		Appendix	Α
Traffic	Impact	Assessme	nt

Section 16 Planning Application in support of Proposed Minor Relaxation of Plot Ratio Restriction for Proposed Hotel use at Chai Wan Inland Lots 12 and 43, 14 - 16 Lee Chung Street, Chai Wan, Hong Kong

Traffic Impact Assessment

Final Report September 2025

Prepared by: CKM Asia Limited

Prepared for: Fortune Creation Developments Ltd.

Section 16 Planning Application in support of Proposed Minor Relaxation of Plot Ratio Restriction for Proposed Hotel use at Chai Wan Inland Lots 12 and 43, 14 - 16 Lee Chung Street, Chai Wan, Hong Kong

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Section 16 Planning Application in support of Proposed Minor Relaxation of Plot Ratio Restriction for Proposed Hotel use at Chai Wan Inland Lots 12 and 43, 14 - 16 Lee Chung Street, Chai Wan, Hong Kong

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5.1

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1.0 INTRODUCTION

Background

- 1.1 The Subject Site is located at 14 16 Lee Chung Street in Chai Wan. It is currently occupied by a revitalised industrial building which is known as the Johnson Building. **Figure 1.1** shows the location of the Subject Site.
- 1.2 A Section 16 planning application for the minor relaxation of the plot ratio for 14,068 m² industrial use at the Subject Site was approved by the Town Planning Board (TPB ref: A/H20/195) on 4th December 2020. The Owner has the intention to redevelop the existing building into a 363-room hotel (the "Proposed Hotel").
- 1.3 Against this background, CKM Asia Limited, a traffic and transportation planning consultancy firm, was commissioned by the Owner to conduct a traffic impact assessment in support of the Proposed Hotel.

Structure of Report

1.4 The report is structured as follows:

Chapter One - Gives the background of the project;

Chapter Two - Describes the existing situation; Chapter Three - Presents the Proposed Hotel;

Chapter Four - Describes the traffic impact analysis;

Chapter Five - Describes the pedestrian impact analysis; and

Chapter Six - Gives the overall conclusion.

2.0 EXISTING SITUATION

The Subject Site

2.1 The Johnson Building fronts onto Lee Chung Street and it adjoins the Shell Industrial Building to the south. The run-in / out of the Johnson Building is provided at Lee Chung Street.

Existing Traffic Flows

- 2.2 To quantify the existing traffic flows in the vicinity of the Subject Site, manual classified counts were conducted on Friday, 16 May 2025 during AM and PM peak periods at the following junctions:
 - J01 Junction of Lee Chung Street / Chui Hang Street
 - J02 Junction of Cheung Lee Street / Kut Shing Street (West Junction)
 - J03 Junction of Cheung Lee Street / Kut Shing Street (East Junction)
 - 104 Junction of Hong Man Street / Tai Man Street
 - J05 Junction of Chai Wan Road / Hong Man Street
 - J06 Junction of Chai Wan Road / Wan Tsui Road
 - J07 Junction of Chai Wan Road Roundabout
 - J08 Junction of Ning Foo Street / Lee Chung Street
 - J09 Junction of Lee Chung Street outside Shun Yee Factory Building
 - J10 Junction of Hong Man Street / Cheung Lee Street
- 2.3 The locations of the surveyed junctions are shown in **Figure 2.1** and the junction layouts are found in **Figures 2.2 2.11**.
- 2.4 The traffic counts are classified by vehicle type to enable traffic flows in passenger car units ("pcu") to be calculated. The AM and PM peak hours identified from the surveys are found to be between 0800 0900 hours and 1730 1830 hours respectively. **Figure 2.12** presents the observed AM and PM peak hour traffic flows in pcu/hour.

Performance of the Surveyed Junctions

2.5 The existing performance of the surveyed junctions is calculated based on the observed traffic counts, and the analyses were undertaken using the methods outlined in Volume 2 of the Transport Planning and Design Manual ("TPDM"), which is published by the Transport Department. The existing junction performance is presented in **Table 2.1**, and detailed calculations are found in **Appendix A**.

TABLE 2.1 EXISTING JUNCTION PERFORMANCE

Ref.	Junction	Junction Type (Parameter)	AM Peak	PM Peak
J01	Lee Chung Street / Chui Hang Street	Priority (DFC)	0.078	0.083
J02	Cheung Lee Street / Kut Shing Street (West Junction)	Priority (DFC)	0.132	0.102
J03	Cheung Lee Street / Kut Shing Street (East Junction)	Signal (RC)	307%	395%
J04	Hong Man Street / Tai Man Street	Priority (DFC)	0.509	0.243
J05	Chai Wan Road / Hong Man Street	Signal (RC)	37%	82%
J06	Chai Wan Road / Wan Tsui Road	Priority (DFC)	0.376	0.315
J07	Chai Wan Road Roundabout	RA (DFC)	0.472	0.363

Ref.	Junction	Junction Type (Parameter)	AM Peak	PM Peak
J08	Ning Foo Street / Lee Chung Street	Signal (RC)	251%	336%
J09	Lee Chung Street outside Shun Yee Factory Building	Priority (DFC)	0.068	0.057
J10	Hong Man Street / Cheung Lee Street	Priority (DFC)	0.536	0.415

Note: DFC – design flow/capacity ratio

RC – Reserve Capacity

RA – Roundabout

2.6 The results in **Table 2.1** show that the junctions analysed operate with capacity.

Public Transport Facilities

2.7 The Subject Site is well-served by public transport facilities, and access to public transport services is convenient, including the Chai Wan MTR station exit C, which is located some 200m away. In addition, numerous franchised bus and public light bus routes operate within 500-metre from the Subject Site. **Figure 2.13** shows details of the road-based public transport services provided within 500-metre from the Subject Site.

Existing Footpath Level-Of-Service

- 2.8 To quantify the existing pedestrian flows, pedestrian counts were conducted during the AM and PM peak periods on Friday, 16 May 2025 at footpaths located in the vicinity, and the observed peak hour pedestrian flows are shown in **Figure 2.14**.
- 2.9 The Level-Of-Service ("LOS") of a pedestrian footpath depends on its width and number of pedestrians using the facility. Description of the LOS at walkway is obtained from Volume 6 of the TPDM and is presented in **Table 2.2**.

TABLE 2.2 DESCRIPTION OF PEDESTRIAN FOOTPATH LOS

	ADEL 2.2 DESCRIPTION OF FEDESTRIAIN FOOTFATTEOS					
LOS	Flow Rate (ped/min/m)	Description				
Α	≤ 16	Pedestrians basically move in desired paths without altering their movements in response to other pedestrians. Walking speeds are freely selected, and conflicts between pedestrians are unlikely.				
В	16 – 23	Sufficient space is provided for pedestrians to freely select their walking speeds, to bypass other pedestrians and to avoid crossing conflicts with others. At this level, pedestrians begin to be aware of other pedestrians and to respond to their presence in the selection of walking paths.				
С	23 – 33	Sufficient space is available to select normal walking speeds and to bypass other pedestrians primarily in unidirectional stream. Where reverse direction or crossing movement exist, minor conflicts will occur, and speed and volume will be somewhat lower.				
D	33 – 49	Freedom to select individual walking speeds and bypass other pedestrians is restricted. Where crossing or reverse-flow movements exist, the probability of conflicts is high and its avoidance requires changes of speeds and position. The LOS provides reasonable fluid flow; however considerable friction and interactions between pedestrians are likely to occur.				
E	49 – 75	Virtually, all pedestrians would have their normal walking speeds restricted. At the lower range of this LOS, forward movement is possible only by shuffling. Space is insufficient to pass over slower pedestrians. Cross- and reverse-movement are possible only with extreme difficulties. Design volumes approach the limit of walking capacity with resulting stoppages and interruptions to flow.				
F	> 75	Walking speeds are severely restricted. Forward progress is made only by shuffling. There are frequent and unavoidable conflicts with other pedestrians. Cross- and reverse-movements are virtually impossible. Flow is sporadic and unstable. Space is more characteristics of queued pedestrians than of moving pedestrian streams.				

Source: Volume 6 Chapter 10 of TPDM

2.10 The observed peak 15 minutes pedestrian flows LOS assessment is presented in **Table 2.3**.

TABLE 2.3 EXISTING LOS ASSESSMENT

Location	Clear Width ⁽¹⁾ [Effective Width] (m)		Flow (ped/ 15 mins)	Flow rate (ped/min/m)	LOS
P1. Eastern Footpath Outside	2.5[1.5]	AM	94	4.2	Α
14-16 Lee Chung Street		PM	187	8.4	Α
P2. Northern Footpath Outside	3.0[2.0]	AM	382	12.8	Α
12 Lee Chung Street		PM	418	14.0	Α

⁽¹⁾ The width excludes railing and obstructions.

2.11 The above results indicate that the surveyed footpaths currently operate with LOS A during the AM and PM peak. As stated in the TPDM, LOS A to C is considered as an acceptable range of level of service. Hence, the footpaths analysed operate with capacity.

3.0 THE PROPOSED HOTEL

The Proposed Hotel

3.1 The Owner of the Subject Site intends to redevelop the existing industrial building to a 363-room hotel.

Provision of Internal Transport Facilities

3.2 The comparison of the proposed internal transport facilities and the recommendations of the Hong Kong Planning Standards and Guidelines ("HKPSG") are presented in **Table 3.1**.

TABLE 3.1 COMPARISON OF THE HKPSG RECOMMENDATIONS AND PROPOSED INTERNAL TRANSPORT FACILITIES

TROTOSED HATERIA/AE TR/A	1
HKPSG Recommendations for a Hotel with 363 rooms	The Proposed Hotel
Car Parking Space	
1 per 100 rooms	4 nos. comprising of:
	(i) 1 set of double-deck parking rack
363 / 100 = 3.63, say 4 nos.	@ 5m(L) X 2.5m (W)
<u> </u>	(ii) 1 no. @ 5m(L) X 2.5m (W) X 2.4m(H),
	(iii) 1 no. @ 5m (L) X 3.5m (W) X 2.4m (H)
	for persons with disabilities
	= Comply HKPSG, OK
	= Comply Tiki 3d, Ok
Motorcycle Parking Space	
5% to 10% of car parking space	1 no. 2.4m(L) X 1m (W) X 2.4m(H)
3 % to 10 % of car parking space	= Comply HKPSG, OK
Minimum 4 v E% 0.2 cay 1 no	= Comply Tike SG, OK
Minimum = $4 \times 5\% = 0.2$, say $\frac{1 \text{ no.}}{1}$	
Maximum = $4 \times 10\% = 0.4$, say <u>1 no.</u>	
Goods Vehicle Loading / Unloading Bay	
0.5 – 1 goods vehicle bay per 100 rooms	2 nos. comprising of:
	(i) 1 LGV @ 7m (L) X 3.5m (W) X 3.6m (H)
Minimum = $0.5 \times 363/100 = 1.82$, say 2 nos.	(ii) 1 HGV @ 11m (L) X 3.5m (W) X 4.7m
With 65% for LGV and 35% for HGV:	(H)
LGV : $2 \times 0.65 = 1.3$, say 1 no. ; &	= Comply HKPSG, OK
HGV : $2 - 1 = 1 \text{ no.}$	
Maximum = $1 \times 363/100 = 3.63$, say 4 nos.	
With 65% for LGV and 35% for HGV:	
LGV: $4 \times 0.65 = 2.6$, say 3 nos.; &	
HGV: 4 - 3 = 1 no.	
Taxi and Private Car Layby	
Minimum 3 nos. for 300 - 599 rooms	3 nos. @ 5m (L) X 2.5m (W) X 2.4m (H)
	= Comply HKPSG, OK
	- comply time ody on
Single Deck Tour Bus Layby	
Minimum 2 – 3 nos. for 300 - 899 rooms	2 nos. @ 12m (L) X 3.5m (W) X 3.8m (H)
7.11.11.11.12 3 1103. 101 300 033 1001113	= Comply HKPSG, OK
	- Comply Tiki 30, Ok

3.3 **Table 3.1** shows that the internal transport facilities provided comply with the recommendations of the HKPSG. The G/F layout plan is shown in **Figure 3.1**.

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Swept Path Analysis

The CAD-based swept path analysis programme, Autodesk Vehicle Tracking, was used to check the ease of manoeuvring of vehicles within the Proposed Hotel, and the swept path analysis drawings are found in **Appendix B**. Vehicles are found to have no manoeuvring problems.

TRAFFIC IMPACT 4.0

Design Year

The Proposed Hotel is expected to be completed in 2030, and the design year 4.1 adopted for the traffic assessment is, whichever later of the 2: (i) at least 3 years after the planned completion of the development, i.e., 2033, or (ii) 5 years from the date of this application, i.e., 2030. Therefore, Year 2033 is adopted for junction capacity analysis.

Traffic Forecasting

4.2 Year 2033 peak hour traffic flows for the junction capacity analysis are produced (i) with reference to the 2019-based Base District Traffic Model HK2 (the "BDTM"); (ii) estimated growth from 2031 to 2033; (iii) expected traffic generation by the planned / committed developments in the vicinity; and (iv) expected traffic generation by the Proposed Hotel.

Estimated Traffic Growth Rate from 2031 to 2033

- 4.3 Reference is made to the: (i) the Annual Average Daily Traffic ("AADT") of core stations located in the vicinity of the Proposed Hotel, which is found in the Annual Traffic Census, published by Transport Department, and (ii) the Hong Kong Population Projection published by Census and Statistics Department.
- The information for (i) is presented in **Table 4.1**. 4.4

AADT OF THE CORE STATIONS IN THE VICINITY OF THE **TABLE 4.1** PROPOSED HOTEL

111010	I		I	
ATC Station No.	1102	1220	1446	Overall
Road	Cheung Lee Street	Chai Wan Road	Island Eastern Corridor	
From	Hong Man Street	Tai Tam Road	Wan Tsui Road	
То	Kut Shing Street	Wan Tsui Road	Wing Tai Road INT	
Year	Annua	l Average Daily Tr	affic (vehicles / day)	
2017	4,320	18,470*	17,730*	40,520
2018	4,500	19,140	17,780*	41,420
2019	4,320	18,490	19,630	42,440
2020	4,240	17,640*	18,700	40,580
2021	4,430	18,440*	19,070*	41,940
2022	4,230	17,590*	17,970*	39,790
2023	4,330	18,590	18,360*	41,280
Average Annual Growth (2017 - 2023)	0.04%	0.11%	0.58%	0.31%

Note: * Estimated by Growth Factor

- **Table 4.1** shows overall annual average traffic growth of 0.31%. 4.5
- The information for (ii) is presented in **Table 4.2**. 4.6

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TABLE 4.2 HONG KONG POPULATION PROJECTIONS FROM CENSUS AND STATISTICS DEPARTMENT

Year	Population in Hong Kong (thousands)
2031	7,820.2
2033	7,903.6
Average Annual Growth (2031 – 2033)	0.53%

4.7 **Table 4.2** shows that the annual population growth between 2031 – 2033 is 0.53%. To be conservative, the annual growth rate of 1% is adopted for 2031 – 2033.

Additional Planned / Committed Developments near the Subject Site

The planned / committed developments near the Subject Site not included in the BDTM but have been incorporated to produce the future year traffic flows are listed in **Table 4.3** and the locations are presented in **Figure 4.1**.

TABLE 4.3 ADDITIONAL PLANNED / COMMITTED DEVELOPMENTS NEAR THE SUBJECT SITE

	1112 90 0 12 0 1 911	_	1	1		
Ref. No.	Development			No. of Flat	Average Flat Size	
Α	Industrial Building at 18 Lee Chung	Street	9,000			-
В	Transitional Housing at 46 Sheung C	On Street		103	30 m ²	
C	Light Public Housing at 50 Sheung (On Street		1,720	30 m ²	
D	Residential Development at 391 Chai Wan Road			850	75 m ²	
Ε	Wah Ha Estate at 2 Kut Shing Street			18 <i>7</i>	30 m ²	
F	Chai Wan Government Complex and Vehicle Depot		33,930			
G	Water Supplies Department Headquarters with Regional Office and Correctional Services Department Headquarters				-	
Н	oint-user Complex at Junction of Office		17,760		-	
	Shing Tai Road and Sheung Mau	Public Vehicle Park				200
	Street, Chai Wan	Driving School	5,000		-	

Traffic Generation of the Proposed Hotel

4.9 To estimate the traffic generation of the Proposed Hotel, reference is made to the mean rates for Hotel uses in TPDM. The adopted traffic generation rates and the estimated AM and PM peak hour traffic generation are presented in **Table 4.4**.

TABLE 4.4 ADOPTED TRIP RATES AND TRAFFIC GENERATION FOR THE PROPOSED HOTEL

The Proposed Hotel	Parameter	AM Peak		PM Peak	
(363 Rooms)		Generation	Attraction	Generation	Attraction
Mean Traffic Generation Rates for Hotel Uses	pcu/hr/ room	0.1329	0.1457	0.1290	0.1546
Traffic Generation	pcu/hr	<u>49</u>	<u>53</u>	<u>47</u>	<u>57</u>
		102 (2-way)		104 (2-	way)

4.10 The Proposed Hotel is expected to generate 102 and 104 pcu / hour (2-way) in AM and PM peak respectively.

Year 2033 Traffic Flows

4.11 Year 2033 traffic flows for the following cases are derived:

Year 2033 Without the Proposed Hotel [A]

 Traffic flows derived with reference to BDTM + estimated traffic growth between 2031 and 2033 + expected traffic generation of the planned / committed developments after 2019

Year 2033 With the Proposed Hotel [B]

= [A] + Traffic Generation of the Proposed Hotel

4.12 Year 2033 peak hour traffic flows for the above cases are shown in **Figures 4.2 – 4.3** respectively.

Year 2033 Junction Capacity Analysis

4.13 Year 2033 junction capacity analysis for the three cases are summarised in **Table 4.5** and detailed calculations are found in the **Appendix A**.

TABLE 4.5 YEAR 2033 JUNCTION PERFORMANCE

Ref.	Junction	Junction Type (Parameter)	Without the Proposed Hotel AM PeakPM Peak		With the Proposed Hotel AM PeakPM Peak	
J01	Lee Chung Street / Chui Hang Street	Priority (DFC)	0.114	0.101	0.220	0.180
J02	Cheung Lee Street / Kut Shing Street (West Junction)	Priority (DFC)	0.148	0.116	0.151	0.118
J03	Cheung Lee Street / Kut Shing Street (East Junction)	Signal (RC)	275%	348%	252%	319%
J04	Hong Man Street / Tai Man Street	Priority (DFC)	0.563	0.267	0.564	0.268
J05	Chai Wan Road / Hong Man Street	Signal (RC)	25%	67%	24%	66%
J06	Chai Wan Road / Wan Tsui Road	Priority (DFC)	0.411	0.344	0.411	0.344
J07	Chai Wan Road Roundabout	RA (DFC)	0.536	0.412	0.565	0.438
J08	Ning Foo Street / Lee Chung Street	Signal (RC)	206%	285%	160%	216%
J09	Lee Chung Street outside Shun Yee Factory Building	Priority (DFC)	0.079	0.064	0.080	0.064
J10	Hong Man Street / Cheung Lee Street	Priority (DFC)	0.607	0.466	0.629	0.486

Note: DFC – design flow/capacity ratio

RC – Reserve Capacity

RA - Roundabout

4.14 **Table 4.5** shows that the junctions analysed have capacity to accommodate the expected traffic growth to 2033 and the traffic generated by the Proposed Hotel. In addition, the traffic generated by the Proposed Hotel has negligible impact to the surrounding road junctions.

5.0 PEDESTRIAN IMPACT

Pedestrian Generation

5.1 The pedestrian generation of the Proposed Hotel and planned / committed developments in the vicinity, i.e., Industrial Building at 18 Lee Chung Street, are estimated with reference to in-house pedestrian generation rates and are presented in **Table 5.1**.

TABLE 5.1 PEDESTRIAN GENERATIONS OF THE PROPOSED HOTEL AND PLANNED / COMMITTED DEVELOPMENTS IN THE VICINITY

ltem	Pedestrian Generations				
	AM I	Peak	PM Peak		
	Generation	Attraction	Generation	Attraction	
Pedestrian Generation Rate Hotel (ped / 15 mins / room)	0.1732	0.0512	0.1772	0.1575	
Industrial (ped / 15mins / 100m ² GFA)	0.0500	0.3410	0.2820	0.0360	
Pedestrian Generation (ped / 15 mins)					
The Proposed Hotel – 363 rooms	63	19	65	58	
	82 (2-	-way)	123 (2-way)		
18 Lee Chung Street – 9,000m² Industrial GFA	5	31	26	4	

5.2 **Table 5.1** shows that the Proposed Hotel is expected to generate 82 and 123 pcu/15-minutes (2-way) in AM and PM peak respectively.

Annual Pedestrian Growth Rate between 2025 - 2033

- 5.3 To establish the pedestrian growth rate from 2025 to 2033, reference is made to 2 sources of information including:
 - (i) Eastern District Population Projection of "2021 based TPEDM" from Planning Department; and
 - (ii) "Hong Kong Population Projections" from the Census and Statistics Department.
- 5.4 Relevant information from the 2021 based TPEDM is presented in **Table 5.2**.

TABLE 5.2 EASTERN DISTRICT POPULATION PROJECTIONS

Year	Population [a]	Employment [b]	Overall [c] = [a] + [b]	
2021	529,600	296,200	825,800	
2031	467,000	277,050	744,050	
Average Annual Growth 2021 to 2031	-1.3%	-0.7%	-1.0%	

- 5.5 **Table 5.2** shows that the average annual population growth in the Eastern District between 2021 and 2031 is -1.0%.
- 5.6 Relevant information from the "Hong Kong Population Projections" is presented in **Table 5.3**.

TABLE 5.3 HONG KONG POPULATION PROJECTIONS FROM CENSUS AND STATISTICS DEPARTMENT

Year	Hong Kong Resident Population ('000)
2025	7,559.8
2033	7,903.6
Average Annual Growth 2025 to 2033	0.56%

5.7 **Table 5.3** shows that the average annual population growth in Hong Kong between 2025 – 2033 is 0.56%. Based on the above, the annual growth from 2025 to 2033 adopted is 0.56%.

Year 2033 Pedestrian Flows

- 5.8 Year 2033 pedestrian flows are produced with reference to (i) the observed 2025 pedestrian flows, (ii) annual pedestrian growth rate, (iii) expected pedestrian demand due to the planned / committed developments between 2025 2033 and the subject site.
- 5.9 Year 2033 pedestrian flows the following cases are derived:

2033 without the Proposed = 2025 observed pedestrian flows + adopted pedestrian Hotel [A] growth from 2025 to 2033 + pedestrian generation of the planned / committed developments

2033 with the Proposed = [A] + pedestrian generation of the Proposed Hotel Hotel [B]

Year 2033 Footpath Level-Of-Service

5.10 Year 2033 peak hour pedestrian flows for the case of 2033 without and with the Proposed Hotel are estimated as shown in **Figure 5.1** and the corresponding LOS assessment is presented in **Table 5.4.**

TABLE 5.4 YEAR 2033 LOS ASSESSMENT

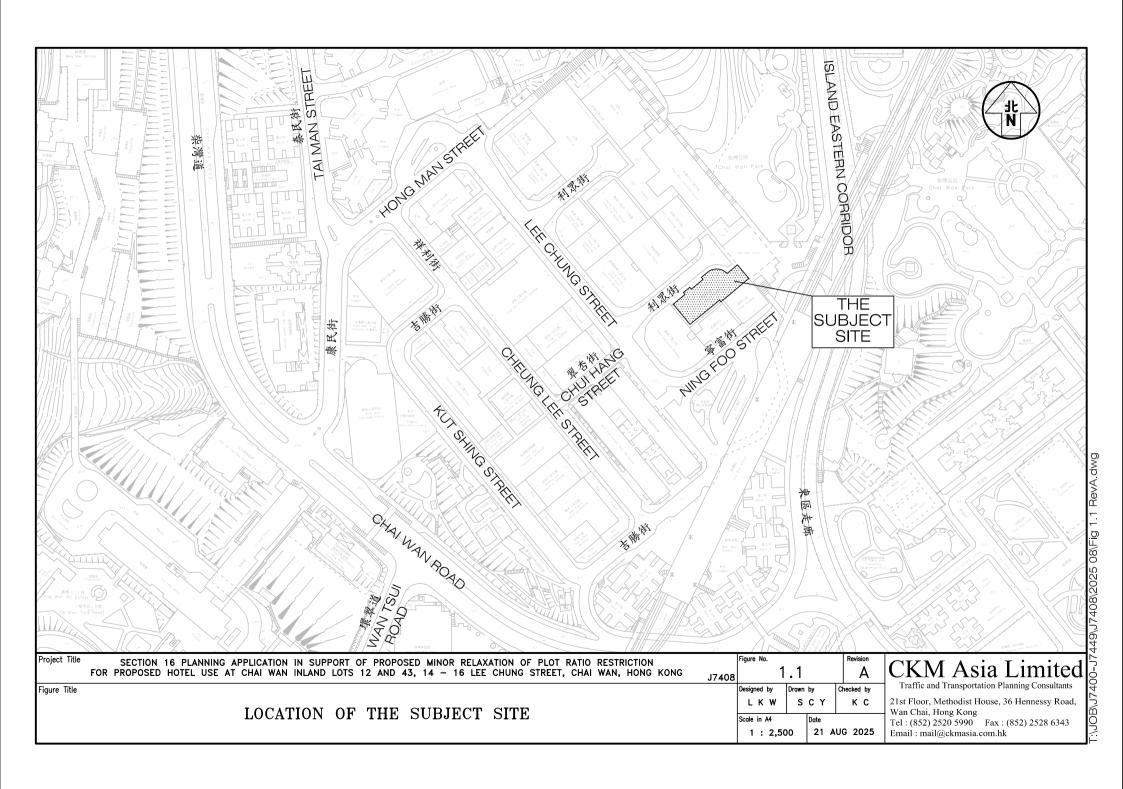
Location	Clear Width ⁽¹⁾ [Effective	Peak Period	2033 without the Proposed Hotel		2033 wit	3 with the Proposed Hotel			
	Width] (m)		Flow (ped/ 15 min)	Flow rate (ped/ min/m)		Flow (ped/ 15 min)	Flow rate (ped/ min/m)	LOS	
P1. Eastern Footpath outside	2.5[1.5]	AM	135	6.0	Α	217	9.7	Α	
14-16 Lee Chung Street		PM	226	10.1	Α	349	15.6	Α	
P2. Northern Footpath outside	3.0[2.0]	AM	436	14.6	Α	518	17.3	В	
12 Lee Chung Street		PM	468	15.6	Α	591	19.7	В	

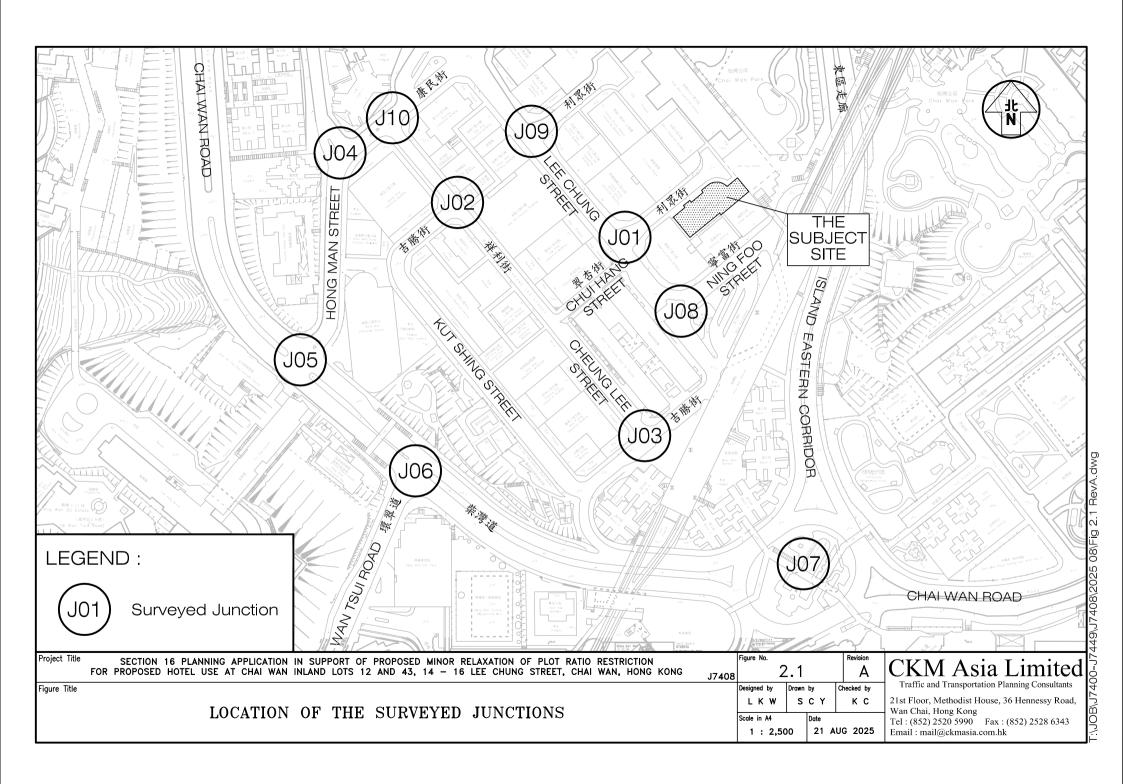
Note: (1) The width excludes railing and obstructions.

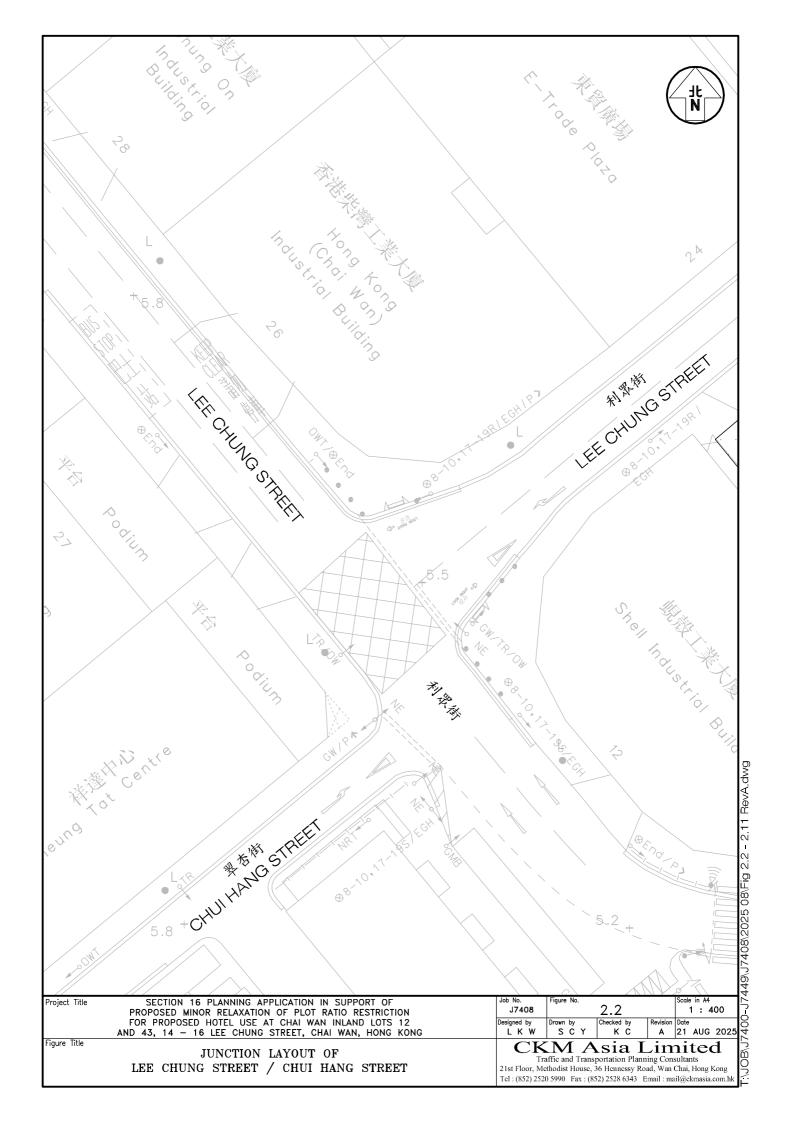
5.11 The results in **Table 5.4** show that the assessed footpaths operate with LOS A or B, which is acceptable.

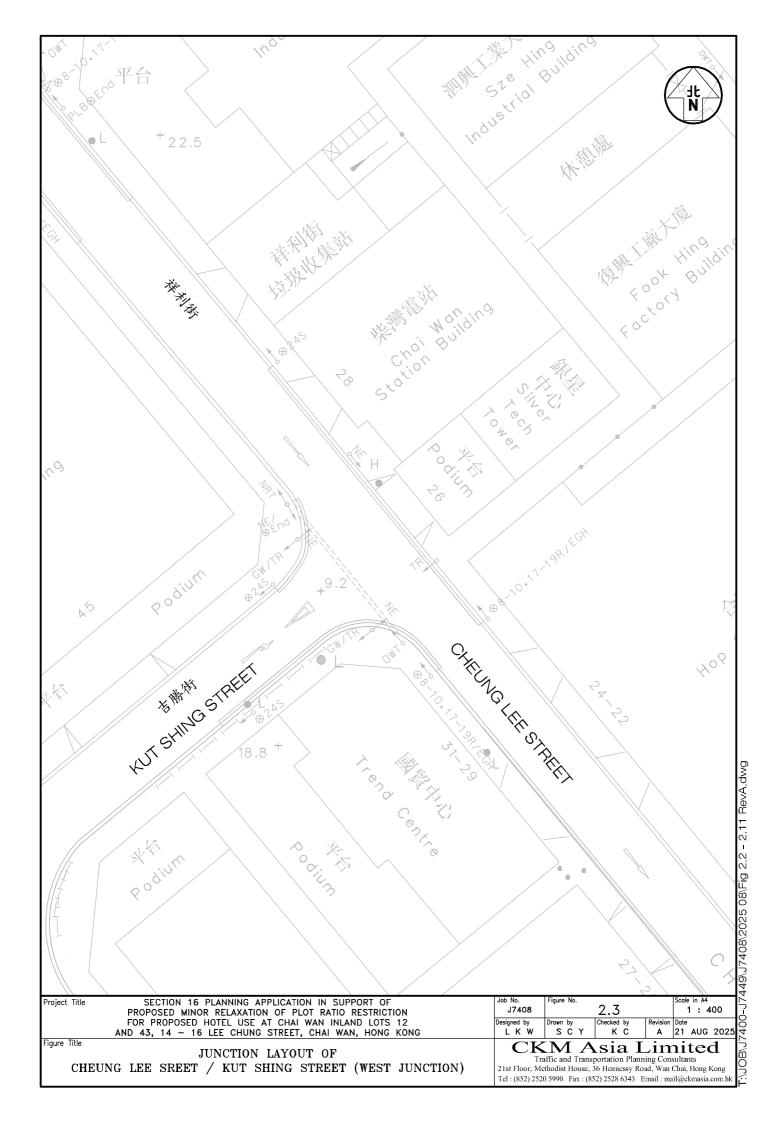
6.0 SUMMARY

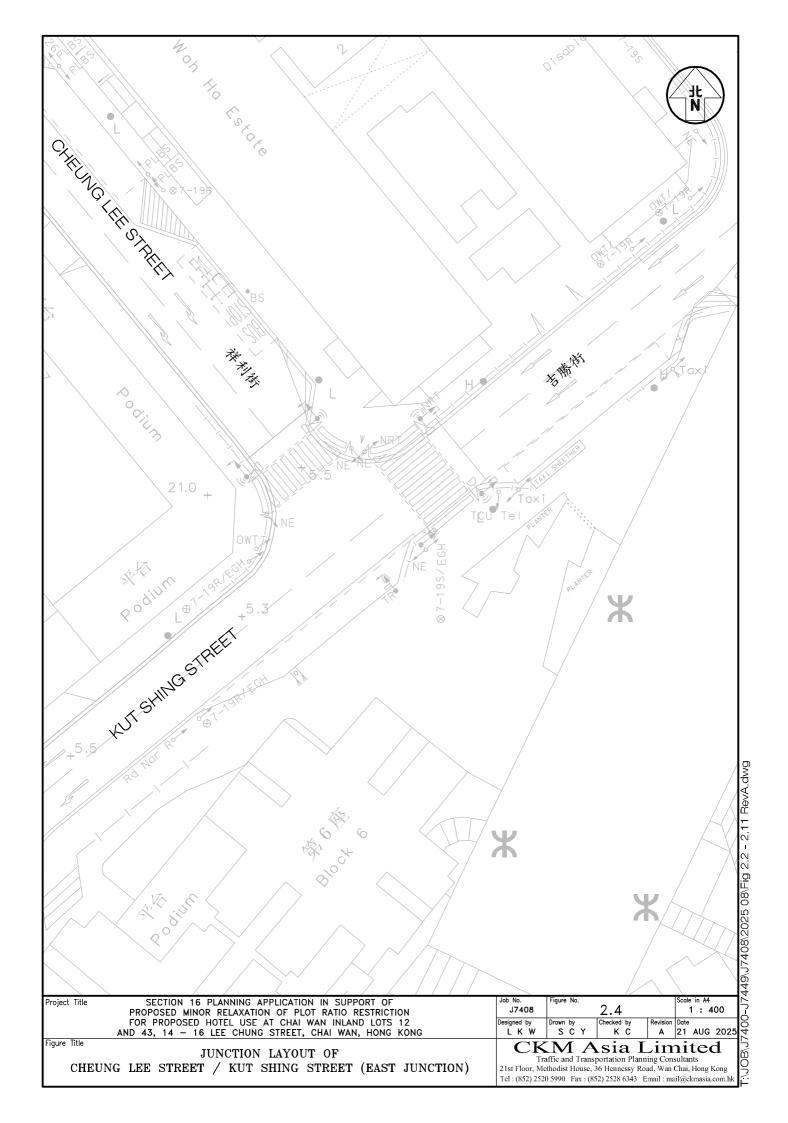
- 6.1 A Section 16 planning application for the minor relaxation of the plot ratio for 14,068 m² industrial use at the Subject Site was approved by the Town Planning Board (TPB ref: A/H20/195) on 4th December 2020. The Owner now has the intention to develop a 363-room hotel.
- 6.2 The Subject Site is conveniently located close to public transport services, including the Chai Wan MTR station and numerous franchised bus routes and public light buses. Pedestrian facilities are provided in the vicinity of the Subject Site, including footpaths along road carriageways and at-grade pedestrian crossings which connect to the Chai Wan MTR station.
- 6.3 Manual classified counts were conducted at junctions, which are located in the vicinity in order to establish the existing traffic flows during the AM and PM peak hours.
- 6.4 The internal transport facilities provided for the Proposed Hotel comply with the recommendations of the HKPSG. Swept path analysis was conducted to ensure that all vehicles could enter and leave the Proposed Hotel and their respective space / bay with ease.
- 6.5 Year 2033 peak hour traffic flows for the junction capacity analysis are produced (i) with reference to the BDTM; (ii) estimated traffic growth from 2031 to 2033; (iii) expected traffic generation by the planned / committed developments in the vicinity; and (iv) traffic generation of the Proposed Hotel.
- 6.6 This TIA concludes that the traffic generation of the Proposed Hotel has negligible traffic impact to the surrounding road network, and, is acceptable from traffic terms.
- 6.7 The assessment of footpaths found that the Proposed Hotel has negligible impact.
- 6.8 It can be concluded that the Proposed Hotel will result in no adverse traffic impact to the surrounding road network. From traffic engineering grounds, the Proposed Hotel is acceptable.

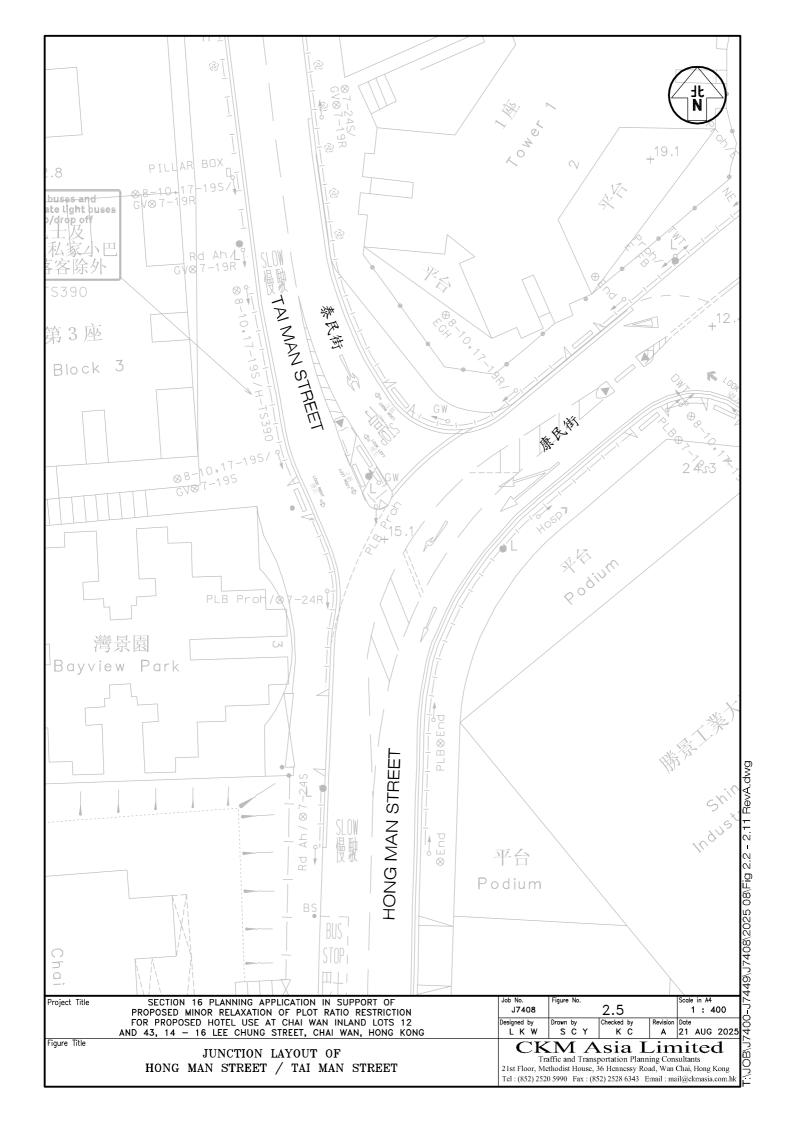


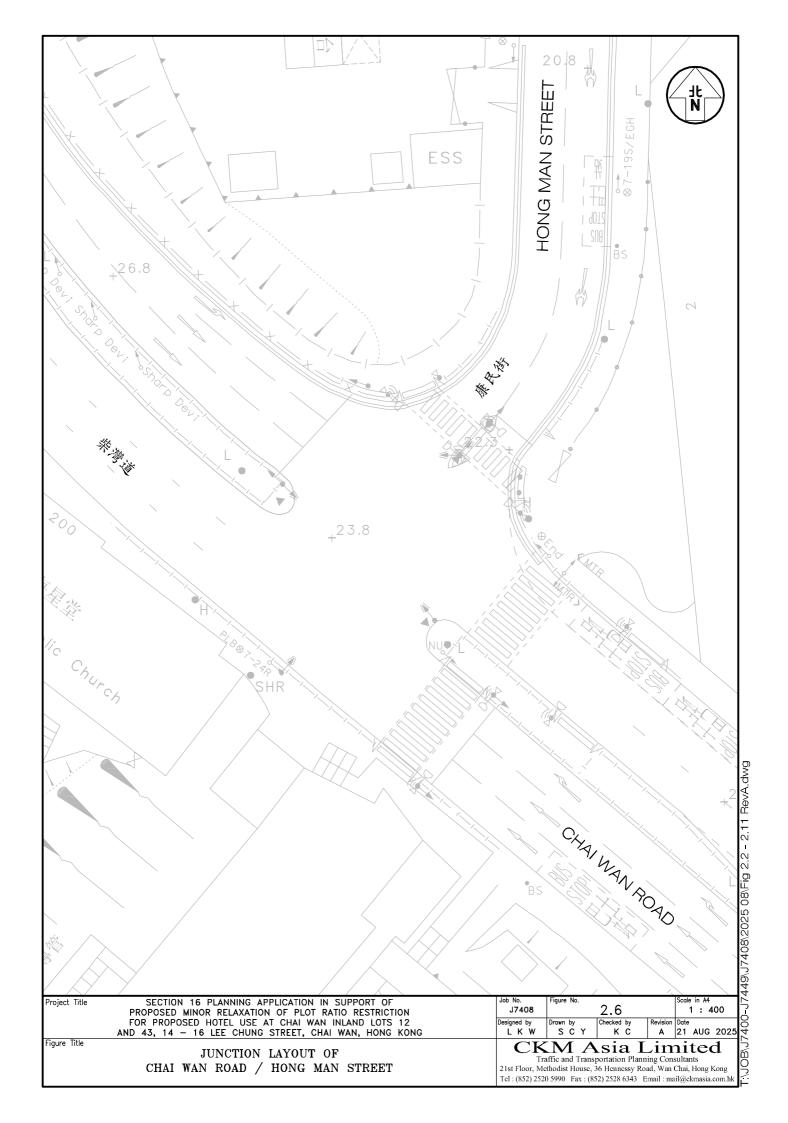


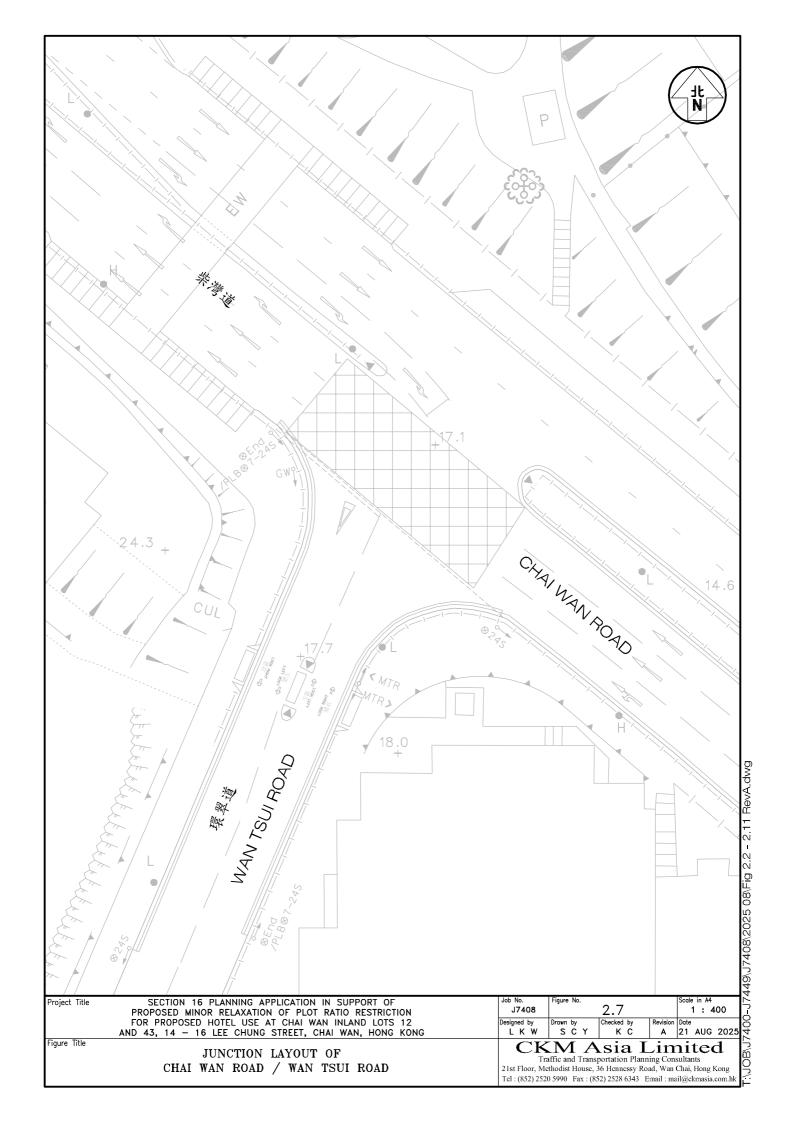


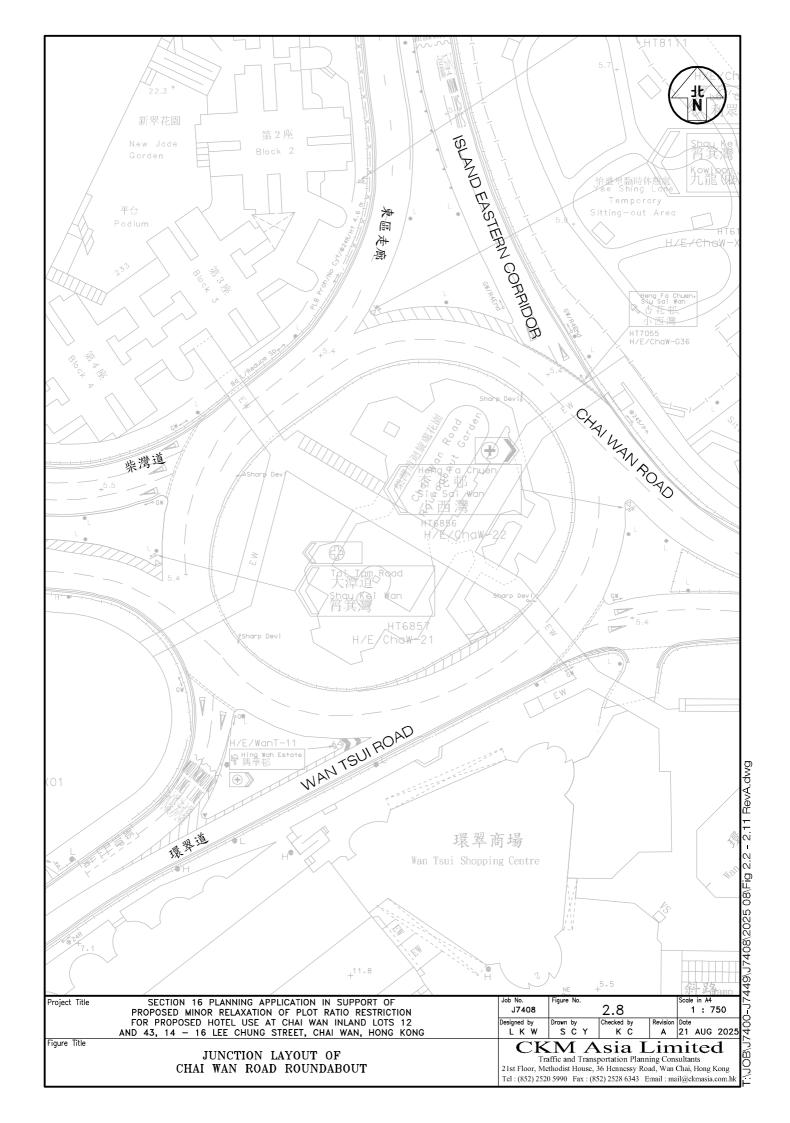


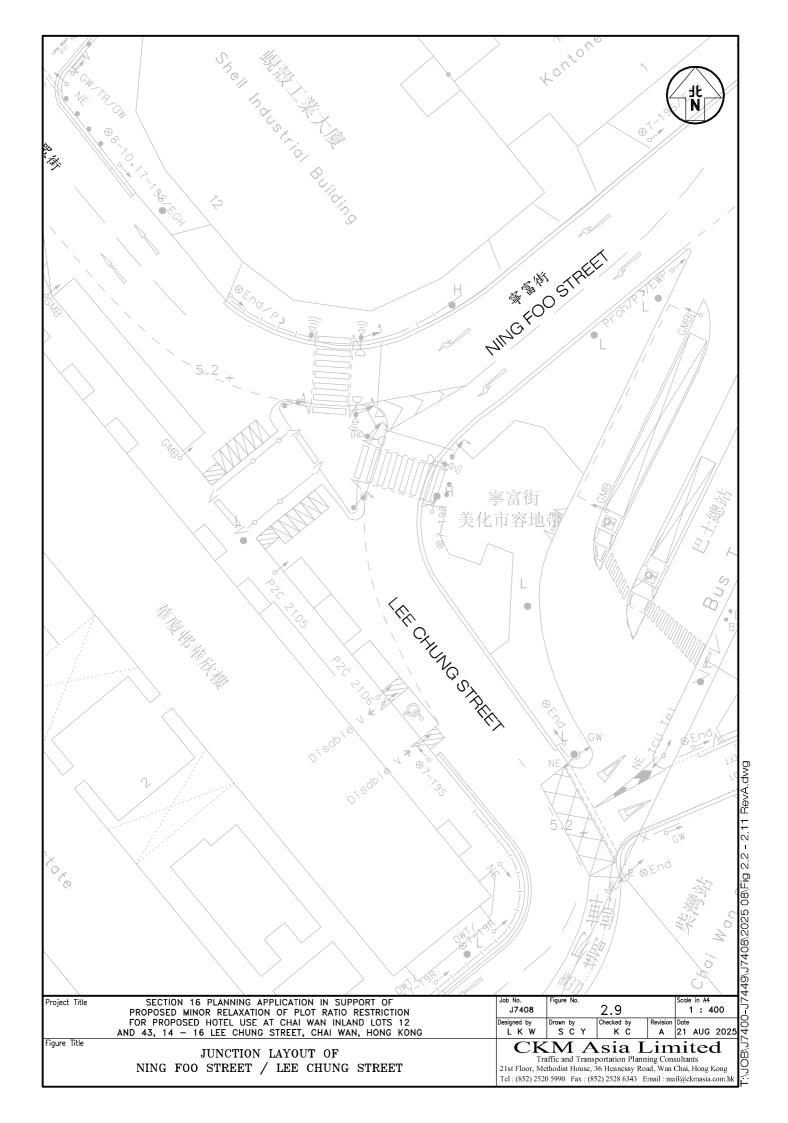


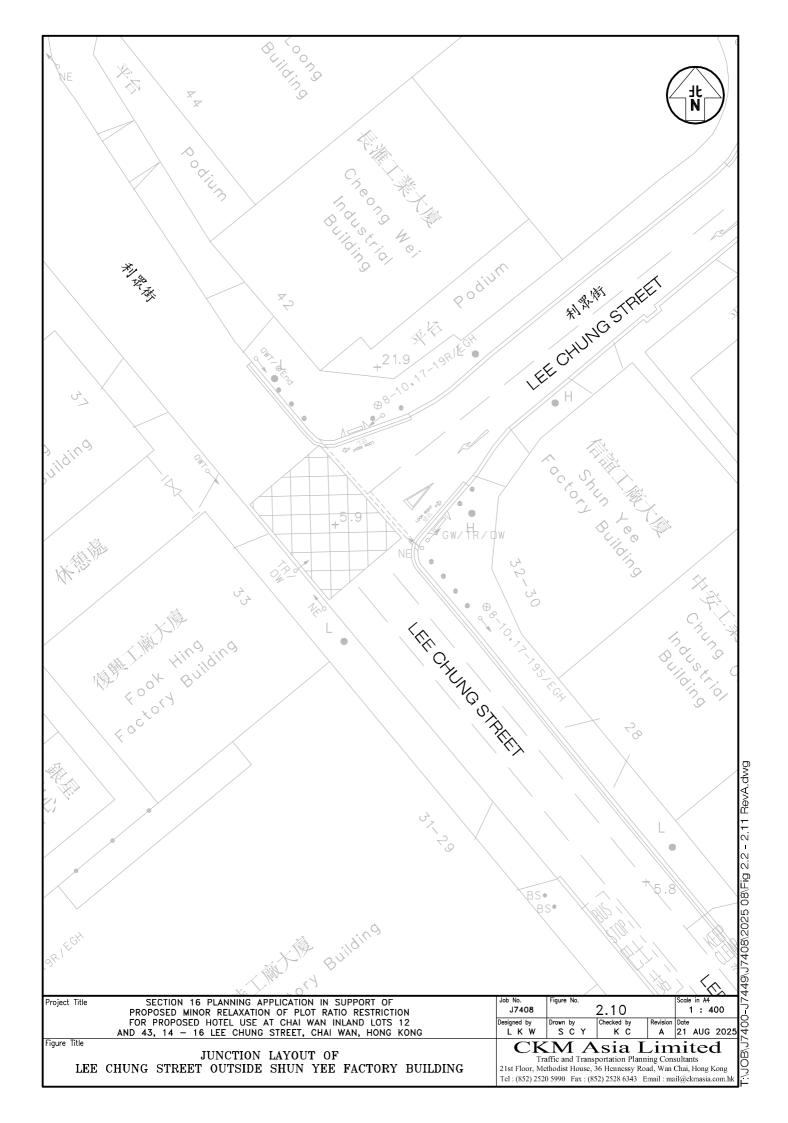


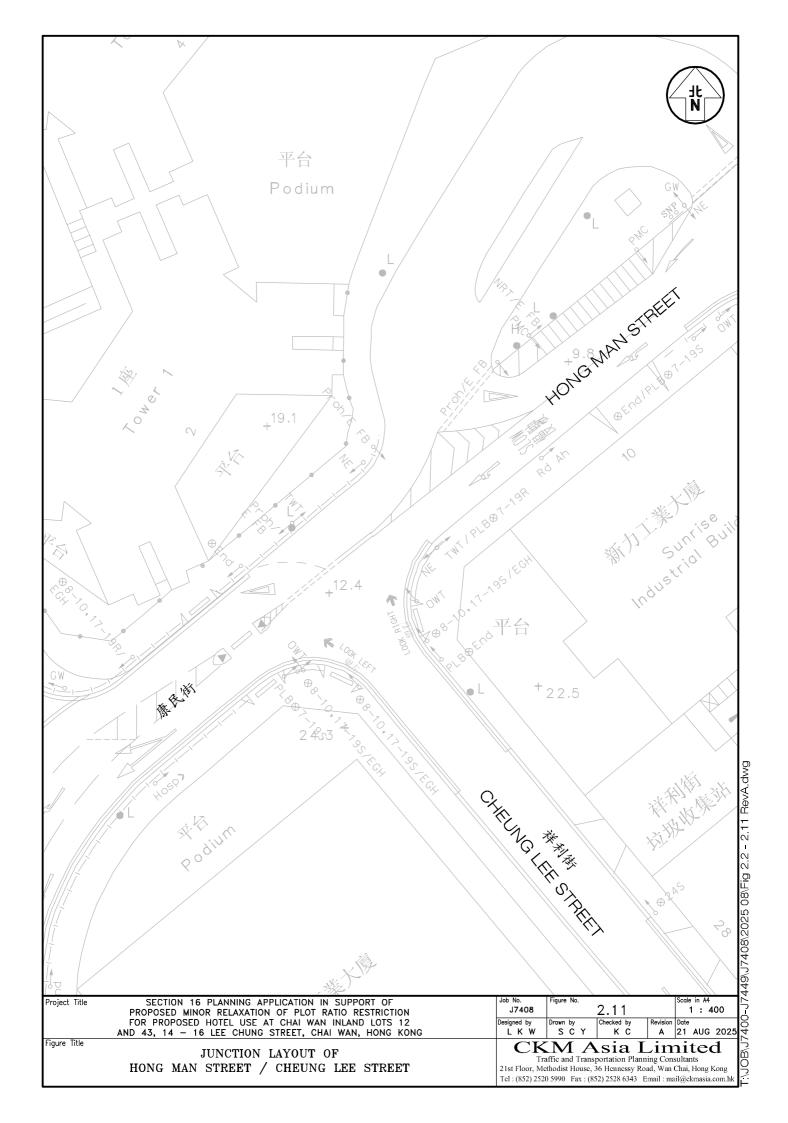


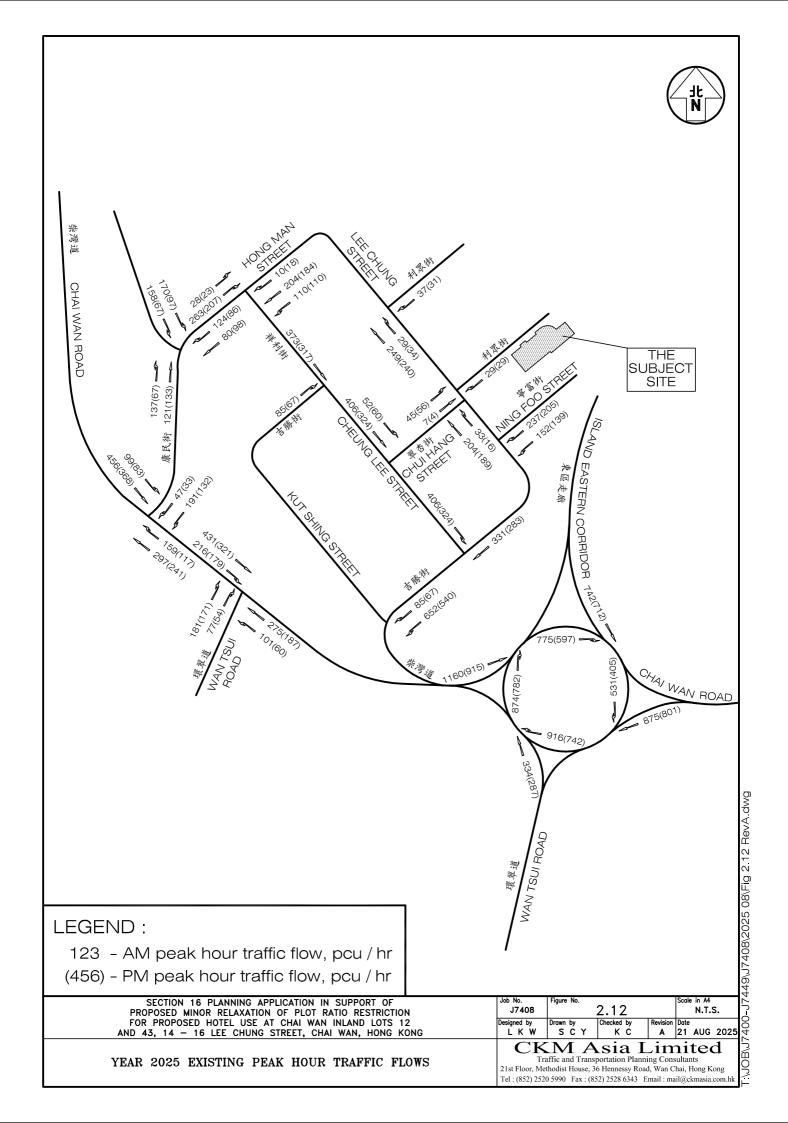


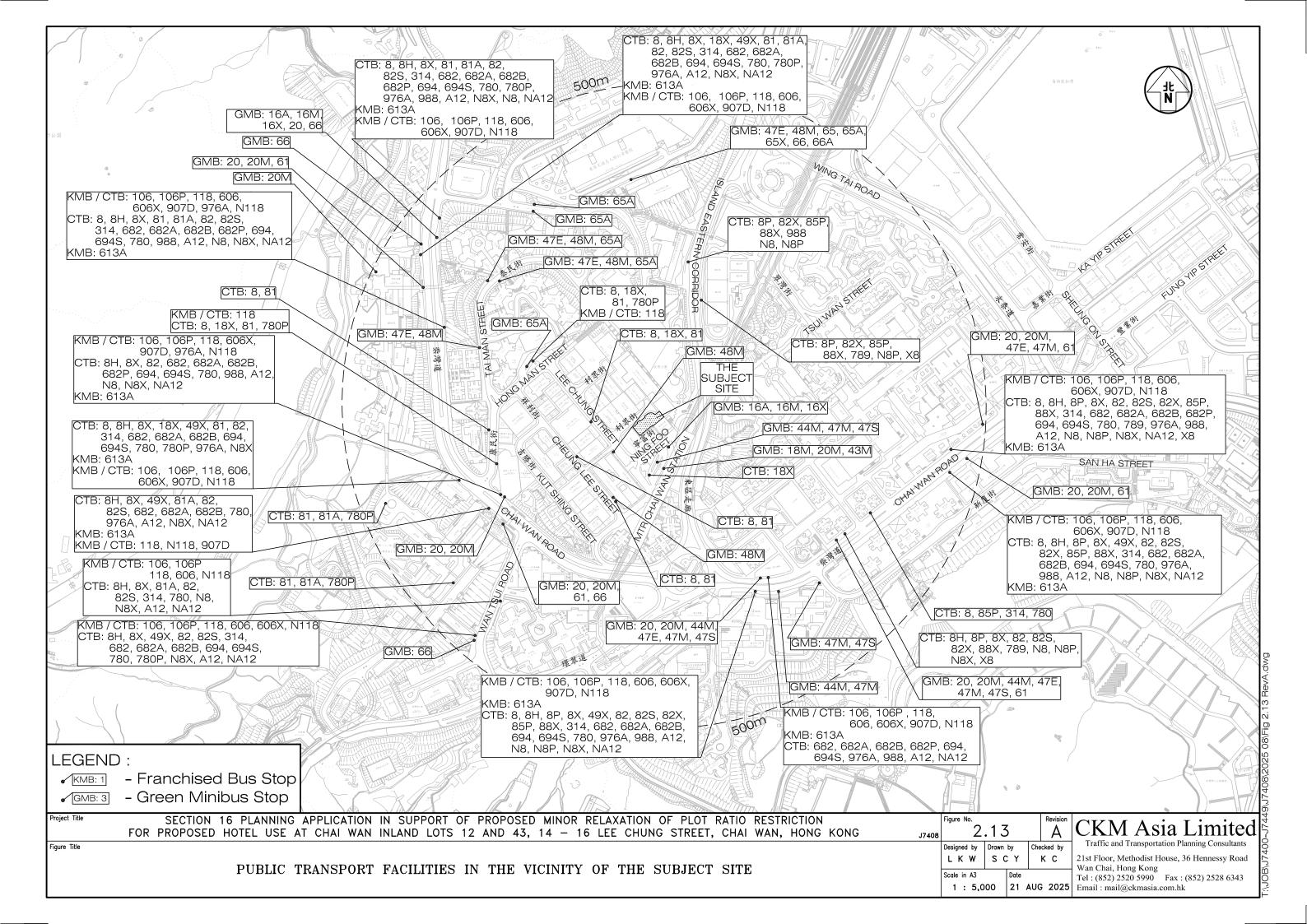


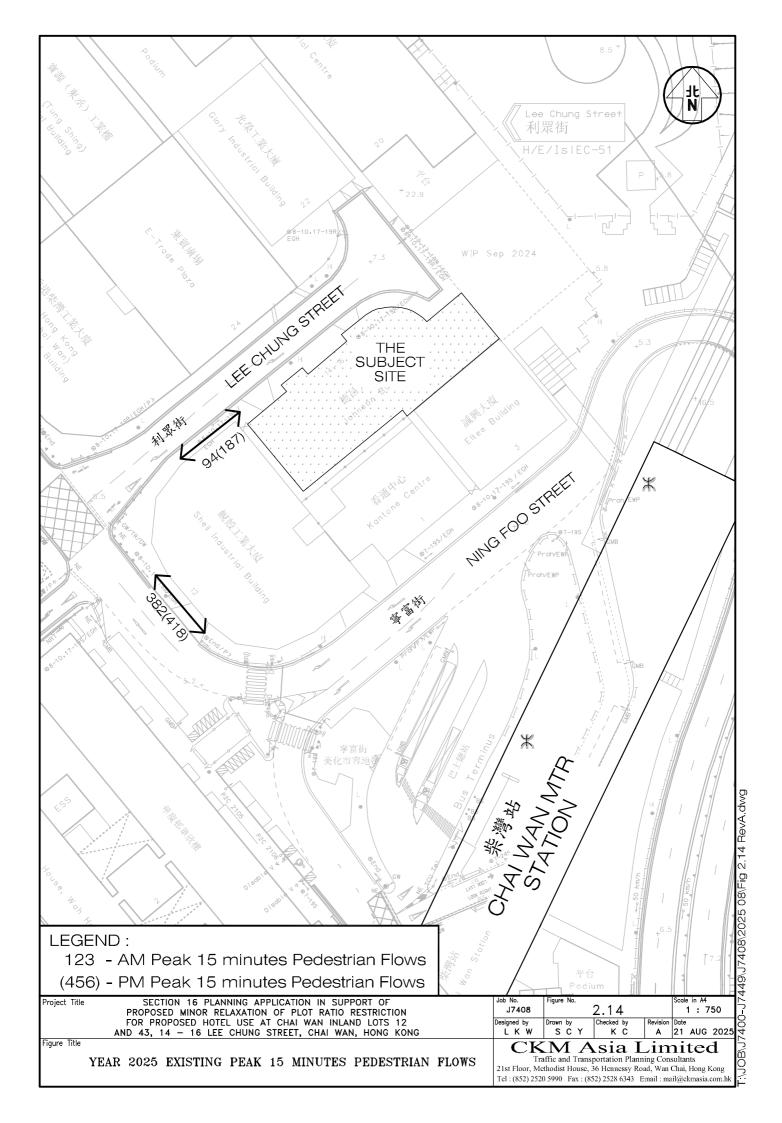


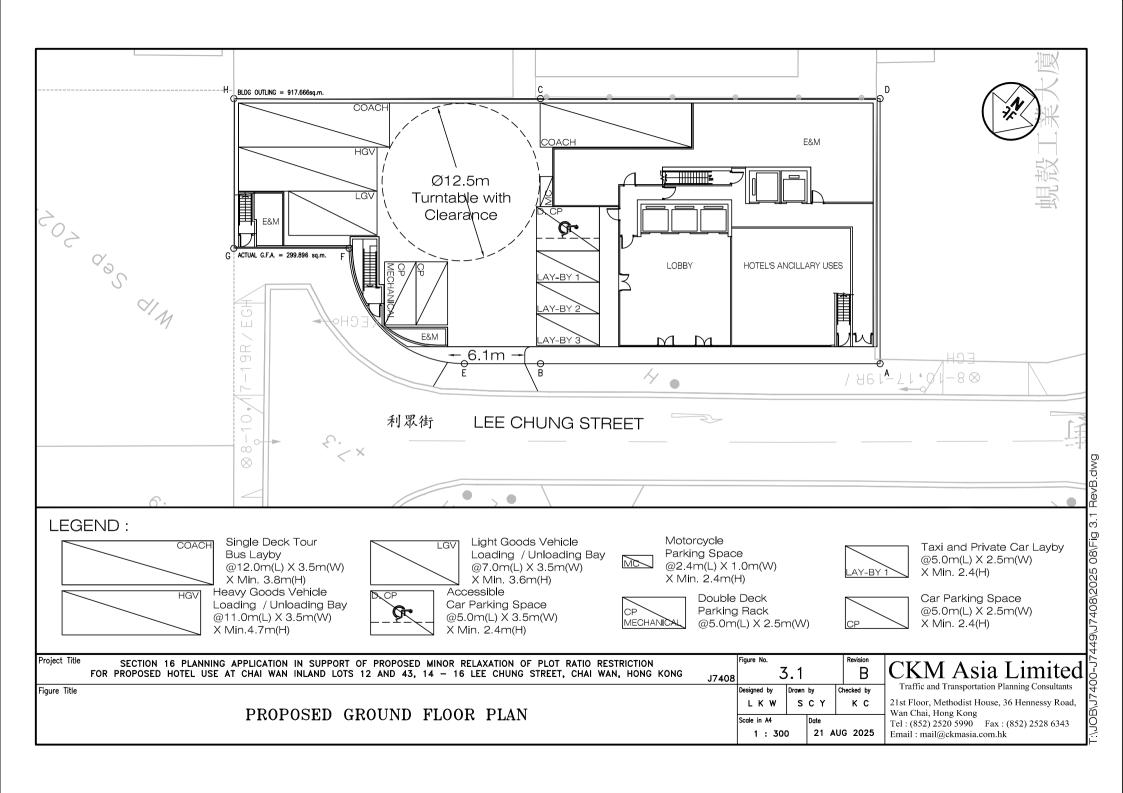


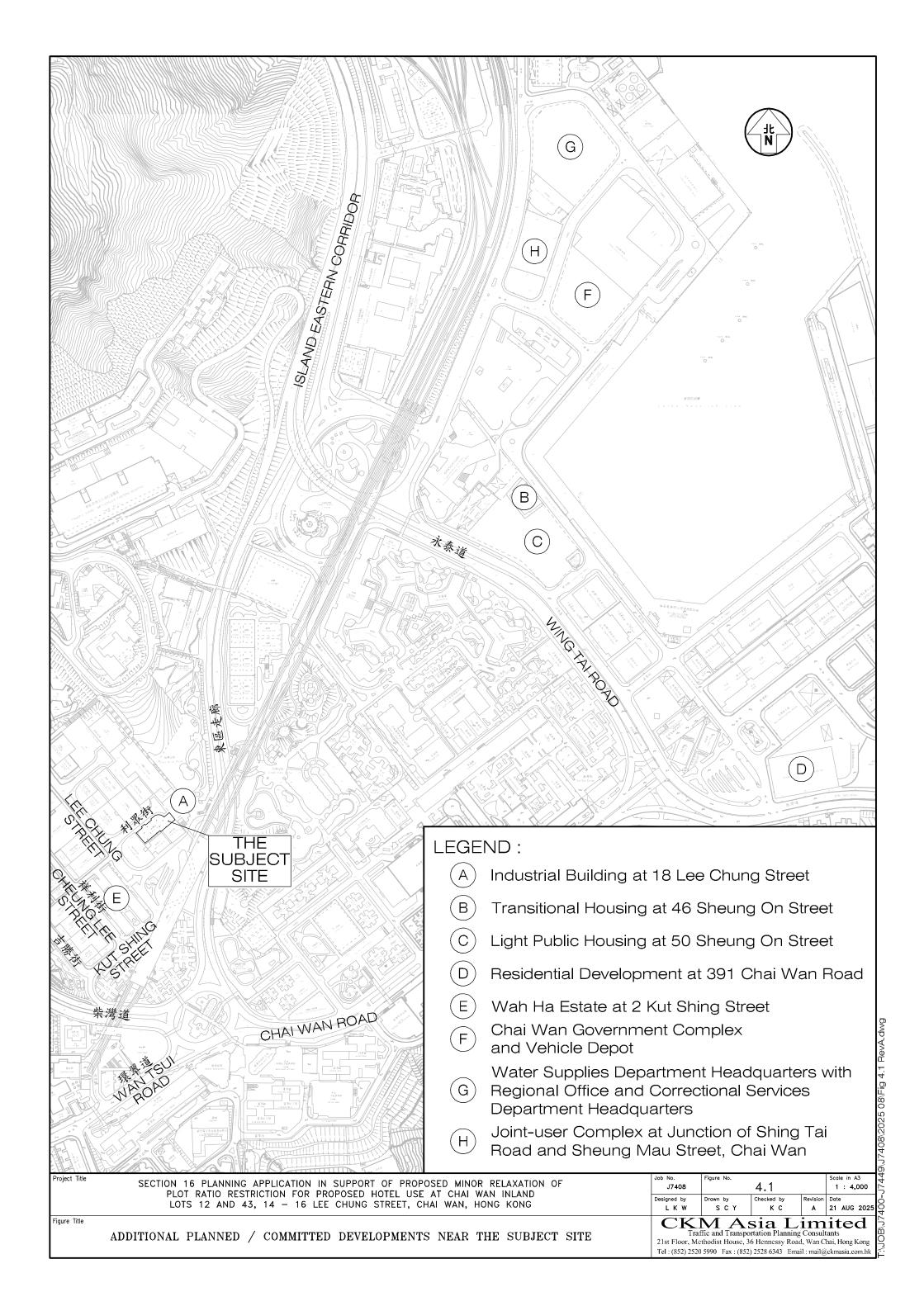


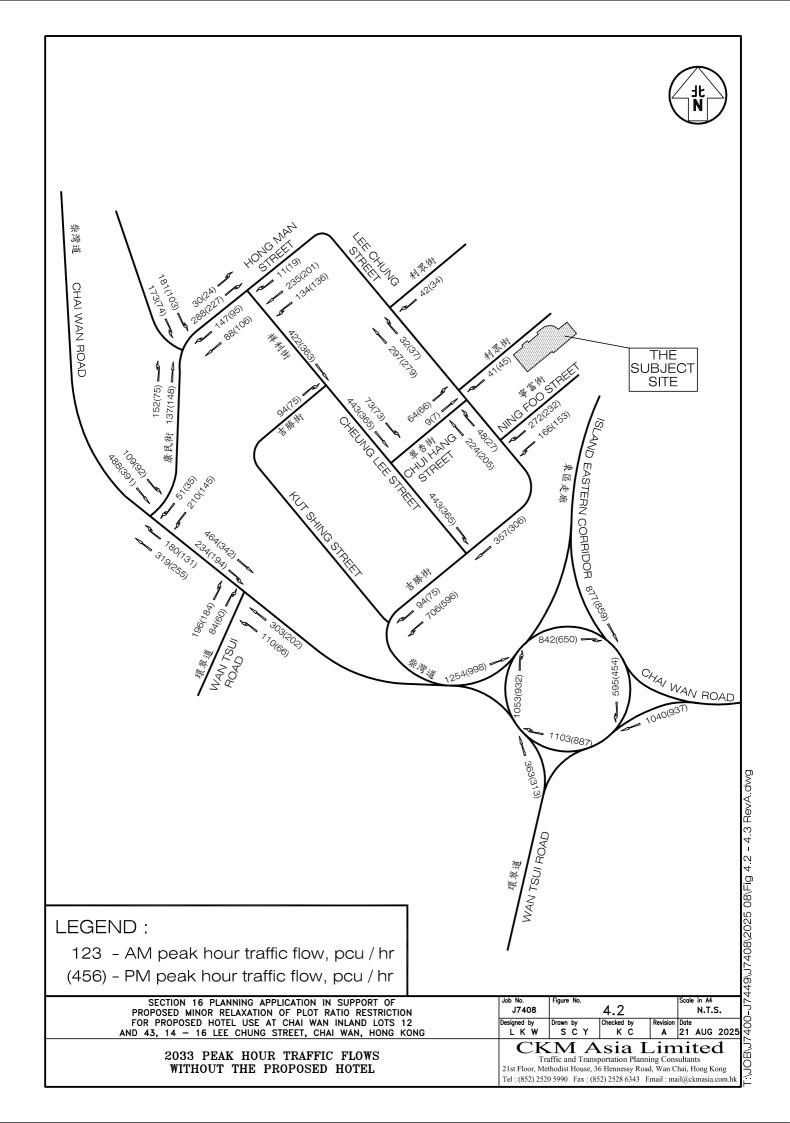


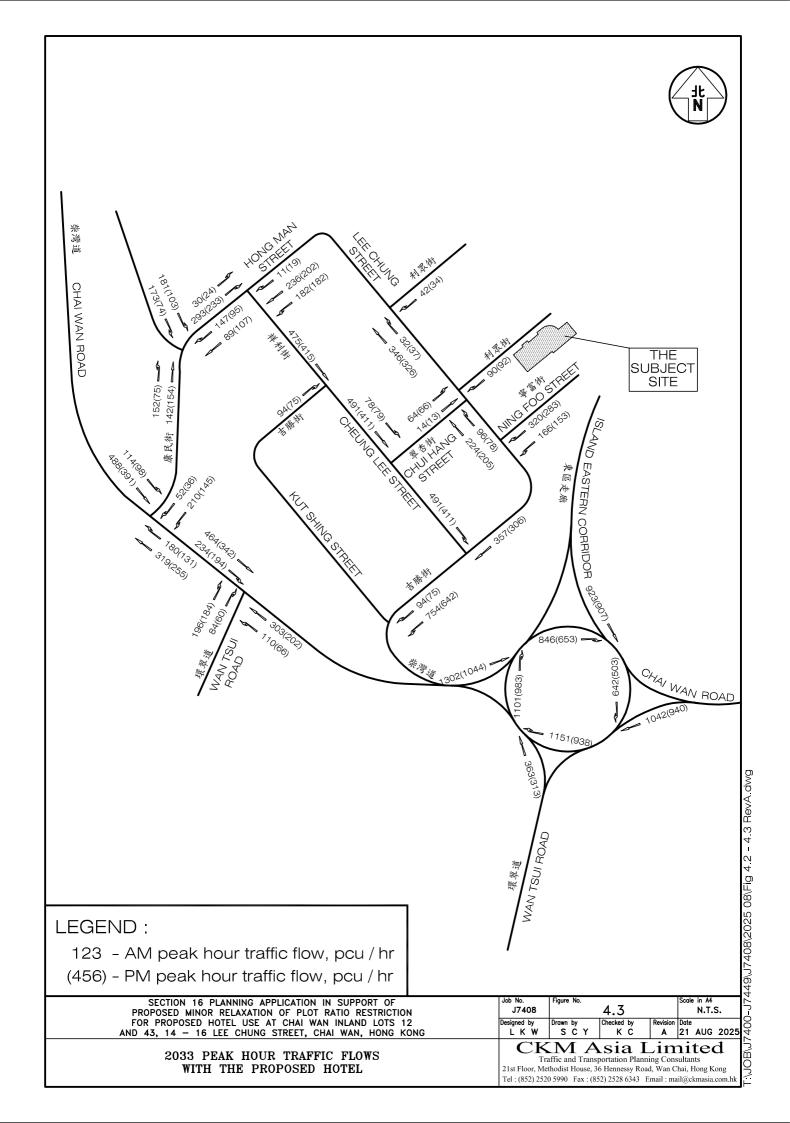


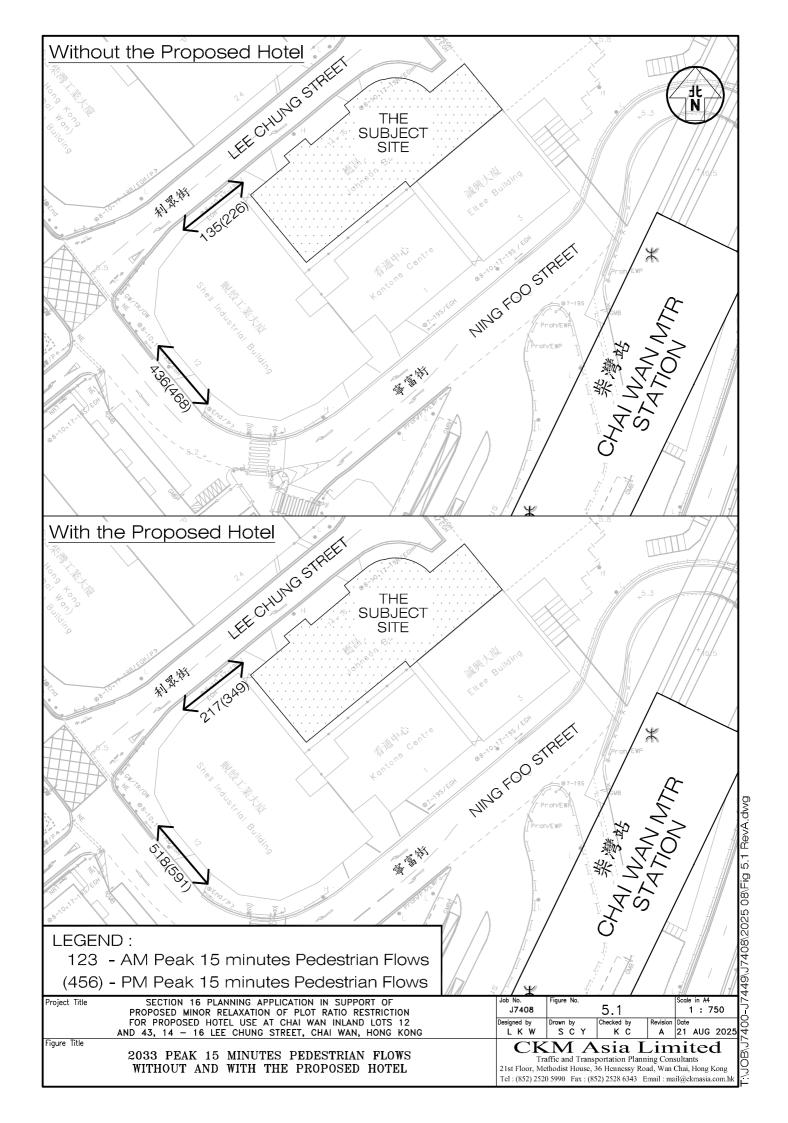


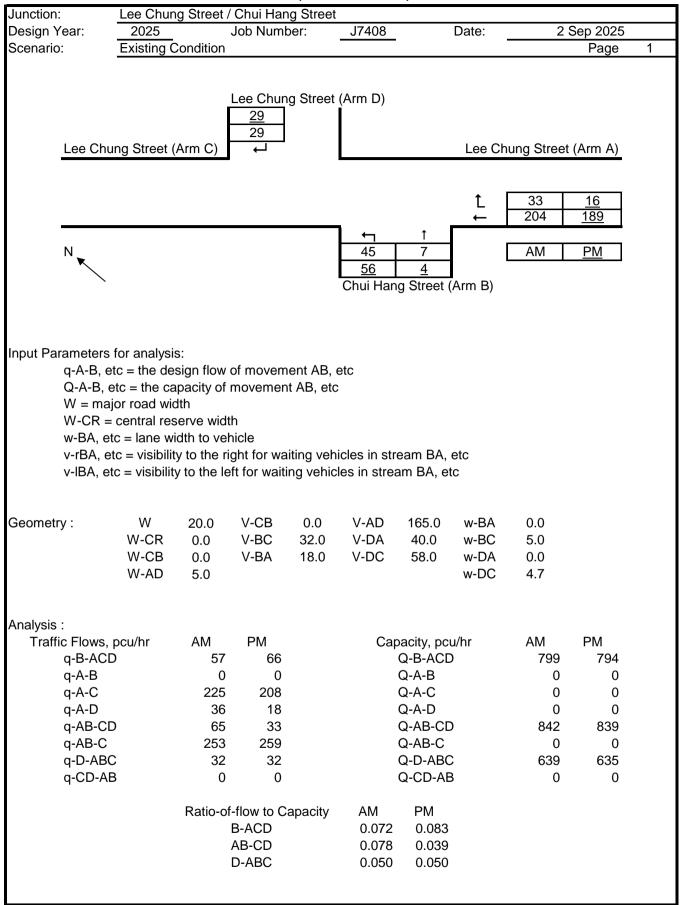


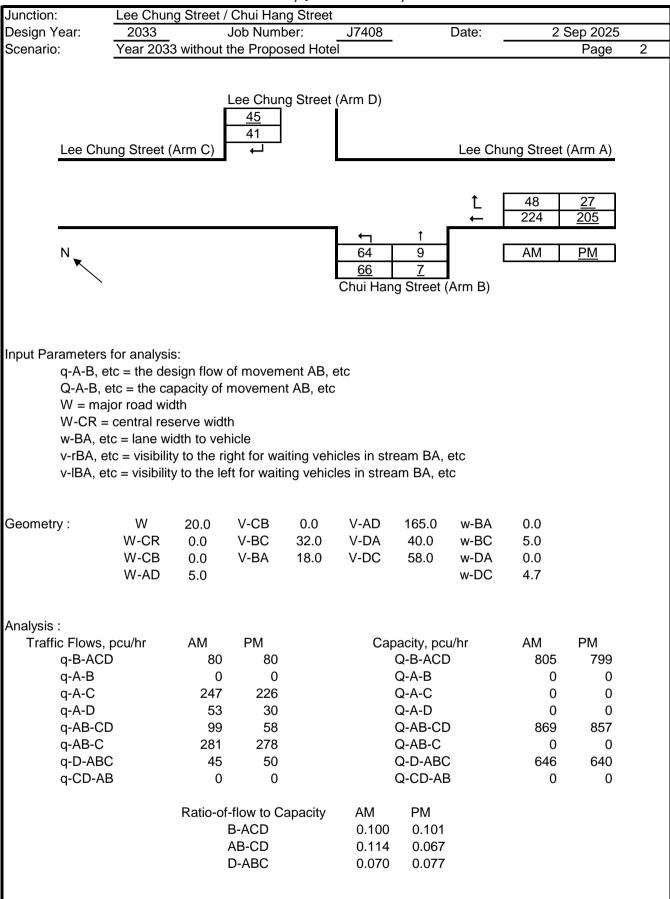












				, ,	tion Ana	1 y 515				
Junction:		-	Chui Hang	_						
Design Year:	2033		Job Numb		J7408		Date:	2.5	Sep 2025	
Scenario:	Year 203	3 with the	Proposed	Hotel					Page	3
Lee Ch	ung Street (Lee Chung <u>92</u> 90	g Street	(Arm D)		Lee Chu	ung Street ((Arm A)	
N N					←1 64 <u>66</u> Chui Han	† 14 13 g Street (Ĺ ← [Arm B)	96 224 AM	78 205 PM	
Q-A-B, W = ma W-CR = w-BA, e v-rBA, e	s for analysi etc = the de etc = the ca ajor road wid = central res etc = lane w etc = visibilit etc = visibilit	sign flow on the sign of the serve widthed to the sign of the sign	movement h nicle ght for wai	AB, etc	icles in stre			0.0		
	W-CR W-CB W-AD	0.0 0.0 5.0	V-BC V-BA	32.0 18.0	V-DA V-DC	40.0 58.0	w-BC w-DA w-DC	5.0 0.0 4.7		
Analysis : Traffic Flows, q-B-ACl q-A-B q-A-C q-A-D q-AB-Cl q-AB-C q-D-ABc	D D C		PM 87 0 226 86 154 244 101 0 -flow to Ca	apacity	AM 0.106	pacity, pcu Q-B-ACD Q-A-B Q-A-D Q-AB-CD Q-AB-C Q-D-ABC Q-CD-AB PM 0.108	· ·	AM 812 0 0 0 869 0 658	PM 807 0 0 0 857 0 652 0	
			AB-CD D-ABC		0.220 0.151	0.180 0.155				

Junction: Cheung Lee Street / Kut Shing Street (West Junction) Design Year: 2025 Job Number: J7408 Date: 2 Sep 2025 Scenario: **Existing Condition** Page 4 Cheung Lee Street (Arm C) Cheung Lee Street (Arm A) 317 373 AM 85 PM67 Kut Shing Street (Arm B) The predictive equations of capacity of movement are: Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]Q-CB = F[745 - 0.364Y(q-AC + q-AB)]The geometric parameters represented by D, E, F are: D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]where Y = 1 - 0.0345Wq-AB, etc = the design flow of movement AB, etc W = major road width W-CR = central reserve width w-BA, etc = lane width to vehicle v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc Geometry: Input Input Calculated Input W 7.30 V-rBA 25 7.40 D 1.1441 w-BA W-CR 0.00 V-IBA 25 w-BC 0.00 Ε 0.5860 V-rBC 0 w-CB 0.00 F 0.5860 Υ V-rCB 0 0.7482 Analysis: Traffic Flows, pcu/hr ΑM PMCapacity, pcu/hr ΑM PM Q-BA q-CA 373 317 644 655 q-CB Q-CB 437 0 0 437 q-AB 0 0 q-AC 0 0 q-BA 85 67 q-BC 0 0 0 0 Ratio-of-flow to Capacity ΑM PM B-A 0.102 0.132 C-B 0.000 0.000

Junction: Cheung Lee Street / Kut Shing Street (West Junction) Design Year: 2033 Job Number: J7408 Date: 2 Sep 2025 Scenario: Year 2033 without the Proposed Hotel Page 5 Cheung Lee Street (Arm C) Cheung Lee Street (Arm A) 363 422 AM 94 PM75 Kut Shing Street (Arm B) The predictive equations of capacity of movement are: Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]Q-CB = F[745 - 0.364Y(q-AC + q-AB)]The geometric parameters represented by D, E, F are: D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]where Y = 1 - 0.0345Wq-AB, etc = the design flow of movement AB, etc W = major road width W-CR = central reserve width w-BA, etc = lane width to vehicle v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc Geometry: Input Input Calculated Input W 7.30 V-rBA 25 7.40 1.1441 w-BA D W-CR 0.00 V-IBA 25 w-BC 0.00 Ε 0.5860 V-rBC 0 w-CB 0.00 F 0.5860 Υ V-rCB 0 0.7482 Analysis: Traffic Flows, pcu/hr ΑM PMCapacity, pcu/hr ΑM PM Q-BA q-CA 422 363 635 646 q-CB Q-CB 437 0 0 437 q-AB 0 0 q-AC 0 0 q-BA 94 75 q-BC 0 0 0 0 Ratio-of-flow to Capacity ΑM PM B-A 0.116 0.148 C-B 0.000 0.000

Junction: Cheung Lee Street / Kut Shing Street (West Junction) Design Year: Job Number: J7408 Date: 2 Sep 2025 2033 Scenario: Year 2033 with the Proposed Hotel Page 6 Cheung Lee Street (Arm C) Cheung Lee Street (Arm A) 415 475 AM PM 94 75 Kut Shing Street (Arm B) The predictive equations of capacity of movement are: Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]Q-CB = F[745 - 0.364Y(q-AC + q-AB)]The geometric parameters represented by D, E, F are: D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]where Y = 1 - 0.0345Wq-AB, etc = the design flow of movement AB, etc W = major road width W-CR = central reserve width w-BA, etc = lane width to vehicle v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc Geometry: Input Input Calculated Input W 7.30 V-rBA 25 7.40 1.1441 w-BA D W-CR 0.00 V-IBA 25 w-BC 0.00 Ε 0.5860 V-rBC 0 w-CB 0.00 F 0.5860 Υ V-rCB 0 0.7482 Analysis: Traffic Flows, pcu/hr ΑM PMCapacity, pcu/hr ΑM PM Q-BA q-CA 475 415 624 636 q-CB Q-CB 437 0 0 437 q-AB 0 0 q-AC 0 0 q-BA 94 75 q-BC 0 0 0 0 Ratio-of-flow to Capacity ΑM PM B-A 0.118 0.151 C-B 0.000 0.000

Junction:		ee Street / Ku	t Shing	Street (East Jur	nction)									Job Nu	mber:	
Scenario:	Existing Co																7
Design Year:	2025	Designe	ed By:		AYT		-	Checke	d By:		LKW		-	Date:	2	Sep 20:	25
				l	1	1	l	ī		AM Peak					PM Peak		
	Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y
Cheung Lee S	treet SB	RT	A1	2	3.90	12.5		100	1790	207	0.116		100	1790	165	0.092	
Cheung Lee S	treet SB	RT	A2	2	3.90	9.0		100	1719	199	0.116	0.116	100	1719	159	0.092	0.092
Kut China Ctun	-+ \WD		D4	4	4.00				2025	400	0.000	0.000		2025	4.40	0.070	0.070
Kut Shing Stre Kut Shing Stre		SA SA	B1 B2	1	4.20				2035	166 165	0.082	0.082		2035	142	0.070	0.070
Nut Stilling Stre	etwo	<u>ى</u> رى	DZ	1	4.20				2000	100	0.001			2000	l++ı	0.008	
					1											1	
pedestrian pha	ase		Ср	1		min c	rossing	time =	8	sec	GM +	9	sec F	GM =	17	sec	
			Dp	2			rossing		8	sec	GM +	8	sec F	GM =	16	sec	
		-															
AM Traffic Flo	w (pcu/hr)			PM Tra	affic Flov	v (pcu/hr	.)			S=1940+1	100(W-3.25	i) :	S=2080+10	0(W-3.25)	Note:		
										S _M =S÷(1+	-1.5f/r)	s	S _M =(S-230)	÷(1+1.5f/r)			
		1						1			AM	Peak	PM	Peak			
		331						283		Group	1+2		1+2				
	406 ↓	+				324	•	+		Sum y	0.197		0.162				
										L(s)	8		8				

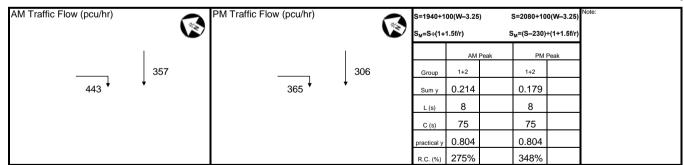
						R.C. (%) 307	76 3957	0	
1 Cp	B2 B1	2 A1 A2	↓····· Dp	3		4		5	
AM G =	I/G = 5	G =	I/G = 5	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =
PM G = G =	I/G = 5 I/G =	G = G =	I/G = 5 I/G =	G = G =	I/G = I/G =	G = G =	I/G =	G = G =	I/G = I/G =

 Junction:
 Cheung Lee Street / Kut Shing Street (East Junction)
 Job Number:
 J7408

 Scenario:
 Year 2033 without the Proposed Hotel
 P. 8

 Design Year:
 2033
 Designed By: AYT
 Checked By: LKW
 Date: 2 Sep 2025

									AM Peak					PM Peak		
Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y
Cheung Lee Street SB	RT	A1	2	3.90	12.5		100	1790	226	0.126		100	1790	186	0.104	
Cheung Lee Street SB	RT	A2	2	3.90	9.0		100	1719	217	0.126	0.126	100	1719	179	0.104	0.104
Kut Shing Street WB	SA	B1	1	4.20				2035	179	0.088	0.088		2035	153	0.075	0.075
Kut Shing Street WB	SA	B2	1	4.20				2035	178	0.087			2035	153	0.075	
_																
pedestrian phase		Ср	1			rossing		8		GM +	9		GM =	17 16	sec	
		Dp	2		min c	rossing	time =	8	sec	GM +	8	sec F	GM =	16	sec	
			l	1							1			1	1	l



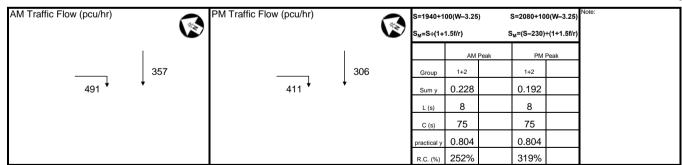
Cp	B2 B1	2 A1 A2	Dp	3		4		5	
AM G =	I/G = 5	G =	I/G = 5	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =
PM G =	I/G = 5		I/G = 5	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =

 Junction:
 Cheung Lee Street / Kut Shing Street (East Junction)
 Job Number:
 J7408

 Scenario:
 Year 2033 with the Proposed Hotel
 P. 9

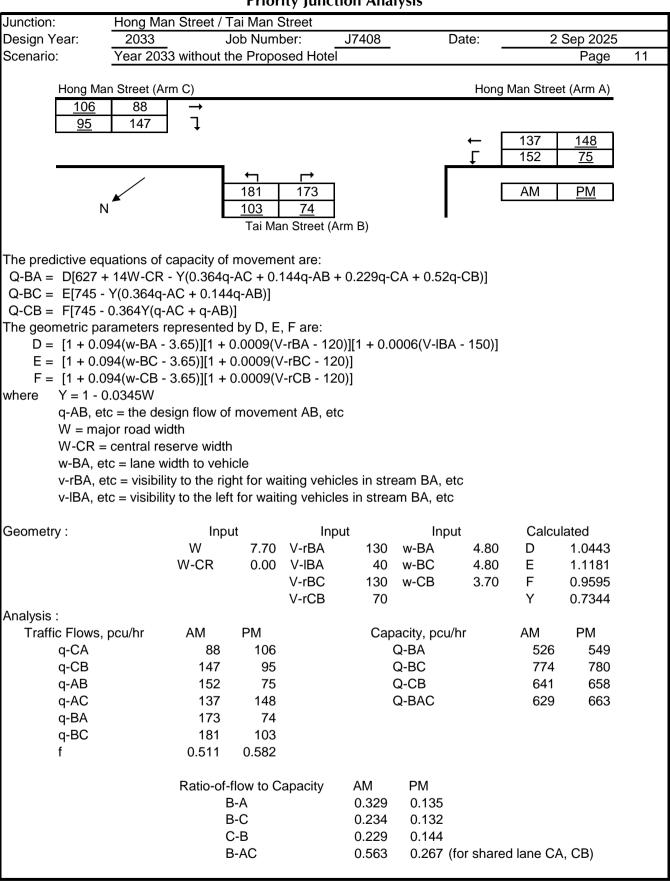
 Design Year:
 2033
 Designed By: AYT
 Checked By: LKW
 Date: 2 Sep 2025

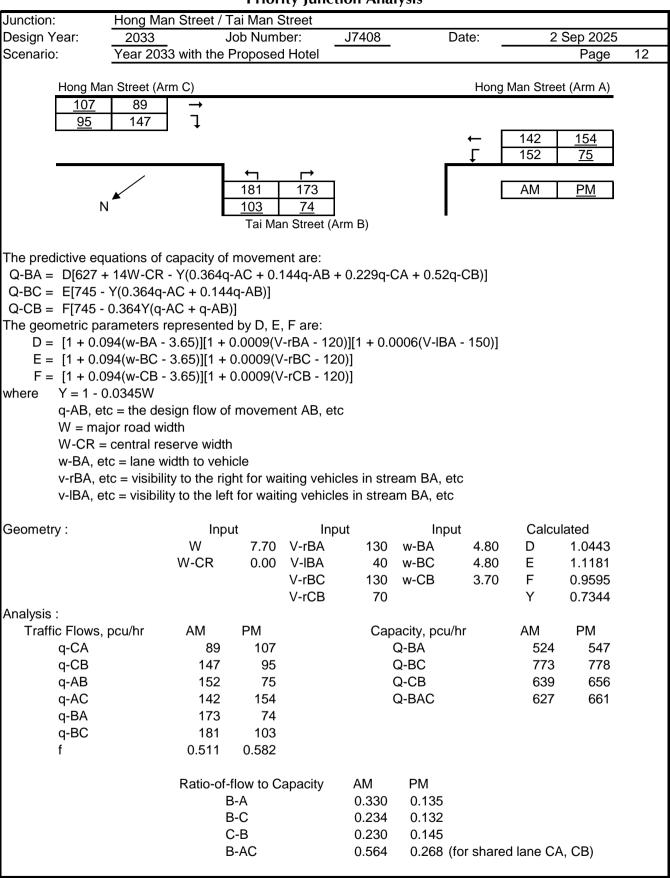
Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	Turning %	Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	y value	Critical y
Cheung Lee Street SB	RT	A1	2	3.90	12.5	Gradient	100	1790	250	0.140		100	1790	210	0.117	
Cheung Lee Street SB	RT	A2	2	3.90	9.0		100	1719	241	0.140	0.140	100	1719	201	0.117	0.117
Vist China Ctroot WD	SA	B1	1	4.20				2035	179	0.000	0.088		2035	153	0.075	0.075
Kut Shing Street WB Kut Shing Street WB	SA	В2	1	4.20				2035	178	0.088	0.000		2035	153	0.075	0.075
pedestrian phase		Cp Dp	1 2			rossing rossing		8		GM + GM +	9		GM =	17 16	sec sec	
		۲۶				· coomig			- 550	Ç.VI (3331	<u> </u>			
				1												



Cp	B2 B1	2 A1 A2	Dp	3		4		5	
AM G =	I/G = 5	G =	I/G = 5	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =
PM G =	I/G = 5		I/G = 5	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =

		Prior	ity Juncti	<u>on Ana</u>	lysis			
-	Hong Man Street							
Design Year:	2025	Job Numb	oer:	J7408	Da	te:	2	Sep 2025
Scenario:	Existing Condition							Page 1
Hong Man	Stroot (Arm C)					Llong	Man Straa	t (Arm A)
	Street (Arm C)					попу	Man Stree	t (AIIII A)
<u>98</u>	80 → 124 7							
<u>86</u>	124					_ г	121	133
						_ F	137	67
		1 🕳	-			+	107	<u>01</u>
		170	158			Г	AM	PM
N [']	K	97	67			L	7 UVI	<u>- 1111</u>
.,			n Street (Ar	m B)				
				– ,				
The predictive equa	ations of capacity	of moveme	ent are:					
Q-BA = D[627 +				0.229q-0	CA + 0.52g-0	CB)]		
Q-BC = E[745 - Y]	•	•	•	•		/-		
Q-CB = F[745 - 0]								
The geometric para	ameters represent	ed by D, E	, F are:					
D = [1 + 0.09]	4(w-BA - 3.65)][1	+ 0.0009(V	-rBA - 120)][1 + 0.0	006(V-IBA -	150)]		
E = [1 + 0.09]	4(w-BC - 3.65)][1	+ 0.0009(V	'-rBC - 120))]				
F = [1 + 0.09]	4(w-CB - 3.65)][1	+ 0.0009(V	'-rCB - 120))]				
where $Y = 1 - 0.0$	0345W							
q-AB, etc	= the design flow	of moveme	ent AB, etc					
•	or road width							
	central reserve wic							
	= lane width to ve							
	c = visibility to the	-	-					
v-IBA, etc	c = visibility to the I	eft for waiti	ng vehicles	s in strea	m BA, etc			
Geometry:	In	nut	Inpu	ı +	Input		Calcu	latad
Jeometry .	W	put 7.70	V-rBA	130	w-BA	4.80	D	1.0443
	W-CR	0.00	V-IBA V-IBA	40	w-BA w-BC	4.80	E	1.1181
	W OIK	0.00	V-rBC					1.1101
				130	w-CB	3 70	F	n 9595
				130 70	w-CB	3.70	F Y	0.9595 0.7344
Analysis ·			V-rCB	130 70	w-CB	3.70	F Y	0.9595 0.7344
-	ocu/hr AM	PM		70			Υ	0.7344
Traffic Flows, p		PM 98		70 Cap	acity, pcu/hr		Y AM	0.7344 PM
Traffic Flows, p q-CA	80	98		70 Cap	acity, pcu/hr Q-BA		Y AM 542	0.7344 PM 559
Traffic Flows, p q-CA q-CB	80 124	98 86		70 Cap	acity, pcu/hr Q-BA Q-BC		Y AM 542 781	0.7344 PM 559 785
Traffic Flows, p q-CA q-CB q-AB	80 124 137	98 86 67		70 Cap	acity, pcu/hr Q-BA Q-BC Q-CB		Y AM 542 781 649	0.7344 PM 559 785 664
Traffic Flows, p q-CA q-CB q-AB q-AC	80 124 137 121	98 86 67 133		70 Cap	acity, pcu/hr Q-BA Q-BC		Y AM 542 781	0.7344 PM 559 785
Traffic Flows, p q-CA q-CB q-AB q-AC q-BA	80 124 137 121 158	98 86 67 133 67		70 Cap	acity, pcu/hr Q-BA Q-BC Q-CB		Y AM 542 781 649	0.7344 PM 559 785 664
Traffic Flows, p q-CA q-CB q-AB q-AC q-BA q-BC	80 124 137 121 158 170	98 86 67 133 67 97		70 Cap	acity, pcu/hr Q-BA Q-BC Q-CB		Y AM 542 781 649	0.7344 PM 559 785 664
Traffic Flows, p q-CA q-CB q-AB q-AC q-BA	80 124 137 121 158	98 86 67 133 67 97		70 Cap	acity, pcu/hr Q-BA Q-BC Q-CB		Y AM 542 781 649	0.7344 PM 559 785 664
Traffic Flows, p q-CA q-CB q-AB q-AC q-BA q-BC	80 124 137 121 158 170 0.518	98 86 67 133 67 97 0.591	V-rCB	70 Cap	acity, pcu/hr Q-BA Q-BC Q-CB Q-BAC		Y AM 542 781 649	0.7344 PM 559 785 664
Traffic Flows, p q-CA q-CB q-AB q-AC q-BA q-BC	80 124 137 121 158 170 0.518	98 86 67 133 67 97 0.591	V-rCB	70 Cap	acity, pcu/hr Q-BA Q-BC Q-CB Q-BAC		Y AM 542 781 649	0.7344 PM 559 785 664
Traffic Flows, p q-CA q-CB q-AB q-AC q-BA q-BC	80 124 137 121 158 170 0.518	98 86 67 133 67 97 0.591 of-flow to C B-A	V-rCB	70 Cap	acity, pcu/hr Q-BA Q-BC Q-CB Q-BAC PM 0.120		Y AM 542 781 649	0.7344 PM 559 785 664
Traffic Flows, p q-CA q-CB q-AB q-AC q-BA q-BC	80 124 137 121 158 170 0.518	98 86 67 133 6 67 97 6 0.591 of-flow to C B-A B-C	V-rCB	70 Cap	acity, pcu/hr Q-BA Q-BC Q-CB Q-BAC PM 0.120 0.124		Y AM 542 781 649	0.7344 PM 559 785 664
q-CA q-CB q-AB q-AC q-BA q-BC	80 124 137 121 158 170 0.518	98 86 67 133 67 97 0.591 of-flow to C B-A	V-rCB	70 Cap	acity, pcu/hr Q-BA Q-BC Q-CB Q-BAC PM 0.120		Y AM 542 781 649 644	0.7344 PM 559 785 664 674



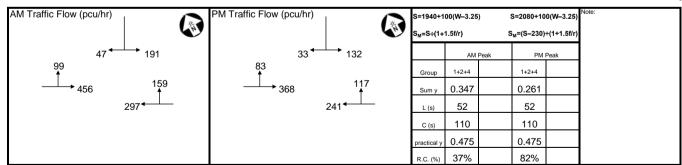


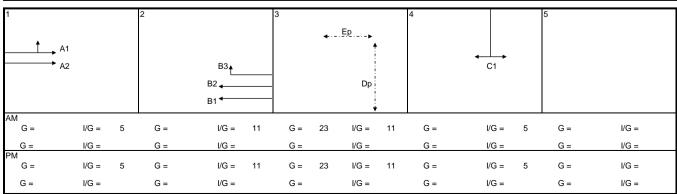
 Junction:
 Chai Wan Road / Hong Man Street
 Job Number:
 J7408

 Scenario:
 Existing Condition
 P. 13

 Design Year:
 2025
 Designed By:
 AYT
 Checked By:
 LKW
 Date:
 2 Sep 2025

									AM Peak					PM Peak		
Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y
Chai Wan Road EB	LT+SA	A1	1	3.50	14.0		37	1988	270	0.136	0.136	38	1986	219	0.110	0.110
Chai Wan Road EB	SA	A2	1	3.50				2105	285	0.135			2105	232	0.110	
Chai Wan Road WB	SA	B1	2	3.50				1965	143	0.073			1965	116	0.059	
Chai Wan Road WB	SA	B2	2	3.50				2105	154	0.073			2105	125	0.059	
Chai Wan Road WB	RT	В3	2	3.50	15.0		100	1914	159	0.083	0.083	100	1914	117	0.061	0.061
Hong Man Road SB	LT+RT	C1	4	4.50	13.0		100	1851	238	0.129	0.129	100	1851	165	0.089	0.089
pedestrian phase		Dp Ep	3			rossing rossing		13 8		GM + GM +	10 7	sec F	GM = GM =	23 15	sec sec	
		Εр	3		HIIII	iossirig	uirie –	- 0	360	GIVI T	,	3601	GIVI –	13	360	
									l		i			l	l	



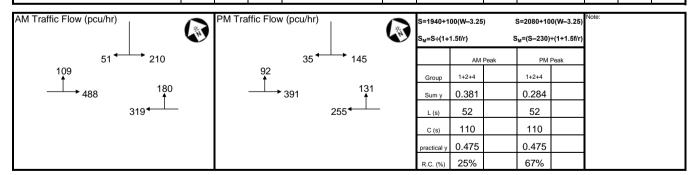


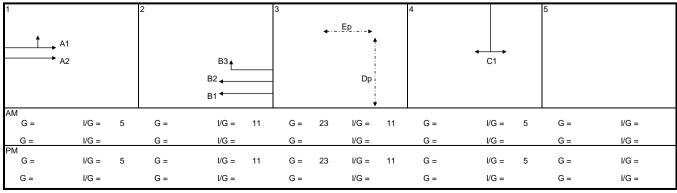
 Junction:
 Chai Wan Road / Hong Man Street
 Job Number:
 J7408

 Scenario:
 Year 2033 without the Proposed Hotel
 P. 14

 Design Year:
 2033
 Designed By:
 AYT
 Checked By:
 LKW
 Date:
 2 Sep 2025

							I		AM Peak					PM Peak		
Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y
Chai Wan Road EB	LT+SA	A1	1	3.50	14.0	Gradieni	38	1986	290	0.146	0.146	39	1984	234	0.118	0.118
					14.0		36				0.146	39				0.116
Chai Wan Road EB	SA	A2	1	3.50				2105	307	0.146			2105	249	0.118	
Chai Wan Road WB	SA	B1	2	3.50				1965	154	0.078			1965	123	0.063	
Chai Wan Road WB	SA	B2	2	3.50				2105	165	0.078			2105	132	0.063	
Chai Wan Road WB	RT	В3	2	3.50	15.0		100	1914	180	0.094	0.094	100	1914	131	0.068	0.068
Hong Man Road SB	LT+RT	C1	4	4.50	13.0		100	1851	261	0.141	0.141	100	1851	180	0.097	0.097
riong mair rioda ob					1010			.00.		01111	01111	.00			0.007	0.00.
pedestrian phase		Dp	3			rossing		13		GM +	10		GM =	23	sec	
		Ep	3		min c	rossing	tirne =	8	sec	GM +	7	sec F	GM =	15	sec	
											l	l				



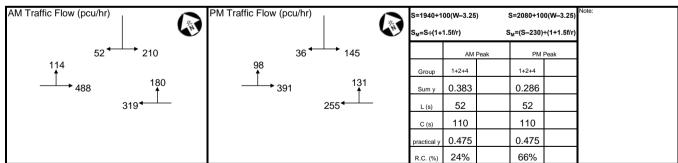


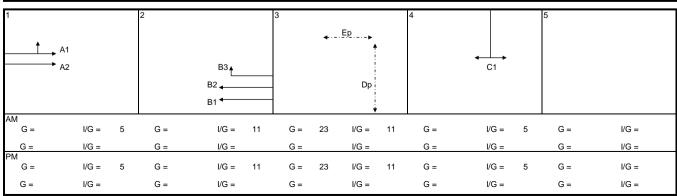
 Junction:
 Chai Wan Road / Hong Man Street
 Job Number:
 J7408

 Scenario:
 Year 2033 with the Proposed Hotel
 P. 15

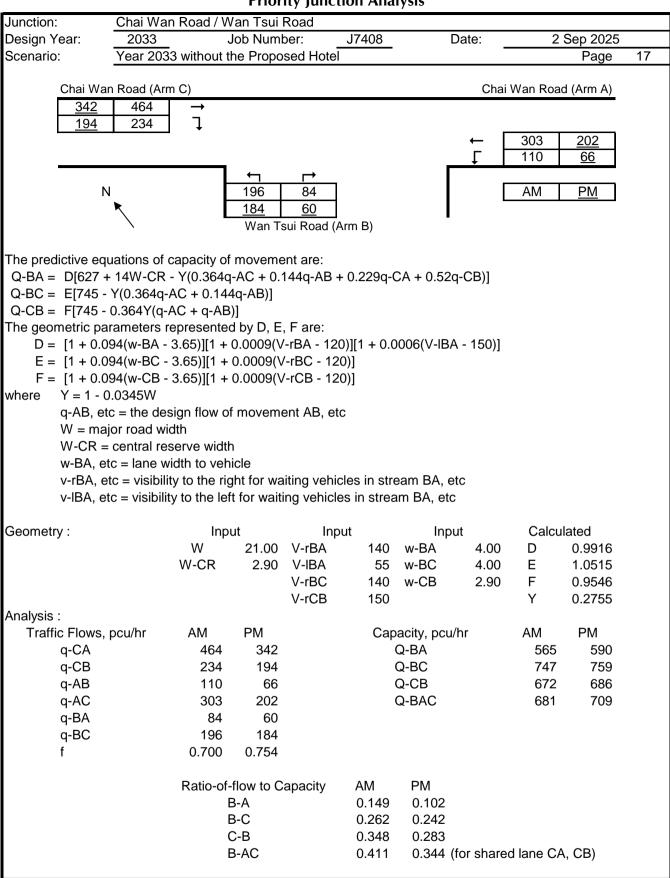
Design Year:	2033	Decianed Pur	AVT	Checked By:	LKW	Doto:	2 Sep 2025
Design real.	2033	Designed By:	ATI	Checked by.	LNVV	Date:	2 Sep 2025

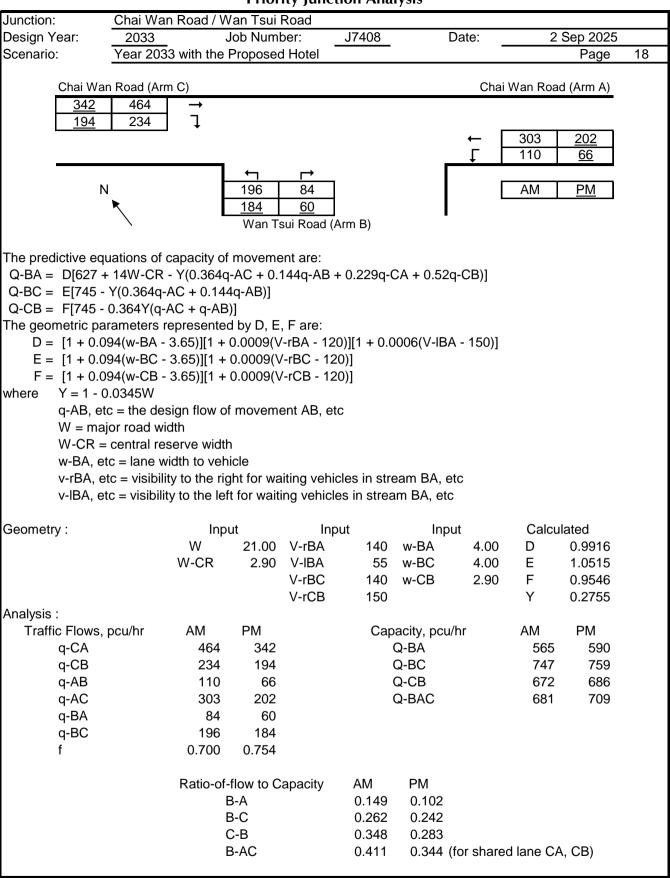
							L.,		AM Peak					PM Peak		
Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y
Chai Wan Road EB	LT+SA	A1	1	3.50	14.0		39	1984	292	0.147		41	1980	237	0.120	0.120
Chai Wan Road EB	SA	A2	1	3.50				2105	310	0.147	0.147		2105	252	0.120	
Chai Wan Road WB	SA	B1	2	3.50				1965	154	0.078			1965	123	0.063	
Chai Wan Road WB	SA	B2	2	3.50				2105	165	0.078			2105	132	0.063	
					45.0		400				0.004	400				0.000
Chai Wan Road WB	RT	В3	2	3.50	15.0		100	1914	180	0.094	0.094	100	1914	131	0.068	0.068
Hong Man Road SB	LT+RT	C1	4	4.50	13.0		100	1851	262	0.142	0.142	100	1851	181	0.098	0.098
pedestrian phase		Dp Ep	3			rossing		13 8		GM + GM +	10 7	sec F	GM =	23 15	sec	
		Εр	<u> </u>		min Ci	rossing	ume =	0	sec	GIVI +	1	Sec F	GIVI =	15	sec	
						•							•			





Junction: Cha			ity Juncti	<u> </u>	1 y 313				
ouriouori. One	ai Wan Road / V	Van Tsui I	Road						
Design Year: 20	025	Job Numb	oer:	J7408	Da	ite:	2 :	Sep 2025	
Scenario: Exis	sting Condition							Page	16
Chai Wan Roa	ad (Arm C)					Chai	Wan Road	d (Arm A)	
	31 →							,	
	<u>1</u> 16 ↓					_			
						-	275	<u>187</u>	
		l ,			_	Ţ	101	<u>60</u>	
N		181	77			Г	AM	PM	
`` \		171	54			L	7 (17)	<u>v.</u>	
	•		sui Road (Ar	m B)					
The predictive equation									
Q-BA = D[627 + 14W]	•	•	144q-AB +	0.229q-0	CA + 0.52q-0	CB)]			
Q-BC = E[745 - Y(0.3)] Q-CB = F[745 - 0.36]	•	. /-							
The geometric parame		/ -	F are:						
D = [1 + 0.094(w)]	•	•)][1 + 0.0	006(V-IBA -	150)]			
E = [1 + 0.094]	,	•			,	/1			
F = [1 + 0.094(w)]	-CB - 3.65)][1 +	- 0.0009(V	-rCB - 120)]					
where $Y = 1 - 0.034$									
•	ne design flow o	of moveme	ent AB, etc						
W = major ro									
VV-L.R = 1.6111	ral racanta widt	·h							
	tral reserve widt								
w-BA, etc = $1a$	ane width to vel	hicle	itina vehicl	es in stre	eam BA, etc				
w-BA, etc = $\frac{1}{2}$ v-rBA, etc = $\frac{1}{2}$		hicle ght for wa	•						
w-BA, etc = $\frac{1}{2}$ v-rBA, etc = $\frac{1}{2}$ v-IBA, etc = $\frac{1}{2}$	ane width to vel visibility to the ri visibility to the le	hicle ght for wa eft for waiti	ng vehicles	s in strea	ım BA, etc		Coloui	otod	
w-BA, etc = $\frac{1}{2}$ v-rBA, etc = $\frac{1}{2}$ v-IBA, etc = $\frac{1}{2}$	ane width to vel visibility to the ri visibility to the le Inp	hicle ght for wa lft for waiti	ng vehicles Inpu	s in strea it	ım BA, etc Input		Calcul D		
w-BA, etc = $\frac{1}{2}$ v-rBA, etc = $\frac{1}{2}$	ane width to vel visibility to the ri visibility to the le Inp W	hicle ght for wa eft for waiti out 21.00	ng vehicles Inpu V-rBA	s in strea ut 140	im BA, etc Input w-BA	4.00	D	0.9916	
w-BA, etc = $\frac{1}{2}$ v-rBA, etc = $\frac{1}{2}$ v-IBA, etc = $\frac{1}{2}$	ane width to vel visibility to the ri visibility to the le Inp	hicle ght for wa lft for waiti	ng vehicles Inpu	s in strea at 140 55	Im BA, etc Input w-BA w-BC			0.9916 1.0515	
w-BA, etc = $\frac{1}{2}$ v-rBA, etc = $\frac{1}{2}$ v-IBA, etc = $\frac{1}{2}$	ane width to vel visibility to the ri visibility to the le Inp W	hicle ght for wa eft for waiti out 21.00	ng vehicles Inpu V-rBA V-IBA	s in strea at 140 55	im BA, etc Input w-BA	4.00 4.00	D E	0.9916	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry :	ane width to vel visibility to the ri visibility to the le Inp W W-CR	hicle ght for wa eft for waiti out 21.00 2.90	ng vehicles Inpu V-rBA V-IBA V-rBC	s in strea at 140 55 140 150	Im BA, etc Input w-BA w-BC w-CB	4.00 4.00 2.90	D E F Y	0.9916 1.0515 0.9546 0.2755	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/b	ane width to vel visibility to the ri visibility to the le Inp W W-CR	hicle ght for wa eft for waiti out 21.00 2.90	ng vehicles Inpu V-rBA V-IBA V-rBC	s in strea at 140 55 140 150 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h	4.00 4.00 2.90	D E F Y	0.9916 1.0515 0.9546 0.2755 PM	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/h q-CA	ane width to vel visibility to the ri visibility to the le Inp W W-CR	hicle ght for wa eft for waiti out 21.00 2.90 PM 321	ng vehicles Inpu V-rBA V-IBA V-rBC	s in strea 140 55 140 150 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h	4.00 4.00 2.90	D E F Y AM 573	0.9916 1.0515 0.9546 0.2755 PM 596	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/h q-CA q-CB	ane width to vel visibility to the ri visibility to the le Inp W W-CR hr AM 431 216	hicle ght for wa eft for waiti out 21.00 2.90 PM 321 179	ng vehicles Inpu V-rBA V-IBA V-rBC	s in strea 140 55 140 150 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC	4.00 4.00 2.90	D E F Y AM 573 750	0.9916 1.0515 0.9546 0.2755 PM 596 761	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/h q-CA q-CB q-AB	ane width to vel visibility to the ri visibility to the le Inp W W-CR	enicle Ight for was Ight for waiti Out 21.00 2.90 PM 321 179 60	ng vehicles Inpu V-rBA V-IBA V-rBC	s in strea 140 55 140 150 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	4.00 4.00 2.90	D E F Y AM 573 750 675	0.9916 1.0515 0.9546 0.2755 PM 596 761 688	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/h q-CA q-CB q-AB q-AC	ane width to vel visibility to the ri visibility to the le Inp W W-CR hr AM 431 216 101 275	enicle Ight for was Ight for waiti Out 21.00 2.90 PM 321 179 60 187	ng vehicles Inpu V-rBA V-IBA V-rBC	s in strea 140 55 140 150 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC	4.00 4.00 2.90	D E F Y AM 573 750	0.9916 1.0515 0.9546 0.2755 PM 596 761	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/h q-CA q-CB q-AB q-AC q-BA	ane width to velvisibility to the rivisibility to the lead of the	phicle ght for wa eft for waiti out 21.00 2.90 PM 321 179 60 187 54	ng vehicles Inpu V-rBA V-IBA V-rBC	s in strea 140 55 140 150 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	4.00 4.00 2.90	D E F Y AM 573 750 675	0.9916 1.0515 0.9546 0.2755 PM 596 761 688	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Traffic Flows, pcu/h q-CA q-CB q-AB q-AC q-BA q-BC	ane width to velvisibility to the rivisibility to the lead of the	PM 21.00 2.90 PM 321 179 60 187 54 171	ng vehicles Inpu V-rBA V-IBA V-rBC	s in strea 140 55 140 150 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	4.00 4.00 2.90	D E F Y AM 573 750 675	0.9916 1.0515 0.9546 0.2755 PM 596 761 688	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/h q-CA q-CB q-AB q-AC q-BA	ane width to velvisibility to the rivisibility to the lead of the	phicle ght for wa eft for waiti out 21.00 2.90 PM 321 179 60 187 54	ng vehicles Inpu V-rBA V-IBA V-rBC	s in strea 140 55 140 150 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	4.00 4.00 2.90	D E F Y AM 573 750 675	0.9916 1.0515 0.9546 0.2755 PM 596 761 688	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/h q-CA q-CB q-AB q-AC q-BA q-BC	ane width to velvisibility to the rivisibility to the lead in the	PM 321 179 60 187 54 171 0.760	ng vehicles Inpu V-rBA V-IBA V-rBC V-rCB	s in strea 140 55 140 150 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC	4.00 4.00 2.90	D E F Y AM 573 750 675	0.9916 1.0515 0.9546 0.2755 PM 596 761 688	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/h q-CA q-CB q-AB q-AC q-BA q-BC	ane width to velvisibility to the rivisibility to the lead in the	PM 321 179 60 187 54 171 0.760	ng vehicles Inpu V-rBA V-IBA V-rBC V-rCB	s in strea 140 55 140 150 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC	4.00 4.00 2.90	D E F Y AM 573 750 675	0.9916 1.0515 0.9546 0.2755 PM 596 761 688	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Traffic Flows, pcu/h q-CA q-CB q-AB q-AC q-BA q-BC	ane width to velvisibility to the rivisibility to the lead in the	phicle ght for was ft for waiting out 21.00 2.90 PM 321 179 60 187 54 171 0.760 f-flow to Care	ng vehicles Inpu V-rBA V-IBA V-rBC V-rCB	s in strea 140 55 140 150 Cap AM 0.134	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC PM 0.091	4.00 4.00 2.90	D E F Y AM 573 750 675	0.9916 1.0515 0.9546 0.2755 PM 596 761 688	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/h q-CA q-CB q-AB q-AC q-BA q-BC	ane width to velvisibility to the rivisibility to the lead of the	phicle ght for wa eft for waiti but 21.00 2.90 PM 321 179 60 187 54 171 0.760 f-flow to Carrell B-A B-C	ng vehicles Inpu V-rBA V-IBA V-rBC V-rCB	AM 0.134 0.241	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC PM 0.091 0.225	4.00 4.00 2.90	D E F Y AM 573 750 675	0.9916 1.0515 0.9546 0.2755 PM 596 761 688	
w-BA, etc = la v-rBA, etc = v v-lBA, etc = v Geometry : Analysis : Traffic Flows, pcu/h q-CA q-CB q-AB q-AC q-BA q-BC	ane width to velvisibility to the rivisibility to the lead of the	phicle ght for was ft for waiting out 21.00 2.90 PM 321 179 60 187 54 171 0.760 f-flow to Care	ng vehicles Inpu V-rBA V-IBA V-rBC V-rCB	s in strea 140 55 140 150 Cap AM 0.134	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC PM 0.091 0.225 0.260	4.00 4.00 2.90	D E F Y AM 573 750 675	0.9916 1.0515 0.9546 0.2755 PM 596 761 688 714	





Roundabout Analysis

Location (Chai Wan Road Roundabout					J7
Scenario I	Existing Condition				Page	19
Design Yea	ır 2025	Job Number	J7408	Date	2 Sep 2	025

AM Peak

Arm	To A	То В	To C	To D	Total	q _c
From A					742	775
From B					875	531
From C					334	916
From D					1160	874
Total					3111	

PM Peak

Arm	To A	То В	To C	To D		Total	q_c
From A						712	597
From B						801	405
From C						287	742
From D						915	782
Total						2715	

Legend

Arm	Road (in clockwise order)
Α	Island Eastern Corridor
В	Chai Wan Road WB
С	Wan Tsui Road
D	Chai Wan Road EB

Geometric Parameters

Geometric	, rai aillett	113					
Arm	e (m)	v (m)	r (m)	L (m)	D (m)	Ø (°)	S
From A	8.0	7.3	100.0	10.0	80	10	0.1
From B	9.4	6.4	57.0	32.0	80	28	0.2
From C	8.0	4.5	25.0	29.0	80	32	0.2
From D	10.0	7.3	50.0	67.0	80	27	0.1

Predictive Equation $Q_E = K(F - f_cq_c)$

Q_E	Entry Capacity
$q_{\rm c}$	Circulating Flow across the Entry
K	= 1-0.00347(Ø-30)-0.978[(1/r)-0.05]
F	$= 303x_2$
f _c	$= 0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
M	$= \exp[(D-60)/10]$
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

е	Entry Width	4.0 - 15.0 m
V	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
Ø	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							C	ζE	Entry	Flow	RI	FC
Arm	X ₂	M	t_{D}	K	F	f _c	AM	PM	AM	PM	AM	PM
From A	7.872	7.389	1.060	1.109	2385.184	0.573	2152	2265	742	712	0.345	0.314
From B	8.708	7.389	1.060	1.039	2638.431	0.610	2404	2484	875	801	0.364	0.322
From C	7.025	7.389	1.060	1.003	2128.537	0.535	1643	1736	334	287	0.203	0.165
From D	9.692	7.389	1.060	1.040	2936.552	0.654	2459	2522	1160	915	0.472	0.363

Roundabout Analysis

Location	Chai Wan Road Roundabout					J7	
Scenario	Year 2033 without the Proposed Hotel				Page	20	
Design Ye	ar 2033	Job Number	J7408	Date	2 Sep 2	025	

AM Peak

Arm	To A	То В	To C	To D	Total	q _c
From A					877	842
From B					1040	595
From C					363	1103
From D					1254	1053
Total					3534	

PM Peak

Arm	To A	То В	To C	To D		Total	q_c
From A						859	650
From B						937	454
From C						313	887
From D						998	932
Total						3107	

Legend

Arm	Road (in clockwise order)					
Α	Island Eastern Corridor					
В	Chai Wan Road WB					
С	Wan Tsui Road					
D	Chai Wan Road EB					

Geometric Parameters

Geometric Farameters							
Arm	e (m)	v (m)	r (m)	L (m)	D (m)	Ø (°)	S
From A	8.0	7.3	100.0	10.0	80	10	0.1
From B	9.4	6.4	57.0	32.0	80	28	0.2
From C	8.0	4.5	25.0	29.0	80	32	0.2
From D	10.0	7.3	50.0	67.0	80	27	0.1

Predictive Equation $Q_E = K(F - f_cq_c)$

Q_{E}	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(Ø-30)-0.978[(1/r)-0.05]
F	$= 303x_2$
f _c	$= 0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
М	$= \exp[(D-60)/10]$
x ₂	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

	-	
е	Entry Width	4.0 - 15.0 m
V	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
Ø	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							C) ^E	Entry	Flow	RI	-C
Arm	X ₂	М	t_{D}	K	F	f _c	AM	PM	AM	PM	AM	PM
From A	7.872	7.389	1.060	1.109	2385.184	0.573	2109	2231	877	859	0.416	0.385
From B	8.708	7.389	1.060	1.039	2638.431	0.610	2363	2453	1040	937	0.440	0.382
From C	7.025	7.389	1.060	1.003	2128.537	0.535	1543	1659	363	313	0.235	0.189
From D	9.692	7.389	1.060	1.040	2936.552	0.654	2337	2420	1254	998	0.536	0.412

Roundabout Analysis

Location Cha	ai Wan Road Roundabout					J7
Scenario Yea	ar 2033 with the Proposed Hotel	·	·	·	Page	21
Design Year	2033	Job Number	J7408	Date	2 Sep 2	025

AM Peak

Arm	To A	To B	To C	To D	Total	q _c
From A					923	846
From B					1042	642
From C					363	1151
From D					1302	1101
Total					3630	

PM Peak

Arm	To A	To B	To C	To D	Total	q_c
From A					907	653
From B					940	503
From C					313	938
From D					1044	983
Total					3204	

Legend

Arm	Road (in clockwise order)					
Α	Island Eastern Corridor					
В	Chai Wan Road WB					
С	Wan Tsui Road					
D	Chai Wan Road EB					

Geometric Parameters

Geometric Farameters							
Arm	e (m)	v (m)	r (m)	L (m)	D (m)	Ø (°)	S
From A	8.0	7.3	100.0	10.0	80	10	0.1
From B	9.4	6.4	57.0	32.0	80	28	0.2
From C	8.0	4.5	25.0	29.0	80	32	0.2
From D	10.0	7.3	50.0	67.0	80	27	0.1

Predictive Equation $Q_E = K(F - f_cq_c)$

Q_{E}	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(Ø-30)-0.978[(1/r)-0.05]
F	$= 303x_2$
f _c	$= 0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
М	$= \exp[(D-60)/10]$
x ₂	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

е	Entry Width	4.0 - 15.0 m
V	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
Ø	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

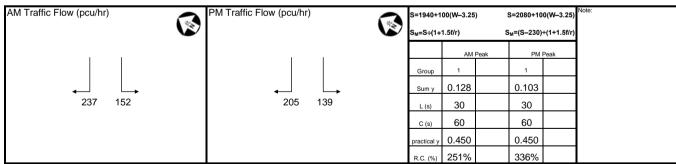
							Q_{E}		Entry	Flow	RI	-C
Arm	X ₂	M	t_D	K	F	f _c	AM	PM	AM	PM	AM	PM
From A	7.872	7.389	1.060	1.109	2385.184	0.573	2107	2229	923	907	0.438	0.407
From B	8.708	7.389	1.060	1.039	2638.431	0.610	2334	2422	1042	940	0.447	0.388
From C	7.025	7.389	1.060	1.003	2128.537	0.535	1517	1631	363	313	0.239	0.192
From D	9.692	7.389	1.060	1.040	2936.552	0.654	2305	2385	1302	1044	0.565	0.438

 Junction:
 Ning Foo Street / Lee Chung Street
 Job Number:
 J7408

 Scenario:
 Existing Condition
 P. 22

 Design Year:
 2025
 Designed By: AYT
 Checked By: LKW
 Date: 2 Sep 2025

Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill	Turning %	Sat. Flow	AM Peak Flow	y value	Critical y	Turning %	Sat. Flow	PM Peak Flow	y value	Critical y
						Gradient		(pcu/hr)	(pcu/hr)				(pcu/hr)	(pcu/hr)		
Ning Foo Street SB	LT	A1	1	4.20	14.0		100	1838	152	0.083		100	1838	139	0.076	
Ning Foo Street SB	RT	A2	1	3.70	20.0		100	1847	237	0.128	0.128		1985	205	0.103	0.103
pedestrian phase		Вр	2		min c	rossing	time =	11	Sec	GM +	7	sec F	GM =	18	sec	
podosinan pridos			_							<u> </u>	·		U.I.			



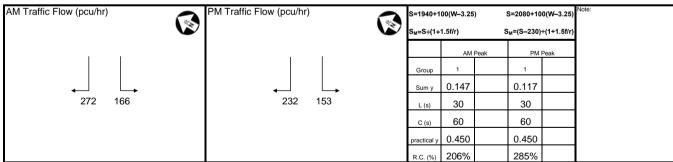
A2	A1	2 *. Bp **	Вр	3		4		5	
AM G =	I/G = 5	G = 15	I/G = 11	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =
PM G =	I/G = 5	G = 15	I/G = 11	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =

 Junction:
 Ning Foo Street / Lee Chung Street
 J7408

 Scenario:
 Year 2033 without the Proposed Hotel
 P. 23

 Design Year:
 2033 Designed By:
 AYT
 Checked By:
 LKW
 Date:
 2 Sep 2025

Approach Phase Stage Width (m) Radius (m) Turning % Sat. Flow (pcu/hr) y value Sat. Flow (pcu/hr) y value Ning Foo Street SB 4.20 100 1838 166 0.090 1838 153 0.083 Ning Foo Street SB RT A2 3.70 20.0 100 1847 272 0.147 0.147 1985 232 0.117 0.117 11 pedestrian phase Вр min crossing time = sec GM+ sec FGM = 18 sec



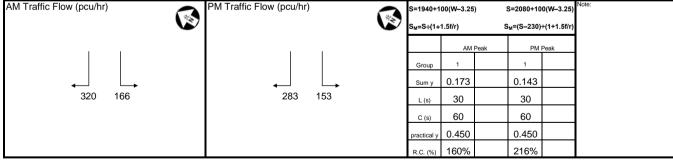
A2	A1	2 Bp **	Bp	3		4		5	
AM G =	I/G = 5	G = 15	I/G = 11	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =
PM G =	I/G = 5	G = 15	I/G = 11	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =

 Junction:
 Ning Foo Street / Lee Chung Street
 Job Number:
 J7408

 Scenario:
 Year 2033 with the Proposed Hotel
 P. 24

 Design Year:
 2033
 Designed By:
 AYT
 Checked By:
 LKW
 Date:
 2 Sep 2025

Approach		Phase	Stage	Midth (m)	Radius (m)	0/ Lle bill	Turning %	Sat. Flow	AM Peak Flow	y value	Critical y	Turning %	Sat. Flow	PM Peak Flow	y value	Critical
Approach		Phase	Stage	vviatn (m)	Radius (m)	% Up-niii Gradient	Turning %	(pcu/hr)	(pcu/hr)	y value	Critical y	Turning %	(pcu/hr)	(pcu/hr)	y value	Critical
Ning Foo Street SB	LT	A1	1	4.20	14.0		100	1838	166	0.090		100	1838	153	0.083	
Ning Foo Street SB	RT	A2	1	3.70	20.0		100	1847	320	0.173	0.173		1985	283	0.143	0.143
pedestrian phase		Вр	2		min o	rossing t	timo –	11	000	GM +	7	sec F	CM -	18	sec	
Dedesiliali pilase		ър			111111111111111111111111111111111111111	rossing i	uirie –	- 11	360	GIVI T	,	3601	GIVI –	10	360	
				-												



A2	A1	2 Bp *4	Bp	3		4		5	
AM G =	I/G = 5	G = 15	I/G = 11	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =
PM G =	I/G = 5	G = 15	I/G = 11	G =	I/G =	G =	I/G =	G =	I/G =
G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =

Junction: Lee Chung Street / Lee Chung Street outside Shun Yee Factory Building Design Year: 2025 Job Number: J7408 Date: 2 Sep 2025 Scenario: **Existing Condition** Page 25 Lee Chung Street (Arm C) Lee Chung Street (Arm A) 240 249 1 29 34 37 AM PM31 Ν Lee Chung Street outside Shun Yee Factory Building (Arm B) The predictive equations of capacity of movement are: Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]Q-CB = F[745 - 0.364Y(q-AC + q-AB)]The geometric parameters represented by D, E, F are: D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]where Y = 1 - 0.0345Wq-AB, etc = the design flow of movement AB, etc W = major road width W-CR = central reserve width w-BA, etc = lane width to vehicle v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc Geometry: Input Input Calculated Input W 10.50 V-rBA 4.40 45 w-BA D 0.9324 W-CR 0.00 V-IBA 40 w-BC 0.00 Ε 0.6126 V-rBC 45 w-CB 3.50 F 0.9460 75 Υ V-rCB 0.6378 Analysis: Traffic Flows, pcu/hr PMCapacity, pcu/hr ΑM PM ΑM q-CA 249 240 Q-BA 542 541 q-CB Q-BC 456 456 29 34 q-AB 0 0 Q-CB 705 705 q-AC 0 0 Q-BAC 542 541 q-BA 31 37 q-BC 0 0 0.000 0.000 Ratio-of-flow to Capacity ΑM PM 0.068 0.057 B-A B-C 0.000 0.000 C-B 0.041 0.048

Junction: Lee Chung Street / Lee Chung Street outside Shun Yee Factory Building Design Year: Job Number: J7408 Date: 2 Sep 2025 Scenario: Year 2033 without the Proposed Hotel Page 26 Lee Chung Street (Arm C) Lee Chung Street (Arm A) 279 297 1 32 37 42 AM PM34 Lee Chung Street outside Shun Yee Factory Building (Arm B) The predictive equations of capacity of movement are: Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]Q-CB = F[745 - 0.364Y(q-AC + q-AB)]The geometric parameters represented by D, E, F are: D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]where Y = 1 - 0.0345Wq-AB, etc = the design flow of movement AB, etc W = major road width W-CR = central reserve width w-BA, etc = lane width to vehicle v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc Geometry: Input Input Calculated Input W 10.50 V-rBA 4.40 45 w-BA D 0.9324 W-CR 0.00 V-IBA 40 0.00 Ε w-BC 0.6126 V-rBC 45 w-CB 3.50 F 0.9460 75 Υ V-rCB 0.6378 Analysis: Traffic Flows, pcu/hr PMCapacity, pcu/hr ΑM PM ΑM q-CA 297 279 Q-BA 534 535 q-CB Q-BC 456 32 37 456 q-AB 0 Q-CB 705 705 0 q-AC 0 0 Q-BAC 534 535 q-BA 42 34 q-BC 0 0 0.000 0.000 Ratio-of-flow to Capacity ΑM PM 0.064 B-A 0.079 B-C 0.000 0.000 C-B 0.045 0.053

Junction: Lee Chung Street / Lee Chung Street outside Shun Yee Factory Building Design Year: Job Number: J7408 Date: 2 Sep 2025 2033 Scenario: Year 2033 with the Proposed Hotel Page 27 Lee Chung Street (Arm C) Lee Chung Street (Arm A) 326 346 7 32 37 42 AM PM34 Lee Chung Street outside Shun Yee Factory Building (Arm B) The predictive equations of capacity of movement are: Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]Q-CB = F[745 - 0.364Y(q-AC + q-AB)]The geometric parameters represented by D, E, F are: D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]where Y = 1 - 0.0345Wq-AB, etc = the design flow of movement AB, etc W = major road width W-CR = central reserve width w-BA, etc = lane width to vehicle v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc Geometry: Input Input Calculated Input W 10.50 V-rBA 4.40 45 w-BA D 0.9324 W-CR 0.00 V-IBA 40 0.00 Ε w-BC 0.6126 V-rBC 45 w-CB 3.50 F 0.9460 75 Υ V-rCB 0.6378 Analysis: Traffic Flows, pcu/hr PMCapacity, pcu/hr ΑM PM ΑM q-CA 346 326 Q-BA 528 529 q-CB Q-BC 32 37 456 456 q-AB 0 Q-CB 705 705 0 q-AC 0 0 Q-BAC 528 529 q-BA 42 34 q-BC 0 0 0.000 0.000 Ratio-of-flow to Capacity ΑM PM 0.064 B-A 0.080 B-C 0.000 0.000 C-B 0.045 0.053

