APPENDIX B

Traffic Impact Assessment

The Hong Kong Buddhist Association
Application for Permission under Section 16 of The Town Planning Ordinance (Cap.131)
For Minor Relaxation of Building Height Restriction from 2 Storeys to 4 Storeys for Proposed 4-Storey Columbarium at Part of Inland Lot No. 7755 RP and Government Land sandwiched between Inland Lot No. 7755 RP and Inland Lot No. 7713
Cape Collinson Road, Chai Wan

TIA Report

March 2024

CTA Consultants Limited
志達顧問有限公司

LIST OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDIX

1. INTRODUCTION

1.1 Background

1.1.1 Hong Kong Buddhist Association ("HKBA") proposed to apply for permission under Section 16 of the Town Planning Ordinance (Cap.131) for minor relaxation of building height restriction of part of Inland Lot No. 7755 RP (IL 7755 RP) and Government Land sandwiched between IL 7755 RP and IL 7713 for a 4-storey columbarium at Cape Collinson Road, Chai Wan (hereafter called "the proposed development"). The proposed development is located at the south-east corner of the existing Cemetery as shown in **Figure 1.1**. The original proposed development was 2 storeys and approved in 2021.

1.1.2 CTA Consultants Limited ("CTA") is commissioned by HKBA to carry out a Traffic Impact Assessment Report in supporting planning application for the proposed development.

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 2032;
- to estimate the likely traffic generated due to the proposed development;
- to assess the possible impacts of traffic generation due to the proposed development on the adjacent road network; and
- to recommend improvement measures, if necessary, to alleviate any foreseeable traffic problems on the road network.

2. THE PROPOSED DEVELOPMENT

2.1 Site Location

2.1.1 The proposed development of 1 4-storey columbarium at part of IL 7755 RP and Government Land sandwiched between IL 7755 RP and IL 7713, Cape Collinson Road, Chan Wan is shown in **Figure 1.1**.

2.1.2 Hong Kong Buddhist Cemetery composed of a number of cemeteries and columbaria managed by the HKBA. At present, in total about 11,200 niches/ graves/ ossuaries in the cemeteries. The proposed development is located at the south-east corner of the existing cemetery as shown in **Figure 1.1**.

2.2 Proposed Development

2.2.1 Development parameters of the proposed development are summarized in **Table 2.1**.

Table 2.1 Proposed Development Parameters

Site Location	**Hong Kong Buddhist Cemetery, Cape Collinson (Part of IL 7755 RP and Government Land sandwiched between IL 7755 RP and IL 7713)**
Proposed Use	4-storey columbarium
Development Scale	From approved development of 2 storeys (around 9,000 niches increment) **to proposed development of 4 storeys (around 18,000 niches increment)**

2.2.2 It is anticipated that the proposed development will be commissioned in year 2029. Therefore, design year 2032 (i.e. 3 years after the planned commencement year of the proposed development) is adopted for the Traffic Impact Assessment.

2.3 Internal Transport Facilities Provisions

2.3.1 The internal transport facilities layout is shown in **Figure 2.1**.

2.3.2 Currently there are no parking and loading/unloading facilities inside the development. 7 public parking spaces and a loading/unloading bay are provided outside the proposed development.

2.3.3 Moreover, visitors of the development are mainly grave sweepers who mostly visit the site during the two festival days (Ching Ming and Chung Yeung Festivals). As temporary traffic arrangement takes place during the two festival days, visitors can only access the site via franchised buses, minibuses or walk. The existing temporary bus stop right in front of the development entrance are considered to be satisfying for the visitors.

2.4 Public Transport Services in the Vicinity

2.4.1 Numerous road-based public transport services are currently operating in the vicinity of the proposed development. The details of the franchised bus and GMB routes operating in the vicinity of the proposed development are presented in **Table 2.2** and the location of the nearby bus/GMB stops are indicated in **Figure 2.2**.

Table 2.2 Existing Road-based Public Transport Services in the Vicinity

Service	Route	Origin - Destination	Headway (mins)
Franchised Bus	9	Shek O – Shau Kei Wan	20
	9C	Shau Kei Wan - Cape Collinson	30
	81	Lai Tak Tsuen – Hing Wah Estate	15-20
	81A(1)	Lai Tak Tsuen – Hing Wah Estate	From Hing Wah Estate: 3 deps From Lai Tak Tsuen: 1 dep
	388(2)	Chai Wan Station – Cape Collinson	10-30
	389	Shau Kei Wan - Cape Collinson	10-20
	780P(3)	Hing Wah Estate - Central	From Hing Wah

Service	Route	Origin - Destination	Headway (mins)
			Estate: 5 deps
GMB	16A	Chai Wan Station Station – Chung Hom Kok	From Chai Wan Station: 5 deps From Chung Hom Kok: 6 deps
	16M	Chai Wan Station Station – Chung Hom Kok	15
	16X	Chai Wan Station – Stanley Beach Road	15
	43M	Fung Wah Estate – Chai Wan Station (Circular)	5-15

Notes:
(1) Every Monday to Friday (School days only).
(2) Operated on specific days during Ching Ming and Chung Yeung Festival periods
(3) Every Monday to Saturday.

2.5 Temporary Traffic Management

2.5.1 The proposed columbarium will follow the temporary traffic arrangement same as other columbarium inside the Chai Wan Cemeteries area. Similar to the existing arrangement, volunteers from the Hong Kong Buddhist Association will be available at site to assist the visitors. As most of the visitors of the proposed columbarium are members of the Hong Kong Buddhist Association. The Hong Kong Buddhist Association can inform their members in advance with the latest temporary traffic arrangement at Chai Wan Cemeteries to avoid confusion.

2.5.2 Unlike other columbarium at Chai Wan Cemeteries, Hong Kong Buddhist Association organizes a series of events throughout the year for the deceases' relatives. Visitors are more likely to visit the columbarium during non-peak days different from other columbarium in the area and therefore, the traffic trips of the proposed development are less concentrated on the two festival days than other columbarium in the area (Ching Ming and Chung Yeung).

3. THE EXISTING TRAFFIC CONDITIONS

3.1 Critical Junctions

3.1.1 Nine junctions were identified to be critical for the traffic impact assessment due to the proposed development which are listed **Table 3.1** and illustrated diagrammatically in **Figure 3.1**. Their existing junction arrangements and Method of Control (MOC) are shown in **Figure 3.2** to **Figure 3.10**.

Table 3.1 Identified Critical Junction

Ref.	Junction	Type	Figure No.
A	Chai Wan Road / Tai Tam Road	Signal	**3.2**
B	Tai Tam Road / Shek O Road	Roundabout	**3.3**
C	Shek O Road / Cape Collison	Priority	**3.4**
D	Chai Wan Road / Island Eastern Corridor / Wan Tsui Road	Roundabout	**3.5**
E	Wan Tsui Road / Chai Wan Road	Priority	**3.6**
F	Chai Wan Road / Hong Man Street	Signal	**3.7**
G	Wan Tsui Road / Lin Shing Road	Signal	**3.8**
H	Cape Collinson Road / Lin Shing Road	Priority	**3.9**
I	Chai Wan Road / Lok Man Road	Signal	**3.10**

3.1.2 With consideration of the characteristic of the proposed columbarium, the most critical traffic conditions in the area will occur during Ching Ming and Chung Yeung Festival periods. To reveal the critical traffic conditions of the above-mentioned critical junctions, traffic survey in form of manual classified count was conducted during the following dates. Traffic surveys were carried out from 7am to 5pm.

Ching Ming Festival Period

- Ching Ming Festival (5 April 2023)
- Good Friday/1st Friday after Ching Ming Festival (7 April 2023)
- 1st Sunday after Ching Ming Festival (9 April 2023)

Chung Yeung Festival Period

- 1st Saturday before Chung Yeung Festival (21 October 2023)
- 1st Sunday before Chung Yeung Festival (22 October 2023)
- Chung Yeung Festival (23 October 2023)

3.1.3 Pedestrian count surveys including observation of trip generation and attraction of the existing Cemetery were also carried out in 15 minutes' interval.

3.1.4 In order to accommodate the heavy volume of grave sweepers to Chai Wan Cemeteries on this day, special traffic arrangements were implemented by the Police in the public transport interchange at MTR Chai Wan Station, along Lin Shing Road and Cape Collinson Road.

3.1.5 For Ching Ming Festival period, based on traffic survey, peak hours for Ching Ming Festival, 7 April 2023 (Fri) and 9 April 2023 (Sun) occurred at 10am to 11am, 11:45am to 12:45pm and 11:45am to 12:45pm respectively.

3.1.6 For Chung Yeung Festival period, based on traffic survey, peak hours for Chung Yeung Festival, 21 October 2023 (Sat) and 22 October 2023 (Sun) occurred at 11:45am to 12:45pm, 11:30am to 12:30pm and 11:15am to 12:15pm respectively.

3.1.7 The observed traffic flows for Ching Ming and Chung Yeung Festival periods are presented from **Figure 3.11** to **Figure 3.16**.

3.1.8 Existing operational performance of the critical junctions based on the existing traffic flows for Ching Ming and Chung Yeung Festival periods are listed in **Table 3.2**, **Table 3.3** and the junction calculation sheets are attached in **Appendix A**.

Table 3.2 Operational Performance of Identified Critical Junctions in Year 2023 Ching Ming Festival Period

Ref.	Junction	Method of Control	Year 2023 Ching Ming Festival Period Peak Hour RC/DFC(1)		
			5 Apr (Ching Ming Festival)	7 Apr	9 Apr
A	Chai Wan Road / Tai Tam Road	Signal	95%	85%	>100%
B	Tai Tam Road / Shek O Road	Roundabout	0.51	0.39	0.44
C	Shek O Road / Cape Collison	Priority	0.36	0.39	0.50
D	Wan Tsui Road / Chai Wan Road / Island Eastern Corridor	Roundabout	0.32	0.34	0.26
E	Wan Tsui Road / Chai Wan Road	Priority	0.24	0.19	0.19
F	Chai Wan Road / Hong Man Street	Signal	89%	48%	>100%
G	Wan Tsui Road / Lin Shing Road	Signal	59%	84%	69%
H	Cape Collinson Road / Lin Shing Road	Priority	0.27	0.33	0.42
I	Chai Wan Road / Lok Man Road	Signal	>100%	95%	100%

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

Table 3.3 Operational Performance of Identified Critical Junctions in Year 2023 Chung Yeung Festival Period

Ref.	Junction	Method of Control	Year 2023 Chung Yeung Festival Period Peak Hour RC/DFC(1)		
			21 Oct	22 Oct	23 Oct (Chung Yeung Festival)
A	Chai Wan Road / Tai Tam Road	Signal	52%	89%	70%
B	Tai Tam Road / Shek O Road	Roundabout	0.47	0.45	0.43
C	Shek O Road / Cape Collison	Priority	0.37	0.41	0.25
D	Wan Tsui Road / Chai Wan Road / Island Eastern Corridor	Roundabout	0.36	0.27	0.36
E	Wan Tsui Road / Chai Wan Road	Priority	0.20	0.18	0.50
F	Chai Wan Road / Hong Man Street	Signal	79%	>100%	65%
G	Wan Tsui Road / Lin Shing Road	Signal	75%	92%	>100%
H	Cape Collinson Road / Lin Shing Road	Priority	0.21	0.35	0.20
I	Chai Wan Road / Lok Man Road	Signal	56%	>100%	>100%

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

3.1.9 The assessment results in **Table 3.2** and **Table 3.3** indicate that all critical junctions are at present operating with ample capacities during the peak hours of Ching Ming and Chung Yeung Festival periods.

4. THE FUTURE TRAFFIC CONDITIONS

4.1 Design Year

4.1.1 It is anticipated that the proposed development will be completed in 2029 tentatively. In order to assess the possible traffic impacts to the local road network due to the proposed development, year 2032 (i.e. 3 years after OP) has been adopted as the design year for this TIA.

4.2 Traffic Forecasts

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. 2019-Based Territorial Population and Employment Data Matrices (TPEDM) published by the Planning Department.
III. Projection of Population Distribution 2021-2029 published by Planning Department.

Annual Traffic Census

4.2.2 Numerous traffic count stations are located in the vicinity of the proposed development and the traffic counts of the concerned stations reported in the Annual Traffic Census (ATC) over a period of 11 years, between 2012 and 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 (2012 to 2022)	Avg. Annual Growth Rate (2013 to 2021)
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
1009	Chai Wan Road (From Island Eastern Corridor Approach to Tai Tam Rd)	25,370	25,120	25,110	25,360	25,280	25,250	25,120	25,220	23,540	24,280	21,560	-1.61%	-0.42%
1021	Tai Tam Road (From Chai Wan Rd to Shek O Rd)	9,640	9,690	10,430	9,780	9,820	9,800	9,360	9,960	9,940	10,930	10,440	0.80%	1.52%
2607	Cape Collison Rd (From Shek O Rd to Restriction Boundary)	620	650	740	780	710	850	640	770	750	680	770	2.19%	0.57%
2401	Lin Shing Rd (From Wan Tsui Rd to Cape Collision Rd)	2,360	2,510	2,330	2,910	2,750	2,770	2,620	2,680	2,310	2,500	2,340	-0.09%	-0.05%
Total		**37,990**	**37,970**	**38,610**	**38,830**	**38,560**	**38,670**	**37,740**	**38,630**	**36,540**	**38,390**	**35,110**	**-0.79%**	**0.14%**

Note: *AADT estimated by growth factor

4.2.3 As shown in **Table 4.1**, the highest annual growth rate is 0.14% from 2013 to 2021.

Planning Data

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

Table 4.2 2019-Based Planning Data from 2019 to 2031

Zone	Population			Avg. Annual Growth Rate	Employment			Avg. Annual Growth Rate
	2019	2026	2031		2019	2026	2031	
Eastern	568,150	533,100	506,050	**-0.96%**	331,300	324,900	317,250	**-0.36%**

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 illustrated 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
Eastern	544,800	540,600	535,100	531,600	524,900	517,100	508,500	500,200	495,600	**-1.18%**

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 -1.18% per annum.

Adopted Growth Rate

4.2.8 A.A.D.T. of ATC indicates that the traffic flows in the local road network has an average annual growth rate of 0.14% from 2013 to 2021.

4.2.9 Whilst, the planning data indicates that the population and employment data of the study area are expected to grow with an average annual growth rate of -0.96% and -0.36% respectively from 2019 to 2031.

4.2.10 Projected population distribution indicates that an average annual growth rate of -1.18% from 2021 to 2029.

4.2.11 As a conservative approach, annual growth rate of **+0.14%** p.a. is adopted.

4.3 Traffic Generations of Planned Adjacent Developments

4.3.1 To fully reflect the growth traffic, trip generation of the future vicinity developments have been taken into consideration. The planned adjacent developments is detailed in **Figure 4.1** and **Table 4.4** and the estimated peak hour trips of the adjacent planned developments are shown in **Table 4.5**.

Table 4.4 Planned Adjacent Development in the Vicinity

Development	Development Scale
Site I or II of Columbarium at Cape Collinson Road	15,000 niches for Site I; 8,000 niches for Site II

Note:
(1) Planned to develop either Site I or Site II only according to Traffic Impact Assessment Study Columbarium Development at Cape Collinson Road, Chai Wan commissioned by Architectural Services Department [Ref: PWSC219/17-18(01)].

Table 4.5 Estimated Trip Generations and Attractions of Adjacent Development

Development	Trip Generations and Attractions (pcu/hr)		
	In(1)	**Out(1)**	**Total**
Site I or II of Columbarium at Cape Collinson Road	68	68	136

Note:
(1) Reference has been made on the Traffic Impact Assessment Study Columbarium Development at Cape Collinson Road, Chai Wan commissioned by Architectural Services Department [Ref: PWSC219/17-18(01)], adopted higher trip generation and attractions

4.4 Reference Traffic Flows

4.4.1 The 2032 reference traffic flows for Ching Ming and Chung Yeung Festival periods are then derived by the following and presented diagrammatically from **Figure 4.2** to **Figure 4.7**.

2032 Reference Traffic Flows (Without Proposed Development) = (**2023 Observed Traffic Flows** x **Adopted Growth Factor (i.e. +0.14% for 9 year)**) + **Traffic Flows of Planned Adjacent Development**

4.5 Traffic Generations and Attractions of Proposed Development

4.5.1 The traffic generations and attractions of the proposed development were calculated based on the traffic surveys as summarized in **Table 4.6**.

Table 4.6 Peak Hour Trip Rates by Traffic Surveys

No. of Niches		**Peak Hour Pedestrian Flow**		**Peak Hour Trip Rate** (pedestrians per niche per hour)(1)	
Total 11,171 (Graves 3,626 Niches 6,121 Ossuaries 1,424)					
Date	**Peak Hour**	**In**	**Out**	**In**	**Out**
5 Apr 2023 (Ching Ming Festival)	1200-1300	323	466	0.0528	0.0761
7 Apr 2023 (Fri)	1100-1200	150	149	0.0245	0.0243
9 Apr 2023 (Sun)	1130-1230	197	232	0.0322	0.0379
21 Oct 2023 (Sat)	1100-1200	99	85	0.0162	0.0139
22 Oct 2023 (Sun)	1045-1145	263	163	0.0430	0.0266
23 Oct 2023 (Chung Yeung Festival)	1115-1215	352	499	0.0575	0.0815
Original Proposed Development adopted		-	-	0.1307	0.1167
Adopted		**-**	**-**	**0.1307**	**0.1167**

Note:
(1) Assume all visitors were niches sweepers as a conservative approach.

4.5.2 Based on the adopted trip rate in **Table 4.6** and the proposed development parameters listed in **Table 2.1**, the estimated generation and attraction due to the proposed development are summarized in **Table 4.7**.

Table 4.7 Estimated Peak Hour Traffic Trips of Proposed Development

Proposed Use	Peak Hour Trip Rate (pedestrians per niche per hour)		Peak Hour Pedestrian Trips	
	In	Out	In	Out
Additional 18,000 niches	0.1307	0.1167	2,353	2,101

4.5.3 Survey has been carried out on the transport mode used by the existing visitors accessing the subject site during festival periods. The results are summarized in **Table 4.8**.

Table 4.8 Observed Modal Split of Visitors to the Subject Site at Chung Yeung Festival

Transport Mode	Proportion of Arrivals
Franchised Bus	92%
GMB	6%
Walk	2%
Total	**100%**

4.5.4 **Table 4.8** shows that the utilization of public transport, particularly franchised bus, as a mean of access to the subject site is very high and is dominant means of transport used by visitors during festival periods.

4.5.5 Capacity of different mode of public transport is listed in **Table 4.9**.

Table 4.9 Capacity of Different Mode of Public Transport

Transport Mode	Capacity per vehicle (passengers)
Franchised Bus	88-136 (88 is adopted)
GMB	16,19 (16 is adopted)

4.5.6 As a conservative approach, assume the existing public transport services commuting between the site and nearby district centre during the two festival days are in full occupancy. Visitors of the proposed development would require additional services. The required additional services is detailed in **Table 4.10**.

Table 4.10 Required Additional Services

Transport Mode	Number of Visitors per hour (Trip Attraction)(1)	Additional Services per hour (Trip Attraction)	
		veh/hr	pcu/hr
Franchised Bus	= 2,353(2) x 92%(3) = 2,165	= 2,165 ÷ 88(4) = 25	= 25 x 2.5 pcu factor = 63
GMB	= 2,353(2) x 6%(3) = 142	= 142 ÷ 16(4) = 9	= 9 x 1.5 pcu factor = 14
Total	**2,307**	**34**	**77**

Notes:
(1) Since the concerned public transport services' routing are in circular. The larger number between the trip generation and the trip attraction is chosen to be the determine factor for calculating the additional services needed for the proposed development.
(2) From **Table 4.7**.
(3) From **Table 4.8**.
(4) From **Table 4.9**.

4.5.7 As shown in **Table 4.10**, the trip generation and attraction of the proposed development is estimated to be 34 veh/hr (or 77 pcu/hr) one-way.

4.6 Design Traffic Forecasts

4.6.1 The traffic generated by the proposed development was then superimposed onto the 2032 reference traffic flows (without proposed development) to derive the 2032 design traffic flows (with proposed development).

2032 Design Traffic Flows (With Proposed Development)	=	**2032 Reference Traffic Flows (Without Proposed Development)**	+	**Traffic Flows of Proposed Development**

4.6.2 The 2032 design traffic flows (with proposed development) for Ching Ming and Chung Yeung Festival periods are shown from **Figure 4.8** to **Figure 4.13**.

5. TRAFFIC IMPACT ASSESSMENT

5.1 Operational Assessment

5.1.1 To assess the traffic impact due to the proposed development, operational performance assessments of the critical junctions identified in **Chapter 3** are carried out for both reference (without proposed development) and design (with proposed development) scenarios in year 2032. The results are summarized in **Table 5.1** to **Table 5.4**, and the junction calculation sheets are attached in **Appendix A**.

Table 5.1 Operational Performance of Identified Critical Junctions in Year 2032 Ching Ming Festival Period Reference Scenario (Without Proposed Development)

Ref.	Junction	Method of Control	Year 2032 Ching Ming Festival Period Peak Hour Reference Scenario (Without Proposed Development) RC/DFC[(1)]		
			5 Apr (Ching Ming Festival)	7 Apr	9 Apr
A	Chai Wan Road / Tai Tam Road	Signal	91%	82%	>100%
B	Tai Tam Road / Shek O Road	Roundabout	0.60	0.47	0.52
C	Shek O Road / Cape Collison	Priority	0.55	0.57	0.66
D	Wan Tsui Road / Chai Wan Road / Island Eastern Corridor	Roundabout	0.34	0.36	0.29
E	Wan Tsui Road / Chai Wan Road	Priority	0.25	0.20	0.20
F	Chai Wan Road / Hong Man Street	Signal	79%	42%	94%
G	Wan Tsui Road / Lin Shing Road	Signal	40%	60%	47%
H	Cape Collinson Road / Lin Shing Road	Priority	0.40	0.46	0.55
I	Chai Wan Road / Lok Man Road	Signal	>100%	90%	94%

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

Table 5.2 Operational Performance of Identified Critical Junctions in Year 2032 Chung Yeung Festival Period Reference Scenario (Without Proposed Development)

Ref.	Junction	Method of Control	Year 2032 Chung Yeung Festival Period Peak Hour Reference Scenario (Without Proposed Development) RC/DFC[(1)]		
			21 Oct	22 Oct	23 Oct (Chung Yeung Festival)
A	Chai Wan Road / Tai Tam Road	Signal	50%	86%	67%
B	Tai Tam Road / Shek O Road	Roundabout	0.50	0.53	0.52
C	Shek O Road / Cape Collison	Priority	0.55	0.57	0.43
D	Wan Tsui Road / Chai Wan Road / Island Eastern Corridor	Roundabout	0.38	0.29	0.37
E	Wan Tsui Road / Chai Wan Road	Priority	0.21	0.19	0.51
F	Chai Wan Road / Hong Man Street	Signal	70%	>100%	57%
G	Wan Tsui Road / Lin Shing Road	Signal	54%	66%	86%
H	Cape Collinson Road / Lin Shing Road	Priority	0.38	0.48	0.33
I	Chai Wan Road / Lok Man Road	Signal	54%	>100%	>100%

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

Table 5.3 Operational Performance of Identified Critical Junctions in Year 2032 Ching Ming Festival Period Design Scenario (With Proposed Development)

Ref.	Junction	Method of Control	Year 2032 Ching Ming Festival Period Peak Hour Design Scenario (With Proposed Development) RC/DFC(1)		
			5 Apr (Ching Ming Festival)	7 Apr	9 Apr
A	Chai Wan Road / Tai Tam Road	Signal	91%	81%	>100%
B	Tai Tam Road / Shek O Road	Roundabout	0.68	0.55	0.60
C	Shek O Road / Cape Collison	Priority	0.74	0.74	0.83
D	Wan Tsui Road / Chai Wan Road / Island Eastern Corridor	Roundabout	0.35	0.37	0.30
E	Wan Tsui Road / Chai Wan Road	Priority	0.26	0.21	0.21
F	Chai Wan Road / Hong Man Street	Signal	72%	37%	85%
G	Wan Tsui Road / Lin Shing Road	Signal	26%	42%	32%
H	Cape Collinson Road / Lin Shing Road	Priority	0.53	0.60	0.69
I	Chai Wan Road / Lok Man Road	Signal	>100%	85%	89%

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

Table 5.4 Operational Performance of Identified Critical Junctions in Year 2032 Chung Yeung Festival Period Design Scenario (With Proposed Development)

Ref.	Junction	Method of Control	Year 2032 Chung Yeung Festival Period Peak Hour Design Scenario (With Proposed Development) RC/DFC[(1)]		
			21 Oct	22 Oct	23 Oct (Chung Yeung Festival)
A	Chai Wan Road / Tai Tam Road	Signal	50%	85%	67%
B	Tai Tam Road / Shek O Road	Roundabout	0.57	0.61	0.60
C	Shek O Road / Cape Collison	Priority	0.72	0.74	0.60
D	Wan Tsui Road / Chai Wan Road / Island Eastern Corridor	Roundabout	0.39	0.30	0.39
E	Wan Tsui Road / Chai Wan Road	Priority	0.21	0.20	0.52
F	Chai Wan Road / Hong Man Street	Signal	63%	99%	52%
G	Wan Tsui Road / Lin Shing Road	Signal	37%	47%	62%
H	Cape Collinson Road / Lin Shing Road	Priority	0.51	0.62	0.46
I	Chai Wan Road / Lok Man Road	Signal	54%	>100%	>100%

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

5.1.2 The assessment results in **Table 5.1** to **Table 5.4** 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 2032 during the peak hours of Ching Ming and Chung Yeung Festival periods.

6. PEDESTRIAN ASSESSMENT

6.1 Survey on Pedestrian Flows

6.1.1 In order to acquire the existing pedestrian condition around the proposed development, a pedestrian headcount survey was conducted at concerned footpath sections along with traffic survey during festival periods as stipulated in the TIA report **Section 3.1.2**.

6.1.2 Sections for assessment at the existing pedestrian footpaths is shown in **Figure 6.1**.

6.1.3 The concept of Minimum Width of Footways and Level-of-service (LOS) in accordance with T.P.D.M. Volume 2 Chapter 3.4.11 and Volume 6 Chapter 10 have been applied for assessing the concerned walkways. The Minimum Width of Footways refers to the desirable minimum effective widths of footways according to pedestrian volume and type of land use. LOS directly relates to the pedestrian comfort and ease with which pedestrians queued and proceed at the walkway.

6.1.4 The related assessment of pedestrian is based on Level-of-Service (LOS) approach, which is stipulated in T.P.D.M. (Volume 6, Chapter 10, Section 10.4.2), defines the service level of walkway in terms of several parameters such as pedestrian flow rate, pedestrian space, walking speed, etc. The standard with relevant descriptions for footpath is summarized in **Table 6.1**.

Table 6.1 Descriptions of Level-of-Service (LOS) for Footpath

LOS	Flow Rate (ped/min/meter)	Description
A	≤ 16	Pedestrians basically move in desired paths without altering their movements in response to other pedestrians. Walking speeds are freely selected, and conflicts between pedestrians are unlikely.
B	16 - 23	Sufficient space is provided for pedestrians to freely select their walking speeds, to bypass other pedestrians and to avoid crossing conflicts with others. At this level, pedestrians begin to be aware of other pedestrians and to respond to their presence in the selection of walking paths.

LOS	Flow Rate (ped/min/meter)	Description
C	23 - 33	Sufficient space is available to select normal walking speeds and to bypass other pedestrians primarily in unidirectional stream. Where reverse direction or crossing movement exists, minor conflicts will occur, and speed and volume will be somewhat lower.
D	33 - 49	Freedom to select individual walking speeds and bypass other pedestrians is restricted. Where crossing or reverse-flow movements exist, the probability of conflicts is high and its avoidance requires changes of speeds and position. The LOS provides reasonable fluid flow; however considerable friction and interactions between pedestrians are likely to occur.
E	49 - 75	Virtually, all pedestrians would have their normal walking speeds restricted. At the lower range of this LOS, forward movement is possible only by shuffling. Space is insufficient to pass over slower pedestrians. Cross- and reverse-movement are possible only with extreme difficulties. Design volumes approach the limit of walking capacity with resulting stoppages and interruptions to flow.
F	> 75	Walking speeds are severely restricted. Forward progress is made only by shuffling. There are frequent and unavoidable conflicts with other pedestrians. Cross- and reverse-movements are virtually impossible. Flow is sporadic and unstable. Space is more characteristics of queued pedestrians than of moving pedestrian streams.

6.1.5 The observed peak hour pedestrian flows for Ching Ming and Chung Yeung Festival periods and the level-of-service (LOS) for existing operational performances of the identified critical section is listed in **Table 6.2**.

Table 6.2 Operational Performance of Critical Footpath in Year 2023

Critical Section	Total Footpath Width (m)[1]	Effective Width (m)[2]	Date	Year 2023 Observed		
				Two-way Pedestrian Flow (ped/hr)	Two-way Pedestrian Flow Rate (ped/min/m)[3]	LOS
P1	4	3	5 Apr (Ching Ming Festival)	790	4.4	A
			7 Apr	300	1.7	A
			9 Apr	430	2.4	A
			21 Oct	185	1.0	A
			22 Oct	425	2.4	A
			23 Oct (Chung Yeung Festival)	850	4.7	A

Notes:
(1) Effective Width = Total Footpath Width – Death Width (0.5m from railings or walls).
(2) Two-way Pedestrian Flow Rate (ped/min/m) = Peak Pedestrian Flow / 15 min / Effective Width.
(3) LOS details extracted from the HCM are tabulated in TPDM Volume 6 Chapter 10 Clause 10.4.2.3.

6.1.6 The results of assessment shown in **Table 6.2** indicate that the critical section is operating with ample reserved capacity during peak hours of Ching Ming and Chung Yeung Festival periods.

6.2 Future Pedestrian Condition

6.2.1 Based on the observed flows, the adopted growth rate of +0.14% and estimated pedestrian trips of adjacent development, future pedestrian reference flows for Ching Ming and Chung Yeung Festival periods at the critical section (without proposed development) in Year 2032 are estimated and summarized in **Table 6.3**.

Table 6.3 Operational Performance of Critical Footpath in Year 2032 Reference Scenario (Without Proposed Development)

Critical Section	Total Footpath Width (m)[1]	Effective Width (m)[2]	Date	Year 2032 Reference Scenario (Without Proposed Development)		
				Two-way Pedestrian Flow (ped/hr)	Two-way Pedestrian Flow Rate (ped/min/m)[3]	LOS
P1	4	3	5 Apr (Ching Ming Festival)	800	4.4	A
			7 Apr	305	1.7	A
			9 Apr	435	2.4	A
			21 Oct	185	1.0	A
			22 Oct	430	2.4	A
			23 Oct (Chung Yeung Festival)	860	4.8	A

Notes:
(1) Effective Width = Total Footpath Width – Death Width (0.5m from railings or walls).
(2) Two-way Pedestrian Flow Rate (ped/min/m) = Peak Pedestrian Flow / 15 min / Effective Width.
(3) LOS details extracted from the HCM are tabulated in TPDM Volume 6 Chapter 10 Clause 10.4.2.3.

6.2.2 Based on **Table 4.7** and **Table 6.3**, future pedestrian design flows for Ching Ming and Chung Yeung Festival periods at the critical section (with proposed development) in Year 2032 are estimated and summarized in **Table 6.4**.

Table 6.4 Operational Performance of Critical Footpath in Year 2032 Design Scenario (With Proposed Development)

Critical Section	Total Footpath Width (m)[1]	Effective Width (m)[2]	Date	Year 2032 Design Scenario (With Proposed Development)		
				Two-way Pedestrian Flow (ped/hr)	Two-way Pedestrian Flow Rate (ped/min/m)[3]	LOS
P1	4	3	5 Apr (Ching Ming Festival)	5,255	29.2	C
			7 Apr	4,755	26.4	C
			9 Apr	4,890	27.2	C
			21 Oct	4,640	25.8	C
			22 Oct	4,885	27.1	C
			23 Oct (Chung Yeung Festival)	5,315	29.5	C

Notes:
(1) Effective Width = Total Footpath Width – Death Width (0.5m from railings or walls).
(2) Two-way Pedestrian Flow Rate (ped/min/m) = Peak Pedestrian Flow / 15 min / Effective Width.
(3) LOS details extracted from the HCM are tabulated in TPDM Volume 6 Chapter 10 Clause 10.4.2.3.

6.2.3 It is revealed from the assessment results in **Table 6.4** that the critical section of footpath would be able to attain the acceptable LOS with additional pedestrian flows arising from the proposed development during peak hours of Ching Ming and Chung Yeung Festival periods in design year 2032.

7. LOADING/ UNLOADING LAYBY

7.1 Queuing assessment (Bus)

7.1.1 The bus stop in front of the proposed development can cater 3 franchised buses (~ 11.5m x ~2.55m) as shown in **Figure 7.1.** Arrival Rate (veh/hr) and Servicing Rate (veh/hr) refer to the total number of bus arrival and average pick-up/drop-off time at the bus stop per hour. The peak hour arrival rate and service rate are summarized in **Table 7.1.**

Table 7.1 Peak Hour Traffic Trips at Bus Layby

	Peak Hour
Existing Arrival Rate (veh/hr)	24(1)
Additional Services due to Proposed Development (veh/hr)	25
Number of Bays	3
Servicing Rate per Bay (veh/hr)	40(1)

Note:
(1) Reference has been made to our on-site observation during festival period.

7.1.2 To understand the loading/ unloading condition at concerned bus layby, queuing assessment is carried out for the critical bus stop.

7.1.3 3 nos. of spaces are provided at the critical bus stop.

7.1.4 Assume all buses including existing bus route no. 388 and 389 (maximum frequency of 6 bus/hr each) arrive in the same peak hour as a conservative approach, Maximum Arrival Rate at peak is 37 veh/hr (6 + 6+ 25).

7.1.5 Average pick-up/drop-off time at the bus stop is 1.5 minutes for each bus, servicing rate per bus bay = 40 veh/hr.

7.1.6 The queuing situation can be assessed based on a single channel queuing system, thus Poisson distribution and multi-servers queuing (M/M/N) theory is used.

7.1.7 The probability that N vehicles are in the queuing system is given by:

$$P(n) = \frac{1}{\sum_{n=0}^{N-1}\frac{e^n}{n!} + \frac{e^N}{N!\left(1-\frac{e}{N}\right)}} \qquad \text{for } n = 0$$

$$P(n) = \frac{e^n}{n!}P(0) \qquad \text{for } 0 < n \le N$$

$$P(n) = \frac{e^n}{N^{n-N}N!}P(0) \qquad \text{for } n > N$$

where: $P(n)$ = Probability of n vehicles in the system

λ = Peak arrival rate = 37 veh/hr

μ = Servicing rate = 40 veh/hr

e = λ / μ = 37 ÷ 40 = 0.925

n = Number of vehicles in the system

N = Number of space for bus = 3

Table 0.1 Summary of Queuing Assessment Results

Parameters	Values
N: Servers	3
P: Probability of more than 3 buses in the system (n>3)	2.3%

7.1.8 The above findings reveal that the probability of formation of queue is approx. 2.3% only (less than 5%). In other words, the probability of having a queue of more than three buses in the concerned bus layby is considered negligible.

8. SUMMARY AND CONCLUSION

8.1 Summary

8.1.1 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.

8.1.2 To appraise the existing traffic condition, manual-classified counting surveys were conducted at critical junctions in 2023. Current operational performance of the critical junctions has been assessed. The results reveal that all critical junctions are at present operating within its capacities during peak hours of Ching Ming and Chung Yeung Festival periods.

8.1.3 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 2032 during peak hours of Ching Ming and Chung Yeung Festival periods.

8.1.4 Pedestrian assessment also revealed that the critical section of footpath would be able to attain the acceptable LOS with additional pedestrian flows arising from the proposed development during peak hours of Ching Ming and Chung Yeung Festival periods in design year 2032.

8.1.5 Based on the findings, the probability of formation of queue is approx. 2.3% only (less than 5%). In other words, the probability of having a queue of more than three buses in the concerned bus layby is considered negligible.

8.2 Conclusion

8.2.1 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 significant traffic impact will be induced.

8.2.2 Therefore, the proposed development is reckoned feasible from traffic engineering point of view.

FIGURE NO.: 1.1	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: SITE LOCATION PLAN
SCALE: 1 : 11000 @A4	DATE: 25 JAN 2024

CTA Consultants Limited
志達顧問有限公司

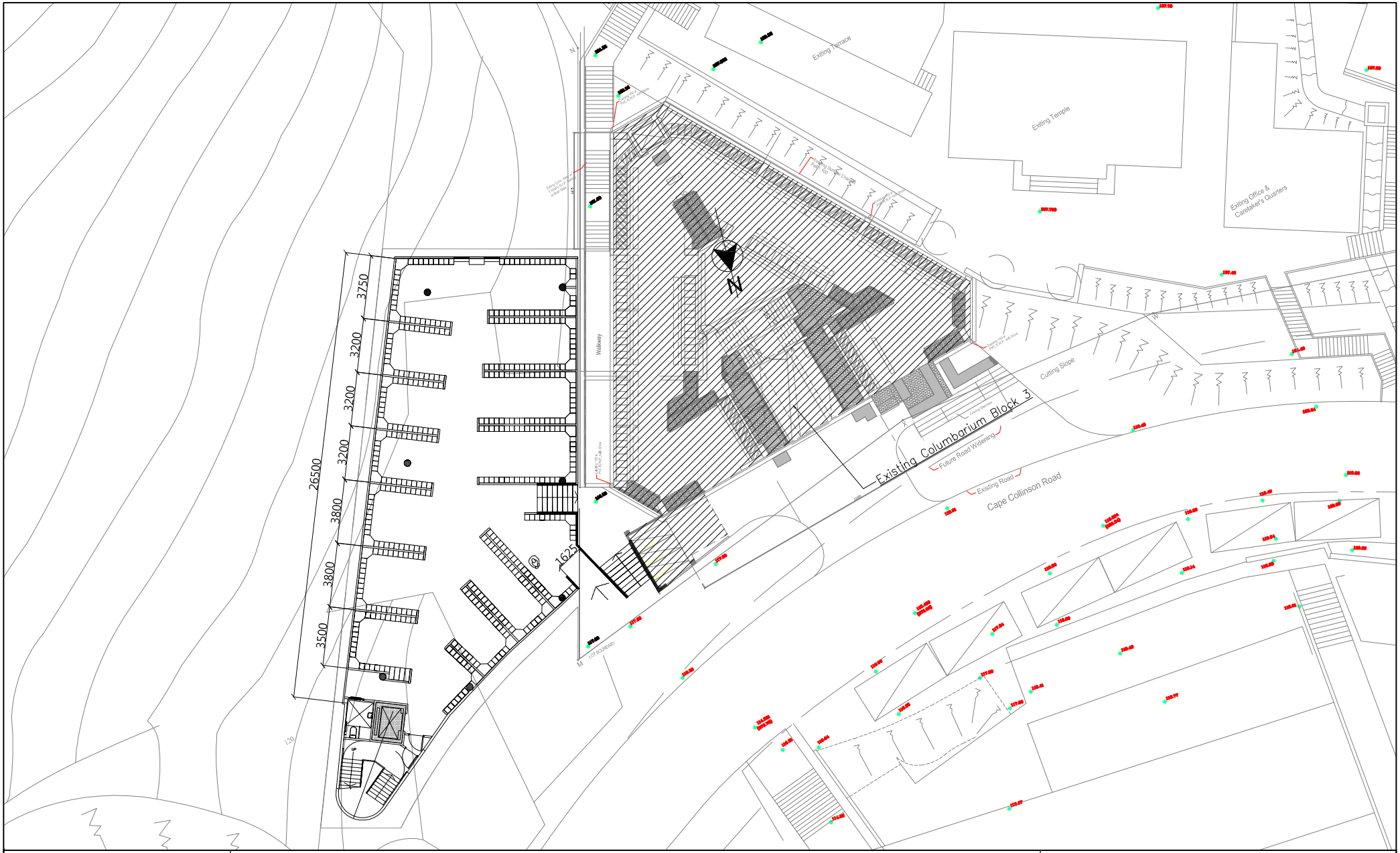


FIGURE NO.: 2.1	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: INTERNAL TRANSPORT FACILITIES	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 300 @A4 / DATE: 25 JAN 2024		

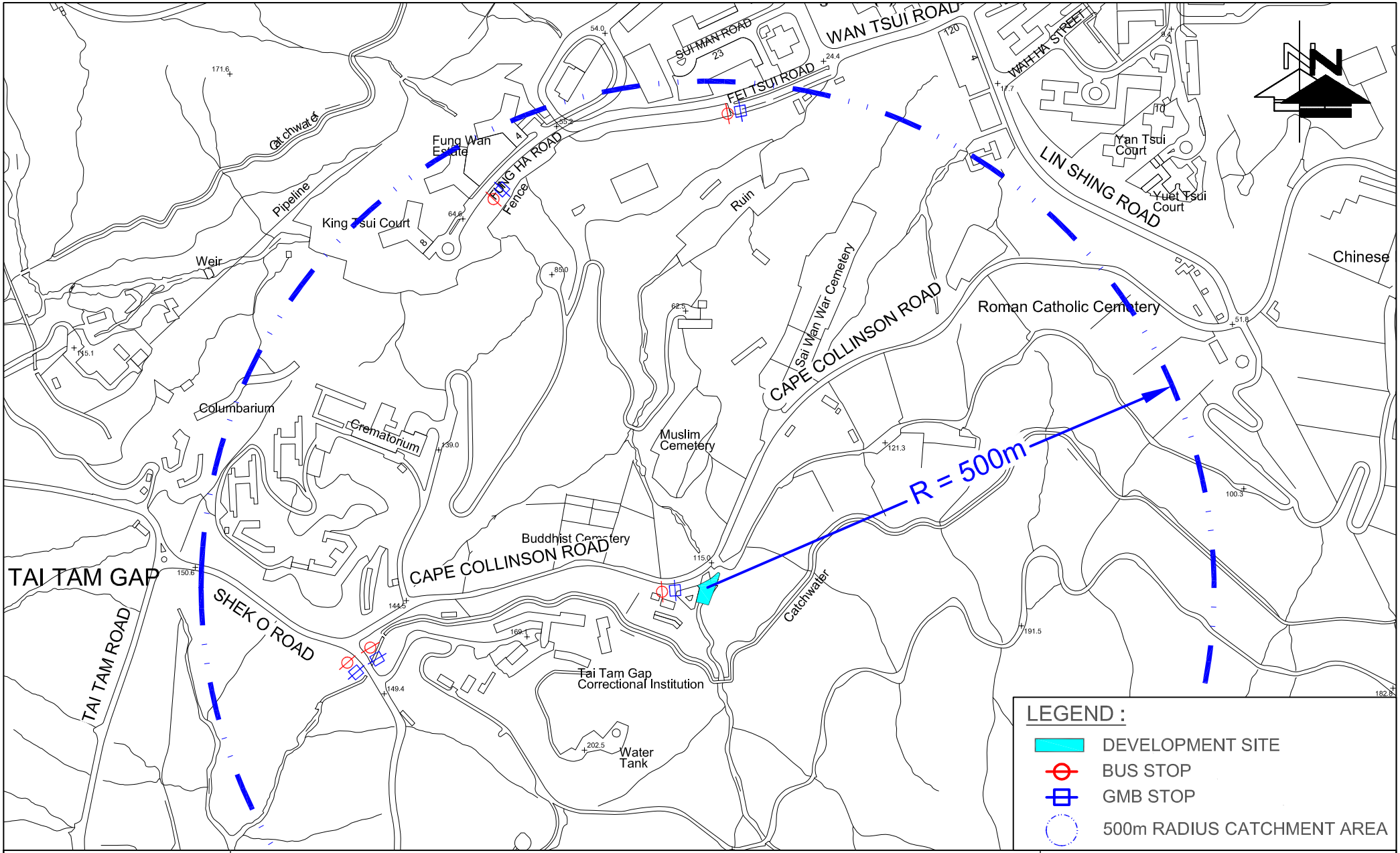


FIGURE NO.: 2.2	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: PUBLIC TRANSPORT IN VICINITY
SCALE: 1 : 5000 @A4	DATE: 25 JAN 2024

CTA Consultants Limited
志達顧問有限公司

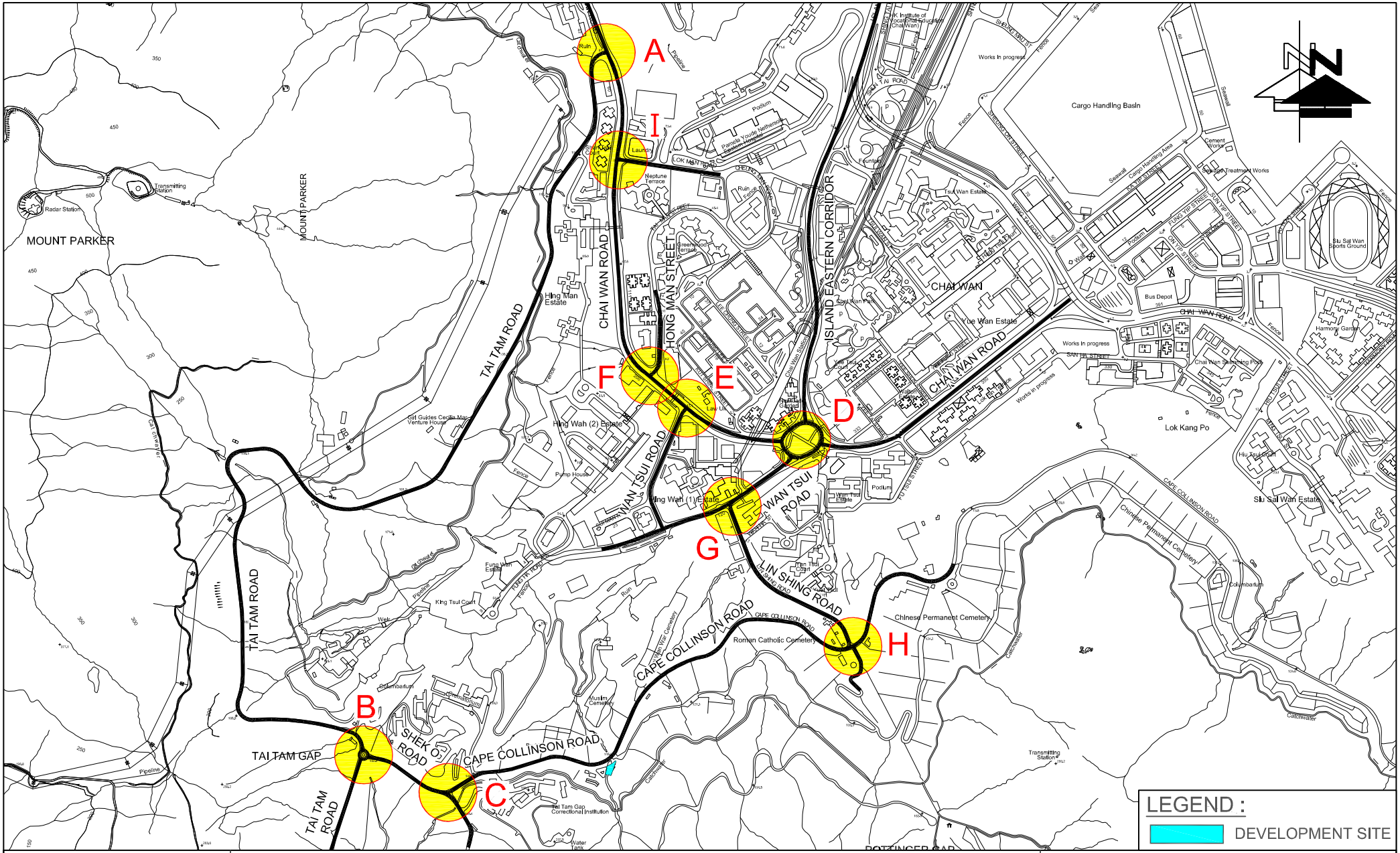


FIGURE NO.: 3.1	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: KEY JUNCTIONS AND EXISTING ROAD NETWORK
SCALE: 1 : 11000 @A4	DATE: 25 JAN 2024

CTA Consultants Limited
志達顧問有限公司

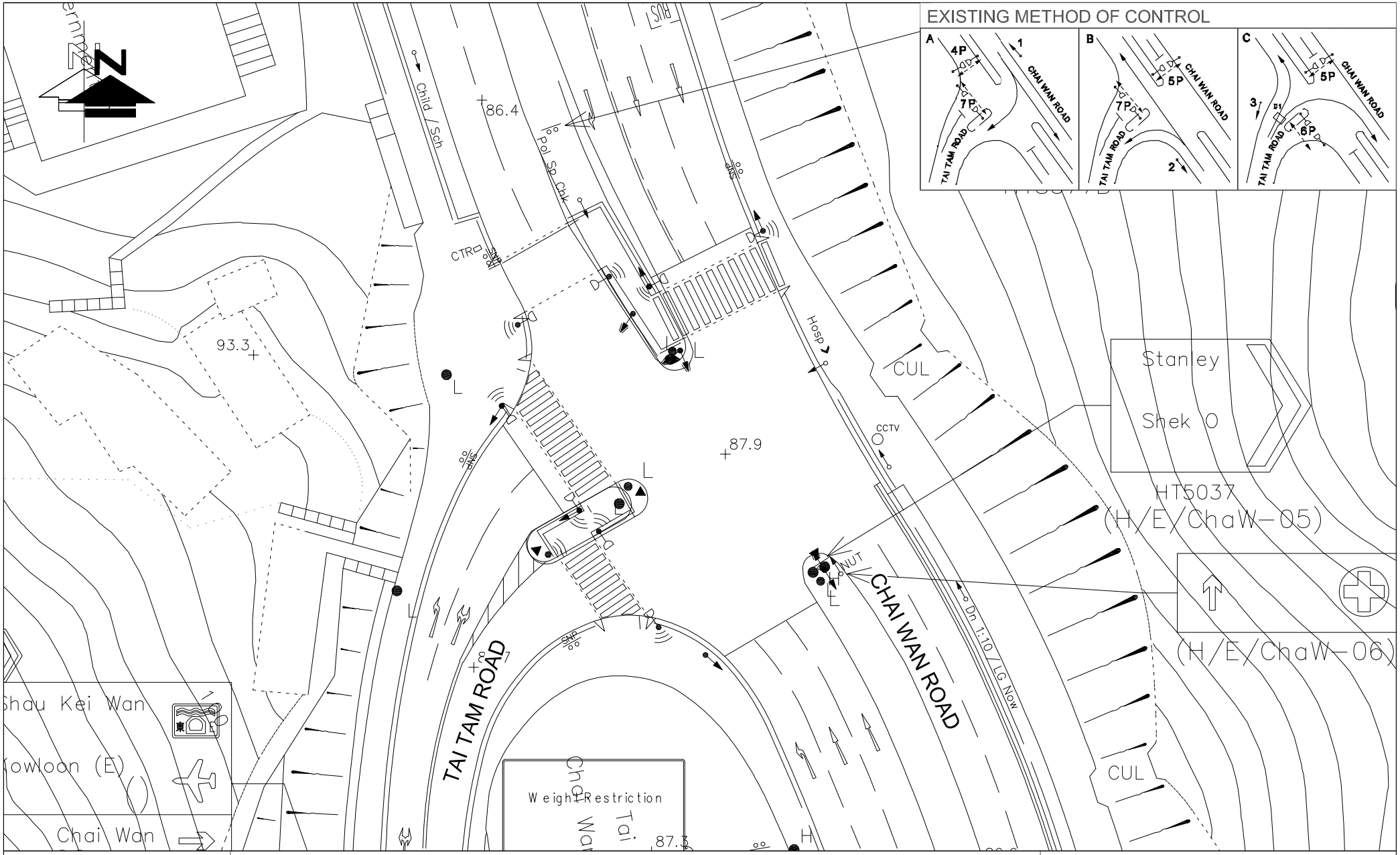


FIGURE NO.: 3.2	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF CHAI WAN ROAD / TAI TAM ROAD (A)
SCALE: 1 : 500 @A4 / DATE: 25 JAN 2024	CTA Consultants Limited 志達顧問有限公司

FIGURE NO.: 3.3	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TAI TAM ROAD / SHEK O ROAD (B)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 500 @A4 / DATE: 25 JAN 2024		

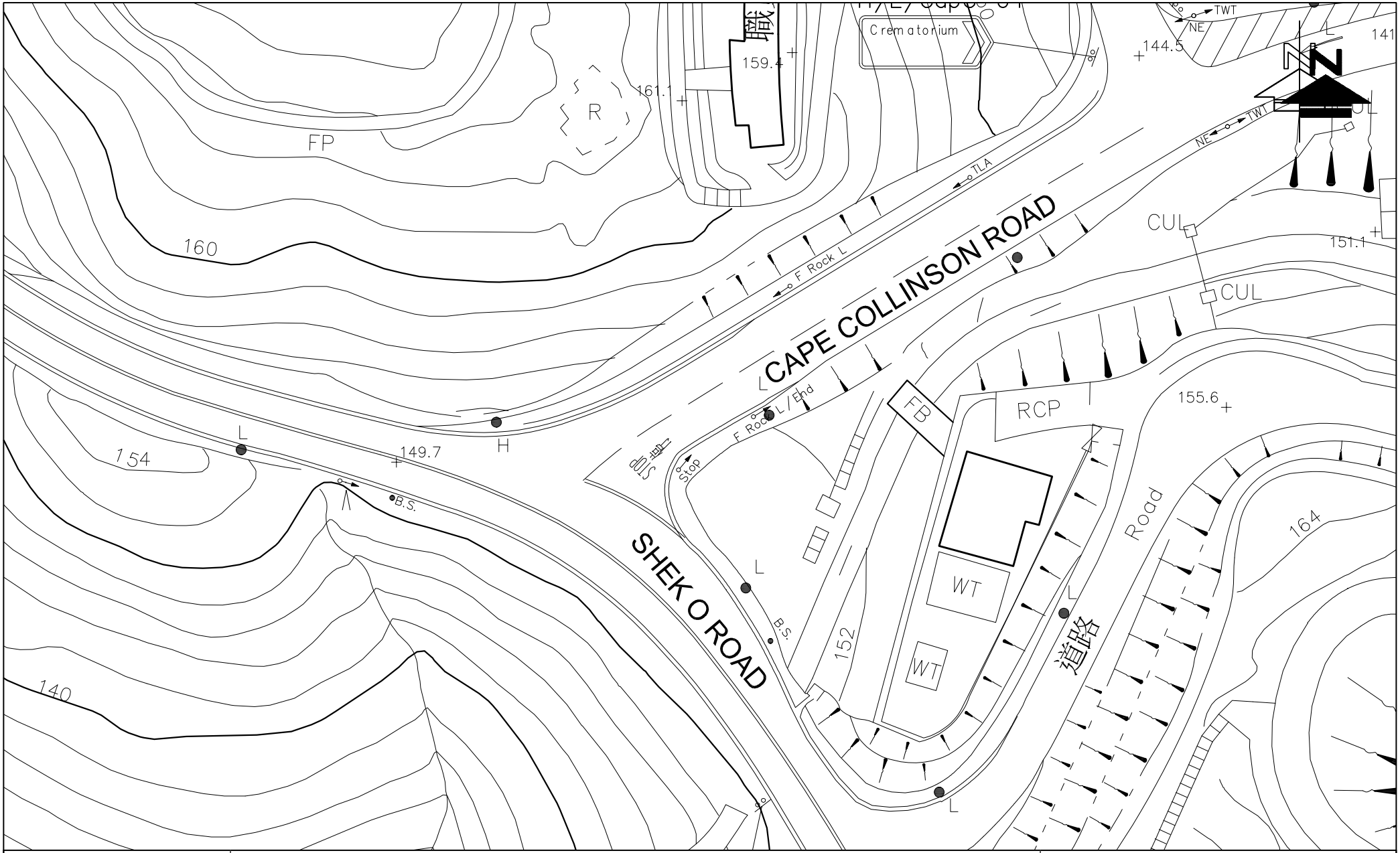


FIGURE NO.: 3.4	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF SHEK O ROAD / CAPE COLLINSON ROAD (C)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 500 @A4 / DATE: 25 JAN 2024		

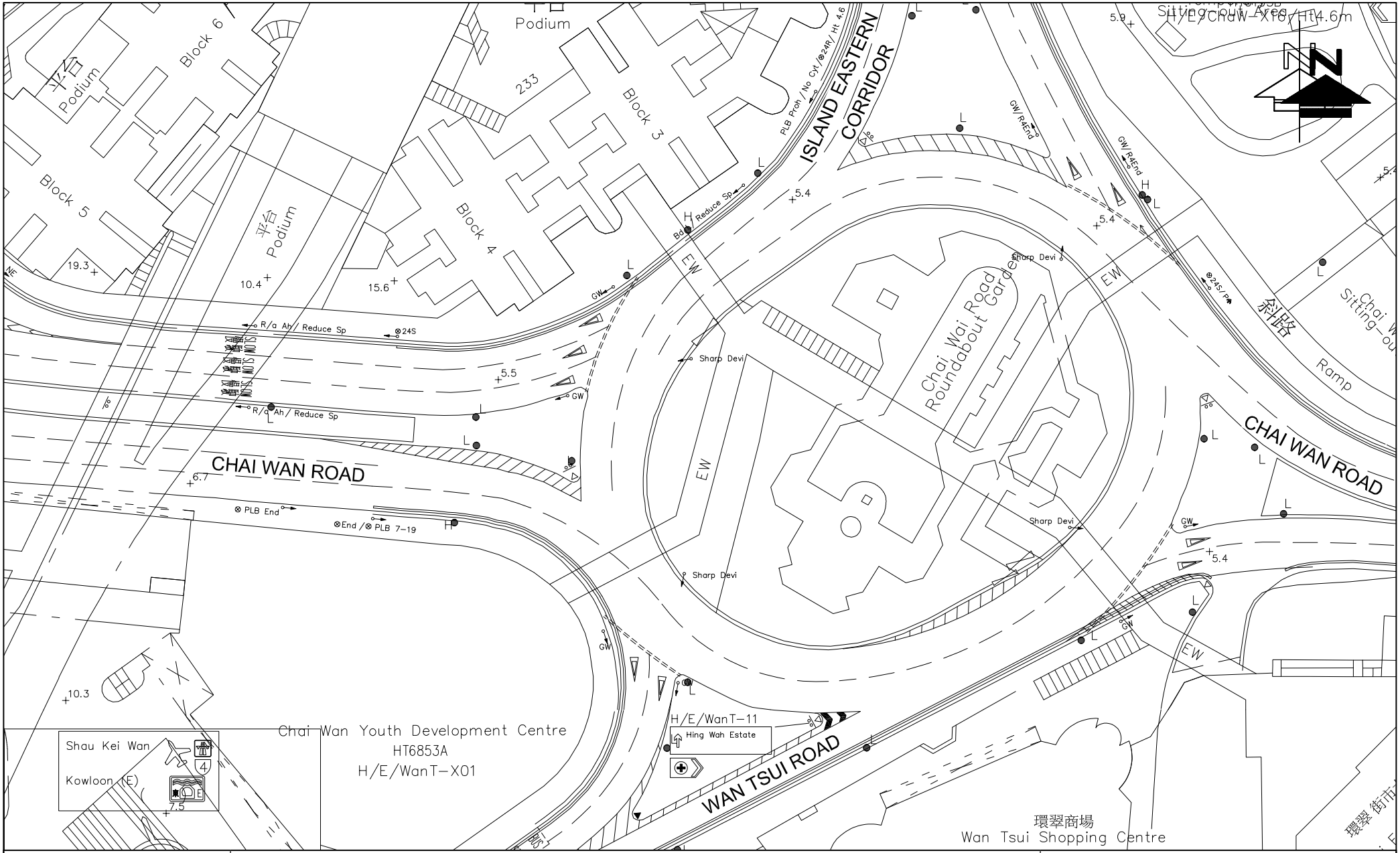


FIGURE NO.: 3.5	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF CHAI WAN ROAD / WAN TSUI ROAD / ISLAND EASTERN CORRIDOR (D)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 750 @A4 / DATE: 25 JAN 2024		

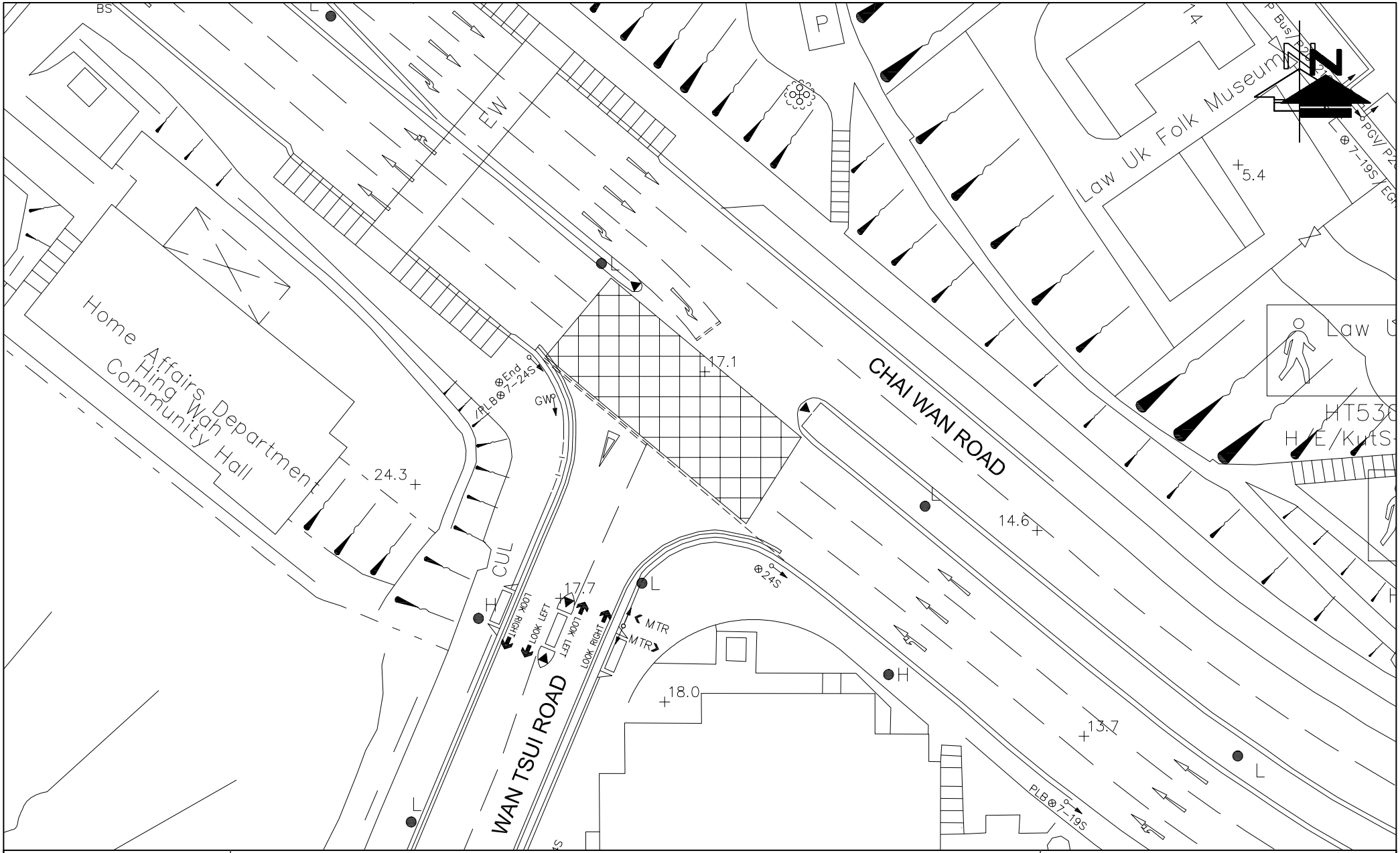


FIGURE NO.: 3.6	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF WAN TSUI ROAD / CHAI WAN ROAD (E)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 500 @A4 / DATE: 25 JAN 2024		

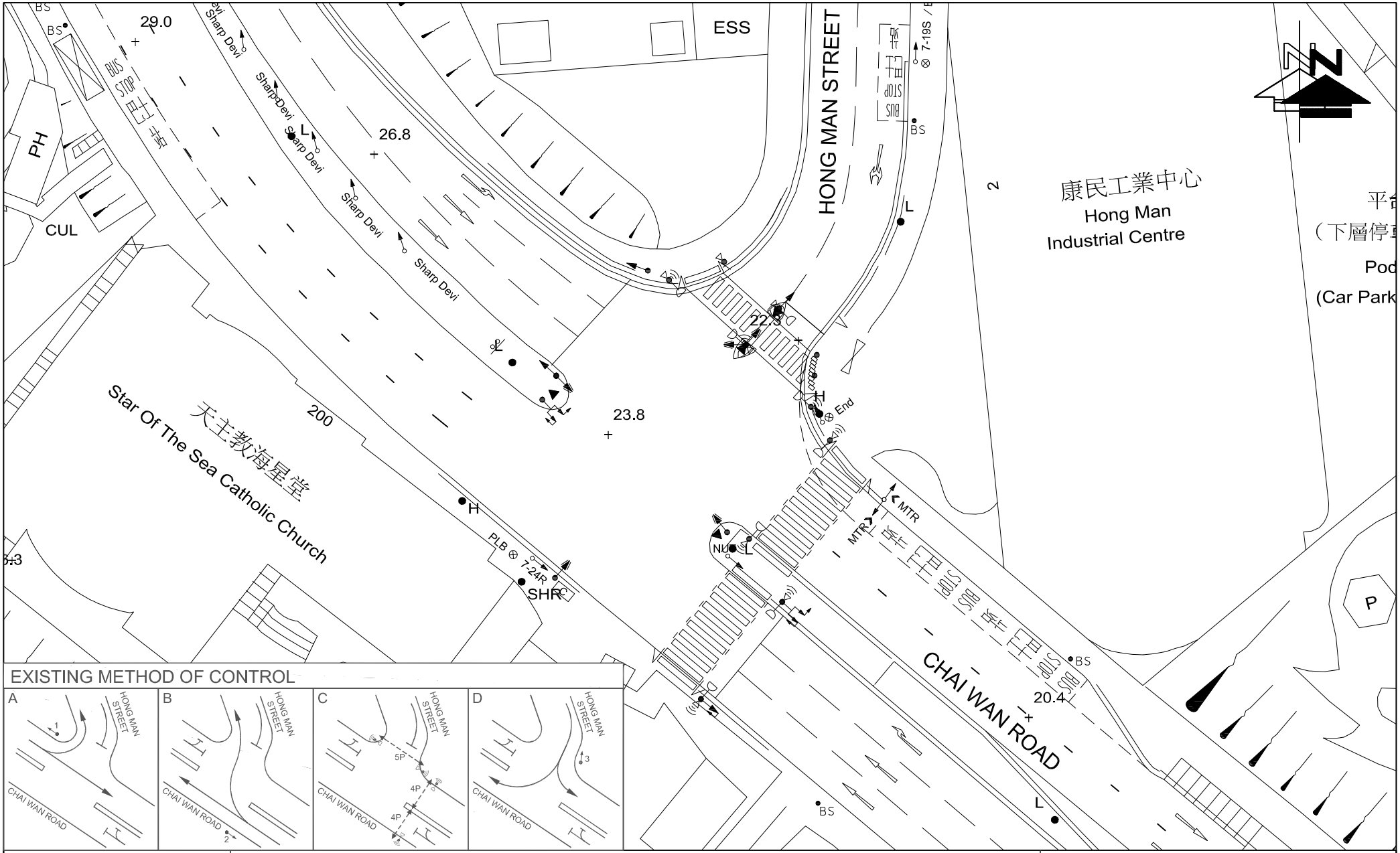


FIGURE NO.: 3.7	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF CHAI WAN ROAD / HONG MAN STREET (F)
SCALE: 1 : 500 @A4 / DATE: 25 JAN 2024	CTA Consultants Limited 志達顧問有限公司

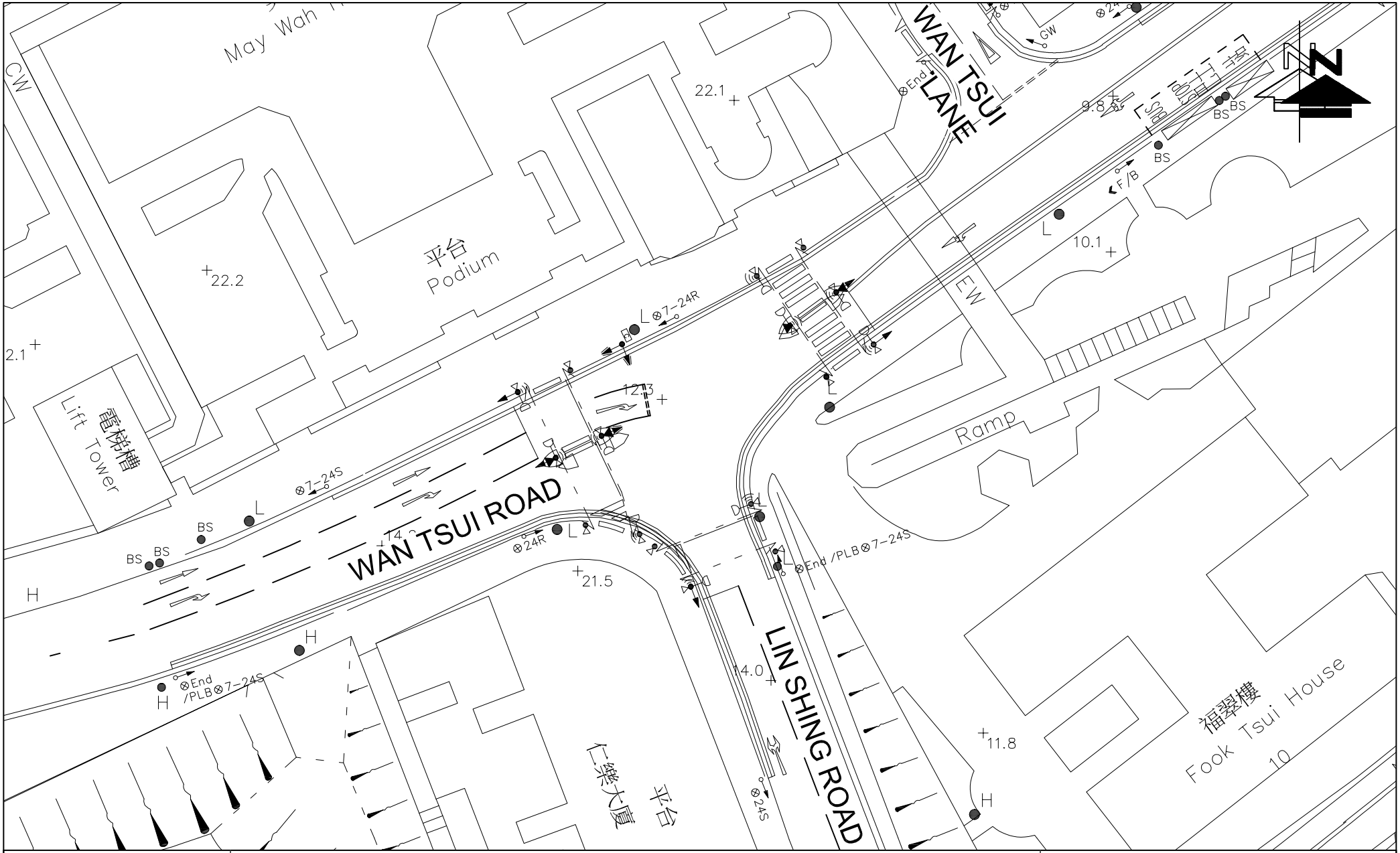


FIGURE NO.: 3.8	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF WAN TSUI ROAD / LIN SHING ROAD (G)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 500 @A4 / DATE: 25 JAN 2024		

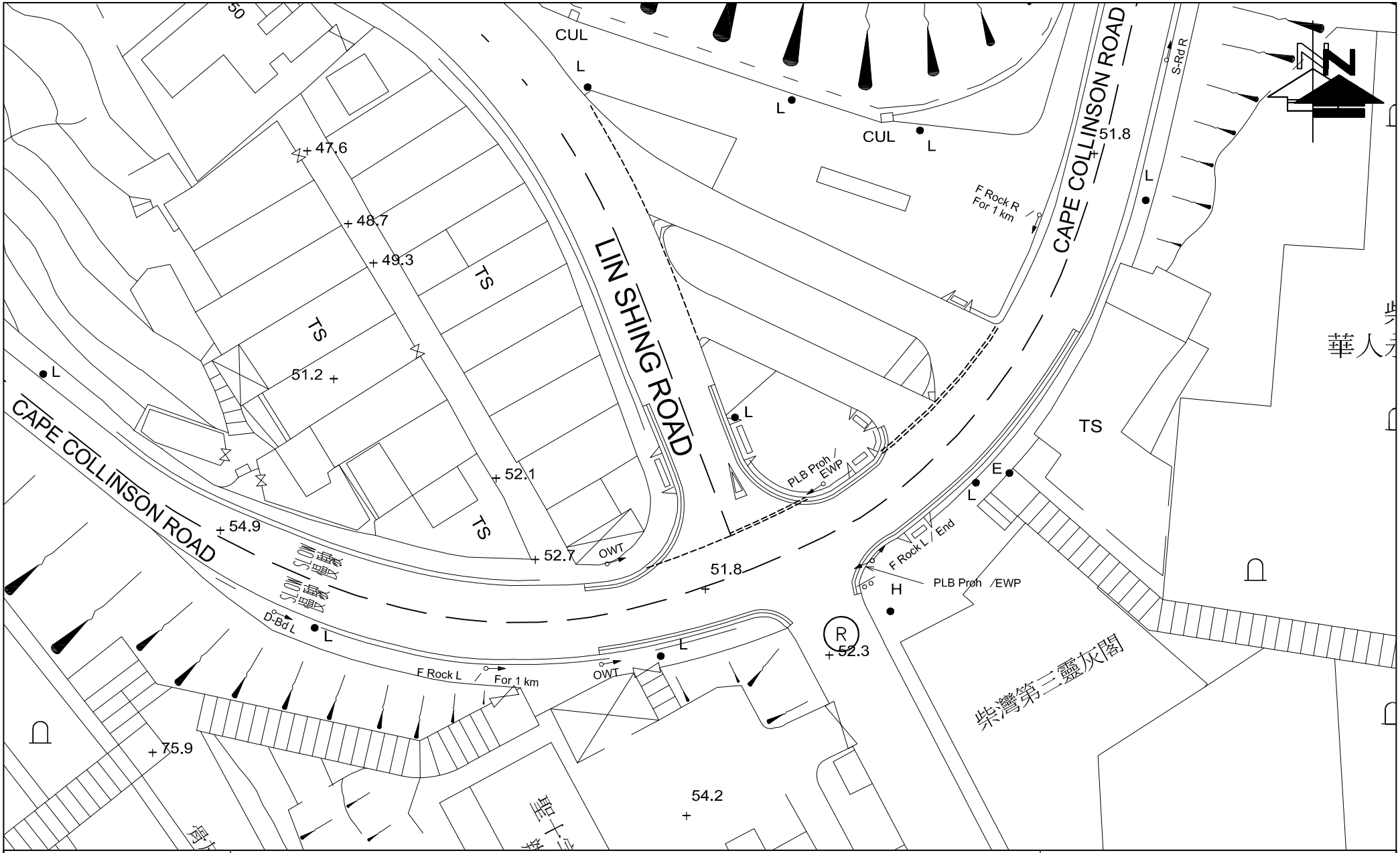


FIGURE NO.: 3.9	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF CAPE COLLINSON ROAD / LIN SHING ROAD (H)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 500 @A4 / DATE: 25 JAN 2024		

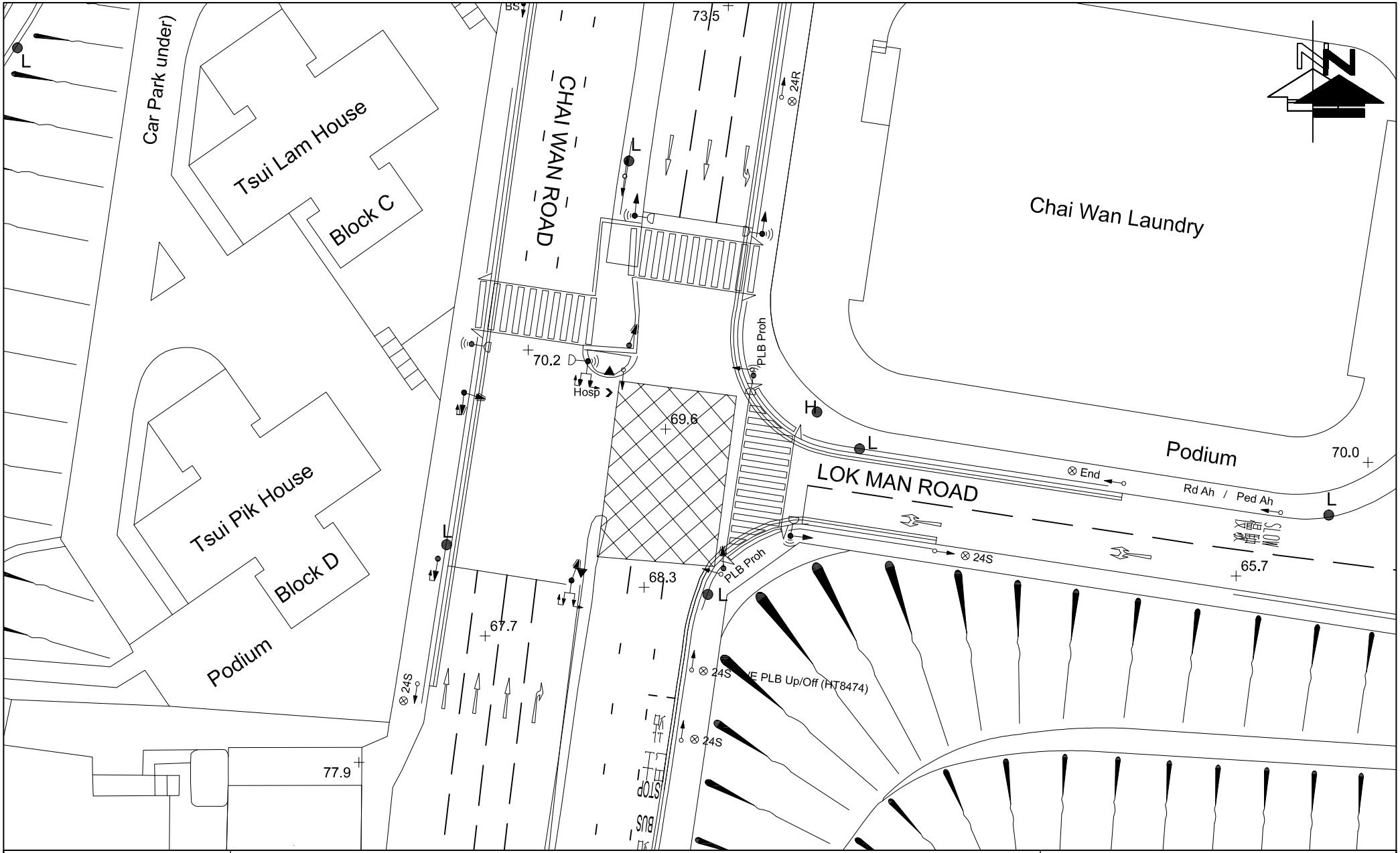
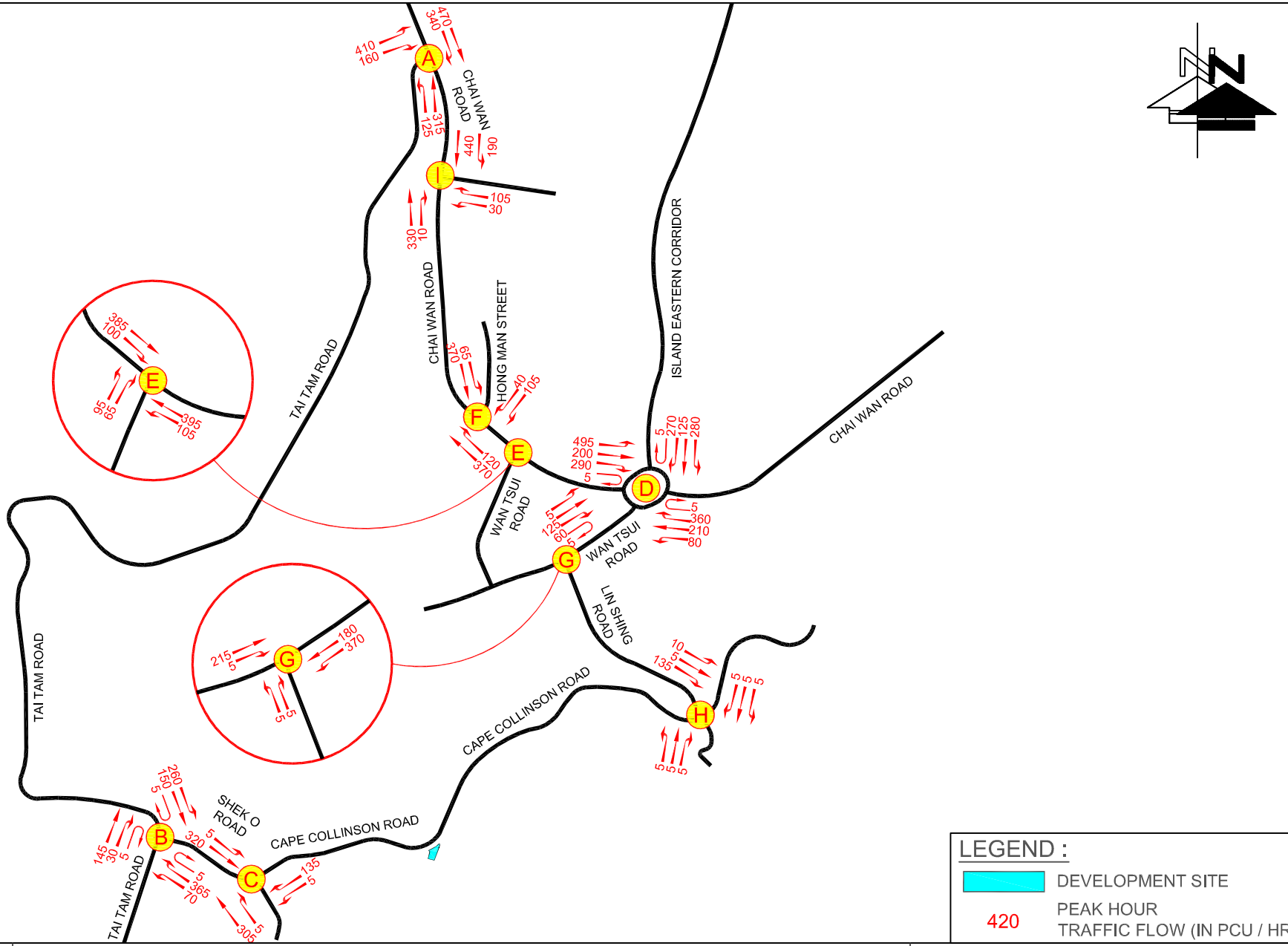


FIGURE NO.: 3.10	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23121HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF CHAI WAN ROAD / LOK MAN ROAD (I)	
SCALE: 1 : 500 @A4 / DATE: 25 JAN 2024		



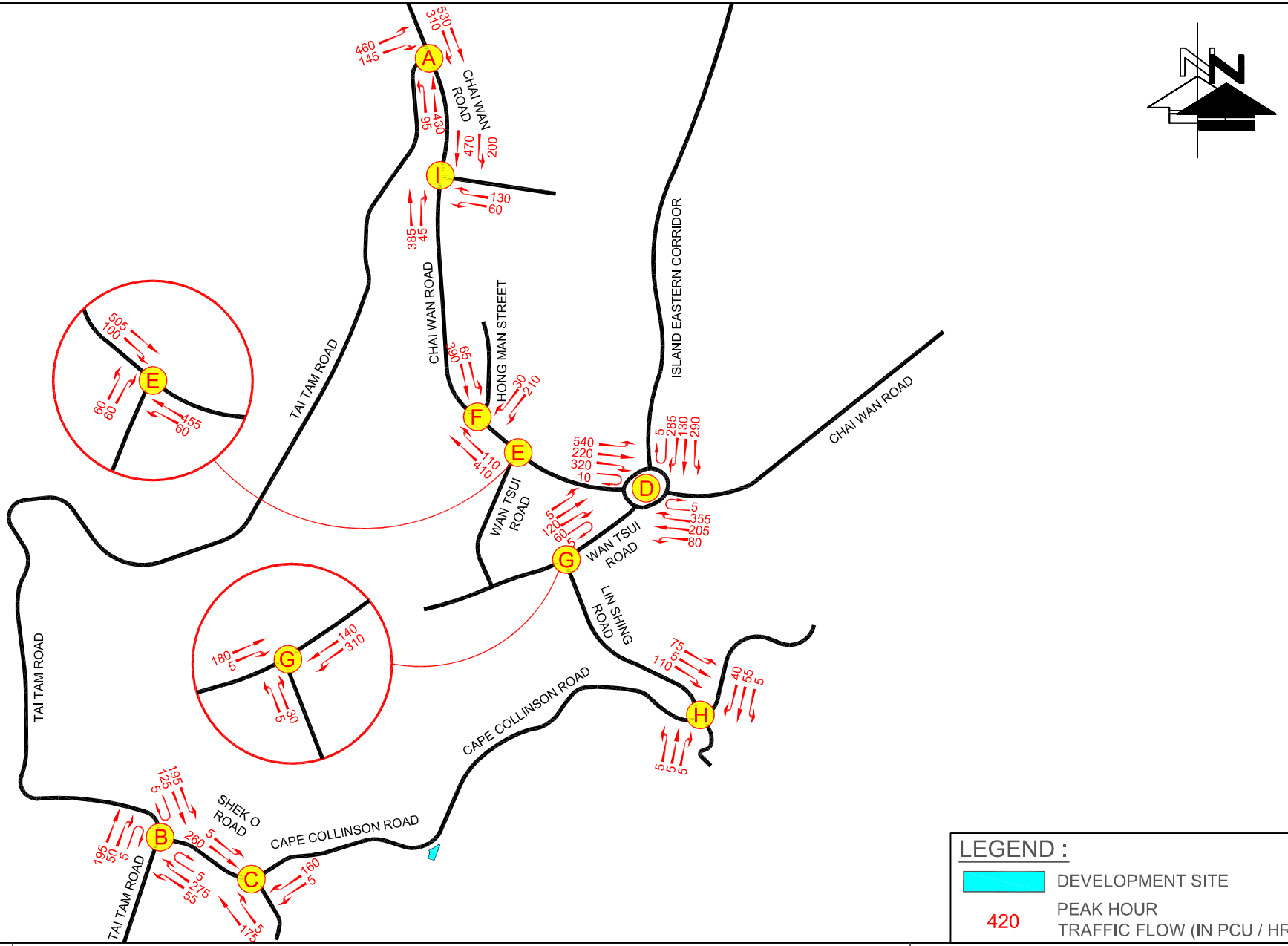
LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 3.11	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2023 OBSERVED TRAFFIC FLOWS - 5 APRIL (CHING MING FESTIVAL)
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	

CTA Consultants Limited
志達顧問有限公司

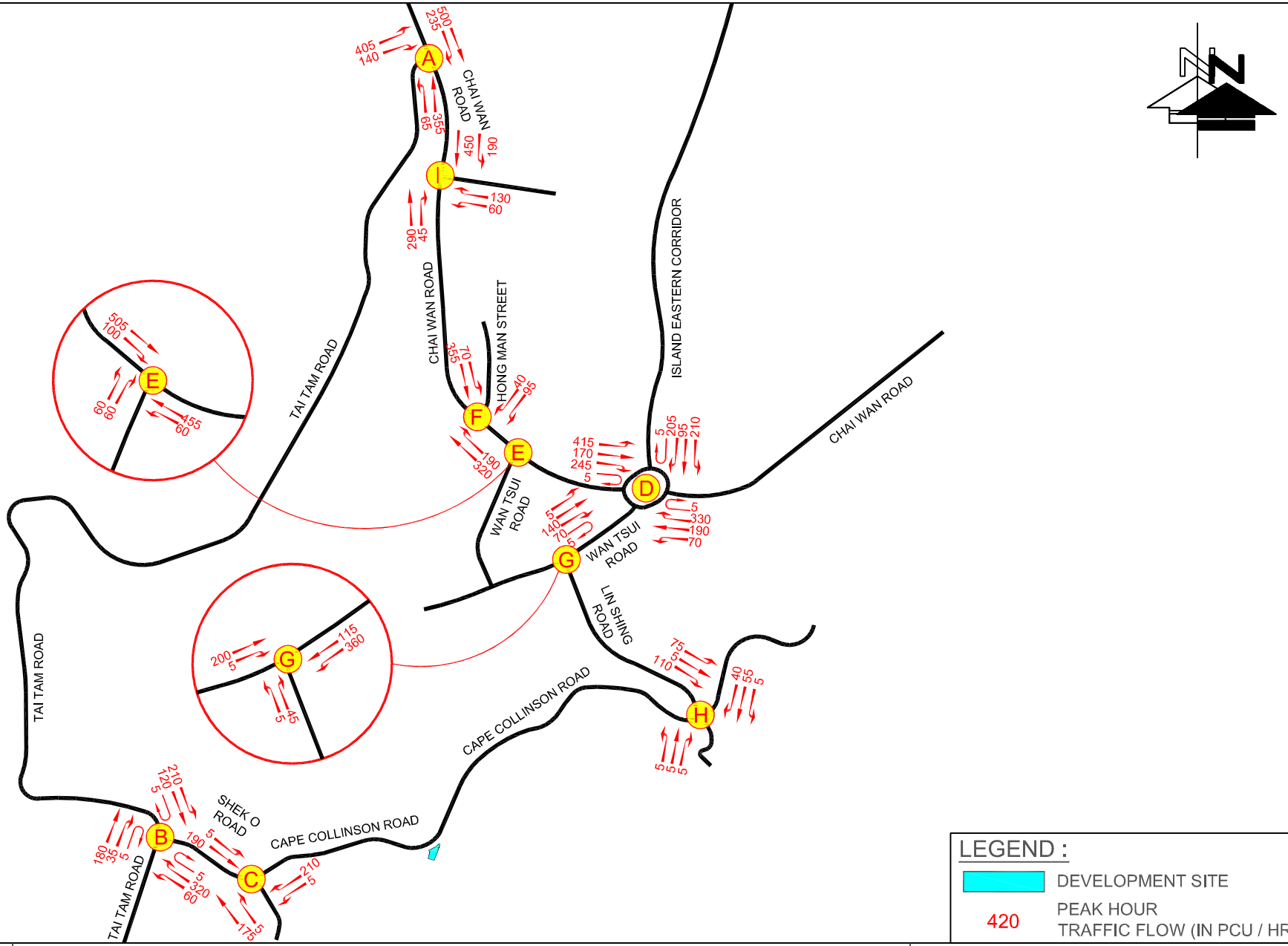


LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 3.12	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: 2023 OBSERVED TRAFFIC FLOWS - 7 APRIL	CTA Consultants Limited 志達顧問有限公司
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024		



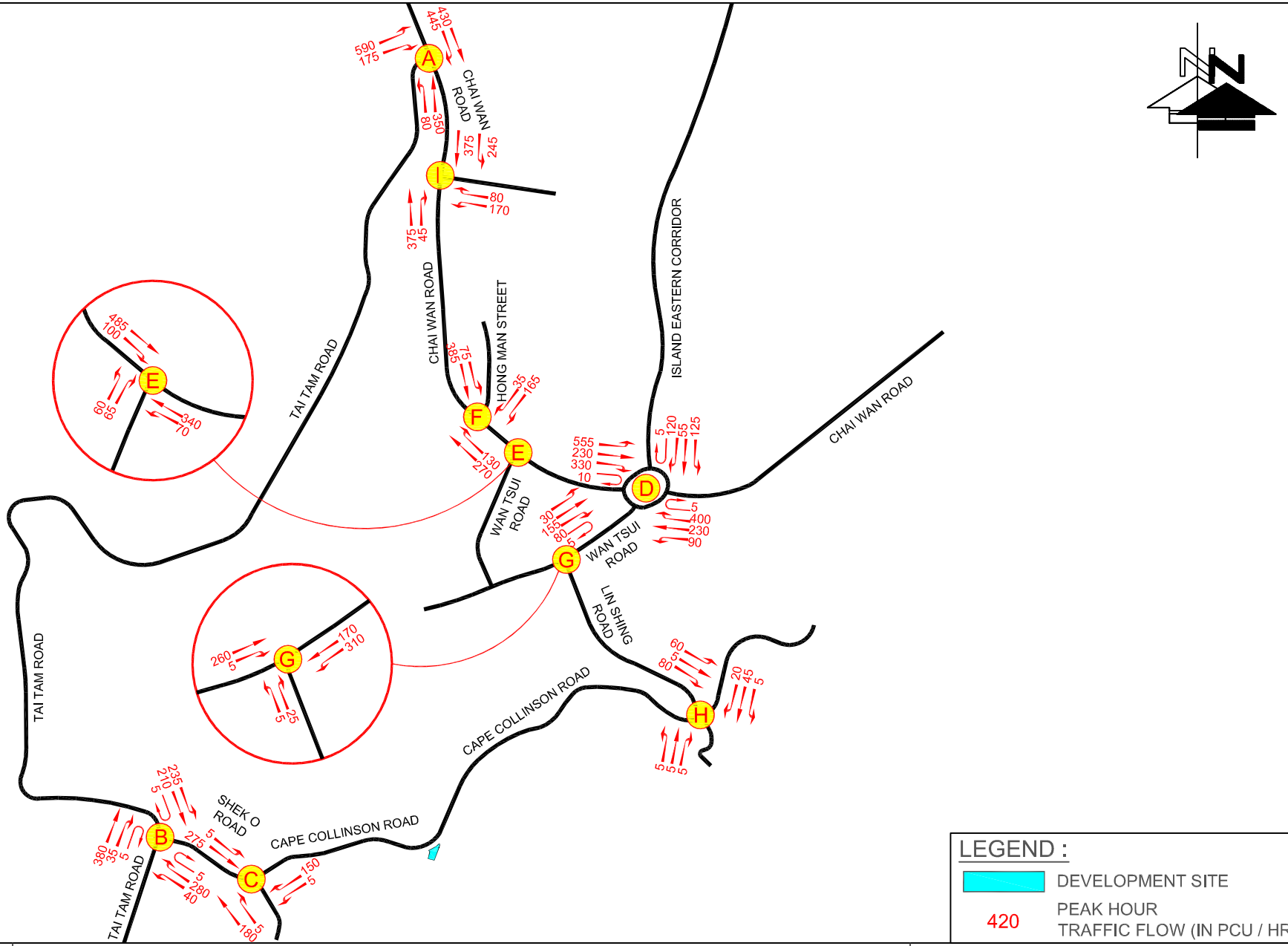
LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 3.13	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: 2023 OBSERVED TRAFFIC FLOWS - 9 APRIL	
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024		

CTA Consultants Limited
志達顧問有限公司



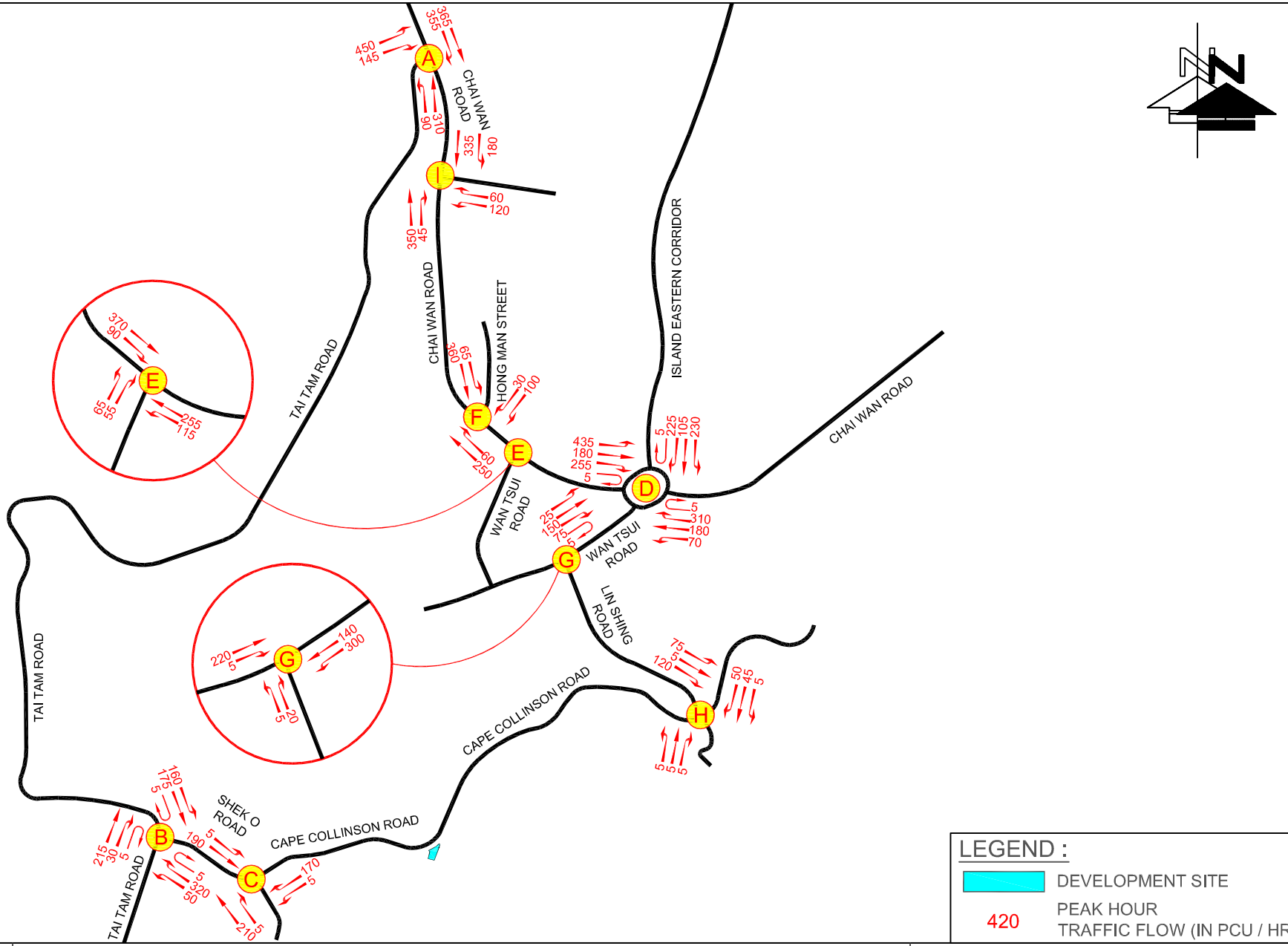
LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 3.14	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: 2023 OBSERVED TRAFFIC FLOWS - 21 OCTOBER	
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024		

CTA Consultants Limited
志達顧問有限公司

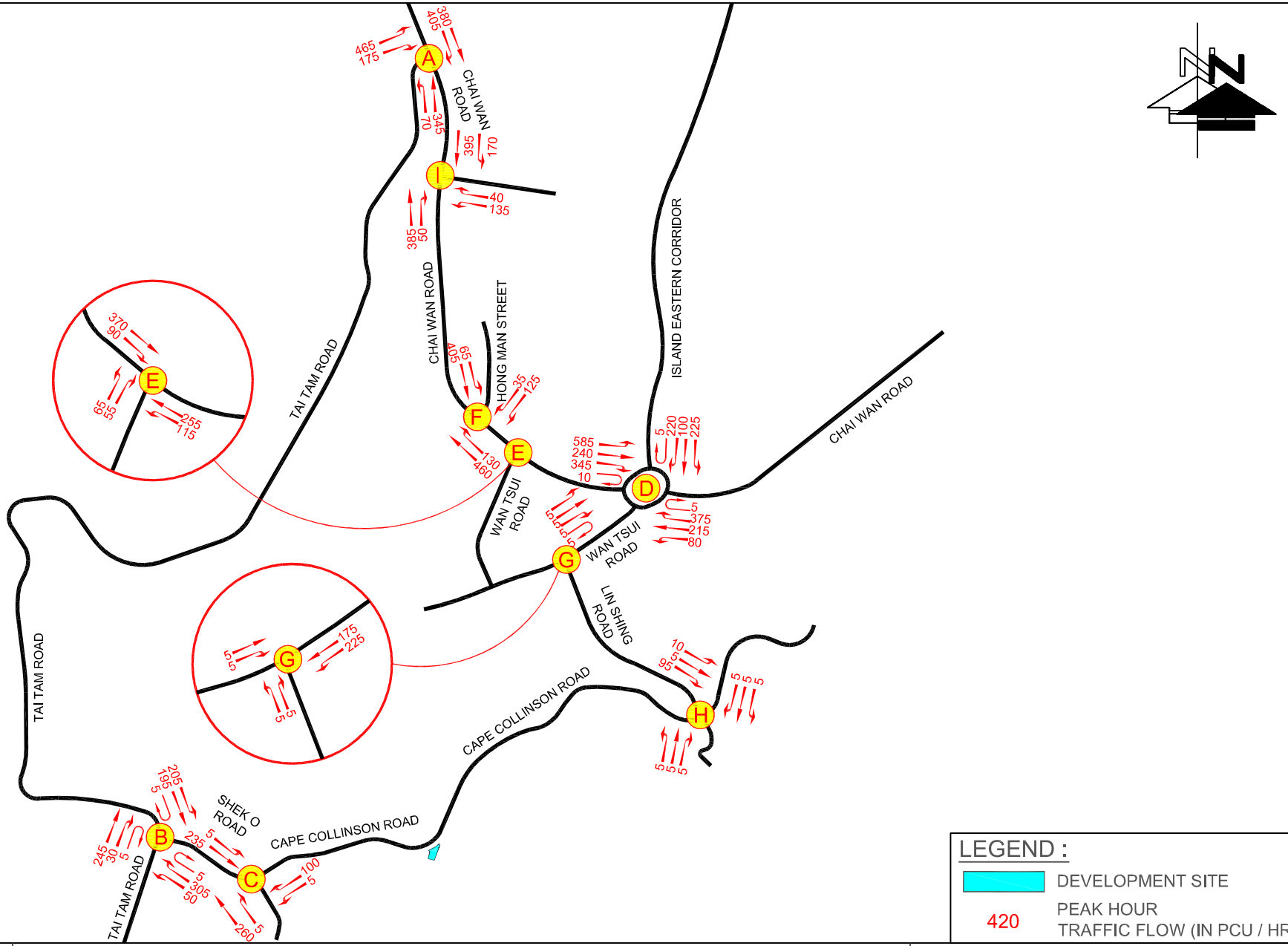


LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 3.15	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2023 OBSERVED TRAFFIC FLOWS - 22 OCTOBER
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	CTA Consultants Limited 志達顧問有限公司



LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 3.16	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2023 OBSERVED TRAFFIC FLOWS - 23 OCTOBER (CHUNG YEUNG FESTIVAL)
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	

CTA Consultants Limited
志達顧問有限公司

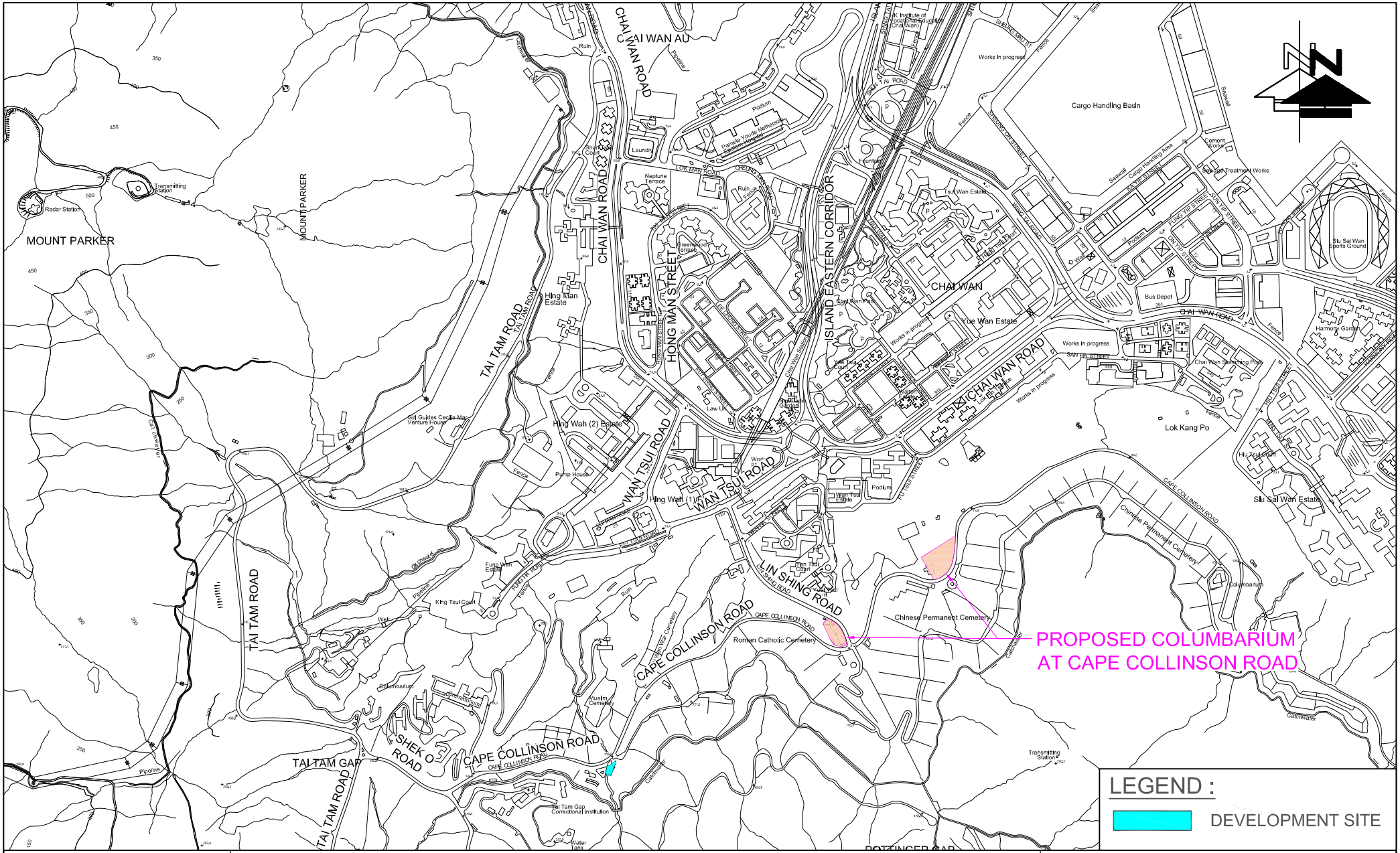
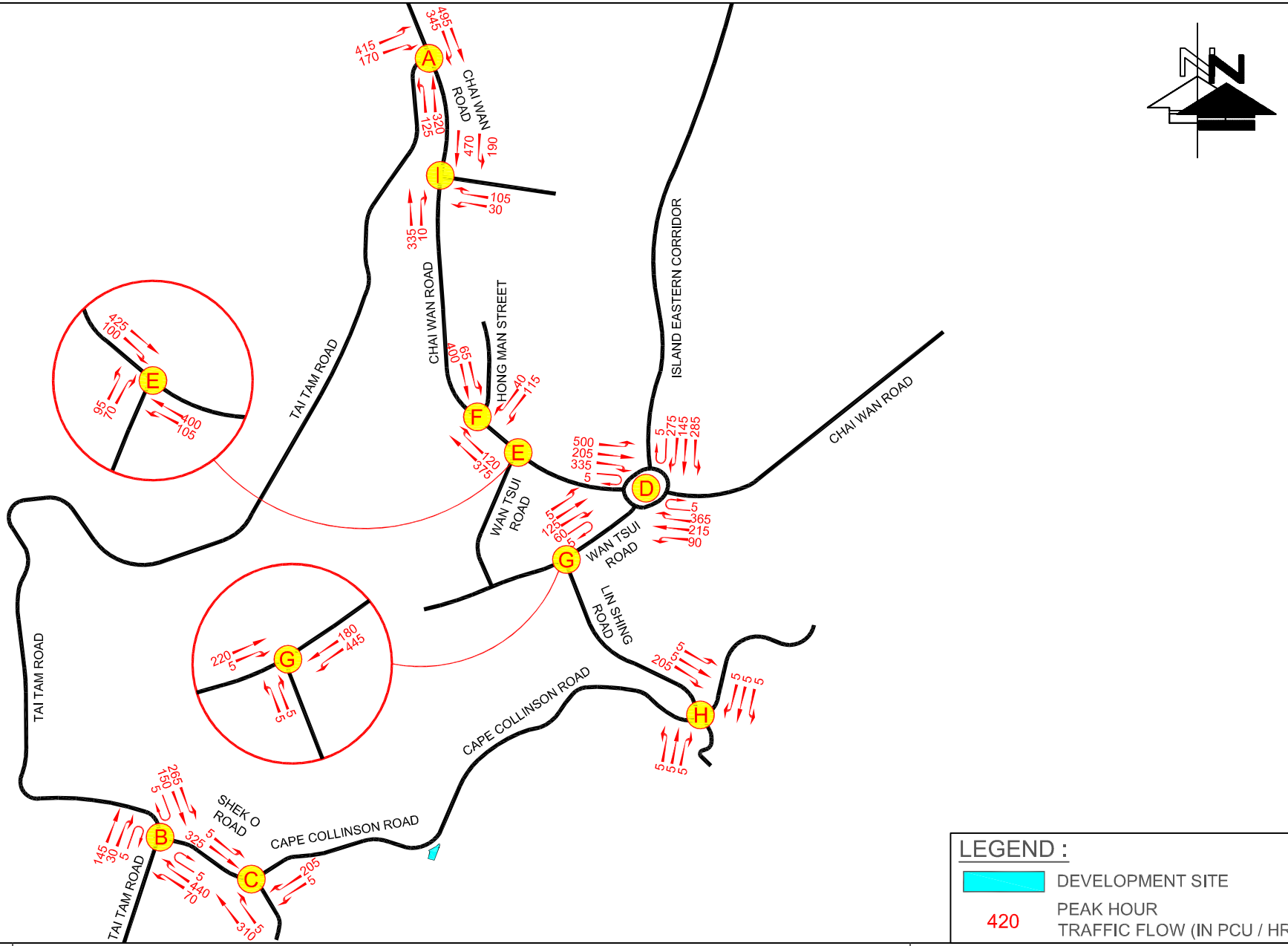


FIGURE NO.: 4.1	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: P2023041403HK	DRAWING TITLE: NEW DEVELOPMENT IN VICINITY
SCALE: 1 : 11000 @A4	DATE: 12 OCT 2023

CTA Consultants Limited
志達顧問有限公司



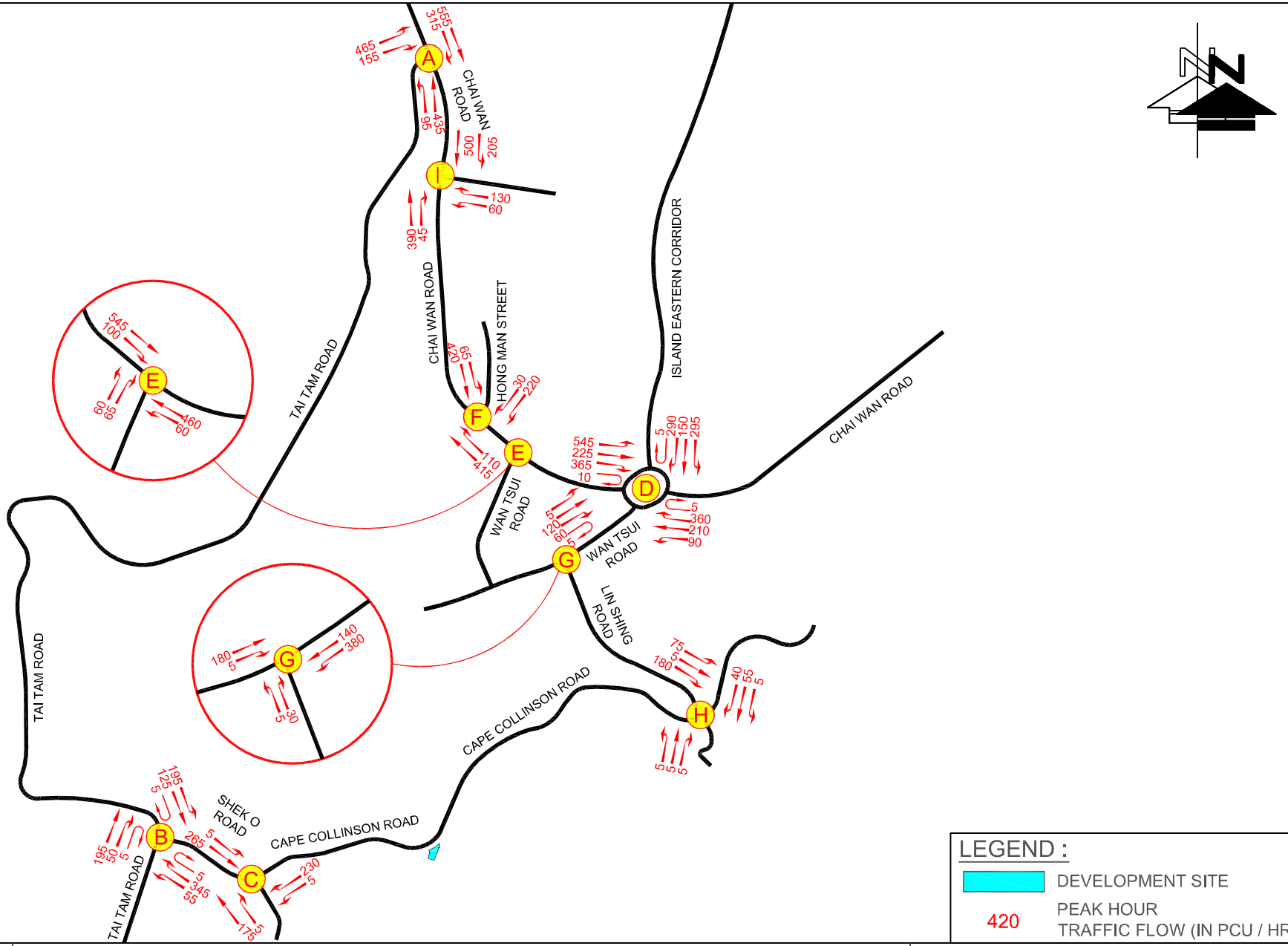
LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 4.2	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 REFERENCE TRAFFIC FLOWS - 5 APRIL (CHING MING FESTIVAL)
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	

CTA Consultants Limited
志達顧問有限公司

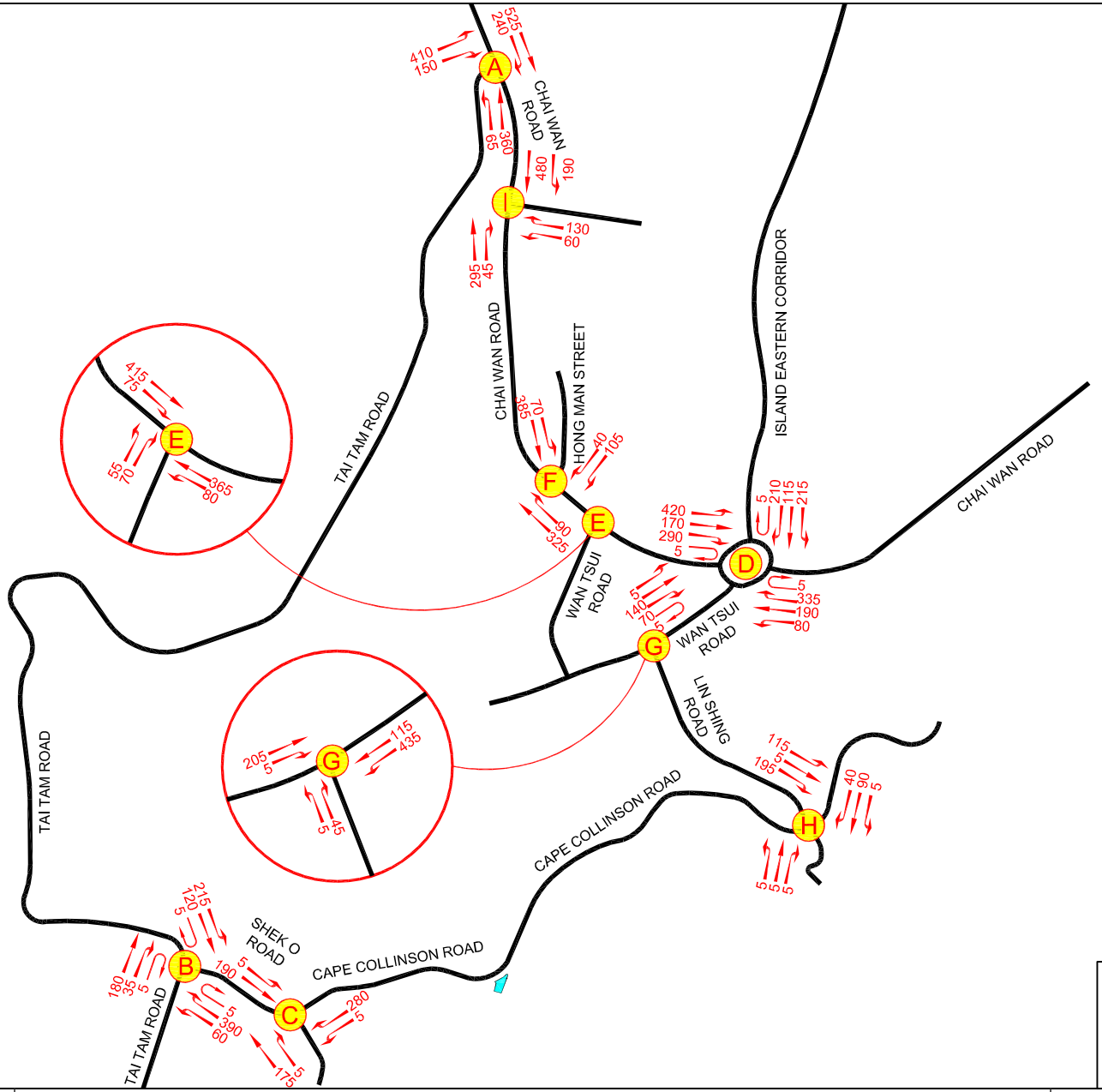


LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 4.3	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 REFERENCE TRAFFIC FLOWS - 7 APRIL
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	CTA Consultants Limited 志達顧問有限公司

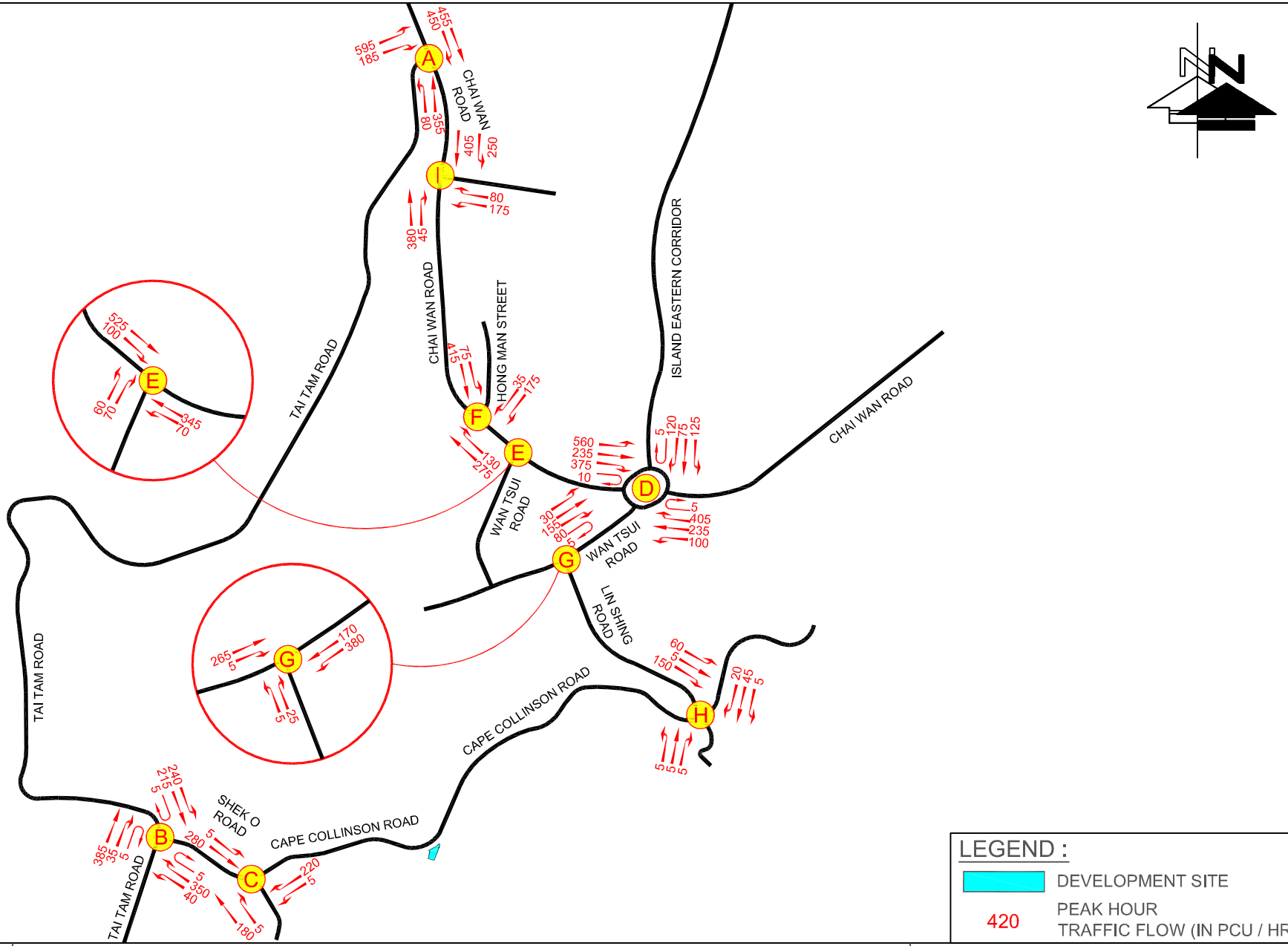


LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 4.4	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 REFERENCE TRAFFIC FLOWS - 9 APRIL
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	CTA Consultants Limited 志達顧問有限公司

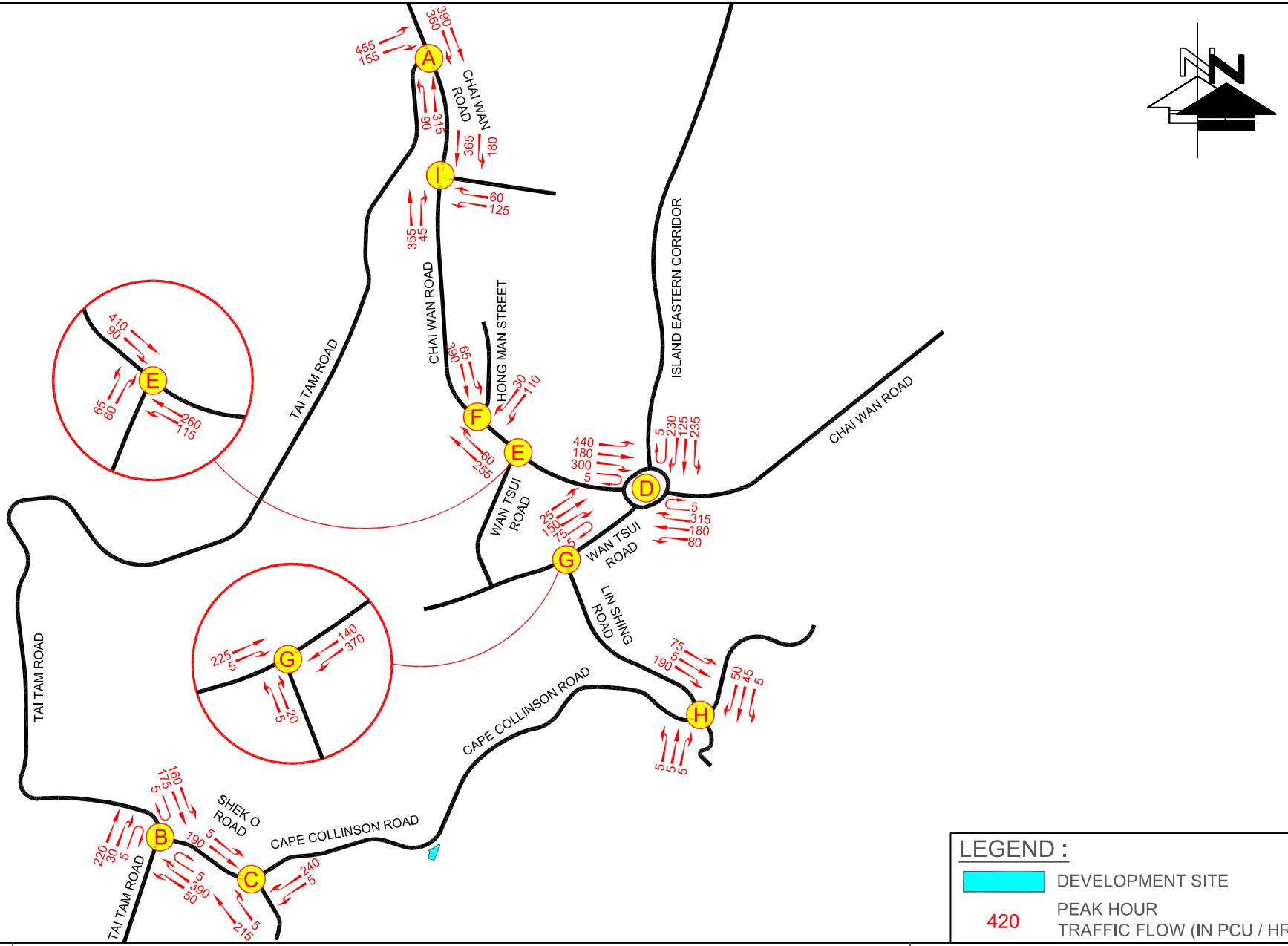


LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 4.5	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 REFERENCE TRAFFIC FLOWS - 21 OCTOBER
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	CTA Consultants Limited 志達顧問有限公司



LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 4.6	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 REFERENCE TRAFFIC FLOWS - 22 OCTOBER
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	CTA Consultants Limited 志達顧問有限公司

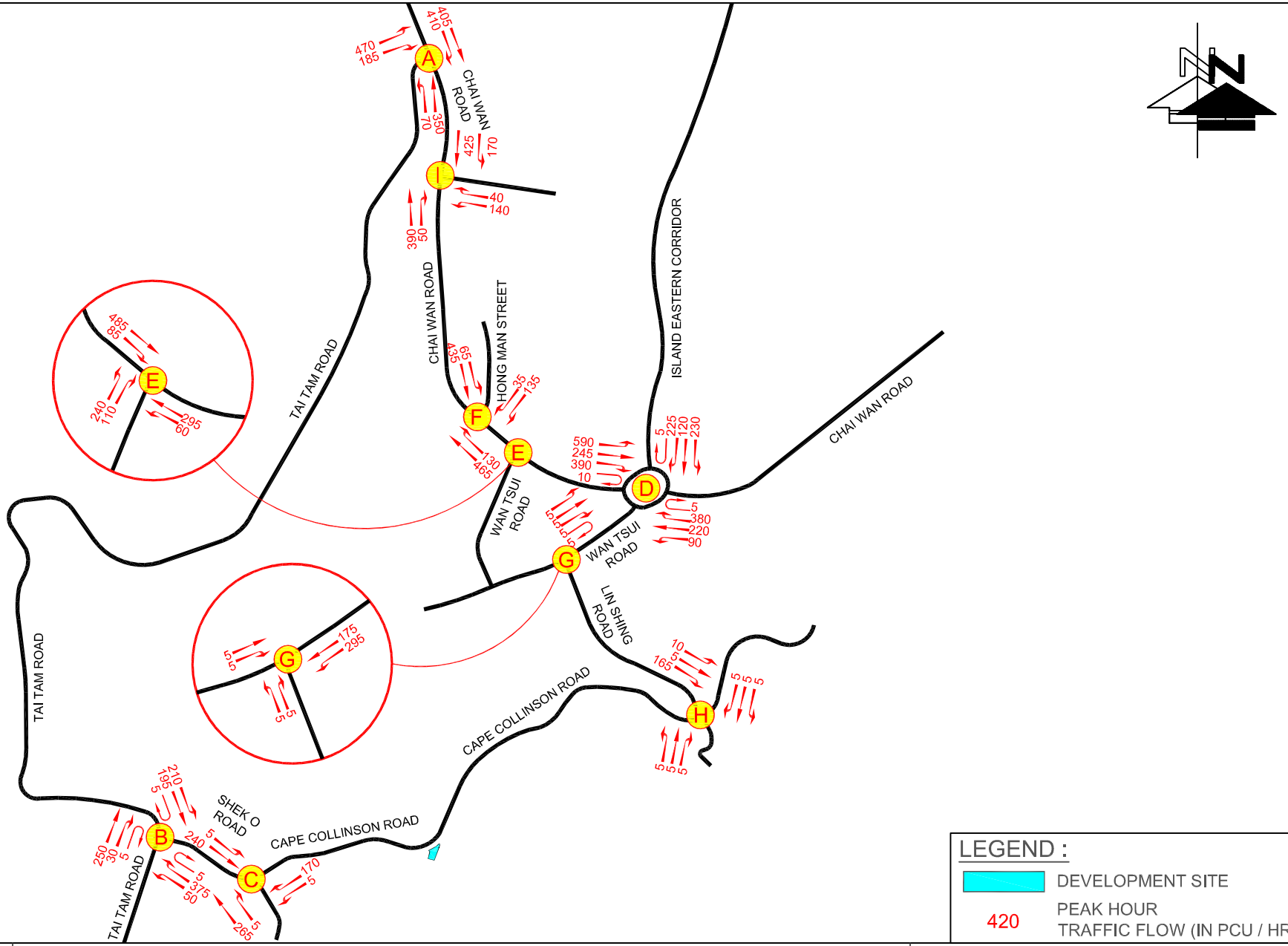
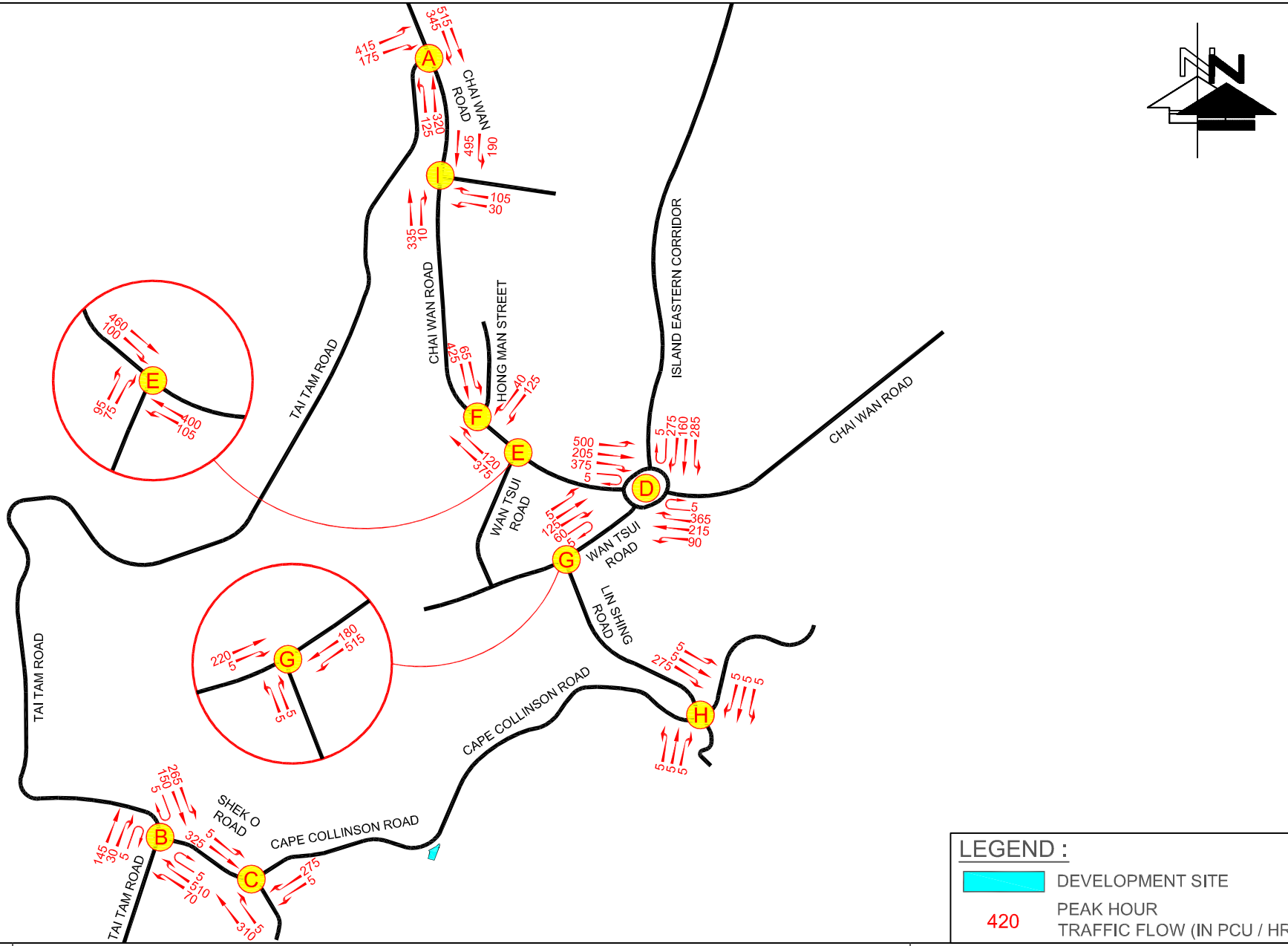


FIGURE NO.: 4.7	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 REFERENCE TRAFFIC FLOWS - 23 OCTOBER (CHUNG YEUNG FESTIVAL)
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	CTA Consultants Limited 志達顧問有限公司



LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 4.8	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 DESIGN TRAFFIC FLOWS - 5 APRIL (CHING MING FESTIVAL)
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	

CTA Consultants Limited
志達顧問有限公司

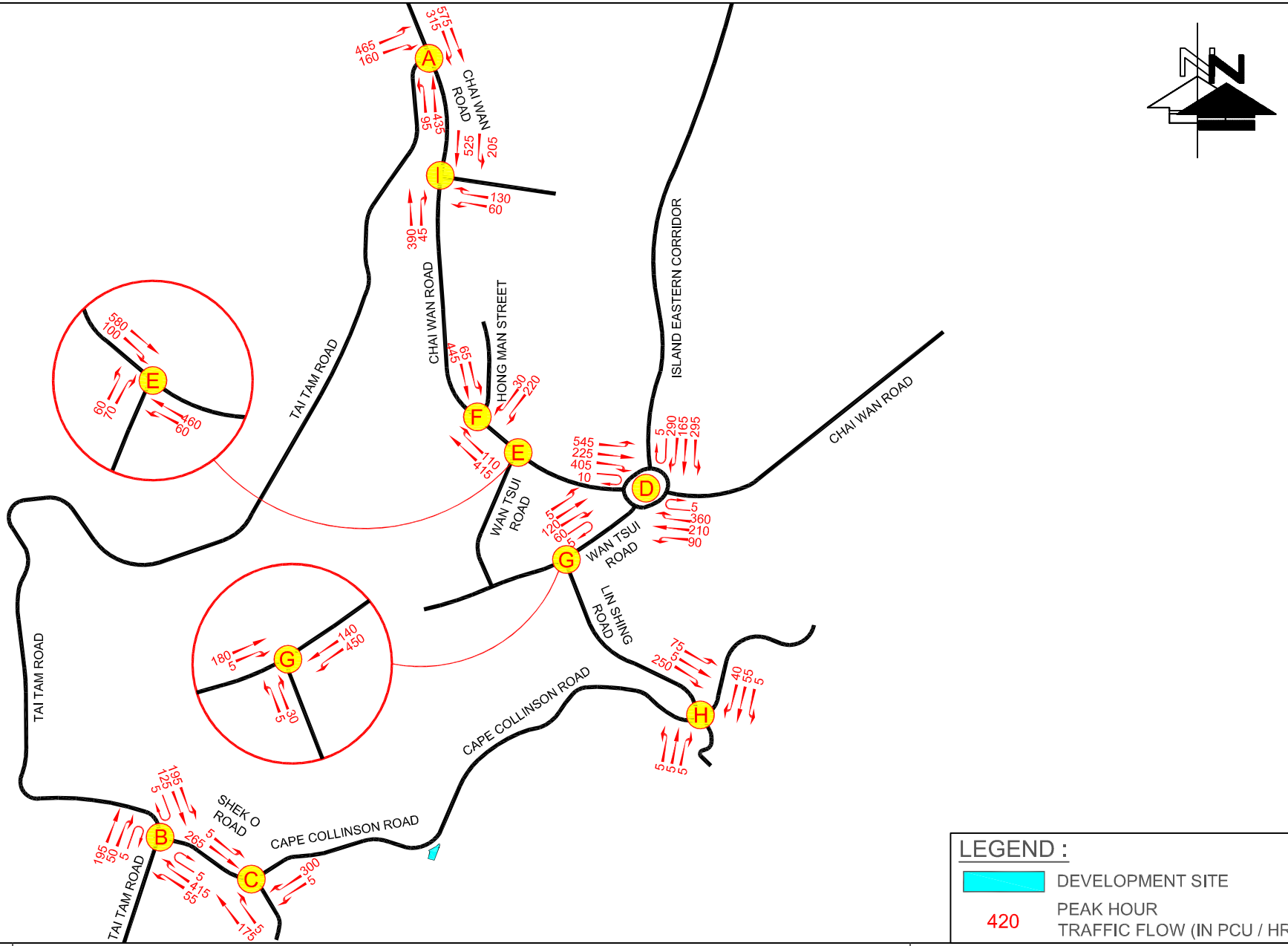
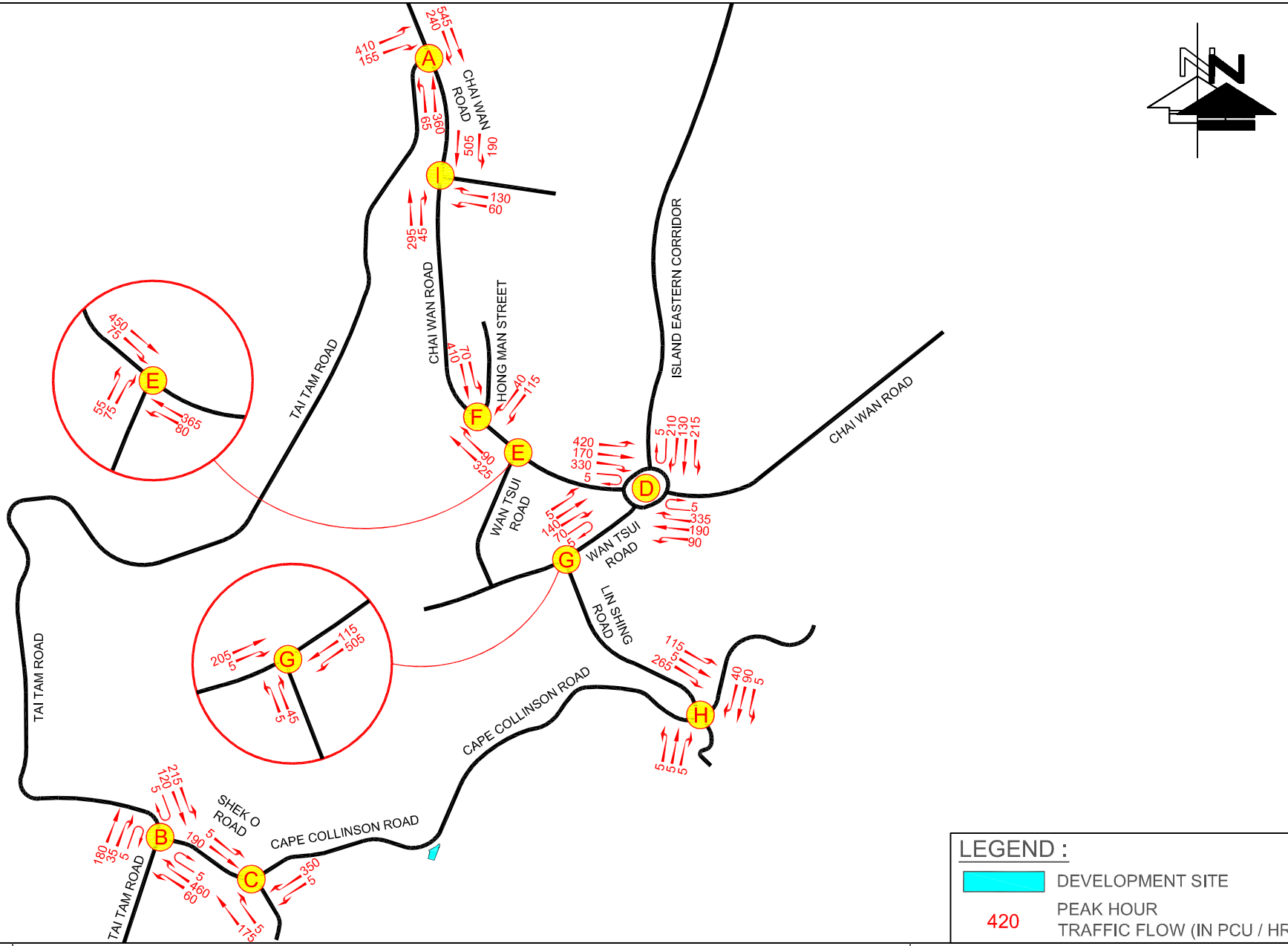


FIGURE NO.: 4.9	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 DESIGN TRAFFIC FLOWS - 7 APRIL	CTA Consultants Limited 志達顧問有限公司
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024		

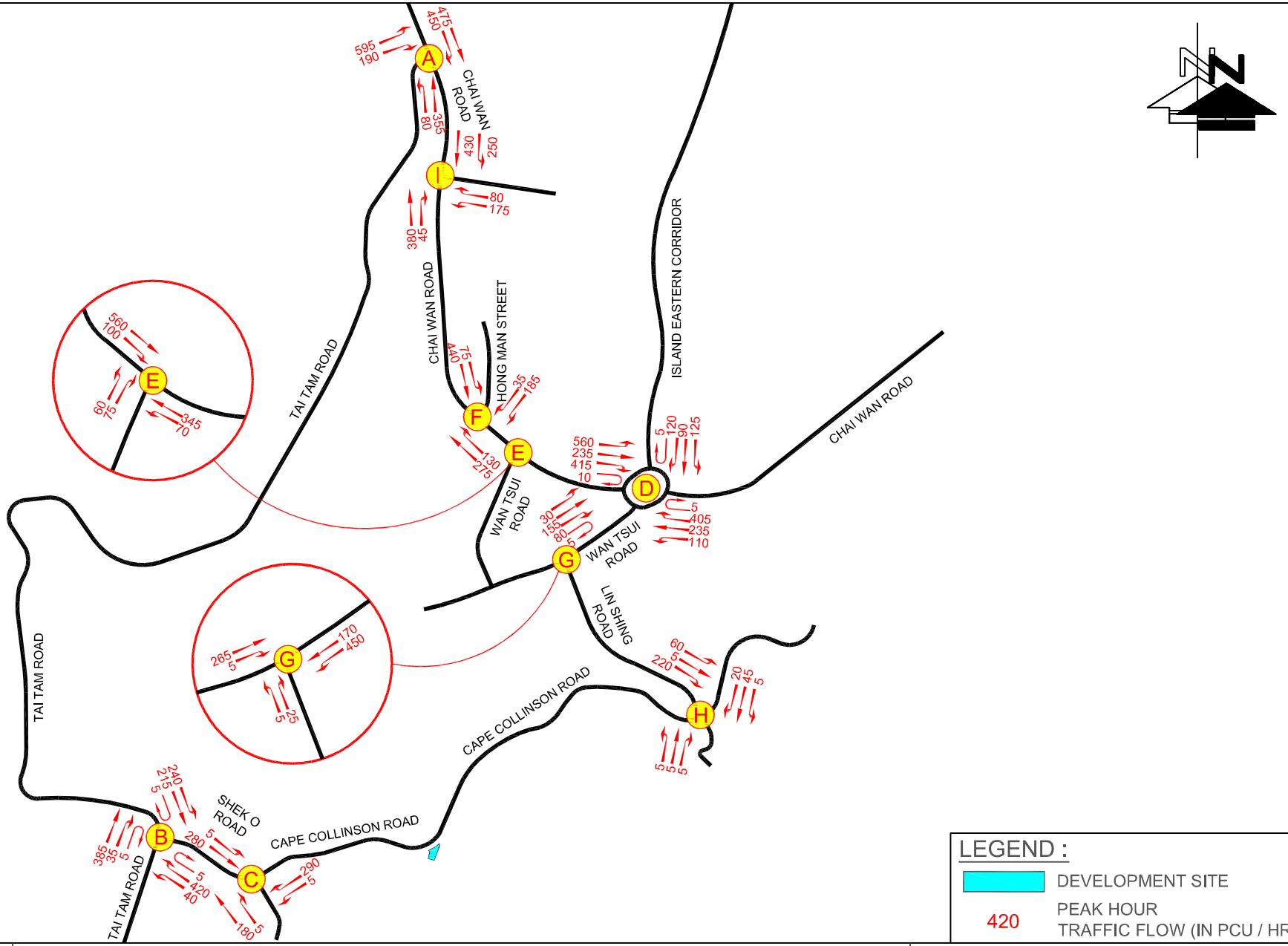


LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 4.10	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 DESIGN TRAFFIC FLOWS - 9 APRIL
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	CTA Consultants Limited 志達顧問有限公司



LEGEND :

DEVELOPMENT SITE

420 PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 4.11	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 DESIGN TRAFFIC FLOWS - 21 OCTOBER
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	CTA Consultants Limited 志達顧問有限公司

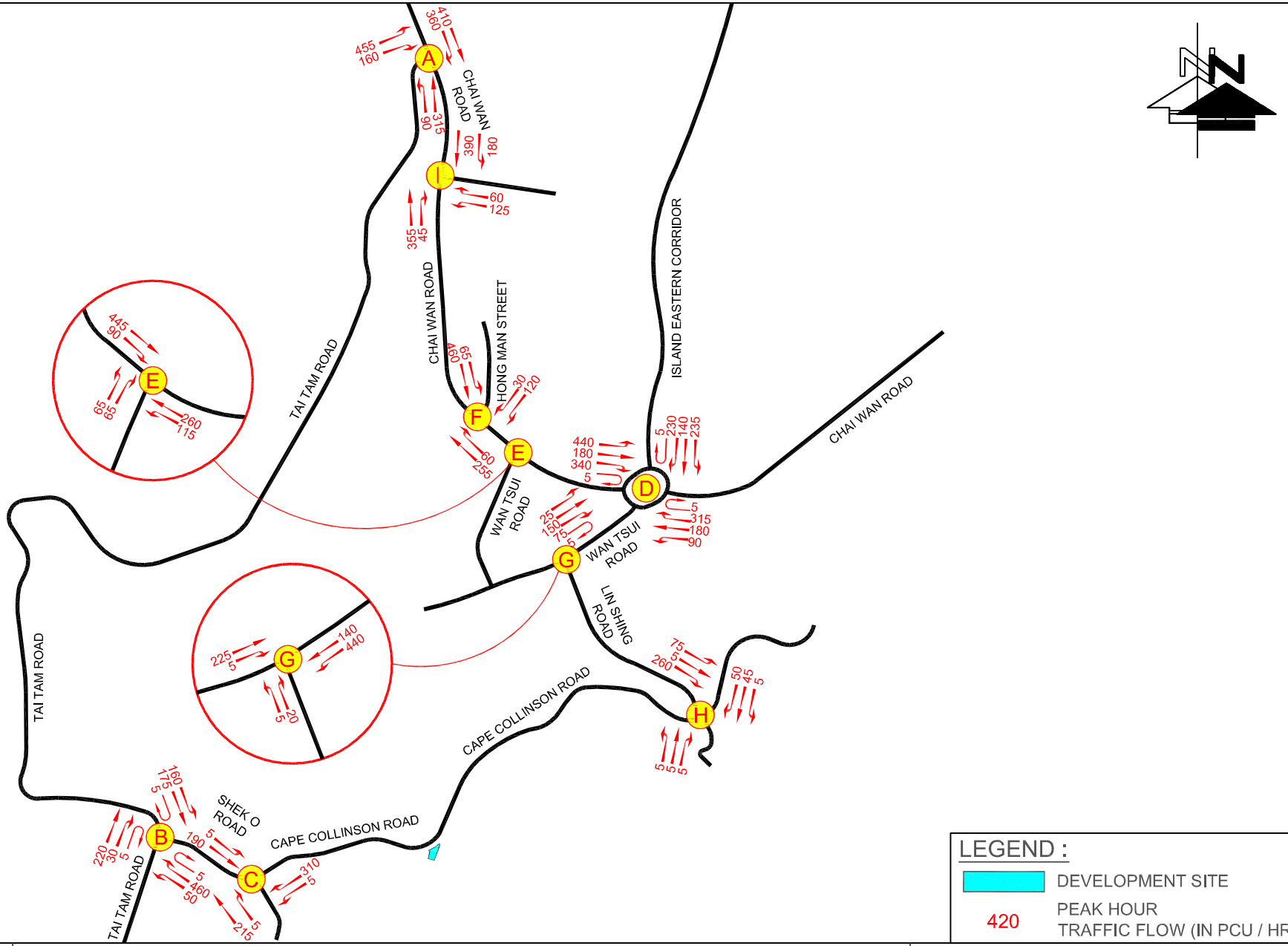


FIGURE NO.: 4.12	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 DESIGN TRAFFIC FLOWS - 22 OCTOBER	CTA Consultants Limited 志達顧問有限公司
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024		

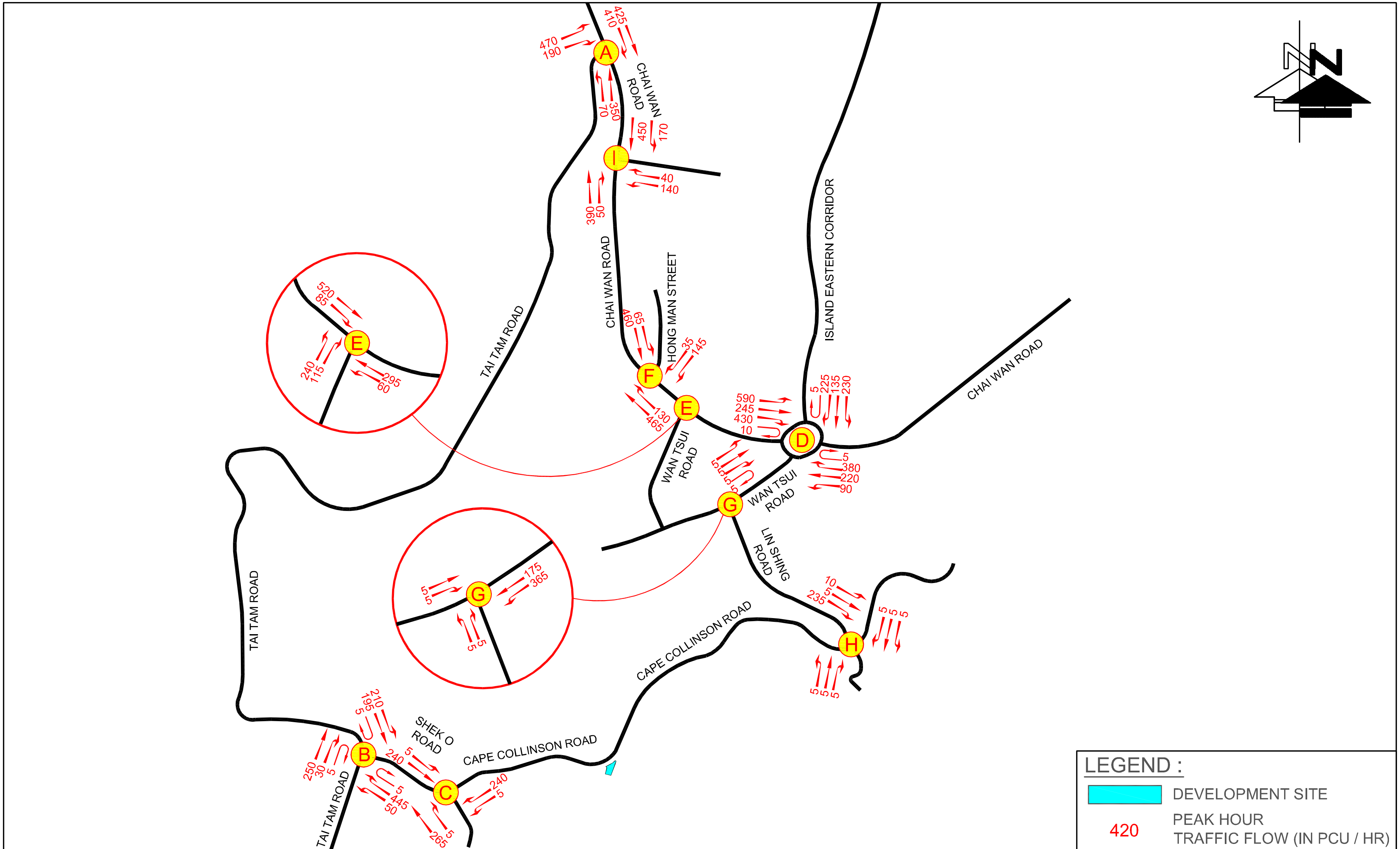


FIGURE NO.: 4.13	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: 2032 DESIGN TRAFFIC FLOWS - 23 OCTOBER (CHUNG YEUNG FESTIVAL)
SCALE: N. T. S. @A4 / DATE: 23 JAN 2024	

CTA Consultants Limited
志達顧問有限公司

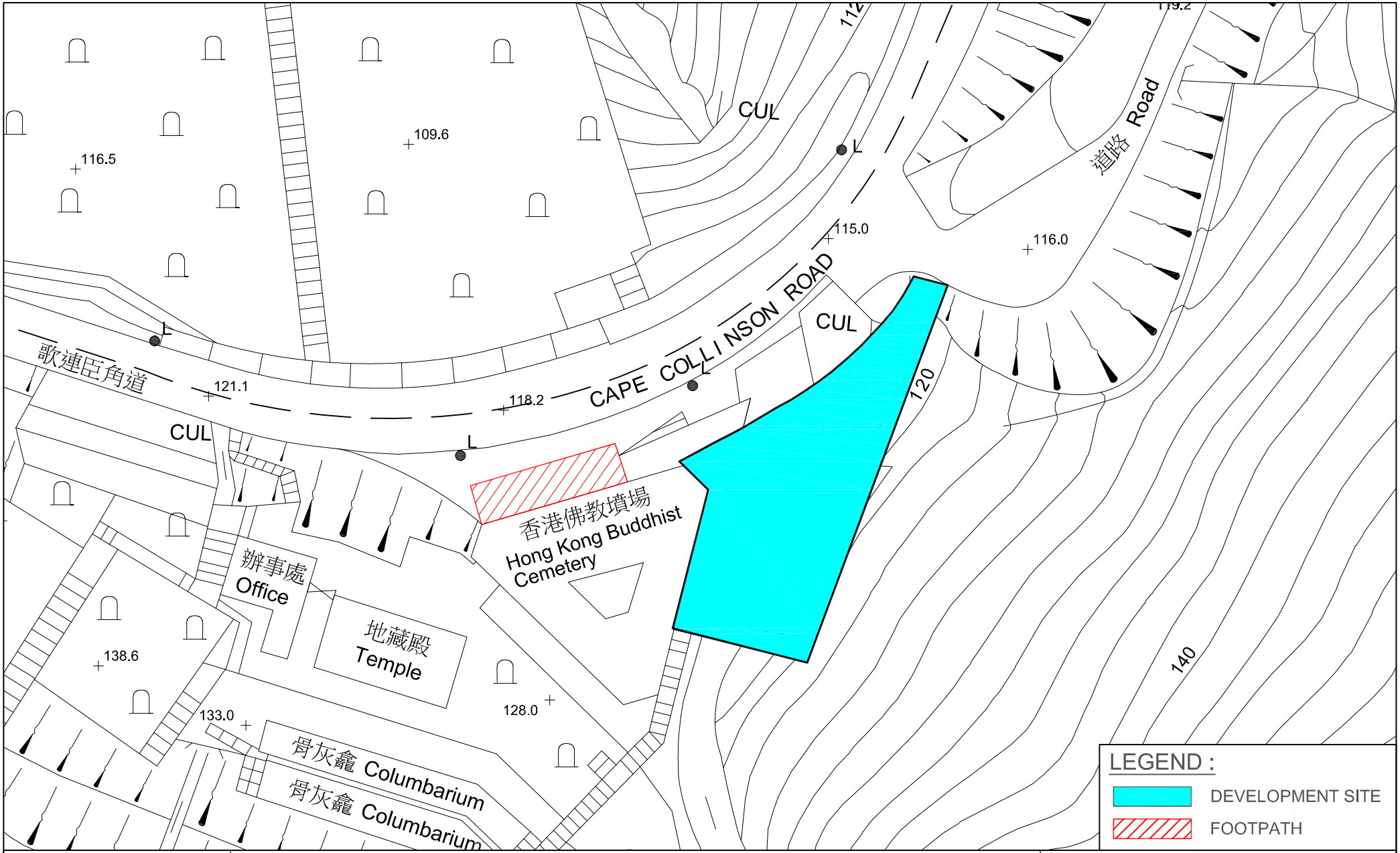


FIGURE NO.: 6.1	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan
PROJECT NO.: 23121HK	DRAWING TITLE: IDENTIFIED CRITICAL SECTION OF FOOTPATH
SCALE: 1 : 500 @A4 / DATE: 08 MAR 2024	CTA Consultants Limited 志達顧問有限公司

CAPE COLLINSON ROAD

歌連臣角道

道路 Road

CUL

100

112

112.2

119.2

115.0

116.0

124.0

121.1

118.2

120

138.6

133.0

128.0

香港佛教墳場
Hong Kong Buddhist Cemetery

辦事處
Office

地藏殿
Temple

LEGEND :

DEVELOPMENT SITE

BUS BAY

FIGURE NO.: 7.1	PROJECT TITLE: The Hong Kong Buddhist Association Proposed Extension to IL 7755RP for Columbarium Use, Cape Collinson Road, Chan Wan	
PROJECT NO.: 23121HK	DRAWING TITLE: LOADING / UNLOADING AREA OF PASSENGERS	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 500 @A4 / DATE: 08 MAR 2024		

APPENDIX A
Junction Calculation Sheets

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

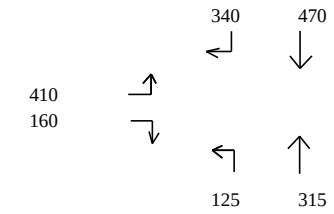
Description: **2023 Observed Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	152	0.077	0.077
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	163	0.077	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	125	0.070	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	274	0.140	0.140
	E	→↓	3	C	5.2	20.0	20	0	46% / 54%	2275	0	2115	0	296	0.140	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	228	0.115	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	242	0.115	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	340	0.175	0.175

Pedestrian crossing			
	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

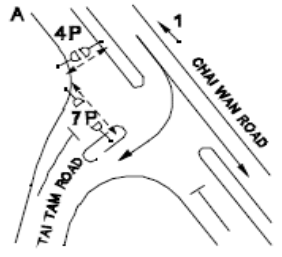
Traffic Flow (pcu / hr)



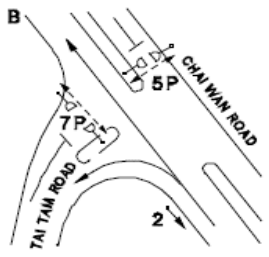
Peak Hour Check Phase

εy	0.392
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	95%

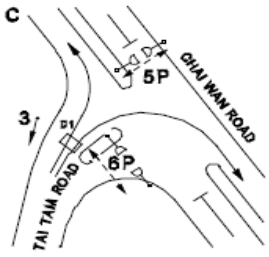
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

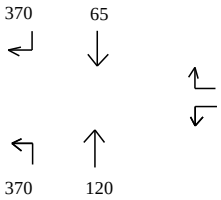
Junction: **Junction F - Chai Wan Road/ Hong Man Street**

Description: **2023 Observed Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	179	0.091	0.091
	N	↑	2	B	3.5	0.0	0	0	0%	2105	0	2105	0	191	0.091	
	N	↱	2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	120	0.062	
Hong Man Street	W	⇅	3	D	5.0	20.0	20	1	72% / 28%	1611	1611	1500	1500	145	0.097	0.097
Chai Wan Road	S	↳	1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S	↓	1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	179	0.091	0.091
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	191	0.091	
Pedestrian crossing		⤢	4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
		⤡	5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

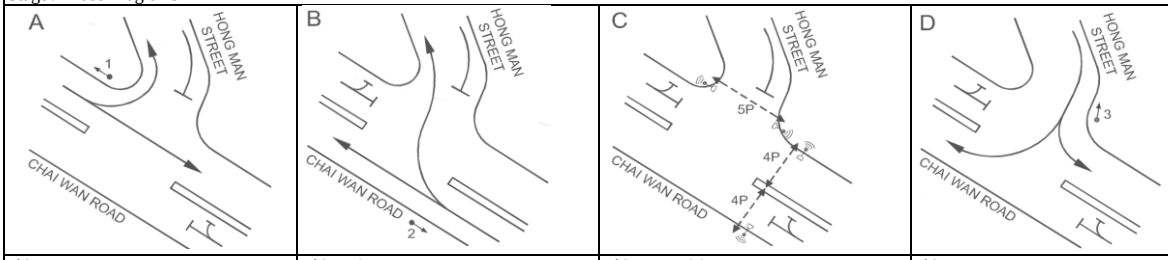
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.278
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	89%

Stage / Phase Diagrams



I/G = 5	I/G = 3	I/G = 39	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

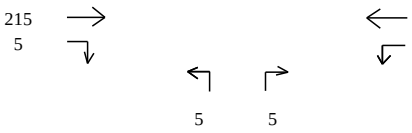
Description: **2023 Observed Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	50% / 50%	1965	1965	1805	1805	10	0.006	0.006
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	215	0.109	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	67%	1965	1965	1870	1870	550	0.294	0.294
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

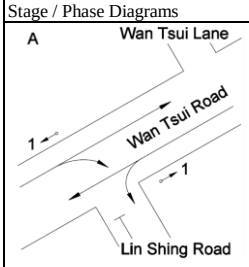
Traffic Flow (pcu / hr)



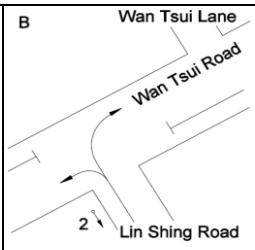
Peak Hour Check Phase

εy	0.300
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	59%

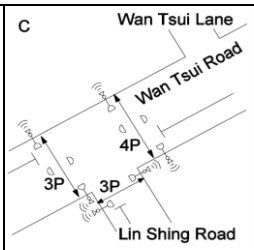
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2023 Observed Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	105	0.053	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	112	0.053	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	112	0.053	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	10	0.005	0.005
Lok Man Road	W		4	D	3.5	15	20	1	22% / 78%	1965	1965	1820	1820	135	0.074	0.074
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	220	0.105	0.106
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	220	0.105	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	190	0.106	

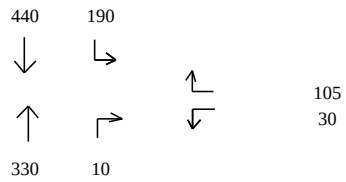
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

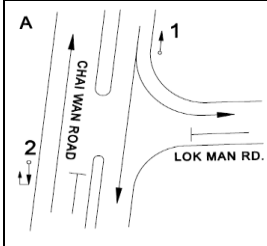
Traffic Flow (pcu / hr)



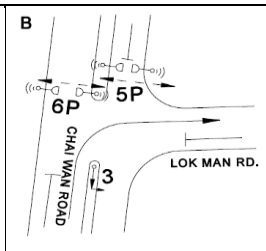
Peak Hour Check Phase

εy	0.186
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	152%

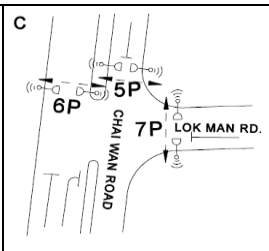
Stage / Phase Diagrams



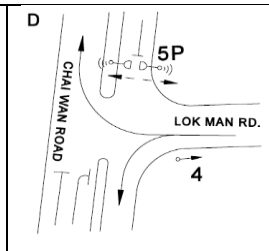
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

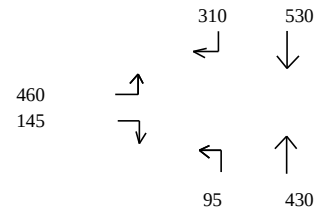
Description: **2023 Observed Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	207	0.105	0.105
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	223	0.105	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	95	0.053	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	291	0.149	0.149
	E	→↓	3	C	5.2	20.0	20	0	54% / 46%	2275	0	2115	0	314	0.149	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	258	0.129	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	272	0.129	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	310	0.159	0.159

Pedestrian crossing			
	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

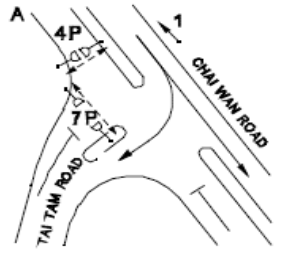
Traffic Flow (pcu / hr)



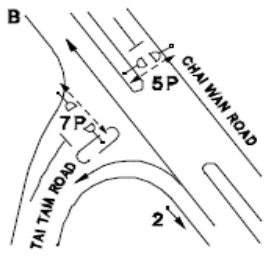
Peak Hour Check Phase

εy	0.413
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	85%

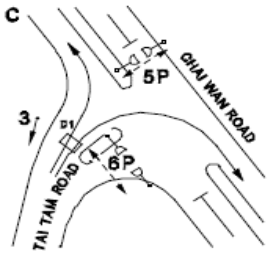
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

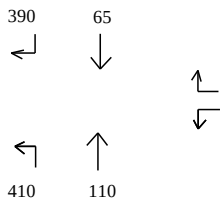
Junction: **Junction F - Chai Wan Road/ Hong Man Street**

Description: **2023 Observed Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	198	0.101	0.101
	N		2	B	3.5	0.0	0	0	0%	2105	0	2105	0	212	0.101	
	N		2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	110	0.057	
Hong Man Street	W		3	D	5.0	20.0	20	1	88% / 13%	1611	1611	1500	1500	240	0.160	0.160
Chai Wan Road	S		1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S		1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	188	0.096	0.096
	S		1	A	3.5	0.0	0	0	0%	2105	0	2105	0	202	0.096	
Pedestrian crossing			4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
			5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

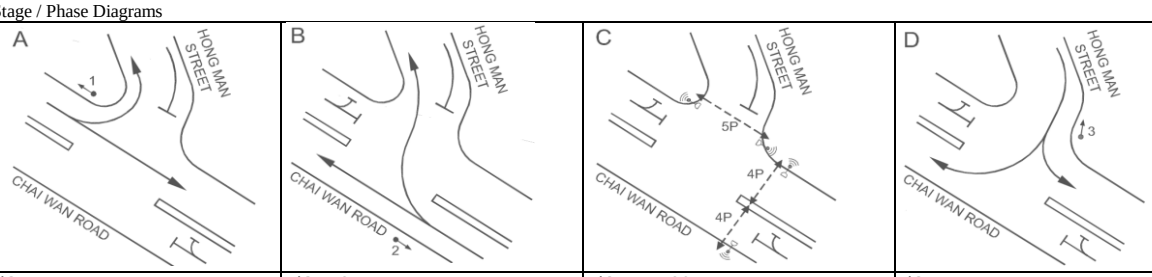
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.357
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	48%

Stage / Phase Diagrams



I/G = 5	I/G = 3	I/G = 39	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**
Description: **2023 Observed Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	14% / 86%	1965	1965	1820	1820	35	0.019	0.019
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	180	0.092	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	69%	1965	1965	1870	1870	450	0.241	0.241
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

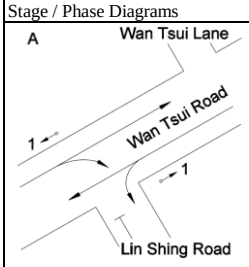
(Nil)

Traffic Flow (pcu / hr)

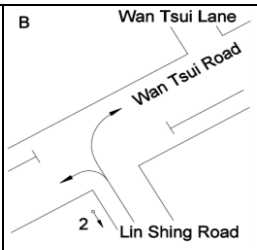
Peak Hour Check Phase

εy	0.260
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	84%

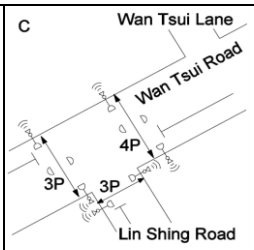
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2023 Observed Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	123	0.062	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	131	0.062	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	131	0.062	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	32% / 68%	1965	1965	1815	1815	190	0.105	0.105
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	235	0.112	0.112
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	235	0.112	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	200	0.112	

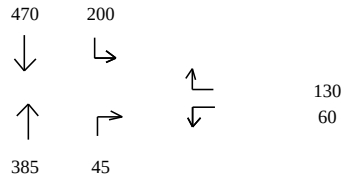
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

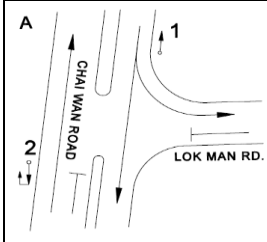
Traffic Flow (pcu / hr)



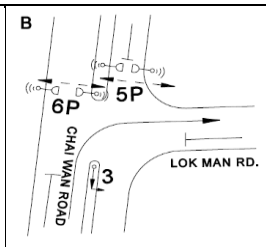
Peak Hour Check Phase

εy	0.240
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	95%

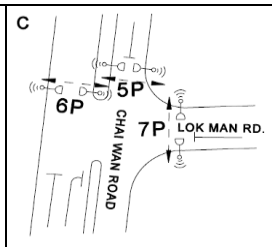
Stage / Phase Diagrams



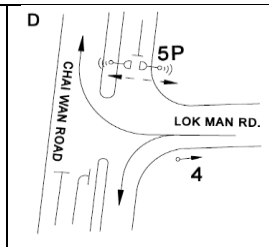
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

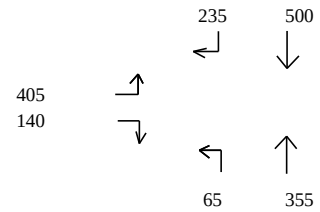
Description: **2023 Observed Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	171	0.087	0.087
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	184	0.087	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	65	0.036	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	262	0.134	0.134
	E	→↓	3	C	5.2	20.0	20	0	51% / 49%	2275	0	2115	0	283	0.134	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	243	0.122	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	257	0.122	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	235	0.121	0.122

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

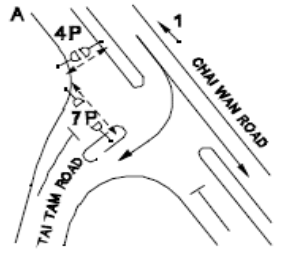
Traffic Flow (pcu / hr)



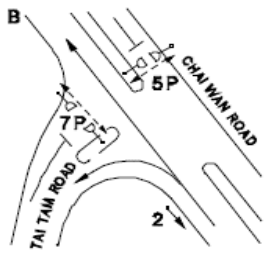
Peak Hour Check Phase

εy	0.343
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	123%

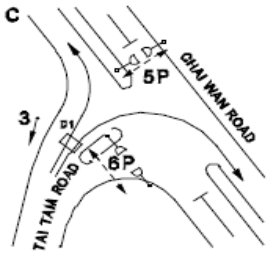
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

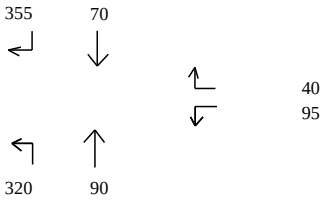
Junction: **Junction F - Chai Wan Road/ Hong Man Street**

Description: **2023 Observed Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	154	0.079	0.079
	N	↑	2	B	3.5	0.0	0	0	0%	2105	0	2105	0	166	0.079	
	N	↱	2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	90	0.046	
Hong Man Street	W	↕	3	D	5.0	20.0	20	1	70% / 30%	1611	1611	1500	1500	135	0.090	0.090
Chai Wan Road	S	↳	1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	70	0.039	
	S	↓	1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	171	0.087	0.087
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	184	0.087	
Pedestrian crossing		⤢	4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
		⤡	5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

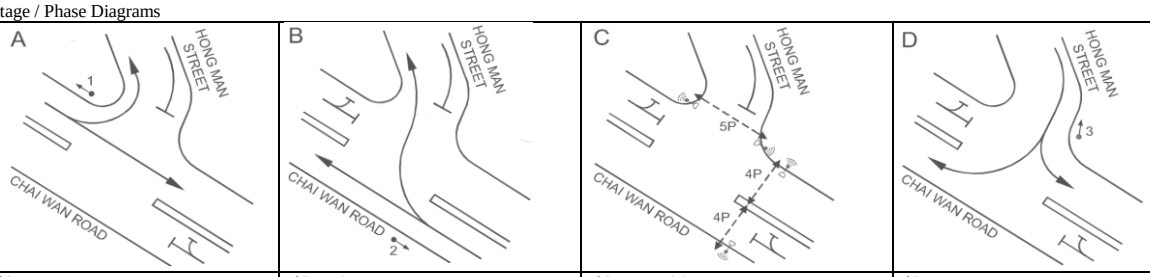
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.256
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	106%

Stage / Phase Diagrams



I/G = 5	I/G = 3	I/G = 39	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

Description: **2023 Observed Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	10% / 90%	1965	1965	1825	1825	50	0.027	0.027
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	200	0.102	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	76%	1965	1965	1860	1860	475	0.255	0.255
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

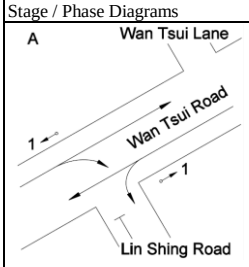
(Nil)

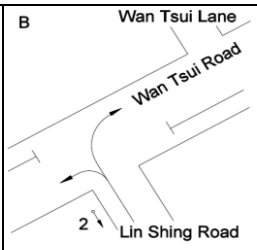
Traffic Flow (pcu / hr)

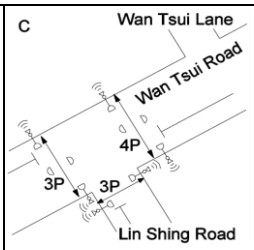
Peak Hour Check Phase

εy	0.283
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	69%

Stage / Phase Diagrams







I/G = 7 | I/G = 12+5=17 | I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2023 Observed Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	92	0.047	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	99	0.047	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	99	0.047	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	32% / 68%	1965	1965	1815	1815	190	0.105	0.105
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	225	0.107	0.107
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	225	0.107	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	190	0.106	

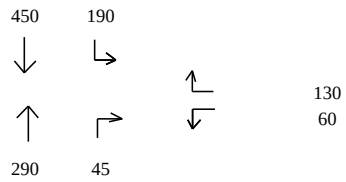
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

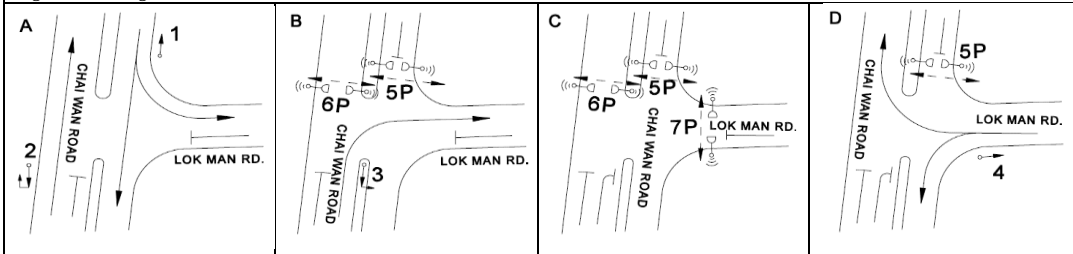
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.235
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	100%

Stage / Phase Diagrams



I/G = 10	I/G = 9+5=14	I/G = 22	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

Description: **2023 Observed Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	168	0.086	0.086
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	182	0.086	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	80	0.045	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	367	0.188	0.188
	E	→	3	C	5.2	20.0	20	0	56% / 44%	2275	0	2115	0	398	0.188	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	209	0.105	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	221	0.105	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	445	0.229	0.229

Pedestrian crossing			
	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

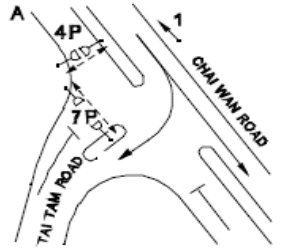
Traffic Flow (pcu / hr)

445 430
590
175
80 350

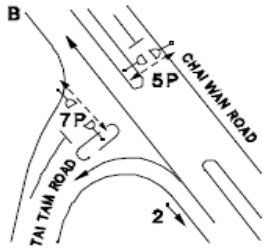
Peak Hour Check Phase

εy	0.502
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	52%

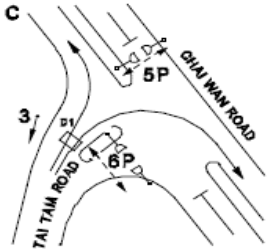
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

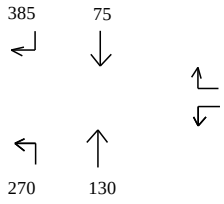
TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction F - Chai Wan Road/ Hong Man Street**
Description: **2023 Observed Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	130	0.066	0.067
	N		2	B	3.5	0.0	0	0	0%	2105	0	2105	0	140	0.066	
	N		2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	130	0.067	
Hong Man Street	W		3	D	5.0	20.0	20	1	83% / 18%	1611	1611	1500	1500	200	0.133	0.133
Chai Wan Road	S		1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	75	0.042	
	S		1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	186	0.095	0.095
	S		1	A	3.5	0.0	0	0	0%	2105	0	2105	0	199	0.095	
Pedestrian crossing			4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
			5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

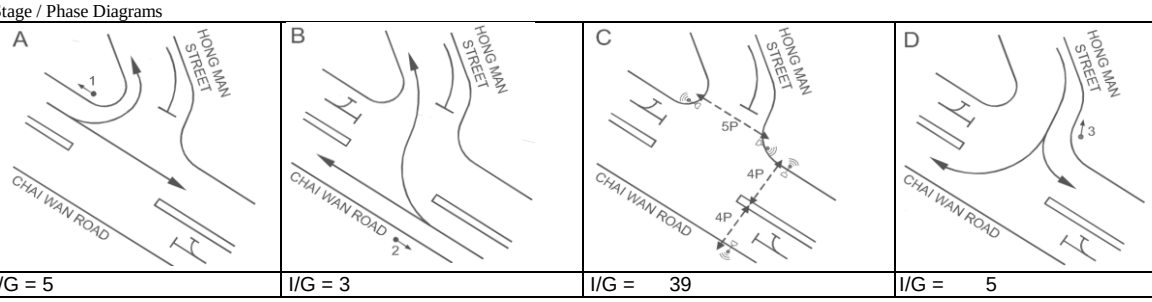
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.295
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	79%

Stage / Phase Diagrams



I/G = 5	I/G = 3	I/G = 39	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

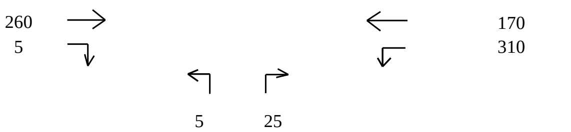
Description: **2023 Observed Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	17% / 83%	1965	1965	1820	1820	30	0.016	0.016
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	260	0.132	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	65%	1965	1965	1875	1875	480	0.256	0.256
Pedestrian Crossing			3p	C	Min. Crossing Time = 10Gm + 11FGm =21s											
			4p	C	Min. Crossing Time = 6Gm + 11FGm =17s											

Notes:

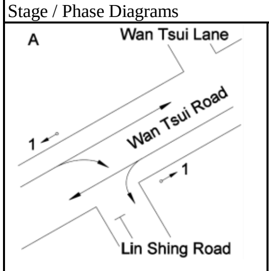
(Nil)

Traffic Flow (pcu / hr)

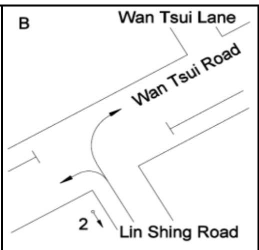


Peak Hour Check Phase	
εy	0.272
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	75%

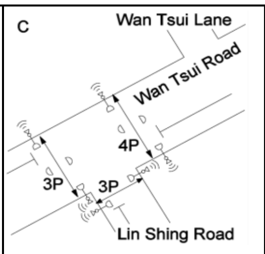
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2023 Observed Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	119	0.061	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	128	0.061	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	128	0.061	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	68% / 32%	1965	1965	1800	1800	250	0.139	0.139
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	188	0.089	0.137
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	188	0.089	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	245	0.137	

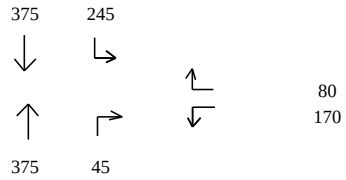
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

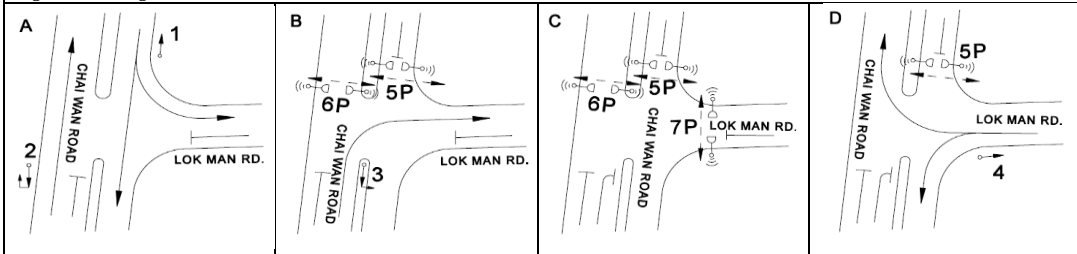
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.299
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	56%

Stage / Phase Diagrams



I/G = 10	I/G = 9+5=14	I/G = 22	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

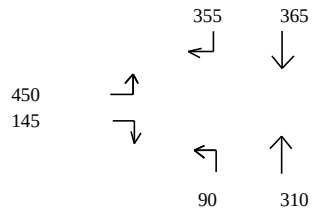
Description: **2023 Observed Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	149	0.076	0.076
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	161	0.076	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	90	0.050	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	286	0.146	0.146
	E	→	3	C	5.2	20.0	20	0	53% / 47%	2275	0	2115	0	309	0.146	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	177	0.089	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	188	0.089	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	355	0.183	0.183

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

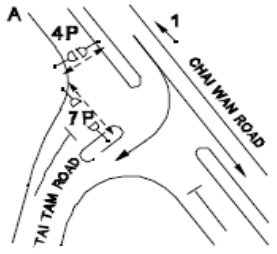
Traffic Flow (pcu / hr)



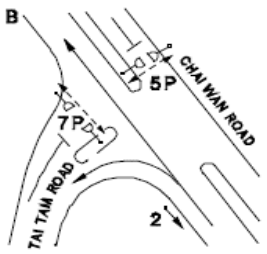
Peak Hour Check Phase

εy	0.405
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	89%

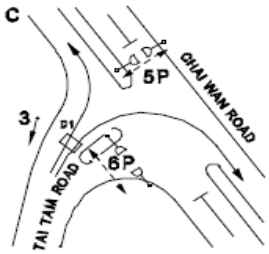
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

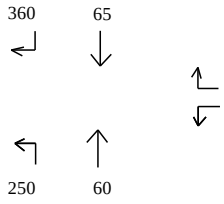
TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction F - Chai Wan Road/ Hong Man Street**
Description: **2023 Observed Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	121	0.061	0.061
	N	↑	2	B	3.5	0.0	0	0	0%	2105	0	2105	0	129	0.061	
	N	↱	2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	60	0.031	
Hong Man Street	W	↕	3	D	5.0	20.0	20	1	77% / 23%	1611	1611	1500	1500	130	0.087	0.087
Chai Wan Road	S	↳	1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S	↓	1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	174	0.088	0.088
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	186	0.088	
Pedestrian crossing		⇕	4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
		⇕	5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

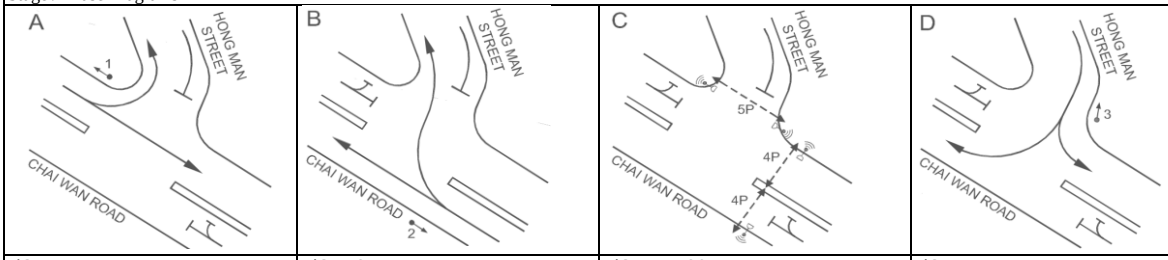
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.237
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	122%

Stage / Phase Diagrams



A	B	C	D
I/G = 5	I/G = 3	I/G = 39	I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

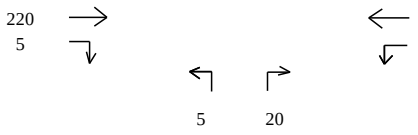
Description: **2023 Observed Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	20% / 80%	1965	1965	1820	1820	25	0.014	0.014
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	220	0.112	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	68%	1965	1965	1870	1870	440	0.235	0.235
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

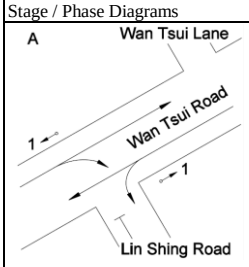
Traffic Flow (pcu / hr)

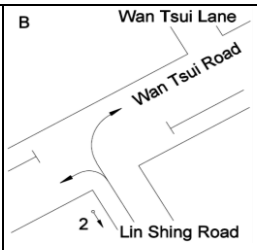


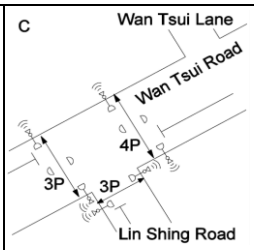
Peak Hour Check Phase

εy	0.249
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	92%

Stage / Phase Diagrams







I/G = 7	I/G = 12+5=17	I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2023 Observed Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	111	0.057	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	119	0.057	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	119	0.057	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	67% / 33%	1965	1965	1800	1800	180	0.100	0.100
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	168	0.080	0.101
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	168	0.080	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	180	0.101	

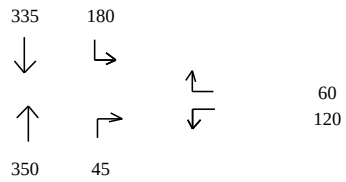
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

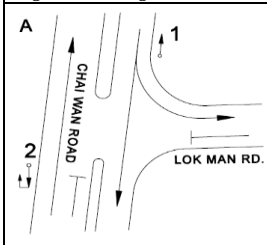
Traffic Flow (pcu / hr)



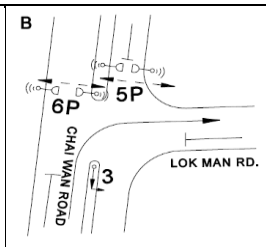
Peak Hour Check Phase

εy	0.224
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	109%

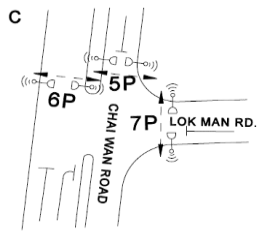
Stage / Phase Diagrams



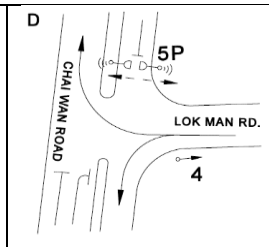
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

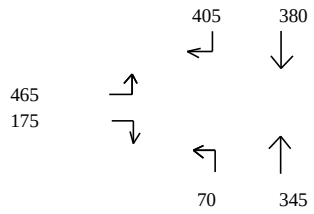
Description: **2023 Observed Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	166	0.084	0.084
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	179	0.084	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	70	0.039	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	307	0.157	0.157
	E	→↓	3	C	5.2	20.0	20	0	47% / 53%	2275	0	2115	0	333	0.157	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	185	0.093	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	195	0.093	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	405	0.208	0.208

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

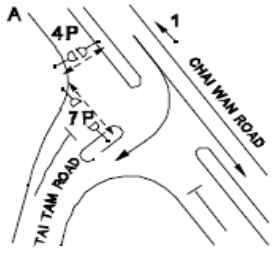
Traffic Flow (pcu / hr)



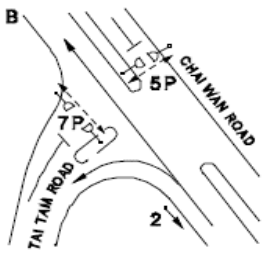
Peak Hour Check Phase

εy	0.450
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	70%

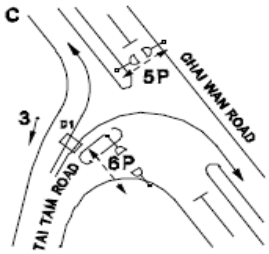
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

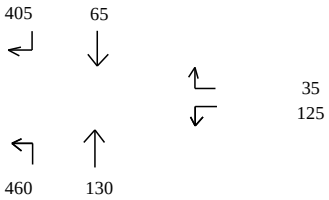
Junction: **Junction F - Chai Wan Road/ Hong Man Street**

Description: **2023 Observed Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	222	0.113	0.113
	N	↑	2	B	3.5	0.0	0	0	0%	2105	0	2105	0	238	0.113	
	N	↱	2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	130	0.067	
Hong Man Street	W	↕	3	D	5.0	20.0	20	1	78% / 22%	1611	1611	1500	1500	160	0.107	0.107
Chai Wan Road	S	↳	1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S	↓	1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	196	0.100	0.100
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	209	0.100	
Pedestrian crossing		⤢	4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
		⤡	5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

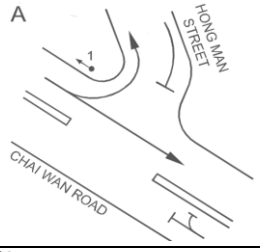
Traffic Flow (pcu / hr)



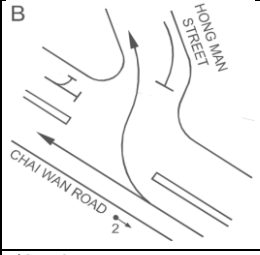
Peak Hour Check Phase

εy	0.319
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	65%

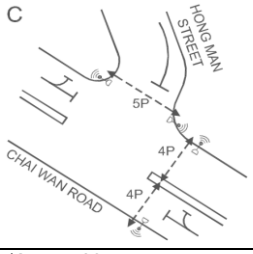
Stage / Phase Diagrams



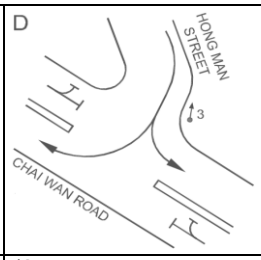
I/G = 5



I/G = 3



I/G = 39



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

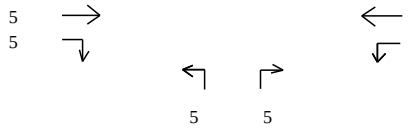
Description: **2023 Observed Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	50% / 50%	1965	1965	1805	1805	10	0.006	0.006
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	5	0.003	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	56%	1965	1965	1885	1885	400	0.212	0.212
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

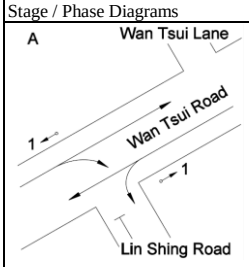
Traffic Flow (pcu / hr)



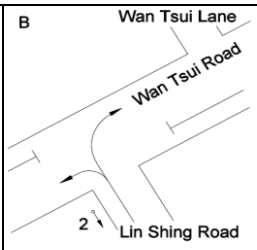
Peak Hour Check Phase

εy	0.218
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	119%

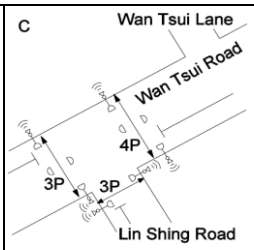
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2023 Observed Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	A	3.5	0	0	1	0%	1965	6175	1965	6175	123	0.062	
	N	↑	2	A	3.5	0	0	0	0%	2105	0	2105	0	131	0.062	
	N	↑	2	A	3.5	0	0	0	0%	2105	0	2105	0	131	0.062	
	N	↱	3	B	3.5	0	20	0	100%	2105	2105	1960	1960	50	0.026	0.026
Lok Man Road	W	↕	4	D	3.5	15	20	1	77% / 23%	1965	1965	1795	1795	175	0.097	0.097
Chai Wan Road	S	↓	1	A	3.5	0	0	0	0%	2105	4210	2105	4210	198	0.094	0.095
	S	↓	1	A	3.5	0	0	0	0%	2105	0	2105	0	198	0.094	
	S	↳	1	A	3.5	15	0	1	100%	1965	1965	1785	1785	170	0.095	

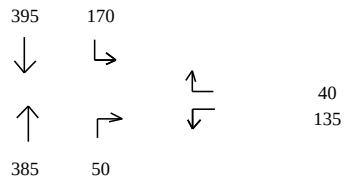
Pedestrian Crossing

⟷	5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
⟷	6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
↕	7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

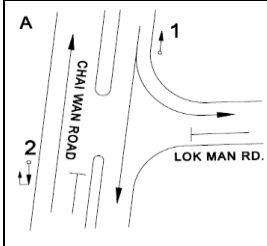
Traffic Flow (pcu / hr)



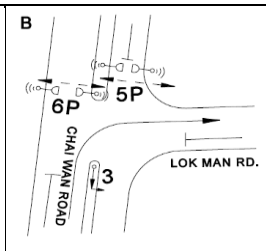
Peak Hour Check Phase

εy	0.218
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	114%

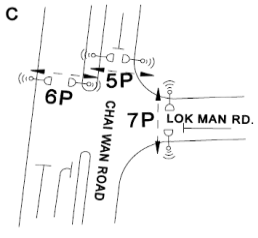
Stage / Phase Diagrams



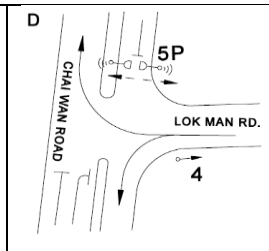
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

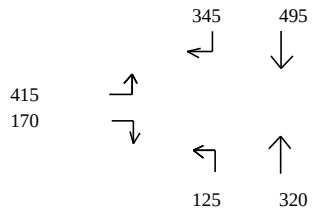
Description: **2032 Reference Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	154	0.078	0.078
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	166	0.078	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	125	0.070	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	281	0.144	0.144
	E	→↓	3	C	5.2	20.0	20	0	44% / 56%	2275	0	2115	0	304	0.144	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	241	0.121	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	254	0.121	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	345	0.177	0.177

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

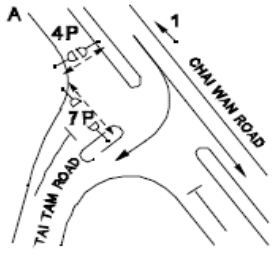
Traffic Flow (pcu / hr)



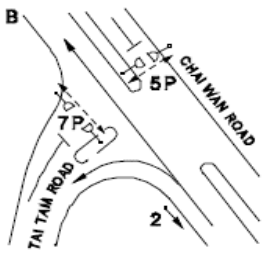
Peak Hour Check Phase

εy	0.399
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	91%

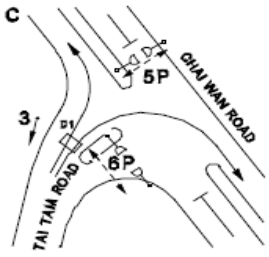
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

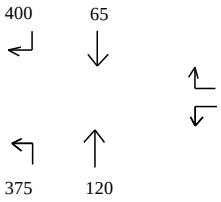
Junction: **Junction F - Chai Wan Road/ Hong Man Street**

Description: **2032 Reference Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	181	0.092	0.092
	N	↑	2	B	3.5	0.0	0	0	0%	2105	0	2105	0	194	0.092	
	N	↱	2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	120	0.062	
Hong Man Street	W	↕	3	D	5.0	20.0	20	1	74% / 26%	1611	1611	1500	1500	155	0.103	0.103
Chai Wan Road	S	↳	1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S	↓	1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	193	0.098	0.098
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	207	0.098	
Pedestrian crossing			4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
			5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

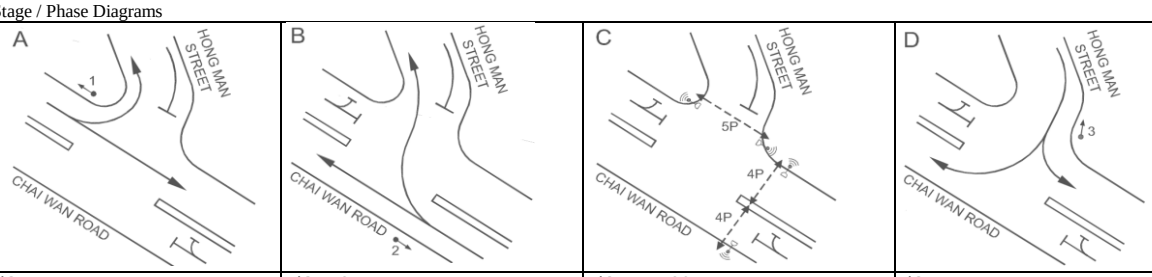
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.294
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	79%

Stage / Phase Diagrams



A	B	C	D
I/G = 5	I/G = 3	I/G = 39	I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

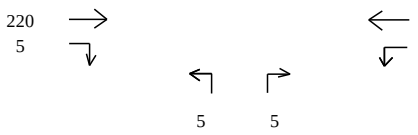
Description: **2032 Reference Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	50% / 50%	1965	1965	1805	1805	10	0.006	0.006
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	220	0.112	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	71%	1965	1965	1865	1865	625	0.335	0.335
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

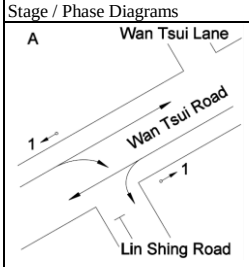
Traffic Flow (pcu / hr)



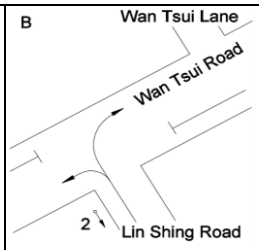
Peak Hour Check Phase

εy	0.341
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	40%

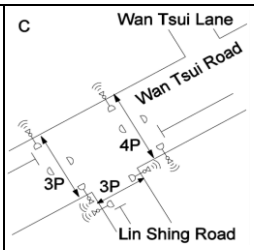
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Reference Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	107	0.054	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	114	0.054	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	114	0.054	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	10	0.005	0.005
Lok Man Road	W		4	D	3.5	15	20	1	22% / 78%	1965	1965	1820	1820	135	0.074	0.074
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	235	0.112	0.112
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	235	0.112	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	190	0.106	

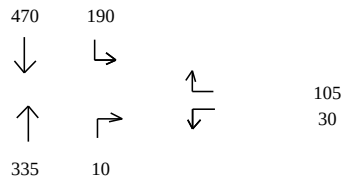
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

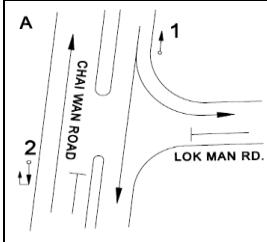
Traffic Flow (pcu / hr)



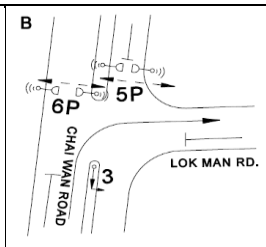
Peak Hour Check Phase

εy	0.191
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	145%

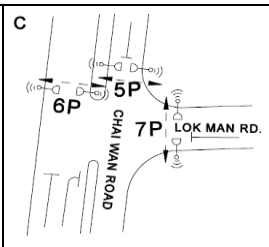
Stage / Phase Diagrams



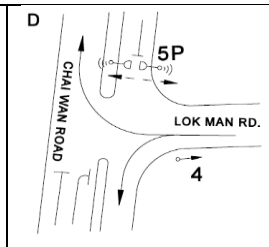
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

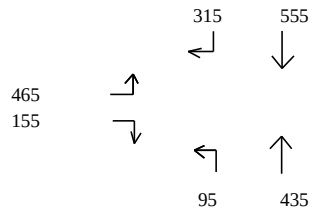
Description: **2032 Reference Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	209	0.106	0.106
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	226	0.106	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	95	0.053	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	298	0.152	0.152
	E	→↓	3	C	5.2	20.0	20	0	52% / 48%	2275	0	2115	0	322	0.152	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	270	0.136	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	285	0.136	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	315	0.162	0.162

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

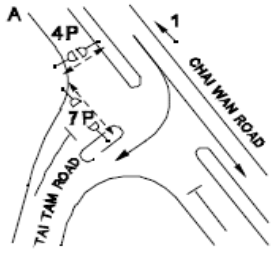
Traffic Flow (pcu / hr)



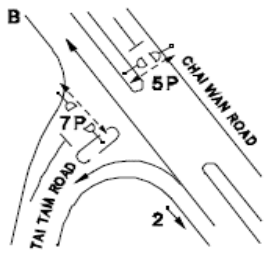
Peak Hour Check Phase

εy	0.421
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	82%

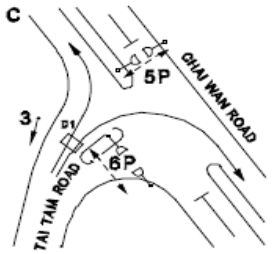
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

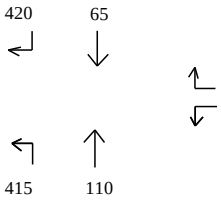
TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction F - Chai Wan Road/ Hong Man Street**
Description: **2032 Reference Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	200	0.102	0.102
	N		2	B	3.5	0.0	0	0	0%	2105	0	2105	0	215	0.102	
	N		2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	110	0.057	
Hong Man Street	W		3	D	5.0	20.0	20	1	88% / 12%	1611	1611	1500	1500	250	0.167	0.167
Chai Wan Road	S		1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S		1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	203	0.103	0.103
	S		1	A	3.5	0.0	0	0	0%	2105	0	2105	0	217	0.103	
Pedestrian crossing			4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
			5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

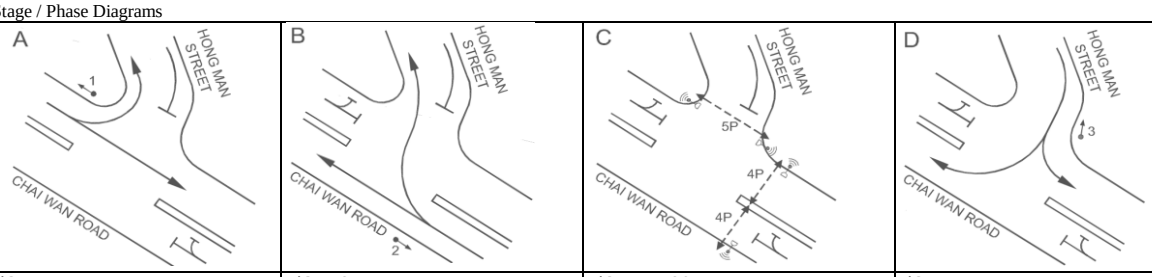
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.372
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	42%

Stage / Phase Diagrams



A	B	C	D
I/G = 5	I/G = 3	I/G = 39	I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

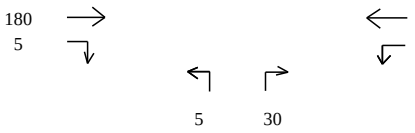
Description: **2032 Reference Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	14% / 86%	1965	1965	1820	1820	35	0.019	0.019
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	180	0.092	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	73%	1965	1965	1865	1865	520	0.279	0.279
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

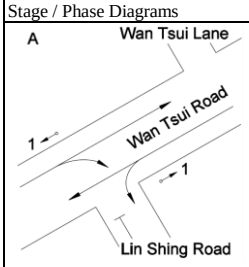
Traffic Flow (pcu / hr)

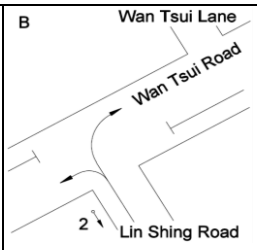


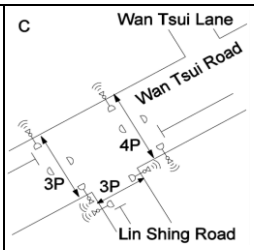
Peak Hour Check Phase

εy	0.298
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	60%

Stage / Phase Diagrams







I/G = 7	I/G = 12+5=17	I/G = 25		

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Reference Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	124	0.063	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	133	0.063	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	133	0.063	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	32% / 68%	1965	1965	1815	1815	190	0.105	0.105
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	250	0.119	0.119
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	250	0.119	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	205	0.115	

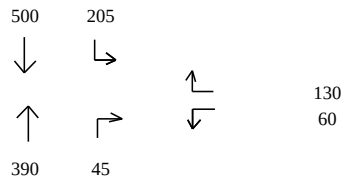
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

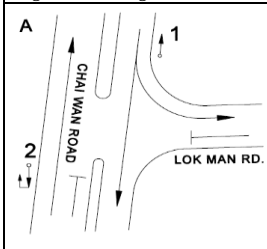
Traffic Flow (pcu / hr)



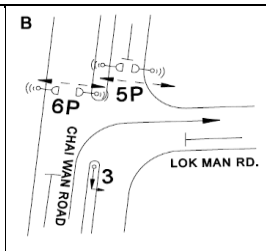
Peak Hour Check Phase

εy	0.246
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	90%

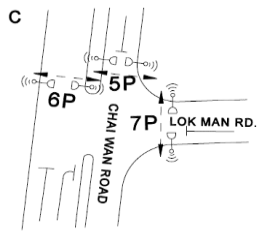
Stage / Phase Diagrams



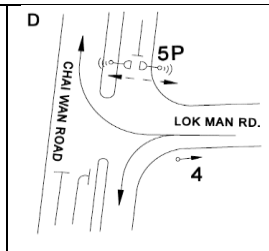
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

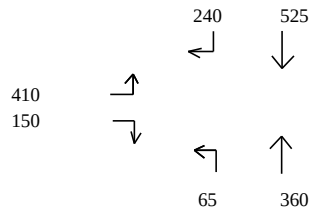
Description: **2032 Reference Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	173	0.088	0.088
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	187	0.088	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	65	0.036	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	269	0.138	0.138
	E	→↓	3	C	5.2	20.0	20	0	48% / 52%	2275	0	2115	0	291	0.138	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	255	0.128	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	270	0.128	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	240	0.123	0.128

Pedestrian crossing			
	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

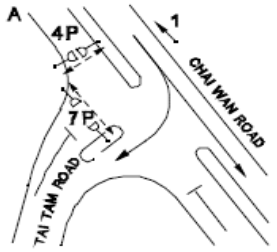
Traffic Flow (pcu / hr)



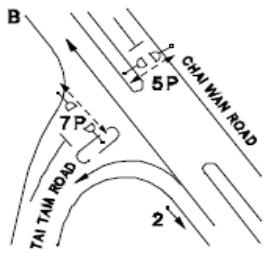
Peak Hour Check Phase

εy	0.354
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	116%

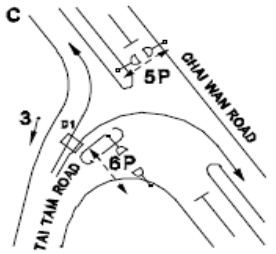
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

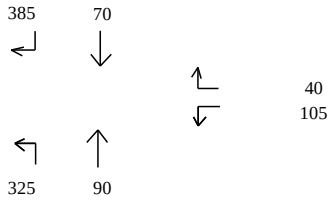
TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction F - Chai Wan Road/ Hong Man Street**
Description: **2032 Reference Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	157	0.080	0.080
	N		2	B	3.5	0.0	0	0	0%	2105	0	2105	0	168	0.080	
	N		2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	90	0.046	
Hong Man Street	W		3	D	5.0	20.0	20	1	72% / 28%	1611	1611	1500	1500	145	0.097	0.097
Chai Wan Road	S		1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	70	0.039	
	S		1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	186	0.095	0.095
	S		1	A	3.5	0.0	0	0	0%	2105	0	2105	0	199	0.095	
Pedestrian crossing			4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
			5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

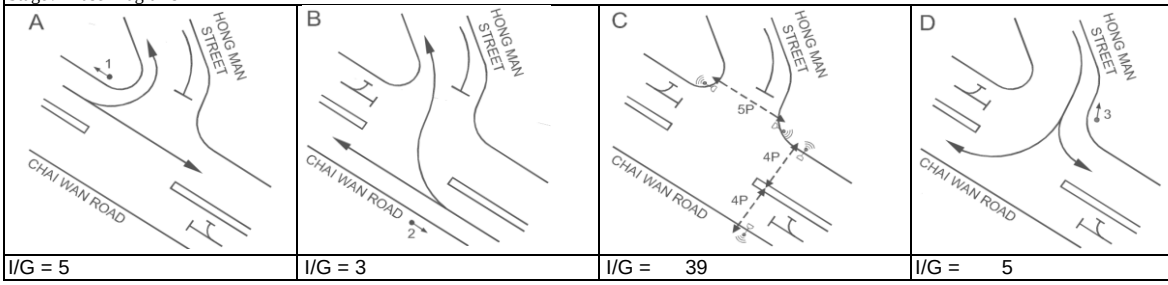
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.271
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	94%

Stage / Phase Diagrams



A	B	C	D
I/G = 5	I/G = 3	I/G = 39	I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

Description: **2032 Reference Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	10% / 90%	1965	1965	1825	1825	50	0.027	0.027
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	205	0.104	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	79%	1965	1965	1855	1855	550	0.296	0.296
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

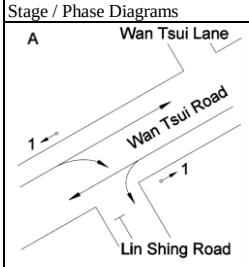
(Nil)

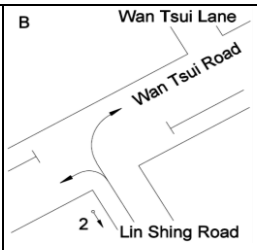
Traffic Flow (pcu / hr)

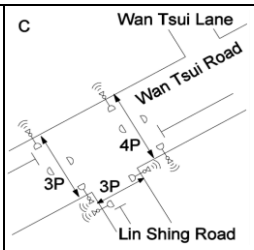
Peak Hour Check Phase

εy	0.324
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	47%

Stage / Phase Diagrams







I/G = 7	I/G = 12+5=17	I/G = 25		

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Reference Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	94	0.048	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	101	0.048	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	101	0.048	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	32% / 68%	1965	1965	1815	1815	190	0.105	0.105
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	240	0.114	0.114
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	240	0.114	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	190	0.106	

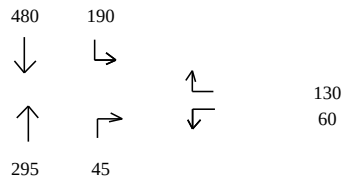
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

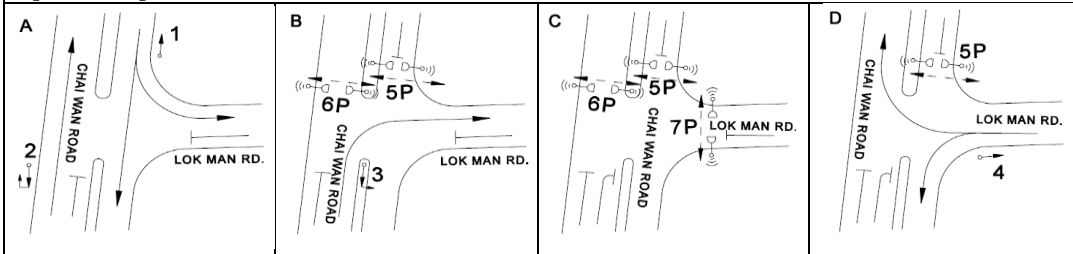
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.242
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	94%

Stage / Phase Diagrams



I/G = 10	I/G = 9+5=14	I/G = 22	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

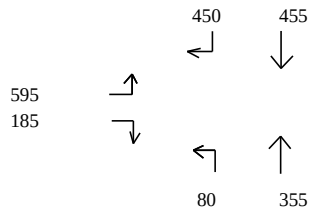
Description: **2032 Reference Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	171	0.087	0.087
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	184	0.087	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	80	0.045	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	375	0.192	0.192
	E	→↓	3	C	5.2	20.0	20	0	54% / 46%	2275	0	2115	0	405	0.192	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	221	0.111	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	234	0.111	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	450	0.231	0.231

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

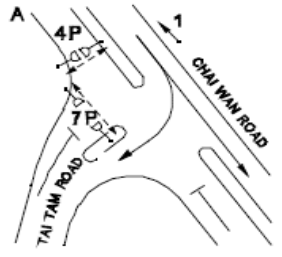
Traffic Flow (pcu / hr)



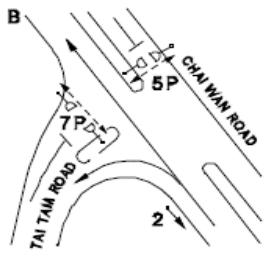
Peak Hour Check Phase

εy	0.510
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	50%

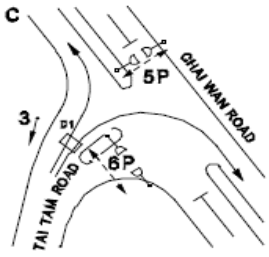
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

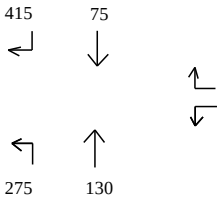
TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction F - Chai Wan Road/ Hong Man Street**
Description: **2032 Reference Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	133	0.068	0.068
	N		2	B	3.5	0.0	0	0	0%	2105	0	2105	0	142	0.068	
	N		2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	130	0.067	
Hong Man Street	W		3	D	5.0	20.0	20	1	83% / 17%	1611	1611	1500	1500	210	0.140	0.140
Chai Wan Road	S		1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	75	0.042	
	S		1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	200	0.102	0.102
	S		1	A	3.5	0.0	0	0	0%	2105	0	2105	0	215	0.102	
Pedestrian crossing			4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
			5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

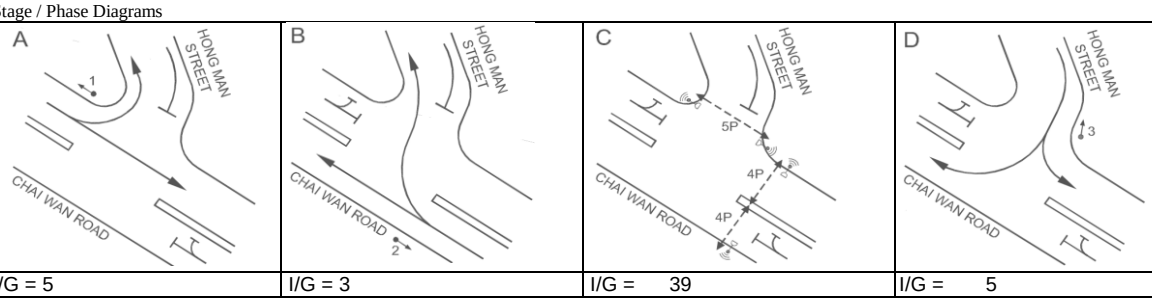
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.310
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	70%

Stage / Phase Diagrams



A	B	C	D	
I/G = 5	I/G = 3	I/G = 39	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

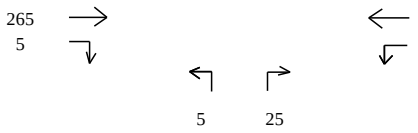
Description: **2032 Reference Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	17% / 83%	1965	1965	1820	1820	30	0.016	0.016
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	265	0.135	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	69%	1965	1965	1870	1870	550	0.294	0.294
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

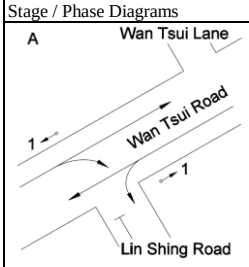
Traffic Flow (pcu / hr)



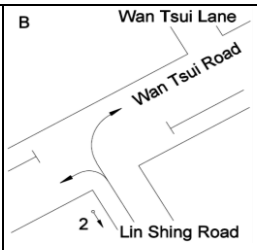
Peak Hour Check Phase

εy	0.311
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	54%

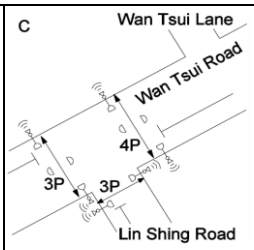
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Reference Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	121	0.062	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	130	0.062	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	130	0.062	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	69% / 31%	1965	1965	1800	1800	255	0.142	0.142
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	203	0.096	0.140
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	203	0.096	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	250	0.140	

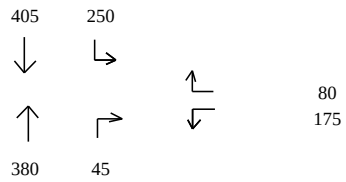
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

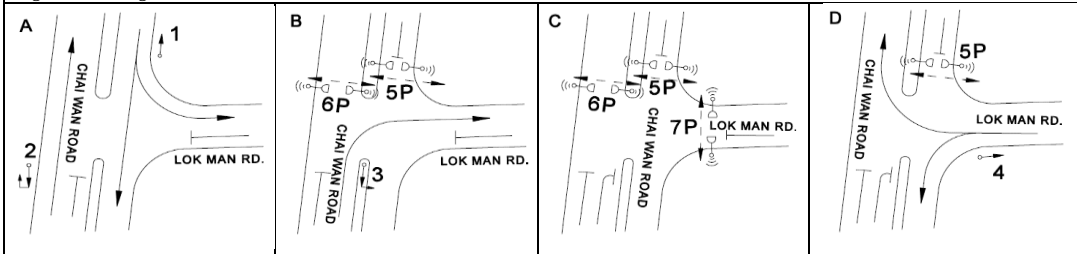
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.305
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	54%

Stage / Phase Diagrams



I/G = 10	I/G = 9+5=14	I/G = 22	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

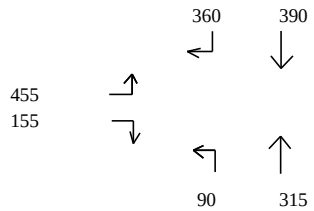
Description: **2032 Reference Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	152	0.077	0.077
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	163	0.077	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	90	0.050	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	293	0.150	0.150
	E	→↓	3	C	5.2	20.0	20	0	51% / 49%	2275	0	2115	0	317	0.150	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	190	0.095	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	200	0.095	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	360	0.185	0.185

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

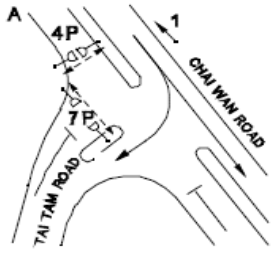
Notes:
(Nil)

Traffic Flow (pcu / hr)

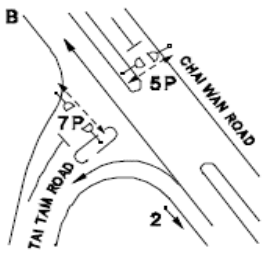


Peak Hour Check Phase	
εy	0.412
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	86%

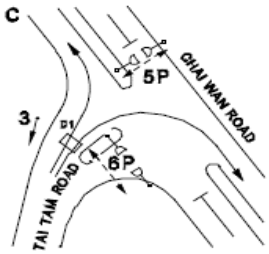
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

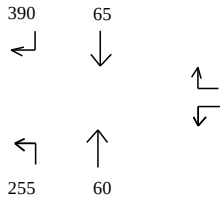
TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction F - Chai Wan Road/ Hong Man Street**
Description: **2032 Reference Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	123	0.063	0.063
	N		2	B	3.5	0.0	0	0	0%	2105	0	2105	0	132	0.063	
	N		2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	60	0.031	
Hong Man Street	W		3	D	5.0	20.0	20	1	79% / 21%	1611	1611	1500	1500	140	0.093	0.093
Chai Wan Road	S		1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S		1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	188	0.096	0.096
	S		1	A	3.5	0.0	0	0	0%	2105	0	2105	0	202	0.096	
Pedestrian crossing			4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
			5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

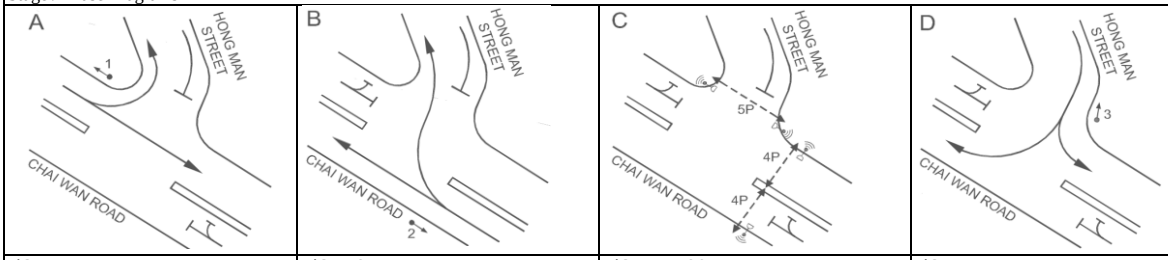
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.252
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	109%

Stage / Phase Diagrams



A	B	C	D	
I/G = 5	I/G = 3	I/G = 39	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

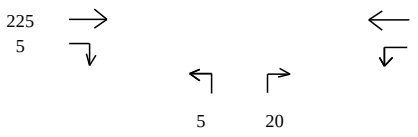
Description: **2032 Reference Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	20% / 80%	1965	1965	1820	1820	25	0.014	0.014
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	225	0.115	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	73%	1965	1965	1865	1865	510	0.273	0.273
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

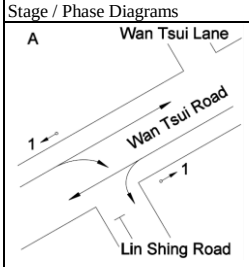
Traffic Flow (pcu / hr)



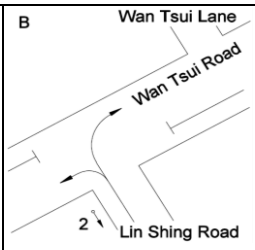
Peak Hour Check Phase

εy	0.287
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	66%

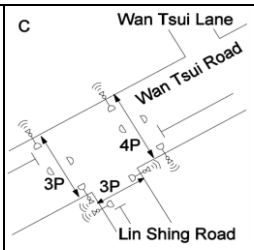
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Reference Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	113	0.057	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	121	0.057	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	121	0.057	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	68% / 32%	1965	1965	1800	1800	185	0.103	0.103
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	183	0.087	0.101
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	183	0.087	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	180	0.101	

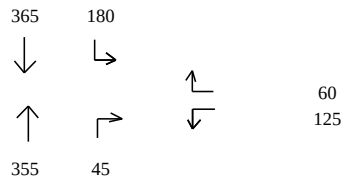
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

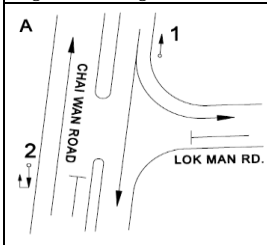
Traffic Flow (pcu / hr)



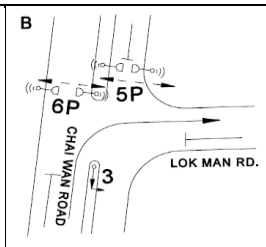
Peak Hour Check Phase

εy	0.227
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	107%

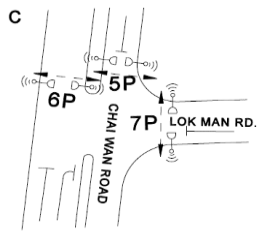
Stage / Phase Diagrams



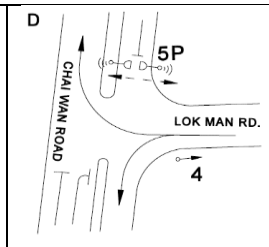
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

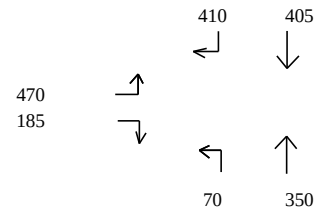
Description: **2032 Reference Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	168	0.086	0.086
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	182	0.086	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	70	0.039	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	315	0.161	0.161
	E	→↓	3	C	5.2	20.0	20	0	46% / 54%	2275	0	2115	0	340	0.161	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	197	0.099	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	208	0.099	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	410	0.211	0.211

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

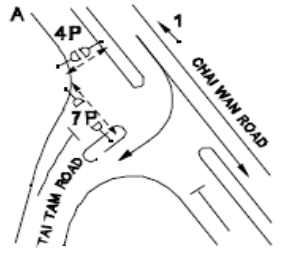
Traffic Flow (pcu / hr)



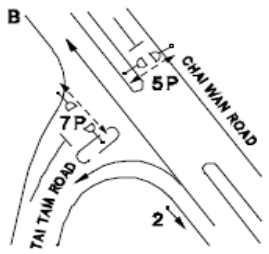
Peak Hour Check Phase

εy	0.457
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	67%

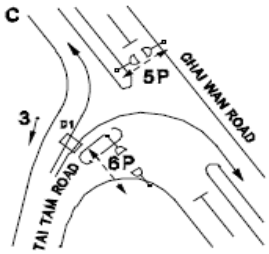
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

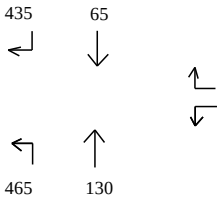
Junction: **Junction F - Chai Wan Road/ Hong Man Street**

Description: **2032 Reference Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	225	0.114	0.114
	N	↑	2	B	3.5	0.0	0	0	0%	2105	0	2105	0	240	0.114	
	N	↱	2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	130	0.067	
Hong Man Street	W	↕	3	D	5.0	20.0	20	1	79% / 21%	1611	1611	1500	1500	170	0.113	0.113
Chai Wan Road	S	↳	1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S	↓	1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	210	0.107	0.107
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	225	0.107	
Pedestrian crossing		⤢	4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
		⤡	5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

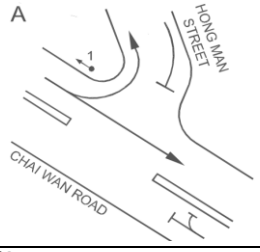
Traffic Flow (pcu / hr)



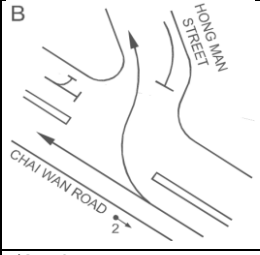
Peak Hour Check Phase

εy	0.334
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	57%

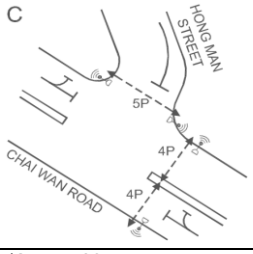
Stage / Phase Diagrams



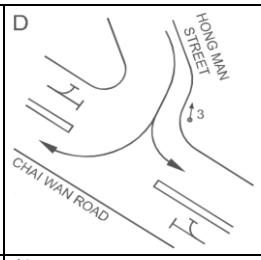
I/G = 5



I/G = 3



I/G = 39



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

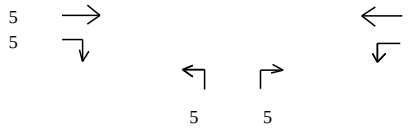
Description: **2032 Reference Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	50% / 50%	1965	1965	1805	1805	10	0.006	0.006
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	5	0.003	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	63%	1965	1965	1875	1875	470	0.251	0.251
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

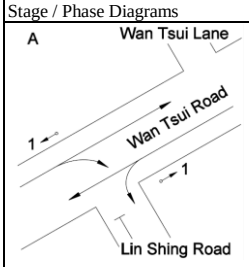
Traffic Flow (pcu / hr)



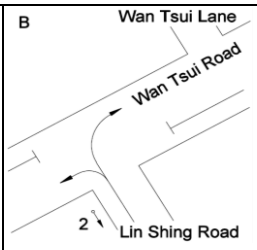
Peak Hour Check Phase

εy	0.256
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	86%

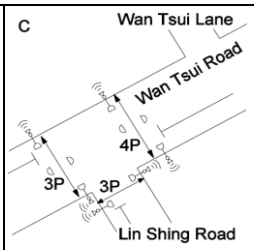
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Reference Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	124	0.063	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	133	0.063	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	133	0.063	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	50	0.026	0.026
Lok Man Road	W		4	D	3.5	15	20	1	78% / 22%	1965	1965	1795	1795	180	0.100	0.100
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	213	0.101	0.101
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	213	0.101	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	170	0.095	

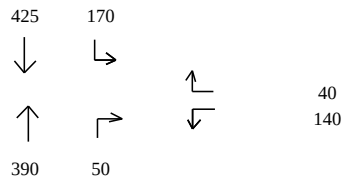
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

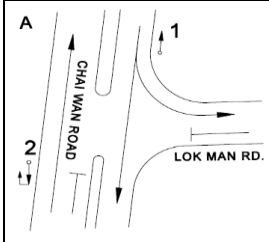
Traffic Flow (pcu / hr)



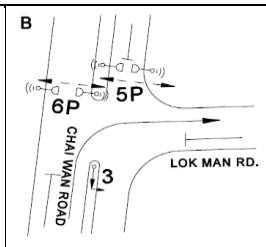
Peak Hour Check Phase

εy	0.227
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	106%

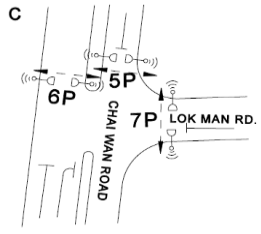
Stage / Phase Diagrams



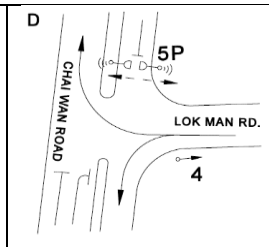
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

Description: **2032 Design Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	154	0.078	0.078
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	166	0.078	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	125	0.070	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	283	0.145	0.145
	E	→	3	C	5.2	20.0	20	0	43% / 57%	2275	0	2115	0	307	0.145	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	250	0.126	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	265	0.126	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	345	0.177	0.177

Pedestrian crossing			
	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

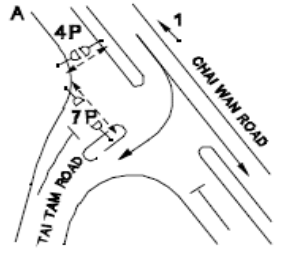
Traffic Flow (pcu / hr)

345 515
415
175
125 320

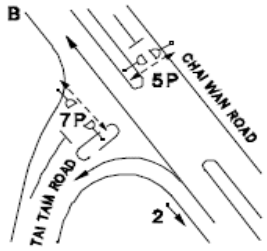
Peak Hour Check Phase

εy	0.401
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	91%

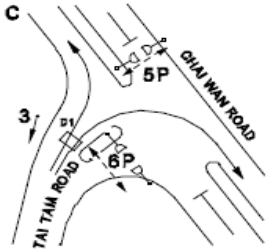
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

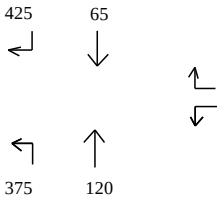
Junction: **Junction F - Chai Wan Road/ Hong Man Street**

Description: **2032 Design Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	181	0.092	0.092
	N	↑	2	B	3.5	0.0	0	0	0%	2105	0	2105	0	194	0.092	
	N	↱	2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	120	0.062	
Hong Man Street	W	↕	3	D	5.0	20.0	20	1	76% / 24%	1611	1611	1500	1500	165	0.110	0.110
Chai Wan Road	S	↳	1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S	↓	1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	205	0.104	0.104
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	220	0.104	
Pedestrian crossing		⇕	4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
		⇕	5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

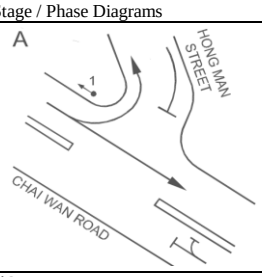
Traffic Flow (pcu / hr)



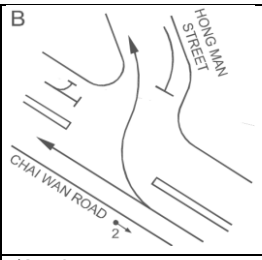
Peak Hour Check Phase

εy	0.307
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	72%

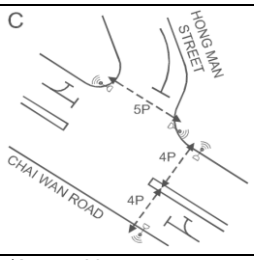
Stage / Phase Diagrams



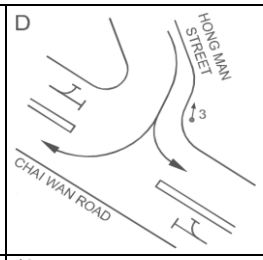
I/G = 5



I/G = 3



I/G = 39



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

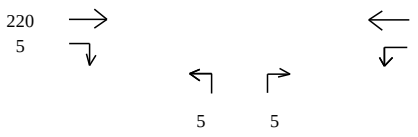
Description: **2032 Design Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	50% / 50%	1965	1965	1805	1805	10	0.006	0.006
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	220	0.112	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	74%	1965	1965	1860	1860	695	0.374	0.374
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

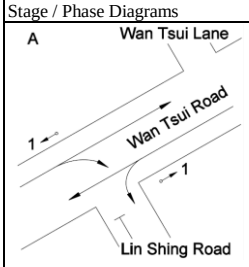
Traffic Flow (pcu / hr)

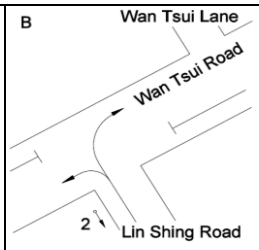


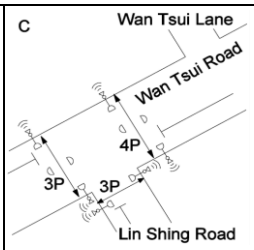
Peak Hour Check Phase

εy	0.379
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	26%

Stage / Phase Diagrams







I/G = 7 | I/G = 12+5=17 | I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Design Traffic Flows - 5 April (Ching Ming Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	107	0.054	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	114	0.054	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	114	0.054	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	10	0.005	0.005
Lok Man Road	W		4	D	3.5	15	20	1	22% / 78%	1965	1965	1820	1820	135	0.074	0.074
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	248	0.118	0.118
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	248	0.118	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	190	0.106	

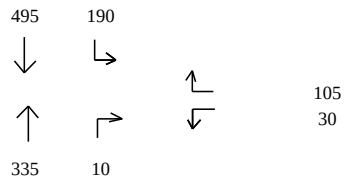
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

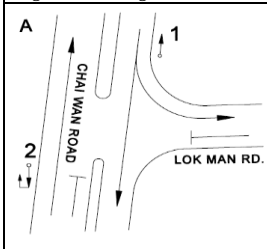
Traffic Flow (pcu / hr)



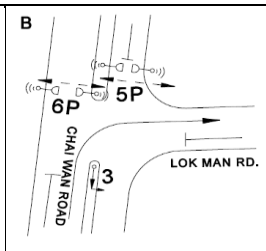
Peak Hour Check Phase

εy	0.197
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	138%

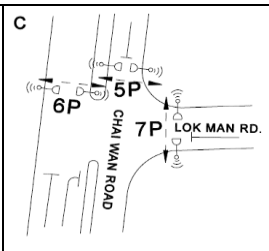
Stage / Phase Diagrams



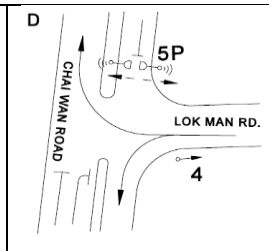
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

Description: **2032 Design Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	209	0.106	0.106
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	226	0.106	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	95	0.053	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	300	0.154	0.154
	E	→↱	3	C	5.2	20.0	20	0	51% / 49%	2275	0	2115	0	325	0.154	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	279	0.140	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	296	0.140	
	S	↳	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	315	0.162	0.162

Pedestrian crossing			
	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

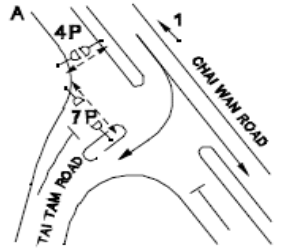
Traffic Flow (pcu / hr)

315 575
465
160
95 435

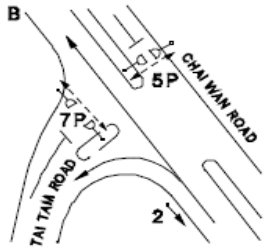
Peak Hour Check Phase

εy	0.422
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	81%

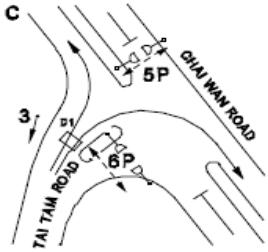
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

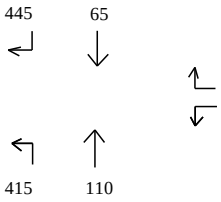
TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction F - Chai Wan Road/ Hong Man Street**
Description: **2032 Design Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	200	0.102	0.102
	N	↑	2	B	3.5	0.0	0	0	0%	2105	0	2105	0	215	0.102	
	N	↱	2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	110	0.057	
Hong Man Street	W	↕	3	D	5.0	20.0	20	1	88% / 12%	1611	1611	1500	1500	260	0.173	0.173
Chai Wan Road	S	↳	1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S	↓	1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	215	0.109	0.109
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	230	0.109	
Pedestrian crossing		⤢	4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
		⤡	5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

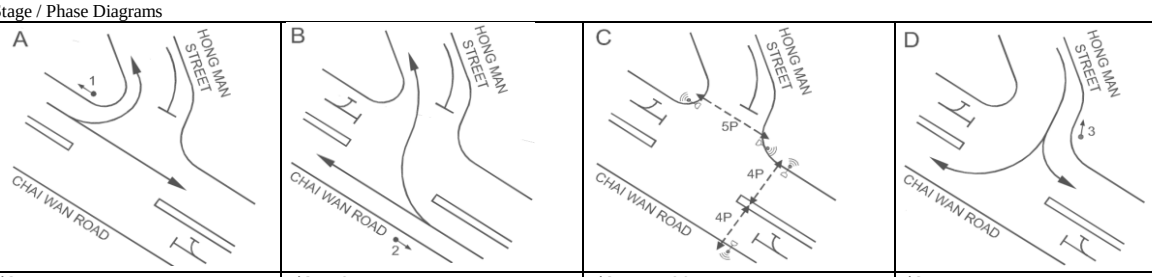
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.385
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	37%

Stage / Phase Diagrams



A	B	C	D	
I/G = 5	I/G = 3	I/G = 39	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

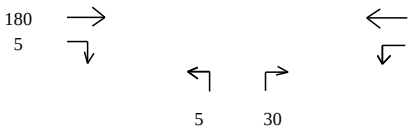
Description: **2032 Design Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	14% / 86%	1965	1965	1820	1820	35	0.019	0.019
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	180	0.092	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	76%	1965	1965	1860	1860	590	0.317	0.317
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

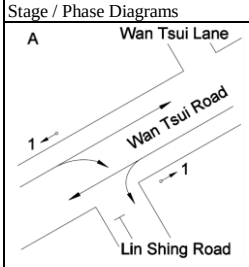
Traffic Flow (pcu / hr)



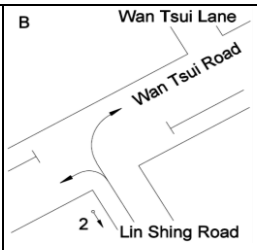
Peak Hour Check Phase

εy	0.336
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	42%

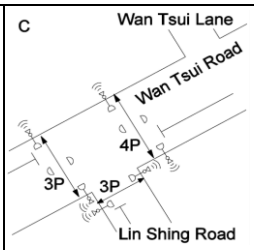
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Design Traffic Flows - 7 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	124	0.063	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	133	0.063	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	133	0.063	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	32% / 68%	1965	1965	1815	1815	190	0.105	0.105
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	263	0.125	0.125
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	263	0.125	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	205	0.115	

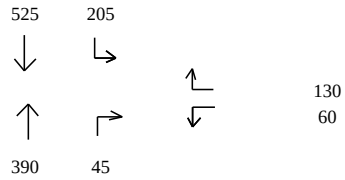
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

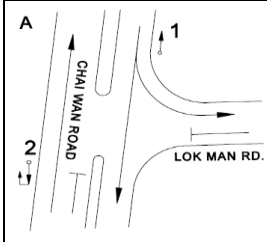
Traffic Flow (pcu / hr)



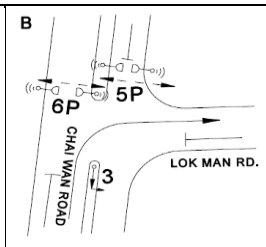
Peak Hour Check Phase

εy	0.252
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	85%

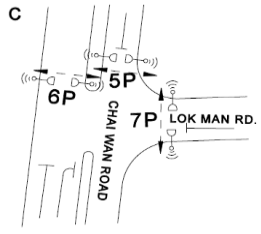
Stage / Phase Diagrams



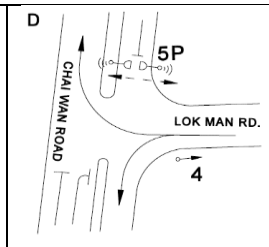
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

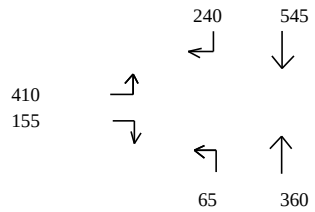
Description: **2032 Design Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	173	0.088	0.088
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	187	0.088	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	65	0.036	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	271	0.139	0.139
	E	→↓	3	C	5.2	20.0	20	0	47% / 53%	2275	0	2115	0	294	0.139	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	265	0.133	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	280	0.133	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	240	0.123	0.133

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

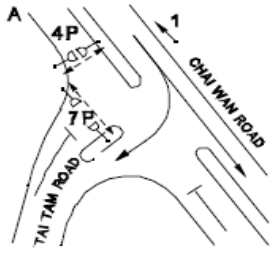
Traffic Flow (pcu / hr)



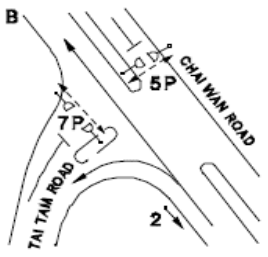
Peak Hour Check Phase

εy	0.360
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	112%

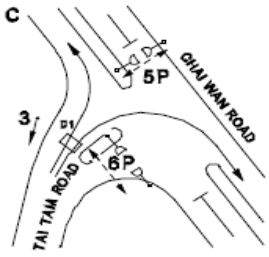
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

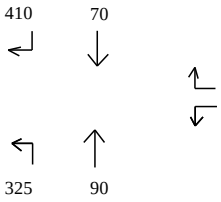
TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction F - Chai Wan Road/ Hong Man Street**
Description: **2032 Design Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	157	0.080	0.080
	N	↑	2	B	3.5	0.0	0	0	0%	2105	0	2105	0	168	0.080	
	N	↱	2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	90	0.046	
Hong Man Street	W	↕	3	D	5.0	20.0	20	1	74% / 26%	1611	1611	1500	1500	155	0.103	0.103
Chai Wan Road	S	↳	1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	70	0.039	
	S	↓	1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	198	0.101	0.101
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	212	0.101	
Pedestrian crossing			4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
			5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

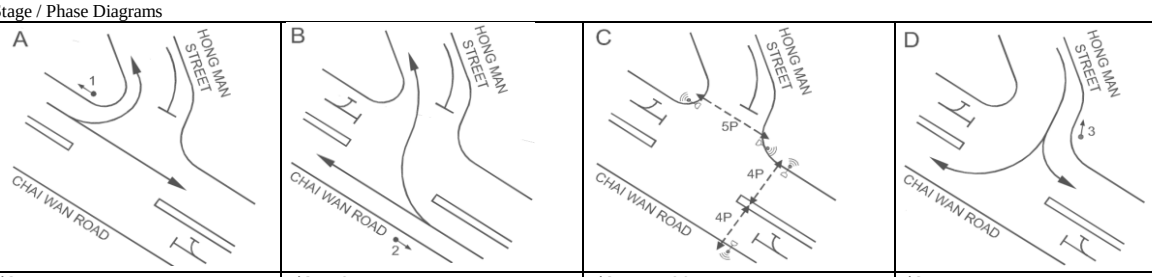
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.284
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	85%

Stage / Phase Diagrams



A	B	C	D
I/G = 5	I/G = 3	I/G = 39	I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

Description: **2032 Design Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	10% / 90%	1965	1965	1825	1825	50	0.027	0.027
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	205	0.104	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	81%	1965	1965	1850	1850	620	0.335	0.335
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

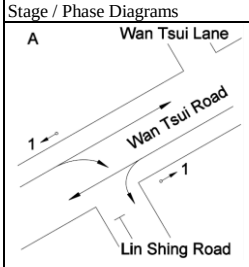
(Nil)

Traffic Flow (pcu / hr)

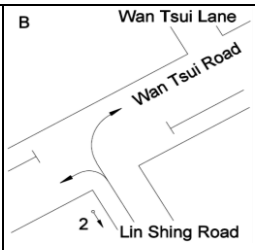
Peak Hour Check Phase

εy	0.363
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	32%

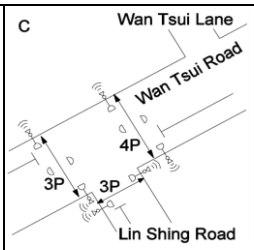
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Design Traffic Flows - 9 April**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	94	0.048	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	101	0.048	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	101	0.048	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	32% / 68%	1965	1965	1815	1815	190	0.105	0.105
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	253	0.120	0.120
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	253	0.120	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	190	0.106	

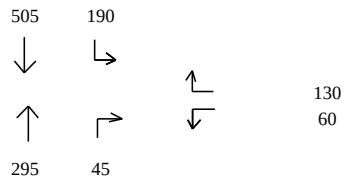
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

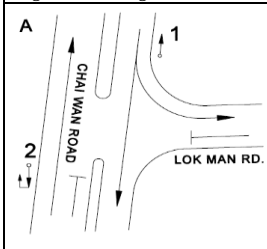
Traffic Flow (pcu / hr)



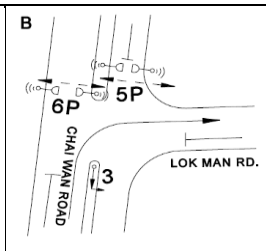
Peak Hour Check Phase

εy	0.248
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	89%

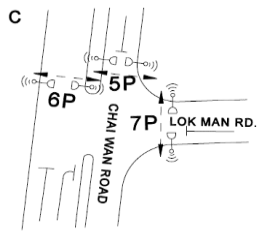
Stage / Phase Diagrams



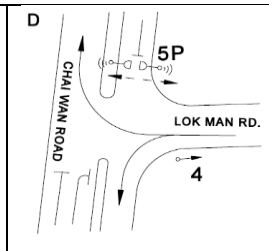
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

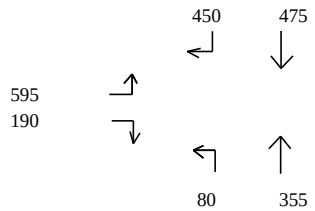
Description: **2032 Design Traffic Flows - 21 October**

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)	Flow (pcu/hr)	y Value	Critical y
						Left	Right									
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	171	0.087	0.087
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	184	0.087	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	80	0.045	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	377	0.193	0.193
	E	→	3	C	5.2	20.0	20	0	53% / 47%	2275	0	2115	0	408	0.193	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	231	0.116	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	244	0.116	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	450	0.231	0.231

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

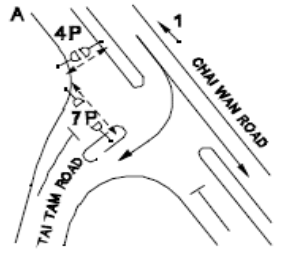
Traffic Flow (pcu / hr)



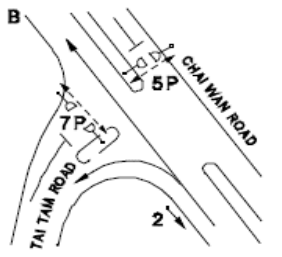
Peak Hour Check Phase

εy	0.511
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	50%

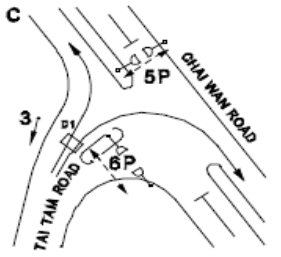
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

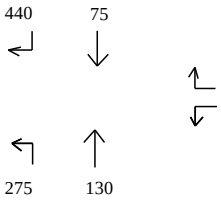
TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction F - Chai Wan Road/ Hong Man Street**
Description: **2032 Design Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	133	0.068	0.068
	N	↑	2	B	3.5	0.0	0	0	0%	2105	0	2105	0	142	0.068	
	N	↱	2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	130	0.067	
Hong Man Street	W	↕	3	D	5.0	20.0	20	1	84% / 16%	1611	1611	1500	1500	220	0.147	0.147
Chai Wan Road	S	↳	1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	75	0.042	
	S	↓	1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	212	0.108	0.108
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	228	0.108	
Pedestrian crossing		⤢	4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
		⤡	5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

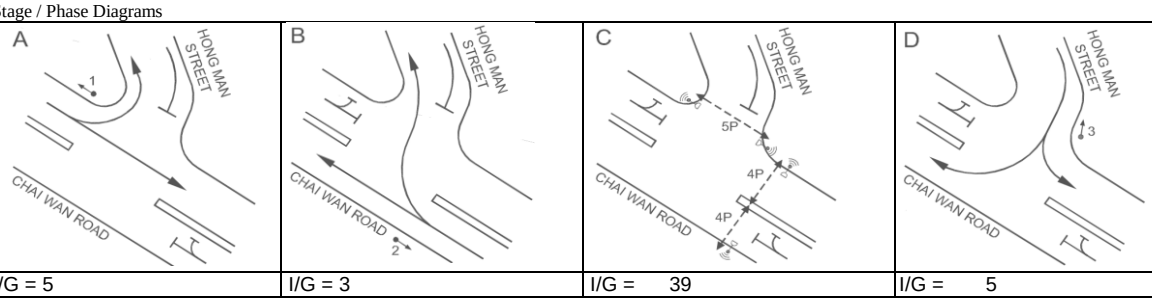
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.322
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	63%

Stage / Phase Diagrams



I/G = 5	I/G = 3	I/G = 39	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

Description: **2032 Design Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	17% / 83%	1965	1965	1820	1820	30	0.016	0.016
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	265	0.135	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	73%	1965	1965	1865	1865	620	0.332	0.332
Pedestrian Crossing			3p	C	Min. Crossing Time = 10Gm + 11FGm =21s											
			4p	C	Min. Crossing Time = 6Gm + 11FGm =17s											

Notes:

(Nil)

Traffic Flow (pcu / hr)

265
5

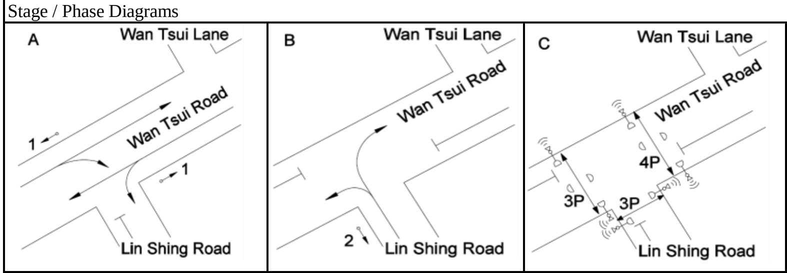
5 25

170
450

Peak Hour Check Phase

εy	0.349
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	37%

Stage / Phase Diagrams



I/G = 7 | I/G = 12+5=17 | I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Design Traffic Flows - 21 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	121	0.062	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	130	0.062	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	130	0.062	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	69% / 31%	1965	1965	1800	1800	255	0.142	0.142
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	215	0.102	0.140
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	215	0.102	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	250	0.140	

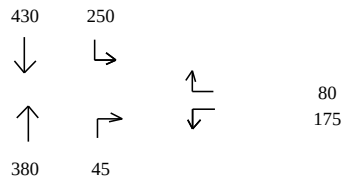
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

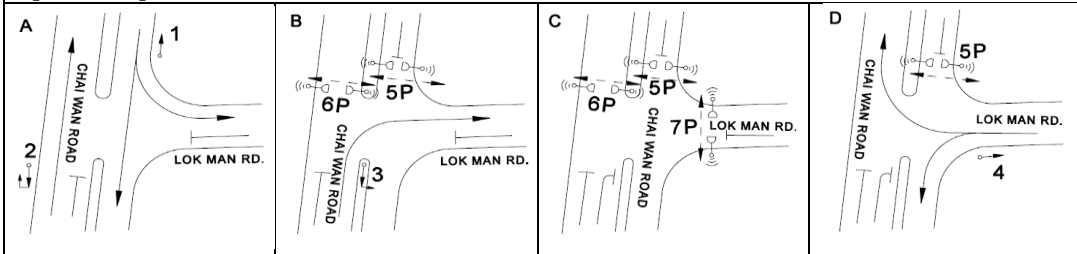
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.305
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	54%

Stage / Phase Diagrams



I/G = 10	I/G = 9+5=14	I/G = 22	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

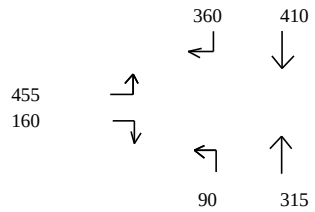
Description: **2032 Design Traffic Flows - 22 October**

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)	Flow (pcu/hr)	y Value	Critical y
						Left	Right									
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	152	0.077	0.077
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	163	0.077	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	90	0.050	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	295	0.151	0.151
	E	→↓	3	C	5.2	20.0	20	0	50% / 50%	2275	0	2115	0	320	0.151	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	199	0.100	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	211	0.100	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	360	0.185	0.185

Pedestrian crossing	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

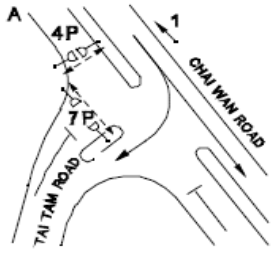
Notes:
(Nil)

Traffic Flow (pcu / hr)

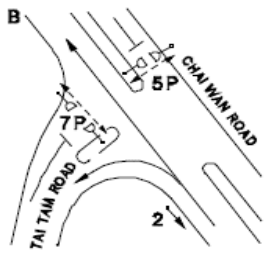


Peak Hour Check Phase	
εy	0.413
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	85%

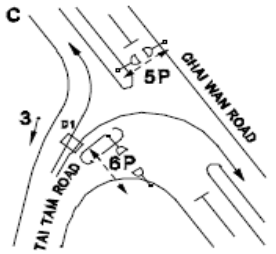
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

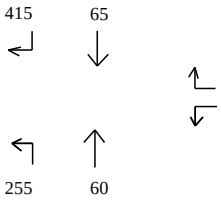
TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction F - Chai Wan Road/ Hong Man Street**
Description: **2032 Design Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	123	0.063	0.063
	N		2	B	3.5	0.0	0	0	0%	2105	0	2105	0	132	0.063	
	N		2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	60	0.031	
Hong Man Street	W		3	D	5.0	20.0	20	1	80% / 20%	1611	1611	1500	1500	150	0.100	0.100
Chai Wan Road	S		1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S		1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	200	0.102	0.102
	S		1	A	3.5	0.0	0	0	0%	2105	0	2105	0	215	0.102	
Pedestrian crossing			4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
			5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

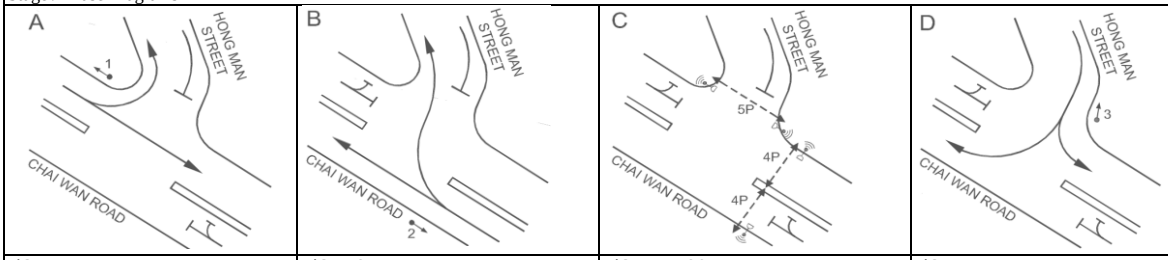
Traffic Flow (pcu / hr)



Peak Hour Check Phase

εy	0.265
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	99%

Stage / Phase Diagrams



I/G = 5	I/G = 3	I/G = 39	I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

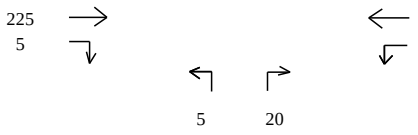
Junction: **Junction G - Wan Tsui Road / Lin Shing Road**
Description: **2032 Design Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	20% / 80%	1965	1965	1820	1820	25	0.014	0.014
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	225	0.115	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	76%	1965	1965	1860	1860	580	0.312	0.312
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

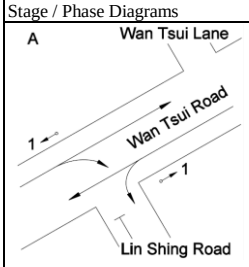
Traffic Flow (pcu / hr)



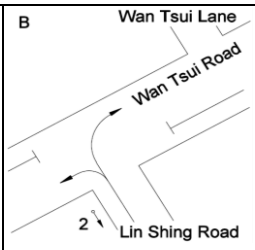
Peak Hour Check Phase

εy	0.326
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	47%

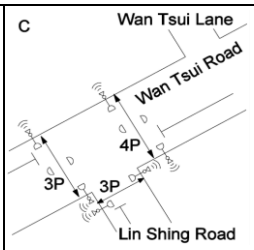
Stage / Phase Diagrams



I/G = 7



I/G = 12+5=17



I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Design Traffic Flows - 22 October**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	113	0.057	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	121	0.057	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	121	0.057	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	45	0.023	0.023
Lok Man Road	W		4	D	3.5	15	20	1	68% / 32%	1965	1965	1800	1800	185	0.103	0.103
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	195	0.093	0.101
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	195	0.093	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	180	0.101	

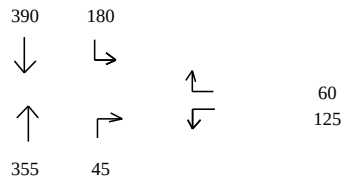
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

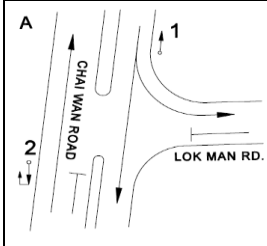
Traffic Flow (pcu / hr)



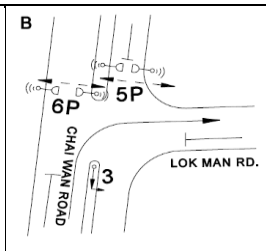
Peak Hour Check Phase

εy	0.227
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	107%

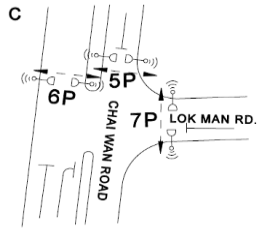
Stage / Phase Diagrams



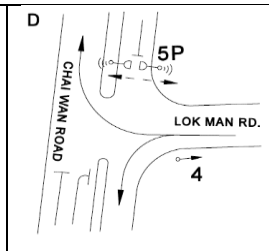
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction A - Chai Wan Road/ Tai Tam Road**

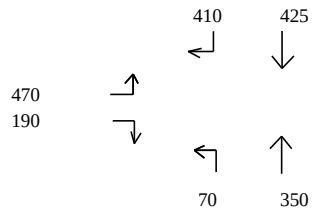
Description: **2032 Design Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N	↑	2	B	3.5	0.0	0	1	0%	1965	4085	1965	4085	168	0.086	0.086
	N	↑	2	B	3.7	0.0	0	0	0%	2120	0	2120	0	182	0.086	
	N	↰	2	B	3.5	15.0	0	1	100%	1965	1965	1785	1785	70	0.039	
Tai Tam Road	E	↱	3	C	5.2	16.5	0	1	100%	2135	4410	1955	4070	317	0.162	0.162
	E	→↓	3	C	5.2	20.0	20	0	45% / 55%	2275	0	2115	0	343	0.162	
Chai Wan Road	S	↓	1	A	3.8	0.0	0	1	0%	1990	4095	1990	4095	207	0.104	
	S	↓	1	A	3.5	0.0	0	0	0%	2105	0	2105	0	218	0.104	
	S	↲	1	A	3.3	0.0	21	0	100%	2085	2085	1945	1945	410	0.211	0.211

Pedestrian crossing			
	4p	A	Min. Crossing Time = 7Gm + 8FGm =15s
	5p	B,C	Min. Crossing Time = 7Gm + 10Gm =17s
	6p	C	Min. Crossing Time = 7Gm + 8FGm =15s
	7p	A,B	Min. Crossing Time = 7Gm + 12FGm =19s

Notes:
(Nil)

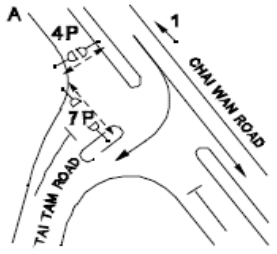
Traffic Flow (pcu / hr)



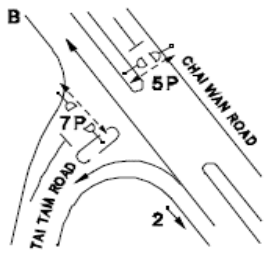
Peak Hour Check Phase

εy	0.459
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	67%

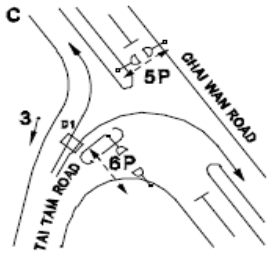
Stage / Phase Diagrams



I/G = 7



I/G = 7



I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

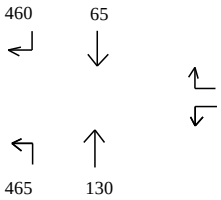
Junction: **Junction F - Chai Wan Road/ Hong Man Street**

Description: **2032 Design Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	B	3.5	0.0	0	1	0%	1965	4070	1965	4070	225	0.114	0.114
	N		2	B	3.5	0.0	0	0	0%	2105	0	2105	0	240	0.114	
	N		2	B	3.2	0.0	22.5	0	100%	2075	2075	1945	1945	130	0.067	
Hong Man Street	W		3	D	5.0	20.0	20	1	81% / 19%	1611	1611	1500	1500	180	0.120	0.120
Chai Wan Road	S		1	A	3.4	16.3	0	1	100%	1955	1955	1790	1790	65	0.036	
	S		1	A	3.5	0.0	0	1	0%	1965	4070	1965	4070	222	0.113	0.113
	S		1	A	3.5	0.0	0	0	0%	2105	0	2105	0	238	0.113	
Pedestrian crossing			4p	C		Min. Crossing Time = 24Gm + 13FGm =37s										
			5p	C		Min. Crossing Time = 24Gm + 13FGm =37s										

Notes:
(Nil)

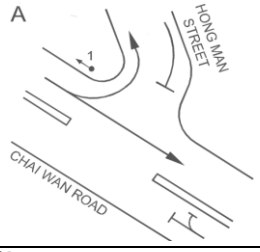
Traffic Flow (pcu / hr)



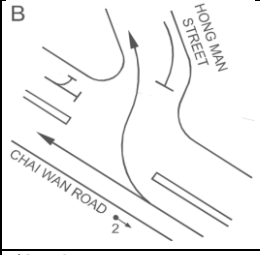
Peak Hour Check Phase

εy	0.347
L (sec)	49
C (sec)	118
y pract.	0.526
R.C. (%)	52%

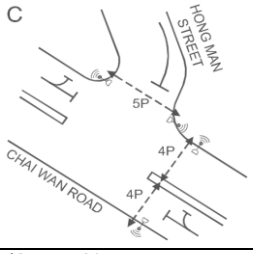
Stage / Phase Diagrams



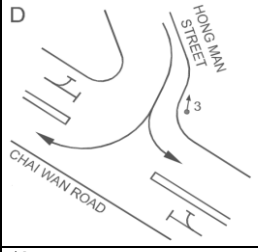
I/G = 5



I/G = 3



I/G = 39



I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction G - Wan Tsui Road / Lin Shing Road**

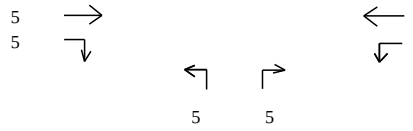
Description: **2032 Design Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Lin Shing Road	N		2	B	3.5	15	20	1	50% / 50%	1965	1965	1805	1805	10	0.006	0.006
Wan Tsui Road	E		1	A	3.5	0	0	1	0%	1965	1965	1965	1965	5	0.003	
	E		1	A	3.5	0	20	0	100%	2105	2105	1960	1960	5	0.003	
Wan Tsui Road	W		1	A	3.5	20	0	1	68%	1965	1965	1870	1870	540	0.289	0.289
Pedestrian Crossing			3p	C		Min. Crossing Time = 10Gm + 11FGm =21s										
			4p	C		Min. Crossing Time = 6Gm + 11FGm =17s										

Notes:

(Nil)

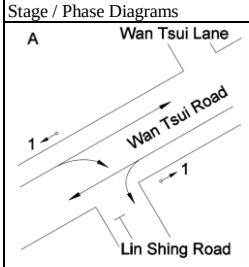
Traffic Flow (pcu / hr)

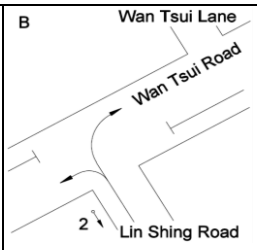


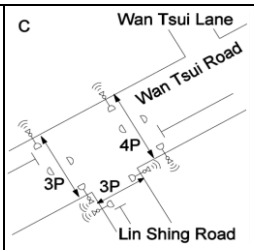
Peak Hour Check Phase

εy	0.294
L (sec)	47
C (sec)	100
y pract.	0.477
R.C. (%)	62%

Stage / Phase Diagrams







I/G = 7 | I/G = 12+5=17 | I/G = 25

TRAFFIC SIGNALS CALCULATION Job No: 23121HK **CTA Consultants Ltd.**

Junction: **Junction I -Chai Wan Road / Lok Man Road**

Description: **2032 Design Traffic Flows - 23 October (Chung Yeung Festival)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	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)	Flow (pcu/hr)	y Value	Critical y
Chai Wan Road	N		2	A	3.5	0	0	1	0%	1965	6175	1965	6175	124	0.063	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	133	0.063	
	N		2	A	3.5	0	0	0	0%	2105	0	2105	0	133	0.063	
	N		3	B	3.5	0	20	0	100%	2105	2105	1960	1960	50	0.026	0.026
Lok Man Road	W		4	D	3.5	15	20	1	78% / 22%	1965	1965	1795	1795	180	0.100	0.100
Chai Wan Road	S		1	A	3.5	0	0	0	0%	2105	4210	2105	4210	225	0.107	0.107
	S		1	A	3.5	0	0	0	0%	2105	0	2105	0	225	0.107	
	S		1	A	3.5	15	0	1	100%	1965	1965	1785	1785	170	0.095	

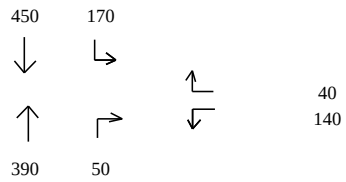
Pedestrian Crossing

5p	B,C,D	Min. Crossing Time = 6Gm + 9FGm =15s
6p	B,C	Min. Crossing Time = 5Gm + 9FGm =14s
7p	C	Min. Crossing Time = 7Gm + 11FGm =18s

Notes:

(Nil)

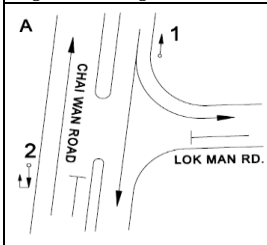
Traffic Flow (pcu / hr)



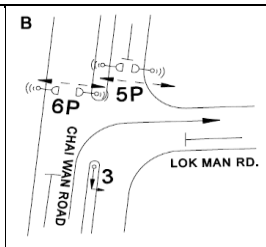
Peak Hour Check Phase

εy	0.233
L (sec)	48
C (sec)	100
y pract.	0.468
R.C. (%)	101%

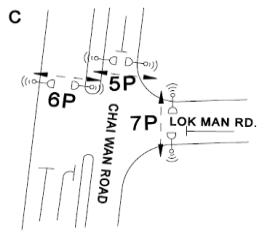
Stage / Phase Diagrams



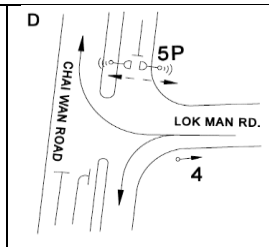
I/G = 10



I/G = 9+5=14



I/G = 22



I/G = 5

Junctions 8

ARCADY 8 - Roundabout Module

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

Filename: junction B.arc8
Path: \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\23121HK (knc) - TIA for HKBA Prop Ext to IL 7755RP for Columb Use, Cape Collinson Rd, Chan Wan\Calculation\2023-11-30\Junction 8
Report generation date: 22/1/2024 11:33:36

Summary of junction performance

	peak			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Arm 1	1.05	8.66	0.51	A
Arm 2	0.27	5.40	0.21	A
Arm 3	0.55	4.79	0.36	A

	A1 - 2023 Ching Ming Festival Period - 7 Apr			
Arm 1	0.63	6.74	0.39	A
Arm 2	0.39	5.58	0.28	A
Arm 3	0.39	4.33	0.28	A
	A1 - 2023 Ching Ming Festival Period - 9 Apr			
Arm 1	0.79	7.39	0.44	A
Arm 2	0.34	5.53	0.25	A
Arm 3	0.40	4.34	0.29	A
	A1 - 2023 Chung Yeung Festival Period - 21 Oct			
Arm 1	0.65	7.22	0.39	A
Arm 2	0.89	7.62	0.47	A
Arm 3	0.63	5.04	0.39	A
	A1 - 2023 Chung Yeung Festival Period - 22 Oct			
Arm 1	0.80	7.70	0.45	A
Arm 2	0.40	5.80	0.29	A
Arm 3	0.41	4.35	0.29	A
	A1 - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Arm 1	0.76	7.63	0.43	A
Arm 2	0.47	6.01	0.32	A
Arm 3	0.53	4.72	0.35	A
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct			
Arm 1	1.57	10.99	0.61	B
Arm 2	0.47	6.65	0.32	A
Arm 3	0.41	4.35	0.29	A
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr			
Arm 1	1.20	9.13	0.55	A
Arm 2	0.44	6.31	0.30	A
Arm 3	0.39	4.33	0.28	A
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr			
Arm 1	1.51	10.38	0.60	B
Arm 2	0.38	6.24	0.28	A
Arm 3	0.41	4.37	0.29	A
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct			
Arm 1	1.30	10.12	0.57	B
Arm 2	1.08	9.16	0.52	A
Arm 3	0.65	5.11	0.40	A
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Arm 1	1.50	10.85	0.60	B
Arm 2	0.55	6.93	0.35	A
Arm 3	0.54	4.75	0.35	A
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Arm 1	2.14	13.29	0.68	B
Arm 2	0.30	6.10	0.23	A
Arm 3	0.56	4.82	0.36	A
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr			
Arm 1	0.87	7.76	0.47	A
Arm 2	0.41	5.92	0.29	A
Arm 3	0.39	4.33	0.28	A
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr			
Arm 1	1.09	8.64	0.52	A
Arm 2	0.36	5.86	0.26	A
Arm 3	0.41	4.37	0.29	A

	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct			
Arm 1	0.92	8.45	0.48	A
Arm 2	0.99	8.37	0.50	A
Arm 3	0.65	5.11	0.40	A
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct			
Arm 1	1.12	9.06	0.53	A
Arm 2	0.44	6.22	0.31	A
Arm 3	0.41	4.35	0.29	A
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Arm 1	1.07	8.96	0.52	A
Arm 2	0.51	6.46	0.34	A
Arm 3	0.54	4.75	0.35	A
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Arm 1	1.50	10.56	0.60	B
Arm 2	0.29	5.74	0.22	A
Arm 3	0.56	4.82	0.36	A

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

"D1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival), peak " model duration: 8:00 - 9:30
"D2 - 2023 Ching Ming Festival Period - 7 Apr, peak" model duration: 8:00 - 9:30
"D3 - 2023 Ching Ming Festival Period - 9 Apr, peak" model duration: 8:00 - 9:30
"D4 - 2023 Chung Yeung Festival Period - 21 Oct, peak" model duration: 8:00 - 9:30
"D5 - 2023 Chung Yeung Festival Period - 22 Oct, peak" model duration: 8:00 - 9:30
"D6 - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), peak" model duration: 8:00 - 9:30
"D7 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), peak" model duration: 8:00 - 9:30
"D8 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr, peak" model duration: 8:00 - 9:30
"D9 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr, peak" model duration: 8:00 - 9:30
"D10 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct, peak" model duration: 8:00 - 9:30
"D11 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct, peak" model duration: 8:00 - 9:30
"D12 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), peak" model duration: 8:00 - 9:30
"D13 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), peak" model duration: 8:00 - 9:30
"D14 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr, peak" model duration: 8:00 - 9:30
"D15 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr, peak" model duration: 8:00 - 9:30
"D16 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct, peak" model duration: 8:00 - 9:30
"D17 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct, peak" model duration: 8:00 - 9:30
"D19 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), peak" model duration: 8:00 - 9:30

Run using Junctions 8.0.5.523 at 22/1/2024 11:33:24

File summary

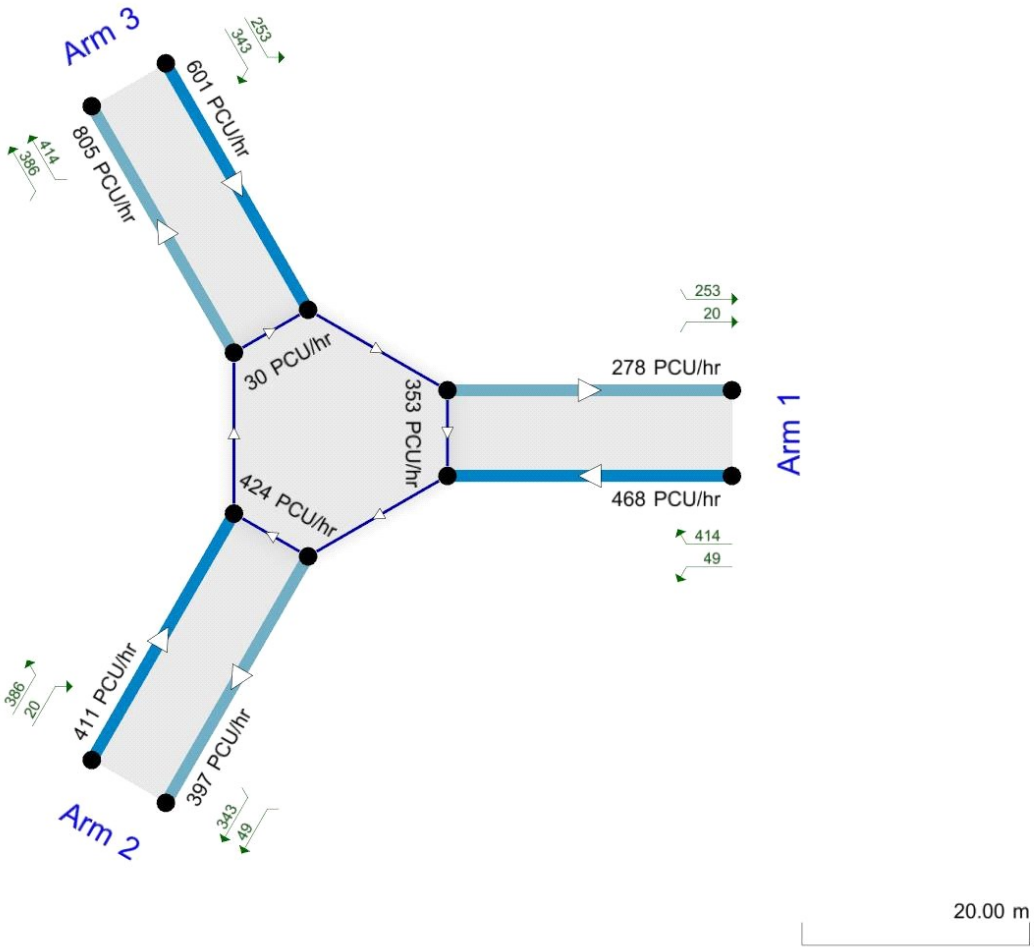
Title	(untitled)
Location	
Site Number	
Date	20/11/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ITADMIN
Description	

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 "; Demand Set "D1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival), peak "

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival), peak

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)	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
2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival), peak	2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival)	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	6.54	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	440.00	100.000
2	FLAT	✓	180.00	100.000
3	FLAT	✓	415.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	70.000	365.000
	2	30.000	5.000	145.000
	3	260.000	150.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.16	0.83
	2	0.17	0.03	0.81
	3	0.63	0.36	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.51	8.66	1.05	A
2	0.21	5.40	0.27	A
3	0.36	4.79	0.55	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	440.00	435.85	159.15	0.00	856.20	0.514	1.04	8.483	A
2	180.00	178.93	371.49	0.00	848.95	0.212	0.27	5.364	A
3	415.00	412.81	39.75	0.00	1167.32	0.356	0.55	4.758	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	440.00	439.96	160.00	0.00	855.75	0.514	1.05	8.654	A
2	180.00	179.99	374.96	0.00	847.10	0.212	0.27	5.395	A
3	415.00	414.99	40.00	0.00	1167.17	0.356	0.55	4.785	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	440.00	439.99	160.00	0.00	855.75	0.514	1.05	8.657	A
2	180.00	180.00	374.99	0.00	847.09	0.212	0.27	5.396	A
3	415.00	415.00	40.00	0.00	1167.17	0.356	0.55	4.785	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	440.00	439.99	160.00	0.00	855.75	0.514	1.05	8.658	A
2	180.00	180.00	374.99	0.00	847.08	0.212	0.27	5.396	A
3	415.00	415.00	40.00	0.00	1167.17	0.356	0.55	4.785	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	440.00	440.00	160.00	0.00	855.75	0.514	1.05	8.658	A
2	180.00	180.00	375.00	0.00	847.08	0.212	0.27	5.396	A
3	415.00	415.00	40.00	0.00	1167.17	0.356	0.55	4.785	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	440.00	440.00	160.00	0.00	855.75	0.514	1.05	8.658	A
2	180.00	180.00	375.00	0.00	847.08	0.212	0.27	5.396	A
3	415.00	415.00	40.00	0.00	1167.17	0.356	0.55	4.785	A

(Default Analysis Set) - 2023 Ching Ming Festival Period - 7 Apr, peak

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)	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
2023 Ching Ming Festival Period - 7 Apr, peak	2023 Ching Ming Festival Period - 7 Apr	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	5.56	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	335.00	100.000
2	FLAT	✓	250.00	100.000
3	FLAT	✓	325.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	55.000	275.000
	2	50.000	5.000	195.000
	3	195.000	125.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.16	0.82
	2	0.20	0.02	0.78
	3	0.60	0.38	0.02

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.39	6.74	0.63	A
2	0.28	5.58	0.39	A
3	0.28	4.33	0.39	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	335.00	332.52	134.35	0.00	869.51	0.385	0.62	6.673	A
2	250.00	248.47	282.91	0.00	896.04	0.279	0.38	5.542	A
3	325.00	323.45	59.63	0.00	1155.58	0.281	0.39	4.318	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	335.00	334.98	135.00	0.00	869.16	0.385	0.62	6.738	A
2	250.00	249.99	284.99	0.00	894.94	0.279	0.39	5.581	A
3	325.00	324.99	60.00	0.00	1155.36	0.281	0.39	4.335	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	335.00	334.99	135.00	0.00	869.16	0.385	0.62	6.738	A
2	250.00	250.00	285.00	0.00	894.93	0.279	0.39	5.581	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	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	335.00	335.00	135.00	0.00	869.16	0.385	0.63	6.738	A
2	250.00	250.00	285.00	0.00	894.93	0.279	0.39	5.581	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	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	335.00	335.00	135.00	0.00	869.16	0.385	0.63	6.738	A
2	250.00	250.00	285.00	0.00	894.93	0.279	0.39	5.581	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	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	335.00	335.00	135.00	0.00	869.16	0.385	0.63	6.738	A
2	250.00	250.00	285.00	0.00	894.93	0.279	0.39	5.581	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	A

(Default Analysis Set) - 2023 Ching Ming Festival Period - 9 Apr, peak

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)	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
2023 Ching Ming Festival Period - 9 Apr, peak	2023 Ching Ming Festival Period - 9 Apr	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	5.87	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	385.00	100.000
2	FLAT	✓	220.00	100.000
3	FLAT	✓	335.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	60.000	320.000
	2	35.000	5.000	180.000
	3	210.000	120.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.16	0.83
	2	0.16	0.02	0.82
	3	0.63	0.36	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.44	7.39	0.79	A
2	0.25	5.53	0.34	A
3	0.29	4.34	0.40	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	385.00	381.88	129.37	0.00	872.18	0.441	0.78	7.298	A
2	220.00	218.66	327.35	0.00	872.42	0.252	0.33	5.495	A
3	335.00	333.40	44.72	0.00	1164.39	0.288	0.40	4.324	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	385.00	384.98	130.00	0.00	871.85	0.442	0.78	7.393	A
2	220.00	219.99	329.98	0.00	871.02	0.253	0.34	5.529	A
3	335.00	334.99	45.00	0.00	1164.22	0.288	0.40	4.341	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	385.00	384.99	130.00	0.00	871.85	0.442	0.79	7.393	A
2	220.00	220.00	329.99	0.00	871.01	0.253	0.34	5.529	A
3	335.00	335.00	45.00	0.00	1164.22	0.288	0.40	4.341	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	385.00	385.00	130.00	0.00	871.85	0.442	0.79	7.393	A
2	220.00	220.00	330.00	0.00	871.01	0.253	0.34	5.529	A
3	335.00	335.00	45.00	0.00	1164.22	0.288	0.40	4.341	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	385.00	385.00	130.00	0.00	871.85	0.442	0.79	7.393	A
2	220.00	220.00	330.00	0.00	871.01	0.253	0.34	5.529	A
3	335.00	335.00	45.00	0.00	1164.22	0.288	0.40	4.341	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	385.00	385.00	130.00	0.00	871.85	0.442	0.79	7.393	A
2	220.00	220.00	330.00	0.00	871.01	0.253	0.34	5.529	A
3	335.00	335.00	45.00	0.00	1164.22	0.288	0.40	4.341	A

(Default Analysis Set) - 2023 Chung Yeung Festival Period - 21 Oct, peak

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)	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
2023 Chung Yeung Festival Period - 21 Oct, peak	2023 Chung Yeung Festival Period - 21 Oct	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	6.54	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	325.00	100.000
2	FLAT	✓	420.00	100.000
3	FLAT	✓	450.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	40.000	280.000
	2	35.000	5.000	380.000
	3	235.000	210.000	5.000

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

		To		
		1	2	3
From	1	0.02	0.12	0.86
	2	0.08	0.01	0.90
	3	0.52	0.47	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.39	7.22	0.65	A
2	0.47	7.62	0.89	A
3	0.39	5.04	0.63	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	325.00	322.43	218.77	0.00	824.21	0.394	0.64	7.140	A
2	420.00	416.51	287.72	0.00	893.48	0.470	0.87	7.495	A
3	450.00	447.50	44.63	0.00	1164.44	0.386	0.62	5.004	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	325.00	324.98	219.99	0.00	823.55	0.395	0.65	7.220	A
2	420.00	419.97	289.98	0.00	892.28	0.471	0.88	7.621	A
3	450.00	449.99	45.00	0.00	1164.22	0.387	0.63	5.039	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	325.00	324.99	220.00	0.00	823.55	0.395	0.65	7.220	A
2	420.00	419.99	289.99	0.00	892.27	0.471	0.88	7.621	A
3	450.00	450.00	45.00	0.00	1164.22	0.387	0.63	5.039	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	325.00	325.00	220.00	0.00	823.55	0.395	0.65	7.220	A
2	420.00	419.99	290.00	0.00	892.27	0.471	0.89	7.621	A
3	450.00	450.00	45.00	0.00	1164.22	0.387	0.63	5.039	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	325.00	325.00	220.00	0.00	823.55	0.395	0.65	7.220	A
2	420.00	420.00	290.00	0.00	892.27	0.471	0.89	7.621	A
3	450.00	450.00	45.00	0.00	1164.22	0.387	0.63	5.039	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	325.00	325.00	220.00	0.00	823.55	0.395	0.65	7.220	A
2	420.00	420.00	290.00	0.00	892.27	0.471	0.89	7.621	A
3	450.00	450.00	45.00	0.00	1164.22	0.387	0.63	5.039	A

(Default Analysis Set) - 2023 Chung Yeung Festival Period - 22 Oct, peak

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)	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
2023 Chung Yeung Festival Period - 22 Oct, peak	2023 Chung Yeung Festival Period - 22 Oct	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	6.03	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	375.00	100.000
2	FLAT	✓	250.00	100.000
3	FLAT	✓	340.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	50.000	320.000
	2	30.000	5.000	215.000
	3	160.000	175.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.13	0.85
	2	0.12	0.02	0.86
	3	0.47	0.51	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.45	7.70	0.80	A
2	0.29	5.80	0.40	A
3	0.29	4.35	0.41	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	375.00	371.84	184.10	0.00	842.81	0.445	0.79	7.594	A
2	250.00	248.41	327.24	0.00	872.47	0.287	0.40	5.755	A
3	340.00	338.37	39.73	0.00	1167.33	0.291	0.41	4.336	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	375.00	374.97	185.00	0.00	842.33	0.445	0.80	7.701	A
2	250.00	249.99	329.98	0.00	871.02	0.287	0.40	5.796	A
3	340.00	339.99	40.00	0.00	1167.17	0.291	0.41	4.351	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	375.00	374.99	185.00	0.00	842.33	0.445	0.80	7.703	A
2	250.00	250.00	329.99	0.00	871.01	0.287	0.40	5.796	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	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	375.00	375.00	185.00	0.00	842.33	0.445	0.80	7.703	A
2	250.00	250.00	330.00	0.00	871.01	0.287	0.40	5.796	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	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	375.00	375.00	185.00	0.00	842.33	0.445	0.80	7.703	A
2	250.00	250.00	330.00	0.00	871.01	0.287	0.40	5.796	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	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	375.00	375.00	185.00	0.00	842.33	0.445	0.80	7.703	A
2	250.00	250.00	330.00	0.00	871.01	0.287	0.40	5.796	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	A

(Default Analysis Set) - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), peak

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)	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
2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), peak	2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	6.07	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	360.00	100.000
2	FLAT	✓	280.00	100.000
3	FLAT	✓	405.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	50.000	305.000
	2	30.000	5.000	245.000
	3	205.000	195.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.14	0.85
	2	0.11	0.02	0.88
	3	0.51	0.48	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.43	7.63	0.76	A
2	0.32	6.01	0.47	A
3	0.35	4.72	0.53	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	360.00	356.99	203.93	0.00	832.17	0.433	0.75	7.530	A
2	280.00	278.15	312.39	0.00	880.37	0.318	0.46	5.960	A
3	405.00	402.89	39.73	0.00	1167.33	0.347	0.53	4.698	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	360.00	359.98	205.00	0.00	831.60	0.433	0.76	7.632	A
2	280.00	279.99	314.98	0.00	878.99	0.319	0.46	6.009	A
3	405.00	404.99	40.00	0.00	1167.17	0.347	0.53	4.722	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	360.00	359.99	205.00	0.00	831.60	0.433	0.76	7.632	A
2	280.00	280.00	314.99	0.00	878.98	0.319	0.47	6.009	A
3	405.00	405.00	40.00	0.00	1167.17	0.347	0.53	4.722	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	360.00	360.00	205.00	0.00	831.60	0.433	0.76	7.632	A
2	280.00	280.00	315.00	0.00	878.98	0.319	0.47	6.009	A
3	405.00	405.00	40.00	0.00	1167.17	0.347	0.53	4.722	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	360.00	360.00	205.00	0.00	831.60	0.433	0.76	7.632	A
2	280.00	280.00	315.00	0.00	878.98	0.319	0.47	6.009	A
3	405.00	405.00	40.00	0.00	1167.17	0.347	0.53	4.722	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	360.00	360.00	205.00	0.00	831.60	0.433	0.76	7.632	A
2	280.00	280.00	315.00	0.00	878.98	0.319	0.47	6.009	A
3	405.00	405.00	40.00	0.00	1167.17	0.347	0.53	4.722	A

(Default Analysis Set) - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), peak

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)	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
2032 Reference (Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), peak	2032 Reference (Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	7.62	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	515.00	100.000
2	FLAT	✓	180.00	100.000
3	FLAT	✓	420.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	70.000	440.000
	2	30.000	5.000	145.000
	3	265.000	150.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.14	0.85
	2	0.17	0.03	0.81
	3	0.63	0.36	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.60	10.56	1.50	B
2	0.22	5.74	0.29	A
3	0.36	4.82	0.56	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	515.00	509.13	159.15	0.00	856.20	0.601	1.47	10.210	B
2	180.00	178.87	444.90	0.00	809.92	0.222	0.28	5.694	A
3	420.00	417.77	39.72	0.00	1167.34	0.360	0.56	4.788	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	515.00	514.91	160.00	0.00	855.75	0.602	1.49	10.554	B
2	180.00	179.99	449.92	0.00	807.25	0.223	0.29	5.738	A
3	420.00	419.99	40.00	0.00	1167.17	0.360	0.56	4.817	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	515.00	514.97	160.00	0.00	855.75	0.602	1.50	10.560	B
2	180.00	180.00	449.97	0.00	807.22	0.223	0.29	5.738	A
3	420.00	420.00	40.00	0.00	1167.17	0.360	0.56	4.817	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	515.00	514.99	160.00	0.00	855.75	0.602	1.50	10.562	B
2	180.00	180.00	449.99	0.00	807.22	0.223	0.29	5.739	A
3	420.00	420.00	40.00	0.00	1167.17	0.360	0.56	4.817	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	515.00	514.99	160.00	0.00	855.75	0.602	1.50	10.562	B
2	180.00	180.00	449.99	0.00	807.21	0.223	0.29	5.739	A
3	420.00	420.00	40.00	0.00	1167.17	0.360	0.56	4.817	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	515.00	514.99	160.00	0.00	855.75	0.602	1.50	10.562	B
2	180.00	180.00	449.99	0.00	807.21	0.223	0.29	5.739	A
3	420.00	420.00	40.00	0.00	1167.17	0.360	0.56	4.817	A

(Default Analysis Set) - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr, peak

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)	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
2032 Reference (Without Proposed Extension) - Ching Ming Festival Period - 7 Apr, peak	2032 Reference (Without Proposed Extension) - Ching Ming Festival Period - 7 Apr	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	6.15	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	405.00	100.000
2	FLAT	✓	250.00	100.000
3	FLAT	✓	325.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	55.000	345.000
	2	50.000	5.000	195.000
	3	195.000	125.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.14	0.85
	2	0.20	0.02	0.78
	3	0.60	0.38	0.02

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.47	7.76	0.87	A
2	0.29	5.92	0.41	A
3	0.28	4.33	0.39	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	405.00	401.57	134.35	0.00	869.51	0.466	0.86	7.639	A
2	250.00	248.37	352.01	0.00	859.30	0.291	0.41	5.877	A
3	325.00	323.45	59.60	0.00	1155.60	0.281	0.39	4.318	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	405.00	404.97	135.00	0.00	869.16	0.466	0.87	7.754	A
2	250.00	249.99	354.97	0.00	857.73	0.291	0.41	5.923	A
3	325.00	324.99	60.00	0.00	1155.36	0.281	0.39	4.335	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	405.00	404.99	135.00	0.00	869.16	0.466	0.87	7.755	A
2	250.00	250.00	354.99	0.00	857.72	0.291	0.41	5.923	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	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	405.00	405.00	135.00	0.00	869.16	0.466	0.87	7.755	A
2	250.00	250.00	355.00	0.00	857.72	0.291	0.41	5.923	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	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	405.00	405.00	135.00	0.00	869.16	0.466	0.87	7.755	A
2	250.00	250.00	355.00	0.00	857.72	0.291	0.41	5.923	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	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	405.00	405.00	135.00	0.00	869.16	0.466	0.87	7.755	A
2	250.00	250.00	355.00	0.00	857.72	0.291	0.41	5.923	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	A

(Default Analysis Set) - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr, peak

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)	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
2032 Reference (Without Proposed Extension) - Ching Ming Festival Period - 9 Apr, peak	2032 Reference (Without Proposed Extension) - Ching Ming Festival Period - 9 Apr	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	6.60	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	455.00	100.000
2	FLAT	✓	220.00	100.000
3	FLAT	✓	340.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	60.000	390.000
	2	35.000	5.000	180.000
	3	215.000	120.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.13	0.86
	2	0.16	0.02	0.82
	3	0.63	0.35	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.52	8.64	1.09	A
2	0.26	5.86	0.36	A
3	0.29	4.37	0.41	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	455.00	450.72	129.37	0.00	872.19	0.522	1.07	8.460	A
2	220.00	218.58	396.26	0.00	835.78	0.263	0.35	5.820	A
3	340.00	338.36	44.70	0.00	1164.40	0.292	0.41	4.349	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	455.00	454.96	130.00	0.00	871.85	0.522	1.08	8.632	A
2	220.00	219.99	399.96	0.00	833.81	0.264	0.36	5.864	A
3	340.00	339.99	45.00	0.00	1164.22	0.292	0.41	4.367	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	455.00	454.99	130.00	0.00	871.85	0.522	1.08	8.634	A
2	220.00	220.00	399.99	0.00	833.80	0.264	0.36	5.864	A
3	340.00	340.00	45.00	0.00	1164.22	0.292	0.41	4.367	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	455.00	454.99	130.00	0.00	871.85	0.522	1.09	8.635	A
2	220.00	220.00	399.99	0.00	833.79	0.264	0.36	5.864	A
3	340.00	340.00	45.00	0.00	1164.22	0.292	0.41	4.367	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	455.00	455.00	130.00	0.00	871.85	0.522	1.09	8.635	A
2	220.00	220.00	400.00	0.00	833.79	0.264	0.36	5.864	A
3	340.00	340.00	45.00	0.00	1164.22	0.292	0.41	4.367	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	455.00	455.00	130.00	0.00	871.85	0.522	1.09	8.635	A
2	220.00	220.00	400.00	0.00	833.79	0.264	0.36	5.864	A
3	340.00	340.00	45.00	0.00	1164.22	0.292	0.41	4.367	A

(Default Analysis Set) - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct, peak

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)	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
2032 Reference (Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct, peak	2032 Reference (Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	7.22	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	395.00	100.000
2	FLAT	✓	425.00	100.000
3	FLAT	✓	460.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	40.000	350.000
	2	35.000	5.000	385.000
	3	240.000	215.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.10	0.89
	2	0.08	0.01	0.91
	3	0.52	0.47	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.48	8.45	0.92	A
2	0.50	8.37	0.99	A
3	0.40	5.11	0.65	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	395.00	391.36	223.72	0.00	821.55	0.481	0.91	8.300	A
2	425.00	421.13	356.70	0.00	856.81	0.496	0.97	8.193	A
3	460.00	457.41	44.59	0.00	1164.46	0.395	0.65	5.073	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	395.00	394.96	224.99	0.00	820.87	0.481	0.92	8.451	A
2	425.00	424.95	359.97	0.00	855.07	0.497	0.98	8.369	A
3	460.00	459.99	45.00	0.00	1164.22	0.395	0.65	5.111	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	395.00	394.99	225.00	0.00	820.87	0.481	0.92	8.453	A
2	425.00	424.99	359.99	0.00	855.06	0.497	0.98	8.370	A
3	460.00	460.00	45.00	0.00	1164.22	0.395	0.65	5.111	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	395.00	394.99	225.00	0.00	820.87	0.481	0.92	8.453	A
2	425.00	424.99	359.99	0.00	855.06	0.497	0.98	8.370	A
3	460.00	460.00	45.00	0.00	1164.22	0.395	0.65	5.111	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	395.00	395.00	225.00	0.00	820.87	0.481	0.92	8.453	A
2	425.00	425.00	360.00	0.00	855.06	0.497	0.98	8.370	A
3	460.00	460.00	45.00	0.00	1164.22	0.395	0.65	5.111	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	395.00	395.00	225.00	0.00	820.87	0.481	0.92	8.453	A
2	425.00	425.00	360.00	0.00	855.06	0.497	0.99	8.370	A
3	460.00	460.00	45.00	0.00	1164.22	0.395	0.65	5.111	A

(Default Analysis Set) - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct, peak

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)	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
2032 Reference (Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct, peak	2032 Reference (Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	6.82	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	445.00	100.000
2	FLAT	✓	255.00	100.000
3	FLAT	✓	340.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	50.000	390.000
	2	30.000	5.000	220.000
	3	160.000	175.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.11	0.88
	2	0.12	0.02	0.86
	3	0.47	0.51	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.53	9.06	1.12	A
2	0.31	6.22	0.44	A
3	0.29	4.35	0.41	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	445.00	440.62	184.10	0.00	842.81	0.528	1.10	8.858	A
2	255.00	253.26	396.09	0.00	835.87	0.305	0.43	6.160	A
3	340.00	338.37	39.71	0.00	1167.34	0.291	0.41	4.336	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	445.00	444.95	185.00	0.00	842.33	0.528	1.11	9.056	A
2	255.00	254.99	399.96	0.00	833.81	0.306	0.44	6.218	A
3	340.00	339.99	40.00	0.00	1167.17	0.291	0.41	4.351	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	445.00	444.98	185.00	0.00	842.33	0.528	1.11	9.058	A
2	255.00	255.00	399.99	0.00	833.80	0.306	0.44	6.219	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	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	445.00	444.99	185.00	0.00	842.33	0.528	1.11	9.060	A
2	255.00	255.00	399.99	0.00	833.79	0.306	0.44	6.219	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	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	445.00	445.00	185.00	0.00	842.33	0.528	1.12	9.060	A
2	255.00	255.00	400.00	0.00	833.79	0.306	0.44	6.219	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	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	445.00	445.00	185.00	0.00	842.33	0.528	1.12	9.060	A
2	255.00	255.00	400.00	0.00	833.79	0.306	0.44	6.219	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	A

(Default Analysis Set) - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), peak

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)	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
2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), peak	2032 Reference (Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	6.80	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	430.00	100.000
2	FLAT	✓	285.00	100.000
3	FLAT	✓	410.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	50.000	375.000
	2	30.000	5.000	250.000
	3	210.000	195.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.12	0.87
	2	0.11	0.02	0.88
	3	0.51	0.48	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.52	8.96	1.07	A
2	0.34	6.46	0.51	A
3	0.35	4.75	0.54	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	430.00	425.81	203.92	0.00	832.18	0.517	1.05	8.772	A
2	285.00	282.98	381.27	0.00	843.75	0.338	0.50	6.396	A
3	410.00	407.85	39.70	0.00	1167.35	0.351	0.54	4.727	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	430.00	429.95	205.00	0.00	831.60	0.517	1.06	8.960	A
2	285.00	284.98	384.96	0.00	841.79	0.339	0.51	6.464	A
3	410.00	409.99	40.00	0.00	1167.17	0.351	0.54	4.754	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	430.00	429.98	205.00	0.00	831.60	0.517	1.06	8.962	A
2	285.00	285.00	384.99	0.00	841.77	0.339	0.51	6.465	A
3	410.00	410.00	40.00	0.00	1167.17	0.351	0.54	4.754	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	430.00	429.99	205.00	0.00	831.60	0.517	1.07	8.963	A
2	285.00	285.00	384.99	0.00	841.77	0.339	0.51	6.465	A
3	410.00	410.00	40.00	0.00	1167.17	0.351	0.54	4.754	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	430.00	430.00	205.00	0.00	831.60	0.517	1.07	8.963	A
2	285.00	285.00	385.00	0.00	841.77	0.339	0.51	6.465	A
3	410.00	410.00	40.00	0.00	1167.17	0.351	0.54	4.754	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	430.00	430.00	205.00	0.00	831.60	0.517	1.07	8.963	A
2	285.00	285.00	385.00	0.00	841.77	0.339	0.51	6.465	A
3	410.00	410.00	40.00	0.00	1167.17	0.351	0.54	4.754	A

(Default Analysis Set) - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), peak

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)	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
2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), peak	2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	9.19	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	585.00	100.000
2	FLAT	✓	180.00	100.000
3	FLAT	✓	420.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	70.000	510.000
	2	30.000	5.000	145.000
	3	265.000	150.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.12	0.87
	2	0.17	0.03	0.81
	3	0.63	0.36	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.68	13.29	2.14	B
2	0.23	6.10	0.30	A
3	0.36	4.82	0.56	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	585.00	576.74	159.14	0.00	856.21	0.683	2.06	12.542	B
2	180.00	178.80	512.71	0.00	773.87	0.233	0.30	6.037	A
3	420.00	417.77	39.70	0.00	1167.35	0.360	0.56	4.788	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	585.00	584.81	160.00	0.00	855.75	0.684	2.11	13.261	B
2	180.00	179.99	519.83	0.00	770.08	0.234	0.30	6.100	A
3	420.00	419.99	40.00	0.00	1167.17	0.360	0.56	4.817	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	585.00	584.93	160.00	0.00	855.75	0.684	2.13	13.280	B
2	180.00	180.00	519.94	0.00	770.02	0.234	0.30	6.100	A
3	420.00	420.00	40.00	0.00	1167.17	0.360	0.56	4.817	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	585.00	584.97	160.00	0.00	855.75	0.684	2.14	13.285	B
2	180.00	180.00	519.97	0.00	770.01	0.234	0.30	6.100	A
3	420.00	420.00	40.00	0.00	1167.17	0.360	0.56	4.817	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	585.00	584.98	160.00	0.00	855.75	0.684	2.14	13.287	B
2	180.00	180.00	519.98	0.00	770.00	0.234	0.30	6.100	A
3	420.00	420.00	40.00	0.00	1167.17	0.360	0.56	4.817	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	585.00	584.99	160.00	0.00	855.75	0.684	2.14	13.290	B
2	180.00	180.00	519.99	0.00	770.00	0.234	0.30	6.101	A
3	420.00	420.00	40.00	0.00	1167.17	0.360	0.56	4.817	A

(Default Analysis Set) - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr, peak

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)	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
2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr, peak	2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	6.98	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	475.00	100.000
2	FLAT	✓	250.00	100.000
3	FLAT	✓	325.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	55.000	415.000
	2	50.000	5.000	195.000
	3	195.000	125.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.12	0.87
	2	0.20	0.02	0.78
	3	0.60	0.38	0.02

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.55	9.13	1.20	A
2	0.30	6.31	0.44	A
3	0.28	4.33	0.39	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	475.00	470.29	134.34	0.00	869.51	0.546	1.18	8.916	A
2	250.00	248.27	420.81	0.00	822.73	0.304	0.43	6.248	A
3	325.00	323.45	59.57	0.00	1155.62	0.281	0.39	4.318	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	475.00	474.95	135.00	0.00	869.16	0.547	1.19	9.129	A
2	250.00	249.99	424.95	0.00	820.52	0.305	0.44	6.309	A
3	325.00	324.99	60.00	0.00	1155.36	0.281	0.39	4.335	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	475.00	474.98	135.00	0.00	869.16	0.547	1.20	9.131	A
2	250.00	250.00	424.98	0.00	820.51	0.305	0.44	6.309	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	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	475.00	474.99	135.00	0.00	869.16	0.547	1.20	9.132	A
2	250.00	250.00	424.99	0.00	820.50	0.305	0.44	6.309	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	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	475.00	474.99	135.00	0.00	869.16	0.547	1.20	9.132	A
2	250.00	250.00	425.00	0.00	820.50	0.305	0.44	6.309	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	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	475.00	475.00	135.00	0.00	869.16	0.547	1.20	9.132	A
2	250.00	250.00	425.00	0.00	820.50	0.305	0.44	6.309	A
3	325.00	325.00	60.00	0.00	1155.36	0.281	0.39	4.335	A

(Default Analysis Set) - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr, peak

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)	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
2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr, peak	2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	7.66	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	525.00	100.000
2	FLAT	✓	220.00	100.000
3	FLAT	✓	340.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	60.000	460.000
	2	35.000	5.000	180.000
	3	215.000	120.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.11	0.88
	2	0.16	0.02	0.82
	3	0.63	0.35	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.60	10.38	1.51	B
2	0.28	6.24	0.38	A
3	0.29	4.37	0.41	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	525.00	519.12	129.36	0.00	872.19	0.602	1.47	10.038	B
2	220.00	218.50	464.77	0.00	799.36	0.275	0.38	6.181	A
3	340.00	338.36	44.67	0.00	1164.41	0.292	0.41	4.349	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	525.00	524.91	130.00	0.00	871.85	0.602	1.49	10.370	B
2	220.00	219.99	469.92	0.00	796.62	0.276	0.38	6.242	A
3	340.00	339.99	45.00	0.00	1164.22	0.292	0.41	4.367	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	525.00	524.97	130.00	0.00	871.85	0.602	1.50	10.374	B
2	220.00	220.00	469.97	0.00	796.59	0.276	0.38	6.242	A
3	340.00	340.00	45.00	0.00	1164.22	0.292	0.41	4.367	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	525.00	524.99	130.00	0.00	871.85	0.602	1.50	10.376	B
2	220.00	220.00	469.99	0.00	796.58	0.276	0.38	6.242	A
3	340.00	340.00	45.00	0.00	1164.22	0.292	0.41	4.367	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	525.00	524.99	130.00	0.00	871.85	0.602	1.50	10.376	B
2	220.00	220.00	469.99	0.00	796.58	0.276	0.38	6.243	A
3	340.00	340.00	45.00	0.00	1164.22	0.292	0.41	4.367	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	525.00	524.99	130.00	0.00	871.85	0.602	1.51	10.378	B
2	220.00	220.00	469.99	0.00	796.58	0.276	0.38	6.243	A
3	340.00	340.00	45.00	0.00	1164.22	0.292	0.41	4.367	A

(Default Analysis Set) - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct, peak

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)	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
2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct, peak	2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	8.11	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	465.00	100.000
2	FLAT	✓	425.00	100.000
3	FLAT	✓	460.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	40.000	420.000
	2	35.000	5.000	385.000
	3	240.000	215.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.09	0.90
	2	0.08	0.01	0.91
	3	0.52	0.47	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.57	10.12	1.30	B
2	0.52	9.16	1.08	A
3	0.40	5.11	0.65	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	465.00	459.91	223.71	0.00	821.56	0.566	1.27	9.823	A
2	425.00	420.79	425.32	0.00	820.33	0.518	1.05	8.921	A
3	460.00	457.41	44.55	0.00	1164.49	0.395	0.65	5.073	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	465.00	464.93	224.99	0.00	820.87	0.566	1.29	10.109	B
2	425.00	424.94	429.94	0.00	817.88	0.520	1.07	9.159	A
3	460.00	459.99	44.99	0.00	1164.22	0.395	0.65	5.111	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	465.00	464.98	225.00	0.00	820.87	0.566	1.30	10.113	B
2	425.00	424.98	429.98	0.00	817.85	0.520	1.07	9.161	A
3	460.00	460.00	45.00	0.00	1164.22	0.395	0.65	5.111	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	465.00	464.99	225.00	0.00	820.87	0.566	1.30	10.113	B
2	425.00	424.99	429.99	0.00	817.85	0.520	1.08	9.163	A
3	460.00	460.00	45.00	0.00	1164.22	0.395	0.65	5.111	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	465.00	464.99	225.00	0.00	820.87	0.566	1.30	10.115	B
2	425.00	424.99	429.99	0.00	817.84	0.520	1.08	9.163	A
3	460.00	460.00	45.00	0.00	1164.22	0.395	0.65	5.111	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	465.00	465.00	225.00	0.00	820.87	0.566	1.30	10.115	B
2	425.00	425.00	430.00	0.00	817.84	0.520	1.08	9.163	A
3	460.00	460.00	45.00	0.00	1164.22	0.395	0.65	5.111	A

(Default Analysis Set) - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct, peak

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)	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
2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct, peak	2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	7.96	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	515.00	100.000
2	FLAT	✓	255.00	100.000
3	FLAT	✓	340.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	50.000	460.000
	2	30.000	5.000	220.000
	3	160.000	175.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.10	0.89
	2	0.12	0.02	0.86
	3	0.47	0.51	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.61	10.99	1.57	B
2	0.32	6.65	0.47	A
3	0.29	4.35	0.41	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	515.00	508.90	184.10	0.00	842.81	0.611	1.52	10.599	B
2	255.00	253.15	464.47	0.00	799.51	0.319	0.46	6.566	A
3	340.00	338.37	39.69	0.00	1167.36	0.291	0.41	4.336	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	515.00	514.90	185.00	0.00	842.33	0.611	1.55	10.986	B
2	255.00	254.98	469.91	0.00	796.62	0.320	0.47	6.645	A
3	340.00	339.99	40.00	0.00	1167.17	0.291	0.41	4.351	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	515.00	514.97	185.00	0.00	842.33	0.611	1.56	10.993	B
2	255.00	255.00	469.97	0.00	796.59	0.320	0.47	6.646	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	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	515.00	514.98	185.00	0.00	842.33	0.611	1.56	10.995	B
2	255.00	255.00	469.99	0.00	796.58	0.320	0.47	6.646	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	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	515.00	514.99	185.00	0.00	842.33	0.611	1.56	10.995	B
2	255.00	255.00	469.99	0.00	796.58	0.320	0.47	6.646	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	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	515.00	514.99	185.00	0.00	842.33	0.611	1.57	10.995	B
2	255.00	255.00	469.99	0.00	796.58	0.320	0.47	6.646	A
3	340.00	340.00	40.00	0.00	1167.17	0.291	0.41	4.351	A

(Default Analysis Set) - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), peak

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)	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
2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), peak	2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)	peak		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	7.82	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.25	2.00	4.50	15.00	10.00	7.50	0.00	
2	2.00	2.00	5.00	10.00	10.00	7.50	0.00	
3	2.00	2.00	8.50	15.00	5.00	5.00	0.00	

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)	0.537	941.609
2		(calculated)	(calculated)	0.532	1046.446
3		(calculated)	(calculated)	0.590	1190.791

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	✓	500.00	100.000
2	FLAT	✓	285.00	100.000
3	FLAT	✓	410.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	5.000	50.000	445.000
	2	30.000	5.000	250.000
	3	210.000	195.000	5.000

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

		To		
		1	2	3
From	1	0.01	0.10	0.89
	2	0.11	0.02	0.88
	3	0.51	0.48	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (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 1 (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	0.60	10.85	1.50	B
2	0.35	6.93	0.55	A
3	0.35	4.75	0.54	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	500.00	494.15	203.91	0.00	832.18	0.601	1.46	10.479	B
2	285.00	282.84	449.71	0.00	807.36	0.353	0.54	6.837	A
3	410.00	407.85	39.68	0.00	1167.36	0.351	0.54	4.726	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	500.00	499.91	205.00	0.00	831.60	0.601	1.48	10.845	B
2	285.00	284.98	454.92	0.00	804.59	0.354	0.54	6.927	A
3	410.00	409.99	40.00	0.00	1167.17	0.351	0.54	4.754	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	500.00	499.97	205.00	0.00	831.60	0.601	1.49	10.851	B
2	285.00	284.99	454.97	0.00	804.56	0.354	0.55	6.928	A
3	410.00	410.00	40.00	0.00	1167.17	0.351	0.54	4.754	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	500.00	499.98	205.00	0.00	831.60	0.601	1.50	10.853	B
2	285.00	285.00	454.99	0.00	804.56	0.354	0.55	6.928	A
3	410.00	410.00	40.00	0.00	1167.17	0.351	0.54	4.754	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	500.00	499.99	205.00	0.00	831.60	0.601	1.50	10.853	B
2	285.00	285.00	454.99	0.00	804.55	0.354	0.55	6.928	A
3	410.00	410.00	40.00	0.00	1167.17	0.351	0.54	4.754	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	500.00	499.99	205.00	0.00	831.60	0.601	1.50	10.853	B
2	285.00	285.00	454.99	0.00	804.55	0.354	0.55	6.928	A
3	410.00	410.00	40.00	0.00	1167.17	0.351	0.54	4.754	A

Junctions 8

PICADY 8 - Priority Intersection Module

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

Filename: Junction C.arc8
Path: \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\23121HK (knc) - TIA for HKBA Prop Ext to IL 7755RP for Columb Use, Cape Collinson Rd, Chan Wan\Calculation\2023-11-30\Junction 8
Report generation date: 22/1/2024 12:29:27

Summary of junction performance

	Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Stream B-C	0.01	7.18	0.01	A
Stream B-A	0.56	14.97	0.36	B
Stream C-A	-	-	-	-
Stream C-B	0.01	7.10	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2023 Ching Ming Festival Period - 7 Apr			
Stream B-C	0.01	7.06	0.01	A
Stream B-A	0.64	14.53	0.39	B
Stream C-A	-	-	-	-
Stream C-B	0.01	6.92	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2023 Ching Ming Festival Period - 9 Apr			
Stream B-C	0.01	7.06	0.01	A
Stream B-A	0.98	16.85	0.50	C
Stream C-A	-	-	-	-
Stream C-B	0.01	6.71	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2023 Chung Yeung Festival Period - 21 Oct			
Stream B-C	0.01	7.06	0.01	A
Stream B-A	0.59	14.20	0.37	B
Stream C-A	-	-	-	-

Stream C-B	0.01	6.96	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2023 Chung Yeung Festival Period - 22 Oct			
Stream B-C	0.01	6.88	0.01	A
Stream B-A	0.68	14.48	0.41	B
Stream C-A	-	-	-	-
Stream C-B	0.01	6.71	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Stream B-C	0.01	6.71	0.01	A
Stream B-A	0.33	11.95	0.25	B
Stream C-A	-	-	-	-
Stream C-B	0.01	6.84	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct			
Stream B-C	0.01	7.64	0.01	A
Stream B-A	2.81	33.22	0.74	D
Stream C-A	-	-	-	-
Stream C-B	0.01	6.71	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr			
Stream B-C	0.01	7.88	0.01	A
Stream B-A	2.75	33.64	0.74	D
Stream C-A	-	-	-	-
Stream C-B	0.01	6.93	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr			
Stream B-C	0.01	7.89	0.01	A
Stream B-A	4.53	48.05	0.83	E
Stream C-A	-	-	-	-
Stream C-B	0.01	6.71	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct			
Stream B-C	0.01	7.89	0.01	A
Stream B-A	2.53	31.91	0.72	D
Stream C-A	-	-	-	-
Stream C-B	0.01	6.98	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Stream B-C	0.01	7.45	0.01	A
Stream B-A	1.49	22.57	0.60	C
Stream C-A	-	-	-	-
Stream C-B	0.01	6.86	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			

Stream B-C	0.01	8.10	0.01	A
Stream B-A	2.72	36.33	0.74	E
Stream C-A	-	-	-	-
Stream C-B	0.01	7.12	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr			
Stream B-C	0.01	7.45	0.01	A
Stream B-A	1.29	20.38	0.57	C
Stream C-A	-	-	-	-
Stream C-B	0.01	6.93	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr			
Stream B-C	0.01	7.43	0.01	A
Stream B-A	1.92	25.03	0.66	D
Stream C-A	-	-	-	-
Stream C-B	0.01	6.71	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct			
Stream B-C	0.01	7.45	0.01	A
Stream B-A	1.20	19.73	0.55	C
Stream C-A	-	-	-	-
Stream C-B	0.01	6.98	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct			
Stream B-C	0.01	7.23	0.01	A
Stream B-A	1.33	20.04	0.57	C
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Stream B-C	0.01	7.07	0.01	A
Stream B-A	0.74	15.69	0.43	C
Stream C-A	-	-	-	-
Stream C-B	0.01	6.86	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Stream B-C	0.01	7.61	0.01	A
Stream B-A	1.21	21.34	0.55	C
Stream C-A	-	-	-	-
Stream C-B	0.01	7.12	0.01	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival), Peak" model duration: 8:00 - 9:30

"D2 - 2023 Ching Ming Festival Period - 7 Apr, Peak" model duration: 8:00 - 9:30
"D3 - 2023 Ching Ming Festival Period - 9 Apr, Peak" model duration: 8:00 - 9:30
"D4 - 2023 Chung Yeung Festival Period - 21 Oct, Peak" model duration: 8:00 - 9:30
"D5 - 2023 Chung Yeung Festival Period - 22 Oct, Peak" model duration: 8:00 - 9:30
"D6 - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak" model duration: 8:00 - 9:30
"D7 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), Peak" model duration: 8:00 - 9:30
"D8 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr, Peak" model duration: 8:00 - 9:30
"D9 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr, Peak" model duration: 8:00 - 9:30
"D10 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct, Peak" model duration: 8:00 - 9:30
"D11 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct, Peak" model duration: 8:00 - 9:30
"D12 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak" model duration: 8:00 - 9:30
"D13 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), Peak" model duration: 8:00 - 9:30
"D14 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr, Peak" model duration: 8:00 - 9:30
"D15 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr, Peak" model duration: 8:00 - 9:30
"D16 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct, Peak" model duration: 8:00 - 9:30
"D17 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct, Peak" model duration: 8:00 - 9:30
"D18 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak " model duration: 8:00 - 9:30

Run using Junctions 8.0.5.523 at 22/1/2024 12:29:27

File summary

Title	(untitled)
Location	
Site Number	
Date	20/11/2018
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

(Default Analysis Set) - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak

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
2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak	2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)	Peak		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	21.96	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	6.00		0.00		2.20	20.00		

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		3.00	3.00								20	20

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	493.923	0.090	0.227	0.143	0.325
1	B-C	636.527	0.098	0.247	-	-
1	C-B	585.545	0.227	0.227	-	-

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	✓	245.00	100.000
B	FLAT	✓	245.00	100.000
C	FLAT	✓	270.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	5.000	240.000
	B	240.000	0.000	5.000
	C	265.000	5.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.98	0.00	0.02
	C	0.98	0.02	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-C	0.01	7.45	0.01	A
B-A	0.60	22.57	1.49	C
C-A	-	-	-	-
C-B	0.01	6.86	0.01	A
A-B	-	-	-	-
A-C	-	-	-	-

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-C	5.00	4.96	0.00	490.19	0.010	0.01	7.418	A
B-A	240.00	234.32	0.00	399.37	0.601	1.42	21.159	C
C-A	265.00	265.00	0.00	-	-	-	-	-
C-B	5.00	4.96	0.00	529.96	0.009	0.01	6.856	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	240.00	240.00	0.00	-	-	-	-	-

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-C	5.00	5.00	0.00	488.13	0.010	0.01	7.450	A
B-A	240.00	239.84	0.00	399.35	0.601	1.46	22.504	C
C-A	265.00	265.00	0.00	-	-	-	-	-
C-B	5.00	5.00	0.00	529.96	0.009	0.01	6.856	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	240.00	240.00	0.00	-	-	-	-	-

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-C	5.00	5.00	0.00	488.07	0.010	0.01	7.451	A
B-A	240.00	239.94	0.00	399.35	0.601	1.48	22.546	C
C-A	265.00	265.00	0.00	-	-	-	-	-
C-B	5.00	5.00	0.00	529.96	0.009	0.01	6.856	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	240.00	240.00	0.00	-	-	-	-	-

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-C	5.00	5.00	0.00	488.05	0.010	0.01	7.451	A
B-A	240.00	239.97	0.00	399.35	0.601	1.48	22.562	C
C-A	265.00	265.00	0.00	-	-	-	-	-
C-B	5.00	5.00	0.00	529.96	0.009	0.01	6.856	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	240.00	240.00	0.00	-	-	-	-	-

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-C	5.00	5.00	0.00	488.04	0.010	0.01	7.451	A
B-A	240.00	239.98	0.00	399.35	0.601	1.49	22.568	C
C-A	265.00	265.00	0.00	-	-	-	-	-
C-B	5.00	5.00	0.00	529.96	0.009	0.01	6.856	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	240.00	240.00	0.00	-	-	-	-	-

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-C	5.00	5.00	0.00	488.03	0.010	0.01	7.451	A
B-A	240.00	239.99	0.00	399.35	0.601	1.49	22.572	C
C-A	265.00	265.00	0.00	-	-	-	-	-
C-B	5.00	5.00	0.00	529.96	0.009	0.01	6.856	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	240.00	240.00	0.00	-	-	-	-	-

Junctions 8

ARCADY 8 - Roundabout Module

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

Filename: junction D.arc8
Path: \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\23121HK (knc) - TIA for HKBA Prop Ext to IL 7755RP for Columb Use, Cape Collinson Rd, Chan Wan\Calculation\2023-11-30\Junction 8
Report generation date: 22/1/2024 15:29:03

Summary of junction performance

	Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Arm 1	0.32	1.74	0.24	A
Arm 2	0.10	1.78	0.09	A
Arm 3	0.45	1.64	0.31	A
Arm 4	0.47	2.51	0.32	A
	A1 - 2023 Ching Ming Festival Period - 7 Apr			
Arm 1	0.32	1.76	0.24	A
Arm 2	0.09	1.77	0.09	A
Arm 3	0.52	1.71	0.34	A
Arm 4	0.52	2.62	0.34	A
	A1 - 2023 Ching Ming Festival Period - 9 Apr			
Arm 1	0.27	1.62	0.21	A
Arm 2	0.11	1.74	0.10	A
Arm 3	0.36	1.53	0.26	A
Arm 4	0.31	2.20	0.24	A
	A1 - 2023 Chung Yeung Festival Period - 21 Oct			
Arm 1	0.34	1.70	0.26	A
Arm 2	0.13	1.80	0.12	A
Arm 3	0.57	1.81	0.36	A
Arm 4	0.17	2.05	0.15	A
	A1 - 2023 Chung Yeung Festival Period - 22 Oct			
Arm 1	0.25	1.62	0.20	A
Arm 2	0.12	1.76	0.11	A
Arm 3	0.38	1.56	0.27	A
Arm 4	0.36	2.29	0.26	A

	A1 - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Arm 1	0.33	1.75	0.25	A
Arm 2	0.01	1.62	0.01	A
Arm 3	0.55	1.69	0.36	A
Arm 4	0.36	2.34	0.26	A
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct			
Arm 1	0.28	1.70	0.22	A
Arm 2	0.13	1.77	0.11	A
Arm 3	0.43	1.62	0.30	A
Arm 4	0.41	2.44	0.29	A
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr			
Arm 1	0.35	1.87	0.26	A
Arm 2	0.09	1.79	0.09	A
Arm 3	0.59	1.80	0.37	A
Arm 4	0.59	2.83	0.37	A
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr			
Arm 1	0.33	1.75	0.25	A
Arm 2	0.17	1.86	0.14	A
Arm 3	0.43	1.66	0.30	A
Arm 4	0.38	2.43	0.27	A
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct			
Arm 1	0.38	1.80	0.27	A
Arm 2	0.14	1.80	0.12	A
Arm 3	0.65	1.90	0.39	A
Arm 4	0.20	2.16	0.17	A
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Arm 1	0.36	1.85	0.27	A
Arm 2	0.01	1.63	0.01	A
Arm 3	0.63	1.78	0.39	A
Arm 4	0.41	2.50	0.29	A
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Arm 1	0.35	1.85	0.26	A
Arm 2	0.10	1.78	0.09	A
Arm 3	0.52	1.72	0.34	A
Arm 4	0.54	2.70	0.35	A
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr			
Arm 1	0.34	1.83	0.25	A
Arm 2	0.09	1.79	0.09	A
Arm 3	0.56	1.77	0.36	A
Arm 4	0.56	2.75	0.36	A
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr			
Arm 1	0.28	1.67	0.22	A
Arm 2	0.16	1.83	0.14	A
Arm 3	0.40	1.62	0.29	A
Arm 4	0.36	2.37	0.26	A
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct			
Arm 1	0.36	1.75	0.27	A
Arm 2	0.13	1.80	0.12	A
Arm 3	0.61	1.86	0.38	A
Arm 4	0.19	2.11	0.16	A
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct			
Arm 1	0.27	1.67	0.21	A

Arm 2	0.13	1.77	0.11	A
Arm 3	0.41	1.59	0.29	A
Arm 4	0.39	2.38	0.28	A
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Arm 1	0.35	1.81	0.26	A
Arm 2	0.01	1.63	0.01	A
Arm 3	0.60	1.75	0.37	A
Arm 4	0.39	2.44	0.28	A
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Arm 1	0.34	1.80	0.25	A
Arm 2	0.10	1.78	0.09	A
Arm 3	0.49	1.69	0.33	A
Arm 4	0.52	2.62	0.34	A

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

"D1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival), Peak" model duration: 8:00 - 9:30
"D2 - 2023 Ching Ming Festival Period - 7 Apr, Peak" model duration: 8:00 - 9:30
"D3 - 2023 Ching Ming Festival Period - 9 Apr, Peak" model duration: 8:00 - 9:30
"D4 - 2023 Chung Yeung Festival Period - 21 Oct, Peak" model duration: 8:00 - 9:30
"D5 - 2023 Chung Yeung Festival Period - 22 Oct, Peak" model duration: 8:00 - 9:30
"D6 - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak" model duration: 8:00 - 9:30
"D7 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), Peak" model duration: 8:00 - 9:30
"D8 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr, Peak" model duration: 8:00 - 9:30
"D9 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr, Peak" model duration: 8:00 - 9:30
"D10 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct, Peak" model duration: 8:00 - 9:30
"D11 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct, Peak" model duration: 8:00 - 9:30
"D12 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak " model duration: 8:00 - 9:30
"D13 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), Peak" model duration: 8:00 - 9:30
"D14 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr, Peak" model duration: 8:00 - 9:30
"D15 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr, Peak" model duration: 8:00 - 9:30
"D16 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct, Peak" model duration: 8:00 - 9:30
"D17 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct, Peak" model duration: 8:00 - 9:30
"D18 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak" model duration: 8:00 - 9:30

Run using Junctions 8.0.5.523 at 22/1/2024 15:29:02

File summary

Title	(untitled)
Location	
Site Number	
Date	20/11/2018
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

(Default Analysis Set) - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	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
2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak	2032 Reference (Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)	Peak		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
1	(untitled)	Roundabout	1,2,3,4			1.92	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

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
4	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	3.50	15.00	37.50	60.00	93.75	0.00	
2	3.50	11.25	37.50	25.00	93.75	0.00	
3	5.63	16.00	30.00	35.00	93.75	0.00	
4	3.75	15.00	15.00	100.00	93.75	0.00	

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)	0.694	3204.544
2		(calculated)	(calculated)	0.626	2755.709
3		(calculated)	(calculated)	0.747	3597.680
4		(calculated)	(calculated)	0.589	2445.146

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	✓	695.00	100.000
2	FLAT	✓	20.00	100.000
3	FLAT	✓	1235.00	100.000
4	FLAT	✓	580.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	5.000	90.000	220.000	380.000
	2	5.000	5.000	5.000	5.000
	3	245.000	390.000	10.000	590.000
	4	230.000	120.000	225.000	5.000

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

		To			
		1	2	3	4
From	1	0.01	0.13	0.32	0.55
	2	0.25	0.25	0.25	0.25
	3	0.20	0.32	0.01	0.48
	4	0.40	0.21	0.39	0.01

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	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	0.26	1.81	0.35	A
2	0.01	1.63	0.01	A
3	0.37	1.75	0.60	A
4	0.28	2.44	0.39	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	695.00	693.60	753.27	0.00	2681.62	0.259	0.35	1.811	A
2	20.00	19.96	843.15	0.00	2227.83	0.009	0.01	1.629	A
3	1235.00	1232.61	404.19	0.00	3295.71	0.375	0.60	1.743	A
4	580.00	578.44	658.72	0.00	2057.43	0.282	0.39	2.432	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	695.00	695.00	755.00	0.00	2680.43	0.259	0.35	1.812	A
2	20.00	20.00	845.00	0.00	2226.67	0.009	0.01	1.630	A
3	1235.00	1235.00	405.00	0.00	3295.10	0.375	0.60	1.746	A
4	580.00	580.00	660.00	0.00	2056.68	0.282	0.39	2.437	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	695.00	695.00	755.00	0.00	2680.42	0.259	0.35	1.812	A
2	20.00	20.00	845.00	0.00	2226.67	0.009	0.01	1.630	A
3	1235.00	1235.00	405.00	0.00	3295.10	0.375	0.60	1.746	A
4	580.00	580.00	660.00	0.00	2056.68	0.282	0.39	2.437	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	695.00	695.00	755.00	0.00	2680.42	0.259	0.35	1.812	A
2	20.00	20.00	845.00	0.00	2226.67	0.009	0.01	1.630	A
3	1235.00	1235.00	405.00	0.00	3295.10	0.375	0.60	1.746	A
4	580.00	580.00	660.00	0.00	2056.68	0.282	0.39	2.437	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	695.00	695.00	755.00	0.00	2680.42	0.259	0.35	1.812	A
2	20.00	20.00	845.00	0.00	2226.67	0.009	0.01	1.630	A
3	1235.00	1235.00	405.00	0.00	3295.10	0.375	0.60	1.746	A
4	580.00	580.00	660.00	0.00	2056.68	0.282	0.39	2.437	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	695.00	695.00	755.00	0.00	2680.42	0.259	0.35	1.812	A
2	20.00	20.00	845.00	0.00	2226.67	0.009	0.01	1.630	A
3	1235.00	1235.00	405.00	0.00	3295.10	0.375	0.60	1.746	A
4	580.00	580.00	660.00	0.00	2056.68	0.282	0.39	2.437	A

Junctions 8

PICADY 8 - Priority Intersection 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: Junction E.arc8
Path: \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\23121HK (knc) - TIA for HKBA Prop Ext to IL 7755RP for Columb Use, Cape Collinson Rd, Chan Wan\Calculation\2023-11-30\Junction 8
Report generation date: 22/1/2024 15:49:52

Summary of junction performance

	Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Stream B-AC	0.32	7.28	0.24	A
Stream C-A	-	-	-	-
Stream C-B	0.20	7.38	0.17	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2023 Ching Ming Festival Period - 7 Apr			
Stream B-AC	0.24	7.08	0.19	A
Stream C-A	-	-	-	-
Stream C-B	0.21	7.40	0.17	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2023 Ching Ming Festival Period - 9 Apr			
Stream B-AC	0.23	6.92	0.19	A
Stream C-A	-	-	-	-
Stream C-B	0.14	6.94	0.13	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2023 Chung Yeung Festival Period - 21 Oct			
Stream B-AC	0.24	7.01	0.20	A
Stream C-A	-	-	-	-
Stream C-B	0.20	7.25	0.17	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2023 Chung Yeung Festival Period - 22 Oct			

Stream B-AC	0.22	6.63	0.18	A
Stream C-A	-	-	-	-
Stream C-B	0.18	7.06	0.15	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Stream B-AC	0.98	10.40	0.50	B
Stream C-A	-	-	-	-
Stream C-B	0.16	6.96	0.14	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct			
Stream B-AC	0.25	6.89	0.20	A
Stream C-A	-	-	-	-
Stream C-B	0.18	7.06	0.15	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr			
Stream B-AC	0.27	7.38	0.21	A
Stream C-A	-	-	-	-
Stream C-B	0.21	7.41	0.17	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr			
Stream B-AC	0.26	7.19	0.21	A
Stream C-A	-	-	-	-
Stream C-B	0.14	6.95	0.13	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct			
Stream B-AC	0.27	7.29	0.21	A
Stream C-A	-	-	-	-
Stream C-B	0.20	7.26	0.17	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Stream B-AC	1.09	11.07	0.52	B
Stream C-A	-	-	-	-
Stream C-B	0.16	6.97	0.14	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Stream B-AC	0.36	7.58	0.26	A
Stream C-A	-	-	-	-
Stream C-B	0.20	7.39	0.17	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr			
Stream B-AC	0.25	7.24	0.20	A
Stream C-A	-	-	-	-
Stream C-B	0.21	7.41	0.17	A
Stream A-B	-	-	-	-

Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr			
Stream B-AC	0.24	7.06	0.20	A
Stream C-A	-	-	-	-
Stream C-B	0.14	6.95	0.13	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct			
Stream B-AC	0.26	7.15	0.21	A
Stream C-A	-	-	-	-
Stream C-B	0.20	7.26	0.17	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct			
Stream B-AC	0.23	6.76	0.19	A
Stream C-A	-	-	-	-
Stream C-B	0.18	7.06	0.15	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Stream B-AC	1.05	10.81	0.51	B
Stream C-A	-	-	-	-
Stream C-B	0.16	6.97	0.14	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Stream B-AC	0.34	7.43	0.25	A
Stream C-A	-	-	-	-
Stream C-B	0.20	7.39	0.17	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival), Peak" model duration: 8:00 - 9:30
"D2 - 2023 Ching Ming Festival Period - 7 Apr, Peak" model duration: 8:00 - 9:30
"D3 - 2023 Ching Ming Festival Period - 9 Apr, Peak" model duration: 8:00 - 9:30
"D4 - 2023 Chung Yeung Festival Period - 21 Oct, Peak" model duration: 8:00 - 9:30
"D5 - 2023 Chung Yeung Festival Period - 22 Oct, Peak" model duration: 8:00 - 9:30
"D6 - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak" model duration: 8:00 - 9:30
"D7 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), Peak" model duration: 8:00 - 9:30
"D8 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr, Peak" model duration: 8:00 - 9:30
"D9 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr, Peak" model duration: 8:00 - 9:30
"D10 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct, Peak" model duration: 8:00 - 9:30
"D11 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct, Peak" model duration: 8:00 - 9:30
"D12 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak" model duration: 8:00 - 9:30
"D13 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), Peak" model duration: 8:00 - 9:30
"D14 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr, Peak" model duration: 8:00 - 9:30
"D15 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr, Peak" model duration: 8:00 - 9:30
"D16 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct, Peak" model duration: 8:00 - 9:30
"D17 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct, Peak" model duration: 8:00 - 9:30
"D18 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak " model duration: 8:00 - 9:30

Run using Junctions 8.0.5.523 at 22/1/2024 15:49:51

File summary

Title	(untitled)
Location	
Site Number	
Date	20/11/2018
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

(Default Analysis Set) - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak

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
2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), Peak	2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)	Peak		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	10.28	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	20.00	✓	2.50	✓	2.70	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	657.069	0.044	0.112	0.070	0.160
1	B-C	786.649	0.047	0.119	-	-
1	C-B	635.728	0.096	0.096	-	-

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	✓	355.00	100.000
C	FLAT	✓	605.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	60.000	295.000
	B	115.000	0.000	240.000
	C	520.000	85.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.17	0.83
	B	0.32	0.00	0.68
	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
B-AC	0.52	11.07	1.09	B
C-A	-	-	-	-
C-B	0.14	6.97	0.16	A
A-B	-	-	-	-
A-C	-	-	-	-

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-AC	355.00	350.74	0.00	680.18	0.522	1.06	10.795	B
C-A	520.00	520.00	0.00	-	-	-	-	-
C-B	85.00	84.35	0.00	601.55	0.141	0.16	6.952	A
A-B	60.00	60.00	0.00	-	-	-	-	-
A-C	295.00	295.00	0.00	-	-	-	-	-

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-AC	355.00	354.95	0.00	680.13	0.522	1.08	11.065	B
C-A	520.00	520.00	0.00	-	-	-	-	-
C-B	85.00	85.00	0.00	601.55	0.141	0.16	6.968	A
A-B	60.00	60.00	0.00	-	-	-	-	-
A-C	295.00	295.00	0.00	-	-	-	-	-

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-AC	355.00	354.98	0.00	680.13	0.522	1.08	11.069	B
C-A	520.00	520.00	0.00	-	-	-	-	-
C-B	85.00	85.00	0.00	601.55	0.141	0.16	6.968	A
A-B	60.00	60.00	0.00	-	-	-	-	-
A-C	295.00	295.00	0.00	-	-	-	-	-

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-AC	355.00	354.99	0.00	680.13	0.522	1.08	11.069	B
C-A	520.00	520.00	0.00	-	-	-	-	-
C-B	85.00	85.00	0.00	601.55	0.141	0.16	6.968	A
A-B	60.00	60.00	0.00	-	-	-	-	-
A-C	295.00	295.00	0.00	-	-	-	-	-

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-AC	355.00	354.99	0.00	680.13	0.522	1.09	11.071	B
C-A	520.00	520.00	0.00	-	-	-	-	-
C-B	85.00	85.00	0.00	601.55	0.141	0.16	6.968	A
A-B	60.00	60.00	0.00	-	-	-	-	-
A-C	295.00	295.00	0.00	-	-	-	-	-

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-AC	355.00	355.00	0.00	680.13	0.522	1.09	11.071	B
C-A	520.00	520.00	0.00	-	-	-	-	-
C-B	85.00	85.00	0.00	601.55	0.141	0.16	6.968	A
A-B	60.00	60.00	0.00	-	-	-	-	-
A-C	295.00	295.00	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection 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: junction H.arc8
Path: \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\23121HK (knc) - TIA for HKBA Prop Ext to IL 7755RP for Columb Use, Cape Collinson Rd, Chan Wan\Calculation\2023-11-30\Junction 8
Report generation date: 22/1/2024 16:59:25

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Stream B-ACD	0.03	6.51	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.01	6.02	0.01	A
Stream D-ABC	0.36	9.00	0.27	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2023 Ching Ming Festival Period - 7 Apr			
Stream B-ACD	0.03	6.81	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.07	6.39	0.07	A
Stream D-ABC	0.49	9.23	0.33	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2023 Ching Ming Festival Period - 9 Apr			
Stream B-ACD	0.03	6.95	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.18	7.02	0.15	A
Stream D-ABC	0.72	10.66	0.42	B
Stream C-D	-	-	-	-

Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2023 Chung Yeung Festival Period - 21 Oct			
Stream B-ACD	0.03	6.69	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.03	6.17	0.03	A
Stream D-ABC	0.33	8.10	0.25	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2023 Chung Yeung Festival Period - 22 Oct			
Stream B-ACD	0.03	6.81	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.09	6.51	0.08	A
Stream D-ABC	0.53	9.59	0.35	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Stream B-ACD	0.03	6.49	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.01	6.02	0.01	A
Stream D-ABC	0.25	8.14	0.20	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct			
Stream B-ACD	0.03	6.90	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.09	6.51	0.08	A
Stream D-ABC	1.60	17.07	0.62	C
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr			
Stream B-ACD	0.03	6.90	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.07	6.39	0.07	A
Stream D-ABC	1.47	16.10	0.60	C
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr			
Stream B-ACD	0.03	7.09	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.07	6.39	0.07	A
Stream D-ABC	2.17	20.51	0.69	C
Stream C-D	-	-	-	-

Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct			
Stream B-ACD	0.03	6.78	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.03	6.17	0.03	A
Stream D-ABC	1.04	13.17	0.51	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Stream B-ACD	0.03	6.57	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.01	6.02	0.01	A
Stream D-ABC	0.84	12.18	0.46	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Stream B-ACD	0.03	6.59	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.01	6.02	0.01	A
Stream D-ABC	1.10	13.97	0.53	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr			
Stream B-ACD	0.03	6.85	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.07	6.39	0.07	A
Stream D-ABC	0.85	11.88	0.46	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr			
Stream B-ACD	0.03	7.03	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.07	6.39	0.07	A
Stream D-ABC	1.22	14.05	0.55	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct			
Stream B-ACD	0.03	6.74	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.03	6.17	0.03	A
Stream D-ABC	0.61	10.19	0.38	B

Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct			
Stream B-ACD	0.03	6.85	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.09	6.51	0.08	A
Stream D-ABC	0.93	12.43	0.48	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival)			
Stream B-ACD	0.03	6.53	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.01	6.02	0.01	A
Stream D-ABC	0.49	9.80	0.33	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
	A1 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival)			
Stream B-ACD	0.03	6.55	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.01	6.02	0.01	A
Stream D-ABC	0.65	10.96	0.40	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A

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

"D1 - 2023 Ching Ming Festival Period - 5 Apr (Ching Ming Festival), AM" model duration: 8:00 - 9:30
"D3 - 2023 Ching Ming Festival Period - 7 Apr, AM" model duration: 8:00 - 9:30
"D5 - 2023 Ching Ming Festival Period - 9 Apr, AM" model duration: 8:00 - 9:30
"D6 - 2023 Chung Yeung Festival Period - 21 Oct, AM" model duration: 8:00 - 9:30
"D7 - 2023 Chung Yeung Festival Period - 22 Oct, AM" model duration: 8:00 - 9:30
"D8 - 2023 Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), AM" model duration: 8:00 - 9:30
"D9 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), AM" model duration: 8:00 - 9:30
"D10 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 7 Apr, AM" model duration: 8:00 - 9:30
"D11 - 2032 Reference(Without Proposed Extension) - Ching Ming Festival Period - 9 Apr, AM" model duration: 8:00 - 9:30
"D12 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 21 Oct, AM" model duration: 8:00 - 9:30
"D13 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 22 Oct, AM" model duration: 8:00 - 9:30
"D14 - 2032 Reference(Without Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), AM" model duration: 8:00 - 9:30
"D15 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 5 Apr (Ching Ming Festival), AM" model duration: 8:00 - 9:30
"D16 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 7 Apr, AM" model duration: 8:00 - 9:30
"D17 - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr, AM " model duration: 8:00 - 9:30
"D18 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 21 Oct, AM" model duration: 8:00 - 9:30
"D19 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 22 Oct, AM" model duration: 8:00 - 9:30
"D20 - 2032 Design(With Proposed Extension) - Chung Yeung Festival Period - 23 Oct (Chung Yeung Festival), AM" model duration: 8:00 - 9:30

Run using Junctions 8.0.5.523 at 22/1/2024 16:59:24

File summary

Title	(untitled)
Location	
Site Number	
Date	21/4/2020
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

(Default Analysis Set) - 2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr, 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
2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr, AM	2032 Design(With Proposed Extension) - Ching Ming Festival Period - 9 Apr	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
H	H	Crossroads	Two-way	A,B,C,D	18.77	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Cape Collinson Road (WB)		Major
B	B	Access Road (NB)		Minor
C	C	Cape Collinson Road (EB)		Major
D	D	Lin Shing Road (SB)		Minor

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)
A	7.40		0.00		2.20	50.00		
C	7.40		0.00		2.20	20.00		

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	3.90										15	15
D	One lane	4.00										23	23

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
H	A-D	602.919	-	-	-	-	-	-	0.219	0.313	0.219	-	-	-
H	B-A	534.022	0.091	0.231	0.231	-	-	-	0.145	0.330	-	0.231	0.231	0.115
H	B-C	690.451	0.099	0.251	-	-	-	-	-	-	-	-	-	-
H	B-D, nearside lane	534.022	0.091	0.231	0.231	-	-	-	0.145	0.330	0.145	-	-	-
H	B-D, offside lane	534.022	0.091	0.231	0.231	-	-	-	0.145	0.330	0.145	-	-	-
H	C-B	585.545	0.213	0.213	0.304	-	-	-	-	-	-	-	-	-
H	D-A	701.986	-	-	-	-	-	-	0.255	-	0.101	-	-	-
H	D-B, nearside lane	545.780	0.148	0.148	0.337	-	-	-	0.236	0.236	0.093	-	-	-
H	D-B, offside lane	545.780	0.148	0.148	0.337	-	-	-	0.236	0.236	0.093	-	-	-
H	D-C	545.780	-	0.148	0.337	0.118	0.236	0.236	0.236	0.236	0.093	-	-	-

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	✓	135.00	100.000
B	FLAT	✓	15.00	100.000
C	FLAT	✓	0.00	100.000
D	FLAT	✓	385.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	5.000	90.000	40.000
	B	5.000	0.000	5.000	5.000
	C	0.000	0.000	0.000	0.000
	D	115.000	5.000	265.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.04	0.67	0.30
	B	0.33	0.00	0.33	0.33
	C	0.25	0.25	0.25	0.25
	D	0.30	0.01	0.69	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction H (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	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-ACD	0.03	7.09	0.03	A
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.07	6.39	0.07	A
D-ABC	0.69	20.51	2.17	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.00	0.00	0.00	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-ACD	15.00	14.88	0.00	523.54	0.029	0.03	7.075	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	90.00	90.00	0.00	-	-	-	-	-
A-D	40.00	39.72	0.00	602.92	0.066	0.07	6.389	A
D-ABC	385.00	376.79	0.00	560.37	0.687	2.05	18.861	C
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	553.13	0.000	0.00	0.000	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-ACD	15.00	15.00	0.00	522.91	0.029	0.03	7.087	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	90.00	90.00	0.00	-	-	-	-	-
A-D	40.00	40.00	0.00	602.92	0.066	0.07	6.394	A
D-ABC	385.00	384.73	0.00	560.27	0.687	2.12	20.422	C
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	553.05	0.000	0.00	0.000	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-ACD	15.00	15.00	0.00	522.89	0.029	0.03	7.087	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	90.00	90.00	0.00	-	-	-	-	-
A-D	40.00	40.00	0.00	602.92	0.066	0.07	6.394	A
D-ABC	385.00	384.90	0.00	560.27	0.687	2.15	20.479	C
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	553.04	0.000	0.00	0.000	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-ACD	15.00	15.00	0.00	522.88	0.029	0.03	7.087	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	90.00	90.00	0.00	-	-	-	-	-
A-D	40.00	40.00	0.00	602.92	0.066	0.07	6.394	A
D-ABC	385.00	384.95	0.00	560.27	0.687	2.16	20.499	C
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	553.04	0.000	0.00	0.000	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-ACD	15.00	15.00	0.00	522.88	0.029	0.03	7.087	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	90.00	90.00	0.00	-	-	-	-	-
A-D	40.00	40.00	0.00	602.92	0.066	0.07	6.394	A
D-ABC	385.00	384.97	0.00	560.27	0.687	2.17	20.509	C
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	553.04	0.000	0.00	0.000	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-ACD	15.00	15.00	0.00	522.88	0.029	0.03	7.087	A
A-B	5.00	5.00	0.00	-	-	-	-	-
A-C	90.00	90.00	0.00	-	-	-	-	-
A-D	40.00	40.00	0.00	602.92	0.066	0.07	6.394	A
D-ABC	385.00	384.98	0.00	560.27	0.687	2.17	20.515	C
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	553.04	0.000	0.00	0.000	A