



Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

**Traffic Impact Assessment
Final Report
April 2026**

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1 INTRODUCTION

1.1 Background

- 1.1.1 Prajna Dhyana Temple is located at Shek Mun Kap, Tung Chung (hereafter referred as the “Application Site”). The Application Site is a religious institution with columbarium of a total of 872 nos. of niches at Lot No. 112, 113, 114, 116, 117 and 118 D.D.2.
- 1.1.2 The Applicant proposes a partial redevelopment of the existing religious institution, with proposed columbarium of a total nos. of 7,500 niches.
- 1.1.3 Ozzo Technology (HK) Limited has been commissioned to undertake a Traffic Impact Assessment (TIA) Study to assess the potential traffic impact on the road network in the vicinity.

1.2 Study Objectives

- 1.2.1 The objectives of the TIA study are as follows:
- To review the existing traffic situation of the surrounding road network during grave sweeping festival day;
 - To estimate the traffic generations/attractions to be induced by the Proposed Development during grave sweeping festival day;
 - To assess the future traffic situation of the surrounding road network during grave sweeping festival day;
 - To appraise the potential traffic impact of the Proposed Development on the surrounding road network during grave sweeping festival day;
 - To recommend traffic and crowd management and control plans to be implemented if necessary.

1.3 Report Structure

1.3.1 Following this introductory chapter, this report is arranged as follow:

- Chapter 2 summarizes the existing traffic condition in the vicinity of the Application Site during grave sweeping festival day;
- Chapter 3 describes the Proposed Development;
- Chapter 4 describes the proposed Crowd Management Plan to be implemented;
- Chapter 5 provides the forecast traffic to be generated by the Proposed Development;
- Chapter 6 describes the traffic impact assessment approach and reports the assessment results; and
- a summary of the findings and conclusion of this TIA study are given in Chapter 7.

2 EXISTING TRAFFIC SITUATION

2.1 Site Location and Study Area

2.1.1 The Application Site is located at Shek Mun Kap, Tung Chung as shown in **Figure 2-1**.

2.1.2 **Figure 2-1** also shows the proposed Study Area for this TIA study. The proposed Study Area covers the key junctions along the major vehicular routes to be used by the traffic to be induced by the Proposed Development.

2.2 Existing Road Network

2.2.1 The Application Site is served by a feeder road named Shek Mun Kap Road which sits next to Tung Chung Road. Tung Chung Road can be connected to Tung Chung town centre via Chung Yan Road and Yu Tung Road.

2.2.2 Shek Mun Kap Road is a **Local Distributor Road** connects the Application Site and Tung Chung Road, and it is also serving Shek Mun Kap Village, which is at the West of Application Site.

2.2.3 Tung Chung Road is a 2-lane Rural Road serving two-way traffic, connecting Tung Chung and South Lantau.

2.3 Existing Public Transport Services

2.3.1 There are several existing public transport provisions in the vicinity of the Application Site as shown in **Figure 2-2**. **Table 2-1** lists out the regular and special franchised bus routes serving the area.

Table 2-1 Existing Public Transport Services

Route No.	Terminating Points		Remarks
3M	Tung Chung Station	Mui Wo Ferry Pier	Daily service between 06:00 to 00:50
11	Tung Chung Station	Tai O	Daily service between 05:15 to 01:20
11A	Tung Chung Station	Shek Pik	Weekend service between 09:40 – 18:35
23	Tung Chung (Tat Tung Road)	Ngong Ping	Daily service between 07:15 to 19:10
34	Tung Chung (Tat Tung Road)	Shek Mun Kap	Daily service between 07:00 to 22:15
34S	Tung Chung (Tat Tung Road)	Cemetery Area No.18	Special service during grave sweeping period
A35	Mui Wo Ferry Pier	HZMB Hong Kong Port	Daily service between 05:30 to 00:15

Note: Information is updated as of date of 10 July 2025.

2.4 Existing Traffic Conditions

2.4.1 To gain an understanding of the existing traffic condition of the vicinity of the Application Site, traffic count surveys were undertaken at the key locations on Ching Ming Festival in 2025, the survey period of 09:00-18:00. The locations of the traffic surveys are shown in **Figure 2-3**.

2.4.2 All vehicular flows in the subsequent analysis are converted to passenger car unit (PCU) based on the PCU factors for signal and priority traffic according to Table 2.3.1.1 of Volume 2 of Transport Planning and Design Manual (TPDM) as shown in **Table 2-2**.

Table 2-2 Passenger Car Unit Conversion Factors

	PCU Conversion Factor	
	Traffic Signal	Priority
Car / Taxi	1.00	1.00
Public Light Bus / Minibus	1.50	1.50
Light Goods Vehicle	1.50	1.50
Medium/ Heavy Goods Vehicle	1.75	2.80
Bus / Coach	2.00	2.80

2.4.3 By applying the above PCU factors, the hourly vehicular traffic flows in PCUs are calculated and the peak hour is identified to occur at 15:00 – 16:00. The peak hour traffic flows are shown in **Figure 2-4**.

2.4.4 Based on the observed peak hour traffic flows, the performances of the key junctions in the Study Area are assessed. The results are summarized in **Table 2-3** and detailed junction capacity calculation sheets are given in **Appendix A**.

2.4.5 For signal-controlled junctions, the reserve capacity index, R.C. is calculated based on current cycle time in accordance with the methods stated in Chapter 2.4 of Volume 4 TPDM.

Table 2-3 2025 Ching Ming Festival Peak Hour Junction Capacity Assessment

Ref No.	Location ⁽¹⁾	Junction Type	Capacity Index ⁽²⁾	Observed Peak
J1	Tung Chung Road / Shek Mun Kap Road	Roundabout	DFC	0.20
J2 ⁽³⁾	Yu Tung Road / Chung Yan Road	Signalized	R.C.	99%
J3 ⁽³⁾	Yu Tung Road / Shun Tung Road	Signalized	R.C.	70%
J4	Tung Cheung Eastern Interchange	Roundabout	DFC	0.38
J5	Yi Tung Road / Ying Hei Road / Tung Chung Waterfront Road	Signalized	R.C.	100%+
J6	Tung Chung Waterfront Road / Wai Tung Road	Signalized	R.C.	100%+
J7	Wai Tung Road / Man Tung Road	Priority	DFC	0.37
J8 ⁽³⁾	Tat Tung Road / Shun Tung Road (West)	Signalized	R.C.	76%
J9	Tat Tung Road / Shun Tung Road (East)	Signalized	R.C.	77%

Notes: (1) Locations refer to **Figure 2-3**.

(2) DFC = Design Flow to Capacity for Priority junction and roundabout

R.C. = Reserve Capacity for Signalized junction

(3) Under existing TTM scheme

2.4.6 The performances of the key road links in the Study Area are also assessed based on the observed peak hour traffic flows. The results are summarized in **Table 2-4**.

Table 2-4 2025 Ching Ming Festival Peak Hour Road Link Capacity Assessment

Ref No.	Location ⁽¹⁾	Direction	Capacity ⁽²⁾	Flow (veh/hr)	V/C Ratio
L1 ⁽³⁾	Shek Mun Kap Road	Eastbound	50	27	0.54
		Westbound	50	26	0.52
L2	Tung Chung Road	Northbound	850	285	0.34
		Southbound	850	220	0.26
L3	Yu Tung Road	Eastbound	2800	726	0.26
		Westbound	2800	629	0.22

Notes: (1) Locations refer to **Figure 2-3**.

(2) Source: TPDM V2 Ch2.4 Table 2.4.1.1 & Ch3.11 CI3.11.3.1

(3) Under existing TTM scheme

2.4.7 The results reveal that the assessed junction and road link are currently operating satisfactorily during the peak hours of 2025 Ching Ming Festival.

2.4.8 A supplementary survey was carried out on 29 March 2026, which is the Sunday before Ching Ming Festival Day, for comparison purpose. The peak hour traffic flows are shown in **Figure 2-5**. The results for the performance of key junctions and key road links are summarized in **Table 2-5** and **Table 2-6** respectively.

Table 2-5 2026 Sunday Peak Hour Junction Capacity Assessment

Ref No.	Location ⁽¹⁾	Junction Type	Capacity Index ⁽²⁾	Observed Peak
J1	Tung Chung Road / Shek Mun Kap Road	Roundabout	DFC	0.17
J2 ⁽³⁾	Yu Tung Road / Chung Yan Road	Signalized	R.C.	100%+
J3 ⁽³⁾	Yu Tung Road / Shun Tung Road	Signalized	R.C.	81%
J4	Tung Cheung Eastern Interchange	Roundabout	DFC	0.34
J5	Yi Tung Road / Ying Hei Road / Tung Chung Waterfront Road	Signalized	R.C.	90%
J6	Tung Chung Waterfront Road / Wai Tung Road	Signalized	R.C.	100%+
J7	Wai Tung Road / Man Tung Road	Priority	DFC	0.45
J8 ⁽³⁾	Tat Tung Road / Shun Tung Road (West)	Signalized	R.C.	78%
J9	Tat Tung Road / Shun Tung Road (East)	Signalized	R.C.	98%

Notes: (1) Locations refer to **Figure 2-3**.

(2) DFC = Design Flow to Capacity for Priority junction and roundabout

R.C. = Reserve Capacity for Signalized junction

(3) Under existing TTM scheme

Table 2-6 2026 Sunday Peak Hour Road Link Capacity Assessment

Ref No.	Location ⁽¹⁾	Direction	Capacity ⁽²⁾	Flow (veh/hr)	V/C Ratio
L1 ⁽³⁾	Shek Mun Kap Road	Eastbound	50	31	0.62
		Westbound	50	23	0.46
L2	Tung Chung Road	Northbound	850	212	0.25
		Southbound	850	182	0.21
L3	Yu Tung Road	Eastbound	2800	604	0.22
		Westbound	2800	574	0.21

Notes: (1) Locations refer to **Figure 2-3**.

(2) Source: TPDM V2 Ch2.4 Table 2.4.1.1 & Ch3.11 Cl3.11.3.1

(3) Under existing TTM scheme

2.4.9 The results reveal that the assessed junction and road link are currently operating satisfactorily during the peak hours of 2026 Sunday before Ching Ming Festival Day, and the performance of the assessed locations are generally found better than that on Ching Ming Festival Day.

2.5 Existing Bus Lay-by at Shun Tung Road

2.5.1 To gain an understanding of the occupancy of existing bus lay-by at Shung Tung Road Eastbound (i.e. bus stop “Tung Chung Crescent”), a supplementary survey was carried out on 5 Apr 2026 (2026 Ching Ming Festival Day). The results are summarized in **Table 2-7**.

Table 2-7 Occupancy of Bus Lay-by at Shun Tung Road Eastbound

Time Period	Nos. of Stopping Buses	Average Stopping Time of Each Bus (h:mm:ss)	Maximum Stopping Time of Each Bus (h:mm:ss)
08:00-09:00	4	0:00:16	0:00:20
09:00-10:00	1	0:00:19	0:00:19
10:00-11:00	1	0:00:21	0:00:21
11:00-12:00	0	/	/
12:00-13:00	2	0:00:11	0:00:12
13:00-14:00	2	0:00:21	0:00:23
14:00-15:00	5	0:00:19	0:00:24
15:00-16:00	3	0:00:26	0:00:35
16:00-17:00	6	0:00:17	0:00:25
17:00-18:00	6	0:00:26	0:00:43
Daily (08:00-18:00)	30	0:00:20	0:00:43

2.5.2 The length of Shun Tung Road bus lay-by is approx. 39m. The results reveal that there are 0 - 6 nos. of trips stopping at the bus lay-by per hour, and the stopping time of each bus would be within 1 minute. There is a maximum of 6 buses will be stopping at the lay-by at the peakiest hour, and the stopping time will be within 1 minutes for each bus.

3 THE PROPOSED DEVELOPMENT

3.1 The Proposed Development

3.1.1 The development parameters of the Proposed Development are summarized in **Table 3-1**.

Table 3-1 Summary of Development Parameters

	Proposed Development – G/IC	Proposed Development – Green Belt
Site Area	About 3,434.58m ²	
Plot Ratio	1.59 (approximate)	0.56 (approximate)
Proposed GFA	Not exceeding 2,889.19m ²	
Site Coverage	68.99% (approximate)	20.01% (approximate)
No. of Blocks	7	
Building Height	3 storeys max. (not exceeding 13.8m)	

3.1.2 The Application Site is proposed to provide a total of 7,500 niches. As summarized in **Table 3-2**, among the total of 7,500 niches, 872 niches were sold before 2025 (with 667 occupied and 205 not occupied), and 6,628 niches are additionally proposed.

Table 3-2 Occupation Statuses

Occupation Statuses	Niche Number
Sold and Occupied	667
Sold but Not Yet Occupied	205
Proposed Additional	6,628
Proposed Total	7,500

3.2 Internal Transport Facilities

3.2.1 The detailed internal layout is shown in **Figure 3-1**. 3 nos. of shuttle bus loading and unloading space are provided for the proposed shuttle bus service under the Crowd Management Plan in **Chapter 4**. **A car park gate with electronic license plate recognition will be deployed for access control.** In addition, 1 no. of accessible parking space is provided. The swept path demonstration of light bus is provided in **Appendix D**.

4 CROWD MANAGEMENT PLAN

4.1 Opening Hours

4.1.1 The columbarium operates daily from **08:00 to 18:00** during both grave-sweeping and non-grave-sweeping festival periods

4.1.2 To minimize the traffic impact to the vicinity, crowd management plans are proposed to be implemented. Expecting large volume of visitors during the grave sweeping festival periods, special crowd control would be implemented on the following Peak Grave Sweeping Days:

- i. 2nd Saturday before Ching Ming / Chung Yeung Festival Day,
- ii. 2nd Sunday before Ching Ming / Chung Yeung Festival Day,
- iii. 1st Saturday before Ching Ming / Chung Yeung Festival Day,
- iv. 1st Sunday before Ching Ming / Chung Yeung Festival Day,
- v. Ching Ming / Chung Yeung Festival Day,
- vi. 1st Saturday after Ching Ming / Chung Yeung Festival,
- vii. 1st Sunday after Ching Ming / Chung Yeung Festival,
- viii. 2nd Saturday after Ching Ming / Chung Yeung Festival,
- ix. 2nd Sunday after Ching Ming / Chung Yeung Festival,
- x. Other public holidays within (i) and (ix).

4.1.3 The detailed crowd management measures include the followings.

4.2 Admission Control

4.2.1 Admission control will be performed at the entrance. The advanced booking procedures are mandatory. Only visitors with the valid booking confirmations will be allowed to admit the columbarium buildings.

4.2.2 Only niche owners and their family members with proofs of memberships are allowed to enter the Columbarium. Other visitors will only be allowed to access the Columbarium when leaded and permitted by the niches owners and their family members of the Columbarium.

- 4.2.3 Niche purchasers are required to accept a set of Sale Agreement at time of purchase, which will include House Rules. These House Rules are legally binding on the purchasers in their use of the niches and effective in controlling their conduct.
- 4.2.4 The House Rules regulates visitors of the columbarium must use the visit by appointment system. It also includes special management measures such as visitors must take the free shuttle bus (**28-seater light bus**) on Peak Grave Sweeping Days (**Shuttle Bus Only Policy**).
- 4.2.5 By signing the Sales Agreement which includes the “Shuttle Bus Only Policy”, the purchasers of the niches are supposed to follow the signed agreement and not to travel by private car or taxi to visit but only shuttle bus to/from Application Site.

4.3 Visit by Appointment System

- 4.3.1 During the Peak Grave Sweeping Days, “Visit-By-Appointment” system will be implemented to control the number of visitors entering the Application Site. Booking by telephone and WhatsApp messages will be available for all visitors. Successful booking confirmation will be sent to visitors together with the successful reservation on the shuttle bus seat. Only visitors with the valid booking confirmations will be allowed to admit the columbarium buildings. The admission time will be 60-minute.
- 4.3.2 Visitors will be guided to wait in the waiting areas within the Application Site as shown in **Figure 3-1**. When some visitors leave the columbarium building, certain number of visitors will be allowed to enter the columbarium building.
- 4.3.3 The columbarium building has limited area and has maximum holding capacity of a total of 250 persons in view of fire safety according to “Code of Practice for Fire Safety in Buildings”. Thus, for safety concerns, the Columbarium will be restricted to accommodate not more than 250 persons staying in the building at any time.
- 4.3.4 **Table 4-2** present the number of visitors with implementation of visit-by-appointment. A limit of 250 visitors per each 60-minute session will be allowed to enter the columbarium building, i.e., **2,500 visitors** per day during Peak Grave Sweeping Days.

Table 4-1 Daily Visitor Profile with Visit-by-Appointment System on Peak Grave Sweeping Days

Session	Time Period (60-Minutes Session)	Number of Visitors	
		In	Out
1	0800-0900	250	250
2	0900-1000	250	250
3	1000-1100	250	250
4	1100-1200	250	250
5	1200-1300	250	250
6	1300-1400	250	250
7	1400-1500	250	250
8	1500-1600	250	250
9	1600-1700	250	250
10	1700-1800	250	250
Daily Total		2,500	2,500

4.4 Proposed Shuttle Bus Services

4.4.1 3 nos. of shuttle bus loading and unloading space are provided within the Application Site. To minimize the traffic impact to the vicinity of the Proposed Development, and to minimize the amount of vehicular traffic and in line with the Government Policy to encourage public transport use with railway as the backbone, the Applicant proposes to provide free shuttle bus services for visitors between the Application Site and MTR Tung Chung West Station.

4.4.2 As signed up in the Sales Agreement, visitors must take the shuttle bus to the Proposed Development with valid booking confirmation. Advance booking for the shuttle bus service is always required before a visit. The proposed routing is shown in **Figure 4-1**. **The shuttle bus service will be free of charge and the details of shuttle bus operation are summarized in Table 4-2.**

Table 4-2 Proposed Shuttle Bus Services

Proposed Free Shuttle Bus Schedules	Peak Grave Sweeping Days
Origins and Destinations	Between a) Prajna Dhyana Temple b) Public Lay-by at Yu Tung Road, connecting to MTR Tung Chung West Station (circulating point for pick-up and drop-off)
Journey Time	Approx. 10 mins for round-trip (Travel distance approx.5km and average speed 30km/hr)
Operation Time	07:45 – 18:00
Frequencies	Departure every 6-7 mins, 9 Departures per hour
Vehicle Details	28-seat light bus
Fleet Size	3 vehicles

4.4.3 As Tung Chung West Station is scheduled to be completed in 2029, the proposed shuttle bus services will be connecting the Application Site to MTR Tung Chung Station instead of Tung Chung West Station before its commencement. The temporary shuttle bus route is presented in **Figure 4-2**, with the pick-up/drop-off point at the bus lay-by at Shun Tung Road Southbound. The round-trip journey time and travelling distance would be approx. 13min and 7km respectively, with a fleet size of 5 vehicles. An alternative shuttle bus pick-up/drop-off point other than bus lay-by at Shun Tung Road for connecting Tung Chung Station would be at Citygate North drop off area.

4.4.4 According to the supplementary survey at Shun Tung Road bus lay-by as provided in **Section 2.5**, a total of 30 nos. of stopping buses are observed throughout the survey period from 08:00 to 18:00. At the peakiest hour of Shun Tung Road bus lay-by (17:00-18:00), a maximum of 6 buses will be stopping at the lay-by, and the stopping time will be within 1 minutes for each bus. The length of bus lay-by is approx. 39m which can accommodate 3 nos. of 12.8m buses, or 5 nos. of 7m light buses. With additional 9 departures generated by the Proposed Development, while each departure will make a pick-up / drop-off at the lay-by with stopping time around 1 minute, it is anticipated that the bus lay-by will be operating satisfactory even with the proposed shuttle bus service in place.

5 TRAFFIC FORECAST OF THE PROPOSED DEVELOPMENT

5.1 Visitor Trip Generations during Festival Period

5.1.1 The traffic trip generation on Grave Sweeping Festival Day of the reference columbarium with similar locality and the Application Site is shown in the table as below:

Table 5-1 Observed Peak Hour Visitor Trip Generations at Reference Columbarium on Grave Sweeping Festival Day

Location	Survey Date	Peak Hour	Visitor Trips			
			Peak Hour Flows (person/hr)		Trip Rates (person/hr/niches)	
			In	Out	In	Out
Filial Park ⁽¹⁾ , Tuen Mun (6265 niches + 7,150 tablets, with 1,331 niches + 136 memorial tablets occupied)	2017 Ching Ming	10:30 – 11:30	180 (two-way)		0.127 (two-way / niches) 0.093 (two-way / tablets)	
	2018 Chung Yeung	11:15 – 12:15	164 (two-way)		0.115 (two-way / niches) 0.084 (two-way / tablets)	
Fat Yuen Ching Shea ⁽²⁾ , Tuen Mun (9,160 niches, with 4,105 niches occupied)	2017 Ching Ming	11:15 – 12:15	643	929	0.157	0.226
	2018 Ching Ming	11:00 – 12:00	733	712	0.131	0.124
Ling Hin Fat Yuen ⁽³⁾ , Tai Po (757 niches, with 299 niches occupied)	2018 Chung Yeung	-	22 (two-way)		0.074 (two-way)	
Pun Chun Yuen ⁽⁴⁾ , Tai Po (3,595 niches, with 2,466 niches occupied) With visit-by-appointment	2021 Ching Ming	11:00 – 12:00	186	170	0.075	0.069
Application Site Prajna Dhyana Temple, Tung Chung (872 niches, with 667 niches occupied) With visit-by-appointment	2025 Ching Ming	14:45-15:45	21	21	0.031	0.031
Pook Fook Hill Columbarium (93,360 niches, with 59,474 niches occupied)	2019 Ching Ming	11:30 – 12:30	3,950	4,400	0.066	0.074
Sai Lam Temple, Sha Tin (10,960 niches, with 3,618 niches occupied)	2024 Ching Ming	11:00 – 12:00	502	489	0.139	0.135

Note: (1) Information extracted from TIA report of its approved planning application [A/TM/527];
(2) Information extracted from TIA report of the approved planning application [A/TM/548];
(3) Information extracted from TIA report of its approved planning application [A/TP/652].
(4) Information extracted from TIA report of its approved planning application [A/TP/681].
(5) Information extracted from FEHD published management plan of Po Fook Columbarium by August 2022
(6) Information extracted from TIA report of its approved planning application [Y/ST/60].

- 5.1.2 By comparing the observed trip generation rates among the reference columbarium, the rate observed on Ching Ming Day in 2017 from Fat Yuen Ching Shea was higher than the others and the subject trip rate will be adopted in estimating the future trips by the proposed columbarium at the Application Site without visit-by-appointment.
- 5.1.3 As described in Chapter 4, the Applicant proposes to adopt “Visit-by-Appointment” system to manage and strictly control the Application Site to accommodate not more than 250 visitors staying within the columbarium building at any time for safety concerns.
- 5.1.4 The proposed appointment system is to smoothen and diversify the concentration of peak hour visitor demands by dividing the daily operation into several 60-minutes sessions during grave sweeping periods and assigning a quota of maximum of 250 visitors for each session.
- 5.1.5 As described in Chapter 4, given the implementation of the visit-by-appointment system, a maximum visitor trips of 2,500 in and 2,500 out are allowed for admission for 10 sessions (60 minutes for each time slot) during the opening hour 08:00 – 18:00. The visitor trips accessing the Application Site will be controlled and limited to 250 in and 250 out per hour. The future trips for the proposed columbarium at the Application Site is summarized in **Table 5-2**.

Table 5-2 Estimated Peak Hour Visitor Trip Generations at Proposed Columbarium on Grave Sweeping Festival Day

Proposed Columbarium (7,500 niches)	Peak Hour Visitor Trips			
	Peak Hour Trip Rates (person/ niches)		Estimated Peak Hour Flows (person)	
	In	Out	In	Out
Without Visit by Appointment ⁽¹⁾	0.157	0.226	1,178	1,695
With Visit by Appointment ⁽²⁾	0.033	0.033	250	250

Note: (1) Refer to **Table 5-1** for the Fat Yuen Ching Shea peak hour trip rates without visit by appointment
(2) Refer to **Table 4-2** for the number of peak hour visits under Visit-by-Appointment System during Grave Sweeping Days

- 5.1.6 **Table 5-3** indicates that the estimated trip generations will be greatly decreased with the implementation of the crowd management plan.

5.2 Vehicular Trip Generations during Festival Period

5.2.1 As mentioned in Chapter 4, with implementation of crowd management by Applicant, i.e., all the visitors should make an appointment before visiting and take the free shuttle bus travelling between the Application Site and MTR Tung Chung West Station, the estimated traffic generation by the proposed columbarium will be regulated. The estimated traffic generation of the proposed columbarium is summarized in **Table 5-3**.

Table 5-3 Estimated Peak Hour Vehicular Trip Generations at Proposed Columbarium on Grave Sweeping Festival Day

Transportation Mode	Percentage	In			Out		
		Visitors /hr	Vehicles /hr	PCU/hr	Visitors /hr	Vehicles /hr	PCU/hr
With Visit-By-Appointment							
Shuttle Bus ⁽¹⁾	100%	250	9	14	250	9	44

Note: (1) Based on [28-seat light bus](#).

5.2.2 As indicated in **Table 5-4**, with implementation of TCMP, a total of 28 pcu's (14 in and 14 out) will be induced during peak hour during Ching Ming / Chung Yeung Festival. For conservative, the vehicular trips will be added along the route to MTR Tung Chung Station instead of Tung Chung West Station to demonstrate the vehicular trips induced by the Proposed Development before the commence of MTR Tung Chung West Station.

6 TRAFFIC IMPACT ASSESSMENT

6.1 Assessment Approach

- 6.1.1 The anticipated licensing year is 2027. The assessment year for this traffic impact assessment study is set as 2030, i.e, 3 years after commissioning of the columbarium.
- 6.1.2 In forecasting the future traffic flows on the road network in the Study Area, due considerations are given to the following information and factors:
- The forecast population and employment from the 2019-based Territorial Population and Employment Data Matrices (TPEDM) planning data published by Planning Department;
 - Historical traffic data from Annual Traffic Census (ATC) published by Transport Department;
 - Committed and planned developments in the Study Area.
- 6.1.3 The observed traffic flows on 2025 Ching Ming Festival Day is found generally larger than that in 2026 Sunday before Ching Ming Festival. Thus, the 2025 observed flows are adopted for traffic forecast, and the following steps are undertaken to derive the 2030 Peak Hour Reference Flows (i.e. without the proposed redevelopment) and Design Flows (i.e. with the proposed redevelopment):
- 2030 Background Flows = 2025 Observed Flows x annual growth
 - 2030 Reference Flows = 2030 Background Flows + additional traffic by planned and committed developments
 - 2030 Design Flows = 2030 Reference Flows + Development traffic
- 6.1.4 The traffic impact to be induced by the Redevelopment is assessed by comparing the Peak Hour Reference Traffic Flows against the Design Traffic Flows for both Design Years.

6.2 2030 Peak Hour Background Flows

6.2.1 Reference is made to the 2021-based Territorial Population and Employment Data Matrices (TPEDM) planning data published by Planning Department. **Table 6-1** presents the population and employment data in Islands District for 2021, 2026 and 2031. As indicated in the table, the population and employment places in Islands District are anticipated to increase by +5.00% over the period of 2021 – 2031.

Table 6-1 2021-Based TPEDM for Islands District

Category	2021	2026	2031	2021-2031 Average Growth (% p.a.)
Population	185,300	229,900	352,500	5.51%
Employment Places	118,000	147,150	191,950	4.14%
Total	303,300	377,050	544,450	5.00%

Source: 2021, 2026 & 2031 population and employment places are extracted from 2021-based TPEDM published by Planning Department.

6.2.2 Reference is also made to the historical traffic data from Annual Traffic Census (ATC) published by Transport Department. **Table 6-2** shows the AADT recorded at the relevant stations in the Study Area and the percent changes from 2018 to 2023. On average, there was an increase of +4.97% per annum in the area over the period from 2018 to 2023.

Table 6-2 Historical Traffic Data from Annual Traffic Census

Stn. No.	Road Name	Between		Average Annual Daily Traffic (AADT)						Growth (p.a.)
				2018	2019	2020	2021	2022	2023	
5256	Tung Chung Rd	South Lantau Rd	Tung Chung Rd nr Mun Hong House	5,210	4,750	4,570	4,790	4,580	6,130	3.31%
				--	-8.83%	-3.79%	4.81%	-4.38%	33.84%	
5706	Yu Tung Rd	Shun Tung Rd	Chung Mun Rd	20,320	24,560	25,000	26,230	25,390	28,540	7.03%
				--	20.87%	1.79%	4.92%	-3.20%	12.41%	
5036	Shun Tung Rd	Yu Tung Rd	Tat Tung Rd	21,350	20,890	18,640	20,180	19,480	21,920	0.53%
				--	-2.15%	-10.77%	8.26%	-3.47%	12.53%	
5705	Shun Tung Rd	Tat Tung Rd	Tung Chung Waterfront Rd	17,650	19,670	16,540	17,340	18,720	21,680	4.20%
				--	11.44%	-15.91%	4.84%	7.96%	15.81%	
5905	Tung Chung Waterfront Rd & Ying Hei Rd	Shun Tung Rd RA	Man Tung Rd	12,320	13,000	10,790	10,630	10,560	13,220	1.42%
				--	5.52%	-17.00%	-1.48%	-0.66%	25.19%	
5311	Yi Tung Rd	Tung Chung Eastern INT	Ying Hei Rd	9,590	11,520	12,540	13,120	12,970	16,500	11.46%
				--	20.13%	8.85%	4.63%	-1.14%	27.22%	
5511	Yu Tung Rd	Shung Tung Rd	Tung Chung Eastern INT	16,800	20,200	19,660	19,910	21,540	23,560	7.00%
				--	20.24%	-2.67%	1.27%	8.19%	9.38%	
Total				103,240	114,590	107,740	112,200	113,240	131,550	4.97%
				--	10.99%	-5.98%	4.14%	0.93%	16.17%	

Source: Annual Traffic Census published by Transport Department.

6.2.3 For conservative, the annual growth rate derived from TPEDM (i.e. +5.00%) will be adopted and applied to the 2025 Peak Hour Observed Flows to derive the 2030 background flows.

6.3 2030 Peak Hour Reference Flows

6.3.1 According to the published information from Town Planning Board, there are some planned developments with proposed use of private housing, public housing, and commercial development. The major planned developments are summarized in **Table 6-3**.

Table 6-3 Estimated Peak Hour Trip Generations by Planned Developments

Location	Land Use	Year of Completion	Trip Generations (pcu/hr)			
			AM Peak		PM Peak	
			In	Out	In	Out
Government Land at Area 42 and Area 46, Tung Chung, Lantau [A/I-TCTC/67] ⁽¹⁾ ⁽²⁾	Area 42 PRH (6,372 flats)	Area 42 Phase 1: 2027/28	208	275	192	151
	Area 42 Non-domestic (GFA 11,940m ²)		29	27	43	37
	Area 46 PRH (1,566 flats)	Area 42 Phase 2 and Area 46: 2028/29	51	68	47	37
	Area 46 Non-domestic (GFA 2,220m ²)		5	5	8	7
Various Lots in D.D.1 TC and Adjoining Government Land, Tung Chung, Lantau Island [Y/I-TCV/1] ⁽³⁾	Private Housing (1,783 flats)	2030	17	49	33	19
	Retail (GFA 3,215m ²)		5	4	8	7
	Kindergarten (6 classrooms)		14	14	1	1
Area 23 Phase 1 ⁽²⁾ ⁽⁴⁾	PRH (495 flats)	2027/28	16	21	15	12
Lots 1766 RP, 1768 (Part), 1770 (Part), 1771 RP (Part), 1774 (Part) in D.D.3 TC and Adjoining Government Land, Tung Chung, Lantau Island [A/I-TCTC/59] ⁽⁵⁾ ⁽⁶⁾	Private Housing (187 flats)	2026	8	13	7	5
Tung Chung Valley [S/I-TCV-2] ⁽⁷⁾ ⁽⁸⁾	Commercial (33,990m ²)	2030	83	78	121	105
Tung Chung West Site A to Site F ⁽⁷⁾ ⁽⁸⁾	Private Housing (about 1,564 flats)	2030	183	354	232	169
Total			619	908	707	550

Notes: (1) Land use and completion year extracted from Gist and Planning Statement of A/I-TCTC/67

(2) Trip generation estimated by mean trip rate for PRH with average flat size 40m² from TPDM V1 Appendix 1 Annex C

(3) Land use, completion year and trip generation extracted from Traffic Impact Assessment of Y/I-TCV/1

(4) Land use, completion year extracted from Planning Brief from Hong Kong Housing Authority

(5) Land use and completion year extracted from RNTPC Paper No. A/I-TCTC/59A

(6) Trip generation estimated by mean trip rate for retail from TPDM V1 Appendix 1 Annex C

(7) Land use and completion year extracted from Legislative Council Brief of S/I-TCV/2

(8) Trip generation estimated by mean trip rate for R(B) with average flat size 120m² and accessibility level A from TPDM V1 Appendix 1 Annex C

6.3.2 The additional development trips by the planned developments and that will affect the traffic of the study area are then added to the 2030 Peak Hour Background Flows to derive the 2030 Peak Hour Reference Flows (i.e., without the proposed development). For conservative, the larger two-way trip generation (i.e. trip generation at AM peak) are adopted. The results are shown in **Figure 6-1**.

6.4 2030 Peak Hour Design Flows on Festival Day

6.4.1 By adding the peak hour development flows (**Figure 6-2**) to the forecast 2030 Peak Hour Reference Flows, the 2030 Design Flows are derived and is shown in **Figure 6-3**. Junction capacity assessments are undertaken and the results are shown in **Table 6-4** and with detailed calculation sheets provided in **Appendix B**.

6.4.2 It is noted that junction improvement schemes are proposed at J1 under CEDD PWP Item No. 7786CL, at J2 under application Y/I-TCV/1, and at J3, J8, J9 under Tung Chung Town Extension. The junction capacity assessments for J1, J2, J3, J8 and J9 have taken in the account the improvement schemes, and the modified junction layout is provided in **Appendix C** for information.

Table 6-4 2030 Peak Hour Junction Capacity Assessment

Ref No.	Junction Location	Junction Type	Capacity Index ⁽¹⁾	2030 Ref	2030 Des
J1 ⁽²⁾	Tung Chung Road / Shek Mun Kap Road	Priority	DFC	0.18	0.21 ⁽⁷⁾
J2 ⁽³⁾	Yu Tung Road / Chung Yan Road	Signalized	R.C.	29%	28% ⁽⁷⁾
J3 ⁽⁴⁾	Yu Tung Road / Shun Tung Road	Signalized	R.C.	32%	32% ⁽⁷⁾
J4	Tung Cheung Eastern Interchange	Roundabout	DFC	0.63	0.64 ⁽⁸⁾
J5	Yi Tung Road / Ying Hei Road / Tung Chung Waterfront Road	Signalized	R.C.	67%	63% ⁽⁸⁾
J6	Tung Chung Waterfront Road / Wai Tung Road	Signalized	R.C.	99%	91% ⁽⁸⁾
J7	Wai Tung Road / Man Tung Road	Priority	DFC	0.49	0.51 ⁽⁸⁾
J8 ⁽⁵⁾	Tat Tung Road / Shun Tung Road (West)	Signalized	R.C.	30%	30% ⁽⁷⁾
J9 ⁽⁶⁾	Tat Tung Road / Shun Tung Road (East)	Signalized	R.C.	60%	59% ⁽⁷⁾

Notes: (1) DFC = Design Flow to Capacity ratio.

R.C. = Reserve Capacity under Current cycle time

(2) J1 is modified to a priority junction under improvement scheme by CEDD PWP Item No. 7786CL

(3) J2 is modified to provide additional traffic lanes under improvement scheme by application Y/I-TCV/1

(4) J3 is modified to provide a left turn exclusive lane at Yu Tung Road NB by Tung Chung Town Extension

(5) J8 is modified to provide additional traffic lane at Shun Tung Road SB by Tung Chung Town Extension

(6) J9 is modified to provide additional traffic lane at Shun Tung Road SB and Tat Tung Road WB by Tung Chung Town Extension

(7) With vehicular trips induced by the Proposed Development added along the route to Shun Tung Road

(8) With vehicular trips induced by the Proposed Development added along the route to Citygate North

6.4.3 The performances of the key road links in the Study Area are also assessed based on the observed peak hour traffic flows. The results are summarized in **Table 6-5**.

Table 6-5 2030 Ching Ming Festival Peak Hour Road Link Capacity Assessment

Ref No.	Location ⁽¹⁾	Direction	Capacity ⁽²⁾	2030 Ref		2030 Des	
				Flow (veh/hr)	V/C Ratio	Flow (veh/hr)	V/C Ratio
L1	Shek Mun Kap Road	Eastbound	400	107	0.27	116	0.29
		Westbound	400	93	0.23	102	0.26
L2	Tung Chug Road	Northbound	850	437	0.51	446	0.52
		Southbound	850	337	0.40	346	0.41
L3	Yu Tung Road	Eastbound	2800	1679	0.60	1688	0.60
		Westbound	2800	1293	0.46	1302	0.47

Notes: (1) Locations refer to **Figure 2-3**.

(2) Source: **TPDM V2 Ch2.4 Table 2.4.1.1**

6.4.4 The results reveal that all the key junctions and road links in the Study Area would perform satisfactorily for both the Reference Scenario (i.e., without proposed development) and Design Scenario (i.e., with proposed development).

7 Summary and Conclusion

7.1 Summary of Findings

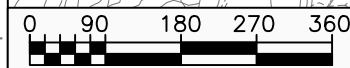
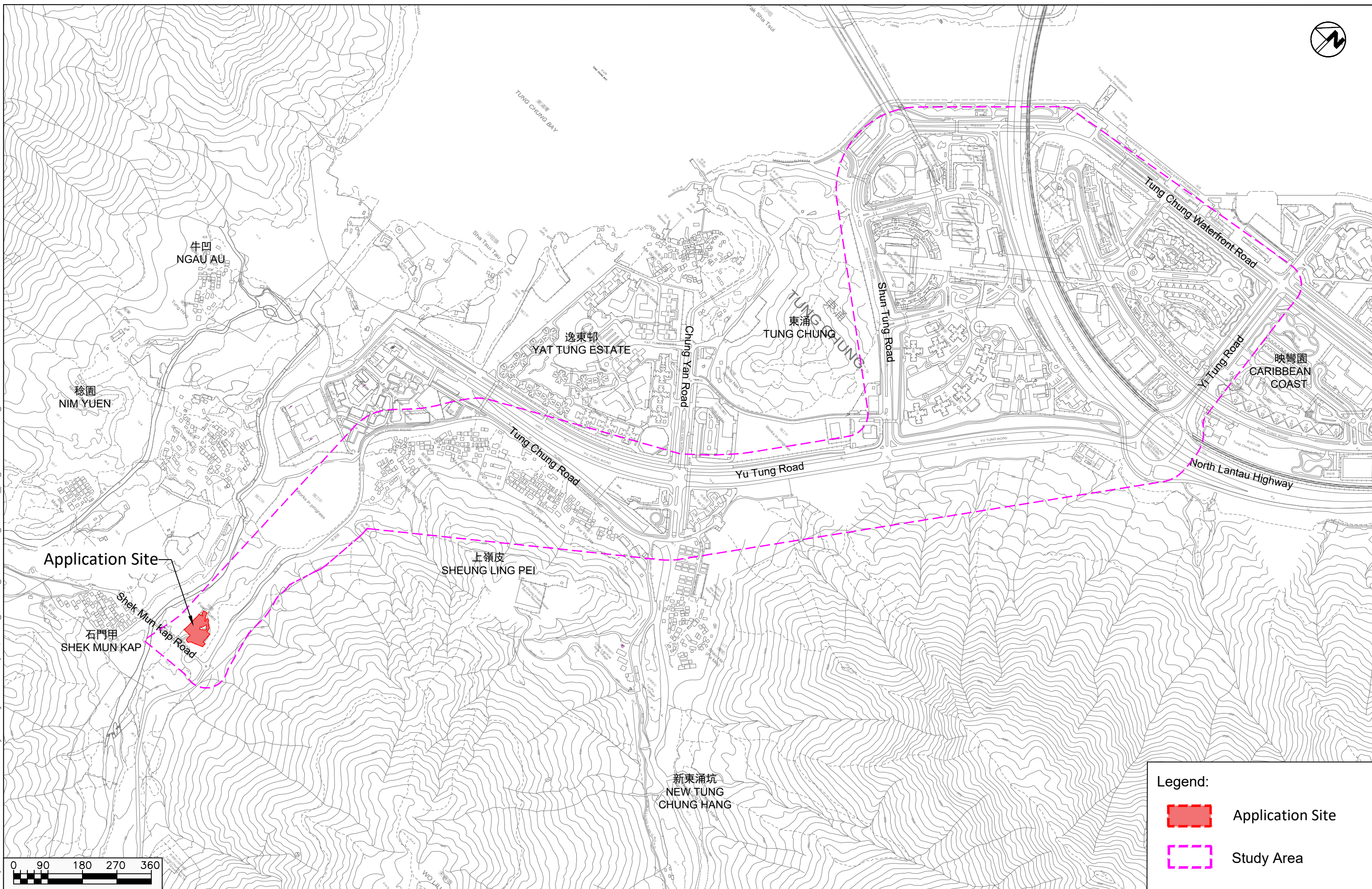
- 7.1.1 The Applicant proposes a partial redevelopment of the existing religious institution, with proposed columbarium of a total nos. of 7,500 niches. Ozzo Technology (HK) Limited are commissioned to undertake a Traffic Impact Assessment (TIA) Study to assess the potential traffic impact to be induced by the Proposed Development.
- 7.1.2 The assessment year is set as 2030, i.e., 3 years from the licencing year in 2027.
- 7.1.3 In order to minimise the amount of vehicular traffic in the area, the Applicant proposes to provide free shuttle bus services for visitors between the Proposed Development and MTR Tung Chung West Station. Also, a maximum of 250 visitors per hour would be allowed to access the proposed columbarium and visitors are required to make appointment via Visit-by-Appointment system before their visits.
- 7.1.4 It is estimated that around 28 pcu's (14 in and 14 out) are to be induced by the Proposed Development during the peak hour during the festival day.
- 7.1.5 The 2030 Peak Hour Reference Traffic Flows (i.e., without the proposed columbarium) are estimated taking into account the planned and committed developments, as well as the future population and employment in Islands District.
- 7.1.6 The additional traffic to be induced by the Proposed Development is added to the 2030 Reference Flows to obtain the 2030 Design Flows (i.e. with the Proposed Development).
- 7.1.7 Junction capacity assessments are carried out for all the key junctions within the study area. The results indicated that the key junctions in the study area would perform satisfactorily in the design year of 2030 with the proposed management plans by the Proposed Development. The traffic impact to be induced by the Proposed Development would be acceptable without creating adverse impact on the nearby road network with the proposed management plans.

7.2 Conclusion

- 7.2.1 The results of the assessment indicate that, with the provision of free shuttle bus services to be provided by the Applicant, the amount of traffic to be induced by the Proposed Development would be small and hence the potential traffic impact to be induced by the proposed columbarium would not pose adverse traffic impacts to the road network in the vicinity of the Application Site.

Figures

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Date: 13/01/2026
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**Section 16 Planning Application for Proposed Religious Institution and Columbarium
 (Partial Redevelopment of Prajna Dhyana Temple)
 Site Location and Study Area**

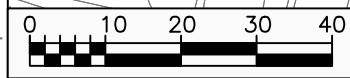
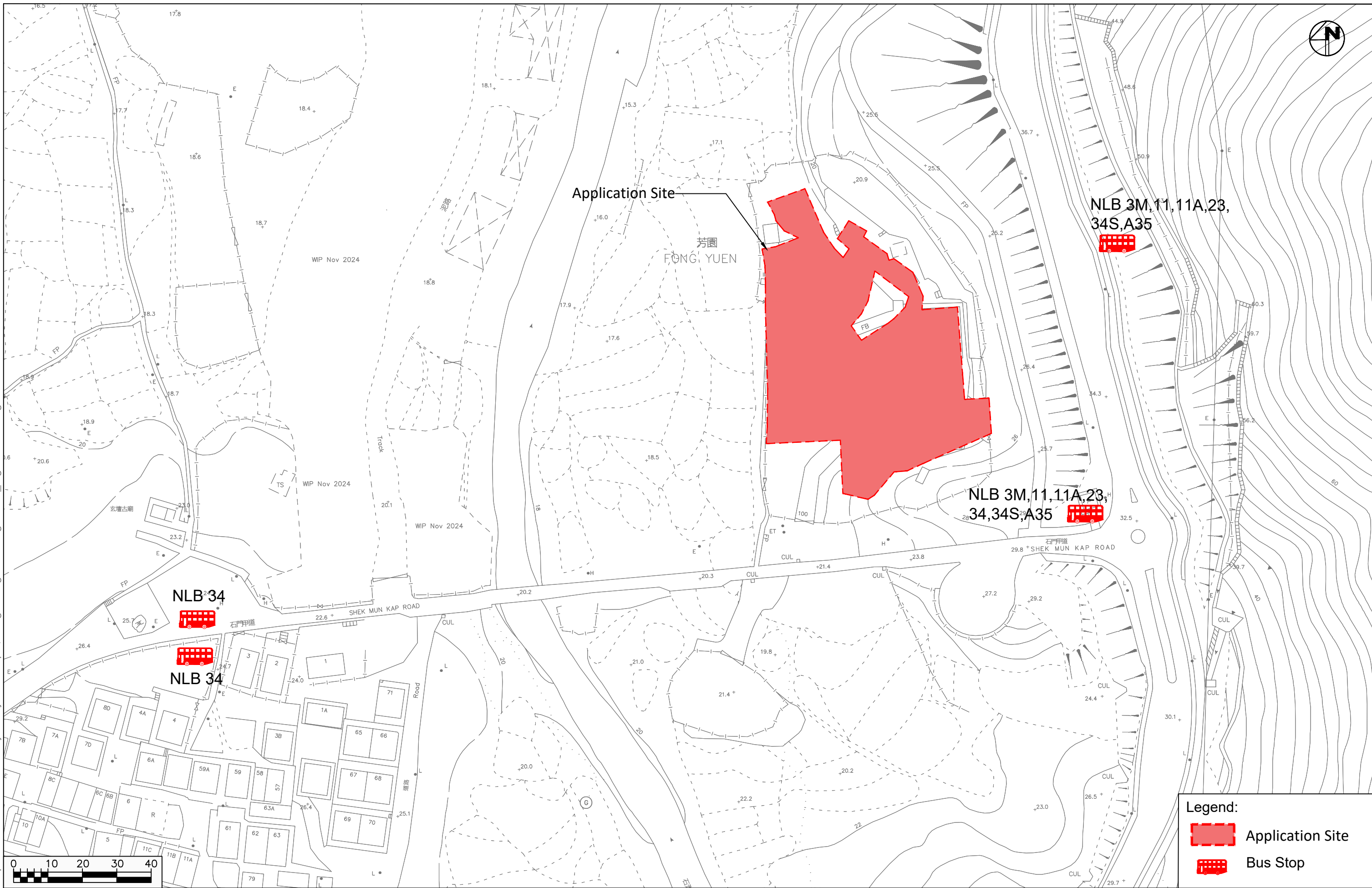
Legend:

- Application Site
- Study Area

Project No. 83209
 Dwg No. Figure 2-1



Rev.
 B

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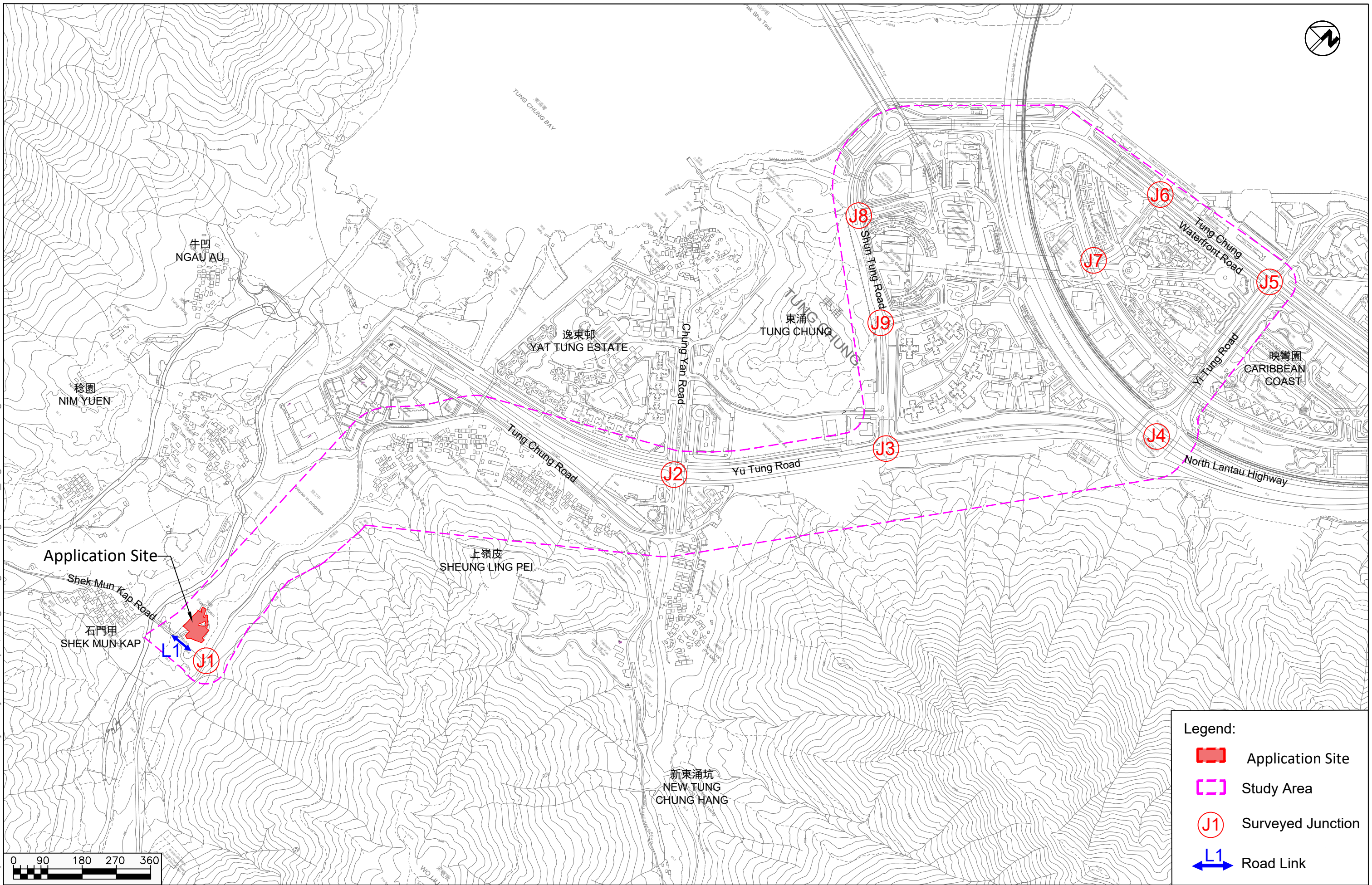
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**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)
Existing Public Transport in the Vicinity of the Application Site**

- Legend:**
-  Application Site
 -  Bus Stop

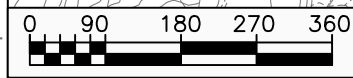
Project No. 83209	Rev. B
Dwg No. Figure 2-2	

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Legend:

- Application Site
- Study Area
- J1 Surveyed Junction
- Road Link



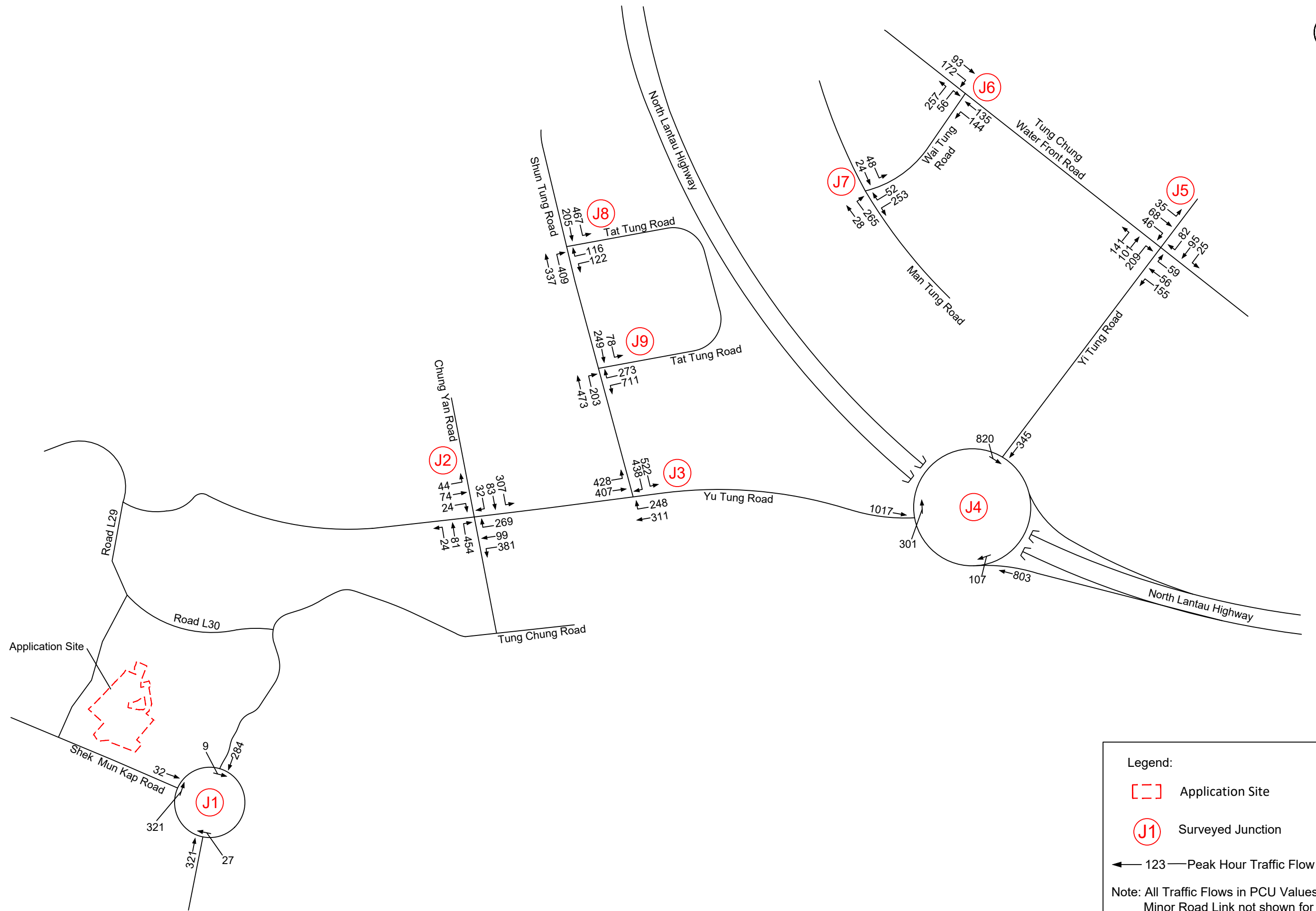
OZZO TECHNOLOGY

Date: 13/01/2026
Scale: 1:9000

**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)
Locations of Surveyed Junctions and Road Links**

Project No. 83209	Rev. B
Dwg No. Figure 2-3	

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Legend:

- Application Site
- J1 Surveyed Junction
- 123 Peak Hour Traffic Flow

Note: All Traffic Flows in PCU Values
Minor Road Link not shown for clarity

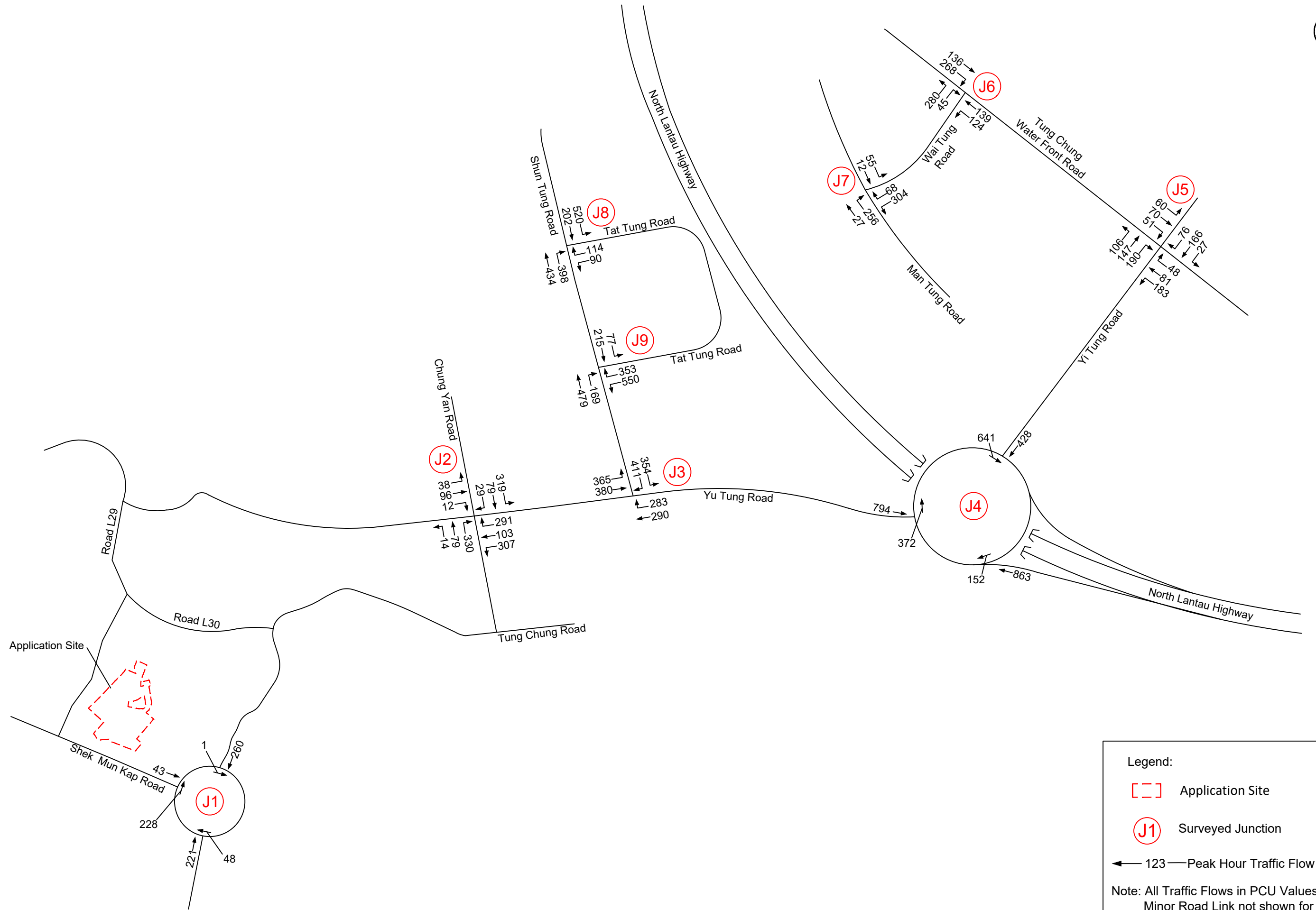
**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)
2025 Ching Ming Observed Peak Hour Traffic Flows**



Date: 13/01/2026
Scale: N.T.S

Project No. 83209	Rev. B
Dwg No. Figure 2-4	

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Legend:

- Application Site
- J1 Surveyed Junction
- 123 — Peak Hour Traffic Flow

Note: All Traffic Flows in PCU Values
Minor Road Link not shown for clarity

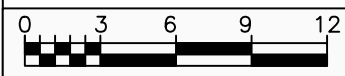
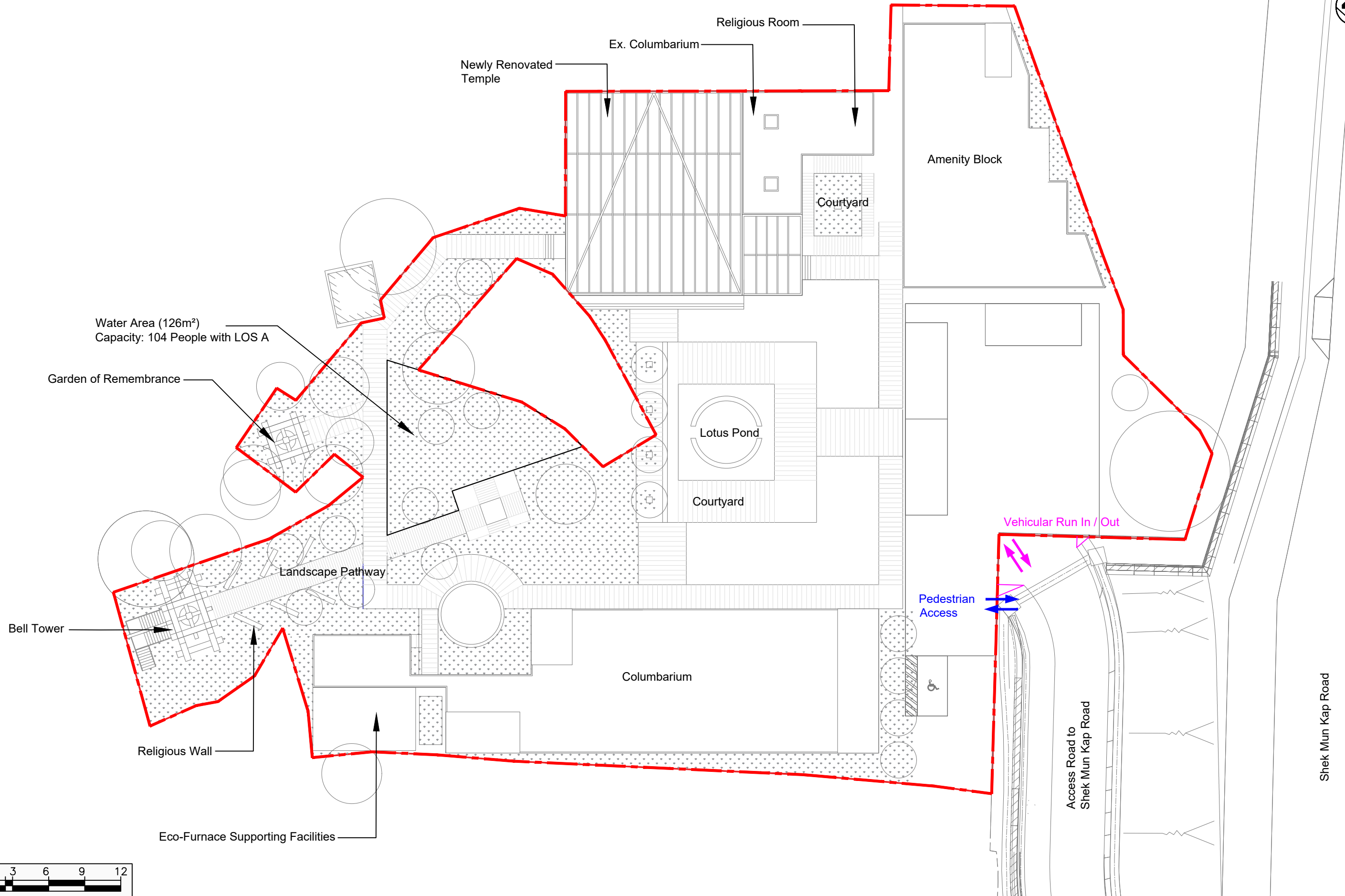
**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)
2026 Sunday Observed Peak Hour Traffic Flows**



Date: 24/04/2026
Scale: N.T.S

Project No. 83209	Rev.
Dwg No. Figure 2-5	-

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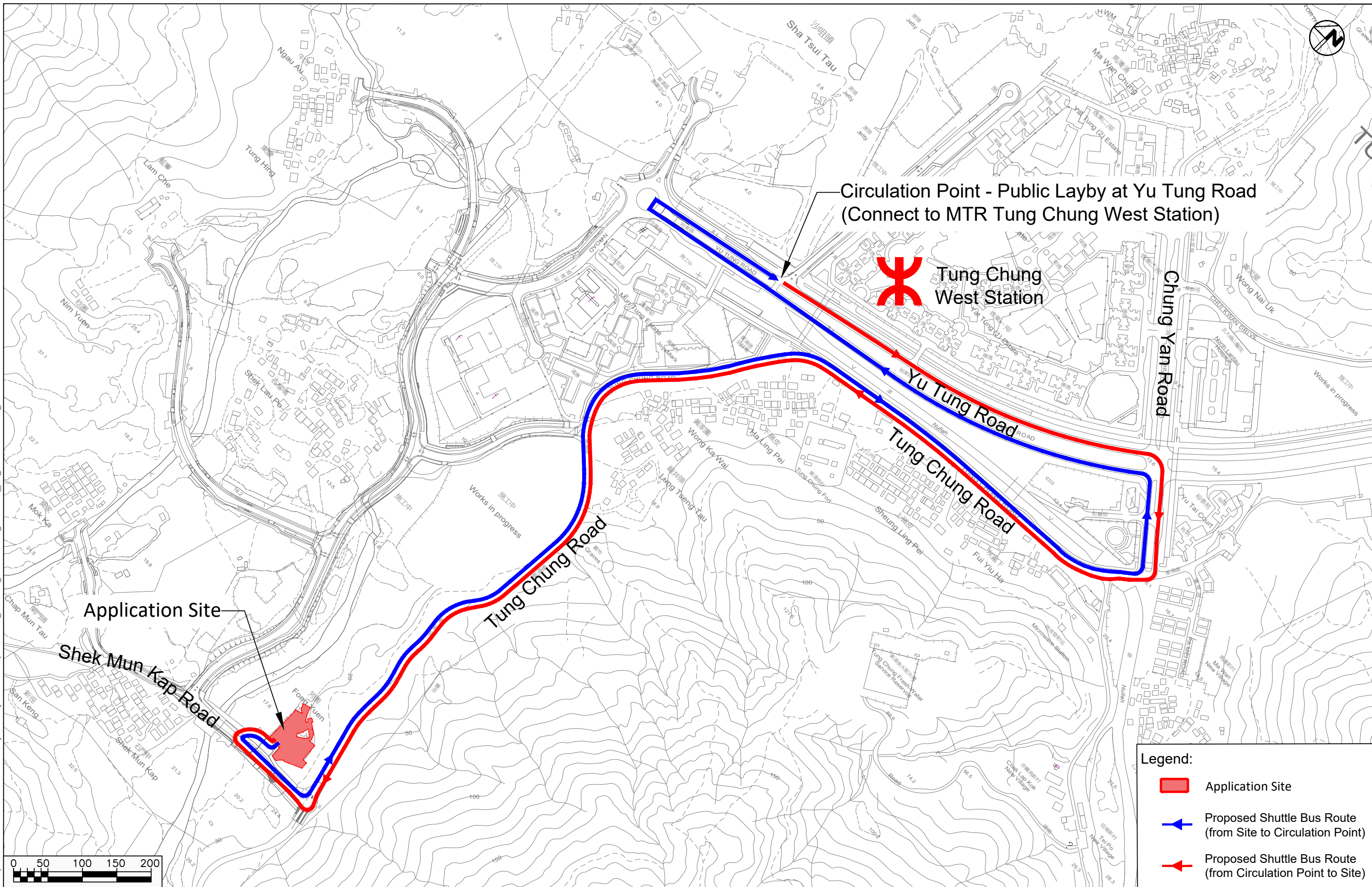


Date 13/01/2026 Scale 1:300

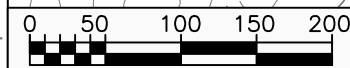
**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)
Layout of Application Site**

Project No. 83209	Rev. C
Dwg No. Figure 3-1	

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- Legend:**
- Application Site
 - Proposed Shuttle Bus Route (from Site to Circulation Point)
 - Proposed Shuttle Bus Route (from Circulation Point to Site)



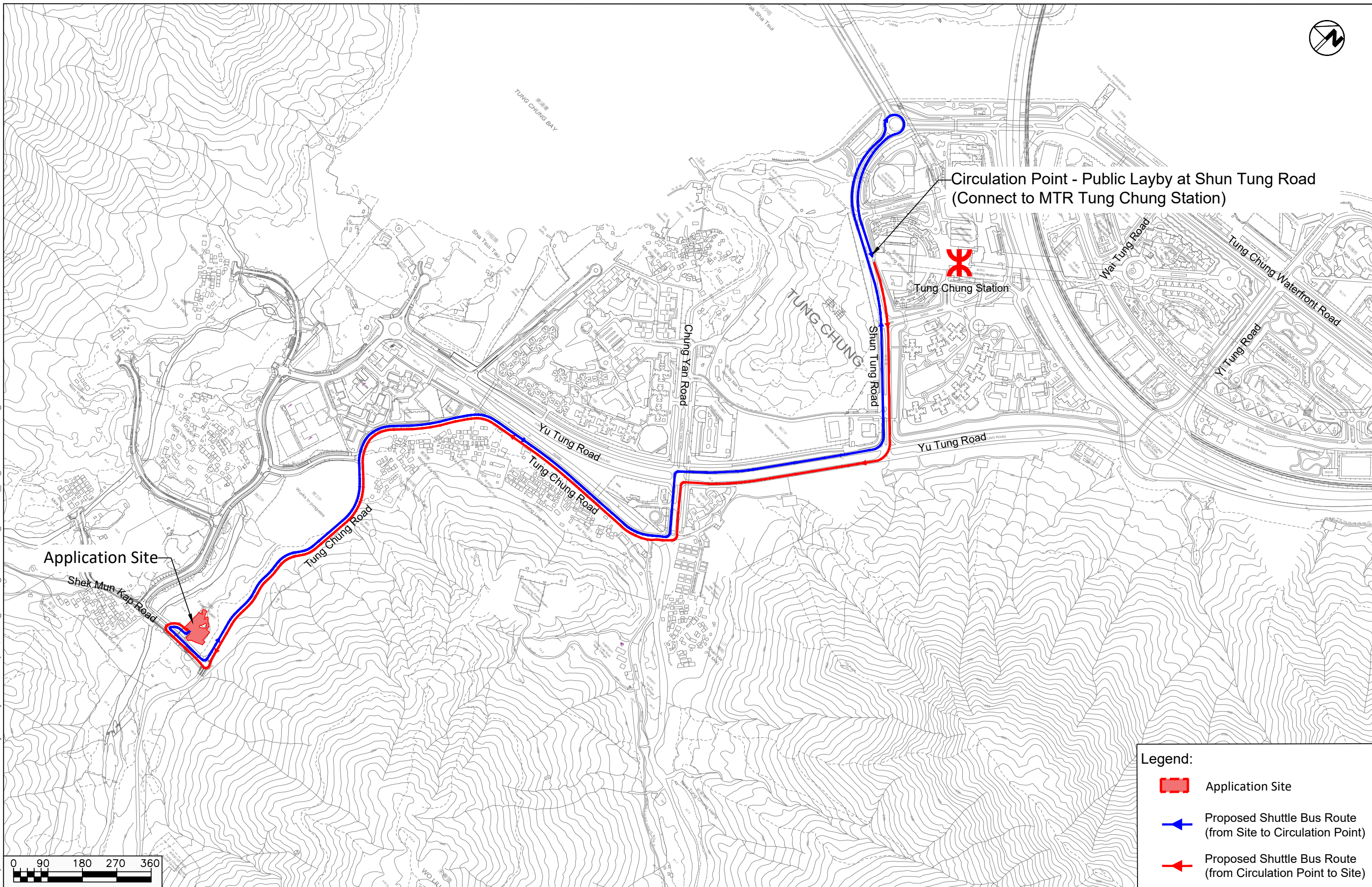
OZZO TECHNOLOGY

Date: 13/01/2026
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**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)
Proposed Route of Shuttle Bus Service (with MTR Tung Chung West Station in place)**

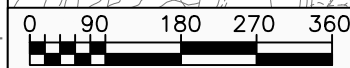
Project No. 83209	Rev. B
Dwg No. Figure 4-1	

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Legend:

-  Application Site
-  Proposed Shuttle Bus Route (from Site to Circulation Point)
-  Proposed Shuttle Bus Route (from Circulation Point to Site)

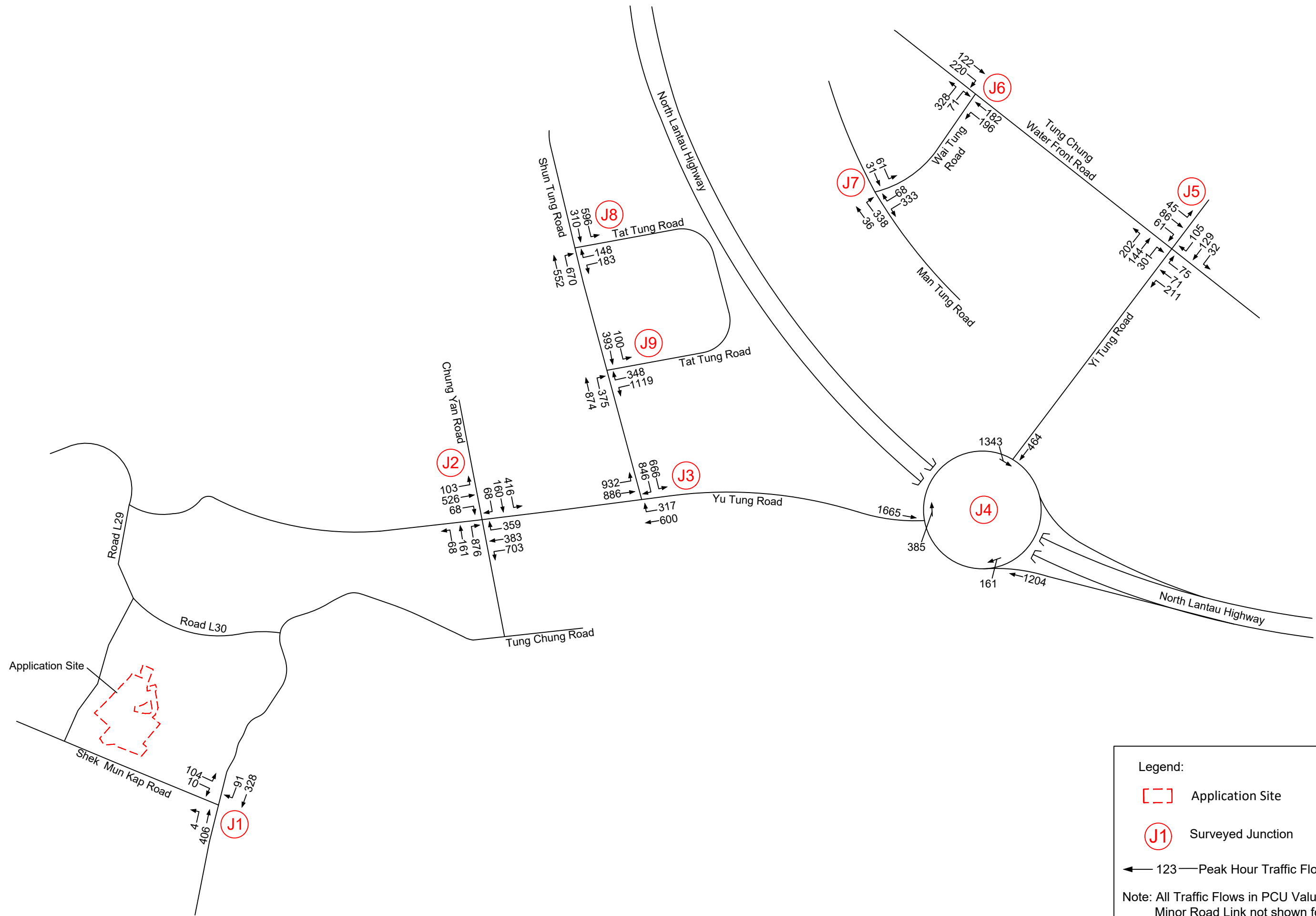


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**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)**
Proposed Route of Shuttle Bus Service (before completion of MTR Tung Chung West Station)

Project No. 83209	Rev. B
Dwg No. Figure 4-2	

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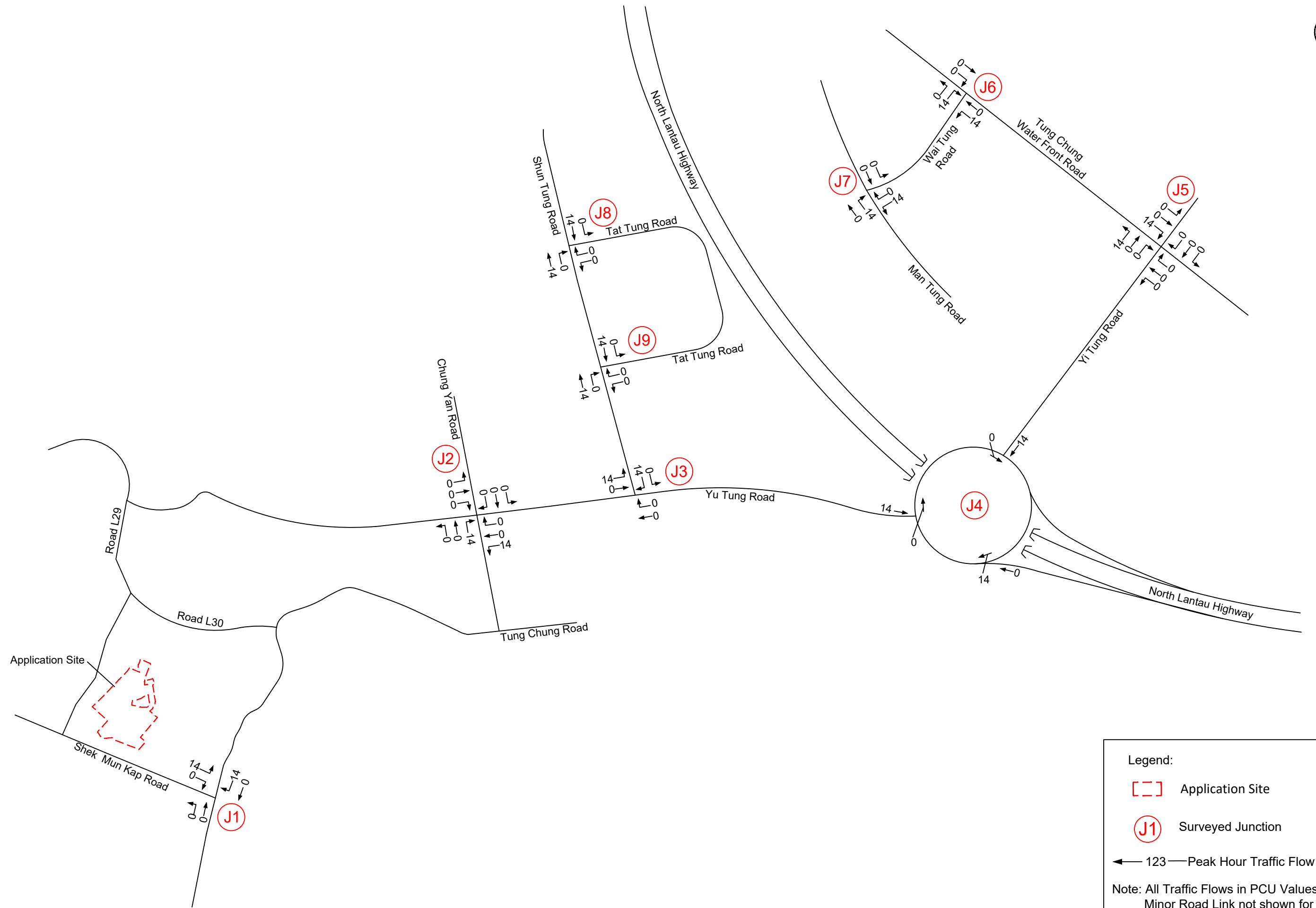
**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)
2030 Reference Peak Hour Traffic Flows**



Date: 13/01/2026
Scale: N.T.S

Project No. 83209	Rev. B
Dwg No. Figure 6-1	

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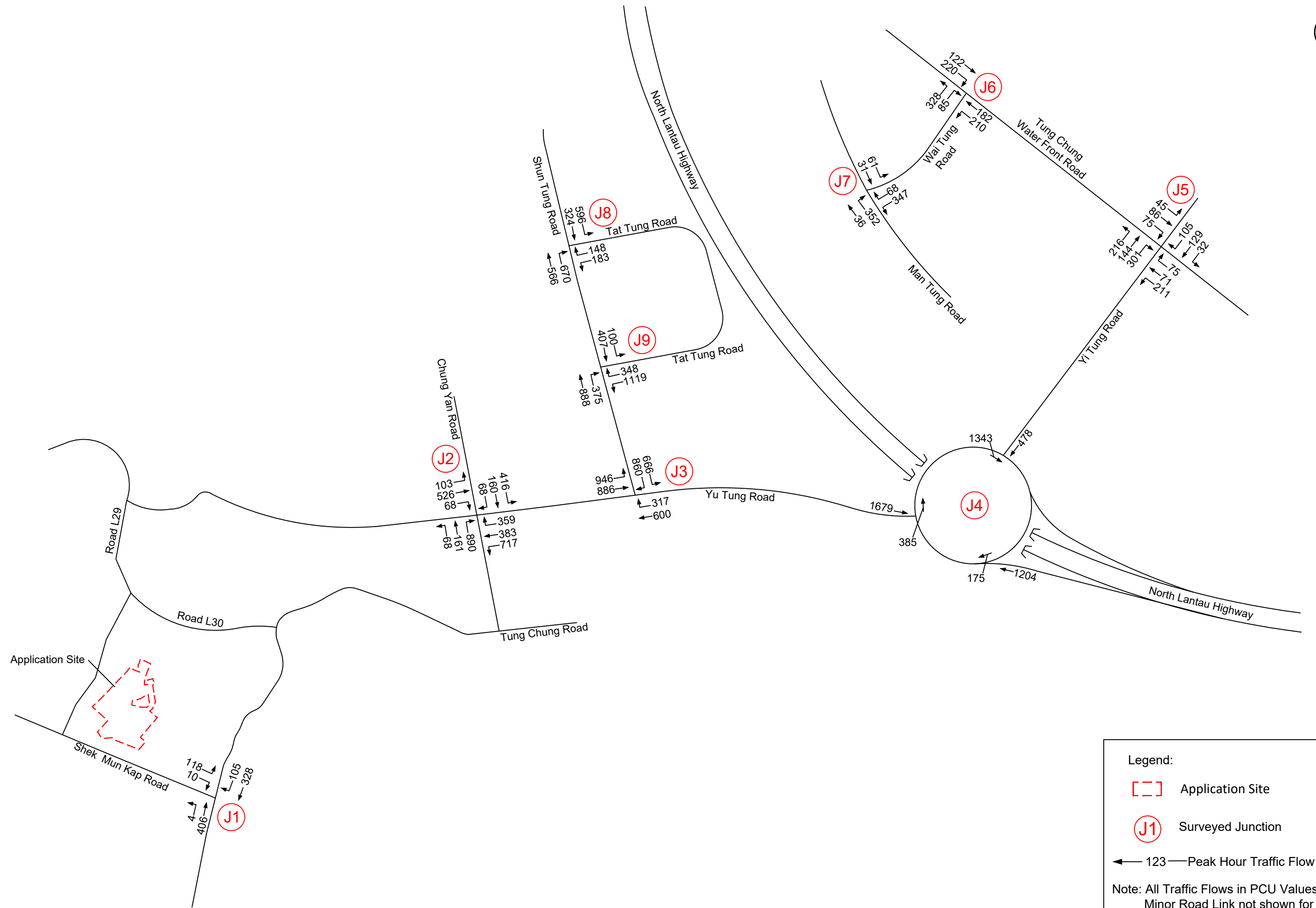
**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)
Peak Hour Development Traffic Flows**



Date: 13/01/2026
Scale: N.T.S

Project No. 83209	Rev. B
Dwg No. Figure 6-2	

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Legend:

- Application Site
- J1 Surveved Junction
- 123 Peak Hour Traffic Flow

Note: All Traffic Flows in PCU Values
Minor Road Link not shown for clarity

**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)
2030 Design Peak Hour Traffic Flows**



Date: 13/01/2026
Scale: N.T.S

Project No. 83209	Rev. B
Dwg No. Figure 6-3	

Appendix A

2025 Junction Calculation Sheets

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS

DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2025Obs_CM

PROJECT NO.: 83209

PREPARED BY:

AH

Jan-26

J1: Tung Chung Road / Shek Mun Kap Road

FILENAME :

CHECKED BY:

CW

Jan-26

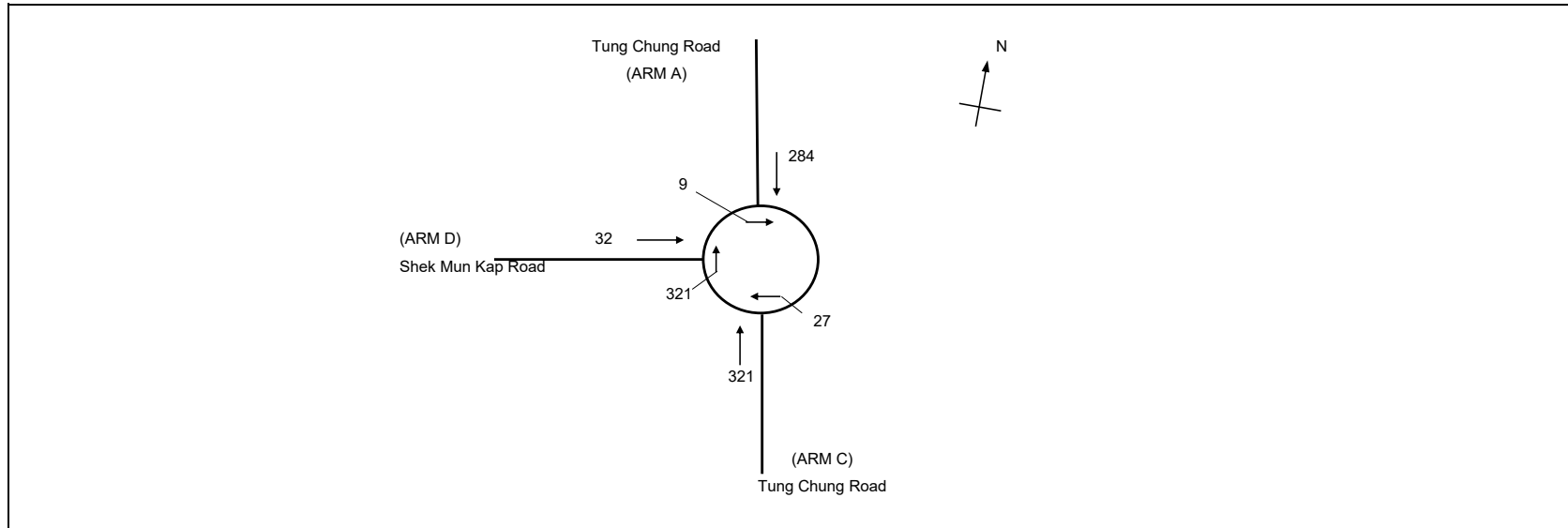
2025 Observed Ching Ming Festival Day Peak Hour Traffic Flows

J1_Tung Chung Road_Shek Mun Kap Road_R.xlsx

REVIEWED BY:

SC

Jan-26



ARM	A	C	D		
INPUT PARAMETERS:					
V = Approach half width (m)	4.0	4.5	3.3		
E = Entry width (m)	5.0	5.5	4.5		
L = Effective length of flare (m)	10.0	10.0	10.0		
R = Entry radius (m)	30.0	20.0	10.0		
D = Inscribed circle diameter (m)	19.0	19.0	19.0		
A = Entry angle (degree)	10.0	20.0	55.0		
Q = Entry flow (pcu/h)	284	321	32		
Qc = Circulating flow across entry (pcu/h)	9	27	321		
OUTPUT PARAMETERS:					
S = Sharpness of flare = 1.6(E-V)/L	0.16	0.16	0.19		
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.09	1.03	0.86		
X2 = V + ((E-V)/(1+2S))	4.76	5.26	4.17		
M = EXP((D-60)/10)	0	0	0		
F = 303*X2	1442	1593	1263		
Td = 1+(0.5*(1+M))	1.49	1.49	1.49		
Fc = 0.21*Td(1+0.2*X2)	0.61	0.64	0.57		
Qe = K(F-Fc*Qc)	1559	1630	932	Total In Sum =	637 PCU
DFC = Design flow/Capacity = Q/Qe	0.18	0.20	0.03	DFC of Critical Approach =	0.20

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2025Obs_CM(TTM)

PROJECT NO.: 83209

Prepared By: AH

Jan-26

J2: Yu Tung Road / Chung Yan Road

FILENAME :

Checked By: CW

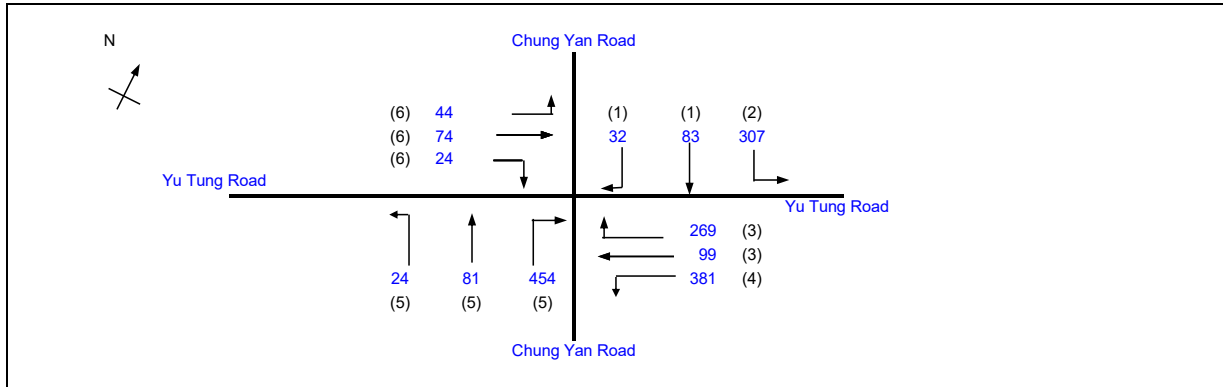
Jan-26

2025 Observed Ching Ming Festival Day Peak Hour Traffic Flow (under existing TTM scheme)

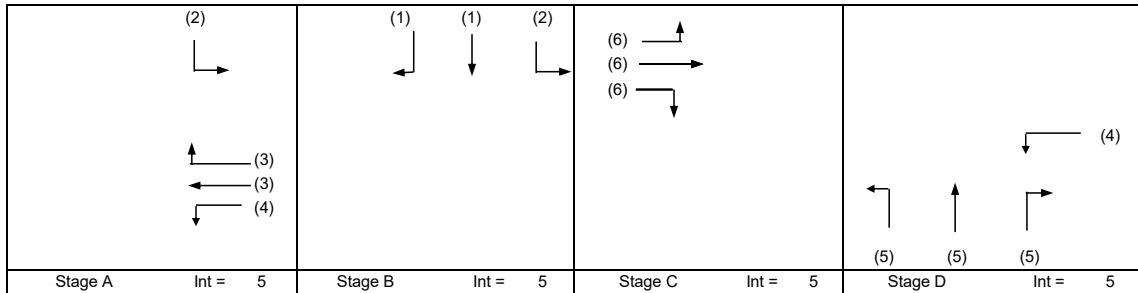
J2_Yu Tung Rd-Chung Yan Road_S.xlsx

Reviewed By: SC

Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	4	
Cycle time	C =	120 sec	
Sum(y)	Y =	0.393	
Loss time	L =	16 sec	
Total Flow	=	1872 pcu	
Co = (1.5*L+5)/(1-Y)	=	47.7 sec	
Cm = L/(1-Y)	=	26.3 sec	
Yult	=	0.780	
R.C.ult = (Yult-Y)/Y*100%	=	98.6 %	
Cp = 0.9*L/(0.9-Y)	=	28.4 sec	
Ymax = 1-L/C	=	0.867	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	99 %	



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

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FFlow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A,B	3.60	2	2	15		N	4090	307			307	1.00	3718			3718	0.083		16	22	61	0.163	15	14
SA,RT	B	3.60	1	1	30			2115		83	32	115	0.28	2086			2086	0.055	0.055		15	15	0.453	18	49
LT	A,D	3.70	4	1	15		N	1985	381			381	1.00	1805			1805	0.211			56	84	0.302	18	7
SA,RT	A	3.70	3	1	40			2125		99	269	368	0.73	2068	48	240	2308	0.159	0.159		42	42	0.453	42	29
LT,SA,RT	D	3.60	5	1	25			2115	24	81	183	288	0.72	2028			2028	0.142	0.142		38	38	0.453	36	32
RT	D	3.60	5	1	40		N	1975			271	271	1.00	1904			1904	0.142			38	38	0.453	36	32
LT,SA	C	3.70	6	1	15		N	1985	44	23		67	0.66	1862			1862	0.036	0.036		10	10	0.453	12	57
SA,RT	C	3.70	6	1	30			2125		51	24	75	0.32	2092			2092	0.036			10	10	0.453	12	56

NOTE : O - OPPOSING TRAFFIC

N - NEAR SIDE LANE

SG - STEADY GREEN

FG - FLASHING GREEN

PEDESTRAIN WALKING SPEED = 1.2m/s

QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2025Obs_CM(TTM)

PROJECT NO.: 83209

Prepared By: AH

Jan-26

J3: Yu Tung Road / Shun Tung Road

FILENAME :

Checked By: CW

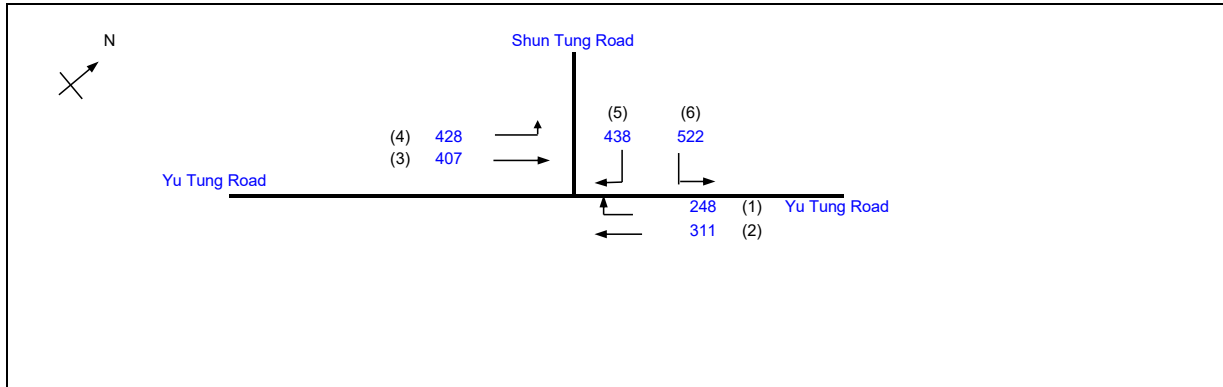
Jan-26

2025 Observed Ching Ming Festival Day Peak Hour Traffic Flow (under existing TTM scheme)

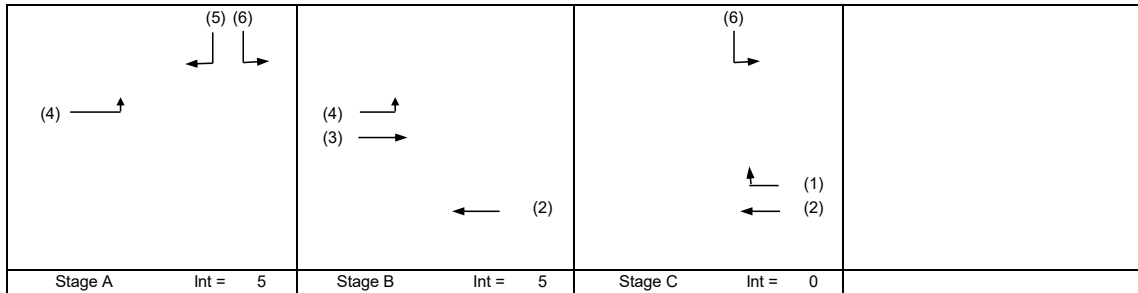
J3_Yu Tung Rd-Shun Tung Road_S.xlsx

Reviewed By: SC

Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	75 sec	
Sum(y)	Y =	0.472	
Loss time	L =	8 sec	
Total Flow	=	2354 pcu	
Co = (1.5*L+5)/(1-Y)	=	32.2 sec	
Cm = L/(1-Y)	=	15.1 sec	
Yult	=	0.840	
R.C.ult = (Yult-Y)/Y*100%	=	78.1 %	
Cp = 0.9*L/(0.9-Y)	=	16.8 sec	
Ymax = 1-L/C	=	0.893	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	70 %	



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

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A,C	3.70	6	1	20		N	1985	522		438	438	1.00	1847			1847	0.283	0.283	8	40	40	0.528	30	12
RT	A	3.70	5	2	30		N	4250			438	438	1.00	4048			4048	0.108			15	16	0.502	21	25
LT	A,B	4.00	4	1	20		N	2015	428			428	1.00	1874			1874	0.228			32	39	0.439	24	11
SA	B	4.00	3	1				2155		407		407	0.00	2155			2155	0.189	0.189		27	27	0.528	30	20
SA	B,C	3.70	2	2			N	4110		311		311	0.00	4110			4110	0.076			11	64	0.089	0	1
RT	C	3.70	1	1	30			2125			248	248	1.00	2024			2024	0.123			17	31	0.296	18	14

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2025Obs_CM

PROJECT NO.: 83209

PREPARED BY: AH

Jan-26

J4: Tung Chung Eastern Interchange

FILENAME :

CHECKED BY: CW

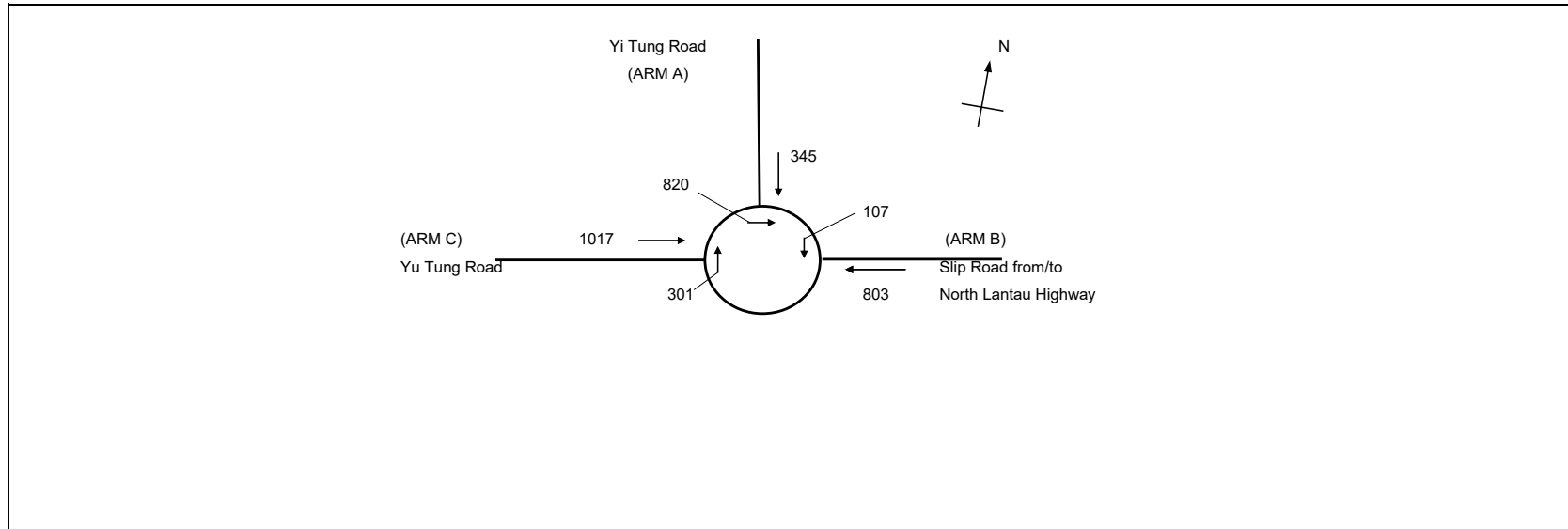
Jan-26

2025 Observed Ching Ming Festival Day Peak Hour Traffic Flows

J4_Tung Chung Eastern Interchange_R.x

REVIEWED BY: SC

Jan-26



ARM	A	B	C		
INPUT PARAMETERS:					
V	= Approach half width (m)	8.0	7.0	8.0	
E	= Entry width (m)	12.0	12.0	12.0	
L	= Effective length of flare (m)	10.0	10.0	10.0	
R	= Entry radius (m)	60.0	60.0	40.0	
D	= Inscribed circle diameter (m)	105.0	105.0	105.0	
A	= Entry angle (degree)	45.0	45.0	45.0	
Q	= Entry flow (pcu/h)	345	803	1017	
Qc	= Circulating flow across entry (pcu/h)	820	107	301	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = $1.6(E-V)/L$	0.64	0.80	0.64	
K	= $1-0.00347(A-30)-0.978(1/R-0.05)$	0.98	0.98	0.97	
X2	= $V + ((E-V)/(1+2S))$	9.75	8.92	9.75	
M	= $EXP((D-60)/10)$	90	90	90	
F	= $303*X2$	2956	2704	2956	
Td	= $1+(0.5/(1+M))$	1.01	1.01	1.01	
Fc	= $0.21*Td(1+0.2*X2)$	0.62	0.59	0.62	
Qe	= $K(F-Fc*Qc)$	2397	2589	2692	
				Total In Sum =	2165 PCU
DFC	= Design flow/Capacity = Q/Qe	0.14	0.31	0.38	
				DFC of Critical Approach =	0.38

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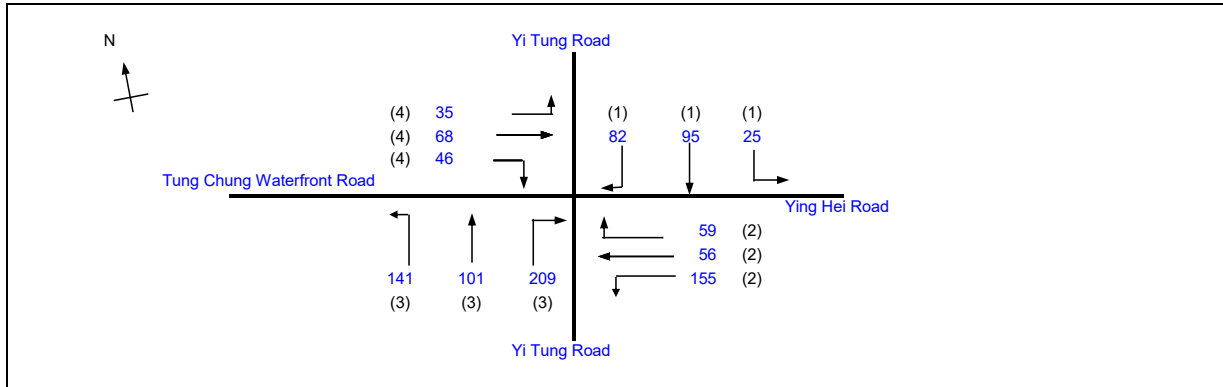
TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)
 J5: Ying Hei Road / Tung Chung Waterfront Road / Yi Tung Road
 2025 Observed Ching Ming Festival Day Peak Hour Traffic Flow

2025Obs_CM

PROJECT NO.: 83209 Prepared By: AH Jan-26
 FILENAME: Checked By: CW Jan-26
 J5_Ying Hei Rd-Yu Tung Road_S.xlsx Reviewed By: SC Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	5	
Cycle time	C =	130 sec	
Sum(y)	Y =	0.221	
Loss time	L =	58 sec	
Total Flow	=	1072 pcu	
Co = (1.5*L+5)/(1-Y)	=	118.2 sec	
Cm = L/(1-Y)	=	74.5 sec	
Yult	=	0.465	
R.C.ult = (Yult-Y)/Y*100%	=	110.1 %	
Cp = 0.9*L/(0.9-Y)	=	76.9 sec	
Ymax = 1-L/C	=	0.554	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	125 %	

Stage	Phase	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
Stage A	(3)	3					
Stage B	(2)	2					
Stage C	(1)	1					
Stage D	(4)	4					
Stage E	(P1), (P2), (P3), (P4)	15	7	13	2	25	13

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT,SA	C	3.70	1	1	20		N	1985	25	74		99	0.25	1948			1948	0.051	0.051	19	16	16	0.400	18	51
SA,RT	C	3.70	1	1	30		N	2125		21	82	103	0.79	2044			2044	0.051			16	16	0.400	18	51
LT	B	3.50	2	1	20		N	1965	84			84	1.00	1828			1828	0.046	0.046		15	15	0.400	12	53
LT,SA	B	3.50	2	1	20		N	2105	71	21		92	0.77	1990			1990	0.046			15	15	0.400	12	53
SA,RT	B	3.50	2	1	30		N	2105		35	59	94	0.63	2041			2041	0.046			15	15	0.400	18	53
LT,SA	A	3.50	3	1	20		N	1965	141	0		141	1.00	1828			1828	0.077	0.077		25	25	0.400	24	44
SA,RT	A	3.50	3	1	30		N	2105		101	57	158	0.36	2068			2068	0.076			25	25	0.396	24	44
RT	A	3.50	3	1	30		N	2105			152	152	1.00	2005			2005	0.076			25	25	0.393	24	44
LT,SA,RT	D	3.70	4	1	20		N	1985	35	68	0	103	0.34	1936	50	231	2166	0.048	0.048		15	15	0.400	18	52
RT	D	3.70	4	1	30		N	2125			46	46	1.00	2024			2024	0.023			7	15	0.191	6	48
PED	E																		39						

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

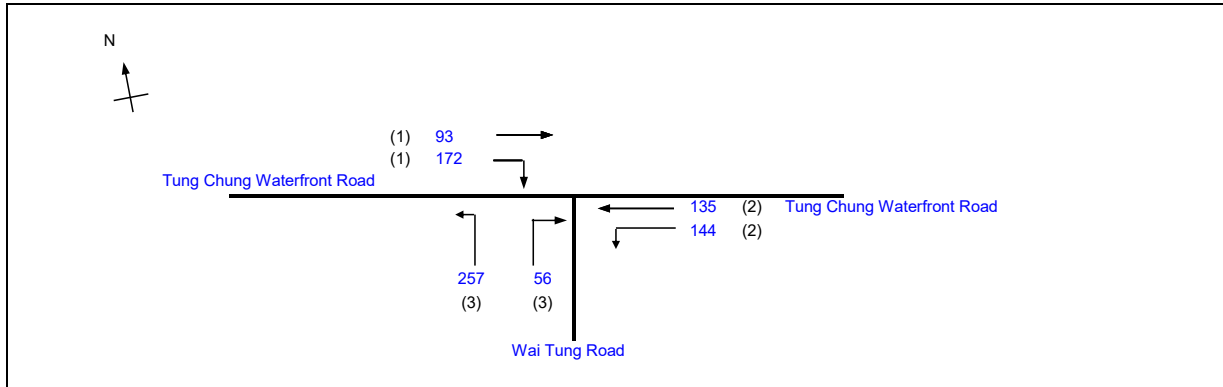
TRAFFIC SIGNAL CALCULATION

INITIALS DATE

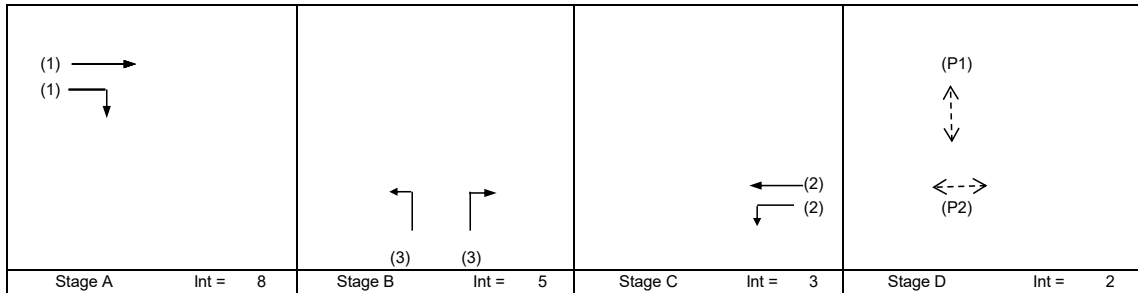
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)
 J6: Tung Chung Waterfront Road / Wai Tung Road
 2025 Observed Ching Ming Festival Day Peak Hour Traffic Flow

2025Obs_CM Peak

PROJECT NO.: 83209 Prepared By: AH Jan-26
 FILENAME: Checked By: CW Jan-26
 J6_Tung Chung Waterfront Rd-Wai Tung Road_S Reviewed By: SC Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	4	
Cycle time	C =	120 sec	
Sum(y)	Y =	0.228	
Loss time	L =	41 sec	
Total Flow	=	857 pcu	
Co = (1.5*L+5)/(1-Y)	=	86.1 sec	
Cm = L/(1-Y)	=	53.1 sec	
Yult	=	0.593	
R.C.ult = (Yult-Y)/Y*100%	=	160.0 %	
Cp = 0.9*L/(0.9-Y)	=	54.9 sec	
Ymax = 1-L/C	=	0.658	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	160 %	

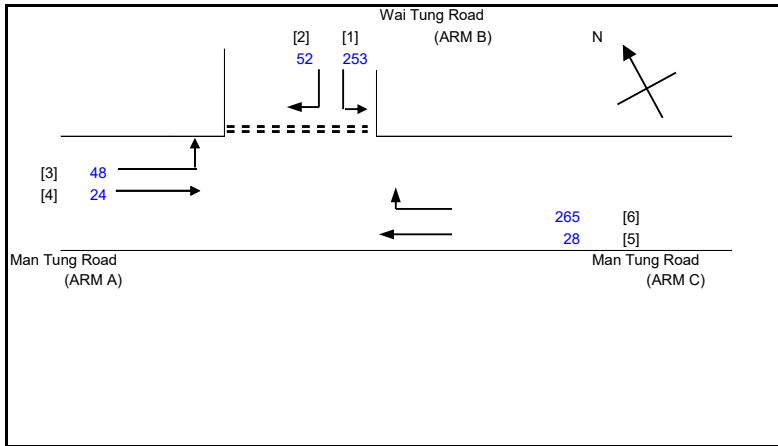


Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	D	10	5	8	2	16	8
P2	D	7	5	6	2	18	6

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
SA,RT	A	4.00	1	1	30		N	2015		93	37	130	0.29	1987			1987	0.066	0.066	15	23	23	0.346	18	40
RT	A	4.00	1	1	30		N	2155			135	135	1.00	2052			2052	0.066			23	23	0.346	18	40
LT,SA	C	4.00	2	1	20		N	2015	144	0		144	1.00	1874			1874	0.077	0.077		27	27	0.346	18	37
SA	C	4.00	2	1				2155		135		135	0.00	2155			2155	0.063			22	22	0.346	18	41
LT	B	3.30	3	1	15		N	1945	151			151	1.00	1768			1768	0.085	0.085		30	30	0.346	18	35
LT,RT	B	3.30	3	1	15			2085	106		56	162	1.00	1895			1895	0.085			30	30	0.346	24	35
PED	D																		26						

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)	2025Obs_CM Peak	PROJECT NO.: 83209	PREPARED BY: BK	BK	Jan-26
J7 : Man Tung Road / Wai Tung Road		FILENAME : J7_Man Tung Rd-Wai Tung Rd_P.x	CHECKED BY: CC	CC	Jan-26
2025 Observed Ching Ming Festival Day Peak Hour Traffic Flow			REVIEWED BY: CC	CC	Jan-26



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W = 7.00 (metres)
W cr = 0 (metres)
q a-b = 48 (pcu/hr)
q a-c = 24 (pcu/hr)

MAJOR ROAD (ARM C)

W c-b = 7.00 (metres)
Vr c-b = 30 (metres)
q c-a = 28 (pcu/hr)
q c-b = 265 (pcu/hr)

MINOR ROAD (ARM B)

W b-a = 3.50 (metres)
W b-c = 3.50 (metres)
VI b-a = 40 (metres)
Vr b-a = 50 (metres)
Vr b-c = 50 (metres)
q b-a = 52 (pcu/hr)
q b-c = 253 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.8628183
E = 0.9237883
F = 1.2083931
Y = 0.7585

THE CAPACITY OF MOVEMENT :

Q b-a = 436
Q b-c = 677 Q b-c (O) = 656.8
Q c-b = 876

TOTAL FLOW = 670 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.1193
DFC b-c = 0.3737
DFC c-b = 0.3025

CRITICAL DFC = 0.37

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2025Obs_CM

PROJECT NO.: 83209

Prepared By:

AH

Jan-26

J8: Tat Tung Road / Shun Tung Road (West)

FILENAME :

Checked By:

CW

Jan-26

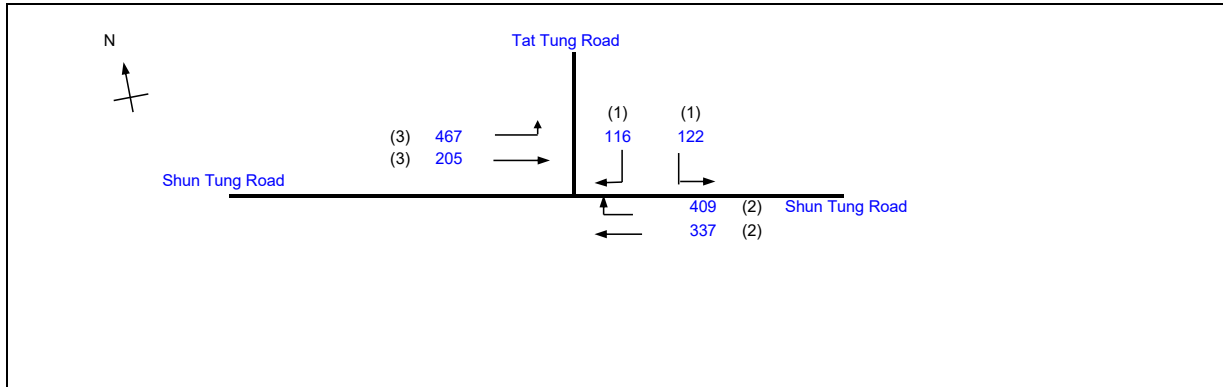
2025 Ching Ming Festival Day Peak Hour Traffic Flow (under existing TTM scheme)

J8_Tat Tung Rd-Shun Tung Road (West)_S

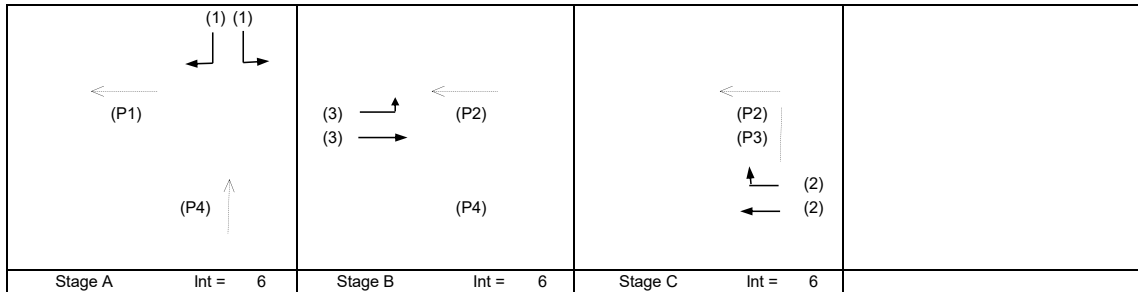
Reviewed By:

SC

Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	110 sec	
Sum(y)	Y =	0.441	
Loss time	L =	15 sec	
Total Flow	=	1656 pcu	
Co = (1.5*L+5)/(1-Y)	=	49.2 sec	
Cm = L/(1-Y)	=	26.8 sec	
Yult	=	0.788	
R.C.ult = (Yult-Y)/Y*100%	=	78.6 %	
Cp = 0.9*L/(0.9-Y)	=	29.4 sec	
Ymax = 1-L/C	=	0.864	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	76 %	



Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	A	13	7	11	2	7	11
P2	B,C	8	5	6	2	82	6
P3	C	10	5	8	2	40	8
P4	A,B	11	6	9	2	49	9

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A	3.40	1	1	15		N	1955	122		122	1.00	1777			1777	0.069	0.069	15	15	15	0.511	18	47	
RT	A	3.40	1	1	25		N	2095		116	116	1.00	1976			1976	0.059			13	15	0.436	18	44	
LT	B	3.80	3	1	16		N	1995	298		298	1.00	1824			1824	0.163			35	35	0.511	36	30	
LT,SA	B	3.80	3	1	16		N	2135	169	205	374	0.45	2048	45	245	2294	0.163	0.163		35	35	0.510	42	30	
SA	C	3.70	2	1			N	1965		337	337	0.00	1965	40	218	2183	0.154			33	45	0.377	36	22	
RT	C	3.70	2	1	20		N	2105		409	409	1.00	1958			1958	0.209	0.209		45	45	0.511	42	24	

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

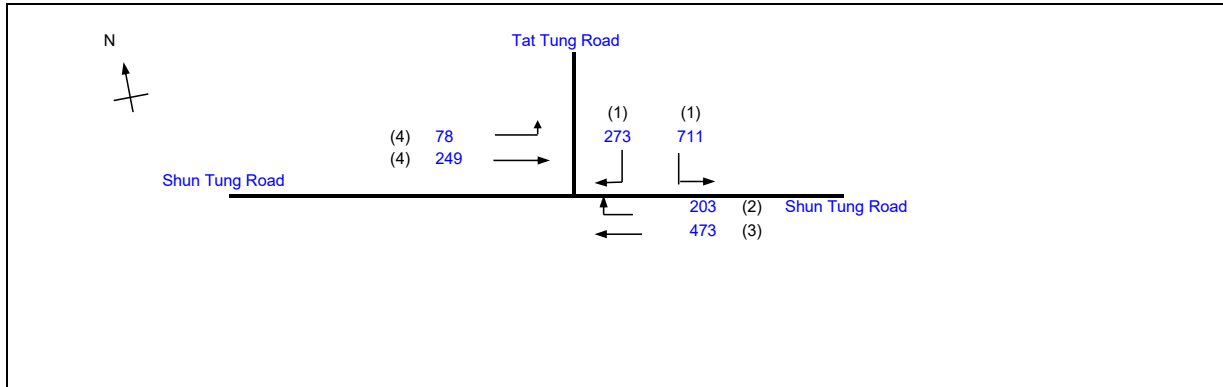
TRAFFIC SIGNAL CALCULATION

INITIALS DATE

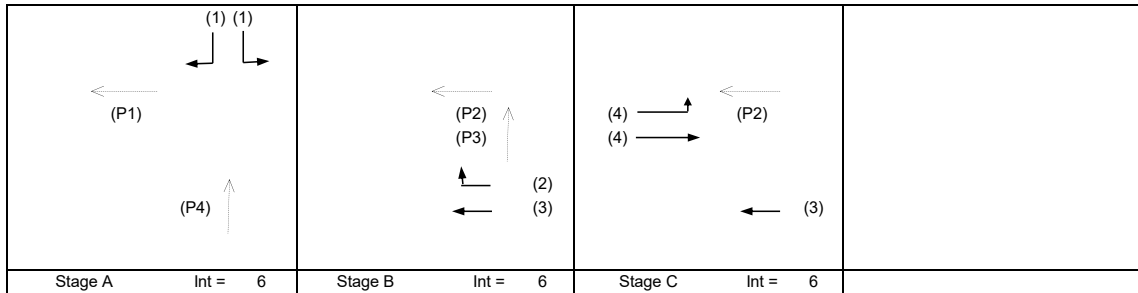
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)
 J9: Tat Tung Road / Shun Tung Road (East)
 2025 Ching Ming Festival Day Peak Hour Traffic Flow

2025Obs_CM Peak

PROJECT NO.: 83209 Prepared By: AH Jan-26
 FILENAME: Checked By: CW Jan-26
 J9_Tat Tung Rd-Shun Tung Road (East)_S Reviewed By: SC Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	110 sec	
Sum(y)	Y =	0.440	
Loss time	L =	15 sec	
Total Flow	=	1987 pcu	
Co = (1.5*L+5)/(1-Y)	=	49.1 sec	
Cm = L/(1-Y)	=	26.8 sec	
Yult	=	0.788	
R.C.ult = (Yult-Y)/Y*100%	=	78.9 %	
Cp = 0.9*L/(0.9-Y)	=	29.4 sec	
Ymax = 1-L/C	=	0.864	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	77 %	



Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	A	13	7	11	2	47	11
P2	B,C	8	5	6	2	41	6
P3	B	8	5	7	2	18	7
P4	A	13	7	11	2	48	11

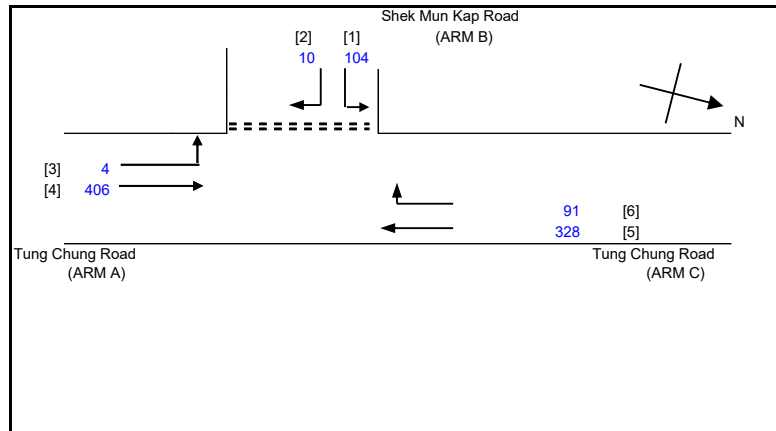
Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A	3.50	1	1	18		N	1965	467		467	1.00	1814			1814	0.258	0.258	15	56	56	0.510	42	18	
LT,RT	A	3.50	1	1	30		N	2105	244	273	517	1.00	2005			2005	0.258			56	56	0.510	42	18	
LT,SA	C	3.70	4	1	15		N	1985	78	76	154	0.51	1889			1889	0.081	0.081		18	18	0.510	18	44	
SA	C	3.70	4	1				2125		173	173	0.00	2125			2125	0.081			18	18	0.510	24	43	
SA	B,C	3.75	3	2			N	4120		473	473	0.00	4120			4120	0.115			25	41	0.311	27	23	
RT	B	3.75	2	1	25			2130		203	203	1.00	2009			2009	0.101	0.101		22	22	0.510	24	40	

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

Appendix B

2030 Junction Calculation Sheets

OZZO TECHNOLOGY (HK) LIMITED		PRIORITY JUNCTION CALCULATION		INITIALS	DATE
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)		2030Ref_CM(IMP)	PROJECT NO.: 83209	PREPARED BY: AH	Jan-26
J1: Tung Chung Road / Shek Mun Kap Road			FILENAME : J1_Tung Chung Road_Shek Mun Kap Road_R.xls	CHECKED BY: CW	Jan-26
2030 Reference Ching Ming Festival Day Peak Hour Traffic Flow (with improvement scheme by others)				REVIEWED BY: SC	Jan-26



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
W = 8.00 (metres)
W cr = 2 (metres)
q a-b = 4 (pcu/hr)
q a-c = 406 (pcu/hr)

MAJOR ROAD (ARM C)
W c-b = 2.10 (metres)
Vr c-b = 50 (metres)
q c-a = 328 (pcu/hr)
q c-b = 91 (pcu/hr)

MINOR ROAD (ARM B)

W b-a = 3.30 (metres)
W b-c = 3.30 (metres)
Vl b-a = 60 (metres)
Vr b-a = 40 (metres)
Vr b-c = 40 (metres)
q b-a = 10 (pcu/hr)
q b-c = 104 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.8490055
E = 0.8974688
F = 0.8004791
Y = 0.724

THE CAPACITY OF MOVEMENT :

Q b-a = 390
Q b-c = 572 Q b-c (O) = 568.3
Q c-b = 510

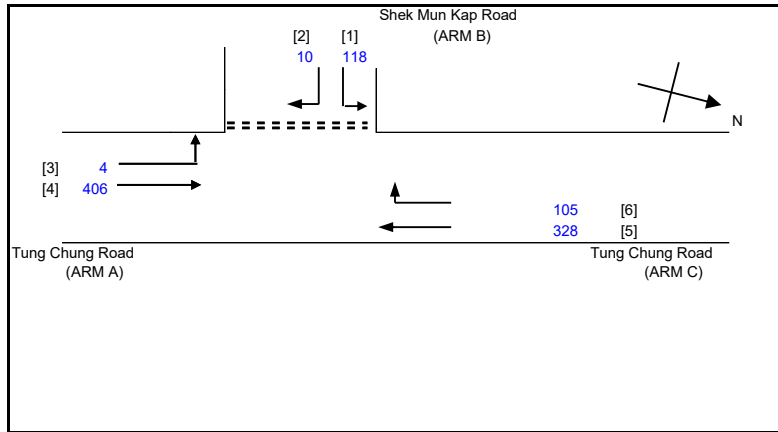
TOTAL FLOW = 943 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0256
DFC b-c = 0.1818
DFC c-b = 0.1784

CRITICAL DFC = 0.18

OZZO TECHNOLOGY (HK) LIMITED		PRIORITY JUNCTION CALCULATION		INITIALS	DATE
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)		2030Des_CM(IMP)	PROJECT NO.: 83209	PREPARED BY: AH	Jan-26
J1: Tung Chung Road / Shek Mun Kap Road			FILENAME : J1_Tung Chung Road_Shek Mun Kap Road_R.xls	CHECKED BY: CW	Jan-26
2030 Design Ching Ming Festival Day Peak Hour Traffic Flow (with improvement scheme by others)				REVIEWED BY: SC	Jan-26



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
W = 8.00 (metres)
W cr = 2 (metres)
q a-b = 4 (pcu/hr)
q a-c = 406 (pcu/hr)

MAJOR ROAD (ARM C)
W c-b = 2.10 (metres)
Vr c-b = 50 (metres)
q c-a = 328 (pcu/hr)
q c-b = 105 (pcu/hr)

MINOR ROAD (ARM B)

W b-a = 3.30 (metres)
W b-c = 3.30 (metres)
Vl b-a = 60 (metres)
Vr b-a = 40 (metres)
Vr b-c = 40 (metres)
q b-a = 10 (pcu/hr)
q b-c = 118 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.8490055
E = 0.8974688
F = 0.8004791
Y = 0.724

THE CAPACITY OF MOVEMENT :

Q b-a = 385
Q b-c = 572 Q b-c (O) = 568.3
Q c-b = 510

TOTAL FLOW = 971 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0260
DFC b-c = 0.2063
DFC c-b = 0.2059

CRITICAL DFC = 0.21

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2030Ref_CM(IMP)

PROJECT NO.: 83209

Prepared By: AH

APR-26

J2: Yu Tung Road / Chung Yan Road

FILENAME:

Checked By: CW

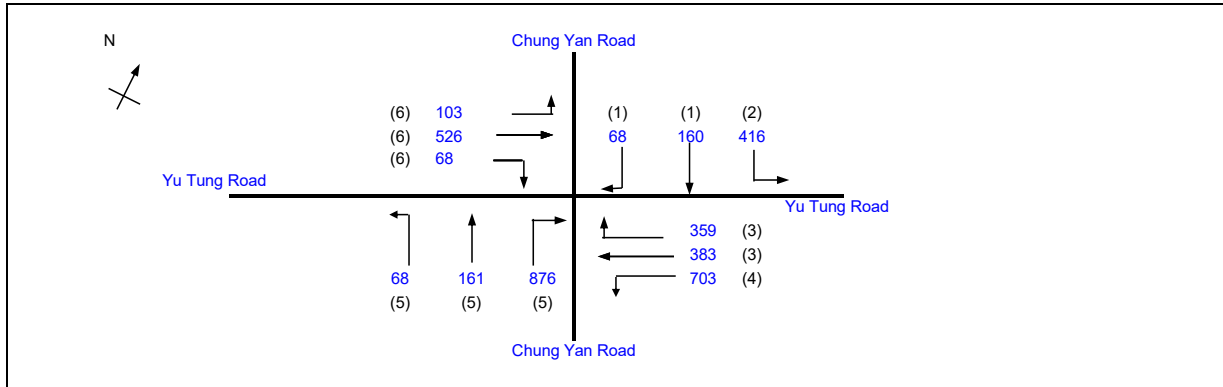
APR-26

2030 Design Ching Ming Festival Day Peak Hour Traffic Flow (with improvement scheme by others)

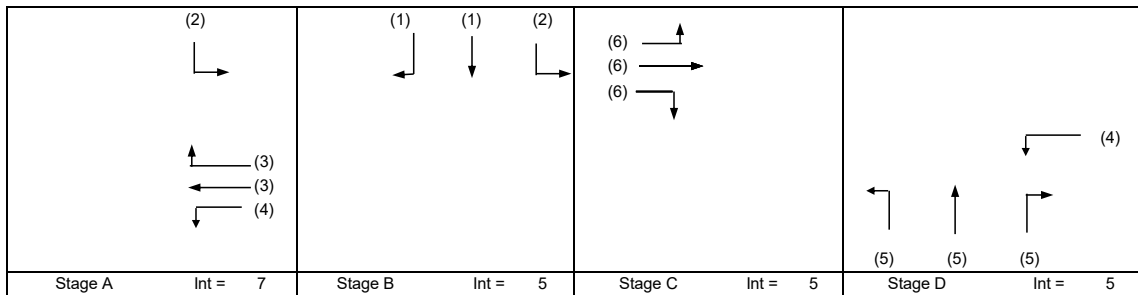
J2_Yu Tung Rd-Chung Yan Road_S.xlsx

Reviewed By: SC

APR-26



		Existing Cycle Time	
No. of stages per cycle	N =	4	
Cycle time	C =	120 sec	
Sum(y)	Y =	0.592	
Loss time	L =	18 sec	
Total Flow	=	3891 pcu	
Co = (1.5*L+5)/(1-Y)	=	78.5 sec	
Cm = L/(1-Y)	=	44.2 sec	
Yult	=	0.765	
R.C.ult = (Yult-Y)/Y*100%	=	29.1 %	
Cp = 0.9*L/(0.9-Y)	=	52.7 sec	
Ymax = 1-L/C	=	0.850	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	29 %	



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

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FFlow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A,B	3.60	2	1	20		N	1975	416			416	1.00	1837			1837	0.226		18	39	40	0.687	54	37
SA,RT	B	3.60	1	1	30			2115		160	0	160	0.00	2115			2115	0.076	0.076		13	13	0.697	30	63
RT	B	3.60	1	1	30			2115			68	68	1.00	2014			2014	0.034			6	13	0.311	12	48
LT	A,D	3.70	4	1	20		N	1985	703			703	1.00	1847			1847	0.381			66		0.000	138	54
SA	A	3.70	3	1				2125		253		253	0.00	2125			2125	0.119	0.119		21	21	0.697	42	52
SA,RT	A	3.70	3	1	30			2125		130	118	247	0.48	2076			2076	0.119			21	21	0.697	42	53
RT	A	3.70	3	1	30			2125			241	241	1.00	2024			2024	0.119			21	21	0.697	36	53
LT,SA,RT	D	3.60	5	1	20		N	1975	68	161	304	533	0.70	1877			1877	0.284	0.284		49	49	0.697	60	31
RT	D	3.60	5	1	30			2115			572	572	1.00	2014			2014	0.284			49	49	0.697	66	31
LT,SA	C	3.70	6	1	20		N	1985	103	115		218	0.47	1917			1917	0.114			20	20	0.000	0	0
SA	C	3.70	6	1	25			2125		241		241	0.00	2125			2125	0.114	0.114		20	20	0.000	0	0
SA,RT	C	3.70	6	1	30			2125		170	68	238	0.29	2095			2095	0.114			20	20	0.000	0	0

NOTE : O - OPPOSING TRAFFIC

N - NEAR SIDE LANE

SG - STEADY GREEN

FG - FLASHING GREEN

PEDESTRAIN WALKING SPEED = 1.2m/s

QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2030Des_CM(IMP)

PROJECT NO.: 83209

Prepared By: AH

APR-26

J2: Yu Tung Road / Chung Yan Road

FILENAME:

Checked By: CW

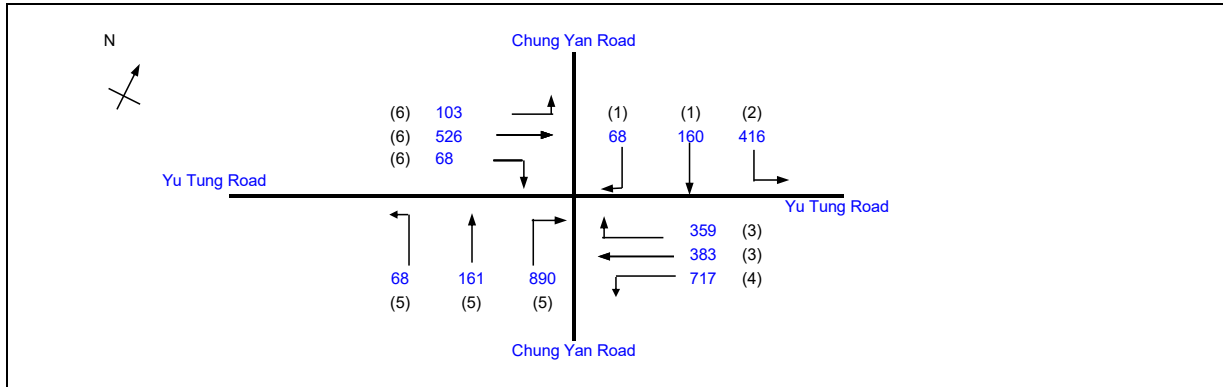
APR-26

2030 Design Ching Ming Festival Day Peak Hour Traffic Flow (with improvement scheme by others)

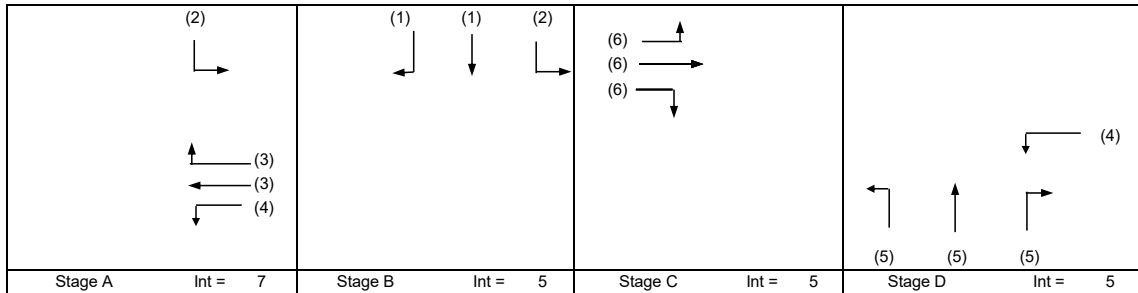
J2_Yu Tung Rd-Chung Yan Road_S.xlsx

Reviewed By: SC

APR-26



		Existing Cycle Time	
No. of stages per cycle	N =	4	
Cycle time	C =	120 sec	
Sum(y)	Y =	0.596	
Loss time	L =	18 sec	
Total Flow	=	3919 pcu	
Co = (1.5*L+5)/(1-Y)	=	79.2 sec	
Cm = L/(1-Y)	=	44.6 sec	
Yult	=	0.765	
R.C.ult = (Yult-Y)/Y*100%	=	28.3 %	
Cp = 0.9*L/(0.9-Y)	=	53.3 sec	
Ymax = 1-L/C	=	0.850	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	28 %	



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

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FFlow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A,B	3.60	2	1	20		N	1975	416		416	1.00	1837			1837	0.226		18	39	39	0.691	54	38	
SA,RT	B	3.60	1	1	30			2115		160	160	0.00	2115			2115	0.076	0.076		13	13	0.701	30	63	
RT	B	3.60	1	1	30			2115		68	68	1.00	2014			2014	0.034			6	13	0.313	12	48	
LT	A,D	3.70	4	1	20		N	1985	717		717	1.00	1847			1847	0.388			66		0.000	138	54	
SA	A	3.70	3	1				2125		253	253	0.00	2125			2125	0.119	0.119		20	20	0.701	42	53	
SA,RT	A	3.70	3	1	30			2125		130	118	0.48	2076			2076	0.119			20	20	0.701	42	53	
RT	A	3.70	3	1	30			2125		241	241	1.00	2024			2024	0.119			20	20	0.701	36	53	
LT,SA,RT	D	3.60	5	1	20		N	1975	68	161	311	0.70	1876			1876	0.288	0.288		49	49	0.701	60	31	
RT	D	3.60	5	1	30			2115		579	579	1.00	2014			2014	0.288			49	49	0.701	66	31	
LT,SA	C	3.70	6	1	20		N	1985	103	115	218	0.47	1917			1917	0.114			19	19	0.000	0	0	
SA	C	3.70	6	1	25			2125		241	241	0.00	2125			2125	0.114	0.114		19	19	0.000	0	0	
SA,RT	C	3.70	6	1	30			2125		170	68	0.29	2095			2095	0.114			19	19	0.000	0	0	

NOTE : O - OPPOSING TRAFFIC

N - NEAR SIDE LANE

SG - STEADY GREEN

FG - FLASHING GREEN

PEDESTRAIN WALKING SPEED = 1.2m/s

QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

J3: Yu Tung Road / Shun Tung Road

2030 Reference Ching Ming Festival Day Peak Hour Traffic Flow (with improvement scheme by others)

2030Ref_CM(IMP)

PROJECT NO.: 83209

Prepared By: AH

Jan-26

FILENAME :

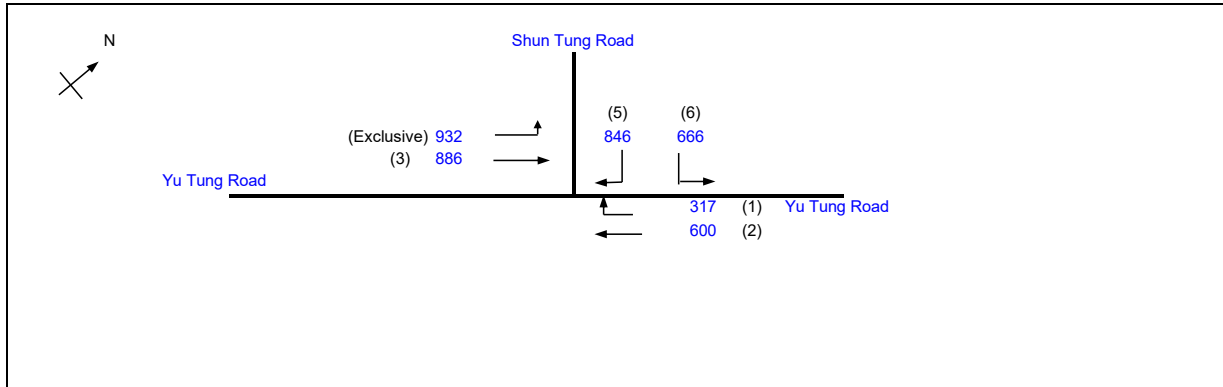
Checked By: CW

Jan-26

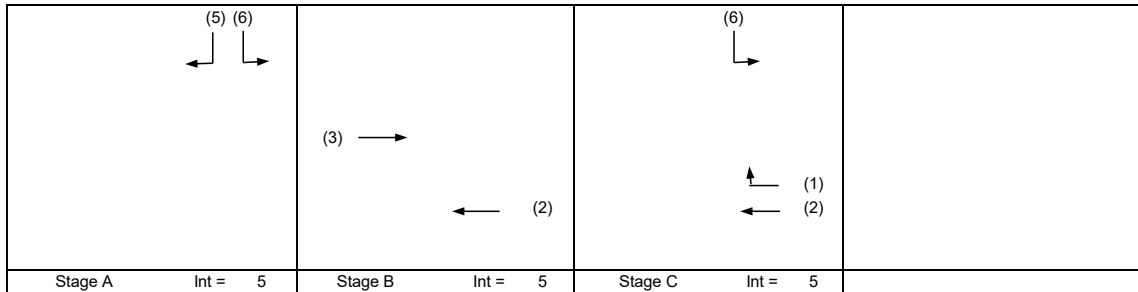
J3_Yu Tung Rd-Shun Tung Road_S.xlsx

Reviewed By: SC

Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	75 sec	
Sum(y)	Y =	0.571	
Loss time	L =	12 sec	
Total Flow	=	3315 pcu	
Co = (1.5*L+5)/(1-Y)	=	53.6 sec	
Cm = L/(1-Y)	=	28.0 sec	
Yult	=	0.810	
R.C.ult = (Yult-Y)/Y*100%	=	41.8 %	
Cp = 0.9*L/(0.9-Y)	=	32.8 sec	
Ymax = 1-L/C	=	0.840	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	32 %	



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

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A,C	3.70	6	1	20		N	1985	666		846	666	1.00	1847		1847	0.361		12	40	44	0.610	30	11	
RT	A	3.70	5	2	30			4250			846	846	1.00	4048		4048	0.209	0.209		23	23	0.680	36	23	
SA	B	4.00	3	2				4310		886		886	0.00	4310		4310	0.206	0.206		23	23	0.680	36	23	
SA	B,C	3.70	2	2			N	4110		600		600	0.00	4110		4110	0.146			16	44	0.249	15	7	
RT	C	3.70	1	1	30			2125			317	317	1.00	2024		2024	0.157	0.157		17	17	0.680	30	31	

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2030Des_CM(IMP)

PROJECT NO.: 83209

Prepared By:

AH

Jan-26

J3: Yu Tung Road / Shun Tung Road

FILENAME :

Checked By:

CW

Jan-26

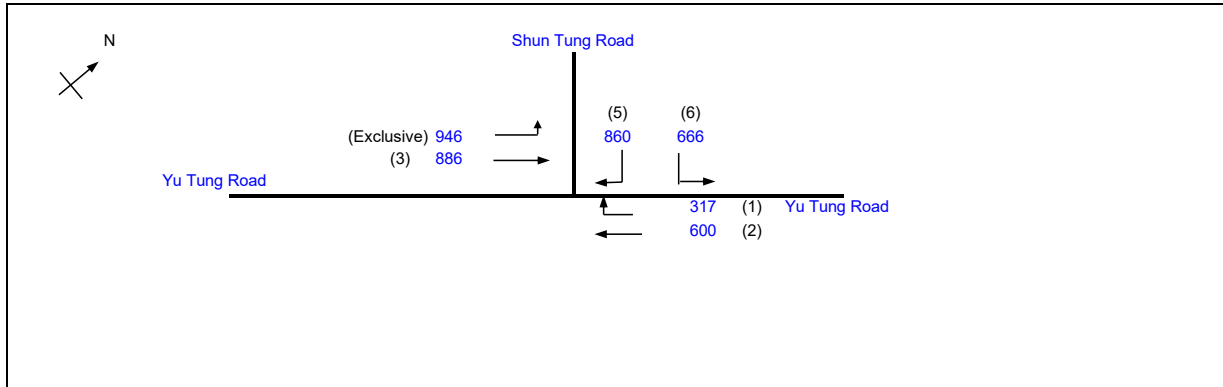
2030 Design Ching Ming Festival Day Peak Hour Traffic Flow (with improvement scheme by others)

J3_Yu Tung Rd-Shun Tung Road_S.xlsx

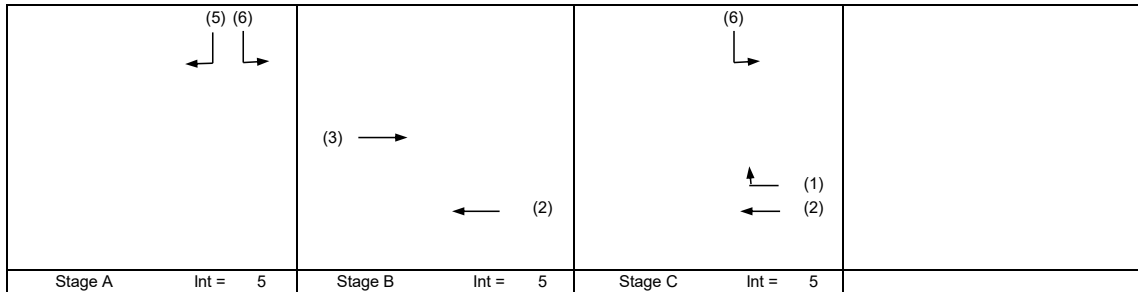
Reviewed By:

SC

Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	75 sec	
Sum(y)	Y =	0.575	
Loss time	L =	12 sec	
Total Flow	=	3329 pcu	
Co = (1.5*L+5)/(1-Y)	=	54.1 sec	
Cm = L/(1-Y)	=	28.2 sec	
Yult	=	0.810	
R.C.ult = (Yult-Y)/Y*100%	=	40.9 %	
Cp = 0.9*L/(0.9-Y)	=	33.2 sec	
Ymax = 1-L/C	=	0.840	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	32 %	



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

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FFlow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A,C	3.70	6	1	20		N	1985	666		860	666	1.00	1847		1847	0.361		12	40	44	0.608	30	11	
RT	A	3.70	5	2	30			4250			860	860	1.00	4048		4048	0.212	0.212		23	23	0.684	36	23	
SA	B	4.00	3	2				4310		886		886	0.00	4310		4310	0.206	0.206		23	23	0.684	36	23	
SA	B,C	3.70	2	2			N	4110		600		600	0.00	4110		4110	0.146			16	44	0.251	15	7	
RT	C	3.70	1	1	30			2125			317	317	1.00	2024		2024	0.157	0.157		17	17	0.684	30	31	

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2030Ref_CM

PROJECT NO.: 83209

PREPARED BY:

AH

Jan-26

J4: Tung Chung Eastern Interchange

FILENAME :

CHECKED BY:

CW

Jan-26

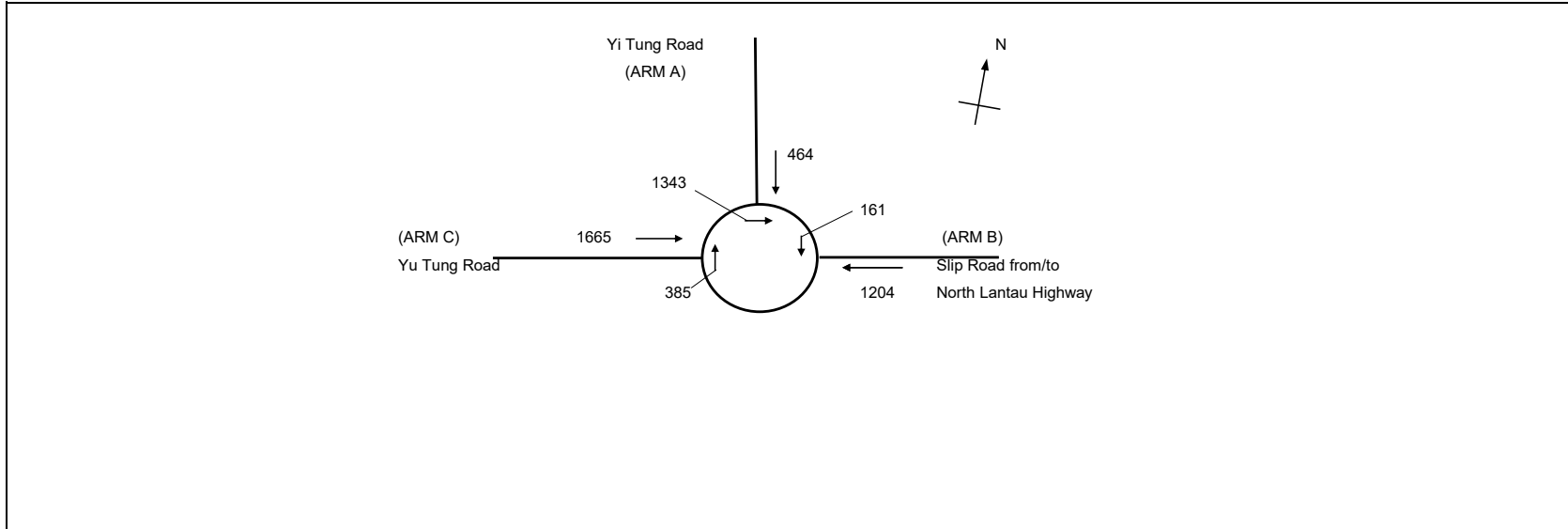
2030 ReferenceChing Ming Festival Day Peak Hour Traffic Flows

J4_Tung Chung Eastern Interchange_R.x

REVIEWED BY:

SC

Jan-26



ARM	A	B	C			
INPUT PARAMETERS:						
V	=	Approach half width (m)	8.0	7.0	8.0	
E	=	Entry width (m)	12.0	12.0	12.0	
L	=	Effective length of flare (m)	10.0	10.0	10.0	
R	=	Entry radius (m)	60.0	60.0	40.0	
D	=	Inscribed circle diameter (m)	105.0	105.0	105.0	
A	=	Entry angle (degree)	45.0	45.0	45.0	
Q	=	Entry flow (pcu/h)	464	1204	1665	
Qc	=	Circulating flow across entry (pcu/h)	1343	161	385	
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = $1.6(E-V)/L$	0.64	0.80	0.64	
K	=	$1-0.00347(A-30)-0.978(1/R-0.05)$	0.98	0.98	0.97	
X2	=	$V + ((E-V)/(1+2S))$	9.75	8.92	9.75	
M	=	$EXP((D-60)/10)$	90	90	90	
F	=	$303*X2$	2956	2704	2956	
Td	=	$1+(0.5/(1+M))$	1.01	1.01	1.01	
Fc	=	$0.21*Td(1+0.2*X2)$	0.62	0.59	0.62	
Qe	=	$K(F-Fc*Qc)$	2078	2558	2641	
					Total In Sum =	3333 PCU
DFC	=	Design flow/Capacity = Q/Qe	0.22	0.47	0.63	
					DFC of Critical Approach =	0.63

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2030Des_CM

PROJECT NO.: 83209

PREPARED BY: AH

Jan-26

J4: Tung Chung Eastern Interchange

FILENAME :

CHECKED BY: CW

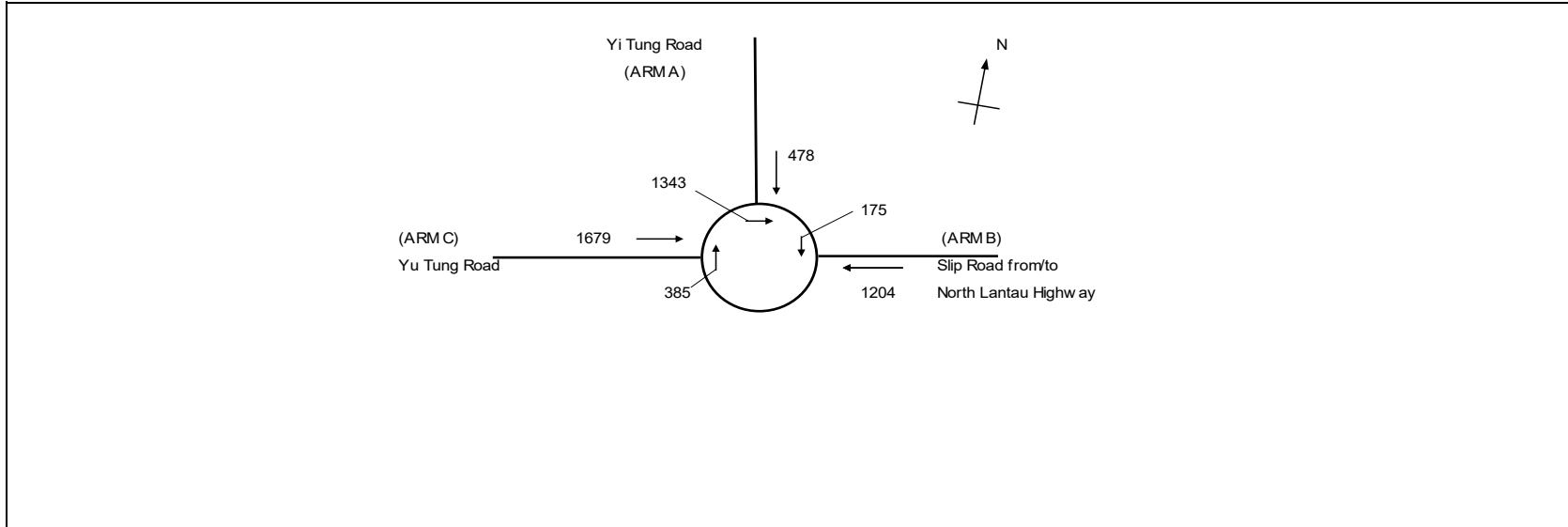
Jan-26

2030 Design Ching Ming Festival Day Peak Hour Traffic Flows

J4_Tung Chung Eastern Interchange_R.x

REVIEWED BY: SC

Jan-26



ARM	A	B	C		
INPUT PARAMETERS:					
V	= Approach half width (m)	8.0	7.0	8.0	
E	= Entry width (m)	12.0	12.0	12.0	
L	= Effective length of flare (m)	10.0	10.0	10.0	
R	= Entry radius (m)	60.0	60.0	40.0	
D	= Inscribed circle diameter (m)	105.0	105.0	105.0	
A	= Entry angle (degree)	45.0	45.0	45.0	
Q	= Entry flow (pcu/h)	478	1204	1679	
Qc	= Circulating flow across entry (pcu/h)	1343	175	385	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = 1.6(E-V)/L	0.64	0.80	0.64	
K	= 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	0.98	0.97	
X2	= V + ((E-V)/(1+2S))	9.75	8.92	9.75	
M	= EXP((D-60)/10)	90	90	90	
F	= 303*X2	2956	2704	2956	
Td	= 1+(0.5/(1+M))	1.01	1.01	1.01	
Fc	= 0.21*Td(1+0.2*X2)	0.62	0.59	0.62	
Qe	= K(F-Fc*Qc)	2078	2550	2641	
					Total In Sum = 3361 PCU
DFC	= Design flow/Capacity = Q/Qe	0.23	0.47	0.64	DFC of Critical Approach = 0.64

OZZO TECHNOLOGY (HK) LIMITED

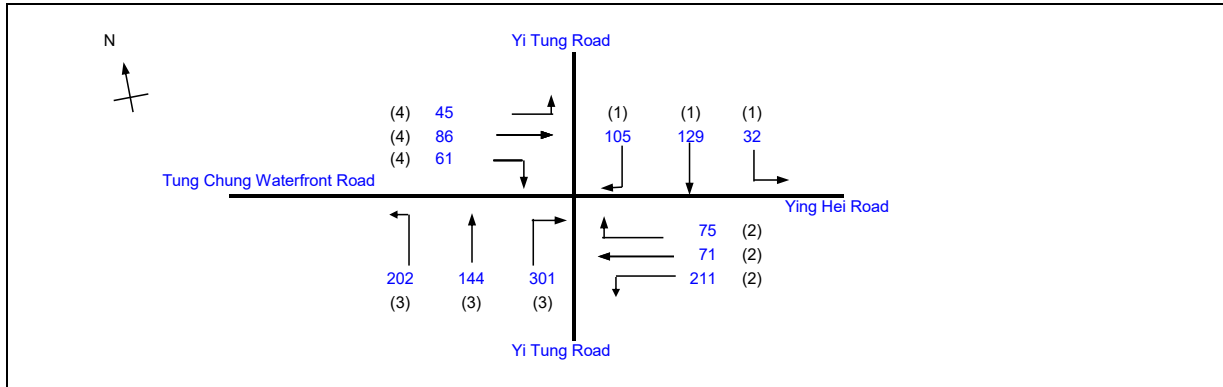
TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)
 J5: Ying Hei Road / Tung Chung Waterfront Road / Yi Tung Road
 2030 Reference Ching Ming Festival Day Peak Hour Traffic Flow

2030Ref_CM

PROJECT NO.: 83209 Prepared By: AH Jan-26
 FILENAME: Checked By: CW Jan-26
 J5_Ying Hei Rd-Yu Tung Road_S.xlsx Reviewed By: SC Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	5	
Cycle time	C =	130 sec	
Sum(y)	Y =	0.299	
Loss time	L =	58 sec	
Total Flow	=	1462 pcu	
Co = (1.5*L+5)/(1-Y)	=	131.2 sec	
Cm = L/(1-Y)	=	82.7 sec	
Yult	=	0.465	
R.C.ult = (Yult-Y)/Y*100%	=	55.7 %	
Cp = 0.9*L/(0.9-Y)	=	86.8 sec	
Ymax = 1-L/C	=	0.554	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	67 %	

Stage	Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)														
				SG	FG	Delay	SG	FG													
Stage A	(3)	Stage B	(3)	Stage C	(1)	Stage D	(4)	Stage E	(P1)	(P2)	(P3)	(P4)									
Stage A	Int = 6	Stage B	Int = 6	Stage C	Int = 6	Stage D	Int = 3	Stage E	Int = 2												

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT,SA	C	3.70	1	1	20		N	1985	32	98		130	0.25	1949		1949	0.067	0.067	19	16	16	0.539	24	56	
SA,RT	C	3.70	1	1	30			2125		31	105	136	0.77	2046		2046	0.067			16	16	0.539	24	56	
LT	B	3.50	2	1	20		N	1965	111			111	1.00	1828		1828	0.061	0.061		15	15	0.539	18	58	
LT,SA	B	3.50	2	1	20			2105	100	21		121	0.82	1983		1983	0.061			15	15	0.539	18	57	
SA,RT	B	3.50	2	1	30			2105		50	75	125	0.60	2044		2044	0.061			15	15	0.539	18	57	
LT,SA	A	3.50	3	1	20		N	1965	202	0		202	1.00	1828		1828	0.111	0.111		27	27	0.539	30	47	
SA,RT	A	3.50	3	1	30			2105		144	82	226	0.36	2067		2067	0.109			26	27	0.533	36	46	
RT	A	3.50	3	1	30			2105			219	219	1.00	2005		2005	0.109			26	27	0.533	36	46	
LT,SA,RT	D	3.70	4	1	20		N	1985	45	86	0	131	0.34	1935	50	231	0.060	0.060		15	15	0.539	24	57	
RT	D	3.70	4	1	30			2125			61	61	1.00	2024		2024	0.030			7	15	0.269	6	50	
PED	E																		39						

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

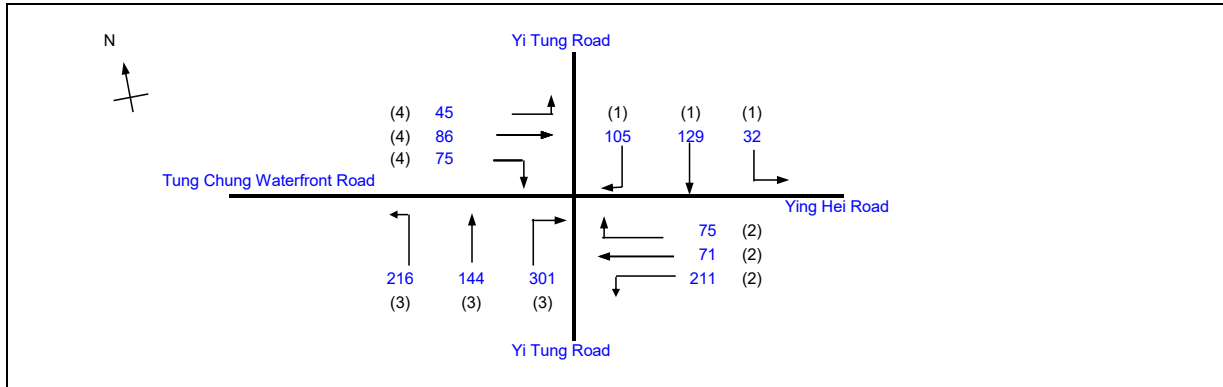
TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)
 J5: Ying Hei Road / Tung Chung Waterfront Road / Yi Tung Road
 2030 Design Ching Ming Festival Day Peak Hour Traffic Flow

2030Des_CM

PROJECT NO.: 83209 Prepared By: AH Jan-26
 FILENAME: Checked By: CW Jan-26
 J5_Ying Hei Rd-Yu Tung Road_S.xlsx Reviewed By: SC Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	5	
Cycle time	C =	130 sec	
Sum(y)	Y =	0.306	
Loss time	L =	58 sec	
Total Flow	=	1490 pcu	
Co = (1.5*L+5)/(1-Y)	=	132.6 sec	
Cm = L/(1-Y)	=	83.6 sec	
Yult	=	0.465	
R.C.ult = (Yult-Y)/Y*100%	=	51.9 %	
Cp = 0.9*L/(0.9-Y)	=	87.9 sec	
Ymax = 1-L/C	=	0.554	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	63 %	

Stage	Phase	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
Stage A	(3)	3					
Stage B	(2)	2					
Stage C	(1)	1					
Stage D	(4)	4					
Stage E	(P1), (P2), (P3), (P4)	15	7	13	2	25	13

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT,SA	C	3.70	1	1	20		N	1985	32	98		130	0.25	1949		1949	0.067	0.067	19	16	16	0.553	24	57	
SA,RT	C	3.70	1	1	30		N	2125		31	105	136	0.77	2046		2046	0.067	0.067		16	16	0.553	24	57	
LT	B	3.50	2	1	20		N	1965	111			111	1.00	1828		1828	0.061	0.061		14	14	0.553	18	59	
LT,SA	B	3.50	2	1	20		N	2105	100	21		121	0.82	1983		1983	0.061	0.061		14	14	0.553	18	58	
SA,RT	B	3.50	2	1	30		N	2105		50	75	125	0.60	2044		2044	0.061	0.061		14	14	0.553	24	58	
LT,SA	A	3.50	3	1	20		N	1965	216	0		216	1.00	1828		1828	0.118	0.118		28	28	0.553	36	46	
SA,RT	A	3.50	3	1	30		N	2105		144	82	226	0.36	2067		2067	0.109	0.109		26	28	0.511	36	44	
RT	A	3.50	3	1	30		N	2105			219	219	1.00	2005		2005	0.109	0.109		26	28	0.511	36	45	
LT,SA,RT	D	3.70	4	1	20		N	1985	45	86	0	131	0.34	1935	50	231	0.060	0.060		14	14	0.553	24	58	
RT	D	3.70	4	1	30		N	2125			75	75	1.00	2024		2024	0.037	0.037		9	14	0.339	12	52	
PED	E																		39						

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

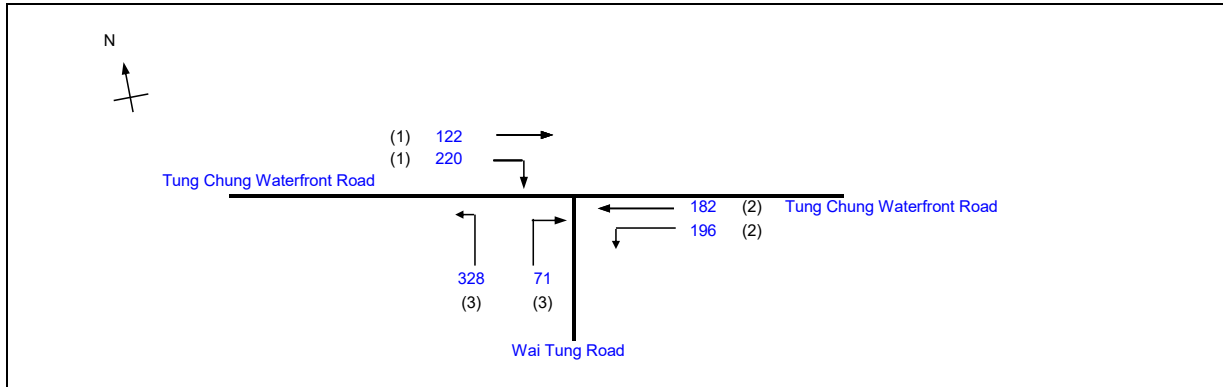
TRAFFIC SIGNAL CALCULATION

INITIALS DATE

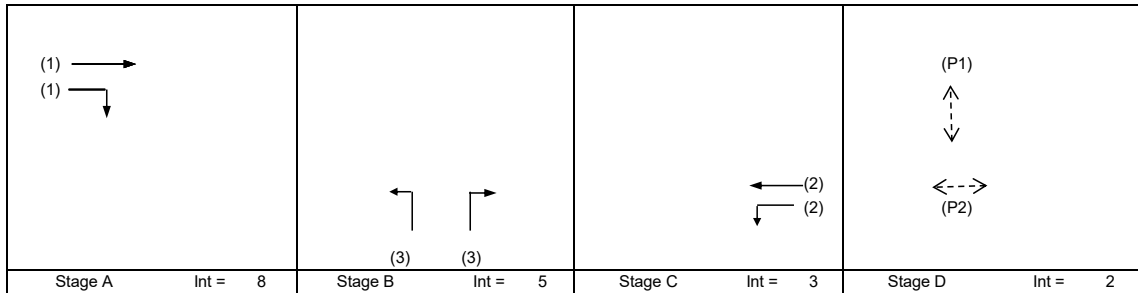
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)
 J6: Tung Chung Waterfront Road / Wai Tung Road
 2030 Reference Ching Ming Festival Day Peak Hour Traffic Flow

2030Ref_CM Peak

PROJECT NO.: 83209 Prepared By: AH Jan-26
 FILENAME: Checked By: CW Jan-26
 J6_Tung Chung Waterfront Rd-Wai Tung Road_S Reviewed By: SC Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	4	
Cycle time	C =	120 sec	
Sum(y)	Y =	0.298	
Loss time	L =	41 sec	
Total Flow	=	1119 pcu	
Co = (1.5*L+5)/(1-Y)	=	94.7 sec	
Cm = L/(1-Y)	=	58.4 sec	
Yult	=	0.593	
R.C.ult = (Yult-Y)/Y*100%	=	98.7 %	
Cp = 0.9*L/(0.9-Y)	=	61.3 sec	
Ymax = 1-L/C	=	0.658	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	99 %	



Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	D	10	5	8	2	16	8
P2	D	7	5	6	2	18	6

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
SA,RT	A	4.00	1	1	30		N	2015		122	46	168	0.27	1988			1988	0.085	0.085	15	22	22	0.453	24	43
RT	A	4.00	1	1	30			2155		174		174	1.00	2052			2052	0.085			22	22	0.453	24	42
LT,SA	C	4.00	2	1	20		N	2015	196	0		196	1.00	1874			1874	0.105	0.105		28	28	0.453	30	39
SA	C	4.00	2	1				2155		182		182	0.00	2155			2155	0.084			22	22	0.453	24	42
LT	B	3.30	3	1	15		N	1945	193			193	1.00	1768			1768	0.109	0.109		29	29	0.453	24	38
LT,RT	B	3.30	3	1	15			2085	135		71	206	1.00	1895			1895	0.109			29	29	0.453	30	38
PED	D																		26						

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

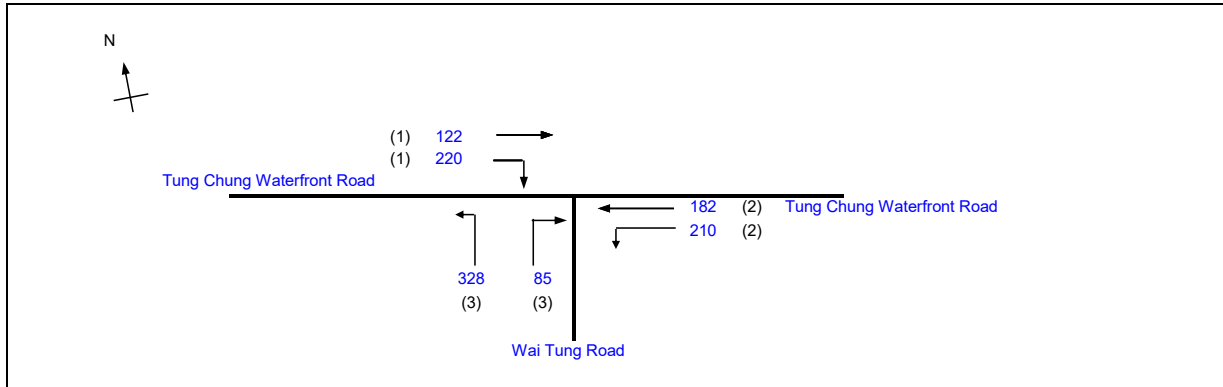
TRAFFIC SIGNAL CALCULATION

INITIALS DATE

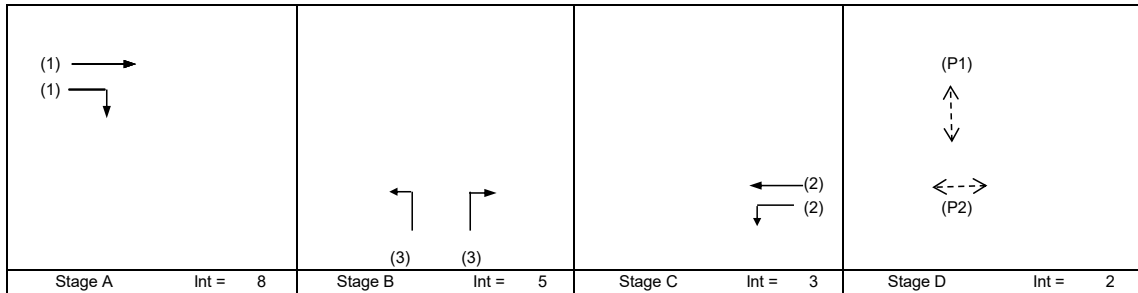
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)
 J6: Tung Chung Waterfront Road / Wai Tung Road
 2030 Design Ching Ming Festival Day Peak Hour Traffic Flow

2030Des_CM Peak

PROJECT NO.: 83209 Prepared By: AH Jan-26
 FILENAME: Checked By: CW Jan-26
 J6_Tung Chung Waterfront Rd-Wai Tung Road_S Reviewed By: SC Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	4	
Cycle time	C =	120 sec	
Sum(y)	Y =	0.309	
Loss time	L =	41 sec	
Total Flow	=	1147 pcu	
Co = (1.5*L+5)/(1-Y)	=	96.3 sec	
Cm = L/(1-Y)	=	59.4 sec	
Yult	=	0.593	
R.C.ult = (Yult-Y)/Y*100%	=	91.5 %	
Cp = 0.9*L/(0.9-Y)	=	62.5 sec	
Ymax = 1-L/C	=	0.658	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	91 %	

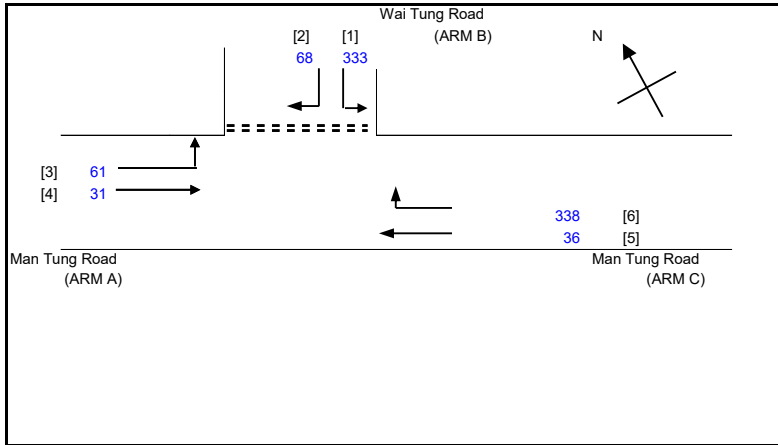


Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	D	10	5	8	2	16	8
P2	D	7	5	6	2	18	6

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
SA,RT	A	4.00	1	1	30		N	2015		122	46	168	0.27	1988			1988	0.085	0.085	15	22	22	0.470	24	44
RT	A	4.00	1	1	30		N	2155			174	174	1.00	2052			2052	0.085			22	22	0.470	24	44
LT,SA	C	4.00	2	1	20		N	2015	210	0		210	1.00	1874			1874	0.112	0.112		29	29	0.470	30	38
SA	C	4.00	2	1			N	2155		182		182	0.00	2155			2155	0.084			22	22	0.470	24	43
LT	B	3.30	3	1	15		N	1945	199			199	1.00	1768			1768	0.113	0.113		29	29	0.470	30	39
LT,RT	B	3.30	3	1	15		N	2085	129		85	214	1.00	1895			1895	0.113		26	29	29	0.470	30	38
PED	D																								

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED		PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)		2030Ref_CM	PROJECT NO.: 83209	PREPARED BY: BK	Jan-26	
J7 : Man Tung Road / Wai Tung Road			FILENAME : J7_Man Tung Rd-Wai Tung Rd_P.x	CHECKED BY: CC	Jan-26	
2030 Reference Ching Ming Festival Day Peak Hour Traffic Flow				REVIEWED BY: CC	Jan-26	



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W = 7.00 (metres)
W cr = 0 (metres)
q a-b = 61 (pcu/hr)
q a-c = 31 (pcu/hr)

MAJOR ROAD (ARM C)

W c-b = 7.00 (metres)
Vr c-b = 30 (metres)
q c-a = 36 (pcu/hr)
q c-b = 338 (pcu/hr)

MINOR ROAD (ARM B)

W b-a = 3.50 (metres)
W b-c = 3.50 (metres)
VI b-a = 40 (metres)
Vr b-a = 50 (metres)
Vr b-c = 50 (metres)
q b-a = 68 (pcu/hr)
q b-c = 333 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.8628183
E = 0.9237883
F = 1.2083931
Y = 0.7585

THE CAPACITY OF MOVEMENT :

Q b-a = 407
Q b-c = 674 Q b-c (O) = 645.8
Q c-b = 870

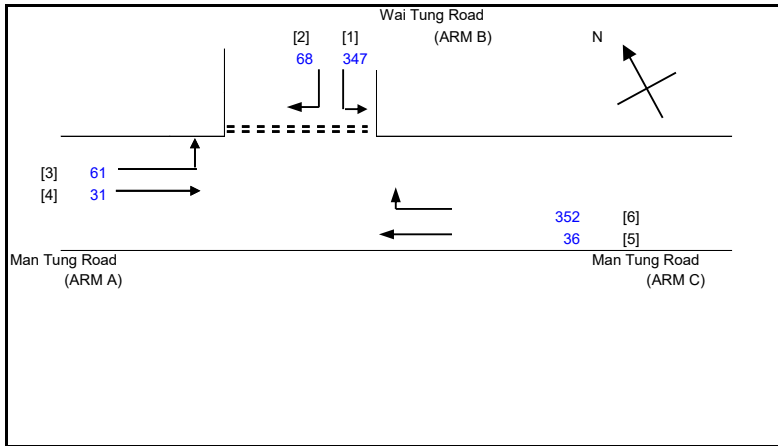
TOTAL FLOW = 867 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.1671
DFC b-c = 0.4941
DFC c-b = 0.3885

CRITICAL DFC = 0.49

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)	2030Des_CM	PROJECT NO.: 83209	PREPARED BY:	BK	Jan-26
J7 : Man Tung Road / Wai Tung Road		FILENAME : J7_Man Tung Rd-Wai Tung Rd_P.x	CHECKED BY:	CC	Jan-26
2030 Design Ching Ming Festival Day Peak Hour Traffic Flow			REVIEWED BY:	CC	Jan-26



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W = 7.00 (metres)
W cr = 0 (metres)
q a-b = 61 (pcu/hr)
q a-c = 31 (pcu/hr)

MAJOR ROAD (ARM C)

W c-b = 7.00 (metres)
Vr c-b = 30 (metres)
q c-a = 36 (pcu/hr)
q c-b = 352 (pcu/hr)

MINOR ROAD (ARM B)

W b-a = 3.50 (metres)
W b-c = 3.50 (metres)
VI b-a = 40 (metres)
Vr b-a = 50 (metres)
Vr b-c = 50 (metres)
q b-a = 68 (pcu/hr)
q b-c = 347 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.8628183
E = 0.9237883
F = 1.2083931
Y = 0.7585

THE CAPACITY OF MOVEMENT :

Q b-a = 403
Q b-c = 674 Q b-c (O) = 645.6
Q c-b = 870

TOTAL FLOW = 895 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.1687
DFC b-c = 0.5148
DFC c-b = 0.4046

CRITICAL DFC = 0.51

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2030Ref_CM

PROJECT NO.: 83209

Prepared By: AH

Jan-26

J8: Tat Tung Road / Shun Tung Road (West)

FILENAME :

Checked By: CW

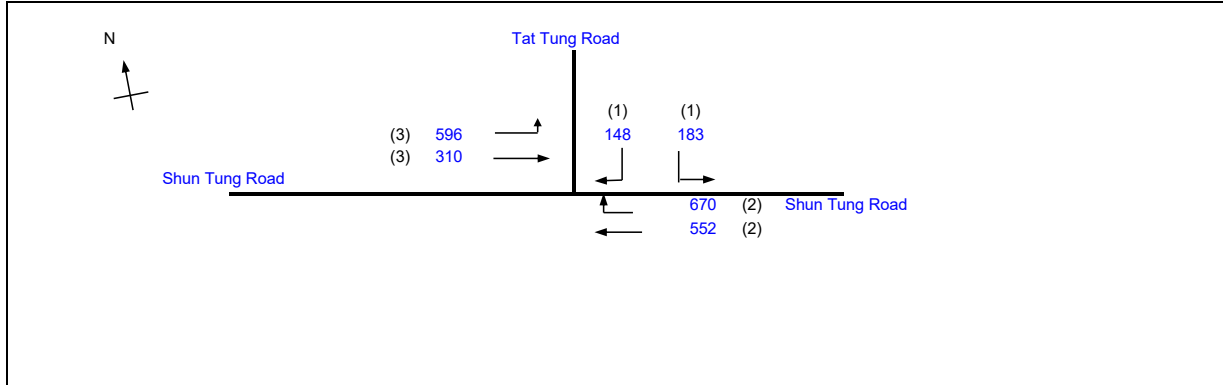
Jan-26

2030 Reference Ching Ming Festival Day Peak Hour Traffic Flow (with improvement scheme by others)

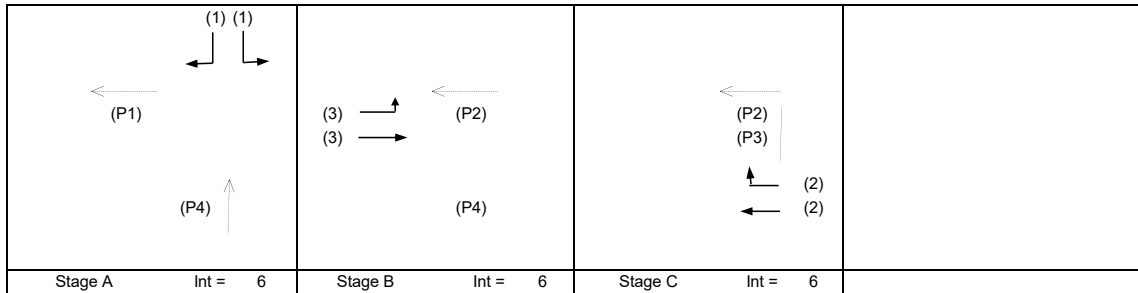
J8_Tat Tung Rd-Shun Tung Road (West)_S

Reviewed By: SC

Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	110 sec	
Sum(y)	Y =	0.600	
Loss time	L =	15 sec	
Total Flow	=	2459 pcu	
Co = (1.5*L+5)/(1-Y)	=	68.7 sec	
Cm = L/(1-Y)	=	37.5 sec	
Yult	=	0.788	
R.C.ult = (Yult-Y)/Y*100%	=	31.3 %	
Cp = 0.9*L/(0.9-Y)	=	45.0 sec	
Ymax = 1-L/C	=	0.864	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	30 %	



Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	A	13	7	11	2	8	11
P2	B,C	8	5	6	2	81	6
P3	C	10	5	8	2	49	8
P4	A,B	11	6	9	2	40	9

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A	3.50	1	1	20		N	1965	183		183	1.00	1828			1828	0.100	0.100	15	16	16	0.694	30	54	
RT	A	3.50	1	1	30		N	2105		148	148	1.00	2005			2005	0.074			12	16	0.512	18	45	
LT	B	3.50	3	2	20		N	4070	596		596	1.00	3786			3786	0.157	0.157		25	25	0.694	42	39	
SA	B	3.50	3	2				4210		310	310	0.00	4210			4210	0.074			12	25	0.325	21	33	
SA	C	3.50	2	2			N	4070		552	552	0.00	4070			4070	0.136	0.342		21	54	0.275	24	15	
RT	C	3.50	2	1	20			2105		670	670	1.00	1958			1958	0.342			54	54	0.694	60	23	

NOTE : O - OPPOSING TRAFFIC

N - NEAR SIDE LANE

SG - STEADY GREEN

FG - FLASHING GREEN

PEDESTRAIN WALKING SPEED = 1.2m/s

QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2030Des_CM

PROJECT NO.: 83209

Prepared By: AH

Jan-26

J8: Tat Tung Road / Shun Tung Road (West)

FILENAME :

Checked By: CW

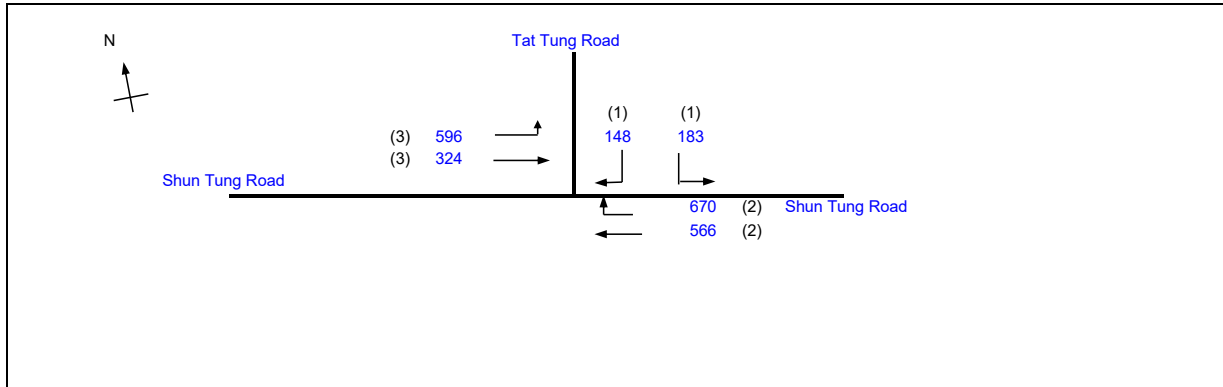
Jan-26

2030 Design Ching Ming Festival Day Peak Hour Traffic Flow (with improvement scheme by others)

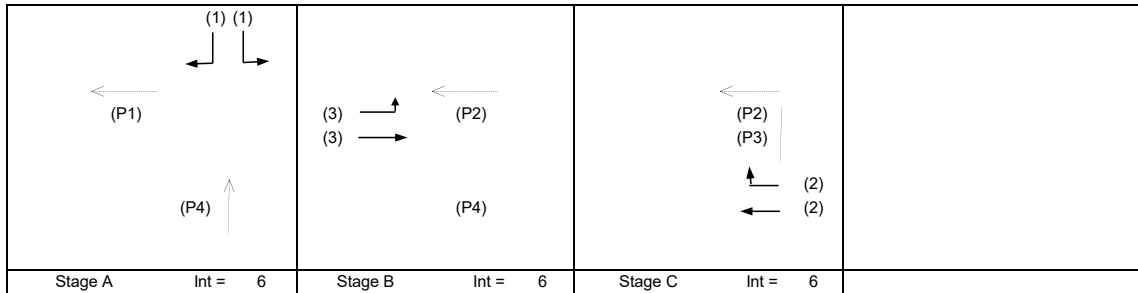
J8_Tat Tung Rd-Shun Tung Road (West)_S

Reviewed By: SC

Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	110 sec	
Sum(y)	Y =	0.600	
Loss time	L =	15 sec	
Total Flow	=	2487 pcu	
Co = (1.5*L+5)/(1-Y)	=	68.7 sec	
Cm = L/(1-Y)	=	37.5 sec	
Yult	=	0.788	
R.C.ult = (Yult-Y)/Y*100%	=	31.3 %	
Cp = 0.9*L/(0.9-Y)	=	45.0 sec	
Ymax = 1-L/C	=	0.864	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	30 %	



Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	A	13	7	11	2	8	11
P2	B,C	8	5	6	2	81	6
P3	C	10	5	8	2	49	8
P4	A,B	11	6	9	2	40	9

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A	3.50	1	1	20		N	1965	183		183	1.00	1828			1828	0.100	0.100	15	16	16	0.694	30	54	
RT	A	3.50	1	1	30			2105		148	148	1.00	2005			2005	0.074			12	16	0.512	18	45	
LT	B	3.50	3	2	20		N	4070	596		596	1.00	3786			3786	0.157	0.157		25	25	0.694	42	39	
SA	B	3.50	3	2				4210		324	324	0.00	4210			4210	0.077			12	25	0.339	21	33	
SA	C	3.50	2	2			N	4070		566	566	0.00	4070			4070	0.139	0.342		22	54	0.282	24	15	
RT	C	3.50	2	1	20			2105		670	670	1.00	1958			1958	0.342			54	54	0.694	60	23	

NOTE : O - OPPOSING TRAFFIC

N - NEAR SIDE LANE

SG - STEADY GREEN

FG - FLASHING GREEN

PEDESTRAIN WALKING SPEED = 1.2m/s

QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

J9: Tat Tung Road / Shun Tung Road (East)

2030 Reference Ching Ming Festival Day Peak Hour Traffic Flow (with improvement scheme by others)

2030Ref_CM Peak

PROJECT NO.: 83209

Prepared By: AH

Jan-26

FILENAME :

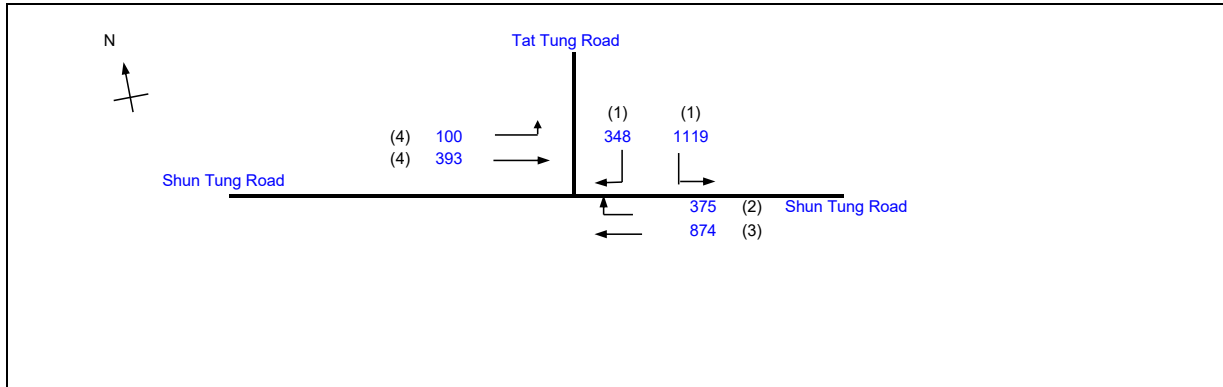
Checked By: CW

Jan-26

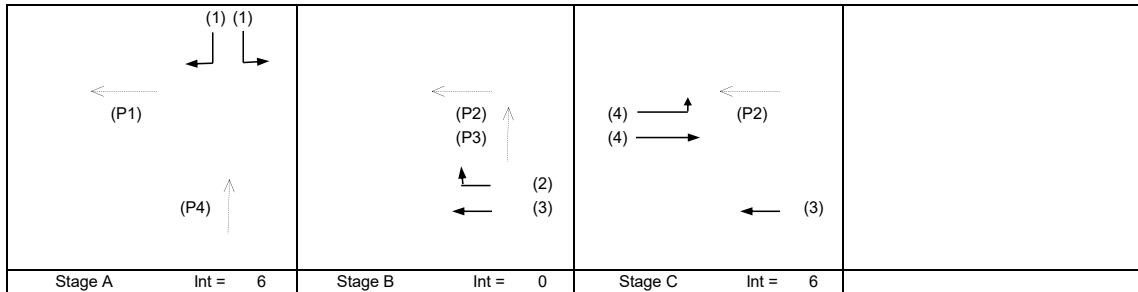
J9_Tat Tung Rd-Shun Tung Road (East)_S

Reviewed By: SC

Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	110 sec	
Sum(y)	Y =	0.510	
Loss time	L =	10 sec	
Total Flow	=	3209 pcu	
Co = (1.5*L+5)/(1-Y)	=	40.8 sec	
Cm = L/(1-Y)	=	20.4 sec	
Yult	=	0.825	
R.C.ult = (Yult-Y)/Y*100%	=	61.7 %	
Cp = 0.9*L/(0.9-Y)	=	23.1 sec	
Ymax = 1-L/C	=	0.909	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	60 %	



Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	A	13	7	11	2	50	11
P2	B,C	8	5	6	2	39	6
P3	B	8	5	7	2	14	7
P4	A	13	7	11	2	50	11

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A	3.50	1	2	20		N	4070	1119		348	1119	1.00	3786		3786	0.296	0.296	10	58	58	0.561	48	17	
RT	A	3.50	1	1	25		N	2105			348	348	1.00	1986		1986	0.175				34	58	0.333	30	14
LT	C	3.50	4	1	15		N	1965	100			100	1.00	1786		1786	0.056				11	19	0.323	12	38
SA	C	3.50	4	2				4210		393		393	0.00	4210		4210	0.093				18	19	0.538	27	40
SA	B,C	3.50	3	2			N	4070		874		874	0.00	4070		4070	0.215	0.215		42	60	0.391	36	13	
RT	B	3.50	2	2	30			4210			375	375	1.00	4010		4010	0.094				18	18	0.572	27	41

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

J9: Tat Tung Road / Shun Tung Road (East)

2030 Design Ching Ming Festival Day Peak Hour Traffic Flow (with improvement scheme by others)

2030Des_CM Peak

PROJECT NO.: 83209

Prepared By: AH

Jan-26

FILENAME :

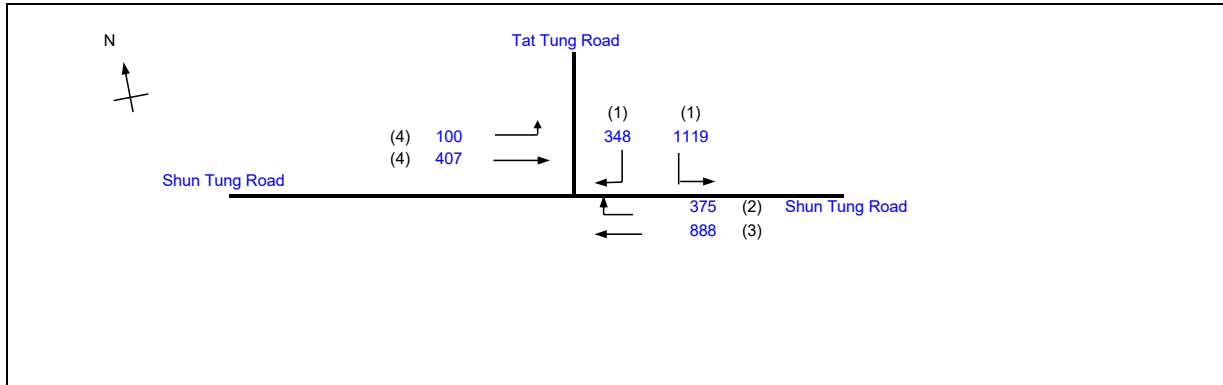
Checked By: CW

Jan-26

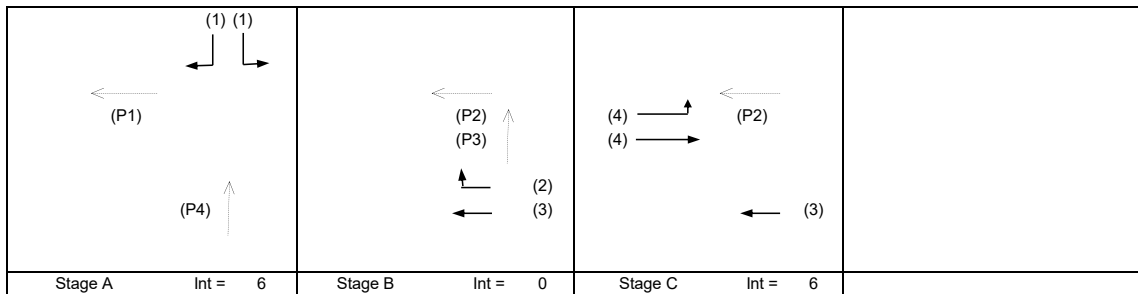
J9_Tat Tung Rd-Shun Tung Road (East)_S

Reviewed By: SC

Jan-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	110 sec	
Sum(y)	Y =	0.514	
Loss time	L =	10 sec	
Total Flow	=	3237 pcu	
Co = (1.5*L+5)/(1-Y)	=	41.1 sec	
Cm = L/(1-Y)	=	20.6 sec	
Yult	=	0.825	
R.C.ult = (Yult-Y)/Y*100%	=	60.6 %	
Cp = 0.9*L/(0.9-Y)	=	23.3 sec	
Ymax = 1-L/C	=	0.909	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	59 %	



Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	A	13	7	11	2	49	11
P2	B,C	8	5	6	2	39	6
P3	B	8	5	7	2	14	7
P4	A	13	7	11	2	50	11

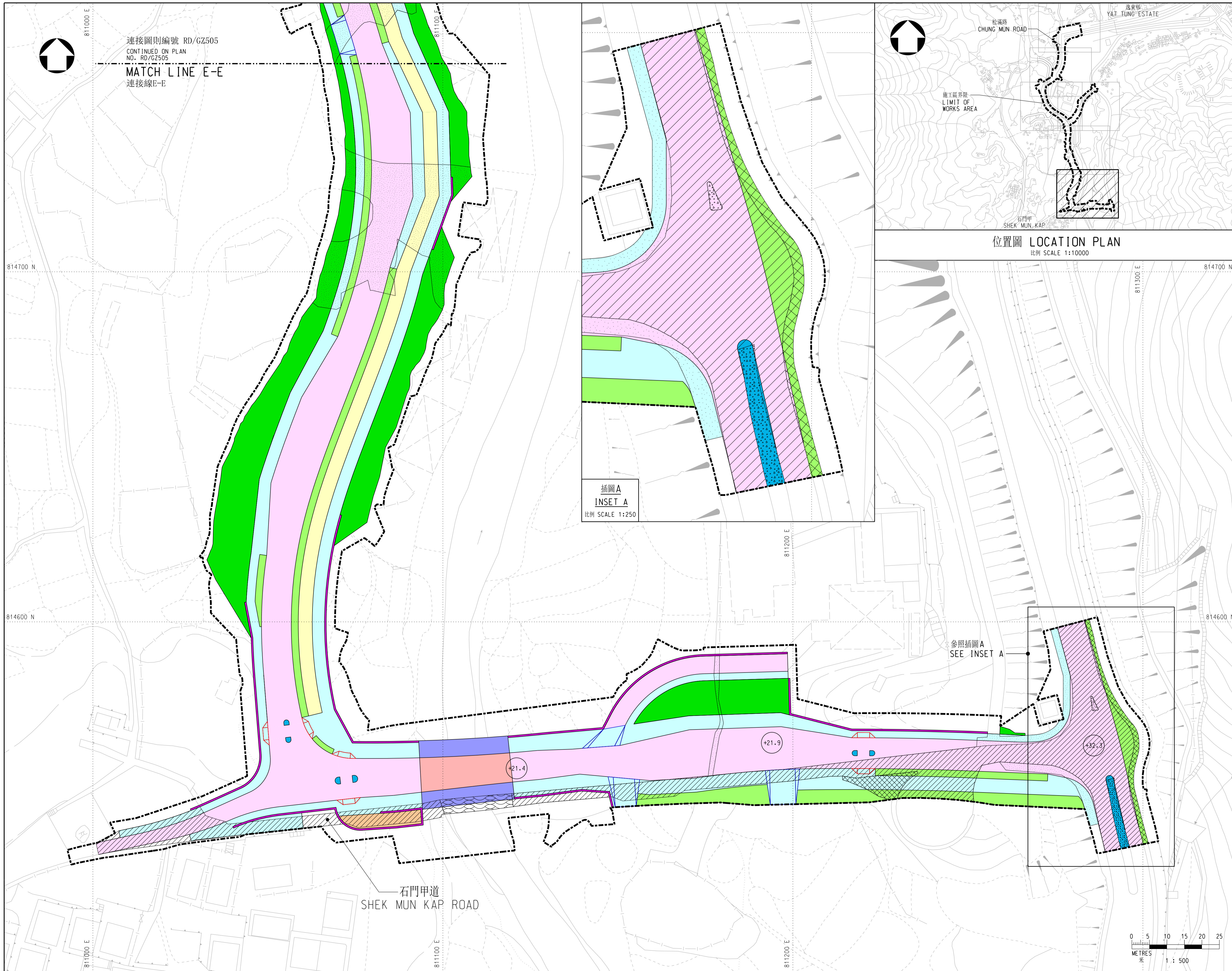
Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A	3.50	1	2	20		N	4070	1119		348	1119	1.00	3786		3786	0.296	0.296	10	58	58	0.565	48	17	
RT	A	3.50	1	1	25		N	2105			348	348	1.00	1986		1986	0.175				34	58	0.335	30	14
LT	C	3.50	4	1	15		N	1965	100			100	1.00	1786		1786	0.056				11	19	0.316	12	38
SA	C	3.50	4	2				4210		407		407	0.00	4210		4210	0.097				19	19	0.546	30	40
SA	B,C	3.50	3	2			N	4070		888		888	0.00	4070		4070	0.218	0.218		42	61	0.396	36	13	
RT	B	3.50	2	2	30			4210			375	375	1.00	4010		4010	0.094				18	18	0.572	27	41

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

Appendix C

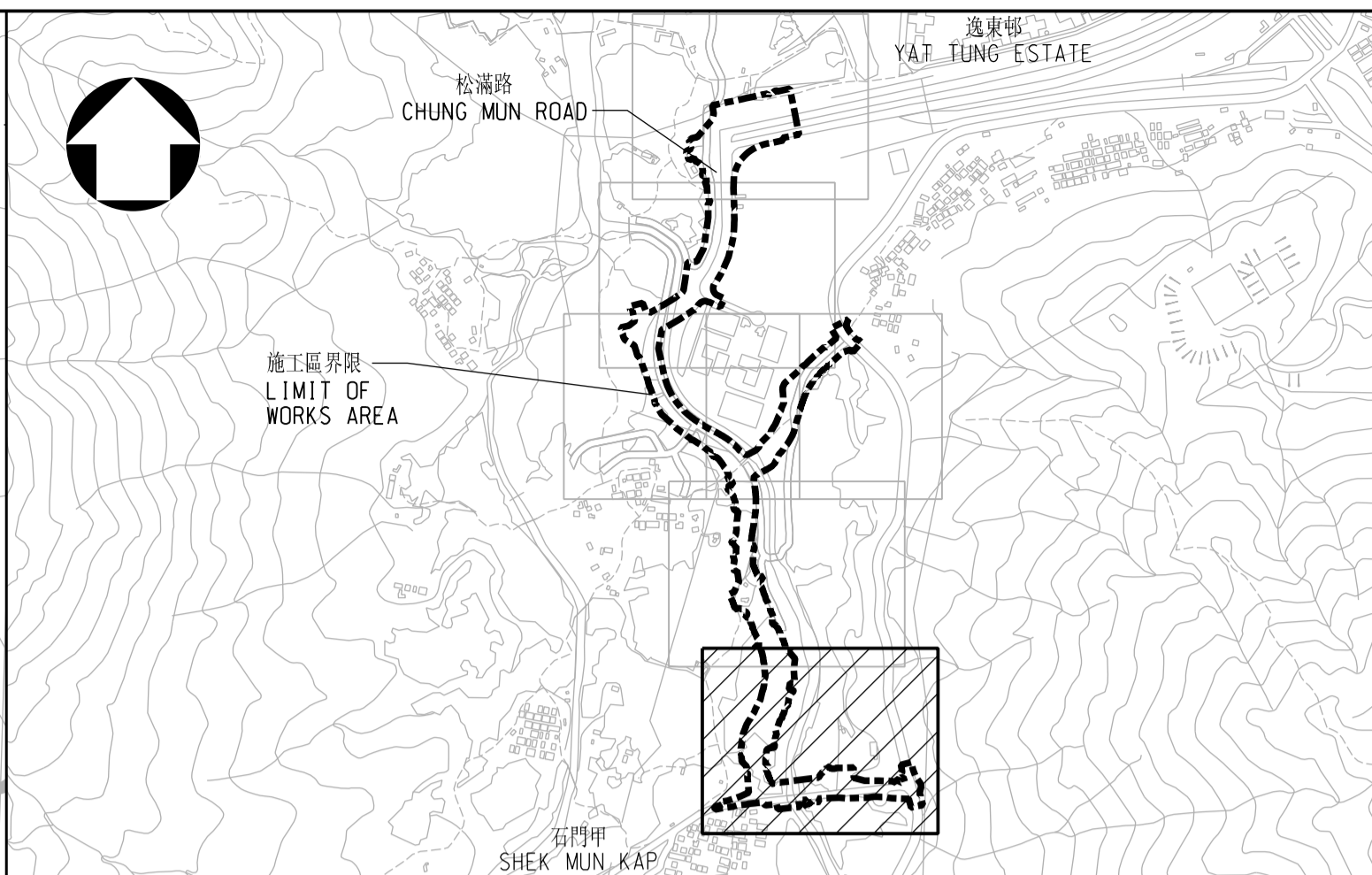
Junction Improvement Works

Proposed by Others



連接圖則編號 RD/GZ505
CONTINUED ON PLAN
NO. RD/GZ505
MATCH LINE E-E
連接線E-E

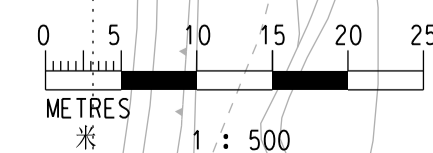
插圖A
INSET A
比例 SCALE 1:250



位置圖 LOCATION PLAN
比例 SCALE 1:10000

參照插圖A
SEE INSET A

石門甲道
SHEK MUN KAP ROAD



註釋 NOTES:

- 除在其他方面指定外，全部以米為量度單位。
ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
- 所有水平均為約數，以米為單位，並在香港主水平基準上。
ALL LEVELS ARE APPROXIMATE VALUES AND IN METRES ABOVE HONG KONG PRINCIPAL DATUM.
- 如有需要，施工區界限內部分現有地面行車道、地面行人路、地面單車徑、地面美化市容地帶、樓梯和地面路中預留帶/安全島或會分期暫時封閉。
SECTIONS OF THE EXISTING AT-GRADE CARRIAGEWAYS, AT-GRADE FOOTPATHS, AT-GRADE CYCLE TRACKS, AT-GRADE AMENITY AREAS, STAIRCASE AND AT-GRADE CENTRAL RESERVE / TRAFFIC ISLAND WITHIN THE LIMIT OF WORKS AREA MAY BE TEMPORARILY CLOSED IN PHASES AS AND WHEN REQUIRED.

工程名稱 PROJECT TITLE
工務計劃項目第7786CL號
東涌新市鎮擴展
(裕東路、松瀨路、L29號公路、L30號公路及石門甲道道路工程)
PWP ITEM NO. 7786CL
TUNG CHUNG NEW TOWN EXTENSION
(ROAD WORKS AT YU TUNG ROAD, CHUNG MUN ROAD, ROAD L29, ROAD L30 AND SHEK MUN KAP ROAD)

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

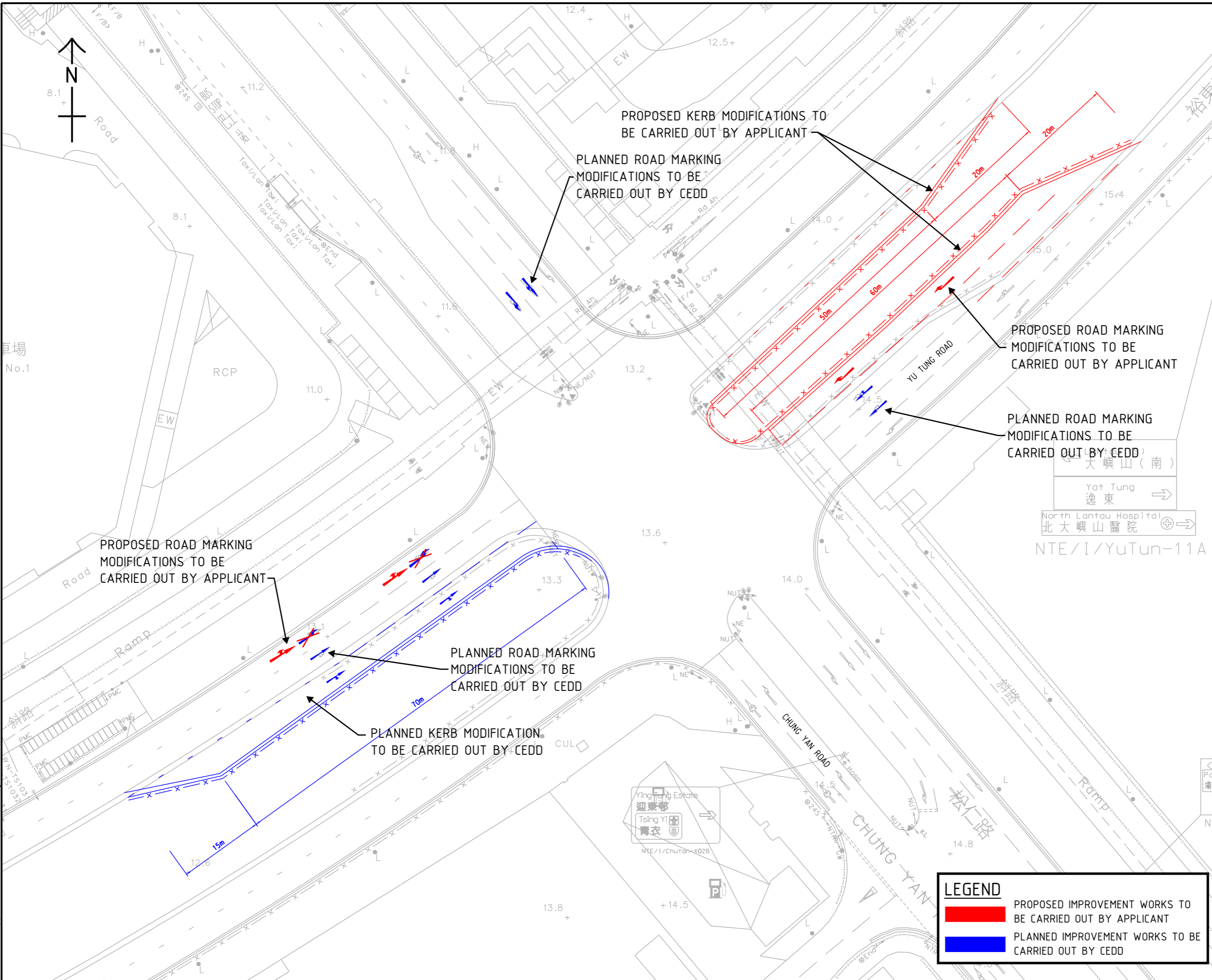
PLAN FOR GAZETTING UNDER ROADS
(WORKS, USE AND COMPENSATION)
ORDINANCE (CHAPTER 370)

圖則編號 PLAN NO.	比例 SCALE
RD/GZ506	1:500@A1

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辦事處 OFFICE
可持續大綱辦事處
SUSTAINABLE LANTAU OFFICE



ISO A1 594mm x 841mm
 Approved:
 Checked:
 Designer:
 Project Management Initials:
 8/11/2024
 PLOT: F:\BACKUP\ALEX\NORTH LANTAU CHUNG WEST\FIGURE 5.2.dgn
 Plot File by: chanowai



PROJECT
 SECTION 12A PLANNING APPLICATION FOR PROPOSED AMENDMENTS TO THE TUNG CHUNG VALLEY OUTLINE ZONING PLAN TO REZONE "RESIDENTIAL (GROUP C)2" ZONE TO "RESIDENTIAL (GROUP B)" ZONE IN SUPPORT OF PRIVATE RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 1 TC AND ADJOINING GOVERNMENT LAND, TUNG CHUNG, LANTAU ISLAND
CLIENT

SUN HUNG KAI REAL ESTATE AGENCY LTD.

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS

ISSUE/REVISION

I/R	DATE	DESCRIPTION	CHK.

STATUS
SCALE **DIMENSION UNIT**
 A3 1: 600
KEY PLAN

PROJECT NO. **CONTRACT NO.**

SHEET TITLE
 PROPOSED JUNCTION IMPROVEMENT SCHEME AT J3 (YU TUNG ROAD / CHUNG YAN ROAD)

SHEET NUMBER

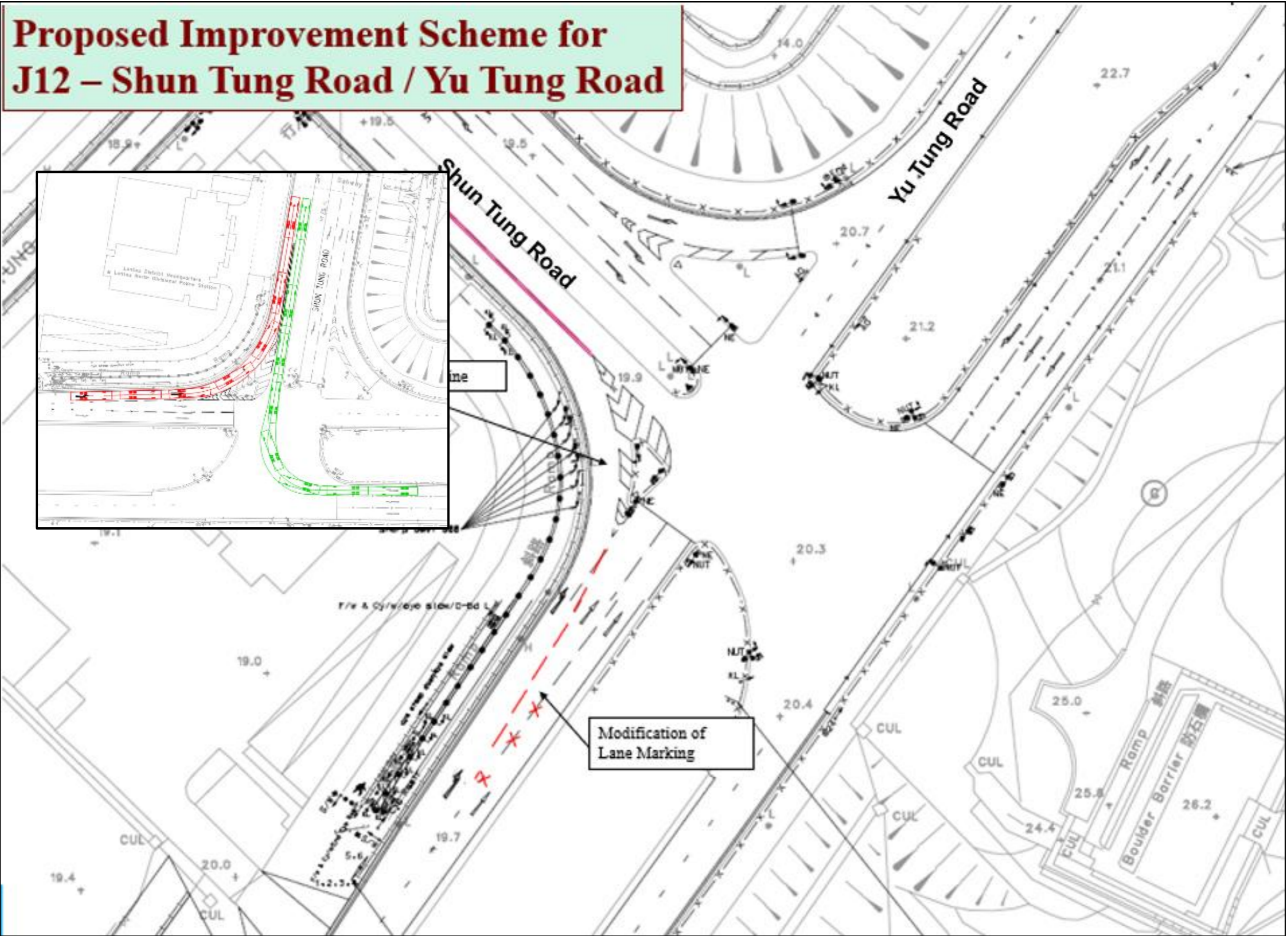
FIGURE 5.1

LEGEND

- PROPOSED IMPROVEMENT WORKS TO BE CARRIED OUT BY APPLICANT
- PLANNED IMPROVEMENT WORKS TO BE CARRIED OUT BY CEDD

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Proposed Improvement Scheme for J12 – Shun Tung Road / Yu Tung Road



AECOM

PROJECT
 SECTION 12A PLANNING APPLICATION FOR PROPOSED AMENDMENTS TO THE TUNG CHUNG VALLEY OUTLINE ZONING PLAN TO REZONE "RESIDENTIAL (GROUP C)2" ZONE TO "RESIDENTIAL (GROUP B)" ZONE IN SUPPORT OF PRIVATE RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 1 TC AND ADJOINING GOVERNMENT LAND, TUNG CHUNG, LANTAU ISLAND

CLIENT
 SUN HUNG KAI REAL ESTATE AGENCY LTD.

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS
 分列工程師有限公司

ISSUE/REVISION

I/R	DATE	DESCRIPTION	CHK.

STATUS

SCALE **DIMENSION UNIT**
 A3 1: 500

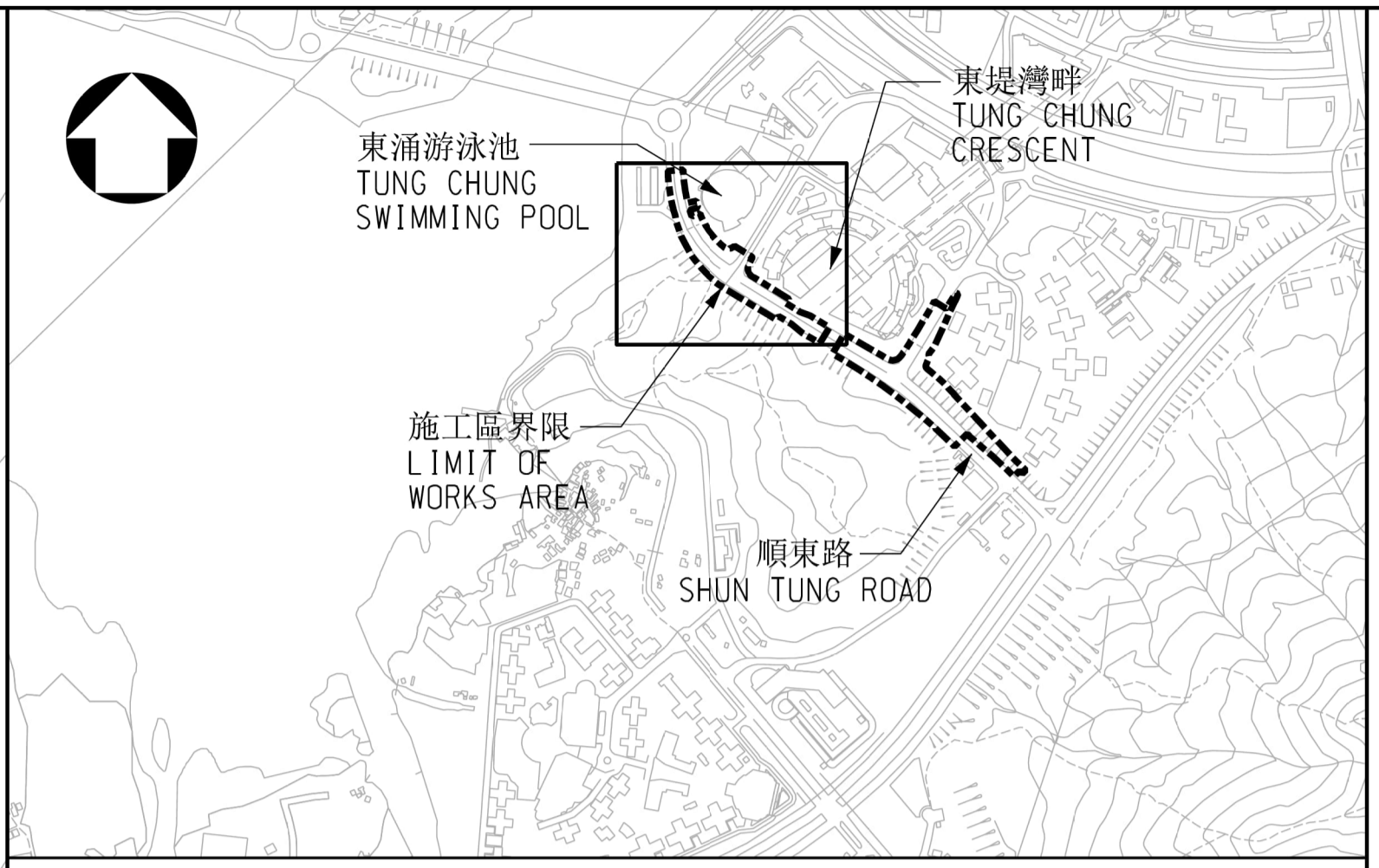
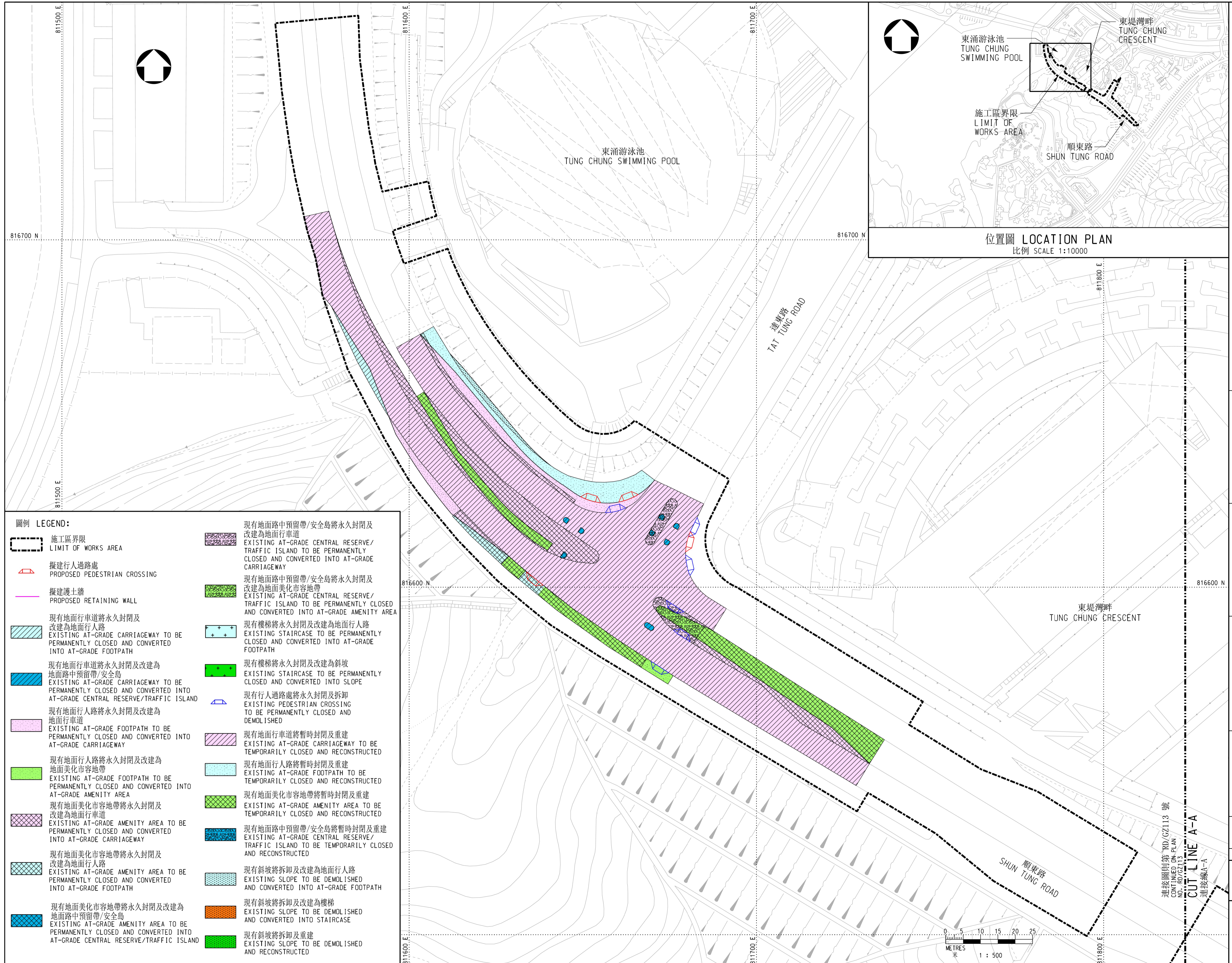
KEY PLAN

PROJECT NO. **CONTRACT NO.**

SHEET TITLE
 PLANNED JUNCTION IMPROVEMENT SCHEME OF J2 UNDER TUNG CHUNG NEW TOWN EXTENSION (WEST) TIA (REP-116-02)

SHEET NUMBER
 FIGURE 3.18

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位置圖 LOCATION PLAN
比例 SCALE 1:10000

圖例 LEGEND:

施工區界限 LIMIT OF WORKS AREA	現有地面路中預留帶/安全島將永久封閉及改建為地面行人路 EXISTING AT-GRADE CENTRAL RESERVE/TRAFFIC ISLAND TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CARRIAGEWAY
擬建行人過路處 PROPOSED PEDESTRIAN CROSSING	現有地面路中預留帶/安全島將永久封閉及改建為地面美化市容地帶 EXISTING AT-GRADE CENTRAL RESERVE/TRAFFIC ISLAND TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE AMENITY AREA
擬建護土牆 PROPOSED RETAINING WALL	現有樓梯將永久封閉及改建為地面行人路 EXISTING STAIRCASE TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE FOOTPATH
現有地面行人車道將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	現有樓梯將永久封閉及改建為斜坡 EXISTING STAIRCASE TO BE PERMANENTLY CLOSED AND CONVERTED INTO SLOPE
現有地面行人車道將永久封閉及改建為地面路中預留帶/安全島 EXISTING AT-GRADE CARRIAGEWAY TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CENTRAL RESERVE/TRAFFIC ISLAND	現有行人過路處將永久封閉及拆卸 EXISTING PEDESTRIAN CROSSING TO BE PERMANENTLY CLOSED AND DEMOLISHED
現有地面行人路將永久封閉及改建為地面行人車道 EXISTING AT-GRADE FOOTPATH TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CARRIAGEWAY	現有地面行人車道將暫時封閉及重建 EXISTING AT-GRADE CARRIAGEWAY TO BE TEMPORARILY CLOSED AND RECONSTRUCTED
現有地面行人路將永久封閉及改建為地面美化市容地帶 EXISTING AT-GRADE FOOTPATH TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE AMENITY AREA	現有地面行人路將暫時封閉及重建 EXISTING AT-GRADE FOOTPATH TO BE TEMPORARILY CLOSED AND RECONSTRUCTED
現有地面美化市容地帶將永久封閉及改建為地面行人車道 EXISTING AT-GRADE AMENITY AREA TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CARRIAGEWAY	現有地面美化市容地帶將暫時封閉及重建 EXISTING AT-GRADE AMENITY AREA TO BE TEMPORARILY CLOSED AND RECONSTRUCTED
現有地面美化市容地帶將永久封閉及改建為地面行人路 EXISTING AT-GRADE AMENITY AREA TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE FOOTPATH	現有地面路中預留帶/安全島將暫時封閉及重建 EXISTING AT-GRADE CENTRAL RESERVE/TRAFFIC ISLAND TO BE TEMPORARILY CLOSED AND RECONSTRUCTED
現有地面美化市容地帶將永久封閉及改建為地面路中預留帶/安全島 EXISTING AT-GRADE AMENITY AREA TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CENTRAL RESERVE/TRAFFIC ISLAND	現有斜坡將拆卸及改建為地面行人路 EXISTING SLOPE TO BE DEMOLISHED AND CONVERTED INTO AT-GRADE FOOTPATH
現有地面美化市容地帶將永久封閉及改建為地面路中預留帶/安全島 EXISTING AT-GRADE AMENITY AREA TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CENTRAL RESERVE/TRAFFIC ISLAND	現有斜坡將拆卸及改建為樓梯 EXISTING SLOPE TO BE DEMOLISHED AND CONVERTED INTO STAIRCASE
現有地面美化市容地帶將永久封閉及改建為地面路中預留帶/安全島 EXISTING AT-GRADE AMENITY AREA TO BE PERMANENTLY CLOSED AND CONVERTED INTO AT-GRADE CENTRAL RESERVE/TRAFFIC ISLAND	現有斜坡將拆卸及重建 EXISTING SLOPE TO BE DEMOLISHED AND RECONSTRUCTED

註釋 NOTES:

- 除另有指明外，所有量度以米為單位。
ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
- 所有水平均以米為單位，並在香港主水平基準上。
ALL LEVELS ARE IN METRES ABOVE HONG KONG PRINCIPAL DATUM.
- 如有需要，施工區界限內部分現有地面行人車道、地面行人路、地面單車徑、地面美化市容地帶、地面路中預留帶/安全島和樓梯或會分階段暫時封閉。
SECTIONS OF THE EXISTING AT-GRADE CARRIAGEWAYS, AT-GRADE FOOTPATHS, AT-GRADE CYCLE TRACKS, AT-GRADE AMENITY AREAS, AT-GRADE CENTRAL RESERVES/TRAFFIC ISLANDS AND STAIRCASE WITHIN THE LIMIT OF WORKS AREA MAY BE TEMPORARILY CLOSED IN PHASES AS AND WHEN REQUIRED.

批註 ENDORSED BY

陳美寶 CHAN Mable
運輸及房屋局常任秘書長(運輸)
PERMANENT SECRETARY FOR TRANSPORT AND HOUSING (TRANSPORT)

日期: _____
DATE:

核准 APPROVED BY

王仲邦 GAVIN C.P. WONG
土木工程拓展署
可持續大嶼辦事處
總工程師/大嶼山2
CHIEF ENGINEER / LANTAU 2
SUSTAINABLE LANTAU OFFICE
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

日期: 04 MAY 2022
DATE:

工程名稱 PROJECT TITLE

工務計劃項目第7786CL號
東涌新市鎮擴展
(順東路道路工程)

PWP ITEM NO. 7786CL
TUNG CHUNG NEW TOWN EXTENSION
(ROAD WORKS AT SHUN TUNG ROAD)

圖別名稱 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
PLAN FOR GAZETTING UNDER ROADS
(WORKS, USE AND COMPENSATION)
ORDINANCE (CHAPTER 370)

(SHEET 1 OF 2) (第一張, 共二張)

圖別編號 PLAN NO. RD/GZ112 比例 SCALE 1:500@A1

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SUSTAINABLE LANTAU OFFICE

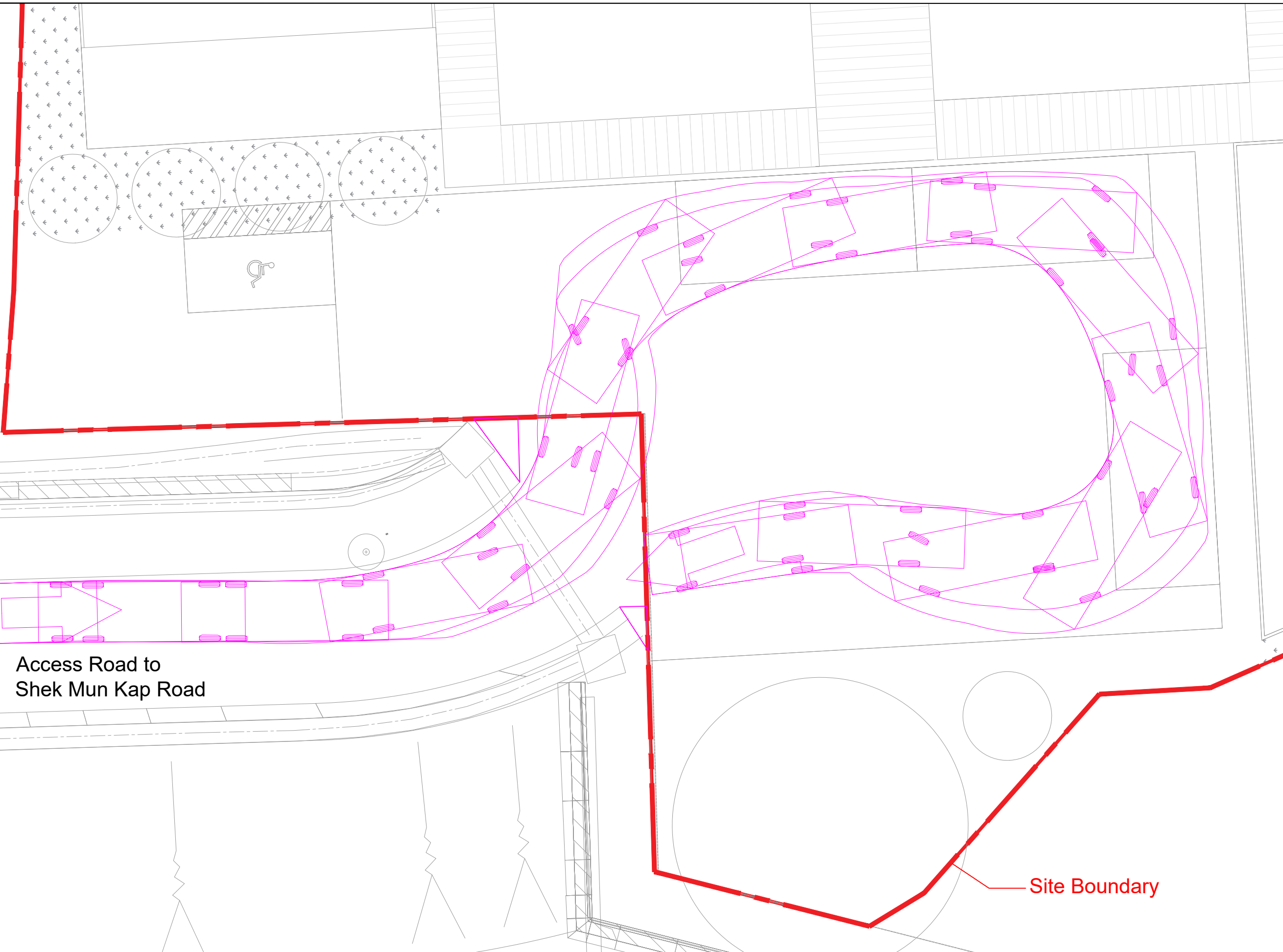


Appendix D

Swept Path Demonstration



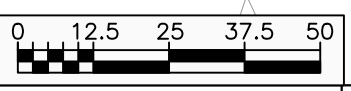
X:\Ozzo\83209_Proposed Columbarium at Prajna Dhyana Temple, Tung Chung\Data\Dwg\83209_SK3_Rev B.dwg 2026/04/22 10:33:44



7m Light Buses

Access Road to
Shek Mun Kap Road

Site Boundary



**Section 16 Planning Application for Proposed Religious Institution and Columbarium
(Partial Redevelopment of Prajna Dhyana Temple)**

7m Light Bus Swept Path Demonstration

Date 13/01/2026 Scale 1:1250

Project No. 83209	Rev. B
Dwg No. Appendix D	

Appendix E

2026 Junction Calculation Sheets

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2026Obs_Sun

PROJECT NO.: 83209

PREPARED BY: AH Apr-26

J1: Tung Chung Road / Shek Mun Kap Road

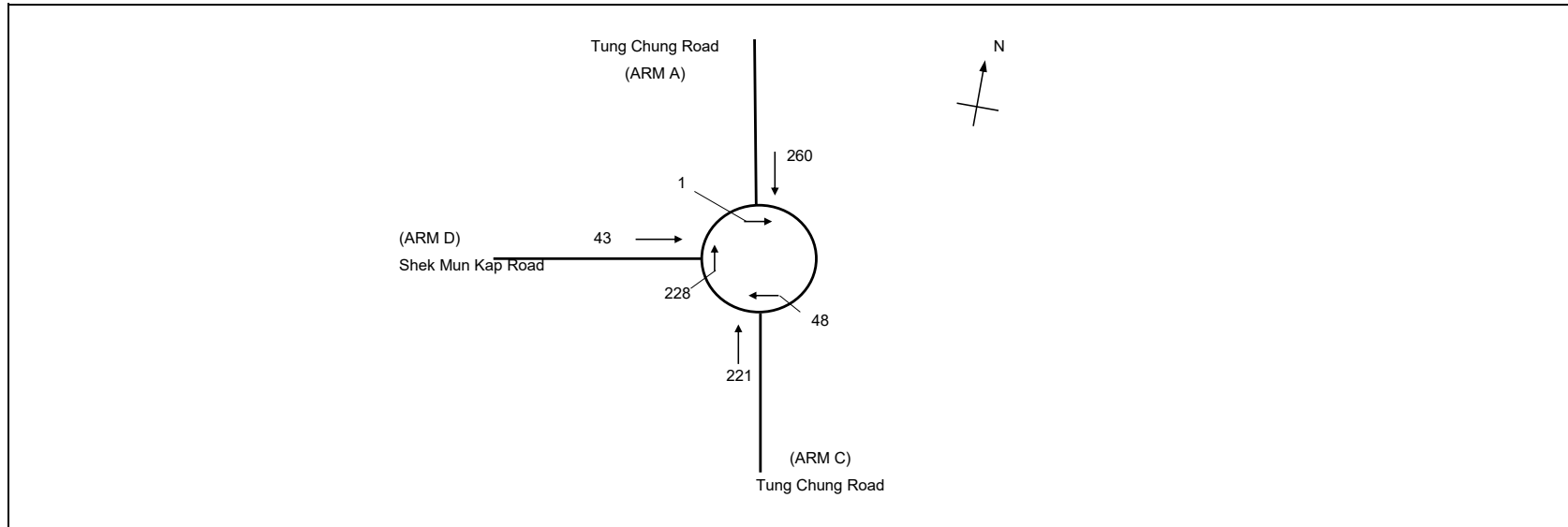
FILENAME :

CHECKED BY: CW Apr-26

2026 Observed Sunday Peak Hour Traffic Flows

J1_Tung Chung Road_Shek Mun Kap Road_R.xlsx

REVIEWED BY: SC Apr-26



ARM	A	C	D		
INPUT PARAMETERS:					
V = Approach half width (m)	4.0	4.5	3.3		
E = Entry width (m)	5.0	5.5	4.5		
L = Effective length of flare (m)	10.0	10.0	10.0		
R = Entry radius (m)	30.0	20.0	10.0		
D = Inscribed circle diameter (m)	19.0	19.0	19.0		
A = Entry angle (degree)	10.0	20.0	55.0		
Q = Entry flow (pcu/h)	260	221	43		
Qc = Circulating flow across entry (pcu/h)	1	48	228		
OUTPUT PARAMETERS:					
S = Sharpness of flare = $1.6(E-V)/L$	0.16	0.16	0.19		
K = $1-0.00347(A-30)-0.978(1/R-0.05)$	1.09	1.03	0.86		
X2 = $V + ((E-V)/(1+2S))$	4.76	5.26	4.17		
M = $EXP((D-60)/10)$	0	0	0		
F = $303 \times X2$	1442	1593	1263		
Td = $1+(0.5(1+M))$	1.49	1.49	1.49		
Fc = $0.21 \times Td(1+0.2 \times X2)$	0.61	0.64	0.57		
Qe = $K(F-Fc \times Qc)$	1564	1616	978	Total In Sum =	524 PCU
DFC = Design flow/Capacity = Q/Qe	0.17	0.14	0.04	DFC of Critical Approach =	0.17

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2026Obs_Sun(TTM)

PROJECT NO.: 83209

Prepared By: AH

Apr-26

J2: Yu Tung Road / Chung Yan Road

FILENAME :

Checked By: CW

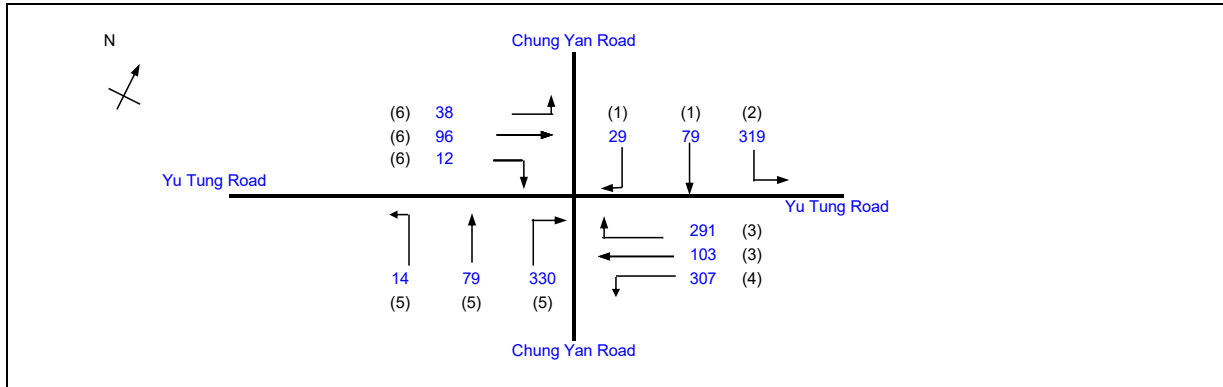
Apr-26

2026 Observed Sunday Peak Hour Traffic Flow (under existing TTM scheme)

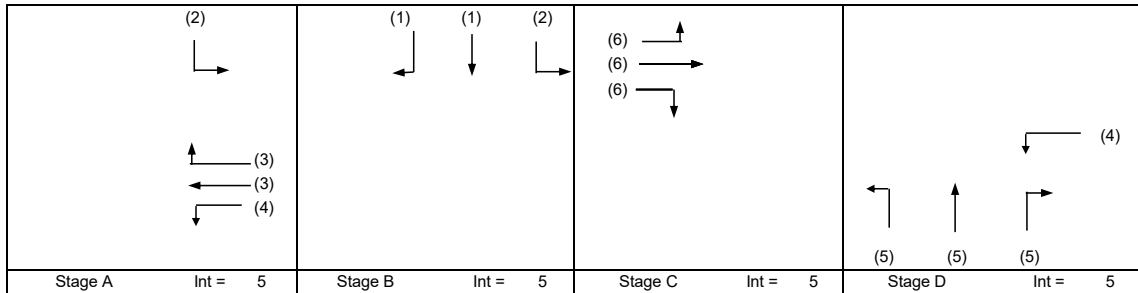
J2_Yu Tung Rd-Chung Yan Road_S.xlsx

Reviewed By: SC

Apr-26



		Existing Cycle Time	
No. of stages per cycle	N =	4	
Cycle time	C =	120 sec	
Sum(y)	Y =	0.366	
Loss time	L =	16 sec	
Total Flow	=	1697 pcu	
Co = (1.5*L+5)/(1-Y)	=	45.8 sec	
Cm = L/(1-Y)	=	25.3 sec	
Yult	=	0.780	
R.C.ult = (Yult-Y)/Y*100%	=	112.9 %	
Cp = 0.9*L/(0.9-Y)	=	27.0 sec	
Ymax = 1-L/C	=	0.867	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	113 %	



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

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A,B	3.60	2	2	15		N	4090	319			319	1.00	3718			3718	0.086		16	24	67	0.153	12	12
SA,RT	B	3.60	1	1	30			2115		79	29	108	0.27	2087			2087	0.052	0.052		15	15	0.423	18	49
LT	A,D	3.70	4	1	15		N	1985	307			307	1.00	1805			1805	0.170			48	83	0.246	18	7
SA,RT	A	3.70	3	1	40			2125		103	291	394	0.74	2068	48	240	2308	0.171	0.171		48	48	0.423	42	24
LT,SA,RT	D	3.60	5	1	25			2115	14	79	126	219	0.64	2037			2037	0.107	0.107		30	30	0.423	30	36
RT	D	3.60	5	1	40		N	1975			204	204	1.00	1904			1904	0.107			30	30	0.423	30	36
LT,SA	C	3.70	6	1	15		N	1985	38	31		69	0.55	1881			1881	0.037	0.037		10	10	0.423	12	54
SA,RT	C	3.70	6	1	30			2125		65	12	77	0.16	2109			2109	0.037			10	10	0.423	12	53

NOTE : O - OPPOSING TRAFFIC

N - NEAR SIDE LANE

SG - STEADY GREEN

FG - FLASHING GREEN

PEDESTRAIN WALKING SPEED = 1.2m/s

QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2026Obs_Sun(TTM)

PROJECT NO.: 83209

Prepared By: AH

Apr-26

J3: Yu Tung Road / Shun Tung Road

FILENAME :

Checked By: CW

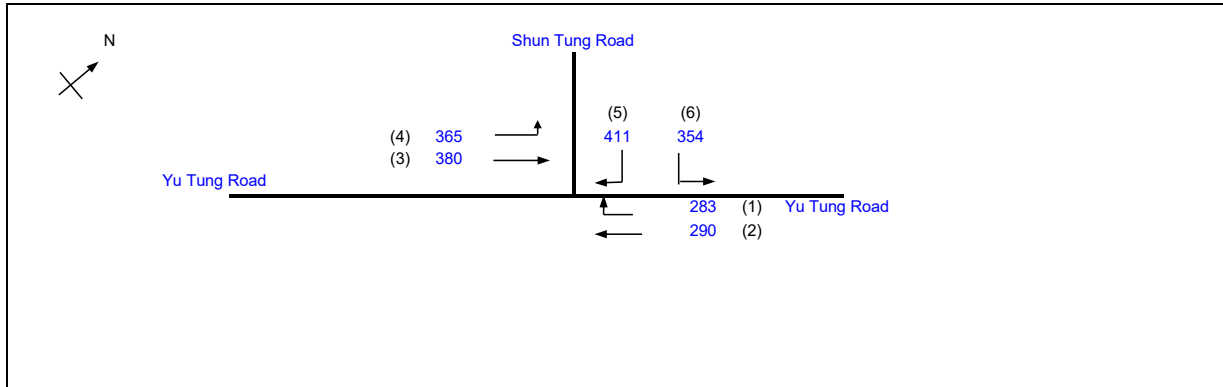
Apr-26

2026 Observed Sunday Peak Hour Traffic Flow (under existing TTM scheme)

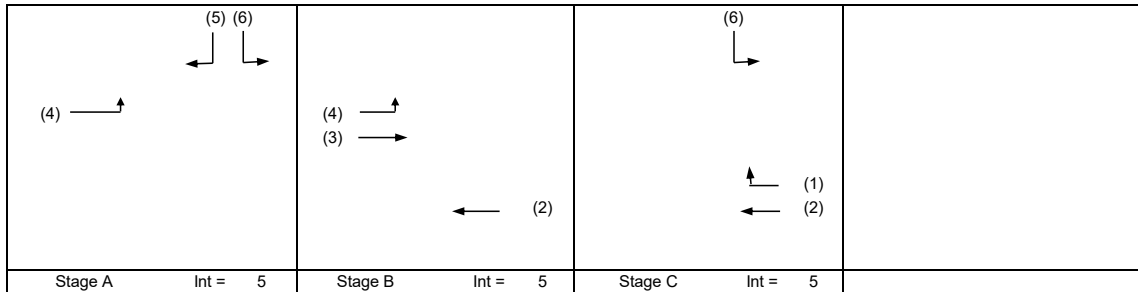
J3_Yu Tung Rd-Shun Tung Road_S.xlsx

Reviewed By: SC

Apr-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	75 sec	
Sum(y)	Y =	0.418	
Loss time	L =	12 sec	
Total Flow	=	2083 pcu	
Co	= $(1.5*L+5)/(1-Y)$	39.5 sec	
Cm	= $L/(1-Y)$	20.6 sec	
Yult	=	0.810	
R.C.ult	= $(Yult-Y)/Y*100%$	93.9 %	
Cp	= $0.9*L/(0.9-Y)$	22.4 sec	
Ymax	= $1-L/C$	0.840	
R.C.(C)	= $(0.9*Ymax-Y)/Y*100%$	81 %	



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

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A,C	3.70	6	1	20		N	1985	354		354	1.00	1847			1847	0.192		12	29	40	0.356	18	10	
RT	A	3.70	5	2	30		N	4250		411	411	1.00	4048			4048	0.102	0.102		15	15	0.497	18	26	
LT	A,B	4.00	4	1	20		N	2015	365		365	1.00	1874			1874	0.195			29	46	0.318	12	7	
SA	B	4.00	3	1				2155		380	380	0.00	2155			2155	0.176	0.176		27	27	0.497	30	19	
SA	B,C	3.70	2	2			N	4110		290	290	0.00	4110			4110	0.071			11	52	0.102	3	4	
RT	C	3.70	1	1	30			2125		283	283	1.00	2024			2024	0.140	0.140		21	21	0.497	24	23	

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2026Obs_Sun

PROJECT NO.: 83209

PREPARED BY: AH

Apr-26

J4: Tung Chung Eastern Interchange

FILENAME :

CHECKED BY: CW

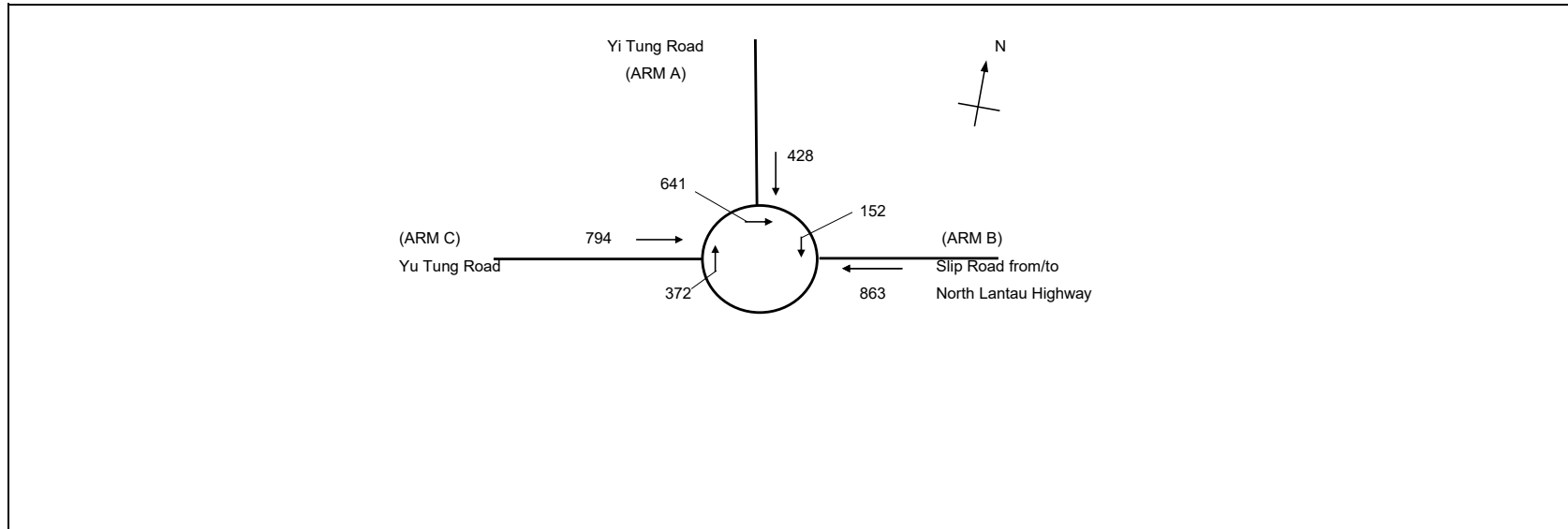
Apr-26

2026 Observed Sunday Peak Hour Traffic Flows

J4_Tung Chung Eastern Interchange_R.x

REVIEWED BY: SC

Apr-26



ARM	A	B	C		
INPUT PARAMETERS:					
V	= Approach half width (m)	8.0	7.0	8.0	
E	= Entry width (m)	12.0	12.0	12.0	
L	= Effective length of flare (m)	10.0	10.0	10.0	
R	= Entry radius (m)	60.0	60.0	40.0	
D	= Inscribed circle diameter (m)	105.0	105.0	105.0	
A	= Entry angle (degree)	45.0	45.0	45.0	
Q	= Entry flow (pcu/h)	428	863	794	
Qc	= Circulating flow across entry (pcu/h)	641	152	372	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = 1.6(E-V)/L	0.64	0.80	0.64	
K	= 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	0.98	0.97	
X2	= V + ((E-V)/(1+2S))	9.75	8.92	9.75	
M	= EXP((D-60)/10)	90	90	90	
F	= 303*X2	2956	2704	2956	
Td	= 1+(0.5/(1+M))	1.01	1.01	1.01	
Fc	= 0.21*Td(1+0.2*X2)	0.62	0.59	0.62	
Qe	= K(F-Fc*Qc)	2506	2563	2649	
				Total In Sum =	2085 PCU
DFC	= Design flow/Capacity = Q/Qe	0.17	0.34	0.30	
				DFC of Critical Approach =	0.34

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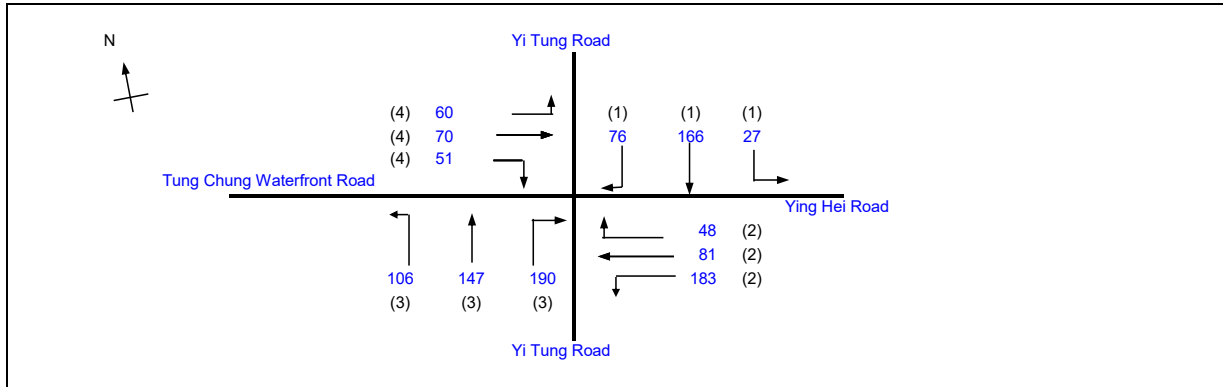
TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)
 J5: Ying Hei Road / Tung Chung Waterfront Road / Yi Tung Road
 2026 Observed Sunday Peak Hour Traffic Flow

2026obs_Sun

PROJECT NO.: 83209 Prepared By: AH Apr-26
 FILENAME: Checked By: CW Apr-26
 J5_Ying Hei Rd-Yu Tung Road_S.xlsx Reviewed By: SC Apr-26



		Existing Cycle Time	
No. of stages per cycle	N =	5	
Cycle time	C =	130 sec	
Sum(y)	Y =	0.263	
Loss time	L =	58 sec	
Total Flow	=	1205 pcu	
Co = (1.5*L+5)/(1-Y)	=	124.8 sec	
Cm = L/(1-Y)	=	78.7 sec	
Yult	=	0.465	
R.C.ult = (Yult-Y)/Y*100%	=	76.9 %	
Cp = 0.9*L/(0.9-Y)	=	81.9 sec	
Ymax = 1-L/C	=	0.554	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	90 %	

Stage	Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)															
				SG	FG	Delay	SG	FG														
Stage A	(3)	Stage B	(3)	Stage C	(1)	Stage D	(4)	Stage E	(P1)	(P2)	(P3)	(P4)										
Int = 6		Int = 6		Int = 6		Int = 3		Int = 2														

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT,SA	C	3.70	1	1	20		N	1985	27	104		131	0.21	1955			1955	0.067	0.067	19	18	18	0.474	24	52
SA,RT	C	3.70	1	1	30			2125		62	76	138	0.55	2068			2068	0.067			18	18	0.474	24	51
LT	B	3.50	2	1	20		N	1965	97			97	1.00	1828			1828	0.053	0.053		15	15	0.474	18	56
LT,SA	B	3.50	2	1	20			2105	86	20	48	105	0.81	1984			1984	0.053			15	15	0.474	18	55
SA,RT	B	3.50	2	1	30			2105		61		109	0.44	2060			2060	0.053			15	15	0.474	18	55
LT,SA	A	3.50	3	1	20		N	1965	106	0		106	1.00	1828			1828	0.058	0.082		16	23	0.334	18	45
SA,RT	A	3.50	3	1	30			2105		147	25	172	0.15	2090			2090	0.082			23	23	0.474	30	48
RT	A	3.50	3	1	30			2105			165	165	1.00	2005			2005	0.082			23	23	0.474	24	48
LT,SA,RT	D	3.70	4	1	20		N	1985	60	70	0	130	0.46	1919	50	231	2149	0.060	0.060		17	17	0.474	24	53
RT	D	3.70	4	1	30			2125			51	51	1.00	2024			2024	0.025			7	17	0.198	6	47
PED	E																		39						

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

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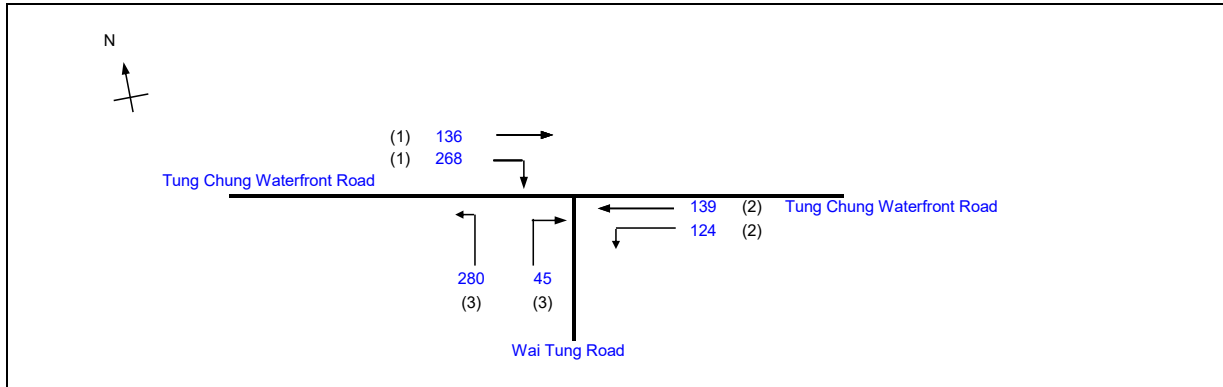
TRAFFIC SIGNAL CALCULATION

INITIALS DATE

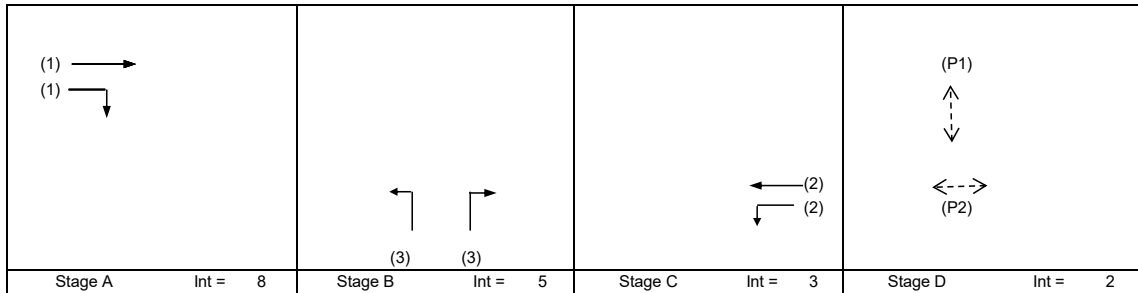
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)
 J6: Tung Chung Waterfront Road / Wai Tung Road
 2026 Observed Sunday Peak Hour Traffic Flow

2026Obs_Sun Peak

PROJECT NO.: 83209 Prepared By: AH
 FILENAME: Checked By: CW
 J6_Tung Chung Waterfront Rd-Wai Tung Road_S Reviewed By: SC Apr-26



		Existing Cycle Time	
No. of stages per cycle	N =	4	
Cycle time	C =	120 sec	
Sum(y)	Y =	0.255	
Loss time	L =	41 sec	
Total Flow	=	992 pcu	
Co = (1.5*L+5)/(1-Y)	=	89.3 sec	
Cm = L/(1-Y)	=	55.0 sec	
Yult	=	0.593	
R.C.ult = (Yult-Y)/Y*100%	=	132.4 %	
Cp = 0.9*L/(0.9-Y)	=	57.2 sec	
Ymax = 1-L/C	=	0.658	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	132 %	

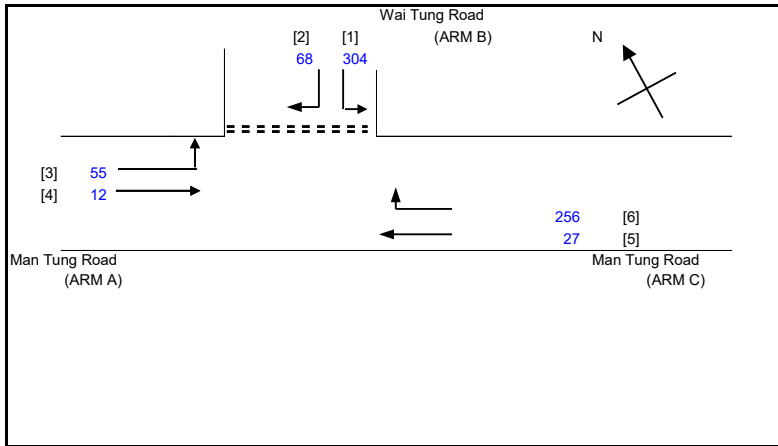


Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	D	10	5	8	2	16	8
P2	D	7	5	6	2	18	6

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
SA,RT	A	4.00	1	1	30		N	2015		136	63	199	0.32	1984			1984	0.100	0.100	15	31	31	0.387	24	35
RT	A	4.00	1	1	30		N	2155			205	205	1.00	2052			2052	0.100			31	31	0.387	30	35
LT,SA	C	4.00	2	1	20		N	2015	124	0		124	1.00	1874			1874	0.066	0.066		20	20	0.387	18	43
SA	C	4.00	2	1			N	2155		139		139	0.00	2155			2155	0.065			20	20	0.387	18	43
LT	B	3.30	3	1	15		N	1945	157			157	1.00	1768			1768	0.089	0.089		27	27	0.387	24	38
LT,RT	B	3.30	3	1	15		N	2085	123		45	168	1.00	1895			1895	0.089			27	27	0.387	24	38
PED	D																		26						

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)	2026Obs_Sun Peak	PROJECT NO.: 83209	PREPARED BY:	AH	Apr-26
J7 : Man Tung Road / Wai Tung Road		FILENAME : J7_Man Tung Rd-Wai Tung Rd_P.x	CHECKED BY:	CW	Apr-26
2026 Observed Sunday Peak Hour Traffic Flow			REVIEWED BY:	SC	Apr-26



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W = 7.00 (metres)
W cr = 0 (metres)
q a-b = 55 (pcu/hr)
q a-c = 12 (pcu/hr)

MAJOR ROAD (ARM C)

W c-b = 7.00 (metres)
Vr c-b = 30 (metres)
q c-a = 27 (pcu/hr)
q c-b = 256 (pcu/hr)

MINOR ROAD (ARM B)

W b-a = 3.50 (metres)
W b-c = 3.50 (metres)
VI b-a = 40 (metres)
Vr b-a = 50 (metres)
Vr b-c = 50 (metres)
q b-a = 68 (pcu/hr)
q b-c = 304 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.8628183
E = 0.9237883
F = 1.2083931
Y = 0.7585

THE CAPACITY OF MOVEMENT :

Q b-a = 442
Q b-c = 680 Q b-c (O) = 653.8
Q c-b = 878

TOTAL FLOW = 722 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.1538
DFC b-c = 0.4471
DFC c-b = 0.2916

CRITICAL DFC = 0.45

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)

2026obs_Sun

PROJECT NO.: 83209

Prepared By: AH

Apr-26

J8: Tat Tung Road / Shun Tung Road (West)

FILENAME :

Checked By: CW

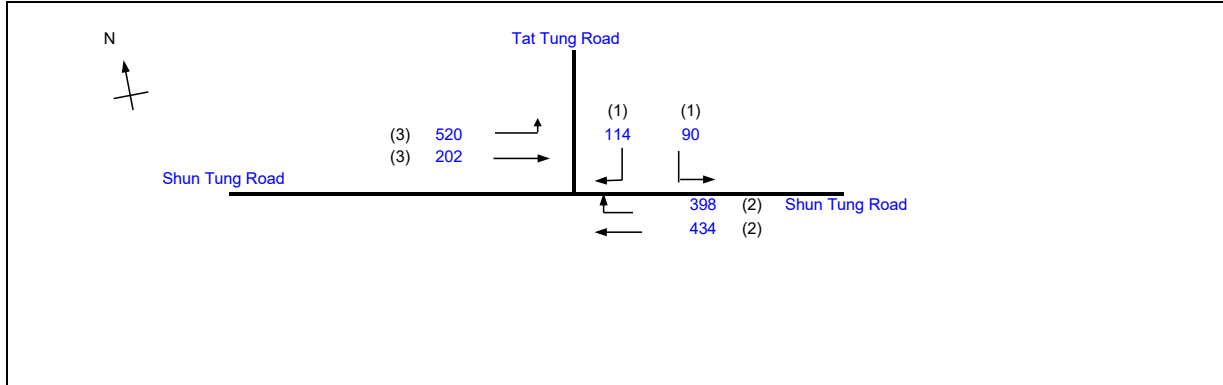
Apr-26

2026 Observed Sunday Peak Hour Traffic Flow (under existing TTM scheme)

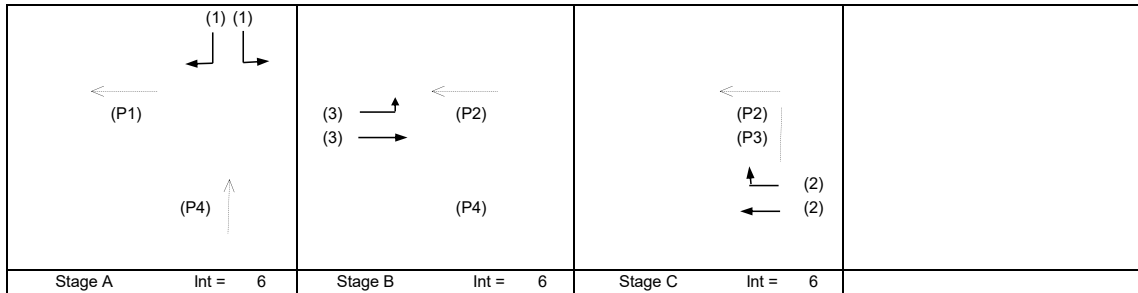
J8_Tat Tung Rd-Shun Tung Road (West)_S

Reviewed By: SC

Apr-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	110 sec	
Sum(y)	Y =	0.437	
Loss time	L =	15 sec	
Total Flow	=	1758 pcu	
Co = (1.5*L+5)/(1-Y)	=	48.8 sec	
Cm = L/(1-Y)	=	26.6 sec	
Yult	=	0.788	
R.C.ult = (Yult-Y)/Y*100%	=	80.3 %	
Cp = 0.9*L/(0.9-Y)	=	29.1 sec	
Ymax = 1-L/C	=	0.864	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	78 %	



Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	A	13	7	11	2	5	11
P2	B,C	8	5	6	2	84	6
P3	C	10	5	8	2	39	8
P4	A,B	11	6	9	2	50	9

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A	3.40	1	1	15		N	1955	90		90	1.00	1777			1777	0.051	0.058	15	11	11	0.506	12	52	
RT	A	3.40	1	1	25		N	2095		114	114	1.00	1976			1976	0.058			13	11	0.576	18	54	
LT	B	3.80	3	1	16		N	1995	320		320	1.00	1824			1824	0.175			38	38	0.506	36	28	
LT,SA	B	3.80	3	1	16		N	2135	200	202	402	0.50	2040	45	245	2285	0.176	0.176		38	38	0.507	48	28	
SA	C	3.70	2	1			N	1965		434	434	0.00	1965	40	218	2183	0.199			43	44	0.495	42	24	
RT	C	3.70	2	1	20		N	2105		398	398	1.00	1958			1958	0.203	0.203		44	44	0.506	42	24	

NOTE : O - OPPOSING TRAFFIC

N - NEAR SIDE LANE

SG - STEADY GREEN

FG - FLASHING GREEN

PEDESTRAIN WALKING SPEED = 1.2m/s

QUEUING LENGTH = AVERAGE QUEUE * 6m

OZZO TECHNOLOGY (HK) LIMITED

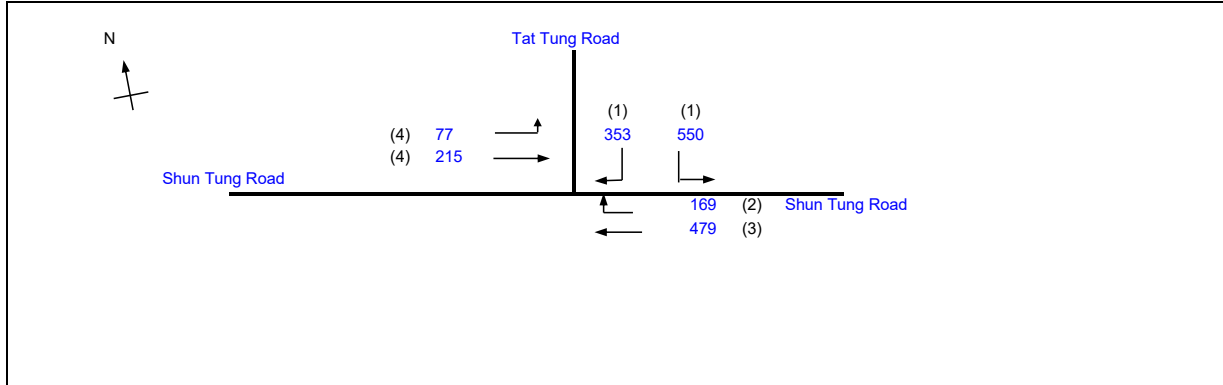
TRAFFIC SIGNAL CALCULATION

INITIALS DATE

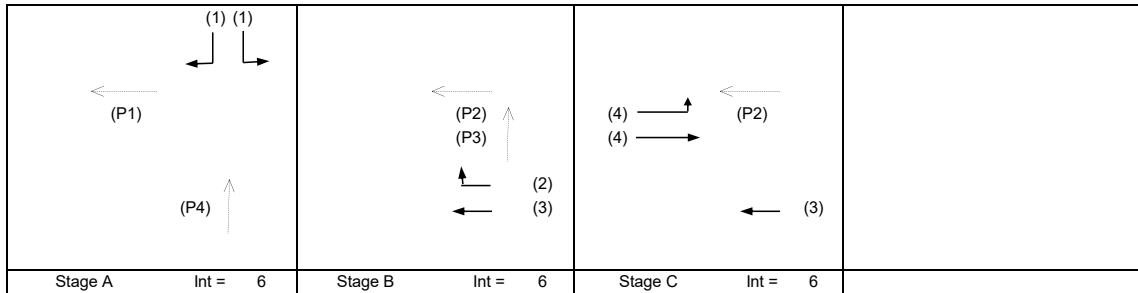
Section 16 Planning Application for Proposed Religious Institution and Columbarium (Partial Redevelopment of Prajna Dhyana Temple)
 J9: Tat Tung Road / Shun Tung Road (East)
 2026 Observed Sunday Peak Hour Traffic Flow

2026Obs_Sun Peak

PROJECT NO.: 83209 Prepared By: AH Apr-26
 FILENAME: Checked By: CW Apr-26
 J9_Tat Tung Rd-Shun Tung Road (East)_S Reviewed By: SC Apr-26



		Existing Cycle Time	
No. of stages per cycle	N =	3	
Cycle time	C =	110 sec	
Sum(y)	Y =	0.393	
Loss time	L =	15 sec	
Total Flow	=	1843 pcu	
Co = (1.5*L+5)/(1-Y)	=	45.3 sec	
Cm = L/(1-Y)	=	24.7 sec	
Yult	=	0.788	
R.C.ult = (Yult-Y)/Y*100%	=	100.1 %	
Cp = 0.9*L/(0.9-Y)	=	26.7 sec	
Ymax = 1-L/C	=	0.864	
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	98 %	



Pedestrian Phase	Stage	Width (m)	Green Time Required (s)			Green Time Provided (s)	
			SG	FG	Delay	SG	FG
P1	A	13	7	11	2	49	11
P2	B,C	8	5	6	2	40	6
P3	B	8	5	7	2	16	7
P4	A	13	7	11	2	49	11

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement			Total FLOW pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
									Left pcu/h	Straight pcu/h	Right pcu/h														
LT	A	3.50	1	1	18		N	1965	429		429	1.00	1814			1814	0.236	0.236	15	57	57	0.456	36	16	
LT,RT	A	3.50	1	1	30		N	2105	121	353	474	1.00	2005			2005	0.236			57	57	0.456	36	16	
LT,SA	C	3.70	4	1	15		N	1985	77	60	137	0.56	1879			1879	0.073	0.073		18	18	0.456	18	42	
SA	C	3.70	4	1			N	2125		155	155	0.00	2125			2125	0.073			18	18	0.456	18	42	
SA	B,C	3.75	3	2			N	4120		479	479	0.00	4120			4120	0.116			28	42	0.302	24	22	
RT	B	3.75	2	1	25		N	2130		169	169	1.00	2009			2009	0.084	0.084		20	20	0.456	24	40	

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m