</sub> | Q <sub>E</sub>  |                 | RFC   |      |
|                                                                                                                              |      |                         |         |                      |                |                | AM              | PM              | AM    | PM   |
| A                                                                                                                            | 0.99 | 9.09                    | 3640.95 | 2754                 | 1.00           | 0.59           | 1904            | 2006            | 0.49  | 0.32 |
| B                                                                                                                            | 0.98 | 7.92                    | 3640.95 | 2400                 | 1.00           | 0.54           | 1337            | 1571            | 0.36  | 0.22 |
| C                                                                                                                            | 1.01 | 6.82                    | 3640.95 | 2065                 | 1.00           | 0.50           | 1194            | 1427            | 0.56  | 0.51 |
| D                                                                                                                            | 1.02 | 7.87                    | 3640.95 | 2385                 | 1.00           | 0.54           | 1326            | 1538            | 0.38  | 0.28 |
| E                                                                                                                            | 0.98 | 7.19                    | 3640.95 | 2180                 | 1.00           | 0.51           | 1289            | 1498            | 0.32  | 0.21 |
| F                                                                                                                            | 0.98 | 8.13                    | 3640.95 | 2464                 | 1.00           | 0.55           | 1875            | 1907            | 0.43  | 0.64 |
| G                                                                                                                            | 1.00 | 5.91                    | 3640.95 | 1790                 | 1.00           | 0.46           | 1107            | 979             | 0.45  | 0.39 |
| Critical Arm:                                                                                                                |      |                         |         |                      |                |                |                 |                 | C     | F    |
| RFC:                                                                                                                         |      |                         |         |                      |                |                |                 |                 | 0.56  | 0.64 |
|                                                                                                                              |      |                         |         |                      |                |                |                 |                 | AM    | PM   |
| - In accordance with TPDM V2.4                                                                                               |      |                         |         |                      |                |                |                 |                 |       |      |
| Calculated by: MYC                                                                                                           |      |                         |         | Date: Jun-25         |                |                | Checked by: CFC |                 |       |      |



Priority Junction Capacity Calculation

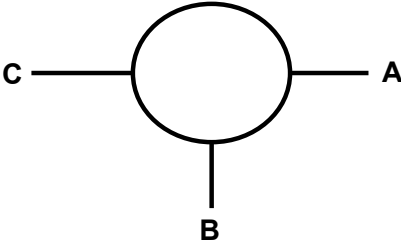
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                 |                  |        |      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|------------------|--------|------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long                                                                                                                                                                                                                                                                                                                                       |                      | Ref. No.: 2024O |                  |        |      |
| Junction: Castle Peak Road Mai Po / Mai Po South Road ( I )                                                                                                                                                                                                                                                                                                                                                                                                        |                      | Ref. No.:       |                  |        |      |
| Scheme: Observe                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      | Rev.: -         |                  |        |      |
| Year: 2024                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Job No.: CHK50873110 |                 |                  |        |      |
| ARM A: Castle Peak Road - Mai Po                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |                 |                  |        |      |
| ARM B: Mai Po South Road                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |                 |                  |        |      |
| ARM C: Castle Peak Road - Mai Po                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |                 |                  |        |      |
| <div><div>ARM C</div><div><div><div>AM(PM)</div><div>185(150)</div><div>5(5)</div></div><div><div>00</div><div>(5)(5)</div></div><div>Minor ARM B</div></div><div><div>ARM A</div><div><div>AM(PM)</div><div>175(205)</div><div>10(5)</div></div></div></div>                                                                                                                                                                                                      |                      |                 |                  |        |      |
| GEOMETRY                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |                 |                  |        |      |
| Major road width                                                                                                                                                                                                                                                                                                                                                                                                                                                   | W                    | 8.40            | Lane widths      | w(b-a) | 4.20 |
| Central Reserve width                                                                                                                                                                                                                                                                                                                                                                                                                                              | Wcr                  | 0.00            |                  | w(b-c) | 4.20 |
| 2 Lane Minor Arm (Y/N)                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      | N               |                  | w(c-b) | 4.20 |
| Visibilities                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Vr(b-a)              | 50              | Calculated       | D      | 0.91 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | VI(b-a)              | 30              |                  | E      | 0.99 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Vr(b-c)              | 50              |                  | F      | 0.99 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Vr(c-b)              | 50              |                  | Y      | 0.71 |
| ANALYSIS                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |                 |                  |        |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                 | AM PEAK(PM) PEAK |        |      |
| TRAFFIC FLOWS                                                                                                                                                                                                                                                                                                                                                                                                                                                      | q(c-a)               |                 | 185              | 150    |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | q(c-b)               |                 | 5                | 5      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | q(a-b)               |                 | 10               | 5      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | q(a-c)               |                 | 175              | 205    |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | q(b-a)               |                 | 0                | 5      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | q(b-c)               |                 | 0                | 5      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | f                    |                 | 0.00             | 0.50   |      |
| CAPACITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Q(b-a)               | Factor1         | 502              | 500    |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Q(b-c)               | 1               | 689              | 681    |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Q(c-b)               | 1               | 687              | 681    |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Q(b-ac)              | 1               | 502              | 577    |      |
| RFC's                                                                                                                                                                                                                                                                                                                                                                                                                                                              | b-a                  |                 | 0.000            | 0.010  |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | b-c                  |                 | 0.000            | 0.007  |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | c-b                  |                 | 0.007            | 0.007  |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | b-ac                 |                 | 0.000            | 0.017  |      |
| Worst RFC                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                      |                 | 0.007            | 0.017  |      |
| Where VI and Vr are visibility distances to the left or right of the respective streams<br>D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))<br>E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))<br>F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))<br>Y = 1-0.0345W<br>f = proportion of minor traffic turning left<br>Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)<br>Capacity of combined streams<br>- in accordance with TPDM V2.4 |                      |                 |                  |        |      |
| Calculated by: MYC                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                      | Date: Jun-25    | Checked by: CFC  |        |      |

J09\_P-Castle\_Peak\_Road\_Mai\_Po-Mai\_Po\_South\_Road.xlsm \ 2024O

### Priority Junction Capacity Calculation

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                   |        |                      |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------|--------|----------------------|-----------------|
| Job Title:                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |        |                      |                 |
| Junction:                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | Castle Peak Road San Tin / Kwu Tung Road ( J )                                                                    |        | Ref. No.: 2024O      |                 |
| Scheme:                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | Observe                                                                                                           |        | Ref. No.:            |                 |
| Year:                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | 2024                                                                                                              |        | Job No.: CHK50873110 |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                   |        | Rev.: -              |                 |
| ARM A:                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Castle Peak Road - San Tin                                                                                        |        |                      |                 |
| ARM B:                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Kwu Tung Road                                                                                                     |        |                      |                 |
| ARM C:                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Castle Peak Road - San Tin                                                                                        |        |                      |                 |
| <div><div>ARM C</div><div><div><div>AM</div><div>(PM)</div></div><div><div>450</div><div>(390)</div></div><div><div>145</div><div>(120)</div></div></div><div><div>ARM A</div><div><div>AM</div><div>(PM)</div></div><div><div>215</div><div>(195)</div></div><div><div>110</div><div>(55)</div></div></div><div><div>Minor ARM B</div><div><div>AM</div><div>(PM)</div></div><div><div>225</div><div>(285)</div></div><div><div>65</div><div>(105)</div></div></div></div> |  |                                                                                                                   |        |                      |                 |
| GEOMETRY                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                   |        |                      |                 |
| Major road width                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | W                                                                                                                 | 8.00   | Lane widths          |                 |
| Central Reserve width                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Wcr                                                                                                               | 0.00   | w(b-a)               |                 |
| 2 Lane Minor Arm (Y/N)                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                   | N      | w(b-c)               |                 |
| Visibilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | Vr(b-a)                                                                                                           | 40     | w(c-b)               |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | VI(b-a)                                                                                                           | 40     | Calculated           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Vr(b-c)                                                                                                           | 35     | D                    |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Vr(c-b)                                                                                                           | 35     | E                    |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                   |        | F                    |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                   |        | Y                    |                 |
| ANALYSIS                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                   |        |                      |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                   |        | AM PEAK              |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                   |        | (PM) PEAK            |                 |
| TRAFFIC FLOWS                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | q(c-a)                                                                                                            |        | 450                  | 390             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | q(c-b)                                                                                                            |        | 145                  | 120             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | q(a-b)                                                                                                            |        | 110                  | 55              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | q(a-c)                                                                                                            |        | 215                  | 195             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | q(b-a)                                                                                                            |        | 65                   | 105             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | q(b-c)                                                                                                            |        | 225                  | 285             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | f                                                                                                                 |        | 0.78                 | 0.73            |
| CAPACITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | Q(b-a)                                                                                                            | Factor | 371                  | 397             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Q(b-c)                                                                                                            | 1      | 622                  | 632             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Q(c-b)                                                                                                            | 1      | 589                  | 607             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Q(b-ac)                                                                                                           | 1      | 540                  | 545             |
| RFC's                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | b-a                                                                                                               |        | 0.175                | 0.264           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | b-c                                                                                                               |        | 0.362                | 0.451           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | c-b                                                                                                               |        | 0.246                | 0.198           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | b-ac                                                                                                              |        | 0.537                | 0.716           |
| Worst RFC                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                   |        | 0.537                | 0.716           |
| Where VI and Vr are visibility distances to the left or right of the respective streams<br>D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))<br>E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))<br>F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))<br>Y = 1-0.0345W<br>f = proportion of minor traffic turning left<br>Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)<br>Capacity of combined streams<br>- in accordance with TPDM V2.4          |  |                                                                                                                   |        |                      |                 |
| Calculated by:                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | LTY                                                                                                               | Date:  | Jun-25               | Checked by: CFC |

Roundabout Capacity Calculation

|                                                                                                                                                               |      |                |       |                      |                |                |                                                                                    |       |      |      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------|-------|----------------------|----------------|----------------|------------------------------------------------------------------------------------|-------|------|------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long                                  |      |                |       |                      |                |                |                                                                                    |       |      |      |
| Junction: San Tin Interchange ( K )                                                                                                                           |      |                |       |                      |                |                | Ref. No.: 2024O                                                                    |       |      |      |
| Scheme: Observe                                                                                                                                               |      |                |       |                      |                |                | Ref. No.:                                                                          |       |      |      |
| Year: 2024                                                                                                                                                    |      |                |       | Job No.: CHK50873110 |                |                | Rev.: -                                                                            |       |      |      |
| <div>AM                      PM</div> <div>ARM A: San Tin Highway Slip Road</div> <div>ARM B: San Sham Road</div> <div>ARM C: Fanling Highway Slip Road</div> |      |                |       |                      |                |                |  |       |      |      |
| GEOMETRY                                                                                                                                                      |      |                |       |                      |                |                |                                                                                    |       |      |      |
| ARM                                                                                                                                                           | v    | e              | L     | r                    | D              | Phi            | S                                                                                  |       |      |      |
| A                                                                                                                                                             | 7.70 | 14.40          | 75    | 30                   | 103            | 40             | 0.14                                                                               |       |      |      |
| B                                                                                                                                                             | 8.80 | 11.70          | 75    | 30                   | 103            | 40             | 0.06                                                                               |       |      |      |
| C                                                                                                                                                             | 8.80 | 12.00          | 40    | 100                  | 103            | 30             | 0.13                                                                               |       |      |      |
| AM FLOWS                                                                                                                                                      |      |                |       |                      |                |                |                                                                                    |       |      |      |
| from \ to                                                                                                                                                     | A    | B              | C     |                      |                |                | Circ                                                                               | Entry |      |      |
| A                                                                                                                                                             | 495  | 525            | 785   |                      |                |                | 255                                                                                | 1805  |      |      |
| B                                                                                                                                                             | 455  | 0              | 0     |                      |                |                | 1415                                                                               | 455   |      |      |
| C                                                                                                                                                             | 480  | 120            | 135   |                      |                |                | 950                                                                                | 735   |      |      |
| PM FLOWS                                                                                                                                                      |      |                |       |                      |                |                |                                                                                    |       |      |      |
| from \ to                                                                                                                                                     | A    | B              | C     |                      |                |                | Circ                                                                               | Entry |      |      |
| A                                                                                                                                                             | 425  | 460            | 600   |                      |                |                | 310                                                                                | 1485  |      |      |
| B                                                                                                                                                             | 610  | 0              | 0     |                      |                |                | 1185                                                                               | 610   |      |      |
| C                                                                                                                                                             | 400  | 150            | 160   |                      |                |                | 1035                                                                               | 710   |      |      |
| CALCULATIONS                                                                                                                                                  |      |                |       |                      |                |                |                                                                                    |       |      |      |
| ARM                                                                                                                                                           | K    | X <sub>2</sub> | M     | F                    | t <sub>D</sub> | f <sub>c</sub> | Q <sub>E</sub>                                                                     |       | RFC  |      |
|                                                                                                                                                               |      |                |       |                      |                |                | AM                                                                                 | PM    | AM   | PM   |
| A                                                                                                                                                             | 0.98 | 12.91          | 73.70 | 3912                 | 1.01           | 0.76           | 3650                                                                               | 3609  | 0.49 | 0.41 |
| B                                                                                                                                                             | 0.98 | 11.38          | 73.70 | 3448                 | 1.01           | 0.69           | 2423                                                                               | 2579  | 0.19 | 0.24 |
| C                                                                                                                                                             | 1.04 | 11.35          | 73.70 | 3438                 | 1.01           | 0.69           | 2891                                                                               | 2830  | 0.25 | 0.25 |
|                                                                                                                                                               |      |                |       |                      |                |                | Critical Arm:                                                                      |       | A    | A    |
|                                                                                                                                                               |      |                |       |                      |                |                | RFC:                                                                               |       | 0.49 | 0.41 |
|                                                                                                                                                               |      |                |       |                      |                |                |                                                                                    |       | AM   | PM   |
| - In accordance with TPDM V2.4                                                                                                                                |      |                |       |                      |                |                |                                                                                    |       |      |      |
| Calculated by: MYC                                                                                                                                            |      |                |       | Date: Jun-25         |                |                | Checked by: CFC                                                                    |       |      |      |



Calculation Spreadsheets  
for  
2031 Reference Scenario

# TRAFFIC SIGNALS CALCULATION

Job No.: **CHK50873110**

MVA HONG KONG LIMITED

Junction: Shek Wu Wai Road / San Tin Highway Slip Road ( A )

Design Year: 2031

Description: Reference

Designed By: KCC

Checked By: CFC

| Approach                       | Movements | Phase | Stage | Width (m) | Radius (m) |       | Gradient (%) | Pro. Turning (%) |     | Revised Saturation Flow (pcu/hr) |      | AM Peak       |         |            | PM Peak       |         |            |
|--------------------------------|-----------|-------|-------|-----------|------------|-------|--------------|------------------|-----|----------------------------------|------|---------------|---------|------------|---------------|---------|------------|
|                                |           |       |       |           | Left       | Right |              | AM               | PM  | AM                               | PM   | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| San Tin highway Slip Road (EB) | →         | A     | 1,2   | 3.650     |            | 12.5  |              | 95%              | 95% | 1780                             | 1780 | 96            | 0.054   |            | 98            | 0.055   |            |
|                                | ↘         | A     | 1,2   | 3.650     |            | 10    |              |                  |     | 1845                             | 1845 | 99            | 0.054   |            | 102           | 0.055   | 0.055      |
| San Tin highway Slip Road (WB) | ←         | B     | 1     | 3.900     |            | 10    |              |                  |     | 1865                             | 1865 | 23            | 0.012   |            | 23            | 0.012   |            |
|                                | ↙         | B     | 1     | 3.900     |            | 12.5  |              | 77%              | 77% | 1835                             | 1835 | 22            | 0.012   |            | 22            | 0.012   |            |
| Shek Wu Wai Road (SB)          | ↓         | C     | 2,3   | 3.500     |            |       |              |                  |     | 1965                             | 1965 | 225           | 0.115   |            | 205           | 0.104   |            |
|                                | ↔         | C     | 2,3   | 3.500     |            | 15    |              | 100%             | 73% | 1915                             | 1960 | 250           | 0.131   | 0.131      | 204           | 0.104   |            |
|                                | ↗         | C     | 2,3   | 3.500     |            | 12.5  |              |                  |     | 1880                             | 1880 | 245           | 0.130   |            | 196           | 0.104   |            |
| Shek Wu Wai Road (NB)          | ↑         | D     | 4     | 3.500     |            |       |              |                  |     | 1965                             | 1965 | 104           | 0.053   |            | 63            | 0.032   | 0.032      |
|                                | ↔         | D     | 4     | 3.500     |            | 15    |              | 89%              | 89% | 1935                             | 1935 | 102           | 0.053   | 0.053      | 62            | 0.032   |            |
|                                | ↖         | D     | 4     | 3.500     |            | 12.5  |              |                  |     | 1880                             | 1880 | 99            | 0.053   |            | 60            | 0.032   |            |
| Shek Wu Wai Road (SB)          | ↓         | E     | 3     | 3.500     |            |       |              |                  |     | 2105                             | 2105 | 179           | 0.085   |            | 140           | 0.067   | 0.067      |
|                                | ↔         | E     | 3     | 3.500     |            |       |              |                  |     | 2105                             | 2105 | 179           | 0.085   |            | 140           | 0.067   |            |
|                                | ↗         | E     | 3     | 3.500     |            |       |              |                  |     | 1965                             | 1965 | 167           | 0.085   |            | 130           | 0.066   |            |
| Shek Wu Wai Road (NB)          | ↑         | F     | 4     | 3.500     |            |       |              |                  |     | 1965                             | 1965 | 83            | 0.042   |            | 48            | 0.024   |            |
|                                | ↔         | F     | 4     | 3.500     |            |       |              |                  |     | 2105                             | 2105 | 88            | 0.042   |            | 51            | 0.024   |            |
|                                | ↖         | F     | 4     | 3.500     |            |       |              |                  |     | 2105                             | 2105 | 89            | 0.042   |            | 51            | 0.024   |            |

| Notes: |  |  |  |  | Group           | B,C,F | B,C,D | Group           | B,C,D | A,E,D |
|--------|--|--|--|--|-----------------|-------|-------|-----------------|-------|-------|
|        |  |  |  |  | <b>y</b>        | 0.173 | 0.183 | <b>y</b>        | 0.149 | 0.154 |
|        |  |  |  |  | <b>L (sec)</b>  | 22    | 22    | <b>L (sec)</b>  | 16    | 14    |
|        |  |  |  |  | <b>C (sec)</b>  | 90    | 90    | <b>C (sec)</b>  | 90    | 90    |
|        |  |  |  |  | <b>y pract.</b> | 0.680 | 0.680 | <b>y pract.</b> | 0.740 | 0.760 |
|        |  |  |  |  | <b>R.C. (%)</b> | 293%  | 271%  | <b>R.C. (%)</b> | 398%  | 394%  |

| Stage / Phase Diagrams |   |        |  |        |  |        |  |      |  |
|------------------------|---|--------|--|--------|--|--------|--|------|--|
| 1.                     |   | 2.     |  | 3.     |  | 4.     |  | 5.   |  |
|                        |   |        |  |        |  |        |  |      |  |
| I/G= 5                 | 5 | I/G= 6 |  | I/G=   |  | I/G= 8 |  | I/G= |  |
| I/G= 5                 |   | I/G=   |  | I/G= 7 |  | I/G= 5 |  | I/G= |  |

Date: JUL, 2025 Junction: Shek Wu Wai Road / San Tin Highway Slip Road ( A ) **(A)**

# TRAFFIC SIGNALS CALCULATION

Job No.: **CHK50873110**

MVA HONG KONG LIMITED

Junction: Shek Wu Wai Road / Road D3 / Road L11 / Road L12 ( B )

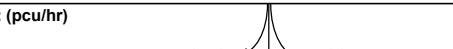
Design Year: 2031

Description: Reference

Designed By: KCC

Checked By: CFC

| Approach    | Movements | Phase | Stage | Width (m) | Radius (m) |       | Gradient (%) | Pro. Turning (%) |         | Revised Saturation Flow (pcu/hr) |      | AM Peak       |         |            | PM Peak       |         |            |
|-------------|-----------|-------|-------|-----------|------------|-------|--------------|------------------|---------|----------------------------------|------|---------------|---------|------------|---------------|---------|------------|
|             |           |       |       |           | Left       | Right |              | AM               | PM      | AM                               | PM   | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Road L11 EB | ↔         | A     | 1     | 4.000     | 15         |       |              |                  |         | 1830                             | 1830 | 168           | 0.092   |            | 35            | 0.019   |            |
|             | ↔         | A     | 1     | 4.000     | 17.5       | 20    |              | 6% / 0%          | 0% / 0% | 2145                             | 2155 | 197           | 0.092   | 0.092      | 230           | 0.107   | 0.107      |
|             | ↔         | A     | 1     | 4.000     |            | 17.5  |              |                  |         | 1985                             | 1985 | 135           | 0.068   |            | 125           | 0.063   |            |
| Road D2 NB  | ↕         | B     | 2     | 3.200     | 15         |       |              |                  |         | 1760                             | 1760 | 57            | 0.032   |            | 70            | 0.040   |            |
|             | ↕         | B     | 2     | 3.200     | 17.5       |       |              | 94%              | 100%    | 1920                             | 1910 | 62            | 0.032   |            | 75            | 0.039   |            |
|             | ↕         | B     | 2     | 3.200     |            |       |              |                  |         | 2075                             | 2075 | 66            | 0.032   |            | 25            | 0.012   |            |
|             | ↕         | B     | 2     | 3.200     |            | 12.5  |              | 100%             | 100%    | 1855                             | 1855 | 220           | 0.119   | 0.119      | 175           | 0.094   | 0.094      |
| Road L11 WB | ↔         | C     | 3     | 3.300     | 12.5       |       |              |                  |         | 1735                             | 1735 | 136           | 0.078   |            | 104           | 0.060   |            |
|             | ↔         | C     | 3     | 3.300     | 15         |       |              | 85%              | 47%     | 1920                             | 1990 | 151           | 0.079   | 0.079      | 120           | 0.060   |            |
|             | ↔         | C     | 3     | 3.300     |            | 20    |              | 0%               | 0%      | 2085                             | 2085 | 163           | 0.078   |            | 126           | 0.060   | 0.060      |
| Road D3 SB  | ↕         | D     | 4     | 4.000     | 12.5       |       |              | 0%               | 0%      | 2015                             | 2015 | 80            | 0.040   |            | 82            | 0.041   |            |
|             | ↕         | D     | 4     | 4.000     |            |       |              |                  |         | 2155                             | 2155 | 85            | 0.039   |            | 88            | 0.041   |            |
|             | ↕         | D     | 4     | 4.000     |            | 20    |              | 100%             | 100%    | 2005                             | 2005 | 110           | 0.055   | 0.055      | 425           | 0.212   | 0.212      |

| Notes: | <div>Flow: (pcu/hr)</div>  | Group    |  | A,B,C,D | Group    |  | A,B,C,D |
|--------|---------------------------------------------------------------------------------------------------------------|----------|--|---------|----------|--|---------|
|        |                                                                                                               | y        |  | 0.344   | y        |  | 0.473   |
|        |                                                                                                               | L (sec)  |  | 22      | L (sec)  |  | 22      |
|        |                                                                                                               | C (sec)  |  | 90      | C (sec)  |  | 90      |
|        |                                                                                                               | y pract. |  | 0.680   | y pract. |  | 0.680   |
|        |                                                                                                               | R.C. (%) |  | 98%     | R.C. (%) |  | 44%     |

| Stage / Phase Diagrams |  |        |  |        |  |        |                                                                  |      |  |
|------------------------|--|--------|--|--------|--|--------|------------------------------------------------------------------|------|--|
| 1.                     |  | 2.     |  | 3.     |  | 4.     |                                                                  | 5.   |  |
|                        |  |        |  |        |  |        |                                                                  |      |  |
| I/G= 6                 |  | I/G= 6 |  | I/G= 7 |  | I/G= 7 |                                                                  | I/G= |  |
| I/G= 6                 |  | I/G= 6 |  | I/G= 7 |  | I/G= 7 |                                                                  | I/G= |  |
| Date: JUL, 2025        |  |        |  |        |  |        | Junction: Shek Wu Wai Road / Road D3 / Road L11 / Road L12 ( B ) |      |  |

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road Mai Po / San Tam Road ( C )                                                                       |                      | Ref. No.: 2031R |  |
| Scheme: Reference                                                                                                            |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |
| ARM B: San Tam Road                                                                                                          |                      |                 |  |
| ARM C: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |

**ARM C**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 310 | (270) |
| 10  | (15)  |

**ARM A**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 595 | (320) |
| 90  | (100) |

**Minor ARM B**

|      |      |
|------|------|
| AM   | (PM) |
| 25   | 100  |
| (15) | (60) |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 8.30 | Lane widths | w(b-a) | 3.20 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 3.20 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 4.10 |
| Visibilities           | Vr(b-a) | 50   | Calculated  | D      | 0.85 |
|                        | VI(b-a) | 70   |             | E      | 0.90 |
|                        | Vr(b-c) | 50   |             | F      | 0.98 |
|                        | Vr(c-b) | 50   |             | Y      | 0.71 |

| ANALYSIS      |            | AM PEAK | (PM) PEAK |
|---------------|------------|---------|-----------|
| TRAFFIC FLOWS | q(c-a)     | 310     | 270       |
|               | q(c-b)     | 10      | 15        |
|               | q(a-b)     | 90      | 100       |
|               | q(a-c)     | 595     | 320       |
|               | q(b-a)     | 100     | 60        |
|               | q(b-c)     | 25      | 15        |
|               | f          | 0.20    | 0.20      |
|               | CAPACITIES | Q(b-a)  | 349       |
| Q(b-c)        |            | 522     | 585       |
| Q(c-b)        |            | 554     | 621       |
| Q(b-ac)       |            | 373     | 439       |
| RFC's         |            | b-a     | 0.287     |
|               | b-c        | 0.048   | 0.026     |
|               | c-b        | 0.018   | 0.024     |
|               | b-ac       | 0.335   | 0.171     |
|               | Worst RFC  | 0.335   | 0.171     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

$Y = 1-0.0345W$

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4



## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road Mai Po / Palm Springs Boulevard ( D )                                                             |                      | Ref. No.: 2031R |  |
| Scheme: Reference                                                                                                            |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |
| ARM B: Palm Springs Boulevard                                                                                                |                      |                 |  |
| ARM C: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |

**ARM C**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 220 | (220) |
| 10  | (30)  |

**ARM A**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 220 | (220) |
| 145 | (205) |

**Minor ARM B**

|      |       |
|------|-------|
| AM   | (PM)  |
| 25   | 225   |
| (50) | (160) |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 7.00 | Lane widths | w(b-a) | 4.00 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 4.00 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 3.00 |
| Visibilities           | Vr(b-a) | 30   | Calculated  | D      | 0.88 |
|                        | VI(b-a) | 30   |             | E      | 0.95 |
|                        | Vr(b-c) | 30   |             | F      | 0.86 |
|                        | Vr(c-b) | 30   |             | Y      | 0.76 |

| ANALYSIS      |            |              |              |
|---------------|------------|--------------|--------------|
|               |            | AM PEAK      | (PM) PEAK    |
| TRAFFIC FLOWS | q(c-a)     | 220          | 220          |
|               | q(c-b)     | 10           | 30           |
|               | q(a-b)     | 145          | 205          |
|               | q(a-c)     | 220          | 220          |
|               | q(b-a)     | 225          | 160          |
|               | q(b-c)     | 25           | 50           |
|               | f          | 0.10         | 0.24         |
|               | CAPACITIES | Q(b-a)       | 448          |
| Q(b-c)        |            | 634          | 628          |
| Q(c-b)        |            | 556          | 542          |
| Q(b-ac)       |            | 462          | 470          |
| RFC's         |            | b-a          | 0.502        |
|               | b-c        | 0.039        | 0.080        |
|               | c-b        | 0.018        | 0.055        |
|               | b-ac       | 0.541        | 0.447        |
|               | Worst RFC  | <b>0.541</b> | <b>0.447</b> |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

Y = 1-0.0345W

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road Mai Po / Geranium Path ( E )                                                                      |                      | Ref. No.: 2031R |  |
| Scheme: Reference                                                                                                            |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |
| ARM B: Geranium Path                                                                                                         |                      |                 |  |
| ARM C: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |

**ARM C**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 435 | (375) |
| 5   | (5)   |

**ARM A**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 360 | (415) |
| 5   | (5)   |

**Minor ARM B**

|    |      |
|----|------|
| AM | (PM) |
| 5  | (5)  |
| 5  | (5)  |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 7.00 | Lane widths | w(b-a) | 3.00 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 3.00 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 3.60 |
| Visibilities           | Vr(b-a) | 50   | Calculated  | D      | 0.82 |
|                        | VI(b-a) | 30   |             | E      | 0.88 |
|                        | Vr(b-c) | 50   |             | F      | 0.93 |
|                        | Vr(c-b) | 50   |             | Y      | 0.76 |

| ANALYSIS      |            |        | AM PEAK     | (PM) PEAK |
|---------------|------------|--------|-------------|-----------|
| TRAFFIC FLOWS | q(c-a)     |        | 435         | 375       |
|               | q(c-b)     |        | 5           | 5         |
|               | q(a-b)     |        | 5           | 5         |
|               | q(a-c)     |        | 360         | 415       |
|               | q(b-a)     |        | 5           | 5         |
|               | q(b-c)     |        | 5           | 5         |
|               | f          |        | 0.50        | 0.50      |
|               | CAPACITIES | Q(b-a) | Factor<br>1 | 367       |
| Q(b-c)        |            | 1      | 567         | 554       |
| Q(c-b)        |            | 1      | 601         | 587       |
| Q(b-ac)       |            | 1      | 446         | 439       |
| RFC's         |            | b-a    | 0.014       | 0.014     |
|               | b-c        | 0.009  | 0.009       |           |
|               | c-b        | 0.008  | 0.009       |           |
|               | b-ac       | 0.022  | 0.023       |           |
| Worst RFC     |            |        | 0.022       | 0.023     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

Y = 1-0.0345W

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road Tam Mi / Yau Pok Road ( F )                                                                       |                      | Ref. No.: 2031R |  |
| Scheme: Reference                                                                                                            |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - Tam Mi                                                                                             |                      |                 |  |
| ARM B: Yau Pok Road                                                                                                          |                      |                 |  |
| ARM C: Castle Peak Road - Tam Mi                                                                                             |                      |                 |  |

ARM C

|     |       |
|-----|-------|
| AM  | (PM)  |
| 440 | (380) |
| 0   | (0)   |

ARM A

|     |       |
|-----|-------|
| AM  | (PM)  |
| 345 | (405) |
| 0   | (0)   |

Minor ARM B

|    |      |
|----|------|
| AM | (PM) |
| 20 | (20) |
| 20 | (20) |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 6.50 | Lane widths | w(b-a) | 1.88 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 1.88 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 0.00 |
| Visibilities           | Vr(b-a) | 16   | Calculated  | D      | 0.70 |
|                        | VI(b-a) | 31   |             | E      | 0.76 |
|                        | Vr(b-c) | 16   |             | F      | 0.59 |
|                        | Vr(c-b) | 0    |             | Y      | 0.78 |

| ANALYSIS      |            | AM PEAK | (PM) PEAK |
|---------------|------------|---------|-----------|
| TRAFFIC FLOWS | q(c-a)     | 440     | 380       |
|               | q(c-b)     | 0       | 0         |
|               | q(a-b)     | 0       | 0         |
|               | q(a-c)     | 345     | 405       |
|               | q(b-a)     | 20      | 20        |
|               | q(b-c)     | 20      | 20        |
|               | f          | 0.50    | 0.50      |
|               | CAPACITIES | Q(b-a)  | 317       |
| Q(b-c)        |            | 489     | 477       |
| Q(c-b)        |            | 379     | 370       |
| Q(b-ac)       |            | 385     | 377       |
| RFC's         |            | b-a     | 0.063     |
|               | b-c        | 0.041   | 0.042     |
|               | c-b        | 0.000   | 0.000     |
|               | b-ac       | 0.104   | 0.106     |
|               | Worst RFC  | 0.104   | 0.106     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

Y = 1-0.0345W

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road Tam Mi / Kam Pok Road ( G )                                                                       |                      | Ref. No.: 2031R |  |
| Scheme: Reference                                                                                                            |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - Tam Mi                                                                                             |                      |                 |  |
| ARM B: Kam Pok Road                                                                                                          |                      |                 |  |
| ARM C: Castle Peak Road - Tam Mi                                                                                             |                      |                 |  |

**GEOMETRY**

|                        |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 7.00 | Lane widths | w(b-a) | 3.50 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 3.50 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 3.50 |
| Visibilities           | Vr(b-a) | 50   | Calculated  | D      | 0.86 |
|                        | VI(b-a) | 35   |             | E      | 0.92 |
|                        | Vr(b-c) | 50   |             | F      | 0.92 |
|                        | Vr(c-b) | 50   |             | Y      | 0.76 |

**ANALYSIS**

|               |            | AM PEAK | (PM) PEAK |
|---------------|------------|---------|-----------|
| TRAFFIC FLOWS | q(c-a)     | 350     | 315       |
|               | q(c-b)     | 110     | 85        |
|               | q(a-b)     | 160     | 150       |
|               | q(a-c)     | 260     | 325       |
|               | q(b-a)     | 180     | 105       |
|               | q(b-c)     | 85      | 80        |
|               | f          | 0.32    | 0.43      |
|               | CAPACITIES | Q(b-a)  | 373       |
| Q(b-c)        |            | 606     | 590       |
| Q(c-b)        |            | 581     | 567       |
| Q(b-ac)       |            | 425     | 443       |
| RFC's         |            | b-a     | 0.483     |
|               | b-c        | 0.140   | 0.136     |
|               | c-b        | 0.189   | 0.150     |
|               | b-ac       | 0.624   | 0.418     |
|               | Worst RFC  | 0.624   | 0.418     |

Where VI and Vr are visibility distances to the left or right of the respective streams  
 $D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$   
 $E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$   
 $F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$   
 $Y = 1-0.0345W$   
f = proportion of minor traffic turning left  
 $Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

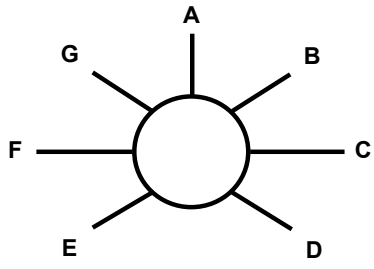
**T.P.D.M.V.2.4**  
**Appendix 1**

Capacity of combined streams  
- in accordance with TPDM V2.4

|                    |              |                 |
|--------------------|--------------|-----------------|
| Calculated by: MYC | Date: Jul-25 | Checked by: CFC |
|--------------------|--------------|-----------------|



# Roundabout Capacity Calculation

|                                                                                                                              |      |                         |         |                                                                                     |                |                |                 |                 |       |      |  |      |
|------------------------------------------------------------------------------------------------------------------------------|------|-------------------------|---------|-------------------------------------------------------------------------------------|----------------|----------------|-----------------|-----------------|-------|------|--|------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |      |                         |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| Junction: Fairview Park Interchange ( H )                                                                                    |      |                         |         |                                                                                     |                |                |                 | Ref. No.: 2031R |       |      |  |      |
| Scheme: Reference                                                                                                            |      |                         |         |                                                                                     |                |                |                 | Ref. No.:       |       |      |  |      |
| Year: 2031                                                                                                                   |      |                         |         | Job No.: CHK50873110                                                                |                |                |                 | Rev.: -         |       |      |  |      |
| AM                                                                                                                           |      | PM                      |         |  |                |                |                 |                 |       |      |  |      |
| ARM A:                                                                                                                       |      | Fairview Park Boulevard |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| ARM B:                                                                                                                       |      | Castle Peak Rd E        |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| ARM C:                                                                                                                       |      | NTCR E                  |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| ARM D:                                                                                                                       |      | San Tam Rd E            |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| ARM E:                                                                                                                       |      | San Tam Rd W            |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| ARM F:                                                                                                                       |      | NTCR W                  |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| ARM G:                                                                                                                       |      | Castle Peak Rd W        |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| GEOMETRY                                                                                                                     |      |                         |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| ARM                                                                                                                          | v    | e                       | L       | r                                                                                   | D              | Phi            | S               |                 |       |      |  |      |
| A                                                                                                                            | 7.00 | 11.00                   | 14      | 22                                                                                  | 142            | 35             | 0.46            |                 |       |      |  |      |
| B                                                                                                                            | 5.50 | 10.50                   | 15      | 20                                                                                  | 142            | 35             | 0.53            |                 |       |      |  |      |
| C                                                                                                                            | 5.50 | 8.50                    | 7.5     | 23                                                                                  | 142            | 30             | 0.64            |                 |       |      |  |      |
| D                                                                                                                            | 6.75 | 8.50                    | 10      | 20                                                                                  | 142            | 25             | 0.28            |                 |       |      |  |      |
| E                                                                                                                            | 6.00 | 8.00                    | 9.5     | 20                                                                                  | 142            | 35             | 0.34            |                 |       |      |  |      |
| F                                                                                                                            | 6.50 | 9.00                    | 15      | 25                                                                                  | 142            | 40             | 0.27            |                 |       |      |  |      |
| G                                                                                                                            | 5.50 | 6.00                    | 7       | 22                                                                                  | 142            | 30             | 0.11            |                 |       |      |  |      |
| AM FLOWS                                                                                                                     |      |                         |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| from \ to                                                                                                                    | A    | B                       | C       | D                                                                                   | E              | F              | G               | Circ            | Entry | Exit |  |      |
| A                                                                                                                            | 10   | 20                      | 220     | 40                                                                                  | 215            | 420            | 30              | 2555            | 955   | 620  |  |      |
| B                                                                                                                            | 10   | 10                      | 135     | 10                                                                                  | 235            | 245            | 30              | 2970            | 675   | 540  |  |      |
| C                                                                                                                            | 105  | 70                      | 10      | 95                                                                                  | 475            | 10             | 215             | 2425            | 980   | 1220 |  |      |
| D                                                                                                                            | 60   | 20                      | 50      | 10                                                                                  | 245            | 245            | 85              | 2965            | 715   | 440  |  |      |
| E                                                                                                                            | 40   | 35                      | 445     | 65                                                                                  | 10             | 480            | 20              | 1935            | 1095  | 1745 |  |      |
| F                                                                                                                            | 290  | 240                     | 10      | 140                                                                                 | 555            | 10             | 340             | 1330            | 1585  | 1700 |  |      |
| G                                                                                                                            | 105  | 145                     | 350     | 80                                                                                  | 10             | 290            | 0               | 2195            | 980   | 720  |  |      |
| PM FLOWS                                                                                                                     |      |                         |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| from \ to                                                                                                                    | A    | B                       | C       | D                                                                                   | E              | F              | G               | Circ            | Entry | Exit |  |      |
| A                                                                                                                            | 10   | 10                      | 185     | 50                                                                                  | 195            | 290            | 30              | 2135            | 770   | 940  |  |      |
| B                                                                                                                            | 35   | 10                      | 85      | 10                                                                                  | 155            | 125            | 30              | 2415            | 450   | 490  |  |      |
| C                                                                                                                            | 180  | 115                     | 20      | 80                                                                                  | 415            | 20             | 195             | 2040            | 1025  | 825  |  |      |
| D                                                                                                                            | 75   | 20                      | 60      | 20                                                                                  | 195            | 135            | 70              | 2650            | 575   | 415  |  |      |
| E                                                                                                                            | 90   | 30                      | 270     | 70                                                                                  | 10             | 260            | 20              | 1665            | 750   | 1560 |  |      |
| F                                                                                                                            | 465  | 220                     | 10      | 135                                                                                 | 580            | 20             | 260             | 1370            | 1690  | 1045 |  |      |
| G                                                                                                                            | 85   | 85                      | 195     | 50                                                                                  | 10             | 195            | 10              | 2445            | 630   | 615  |  |      |
| CALCULATIONS                                                                                                                 |      |                         |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| ARM                                                                                                                          | K    | X <sub>2</sub>          | M       | F                                                                                   | t <sub>D</sub> | f <sub>c</sub> | AM              | PM              | AM    | PM   |  |      |
| A                                                                                                                            | 0.99 | 9.09                    | 3640.95 | 2754                                                                                | 1.00           | 0.59           | 1226            | 1471            | 0.78  | 0.52 |  |      |
| B                                                                                                                            | 0.98 | 7.92                    | 3640.95 | 2400                                                                                | 1.00           | 0.54           | 774             | 1070            | 0.87  | 0.42 |  |      |
| C                                                                                                                            | 1.01 | 6.82                    | 3640.95 | 2065                                                                                | 1.00           | 0.50           | 867             | 1059            | 1.13  | 0.97 |  |      |
| D                                                                                                                            | 1.02 | 7.87                    | 3640.95 | 2385                                                                                | 1.00           | 0.54           | 796             | 969             | 0.90  | 0.59 |  |      |
| E                                                                                                                            | 0.98 | 7.19                    | 3640.95 | 2180                                                                                | 1.00           | 0.51           | 1168            | 1304            | 0.94  | 0.58 |  |      |
| F                                                                                                                            | 0.98 | 8.13                    | 3640.95 | 2464                                                                                | 1.00           | 0.55           | 1687            | 1665            | 0.94  | 1.01 |  |      |
| G                                                                                                                            | 1.00 | 5.91                    | 3640.95 | 1790                                                                                | 1.00           | 0.46           | 788             | 673             | 1.24  | 0.94 |  |      |
|                                                                                                                              |      |                         |         |                                                                                     |                |                |                 | Q <sub>E</sub>  |       | RFC  |  |      |
|                                                                                                                              |      |                         |         |                                                                                     |                |                |                 | Critical Arm:   |       | G    |  | F    |
|                                                                                                                              |      |                         |         |                                                                                     |                |                |                 | RFC:            |       | 1.24 |  | 1.01 |
|                                                                                                                              |      |                         |         |                                                                                     |                |                |                 |                 |       | AM   |  | PM   |
| - In accordance with TPDM V2.4                                                                                               |      |                         |         |                                                                                     |                |                |                 |                 |       |      |  |      |
| Calculated by: MYC                                                                                                           |      |                         |         | Date: Jul-25                                                                        |                |                | Checked by: CFC |                 |       |      |  |      |

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road Mai Po / Mai Po South Road ( I )                                                                  |                      | Ref. No.: 2031R |  |
| Scheme: Reference                                                                                                            |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |
| ARM B: Mai Po South Road                                                                                                     |                      |                 |  |
| ARM C: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |

**ARM C**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 230 | (235) |
| 5   | (5)   |

**ARM A**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 235 | (260) |
| 10  | (5)   |

**Minor ARM B**

|      |      |
|------|------|
| AM   | (PM) |
| 0    | 0    |
| (10) | (15) |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 8.40 | Lane widths | w(b-a) | 4.20 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 4.20 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 4.20 |
| Visibilities           | Vr(b-a) | 50   | Calculated  | D      | 0.91 |
|                        | VI(b-a) | 30   |             | E      | 0.99 |
|                        | Vr(b-c) | 50   |             | F      | 0.99 |
|                        | Vr(c-b) | 50   |             | Y      | 0.71 |

| ANALYSIS      |            |         |           |
|---------------|------------|---------|-----------|
|               |            | AM PEAK | (PM) PEAK |
| TRAFFIC FLOWS | q(c-a)     | 230     | 235       |
|               | q(c-b)     | 5       | 5         |
|               | q(a-b)     | 10      | 5         |
|               | q(a-c)     | 235     | 260       |
|               | q(b-a)     | 0       | 15        |
|               | q(b-c)     | 0       | 10        |
|               | f          | 0.00    | 0.40      |
|               | CAPACITIES | Q(b-a)  | 481       |
| Q(b-c)        |            | 673     | 667       |
| Q(c-b)        |            | 672     | 667       |
| Q(b-ac)       |            | 481     | 537       |
| RFC's         |            | b-a     | 0.000     |
|               | b-c        | 0.000   | 0.015     |
|               | c-b        | 0.007   | 0.007     |
|               | b-ac       | 0.000   | 0.047     |
|               | Worst RFC  | 0.007   | 0.047     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

Y = 1-0.0345W

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

Calculation Spreadsheets  
for  
2031 Design Scenario

# TRAFFIC SIGNALS CALCULATION

Job No.: **CHK50873110**

MVA HONG KONG LIMITED

Junction: Shek Wu Wai Road / San Tin Highway Slip Road ( A )

Design Year: 2031

Description: Design

Designed By: KCC

Checked By: CFC

| Approach                       | Movements | Phase | Stage | Width (m) | Radius (m) |       | Gradient (%) | Pro. Turning (%) |     | Revised Saturation Flow (pcu/hr) |      | AM Peak       |         |            | PM Peak       |         |            |
|--------------------------------|-----------|-------|-------|-----------|------------|-------|--------------|------------------|-----|----------------------------------|------|---------------|---------|------------|---------------|---------|------------|
|                                |           |       |       |           | Left       | Right |              | AM               | PM  | AM                               | PM   | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| San Tin highway Slip Road (EB) | →         | A     | 1,2   | 3.650     |            | 12.5  |              | 95%              | 95% | 1780                             | 1780 | 96            | 0.054   |            | 98            | 0.055   |            |
|                                | ↓         | A     | 1,2   | 3.650     |            | 10    |              |                  |     | 1845                             | 1845 | 99            | 0.054   |            | 102           | 0.055   |            |
| San Tin highway Slip Road (WB) | ←         | B     | 1     | 3.900     |            | 10    |              |                  |     | 1865                             | 1865 | 41            | 0.022   | 0.022      | 43            | 0.023   |            |
|                                | ←         | B     | 1     | 3.900     |            | 12.5  |              | 87%              | 88% | 1815                             | 1815 | 39            | 0.021   |            | 42            | 0.023   | 0.023      |
| Shek Wu Wai Road (SB)          | ↓         | C     | 2,3   | 3.500     |            |       |              |                  |     | 1965                             | 1965 | 225           | 0.115   |            | 212           | 0.108   |            |
|                                | ↔         | C     | 2,3   | 3.500     |            | 15    |              | 100%             | 77% | 1915                             | 1955 | 270           | 0.141   | 0.141      | 210           | 0.107   |            |
|                                | ↓         | C     | 2,3   | 3.500     |            | 12.5  |              |                  |     | 1880                             | 1880 | 265           | 0.141   |            | 203           | 0.108   | 0.108      |
| Shek Wu Wai Road (NB)          | ↑         | D     | 4     | 3.500     |            |       |              |                  |     | 1965                             | 1965 | 115           | 0.059   | 0.059      | 77            | 0.039   |            |
|                                | ↔         | D     | 4     | 3.500     |            | 15    |              | 70%              | 52% | 1970                             | 2000 | 115           | 0.058   |            | 79            | 0.040   | 0.040      |
|                                | ↔         | D     | 4     | 3.500     |            | 12.5  |              |                  |     | 1880                             | 1880 | 110           | 0.059   |            | 74            | 0.039   |            |
| Shek Wu Wai Road (SB)          | ↓         | E     | 3     | 3.500     |            |       |              |                  |     | 2105                             | 2105 | 193           | 0.092   |            | 147           | 0.070   |            |
|                                | ↓         | E     | 3     | 3.500     |            |       |              |                  |     | 2105                             | 2105 | 192           | 0.091   |            | 146           | 0.069   |            |
|                                | ↓         | E     | 3     | 3.500     |            |       |              |                  |     | 1965                             | 1965 | 180           | 0.092   |            | 137           | 0.070   |            |
| Shek Wu Wai Road (NB)          | ↑         | F     | 4     | 3.500     |            |       |              |                  |     | 1965                             | 1965 | 83            | 0.042   |            | 48            | 0.024   |            |
|                                | ↑         | F     | 4     | 3.500     |            |       |              |                  |     | 2105                             | 2105 | 88            | 0.042   |            | 51            | 0.024   |            |
|                                | ↑         | F     | 4     | 3.500     |            |       |              |                  |     | 2105                             | 2105 | 89            | 0.042   |            | 51            | 0.024   |            |

|               |  |  |  |  |                 |       |       |                 |       |       |
|---------------|--|--|--|--|-----------------|-------|-------|-----------------|-------|-------|
| <b>Notes:</b> |  |  |  |  | <b>Group</b>    | B,C,F | B,C,D | <b>Group</b>    | A,E,D | B,C,D |
|               |  |  |  |  | <b>y</b>        | 0.205 | 0.222 | <b>y</b>        | 0.165 | 0.171 |
|               |  |  |  |  | <b>L (sec)</b>  | 16    | 16    | <b>L (sec)</b>  | 14    | 16    |
|               |  |  |  |  | <b>C (sec)</b>  | 90    | 90    | <b>C (sec)</b>  | 90    | 90    |
|               |  |  |  |  | <b>y pract.</b> | 0.740 | 0.740 | <b>y pract.</b> | 0.760 | 0.740 |
|               |  |  |  |  | <b>R.C. (%)</b> | 261%  | 234%  | <b>R.C. (%)</b> | 362%  | 334%  |

| Stage / Phase Diagrams |  |        |  |      |  |        |  |      |  |
|------------------------|--|--------|--|------|--|--------|--|------|--|
| 1.                     |  | 2.     |  | 3.   |  | 4.     |  | 5.   |  |
|                        |  |        |  |      |  |        |  |      |  |
| I/G= 5                 |  | I/G= 6 |  | I/G= |  | I/G= 8 |  | I/G= |  |
| I/G= 5                 |  | I/G= 6 |  | I/G= |  | I/G= 8 |  | I/G= |  |

Date: JUL, 2025 Junction: Shek Wu Wai Road / San Tin Highway Slip Road ( A ) (A)



# TRAFFIC SIGNALS CALCULATION

Job No.: **CHK50873110**

MVA HONG KONG LIMITED

Junction: Shek Wu Wai Road / Road D3 / Road L11 / Road L12 ( B )

Design Year: 2031

Description: Design

Designed By: KCC

Checked By: CFC

| Approach    | Movements | Phase | Stage | Width (m) | Radius (m) |       | Gradient (%) | Pro. Turning (%) |         | Revised Saturation Flow (pcu/hr) |      | AM Peak       |         |            | PM Peak       |         |            |
|-------------|-----------|-------|-------|-----------|------------|-------|--------------|------------------|---------|----------------------------------|------|---------------|---------|------------|---------------|---------|------------|
|             |           |       |       |           | Left       | Right |              | AM               | PM      | AM                               | PM   | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Road L11 EB | ↔         | A     | 1     | 4.000     | 15         |       |              |                  |         | 1830                             | 1830 | 180           | 0.098   |            | 35            | 0.019   |            |
|             | ↕         | A     | 1     | 4.000     | 17.5       | 20    |              | 0% / 14%         | 0% / 0% | 2135                             | 2155 | 215           | 0.101   |            | 230           | 0.107   | 0.107      |
|             | ↔         | A     | 1     | 4.000     |            | 17.5  |              |                  |         | 1985                             | 1985 | 200           | 0.101   | 0.101      | 180           | 0.091   |            |
| Road D2 NB  | ↕         | B     | 2     | 3.200     | 15         |       |              |                  |         | 1760                             | 1760 | 84            | 0.048   |            | 103           | 0.059   |            |
|             | ↕         | B     | 2     | 3.200     | 17.5       |       |              | 100%             | 100%    | 1910                             | 1910 | 91            | 0.048   |            | 112           | 0.059   |            |
|             | ↕         | B     | 2     | 3.200     |            |       |              |                  |         | 2075                             | 2075 | 70            | 0.034   |            | 25            | 0.012   |            |
|             | ↕         | B     | 2     | 3.200     |            | 12.5  |              | 100%             | 100%    | 1855                             | 1855 | 220           | 0.119   | 0.119      | 175           | 0.094   | 0.094      |
| Road L11 WB | ↔         | C     | 3     | 3.300     | 12.5       |       |              |                  |         | 1735                             | 1735 | 136           | 0.078   |            | 104           | 0.060   |            |
|             | ↕         | C     | 3     | 3.300     | 15         |       |              | 85%              | 47%     | 1920                             | 1990 | 151           | 0.079   | 0.079      | 120           | 0.060   |            |
|             | ↔         | C     | 3     | 3.300     |            | 20    |              | 0%               | 0%      | 2085                             | 2085 | 163           | 0.078   |            | 126           | 0.060   | 0.060      |
| Road D3 SB  | ↕         | D     | 4     | 4.000     | 12.5       |       |              | 0%               | 0%      | 2015                             | 2015 | 80            | 0.040   |            | 82            | 0.041   |            |
|             | ↕         | D     | 4     | 4.000     |            |       |              |                  |         | 2155                             | 2155 | 85            | 0.039   |            | 88            | 0.041   |            |
|             | ↕         | D     | 4     | 4.000     |            | 20    |              | 100%             | 100%    | 2005                             | 2005 | 110           | 0.055   | 0.055      | 425           | 0.212   | 0.212      |

| Notes: | Flow: (pcu/hr) |  | Group    |  | A,B,C,D | Group    |  | A,B,C,D |
|--------|----------------|--|----------|--|---------|----------|--|---------|
|        |                |  | y        |  | 0.353   | y        |  | 0.473   |
|        |                |  | L (sec)  |  | 22      | L (sec)  |  | 22      |
|        |                |  | C (sec)  |  | 90      | C (sec)  |  | 90      |
|        |                |  | y pract. |  | 0.680   | y pract. |  | 0.680   |
|        |                |  | R.C. (%) |  | 93%     | R.C. (%) |  | 44%     |

| Stage / Phase Diagrams                                                              |  |  |                                                                                     |  |  |                                                                                     |  |                                                                                       |      |    |  |
|-------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|------|----|--|
| 1.                                                                                  |  |  | 2.                                                                                  |  |  | 3.                                                                                  |  | 4.                                                                                    |      | 5. |  |
|  |  |  |  |  |  |  |  |  |      |    |  |
| I/G= 6                                                                              |  |  | I/G= 6                                                                              |  |  | I/G= 7                                                                              |  |                                                                                       | I/G= |    |  |
| I/G= 6                                                                              |  |  | I/G= 6                                                                              |  |  | I/G= 7                                                                              |  |                                                                                       | I/G= |    |  |

Date: JUL, 2025 Junction: Shek Wu Wai Road / Road D3 / Road L11 / Road L12 ( B ) (B)

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road Mai Po / San Tam Road ( C )                                                                       |                      | Ref. No.: 2031D |  |
| Scheme: Design                                                                                                               |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |
| ARM B: San Tam Road                                                                                                          |                      |                 |  |
| ARM C: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |

**ARM C**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 405 | (320) |
| 10  | (15)  |

**ARM A**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 655 | (390) |
| 90  | (100) |

**Minor ARM B**

|      |      |
|------|------|
| AM   | (PM) |
| 25   | 100  |
| (15) | (60) |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 8.30 | Lane widths | w(b-a) | 3.20 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 3.20 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 4.10 |
| Visibilities           | Vr(b-a) | 50   | Calculated  | D      | 0.85 |
|                        | VI(b-a) | 70   |             | E      | 0.90 |
|                        | Vr(b-c) | 50   |             | F      | 0.98 |
|                        | Vr(c-b) | 50   |             | Y      | 0.71 |

| ANALYSIS      |            |        | AM PEAK     | (PM) PEAK |
|---------------|------------|--------|-------------|-----------|
| TRAFFIC FLOWS | q(c-a)     |        | 405         | 320       |
|               | q(c-b)     |        | 10          | 15        |
|               | q(a-b)     |        | 90          | 100       |
|               | q(a-c)     |        | 655         | 390       |
|               | q(b-a)     |        | 100         | 60        |
|               | q(b-c)     |        | 25          | 15        |
|               | f          |        | 0.20        | 0.20      |
|               | CAPACITIES | Q(b-a) | Factor<br>1 | 323       |
| Q(b-c)        |            | 1      | 508         | 568       |
| Q(c-b)        |            | 1      | 539         | 603       |
| Q(b-ac)       |            | 1      | 348         | 417       |
| RFC's         |            | b-a    |             | 0.310     |
|               | b-c        |        | 0.049       | 0.026     |
|               | c-b        |        | 0.019       | 0.025     |
|               | b-ac       |        | 0.359       | 0.180     |
|               | Worst RFC  |        | 0.359       | 0.180     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

Y = 1-0.0345W

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road Mai Po / Palm Springs Boulevard ( D )                                                             |                      | Ref. No.: 2031D |  |
| Scheme: Design                                                                                                               |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |
| ARM B: Palm Springs Boulevard                                                                                                |                      |                 |  |
| ARM C: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 7.00 | Lane widths | w(b-a) | 4.00 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 4.00 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 3.00 |
| Visibilities           | Vr(b-a) | 30   | Calculated  | D      | 0.88 |
|                        | VI(b-a) | 30   |             | E      | 0.95 |
|                        | Vr(b-c) | 30   |             | F      | 0.86 |
|                        | Vr(c-b) | 30   |             | Y      | 0.76 |

| ANALYSIS      |            |         |           |
|---------------|------------|---------|-----------|
|               |            | AM PEAK | (PM) PEAK |
| TRAFFIC FLOWS | q(c-a)     | 265     | 245       |
|               | q(c-b)     | 10      | 30        |
|               | q(a-b)     | 145     | 205       |
|               | q(a-c)     | 250     | 255       |
|               | q(b-a)     | 225     | 160       |
|               | q(b-c)     | 25      | 50        |
|               | f          | 0.10    | 0.24      |
|               | CAPACITIES | Q(b-a)  | 434       |
| Q(b-c)        |            | 627     | 619       |
| Q(c-b)        |            | 549     | 533       |
| Q(b-ac)       |            | 448     | 458       |
| RFC's         |            | b-a     | 0.518     |
|               | b-c        | 0.040   | 0.081     |
|               | c-b        | 0.018   | 0.056     |
|               | b-ac       | 0.558   | 0.459     |
|               | Worst RFC  | 0.558   | 0.459     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

$Y = 1-0.0345W$

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road Mai Po / Geranium Path ( E )                                                                      |                      | Ref. No.: 2031D |  |
| Scheme: Design                                                                                                               |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |
| ARM B: Geranium Path                                                                                                         |                      |                 |  |
| ARM C: Castle Peak Road - Mai Po                                                                                             |                      |                 |  |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 7.00 | Lane widths | w(b-a) | 3.00 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 3.00 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 3.60 |
| Visibilities           | Vr(b-a) | 50   | Calculated  | D      | 0.82 |
|                        | VI(b-a) | 30   |             | E      | 0.88 |
|                        | Vr(b-c) | 50   |             | F      | 0.93 |
|                        | Vr(c-b) | 50   |             | Y      | 0.76 |

| ANALYSIS      |         |         |           |
|---------------|---------|---------|-----------|
|               |         | AM PEAK | (PM) PEAK |
| TRAFFIC FLOWS | q(c-a)  | 485     | 400       |
|               | q(c-b)  | 5       | 5         |
|               | q(a-b)  | 5       | 5         |
|               | q(a-c)  | 390     | 455       |
|               | q(b-a)  | 5       | 5         |
|               | q(b-c)  | 5       | 5         |
|               | f       | 0.50    | 0.50      |
| CAPACITIES    | Q(b-a)  | 353     | 351       |
|               | Q(b-c)  | 560     | 544       |
|               | Q(c-b)  | 593     | 576       |
|               | Q(b-ac) | 433     | 427       |
| RFC's         | b-a     | 0.014   | 0.014     |
|               | b-c     | 0.009   | 0.009     |
|               | c-b     | 0.008   | 0.009     |
|               | b-ac    | 0.023   | 0.023     |
| Worst RFC     |         | 0.023   | 0.023     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1 + 0.094(w(b-a) - 3.65))(1 + 0.0009(Vr(b-a) - 120))(1 + 0.0006(VI(b-a) - 150))$

$E = (1 + 0.094(w(b-c) - 3.65))(1 + 0.0009(Vr(b-c) - 120))$

$F = (1 + 0.094(w(c-b) - 3.65))(1 + 0.0009(Vr(c-b) - 120))$

$Y = 1 - 0.0345W$

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c) * Q(b-a) / ((1-f) * Q(b-c) + f * Q(b-a))$

Capacity of combined streams

- in accordance with TPDM V2.4

|                    |              |                 |
|--------------------|--------------|-----------------|
| Calculated by: MYC | Date: Jul-25 | Checked by: CFC |
|--------------------|--------------|-----------------|



## Priority Junction Capacity Calculation

|                                                                                                                              |                      |  |                 |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|--|-----------------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |  |                 |
| Junction: Castle Peak Road Tam Mi / Yau Pok Road ( F )                                                                       |                      |  | Ref. No.: 2031D |
| Scheme: Design                                                                                                               |                      |  | Ref. No.:       |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 |  | Rev.: -         |
| ARM A: Castle Peak Road - Tam Mi                                                                                             |                      |  |                 |
| ARM B: Yau Pok Road                                                                                                          |                      |  |                 |
| ARM C: Castle Peak Road - Tam Mi                                                                                             |                      |  |                 |

ARM C

|     |       |
|-----|-------|
| AM  | (PM)  |
| 490 | (405) |
| 0   | (0)   |

ARM A

|     |       |
|-----|-------|
| AM  | (PM)  |
| 375 | (440) |
| 0   | (0)   |

Minor ARM B

|      |      |
|------|------|
| AM   | (PM) |
| 20   | (20) |
| (20) | (20) |

| GEOMETRY               |         |      |             |
|------------------------|---------|------|-------------|
| Major road width       | W       | 6.50 | Lane widths |
| Central Reserve width  | Wcr     | 0.00 | w(b-a)      |
| 2 Lane Minor Arm (Y/N) |         | N    | w(b-c)      |
| Visibilities           | Vr(b-a) | 16   | w(c-b)      |
|                        | VI(b-a) | 31   | Calculated  |
|                        | Vr(b-c) | 16   | D           |
|                        | Vr(c-b) | 0    | E           |
|                        |         |      | F           |
|                        |         |      | Y           |

| ANALYSIS      |            | AM PEAK | (PM) PEAK |
|---------------|------------|---------|-----------|
| TRAFFIC FLOWS | q(c-a)     | 490     | 405       |
|               | q(c-b)     | 0       | 0         |
|               | q(a-b)     | 0       | 0         |
|               | q(a-c)     | 375     | 440       |
|               | q(b-a)     | 20      | 20        |
|               | q(b-c)     | 20      | 20        |
|               | f          | 0.50    | 0.50      |
|               | CAPACITIES | Q(b-a)  | 305       |
| Q(b-c)        |            | 483     | 469       |
| Q(c-b)        |            | 374     | 364       |
| Q(b-ac)       |            | 374     | 367       |
| RFC's         |            | b-a     | 0.066     |
|               | b-c        | 0.041   | 0.043     |
|               | c-b        | 0.000   | 0.000     |
|               | b-ac       | 0.107   | 0.109     |
|               | Worst RFC  | 0.107   | 0.109     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

Y = 1-0.0345W

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road Tam Mi / Kam Pok Road ( G )                                                                       |                      | Ref. No.: 2031D |  |
| Scheme: Design                                                                                                               |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - Tam Mi                                                                                             |                      |                 |  |
| ARM B: Kam Pok Road                                                                                                          |                      |                 |  |
| ARM C: Castle Peak Road - Tam Mi                                                                                             |                      |                 |  |

**ARM C**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 400 | (340) |
| 110 | (85)  |

**ARM A**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 290 | (360) |
| 160 | (150) |

**Minor ARM B**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 85  | (80)  |
| 180 | (105) |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 7.00 | Lane widths | w(b-a) | 3.50 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 3.50 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 3.50 |
| Visibilities           | Vr(b-a) | 50   | Calculated  | D      | 0.86 |
|                        | VI(b-a) | 35   |             | E      | 0.92 |
|                        | Vr(b-c) | 50   |             | F      | 0.92 |
|                        | Vr(c-b) | 50   |             | Y      | 0.76 |

| ANALYSIS      |            |        |              |              |       |
|---------------|------------|--------|--------------|--------------|-------|
|               |            |        | AM PEAK      | (PM) PEAK    |       |
| TRAFFIC FLOWS | q(c-a)     |        | 400          | 340          |       |
|               | q(c-b)     |        | 110          | 85           |       |
|               | q(a-b)     |        | 160          | 150          |       |
|               | q(a-c)     |        | 290          | 360          |       |
|               | q(b-a)     |        | 180          | 105          |       |
|               | q(b-c)     |        | 85           | 80           |       |
|               | f          |        | 0.32         | 0.43         |       |
|               | CAPACITIES | Q(b-a) | Factor<br>1  | 358          | 360   |
| Q(b-c)        |            | 1      | 598          | 581          |       |
| Q(c-b)        |            | 1      | 573          | 558          |       |
| Q(b-ac)       |            | 1      | 411          | 431          |       |
| RFC's         |            | b-a    |              | 0.503        | 0.292 |
|               | b-c        |        | 0.142        | 0.138        |       |
|               | c-b        |        | 0.192        | 0.152        |       |
|               | b-ac       |        | 0.645        | 0.429        |       |
| Worst RFC     |            |        | <b>0.645</b> | <b>0.429</b> |       |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

Y = 1-0.0345W

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

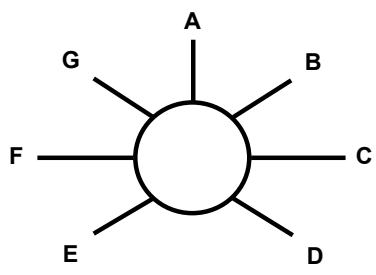
Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

# Roundabout Capacity Calculation

|                                                                                                                              |      |                                                                                     |         |                      |                |                |                 |                 |       |      |
|------------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|---------|----------------------|----------------|----------------|-----------------|-----------------|-------|------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |      |                                                                                     |         |                      |                |                |                 |                 |       |      |
| Junction: Fairview Park Interchange ( H )                                                                                    |      |                                                                                     |         |                      |                |                |                 | Ref. No.: 2031D |       |      |
| Scheme: Design                                                                                                               |      |                                                                                     |         | Ref. No.:            |                |                |                 |                 |       |      |
| Year: 2031                                                                                                                   |      |                                                                                     |         | Job No.: CHK50873110 |                |                |                 | Rev.: -         |       |      |
| AM                                                                                                                           |      | PM                                                                                  |         |                      |                |                |                 |                 |       |      |
| ARM A:                                                                                                                       |      | Fairview Park Boulevard                                                             |         |                      |                |                |                 |                 |       |      |
| ARM B:                                                                                                                       |      | Castle Peak Rd E                                                                    |         |                      |                |                |                 |                 |       |      |
| ARM C:                                                                                                                       |      | NTCR E                                                                              |         |                      |                |                |                 |                 |       |      |
| ARM D:                                                                                                                       |      | San Tam Rd E                                                                        |         |                      |                |                |                 |                 |       |      |
| ARM E:                                                                                                                       |      | San Tam Rd W                                                                        |         |                      |                |                |                 |                 |       |      |
| ARM F:                                                                                                                       |      | NTCR W                                                                              |         |                      |                |                |                 |                 |       |      |
| ARM G:                                                                                                                       |      | Castle Peak Rd W                                                                    |         |                      |                |                |                 |                 |       |      |
|                                                                                                                              |      |  |         |                      |                |                |                 |                 |       |      |
| GEOMETRY                                                                                                                     |      |                                                                                     |         |                      |                |                |                 |                 |       |      |
| ARM                                                                                                                          | v    | e                                                                                   | L       | r                    | D              | Phi            | S               |                 |       |      |
| A                                                                                                                            | 7.00 | 11.00                                                                               | 14      | 22                   | 142            | 35             | 0.46            |                 |       |      |
| B                                                                                                                            | 5.50 | 10.50                                                                               | 15      | 20                   | 142            | 35             | 0.53            |                 |       |      |
| C                                                                                                                            | 5.50 | 8.50                                                                                | 7.5     | 23                   | 142            | 30             | 0.64            |                 |       |      |
| D                                                                                                                            | 6.75 | 8.50                                                                                | 10      | 20                   | 142            | 25             | 0.28            |                 |       |      |
| E                                                                                                                            | 6.00 | 8.00                                                                                | 9.5     | 20                   | 142            | 35             | 0.34            |                 |       |      |
| F                                                                                                                            | 6.50 | 9.00                                                                                | 15      | 25                   | 142            | 40             | 0.27            |                 |       |      |
| G                                                                                                                            | 5.50 | 6.00                                                                                | 7       | 22                   | 142            | 30             | 0.11            |                 |       |      |
| AM FLOWS                                                                                                                     |      |                                                                                     |         |                      |                |                |                 |                 |       |      |
| from \ to                                                                                                                    | A    | B                                                                                   | C       | D                    | E              | F              | G               | Circ            | Entry | Exit |
| A                                                                                                                            | 10   | 20                                                                                  | 220     | 40                   | 215            | 420            | 30              | 2585            | 955   | 620  |
| B                                                                                                                            | 10   | 10                                                                                  | 135     | 10                   | 235            | 290            | 30              | 2970            | 720   | 570  |
| C                                                                                                                            | 105  | 70                                                                                  | 10      | 95                   | 475            | 10             | 215             | 2470            | 980   | 1220 |
| D                                                                                                                            | 60   | 20                                                                                  | 50      | 10                   | 245            | 245            | 85              | 3010            | 715   | 440  |
| E                                                                                                                            | 40   | 35                                                                                  | 445     | 65                   | 10             | 480            | 20              | 1980            | 1095  | 1745 |
| F                                                                                                                            | 290  | 270                                                                                 | 10      | 140                  | 555            | 10             | 340             | 1330            | 1615  | 1745 |
| G                                                                                                                            | 105  | 145                                                                                 | 350     | 80                   | 10             | 290            | 0               | 2225            | 980   | 720  |
| PM FLOWS                                                                                                                     |      |                                                                                     |         |                      |                |                |                 |                 |       |      |
| from \ to                                                                                                                    | A    | B                                                                                   | C       | D                    | E              | F              | G               | Circ            | Entry | Exit |
| A                                                                                                                            | 10   | 10                                                                                  | 185     | 50                   | 195            | 290            | 30              | 2170            | 770   | 940  |
| B                                                                                                                            | 35   | 10                                                                                  | 85      | 10                   | 155            | 155            | 30              | 2415            | 480   | 525  |
| C                                                                                                                            | 180  | 115                                                                                 | 20      | 80                   | 415            | 20             | 195             | 2070            | 1025  | 825  |
| D                                                                                                                            | 75   | 20                                                                                  | 60      | 20                   | 195            | 135            | 70              | 2680            | 575   | 415  |
| E                                                                                                                            | 90   | 30                                                                                  | 270     | 70                   | 10             | 260            | 20              | 1695            | 750   | 1560 |
| F                                                                                                                            | 465  | 255                                                                                 | 10      | 135                  | 580            | 20             | 260             | 1370            | 1725  | 1075 |
| G                                                                                                                            | 85   | 85                                                                                  | 195     | 50                   | 10             | 195            | 10              | 2480            | 630   | 615  |
| CALCULATIONS                                                                                                                 |      |                                                                                     |         |                      |                |                |                 | Q <sub>E</sub>  | RFC   |      |
| ARM                                                                                                                          | K    | X <sub>2</sub>                                                                      | M       | F                    | t <sub>D</sub> | f <sub>c</sub> | AM              | PM              | AM    | PM   |
| A                                                                                                                            | 0.99 | 9.09                                                                                | 3640.95 | 2754                 | 1.00           | 0.59           | 1208            | 1451            | 0.79  | 0.53 |
| B                                                                                                                            | 0.98 | 7.92                                                                                | 3640.95 | 2400                 | 1.00           | 0.54           | 774             | 1070            | 0.93  | 0.45 |
| C                                                                                                                            | 1.01 | 6.82                                                                                | 3640.95 | 2065                 | 1.00           | 0.50           | 845             | 1044            | 1.16  | 0.98 |
| D                                                                                                                            | 1.02 | 7.87                                                                                | 3640.95 | 2385                 | 1.00           | 0.54           | 771             | 952             | 0.93  | 0.60 |
| E                                                                                                                            | 0.98 | 7.19                                                                                | 3640.95 | 2180                 | 1.00           | 0.51           | 1146            | 1289            | 0.96  | 0.58 |
| F                                                                                                                            | 0.98 | 8.13                                                                                | 3640.95 | 2464                 | 1.00           | 0.55           | 1687            | 1665            | 0.96  | 1.04 |
| G                                                                                                                            | 1.00 | 5.91                                                                                | 3640.95 | 1790                 | 1.00           | 0.46           | 774             | 656             | 1.27  | 0.96 |
|                                                                                                                              |      |                                                                                     |         |                      |                |                |                 | Critical Arm:   | G     | F    |
|                                                                                                                              |      |                                                                                     |         |                      |                |                |                 | RFC:            | 1.27  | 1.04 |
|                                                                                                                              |      |                                                                                     |         |                      |                |                |                 |                 | AM    | PM   |
| - In accordance with TPDM V2.4                                                                                               |      |                                                                                     |         |                      |                |                |                 |                 |       |      |
| Calculated by: MYC                                                                                                           |      |                                                                                     |         | Date: Jul-25         |                |                | Checked by: CFC |                 |       |      |

- In accordance with TPDM V2.4

|                    |              |                 |
|--------------------|--------------|-----------------|
| Calculated by: MYC | Date: Jul-25 | Checked by: CFC |
|--------------------|--------------|-----------------|

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |  |                 |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|--|-----------------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |  |                 |
| Junction: Castle Peak Road Mai Po / Mai Po South Road ( I )                                                                  |                      |  | Ref. No.: 2031D |
| Scheme: Design                                                                                                               |                      |  | Ref. No.:       |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 |  | Rev.: -         |
| ARM A: Castle Peak Road - Mai Po                                                                                             |                      |  |                 |
| ARM B: Mai Po South Road                                                                                                     |                      |  |                 |
| ARM C: Castle Peak Road - Mai Po                                                                                             |                      |  |                 |

**ARM C**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 230 | (235) |
| 65  | (75)  |

**ARM A**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 235 | (260) |
| 40  | (40)  |

**Minor ARM B**

|      |      |
|------|------|
| AM   | (PM) |
| 95   | 50   |
| (60) | (40) |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 8.40 | Lane widths | w(b-a) | 4.20 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 4.20 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 4.20 |
| Visibilities           | Vr(b-a) | 50   | Calculated  | D      | 0.91 |
|                        | VI(b-a) | 30   |             | E      | 0.99 |
|                        | Vr(b-c) | 50   |             | F      | 0.99 |
|                        | Vr(c-b) | 50   |             | Y      | 0.71 |

| ANALYSIS      |            |         |           |
|---------------|------------|---------|-----------|
|               |            | AM PEAK | (PM) PEAK |
| TRAFFIC FLOWS | q(c-a)     | 230     | 235       |
|               | q(c-b)     | 65      | 75        |
|               | q(a-b)     | 40      | 40        |
|               | q(a-c)     | 235     | 260       |
|               | q(b-a)     | 50      | 40        |
|               | q(b-c)     | 95      | 60        |
|               | f          | 0.66    | 0.60      |
|               | CAPACITIES | Q(b-a)  | 458       |
| Q(b-c)        |            | 670     | 664       |
| Q(c-b)        |            | 664     | 658       |
| Q(b-ac)       |            | 578     | 557       |
| RFC's         |            | b-a     | 0.109     |
|               | b-c        | 0.142   | 0.090     |
|               | c-b        | 0.098   | 0.114     |
|               | b-ac       | 0.251   | 0.180     |
|               | Worst RFC  | 0.251   | 0.180     |

Where VI and Vr are visibility distances to the left or right of the respective streams  
 $D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$   
 $E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$   
 $F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$   
 $Y = 1-0.0345W$   
 $f = \text{proportion of minor traffic turning left}$   
 $Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**  
**Appendix 1**

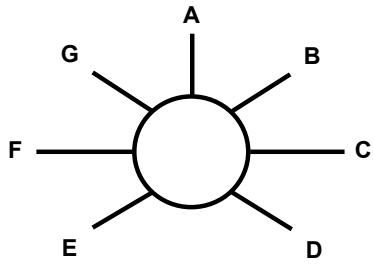
Capacity of combined streams  
- in accordance with TPDM V2.4

|                    |              |                 |
|--------------------|--------------|-----------------|
| Calculated by: MYC | Date: Jul-25 | Checked by: CFC |
|--------------------|--------------|-----------------|



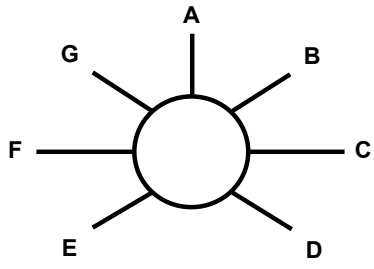
Calculation Spreadsheets  
for  
2031 Reference Scenario  
(With Improvement)

## Roundabout Capacity Calculation

|                                                                                                                              |      |                         |         |                                                                                     |                |                |                 |                 |       |      |
|------------------------------------------------------------------------------------------------------------------------------|------|-------------------------|---------|-------------------------------------------------------------------------------------|----------------|----------------|-----------------|-----------------|-------|------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |      |                         |         |                                                                                     |                |                |                 |                 |       |      |
| Junction: Fairview Park Interchange (H)                                                                                      |      |                         |         |                                                                                     |                |                |                 | Ref. No.: 2031R |       |      |
| Scheme: Reference (Under Improvement 2)                                                                                      |      |                         |         |                                                                                     |                |                |                 | Ref. No.:       |       |      |
| Year: 2031                                                                                                                   |      |                         |         | Job No.: CHK50873110                                                                |                |                |                 | Rev.: -         |       |      |
| AM                                                                                                                           |      | PM                      |         |  |                |                |                 |                 |       |      |
| ARM A:                                                                                                                       |      | Fairview Park Boulevard |         |                                                                                     |                |                |                 |                 |       |      |
| ARM B:                                                                                                                       |      | Castle Peak Rd E        |         |                                                                                     |                |                |                 |                 |       |      |
| ARM C:                                                                                                                       |      | NTCR E                  |         |                                                                                     |                |                |                 |                 |       |      |
| ARM D:                                                                                                                       |      | San Tam Rd E            |         |                                                                                     |                |                |                 |                 |       |      |
| ARM E:                                                                                                                       |      | San Tam Rd W            |         |                                                                                     |                |                |                 |                 |       |      |
| ARM F:                                                                                                                       |      | NTCR W                  |         |                                                                                     |                |                |                 |                 |       |      |
| ARM G:                                                                                                                       |      | Castle Peak Rd W        |         |                                                                                     |                |                |                 |                 |       |      |
| GEOMETRY                                                                                                                     |      |                         |         |                                                                                     |                |                |                 |                 |       |      |
| ARM                                                                                                                          | v    | e                       | L       | r                                                                                   | D              | Phi            | S               |                 |       |      |
| A                                                                                                                            | 7.00 | 11.80                   | 20      | 25                                                                                  | 140            | 35             | 0.38            |                 |       |      |
| B                                                                                                                            | 7.30 | 12.00                   | 36      | 30                                                                                  | 140            | 25             | 0.21            |                 |       |      |
| C                                                                                                                            | 7.30 | 13.00                   | 13      | 45                                                                                  | 140            | 30             | 0.70            |                 |       |      |
| D                                                                                                                            | 7.30 | 11.00                   | 23      | 25                                                                                  | 140            | 35             | 0.26            |                 |       |      |
| E                                                                                                                            | 7.30 | 12.00                   | 27      | 25                                                                                  | 140            | 45             | 0.28            |                 |       |      |
| F                                                                                                                            | 6.00 | 12.50                   | 20      | 25                                                                                  | 140            | 40             | 0.52            |                 |       |      |
| G                                                                                                                            | 6.50 | 11.20                   | 22      | 25                                                                                  | 140            | 35             | 0.34            |                 |       |      |
| AM FLOWS                                                                                                                     |      |                         |         |                                                                                     |                |                |                 |                 |       |      |
| from \ to                                                                                                                    | A    | B                       | C       | D                                                                                   | E              | F              | G               | Circ            | Entry | Exit |
| A                                                                                                                            | 10   | 20                      | 220     | 40                                                                                  | 215            | 420            | 30              | 2555            | 955   | 620  |
| B                                                                                                                            | 10   | 10                      | 135     | 10                                                                                  | 235            | 245            | 30              | 2970            | 675   | 540  |
| C                                                                                                                            | 105  | 70                      | 10      | 95                                                                                  | 475            | 10             | 215             | 2425            | 980   | 1220 |
| D                                                                                                                            | 60   | 20                      | 50      | 10                                                                                  | 245            | 245            | 85              | 2965            | 715   | 440  |
| E                                                                                                                            | 40   | 35                      | 445     | 65                                                                                  | 10             | 480            | 20              | 1935            | 1095  | 1745 |
| F                                                                                                                            | 290  | 240                     | 10      | 140                                                                                 | 555            | 10             | 0               | 1330            | 1245  | 1700 |
| G                                                                                                                            | 105  | 145                     | 350     | 80                                                                                  | 10             | 290            | 0               | 2195            | 980   | 380  |
| PM FLOWS                                                                                                                     |      |                         |         |                                                                                     |                |                |                 |                 |       |      |
| from \ to                                                                                                                    | A    | B                       | C       | D                                                                                   | E              | F              | G               | Circ            | Entry | Exit |
| A                                                                                                                            | 10   | 10                      | 185     | 50                                                                                  | 195            | 290            | 30              | 2135            | 770   | 940  |
| B                                                                                                                            | 35   | 10                      | 85      | 10                                                                                  | 155            | 125            | 30              | 2415            | 450   | 490  |
| C                                                                                                                            | 180  | 115                     | 20      | 80                                                                                  | 415            | 20             | 195             | 2040            | 1025  | 825  |
| D                                                                                                                            | 75   | 20                      | 60      | 20                                                                                  | 195            | 135            | 70              | 2650            | 575   | 415  |
| E                                                                                                                            | 90   | 30                      | 270     | 70                                                                                  | 10             | 260            | 20              | 1665            | 750   | 1560 |
| F                                                                                                                            | 465  | 220                     | 10      | 135                                                                                 | 580            | 20             | 0               | 1370            | 1430  | 1045 |
| G                                                                                                                            | 85   | 85                      | 195     | 50                                                                                  | 10             | 195            | 10              | 2445            | 630   | 355  |
| CALCULATIONS                                                                                                                 |      |                         |         |                                                                                     |                |                |                 | Q <sub>E</sub>  | RFC   |      |
| ARM                                                                                                                          | K    | X <sub>2</sub>          | M       | F                                                                                   | t <sub>D</sub> | f <sub>c</sub> | AM              | PM              | AM    | PM   |
| A                                                                                                                            | 0.99 | 9.71                    | 2980.96 | 2944                                                                                | 1.00           | 0.62           | 1354            | 1612            | 0.71  | 0.48 |
| B                                                                                                                            | 1.03 | 10.62                   | 2980.96 | 3216                                                                                | 1.00           | 0.66           | 1311            | 1687            | 0.51  | 0.27 |
| C                                                                                                                            | 1.03 | 9.67                    | 2980.96 | 2931                                                                                | 1.00           | 0.62           | 1475            | 1719            | 0.66  | 0.60 |
| D                                                                                                                            | 0.99 | 9.74                    | 2980.96 | 2952                                                                                | 1.00           | 0.62           | 1107            | 1301            | 0.65  | 0.44 |
| E                                                                                                                            | 0.96 | 10.32                   | 2980.96 | 3127                                                                                | 1.00           | 0.64           | 1802            | 1968            | 0.61  | 0.38 |
| F                                                                                                                            | 0.98 | 9.19                    | 2980.96 | 2783                                                                                | 1.00           | 0.60           | 1941            | 1918            | 0.64  | 0.75 |
| G                                                                                                                            | 0.99 | 9.29                    | 2980.96 | 2815                                                                                | 1.00           | 0.60           | 1486            | 1337            | 0.66  | 0.47 |
|                                                                                                                              |      |                         |         |                                                                                     |                |                |                 | Critical Arm:   | A     | F    |
|                                                                                                                              |      |                         |         |                                                                                     |                |                |                 | RFC:            | 0.71  | 0.75 |
| - In accordance with TPDM V2.4                                                                                               |      |                         |         |                                                                                     |                |                |                 |                 | AM    | PM   |
| Calculated by: MYC                                                                                                           |      |                         |         | Date: Jul-25                                                                        |                |                | Checked by: CFC |                 |       |      |

Calculation Spreadsheets  
for  
2031 Design Scenario  
(With Improvement)

# Roundabout Capacity Calculation

|                                                                                                                                                                                                                                                                                                                                                                          |      |                |         |                      |                |                |                 |                 |       |      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------|---------|----------------------|----------------|----------------|-----------------|-----------------|-------|------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long                                                                                                                                                                                                                                             |      |                |         |                      |                |                |                 |                 |       |      |
| Junction: Fairview Park Interchange (H)                                                                                                                                                                                                                                                                                                                                  |      |                |         |                      |                |                |                 | Ref. No.: 2031D |       |      |
| Scheme: Design (Under Improvement 2)                                                                                                                                                                                                                                                                                                                                     |      |                |         |                      |                |                |                 | Ref. No.:       |       |      |
| Year: 2031                                                                                                                                                                                                                                                                                                                                                               |      |                |         | Job No.: CHK50873110 |                |                |                 | Rev.: -         |       |      |
| <div><div><div>AM</div><div>PM</div></div><div>ARM A: Fairview Park Boulevard</div><div>ARM B: Castle Peak Rd E</div><div>ARM C: NTCR E</div><div>ARM D: San Tam Rd E</div><div>ARM E: San Tam Rd W</div><div>ARM F: NTCR W</div><div>ARM G: Castle Peak Rd W</div></div> <div></div> |      |                |         |                      |                |                |                 |                 |       |      |
| GEOMETRY                                                                                                                                                                                                                                                                                                                                                                 |      |                |         |                      |                |                |                 |                 |       |      |
| ARM                                                                                                                                                                                                                                                                                                                                                                      | v    | e              | L       | r                    | D              | Phi            | S               |                 |       |      |
| A                                                                                                                                                                                                                                                                                                                                                                        | 7.00 | 11.80          | 20      | 25                   | 140            | 35             | 0.38            |                 |       |      |
| B                                                                                                                                                                                                                                                                                                                                                                        | 7.30 | 12.00          | 36      | 30                   | 140            | 25             | 0.21            |                 |       |      |
| C                                                                                                                                                                                                                                                                                                                                                                        | 7.30 | 13.00          | 13      | 45                   | 140            | 30             | 0.70            |                 |       |      |
| D                                                                                                                                                                                                                                                                                                                                                                        | 7.30 | 11.00          | 23      | 25                   | 140            | 35             | 0.26            |                 |       |      |
| E                                                                                                                                                                                                                                                                                                                                                                        | 7.30 | 12.00          | 27      | 25                   | 140            | 45             | 0.28            |                 |       |      |
| F                                                                                                                                                                                                                                                                                                                                                                        | 6.00 | 12.50          | 20      | 25                   | 140            | 40             | 0.52            |                 |       |      |
| G                                                                                                                                                                                                                                                                                                                                                                        | 6.50 | 11.20          | 22      | 25                   | 140            | 35             | 0.34            |                 |       |      |
| AM FLOWS                                                                                                                                                                                                                                                                                                                                                                 |      |                |         |                      |                |                |                 |                 |       |      |
| from \ to                                                                                                                                                                                                                                                                                                                                                                | A    | B              | C       | D                    | E              | F              | G               | Circ            | Entry | Exit |
| A                                                                                                                                                                                                                                                                                                                                                                        | 10   | 20             | 220     | 40                   | 215            | 420            | 30              | 2585            | 955   | 620  |
| B                                                                                                                                                                                                                                                                                                                                                                        | 10   | 10             | 135     | 10                   | 235            | 290            | 30              | 2970            | 720   | 570  |
| C                                                                                                                                                                                                                                                                                                                                                                        | 105  | 70             | 10      | 95                   | 475            | 10             | 215             | 2470            | 980   | 1220 |
| D                                                                                                                                                                                                                                                                                                                                                                        | 60   | 20             | 50      | 10                   | 245            | 245            | 85              | 3010            | 715   | 440  |
| E                                                                                                                                                                                                                                                                                                                                                                        | 40   | 35             | 445     | 65                   | 10             | 480            | 20              | 1980            | 1095  | 1745 |
| F                                                                                                                                                                                                                                                                                                                                                                        | 290  | 270            | 10      | 140                  | 555            | 10             | 0               | 1330            | 1275  | 1745 |
| G                                                                                                                                                                                                                                                                                                                                                                        | 105  | 145            | 350     | 80                   | 10             | 290            | 0               | 2225            | 980   | 380  |
| PM FLOWS                                                                                                                                                                                                                                                                                                                                                                 |      |                |         |                      |                |                |                 |                 |       |      |
| from \ to                                                                                                                                                                                                                                                                                                                                                                | A    | B              | C       | D                    | E              | F              | G               | Circ            | Entry | Exit |
| A                                                                                                                                                                                                                                                                                                                                                                        | 10   | 10             | 185     | 50                   | 195            | 290            | 30              | 2170            | 770   | 940  |
| B                                                                                                                                                                                                                                                                                                                                                                        | 35   | 10             | 85      | 10                   | 155            | 155            | 30              | 2415            | 480   | 525  |
| C                                                                                                                                                                                                                                                                                                                                                                        | 180  | 115            | 20      | 80                   | 415            | 20             | 195             | 2070            | 1025  | 825  |
| D                                                                                                                                                                                                                                                                                                                                                                        | 75   | 20             | 60      | 20                   | 195            | 135            | 70              | 2680            | 575   | 415  |
| E                                                                                                                                                                                                                                                                                                                                                                        | 90   | 30             | 270     | 70                   | 10             | 260            | 20              | 1695            | 750   | 1560 |
| F                                                                                                                                                                                                                                                                                                                                                                        | 465  | 255            | 10      | 135                  | 580            | 20             | 0               | 1370            | 1465  | 1075 |
| G                                                                                                                                                                                                                                                                                                                                                                        | 85   | 85             | 195     | 50                   | 10             | 195            | 10              | 2480            | 630   | 355  |
| CALCULATIONS                                                                                                                                                                                                                                                                                                                                                             |      |                |         |                      |                |                |                 |                 |       |      |
| ARM                                                                                                                                                                                                                                                                                                                                                                      | K    | X <sub>2</sub> | M       | F                    | t <sub>D</sub> | f <sub>c</sub> | AM              | PM              | AM    | PM   |
| A                                                                                                                                                                                                                                                                                                                                                                        | 0.99 | 9.71           | 2980.96 | 2944                 | 1.00           | 0.62           | 1336            | 1590            | 0.72  | 0.48 |
| B                                                                                                                                                                                                                                                                                                                                                                        | 1.03 | 10.62          | 2980.96 | 3216                 | 1.00           | 0.66           | 1311            | 1687            | 0.55  | 0.28 |
| C                                                                                                                                                                                                                                                                                                                                                                        | 1.03 | 9.67           | 2980.96 | 2931                 | 1.00           | 0.62           | 1447            | 1700            | 0.68  | 0.60 |
| D                                                                                                                                                                                                                                                                                                                                                                        | 0.99 | 9.74           | 2980.96 | 2952                 | 1.00           | 0.62           | 1080            | 1283            | 0.66  | 0.45 |
| E                                                                                                                                                                                                                                                                                                                                                                        | 0.96 | 10.32          | 2980.96 | 3127                 | 1.00           | 0.64           | 1774            | 1950            | 0.62  | 0.38 |
| F                                                                                                                                                                                                                                                                                                                                                                        | 0.98 | 9.19           | 2980.96 | 2783                 | 1.00           | 0.60           | 1941            | 1918            | 0.66  | 0.76 |
| G                                                                                                                                                                                                                                                                                                                                                                        | 0.99 | 9.29           | 2980.96 | 2815                 | 1.00           | 0.60           | 1468            | 1316            | 0.67  | 0.48 |
| Critical Arm:                                                                                                                                                                                                                                                                                                                                                            |      |                |         |                      |                |                |                 |                 | A     | F    |
| RFC:                                                                                                                                                                                                                                                                                                                                                                     |      |                |         |                      |                |                |                 |                 | 0.72  | 0.76 |
|                                                                                                                                                                                                                                                                                                                                                                          |      |                |         |                      |                |                |                 |                 | AM    | PM   |
| - In accordance with TPDM V2.4                                                                                                                                                                                                                                                                                                                                           |      |                |         |                      |                |                |                 |                 |       |      |
| Calculated by: MYC                                                                                                                                                                                                                                                                                                                                                       |      |                |         | Date: Jul-25         |                |                | Checked by: CFC |                 |       |      |



# **ANNEX B – PRELIMINARY PHASING ON SAN TIN TECHNOPOLE**



ISO A1 594mm x 841mm  
Approved:  
Checked:  
Designer:  
Project Management Initials:  
Plot File by: RenS  
2023/11/14  
PATH P:\PROJECTS\60670882\DRAWING\REPORT\A34\A34\_371.dgn

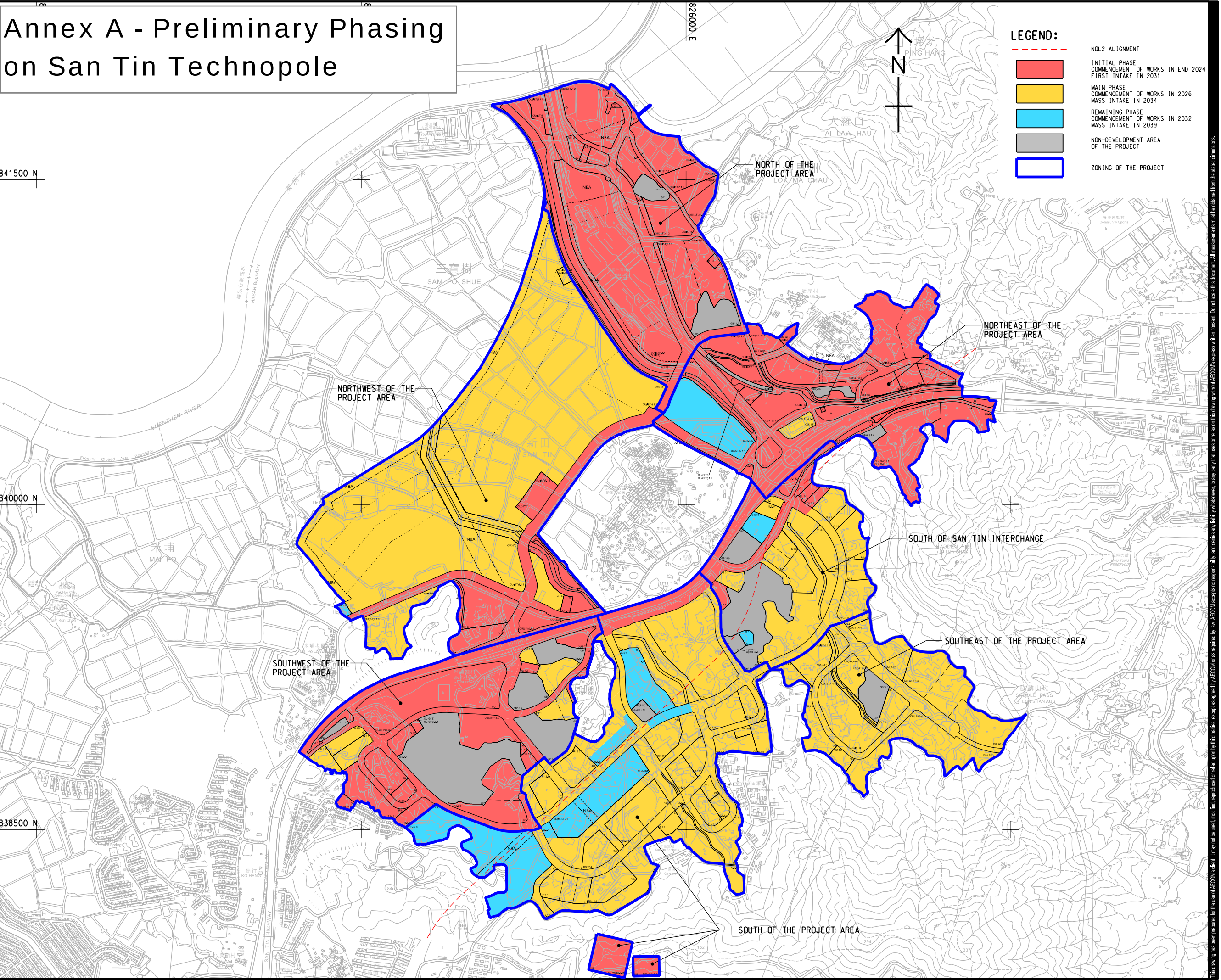
# Annex A - Preliminary Phasing on San Tin Technopole

841500 N

840000 N

838500 N

826000 E



**LEGEND:**

- INITIAL PHASE COMMENCEMENT OF WORKS IN END 2024 FIRST INTAKE IN 2031
- MAIN PHASE COMMENCEMENT OF WORKS IN 2026 MASS INTAKE IN 2034
- REMAINING PHASE COMMENCEMENT OF WORKS IN 2032 MASS INTAKE IN 2039
- NON-DEVELOPMENT AREA OF THE PROJECT
- ZONING OF THE PROJECT

NOL2 ALIGNMENT

**AECOM**

**PROJECT**  
項目  
FIRST PHASE DEVELOPMENT OF THE NEW TERRITORIES NORTH – SAN TIN / LOK MA CHAU DEVELOPMENT NODE – INVESTIGATION

**CLIENT**  
業主  
 土木工程拓展署  
Civil Engineering and Development Department  
 規劃署  
Planning Department

**CONSULTANT**  
顧問公司  
AECOM Asia Company Ltd.  
www.aecom.com

**SUB-CONSULTANTS**  
分判工程顧問公司

| ISSUE/REVISION |      |             |      |
|----------------|------|-------------|------|
| 修訂             |      |             |      |
|                |      |             |      |
|                |      |             |      |
|                |      |             |      |
|                |      |             |      |
|                |      |             |      |
| I/R            | DATE | DESCRIPTION | CHK. |
| 修訂             | 日期   | 內容描述        | 校核   |

| STATUS |  |
|--------|--|
| 階段     |  |

| SCALE        | DIMENSION UNIT |
|--------------|----------------|
| 比例           | 尺寸單位           |
| A3 1 : 16000 | METRES         |

| KEY PLAN |  |
|----------|--|
| 索引圖      |  |

|                            |                              |
|----------------------------|------------------------------|
| <b>PROJECT NO.</b><br>項目編號 | <b>AGREEMENT NO.</b><br>協議編號 |
| 60670882                   | CE 20/2021                   |

|                                                         |
|---------------------------------------------------------|
| <b>SHEET TITLE</b><br>圖紙名稱                              |
| PRELIMINARY CONSTRUCTION AND POPULATION INTAKE SCHEDULE |

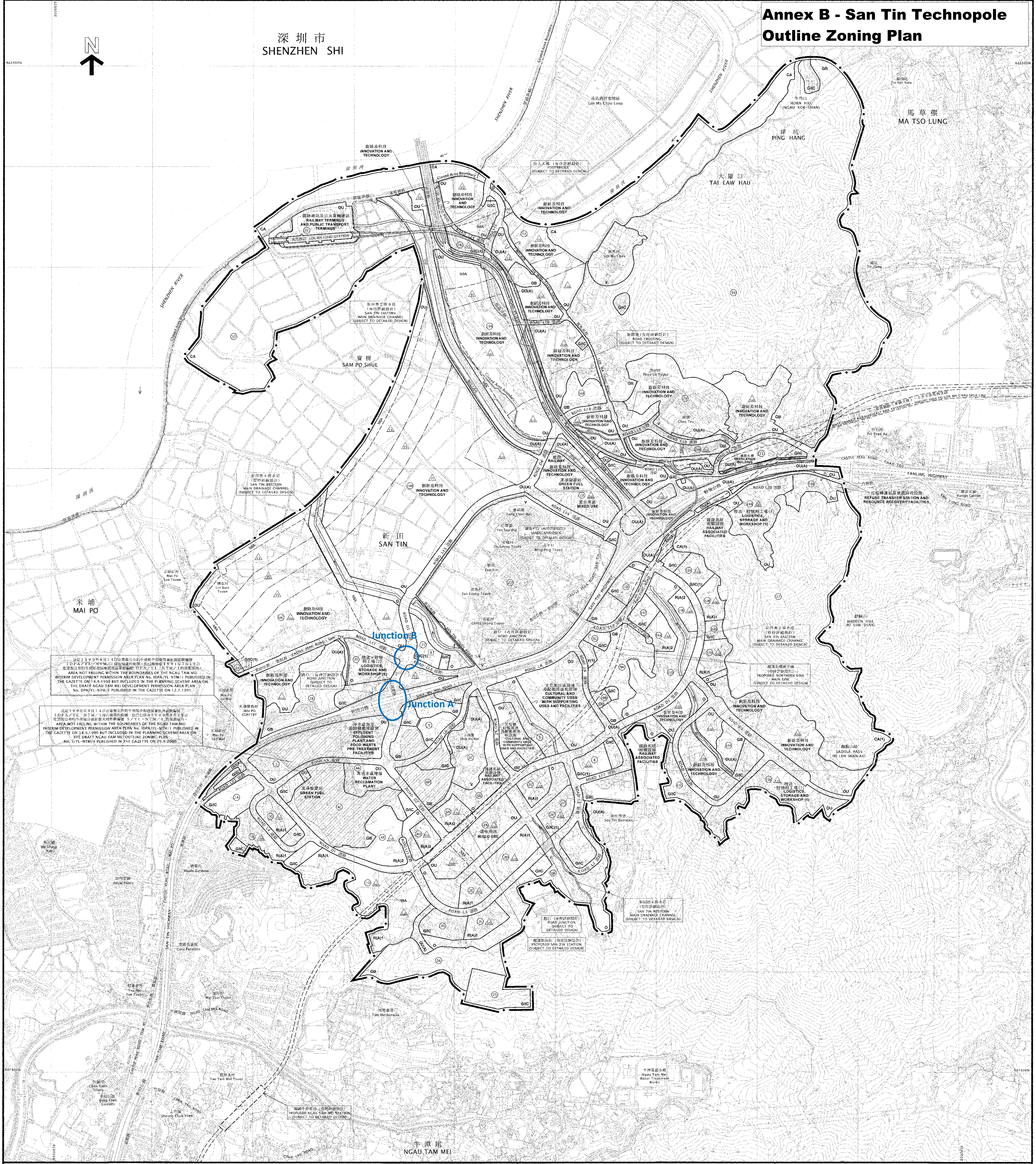
|                             |
|-----------------------------|
| <b>SHEET NUMBER</b><br>圖紙編號 |
| 60670882/A34/APPENDIX 2.1   |

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# **ANNEX C – SAN TIN TECHNOPOLE – OUTLINE ZONING PLAN**





Annex B - San Tin Technopole  
Outline Zoning Plan

**圖例**  
NOTATION

**ZONES**

RESIDENTIAL (GROUP A) R(A)

VILLAGE TYPE DEVELOPMENT V

GOVERNMENT, INSTITUTION OR COMMUNITY GIC

OPEN SPACE O

OTHER SPECIFIED USES OU

OTHER SPECIFIED USES (AMENITY AREA) OU(A)

GREEN BELT GB

CONSERVATION AREA CA

**地帶**

住宅 (甲類)

鄉村式發展

政府、機構或社區

休憩用地

其他指定用途 (美化市密地帶)

綠化地帶

自然保育區

**COMMUNICATIONS**

RAILWAY AND STATION

RAILWAY AND STATION (UNDERGROUND)

RAILWAY AND STATION (ELEVATED)

MAJOR ROAD AND JUNCTION

ELEVATED ROAD

**MISCELLANEOUS**

BOUNDARY OF PLANNING SCHEME

PLANNING AREA NUMBER

BUILDING HEIGHT CONTROL ZONE BOUNDARY

MAXIMUM BUILDING HEIGHT (IN METRES ABOVE PRINCIPAL DATUM)

MAXIMUM BUILDING HEIGHT (IN NUMBER OF STOREYS)

NON-BUILDING AREA

**交通**

鐵路及車站

鐵路及車站 (地下)

鐵路及車站 (高架)

主要道路及路口

高架道路

**其他**

規劃範圍界線

規劃區編號

建築物高度管制區界線

最高樓宇高度 (在主水平基準上若干米)

最高樓宇高度 (樓層數目)

非建築用地

**土地用途及面積一覽表**  
SCHEDULE OF USES AND AREAS

| USES                                 | 土地面積及百分比<br>APPROXIMATE AREA & % |          | 用途              |
|--------------------------------------|----------------------------------|----------|-----------------|
|                                      | 公頃<br>HECTARES                   | 百分比<br>% |                 |
| RESIDENTIAL (GROUP A)                | 44.78                            | 4.46     | 住宅 (甲類)         |
| VILLAGE TYPE DEVELOPMENT             | 76.48                            | 7.82     | 鄉村式發展           |
| GOVERNMENT, INSTITUTION OR COMMUNITY | 56.52                            | 5.63     | 政府、機構或社區        |
| OPEN SPACE                           | 56.68                            | 5.57     | 休憩用地            |
| OTHER SPECIFIED USES                 | 284.63                           | 28.35    | 其他指定用途          |
| OTHER SPECIFIED USES (AMENITY AREA)  | 26.61                            | 2.85     | 其他指定用途 (美化市密地帶) |
| GREEN BELT                           | 207.29                           | 20.65    | 綠化地帶            |
| CONSERVATION AREA                    | 139.36                           | 13.86    | 自然保育區           |
| MAJOR ROAD ETC.                      | 108.45                           | 10.79    | 主要道路等           |
| TOTAL PLANNING SCHEME AREA           | 1004.00                          | 100.00   | 規劃範圍總面積         |

2024年3月8日 按照城市規劃條例第5條展示的  
草案  
DRAFT PLAN EXHIBITED UNDER SECTION 5 OF THE TOWN  
PLANNING ORDINANCE ON 8 MARCH 2024

C. K. Yip 葉子學  
SECRETARY 城市規劃委員會秘書  
TOWN PLANNING BOARD

香港城市規劃委員會依據城市規劃條例擬備的新田科技城分區計劃大綱圖  
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD  
SAN TIN TECHNOPOLE - OUTLINE ZONING PLAN

SCALE 1:7500 比例尺

規劃署遵照城市規劃委員會指示擬備  
PREPARED BY THE PLANNING DEPARTMENT UNDER  
THE DIRECTION OF THE TOWN PLANNING BOARD

圖則編號  
PLAN No. S/STT/1



# **ANNEX D – DETAIL OF JUNCTION CALCULATION SHEETS (SENSITIVITY TEST)**

Calculation Spreadsheets  
for 2031  
Reference & Design Scenario  
(Sensitivity Test)

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |  |                 |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|--|-----------------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |  |                 |
| Junction: Shek Wu Wai Road / San Tin Highway Slip Road ( A1 )                                                                |                      |  | Ref. No.: 2031R |
| Scheme: Reference (Sensitivity Test 1)                                                                                       |                      |  | Ref. No.:       |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 |  | Rev.: -         |
| ARM A: Shek Wu Wai Road                                                                                                      |                      |  |                 |
| ARM B: San Tin Highway Slip Road                                                                                             |                      |  |                 |
| ARM C: Shek Wu Wai Road                                                                                                      |                      |  |                 |

**ARM C**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 395 | (310) |
| 0   | (0)   |

**ARM A**

|     |      |
|-----|------|
| AM  | (PM) |
| 110 | (75) |
| 0   | (0)  |

**Minor ARM B**

|       |      |
|-------|------|
| AM    | (PM) |
| 255   | 85   |
| (255) | (90) |

| GEOMETRY               |         |      |             |
|------------------------|---------|------|-------------|
| Major road width       | W       | 7.20 | Lane widths |
| Central Reserve width  | Wcr     | 0.00 | w(b-a)      |
| 2 Lane Minor Arm (Y/N) |         | N    | w(b-c)      |
| Visibilities           | Vr(b-a) | 20   | w(c-b)      |
|                        | VI(b-a) | 20   | Calculated  |
|                        | Vr(b-c) | 20   | D           |
|                        | Vr(c-b) |      | E           |
|                        |         |      | F           |
|                        |         |      | Y           |

| ANALYSIS      |            |         |           |
|---------------|------------|---------|-----------|
|               |            | AM PEAK | (PM) PEAK |
| TRAFFIC FLOWS | q(c-a)     | 395     | 310       |
|               | q(c-b)     | 0       | 0         |
|               | q(a-b)     | 0       | 0         |
|               | q(a-c)     | 110     | 75        |
|               | q(b-a)     | 85      | 90        |
|               | q(b-c)     | 255     | 255       |
|               | f          | 0.75    | 0.74      |
|               | CAPACITIES | Q(b-a)  | 638       |
| Q(b-c)        |            | 935     | 947       |
| Q(c-b)        |            | 419     | 425       |
| Q(b-ac)       |            | 837     | 854       |
| RFC's         |            | b-a     | 0.133     |
|               | b-c        | 0.273   | 0.269     |
|               | c-b        | 0.000   | 0.000     |
|               | b-ac       | 0.406   | 0.404     |
|               | Worst RFC  | 0.406   | 0.404     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

Y = 1-0.0345W

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      | Ref. No.: 2031R |  |
| Junction: Shek Wu Wai Road / Mai Po Lung Road ( A2 )                                                                         |                      | Ref. No.:       |  |
| Scheme: Reference (Sensitivity Test 1)                                                                                       |                      | Rev.: -         |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 |                 |  |
| ARM A: Mai Po Lung Road                                                                                                      |                      |                 |  |
| ARM B: San Tin Highway Slip Road                                                                                             |                      |                 |  |
| ARM C: Shek Wu Wai Road                                                                                                      |                      |                 |  |
| ARM D: Shek Wu Wai Road                                                                                                      |                      |                 |  |

**Minor Arm D**

|    |    |   |
|----|----|---|
| 65 | 60 | 5 |
| 40 | 45 | 5 |

AM (PM)

**ARM C**

|     |     |
|-----|-----|
| 95  | 100 |
| 45  | 100 |
| 335 | 205 |

AM (PM)

**ARM A**

|    |    |
|----|----|
| 0  | 5  |
| 50 | 40 |
| 40 | 45 |

AM (PM)

**Minor ARM B**

|   |   |   |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 0 | 0 |

AM (PM)

| GEOMETRY              |         |       |             | ARM B  |      | ARM D  |      |      |
|-----------------------|---------|-------|-------------|--------|------|--------|------|------|
| Major road width      | W       | 10.30 | Lane widths | w(b-a) | 0.00 | w(b-a) | 5.40 |      |
| Central Reserve width | Wcr     | 0.00  |             | w(b-c) | 0.00 | w(b-c) | 5.40 |      |
|                       |         |       |             | w(c-b) | 3.50 | w(c-b) | 3.30 |      |
| Visibilities          | Vr(b-a) | 0     | Vr(d-c)     | 30     | D    | 0.53   | D    | 0.99 |
|                       | VI(b-a) | 0     | VI(d-c)     | 30     | E    | 0.59   | E    | 1.06 |
|                       | Vr(b-c) | 0     | Vr(d-a)     | 25     | F    | 0.91   | F    | 0.89 |
|                       | Vr(c-b) | 40    | Vr(a-d)     | 30     | Y    | 0.64   | Y    | 0.64 |

| ANALYSIS      |         | Arm B     |       | Arm D   |           |
|---------------|---------|-----------|-------|---------|-----------|
|               | AM PEAK | (PM) PEAK |       | AM PEAK | (PM) PEAK |
| TRAFFIC FLOWS | q(c-a)  | 50        | 105   | q(a-c)  | 40        |
|               | q(c-b)  | 335       | 205   | q(a-d)  | 5         |
|               | q(a-b)  | 40        | 45    | q(c-d)  | 100       |
|               | q(a-c)  | 115       | 80    | q(c-a)  | 100       |
|               | q(b-a)  | 0         | 0     | q(d-c)  | 85        |
|               | q(b-c)  | 0         | 0     | q(d-a)  | 5         |
|               | f       | 0.00      | 0.00  | f       | 0.06      |
| CAPACITIES    | Q(b-a)  | 254       | 277   | Q(d-c)  | 583       |
|               | Q(b-c)  | 419       | 423   | Q(d-a)  | 759       |
|               | Q(c-b)  | 648       | 655   | Q(a-d)  | 620       |
|               | Q(b-ac) | 254       | 277   | Q(d-ca) | 590       |
|               | Q(c-a)  | 869       | 1237  | Q(a-c)  | 1785      |
| RFC's         | b-a     | 0.000     | 0.000 | d-c     | 0.146     |
|               | b-c     | 0.000     | 0.000 | d-a     | 0.007     |
|               | c-b     | 0.517     | 0.313 | a-d     | 0.008     |
|               | b-ac    | 0.000     | 0.000 | d-ca    | 0.152     |
|               | c-a     | 0.058     | 0.085 | a-c     | 0.022     |

| Worst RFC |       |
|-----------|-------|
| AM        | (PM)  |
| 0.517     | 0.313 |

Where VI and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)\*Q(b-a)/((1-f)\*Q(b-c)+f\*Q(b-a))

Capacity of combined streams

- in accordance with TPDM V2.4

T.P.D.M.V.2.4  
Appendix 1

|                    |              |                 |
|--------------------|--------------|-----------------|
| Calculated by: MYC | Date: Jul-25 | Checked by: CFC |
|--------------------|--------------|-----------------|



## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road San Tin / Shek Wu Wai Road ( B )                                                                  |                      | Ref. No.: 2031R |  |
| Scheme: Reference (Sensitivity Test 1)                                                                                       |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - San Tin                                                                                            |                      |                 |  |
| ARM B: Shek Wu Wai Road                                                                                                      |                      |                 |  |
| ARM C: Castle Peak Road - San Tin                                                                                            |                      |                 |  |

**ARM C**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 205 | (255) |
| 120 | (125) |

**ARM A**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 205 | (210) |
| 275 | (185) |

**Minor ARM B**

|       |       |
|-------|-------|
| AM    | (PM)  |
| 105   | 265   |
| (140) | (195) |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 6.50 | Lane widths | w(b-a) | 4.20 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 4.20 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 3.60 |
| Visibilities           | Vr(b-a) | 30   | Calculated  | D      | 0.90 |
|                        | VI(b-a) | 30   |             | E      | 0.98 |
|                        | Vr(b-c) | 40   |             | F      | 0.91 |
|                        | Vr(c-b) | 30   |             | Y      | 0.78 |

| ANALYSIS      |            |        | AM PEAK | (PM) PEAK |
|---------------|------------|--------|---------|-----------|
| TRAFFIC FLOWS | q(c-a)     |        | 205     | 255       |
|               | q(c-b)     |        | 120     | 125       |
|               | q(a-b)     |        | 275     | 185       |
|               | q(a-c)     |        | 205     | 210       |
|               | q(b-a)     |        | 265     | 195       |
|               | q(b-c)     |        | 105     | 140       |
|               | f          |        | 0.28    | 0.42      |
|               | CAPACITIES | Q(b-a) | Factor  | 407       |
| Q(b-c)        |            | 1      | 641     | 649       |
| Q(c-b)        |            | 1      | 557     | 579       |
| Q(b-ac)       |            | 1      | 454     | 481       |
| RFC's         |            | b-a    |         | 0.651     |
|               | b-c        |        | 0.164   | 0.216     |
|               | c-b        |        | 0.215   | 0.216     |
|               | b-ac       |        | 0.815   | 0.696     |
| Worst RFC     |            |        | 0.815   | 0.696     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

$Y = 1-0.0345W$

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Shek Wu Wai Road / San Tin Highway Slip Road ( A1 )                                                                |                      | Ref. No.: 2031D |  |
| Scheme: Design (Sensitivity Test 1)                                                                                          |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Shek Wu Wai Road                                                                                                      |                      |                 |  |
| ARM B: San Tin Highway Slip Road                                                                                             |                      |                 |  |
| ARM C: Shek Wu Wai Road                                                                                                      |                      |                 |  |

ARM C

|     |       |
|-----|-------|
| AM  | (PM)  |
| 430 | (330) |
| 0   | (0)   |

ARM A

|     |      |
|-----|------|
| AM  | (PM) |
| 110 | (75) |
| 0   | (0)  |

Minor ARM B

|       |      |
|-------|------|
| AM    | (PM) |
| 280   | 85   |
| (285) | (90) |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 7.20 | Lane widths | w(b-a) | 8.30 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 8.30 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 0.00 |
| Visibilities           | Vr(b-a) | 20   | Calculated  | D      | 1.21 |
|                        | VI(b-a) | 20   |             | E      | 1.31 |
|                        | Vr(b-c) | 20   |             | F      | 0.59 |
|                        | Vr(c-b) |      |             | Y      | 0.75 |

| ANALYSIS      |            |        | AM PEAK     | (PM) PEAK |
|---------------|------------|--------|-------------|-----------|
| TRAFFIC FLOWS | q(c-a)     |        | 430         | 330       |
|               | q(c-b)     |        | 0           | 0         |
|               | q(a-b)     |        | 0           | 0         |
|               | q(a-c)     |        | 110         | 75        |
|               | q(b-a)     |        | 85          | 90        |
|               | q(b-c)     |        | 280         | 285       |
|               | f          |        | 0.77        | 0.76      |
|               | CAPACITIES | Q(b-a) | Factor<br>1 | 630       |
| Q(b-c)        |            | 1      | 935         | 947       |
| Q(c-b)        |            | 1      | 419         | 425       |
| Q(b-ac)       |            | 1      | 840         | 859       |
| RFC's         |            | b-a    |             | 0.135     |
|               | b-c        |        | 0.299       | 0.301     |
|               | c-b        |        | 0.000       | 0.000     |
|               | b-ac       |        | 0.435       | 0.437     |
|               | Worst RFC  |        | 0.435       | 0.437     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

Y = 1-0.0345W

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |         |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|---------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |         |
| Junction: Shek Wu Wai Road / Mai Po Lung Road ( A2 )                                                                         |                      | Ref. No.: 2031D |         |
| Scheme: Design (Sensitivity Test 1)                                                                                          |                      | Ref. No.:       |         |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 |                 | Rev.: - |
| ARM A: Mai Po Lung Road                                                                                                      |                      |                 |         |
| ARM B: San Tin Highway Slip Road                                                                                             |                      |                 |         |
| ARM C: Shek Wu Wai Road                                                                                                      |                      |                 |         |
| ARM D: Shek Wu Wai Road                                                                                                      |                      |                 |         |

| ARM C |     | ARM D |    | ARM A |    | ARM B |    |
|-------|-----|-------|----|-------|----|-------|----|
| AM    | PM  | AM    | PM | AM    | PM | AM    | PM |
| 95    | 100 | 65    | 40 | 0     | 5  | 0     | 0  |
| 45    | 100 | 60    | 45 | 50    | 40 | 0     | 0  |
| 370   | 225 | 5     | 5  | 40    | 45 | 0     | 0  |

| GEOMETRY              |         |       |             | ARM B  |      | ARM D  |      |      |
|-----------------------|---------|-------|-------------|--------|------|--------|------|------|
| Major road width      | W       | 10.30 | Lane widths | w(b-a) | 0.00 | w(b-a) | 5.40 |      |
| Central Reserve width | Wcr     | 0.00  |             | w(b-c) | 0.00 | w(b-c) | 5.40 |      |
|                       |         |       |             | w(c-b) | 3.50 | w(c-b) | 3.30 |      |
| Visibilities          | Vr(b-a) | 0     | Vr(d-c)     | 30     | D    | 0.53   | D    | 0.99 |
|                       | VI(b-a) | 0     | VI(d-c)     | 30     | E    | 0.59   | E    | 1.06 |
|                       | Vr(b-c) | 0     | Vr(d-a)     | 25     | F    | 0.91   | F    | 0.89 |
|                       | Vr(c-b) | 40    | Vr(a-d)     | 30     | Y    | 0.64   | Y    | 0.64 |

| ANALYSIS      |         | Arm B     |       | Arm D   |           |
|---------------|---------|-----------|-------|---------|-----------|
|               | AM PEAK | (PM) PEAK |       | AM PEAK | (PM) PEAK |
| TRAFFIC FLOWS | q(c-a)  | 50        | 105   | q(a-c)  | 40        |
|               | q(c-b)  | 370       | 225   | q(a-d)  | 5         |
|               | q(a-b)  | 40        | 45    | q(c-d)  | 100       |
|               | q(a-c)  | 115       | 80    | q(c-a)  | 100       |
|               | q(b-a)  | 0         | 0     | q(d-c)  | 85        |
|               | q(b-c)  | 0         | 0     | q(d-a)  | 5         |
|               | f       | 0.00      | 0.00  | f       | 0.06      |
| CAPACITIES    | Q(b-a)  | 248       | 274   | Q(d-c)  | 583       |
|               | Q(b-c)  | 419       | 423   | Q(d-a)  | 759       |
|               | Q(c-b)  | 648       | 655   | Q(a-d)  | 620       |
|               | Q(b-ac) | 248       | 274   | Q(d-ca) | 590       |
|               | Q(c-a)  | 772       | 1182  | Q(a-c)  | 1785      |
|               |         |           |       |         |           |
| RFC's         | b-a     | 0.000     | 0.000 | d-c     | 0.146     |
|               | b-c     | 0.000     | 0.000 | d-a     | 0.007     |
|               | c-b     | 0.571     | 0.344 | a-d     | 0.008     |
|               | b-ac    | 0.000     | 0.000 | d-ca    | 0.152     |
|               | c-a     | 0.065     | 0.089 | a-c     | 0.022     |
|               |         |           |       |         |           |

| Worst RFC |  | AM    | (PM)  |
|-----------|--|-------|-------|
|           |  | 0.571 | 0.344 |

Where VI and Vr are visibility distances to the left or right of the respective streams  
 $D = (1 + 0.094(w(b-a) - 3.65))(1 + 0.0009(Vr(b-a) - 120))(1 + 0.0006(VI(b-a) - 150))$   
 $E = (1 + 0.094(w(b-c) - 3.65))(1 + 0.0009(Vr(b-c) - 120))$   
 $F = (1 + 0.094(w(c-b) - 3.65))(1 + 0.0009(Vr(c-b) - 120))$   
 $Y = 1 - 0.0345W$   
 $f = \text{proportion of minor traffic turning left}$   
 $Q(b-ac) = Q(b-c) * Q(b-a) / ((1-f) * Q(b-c) + f * Q(b-a))$   
Capacity of combined streams  
- in accordance with TPDM V2.4

T.P.D.M.V.2.4  
Appendix 1

|                    |              |                 |
|--------------------|--------------|-----------------|
| Calculated by: MYC | Date: Jul-25 | Checked by: CFC |
|--------------------|--------------|-----------------|

## Priority Junction Capacity Calculation

|                                                                                                                              |                      |                 |  |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |                      |                 |  |
| Junction: Castle Peak Road San Tin / Shek Wu Wai Road ( B )                                                                  |                      | Ref. No.: 2031D |  |
| Scheme: Design (Sensitivity Test 1)                                                                                          |                      | Ref. No.:       |  |
| Year: 2031                                                                                                                   | Job No.: CHK50873110 | Rev.: -         |  |
| ARM A: Castle Peak Road - San Tin                                                                                            |                      |                 |  |
| ARM B: Shek Wu Wai Road                                                                                                      |                      |                 |  |
| ARM C: Castle Peak Road - San Tin                                                                                            |                      |                 |  |

**ARM C**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 260 | (285) |
| 155 | (145) |

**ARM A**

|     |       |
|-----|-------|
| AM  | (PM)  |
| 240 | (255) |
| 275 | (185) |

**Minor ARM B**

|       |       |
|-------|-------|
| AM    | (PM)  |
| 130   | 265   |
| (170) | (195) |

| GEOMETRY               |         |      |             |        |      |
|------------------------|---------|------|-------------|--------|------|
| Major road width       | W       | 6.50 | Lane widths | w(b-a) | 4.20 |
| Central Reserve width  | Wcr     | 0.00 |             | w(b-c) | 4.20 |
| 2 Lane Minor Arm (Y/N) |         | N    |             | w(c-b) | 3.60 |
| Visibilities           | Vr(b-a) | 30   | Calculated  | D      | 0.90 |
|                        | VI(b-a) | 30   |             | E      | 0.98 |
|                        | Vr(b-c) | 40   |             | F      | 0.91 |
|                        | Vr(c-b) | 30   |             | Y      | 0.78 |

| ANALYSIS      |            |         |           |
|---------------|------------|---------|-----------|
|               |            | AM PEAK | (PM) PEAK |
| TRAFFIC FLOWS | q(c-a)     | 260     | 285       |
|               | q(c-b)     | 155     | 145       |
|               | q(a-b)     | 275     | 185       |
|               | q(a-c)     | 240     | 255       |
|               | q(b-a)     | 265     | 195       |
|               | q(b-c)     | 130     | 170       |
|               | f          | 0.33    | 0.47      |
|               | CAPACITIES | Q(b-a)  | 377       |
| Q(b-c)        |            | 631     | 637       |
| Q(c-b)        |            | 548     | 568       |
| Q(b-ac)       |            | 435     | 468       |
| RFC's         | b-a        | 0.703   | 0.512     |
|               | b-c        | 0.206   | 0.267     |
|               | c-b        | 0.283   | 0.255     |
|               | b-ac       | 0.908   | 0.780     |
| Worst RFC     |            | 0.908   | 0.780     |

Where VI and Vr are visibility distances to the left or right of the respective streams

$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$

$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$

$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$

Y = 1-0.0345W

f = proportion of minor traffic turning left

$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$

**T.P.D.M.V.2.4**

**Appendix 1**

Calculated by: MYC

Date: Jul-25

Checked by: CFC

Capacity of combined streams  
- in accordance with TPDM V2.4



Calculation Spreadsheets  
for 2031  
Reference & Design Scenario  
(Sensitivity Test)  
(With Improvement)

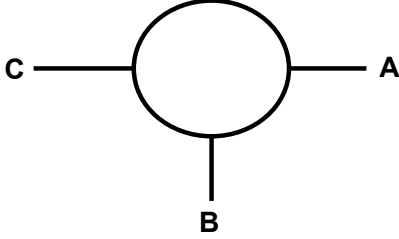
# Roundabout Capacity Calculation

|                                                                                                                              |      |                |      |                      |                |                |                |                 |       |               |      |      |
|------------------------------------------------------------------------------------------------------------------------------|------|----------------|------|----------------------|----------------|----------------|----------------|-----------------|-------|---------------|------|------|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |      |                |      |                      |                |                |                |                 |       |               |      |      |
| Junction: Castle Peak Road San Tin / Shek Wu Wai Road ( B )                                                                  |      |                |      |                      |                |                |                | Ref. No.: 2031R |       |               |      |      |
| Scheme: Reference (Under Improvement in Sensitivity Test 1)                                                                  |      |                |      |                      |                |                |                | Ref. No.:       |       |               |      |      |
| Year: 2031                                                                                                                   |      |                |      | Job No.: CHK50873110 |                |                |                | Rev.: -         |       |               |      |      |
| AM                                                                                                                           |      |                |      | PM                   |                |                |                |                 |       |               |      |      |
| ARM A: Castle Peak Road-San Tin                                                                                              |      |                |      |                      |                |                |                |                 |       |               |      |      |
| ARM B: Shek Wu Wai Road                                                                                                      |      |                |      |                      |                |                |                |                 |       |               |      |      |
| ARM C: Castle Peak Road-San Tin                                                                                              |      |                |      |                      |                |                |                |                 |       |               |      |      |
|                                                                                                                              |      |                |      |                      |                |                |                |                 |       |               |      |      |
| GEOMETRY                                                                                                                     |      |                |      |                      |                |                |                |                 |       |               |      |      |
| ARM                                                                                                                          | v    | e              | L    | r                    | D              | Phi            | S              |                 |       |               |      |      |
| A                                                                                                                            | 3.50 | 5.90           | 5    | 14                   | 23             | 34             | 0.77           |                 |       |               |      |      |
| B                                                                                                                            | 4.00 | 4.50           | 7    | 25                   | 23             | 3              | 0.11           |                 |       |               |      |      |
| C                                                                                                                            | 3.50 | 4.00           | 12   | 10                   | 23             | 13             | 0.07           |                 |       |               |      |      |
| AM FLOWS                                                                                                                     |      |                |      |                      |                |                |                |                 |       |               |      |      |
| from \ to                                                                                                                    | A    | B              | C    |                      |                |                |                | Circ            | Entry |               |      |      |
| A                                                                                                                            | 0    | 275            | 205  |                      |                |                |                | 120             | 480   |               |      |      |
| B                                                                                                                            | 265  | 0              | 105  |                      |                |                |                | 205             | 370   |               |      |      |
| C                                                                                                                            | 205  | 120            | 0    |                      |                |                |                | 265             | 325   |               |      |      |
| PM FLOWS                                                                                                                     |      |                |      |                      |                |                |                |                 |       |               |      |      |
| from \ to                                                                                                                    | A    | B              | C    |                      |                |                |                | Circ            | Entry |               |      |      |
| A                                                                                                                            | 0    | 185            | 210  |                      |                |                |                | 125             | 395   |               |      |      |
| B                                                                                                                            | 195  | 0              | 140  |                      |                |                |                | 210             | 335   |               |      |      |
| C                                                                                                                            | 255  | 125            | 0    |                      |                |                |                | 195             | 380   |               |      |      |
| CALCULATIONS                                                                                                                 |      |                |      |                      |                |                |                |                 |       |               |      |      |
| ARM                                                                                                                          | K    | X <sub>2</sub> | M    | F                    | t <sub>D</sub> | f <sub>c</sub> | Q <sub>E</sub> | AM              | PM    | RFC           | AM   | PM   |
| A                                                                                                                            | 0.97 | 4.45           | 0.02 | 1347                 | 1.49           | 0.59           | 1232           | 1229            |       | 0.39          |      | 0.32 |
| B                                                                                                                            | 1.10 | 4.41           | 0.02 | 1335                 | 1.49           | 0.59           | 1340           | 1337            |       | 0.28          |      | 0.25 |
| C                                                                                                                            | 1.01 | 3.94           | 0.02 | 1194                 | 1.49           | 0.56           | 1057           | 1096            |       | 0.31          |      | 0.35 |
|                                                                                                                              |      |                |      |                      |                |                |                |                 |       | Critical Arm: | A    | C    |
|                                                                                                                              |      |                |      |                      |                |                |                |                 |       | RFC:          | 0.39 | 0.35 |
|                                                                                                                              |      |                |      |                      |                |                |                |                 |       |               | AM   | PM   |
| - In accordance with TPDM V2.4                                                                                               |      |                |      |                      |                |                |                |                 |       |               |      |      |
| Calculated by: MYC                                                                                                           |      |                |      | Date: Jul-25         |                |                |                | Checked by: CFC |       |               |      |      |

# Roundabout Capacity Calculation

|                                                                                                                              |  |  |  |                      |  |  |  |                 |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------|--|--|--|----------------------|--|--|--|-----------------|--|--|--|
| Job Title: Proposed Comprehensive Residential Development at Lots 50 S.A. and 77 in D.D.101, Wo Shang Wai, Mai Po, Yuen Long |  |  |  |                      |  |  |  |                 |  |  |  |
| Junction: Castle Peak Road San Tin / Shek Wu Wai Road ( B )                                                                  |  |  |  |                      |  |  |  | Ref. No.: 2031D |  |  |  |
| Scheme: Design (Under Improvement Sensitivity in Test 1)                                                                     |  |  |  |                      |  |  |  | Ref. No.:       |  |  |  |
| Year: 2031                                                                                                                   |  |  |  | Job No.: CHK50873110 |  |  |  | Rev.: -         |  |  |  |

|                                                                                                                                            |                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <p>AM                  PM</p> <p>ARM A: Castle Peak Road-San Tin</p> <p>ARM B: Shek Wu Wai Road</p> <p>ARM C: Castle Peak Road-San Tin</p> |  |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

### GEOMETRY

| ARM | v    | e    | L  | r  | D  | Phi | S    |
|-----|------|------|----|----|----|-----|------|
| A   | 3.50 | 5.90 | 5  | 14 | 23 | 34  | 0.77 |
| B   | 4.00 | 4.50 | 7  | 25 | 23 | 3   | 0.11 |
| C   | 3.50 | 4.00 | 12 | 10 | 23 | 13  | 0.07 |

### AM FLOWS

| from \ to | A   | B   | C   | Circ | Entry |
|-----------|-----|-----|-----|------|-------|
| A         | 0   | 275 | 240 | 155  | 515   |
| B         | 265 | 0   | 130 | 240  | 395   |
| C         | 260 | 155 | 0   | 265  | 415   |

### PM FLOWS

| from \ to | A   | B   | C   | Circ | Entry |
|-----------|-----|-----|-----|------|-------|
| A         | 0   | 185 | 255 | 145  | 440   |
| B         | 195 | 0   | 170 | 255  | 365   |
| C         | 285 | 145 | 0   | 195  | 430   |

### CALCULATIONS

| ARM | K    | X <sub>2</sub> | M    | F    | t <sub>D</sub> | f <sub>c</sub> | Q <sub>E</sub> |      | RFC  |      |
|-----|------|----------------|------|------|----------------|----------------|----------------|------|------|------|
|     |      |                |      |      |                |                | AM             | PM   | AM   | PM   |
| A   | 0.97 | 4.45           | 0.02 | 1347 | 1.49           | 0.59           | 1212           | 1218 | 0.42 | 0.36 |
| B   | 1.10 | 4.41           | 0.02 | 1335 | 1.49           | 0.59           | 1318           | 1308 | 0.30 | 0.28 |
| C   | 1.01 | 3.94           | 0.02 | 1194 | 1.49           | 0.56           | 1057           | 1096 | 0.39 | 0.39 |

|                      |             |             |
|----------------------|-------------|-------------|
| <b>Critical Arm:</b> | <b>A</b>    | <b>C</b>    |
| <b>RFC:</b>          | <b>0.42</b> | <b>0.39</b> |
|                      | <b>AM</b>   | <b>PM</b>   |

- In accordance with TPDM V2.4

|                    |              |                 |
|--------------------|--------------|-----------------|
| Calculated by: MYC | Date: Jul-25 | Checked by: CFC |
|--------------------|--------------|-----------------|