S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan Ti Temple) at Tai Tong, Yuen Long, N.T.

TIA Report

November 2024

CTA Consultants Limited
志達顧問有限公司

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1. INTRODUCTION

1.1 Background

1.1.1 CTA Consultants Limited was commissioned as the traffic consultant to prepare a Traffic Impact Assessment (TIA) study for Proposed Religious Development (The Supreme Kwan Ti Temple) at Tai Tong, Yuen Long, N.T. (hereafter called "proposed development").

1.1.2 The location of the proposed development is shown diagrammatically in **Figure 1.1**.

1.2 Study Objectives

1.2.1 The main objectives of this study are as follows:

- To assess the existing traffic conditions in the vicinity of the proposed development;
- To forecast traffic demands on the adjacent road network in the design year;
- To estimate the likely traffic generated by the proposed development;
- To assess the impacts of traffic generated by the proposed development on the adjacent road network; and
- To recommend improvement measures, if necessary, to alleviate any traffic problems on the road network

2. THE PROPOSED DEVELOPMENT

2.1 Site Location

2.1.1 The proposed development is located at Tai Tong, Yuen Long, N.T as shown in **Figure 1.1**.

2.2 Proposed Development

2.2.1 The development schedule for the proposed development is summarized in **Table 2.1**.

Table 2.1 Development Parameters

Site Location	Tai Tong, Yuen Long
Application Site Area	31,068m^2
Development Area	17,393m^2
Total GFA	22,775m^2
Estimated no. of Visitors and Staff on Normal (Non-Ceremony/Event) Day	Visitors: ~100 to ~1,000 Staff: ~20 to ~60(1)
Estimated no. of Visitors and Staff on Ceremony/Event Day	Visitors: ~4,000 Staff: ~150

Note:
(1) Depending on the type of activities available and bookings.

2.2.2 It is noted that for normal day, there will be tours, exhibitions and performances with 1-2 hours long per session.

2.2.3 For Ceremony/Event Day, it is anticipated that about 2,000 visitors attend major worshipping time for 20 minutes between 8am and 12pm. Visitors will be divided to about 500 visitors/hr. Non-worshipping activities (tours, exhibitions and

performances) will be resumed after 12pm, it is anticipated that about 2,000 visitors for non-worshipping activities (tour, exhibitions and performances with 1-2 hours long per session).

2.2.4 Activities of the proposed development require pre-booking and the use of coach provided by the operator to/from the proposed development.

2.2.5 It is anticipated that the proposed development will be completed by 2030 tentatively. Therefore, design year 2033 (i.e. 3 years after the planned commencement year of the proposed development) is adopted for the Traffic Impact Assessment.

2.3 Proposed Minor Road Improvement of Access Road to Proposed Development

2.3.1 Given the existing road configuration of access road to the proposed development is a village track connecting Tai Tong Shan Road and the proposed development, manoeuvring problems of long vehicles at the village track is anticipated. With consideration of existing road configuration, trees and land status, minor road improvement of 6m wide carriageway with widening at turning area together with a 2m wide footpath is proposed, drawing on the proposed minor road improvement of access road to proposed development is shown in **Figure 2.1**.

2.3.2 There is no vehicular access at the existing site. The proposed vehicular access is located at the southwest of the proposed development. Location of the vehicular access is shown diagrammatically in **Figure 2.1**.

2.4 Internal Transport Facilities Provision

2.4.1 As shown in **Figure 2.2**, the walking distance between the proposed development and the bus stop is ~1.1km. In view of the remote location of the proposed development, the operator would provide 60-seater coaches with stop near Long Ping Station for staff and visitors. Therefore it is anticipated that the proposed development will not generate nearby public transport demand.

2.4.2 Activities of the proposed development require pre-booking and the use of coach provided by the operator to/from the proposed development.

2.4.3 Private car parking spaces at the site would be provided for staff, visitors or persons with disabilities, booking in advance is required.

2.4.4 The proposed parking facilities provision of the proposed development is based on operation needs and summarized in **Table 2.2**.

Table 2.2 Proposed Parking Provision

Parking Provision			
Private Car Parking Space 5m x 2.5m		**Motorcycle Parking Space 2.4m x 1m**	
30(1)		4	
Loading/Unloading Provision			
Taxi Layby (5m x 2.5m)	**Coach (12m x 3.5m)**	**Small Coach (9m x 3.5m)**	**Light Bus (8m x 3m)**
4	3	1(2)	3

Notes:
(1) Including 1 accessible car parking space for 1-50 car parking spaces.
(2) With reference to HKPSG requirement for Churches.

2.4.5 The ground floor layout plan of the proposed development showing the internal transport provision is shown in **Figure 2.3**.

2.5 Public Transport Services Provided by Operator

2.5.1 During the red maple tree season (normally between December and mid-January), franchised buses route no. K66A would be provided within 500 meters catchment area from/to Long Ping. During the non-red maple tree season, there is no franchised buses and GMB routes within 500 meters catchment area.

2.5.2 As shown in **Figure 2.2**, the walking distance between the proposed development and the bus stop is ~1.1km. In view of the remote location of the proposed development, the operator would provide 60-seater coaches with stop near Long Ping Station for staff and visitors. Therefore it is anticipated that the proposed development will not generate nearby public transport demand.

2.5.3 Activities of the proposed development require pre-booking and the use of coach provided by the operator to/from the proposed development.

2.5.4 The designated pick-up/drop-off location near Long Ping Station is shown in **Figure 2.4**. **Section 4.6** will discuss the estimated trip generations of the proposed development for Normal (Non-Ceremony/Event) Day and Ceremony/Event Day.

2.5.5 It is proposed the operation time of the shuttle service from 7:30am to 5:30pm, with 20 minutes headway for Normal (Non-Ceremony/Event) Day and 5 minutes headway for Ceremony/Event Day (refer to **Section 4.6** for details).

2.5.6 It is noted that proposed shuttle service require application to the Transport Department ("TD") prior to the actual implementation. The routings and pick-up/drop-off location will be adjusted during the shuttle service application if necessary, subject to approval of TD.

3. THE EXISTING TRAFFIC CONDITIONS

3.1 Critical Junctions

3.1.1 As shown in **Figure 3.1**, 5 junctions were identified to be critical for assessment of traffic impact due to the proposed development. They are listed in below **Table 3.1** and their existing junction layout arrangements are shown in **Figure 3.2** to **Figure 3.6** respectively.

Table 3.1 Identified Critical Junction

Ref.	Junction	Method of Control	Figure No.
A	Shap Pat Heung Interchange	Roundabout	3.2
B	Tai Tong Road / Tai Kei Leng Road	Signal	3.3
C	Tai Tong Road / Kiu Hing Road	Priority	3.4
D	Kiu Hing Road / Tai Tong Shan Road	Priority	3.5
E	Tai Tong Shan Road / Access Road to the Site	Priority	3.6

3.1.2 In order to establish the existing traffic condition in the above-mentioned critical junctions, traffic survey in the form of manual classified count was conducted during AM and PM peak periods during 7:00am to 9:00am and 5:30pm to 7:30pm on a typical weekday on 7 June 2024 (Friday).

3.1.3 Analysis of the observed traffic data indicates that the AM and PM peak hour flows occurred from 7:30am to 8:30am and 5:30pm to 6:30pm respectively. The existing traffic flows is presented in **Figure 3.7**.

3.1.4 Existing performance of the identified critical junctions are assessed. The results are summarized in **Table 3.2** and the junction calculation sheets are attached in **Appendix A**.

Table 3.2 Operational Performance of Identified Critical Junctions in 2024

Ref.	Junction	Method of Control	Year 2024 Existing RC/DFC (1)	
			AM Peak	PM Peak
A	Shap Pat Heung Interchange	Roundabout	0.72	0.76
B	Tai Tong Road / Tai Kei Leng Road	Signal	36%	47%
C	Tai Tong Road / Kiu Hing Road	Priority	0.43	0.56
D	Kiu Hing Road / Tai Tong Shan Road	Priority	0.24	0.29
E	Tai Tong Shan Road / Access Road to the Site	Priority	0.03	0.03

Notes: (1) RC = Reserve Capacity
DFC = Design flow/capacity

3.1.5 The assessment results in **Table 3.2** indicate that all critical junctions are at present operating within their capacities during peak hours.

4. TRAFFIC IMPACT ASSESSMENT

4.1 Design Year

4.1.1 The proposed development is anticipated to be completed by year 2030 tentatively. Year 2033 (i.e. 3 years after completion) is therefore adopted as the design year for this TIA.

4.2 Traffic Forecast

4.2.1 The traffic growth can be estimated by applying growth factor, based on the following information sources:

I. Historical traffic growth in Annual Traffic Census (ATC) published by the Transport Department (TD).
II. Territorial planning assumptions prepared by the Planning Department.
III. Projection of Population Distribution 2021-2029 published by Planning Department.

Annual Traffic Census

4.2.2 Numerous of traffic count stations are located in the vicinity of the proposed development. The traffic counts reported in the Annual Traffic Census (ATC), which is published by Transport Department, over a period of eight years, i.e. 2015 to 2022 are summarized in **Table 4.1**.

Table 4.1 Historical Traffic Data from Annual Traffic Census (ATC)

ATC Stn	Road Name	Annual Average Daily Traffic (AADT)					Avg. Annual Growth Rate
		2015	2016	2017	2018	2022	
5008	Kau Yuk Rd (From Yuen Long Tai Yuk Rd to Yuen Long Hong Lok Rd)	12,920	12,920	12,410	12,470	12,070	-0.97%
5711	Shap Pat Heung Rd (From Shap Pat Heung INT to Tai Tong Rd)	23,020	21,960	21,810*	22,500*	28,060*	2.87%
5856	Tai Tong Rd (From Hop Yick Rd to Sham Chung Rd)	9,540*	10,660	10,520	10,780*	11,090	2.17%
6030	Hop Yick Rd (From Fung Cheung Rd to Tai Tong Rd)	10,950	11,400	10,210	10,340	8,230	-4.00%
Total		**56,430**	**56,940**	**54,950**	**56,090**	**59,450**	**0.75%**

Note:
(1) *AADT estimated by Growth factor
(2) Traffic volumes for Year 2019 to Year 2021 may be suppressed by the special working arrangement implemented during the COVID-19 outbreak period and/or social event outbreak, therefore AADT from Year 2019 to Year 2021 are not adopted.

Planning Data

4.2.3 Reference has also been made to the latest 2019-based Territorial Population Employment Data Matrices (TPEDM) planning data published by the Planning Department for years 2019 and 2031 in the study district. The average annual growth rates in terms of population and employment from 2019 to 2031 are tabulated in **Table 4.2**.

Table 4.2 TPEDM Planning Data from 2019 to 2031

Zone	Population			Avg. Annual Growth Rate	Employment			Avg. Annual Growth Rate
	2019	2026	2031		2019	2026	2031	
Yuen Long	175,150	172,350	159,850	**-0.76%**	68,100	70,700	70,250	**0.26%**

4.2.4 It is indicated that the average annual growth rate of population in the study area from 2019 to 2031 under the 2019-based Territorial Planning Data is -0.76% per year while the growth rate of employment is +0.26% per year.

Projection of Population Distribution 2021-2029

4.2.5 Reference has been made to the Projection of Population Distribution 2021-2029 published by Planning Department which adopted the latest Census and Statistics Department's projections of territorial population released in September 2020 as the control totals.

4.2.6 The average annual growth rates in terms of population in the area from 2021 to 2029 are shown in **Table 4.3**.

Table 4.3 Projection of Population Distribution 2021-2029

Zone	2021	2022	2023	2024	2025	2026	2027	2028	2029	Avg. Annual Growth Rate
Yuen Long	651,400	657,700	662,700	666,500	665,600	668,700	674,200	694,200	708,200	**1.05%**

4.2.7 Based on the above **Table 4.3**, the average annual growth rate derived from projected population distribution from 2021 to 2029 is +1.05% per annum.

Adopted Growth Rate

4.2.8 A.A.D.T. of ATC indicates that the traffic flow of the local road network has an average annual growth rate of +0.75% from year 2015 to year 2022.

4.2.9 Whilst, the planning data indicates that the population and employment in the area are expected to develop with an average annual growth rate of -0.76% and +0.26% respectively from 2019 to 2031.

4.2.10 Projected population distribution indicates that an average annual growth rate of +1.05% from 2021 to 2029.

4.2.11 As a conservative approach, annual growth rate **+1.05%** p.a. is adopted.

4.3 Traffic Generations of Adjacent New Developments

4.3.1 To fully reflect the growth traffic, trip generation of the future vicinity developments have been taken into consideration. The estimated peak hour trips of the planned adjacent development is extracted from its TIA report and detailed in **Figure 4.1** and **Table 4.4**.

Table 4.4 Planned Adjacent Developments in the Vicinity and the Estimated Trip Generations and Attractions

Land Use	Units	AM Peak Hour		PM Peak Hour	
		Generation (pcu/hr)	Attraction (pcu/hr)	Generation (pcu/hr)	Attraction (pcu/hr)
Yuen Long South - Area 1					
Private housing	2,800 flats	297	171	121	166
Commercial	64,260m^2 GFA	83	98	152	169
Primary School	30 classrooms	7	30	1	1
Kindergarten	12 classrooms	27	29	28	26
Industrial and Open storage	496,910m^2 GFA	348	517	522	418
Retention Tank	1 nos.	10	10	10	10
Refuse Collection Point and Sewage Pumping Station	1,100m^2 GFA	3	3	2	2
Total		***775***	***858***	***836***	***792***
Yuen Long South - Area 2					
Private housing	2,980 flats	197	90	78	123
Private housing	470 flats	50	29	21	28
Public housing	18,480 flats	888	518	444	647
Commercial	113,270m^2 GFA	145	173	268	297
Sports Centre and Market	64,000m^2 GFA	151	151	74	74
Primary School	120 classrooms	28	120	4	4

Land Use	Units	AM Peak Hour		PM Peak Hour	
		Generation (pcu/hr)	Attraction (pcu/hr)	Generation (pcu/hr)	Attraction (pcu/hr)
Kindergarten	36 classrooms	80	87	83	76
Electricity Substation - 132kV	2,000m^2 GFA	5	5	3	3
Government Complex for Social Welfare Building (including clinic)	14,210m^2 GFA	34	34	17	17
Divisional Fire Station and Ambulance Depot	13,500m^2 GFA	32	32	16	16
Refuse Collection Point and Sewage Pumping Station	3,500m^2 GFA	9	9	5	5
Married Quarters	500 flats	53	31	22	30
Total		***1,672***	***1,279***	***1,035***	***1,320***
Wang Chau Development (Phase 1 and Remaining Phases)					
PRH		82	54	49	66
HOS		121	70	61	88
Retail		8	8	10	12
Primary School		6	24	1	1
Total		***744***	***156***	***121***	***167***
Public Housing Development at Long Bin (Phase 1 and Phase 2)					
Phase 1	3,080 flats	192	132	92	124
Phase 2	8,860 flats	552	378	264	356
Total		***1,488***	***666***	***477***	***647***

Note:
(1) Extracted from TIA report of the relevant application.

4.4 Planned Junction Layout and Road Improvement Works under Development Projects

4.4.1 According to the approved TIA report of Agreement No. CE35/2012 (CE) Planning and Engineering Study for Housing Sites in Yuen Long South – Investigation. (hereafter called "Yuen Long South development"), improvement to sections of existing Kung Um Road, Kiu Hing Road, Wong Nai Tun Tsuen Road will be completed in year 2028 and attached in **Appendix B**. Also, a widened slip road for

connection to Junction Shap Pat Heung Interchange (A) will be introduced between year 2025 and year 2031, and the detail is presented in **Figure 4.2**.

4.5 Reference Traffic Flows

4.5.1 The reference traffic flow is estimated by applying the adopted growth rate to the observed traffic flow in the current year, and the 2033 reference traffic flows can be computed with the following calculation:

2033 Reference Traffic Flows (Without Proposed Development) = (**2024 Observed Traffic Flows** **x** **Adopted Growth Factor (i.e. +1.05% p.a. for 9 year)**) + **Traffic Flows of Planned Adjacent Development**

4.5.2 The 2033 reference traffic flows are shown in **Figure 4.3**.

4.6 Traffic Generations and Attractions

4.6.1 As mentioned in **Section 2.4**, in view of the remote location of the proposed development, the operator would provide 60-seater coaches with stop near Long Ping Station for staff and visitors. Therefore it is anticipated that the proposed development will not generate nearby public transport demand. Activities of the proposed development require pre-booking and the use of coach provided by the operator to/from the proposed development.

4.6.2 It is understood that staff and visitors will not arrive and depart the proposed development together.

4.6.3 Based on **Section 2.2**, the estimated trip generations of the proposed development for the proposed development is summarized in **Table 4.5** for Normal (Non-Ceremony/Event) Day and Ceremony/Event Day. As a conservative approach, it is assumed that staff and visitors would not take the same coach and it is assumed that the maximum occupancy would be 75% for each coach.

Table 4.5 Estimated Trip Generations and Attractions of Proposed Development

Normal (Non-Ceremony/Event) Day	No. of Persons[1]			No. of 60-seater Coaches		
	Per Day	Per Hour	Max Per Hour [A]	(veh/hr/ direction) [B]=[A]÷ (60x75%[2])	(pcu/hr/ direction) [B]x3[3]	Headway (min)
Visitors	1,000	125	125	3	**9**	20
Staff	60	N/A				

Ceremony/Event Day	No. of Persons[1]				No. of 60-seater Coaches		
	Day	8am to 12pm	After 12pm	Max Per Hour [A]	(veh/hr/ direction) [B]=[A]÷ (60x75%[2])	(pcu/hr/ direction) [B]x3[3]	Headway (min)
Visitors	4,000	2,000 (or 500 persons/hr)	2,000 (or 500 persons/hr)	500	12	**36**	5
Staff	150	N/A	N/A				

Notes:
(1) From **Section 2.2**.
(2) Assumed 75% occupancy of 60-seater coach.
(3) PCU factor of 3 for hilly terrain as stipulated in TPDM Volume 2 Table 2.3.1.1.

4.6.4 Based on **Table 4.5**, the estimated traffic generation and attraction due to the proposed development are summarized in **Table 4.6**.

Table 4.6 Estimated Trip Generations and Attractions of Proposed Development

Proposed Development	AM Peak Hour		PM Peak Hour	
	Generation (pcu/hr)	Attraction (pcu/hr)	Generation (pcu/hr)	Attraction (pcu/hr)
Normal (Non-Ceremony/Event) Day	9	9	9	9
Ceremony/Event Day	36	36	36	36

4.6.5 During Normal (Non-Ceremony/Event) Day, it is anticipated that the proposed development would generate and attract +9 pcu/hr each during AM and PM peak hours.

4.6.6 During Ceremony/Event Day, it is anticipated that the proposed development would generate and attract +36 pcu/hr each during AM and PM peak hours.

4.7 Design Traffic Forecasts

4.7.1 The future traffic generations of the proposed development were then assigned onto the road network and superimposed onto the 2033 reference traffic flows (without proposed development) to derive the 2033 design traffic forecasts (with proposed development).

2033 Design Traffic Flows (with proposed development)	=	**2033 Reference Traffic Flows (without proposed development)**	+	**Proposed Development Traffic Flows**

4.7.2 Year 2033 design traffic flows (with proposed development) for Normal (Non-Ceremony/Event) Day and Ceremony/Event Day are shown in **Figure 4.4** and **Figure 4.5** respectively.

5. TRAFFIC IMPACT ASSESSMENT

5.1 Operational Assessment

5.1.1 To assess the potential traffic impact due to the proposed development, capacity analysis of the identified critical junctions for both reference and design scenarios in year 2033 were carried out. The results are summarized in **Table 5.1** and the junction calculation sheets are attached in **Appendix A**.

Table 5.1 Junction Performance of Identified Critical Junction in Year 2033 (With and Without Proposed Development)

Ref.	Junction	Method of Control	Year 2033 RC/DFC (1)					
			Reference Scenario (Without Proposed Development)		Design Scenario (With Proposed Development)			
					Normal (Non-Ceremony/Event) Day		Ceremony/Event Day	
			AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
A	Shap Pat Heung Interchange(2)	Roundabout	0.80	0.80	0.80	0.80	0.81	0.81
B	Tai Tong Road / Tai Kei Leng Road	Signal	27%	42%	25%	41%	21%	36%
C	Tai Tong Road / Kiu Hing Road	Priority	0.48	0.58	0.49	0.60	0.54	0.65
D	Kiu Hing Road / Tai Tong Shan Road	Priority	0.26	0.31	0.28	0.33	0.33	0.38
E	Tai Tong Shan Road / Access Road to the Site	Priority	0.03	0.03	0.05	0.04	0.09	0.09

Notes:
(1) RC = Reserve Capacity
DFC = Design flow/capacity
(2) The planned junction improvement works will be in place, which will be carried out by Agreement No. CE35/2012 (CE) Planning and Engineering Study for Housing Sites in Yuen Long South – Investigation mentioned in **Section 4.4.1**.

5.1.2 The assessment results in **Table 5.1** revealed that all critical junctions would still operate within their capacities in both reference and design year 2033 during the peak hours for Normal (Non-Ceremony/Event) Day and Ceremony/Event Day.

5.1.3 As mentioned in **Section 4.4**, a widened slip road for connection to Junction Shap Pat Heung Interchange (A) will be introduced between year 2025 and year 2031. Assessment for Junction A modification has been carried out for design scenario (with proposed development) for Normal (Non-Ceremony/Event) Day and Ceremony/Event Day.

6. SUMMARY AND CONCLUSION

6.1 Summary

6.1.1 CTA Consultants Limited (CTA) is commissioned as the traffic consultant to prepare the Traffic Impact Assessment (TIA) and provide technical justifications in supporting the planning application from traffic engineering point of view.

6.1.2 To appraise the existing traffic condition, manual-classified counting surveys were conducted at critical junctions in 2024. Current operational performance of the critical junctions has been assessed. The results reveal that all critical junctions are at present operating within its capacities.

6.1.3 Assessment of operational performance of the critical junctions revealed that all critical junctions would still operate within their capacities in both reference scenario (without proposed development) and design scenario (with proposed development) in 2033 during the peak hours.

6.1.4 The assessment results revealed that all crucial junctions would operate within their capacities in both reference and design year 2033 during the peak hours.

6.2 Conclusion

6.2.1 In conclusion, this TIA has demonstrated that the related traffic trips related to the proposed development can be absorbed by the nearby road network and no insurmountable traffic impact will be induced.

6.2.2 Therefore, the proposed development is considered feasible from traffic engineering point of view.

FIGURE NO.: 1.1	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan TI Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK	DRAWING TITLE: SITE LOCATION PLAN	
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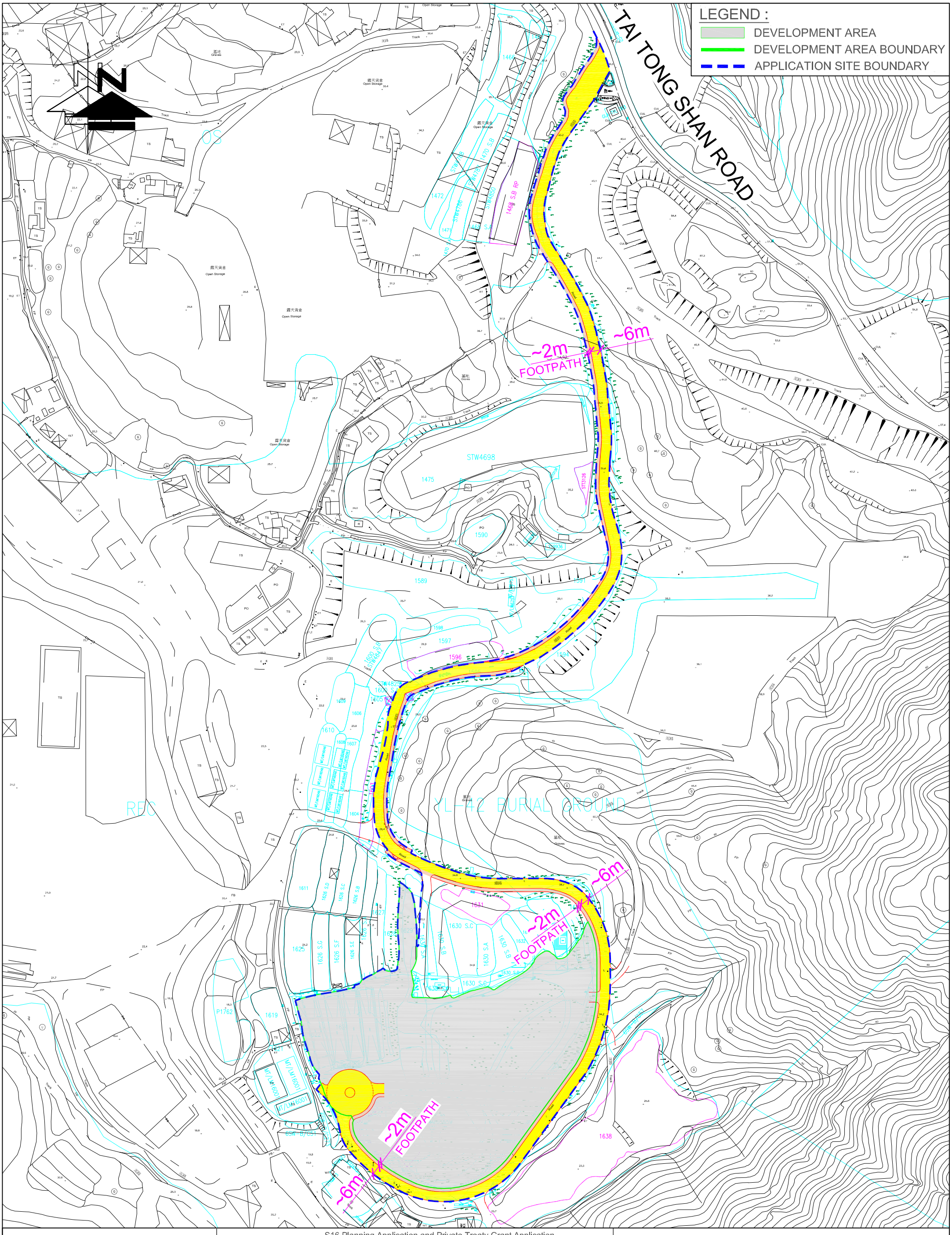

FIGURE NO.: 2.1	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan Ti Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
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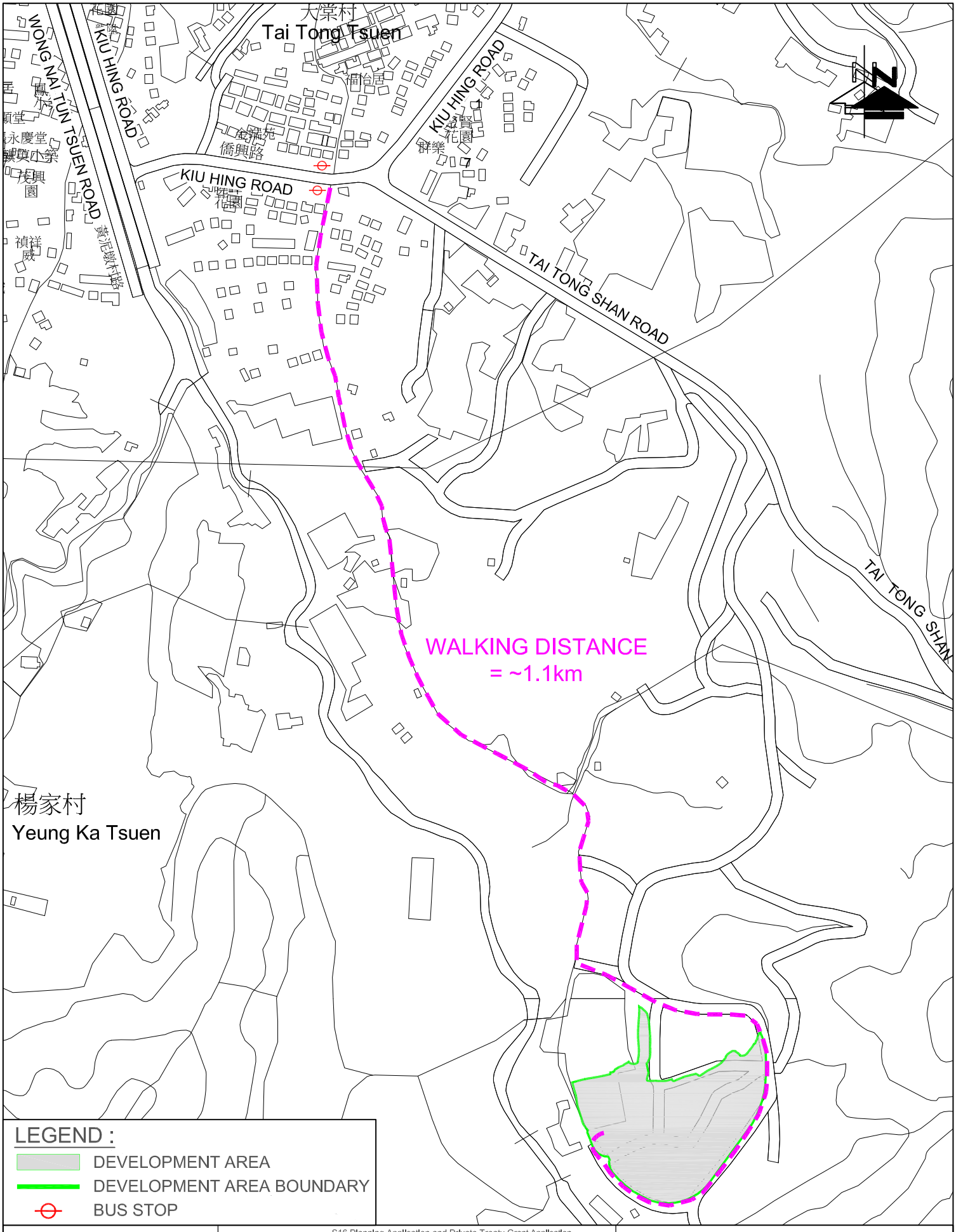

FIGURE NO.: 2.2		PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan TI Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK		DRAWING TITLE: WALKING DISTANCE BETWEEN PROPOSED DEVELOPMENT AND NEAREST BUS STOP	
SCALE: 1 : 4500 @A4	DATE: 06 NOV 2024		

LEGEND :
DEVELOPMENT AREA
DEVELOPMENT AREA BOUNDARY
APPLICATION SITE BOUNDARY

FIGURE NO.: 2.3	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan Ti Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司	
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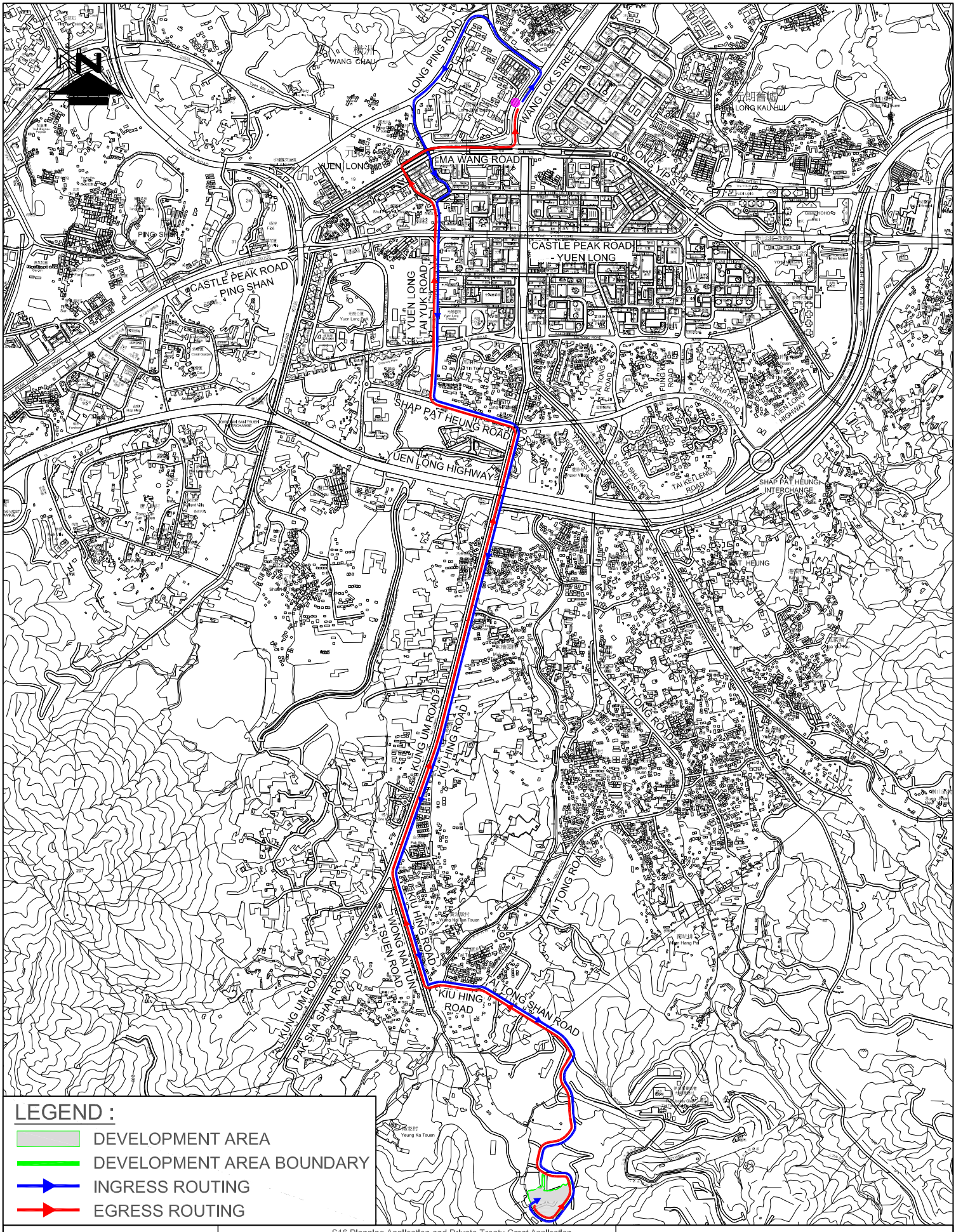

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PROJECT NO.: 23132HK		DRAWING TITLE:	PROPOSED ROUTING BETWEEN THE SITE AND PICK-UP / DROP-OFF LOCATION NEAR LONG PING STATION
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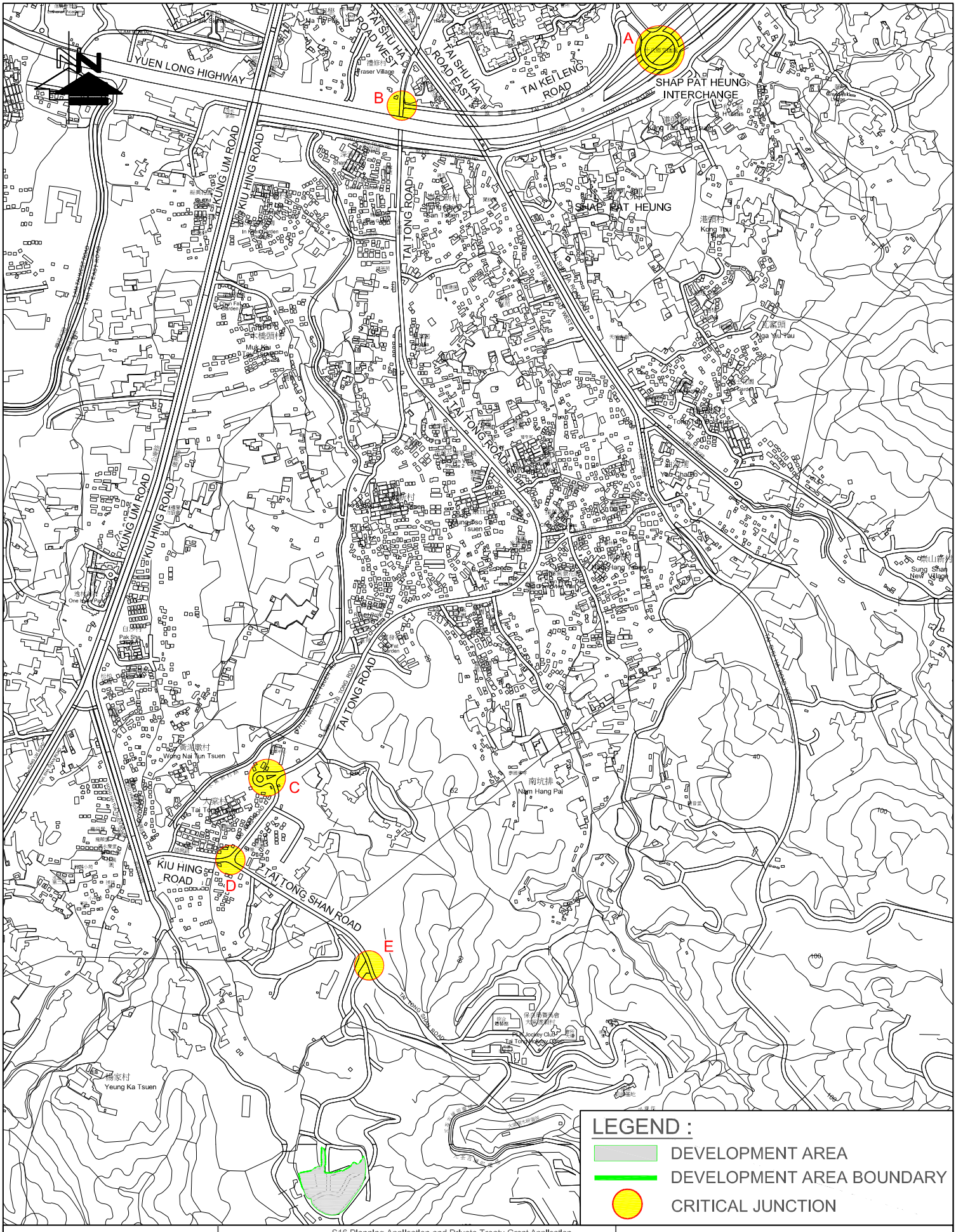

FIGURE NO.: 3.1	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan TI Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
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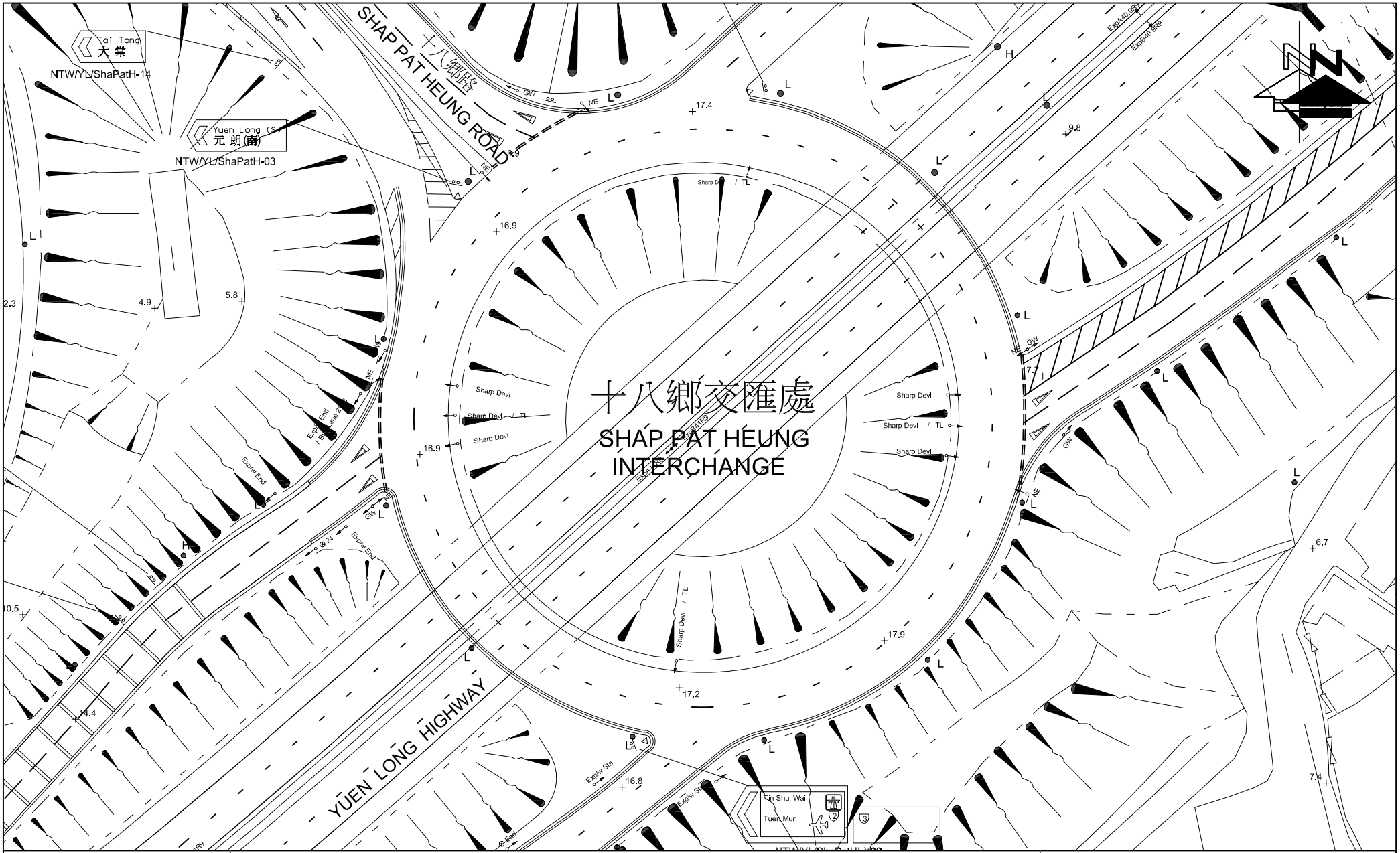

FIGURE NO.: 3.2	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan Ti Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
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SCALE: 1 : 800 @A4 / DATE: 12 JAN 2024		

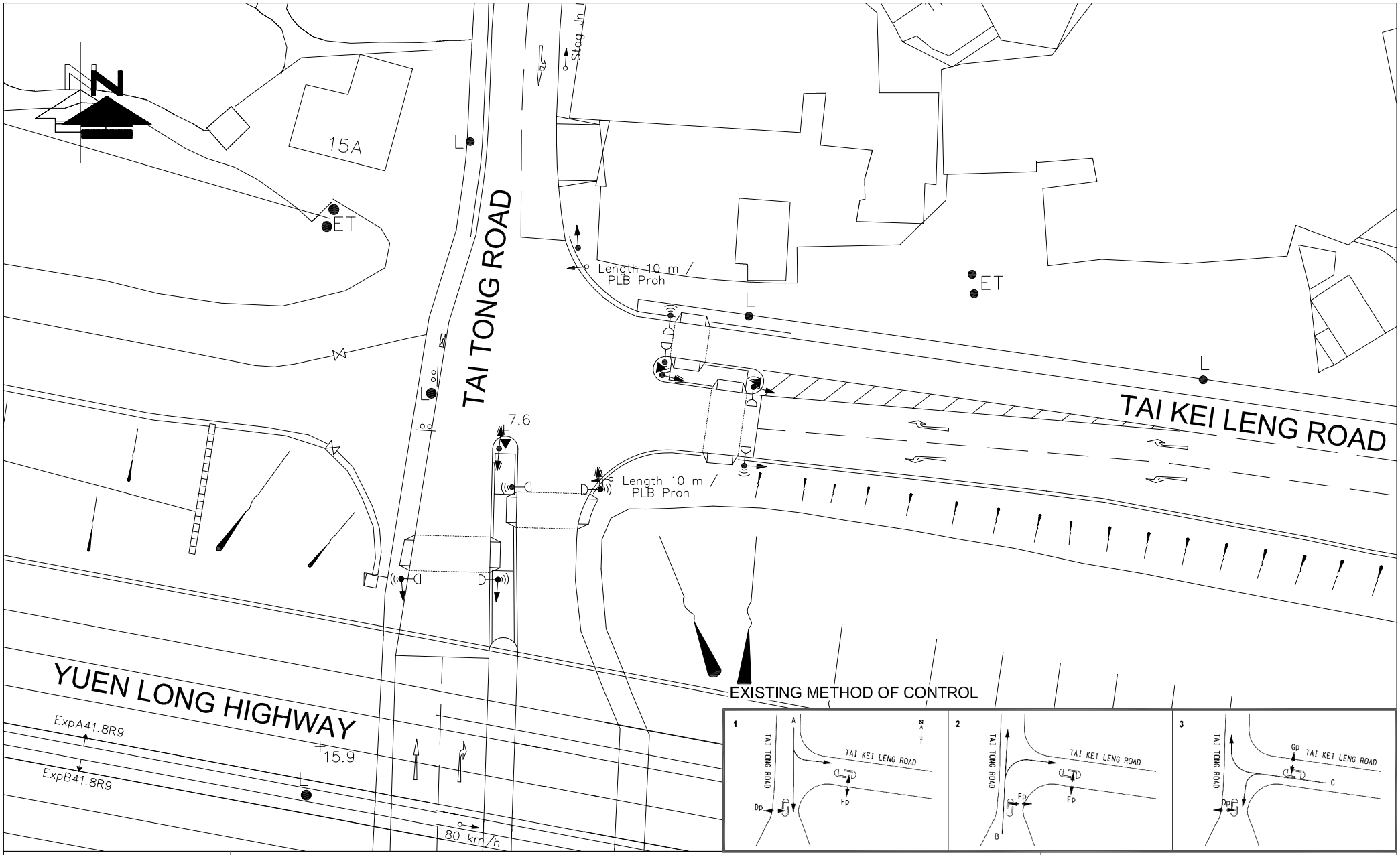


FIGURE NO.: 3.3	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan Ti Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TAI TONG ROAD / TAI KEI LENG ROAD (B)	
SCALE: 1 : 500 @A4 / DATE: 30 APR 2024		

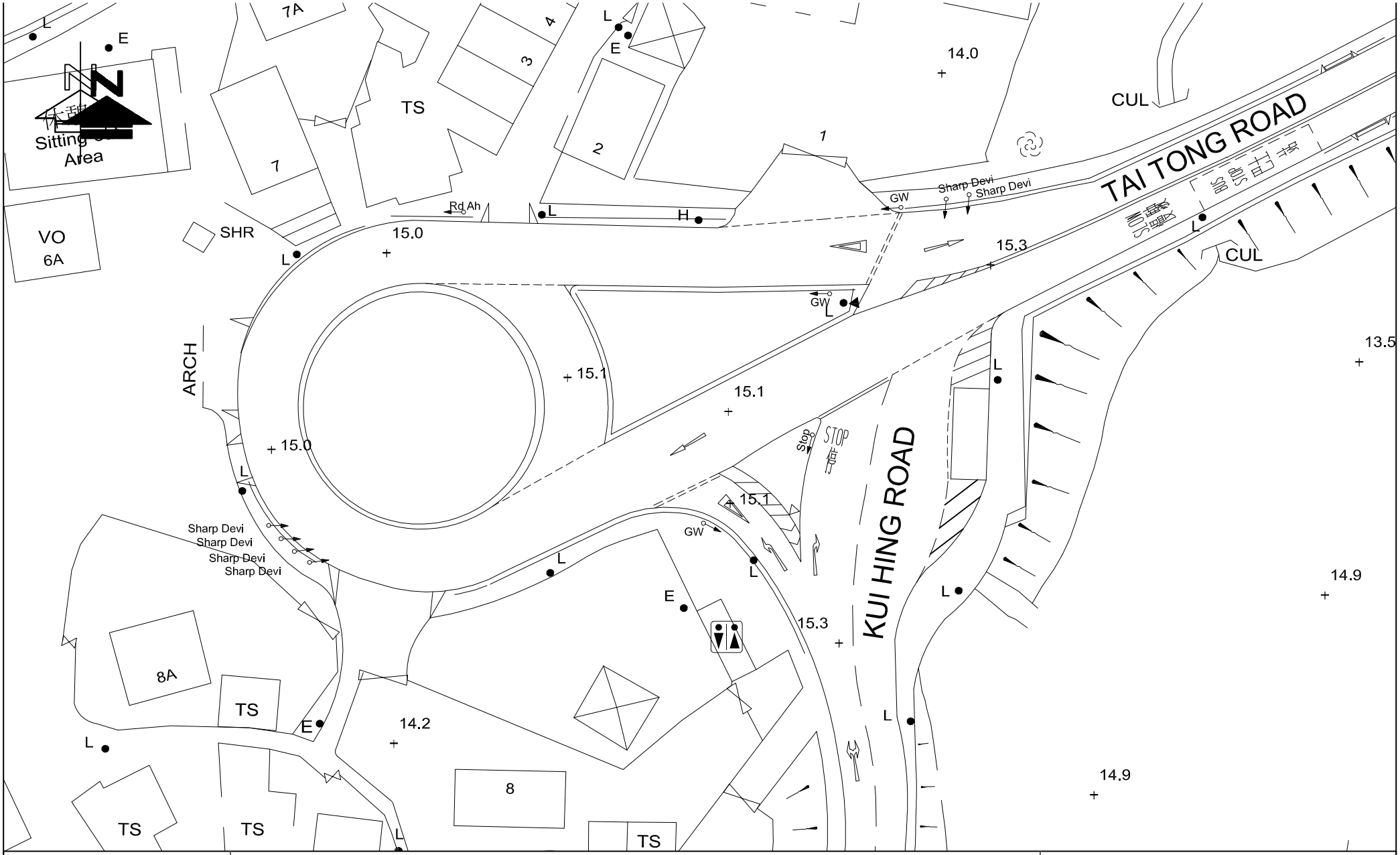


FIGURE NO.: 3.4	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan Ti Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TAI TONG ROAD / KIU HING ROAD (C)	
SCALE: 1 : 500 @A4 / DATE: 12 JAN 2024		

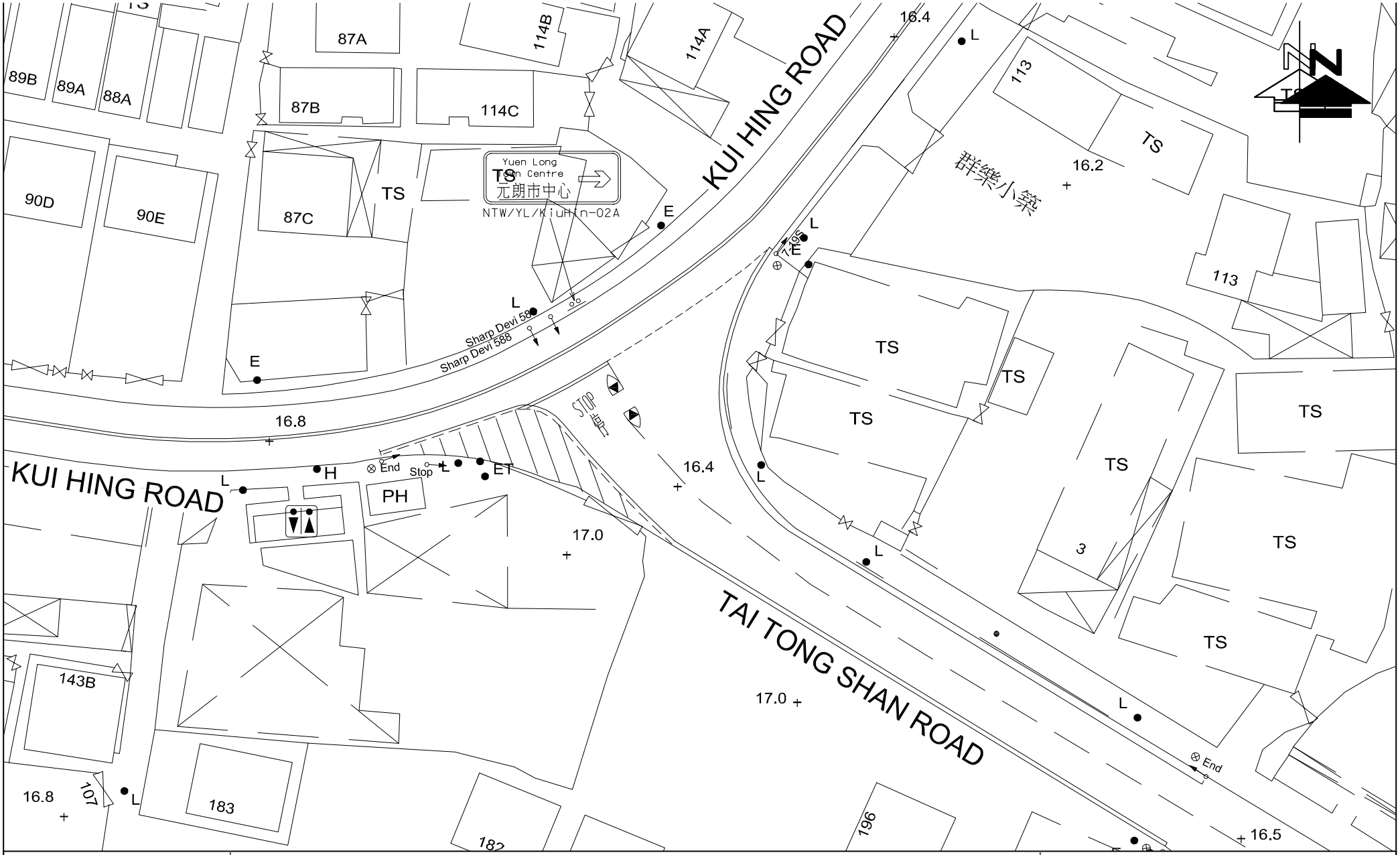


FIGURE NO.: 3.5	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan Ti Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF KIU HING ROAD / TAI TONG SHAN ROAD (D)	
SCALE: 1 : 500 @A4 / DATE: 12 JAN 2024		

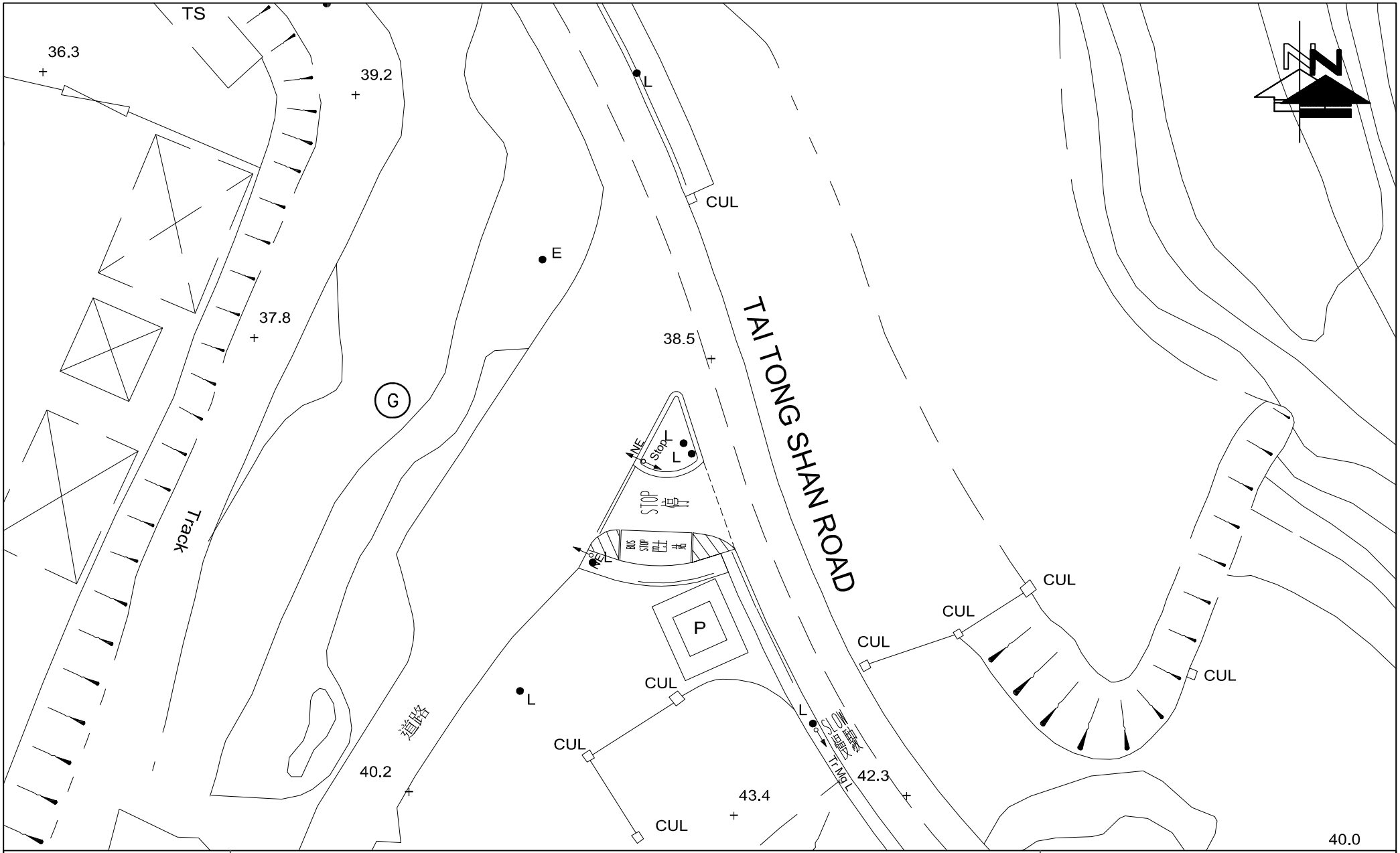
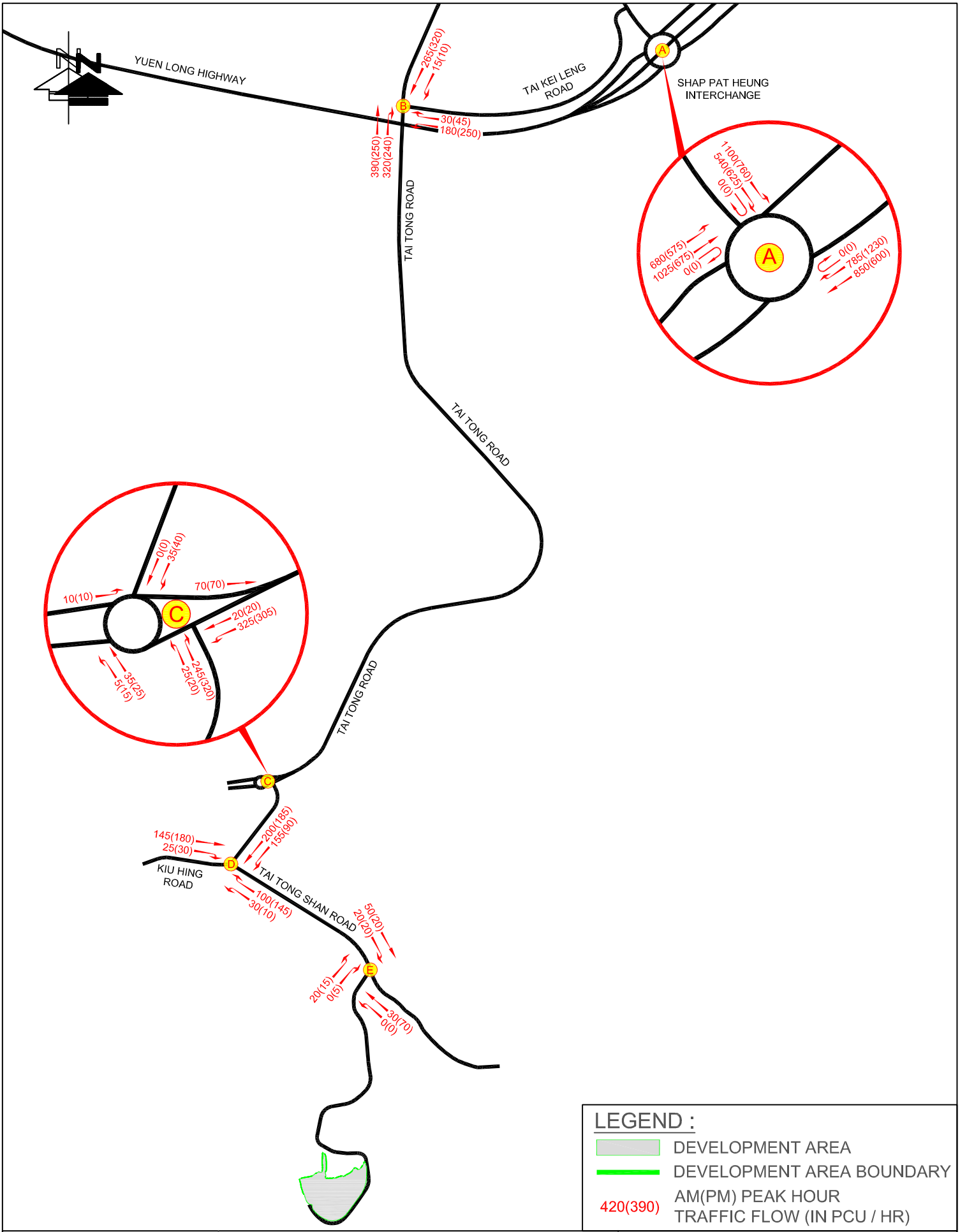


FIGURE NO.: 3.6	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan Ti Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TAI TONG SHAN ROAD / ACCESS ROAD TO THE SITE (E)	
SCALE: 1 : 500 @A4 / DATE: 12 JAN 2024		



LEGEND :

DEVELOPMENT AREA

DEVELOPMENT AREA BOUNDARY

420(390) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 3.7	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan TI Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK	DRAWING TITLE: 2024 OBSERVED TRAFFIC FLOWS	
SCALE: N.T.S. @A4 / DATE: 08 APR 2024		

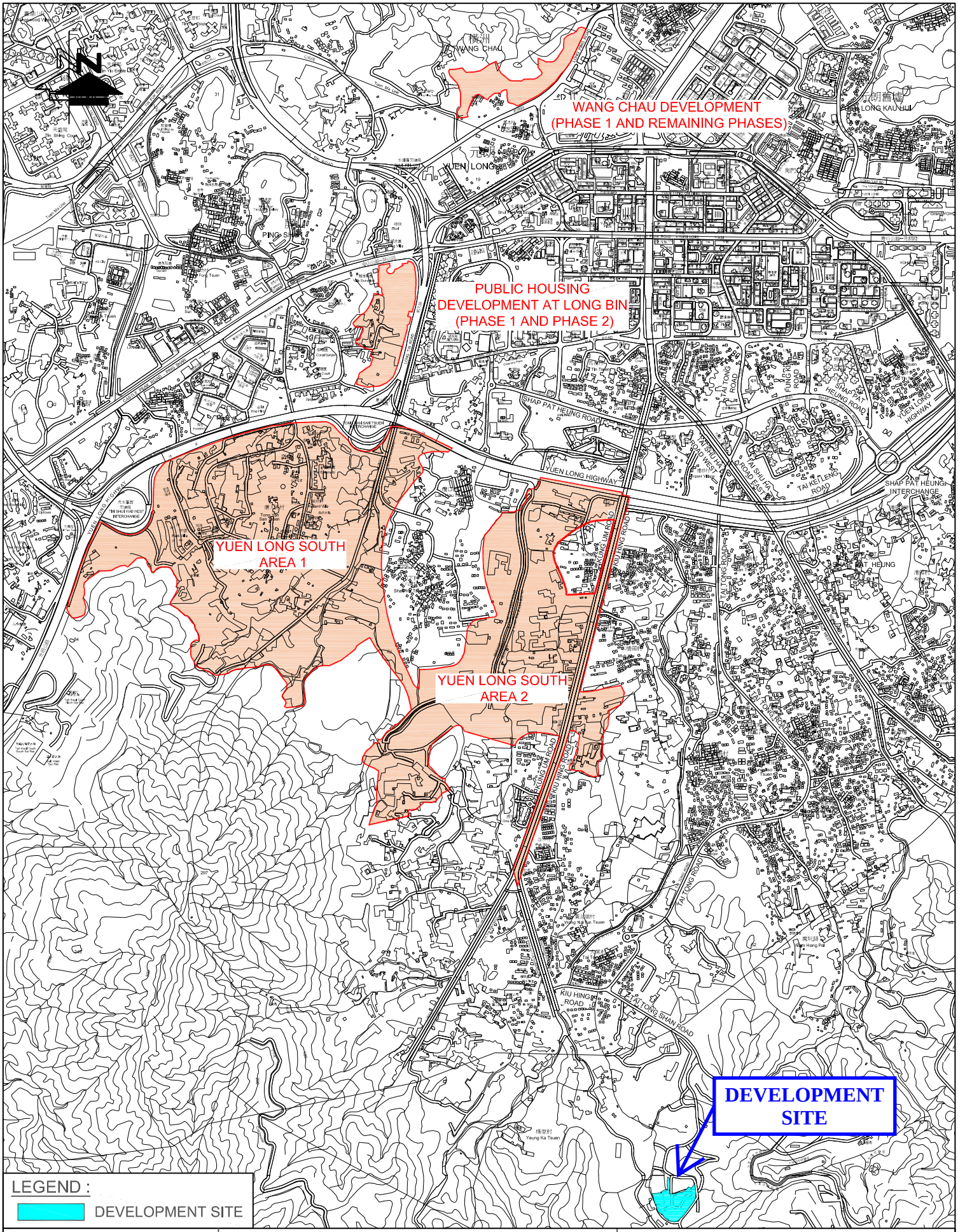


FIGURE NO.: 4.1	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan TI Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK	DRAWING TITLE: PLANNED MAJOR DEVELOPMENTS IN THE VICINITY	
SCALE: 1 : 20000 @A4 / DATE: 01 FEB 2024		

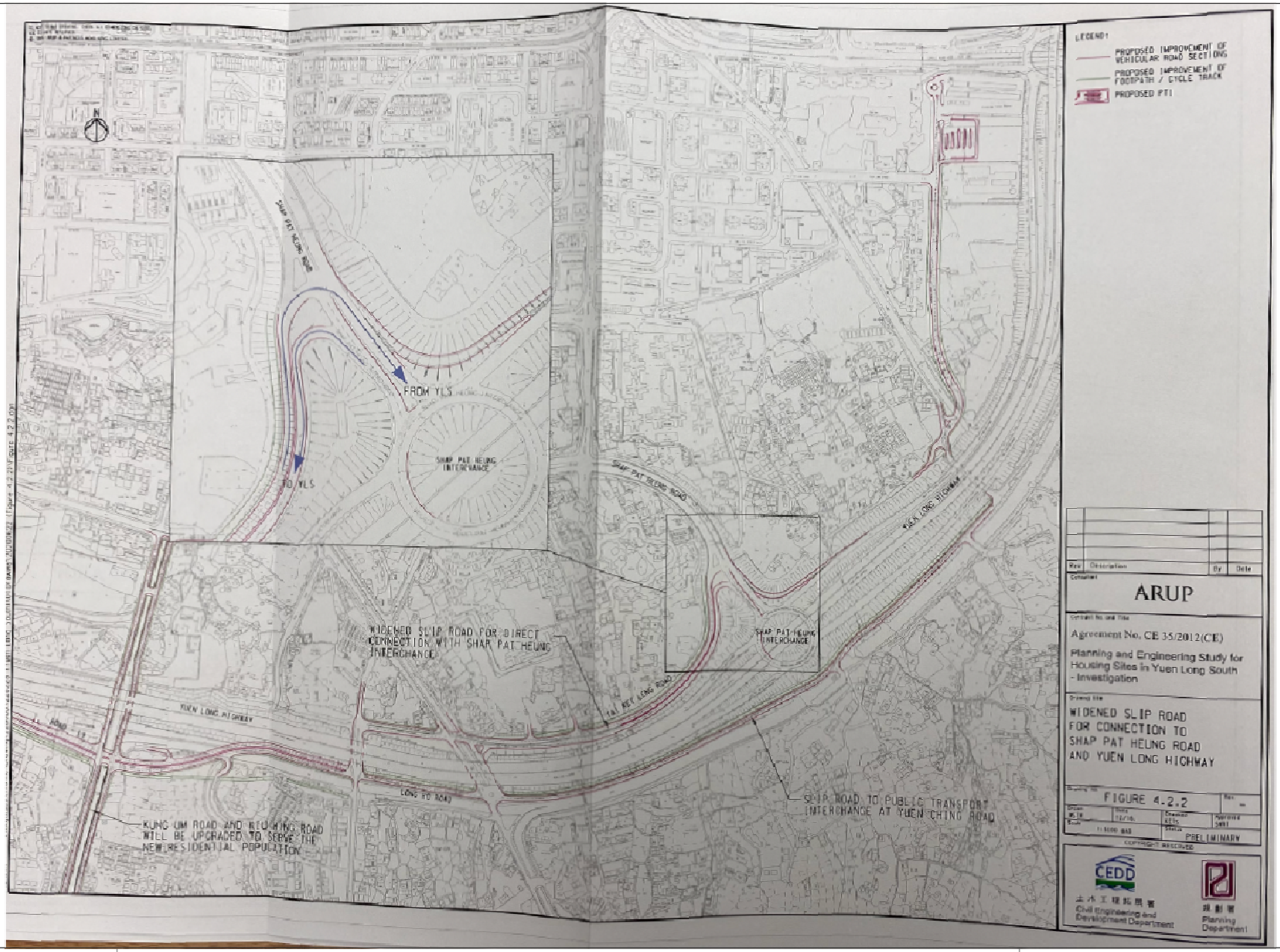


FIGURE NO.: 4.2		PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan Ti Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK		DRAWING TITLE: PLANNED JUNCTION SHAP PAT HEUNG INTERCHANGE (A) UNDER AGREEMENT NO. CE35/2012 (CE) PLANNING AND ENGINEERING STUDY FOR HOUSING SITES IN YUEN LONG SOUTH – INVESTIGATION	
SCALE: N.T.S. @A4	DATE: 01 FEB 2024		

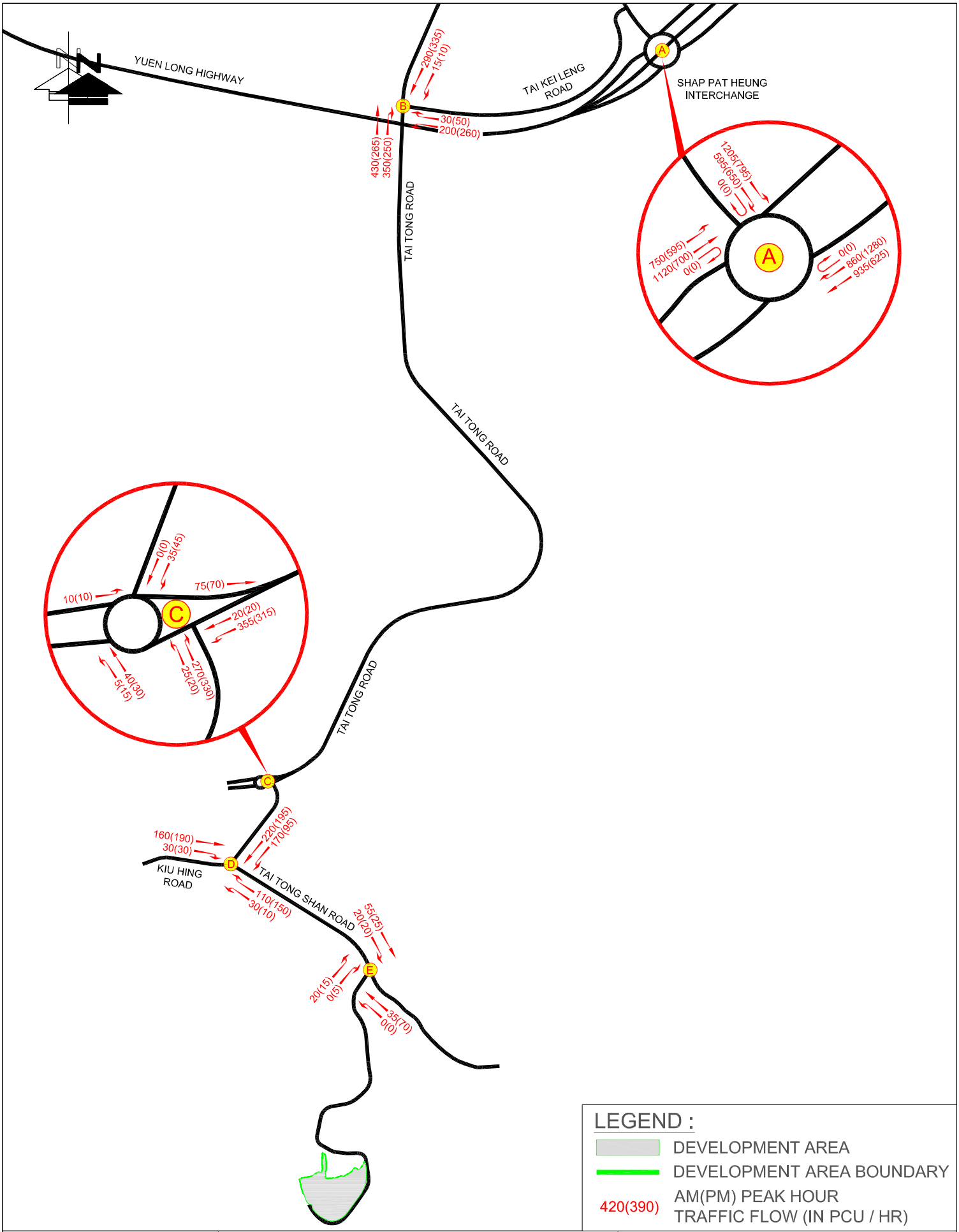
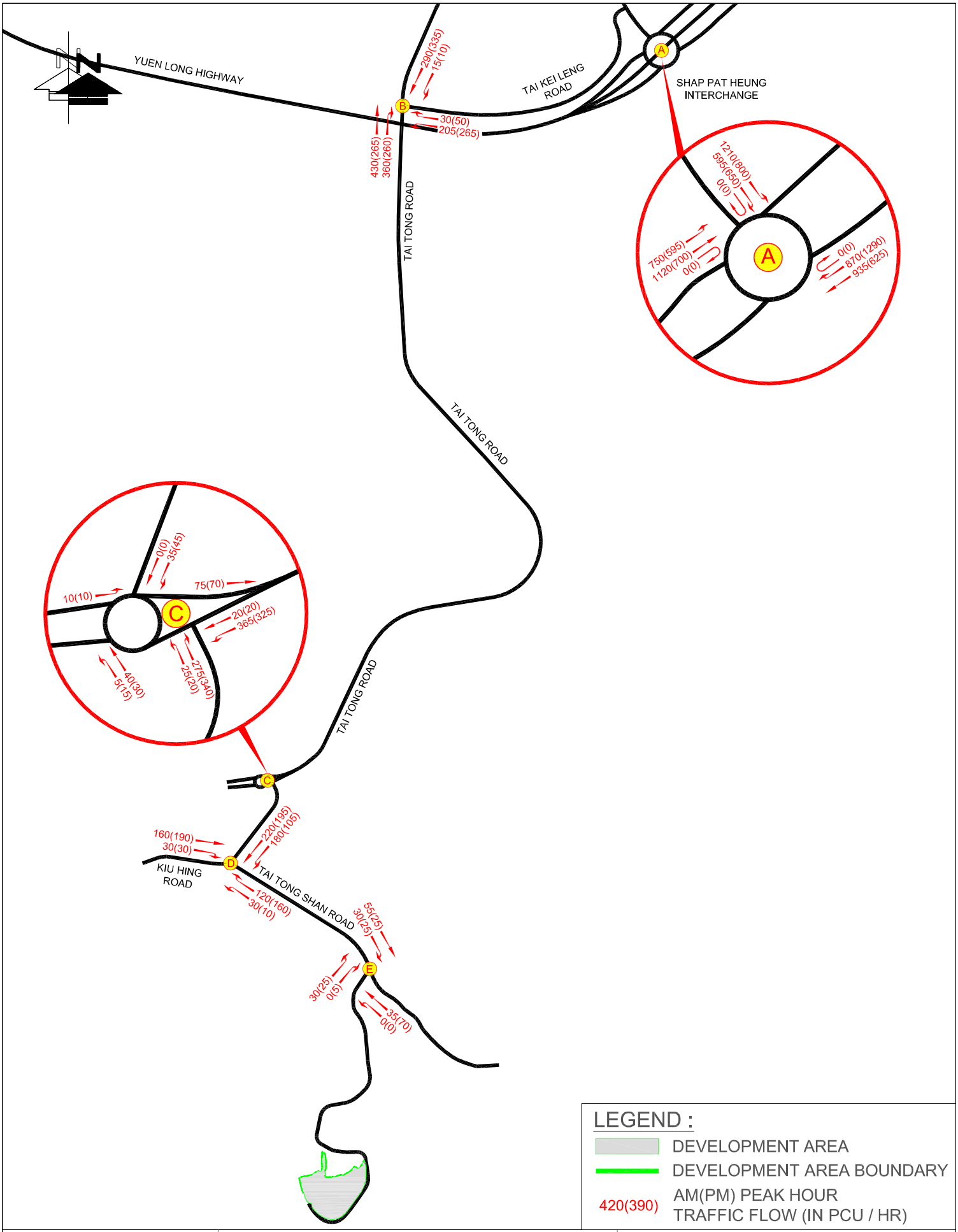


FIGURE NO.: 4.3	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan TI Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK	DRAWING TITLE: 2033 REFERENCE TRAFFIC FLOWS	
SCALE: N.T.S. @A4 / DATE: 23 JUL 2024		



LEGEND :

- DEVELOPMENT AREA
- DEVELOPMENT AREA BOUNDARY
- 420(390) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 4.4	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan TI Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK	DRAWING TITLE: 2033 DESIGN TRAFFIC FLOWS (NORMAL DAY)	
SCALE: N.T.S. @A4 / DATE: 23 JUL 2024		

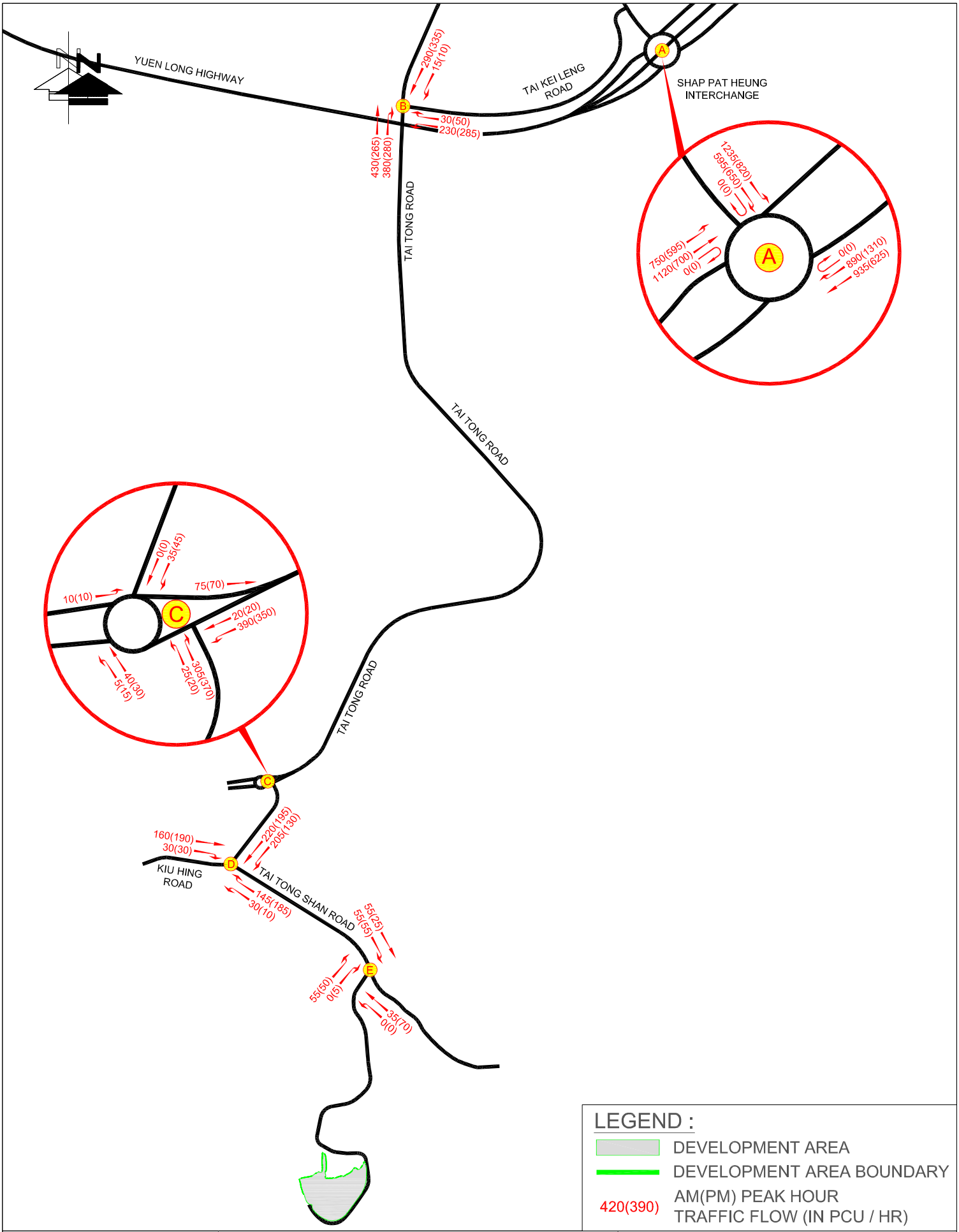


FIGURE NO.: 4.5	PROJECT TITLE: S16 Planning Application and Private Treaty Grant Application for Proposed Religious Development (The Supreme Kwan TI Temple) at Tai Tong, Yuen Long, N.T.	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23132HK	DRAWING TITLE: 2033 DESIGN TRAFFIC FLOWS (CEREMONY / EVENT DAY)	
SCALE: N.T.S. @A4 / DATE: 23 JUL 2024		

APPENDIX A

JUNCTION CALCULATION SHEETS

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: 23132HK Jn A.arc8
Path: \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\23132HK (knc) - S16 & PTG for Religious Facilities at Tai Tong, Yuen Long\Calculation\2024-07-23
Report generation date: 23/7/2024 18:53:46

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	Shap Pat Heung Interchange - 2024 Existing							
Arm 1	1.99	4.39	0.67	A	3.17	6.27	0.76	A
Arm 2	2.50	5.30	0.72	A	1.45	4.18	0.59	A
Arm 3	1.77	3.90	0.64	A	0.99	2.57	0.50	A
	Shap Pat Heung Interchange - 2033 Design (Event Day)(Planned Junction Improvement)							
Arm 1	3.04	6.03	0.75	A	4.22	7.92	0.81	A
Arm 2	4.13	8.00	0.81	A	1.69	4.70	0.63	A
Arm 3	0.31	1.89	0.24	A	0.31	1.70	0.23	A
	Shap Pat Heung Interchange - 2033 Design (Normal Day)(Planned Junction Improvement)							
Arm 1	2.91	5.83	0.75	A	4.01	7.58	0.80	A
Arm 2	4.02	7.79	0.80	A	1.66	4.62	0.62	A
Arm 3	0.31	1.89	0.24	A	0.31	1.70	0.23	A
	Shap Pat Heung Interchange - 2033 Reference (Normal Day)(Planned Junction Improvement)							
Arm 1	2.85	5.74	0.74	A	3.91	7.43	0.80	A
Arm 2	3.97	7.69	0.80	A	1.65	4.59	0.62	A
Arm 3	0.31	1.89	0.24	A	0.31	1.70	0.23	A

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

"D1 - 2024 Existing, AM " model duration: 8:00 - 9:30
"D2 - 2024 Existing, PM" model duration: 8:00 - 9:30
"D9 - 2033 Design (Normal Day)(Planned Junction Improvement), AM" model duration: 8:00 - 9:30
"D10 - 2033 Design (Normal Day)(Planned Junction Improvement), PM" model duration: 8:00 - 9:30
"D11 - 2033 Design (Event Day)(Planned Junction Improvement), AM" model duration: 8:00 - 9:30
"D12 - 2033 Design (Event Day)(Planned Junction Improvement), PM" model duration: 8:00 - 9:30
"D13 - 2033 Reference (Normal Day)(Planned Junction Improvement), AM" model duration: 8:00 - 9:30
"D14 - 2033 Reference (Normal Day)(Planned Junction Improvement), PM" model duration: 8:00 - 9:30

Run using Junctions 8.0.5.523 at 23/7/2024 18:53:42

File summary

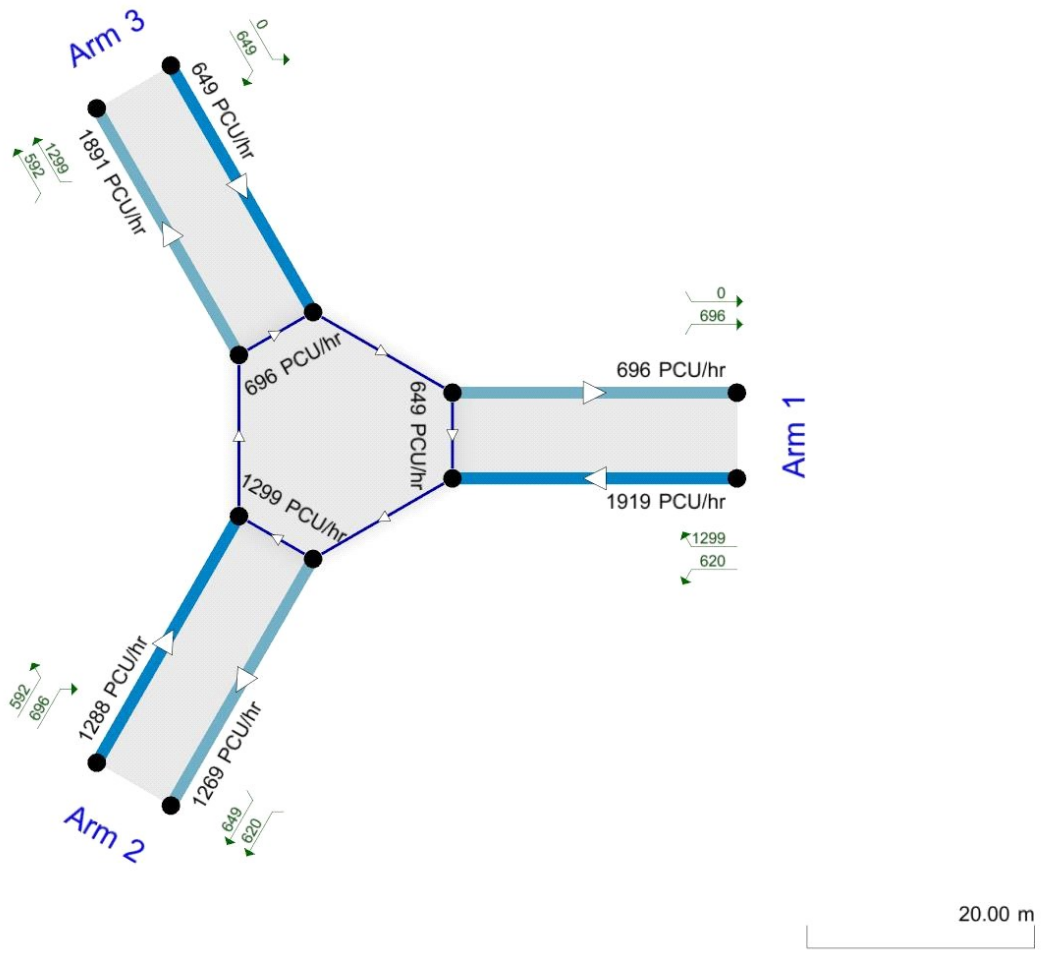
Title	(untitled)
Location	
Site Number	
Date	11/10/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ITADMIN
Description	

Analysis Options

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

Units

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



Showing modelled flow through junction (PCU/hr).
Time Segment: (08:00-08:15)
Showing Analysis Set "A1 - Shap Pat Heung Interchange "; Demand Set "D1 - 2024 Existing, AM "

The junction diagram reflects the last run of ARCADY.

Shap Pat Heung Interchange - 2024 Existing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Shap Pat Heung Interchange	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Existing, AM	2024 Existing	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
E	Shap Pat Heung Interchange	Roundabout	1,2,3			4.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Yuen Long Highway west bound	
2	2	Yuen Long Highway east bound	
3	3	Shap Pat Heung road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	8.20	9.70	20.00	26.36	100.00	41.00	
2	8.58	9.50	20.00	36.67	100.00	34.00	
3	11.50	12.00	25.00	29.00	100.00	67.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.595	2775.943
2		(calculated)	(calculated)	0.615	2866.468
3		(calculated)	(calculated)	0.638	3216.272

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	FLAT	✓	1635.00	100.000
2	FLAT	✓	1705.00	100.000
3	FLAT	✓	1640.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	850.000	785.000
	2	1025.000	0.000	680.000
	3	1100.000	540.000	0.000

Turning Proportions (PCU) - Junction E (for whole period)

		To		
		1	2	3
From	1	0.00	0.52	0.48
	2	0.60	0.00	0.40
	3	0.67	0.33	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction E (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction E (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.67	4.39	1.99	A
2	0.72	5.30	2.50	A
3	0.64	3.90	1.77	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1635.00	1627.15	537.70	0.00	2456.26	0.666	1.96	4.302	A
2	1705.00	1695.19	781.23	0.00	2386.35	0.714	2.45	5.138	A
3	1640.00	1633.00	1019.10	0.00	2566.36	0.639	1.75	3.829	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1635.00	1634.93	539.98	0.00	2454.90	0.666	1.98	4.390	A
2	1705.00	1704.88	784.97	0.00	2384.06	0.715	2.48	5.298	A
3	1640.00	1639.94	1024.93	0.00	2562.65	0.640	1.77	3.901	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1635.00	1634.98	539.99	0.00	2454.89	0.666	1.98	4.390	A
2	1705.00	1704.96	784.99	0.00	2384.04	0.715	2.49	5.301	A
3	1640.00	1639.98	1024.98	0.00	2562.61	0.640	1.77	3.901	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1635.00	1634.99	540.00	0.00	2454.89	0.666	1.99	4.390	A
2	1705.00	1704.98	785.00	0.00	2384.04	0.715	2.50	5.301	A
3	1640.00	1639.99	1024.99	0.00	2562.61	0.640	1.77	3.901	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1635.00	1634.99	540.00	0.00	2454.89	0.666	1.99	4.390	A
2	1705.00	1704.99	785.00	0.00	2384.04	0.715	2.50	5.301	A
3	1640.00	1640.00	1024.99	0.00	2562.60	0.640	1.77	3.901	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1635.00	1635.00	540.00	0.00	2454.89	0.666	1.99	4.390	A
2	1705.00	1704.99	785.00	0.00	2384.04	0.715	2.50	5.301	A
3	1640.00	1640.00	1025.00	0.00	2562.60	0.640	1.77	3.901	A

Shap Pat Heung Interchange - 2024 Existing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Shap Pat Heung Interchange	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Existing, PM	2024 Existing	PM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
E	Shap Pat Heung Interchange	Roundabout	1,2,3			4.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Yuen Long Highway west bound	
2	2	Yuen Long Highway east bound	
3	3	Shap Pat Heung road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	8.20	9.70	20.00	26.36	100.00	41.00	
2	8.58	9.50	20.00	36.67	100.00	34.00	
3	11.50	12.00	25.00	29.00	100.00	67.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.595	2775.943
2		(calculated)	(calculated)	0.615	2866.468
3		(calculated)	(calculated)	0.638	3216.272

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	FLAT	✓	1830.00	100.000
2	FLAT	✓	1250.00	100.000
3	FLAT	✓	1385.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	600.000	1230.000
	2	675.000	0.000	575.000
	3	760.000	625.000	0.000

Turning Proportions (PCU) - Junction E (for whole period)

		To		
		1	2	3
From	1	0.00	0.33	0.67
	2	0.54	0.00	0.46
	3	0.55	0.45	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction E (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction E (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.76	6.27	3.17	A
2	0.59	4.18	1.45	A
3	0.50	2.57	0.99	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1830.00	1817.63	623.23	0.00	2405.40	0.761	3.09	6.006	A
2	1250.00	1244.29	1221.69	0.00	2115.67	0.591	1.43	4.106	A
3	1385.00	1381.07	671.92	0.00	2787.77	0.497	0.98	2.551	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1830.00	1829.81	624.99	0.00	2404.35	0.761	3.14	6.259	A
2	1250.00	1249.94	1229.87	0.00	2110.64	0.592	1.44	4.182	A
3	1385.00	1384.98	674.97	0.00	2785.82	0.497	0.99	2.569	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1830.00	1829.94	625.00	0.00	2404.35	0.761	3.16	6.264	A
2	1250.00	1249.99	1229.96	0.00	2110.58	0.592	1.45	4.182	A
3	1385.00	1385.00	674.99	0.00	2785.81	0.497	0.99	2.569	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1830.00	1829.97	625.00	0.00	2404.35	0.761	3.16	6.264	A
2	1250.00	1249.99	1229.98	0.00	2110.57	0.592	1.45	4.182	A
3	1385.00	1385.00	675.00	0.00	2785.81	0.497	0.99	2.569	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1830.00	1829.98	625.00	0.00	2404.35	0.761	3.17	6.267	A
2	1250.00	1250.00	1229.99	0.00	2110.57	0.592	1.45	4.182	A
3	1385.00	1385.00	675.00	0.00	2785.81	0.497	0.99	2.569	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1830.00	1829.99	625.00	0.00	2404.35	0.761	3.17	6.267	A
2	1250.00	1250.00	1229.99	0.00	2110.56	0.592	1.45	4.182	A
3	1385.00	1385.00	675.00	0.00	2785.81	0.497	0.99	2.569	A

Shap Pat Heung Interchange - 2033 Design (Normal Day)(Planned Junction Improvement), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Shap Pat Heung Interchange	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Normal Day)(Planned Junction Improvement), AM	2033 Design (Normal Day)(Planned Junction Improvement)	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
E	Shap Pat Heung Interchange	Roundabout	1,2,3			6.14	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Yuen Long Highway west bound	
2	2	Yuen Long Highway east bound	
3	3	Shap Pat Heung road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	8.20	9.70	20.00	26.36	100.00	41.00	
2	8.58	9.50	20.00	36.67	100.00	34.00	
3	11.50	12.00	25.00	29.00	100.00	67.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.595	2775.943
2		(calculated)	(calculated)	0.615	2866.468
3		(calculated)	(calculated)	0.638	3216.272

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	FLAT	✓	1805.00	100.000
2	FLAT	✓	1870.00	100.000
3	FLAT	✓	595.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	935.000	870.000
	2	1120.000	0.000	750.000
	3	0.000	595.000	0.000

Turning Proportions (PCU) - Junction E (for whole period)

		To		
		1	2	3
From	1	0.00	0.52	0.48
	2	0.60	0.00	0.40
	3	0.00	1.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction E (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction E (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.75	5.83	2.91	A
2	0.80	7.79	4.02	A
3	0.24	1.89	0.31	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1805.00	1793.60	593.76	0.00	2422.92	0.745	2.85	5.622	A
2	1870.00	1854.56	864.51	0.00	2335.18	0.801	3.86	7.274	A
3	595.00	593.76	1110.76	0.00	2507.91	0.237	0.31	1.880	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1805.00	1804.85	595.00	0.00	2422.19	0.745	2.89	5.827	A
2	1870.00	1869.61	869.93	0.00	2331.84	0.802	3.96	7.771	A
3	595.00	595.00	1119.76	0.00	2502.17	0.238	0.31	1.886	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1805.00	1804.95	595.00	0.00	2422.19	0.745	2.90	5.830	A
2	1870.00	1869.87	869.98	0.00	2331.82	0.802	3.99	7.784	A
3	595.00	595.00	1119.92	0.00	2502.06	0.238	0.31	1.886	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1805.00	1804.98	595.00	0.00	2422.19	0.745	2.91	5.832	A
2	1870.00	1869.94	869.99	0.00	2331.81	0.802	4.00	7.789	A
3	595.00	595.00	1119.96	0.00	2502.04	0.238	0.31	1.886	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1805.00	1804.99	595.00	0.00	2422.19	0.745	2.91	5.832	A
2	1870.00	1869.96	869.99	0.00	2331.80	0.802	4.01	7.790	A
3	595.00	595.00	1119.98	0.00	2502.03	0.238	0.31	1.886	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1805.00	1804.99	595.00	0.00	2422.19	0.745	2.91	5.832	A
2	1870.00	1869.98	870.00	0.00	2331.80	0.802	4.02	7.792	A
3	595.00	595.00	1119.99	0.00	2502.02	0.238	0.31	1.886	A

Shap Pat Heung Interchange - 2033 Design (Normal Day)(Planned Junction Improvement), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Shap Pat Heung Interchange	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Normal Day)(Planned Junction Improvement), PM	2033 Design (Normal Day)(Planned Junction Improvement)	PM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
E	Shap Pat Heung Interchange	Roundabout	1,2,3			5.60	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Yuen Long Highway west bound	
2	2	Yuen Long Highway east bound	
3	3	Shap Pat Heung road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	8.20	9.70	20.00	26.36	100.00	41.00	
2	8.58	9.50	20.00	36.67	100.00	34.00	
3	11.50	12.00	25.00	29.00	100.00	67.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.595	2775.943
2		(calculated)	(calculated)	0.615	2866.468
3		(calculated)	(calculated)	0.638	3216.272

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	FLAT	✓	1915.00	100.000
2	FLAT	✓	1295.00	100.000
3	FLAT	✓	650.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	625.000	1290.000
	2	700.000	0.000	595.000
	3	0.000	650.000	0.000

Turning Proportions (PCU) - Junction E (for whole period)

		To		
		1	2	3
From	1	0.00	0.33	0.67
	2	0.54	0.00	0.46
	3	0.00	1.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction E (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction E (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.80	7.58	4.01	A
2	0.62	4.62	1.66	A
3	0.23	1.70	0.31	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1915.00	1899.52	648.78	0.00	2390.21	0.801	3.87	7.127	A
2	1295.00	1288.49	1279.57	0.00	2080.10	0.623	1.63	4.511	A
3	650.00	648.78	696.48	0.00	2772.11	0.234	0.31	1.695	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1915.00	1914.68	650.00	0.00	2389.49	0.801	3.95	7.568	A
2	1295.00	1294.91	1289.78	0.00	2073.82	0.624	1.65	4.621	A
3	650.00	650.00	699.95	0.00	2769.89	0.235	0.31	1.697	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1915.00	1914.89	650.00	0.00	2389.49	0.801	3.98	7.577	A
2	1295.00	1294.98	1289.93	0.00	2073.73	0.624	1.65	4.622	A
3	650.00	650.00	699.99	0.00	2769.87	0.235	0.31	1.697	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1915.00	1914.94	650.00	0.00	2389.49	0.801	3.99	7.580	A
2	1295.00	1294.99	1289.96	0.00	2073.71	0.624	1.66	4.622	A
3	650.00	650.00	699.99	0.00	2769.86	0.235	0.31	1.697	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1915.00	1914.97	650.00	0.00	2389.49	0.801	4.00	7.583	A
2	1295.00	1294.99	1289.98	0.00	2073.70	0.624	1.66	4.622	A
3	650.00	650.00	700.00	0.00	2769.86	0.235	0.31	1.697	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1915.00	1914.98	650.00	0.00	2389.49	0.801	4.01	7.583	A
2	1295.00	1295.00	1289.98	0.00	2073.69	0.624	1.66	4.622	A
3	650.00	650.00	700.00	0.00	2769.86	0.235	0.31	1.697	A

Shap Pat Heung Interchange - 2033 Design (Event Day)(Planned Junction Improvement), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Shap Pat Heung Interchange	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Event Day)(Planned Junction Improvement), AM	2033 Design (Event Day)(Planned Junction Improvement)	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
E	Shap Pat Heung Interchange	Roundabout	1,2,3			6.31	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Yuen Long Highway west bound	
2	2	Yuen Long Highway east bound	
3	3	Shap Pat Heung road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	8.20	9.70	20.00	26.36	100.00	41.00	
2	8.58	9.50	20.00	36.67	100.00	34.00	
3	11.50	12.00	25.00	29.00	100.00	67.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.595	2775.943
2		(calculated)	(calculated)	0.615	2866.468
3		(calculated)	(calculated)	0.638	3216.272

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	FLAT	✓	1825.00	100.000
2	FLAT	✓	1870.00	100.000
3	FLAT	✓	595.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	935.000	890.000
	2	1120.000	0.000	750.000
	3	0.000	595.000	0.000

Turning Proportions (PCU) - Junction E (for whole period)

		To		
		1	2	3
From	1	0.00	0.51	0.49
	2	0.60	0.00	0.40
	3	0.00	1.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction E (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction E (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.75	6.03	3.04	A
2	0.81	8.00	4.13	A
3	0.24	1.89	0.31	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1825.00	1813.11	593.76	0.00	2422.92	0.753	2.97	5.796	A
2	1870.00	1854.18	884.20	0.00	2323.07	0.805	3.95	7.445	A
3	595.00	593.76	1110.53	0.00	2508.06	0.237	0.31	1.880	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1825.00	1824.83	595.00	0.00	2422.19	0.753	3.01	6.022	A
2	1870.00	1869.57	889.92	0.00	2319.56	0.806	4.06	7.980	A
3	595.00	595.00	1119.75	0.00	2502.18	0.238	0.31	1.886	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1825.00	1824.94	595.00	0.00	2422.19	0.753	3.03	6.025	A
2	1870.00	1869.86	889.97	0.00	2319.53	0.806	4.09	7.995	A
3	595.00	595.00	1119.92	0.00	2502.07	0.238	0.31	1.886	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1825.00	1824.97	595.00	0.00	2422.19	0.753	3.04	6.027	A
2	1870.00	1869.93	889.99	0.00	2319.52	0.806	4.11	8.000	A
3	595.00	595.00	1119.96	0.00	2502.04	0.238	0.31	1.886	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1825.00	1824.98	595.00	0.00	2422.19	0.753	3.04	6.027	A
2	1870.00	1869.96	889.99	0.00	2319.51	0.806	4.12	8.002	A
3	595.00	595.00	1119.98	0.00	2502.03	0.238	0.31	1.886	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1825.00	1824.99	595.00	0.00	2422.19	0.753	3.04	6.027	A
2	1870.00	1869.97	889.99	0.00	2319.51	0.806	4.13	8.003	A
3	595.00	595.00	1119.98	0.00	2502.02	0.238	0.31	1.886	A

Shap Pat Heung Interchange - 2033 Design (Event Day)(Planned Junction Improvement), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Shap Pat Heung Interchange	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Event Day)(Planned Junction Improvement), PM	2033 Design (Event Day)(Planned Junction Improvement)	PM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
E	Shap Pat Heung Interchange	Roundabout	1,2,3			5.80	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Yuen Long Highway west bound	
2	2	Yuen Long Highway east bound	
3	3	Shap Pat Heung road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	8.20	9.70	20.00	26.36	100.00	41.00	
2	8.58	9.50	20.00	36.67	100.00	34.00	
3	11.50	12.00	25.00	29.00	100.00	67.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.595	2775.943
2		(calculated)	(calculated)	0.615	2866.468
3		(calculated)	(calculated)	0.638	3216.272

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	FLAT	✓	1935.00	100.000
2	FLAT	✓	1295.00	100.000
3	FLAT	✓	650.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	625.000	1310.000
	2	700.000	0.000	595.000
	3	0.000	650.000	0.000

Turning Proportions (PCU) - Junction E (for whole period)

		To		
		1	2	3
From	1	0.00	0.32	0.68
	2	0.54	0.00	0.46
	3	0.00	1.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction E (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction E (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.81	7.92	4.22	A
2	0.63	4.70	1.69	A
3	0.23	1.70	0.31	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1935.00	1918.72	648.78	0.00	2390.21	0.810	4.07	7.399	A
2	1295.00	1288.39	1298.98	0.00	2068.17	0.626	1.65	4.579	A
3	650.00	648.78	696.43	0.00	2772.14	0.234	0.31	1.695	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1935.00	1934.63	650.00	0.00	2389.49	0.810	4.16	7.897	A
2	1295.00	1294.91	1309.75	0.00	2061.55	0.628	1.67	4.695	A
3	650.00	650.00	699.95	0.00	2769.89	0.235	0.31	1.697	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1935.00	1934.87	650.00	0.00	2389.49	0.810	4.19	7.909	A
2	1295.00	1294.98	1309.91	0.00	2061.45	0.628	1.68	4.696	A
3	650.00	650.00	699.99	0.00	2769.87	0.235	0.31	1.697	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1935.00	1934.94	650.00	0.00	2389.49	0.810	4.21	7.913	A
2	1295.00	1294.99	1309.96	0.00	2061.42	0.628	1.68	4.696	A
3	650.00	650.00	699.99	0.00	2769.86	0.235	0.31	1.697	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1935.00	1934.96	650.00	0.00	2389.49	0.810	4.22	7.912	A
2	1295.00	1294.99	1309.97	0.00	2061.41	0.628	1.68	4.696	A
3	650.00	650.00	700.00	0.00	2769.86	0.235	0.31	1.697	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1935.00	1934.97	650.00	0.00	2389.49	0.810	4.22	7.916	A
2	1295.00	1295.00	1309.98	0.00	2061.40	0.628	1.69	4.696	A
3	650.00	650.00	700.00	0.00	2769.86	0.235	0.31	1.697	A

Shap Pat Heung Interchange - 2033 Reference (Normal Day)(Planned Junction Improvement), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Shap Pat Heung Interchange	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Reference (Normal Day)(Planned Junction Improvement), AM	2033 Reference (Normal Day) (Planned Junction Improvement)	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
E	Shap Pat Heung Interchange	Roundabout	1,2,3			6.06	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Yuen Long Highway west bound	
2	2	Yuen Long Highway east bound	
3	3	Shap Pat Heung road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	8.20	9.70	20.00	26.36	100.00	41.00	
2	8.58	9.50	20.00	36.67	100.00	34.00	
3	11.50	12.00	25.00	29.00	100.00	67.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.595	2775.943
2		(calculated)	(calculated)	0.615	2866.468
3		(calculated)	(calculated)	0.638	3216.272

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	FLAT	✓	1795.00	100.000
2	FLAT	✓	1870.00	100.000
3	FLAT	✓	595.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	935.000	860.000
	2	1120.000	0.000	750.000
	3	0.000	595.000	0.000

Turning Proportions (PCU) - Junction E (for whole period)

		To		
		1	2	3
From	1	0.00	0.52	0.48
	2	0.60	0.00	0.40
	3	0.00	1.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction E (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction E (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.74	5.74	2.85	A
2	0.80	7.69	3.97	A
3	0.24	1.89	0.31	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1795.00	1783.84	593.76	0.00	2422.92	0.741	2.79	5.539	A
2	1870.00	1854.75	854.65	0.00	2341.23	0.799	3.81	7.190	A
3	595.00	593.76	1110.87	0.00	2507.84	0.237	0.31	1.881	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1795.00	1794.86	595.00	0.00	2422.19	0.741	2.83	5.734	A
2	1870.00	1869.62	859.93	0.00	2337.99	0.800	3.91	7.671	A
3	595.00	595.00	1119.77	0.00	2502.16	0.238	0.31	1.886	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1795.00	1794.95	595.00	0.00	2422.19	0.741	2.84	5.737	A
2	1870.00	1869.88	859.98	0.00	2337.96	0.800	3.94	7.682	A
3	595.00	595.00	1119.93	0.00	2502.06	0.238	0.31	1.886	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1795.00	1794.98	595.00	0.00	2422.19	0.741	2.84	5.739	A
2	1870.00	1869.94	859.99	0.00	2337.95	0.800	3.95	7.686	A
3	595.00	595.00	1119.96	0.00	2502.04	0.238	0.31	1.886	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1795.00	1794.99	595.00	0.00	2422.19	0.741	2.85	5.739	A
2	1870.00	1869.96	859.99	0.00	2337.95	0.800	3.96	7.688	A
3	595.00	595.00	1119.98	0.00	2502.03	0.238	0.31	1.886	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1795.00	1794.99	595.00	0.00	2422.19	0.741	2.85	5.739	A
2	1870.00	1869.98	860.00	0.00	2337.95	0.800	3.97	7.689	A
3	595.00	595.00	1119.99	0.00	2502.02	0.238	0.31	1.886	A

Shap Pat Heung Interchange - 2033 Reference (Normal Day)(Planned Junction Improvement), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Shap Pat Heung Interchange	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Reference (Normal Day)(Planned Junction Improvement), PM	2033 Reference (Normal Day) (Planned Junction Improvement)	PM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
E	Shap Pat Heung Interchange	Roundabout	1,2,3			5.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Yuen Long Highway west bound	
2	2	Yuen Long Highway east bound	
3	3	Shap Pat Heung road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	8.20	9.70	20.00	26.36	100.00	41.00	
2	8.58	9.50	20.00	36.67	100.00	34.00	
3	11.50	12.00	25.00	29.00	100.00	67.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.595	2775.943
2		(calculated)	(calculated)	0.615	2866.468
3		(calculated)	(calculated)	0.638	3216.272

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	FLAT	✓	1905.00	100.000
2	FLAT	✓	1295.00	100.000
3	FLAT	✓	650.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	625.000	1280.000
	2	700.000	0.000	595.000
	3	0.000	650.000	0.000

Turning Proportions (PCU) - Junction E (for whole period)

		To		
		1	2	3
From	1	0.00	0.33	0.67
	2	0.54	0.00	0.46
	3	0.00	1.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction E (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction E (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.80	7.43	3.91	A
2	0.62	4.59	1.65	A
3	0.23	1.70	0.31	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1905.00	1889.89	648.78	0.00	2390.21	0.797	3.78	6.998	A
2	1295.00	1288.54	1269.85	0.00	2086.07	0.621	1.62	4.479	A
3	650.00	648.78	696.51	0.00	2772.09	0.234	0.31	1.695	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1905.00	1904.70	650.00	0.00	2389.49	0.797	3.85	7.412	A
2	1295.00	1294.92	1279.80	0.00	2079.96	0.623	1.64	4.585	A
3	650.00	650.00	699.96	0.00	2769.89	0.235	0.31	1.697	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1905.00	1904.90	650.00	0.00	2389.49	0.797	3.88	7.420	A
2	1295.00	1294.98	1279.93	0.00	2079.87	0.623	1.64	4.586	A
3	650.00	650.00	699.99	0.00	2769.87	0.235	0.31	1.697	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1905.00	1904.95	650.00	0.00	2389.49	0.797	3.89	7.423	A
2	1295.00	1294.99	1279.96	0.00	2079.85	0.623	1.64	4.586	A
3	650.00	650.00	699.99	0.00	2769.86	0.235	0.31	1.697	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1905.00	1904.97	650.00	0.00	2389.49	0.797	3.90	7.426	A
2	1295.00	1294.99	1279.98	0.00	2079.84	0.623	1.65	4.586	A
3	650.00	650.00	700.00	0.00	2769.86	0.235	0.31	1.697	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1905.00	1904.98	650.00	0.00	2389.49	0.797	3.91	7.426	A
2	1295.00	1295.00	1279.99	0.00	2079.84	0.623	1.65	4.586	A
3	650.00	650.00	700.00	0.00	2769.86	0.235	0.31	1.697	A

TRAFFIC SIGNALS CALCULATION Job No: 23132HK **CTA Consultants Ltd.**

Junction: **Tai Tong Road / Tai Kei Leng Road J(B)**
Description: **2024 Observed Traffic Flows**

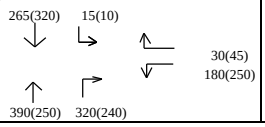
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak		
						Left	Right		A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tai Tong Road	N		A	2	5.2	0	15	1	45%	49%	2135	2135	2045	2035	2045	2035	710	0.347	0.347	490	0.241	0.241
Tai Kei Leng Road	E		B	3	3.3	0	15	0	100%	100%	2085	2085	1895	1895	1895	1895	30	0.016		45	0.024	
Tai Kei Leng Road	E		B	3	3.2	15	0	1	100%	100%	1935	1935	1760	1760	1760	1760	180	0.102	0.102	250	0.142	0.142
Tai Tong Road	S		C	1	3.4	0	15	1	5%	3%	1955	1955	1945	1950	1945	1950	280	0.144	0.144	330	0.169	0.169

Pedestrian crossing

Dp	Min. green time = 5Gm + 5 FGm = 10s
Ep	Min. green time = 5Gm + 6 FGm = 11s
Fp	Min. green time = 5Gm + 6 FGm = 11s
Gp	Min. green time = 5Gm + 5 FGm = 10s

Notes:

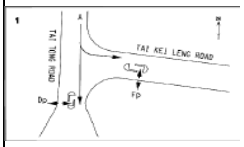
Traffic Flow (pcu / hr)

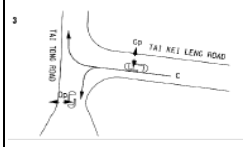


A.M. Check Phase	
ey	0.593
L (sec)	12
C (sec)	120
y pract.	0.810
R.C. (%)	**36%**

P.M. Check Phase	
ey	0.552
L (sec)	12
C (sec)	120
y pract.	0.810
R.C. (%)	**47%**

Stage / Phase Diagrams





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TRAFFIC SIGNALS CALCULATION Job No: 23132HK **CTA Consultants Ltd.**

Junction: **Tai Tong Road / Tai Kei Leng Road J(B)**

Description: **2033 Reference Traffic Flows(With Planned Junction Improvement)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak		
						Left	Right		A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tai Tong Road	N		A	2	6.0	0	15	1	45%	49%	2215	2215	2120	2110	2120	2110	780	0.368	0.368	515	0.244	0.244
Tai Kei Leng Road	E		B	3	3.3	0	15	0	100%	100%	2085	2085	1895	1895	1895	1895	30	0.016		50	0.026	
Tai Kei Leng Road	E		B	3	3.2	15	0	1	100%	100%	1935	1935	1760	1760	1760	1760	200	0.114	0.114	260	0.148	0.148
Tai Tong Road	S		C	1	3.4	0	15	1	5%	3%	1955	1955	1945	1950	1945	1950	305	0.157	0.157	345	0.177	0.177

Pedestrian crossing

Dp	Min. green time = 5Gm + 5 FGm = 10s
Ep	Min. green time = 5Gm + 6 FGm = 11s
Fp	Min. green time = 5Gm + 6 FGm = 11s
Gp	Min. green time = 5Gm + 5 FGm = 10s

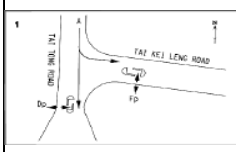
Notes:

Traffic Flow (pcu / hr)

290(335) 15(10) 30(50) 200(260) 430(265) 350(250)

A.M. Check Phase		P.M. Check Phase	
ey	0.638	ey	0.569
L (sec)	12	L (sec)	12
C (sec)	120	C (sec)	120
y pract.	0.810	y pract.	0.810
R.C. (%)	**27%**	R.C. (%)	**42%**

Stage / Phase Diagrams



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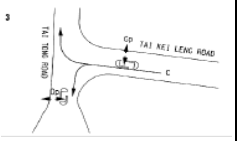

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TRAFFIC SIGNALS CALCULATION Job No: 23132HK **CTA Consultants Ltd.**

Junction: **Tai Tong Road / Tai Kei Leng Road J(B)**

Description: **2033 Design Traffic Flows (Normal (Non-Ceremony/Event) Day)(With Planned Junction Improvement)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak		
						Left	Right		A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tai Tong Road	N		A	2	6.0	0	15	1	46%	50%	2215	2215	2120	2110	2120	2110	790	0.373	0.373	525	0.249	0.249
Tai Kei Leng Road	E		B	3	3.3	0	15	0	100%	100%	2085	2085	1895	1895	1895	1895	30	0.016		50	0.026	
Tai Kei Leng Road	E		B	3	3.2	15	0	1	100%	100%	1935	1935	1760	1760	1760	1760	205	0.116	0.116	265	0.151	0.151
Tai Tong Road	S		C	1	3.4	0	15	1	5%	3%	1955	1955	1945	1950	1945	1950	305	0.157	0.157	345	0.177	0.177

Pedestrian crossing

Dp	Min. green time = 5Gm + 5 FGm = 10s
Ep	Min. green time = 5Gm + 6 FGm = 11s
Fp	Min. green time = 5Gm + 6 FGm = 11s
Gp	Min. green time = 5Gm + 5 FGm = 10s

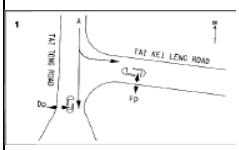
Notes:

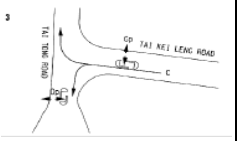
Traffic Flow (pcu / hr)

290(335) 15(10) 30(50) 205(265) 430(265) 360(260)

A.M. Check Phase		P.M. Check Phase	
ey	0.646	ey	0.576
L (sec)	12	L (sec)	12
C (sec)	120	C (sec)	120
y pract.	0.810	y pract.	0.810
R.C. (%)	**25%**	R.C. (%)	**41%**

Stage / Phase Diagrams





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TRAFFIC SIGNALS CALCULATION Job No: 23132HK **CTA Consultants Ltd.**

Junction: **Tai Tong Road / Tai Kei Leng Road J(B)**

Description: **2033 Design Traffic Flows (Ceremony/Event Day)(With Planned Junction Improvement)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak		
						Left	Right		A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tai Tong Road	N		A	2	6.0	0	15	1	47%	51%	2215	2215	2115	2105	2115	2105	810	0.383	0.383	545	0.259	0.259
Tai Kei Leng Road	E		B	3	3.3	0	15	0	100%	100%	2085	2085	1895	1895	1895	1895	30	0.016		50	0.026	
Tai Kei Leng Road	E		B	3	3.2	15	0	1	100%	100%	1935	1935	1760	1760	1760	1760	230	0.131	0.131	285	0.162	0.162
Tai Tong Road	S		C	1	3.4	0	15	1	5%	3%	1955	1955	1945	1950	1945	1950	305	0.157	0.157	345	0.177	0.177

Pedestrian crossing

Dp	Min. green time = 5Gm + 5 FGm = 10s
Ep	Min. green time = 5Gm + 6 FGm = 11s
Fp	Min. green time = 5Gm + 6 FGm = 11s
Gp	Min. green time = 5Gm + 5 FGm = 10s

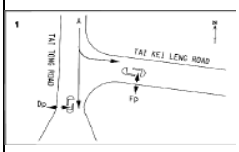
Notes:

Traffic Flow (pcu / hr)

290(335) 15(10) 30(50) 230(285) 430(265) 380(280)

A.M. Check Phase		P.M. Check Phase	
ey	0.670	ey	0.598
L (sec)	12	L (sec)	12
C (sec)	120	C (sec)	120
y pract.	0.810	y pract.	0.810
R.C. (%)	**21%**	R.C. (%)	**36%**

Stage / Phase Diagrams



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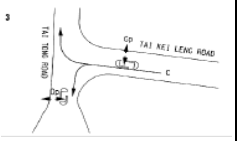

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Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]

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Filename: 23132HK Jn C.arc8
Path: \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\23132HK (knc) - S16 & PTG for Religious Facilities at Tai Tong, Yuen Long\Calculation\2024-07-23
Report generation date: 23/7/2024 19:01:44

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2024 Existing							
Stream B-A	0.75	11.03	0.43	B	1.26	14.21	0.56	B
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-C	0.04	6.35	0.04	A	0.04	6.53	0.03	A
	A1 - 2033 Design (Event Day)							
Stream B-A	1.17	13.92	0.54	B	1.85	18.11	0.65	C
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-C	0.05	6.64	0.04	A	0.04	6.77	0.04	A
	A1 - 2033 Design (Normal Day)							
Stream B-A	0.94	12.36	0.49	B	1.46	15.56	0.60	C
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-C	0.05	6.50	0.04	A	0.04	6.62	0.04	A
	A1 - 2033 Reference							
Stream B-A	0.90	12.11	0.48	B	1.35	14.85	0.58	B
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-C	0.04	6.47	0.04	A	0.04	6.57	0.04	A

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

"D1 - 2024 Existing, AM " model duration: 8:00 - 9:30
"D2 - 2024 Existing, PM" model duration: 18:00 - 19:30
"D3 - 2033 Reference, AM" model duration: 8:00 - 9:30
"D4 - 2033 Reference, PM" model duration: 18:00 - 19:30
"D5 - 2033 Design (Normal Day), AM" model duration: 8:00 - 9:30
"D6 - 2033 Design (Normal Day), PM" model duration: 18:00 - 19:30
"D7 - 2033 Design (Event Day), AM" model duration: 8:00 - 9:30
"D8 - 2033 Design (Event Day), PM" model duration: 18:00 - 19:30

Run using Junctions 8.0.5.523 at 23/7/2024 19:01:39

File summary

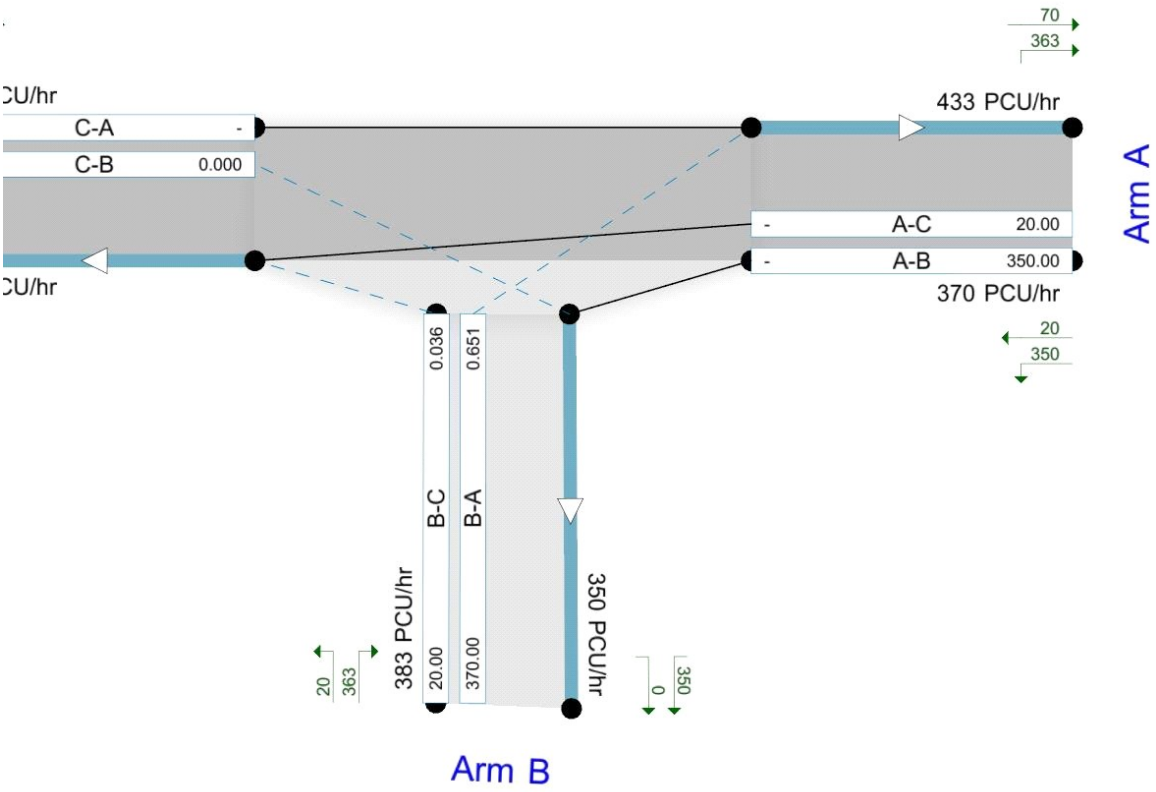
Title	(untitled)
Location	
Site Number	
Date	29/1/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	user
Description	

Analysis Options

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

Units

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



Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (08:00-08:15)
Showing Analysis Set "A1 "; Demand Set "D1 - 2024 Existing, AM "

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2024 Existing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Existing, AM	2024 Existing	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.60	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		3.70	5.00								50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.105	0.265	0.167	0.379
1	B-C	701.346	0.100	0.252	-	-
1	C-B	602.919	0.216	0.216	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	345.00	100.000
B	FLAT	✓	270.00	100.000
C	FLAT	✓	70.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	325.000	20.000
	B	245.000	0.000	25.000
	C	70.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.94	0.06
	B	0.91	0.00	0.09
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A	0.43	11.03	0.75	B
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.00	0.00	0.00	A
A-C	-	-	-	-
B-C	0.04	6.35	0.04	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	245.00	242.06	0.00	571.23	0.429	0.74	10.844	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	24.83	0.00	592.77	0.042	0.04	6.337	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	245.00	244.97	0.00	571.23	0.429	0.74	11.032	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	591.91	0.042	0.04	6.349	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	245.00	244.99	0.00	571.23	0.429	0.75	11.034	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	591.90	0.042	0.04	6.349	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	245.00	244.99	0.00	571.23	0.429	0.75	11.034	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	591.90	0.042	0.04	6.349	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	245.00	245.00	0.00	571.23	0.429	0.75	11.034	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	591.90	0.042	0.04	6.349	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	245.00	245.00	0.00	571.23	0.429	0.75	11.034	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	591.90	0.042	0.04	6.349	A

(Default Analysis Set) - 2024 Existing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Existing, PM	2024 Existing	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	13.75	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		3.70	5.00								50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.105	0.265	0.167	0.379
1	B-C	701.346	0.100	0.252	-	-
1	C-B	602.919	0.216	0.216	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	325.00	100.000
B	FLAT	✓	340.00	100.000
C	FLAT	✓	70.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	305.000	20.000
	B	320.000	0.000	20.000
	C	70.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.94	0.06
	B	0.94	0.00	0.06
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A	0.56	14.21	1.26	B
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.00	0.00	0.00	A
A-C	-	-	-	-
B-C	0.03	6.53	0.04	A

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	320.00	315.12	0.00	573.33	0.558	1.22	13.699	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	305.00	305.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	532.61	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	19.86	0.00	573.03	0.035	0.04	6.506	A

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	320.00	319.92	0.00	573.33	0.558	1.24	14.193	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	305.00	305.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	532.61	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	571.61	0.035	0.04	6.525	A

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	320.00	319.97	0.00	573.33	0.558	1.25	14.201	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	305.00	305.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	532.61	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	571.58	0.035	0.04	6.525	A

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	320.00	319.99	0.00	573.33	0.558	1.25	14.204	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	305.00	305.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	532.61	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	571.58	0.035	0.04	6.525	A

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	320.00	319.99	0.00	573.33	0.558	1.25	14.207	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	305.00	305.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	532.61	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	571.57	0.035	0.04	6.526	A

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	320.00	319.99	0.00	573.33	0.558	1.26	14.207	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	305.00	305.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	532.61	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	571.57	0.035	0.04	6.526	A

(Default Analysis Set) - 2033 Reference, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Reference, AM	2033 Reference	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	11.63	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		3.70	5.00								50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.105	0.265	0.167	0.379
1	B-C	701.346	0.100	0.252	-	-
1	C-B	602.919	0.216	0.216	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	375.00	100.000
B	FLAT	✓	295.00	100.000
C	FLAT	✓	75.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	355.000	20.000
	B	270.000	0.000	25.000
	C	75.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.95	0.05
	B	0.92	0.00	0.08
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A	0.48	12.11	0.90	B
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.00	0.00	0.00	A
A-C	-	-	-	-
B-C	0.04	6.47	0.04	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	270.00	266.46	0.00	567.24	0.476	0.89	11.836	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	355.00	355.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	521.80	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	24.82	0.00	582.32	0.043	0.04	6.456	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	270.00	269.96	0.00	567.24	0.476	0.90	12.105	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	355.00	355.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	521.80	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	581.29	0.043	0.04	6.470	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	270.00	269.98	0.00	567.24	0.476	0.90	12.108	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	355.00	355.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	521.80	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	581.27	0.043	0.04	6.470	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	270.00	269.99	0.00	567.24	0.476	0.90	12.108	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	355.00	355.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	521.80	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	581.27	0.043	0.04	6.470	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	270.00	270.00	0.00	567.24	0.476	0.90	12.110	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	355.00	355.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	521.80	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	581.27	0.043	0.04	6.470	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	270.00	270.00	0.00	567.24	0.476	0.90	12.110	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	355.00	355.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	521.80	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	581.27	0.043	0.04	6.470	A

(Default Analysis Set) - 2033 Reference, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Reference, PM	2033 Reference	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	14.38	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		3.70	5.00								50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.105	0.265	0.167	0.379
1	B-C	701.346	0.100	0.252	-	-
1	C-B	602.919	0.216	0.216	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	335.00	100.000
B	FLAT	✓	350.00	100.000
C	FLAT	✓	70.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	315.000	20.000
	B	330.000	0.000	20.000
	C	70.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.94	0.06
	B	0.94	0.00	0.06
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A	0.58	14.85	1.35	B
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.00	0.00	0.00	A
A-C	-	-	-	-
B-C	0.04	6.57	0.04	A

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	330.00	324.75	0.00	572.28	0.577	1.31	14.263	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	315.00	315.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	530.45	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	19.86	0.00	569.09	0.035	0.04	6.552	A

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	330.00	329.90	0.00	572.28	0.577	1.34	14.837	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	315.00	315.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	530.45	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	567.57	0.035	0.04	6.573	A

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	330.00	329.97	0.00	572.28	0.577	1.34	14.842	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	315.00	315.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	530.45	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	567.54	0.035	0.04	6.574	A

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	330.00	329.98	0.00	572.28	0.577	1.35	14.852	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	315.00	315.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	530.45	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	567.53	0.035	0.04	6.574	A

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	330.00	329.99	0.00	572.28	0.577	1.35	14.852	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	315.00	315.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	530.45	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	567.53	0.035	0.04	6.574	A

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	330.00	329.99	0.00	572.28	0.577	1.35	14.855	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	315.00	315.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	530.45	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	567.52	0.035	0.04	6.574	A

(Default Analysis Set) - 2033 Design (Normal Day), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Normal Day), AM	2033 Design (Normal Day)	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	11.87	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		3.70	5.00								50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.105	0.265	0.167	0.379
1	B-C	701.346	0.100	0.252	-	-
1	C-B	602.919	0.216	0.216	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	385.00	100.000
B	FLAT	✓	300.00	100.000
C	FLAT	✓	75.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	365.000	20.000
	B	275.000	0.000	25.000
	C	75.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.95	0.05
	B	0.92	0.00	0.08
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A	0.49	12.36	0.94	B
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.00	0.00	0.00	A
A-C	-	-	-	-
B-C	0.04	6.50	0.05	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	275.00	271.32	0.00	566.19	0.486	0.92	12.065	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	365.00	365.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	519.63	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	24.82	0.00	579.84	0.043	0.04	6.485	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	275.00	274.95	0.00	566.19	0.486	0.93	12.354	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	365.00	365.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	519.63	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	578.77	0.043	0.04	6.500	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	275.00	274.98	0.00	566.19	0.486	0.94	12.359	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	365.00	365.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	519.63	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	578.75	0.043	0.05	6.500	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	275.00	274.99	0.00	566.19	0.486	0.94	12.359	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	365.00	365.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	519.63	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	578.75	0.043	0.05	6.500	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	275.00	275.00	0.00	566.19	0.486	0.94	12.362	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	365.00	365.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	519.63	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	578.75	0.043	0.05	6.500	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	275.00	275.00	0.00	566.19	0.486	0.94	12.362	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	365.00	365.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	519.63	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	578.74	0.043	0.05	6.500	A

(Default Analysis Set) - 2033 Design (Normal Day), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Normal Day), PM	2033 Design (Normal Day)	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	15.06	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		3.70	5.00								50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.105	0.265	0.167	0.379
1	B-C	701.346	0.100	0.252	-	-
1	C-B	602.919	0.216	0.216	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	345.00	100.000
B	FLAT	✓	360.00	100.000
C	FLAT	✓	70.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	325.000	20.000
	B	340.000	0.000	20.000
	C	70.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.94	0.06
	B	0.94	0.00	0.06
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A	0.60	15.56	1.46	C
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.00	0.00	0.00	A
A-C	-	-	-	-
B-C	0.04	6.62	0.04	A

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	340.00	334.35	0.00	571.23	0.595	1.41	14.873	B
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	19.85	0.00	565.16	0.035	0.04	6.600	A

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	340.00	339.89	0.00	571.23	0.595	1.44	15.539	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	563.52	0.035	0.04	6.622	A

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	340.00	339.96	0.00	571.23	0.595	1.45	15.555	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	563.49	0.035	0.04	6.623	A

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	340.00	339.98	0.00	571.23	0.595	1.45	15.559	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	563.48	0.035	0.04	6.623	A

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	340.00	339.99	0.00	571.23	0.595	1.46	15.561	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	563.47	0.035	0.04	6.623	A

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	340.00	339.99	0.00	571.23	0.595	1.46	15.560	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	325.00	325.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	528.29	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	563.47	0.035	0.04	6.623	A

(Default Analysis Set) - 2033 Design (Event Day), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Event Day), AM	2033 Design (Event Day)	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	13.37	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		3.70	5.00								50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.105	0.265	0.167	0.379
1	B-C	701.346	0.100	0.252	-	-
1	C-B	602.919	0.216	0.216	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	410.00	100.000
B	FLAT	✓	330.00	100.000
C	FLAT	✓	75.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	390.000	20.000
	B	305.000	0.000	25.000
	C	75.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.95	0.05
	B	0.92	0.00	0.08
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A	0.54	13.92	1.17	B
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.00	0.00	0.00	A
A-C	-	-	-	-
B-C	0.04	6.64	0.05	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	305.00	300.43	0.00	563.57	0.541	1.14	13.462	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	390.00	390.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	514.23	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	24.82	0.00	568.53	0.044	0.05	6.619	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	305.00	304.93	0.00	563.57	0.541	1.16	13.908	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	390.00	390.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	514.23	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	567.20	0.044	0.05	6.638	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	305.00	304.97	0.00	563.57	0.541	1.17	13.916	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	390.00	390.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	514.23	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	567.18	0.044	0.05	6.639	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	305.00	304.99	0.00	563.57	0.541	1.17	13.919	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	390.00	390.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	514.23	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	567.17	0.044	0.05	6.639	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	305.00	304.99	0.00	563.57	0.541	1.17	13.919	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	390.00	390.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	514.23	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	567.17	0.044	0.05	6.639	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	305.00	304.99	0.00	563.57	0.541	1.17	13.919	B
C-A	75.00	75.00	0.00	-	-	-	-	-
A-B	390.00	390.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	514.23	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	25.00	25.00	0.00	567.16	0.044	0.05	6.639	A

(Default Analysis Set) - 2033 Design (Event Day), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Event Day), PM	2033 Design (Event Day)	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	17.53	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		3.70	5.00								50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.105	0.265	0.167	0.379
1	B-C	701.346	0.100	0.252	-	-
1	C-B	602.919	0.216	0.216	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	370.00	100.000
B	FLAT	✓	390.00	100.000
C	FLAT	✓	70.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	350.000	20.000
	B	370.000	0.000	20.000
	C	70.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.95	0.05
	B	0.95	0.00	0.05
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A	0.65	18.11	1.85	C
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.00	0.00	0.00	A
A-C	-	-	-	-
B-C	0.04	6.77	0.04	A

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	370.00	362.94	0.00	568.60	0.651	1.76	16.977	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	350.00	350.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	522.88	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	19.85	0.00	553.86	0.036	0.04	6.739	A

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	370.00	369.81	0.00	568.60	0.651	1.81	18.062	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	350.00	350.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	522.88	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	551.81	0.036	0.04	6.768	A

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	370.00	369.93	0.00	568.60	0.651	1.83	18.094	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	350.00	350.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	522.88	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	551.76	0.036	0.04	6.769	A

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	370.00	369.97	0.00	568.60	0.651	1.84	18.104	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	350.00	350.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	522.88	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	551.74	0.036	0.04	6.769	A

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	370.00	369.98	0.00	568.60	0.651	1.84	18.110	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	350.00	350.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	522.88	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	551.73	0.036	0.04	6.769	A

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A	370.00	369.99	0.00	568.60	0.651	1.85	18.113	C
C-A	70.00	70.00	0.00	-	-	-	-	-
A-B	350.00	350.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	522.88	0.000	0.00	0.000	A
A-C	20.00	20.00	0.00	-	-	-	-	-
B-C	20.00	20.00	0.00	551.72	0.036	0.04	6.769	A

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]

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Filename: 23132HK Jn D.arc8
Path: \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\23132HK (knc) - S16 & PTG for Religious Facilities at Tai Tong, Yuen Long\Calculation\2024-07-23
Report generation date: 23/7/2024 19:10:38

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2024 Existing							
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.05	7.23	0.05	A	0.06	7.05	0.06	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-AC	0.31	8.59	0.24	A	0.42	9.67	0.29	A
	A1 - 2033 Design (Event Day)							
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.06	7.55	0.06	A	0.06	7.21	0.06	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-AC	0.50	10.30	0.33	B	0.60	11.20	0.38	B
	A1 - 2033 Design (Normal Day)							
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.06	7.46	0.06	A	0.06	7.13	0.06	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-AC	0.39	9.43	0.28	A	0.48	10.28	0.33	B
	A1 - 2033 Reference							
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.06	7.43	0.06	A	0.06	7.10	0.06	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-AC	0.35	9.11	0.26	A	0.44	9.95	0.31	A

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

"D1 - 2024 Existing, AM " model duration: 8:00 - 9:30
"D2 - 2024 Existing, PM" model duration: 18:00 - 19:30
"D3 - 2033 Reference, AM" model duration: 8:00 - 9:30
"D4 - 2033 Reference, PM" model duration: 18:00 - 19:30
"D5 - 2033 Design (Normal Day), AM" model duration: 8:00 - 9:30
"D6 - 2033 Design (Normal Day), PM" model duration: 18:00 - 19:30
"D7 - 2033 Design (Event Day), AM" model duration: 8:00 - 9:30
"D8 - 2033 Design (Event Day), PM" model duration: 18:00 - 19:30

Run using Junctions 8.0.5.523 at 23/7/2024 19:10:33

File summary

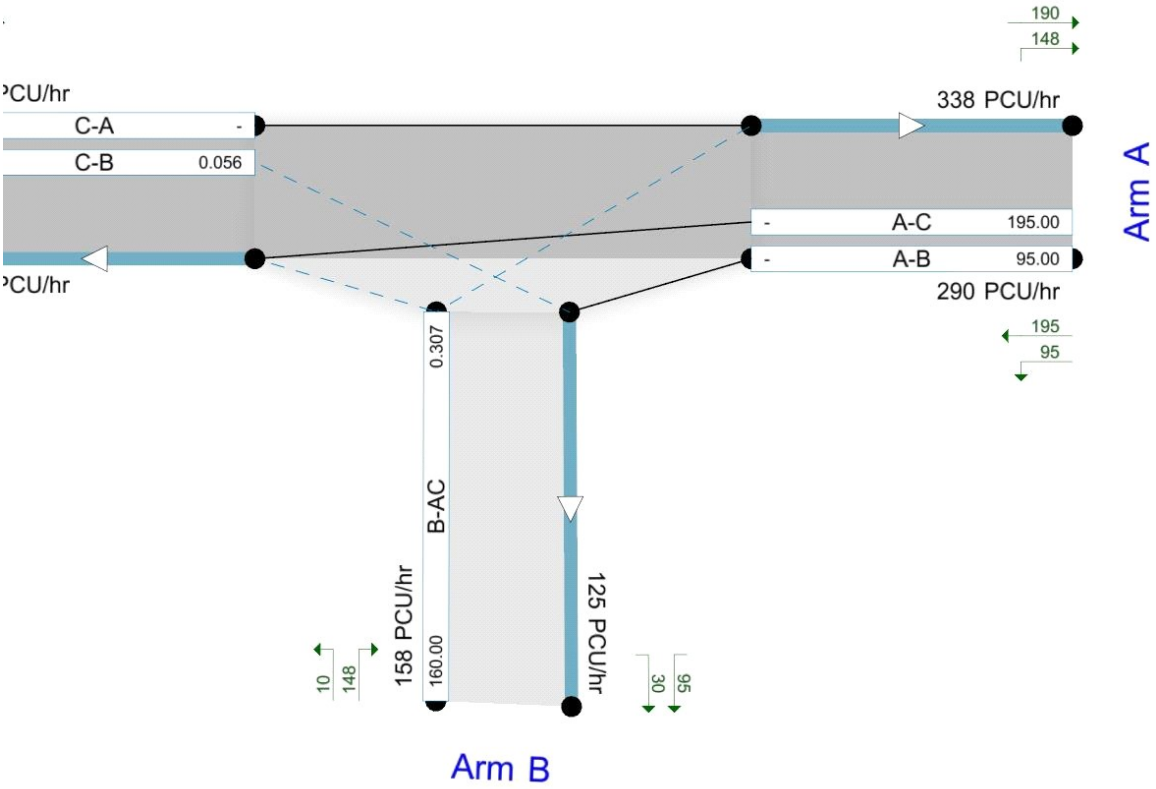
Title	(untitled)
Location	
Site Number	
Date	29/1/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	user
Description	

Analysis Options

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

Units

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



Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (08:00-08:15)
Showing Analysis Set "A1 "; Demand Set "D1 - 2024 Existing, AM "

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2024 Existing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Existing, AM	2024 Existing	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	8.37	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.110	0.278	0.175	0.397
1	B-C	786.649	0.117	0.296	-	-
1	C-B	602.919	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	355.00	100.000
B	FLAT	✓	130.00	100.000
C	FLAT	✓	170.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	155.000	200.000
	B	100.000	0.000	30.000
	C	145.000	25.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.44	0.56
	B	0.77	0.00	0.23
	C	0.85	0.15	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.05	7.23	0.05	A
A-C	-	-	-	-
B-AC	0.24	8.59	0.31	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	145.00	145.00	0.00	-	-	-	-	-
A-B	155.00	155.00	0.00	-	-	-	-	-
C-B	25.00	24.80	0.00	522.52	0.048	0.05	7.227	A
A-C	200.00	200.00	0.00	-	-	-	-	-
B-AC	130.00	128.78	0.00	549.32	0.237	0.31	8.536	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	145.00	145.00	0.00	-	-	-	-	-
A-B	155.00	155.00	0.00	-	-	-	-	-
C-B	25.00	25.00	0.00	522.52	0.048	0.05	7.235	A
A-C	200.00	200.00	0.00	-	-	-	-	-
B-AC	130.00	129.99	0.00	549.25	0.237	0.31	8.586	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	145.00	145.00	0.00	-	-	-	-	-
A-B	155.00	155.00	0.00	-	-	-	-	-
C-B	25.00	25.00	0.00	522.52	0.048	0.05	7.235	A
A-C	200.00	200.00	0.00	-	-	-	-	-
B-AC	130.00	130.00	0.00	549.25	0.237	0.31	8.586	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	145.00	145.00	0.00	-	-	-	-	-
A-B	155.00	155.00	0.00	-	-	-	-	-
C-B	25.00	25.00	0.00	522.52	0.048	0.05	7.235	A
A-C	200.00	200.00	0.00	-	-	-	-	-
B-AC	130.00	130.00	0.00	549.25	0.237	0.31	8.586	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	145.00	145.00	0.00	-	-	-	-	-
A-B	155.00	155.00	0.00	-	-	-	-	-
C-B	25.00	25.00	0.00	522.52	0.048	0.05	7.235	A
A-C	200.00	200.00	0.00	-	-	-	-	-
B-AC	130.00	130.00	0.00	549.25	0.237	0.31	8.586	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	145.00	145.00	0.00	-	-	-	-	-
A-B	155.00	155.00	0.00	-	-	-	-	-
C-B	25.00	25.00	0.00	522.52	0.048	0.05	7.235	A
A-C	200.00	200.00	0.00	-	-	-	-	-
B-AC	130.00	130.00	0.00	549.25	0.237	0.31	8.586	A

(Default Analysis Set) - 2024 Existing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Existing, PM	2024 Existing	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.25	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.110	0.278	0.175	0.397
1	B-C	786.649	0.117	0.296	-	-
1	C-B	602.919	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	275.00	100.000
B	FLAT	✓	155.00	100.000
C	FLAT	✓	210.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	90.000	185.000
	B	145.000	0.000	10.000
	C	180.000	30.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.33	0.67
	B	0.94	0.00	0.06
	C	0.86	0.14	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.06	7.05	0.06	A
A-C	-	-	-	-
B-AC	0.29	9.67	0.42	A

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	180.00	180.00	0.00	-	-	-	-	-
A-B	90.00	90.00	0.00	-	-	-	-	-
C-B	30.00	29.77	0.00	540.63	0.055	0.06	7.043	A
A-C	185.00	185.00	0.00	-	-	-	-	-
B-AC	155.00	153.36	0.00	527.30	0.294	0.41	9.586	A

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	180.00	180.00	0.00	-	-	-	-	-
A-B	90.00	90.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	540.63	0.055	0.06	7.049	A
A-C	185.00	185.00	0.00	-	-	-	-	-
B-AC	155.00	154.99	0.00	527.21	0.294	0.41	9.671	A

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	180.00	180.00	0.00	-	-	-	-	-
A-B	90.00	90.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	540.63	0.055	0.06	7.049	A
A-C	185.00	185.00	0.00	-	-	-	-	-
B-AC	155.00	155.00	0.00	527.21	0.294	0.41	9.671	A

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	180.00	180.00	0.00	-	-	-	-	-
A-B	90.00	90.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	540.63	0.055	0.06	7.049	A
A-C	185.00	185.00	0.00	-	-	-	-	-
B-AC	155.00	155.00	0.00	527.21	0.294	0.41	9.671	A

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	180.00	180.00	0.00	-	-	-	-	-
A-B	90.00	90.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	540.63	0.055	0.06	7.049	A
A-C	185.00	185.00	0.00	-	-	-	-	-
B-AC	155.00	155.00	0.00	527.21	0.294	0.42	9.671	A

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	180.00	180.00	0.00	-	-	-	-	-
A-B	90.00	90.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	540.63	0.055	0.06	7.049	A
A-C	185.00	185.00	0.00	-	-	-	-	-
B-AC	155.00	155.00	0.00	527.21	0.294	0.42	9.671	A

(Default Analysis Set) - 2033 Reference, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Reference, AM	2033 Reference	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	8.81	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.110	0.278	0.175	0.397
1	B-C	786.649	0.117	0.296	-	-
1	C-B	602.919	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	390.00	100.000
B	FLAT	✓	140.00	100.000
C	FLAT	✓	190.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	170.000	220.000
	B	110.000	0.000	30.000
	C	160.000	30.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.44	0.56
	B	0.79	0.00	0.21
	C	0.84	0.16	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.06	7.43	0.06	A
A-C	-	-	-	-
B-AC	0.26	9.11	0.35	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	170.00	170.00	0.00	-	-	-	-	-
C-B	30.00	29.75	0.00	514.59	0.058	0.06	7.422	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	140.00	138.60	0.00	535.21	0.262	0.35	9.046	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	170.00	170.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	514.59	0.058	0.06	7.428	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	140.00	139.99	0.00	535.12	0.262	0.35	9.110	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	170.00	170.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	514.59	0.058	0.06	7.428	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	140.00	140.00	0.00	535.12	0.262	0.35	9.110	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	170.00	170.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	514.59	0.058	0.06	7.428	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	140.00	140.00	0.00	535.12	0.262	0.35	9.110	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	170.00	170.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	514.59	0.058	0.06	7.428	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	140.00	140.00	0.00	535.12	0.262	0.35	9.110	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	170.00	170.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	514.59	0.058	0.06	7.428	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	140.00	140.00	0.00	535.12	0.262	0.35	9.110	A

(Default Analysis Set) - 2033 Reference, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Reference, PM	2033 Reference	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.110	0.278	0.175	0.397
1	B-C	786.649	0.117	0.296	-	-
1	C-B	602.919	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	290.00	100.000
B	FLAT	✓	160.00	100.000
C	FLAT	✓	220.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	95.000	195.000
	B	150.000	0.000	10.000
	C	190.000	30.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.33	0.67
	B	0.94	0.00	0.06
	C	0.86	0.14	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.06	7.10	0.06	A
A-C	-	-	-	-
B-AC	0.31	9.95	0.44	A

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	95.00	95.00	0.00	-	-	-	-	-
C-B	30.00	29.77	0.00	537.24	0.056	0.06	7.090	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	160.00	158.26	0.00	521.94	0.307	0.44	9.838	A

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	95.00	95.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	537.24	0.056	0.06	7.096	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	160.00	159.99	0.00	521.85	0.307	0.44	9.948	A

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	95.00	95.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	537.24	0.056	0.06	7.096	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	160.00	160.00	0.00	521.85	0.307	0.44	9.948	A

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	95.00	95.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	537.24	0.056	0.06	7.096	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	160.00	160.00	0.00	521.85	0.307	0.44	9.948	A

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	95.00	95.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	537.24	0.056	0.06	7.096	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	160.00	160.00	0.00	521.85	0.307	0.44	9.948	A

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	95.00	95.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	537.24	0.056	0.06	7.096	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	160.00	160.00	0.00	521.85	0.307	0.44	9.948	A

(Default Analysis Set) - 2033 Design (Normal Day), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Normal Day), AM	2033 Design (Normal Day)	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.10	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.110	0.278	0.175	0.397
1	B-C	786.649	0.117	0.296	-	-
1	C-B	602.919	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	400.00	100.000
B	FLAT	✓	150.00	100.000
C	FLAT	✓	190.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	180.000	220.000
	B	120.000	0.000	30.000
	C	160.000	30.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.45	0.55
	B	0.80	0.00	0.20
	C	0.84	0.16	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.06	7.46	0.06	A
A-C	-	-	-	-
B-AC	0.28	9.43	0.39	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	180.00	180.00	0.00	-	-	-	-	-
C-B	30.00	29.75	0.00	512.32	0.059	0.06	7.457	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	150.00	148.45	0.00	531.79	0.282	0.39	9.355	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	180.00	180.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	512.32	0.059	0.06	7.462	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	150.00	149.99	0.00	531.70	0.282	0.39	9.431	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	180.00	180.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	512.32	0.059	0.06	7.462	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	150.00	150.00	0.00	531.70	0.282	0.39	9.431	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	180.00	180.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	512.32	0.059	0.06	7.462	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	150.00	150.00	0.00	531.70	0.282	0.39	9.431	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	180.00	180.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	512.32	0.059	0.06	7.462	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	150.00	150.00	0.00	531.70	0.282	0.39	9.431	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	180.00	180.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	512.32	0.059	0.06	7.462	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	150.00	150.00	0.00	531.70	0.282	0.39	9.431	A

(Default Analysis Set) - 2033 Design (Normal Day), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Normal Day), PM	2033 Design (Normal Day)	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.81	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.110	0.278	0.175	0.397
1	B-C	786.649	0.117	0.296	-	-
1	C-B	602.919	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	300.00	100.000
B	FLAT	✓	170.00	100.000
C	FLAT	✓	220.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	105.000	195.000
	B	160.000	0.000	10.000
	C	190.000	30.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.35	0.65
	B	0.94	0.00	0.06
	C	0.86	0.14	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.06	7.13	0.06	A
A-C	-	-	-	-
B-AC	0.33	10.28	0.48	B

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	105.00	105.00	0.00	-	-	-	-	-
C-B	30.00	29.76	0.00	534.97	0.056	0.06	7.122	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	170.00	168.09	0.00	520.28	0.327	0.48	10.168	B

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	105.00	105.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	534.97	0.056	0.06	7.128	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	170.00	169.98	0.00	520.19	0.327	0.48	10.279	B

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	105.00	105.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	534.97	0.056	0.06	7.128	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	170.00	169.99	0.00	520.19	0.327	0.48	10.279	B

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	105.00	105.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	534.97	0.056	0.06	7.128	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	170.00	170.00	0.00	520.19	0.327	0.48	10.279	B

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	105.00	105.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	534.97	0.056	0.06	7.128	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	170.00	170.00	0.00	520.19	0.327	0.48	10.279	B

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	105.00	105.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	534.97	0.056	0.06	7.128	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	170.00	170.00	0.00	520.19	0.327	0.48	10.279	B

(Default Analysis Set) - 2033 Design (Event Day), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Event Day), AM	2033 Design (Event Day)	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.90	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.110	0.278	0.175	0.397
1	B-C	786.649	0.117	0.296	-	-
1	C-B	602.919	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	425.00	100.000
B	FLAT	✓	175.00	100.000
C	FLAT	✓	190.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	205.000	220.000
	B	145.000	0.000	30.000
	C	160.000	30.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.48	0.52
	B	0.83	0.00	0.17
	C	0.84	0.16	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.06	7.55	0.06	A
A-C	-	-	-	-
B-AC	0.33	10.30	0.50	B

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	205.00	205.00	0.00	-	-	-	-	-
C-B	30.00	29.75	0.00	506.66	0.059	0.06	7.545	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	175.00	173.03	0.00	524.45	0.334	0.49	10.188	B

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	205.00	205.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	506.66	0.059	0.06	7.551	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	175.00	174.98	0.00	524.36	0.334	0.50	10.304	B

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	205.00	205.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	506.66	0.059	0.06	7.551	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	175.00	174.99	0.00	524.36	0.334	0.50	10.304	B

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	205.00	205.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	506.66	0.059	0.06	7.551	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	175.00	175.00	0.00	524.36	0.334	0.50	10.304	B

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	205.00	205.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	506.66	0.059	0.06	7.551	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	175.00	175.00	0.00	524.36	0.334	0.50	10.304	B

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	160.00	160.00	0.00	-	-	-	-	-
A-B	205.00	205.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	506.66	0.059	0.06	7.551	A
A-C	220.00	220.00	0.00	-	-	-	-	-
B-AC	175.00	175.00	0.00	524.36	0.334	0.50	10.304	B

(Default Analysis Set) - 2033 Design (Event Day), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Event Day), PM	2033 Design (Event Day)	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.67	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.70		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.110	0.278	0.175	0.397
1	B-C	786.649	0.117	0.296	-	-
1	C-B	602.919	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	325.00	100.000
B	FLAT	✓	195.00	100.000
C	FLAT	✓	220.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	130.000	195.000
	B	185.000	0.000	10.000
	C	190.000	30.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.40	0.60
	B	0.95	0.00	0.05
	C	0.86	0.14	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.06	7.21	0.06	A
A-C	-	-	-	-
B-AC	0.38	11.20	0.60	B

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	130.00	130.00	0.00	-	-	-	-	-
C-B	30.00	29.76	0.00	529.31	0.057	0.06	7.203	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	195.00	192.62	0.00	516.38	0.378	0.59	11.041	B

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	130.00	130.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	529.31	0.057	0.06	7.209	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	195.00	194.98	0.00	516.28	0.378	0.60	11.202	B

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	130.00	130.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	529.31	0.057	0.06	7.209	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	195.00	194.99	0.00	516.28	0.378	0.60	11.204	B

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	130.00	130.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	529.31	0.057	0.06	7.209	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	195.00	195.00	0.00	516.28	0.378	0.60	11.204	B

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	130.00	130.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	529.31	0.057	0.06	7.209	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	195.00	195.00	0.00	516.28	0.378	0.60	11.204	B

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	190.00	190.00	0.00	-	-	-	-	-
A-B	130.00	130.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	529.31	0.057	0.06	7.209	A
A-C	195.00	195.00	0.00	-	-	-	-	-
B-AC	195.00	195.00	0.00	516.28	0.378	0.60	11.204	B

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]

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Filename: 23132HK Jn E.arc8
Path: \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\23132HK (knc) - S16 & PTG for Religious Facilities at Tai Tong, Yuen Long\Calculation\2024-07-23
Report generation date: 23/7/2024 19:35:08

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2024 Existing							
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.03	6.25	0.03	A	0.04	6.35	0.03	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-AC	0.03	4.75	0.03	A	0.03	5.19	0.03	A
	A1 - 2033 Design (Event Day)							
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.10	6.66	0.09	A	0.10	6.76	0.09	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-AC	0.08	4.99	0.07	A	0.08	5.22	0.07	A
	A1 - 2033 Design (Normal Day)							
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.05	6.37	0.05	A	0.04	6.40	0.04	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-AC	0.04	4.82	0.04	A	0.04	5.14	0.04	A
	A1 - 2033 Reference							
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream C-B	0.03	6.26	0.03	A	0.04	6.35	0.03	A
Stream A-C	-	-	-	-	-	-	-	-
Stream B-AC	0.03	4.76	0.03	A	0.03	5.19	0.03	A

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

"D1 - 2024 Existing, AM " model duration: 8:00 - 9:30
"D2 - 2024 Existing, PM" model duration: 18:00 - 19:30
"D3 - 2033 Reference, AM" model duration: 8:00 - 9:30
"D4 - 2033 Reference, PM" model duration: 18:00 - 19:30
"D5 - 2033 Design (Normal Day), AM" model duration: 8:00 - 9:30
"D6 - 2033 Design (Normal Day), PM" model duration: 18:00 - 19:30
"D7 - 2033 Design (Event Day), AM" model duration: 8:00 - 9:30
"D8 - 2033 Design (Event Day), PM" model duration: 18:00 - 19:30

Run using Junctions 8.0.5.523 at 23/7/2024 19:35:03

File summary

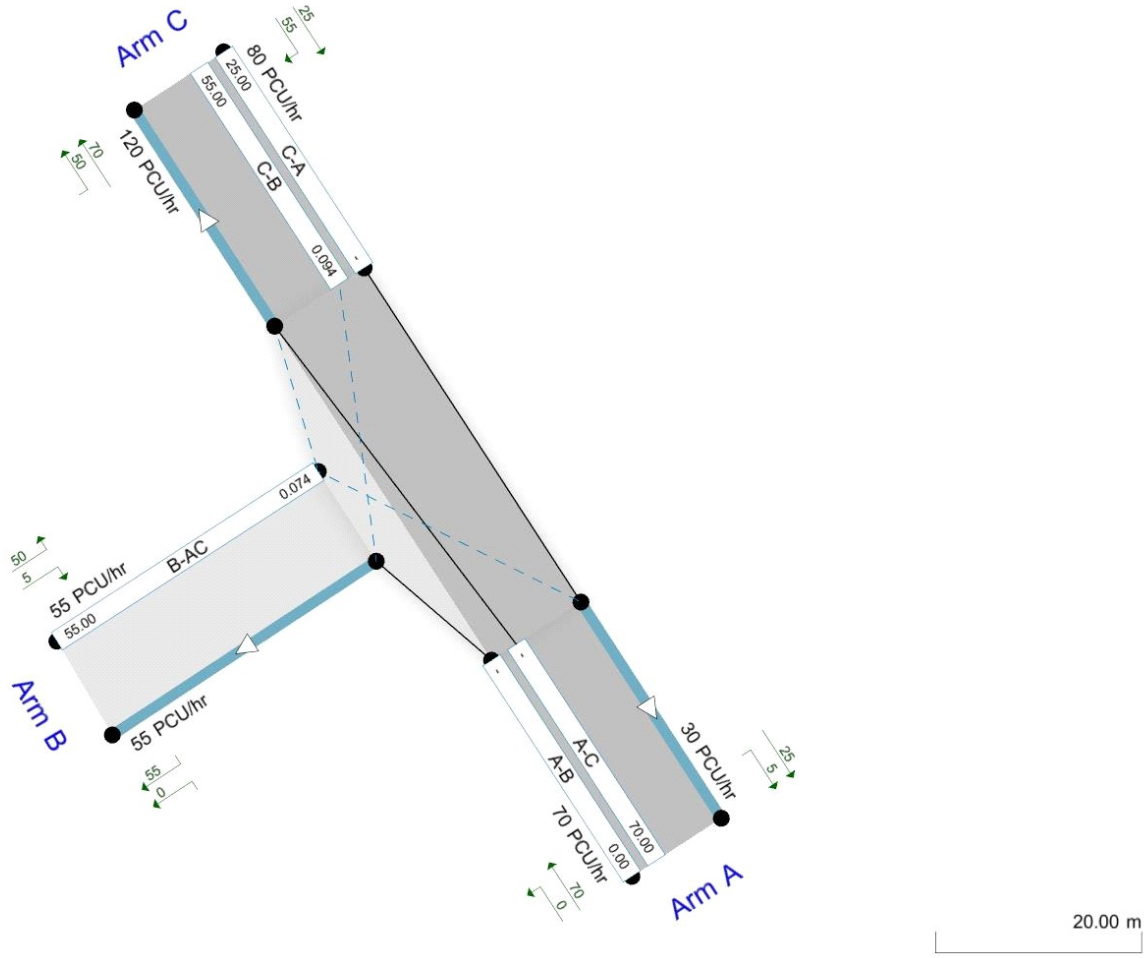
Title	(untitled)
Location	
Site Number	
Date	29/1/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	user
Description	

Analysis Options

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

Units

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



Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (08:00-08:15)
Showing Analysis Set "A1 "; Demand Set "D1 - 2024 Existing, AM "

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2024 Existing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Existing, AM	2024 Existing	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.108	0.274	0.172	0.391
1	B-C	786.649	0.115	0.292	-	-
1	C-B	602.919	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	30.00	100.000
B	FLAT	✓	20.00	100.000
C	FLAT	✓	70.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	30.000
	B	0.000	0.000	20.000
	C	50.000	20.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.00	0.00	1.00
	C	0.71	0.29	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.03	6.25	0.03	A
A-C	-	-	-	-
B-AC	0.03	4.75	0.03	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	50.00	50.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	19.86	0.00	596.22	0.034	0.03	6.244	A
A-C	30.00	30.00	0.00	-	-	-	-	-
B-AC	20.00	19.90	0.00	777.90	0.026	0.03	4.749	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	50.00	50.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	596.22	0.034	0.03	6.246	A
A-C	30.00	30.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	777.90	0.026	0.03	4.749	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	50.00	50.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	596.22	0.034	0.03	6.246	A
A-C	30.00	30.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	777.90	0.026	0.03	4.749	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	50.00	50.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	596.22	0.034	0.03	6.246	A
A-C	30.00	30.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	777.90	0.026	0.03	4.749	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	50.00	50.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	596.22	0.034	0.03	6.249	A
A-C	30.00	30.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	777.90	0.026	0.03	4.749	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	50.00	50.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	596.22	0.034	0.03	6.249	A
A-C	30.00	30.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	777.90	0.026	0.03	4.749	A

(Default Analysis Set) - 2024 Existing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Existing, PM	2024 Existing	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.77	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.108	0.274	0.172	0.391
1	B-C	786.649	0.115	0.292	-	-
1	C-B	602.919	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	70.00	100.000
B	FLAT	✓	20.00	100.000
C	FLAT	✓	40.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	70.000
	B	5.000	0.000	15.000
	C	20.000	20.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.25	0.00	0.75
	C	0.50	0.50	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.03	6.35	0.04	A
A-C	-	-	-	-
B-AC	0.03	5.19	0.03	A

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	20.00	20.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	19.86	0.00	587.28	0.034	0.04	6.342	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	19.89	0.00	713.68	0.028	0.03	5.189	A

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	20.00	20.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	587.28	0.034	0.04	6.345	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	713.66	0.028	0.03	5.189	A

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	20.00	20.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	587.28	0.034	0.04	6.345	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	713.66	0.028	0.03	5.189	A

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	20.00	20.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	587.28	0.034	0.04	6.345	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	713.66	0.028	0.03	5.189	A

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	20.00	20.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	587.28	0.034	0.04	6.347	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	713.66	0.028	0.03	5.189	A

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	20.00	20.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	587.28	0.034	0.04	6.347	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	713.66	0.028	0.03	5.189	A

(Default Analysis Set) - 2033 Reference, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Reference, AM	2033 Reference	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.51	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.108	0.274	0.172	0.391
1	B-C	786.649	0.115	0.292	-	-
1	C-B	602.919	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	35.00	100.000
B	FLAT	✓	20.00	100.000
C	FLAT	✓	75.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	35.000
	B	0.000	0.000	20.000
	C	55.000	20.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.00	0.00	1.00
	C	0.73	0.27	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.03	6.26	0.03	A
A-C	-	-	-	-
B-AC	0.03	4.76	0.03	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	19.86	0.00	595.10	0.034	0.03	6.256	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	20.00	19.89	0.00	776.45	0.026	0.03	4.758	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	595.10	0.034	0.03	6.259	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	776.45	0.026	0.03	4.758	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	595.10	0.034	0.03	6.259	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	776.45	0.026	0.03	4.758	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	595.10	0.034	0.03	6.259	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	776.45	0.026	0.03	4.758	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	595.10	0.034	0.03	6.259	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	776.45	0.026	0.03	4.758	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	595.10	0.034	0.03	6.259	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	776.45	0.026	0.03	4.758	A

(Default Analysis Set) - 2033 Reference, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Reference, PM	2033 Reference	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.77	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.108	0.274	0.172	0.391
1	B-C	786.649	0.115	0.292	-	-
1	C-B	602.919	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	70.00	100.000
B	FLAT	✓	20.00	100.000
C	FLAT	✓	45.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	70.000
	B	5.000	0.000	15.000
	C	25.000	20.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.25	0.00	0.75
	C	0.56	0.44	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.03	6.35	0.04	A
A-C	-	-	-	-
B-AC	0.03	5.19	0.03	A

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	19.86	0.00	587.28	0.034	0.04	6.342	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	19.89	0.00	713.36	0.028	0.03	5.191	A

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	587.28	0.034	0.04	6.345	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	713.34	0.028	0.03	5.191	A

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	587.28	0.034	0.04	6.345	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	713.34	0.028	0.03	5.191	A

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	587.28	0.034	0.04	6.345	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	713.34	0.028	0.03	5.191	A

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	587.28	0.034	0.04	6.347	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	713.34	0.028	0.03	5.191	A

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	587.28	0.034	0.04	6.347	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	20.00	20.00	0.00	713.34	0.028	0.03	5.191	A

(Default Analysis Set) - 2033 Design (Normal Day), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Normal Day), AM	2033 Design (Normal Day)	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.60	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.108	0.274	0.172	0.391
1	B-C	786.649	0.115	0.292	-	-
1	C-B	602.919	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	35.00	100.000
B	FLAT	✓	30.00	100.000
C	FLAT	✓	85.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	35.000
	B	0.000	0.000	30.000
	C	55.000	30.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.00	0.00	1.00
	C	0.65	0.35	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.05	6.37	0.05	A
A-C	-	-	-	-
B-AC	0.04	4.82	0.04	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	30.00	29.79	0.00	595.10	0.050	0.05	6.367	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	30.00	29.84	0.00	776.45	0.039	0.04	4.820	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	595.10	0.050	0.05	6.369	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	30.00	30.00	0.00	776.45	0.039	0.04	4.822	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	595.10	0.050	0.05	6.369	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	30.00	30.00	0.00	776.45	0.039	0.04	4.822	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	595.10	0.050	0.05	6.369	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	30.00	30.00	0.00	776.45	0.039	0.04	4.822	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	595.10	0.050	0.05	6.369	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	30.00	30.00	0.00	776.45	0.039	0.04	4.822	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	30.00	30.00	0.00	595.10	0.050	0.05	6.372	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	30.00	30.00	0.00	776.45	0.039	0.04	4.822	A

(Default Analysis Set) - 2033 Design (Normal Day), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Normal Day), PM	2033 Design (Normal Day)	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.72	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.108	0.274	0.172	0.391
1	B-C	786.649	0.115	0.292	-	-
1	C-B	602.919	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	70.00	100.000
B	FLAT	✓	30.00	100.000
C	FLAT	✓	50.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	70.000
	B	5.000	0.000	25.000
	C	25.000	25.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.17	0.00	0.83
	C	0.50	0.50	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.04	6.40	0.04	A
A-C	-	-	-	-
B-AC	0.04	5.14	0.04	A

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	25.00	24.82	0.00	587.28	0.043	0.04	6.399	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	30.00	29.83	0.00	729.66	0.041	0.04	5.142	A

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	25.00	25.00	0.00	587.28	0.043	0.04	6.401	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	30.00	30.00	0.00	729.64	0.041	0.04	5.144	A

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	25.00	25.00	0.00	587.28	0.043	0.04	6.401	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	30.00	30.00	0.00	729.64	0.041	0.04	5.144	A

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	25.00	25.00	0.00	587.28	0.043	0.04	6.401	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	30.00	30.00	0.00	729.64	0.041	0.04	5.144	A

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	25.00	25.00	0.00	587.28	0.043	0.04	6.401	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	30.00	30.00	0.00	729.64	0.041	0.04	5.144	A

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	25.00	25.00	0.00	587.28	0.043	0.04	6.401	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	30.00	30.00	0.00	729.64	0.041	0.04	5.144	A

(Default Analysis Set) - 2033 Design (Event Day), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Event Day), AM	2033 Design (Event Day)	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.83	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.108	0.274	0.172	0.391
1	B-C	786.649	0.115	0.292	-	-
1	C-B	602.919	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	35.00	100.000
B	FLAT	✓	55.00	100.000
C	FLAT	✓	110.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	35.000
	B	0.000	0.000	55.000
	C	55.000	55.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.00	0.00	1.00
	C	0.50	0.50	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.09	6.66	0.10	A
A-C	-	-	-	-
B-AC	0.07	4.99	0.08	A

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	54.60	0.00	595.10	0.092	0.10	6.656	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	55.00	54.70	0.00	776.45	0.071	0.08	4.985	A

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	595.10	0.092	0.10	6.664	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	55.00	55.00	0.00	776.45	0.071	0.08	4.989	A

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	595.10	0.092	0.10	6.664	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	55.00	55.00	0.00	776.45	0.071	0.08	4.989	A

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	595.10	0.092	0.10	6.664	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	55.00	55.00	0.00	776.45	0.071	0.08	4.989	A

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	595.10	0.092	0.10	6.664	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	55.00	55.00	0.00	776.45	0.071	0.08	4.989	A

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	55.00	55.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	595.10	0.092	0.10	6.664	A
A-C	35.00	35.00	0.00	-	-	-	-	-
B-AC	55.00	55.00	0.00	776.45	0.071	0.08	4.989	A

(Default Analysis Set) - 2033 Design (Event Day), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Design (Event Day), PM	2033 Design (Event Day)	PM		FLAT	18:00	19:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.99	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	50.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	622.329	0.108	0.274	0.172	0.391
1	B-C	786.649	0.115	0.292	-	-
1	C-B	602.919	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	70.00	100.000
B	FLAT	✓	55.00	100.000
C	FLAT	✓	80.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	70.000
	B	5.000	0.000	50.000
	C	25.000	55.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.09	0.00	0.91
	C	0.31	0.69	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
C-A	-	-	-	-
A-B	-	-	-	-
C-B	0.09	6.76	0.10	A
A-C	-	-	-	-
B-AC	0.07	5.22	0.08	A

Main Results for each time segment

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	54.59	0.00	587.28	0.094	0.10	6.754	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	55.00	54.68	0.00	744.10	0.074	0.08	5.219	A

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	587.28	0.094	0.10	6.762	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	55.00	55.00	0.00	744.08	0.074	0.08	5.223	A

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	587.28	0.094	0.10	6.762	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	55.00	55.00	0.00	744.08	0.074	0.08	5.223	A

Main results: (18:45-19:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	587.28	0.094	0.10	6.762	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	55.00	55.00	0.00	744.08	0.074	0.08	5.223	A

Main results: (19:00-19:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	587.28	0.094	0.10	6.762	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	55.00	55.00	0.00	744.08	0.074	0.08	5.223	A

Main results: (19:15-19:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
C-A	25.00	25.00	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	587.28	0.094	0.10	6.762	A
A-C	70.00	70.00	0.00	-	-	-	-	-
B-AC	55.00	55.00	0.00	744.08	0.074	0.08	5.223	A

APPENDIX B

IMPROVEMENT TO SECTIONS OF EXISTING KUNG UM ROAD, KIU HING ROAD, WONG NAI TUN TSUEN ROAD UNDER AGREEMENT NO. CE35/2012 (CE) PLANNING AND ENGINEERING STUDY FOR HOUSING SITES IN YUEN LONG SOUTH – INVESTIGATION

819000 E
820000 E
821000 N
833000 N
832000 N
831000 N
N
十二張之第一張
SHEET 1 OF 12
60566218/GAZ/101
十二張之第二張
SHEET 2 OF 12
60566218/GAZ/102
十二張之第三張
SHEET 3 OF 12
60566218/GAZ/103
十二張之第四張
SHEET 4 OF 12
60566218/GAZ/104
十二張之第五張
SHEET 5 OF 12
60566218/GAZ/105
十二張之第六張
SHEET 6 OF 12
60566218/GAZ/106
十二張之第七張
SHEET 7 OF 12
60566218/GAZ/107
十二張之第八張
SHEET 8 OF 12
60566218/GAZ/108
十二張之第九張
SHEET 9 OF 12
60566218/GAZ/109
十二張之第十張
SHEET 10 OF 12
60566218/GAZ/110
十二張之第十一張
SHEET 11 OF 12
60566218/GAZ/111
十二張之第十二張
SHEET 12 OF 12
60566218/GAZ/112
插圖 'C'
INSET 'C'
屏山新村
PING SHAN SAN TSUEN
新起村
SAN HEI TSUEN
唐人新村
TONG YAN SAN TSUEN
欖口村
LAM HAU TSUEN
山下村
SHAN HA TSUEN
元朗公路
YUEN LONG HIGHWAY
馬田堡
MA TIN POK
田寮村
TIN LIU TSUEN
崇正新村
SHUNG CHING SAN TSUEN
木橋頭村
MUK KIU TAU TSUEN
白沙村
PAK SHA TSUEN
黃泥墩村
WONG NAI TUN TSUEN
大棠村
TAI TONG TSUEN
WONG NAI TUN TSUEN ROAD
KIU HING ROAD
YUEN LONG HIGHWAY 元朗公路
SHAP PAI HEUNG INTERCHANGE 十八鄉交匯處

註釋:
NOTES:

1. 除在其他方面指定外，所有量度以米為單位。
   ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SPECIFIED.
2. 所有水平均為約數，以米為單位，並在香港主水平基準以上。
   ALL LEVELS ARE APPROXIMATE VALUES AND IN METRES ABOVE HONG KONG PRINCIPAL DATUM.
3. 如有需要，施工區界限內之部分現有行車道、行人路、單車徑、美化市容地帶、中央分隔帶/安全島/交通島及路旁帶的部分路段/範圍或其部分或會分階段暫時封閉。
   SECTIONS OF THE EXISTING CARRIAGEWAYS, FOOTPATHS, CYCLE TRACKS, AMENITY AREAS, CENTRAL RESERVES/REFUGE ISLANDS/TRAFFIC ISLANDS AND VERGES OR PARTS THEREOF WITHIN THE LIMIT OF WORKS AREA MAY BE TEMPORARILY CLOSED IN PHASES AS AND WHEN REQUIRED.
4. 如有需要，斜坡穩固工程或會在施工區界限之內進行。
   SLOPE STABILIZATION WORKS MAY BE CARRIED OUT WITHIN THE LIMIT OF WORKS AREA AS AND WHEN REQUIRED.

圖例:
LEGEND:

施工區界限
LIMIT OF WORKS AREA

工程名稱 PROJECT TITLE
工務計劃項目第 7817CL 號及
第 7827CL 號（部分）
元朗南發展第一階段工程
及第二階段工程第一期的道路工程

PWP ITEM NOS. 7817CL AND 7827CL (PART)
ROAD WORKS UNDER
YUEN LONG SOUTH DEVELOPMENT STAGE 1
WORKS AND STAGE 2 WORKS, PHASE 1

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

索引圖 KEY PLAN

圖則編號 PLAN NO.
60566218/GAZ/100

比例 SCALE
A1 1 : 6000

辦事處 OFFICE
西拓展處
WEST DEVELOPMENT OFFICE

土木工程拓展署
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT