Appendix F

Traffic Impact Assessment

03/06/2026

Reference number: CHK50834010

SECTION 12A PLANNING APPLICATION FOR PROPOSED AMENDMENTS TO THE SHATIN OUTLINE ZONING PLAN TO REZONE “OPEN SPACE” ZONE TO “OTHER SPECIFIED USE (HOTEL DEVELOPMENT) ZONE IN SUPPORT OF PROPOSED HOTEL DEVELOPMENT AT VARIOUS LOTS IN D.D. 184 AND ADJOINING GOVERNMENT LAND, SHA TIN, NEW TERRITORIES

TRAFFIC IMPACT ASSESSMENT REPORT

SYSTRA MVA

IDENTIFICATION TABLE	
Project	Section 12A Planning Application for Proposed Amendments to the Shatin Outline Zoning Plan to Rezone “Open Space” Zone to “Other Specified Use (Hotel Development) Zone in Support of Proposed Hotel Development at Various Lots in D.D. 184 and Adjoining Government Land, Sha Tin, New Territories
Study	Traffic Impact Assessment
Type of document	Report (Revision 2)
Date	03/06/2026
Reference number	CHK50834010

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1.1 Background

1.1.1 The Application Site is located at various lots in D.D. 184 and adjoining government land, Sha Tin, New Territories. It falls within an area zoned "Open Space" ("O") on the Draft Sha Tin Outline Zoning Plan (OZP) No. S/ST/39.

1.1.2 The current planning application proposes to rezone the Application Site from "O" to "Other Specified Use" annotated "Hotel Development" to facilitate a proposed hotel development (the Proposed Development) with an active public realm that contains retail / F&B and recreational elements and the preserved Main Building of Ng Yuen.

1.1.3 The purpose of this Traffic Impact Assessment (TIA) Study is to investigate any potential impact on the adjacent local road network arising from the Proposed Development.

1.2 Study Scopes

1.2.1 The scopes of this TIA Study are summarised as follows:

- Review the latest traffic condition in the vicinity of the Application Site;
- Review the Proposed Development schedule and internal transport facilities;
- Review the potential traffic impact of the local road network and public transport facilities upon completion of the Proposed Development;
- Propose any traffic improvement remedial measures, if necessary, to alleviate the potential traffic problems.

1.3 Report Structure

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

- Chapter 2 – The Proposed Development, presents the Proposed Development schedule and internal transport facilities;
- Chapter 3 – Existing Traffic Context, reviews the existing traffic arrangement and current condition of the local road network in the vicinity;
- Chapter 4 – Traffic Forecast, describes the forecasting methodology and presents the traffic forecast results;
- Chapter 5 – Traffic Assessment, presents the assessment results on the local road network under existing conditions and upon occupation of the Proposed Development; and,
- Chapter 6 – Summary and Conclusion, summarise and conclude the study findings.

2. THE PROPOSED DEVELOPMENT

2.1 Site Location

2.1.1 The Application Site is located near the junction of Tai Chung Kiu Road and Sha Kok Street at Sha Tin to the south of Shing Mun River Promenade. It is currently zoned as "Open Space" ("O") under the Draft Sha Tin OZP No. S/ST/39.

2.1.2 The Application Site has remained idle for years, and is currently fenced off and occupied by a Grade 3 Historical Building – "Ng Yuen" and some temporary structures only.

2.1.3 The location plan of the site is shown in **Drawing No. 2.1**.

2.2 Indicative Development Scheme

2.2.1 The Application Site is proposed to be developed into a hotel development with 443 rooms supported with ancillary commercial uses. The Proposed Development schedule is summarised in **Table 2.1**.

Table 2.1 Proposed Development Schedule

Component	Parameters
Application Site Area	Approx. 4,561.5 m^2
Total Non-domestic Plot Ratio	About 4.0
No. of blocks	2 nos.
Proposed no. of hotel rooms	443 nos.
Proposed Retail GFA	800 m^2

2.2.2 The indicative Master Layout Plan (MLP) is enclosed in **Drawing No. 2.2**.

2.3 Vehicular and Pedestrian Access Arrangement

2.3.1 There is currently a vehicular access which is located on a sub-standard single-track access road serving the Application Site. The access road is approximately 5m in width and connected to the junction of Tai Chung Kiu Road and Sha Kok Street with left-in-left-out arrangement in form of signalised junction.

2.3.2 Under the development proposal, it is proposed that the present vehicular access location to remain the status quo, and to upgrade the single-track access road to a standard 7.3m single-two carriageway with a cul-de-sac at the end. Footpath would be provided on the west kerb-side of the upgraded access road, connecting Tai Chung Kiu Road and Shing Mun River Promenade. Besides, two pedestrian access points are proposed for the hotel development at the upgraded access road and Tai Chung Kiu Road respectively.

2.3.3 In addition, it is noted that existing footpath and cycle track layout along the north kerb-side of Tai Chung Kiu Road, adjacent to the Application Site, would be modified under the project *"Trunk Road T4 and Associated Works"* by Civil Engineering and Development Department

(CEDD) by year 2030. The planned works on Tai Chung Kiu Road under CEDD's project is appended in **Appendix A** for reference.

2.3.4 To enhance the connectivity and integration of the Proposed Development with adjacent land use, it is further proposed to re-align the planned at-grade footpath and cycle track layouts of CEDD's project for providing a functional public open space at the amenity area abutting the south boundary of the Application Site. Staggered pedestrian crossing is also proposed under the revised layout for connecting the Proposed Development and public open space with Tai Chung Kiu Road.

2.3.5 The proposed vehicular and pedestrian access arrangement with the preliminary public road layout proposal are illustrated in **Drawing No. 2.2**.

2.4 Internal Transport Facilities

2.4.1 The proposed parking provisions for the Proposed Development have been reviewed with reference to the proposed parameters and the prevailing requirement as stipulated in the latest Hong Kong Planning Standards and Guidelines (HKPSG).

2.4.2 Given the good accessibility of the Proposed Development by MTR and public transport services, as well as nil provision of conventions centres, conference and banquet facilities in the Proposed Development, low-end provision of parking, loading/unloading and lay-by facilities is proposed with reference to HKPSG.

2.4.3 Furthermore, a loading/unloading demand survey was conducted at Courtyard by Marriott Hong Kong Sha Tin, which has a comparable number of guestrooms, to review the demand of tour buses and goods vehicles. A maximum of six heavy vehicles, including tour buses and goods vehicles, was observed during the surveyed peak hour. To allow for more efficient use and greater operational flexibility, it is proposed that all loading/unloading bays for goods vehicles and lay-bys for single-deck tour buses be in 12m in length and operated under a shared-use arrangement.

2.4.4 The relevant calculations of the internal transport facility provisions are summarized in **Table 2.2**.

Table 2.2 Proposed Internal Transport Facility Provisions

Schedule of Use	HKPSG Requirement	Required Provision	Proposed Provision
Private car parking			
Hotel (443 rooms)	1 car space per 100 rooms	5	5
Retail (800 m^2 GFA)	1 space per 150-300 sqm GFA	3-6	3
		Sub-Total	**8**
Motorcycle parking			
Hotel (443 rooms)	5-10% of Hotel private car parking	1	1
Retail (800 m^2 GFA)	5-10% of Retail private car parking	1	1
		Sub-Total	**2**
Loading/Unloading bay for goods vehicle			
Hotel (443 rooms)	0.5 - 1 space per 100 rooms	3-5	3
Retail (800 m^2 GFA)	1 space per 800-1,200 sqm GFA	1	1
		Sub-Total	**4** (1)
Lay-by for taxi and private car			
Hotel (443 rooms)	3 spaces for 300-599 rooms	3	**3**
Lay-by for single-deck tour buses			
Hotel (443 rooms)	2-3 spaces for 300-899 rooms	2-3	**2** (1)

Notes: (1) Shared-use arrangement of the loading/unloading bays and lay-bys is proposed for goods vehicles and tour buses.

2.4.5 All internal transport facilities are located on ground level under the current MLP. The proposed ground floor layout plan is shown in **Drawing No. 2.3**.

3. EXISTING TRAFFIC CONTEXT

3.1 Local Road Network

3.1.1 The Application Site is primarily served by Tai Chung Kiu Road, which connects Che Kung Miu Road, Lion Rock Tunnel Road, Sha Tin Wai Road.

3.1.2 Tai Chung Kiu Road is a primary distributor of dual-3 carriageway running along Shing Mun River in east-west direction, linking up the residential developments along the carriageway with other major distributors.

3.1.3 Che Kung Miu Road a primary distributor connecting Tai Wai with Tai Chung Kiu Road towards the north It is a dual-3 carriageway running in east-west direction.

3.1.4 Lion Rock Tunnel Road is a primary distributor aligning north-south across Shing Mun River, which connects Sha Tin and Tai Wai with Lion Rock Tunnel towards Kowloon. The section of Lion Rock Tunnel Road in junction with Che Kung Miu Road and Tai Chung Kiu Road is a dual-2 carriageway.

3.1.5 Sha Tin Wai Road is a primary distributor connecting Tai Chung Kiu Road and Sha Tin Rural Committee Road with Siu Lek Yuen Road and Sha Lek Highway towards Siu Lek Yuen area and Tate's Cairn Highway.

3.2 Existing Traffic Conditions

Traffic Surveys

3.2.1 To appraise the existing traffic conditions of local road network, traffic surveys in the form of manual classified count were conducted during the peak hour periods on a typical weekday in May 2025.

3.2.2 Eleven existing junctions as listed in **Table 3.1** are identified as key junctions for assessment purpose. The junction locations are indicated in **Drawing No. 3.1**, and their current layout arrangements are shown in **Drawing Nos. 3.2 to 3.12**.

Table 3.1 Identified Key Junctions

Ref. (1)	Junctions	Type (2)	Drawing No. (2)
J1	Che Kung Miu Road / Hung Mui Kuk Road / Mei Tin Road	Roundabout	3.2
J2	Che Kung Miu Road / Chui Tin Street	Signal	3.3
J3	Che Kung Miu Road / Sha Tin Tau Road	Signal	3.4
J4	Lion Rock Tunnel Road / Tai Chung Kiu Road	Signal	3.5
J5	Tai Chung Kiu Road / Sha Kok Street	Signal	3.6
J6	Tai Chung Kiu Road / Sha Tin Wai Road / Sha Tin Rural Committee Road	Signal	3.7
J7	Sha Kok Street / Jat Min Chuen Street	Priority	3.8
J8	Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Hong Estate	Signal	3.9
J9	Sha Kok Street / Yat Tai Street	Signal	3.10
J10	Sha Kok Street / Shui Chuen Au Street	Signal	3.11
J11	Sha Tin Wai Road / Sha Kok Street	Signal	3.12

Remarks: (1) Junction locations refer to **Drawing No. 3.1**.
(2) Junction layouts as of Aug 2025.

3.2.3 Results of the surveyed data indicate that the weekday morning and evening peak hour were identified to be 07:45 - 08:45 and 17:45 - 18:45 hours respectively.

3.2.4 The observed peak hour traffic data in vehicle unit are converted to passenger car unit (PCU) values with reference to the PCU conversion factors as suggested in Transport Planning and Design Manual (TPDM) Volume 2 Chapter 2.3.

3.2.5 Moreover, adjustments have been made to the observed peak hour traffic data to account for seasonal variations, with reference to Annual Traffic Census (ATC) published by Transport Department (TD).

3.2.6 The adjusted peak hour traffic flows at the identified key junctions in year 2025, in PCU units, are shown in **Drawing No. 3.13**.

Existing Operational Performance

3.2.7 Junction capacity assessments have been conducted for the identified key junctions based on the traffic layouts and adjusted traffic flows in year 2025. The results are summarised in **Table 3.2**.

Table 3.2 Operational Performance of Identified Key Junctions in Year 2025

Ref. (1)	Junctions	Reserve Capacity / Ratio of Flow to Capacity (2)	
		AM Peak	PM Peak
J1	Che Kung Miu Road / Hung Mui Kuk Road / Mei Tin Road	0.56	0.60
J2	Che Kung Miu Road / Chui Tin Street	>100%	>100%
J3	Che Kung Miu Road / Sha Tin Tau Road	>100%	>100%
J4	Lion Rock Tunnel Road / Tai Chung Kiu Road	20%	34%
J5	Tai Chung Kiu Road / Sha Kok Street	41%	>100%
J6	Tai Chung Kiu Road / Sha Tin Wai Road / Sha Tin Rural Committee Road	9%	28%
J7	Sha Kok Street / Jat Min Chuen Street	0.38	0.15
J8	Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Hong Estate	>100%	>100%
J9	Sha Kok Street / Yat Tai Street	65%	96%
J10	Sha Kok Street / Shui Chuen Au Street	82%	>100%
J11	Sha Tin Wai Road / Sha Kok Street	15%	39%

Remarks: (1) Junction locations refer to **Drawing No. 3.1**.
(2) The operational performance of a signal junction is represented in Reserve Capacity (RC), which considered reasonable if the RC is ≥15% is defined as overloaded while the RC is less than 0%. The operational performance of a roundabout / priority junction is represented in Ratio of Flow to Capacity (RFC), which is considered reasonable if the RFC is ≥0.85 and defined as overloaded if the RFC is over 1.00.
(3) Junction calculation sheets are appended in **Appendix C**.

3.2.8 **Table 3.2** indicates that all the identified key junctions are operating within their capacities during weekday peak hours in year 2025.

3.3 Public Transport Services

3.3.1 The Application Site is currently served by MTR Che Kung Miu Station (Tuen Ma Line). Moreover, franchised bus and green minibus stops are available at Tai Chung Kiu Road and Lion Rock Tunnel Road, within 400m walking distance from the Application Site. The Application Site is well-connected with the above-mentioned public transport services by at-grade footpath, pedestrian footbridges and subways.

3.3.2 The existing public transport facilities in the vicinity are shown in **Drawing No. 3.14**, and details of the operation schedule are listed in **Appendix B**. It is considered that the Application Site is well-served by the current provision of public transport services.

4. TRAFFIC FORECAST

4.1 Design Year

4.1.1 The tentative completion year of the Proposed Development is year 2030. The design year of 2033 (which is three years upon full occupation) has been adopted for traffic forecast and assessment purposes.

4.2 Traffic Forecast Approach

4.2.1 Growth factor method is adopted for traffic forecast purpose in this TIA study. The traffic forecast has made reference to the existing traffic conditions, latest planning parameters including future traffic growth and additional traffic demand, and planned road network which are to be discussed in the following sections.

4.3 Forecast Assumptions

4.3.1 To estimate the year 2033 traffic flows, the future traffic growth and additional traffic demand are reviewed.

Potential Future Traffic Growth

4.3.2 Reference has been made to the historical traffic data from ATC published by TD to identify the future traffic growth for local area. The ATC traffic count stations in the vicinity have been selected for investigation and the corresponding traffic count data of years 2014 and 2024 are summarised in **Table 4.2**.

Table 4.1 Extract of Traffic Counts Record from Annual Traffic Census

Stn. No.	Station Location	Annual Average Daily Traffic (veh/day)		Year 14-24 Growth Rate p.a.
		2018	2024	
5211	Tai Chung Kiu Road (Sha Tin Wai Rd - Sha Kok St)	21,130	19,940	-0.58%
5212	Hung Mui Kuk Road (Tin Sam St - Che Kung Miu Rd)	27,250	33,340	+2.04%
5215	Lion Rock Tunnel Road (Sha Tin Rd - Tai Chung Kiu Rd)	10,720	9,390	-1.32%
5242	Sha Kok Street (Sha Tin Wai Rd - Tai Chung Kiu Rd)	10,980	11,070	+0.08%
5416	Tai Chung Kiu Road (Yuen Chau Kok Rd - Sha Tin Wai Rd)	23,200	16,350	-3.44%
5417	Mei Tin Road (Chik Wan St - Che Kung Miu Rd)	35,750	40,330	+1.21%
5418	Sha Tin Wai Road (Sha Kok St - Tai Chung Kiu Rd)	25,970	26,950	+0.37%
5615	Che Kung Miu Road (Chui Tin St - Sha Tin Tau Rd)	19,180	18,290	-0.47%
5619	Sha Tin Rural Committee Rd (Yuen Wo Rd - Tai Chung Kiu Rd)	31,860	33,070	+0.37%
5815	Che Kung Miu Road (Sha Tin Tau Rd - Lion Rock Tunnel Rd)	21,830	22,280	+0.20%
6011	Tai Chung Kiu Road (Sha Kok St - Lion Rock Tunnel Rd)	27,780	30,280	+0.87%
6015	Lion Rock Tunnel Road (Tai Po Rd - Tai Wai – Tai Chung Kiu Rd)	19,930	20,310	+0.19%
Total		**275,580**	**281,600**	**+0.22%**

4.3.3 In addition, the projected population and employment data available from the latest "2021-based Territorial Population and Employment Data Matrix (TPEDM)" published by Planning Department has been reviewed. Since the Application Site and identified road network are located in "Sha Tin" planning data district under the district map of TPEDM, the corresponding district population planning data has been extracted for study in **Table 4.3**.

Table 4.2 Extract of 2021-based TPEDM Data

Planning Data District	Population		
	2021	2026	2031
Sha Tin	692,800	687,450	667,750
Growth Rate per annum	**2021 – 2026**		**2026 – 2031**
	-0.15%		**-0.58%**

4.3.4 As indicated in **Table 4.2**, the annual traffic growth pattern at the identified traffic count stations suggested an increasing trend of +0.22% per annum over the past few years. While **Table 4.3** suggested decreasing trends future population at the identified TPEDM planning district.

4.3.5 Having reviewed the TPEDM data and historical ATC record, a nominal growth rate of +1% per annum has been applied for the traffic growth between year 2025 and 2033 for conservative assessment.

Planned Development

4.3.6 Apart from the local traffic growth, planned developments in local area have also been taken into consideration for the traffic forecast of year 2033. The corresponding development details and estimated traffic trip volumes are summarised in **Table 4.3 and Table 4.4**.

Table 4.3 Assumption for Planned Development

Site		Use	Parameters
1.	Pavilia Farm - Phase III	Residential	892 flats

Table 4.4 Estimated Trip Generations for Planned Development

Site	Parameter	Adopted Trip Rates (pcu/hr/flat)				Trip Generations (pcu/hr)			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Gen	Att	Gen	Att	Gen	Att	Gen	Att
Pavilia Farm - Phase III	892 flats	0.1887	0.0942	0.0862	0.1214	94	54	38	53

Remarks: Mean trip rates for flat size 100sqm as suggested from TPDM are adopted, with reference to the average flat size of Pavilia Farm Phase III.

4.4 Planned Road Improvement Works

4.4.1 Construction of Trunk Road T4, which is an elevated road connecting Sha Tin Road with Tsing Sha Highway and Shing Mun Tunnel Road, has been commenced in year 2024 under the project *"Trunk Road T4 and Associated Works"* by CEDD. It is expected that upon completion of Trunk Road T4 by year 2030, this strategic route could provide a direct connection for through traffic between Shing Mun Tunnel and Eagle's Nest Tunnel and Ma On Shan, hence diverting a substantial amount of Ma On Shan traffic from the internal roads and junctions of Sha Tin area. The potential traffic implications of Trunk Road T4 have therefore been considered in the traffic forecast of this study.

4.5 Estimated Development Traffic Generations

4.5.1 The traffic generations of the Proposed Development are estimated with reference to the traffic generation rates as stipulated in TPDM.

4.5.2 The traffic trip generation and attraction volumes of the Proposed Development scheme are estimated in **Table 4.5**.

Table 4.5 Estimated Trip Generations for the Proposed Development

Development Schedule	Parameter	Adopted Trip Rates (pcu/hr/room or 100 sqm)				Trip Generations (pcu/hr)			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Gen	Att	Gen	Att	Gen	Att	Gen	Att
Hotel	443 rooms	0.1329	0.1457	0.129	0.1546	59	65	58	69
Retail	800 m^2	0.2296	0.2434	0.31	0.3563	2	2	3	3
					Total:	**61**	**67**	**61**	**72**

Remarks: Mean trip rates for hotel and retail as suggested from TPDM are adopted.

4.6 Design Traffic Forecast

4.6.1 Year 2033 reference traffic flows (without Proposed Development) are produced based on the year 2025 observed flows, with the forecast assumptions as discussed in **Sections 4.3 to 4.5**. The derived year 2033 reference traffic flows are shown in **Drawing No. 4.1**.

4.6.2 The estimated development traffic would be assigned to the road network to produce the year 2033 design traffic forecast (with Proposed Development). The year 2033 design traffic flows are shown in **Drawing No. 4.2**.

5. TRAFFIC ASSESSMENTS

5.1 Junction Capacity Assessment

5.1.1 To evaluate the traffic impact induced by the Proposed Development, the operational performance of the identified local key junctions are assessed for year 2033 reference (without Proposed Development) and design (with Proposed Development) scenarios. **Table 5.1** summarises the junction assessment results.

Table 5.1 Operational Performance of Identified Key Junctions in Year 2033

Ref. (1)	Junctions	Reserve Capacity / Ratio of Flow to Capacity (2)			
		Reference Scenario		Design Scenario	
		AM Peak	PM Peak	AM Peak	PM Peak
J1	Che Kung Miu Road / Hung Mui Kuk Road / Mei Tin Road	0.55	0.54	0.55	0.54
J2	Che Kung Miu Road / Chui Tin Street	60%	86%	60%	86%
J3	Che Kung Miu Road / Sha Tin Tau Road	99%	>100%	95%	>100%
J4	Lion Rock Tunnel Road / Tai Chung Kiu Road	54%	51%	45%	43%
J5	Tai Chung Kiu Road / Sha Kok Street	45%	>100%	45%	>100%
J6	Tai Chung Kiu Road / Sha Tin Wai Road / Sha Tin Rural Committee Road	37%	56%	35%	56%
J7	Sha Kok Street / Jat Min Chuen Street	0.63	0.22	0.63	0.22
J8	Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Hong Estate	>100%	>100%	>100%	>100%
J9	Sha Kok Street / Yat Tai Street	58%	82%	58%	82%
J10	Sha Kok Street / Shui Chuen Au Street	63%	99%	63%	99%
J11	Sha Tin Wai Road / Sha Kok Street	21%	64%	20%	62%

Remarks: (1) Junction locations refer to **Drawing No. 3.1**.

(2) The operational performance of a signal junction is represented in Reserve Capacity (RC), which considered reasonable if the RC is ≥15% is defined as overloaded while the RC is less than 0%. The operational performance of a roundabout / priority junction is represented in Ratio of Flow to Capacity (RFC), which is considered reasonable if the RFC is 0.85 and defined as overloaded if the RFC is over 1.00.

(3) Junction calculation sheets are appended in **Appendix A**.

5.1.2 As reflected in **Table 5.1**, under the reference and design scenarios by year 2033, all the identified junctions would operate within capacities under the current junction layouts, with insignificant traffic impact imposed by the Proposed Development.

5.2 Proposed Junction Modification Works at Tai Chung Kiu Road / Sha Kok Street (J5)

5.2.1 According to the existing traffic arrangement of the junction at Tai Chung Kiu Road / Sha Kok Street (J5), left-in-left-out is only allowed for vehicles arriving and leaving the access road connecting the Application Site which may cause unnecessary de-tour in traffic routings.

5.2.2 In view of the above, a modification scheme has been developed at the aforesaid junction to facilitate the development traffic. It is suggested to slightly modify the traffic island at the access road, and revise the junction method-of-control (MOC) and existing road markings to allow additional traffic movements at approaches of Tai Chung Kiu Road and Sha Kok Street. The proposed junction layout is illustrated in **Drawing No. 5.1**, and it is proposed that the modification works to be carried out by the Applicant.

5.2.3 With consideration of the proposed modification works, the Proposed Development traffic are re-assigned to the local road network and the corresponding year 2033 design traffic flows are shown in **Drawing No. 5.2**.

5.2.4 In addition, the operational performance of the identified local key junctions are re-assessed with the proposed junction layout at J5 and anticipated traffic forecast. The results are summarised in **Table 5.2**.

Table 5.2 Operational Performance of Identified Key Junctions in Year 2033 (With Modification Layout at J5)

Ref. (1)	Junctions	Reserve Capacity / Ratio of Flow to Capacity (2)	
		AM Peak	PM Peak
J1	Che Kung Miu Road / Hung Mui Kuk Road / Mei Tin Road	0.55	0.54
J2	Che Kung Miu Road / Chui Tin Street	59%	86%
J3	Che Kung Miu Road / Sha Tin Tau Road	96%	>100%
J4	Lion Rock Tunnel Road / Tai Chung Kiu Road	46%	44%
J5	Tai Chung Kiu Road / Sha Kok Street	36%	>100%
J6	Tai Chung Kiu Road / Sha Tin Wai Road / Sha Tin Rural Committee Road	37%	56%
J7	Sha Kok Street / Jat Min Chuen Street	0.64	0.21
J8	Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Hong Estate	>100%	>100%
J9	Sha Kok Street / Yat Tai Street	55%	78%
J10	Sha Kok Street / Shui Chuen Au Street	61%	96%
J11	Sha Tin Wai Road / Sha Kok Street	21%	60%

Remarks: (1) Junction locations refer to **Drawing No. 3.1**.
(2) The operational performance of a signal junction is represented in Reserve Capacity (RC), which considered reasonable if the RC is ≥15% is defined as overloaded while the RC is less than 0%. The operational performance of a roundabout / priority junction is represented in Ratio of Flow to Capacity (RFC), which is considered reasonable if the RFC is 0.85 and defined as overloaded if the RFC is over 1.00.
(3) Junction calculation sheets are appended in **Appendix C**.

5.2.5 **Table 5.2** revealed that the operational performances of all key junctions in year 2033 would still operate within capacities with the proposed modification works at junction J5.

5.3 Review on Public Transport and Pedestrian Demand

5.3.1 To assess the pedestrian transport and pedestrian demand arising from the Proposed Development, pedestrian trip generation in the morning peak hour has been estimated with reference to the anticipated travel patterns of the hotel guests and the working shifts of hotel staff, as presented in **Table 5.3**.

Table 5.3 Anticipated Pedestrian Trip Generations of Proposed Development

Category	Maximum Capacity/ No. of Staff	Peak hour factor	Peak Hour Pedestrian Trip Generations (trips/hr)
Proposed Hotel Guests (443 rooms)	886	33.3% (1)	295
Hotel Staff / Retail Workers	183	20% (2)	37
		Total	**332**

Notes: (1) It is assumed that the peak hour of the Hotel Development would occur in the AM peak, with all outbound trips by hotel guests be distributed over the period from 8 a.m. to 11 a.m., (i.e. three hours).
(2) Switchover of the hotel staff working shifts normally would not occur during the typical AM peak hour, and a factor of 20% has been adopted to account for the retail works for assessment.

5.3.2 Based on the calculation in **Table 5.3**, it is anticipated that the Proposed Development would generate approximately 332 two-way pedestrian trips in the morning peak hour.

5.3.3 Given the good accessibility and transport facilities of the adjacent pedestrian network, it is believed that the impact on performance of pedestrian facilities and public transport services would be marginal.

6. SUMMARY AND CONCLUSION

6.1 Summary

6.1.1 The Application Site is located at various lots in D.D. 184 and adjoining government land, Sha Tin, New Territories. It is proposed to be developed into a hotel development of 443 rooms with ancillary retail facilities by year 2030.

6.1.2 This Traffic Impact Assessment study is to review the existing site traffic conditions and to examine the anticipated traffic impact on the adjacent local road network upon completion of the Proposed Development.

6.1.3 To facilitate the vehicular and pedestrian accesses, it is proposed to upgrade access road connecting the Application Site and re-align the public footpath and cycle track layouts so as to enhance the connectivity and integration of the Proposed Development with surrounding area.

6.1.4 The parking facilities for the Proposed Development have been reviewed against with the Hong Kong Planning Standards and Guidelines, and the parking provisions are proposed in accordance to the stipulations.

6.1.5 The design year of 2033 has been adopted for traffic forecast and assessment purposes. The future traffic forecasts have taken into consideration of traffic growth, planned road network and the estimated trip generations arising from the Proposed Development.

6.1.6 Operational performance of the identified key local junctions has been assessed based on the existing and future traffic flows under reference and design scenarios. It is revealed that the junctions would operate within capacities in future.

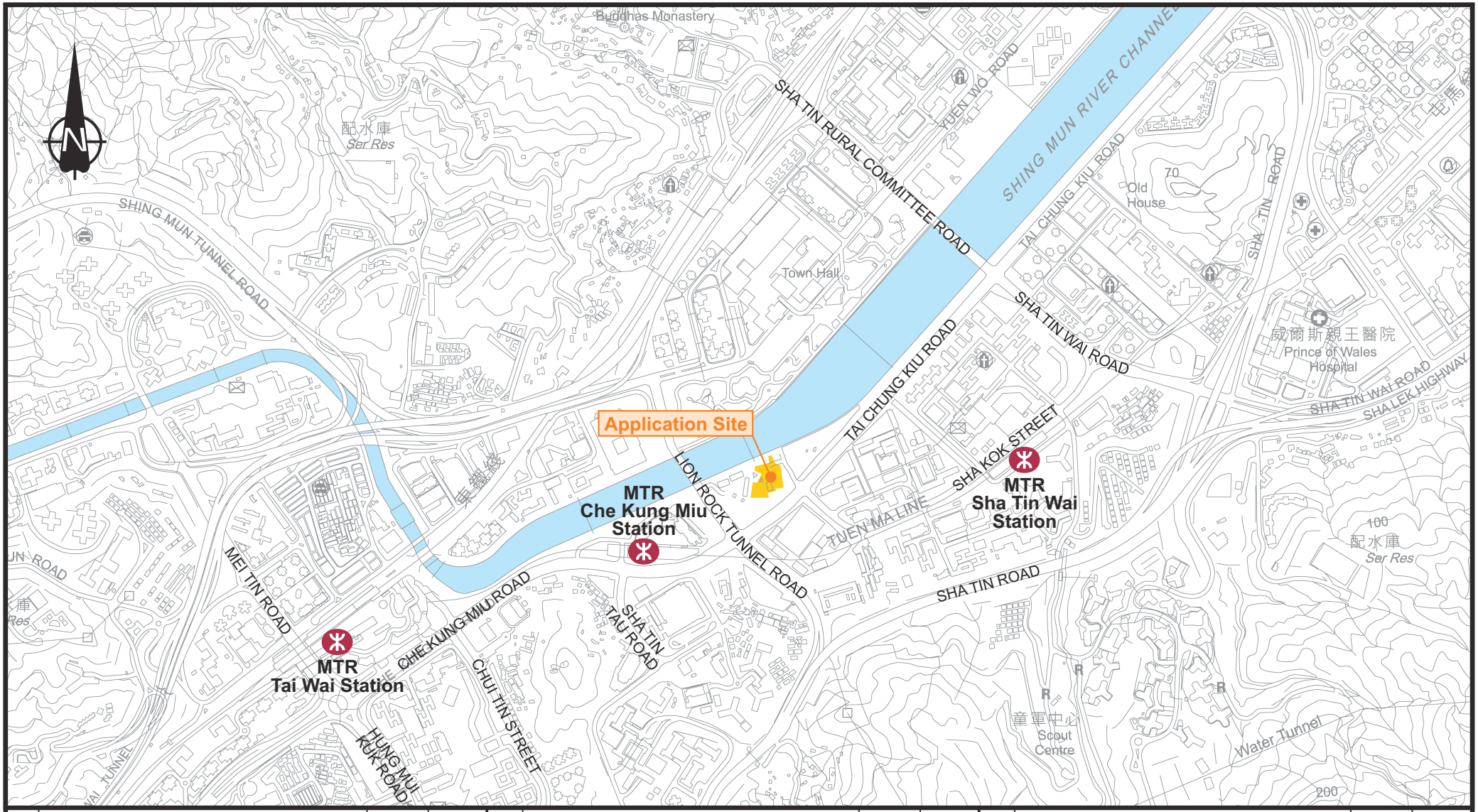
6.1.7 A junction modification scheme has been developed for the junction at Tai Chung Kiu Road / Sha Kok Street to facilitate the development traffic. The key junction performances are re-assessed with the proposed junction layout and anticipated traffic forecast, and the impact on the local road junctions is forecasted to be minimal.

6.1.8 In view of the Proposed Development's good accessibility and transport facilities of the adjacent pedestrian network, the impact on public transport and pedestrian facilities is expected to be minimal.

6.2 Conclusion

6.2.1 In conclusion, this traffic impact assessment has demonstrated that the Proposed Development would not cause adverse traffic impact and is considered acceptable in traffic terms.

REPORT DRAWINGS



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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT AT VARIOUS LOTS IN D.D. 184 AND ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

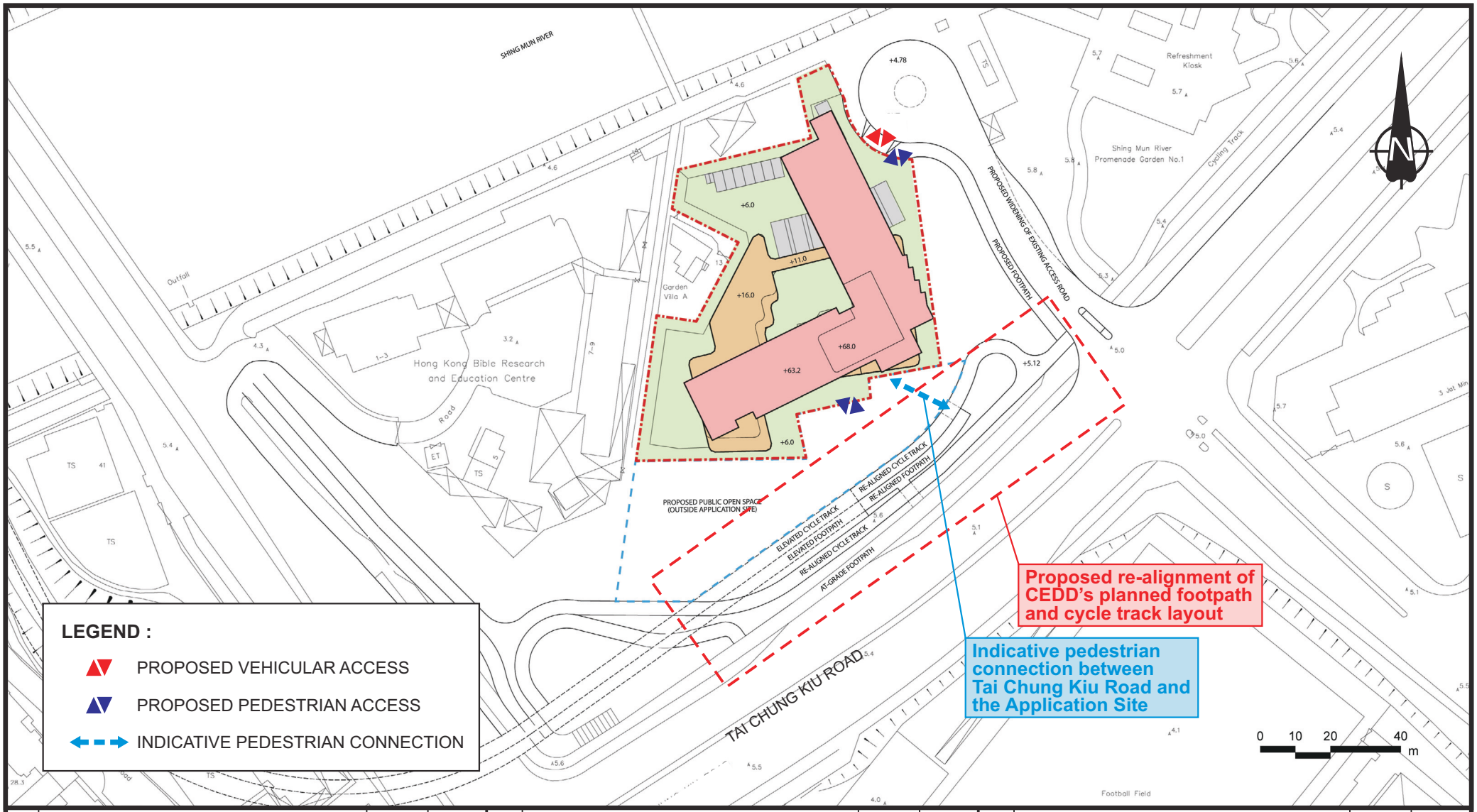
SITE LOCATION PLAN

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	NTS	AUG 2025	2.1	-

SYSTRA MVA

CHK50813910/TIA/F21.CDR/LLH/12AUG25

Original Size : A4



Rev.	Description	Checked	Date
A	LAYOUT REVISED	CCN	23APR26
B	LAYOUT REVISED	CCN	2JUN26
-	-	-	-

Project Title

PROPOSED HOTEL DEVELOPMENT AT VARIOUS LOTS IN D.D. 184 AND ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

PROPOSED MASTER LAYOUT PLAN

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	NTS	JAN 2026	2.2	B

SYSTRA MVA

Rev.	Description	Checked	Date
A	LAYOUT REVISED	CCN	23APR26
B	LAYOUT REVISED	CCN	2JUN26
-	-	-	-

Project Title

PROPOSED HOTEL DEVELOPMENT AT VARIOUS LOTS IN D.D. 184 AND ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

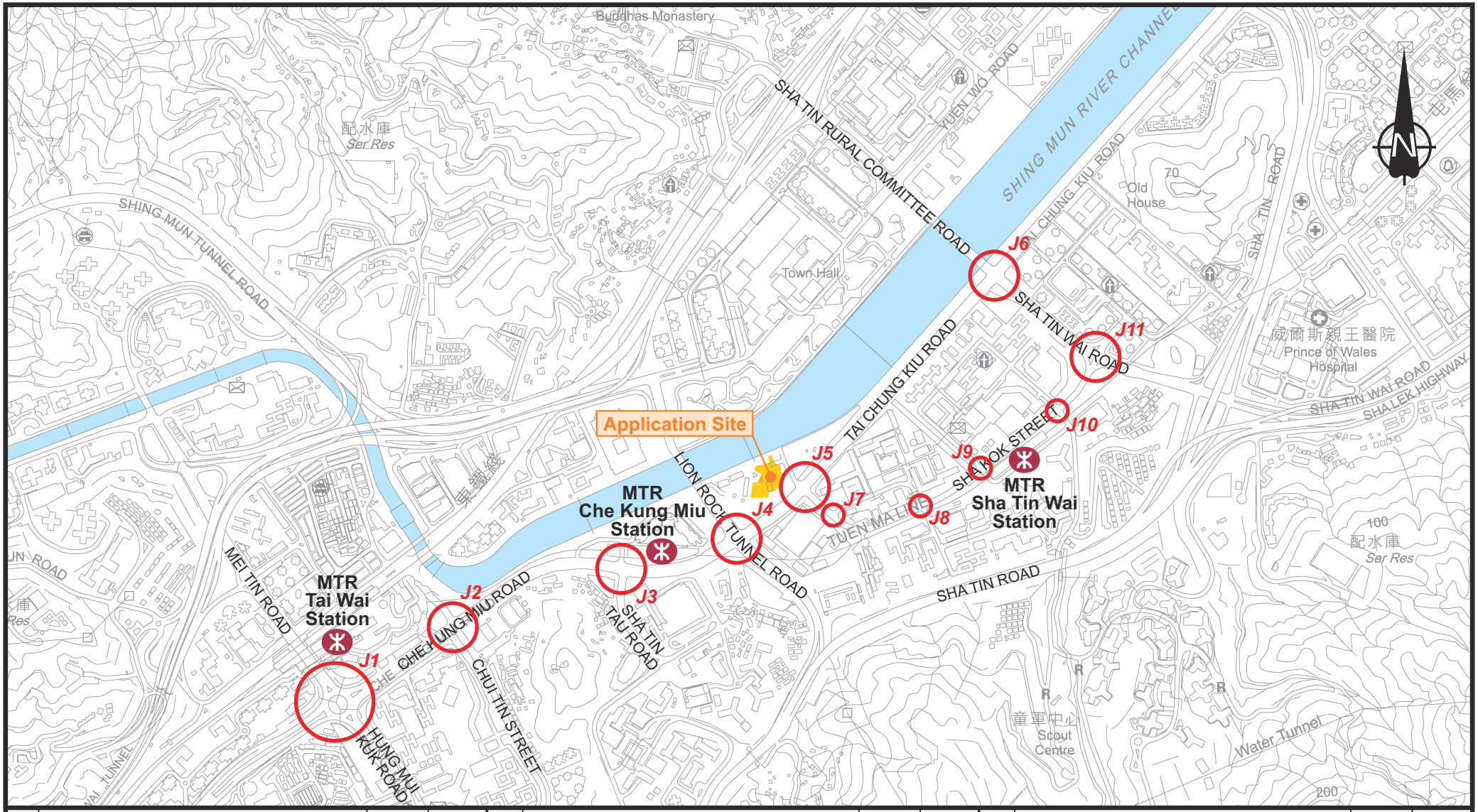
PROPOSED GROUND FLOOR LAYOUT PLAN

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	NTS	JAN 2026	2.3	B

SYSTRA MVA

CHK50813910/TIA/F23-A.CDR/LLH/23APR26

Original Size : A4



A	TD COMMENTS INCORPORATED	CCN	29APR26	-	-	-	-	-	-	-
Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT AT VARIOUS LOTS IN D.D. 184 AND ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

IDENTIFIED KEY JUNCTIONS

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	NTS	AUG 2025	3.1	A

SYSTRA MVA

CHK50813910/TIA/F31-A.CDR/LLH/29APR26

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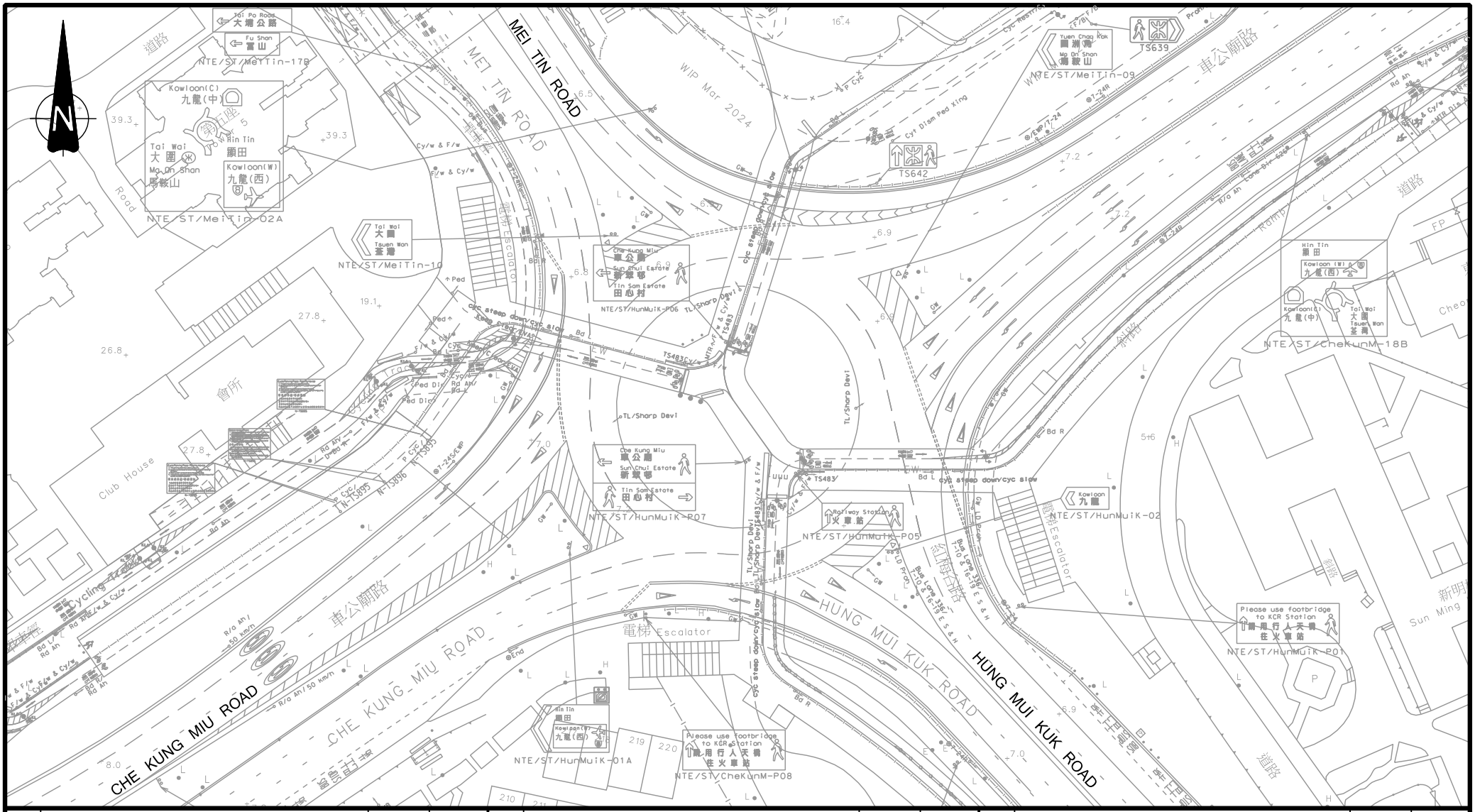

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF CHE KUNG MIU ROAD / HUNG MUI KUK ROAD / MEI TIN ROAD (J1)

Designed	Checked	Scale	Date	Drawing No.	Rev.
WKY	CCN	1:1000(A4)	JUN 2025	3.2	-

SYSTRA MVA

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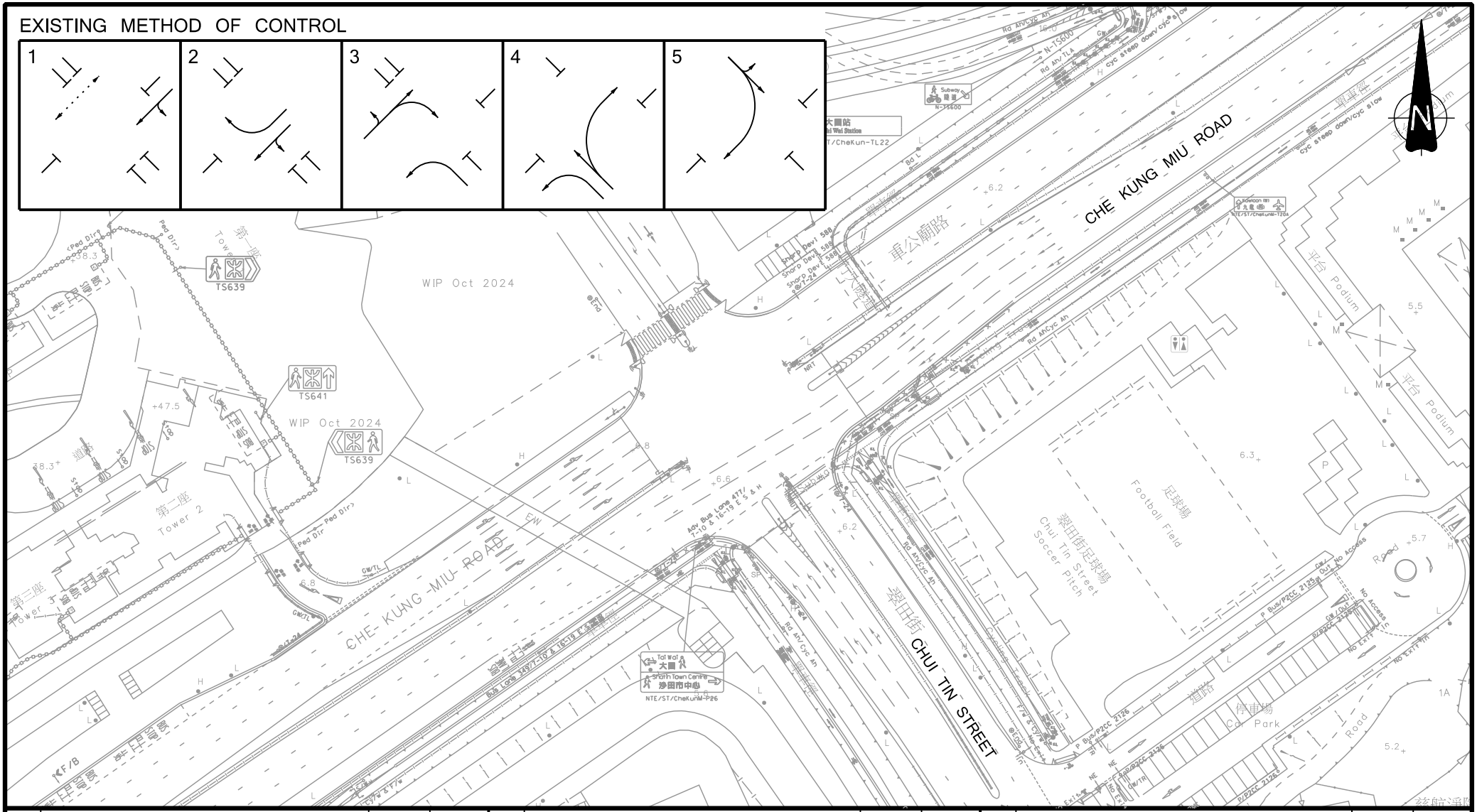

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF CHE KUNG MIU ROAD / CHUI TIN STREET (J2)

Designed	Checked	Scale	Date	Drawing No.	Rev.
WKY	CCN	1:1000(A4)	JUN 2025	3.3	-

SYSTRA MVA

Original Size : A4

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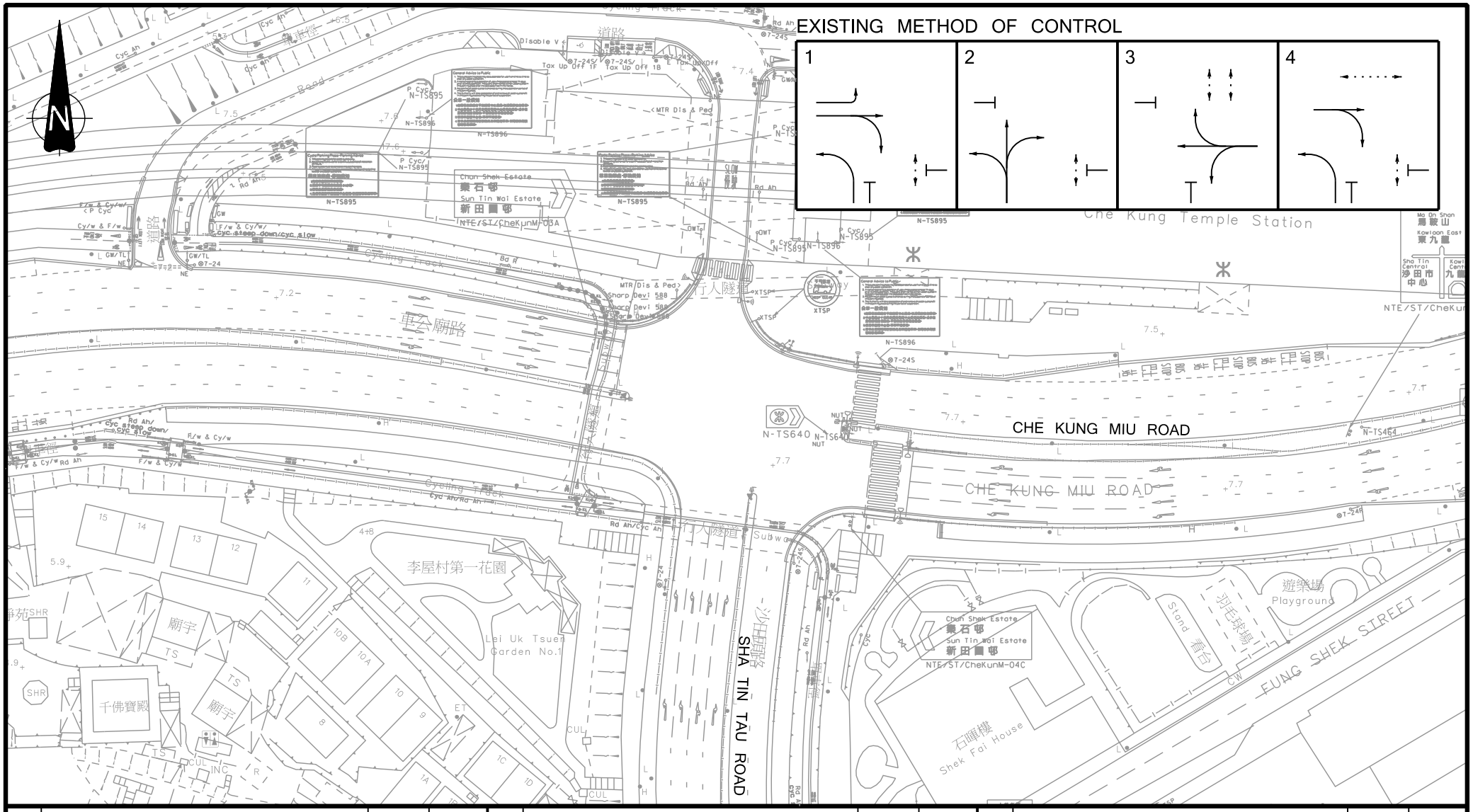

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF CHE KUNG MIU ROAD / SHA TIN TAU ROAD (J3)

Designed	Checked	Scale	Date	Drawing No.	Rev.
WKY	CCN	1:1000(A4)	JUN 2025	3.4	-

SYSTRA MVA

Original Size : A4

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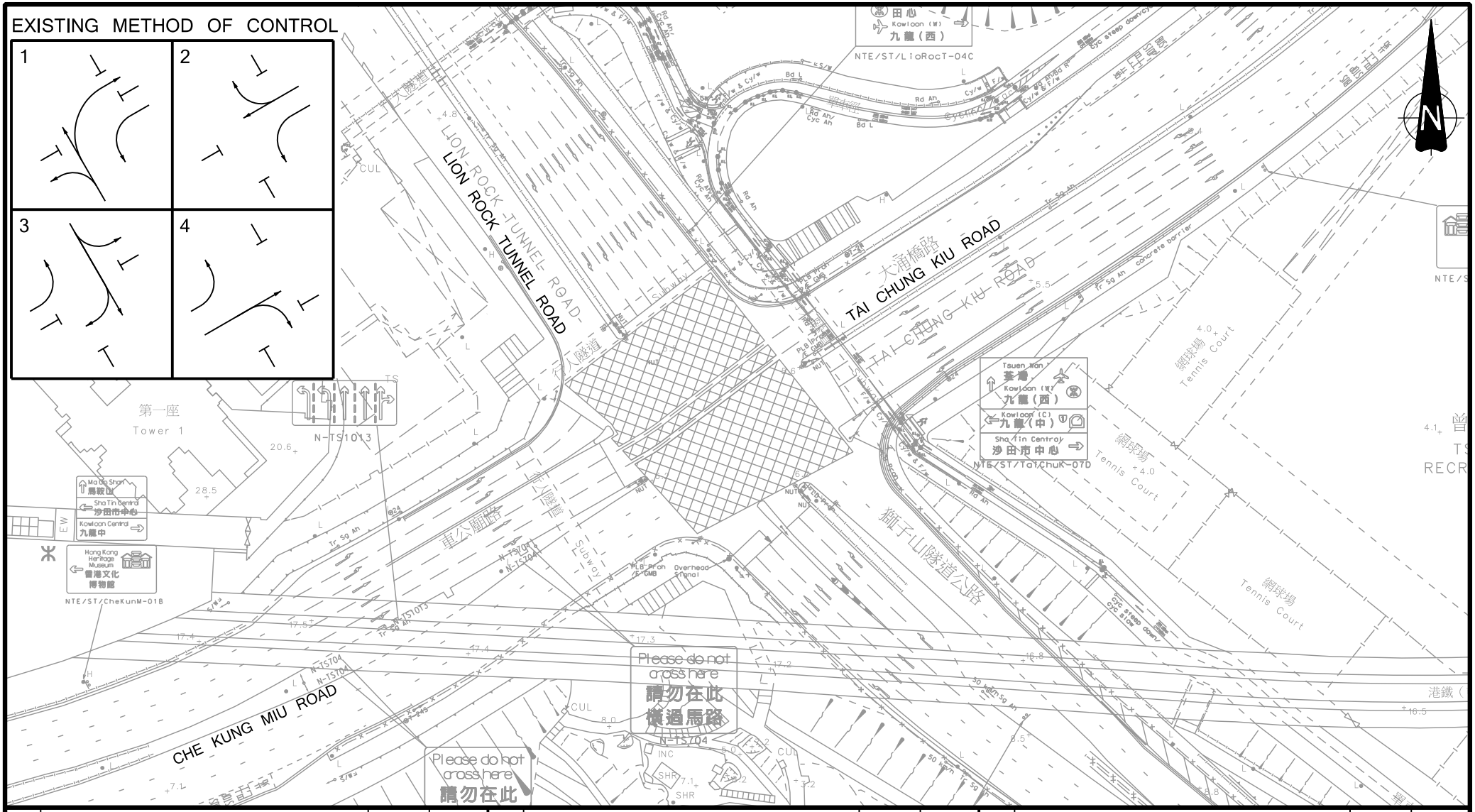

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF LION ROCK TUNNEL ROAD / TAI CHUNG KIU ROAD (J4)

Designed	Checked	Scale	Date	Drawing No.	Rev.
WKY	CCN	1:1000(A4)	JUN 2025	3.5	-

SYSTRA MVA

Original Size : A4

FILENAME: E:\OneDrive - SystraGroup\hlocal\chk50834010\tiaiF35.dgn
PRINTED BY: lho1 DATE: 27 Jun 2025 TIME: 10:16:25

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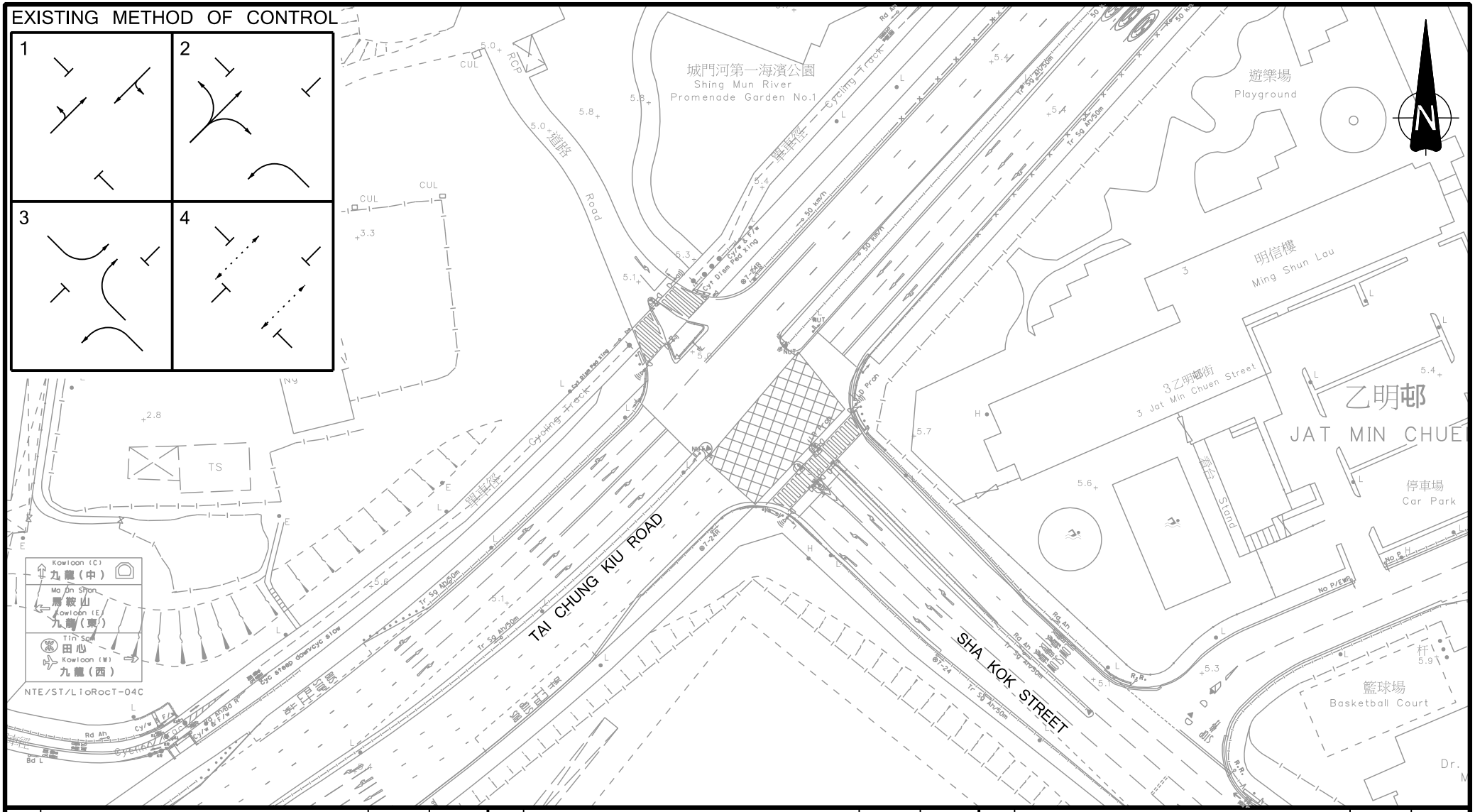

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF TAI CHUNG KIU ROAD / SHA KOK STREET (J5)

Designed	Checked	Scale	Date	Drawing No.	Rev.
WKY	CCN	1:1000(A4)	JUN 2025	3.6	-

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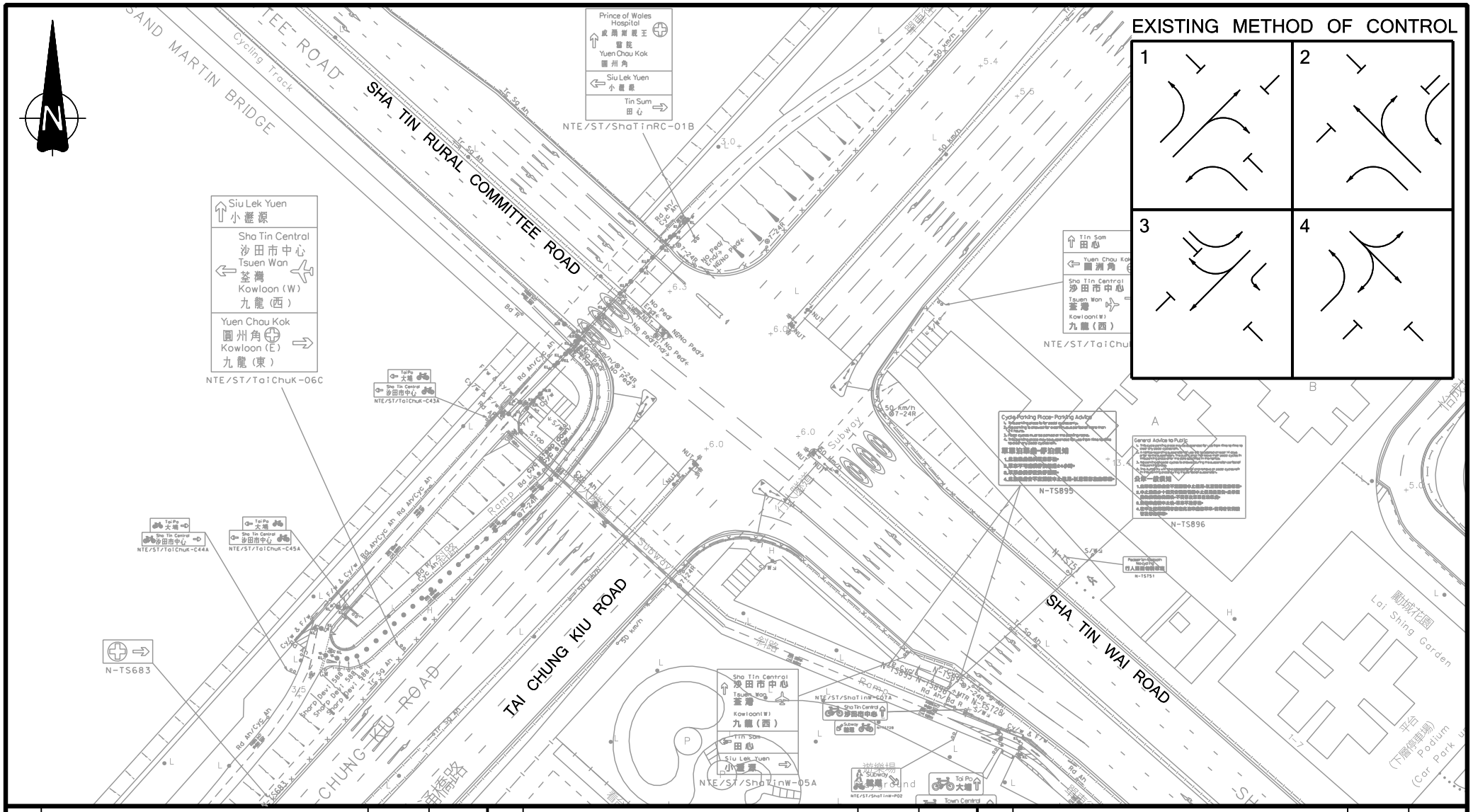

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF TAI CHUNG KIU ROAD / SHA TIN WAI ROAD / SHA TIN RURAL COMMITTEE ROAD (J6)

Designed	Checked	Scale	Date	Drawing No.	Rev.
WKY	CCN	1:1000(A4)	JUN 2025	3.7	-

SYSTRA MVA

Original Size : A4

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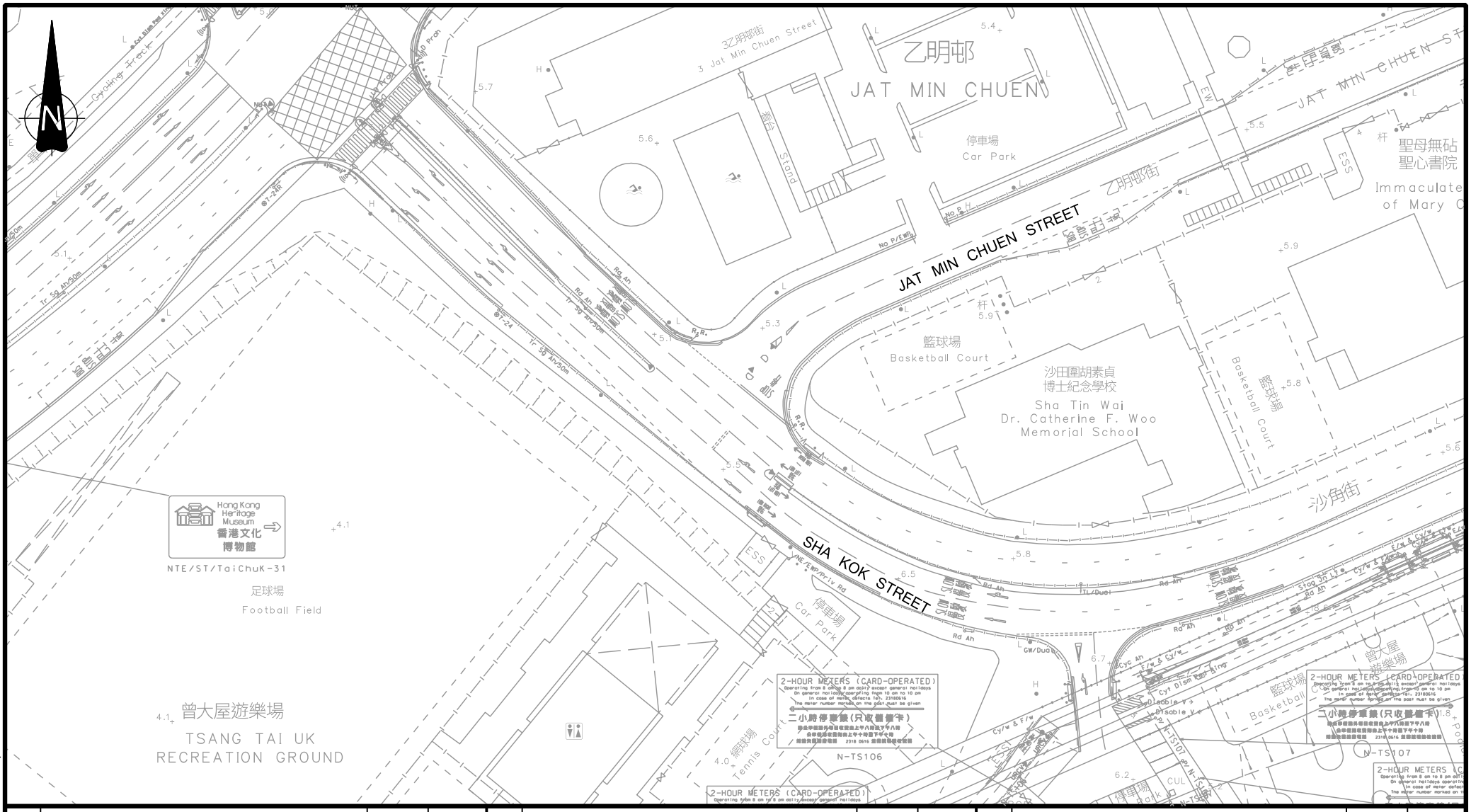

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF AT SHA KOK STREET / JAT MIN CHUEN STREET (J7)

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	1:1000(A4)	JUN 2025	3.8	A

SYSTRA MVA

Original Size : A4

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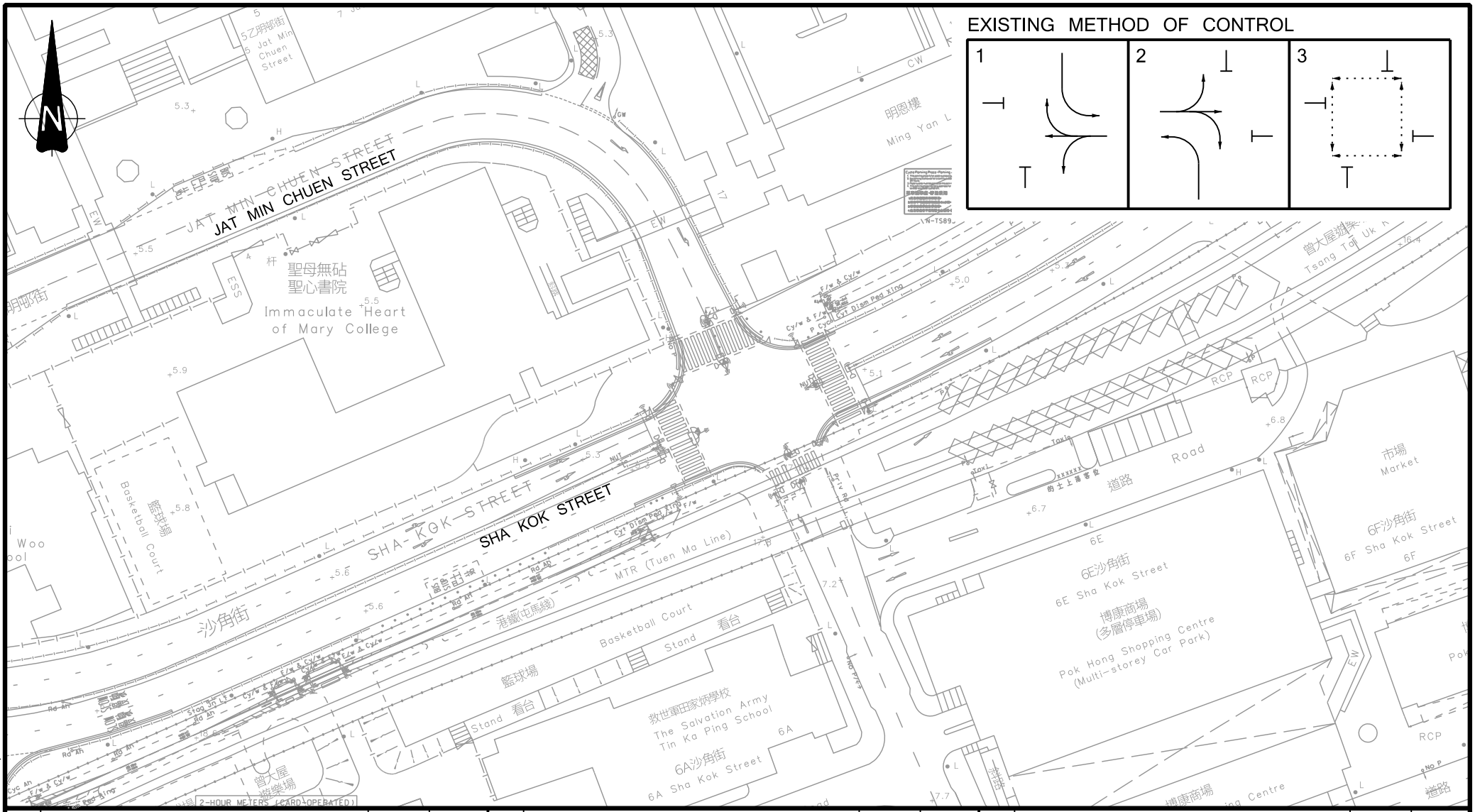

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF AT SHA KOK STREET / JAT MIN CHUEN STREET / ACCESS ROAD TO POK HONG ESTATE (J8)

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	1:1000(A4)	JUN 2025	3.9	A

SYSTRA MVA

Original Size : A4

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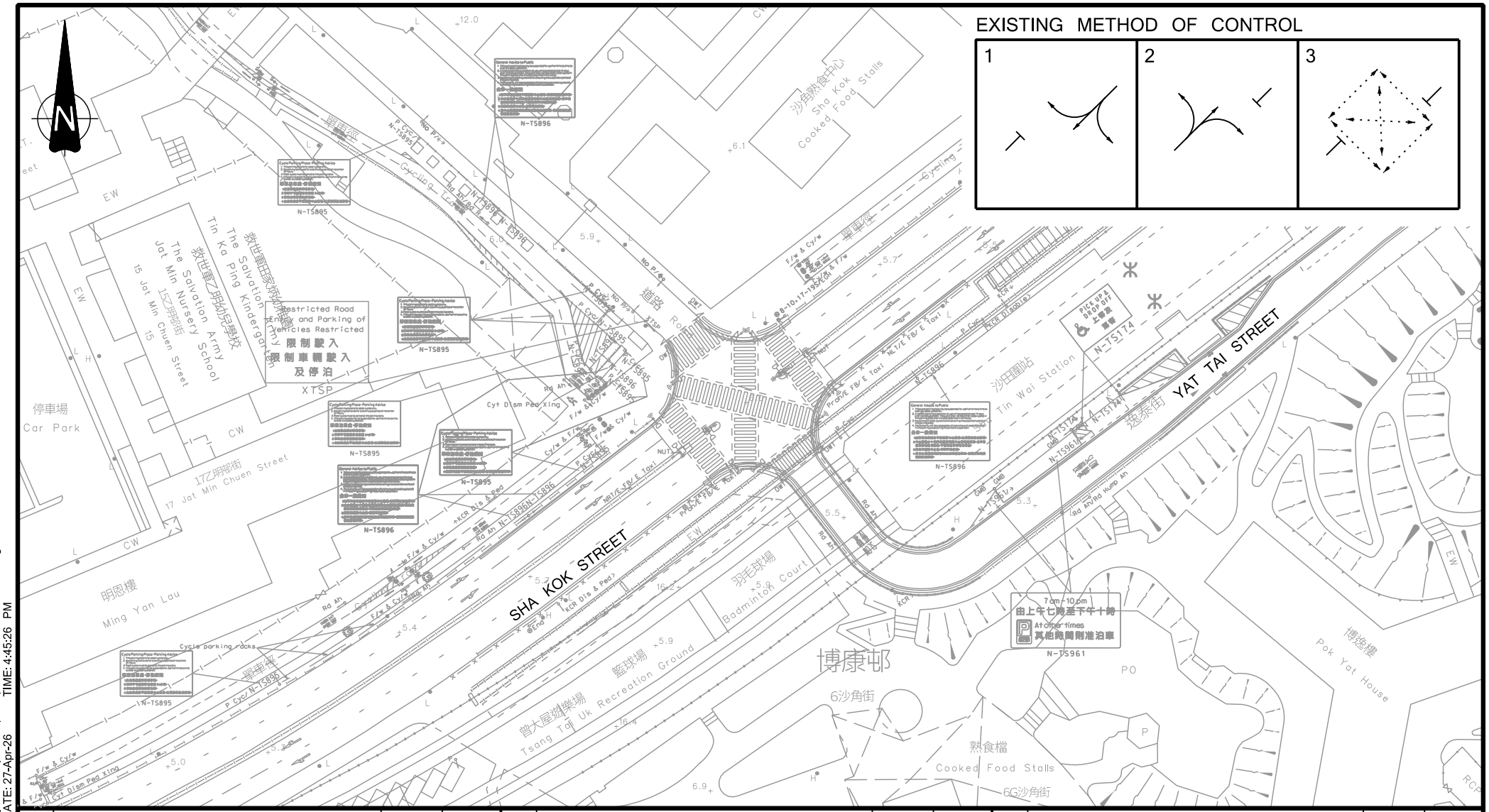

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF AT SHA KOK STREET / YAT TAI STREET (J9)

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	1:1000(A4)	APR 2026	3.10	-

SYSTRA MVA

Original Size : A4

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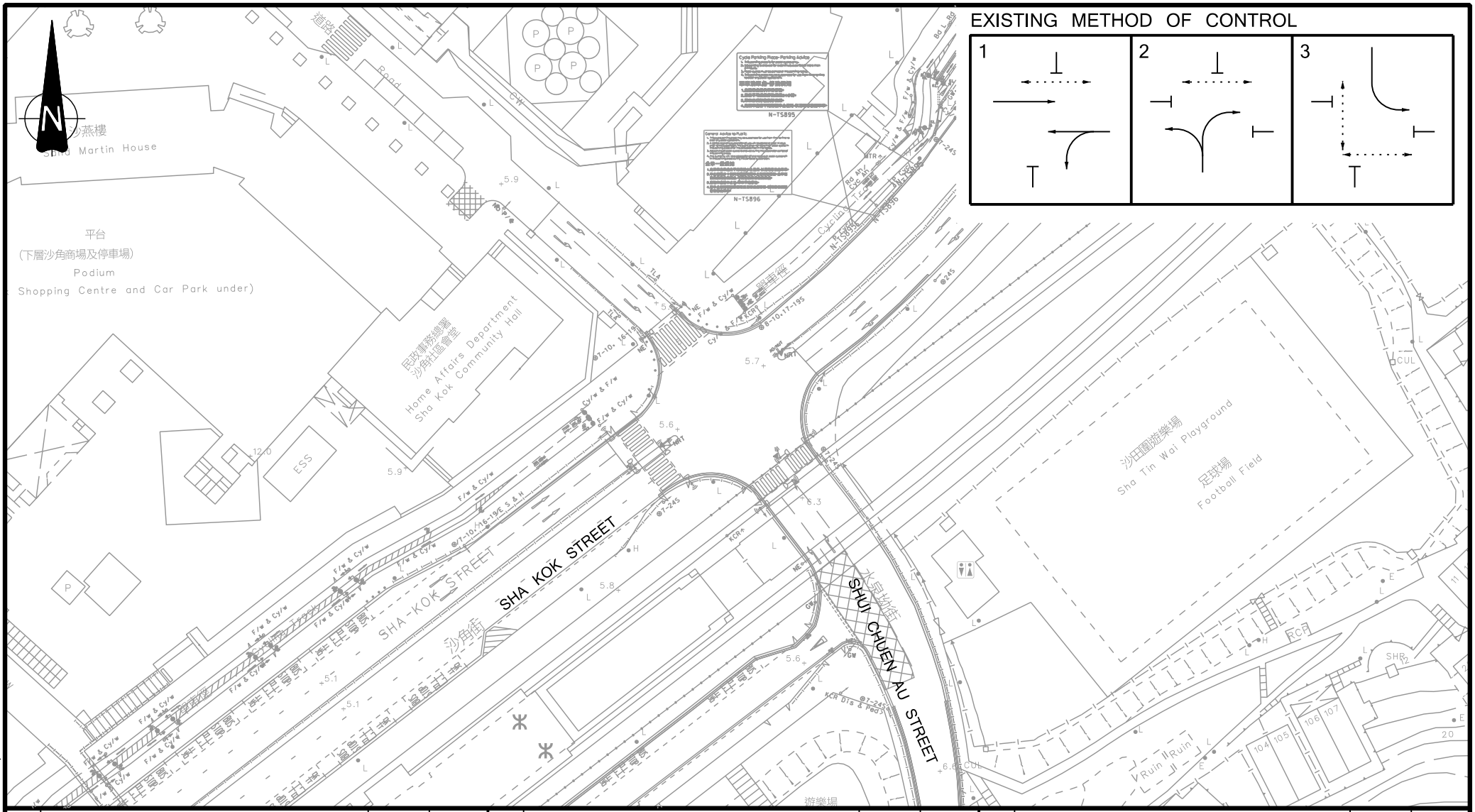

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF AT SHA KOK STREET / SHUI CHUEN AU STREET (J10)

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	1:1000(A4)	APR 2026	3.11	-

SYSTRA MVA

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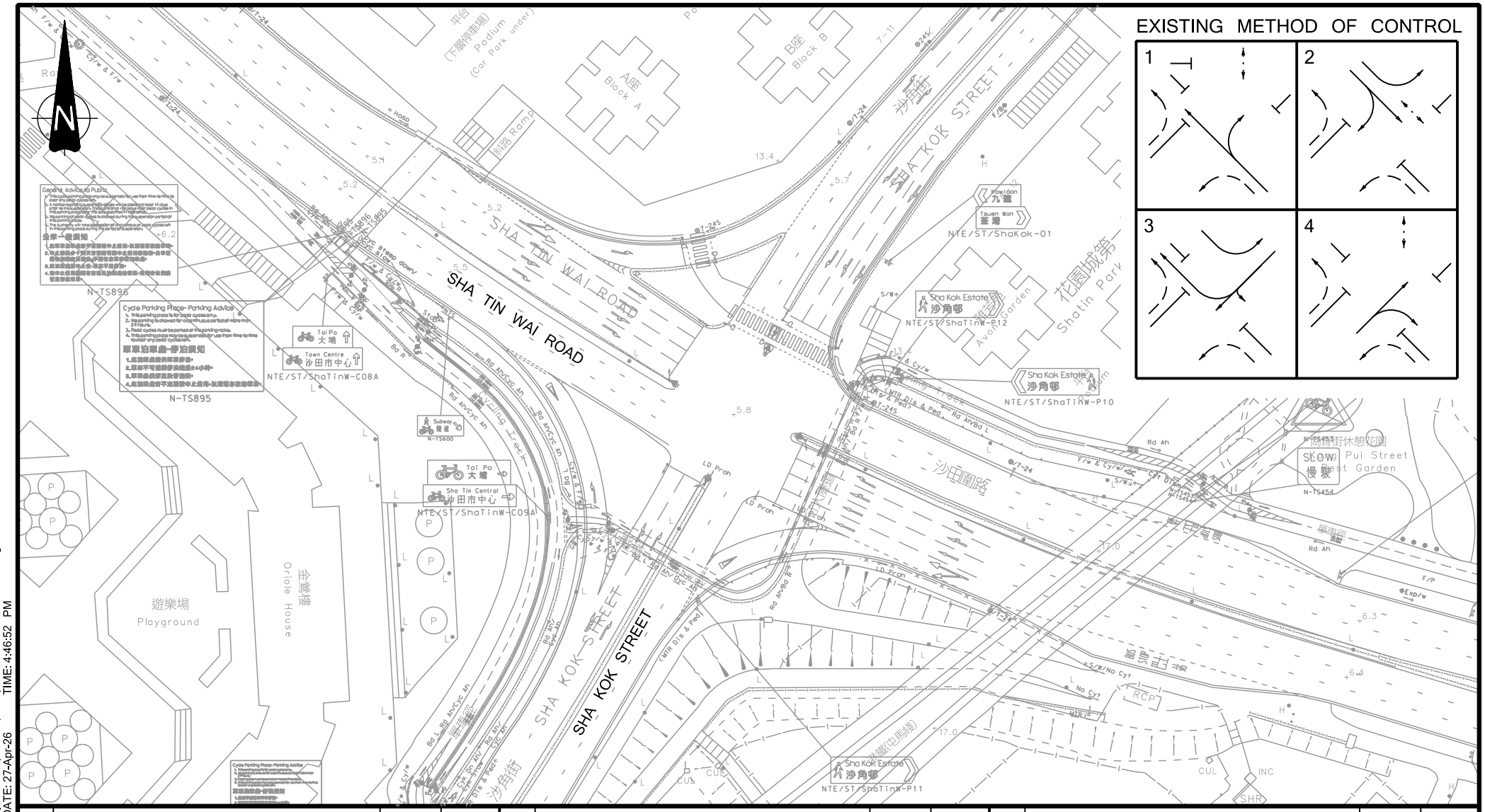

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING JUNCTION LAYOUT OF OF SHA TIN WAI ROAD / SHA KOK STREET (J11)

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	1:1000(A4)	APR 2026	3.12	-

SYSTRA MVA

Original Size : A4

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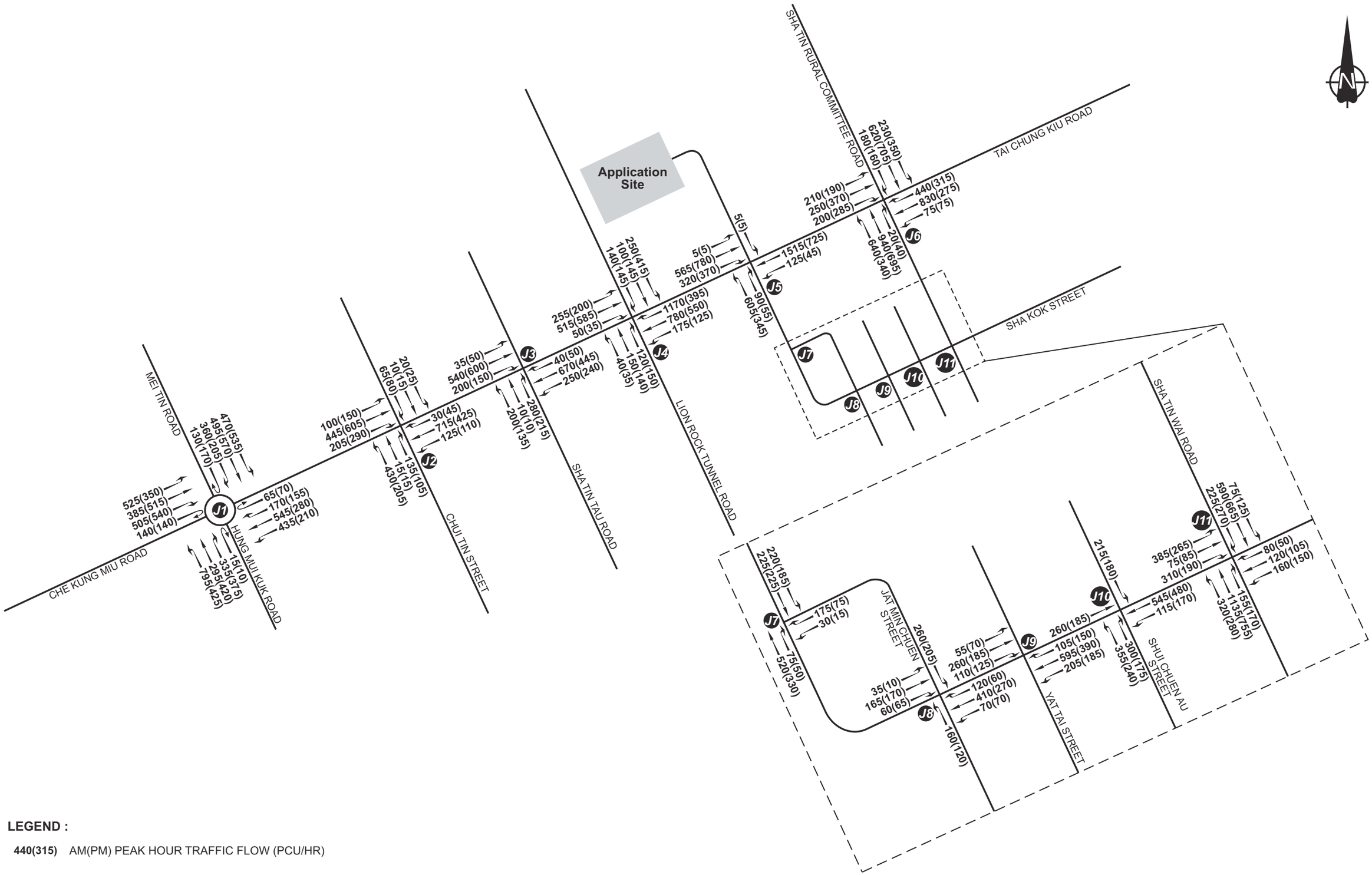

LEGEND :

440(315) AM(PM) PEAK HOUR TRAFFIC FLOW (PCU/HR)

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

Project Title

PROPOSED HOTEL DEVELOPMENT AT VARIOUS LOTS IN D.D. 184 AND ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

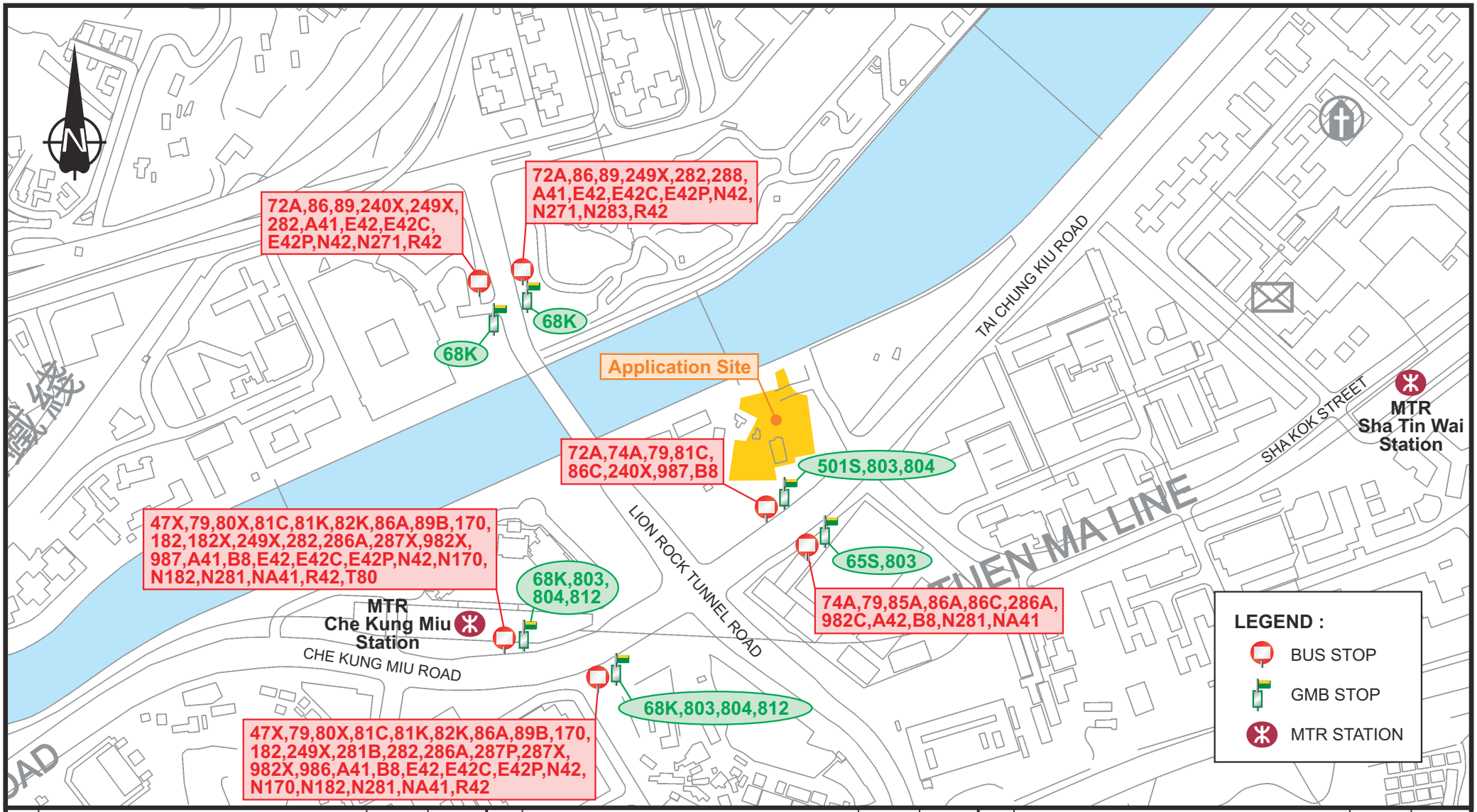
YEAR 2025 ADJUSTED TRAFFIC FLOWS

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	NTS	MAY 2026	3.13	-

SYSTRA MVA

CHK50813910/TIA/F313.CDR/LLH/7MAY26

Original Size : A3



Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
A	MINOR UPDATE	CCN	2JUN26	-	-	-	-	-	-	-	-

Project Title

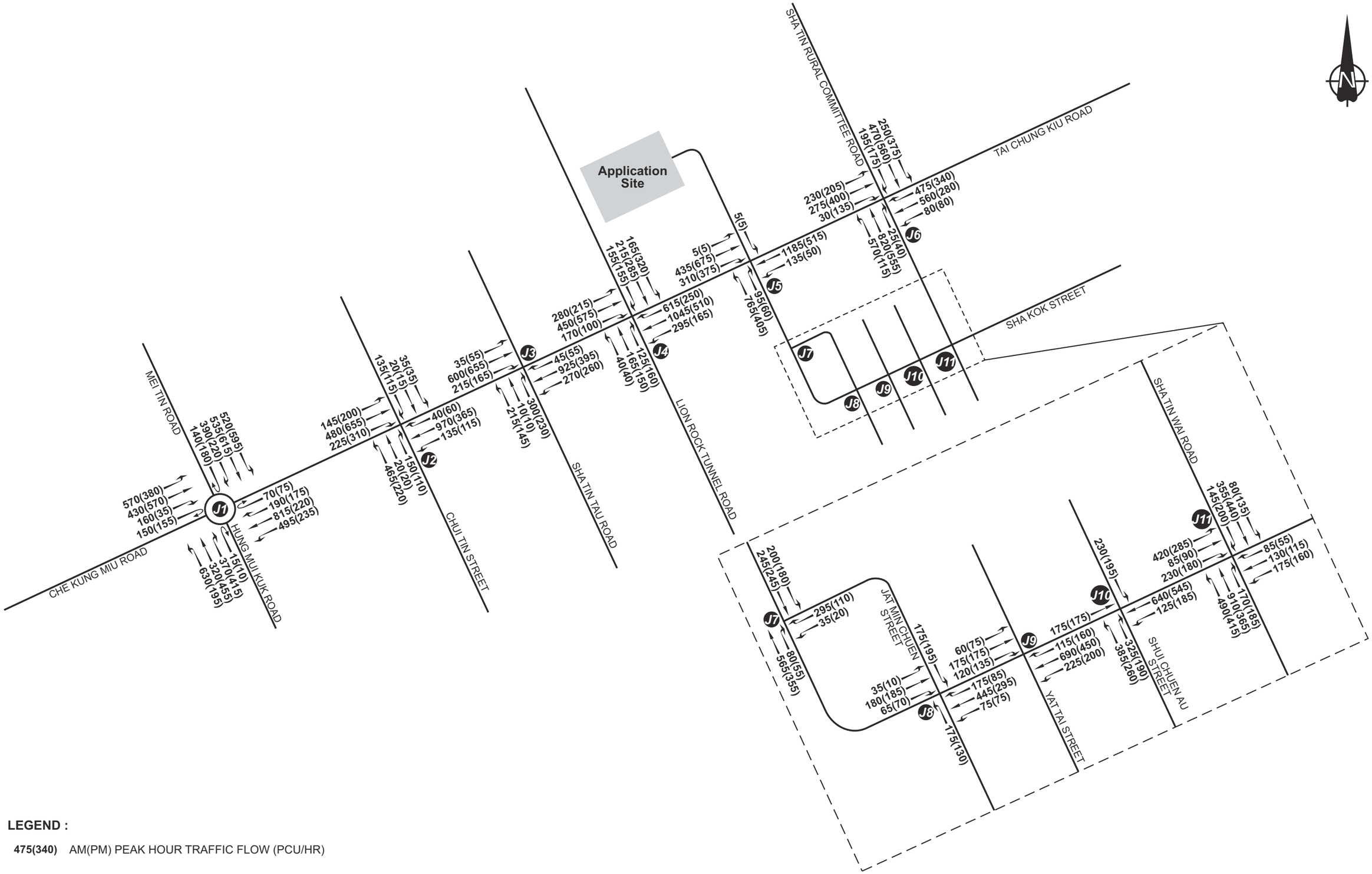
PROPOSED HOTEL DEVELOPMENT AT
VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

EXISTING PUBLIC TRANSPORT SERVICES IN THE VICINITY

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	NTS	APR 2026	3.14	A

SYSTRA MVA



LEGEND :

475(340) AM(PM) PEAK HOUR TRAFFIC FLOW (PCU/HR)

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
A	TD COMMENTS INCORPORATED	CCN	7MAY26

Project Title

PROPOSED HOTEL DEVELOPMENT AT VARIOUS LOTS IN D.D. 184 AND ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

YEAR 2033 REFERENCE TRAFFIC FLOWS

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	NTS	AUG 2025	4.1	A

SYSTRA MVA

CHK50813910/TIA/F41-A.CDR/LLH/7MAY26

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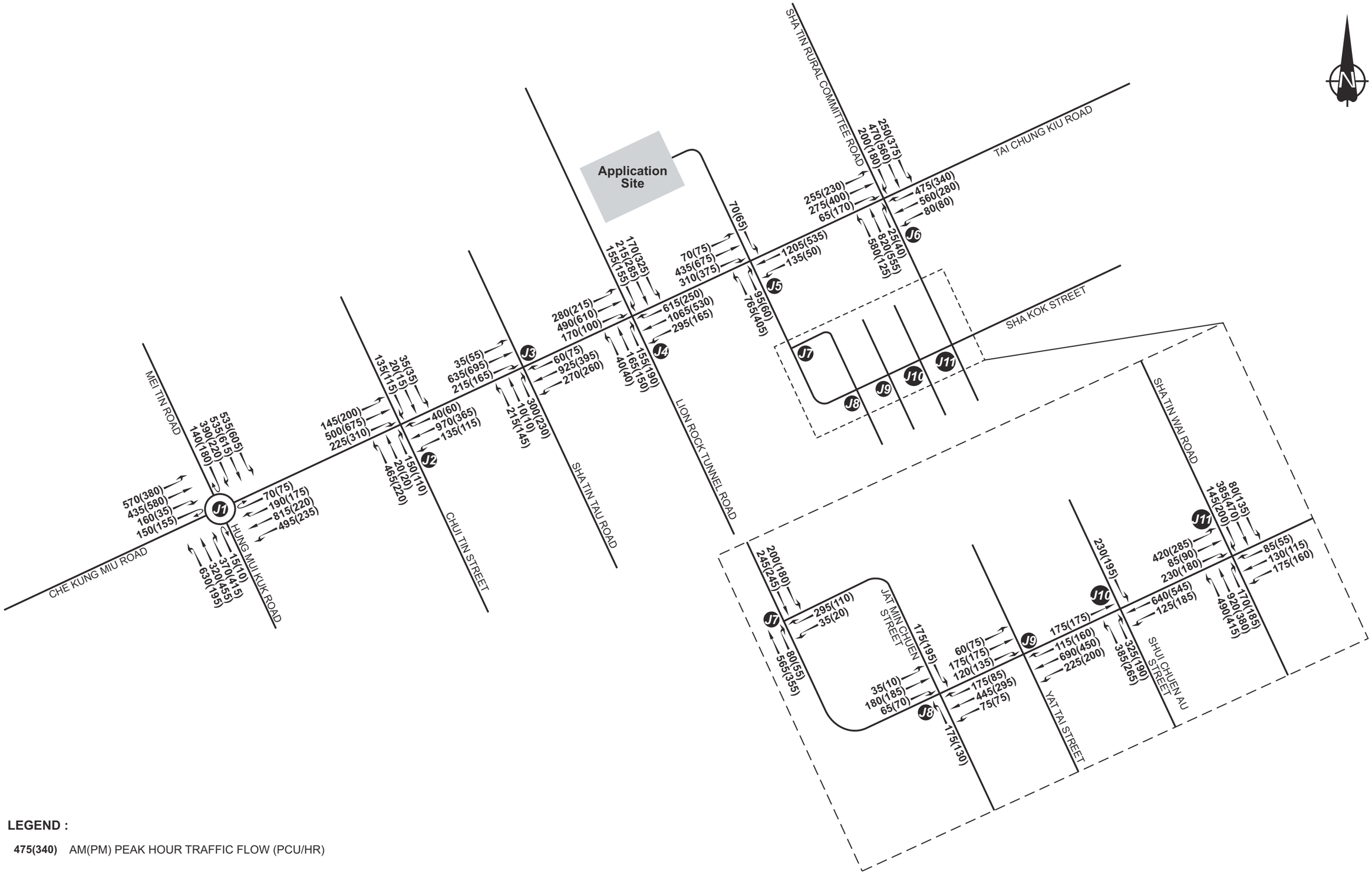

LEGEND :

475(340) AM(PM) PEAK HOUR TRAFFIC FLOW (PCU/HR)

Rev.	Description	Checked	Date
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-	-	-	-
-	-	-	-
A	TD COMMENTS INCORPORATED	CCN	7MAY26

Project Title

PROPOSED HOTEL DEVELOPMENT AT VARIOUS LOTS IN D.D. 184 AND ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

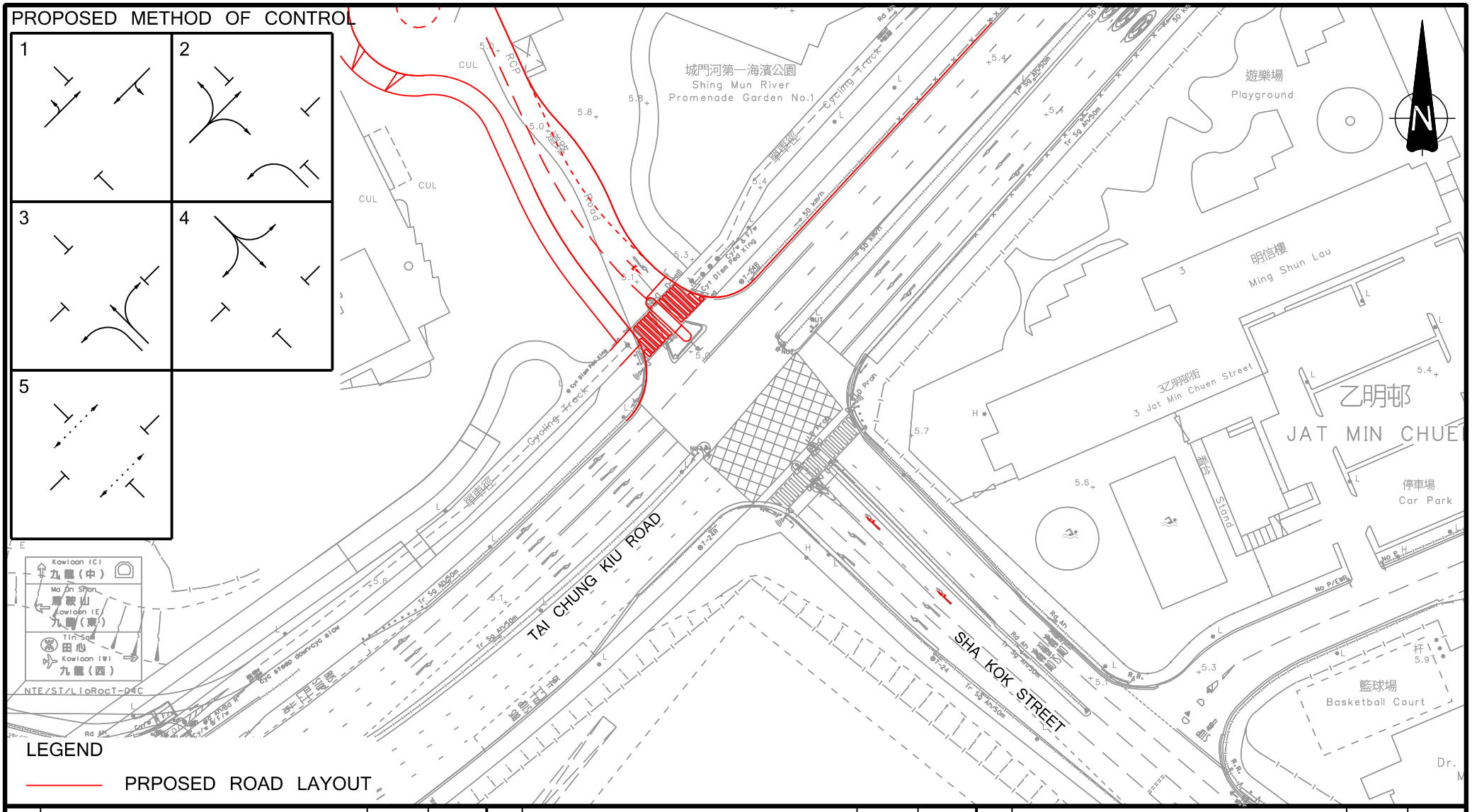
YEAR 2033 DESIGN TRAFFIC FLOWS

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	NTS	AUG 2025	4.2	A

SYSTRA MVA

CHK50813910/TIA/F42-A.CDR/LLH/7MAY26

Original Size : A3



A	REVISED LAYOUT	CCN	23APR26	B	REVISED LAYOUT	CCN	03JUN26	-	-	-	-
Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED HOTEL DEVELOPMENT
AT VARIOUS LOTS IN D.D. 184 AND
ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

PROPOSED JUNCTION LAYOUT OF TAI CHUNG KIU ROAD / SHA KOK STREET (J5)

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	1:1000(A4)	JUN 2025	5.1	B

SYSTRA MVA

Original Size : A4

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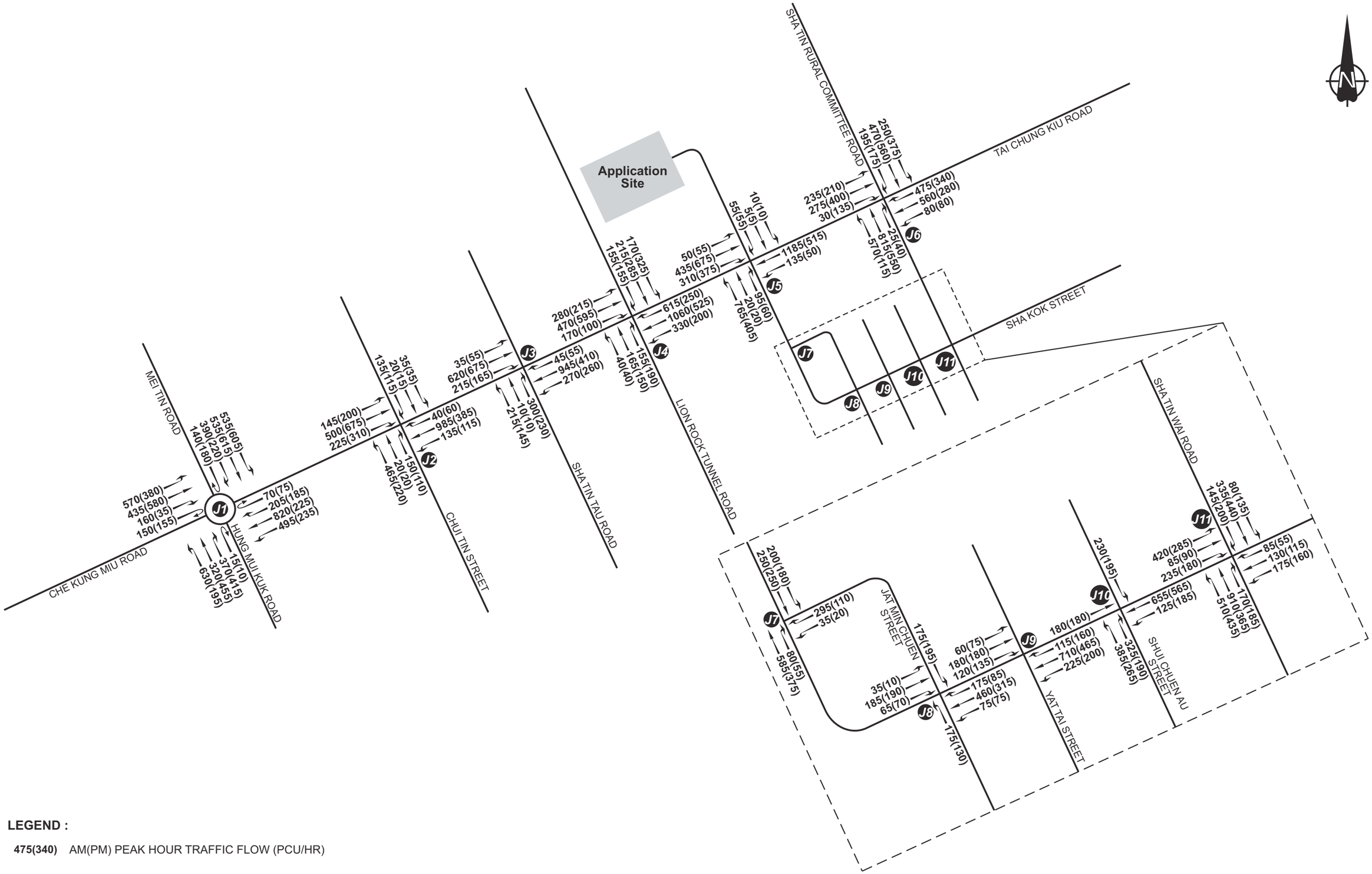

LEGEND :

475(340) AM(PM) PEAK HOUR TRAFFIC FLOW (PCU/HR)

Rev.	Description	Checked	Date
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-	-	-	-
-	-	-	-
A	TD COMMENTS INCORPORATED	CCN	7MAY26

Project Title

PROPOSED HOTEL DEVELOPMENT AT VARIOUS LOTS IN D.D. 184 AND ADJOINING GOVERNMENT LAND, SHA TIN

Drawing Title

YEAR 2033 DESIGN TRAFFIC FLOWS (WITH PROPOSED JUNCTION MODIFICATION)

Designed	Checked	Scale	Date	Drawing No.	Rev.
DKH	CCN	NTS	AUG 2025	5.2	A

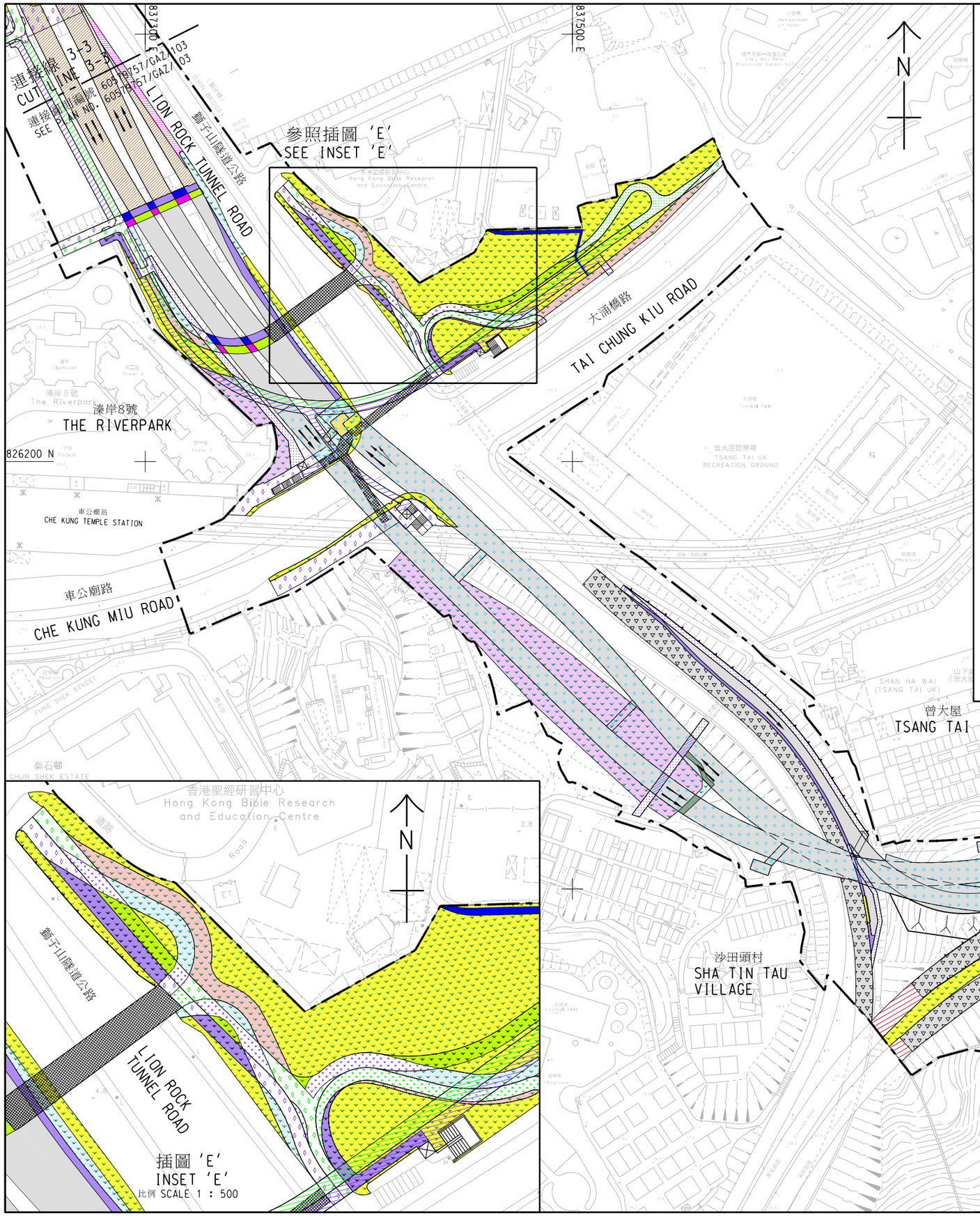
SYSTRA MVA

CHK50813910/TIA/F52-A.CDR/LLH/7MAY26

Original Size : A3

APPENDIX A –

PLANNED ROAD WORKS ON TAI CHUNG KIU ROAD UNDER CEDD'S TRUNK ROAD T4 PROJECT



現有地面單車徑將予永久封閉及拆卸
EXISTING AT-GRADE CYCLE TRACK TO BE PERMANENTLY CLOSED AND DEMOLISHED

現有樓梯將予永久封閉及拆卸
EXISTING STAIRCASE TO BE PERMANENTLY CLOSED AND DEMOLISHED

現有行人隧道將予永久封閉及拆卸
EXISTING PEDESTRIAN SUBWAY TO BE PERMANENTLY CLOSED AND DEMOLISHED

現有地面行車道將予暫時封閉及重建
EXISTING AT-GRADE CARRIAGEWAY TO BE TEMPORARILY CLOSED AND RECONSTRUCTED

現有高架行車道將予暫時封閉及重建
EXISTING ELEVATED CARRIAGEWAY TO BE TEMPORARILY CLOSED AND RECONSTRUCTED

現有地面行人路將予暫時封閉及重建
EXISTING AT-GRADE FOOTPATH TO BE TEMPORARILY CLOSED AND RECONSTRUCTED

現有地面單車徑將予暫時封閉及重建
EXISTING AT-GRADE CYCLE TRACK TO BE TEMPORARILY CLOSED AND RECONSTRUCTED

現有中央分隔帶將予暫時封閉及重建
EXISTING CENTRAL MEDIAN TO BE TEMPORARILY CLOSED AND RECONSTRUCTED

現有美化市容地帶將予暫時封閉及重建
EXISTING AMENITY AREA TO BE TEMPORARILY CLOSED AND RECONSTRUCTED

擬建半開放式隔音屏障
PROPOSED SEMI-ENCLOSURE NOISE BARRIER

擬建密封式隔音屏障
PROPOSED FULL-ENCLOSURE NOISE BARRIER

擬建直立式隔音屏障
PROPOSED VERTICAL NOISE BARRIER

擬建附設懸臂的直立式隔音屏障
PROPOSED VERTICAL NOISE BARRIER WITH CANTILEVER

現有直立式隔音屏障將予拆除
EXISTING VERTICAL NOISE BARRIER TO BE DEMOLISHED

現有半開放式隔音屏障將予重建
EXISTING SEMI-ENCLOSURE NOISE BARRIER TO BE RECONSTRUCTED

現有直立式隔音屏障將予重建
EXISTING VERTICAL NOISE BARRIER TO BE RECONSTRUCTED

現有附設懸臂的直立式隔音屏障將予重建
EXISTING VERTICAL NOISE BARRIER WITH CANTILEVER TO BE RECONSTRUCTED

擬建擋土牆
PROPOSED RETAINING WALL

擬建斜坡
PROPOSED SLOPE

行車線（每一箭嘴代表一條行車線）
TRAFFIC LANE (ONE ARROW REPRESENTS ONE LANE)

現有地面行人路將予永久封閉及改建為地面單車徑
EXISTING AT-GRADE FOOTPATH TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CYCLE TRACK

現有地面行人路將予永久封閉及改建為中央分隔帶
EXISTING AT-GRADE FOOTPATH TO BE PERMANENTLY CLOSED AND CONVERTED INTO CENTRAL MEDIAN

現有地面行人路將予永久封閉及改建為美化市容地帶
EXISTING AT-GRADE FOOTPATH TO BE PERMANENTLY CLOSED AND CONVERTED INTO AMENITY AREA

現有地面單車徑將予永久封閉及改建為地面行車道
EXISTING AT-GRADE CYCLE TRACK TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CARRIAGEWAY

現有地面單車徑將予永久封閉及改建為地面行人路
EXISTING AT-GRADE CYCLE TRACK TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE FOOTPATH

現有地面單車徑將予永久封閉及改建為美化市容地帶
EXISTING AT-GRADE CYCLE TRACK TO BE PERMANENTLY CLOSED AND CONVERTED INTO AMENITY AREA

現有中央分隔帶將予永久拆除及改建為地面行車道
EXISTING CENTRAL MEDIAN TO BE PERMANENTLY DEMOLISHED AND CONVERTED INTO AT-GRADE CARRIAGEWAY

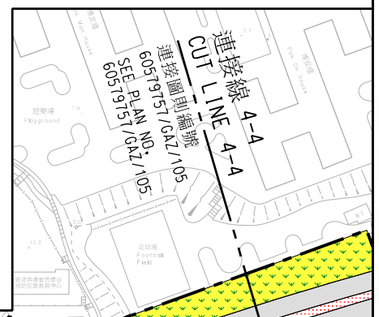
現有美化市容地帶將予永久封閉及改建為地面行車道
EXISTING AMENITY AREA TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CARRIAGEWAY

現有美化市容地帶將予永久封閉及改建為地面行人路
EXISTING AMENITY AREA TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE FOOTPATH

現有美化市容地帶將予永久封閉及改建為地面單車徑
EXISTING AMENITY AREA TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CYCLE TRACK

現有高架行車道將予永久封閉及拆卸
EXISTING ELEVATED CARRIAGEWAY TO BE PERMANENTLY CLOSED AND DEMOLISHED

現有地面行人路將予永久封閉及拆卸
EXISTING AT-GRADE FOOTPATH TO BE PERMANENTLY CLOSED AND DEMOLISHED



註釋：
NOTES:

1. 除在其他方面指定外，所有量度以米為單位。
ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.

2. 所有水平均為約數，以米為單位，並基於香港主水平基準上。
ALL LEVELS ARE APPROXIMATE VALUES AND IN METRES ABOVE HONG KONG PRINCIPAL DATUM.

3. 如有需要，施工區界限內部分現有行車道、行人路、單車徑及隧道或會分階段暫時封閉及實施臨時交通安排，以便進行建造工程。
SECTIONS OF THE EXISTING CARRIAGEWAYS, FOOTPATHS, CYCLE TRACKS AND SUBWAYS WITHIN THE LIMIT OF WORKS AREA MAY BE TEMPORARILY CLOSED IN PHASES AND TEMPORARY TRAFFIC ARRANGEMENT MAY BE IMPLEMENTED TO FACILITATE CONSTRUCTION WORKS AS AND WHEN REQUIRED.

圖例：
LEGEND:

施工區界限
LIMIT OF WORKS AREA

擬建高架行車道
PROPOSED ELEVATED CARRIAGEWAY

擬建地面行車道
PROPOSED AT-GRADE CARRIAGEWAY

擬建行車隧道
PROPOSED UNDERPASS

擬建地面行人路
PROPOSED AT-GRADE FOOTPATH

擬建高架行人路
PROPOSED ELEVATED FOOTPATH

擬建地面單車徑
PROPOSED AT-GRADE CYCLE TRACK

擬建高架單車徑
PROPOSED ELEVATED CYCLE TRACK

擬建中央分隔帶
PROPOSED CENTRAL MEDIAN

擬建行人過路處
PROPOSED PEDESTRIAN CROSSING

擬建升降機
PROPOSED LIFT

擬建樓梯
PROPOSED STAIRCASE

擬建美化市容地帶
PROPOSED AMENITY AREA

現有地面行車道將予永久封閉及改建為地面行人路
EXISTING AT-GRADE CARRIAGEWAY TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE FOOTPATH

現有地面行車道將予永久封閉及改建為地面單車徑
EXISTING AT-GRADE CARRIAGEWAY TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CYCLE TRACK

現有地面行車道將予永久封閉及改建為中央分隔帶
EXISTING AT-GRADE CARRIAGEWAY TO BE PERMANENTLY CLOSED AND CONVERTED INTO CENTRAL MEDIAN

現有地面行車道將予永久封閉及改建為美化市容地帶
EXISTING AT-GRADE CARRIAGEWAY TO BE PERMANENTLY CLOSED AND CONVERTED INTO AMENITY AREA

現有地面行人路將予永久封閉及改建為地面行車道
EXISTING AT-GRADE FOOTPATH TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CARRIAGEWAY

現有地面行人路將予永久封閉及改建為行車隧道
EXISTING AT-GRADE FOOTPATH TO BE PERMANENTLY CLOSED AND CONVERTED INTO UNDERPASS

現有高架行人路將予永久封閉及改建為高架行車道
EXISTING ELEVATED FOOTPATH TO BE PERMANENTLY CLOSED AND CONVERTED INTO ELEVATED CARRIAGEWAY

工程名稱 Project title
工務計劃項目第7705TH號
沙田新市鎮第二期-T4號主幹路
PWP ITEM NO. 7705TH
SHA TIN NEW TOWN, STAGE 2 - TRUNK ROAD T4

圖則名稱 Plan title
根據《道路(工程、使用及補償)條例》(第370章)而在憲報公布之圖則
PLANS FOR GAZETTING UNDER ROADS (WORKS, USE AND COMPENSATION) ORDINANCE (CHAPTER 370)

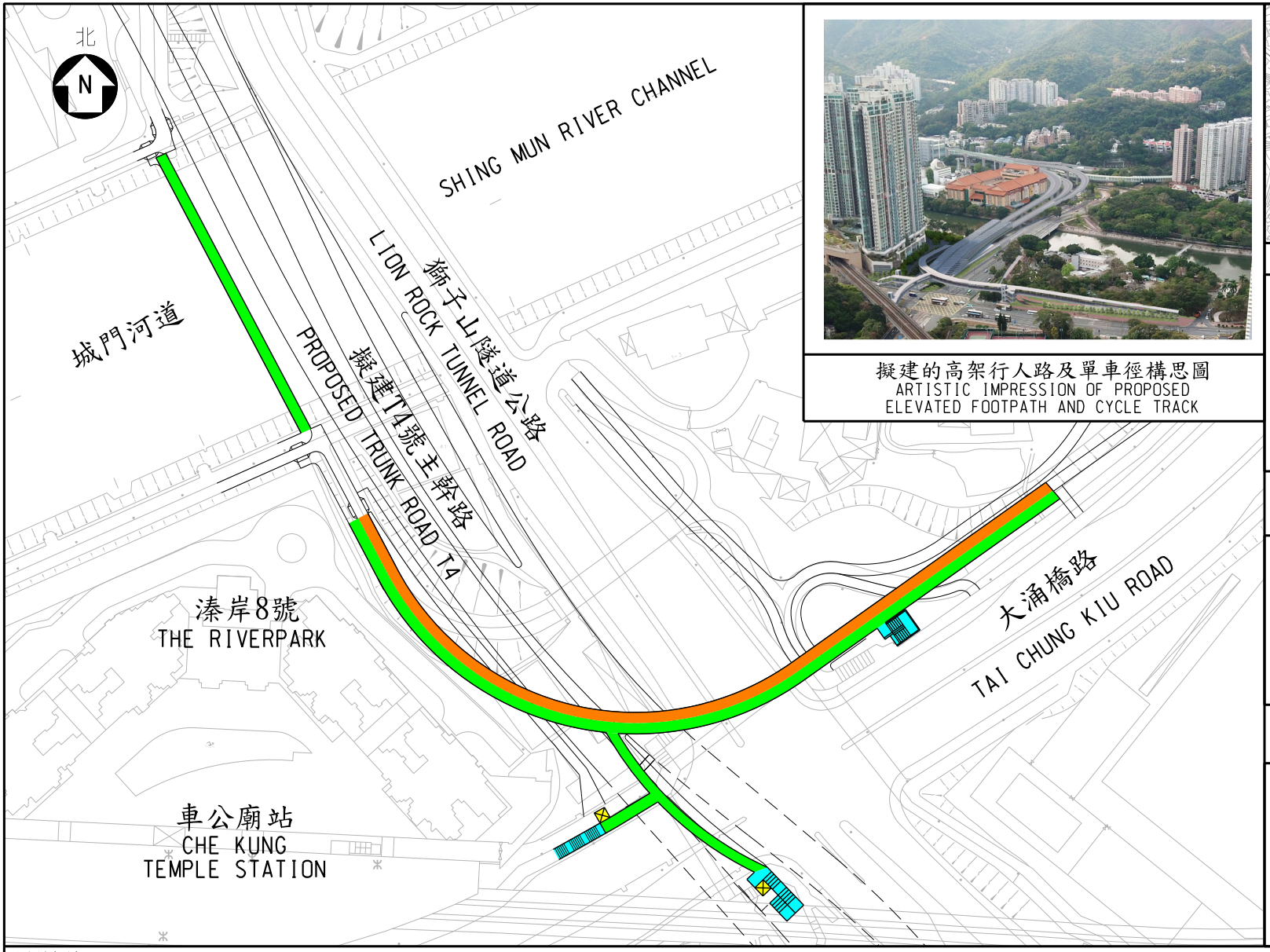
六張之第四張
SHEET 4 OF 6

圖則編號 Plan no.
60579757/GAZ/104

比例 Scale
A1 1 : 1000

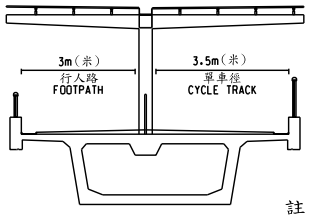
辦事處 Office
北拓展處
NORTH DEVELOPMENT OFFICE

土木工程拓展署
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT



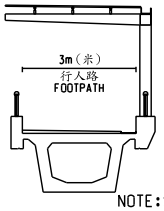
擬建的高架行人路及單車徑構思圖
ARTISTIC IMPRESSION OF PROPOSED
ELEVATED FOOTPATH AND CYCLE TRACK

位置圖 LOCATION PLAN



註：示意圖
NOTE:SCHEMATIC DIAGRAM

擬建的高架行人路暨單車徑切面圖
TYPICAL CROSS SECTION OF PROPOSED
ELEVATED FOOTPATH CUM CYCLE TRACK



註：示意圖
NOTE:SCHEMATIC DIAGRAM

擬建的高架行人路切面圖
TYPICAL CROSS SECTION OF
PROPOSED ELEVATED FOOTPATH

圖例 LEGEND:

- 擬建的高架單車徑 PROPOSED ELEVATED CYCLE TRACK
- 擬建的高架行人徑 PROPOSED ELEVATED FOOTPATH
- 擬建的樓梯 PROPOSED STAIRCASE
- 擬建的升降機塔 PROPOSED LIFT TOWER

圖則名稱 drawing title

工務計劃項目第705TH號 - 沙田T4號主幹路擬建的高架行人路及單車徑位置圖

PWP ITEM NO. 705TH - LOCATION PLAN OF PROPOSED ELEVATED FOOTPATH AND CYCLE TRACK OF TRUNK ROAD T4 IN SHA TIN

APPENDIX B –

EXISTING PUBLIC TRANSPORT SERVICES IN THE VICINITY

APPENDIX B –
EXISTING PUBLIC TRANSPORT SERVICES IN THE VICINITY

Route no.	Destinations	Frequency (minutes)
Franchised buses		
47X	Chun Shek ⇋ Kwai Shing (East)	6-25
72A	Tai Wai Station ⇋ Tai Po Industrial Estate	20-35
74A	Tai Po (Tai Wo) ⇋ Kai Yip	60
79	Queen's Hill Fanling ⇋ Tai Wai Station	10-30
80X	Chun Shek ⇋ Kwun Tong Ferry	10-30
81C	Yiu On ⇋ Tsim Sha Tsui East (Mody Road)	10-60
81K	Sun Tin Wai ⇋ Sui Wo Court	9-25
82K	Mei Tin ⇋ Yu Chui Court	30-40
85A	Kwong Yuen ⇋ Kowloon City Ferry	25-30
86	Wong Nai Tau ⇋ Mei Foo	15-30
86A	Sha Tin Wai ⇋ Cheung Sha Wan (Kom Tsun Street)	20-30
86C	Lee On ⇋ Cheung Sha Wan	20-30
89	Lek Yuen ⇋ Kwun Tong (Tsui Ping North Estate)	15-30
89B	Sha Tin Wai ⇋ Ngau Tau Kok	25-30
170	Sha Tin Station ⇋ Wah Fu (Central)	15-30
182	Yu Chui Court ⇋ Central (Macau Ferry)	15-30
182X	Central (Macau Ferry) → Yu Chui Court	20-35
240X	Wong Nai Tau ⇋ Kwai Hing Station	10-15
249X	Pok Hong ⇋ Tsing Yi Station	15-30
281B	Shek Mun Estate → Tsim Sha Tsui East (Mody Road)	20-30
282	Sha Tin Central ⇋ Sun Tin Wai (Circular)	10-25
286A	Sha Tin Wai ⇋ Cheung Sha Wan (Circular)	15-30
287P	Shui Chuen O → Yau Ma Tei	20
287X	Shui Chuen O ⇋ Jordan (Circular)	9-25
288	Shui Chuen O (Upper) ⇋ Sha Tin Central (Circular)	7-20
982C	Shek Mun Estate ⇋ Sai Wan HoTai Hong House	24
982X	Yu Chui Court / Shui Chuen O ⇋ Wan Chai (Fleming Road)	7-20
986	Sha Tin Wai → Munsang College (Hong Kong Island)	15-25
987	Munsang College (Hong Kong Island) → Fo Tan Chun Yeung Estate	10-20
A41	Shek Mun Estate ⇋ Airport (Ground Transportation Centre)	15-35
A42	Wong Nai Tau ⇋ Airport (Ground Transportation Centre)	30-60
B8	Tai Wai Station ⇋ Heung Yuen Wai Port	5-30
E42	Pok Hong ⇋ Airport (Ground Transportation Centre)	8-20
E42C	Pok Hong ⇋ Aircraft Maintenance Area	20-120

Route no.	Destinations	Frequency (minutes)
E42P	Fo Tan (Shan Mei St) ⇋ Tung Chung (Yat Tung)	20-45
N170	Shatin Central ⇋ Wah Fu (Central)	22-30
N182	Kwong Yuen ⇋ Central (Macau Ferry)	20-30
N271	Tai Po (Fu Heng) ⇋ Hung Hom Station	20-30
N281	Kam Ying Court ⇋ Hung Hom Station	25-30
N283	Tsim Sha Tsui East (Mody Road) → Wong Nai Tau	30
N42	Yiu On ⇋ Tung Chung Station	60
NA41	Shui Chuen O ⇋ HZMB Hong Kong Port	25-50
R42	Disneyland ⇋ Tai Wai Station	-
T80	Mei Tin / Hin Keng → Kowloon Bay	20
Green Minibus		
65S	Wong Nai Tau ⇋ Mong Kok Station (Circular)	20-25
68K	Julimount Garden ⇋ Sha Tin Station	7-9
501S	Sheung Shui Station ⇋ Kwun Tong (Yue Man Square)	60
803	Hin Keng Estate ⇋ Lee On Estate	5-15
804	Hin Keng Estate ⇋ Kwong Yuen Estate	5-6
812	Shui Chuen O Estate ⇋ Hin Keng Station	8-20

Note: Schedule of services as of August 2025.

APPENDIX C –
JUNCTION CALCULATION SHEETS

ROUNDABOUT CAPACITY CALCULATION

Job No.: CHK50834010

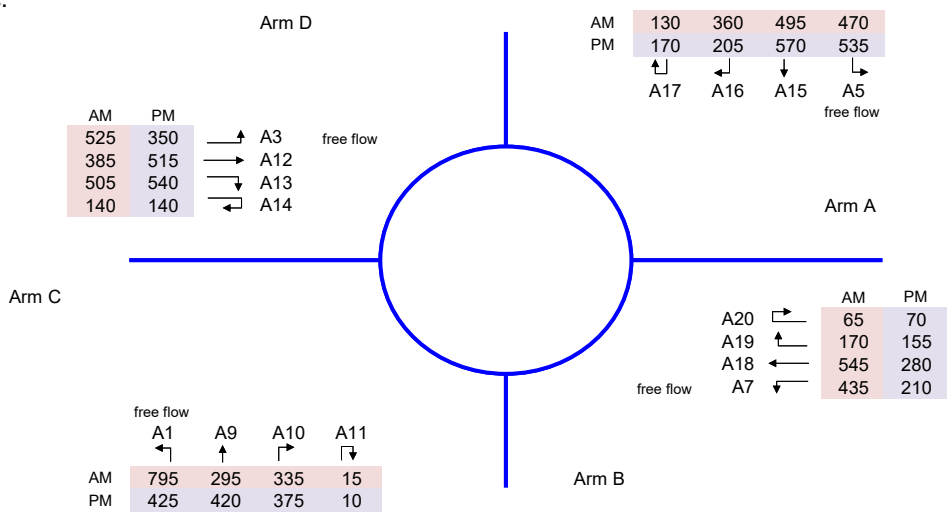
Junction: Che Kung Miu Road / Hung Mui Kuk Road / Mei Tin Road — Design Year: 2025

Description: 2025 - Observed Flow — Designed By: DKH — Checked By: CCN

Approach:

Arm A	Che Kung Miu Road
Arm B	Hung Mui Kuk Road
Arm C	Che Kung Miu Road
Arm D	Mei Tin Road
Arm E	

Traffic Flows:



			Enytry Arm	A	B	C	D	
Input Parameters:								
V	Approach Half Width (m)			7.80	6.60	7.60	6.60	
E	Entry Width (m)			11.00	9.00	9.20	9.80	
L	Effective Length of Flare (m)			17.00	24.00	23.50	25.50	
R	Entry Radius (m)			21.50	20.50	23.00	23.50	
D	Inscribed Circle Diameter (m)			65.00	65.00	65.00	65.00	
A	Entry Angle (degree)			25.00	20.00	15.00	20.00	
Q	Entry Flow (pcu/hour)		AM	780	645	1,030	985	
			PM	505	805	1,195	945	
Qc	Circulating Flow Across Entry (pcu/hour)		AM	1,645	1,410	1,010	1,445	
			PM	1,635	1,020	1,200	1,650	
Output Parameters:								
S	= 1.6 (E - V) / L	Sharpness of flare		0.30	0.16	0.11	0.20	
K	= 1 - 0.00347 (A-30) - 0.978 (1/R - 0.05)			1.02	1.04	1.06	1.04	
X2	= V + ((E-V) / (1+2S))			9.80	8.42	8.91	8.88	
M	= EXP ((D-60) /10)			1.65	1.65	1.65	1.65	
F	= 303 * X2			2969	2551	2701	2692	
Td	= 1 + (0.5 / (1+M))			1.19	1.19	1.19	1.19	
Fc	= 0.21*Td (1 + 0.2*X2)			0.74	0.67	0.69	0.69	
Qe	= K (F - Fc*Qc)		AM	1790	1664	2116	1761	
			PM	1797	1934	1976	1613	
Total Entry Flows:		**Design Flow / Capacity Ratio (DFC):**						
AM	3,440	DFC = Q / Qe	AM	0.44	0.39	0.49	0.56	
PM	3,450		PM	0.28	0.42	0.60	0.59	
Critial DFC:			**AM**			**0.56**		
			PM			**0.60**		

Notes:

All the above formulas are in accordance to T.P.D.M. Vol.2 Chp.4 Sec 4.5.9

Sheet No.:	Date:	Junction:
	APR, 2026	Che Kung Miu Road / Hung Mui Kuk Road / J1

ROUNDABOUT CAPACITY CALCULATION

Job No.: CHK50834010

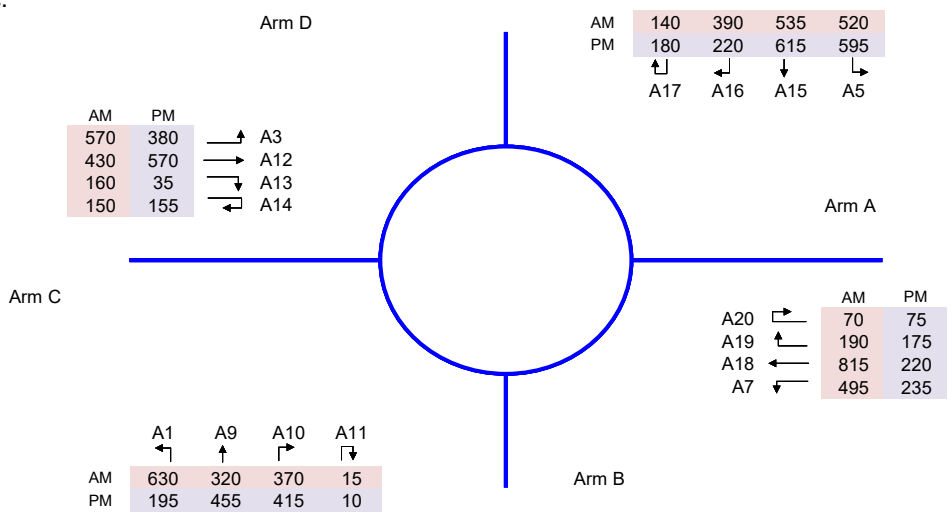
Junction: Che Kung Miu Road / Hung Mui Kuk Road / Mei Tin Road — Design Year: 2033

Description: 2033 - Reference Flow — Designed By: DKH — Checked By: CCN

Approach:

Arm A	Che Kung Miu Road
Arm B	Hung Mui Kuk Road
Arm C	Che Kung Miu Road
Arm D	Mei Tin Road
Arm E	

Traffic Flows:



			Enytry Arm	A	B	C	D	
Input Parameters:								
V	Approach Half Width (m)			7.80	6.60	7.60	6.60	
E	Entry Width (m)			11.00	9.00	9.20	9.80	
L	Effective Length of Flare (m)			17.00	24.00	23.50	25.50	
R	Entry Radius (m)			21.50	20.50	23.00	23.50	
D	Inscribed Circle Diameter (m)			65.00	65.00	65.00	65.00	
A	Entry Angle (degree)			25.00	20.00	15.00	20.00	
Q	Entry Flow (pcu/hour)		AM	1,075	705	740	1,065	
			PM	470	880	760	1,015	
Qc	Circulating Flow Across Entry (pcu/hour)		AM	1,390	1,755	1,105	1,195	
			PM	1,215	1,025	1,310	1,260	
Output Parameters:								
S	= 1.6 (E - V) / L	Sharpness of flare		0.30	0.16	0.11	0.20	
K	= 1 - 0.00347 (A-30) - 0.978 (1/R - 0.05)			1.02	1.04	1.06	1.04	
X2	= V + ((E-V) / (1+2S))			9.80	8.42	8.91	8.88	
M	= EXP ((D-60) /10)			1.65	1.65	1.65	1.65	
F	= 303 * X2			2969	2551	2701	2692	
Td	= 1 + (0.5 / (1+M))			1.19	1.19	1.19	1.19	
Fc	= 0.21*Td (1 + 0.2*X2)			0.74	0.67	0.69	0.69	
Qe	= K (F - Fc*Qc)		AM	1982	1424	2046	1941	
			PM	2114	1931	1895	1895	

Total Entry Flows:		**Design Flow / Capacity Ratio (DFC):**						
AM	3,585	DFC = Q / Qe	AM	0.54	0.49	0.36	0.55	
PM	3,125		PM	0.22	0.46	0.40	0.54	

Critial DFC:			
	AM	**0.55**	
	PM	**0.54**	

Notes:

All the above formulas are in accordance to T.P.D.M. Vol.2 Chp.4 Sec 4.5.9

ROUNDABOUT CAPACITY CALCULATION

Job No.: CHK50834010

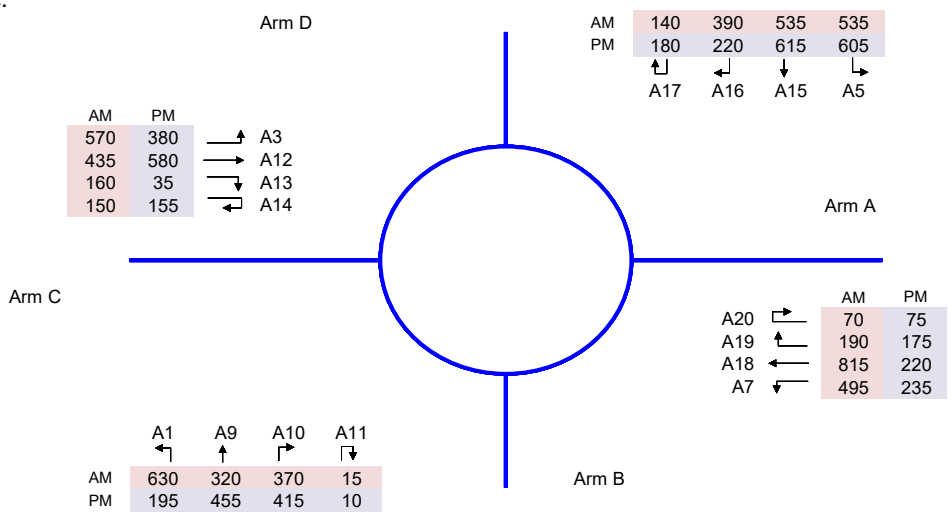
Junction: Che Kung Miu Road / Hung Mui Kuk Road / Mei Tin Road — Design Year: 2033

Description: 2033 - Design Flow (Scenario 1) — Designed By: DKH — Checked By: CCN

Approach:

Arm A	Che Kung Miu Road
Arm B	Hung Mui Kuk Road
Arm C	Che Kung Miu Road
Arm D	Mei Tin Road
Arm E	

Traffic Flows:



			Enytry Arm	A	B	C	D
Input Parameters:							
V	Approach Half Width (m)			7.80	6.60	7.60	6.60
E	Entry Width (m)			11.00	9.00	9.20	9.80
L	Effective Length of Flare (m)			17.00	24.00	23.50	25.50
R	Entry Radius (m)			21.50	20.50	23.00	23.50
D	Inscribed Circle Diameter (m)			65.00	65.00	65.00	65.00
A	Entry Angle (degree)			25.00	20.00	15.00	20.00
Q	Entry Flow (pcu/hour)		AM	1,075	705	745	1,065
			PM	470	880	770	1,015
Qc	Circulating Flow Across Entry (pcu/hour)		AM	1,390	1,755	1,105	1,200
			PM	1,215	1,025	1,310	1,270
Output Parameters:							
S	= 1.6 (E - V) / L	Sharpness of flare		0.30	0.16	0.11	0.20
K	= 1 - 0.00347 (A-30) - 0.978 (1/R - 0.05)			1.02	1.04	1.06	1.04
X2	= V + ((E-V) / (1+2S))			9.80	8.42	8.91	8.88
M	= EXP ((D-60) /10)			1.65	1.65	1.65	1.65
F	= 303 * X2			2969	2551	2701	2692
Td	= 1 + (0.5 / (1+M))			1.19	1.19	1.19	1.19
Fc	= 0.21*Td (1 + 0.2*X2)			0.74	0.67	0.69	0.69
Qe	= K (F - Fc*Qc)		AM	1982	1424	2046	1938
			PM	2114	1931	1895	1887

Total Entry Flows:		**Design Flow / Capacity Ratio (DFC):**					
AM	3,590	DFC = Q / Qe	AM	0.54	0.49	0.36	0.55
PM	3,135		PM	0.22	0.46	0.41	0.54

Critial DFC:

AM	**0.55**
PM	**0.54**

Notes:

All the above formulas are in accordance to T.P.D.M. Vol.2 Chp.4 Sec 4.5.9

ROUNDABOUT CAPACITY CALCULATION

Job No.: CHK50834010

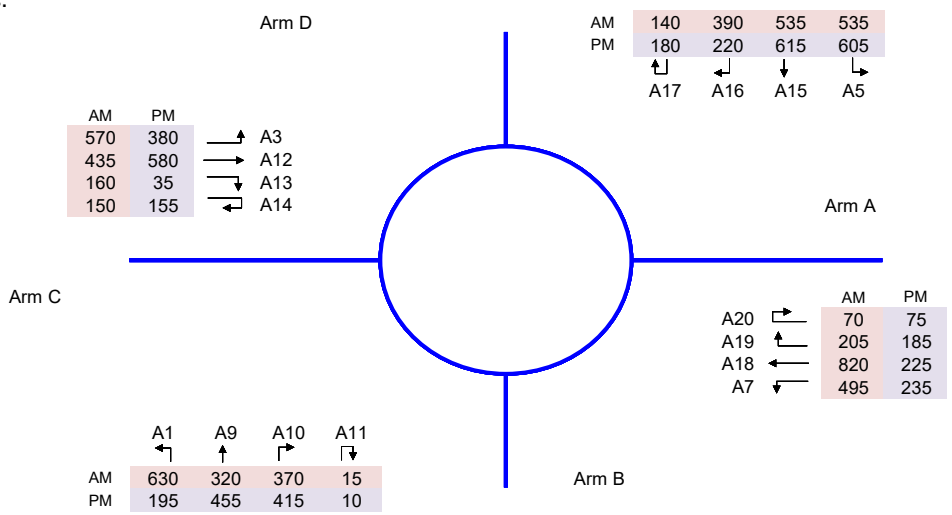
Junction: Che Kung Miu Road / Hung Mui Kuk Road / Mei Tin Road — Design Year: 2033

Description: 2033 - Design Flow (Scenario 2) — Designed By: DKH — Checked By: CCN

Approach:

Arm A	Che Kung Miu Road
Arm B	Hung Mui Kuk Road
Arm C	Che Kung Miu Road
Arm D	Mei Tin Road
Arm E	

Traffic Flows:



			Enytry Arm	A	B	C	D
Input Parameters:							
V	Approach Half Width (m)			7.80	6.60	7.60	6.60
E	Entry Width (m)			11.00	9.00	9.20	9.80
L	Effective Length of Flare (m)			17.00	24.00	23.50	25.50
R	Entry Radius (m)			21.50	20.50	23.00	23.50
D	Inscribed Circle Diameter (m)			65.00	65.00	65.00	65.00
A	Entry Angle (degree)			25.00	20.00	15.00	20.00
Q	Entry Flow (pcu/hour)		AM	1,095	705	745	1,065
			PM	485	880	770	1,015
Qc	Circulating Flow Across Entry (pcu/hour)		AM	1,390	1,775	1,120	1,200
			PM	1,215	1,040	1,320	1,270
Output Parameters:							
S	= 1.6 (E - V) / L	Sharpness of flare		0.30	0.16	0.11	0.20
K	= 1 - 0.00347 (A-30) - 0.978 (1/R - 0.05)			1.02	1.04	1.06	1.04
X2	= V + ((E-V) / (1+2S))			9.80	8.42	8.91	8.88
M	= EXP ((D-60) /10)			1.65	1.65	1.65	1.65
F	= 303 * X2			2969	2551	2701	2692
Td	= 1 + (0.5 / (1+M))			1.19	1.19	1.19	1.19
Fc	= 0.21*Td (1 + 0.2*X2)			0.74	0.67	0.69	0.69
Qe	= K (F - Fc*Qc)		AM	1982	1410	2035	1938
			PM	2114	1921	1888	1887

Total Entry Flows:		**Design Flow / Capacity Ratio (DFC):**					
AM	3,610	DFC = Q / Qe	AM	0.55	0.50	0.37	0.55
PM	3,150		PM	0.23	0.46	0.41	0.54

Critial DFC:

AM	**0.55**
PM	**0.54**

Notes:

All the above formulas are in accordance to T.P.D.M. Vol.2 Chp.4 Sec 4.5.9

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

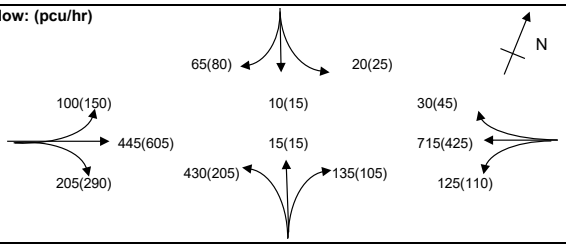
Junction: J2 - Che Kung Miu Road / Chui Tin Street Design Year: 2025

Description: 2025 - Observed Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Chui Tin Street		D	3,4	3.500	10					1710	1710	205	0.120		98	0.057	
NB		D	3,4	3.500	13					1885	1885	225	0.119		107	0.057	
		E	4	3.500		12		90%	88%	1890	1895	150	0.079	0.079	120	0.063	0.063
Che Kung Miu Road		C	3	3.380	10			61%	67%	1790	1775	163	0.091		225	0.127	
EB		C	3	3.380						2095	2095	191	0.091		265	0.126	
		C	3	3.380						2095	2095	191	0.091		265	0.126	
		C	3	3.380		12				1860	1860	205	0.110	0.110	290	0.156	0.156
Access Road to		F	5	3.500	11	15		43% / 35%	43% / 31%	1795	1805	46	0.026	0.026	58	0.032	0.032
The Pavilia Farm		F	5	3.500		17				1935	1935	49	0.025		62	0.032	
SB																	
Che Kung Miu Road		A	1,2	3.300	10			49%	69%	1810	1760	254	0.140		159	0.090	0.090
WB		A	1,2	3.300						2085	2085	293	0.141	0.141	188	0.090	
		A	1,2	3.300						2085	2085	293	0.141		188	0.090	
		B	2	3.500		16.5				1930	1930	30	0.016		45	0.023	
Pedestrian Crossing		Gp	1	MIN GREEN + FLASH =			9	+	7	=	16						

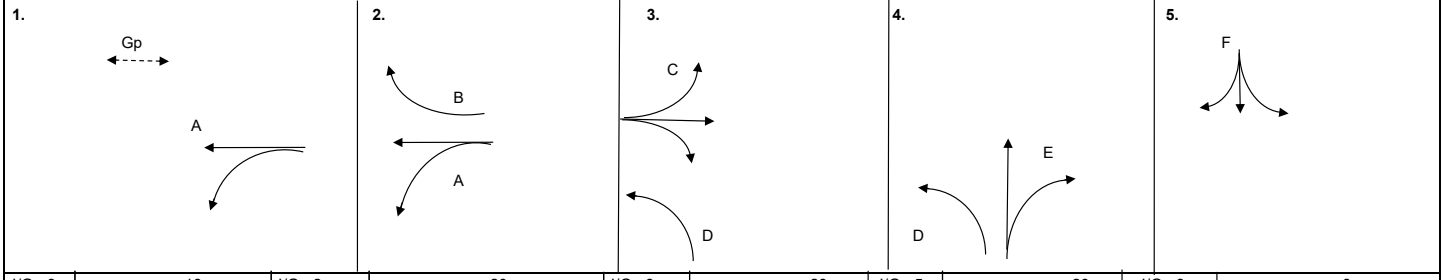
Notes:

Flow: (pcu/hr)



Group	Gp,B,C,E,F	A,C,E,F	Group	Gp,B,C,E,F	A,C,E,F
y	0.215	0.356	y	0.275	0.342
L (sec)	49	25	L (sec)	43	25
C (sec)	120	120	C (sec)	120	120
y pract.	0.533	0.713	y pract.	0.578	0.713
R.C. (%)	147%	100%	R.C. (%)	110%	109%

Stage / Phase Diagrams



I/G= 8	16	I/G= 2	20	I/G= 8	29	I/G= 5	20	I/G= 8	8
I/G= 8	16	I/G= 2	8	I/G= 8	43	I/G= 5	16	I/G= 8	8

Date: APR, 2026 **Junction:** J2 Che Kung Miu Road / Chui Tin Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

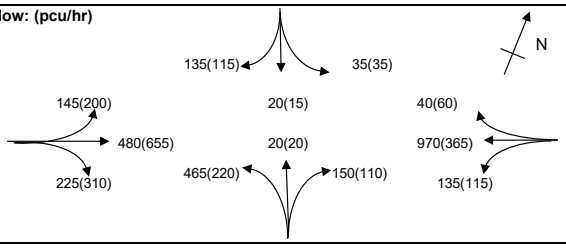
Junction: J2 - Che Kung Miu Road / Chui Tin Street Design Year: 2033

Description: 2033 - Reference Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Chui Tin Street		D	3,4	3.500	10					1710	1710	221	0.129		105	0.061	
NB		D	3,4	3.500	13					1885	1885	244	0.129		115	0.061	
		E	4	3.500		12		88%	85%	1895	1905	170	0.090	0.090	130	0.068	0.068
Che Kung Miu Road		C	3	3.380	10			79%	79%	1745	1745	184	0.105		252	0.144	
EB		C	3	3.380						2095	2095	221	0.105		302	0.144	
		C	3	3.380						2095	2095	220	0.105		301	0.144	
		C	3	3.380		12				1860	1860	225	0.121	0.121	310	0.167	0.167
Access Road to		F	5	3.500	11	15		38% / 40%	44% / 37%	1800	1790	92	0.051	0.051	79	0.044	
The Pavilia Farm		F	5	3.500		17				1935	1935	98	0.051		86	0.044	0.044
SB																	
Che Kung Miu Road		A	1,2	3.300	10			40%	82%	1835	1735	338	0.184	0.184	141	0.081	
WB		A	1,2	3.300						2085	2085	384	0.184		170	0.082	
		A	1,2	3.300						2085	2085	383	0.184		169	0.081	
		B	2	3.500		16.5				1930	1930	40	0.021		60	0.031	0.031
Pedestrian Crossing		Gp	1	MIN GREEN + FLASH =			9	+	7	=	16						*

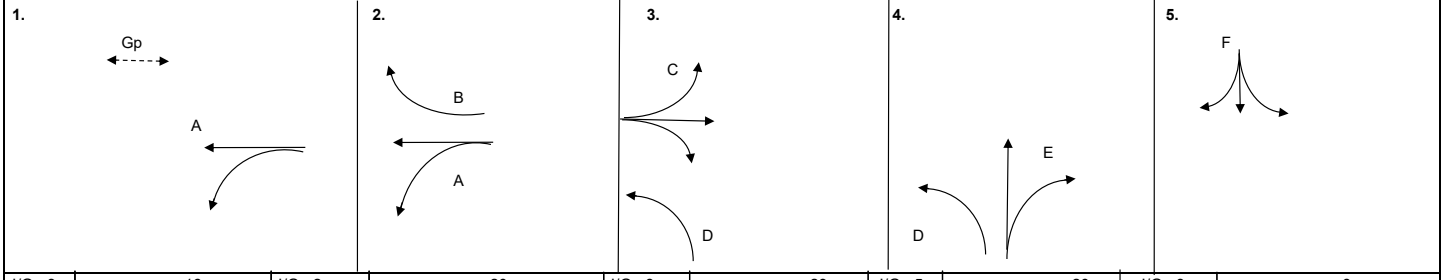
Notes:

Flow: (pcu/hr)



Group	Gp,B,C,E,F	A,C,E,F	Group	A,C,E,F	Gp,B,C,E,F
y	0.262	0.446	y	0.361	0.310
L (sec)	49	25	L (sec)	25	43
C (sec)	120	120	C (sec)	120	120
y pract.	0.533	0.713	y pract.	0.713	0.578
R.C. (%)	103%	60%	R.C. (%)	97%	86%

Stage / Phase Diagrams



I/G= 8	16	I/G= 2	20	I/G= 8	29	I/G= 5	20	I/G= 8	8
I/G= 8	16	I/G= 2	8	I/G= 8	43	I/G= 5	16	I/G= 8	8

Date: APR, 2026 **Junction:** J2 Che Kung Miu Road / Chui Tin Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

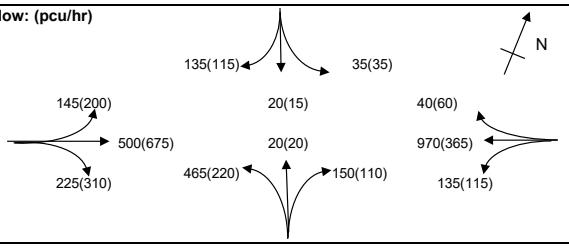
Junction: J2 - Che Kung Miu Road / Chui Tin Street Design Year: 2033

Description: 2033 - Design Flow (Scenario 1) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Chui Tin Street		D	3,4	3.500	10					1710	1710	221	0.129		105	0.061	
NB		D	3,4	3.500	13					1885	1885	244	0.129		115	0.061	
		E	4	3.500		12		88%	85%	1895	1905	170	0.090	0.090	130	0.068	0.068
Che Kung Miu Road		C	3	3.380	10			76%	78%	1750	1750	190	0.109		258	0.147	
EB		C	3	3.380						2095	2095	228	0.109		309	0.147	
		C	3	3.380						2095	2095	227	0.108		308	0.147	
		C	3	3.380		12				1860	1860	225	0.121	0.121	310	0.167	0.167
Access Road to		F	5	3.500	11	15		38% / 40%	44% / 37%	1800	1790	92	0.051	0.051	79	0.044	
The Pavilia Farm		F	5	3.500		17				1935	1935	98	0.051		86	0.044	0.044
SB																	
Che Kung Miu Road		A	1,2	3.300	10			40%	82%	1835	1735	338	0.184	0.184	141	0.081	
WB		A	1,2	3.300						2085	2085	384	0.184		170	0.082	
		A	1,2	3.300						2085	2085	383	0.184		169	0.081	
		B	2	3.500		16.5				1930	1930	40	0.021		60	0.031	0.031
Pedestrian Crossing		Gp	1	MIN GREEN + FLASH =			9	+	7	=	16						*

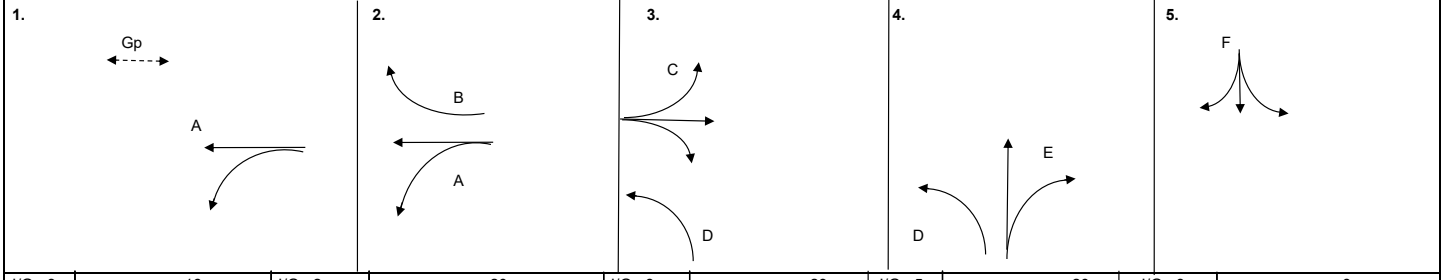
Notes:

Flow: (pcu/hr)



Group	Gp,B,C,E,F	A,C,E,F	Group	A,C,E,F	Gp,B,C,E,F
y	0.262	0.446	y	0.361	0.310
L (sec)	49	25	L (sec)	25	43
C (sec)	120	120	C (sec)	120	120
y pract.	0.533	0.713	y pract.	0.713	0.578
R.C. (%)	103%	60%	R.C. (%)	97%	86%

Stage / Phase Diagrams



I/G= 8	16	I/G= 2	20	I/G= 8	29	I/G= 5	20	I/G= 8	8
I/G= 8	16	I/G= 2	8	I/G= 8	43	I/G= 5	16	I/G= 8	8

Date: APR, 2026 **Junction:** J2 Che Kung Miu Road / Chui Tin Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

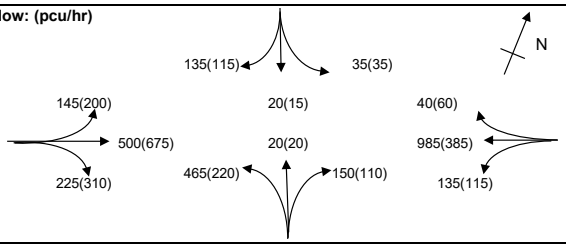
Junction: J2 - Che Kung Miu Road / Chui Tin Street Design Year: 2033

Description: 2033 - Design Flow (Scenario 2) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Chui Tin Street		D	3,4	3.500	10					1710	1710	221	0.129		105	0.061	
NB		D	3,4	3.500	13					1885	1885	244	0.129		115	0.061	
		E	4	3.500		12		88%	85%	1895	1905	170	0.090	0.090	130	0.068	0.068
Che Kung Miu Road		C	3	3.380	10			76%	78%	1750	1750	190	0.109		258	0.147	
EB		C	3	3.380						2095	2095	228	0.109		309	0.147	
		C	3	3.380						2095	2095	227	0.108		308	0.147	
		C	3	3.380		12				1860	1860	225	0.121	0.121	310	0.167	0.167
Access Road to		F	5	3.500	11	15		38% / 40%	44% / 37%	1800	1790	92	0.051	0.051	79	0.044	
The Pavilia Farm		F	5	3.500		17				1935	1935	98	0.051		86	0.044	0.044
SB																	
Che Kung Miu Road		A	1,2	3.300	10			39%	78%	1835	1740	342	0.186		147	0.084	
WB		A	1,2	3.300						2085	2085	389	0.187	0.187	177	0.085	
		A	1,2	3.300						2085	2085	389	0.187		176	0.084	
		B	2	3.500		16.5				1930	1930	40	0.021		60	0.031	0.031
Pedestrian Crossing		Gp	1	MIN GREEN + FLASH =			9	+	7	=	16						*

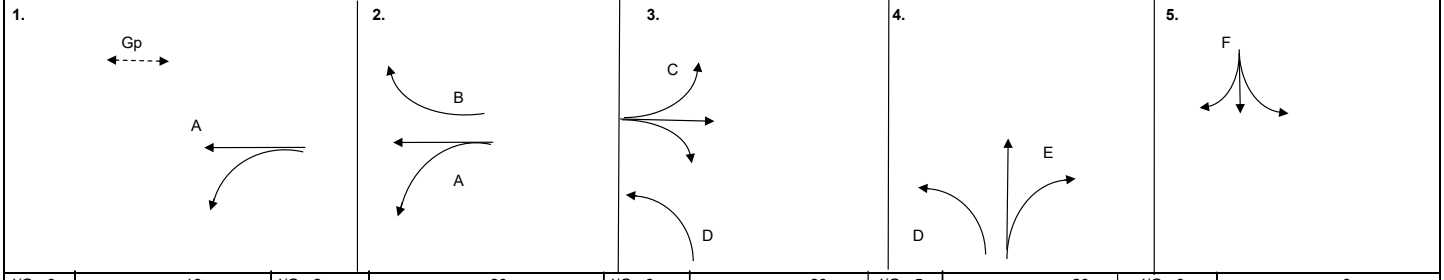
Notes:

Flow: (pcu/hr)



Group	Gp,B,C,E,F	A,C,E,F	Group	A,C,E,F	Gp,B,C,E,F
y	0.262	0.448	y	0.364	0.310
L (sec)	49	25	L (sec)	25	43
C (sec)	120	120	C (sec)	120	120
y pract.	0.533	0.713	y pract.	0.713	0.578
R.C. (%)	103%	59%	R.C. (%)	96%	86%

Stage / Phase Diagrams



I/G= 8	16	I/G= 2	20	I/G= 8	29	I/G= 5	20	I/G= 8	8
I/G= 8	16	I/G= 2	8	I/G= 8	43	I/G= 5	16	I/G= 8	8

Date: APR, 2026 **Junction:** J2 Che Kung Miu Road / Chui Tin Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

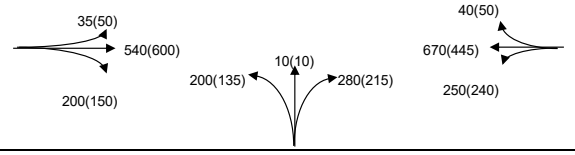
Junction: J3 - Che Kung Miu Road / Sha Tin Tau Road — Design Year: 2025

Description: 2025 - Observed Flow — Designed By: DKH — Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Che Kung Miu Road EB		E	1	3.080	17					1765	1765	35	0.020		50	0.028	
		C	1,4	3.080						2065	2065	252	0.122		254	0.123	
		C	1,4	3.080						2065	2065	253	0.123	0.123	255	0.123	0.123
		C	1,4	3.080		17		85%	62%	1920	1955	235	0.122		241	0.123	
Sha Tin Tau Road NB		D	1,2,4	3.000	12.5					1710	1710	95	0.056		64	0.037	
		D	1,2,4	3.000	17					1890	1890	105	0.056		71	0.038	
		A	2	3.000		17		93%	91%	1900	1900	148	0.078	0.078	115	0.061	0.061
		A	2	3.000		12				1825	1825	142	0.078		110	0.060	
Che Kung Miu Road WB		B	3	3.000	12					1700	1700	250	0.147	0.147	240	0.141	0.141
		B	3	3.000						2055	2055	238	0.116		166	0.081	
		B	3	3.000						2055	2055	238	0.116		167	0.081	
		B	3	3.000		17		17%	31%	2025	2000	234	0.116		162	0.081	
Pedestrian Crossing		Fp	4	MIN GREEN + FLASH =	5	+	9	=	14								
		Gp	1,2,4	MIN GREEN + FLASH =	5	+	11	=	16								
		Hp	3	MIN GREEN + FLASH =	5	+	9	=	14								

Notes:

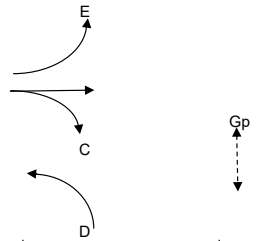
Flow: (pcu/hr)



Group	D,B	C,A,B	Group	D,B	C,A,B
y	0.203	0.347	y	0.179	0.325
L (sec)	11	20	L (sec)	11	20
C (sec)	120	120	C (sec)	120	120
y pract.	0.818	0.750	y pract.	0.818	0.750
R.C. (%)	303%	116%	R.C. (%)	357%	131%

Stage / Phase Diagrams

1.



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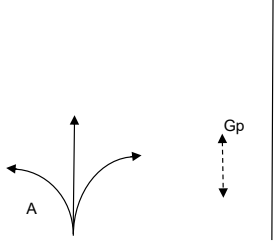
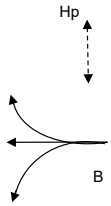
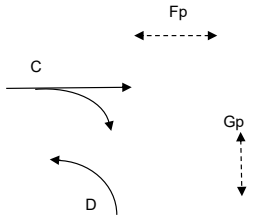


3.



4.



I/G=0	21	I/G= 8	21	I/G= 5	41	I/G= 10	14
I/G= 0	23	I/G= 8	18	I/G= 5	42	I/G= 10	14

Date: APR, 2026 — **Junction:** J3 Che Kung Miu Road / Sha Tin Tau Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

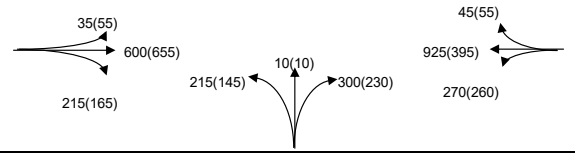
Junction: J3 - Che Kung Miu Road / Sha Tin Tau Road — Design Year: 2033

Description: 2033 - Reference Flow — Designed By: DKH — Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Che Kung Miu Road EB		E	1	3.080	17					1765	1765	35	0.020		55	0.031	
		C	1,4	3.080						2065	2065	278	0.135		278	0.135	
		C	1,4	3.080						2065	2065	278	0.135		278	0.135	
		C	1,4	3.080		17		83%	63%	1920	1955	259	0.135	0.135	264	0.135	0.135
Sha Tin Tau Road NB		D	1,2,4	3.000	12.5					1710	1710	102	0.060		69	0.040	
		D	1,2,4	3.000	17					1890	1890	113	0.060		76	0.040	
		A	2	3.000		17		94%	92%	1900	1900	158	0.083		122	0.064	
		A	2	3.000		12				1825	1825	152	0.083	0.083	118	0.065	0.065
Che Kung Miu Road WB		B	3	3.000	12					1700	1700	270	0.159	0.159	260	0.153	0.153
		B	3	3.000						2055	2055	324	0.158		151	0.073	
		B	3	3.000						2055	2055	325	0.158		152	0.074	
		B	3	3.000		17		14%	37%	2030	1990	321	0.158		147	0.074	
Pedestrian Crossing		Fp	4	MIN GREEN + FLASH =			5	+	9	=	14						
		Gp	1,2,4	MIN GREEN + FLASH =			5	+	11	=	16						
		Hp	3	MIN GREEN + FLASH =			5	+	9	=	14						

Notes:

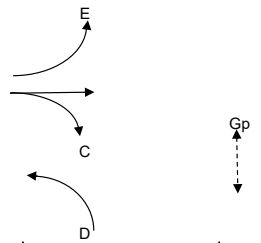
Flow: (pcu/hr)



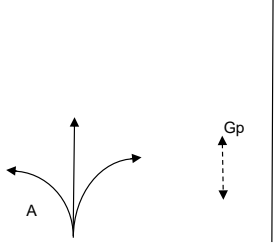
Group	D,B	C,A,B	Group	D,B	C,A,B
y	0.219	0.377	y	0.193	0.353
L (sec)	11	20	L (sec)	11	20
C (sec)	120	120	C (sec)	120	120
y pract.	0.818	0.750	y pract.	0.818	0.750
R.C. (%)	274%	99%	R.C. (%)	323%	113%

Stage / Phase Diagrams

1.



2.



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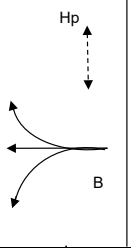

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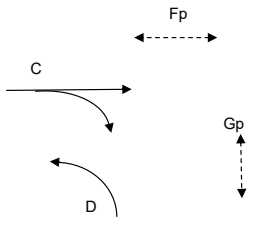


I/G=0	21	I/G= 8	21	I/G= 5	41	I/G= 10	14
I/G= 0	23	I/G= 8	18	I/G= 5	42	I/G= 10	14

Date: APR, 2026 — **Junction:** J3 Che Kung Miu Road / Sha Tin Tau Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

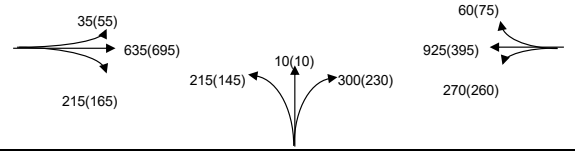
Junction: J3 - Che Kung Miu Road / Sha Tin Tau Road — Design Year: 2033

Description: 2033 - Design Flow (Scenario 1) — Designed By: DKH — Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Che Kung Miu Road EB		E	1	3.080	17					1765	1765	35	0.020		55	0.031	
		C	1,4	3.080						2065	2065	289	0.140		291	0.141	
		C	1,4	3.080						2065	2065	290	0.140	0.140	292	0.141	0.141
		C	1,4	3.080		17		79%	60%	1930	1960	271	0.140		277	0.141	
Sha Tin Tau Road NB		D	1,2,4	3.000	12.5					1710	1710	102	0.060		69	0.040	
		D	1,2,4	3.000	17					1890	1890	113	0.060		76	0.040	
		A	2	3.000		17		94%	92%	1900	1900	158	0.083		122	0.064	
		A	2	3.000		12				1825	1825	152	0.083	0.083	118	0.065	0.065
Che Kung Miu Road WB		B	3	3.000	12					1700	1700	270	0.159		260	0.153	0.153
		B	3	3.000						2055	2055	330	0.161		159	0.077	
		B	3	3.000						2055	2055	330	0.161		159	0.077	
		B	3	3.000		17		18%	49%	2020	1970	325	0.161	0.161	152	0.077	
Pedestrian Crossing		Fp	4	MIN GREEN + FLASH =			5	+	9	=	14						
		Gp	1,2,4	MIN GREEN + FLASH =			5	+	11	=	16						
		Hp	3	MIN GREEN + FLASH =			5	+	9	=	14						

Notes:

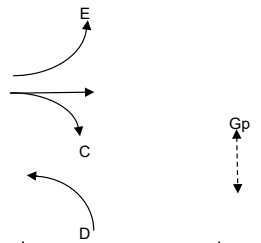
Flow: (pcu/hr)



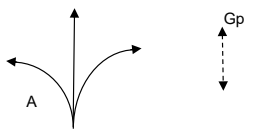
Group	D,B	C,A,B	Group	D,B	C,A,B
y	0.221	0.385	y	0.193	0.359
L (sec)	11	20	L (sec)	11	20
C (sec)	120	120	C (sec)	120	120
y pract.	0.818	0.750	y pract.	0.818	0.750
R.C. (%)	270%	95%	R.C. (%)	323%	109%

Stage / Phase Diagrams

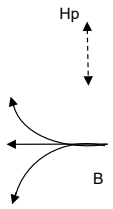
1.



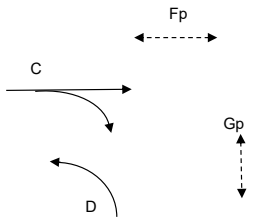
2.



3.



4.



I/G=0	21	I/G= 8	21	I/G= 5	41	I/G= 10	14
I/G= 0	23	I/G= 8	18	I/G= 5	42	I/G= 10	14

Date: APR, 2026 **Junction:** J3 Che Kung Miu Road / Sha Tin Tau Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

Junction: J3 - Che Kung Miu Road / Sha Tin Tau Road — Design Year: 2033

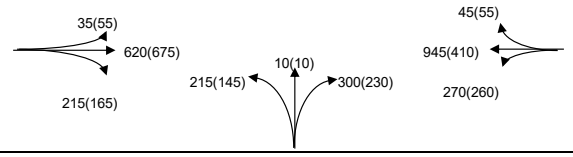
Description: 2033 - Design Flow (Scenario 2) — Designed By: DKH — Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Che Kung Miu Road		E	1	3.080	17					1765	1765	35	0.020		55	0.031	
EB		C	1,4	3.080						2065	2065	284	0.138		285	0.138	
		C	1,4	3.080						2065	2065	285	0.138		285	0.138	
		C	1,4	3.080		17		81%	61%	1925	1955	266	0.138	0.138	270	0.138	0.138
Sha Tin Tau Road		D	1,2,4	3.000	12.5					1710	1710	102	0.060		69	0.040	
NB		D	1,2,4	3.000	17					1890	1890	113	0.060		76	0.040	
		A	2	3.000		17		94%	92%	1900	1900	158	0.083		122	0.064	
		A	2	3.000		12				1825	1825	152	0.083	0.083	118	0.065	0.065
Che Kung Miu Road		B	3	3.000	12					1700	1700	270	0.159		260	0.153	0.153
WB		B	3	3.000						2055	2055	331	0.161		156	0.076	
		B	3	3.000						2055	2055	332	0.162	0.162	157	0.076	
		B	3	3.000		17		14%	36%	2030	1990	327	0.161		152	0.076	

Pedestrian Crossing	Fp	4	MIN GREEN + FLASH =	5	+	9	=	14
	Gp	1,2,4	MIN GREEN + FLASH =	5	+	11	=	16
	Hp	3	MIN GREEN + FLASH =	5	+	9	=	14

Notes:

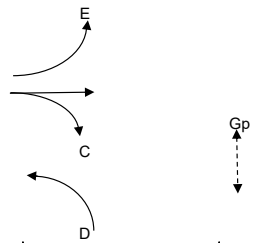
Flow: (pcu/hr)



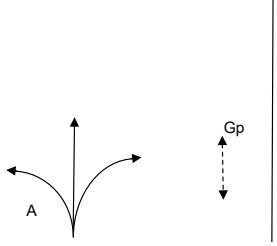
Group	D,B	C,A,B	Group	D,B	C,A,B
y	0.221	0.383	y	0.193	0.356
L (sec)	11	20	L (sec)	11	20
C (sec)	120	120	C (sec)	120	120
y pract.	0.818	0.750	y pract.	0.818	0.750
R.C. (%)	269%	96%	R.C. (%)	323%	111%

Stage / Phase Diagrams

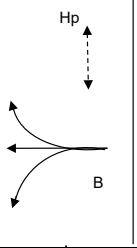
1.



2.



3.



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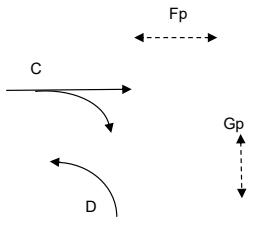


I/G=0	21	I/G= 8	21	I/G= 5	41	I/G= 10	14
I/G= 0	23	I/G= 8	18	I/G= 5	42	I/G= 10	14

Date: APR, 2026 **Junction:** J3 Che Kung Miu Road / Sha Tin Tau Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

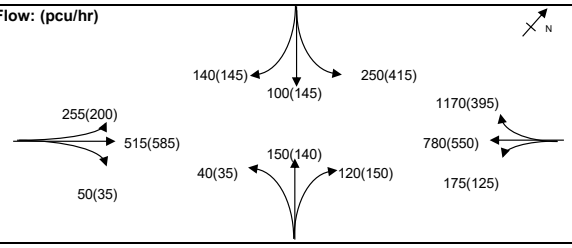
Junction: J4 - Lion Rock Tunnel Road / Tai Chung Kiu Road Design Year: 2025

Description: 2025 - Observed Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Lion Rock Tunnel Road NB		A	1	3.300	6					1555	1555	40	0.026		35	0.023	
		A	1	3.300						2085	2085	75	0.036		70	0.034	
		A	1	3.300						2085	2085	75	0.036		70	0.034	
		A	1	3.000		13				1980	1980	120	0.061	0.061	150	0.076	0.076
Che Kung Mui Road		F	3.4	3.000	15					2025	2025	255	0.126		200	0.099	
		D	4	3.000						2055	2055	190	0.092	0.092	208	0.101	0.101
		D	4	3.000						2055	2055	190	0.092		208	0.101	
		D	4	3.000		16		27%	17%	2005	2020	185	0.092		204	0.101	
Tai Chung Kiu Road WB		E	1,2	3.500	15					1785	1785	175	0.098		125	0.070	
		B	2	3.100						2065	2065	390	0.189		243	0.118	
		B	2	3.100						2065	2065	390	0.189		244	0.118	0.118
		B	2	3.100		22		100%	73%	1935	1965	587	0.303		232	0.118	
		B	2	3.100		20				1920	1920	583	0.304	0.304	226	0.118	
Lion Rock Tunnel Road SB		C	3	3.300	15					1970	1970	250	0.127	0.127	415	0.211	0.211
		C	3	3.300						2085	2085	50	0.024		73	0.035	
		C	3	3.300						2085	2085	50	0.024		72	0.035	
		C	3	3.300		23				2225	2225	140	0.063		145	0.065	

Notes:

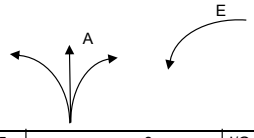
Flow: (pcu/hr)



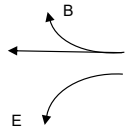
Group	E,C,D	A,B,C,D	Group	E,C,D	A,B,C,D
y	0.317	0.584	y	0.382	0.506
L (sec)	24	25	L (sec)	24	25
C (sec)	113	113	C (sec)	102	102
y pract.	0.709	0.701	y pract.	0.688	0.679
R.C. (%)	123%	20%	R.C. (%)	80%	34%

Stage / Phase Diagrams

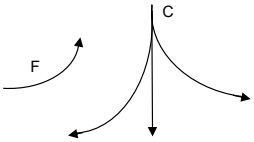
1.



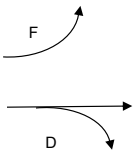
2.



3.



4.



I/G= 5	8	I/G= 6	45	I/G= 9	18	I/G= 9	13
I/G= 5	11	I/G= 6	17	I/G= 9	31	I/G= 9	14

Date: APR, 2026 **Junction:** J4 Lion Rock Tunnel Road / Tai Chung Kiu Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

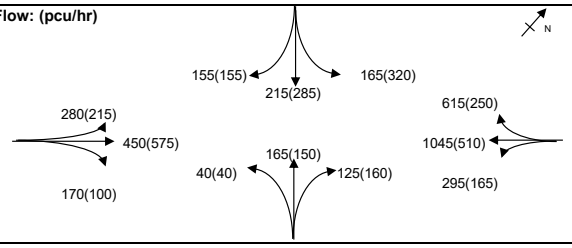
Junction: J4 - Lion Rock Tunnel Road / Tai Chung Kiu Road Design Year: 2033

Description: 2033 - Reference Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Lion Rock Tunnel Road NB		A	1	3.300	6					1555	1555	40	0.026		40	0.026	
		A	1	3.300						2085	2085	83	0.040		75	0.036	
		A	1	3.300						2085	2085	82	0.039		75	0.036	
		A	1	3.000		13				1980	1980	125	0.063	0.063	160	0.081	0.081
Che Kung Mui Road		F	3.4	3.000	15					2025	2025	280	0.138		215	0.106	
		D	4	3.000						2055	2055	212	0.103	0.103	228	0.111	
		D	4	3.000						2055	2055	212	0.103		228	0.111	
		D	4	3.000		16		87%	46%	1900	1970	196	0.103		219	0.111	0.111
Tai Chung Kiu Road WB		E	1,2	3.500	15					1785	1785	295	0.165		165	0.092	
		B	2	3.100						2065	2065	426	0.206		195	0.094	0.094
		B	2	3.100						2065	2065	426	0.206		194	0.094	
		B	2	3.100		22		53%	36%	1995	2015	412	0.207	0.207	190	0.094	
		B	2	3.100		20				1920	1920	396	0.206		181	0.094	
Lion Rock Tunnel Road SB		C	3	3.300	15					1970	1970	165	0.084	0.084	320	0.162	0.162
		C	3	3.300						2085	2085	108	0.052		143	0.069	
		C	3	3.300						2085	2085	107	0.051		142	0.068	
		C	3	3.300		23				2225	2225	155	0.070		155	0.070	

Notes:

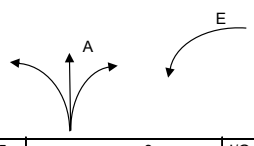
Flow: (pcu/hr)



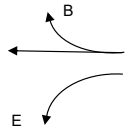
Group	E,C,D	A,B,C,D	Group	E,C,D	A,B,C,D
y	0.352	0.457	y	0.366	0.449
L (sec)	24	25	L (sec)	24	25
C (sec)	113	113	C (sec)	102	102
y pract.	0.709	0.701	y pract.	0.688	0.679
R.C. (%)	101%	54%	R.C. (%)	88%	51%

Stage / Phase Diagrams

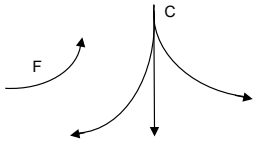
1.



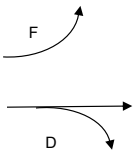
2.



3.



4.



I/G= 5	8	I/G= 6	45	I/G= 9	18	I/G= 9	13
I/G= 5	11	I/G= 6	17	I/G= 9	31	I/G= 9	14

Date: APR, 2026 **Junction:** J4 Lion Rock Tunnel Road / Tai Chung Kiu Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

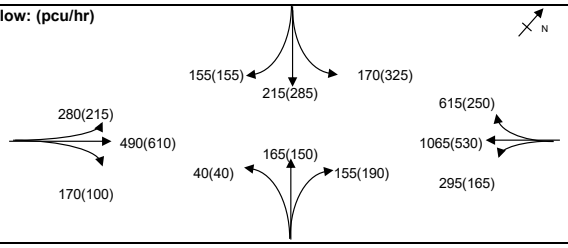
Junction: J4 - Lion Rock Tunnel Road / Tai Chung Kiu Road Design Year: 2033

Description: 2033 - Design Flow (Scenario 1) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Lion Rock Tunnel Road NB		A	1	3.300	6					1555	1555	40	0.026		40	0.026	
		A	1	3.300						2085	2085	83	0.040		75	0.036	
		A	1	3.300						2085	2085	82	0.039		75	0.036	
		A	1	3.000		13				1980	1980	155	0.078	0.078	190	0.096	0.096
Che Kung Mui Road		F	3.4	3.000	15					2025	2025	280	0.138		215	0.106	
		D	4	3.000						2055	2055	225	0.109		240	0.117	0.117
		D	4	3.000						2055	2055	226	0.110	0.110	240	0.117	
		D	4	3.000		16		81%	43%	1910	1975	209	0.109		230	0.116	
Tai Chung Kiu Road WB		E	1,2	3.500	15					1785	1785	295	0.165		165	0.092	
		B	2	3.100						2065	2065	431	0.209		200	0.097	
		B	2	3.100						2065	2065	431	0.209		199	0.096	
		B	2	3.100		22		51%	33%	1995	2020	417	0.209	0.209	195	0.097	
		B	2	3.100		20				1920	1920	401	0.209		186	0.097	0.097
Lion Rock Tunnel Road SB		C	3	3.300	15					1970	1970	170	0.086	0.086	325	0.165	0.165
		C	3	3.300						2085	2085	108	0.052		143	0.069	
		C	3	3.300						2085	2085	107	0.051		142	0.068	
		C	3	3.300		23				2225	2225	155	0.070		155	0.070	

Notes:

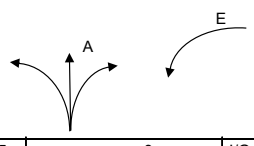
Flow: (pcu/hr)



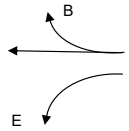
Group	E,C,D	A,B,C,D	Group	E,C,D	A,B,C,D
y	0.362	0.484	y	0.374	0.475
L (sec)	24	25	L (sec)	24	25
C (sec)	113	113	C (sec)	102	102
y pract.	0.709	0.701	y pract.	0.688	0.679
R.C. (%)	96%	45%	R.C. (%)	84%	43%

Stage / Phase Diagrams

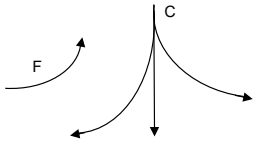
1.



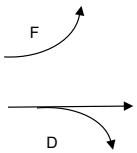
2.



3.



4.



I/G= 5	8	I/G= 6	45	I/G= 9	18	I/G= 9	13
I/G= 5	11	I/G= 6	17	I/G= 9	31	I/G= 9	14

Date: APR, 2026 **Junction:** J4 Lion Rock Tunnel Road / Tai Chung Kiu Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

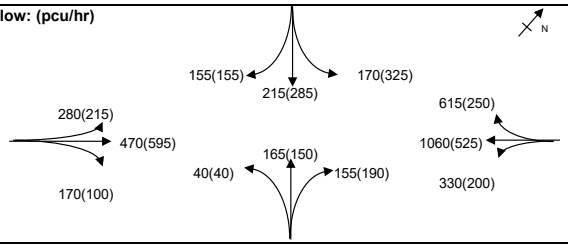
Junction: J4 - Lion Rock Tunnel Road / Tai Chung Kiu Road Design Year: 2033

Description: 2033 - Design Flow (Scenario 2) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Lion Rock Tunnel Road NB		A	1	3.300	6					1555	1555	40	0.026		40	0.026	
		A	1	3.300						2085	2085	83	0.040		75	0.036	
		A	1	3.300						2085	2085	82	0.039		75	0.036	
		A	1	3.000		13				1980	1980	155	0.078	0.078	190	0.096	0.096
Che Kung Mui Road		F	3.4	3.000	15					2025	2025	280	0.138		215	0.106	
		D	4	3.000						2055	2055	218	0.106		235	0.114	0.114
		D	4	3.000						2055	2055	219	0.107	0.107	235	0.114	
		D	4	3.000		16		84%	44%	1905	1975	203	0.107		225	0.114	
Tai Chung Kiu Road WB		E	1,2	3.500	15					1785	1785	330	0.185		200	0.112	
		B	2	3.100						2065	2065	430	0.208		198	0.096	
		B	2	3.100						2065	2065	430	0.208		199	0.096	0.096
		B	2	3.100		22		52%	34%	1995	2020	415	0.208		194	0.096	
		B	2	3.100		20				1920	1920	400	0.208	0.208	184	0.096	
Lion Rock Tunnel Road SB		C	3	3.300	15					1970	1970	170	0.086	0.086	325	0.165	0.165
		C	3	3.300						2085	2085	108	0.052		143	0.069	
		C	3	3.300						2085	2085	107	0.051		142	0.068	
		C	3	3.300		23				2225	2225	155	0.070		155	0.070	

Notes:

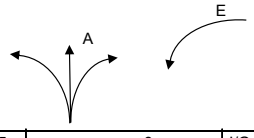
Flow: (pcu/hr)



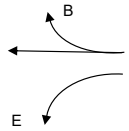
Group	E,C,D	A,B,C,D	Group	E,C,D	A,B,C,D
y	0.378	0.479	y	0.391	0.472
L (sec)	24	25	L (sec)	24	25
C (sec)	113	113	C (sec)	102	102
y pract.	0.709	0.701	y pract.	0.688	0.679
R.C. (%)	88%	46%	R.C. (%)	76%	44%

Stage / Phase Diagrams

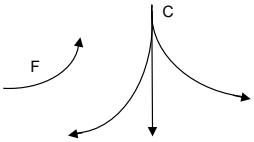
1.



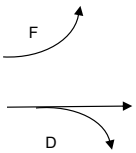
2.



3.



4.



I/G= 5	8	I/G= 6	45	I/G= 9	18	I/G= 9	13
I/G= 5	11	I/G= 6	17	I/G= 9	31	I/G= 9	14

Date: APR, 2026 **Junction:** J4 Lion Rock Tunnel Road / Tai Chung Kiu Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

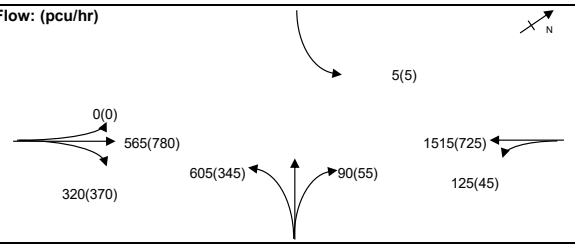
Junction: J5 - Sha Kok Street / Tai Chung Kiu Road Design Year: 2025

Description: 2025 - Observed Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		D	2,3	3.500	20					1830	1830	290	0.158		165	0.090	
WB		D	2,3	3.500	25					1985	1985	315	0.159	0.159	180	0.091	
		E	3	3.500		15				1915	1915	90	0.047		55	0.029	0.029
Tai Chung Kiu Road		C	1,2	3.000	30			0%	0%	1915	1915	273	0.143		376	0.196	
NB		C	1,2	3.000						2055	2055	292	0.142		404	0.197	
		B	2	3.500		25				1985	1985	161	0.081		186	0.094	
		B	2	3.500		20				1960	1960	159	0.081		184	0.094	0.094
Access Road EB		F	3	3.500	10					1710	1710	5	0.003		5	0.003	
Tai Chung Kiu Road		A	1	3.500	15			24%	18%	1920	1930	517	0.269		244	0.126	0.126
SB		A	1	3.300						2085	2085	562	0.270	0.270	263	0.126	
		A	1	3.300						2085	2085	561	0.269		263	0.126	
Pedestrian Crossing		Gp	4	MIN GREEN + FLASH =			10	+	5	=	15						
		Hp	4	MIN GREEN + FLASH =			13	+	12	=	25			*			*

Notes:

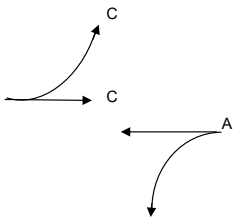
Flow: (pcu/hr)



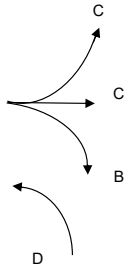
Group	A,B,E,Hp	A,D,Hp	Group	C,E,Hp	A,B,E,Hp
y	0.398	0.428	y	0.225	0.249
L (sec)	39	37	L (sec)	35	39
C (sec)	113	113	C (sec)	102	102
y pract.	0.589	0.605	y pract.	0.591	0.556
R.C. (%)	48%	41%	R.C. (%)	162%	123%

Stage / Phase Diagrams

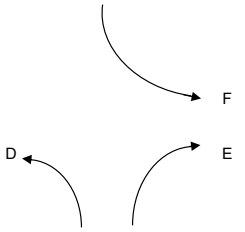
1.



2.



3.



4.

I/G= 2	49	I/G= 7	14	I/G=	8	I/G= 5	25
I/G= 2	31	I/G= 5	23	I/G= 5	6	I/G= 5	25

Date: APR, 2026 **Junction:** J5 Sha Kok Street / Tai Chung Kiu Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

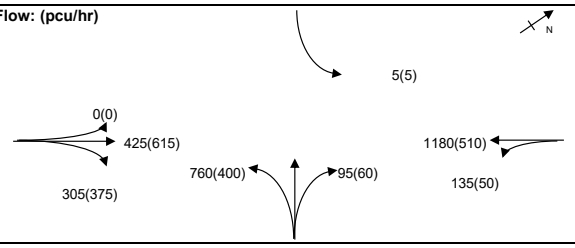
Junction: J5 - Sha Kok Street / Tai Chung Kiu Road Design Year: 2033

Description: 2033 - Reference Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		D	2,3	3.500	20					1830	1830	365	0.199	0.199	192	0.105	
WB		D	2,3	3.500	25					1985	1985	395	0.199		208	0.105	
		E	3	3.500		15				1915	1915	95	0.050		60	0.031	0.031
Tai Chung Kiu Road		C	1,2	3.000	30			0%	0%	1915	1915	205	0.107		297	0.155	
NB		C	1,2	3.000						2055	2055	220	0.107		318	0.155	
		B	2	3.500		25				1985	1985	153	0.077		189	0.095	0.095
		B	2	3.500		20				1960	1960	152	0.078		186	0.095	
Access Road EB		F	3	3.500	10					1710	1710	5	0.003		5	0.003	
Tai Chung Kiu Road		A	1	3.500	15			33%	28%	1905	1910	412	0.216		176	0.092	0.092
SB		A	1	3.300						2085	2085	452	0.217	0.217	192	0.092	
		A	1	3.300						2085	2085	451	0.216		192	0.092	
Pedestrian Crossing		Gp	4	MIN GREEN + FLASH =			10	+	5	=	15						
		Hp	4	MIN GREEN + FLASH =			13	+	12	=	25			*			*

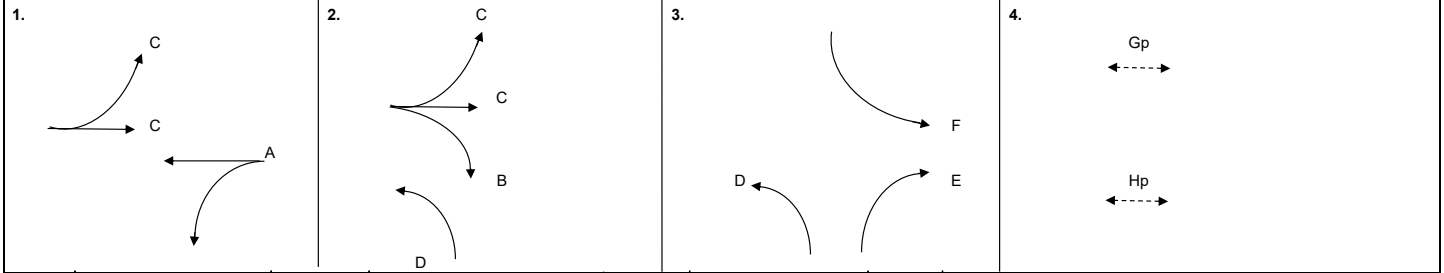
Notes:

Flow: (pcu/hr)



Group	A,B,E,Hp	A,D,Hp	Group	A,D,Hp	A,B,E,Hp
y	0.344	0.416	y	0.197	0.219
L (sec)	39	37	L (sec)	37	39
C (sec)	113	113	C (sec)	102	102
y pract.	0.589	0.605	y pract.	0.574	0.556
R.C. (%)	71%	45%	R.C. (%)	191%	154%

Stage / Phase Diagrams



I/G= 2	49	I/G= 7	14	I/G=	8	I/G= 5	25
I/G= 2	31	I/G= 5	23	I/G= 5	6	I/G= 5	25

Date: APR, 2026 **Junction:** J5 Sha Kok Street / Tai Chung Kiu Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

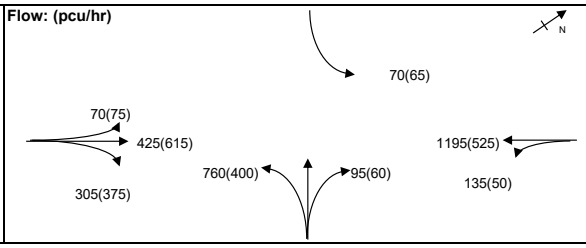
Junction: J5 - Sha Kok Street / Tai Chung Kiu Road Design Year: 2033

Description: 2033 - Design Flow (Scenario 1) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		D	2,3	3.500	20					1830	1830	365	0.199	0.199	192	0.105	
WB		D	2,3	3.500	25					1985	1985	395	0.199		208	0.105	
		E	3	3.500		15				1915	1915	95	0.050		60	0.031	0.031
Tai Chung Kiu Road		C	1,2	3.000	30			30%	23%	1885	1895	237	0.126		331	0.175	
NB		C	1,2	3.000						2055	2055	258	0.126		359	0.175	
		B	2	3.500		25				1985	1985	153	0.077		189	0.095	0.095
		B	2	3.500		20				1960	1960	152	0.078		186	0.095	
Access Road EB		F	3	3.500	10					1710	1710	70	0.041		65	0.038	
Tai Chung Kiu Road		A	1	3.500	15			32%	28%	1905	1910	417	0.219		181	0.095	0.095
SB		A	1	3.300						2085	2085	457	0.219	0.219	197	0.094	
		A	1	3.300						2085	2085	456	0.219		197	0.094	
Pedestrian Crossing		Gp	4	MIN GREEN + FLASH =			10	+	5	=	15						
		Hp	4	MIN GREEN + FLASH =			13	+	12	=	25			*			*

Notes:

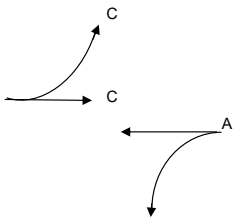
Flow: (pcu/hr)



Group	A,B,E,Hp	A,D,Hp	Group	C,E,Hp	A,B,E,Hp
y	0.346	0.419	y	0.206	0.221
L (sec)	39	37	L (sec)	35	39
C (sec)	113	113	C (sec)	102	102
y pract.	0.589	0.605	y pract.	0.591	0.556
R.C. (%)	70%	45%	R.C. (%)	187%	151%

Stage / Phase Diagrams

1.



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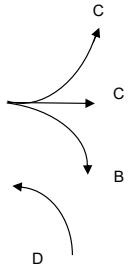
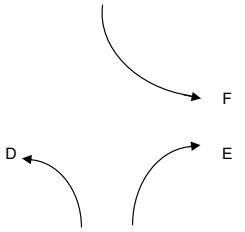


3.



4.

I/G= 2	49	I/G= 7	14	I/G=	8	I/G= 5	25		
I/G= 2	31	I/G= 5	23	I/G= 5	6	I/G= 5	25		

Date: APR, 2026 **Junction:** J5 Sha Kok Street / Tai Chung Kiu Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

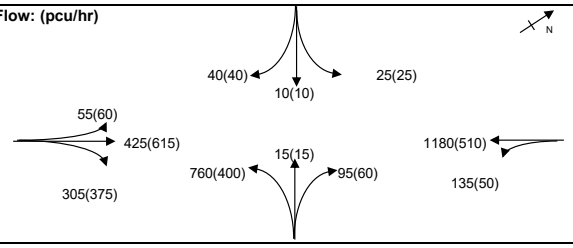
Junction: J5 - Sha Kok Street / Tai Chung Kiu Road Design Year: 2033

Description: 2033 - Design Flow (Scenario 2) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		D	2,3	3.500	20					1830	1830	365	0.199	0.199	192	0.105	
WB		D	2,3	3.500	25					1985	1985	395	0.199		208	0.105	
		E	3	3.500		15		86%	80%	1940	1950	110	0.057		75	0.038	0.038
Tai Chung Kiu Road		C	1,2	3.000	30			24%	19%	1890	1895	230	0.122		324	0.171	
NB		C	1,2	3.000						2055	2055	250	0.122		351	0.171	
		B	2	3.500		25				1985	1985	153	0.077		189	0.095	0.095
		B	2	3.500		20				1960	1960	152	0.078		186	0.095	
Access Road EB		F	3	3.500	10	25		33% / 53%	33% / 53%	1815	1815	75	0.041	0.041	75	0.041	0.041
Tai Chung Kiu Road		A	1	3.500	15			33%	28%	1905	1910	412	0.216		176	0.092	0.092
SB		A	1	3.300						2085	2085	452	0.217	0.217	192	0.092	
		A	1	3.300						2085	2085	451	0.216		192	0.092	
Pedestrian Crossing		Gp	5	MIN GREEN + FLASH =			10	+	5	=	15						
		Hp	5	MIN GREEN + FLASH =			13	+	12	=	25			*			*

Notes:

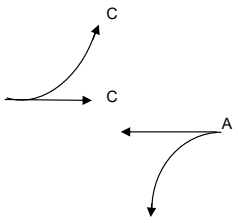
Flow: (pcu/hr)



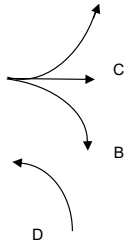
Group	A,B,E,F,Hp	A,D,F,Hp	Group	C,E,F,Hp	A,B,E,F,Hp
y	0.392	0.458	y	0.251	0.267
L (sec)	43	41	L (sec)	39	43
C (sec)	132	132	C (sec)	123	123
y pract.	0.607	0.620	y pract.	0.615	0.585
R.C. (%)	55%	36%	R.C. (%)	145%	119%

Stage / Phase Diagrams

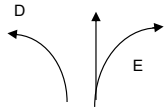
1.



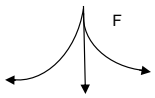
2.



3.



4.



5.

I/G= 2	49	I/G= 7	14	I/G=	8	I/G= 5	25
I/G= 2	31	I/G= 5	23	I/G= 5	6	I/G= 5	25

Date: APR, 2026 **Junction:** J5 Sha Kok Street / Tai Chung Kiu Road

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

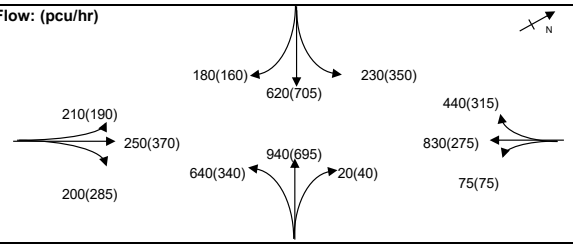
Junction: J6 - Tai Chung Kiu Road / Sha Tin Wai Road / Shatin Rural Committee Road Design Year: 2025

Description: 2025 - Observed Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Tin Wai Road		E	1,2	3.200	18					1950	1950	640	0.328	0.328	340	0.174	
NB		B	2	3.200						2075	2075	452	0.218		347	0.167	0.167
		B	2	3.200		17		4%	10%	2335	2325	508	0.218		388	0.167	
Tai Chung Kiu Road		H	1,4	3.000	12					1700	1700	210	0.124		190	0.112	
EB		A	1	3.000						2055	2055	125	0.061		185	0.090	
		A	1	3.000						2055	2055	125	0.061		185	0.090	
		A	1	3.000		17				2110	2110	200	0.095		285	0.135	0.135
Sha Tin Rural		G	3,4	2.900	12					1695	1695	230	0.136		350	0.206	
Committee Road		D	4	2.900						2045	2045	310	0.152	0.152	353	0.173	0.173
SB		D	4	2.900		20		0%	0%	2045	2045	310	0.152		352	0.172	
		D	4	2.900		18				1890	1890	180	0.095		160	0.085	
Tai Chung Kiu Road		F	2,3	3.300	12					1730	1730	75	0.043		75	0.043	
WB		C	3	3.000						2055	2055	415	0.202	0.202	138	0.067	
		C	3	3.000						2055	2055	415	0.202		137	0.067	
		C	3	3.000		14				1855	1855	222	0.120		159	0.086	0.086
		C	3	3.000		12				1825	1825	218	0.119		156	0.085	

Notes:

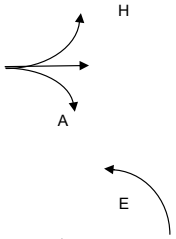
Flow: (pcu/hr)



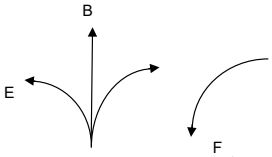
Group	A,B,C,D	E,C,D	Group	E,C,D	A,B,C,D
y	0.666	0.682	y	0.433	0.561
L (sec)	22	21	L (sec)	21	22
C (sec)	120	120	C (sec)	110	110
y pract.	0.735	0.743	y pract.	0.728	0.720
R.C. (%)	10%	9%	R.C. (%)	68%	28%

Stage / Phase Diagrams

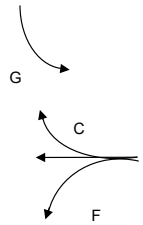
1.



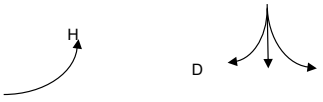
2.



3.



4.



I/G= 11	13	I/G= 6	31	I/G= 7	29	I/G= 6	21
I/G= 7	21	I/G= 6	25	I/G= 7	12	I/G= 6	26

Date: APR, 2026 **Junction:** J6 Tai Chung Kiu Road / Sha Tin Wai Road / Shatin Rural Committ

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

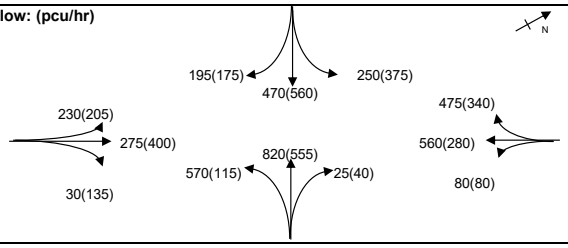
Junction: J6 - Tai Chung Kiu Road / Sha Tin Wai Road / Shatin Rural Committee Road Design Year: 2033

Description: 2033 - Refernce Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Tin Wai Road	↰	E	1,2	3.200	18					1950	1950	570	0.292	0.292	115	0.059	
NB	↑	B	2	3.200						2075	2075	398	0.192		281	0.135	0.135
	↑	B	2	3.200		17		6%	13%	2335	2320	447	0.191		314	0.135	
Tai Chung Kiu Road	↱	H	1,4	3.000	12					1700	1700	230	0.135		205	0.121	
EB	→	A	1	3.000						2055	2055	138	0.067		200	0.097	0.097
	→	A	1	3.000						2055	2055	137	0.067		200	0.097	
	↴	A	1	3.000		17				2110	2110	30	0.014		135	0.064	
Sha Tin Rural	↳	G	3,4	2.900	12					1695	1695	250	0.147		375	0.221	
Committee Road	↓	D	4	2.900						2045	2045	235	0.115	0.115	280	0.137	0.137
SB	↙	D	4	2.900		20		0%	0%	2045	2045	235	0.115		280	0.137	
	↲	D	4	2.900		18				1890	1890	195	0.103		175	0.093	
Tai Chung Kiu Road	↰	F	2,3	3.300	12					1730	1730	80	0.046		80	0.046	
WB	←	C	3	3.000						2055	2055	280	0.136	0.136	140	0.068	
	←	C	3	3.000						2055	2055	280	0.136		140	0.068	
	↰	C	3	3.000		14				1855	1855	239	0.129		171	0.092	
	↰	C	3	3.000		12				1825	1825	236	0.129		169	0.093	0.093

Notes:

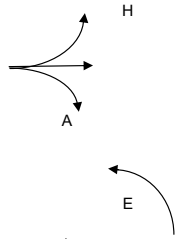
Flow: (pcu/hr)



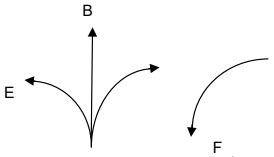
Group	A,B,C,D	E,C,D	Group	H,B,C	A,B,C,D
y	0.510	0.543	y	0.349	0.462
L (sec)	22	21	L (sec)	20	22
C (sec)	120	120	C (sec)	110	110
y pract.	0.735	0.743	y pract.	0.736	0.720
R.C. (%)	44%	37%	R.C. (%)	111%	56%

Stage / Phase Diagrams

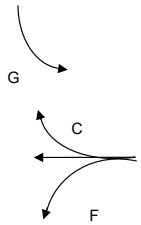
1.



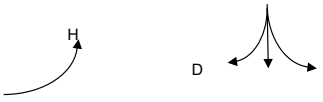
2.



3.



4.



I/G= 11	13	I/G= 6	31	I/G= 7	29	I/G= 6	21
I/G= 7	21	I/G= 6	25	I/G= 7	12	I/G= 6	26

Date: APR, 2026 **Junction:** J6 Tai Chung Kiu Road / Sha Tin Wai Road / Shatin Rural Committ

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

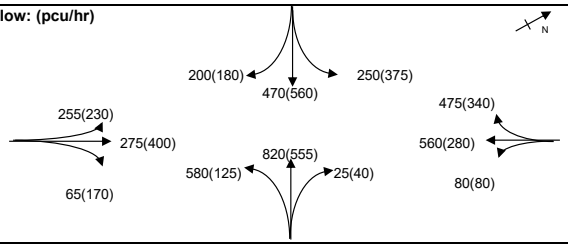
Junction: J6 - Tai Chung Kiu Road / Sha Tin Wai Road / Shatin Rural Committee Road Design Year: 2033

Description: 2033 - Design Flow (Scenario 1) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Tin Wai Road		E	1,2	3.200	18					1950	1950	580	0.297	0.297	125	0.064	
NB		B	2	3.200						2075	2075	398	0.192		281	0.135	0.135
		B	2	3.200		17		6%	13%	2335	2320	447	0.191		314	0.135	
Tai Chung Kiu Road		H	1,4	3.000	12					1700	1700	255	0.150		230	0.135	
EB		A	1	3.000						2055	2055	138	0.067		200	0.097	0.097
		A	1	3.000						2055	2055	137	0.067		200	0.097	
		A	1	3.000		17				2110	2110	65	0.031		170	0.081	
Sha Tin Rural		G	3,4	2.900	12					1695	1695	250	0.147		375	0.221	
Committee Road		D	4	2.900						2045	2045	235	0.115	0.115	280	0.137	0.137
SB		D	4	2.900		20		0%	0%	2045	2045	235	0.115		280	0.137	
		D	4	2.900		18				1890	1890	200	0.106		180	0.095	
Tai Chung Kiu Road		F	2,3	3.300	12					1730	1730	80	0.046		80	0.046	
WB		C	3	3.000						2055	2055	280	0.136	0.136	140	0.068	
		C	3	3.000						2055	2055	280	0.136		140	0.068	
		C	3	3.000		14				1855	1855	239	0.129		171	0.092	
		C	3	3.000		12				1825	1825	236	0.129		169	0.093	0.093

Notes:

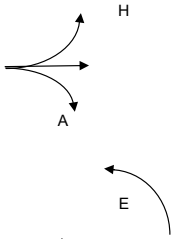
Flow: (pcu/hr)



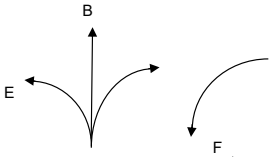
Group	A,B,C,D	E,C,D	Group	H,B,C	A,B,C,D
y	0.510	0.549	y	0.363	0.462
L (sec)	22	21	L (sec)	20	22
C (sec)	120	120	C (sec)	110	110
y pract.	0.735	0.743	y pract.	0.736	0.720
R.C. (%)	44%	35%	R.C. (%)	103%	56%

Stage / Phase Diagrams

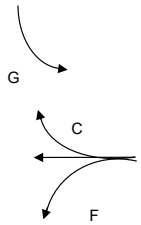
1.



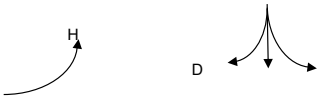
2.



3.



4.



I/G= 11	13	I/G= 6	31	I/G= 7	29	I/G= 6	21
I/G= 7	21	I/G= 6	25	I/G= 7	12	I/G= 6	26

Date: APR, 2026 **Junction:** J6 Tai Chung Kiu Road / Sha Tin Wai Road / Shatin Rural Committ

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

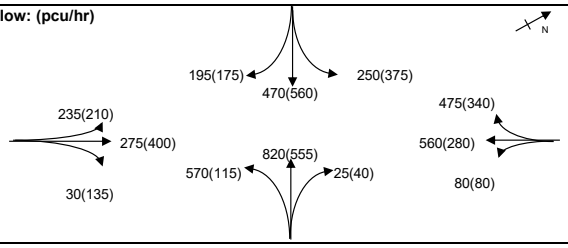
Junction: J6 - Tai Chung Kiu Road / Sha Tin Wai Road / Shatin Rural Committee Road Design Year: 2033

Description: 2033 - Design Flow (Scenario 2) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Tin Wai Road	↰	E	1,2	3.200	18					1950	1950	570	0.292	0.292	115	0.059	
NB	↑	B	2	3.200						2075	2075	398	0.192		281	0.135	0.135
	↑	B	2	3.200		17		6%	13%	2335	2320	447	0.191		314	0.135	
Tai Chung Kiu Road	↗	H	1,4	3.000	12					1700	1700	235	0.138		210	0.124	
EB	→	A	1	3.000						2055	2055	138	0.067		200	0.097	0.097
	→	A	1	3.000						2055	2055	137	0.067		200	0.097	
	↘	A	1	3.000		17				2110	2110	30	0.014		135	0.064	
Sha Tin Rural	↳	G	3,4	2.900	12					1695	1695	250	0.147		375	0.221	
Committee Road	↓	D	4	2.900						2045	2045	235	0.115	0.115	280	0.137	0.137
SB	↙	D	4	2.900		20		0%	0%	2045	2045	235	0.115		280	0.137	
	↲	D	4	2.900		18				1890	1890	195	0.103		175	0.093	
Tai Chung Kiu Road	↰	F	2,3	3.300	12					1730	1730	80	0.046		80	0.046	
WB	←	C	3	3.000						2055	2055	280	0.136	0.136	140	0.068	
	←	C	3	3.000						2055	2055	280	0.136		140	0.068	
	↰	C	3	3.000		14				1855	1855	239	0.129		171	0.092	
	↰	C	3	3.000		12				1825	1825	236	0.129		169	0.093	0.093

Notes:

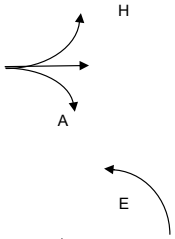
Flow: (pcu/hr)



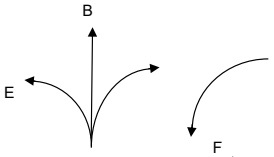
Group	A,B,C,D	E,C,D	Group	H,B,C	A,B,C,D
y	0.510	0.543	y	0.352	0.462
L (sec)	22	21	L (sec)	20	22
C (sec)	120	120	C (sec)	110	110
y pract.	0.735	0.743	y pract.	0.736	0.720
R.C. (%)	44%	37%	R.C. (%)	109%	56%

Stage / Phase Diagrams

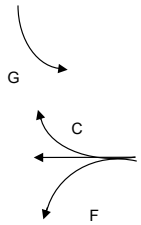
1.



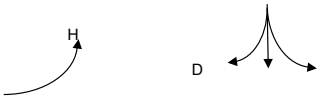
2.



3.



4.



I/G= 11	13	I/G= 6	31	I/G= 7	29	I/G= 6	21
I/G= 7	21	I/G= 6	25	I/G= 7	12	I/G= 6	26

Date: APR, 2026 **Junction:** J6 Tai Chung Kiu Road / Sha Tin Wai Road / Shatin Rural Committ

DESIGN SHEET - PRIORITY JUNCTION CAPACITY

Job No.: CHK50834010 **MVA ASIA LIMITED**

Junction: Sha Kok Street / Jat Min Chuen Street — Design Year: 2025

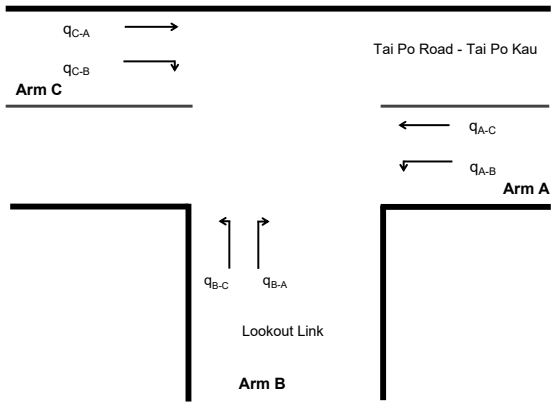
Description: 2025 - Observed Flow — Designed By: DKH — Checked By: CCN

Approach Arms

Arm A : Sha Kok Street

Arm B : Jat Min Chuen Street

Arm C : Sha Kok Street



Design Flow

		AM Peak	PM Peak
q_{A-C}	=	225	225
q_{A-B}	=	220	185
q_{B-A}	=	175	75
q_{B-C}	=	30	15
q_{C-A}	=	520	330
q_{C-B}	=	75	50

Geometric Configurations

W =	major road width	=	9.2
W_{CR} =	central reserve width	=	0
W_{B-A} =	lane width available to vehicle waiting in stream B-A	=	6
W_{B-C} =	lane width available to vehicle waiting in stream B-C	=	6
W_{C-B} =	lane width available to vehicle waiting in stream C-B	=	3.5
V_{rB-A} =	visibility to the right for vehicles waiting in stream B-A	=	100
V_{rB-C} =	visibility to the right for vehicles waiting in stream B-C	=	100
V_{rC-B} =	visibility to the right for vehicles waiting in stream C-B	=	100
V_{lB-A} =	visibility to the left for vehicles waiting in stream B-A	=	100

Capacity Assessment

		AM Peak	PM Peak
$D = [1 + 0.094(w_{B-A} - 3.65)] [1 + 0.0009(V_{rB-A} - 120)] [1 + 0.0006(V_{lB-A} - 150)]$	=	1.163	
$E = [1 + 0.094(w_{B-C} - 3.65)] [1 + 0.0009(V_{rB-C} - 120)]$	=	1.199	
$F = [1 + 0.094(w_{C-B} - 3.65)] [1 + 0.0009(V_{rC-B} - 120)]$	=	0.968	
$Y = (1 - 0.0345W)$	=	0.683	
f = proportion of minor road traffic turning left	=	0.146	0.167
$Q_{B-A} = D [627 + 14W_{CR} - Y (0.364q_{A-C} + 0.144q_{A-B} + 0.229q_{C-A} + 0.52q_{C-B})]$	=	514	562
$RFC_{B-A} = q_{B-A}/Q_{B-A}$	=	0.341	0.133
$Q_{B-C} = E [745 - Y(0.364q_{A-C} + 0.144q_{A-B})]$	=	800	804
$RFC_{B-C} = q_{B-C}/Q_{B-C}$	=	0.037	0.019
$Q_{C-B} = F [745 - 0.364Y(q_{A-C} + q_{A-B})]$	=	614	623
$RFC_{C-B} = q_{C-B}/Q_{C-B}$	=	0.122	0.080
$Q_{B-AC} = (Q_{B-C})(Q_{B-A})/[(1-f)(Q_{B-C})+(f)(Q_{B-A})]$	=	542	592
$RFC_{B-AC} = (q_{B-A} + q_{B-C}) / Q_{B-AC}$	=	0.378	0.152

Results Summary

		AM	PM
RFC_{B-A}	=	**0.341**	**0.133**
RFC_{B-C}	=	**0.037**	**0.019**
RFC_{C-B}	=	**0.122**	**0.080**
RFC_{B-AC}	=	**0.378**	**0.152**

Sheet No.:	Date:	Junction:	J7
J1 - OBS	APR, 2026	Sha Kok Street / Jat Min Chuen Street	

DESIGN SHEET - PRIORITY JUNCTION CAPACITY

Job No.: CHK50834010 **MVA ASIA LIMITED**

Junction: Sha Kok Street / Jat Min Chuen Street — Design Year: 2033

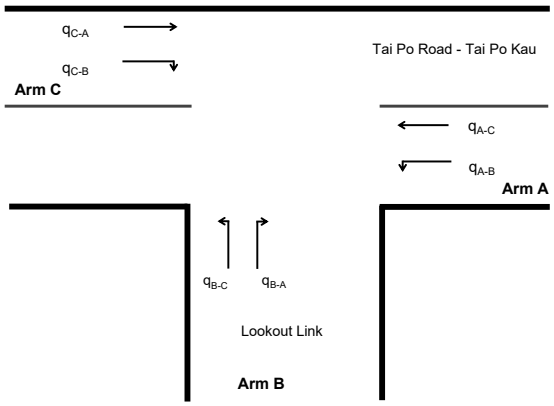
Description: 2033 - Refernce Flow — Designed By: DKH — Checked By: CCN

Approach Arms

Arm A : Sha Kok Street

Arm B : Jat Min Chuen Street

Arm C : Sha Kok Street



Design Flow

		AM Peak	PM Peak
q_{A-C}	=	245	245
q_{A-B}	=	200	180
q_{B-A}	=	295	110
q_{B-C}	=	35	20
q_{C-A}	=	565	355
q_{C-B}	=	80	55

Geometric Configurations

W =	major road width	=	9.2
W_{CR} =	central reserve width	=	0
W_{B-A} =	lane width available to vehicle waiting in stream B-A	=	6
W_{B-C} =	lane width available to vehicle waiting in stream B-C	=	6
W_{C-B} =	lane width available to vehicle waiting in stream C-B	=	3.5
V_{rB-A} =	visibility to the right for vehicles waiting in stream B-A	=	100
V_{rB-C} =	visibility to the right for vehicles waiting in stream B-C	=	100
V_{rC-B} =	visibility to the right for vehicles waiting in stream C-B	=	100
V_{lB-A} =	visibility to the left for vehicles waiting in stream B-A	=	100

Capacity Assessment

		AM Peak	PM Peak
$D = [1 + 0.094(w_{B-A} - 3.65)] [1 + 0.0009(V_{rB-A} - 120)] [1 + 0.0006(V_{lB-A} - 150)]$	=	1.163	
$E = [1 + 0.094(w_{B-C} - 3.65)] [1 + 0.0009(V_{rB-C} - 120)]$	=	1.199	
$F = [1 + 0.094(w_{C-B} - 3.65)] [1 + 0.0009(V_{rC-B} - 120)]$	=	0.968	
$Y = (1 - 0.0345W)$	=	0.683	
f = proportion of minor road traffic turning left	=	0.106	0.154
$Q_{B-A} = D [627 + 14W_{CR} - Y (0.364q_{A-C} + 0.144q_{A-B} + 0.229q_{C-A} + 0.52q_{C-B})]$	=	500	551
$RFC_{B-A} = q_{B-A}/Q_{B-A}$	=	0.590	0.200
$Q_{B-C} = E [745 - Y(0.364q_{A-C} + 0.144q_{A-B})]$	=	797	799
$RFC_{B-C} = q_{B-C}/Q_{B-C}$	=	0.044	0.025
$Q_{C-B} = F [745 - 0.364Y(q_{A-C} + q_{A-B})]$	=	614	619
$RFC_{C-B} = q_{C-B}/Q_{C-B}$	=	0.130	0.089
$Q_{B-AC} = (Q_{B-C})(Q_{B-A})/[(1-f)(Q_{B-C})+(f)(Q_{B-A})]$	=	520	578
$RFC_{B-AC} = (q_{B-A} + q_{B-C}) / Q_{B-AC}$	=	0.634	0.225

Results Summary

		AM	PM
RFC_{B-A}	=	**0.590**	**0.200**
RFC_{B-C}	=	**0.044**	**0.025**
RFC_{C-B}	=	**0.130**	**0.089**
RFC_{B-AC}	=	**0.634**	**0.225**

Sheet No.:	Date:	Junction:	J7
J1 - OBS	APR, 2026	Sha Kok Street / Jat Min Chuen Street	

DESIGN SHEET - PRIORITY JUNCTION CAPACITY

Job No.: CHK50834010 **MVA ASIA LIMITED**

Junction: Sha Kok Street / Jat Min Chuen Street — Design Year: 2033

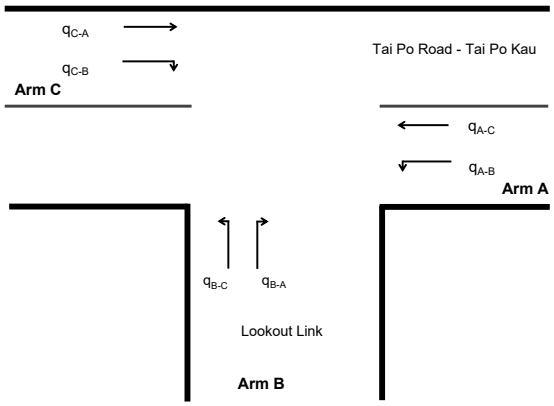
Description: 2033 - Design Flow (Scenario 1) — Designed By: DKH — Checked By: CCN

Approach Arms

Arm A : Sha Kok Street

Arm B : Jat Min Chuen Street

Arm C : Sha Kok Street



Design Flow

		AM Peak	PM Peak
q_{A-C}	=	245	245
q_{A-B}	=	200	180
q_{B-A}	=	295	110
q_{B-C}	=	35	20
q_{C-A}	=	565	355
q_{C-B}	=	80	55

Geometric Configurations

W =	major road width	=	9.2
W_{CR} =	central reserve width	=	0
W_{B-A} =	lane width available to vehicle waiting in stream B-A	=	6
W_{B-C} =	lane width available to vehicle waiting in stream B-C	=	6
W_{C-B} =	lane width available to vehicle waiting in stream C-B	=	3.5
V_{rB-A} =	visibility to the right for vehicles waiting in stream B-A	=	100
V_{rB-C} =	visibility to the right for vehicles waiting in stream B-C	=	100
V_{rC-B} =	visibility to the right for vehicles waiting in stream C-B	=	100
V_{lB-A} =	visibility to the left for vehicles waiting in stream B-A	=	100

Capacity Assessment

		AM Peak	PM Peak
$D = [1 + 0.094(w_{B-A} - 3.65)] [1 + 0.0009(V_{rB-A} - 120)] [1 + 0.0006(V_{lB-A} - 150)]$	=	1.163	
$E = [1 + 0.094(w_{B-C} - 3.65)] [1 + 0.0009(V_{rB-C} - 120)]$	=	1.199	
$F = [1 + 0.094(w_{C-B} - 3.65)] [1 + 0.0009(V_{rC-B} - 120)]$	=	0.968	
$Y = (1 - 0.0345W)$	=	0.683	
f = proportion of minor road traffic turning left	=	0.106	0.154
$Q_{B-A} = D [627 + 14W_{CR} - Y (0.364q_{A-C} + 0.144q_{A-B} + 0.229q_{C-A} + 0.52q_{C-B})]$	=	500	551
$RFC_{B-A} = q_{B-A}/Q_{B-A}$	=	0.590	0.200
$Q_{B-C} = E [745 - Y(0.364q_{A-C} + 0.144q_{A-B})]$	=	797	799
$RFC_{B-C} = q_{B-C}/Q_{B-C}$	=	0.044	0.025
$Q_{C-B} = F [745 - 0.364Y(q_{A-C} + q_{A-B})]$	=	614	619
$RFC_{C-B} = q_{C-B}/Q_{C-B}$	=	0.130	0.089
$Q_{B-AC} = (Q_{B-C})(Q_{B-A})/[(1-f)(Q_{B-C})+(f)(Q_{B-A})]$	=	520	578
$RFC_{B-AC} = (q_{B-A} + q_{B-C}) / Q_{B-AC}$	=	0.634	0.225

Results Summary

		AM	PM
RFC_{B-A}	=	**0.590**	**0.200**
RFC_{B-C}	=	**0.044**	**0.025**
RFC_{C-B}	=	**0.130**	**0.089**
RFC_{B-AC}	=	**0.634**	**0.225**

Sheet No.:	Date:	Junction:	J7
J1 - OBS	APR, 2026	Sha Kok Street / Jat Min Chuen Street	

DESIGN SHEET - PRIORITY JUNCTION CAPACITY

Job No.: CHK50834010 **MVA ASIA LIMITED**

Junction: Sha Kok Street / Jat Min Chuen Street — Design Year: 2033

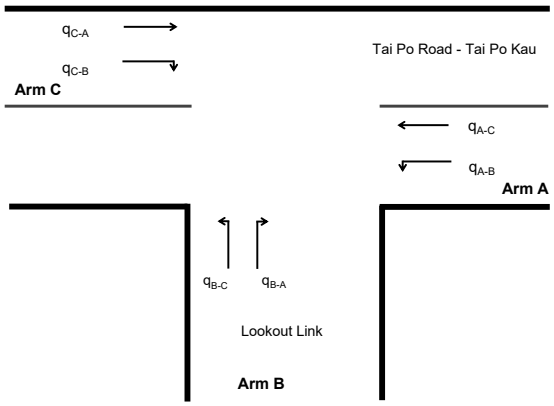
Description: 2033 - Design Flow (Scenario 2) — Designed By: DKH — Checked By: CCN

Approach Arms

Arm A : Sha Kok Street

Arm B : Jat Min Chuen Street

Arm C : Sha Kok Street



Design Flow

		AM Peak	PM Peak
q_{A-C}	=	250	250
q_{A-B}	=	200	180
q_{B-A}	=	295	110
q_{B-C}	=	35	20
q_{C-A}	=	585	375
q_{C-B}	=	80	55

Geometric Configurations

W =	major road width	=	9.2
W_{CR} =	central reserve width	=	0
W_{B-A} =	lane width available to vehicle waiting in stream B-A	=	6
W_{B-C} =	lane width available to vehicle waiting in stream B-C	=	6
W_{C-B} =	lane width available to vehicle waiting in stream C-B	=	3.5
V_{rB-A} =	visibility to the right for vehicles waiting in stream B-A	=	100
V_{rB-C} =	visibility to the right for vehicles waiting in stream B-C	=	100
V_{rC-B} =	visibility to the right for vehicles waiting in stream C-B	=	100
V_{lB-A} =	visibility to the left for vehicles waiting in stream B-A	=	100

Capacity Assessment

		AM Peak	PM Peak
$D = [1 + 0.094(w_{B-A} - 3.65)] [1 + 0.0009(V_{rB-A} - 120)] [1 + 0.0006(V_{lB-A} - 150)]$	=	1.163	
$E = [1 + 0.094(w_{B-C} - 3.65)] [1 + 0.0009(V_{rB-C} - 120)]$	=	1.199	
$F = [1 + 0.094(w_{C-B} - 3.65)] [1 + 0.0009(V_{rC-B} - 120)]$	=	0.968	
$Y = (1 - 0.0345W)$	=	0.683	
f = proportion of minor road traffic turning left	=	0.106	0.154
$Q_{B-A} = D [627 + 14W_{CR} - Y (0.364q_{A-C} + 0.144q_{A-B} + 0.229q_{C-A} + 0.52q_{C-B})]$	=	495	545
$RFC_{B-A} = q_{B-A}/Q_{B-A}$	=	0.596	0.202
$Q_{B-C} = E [745 - Y(0.364q_{A-C} + 0.144q_{A-B})]$	=	795	798
$RFC_{B-C} = q_{B-C}/Q_{B-C}$	=	0.044	0.025
$Q_{C-B} = F [745 - 0.364Y(q_{A-C} + q_{A-B})]$	=	613	618
$RFC_{C-B} = q_{C-B}/Q_{C-B}$	=	0.131	0.089
$Q_{B-AC} = (Q_{B-C})(Q_{B-A})/[(1-f)(Q_{B-C})+(f)(Q_{B-A})]$	=	515	573
$RFC_{B-AC} = (q_{B-A} + q_{B-C}) / Q_{B-AC}$	=	0.640	0.227

Results Summary

		AM	PM
RFC_{B-A}	=	**0.596**	**0.202**
RFC_{B-C}	=	**0.044**	**0.025**
RFC_{C-B}	=	**0.131**	**0.089**
RFC_{B-AC}	=	**0.640**	**0.227**

Sheet No.:	Date:	Junction:	J7
J1 - OBS	APR, 2026	Sha Kok Street / Jat Min Chuen Street	

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

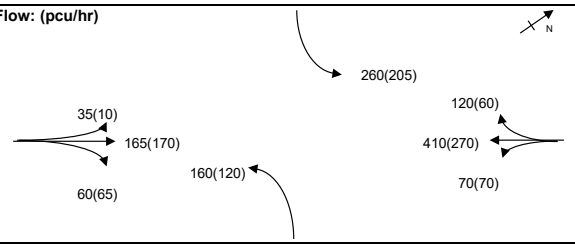
Junction: J8 - Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Hong Estate Design Year: 2025

Description: 2025 - Observed Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street WB		A	1	3.300	13	22		24% / 39%	37% / 29%	1890 / 2030	1865 / 2045	289 / 311	0.153 / 0.153	0.153	191 / 209	0.102 / 0.102	
Jat Min Chuen Street SB		A	1	3.300	13					1745	1745	260	0.149		205	0.117	0.117
Sha Kok Street EB		B	2	3.300	13	22		28% / 44%	8% / 52%	1885 / 2025	1925 / 2015	125 / 135	0.066 / 0.067		120 / 125	0.062 / 0.062	
Access Road NB		B	2	3.300	13					1745	1745	160	0.092	0.092	120	0.069	0.069
Pedestrian Crossing		Cp	3	MIN GREEN + FLASH =			9	+	8	=	17			*			*

Notes:

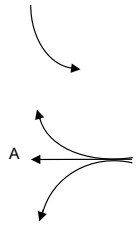
Flow: (pcu/hr)



Group	A,B,Cp	A,B,Cp	Group	A,B,Cp	A,B,Cp
y	0.245	0.245	y	0.186	0.186
L (sec)	15	35	L (sec)	15	35
C (sec)	120	120	C (sec)	120	120
y pract.	0.788	0.638	y pract.	0.788	0.638
R.C. (%)	222%	160%	R.C. (%)	323%	242%

Stage / Phase Diagrams

1.



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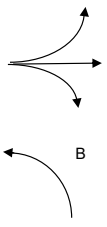

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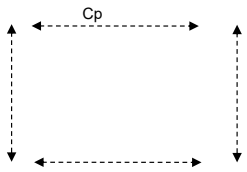


I/G= 3	52	I/G= 7	31	I/G= 10	17
I/G= 3	53	I/G= 7	30	I/G= 10	17

Date: APR, 2026 **Junction:** J8 Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Ho

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

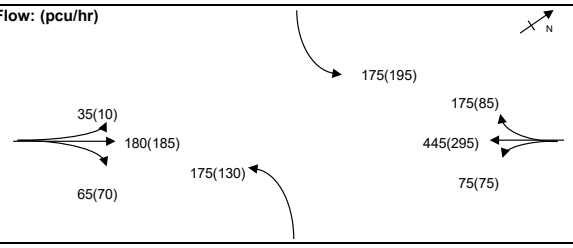
Junction: J8 - Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Hong Estate Design Year: 2033

Description: 2033 - Reference Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street WB		A	1	3.300	13	22		22%	34%	1895	1870	337	0.178	0.178	218	0.117	0.117
		A	1	3.300		22		49%	36%	2020	2035	358	0.177		237	0.116	
Jat Min Chuen Street SB		A	1	3.300	13					1745	1745	175	0.100		195	0.112	
Sha Kok Street EB		B	2	3.300	13	22		26%	8%	1890	1930	135	0.071		130	0.067	
		B	2	3.300		22		45%	52%	2025	2015	145	0.072		135	0.067	
Access Road NB		B	2	3.300	13					1745	1745	175	0.100	0.100	130	0.074	0.074
Pedestrian Crossing		Cp	3	MIN GREEN + FLASH =			9	+	8	=	17			*			*

Notes:

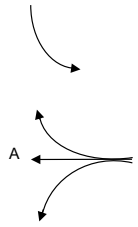
Flow: (pcu/hr)



Group	A,B,Cp	A,B,Cp	Group	A,B,Cp	A,B,Cp
y	0.278	0.278	y	0.191	0.191
L (sec)	15	35	L (sec)	15	35
C (sec)	120	120	C (sec)	120	120
y pract.	0.788	0.638	y pract.	0.788	0.638
R.C. (%)	183%	129%	R.C. (%)	312%	234%

Stage / Phase Diagrams

1.



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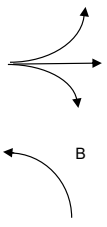

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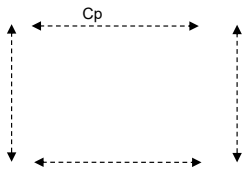


I/G= 3	52	I/G= 7	31	I/G= 10	17
I/G= 3	53	I/G= 7	30	I/G= 10	17

Date: APR, 2026 **Junction:** J8 Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Ho

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

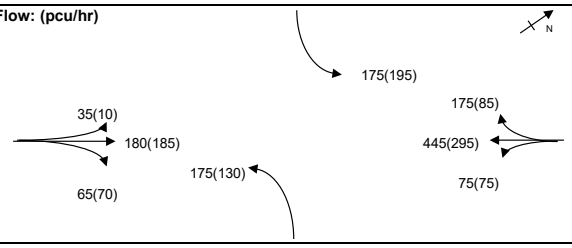
Junction: J8 - Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Hong Estate Design Year: 2033

Description: 2033 - Design Flow (Scenario 1) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street WB		A	1	3.300	13	22		22%	34%	1895	1870	337	0.178	0.178	218	0.117	0.117
		A	1	3.300		22		49%	36%	2020	2035	358	0.177		237	0.116	
Jat Min Chuen Street SB		A	1	3.300	13					1745	1745	175	0.100		195	0.112	
Sha Kok Street EB		B	2	3.300	13			26%	8%	1890	1930	135	0.071		130	0.067	
		B	2	3.300		22		45%	52%	2025	2015	145	0.072		135	0.067	
Access Road NB		B	2	3.300	13					1745	1745	175	0.100	0.100	130	0.074	0.074
Pedestrian Crossing		Cp	3	MIN GREEN + FLASH =			9	+	8	=	17			*			*

Notes:

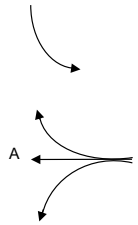
Flow: (pcu/hr)



Group	A,B,Cp	A,B,Cp	Group	A,B,Cp	A,B,Cp
y	0.278	0.278	y	0.191	0.191
L (sec)	15	35	L (sec)	15	35
C (sec)	120	120	C (sec)	120	120
y pract.	0.788	0.638	y pract.	0.788	0.638
R.C. (%)	183%	129%	R.C. (%)	312%	234%

Stage / Phase Diagrams

1.



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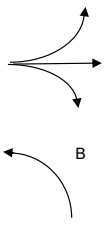

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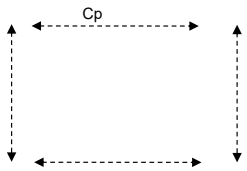


I/G= 3	52	I/G= 7	31	I/G= 10	17
I/G= 3	53	I/G= 7	30	I/G= 10	17

Date: APR, 2026 **Junction:** J8 Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Ho

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

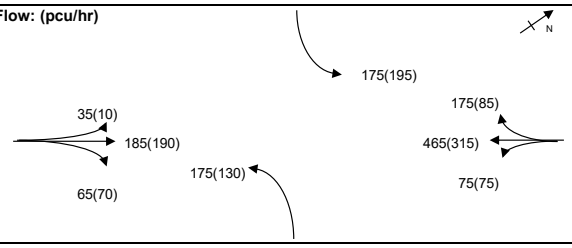
Junction: J8 - Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Hong Estate Design Year: 2033

Description: 2033 - Design Flow (Scenario 2) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street WB		A	1	3.300	13	22		22% / 47%	33% / 34%	1900 / 2020	1875 / 2035	346 / 369	0.182 / 0.183	0.183	228 / 247	0.122 / 0.121	0.122
Jat Min Chuen Street SB		A	1	3.300	13					1745	1745	175	0.100		195	0.112	
Sha Kok Street EB		B	2	3.300	13	22		25% / 44%	8% / 51%	1890 / 2025	1930 / 2015	138 / 147	0.073 / 0.073		132 / 138	0.068 / 0.068	
Access Road NB		B	2	3.300	13					1745	1745	175	0.100	0.100	130	0.074	0.074
Pedestrian Crossing		Cp	3	MIN GREEN + FLASH =			9	+	8	=	17			*			*

Notes:

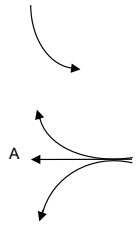
Flow: (pcu/hr)



Group	A,B,Cp	A,B,Cp	Group	A,B,Cp	A,B,Cp
y	0.283	0.283	y	0.196	0.196
L (sec)	15	35	L (sec)	15	35
C (sec)	120	120	C (sec)	120	120
y pract.	0.788	0.638	y pract.	0.788	0.638
R.C. (%)	178%	125%	R.C. (%)	302%	225%

Stage / Phase Diagrams

1.



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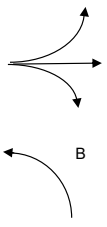

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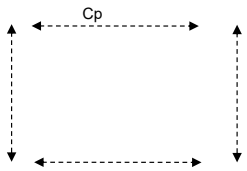


I/G= 3	52	I/G= 7	31	I/G= 10	17
I/G= 3	53	I/G= 7	30	I/G= 10	17

Date: APR, 2026 **Junction:** J8 Sha Kok Street / Jat Min Chuen Street / Access Road to Pok Ho

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

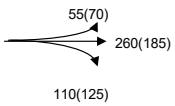
Junction: J9 - Sha Kok Street / Jat Tai Street Design Year: 2025

Description: 2025 - Observed Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		A	1	3.300	13			48%	54%	1845	1830	428	0.232		344	0.188	0.188
WB		A	1	3.300		22		22%	39%	2055	2030	477	0.232	0.232	381	0.188	
Sha Kok Street		B	2	3.300	13			27%	38%	1885	1865	205	0.109		183	0.098	
EB		B	2	3.300		22		50%	63%	2015	2000	220	0.109	0.109	197	0.099	0.099
Pedestrian Crossing		Cp	3	MIN GREEN + FLASH =			10	+	9	=	19						
		Dp	3	MIN GREEN + FLASH =			6	+	11	=	17						
		Ep	3	MIN GREEN + FLASH =			10	+	9	=	19						
		Fp	3	MIN GREEN + FLASH =			5	+	10	=	15						
		Gp	3	MIN GREEN + FLASH =			10	+	19	=	29						
		Hp	3	MIN GREEN + FLASH =			10	+	19	=	29			*			*

Notes:

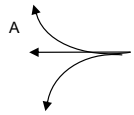
Flow: (pcu/hr)



Group	A,B,Cp	A,B,Hp	Group	A,B,Cp	A,B,Hp
y	0.341	0.341	y	0.286	0.286
L (sec)	35	45	L (sec)	35	45
C (sec)	120	120	C (sec)	120	120
y pract.	0.638	0.563	y pract.	0.638	0.563
R.C. (%)	87%	65%	R.C. (%)	123%	96%

Stage / Phase Diagrams

1.



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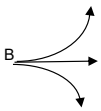

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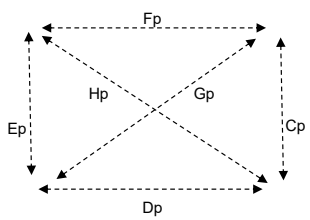


I/G= 3	57	I/G= 6	26	I/G= 9	29
I/G= 3	55	I/G= 6	28	I/G= 9	29

Date: APR, 2026 **Junction:** J9 Sha Kok Street / Jat Tai Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

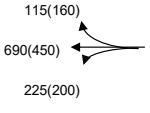
Junction: J9 - Sha Kok Street / Jat Tai Street — Design Year: 2033

Description: 2033 - Reference Flow — Designed By: DKH — Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		A	1	3.300	13			46%	52%	1845	1835	487	0.264		384	0.209	
WB		A	1	3.300		22		21%	38%	2055	2035	543	0.264	0.264	426	0.209	0.209
Sha Kok Street		B	2	3.300	13			35%	40%	1870	1860	172	0.092	0.092	186	0.100	0.100
EB		B	2	3.300		22		66%	68%	1995	1995	183	0.092		199	0.100	
Pedestrian Crossing		Cp	3	MIN GREEN + FLASH =			10	+	9	=	19						
		Dp	3	MIN GREEN + FLASH =			6	+	11	=	17						
		Ep	3	MIN GREEN + FLASH =			10	+	9	=	19						
		Fp	3	MIN GREEN + FLASH =			5	+	10	=	15						
		Gp	3	MIN GREEN + FLASH =			10	+	19	=	29						
		Hp	3	MIN GREEN + FLASH =			10	+	19	=	29			*			*

Notes:

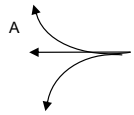
Flow: (pcu/hr)



Group	A,B,Cp	A,B,Hp	Group	A,B,Cp	A,B,Hp
y	0.356	0.356	y	0.309	0.309
L (sec)	35	45	L (sec)	35	45
C (sec)	120	120	C (sec)	120	120
y pract.	0.638	0.563	y pract.	0.638	0.563
R.C. (%)	79%	58%	R.C. (%)	106%	82%

Stage / Phase Diagrams

1.



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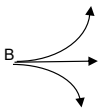

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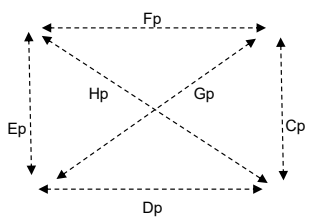


I/G= 3	57	I/G= 6	26	I/G= 9	29
I/G= 3	55	I/G= 6	28	I/G= 9	29

Date: APR, 2026 — **Junction:** J9 Sha Kok Street / Jat Tai Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

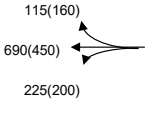
Junction: J9 - Sha Kok Street / Jat Tai Street Design Year: 2033

Description: 2033 - Design Flow (Scenario 1) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		A	1	3.300	13			46%	52%	1845	1835	487	0.264		384	0.209	
WB		A	1	3.300		22		21%	38%	2055	2035	543	0.264	0.264	426	0.209	0.209
Sha Kok Street		B	2	3.300	13			35%	40%	1870	1860	172	0.092	0.092	186	0.100	0.100
EB		B	2	3.300		22		66%	68%	1995	1995	183	0.092		199	0.100	
Pedestrian Crossing		Cp	3	MIN GREEN + FLASH =			10	+	9	=	19						
		Dp	3	MIN GREEN + FLASH =			6	+	11	=	17						
		Ep	3	MIN GREEN + FLASH =			10	+	9	=	19						
		Fp	3	MIN GREEN + FLASH =			5	+	10	=	15						
		Gp	3	MIN GREEN + FLASH =			10	+	19	=	29						
		Hp	3	MIN GREEN + FLASH =			10	+	19	=	29			*			*

Notes:

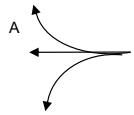
Flow: (pcu/hr)



Group	A,B,Cp	A,B,Hp	Group	A,B,Cp	A,B,Hp
y	0.356	0.356	y	0.309	0.309
L (sec)	35	45	L (sec)	35	45
C (sec)	120	120	C (sec)	120	120
y pract.	0.638	0.563	y pract.	0.638	0.563
R.C. (%)	79%	58%	R.C. (%)	106%	82%

Stage / Phase Diagrams

1.



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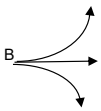
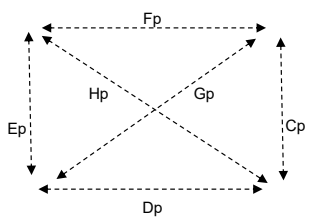


3.



I/G= 3	57	I/G= 6	26	I/G= 9	29
I/G= 3	55	I/G= 6	28	I/G= 9	29

Date: APR, 2026 **Junction:** J9 Sha Kok Street / Jat Tai Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

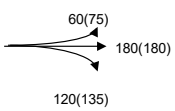
Junction: J9 - Sha Kok Street / Jat Tai Street Design Year: 2033

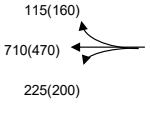
Description: 2033 - Design Flow (Scenario 2) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		A	1	3.300	13			45%	51%	1850	1835	497	0.269		394	0.215	0.215
WB		A	1	3.300		22		21%	37%	2055	2035	553	0.269	0.269	436	0.214	
Sha Kok Street		B	2	3.300	13			34%	40%	1870	1860	174	0.093		188	0.101	
EB		B	2	3.300		22		65%	67%	1995	1995	186	0.093	0.093	202	0.101	0.101
Pedestrian Crossing		Cp	3	MIN GREEN + FLASH =			10	+	9	=	19						
		Dp	3	MIN GREEN + FLASH =			6	+	11	=	17						
		Ep	3	MIN GREEN + FLASH =			10	+	9	=	19						
		Fp	3	MIN GREEN + FLASH =			5	+	10	=	15						
		Gp	3	MIN GREEN + FLASH =			10	+	19	=	29						
		Hp	3	MIN GREEN + FLASH =			10	+	19	=	29			*			*

Notes:

Flow: (pcu/hr)

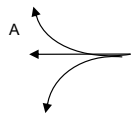




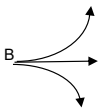
Group	A,B,Cp	A,B,Hp	Group	A,B,Cp	A,B,Hp
y	0.362	0.362	y	0.316	0.316
L (sec)	35	45	L (sec)	35	45
C (sec)	120	120	C (sec)	120	120
y pract.	0.638	0.563	y pract.	0.638	0.563
R.C. (%)	76%	55%	R.C. (%)	102%	78%

Stage / Phase Diagrams

1.



2.



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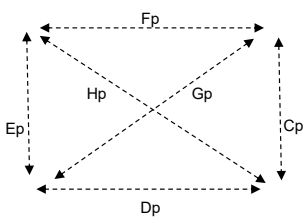


I/G= 3	57	I/G= 6	26	I/G= 9	29
I/G= 3	55	I/G= 6	28	I/G= 9	29

Date: APR, 2026 **Junction:** J9 Sha Kok Street / Jat Tai Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

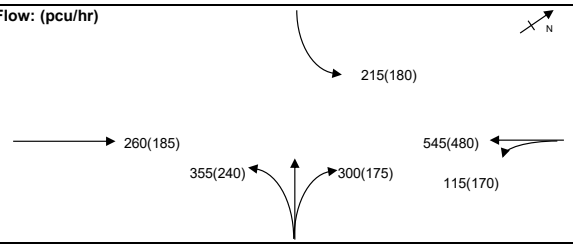
Junction: J10 - Sha Kok Street / Shui Chuen Au Street Design Year: 2025

Description: 2025 - Observed Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street	→	A	1	3.300						1945	1945	125	0.064		89	0.046	
EB	→	A	1	3.300						2085	2085	135	0.065		96	0.046	
Sha Kok Street	↖↑	A	1	3.300	15			37%	56%	1875	1840	313	0.167	0.167	305	0.166	0.166
WB	←	A	1	3.300						2085	2085	347	0.166		345	0.165	
Shui Chuen Au Street	↰	B	2	3.300	15					1770	1770	355	0.201	0.201	240	0.136	0.136
NB	↱	B	2	3.300		22				1950	1950	300	0.154		175	0.090	
Access Road SB	↳	C	3	3.500	15					1785	1785	103	0.058		86	0.048	
	↳	C	3	3.500	18					1945	1945	112	0.058		94	0.048	
Pedestrian Crossing		Dp	3	MIN GREEN + FLASH =			5	+	11	=	16			*			*
		Ep	1,2	MIN GREEN + FLASH =			6	+	15	=	21						

Notes:

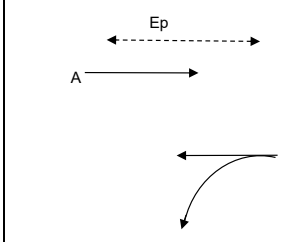
Flow: (pcu/hr)



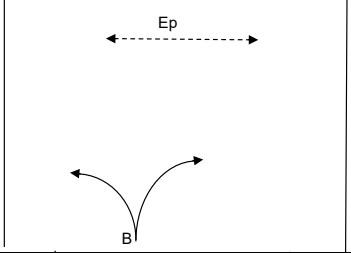
Group		A,B,Dp	Group		A,B,Dp
y		0.367	y		0.301
L (sec)		31	L (sec)		31
C (sec)		120	C (sec)		120
y pract.		0.668	y pract.		0.668
R.C. (%)		82%	R.C. (%)		122%

Stage / Phase Diagrams

1.



2.



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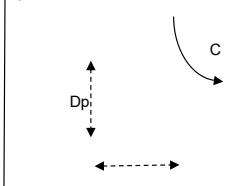


I/G= 3	39	I/G= 7	48	I/G= 7	16
I/G= 3	48	I/G= 7	39	I/G= 7	16

Date: APR, 2026 **Junction:** J10 Sha Kok Street / Shui Chuen Au Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

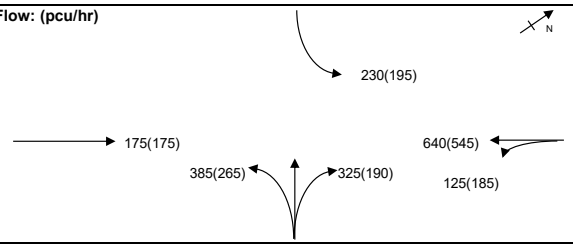
Junction: J10 - Sha Kok Street / Shui Chuen Au Street Design Year: 2033

Description: 2033 - Reference Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street	→	A	1	3.300						1945	1945	84	0.043		84	0.043	
EB	→	A	1	3.300						2085	2085	91	0.044		91	0.044	
Sha Kok Street	↖↑	A	1	3.300	15			34%	54%	1880	1845	363	0.193	0.193	343	0.186	0.186
WB	←	A	1	3.300						2085	2085	402	0.193		387	0.186	
Shui Chuen Au Street	↰	B	2	3.300	15					1770	1770	385	0.218	0.218	265	0.150	0.150
NB	↱	B	2	3.300		22				1950	1950	325	0.167		190	0.097	
Access Road SB	↳	C	3	3.500	15					1785	1785	110	0.062		93	0.052	
	↳	C	3	3.500	18					1945	1945	120	0.062		102	0.052	
Pedestrian Crossing		Dp	3	MIN GREEN + FLASH =			5	+	11	=	16			*			*
		Ep	1,2	MIN GREEN + FLASH =			6	+	15	=	21						

Notes:

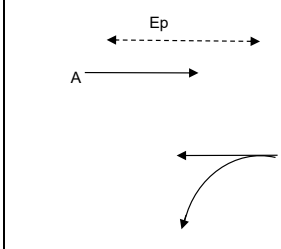
Flow: (pcu/hr)



Group		A,B,Dp	Group		A,B,Dp
y		0.411	y		0.336
L (sec)		31	L (sec)		31
C (sec)		120	C (sec)		120
y pract.		0.668	y pract.		0.668
R.C. (%)		63%	R.C. (%)		99%

Stage / Phase Diagrams

1.



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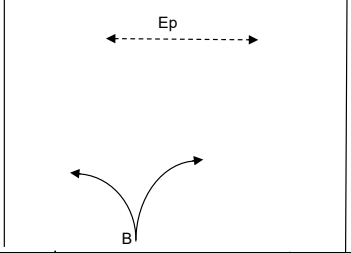

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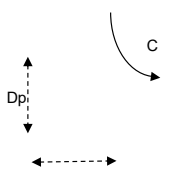


I/G= 3	39	I/G= 7	48	I/G= 7	16
I/G= 3	48	I/G= 7	39	I/G= 7	16

Date: APR, 2026 **Junction:** J10 Sha Kok Street / Shui Chuen Au Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

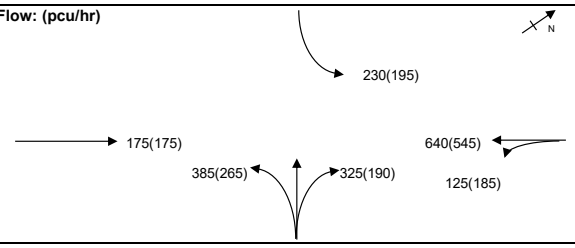
Junction: J10 - Sha Kok Street / Shui Chuen Au Street Design Year: 2033

Description: 2033 - Design Flow (Scenario 1) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street	→	A	1	3.300						1945	1945	84	0.043		84	0.043	
EB	→	A	1	3.300						2085	2085	91	0.044		91	0.044	
Sha Kok Street	↰↑	A	1	3.300	15			34%	54%	1880	1845	363	0.193	0.193	343	0.186	0.186
WB	←	A	1	3.300						2085	2085	402	0.193		387	0.186	
Shui Chuen Au Street	↰	B	2	3.300	15					1770	1770	385	0.218	0.218	265	0.150	0.150
NB	↱	B	2	3.300		22				1950	1950	325	0.167		190	0.097	
Access Road SB	↳	C	3	3.500	15					1785	1785	110	0.062		93	0.052	
	↳	C	3	3.500	18					1945	1945	120	0.062		102	0.052	
Pedestrian Crossing		Dp	3	MIN GREEN + FLASH =			5	+	11	=	16			*			*
		Ep	1,2	MIN GREEN + FLASH =			6	+	15	=	21						

Notes:

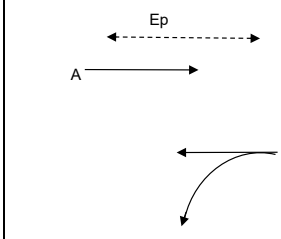
Flow: (pcu/hr)



Group		A,B,Dp	Group		A,B,Dp
y		0.411	y		0.336
L (sec)		31	L (sec)		31
C (sec)		120	C (sec)		120
y pract.		0.668	y pract.		0.668
R.C. (%)		63%	R.C. (%)		99%

Stage / Phase Diagrams

1.



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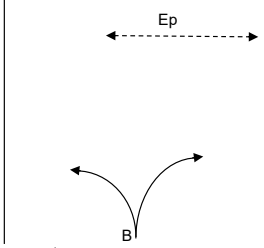

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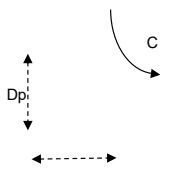


I/G= 3	39	I/G= 7	48	I/G= 7	16						
I/G= 3	48	I/G= 7	39	I/G= 7	16						

Date: APR, 2026 **Junction:** J10 Sha Kok Street / Shui Chuen Au Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

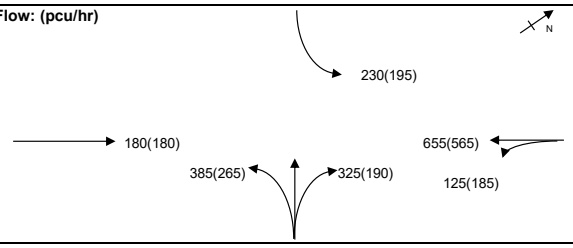
Junction: J10 - Sha Kok Street / Shui Chuen Au Street Design Year: 2033

Description: 2033 - Design Flow (Scenario 2) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street	→	A	1	3.300						1945	1945	87	0.045		87	0.045	
EB	→	A	1	3.300						2085	2085	93	0.045		93	0.045	
Sha Kok Street	↰↑	A	1	3.300	15			34%	53%	1880	1850	370	0.197	0.197	352	0.190	
WB	←	A	1	3.300						2085	2085	410	0.197		398	0.191	0.191
Shui Chuen Au Street	↰	B	2	3.300	15					1770	1770	385	0.218	0.218	265	0.150	0.150
NB	↱	B	2	3.300		22				1950	1950	325	0.167		190	0.097	
Access Road SB	↳	C	3	3.500	15					1785	1785	110	0.062		93	0.052	
	↳	C	3	3.500	18					1945	1945	120	0.062		102	0.052	
Pedestrian Crossing		Dp	3	MIN GREEN + FLASH =			5	+	11	=	16			*			*
		Ep	1,2	MIN GREEN + FLASH =			6	+	15	=	21						

Notes:

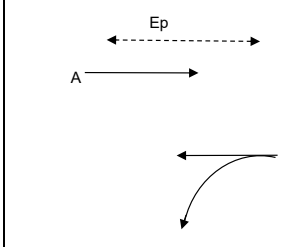
Flow: (pcu/hr)



Group		A,B,Dp	Group		A,B,Dp
y		0.414	y		0.341
L (sec)		31	L (sec)		31
C (sec)		120	C (sec)		120
y pract.		0.668	y pract.		0.668
R.C. (%)		61%	R.C. (%)		96%

Stage / Phase Diagrams

1.



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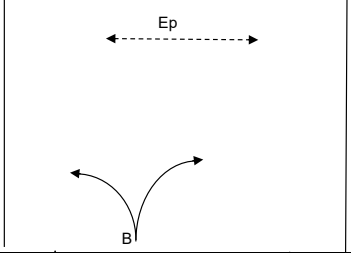
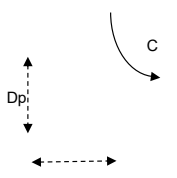


3.



I/G= 3	39	I/G= 7	48	I/G= 7	16
I/G= 3	48	I/G= 7	39	I/G= 7	16

Date: APR, 2026 **Junction:** J10 Sha Kok Street / Shui Chuen Au Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

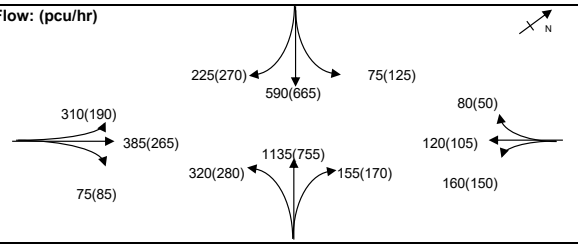
Junction: J11 - Sha Tin Wai Road / Sha Kok Street Design Year: 2025

Description: 2025 - Observed Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		E	4	3.380		15		0%	0%	1955	1955	385	0.197	0.197	265	0.136	0.136
EB		E	4	3.370		12				1860	1860	75	0.040		85	0.046	
Sha Tin Wai Road		A	1	3.500						1965	1965	200	0.102		230	0.117	
SB		A	1	3.500						2105	2105	214	0.102		246	0.117	
		A	1	3.500		15		17%	21%	2070	2060	211	0.102	0.102	240	0.117	
		A	1	3.500		12				1870	1870	190	0.102		219	0.117	0.117
Sha Tin Wai Road		C	2,3	3.000	45			70%	87%	1870	1860	455	0.243		323	0.174	
NB		B	2	3.000						2055	2055	500	0.243	0.243	356	0.173	0.173
		B	2	3.000		15		0%	0%	2055	2055	500	0.243		356	0.173	
		B	2	3.000		12				1825	1825	155	0.085		170	0.093	
Sha Kok Street		D	3	3.400	11			100%	100%	1720	1720	160	0.093	0.093	150	0.087	0.087
WB		D	3	3.300		15		0%	0%	2085	2085	120	0.058		105	0.050	
		D	3	3.300		13				1870	1870	80	0.043		50	0.027	
Pedestrian Crossing		Fp	1,4	MIN GREEN + FLASH =			5	+	5	=	10						
		Gp	2	MIN GREEN + FLASH =			12	+	10	=	22						

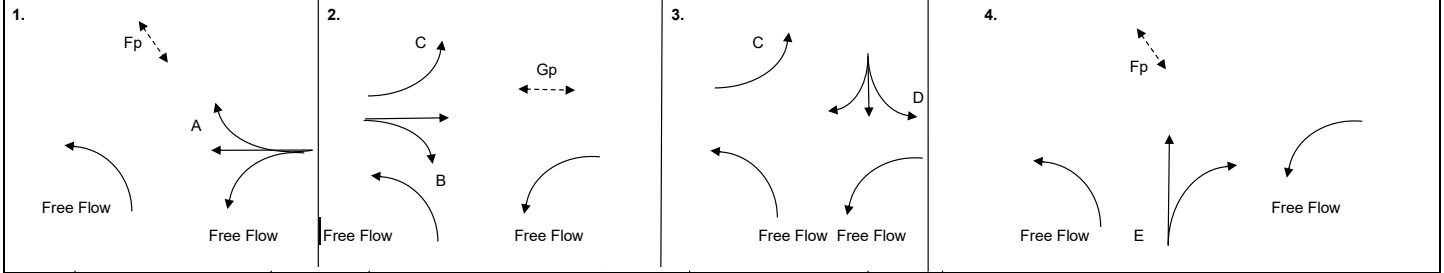
Notes:

Flow: (pcu/hr)



Group	A,C,E	A,B,D,E	Group	A,C,E	A,B,D,E
y	0.542	0.635	y	0.426	0.513
L (sec)	20	23	L (sec)	20	23
C (sec)	120	120	C (sec)	110	110
y pract.	0.750	0.728	y pract.	0.736	0.712
R.C. (%)	38%	15%	R.C. (%)	73%	39%

Stage / Phase Diagrams



I/G= 5	15	I/G= 8	36	I/G= 6	13	I/G= 8	29
I/G= 5	19	I/G= 8	28	I/G= 6	14	I/G= 8	22

Date: APR, 2026 **Junction:** J11 Sha Tin Wai Road / Sha Kok Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

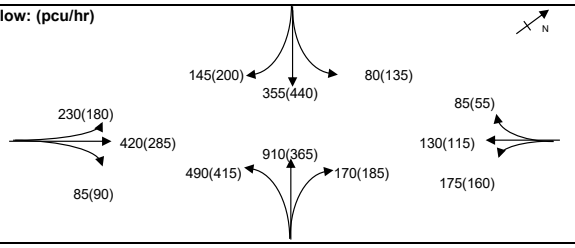
Junction: J11 - Sha Tin Wai Road / Sha Kok Street Design Year: 2033

Description: 2033 - Reference Flow Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		E	4	3.380		15		0%	0%	1955	1955	420	0.215	0.215	285	0.146	0.146
EB		E	4	3.370		12				1860	1860	85	0.046		90	0.048	
Sha Tin Wai Road		A	1	3.500						1965	1965	123	0.063		158	0.080	0.080
SB		A	1	3.500						2105	2105	131	0.062		168	0.080	
		A	1	3.500		15		22%	30%	2060	2045	129	0.063	0.063	164	0.080	
		A	1	3.500		12				1870	1870	117	0.063		150	0.080	
Sha Tin Wai Road		C	2,3	3.000	45			100%	100%	1855	1855	490	0.264		415	0.224	0.224
NB		B	2	3.000						2055	2055	455	0.221	0.221	191	0.093	
		B	2	3.000		15		0%	8%	2055	2040	455	0.221		189	0.093	
		B	2	3.000		12				1825	1825	170	0.093		170	0.093	
Sha Kok Street		D	3	3.400	11			100%	100%	1720	1720	175	0.102	0.102	160	0.093	
WB		D	3	3.300		15		0%	0%	2085	2085	130	0.062		115	0.055	
		D	3	3.300		13				1870	1870	85	0.045		55	0.029	
Pedestrian Crossing		Fp	1,4	MIN GREEN + FLASH =			5	+	5	=	10						
		Gp	2	MIN GREEN + FLASH =			12	+	10	=	22						

Notes:

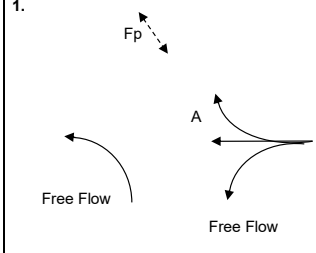
Flow: (pcu/hr)



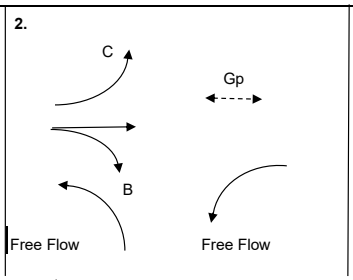
Group	A,C,E	A,B,D,E	Group	A,B,D,E	A,C,E
y	0.542	0.601	y	0.412	0.450
L (sec)	20	23	L (sec)	23	20
C (sec)	120	120	C (sec)	110	110
y pract.	0.750	0.728	y pract.	0.712	0.736
R.C. (%)	38%	21%	R.C. (%)	73%	64%

Stage / Phase Diagrams

1.



2.



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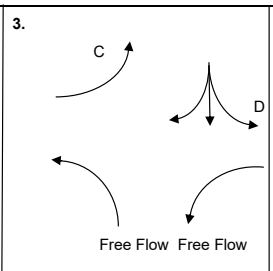
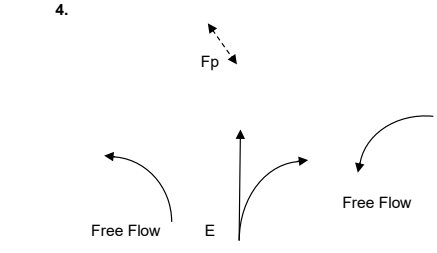


4.



I/G= 5	15	I/G= 8	36	I/G= 6	13	I/G= 8	29
I/G= 5	19	I/G= 10	28	I/G= 6	14	I/G= 8	22

Date: APR, 2026 **Junction:** J11 Sha Tin Wai Road / Sha Kok Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

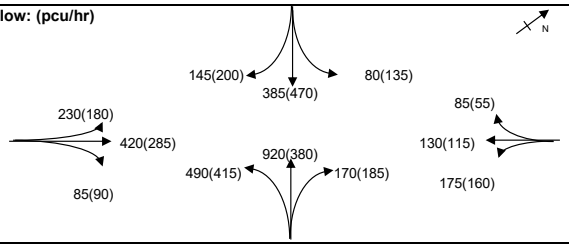
Junction: J11 - Sha Tin Wai Road / Sha Kok Street Design Year: 2033

Description: 2033 - Design Flow (Scenario 1) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		E	4	3.380		15		0%	0%	1955	1955	420	0.215	0.215	285	0.146	0.146
EB		E	4	3.370		12				1860	1860	85	0.046		90	0.048	
Sha Tin Wai Road		A	1	3.500						1965	1965	130	0.066		165	0.084	0.084
SB		A	1	3.500						2105	2105	139	0.066		176	0.084	
		A	1	3.500		15		15%	25%	2075	2055	137	0.066		172	0.084	
		A	1	3.500		12				1870	1870	124	0.066	0.066	157	0.084	
Sha Tin Wai Road		C	2,3	3.000	45			100%	100%	1855	1855	490	0.264		415	0.224	0.224
NB		B	2	3.000						2055	2055	460	0.224	0.224	196	0.095	
		B	2	3.000		15		0%	6%	2055	2045	460	0.224		195	0.095	
		B	2	3.000		12				1825	1825	170	0.093		174	0.095	
Sha Kok Street		D	3	3.400	11			100%	100%	1720	1720	175	0.102	0.102	160	0.093	
WB		D	3	3.300		15		0%	0%	2085	2085	130	0.062		115	0.055	
		D	3	3.300		13				1870	1870	85	0.045		55	0.029	
Pedestrian Crossing		Fp	1,4	MIN GREEN + FLASH =			5	+	5	=	10						
		Gp	2	MIN GREEN + FLASH =			12	+	10	=	22						

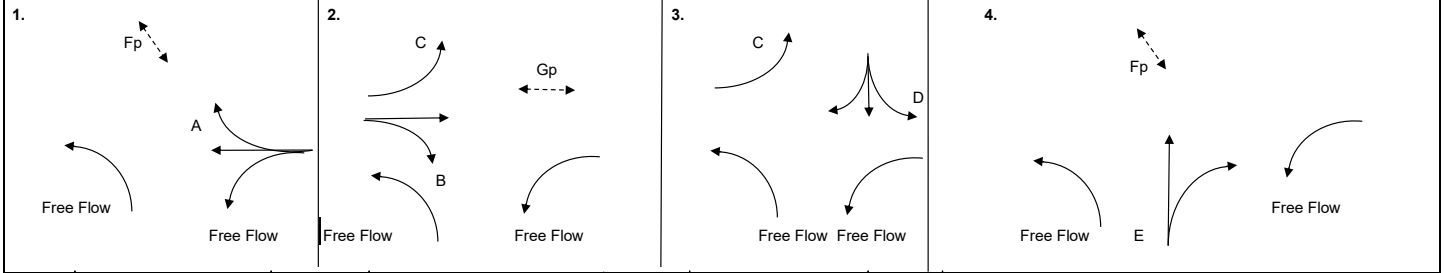
Notes:

Flow: (pcu/hr)



Group	A,C,E	A,B,D,E	Group	A,B,D,E	A,C,E
y	0.545	0.607	y	0.418	0.453
L (sec)	20	23	L (sec)	23	20
C (sec)	120	120	C (sec)	110	110
y pract.	0.750	0.728	y pract.	0.712	0.736
R.C. (%)	38%	20%	R.C. (%)	70%	62%

Stage / Phase Diagrams



I/G= 5	15	I/G= 8	36	I/G= 6	13	I/G= 8	29
I/G= 5	19	I/G= 10	28	I/G= 6	14	I/G= 8	22

Date: APR, 2026 **Junction:** J11 Sha Tin Wai Road / Sha Kok Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50834010 **MVA HONG KONG LIMITED**

Junction: J11 - Sha Tin Wai Road / Sha Kok Street Design Year: 2033

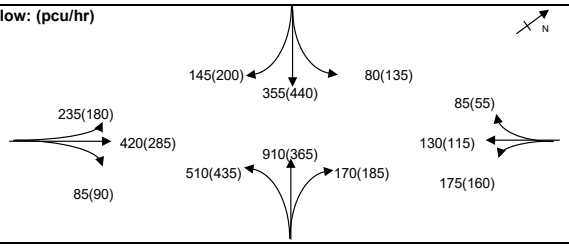
Description: 2033 - Design Flow (Scenario 2) Designed By: DKH Checked By: CCN

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sha Kok Street		E	4	3.380		15		0%	0%	1955	1955	420	0.215	0.215	285	0.146	0.146
EB		E	4	3.370		12				1860	1860	85	0.046		90	0.048	
Sha Tin Wai Road		A	1	3.500						1965	1965	123	0.063		158	0.080	0.080
SB		A	1	3.500						2105	2105	131	0.062		168	0.080	
		A	1	3.500		15		22%	30%	2060	2045	129	0.063	0.063	164	0.080	
		A	1	3.500		12				1870	1870	117	0.063		150	0.080	
Sha Tin Wai Road		C	2,3	3.000	45			100%	100%	1855	1855	510	0.275		435	0.235	0.235
NB		B	2	3.000						2055	2055	455	0.221	0.221	191	0.093	
		B	2	3.000		15		0%	8%	2055	2040	455	0.221		189	0.093	
		B	2	3.000		12				1825	1825	170	0.093		170	0.093	
Sha Kok Street		D	3	3.400	11			100%	100%	1720	1720	175	0.102	0.102	160	0.093	
WB		D	3	3.300		15		0%	0%	2085	2085	130	0.062		115	0.055	
		D	3	3.300		13				1870	1870	85	0.045		55	0.029	

Pedestrian Crossing	Fp	1,4	MIN GREEN + FLASH =	5	+	5	=	10	
	Gp	2	MIN GREEN + FLASH =	12	+	10	=	22	

Notes:

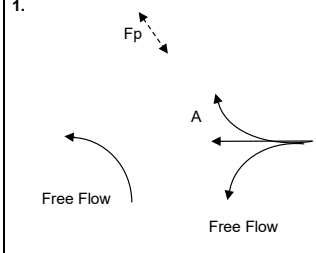
Flow: (pcu/hr)



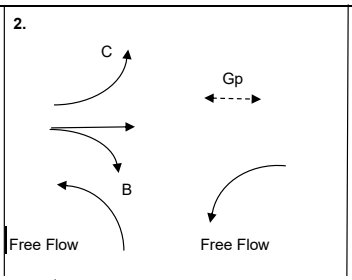
Group	A,C,E	A,B,D,E	Group	A,B,D,E	A,C,E
y	0.552	0.601	y	0.412	0.461
L (sec)	20	23	L (sec)	23	20
C (sec)	120	120	C (sec)	110	110
y pract.	0.750	0.728	y pract.	0.712	0.736
R.C. (%)	36%	21%	R.C. (%)	73%	60%

Stage / Phase Diagrams

1.



2.



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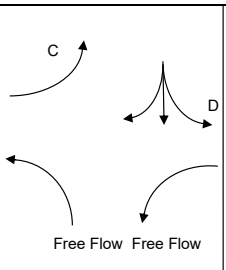

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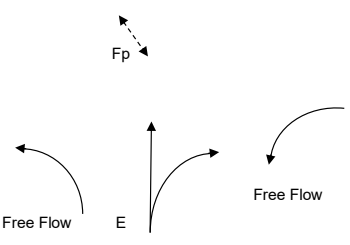

I/G= 5	15	I/G= 8	36	I/G= 6	13	I/G= 8	29
I/G= 5	19	I/G= 10	28	I/G= 6	14	I/G= 8	22

Date: APR, 2026 **Junction:** J11 Sha Tin Wai Road / Sha Kok Street