

APPENDIX 2

Traffic Impact Assessment

*PROPOSED REZONING FROM "AGR" & "GB" TO "G/IC"
FOR A PROPOSED "SOCIAL WELFARE FACILITES"
(RESIDENTIAL CARE HOMES FOR THE ELDERLY) (RCHE)
Tung Tsz, Tai Po, N.T.*

R LEE ARCHITECTS LTD



**S12A Amendment of Plan Application
Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19
Proposed Re-zoning from “AGR” to “G/IC” for a
Proposed “Social Welfare Facilities”
Residential Care Home for the Elderly (RCHE)
At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T**

TIA Report

December 2024



CTA Consultants Limited
志達顧問有限公司

LIST OF CONTENTS

1.	INTRODUCTION.....	1
1.1	Background	1
1.2	Study Objectives	1
2.	THE DEVELOPMENT.....	2
2.1	Site Location	2
2.2	Proposed Development	2
2.3	Proposed Vehicular Access.....	2
2.4	Internal Transport Facilities Provision.....	2
2.5	Public Transport Services in the Vicinity	3
3.	THE EXISTING TRAFFIC CONDITIONS.....	5
3.1	Critical Junctions	5
4.	THE FUTURE TRAFFIC CONDITIONS	7
4.1	Design Year	7
4.2	Traffic Forecasts	7
4.3	Traffic Generations of Adjacent New Developments.....	8
4.4	Planned Junction Layout under Planned Project	11
4.5	Reference Traffic Flows	12
4.6	Traffic Generations and Attractions of Proposed Development.....	12
4.7	Design Traffic Flows	13
5.	TRAFFIC IMPACT ASSESSMENT	14
5.1	Operational Assessment.....	14
6.	SUMMARY AND CONCLUSION	17
6.1	Summary	17
6.2	Conclusion	18

LIST OF TABLES

Table 2.1	Development Parameters of the Proposed Development.....	2
Table 2.2	Proposed Parking Provision.....	3
Table 2.4	Road-Based Public Transport Services in the Vicinity.....	4
Table 3.1	Identified Critical Junctions	5
Table 3.2	Junction Performance of Identified Critical Junctions in Year 2024.....	6
Table 4.1	TPEDM Planning Data from 2019 to 2031	7
Table 4.2	Estimated Trip Rates of Planned Adjacent Developments	8
Table 4.3	Estimated Trip Generations and Attractions of Planned Adjacent Developments	10
Table 4.4	Adopted Generation and Attraction Trip Rates of Proposed Development	13
Table 4.5	Estimated Traffic Generation and Attraction of Proposed Development	13
Table 5.1	Junction Performance of Identified Critical Junctions in Year 2033 (With and Without Proposed Development).....	14

APPENDIX

Appendix A Junction Calculation Sheets

LIST OF FIGURES

Figure 1.1	Site Location
Figure 2.1	Layout Plan of Proposed Development
Figure 2.2	Existing Public Transport Facilities
Figure 3.1	Identified Key Junctions
Figure 3.2	Existing Junction Layout of Tung Tsz Road/ Universal Gate Road (A)
Figure 3.3	Existing Junction Layout of Ting Kok Road/ Tung Tsz Road (B)
Figure 3.4	Existing Junction Layout of Ting Kok Road/ Sam Mun Tsai Road (C)
Figure 3.5	Existing Junction Layout of Ting Kok Road/ Lo Fai Road (D)
Figure 3.6	Existing Junction Layout of Ting Kok Road/ Dai Kwai Street (E)
Figure 3.7	Existing Junction Layout of Ting Kok Road/ Dai Fat Street (F)
Figure 3.8	Existing Junction Layout of Ting Kok Road/ Fung Yuen Road (G)
Figure 3.9	Existing Junction Layout of Ting Kok Road/ Yuen Shin Road/ Dai Fuk Street (H)
Figure 3.10	Existing Junction Layout of Yuen Shin Road/ Dai Fat Street (I)
Figure 3.11	Existing Junction Layout of Yuen Shin Road/ Tai Po Tai Wo Road (J)
Figure 3.12	2024 Existing Traffic Flows
Figure 4.1	Planned Major Developments in the Vicinity
Figure 4.2	Planned Junction Layout of Fung Yuen Road / Ting Kok Road (G) under Planning Application No.: A/NE-TK/702
Figure 4.3	2033 Reference Traffic Flows (Without Proposed Development)
Figure 4.4	2033 Design Traffic Flows (With Proposed Development)
Figure SP-01	Swept Path Analysis of Private Vehicle
Figure SP-02	Swept Path Analysis of Mini-Bus
Figure SP-03	Swept Path Analysis of 7m Vehicle



1. INTRODUCTION

1.1 Background

1.1.1 CTA Consultants Limited was commissioned as the traffic consultant to prepare a Traffic Impact Assessment Report for proposed re-zoning from “AGR” to “G/IC” for a Proposed “Social Welfare Facilities” Residential Care Home for the Elderly (RCHE) at various lots in D.D. 23, Tung Tsz, Tai Po, New Territories (hereafter called “proposed development”).

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

1.2 Study Objectives

1.2.1 The main objectives of this study are as follows:

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



2. THE DEVELOPMENT

2.1 Site Location

2.1.1 The proposed development is located at various lots in D.D. 23, Tung Tsz, Tai Po which is bounded by Treasure Spot Garden II to the west 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 Development Parameters of the Proposed Development

Site Location	At various lots in D.D. 23, Tung Tsz, Tai Po, New Territories
Site Area	1,494.67 m ²
No. of Blocks	1
No. of Storeys	10
No. of Suites and Beds	~28 nos. of suites and ~225 nos. of beds

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

2.3 Proposed Vehicular Access

2.3.1 The proposed vehicular access is located at the southwest of the proposed development. Location of the proposed vehicular access is shown diagrammatically in **Figure 2.1**.

2.4 Internal Transport Facilities Provision

2.4.1 It is noted that the requirement of provision of internal transport facilities for welfare uses are not specified in the latest Hong Kong Planning Standards and Guidelines



(HKPSG). The proposed provision is based on the operator’s past experience and future operation need, and summarized in **Table 2.2**.

- 2.4.2 The ground floor layout plan of the proposed development showing the internal transport provision is shown in **Figure 2.1** and **Figure SP-01** to **Figure SP-03** demonstrating vehicles can be manoeuvred within the site.

Table 2.2 Proposed Parking Provision

Parking Spaces	Dimensions	Proposed
Motorcycle	2.4m(L) x 1m(W)	1 no.
Private Car	5m(L) x 2.5m(W)	1 no.
Private Car for Accessible	5m(L) x 3.5m(W)	1 no.
Loading/Unloading	Dimensions	Proposed
LGV	7m(L) x 3.5m(W)	1 no.
Minibus	8m(L) x 3m(W)	1 no.

2.5 Public Transport Services in the Vicinity

- 2.5.1 Numerous road-based public transport services are provided in vicinity of the proposed development. Details of the current services of franchised buses and GMB routes are listed in **Table 2.3** and the service points are demonstrated in **Figure 2.2**. It is revealed that the site is well-served by public transport services in the vicinity.



Table 2.3 Road-Based Public Transport Services in the Vicinity

Service	Route	Origin – Destination	Frequency (Mins)
Ting Kok Road near Ting Kok Village Road			
Franchised Bus	73P ⁽¹⁾	Nina Tower Bus Terminus – Tai Mei Tuk Bus Terminus	2 Departures
		Tai Mei Tuk Bus Terminus - Nina Tower Bus Terminus – Tai Mei Tuk Bus Terminus	2 Departures
	74E ⁽¹⁾	Kwun Tong Ferry – Tai Mei Tuk Bus Terminus	3 Departures
		Tai Mei Tuk Bus Terminus - Kwun Tong Ferry	3 Departures
	75K	Tai Po Market Station Bus Terminus – Tai Mei Tuk Bus Terminus	10-20
		Tai Mei Tuk Bus Terminus - Tai Po Market Station Bus Terminus	8-30
	275R	Tai Po Market Station Bus Terminus – Wu Kau Tang Bus Terminus	10-20
		Wu Kau Tang Bus Terminus - Tai Po Market Station Bus Terminus	10-20
GMB	72C ⁽¹⁾	Tai Mei Tuk Bus Terminus – Tai Po Market Station Bus Terminus	1 Departure
		Tai Mei Tuk Bus Terminus – Tai Po Market Station Bus Terminus	1 Departure
	20C	Tai Mei Tuk Public Transport Interchange – Tai Po Market Station Minibus Terminus	4-10
		Tai Po Market Station Minibus Terminus - Tai Mei Tuk Public Transport Interchange	4-10
		Tai Mei Tuk Public Transport Interchange – Tai Po Market Station Minibus Terminus (via Tai Po Tai Wo Road)	12-15
		Tai Po Market Station Minibus Terminus - Tai Mei Tuk Public Transport Interchange (via Tai Po Tai Wo Road)	12-15
	20C ⁽²⁾	Tai Po Market Station Minibus Terminus - Tai Mei Tuk Public Transport Interchange (via Shan Liu Road)	4-10
	20E ⁽³⁾	Tai Po Market Station Minibus Terminus – Shan Liu Road, Elle Villas	30
		Shan Liu Road, Elle Villas – Tai Po Market Station Minibus Terminus	
	20R	Wu Kau Tang – Tai Po Market Station Minibus Terminus	60
		Tai Po Market Station Minibus Terminus - Wu Kau Tang	60

Notes:

- (1) Peak Hour Service Only.
- (2) Special Route during special traffic and transport arrangements (STTA) days.
- (3) Circular Route.



3. THE EXISTING TRAFFIC CONDITIONS

3.1 Critical Junctions

- 3.1.1 As shown in **Figure 3.1**, 11 junctions were identified to be critical for assessment of traffic impact due to the proposed development. They are listed in **Table 3.1** and their existing junction layout arrangements are shown in **Figures 3.2** to **3.11** respectively.

Table 3.1 Identified Critical Junctions

Ref.	Junction	Method of Control	Figure No.
A	Tung Tsz Road/ Universal Gate Road	Priority	3.2
B	Ting Kok Road/ Tung Tsz Road	Priority	3.3
C	Ting Kok Road/ Sam Mun Tsai Road	Signal	3.4
D	Ting Kok Road/ Lo Fai Road	Signal	3.5
E	Ting Kok Road/ Dai Kwai Street	Signal	3.6
F	Ting Kok Road/ Dai Fat Street	Signal	3.7
G	Ting Kok Road/ Fung Yuen Road	Signal	3.8
H	Ting Kok Road/ Yuen Shin Road/ Dai Fuk Street	Signal	3.9
I	Yuen Shin Road/ Dai Fat Street	Signal	3.10
J	Yuen Shin Road/ Tai Po Tai Wo Road	Signal	3.11

- 3.1.2 In order to establish the existing traffic condition in the above-mentioned critical junctions, traffic survey in form of manual classified count was conducted during the AM and PM peak periods (7:15am to 9:15am and 5:00pm to 7:00pm) on a typical weekday, 6 December 2024. Analysis of the existing traffic data indicates that the AM and PM peak hour flows occurred from 7:45am to 8:45am and 5:15pm to 6:15pm respectively. The existing traffic flows is presented in **Figure 3.12**.
- 3.1.3 Existing operational performance of the identified critical junctions were assessed. The results are summarized in **Table 3.2** and the junction calculation sheets are attached in **Appendix A**.



Table 3.2 Junction Performance of Identified Critical Junctions in Year 2024

Junction	Junction Location	Method of Control	Year 2024 RC ⁽¹⁾ /RFC ⁽²⁾	
			AM Peak	PM Peak
A	Tung Tsz Road/ Universal Gate Road	Priority	0.03	0.03
B	Ting Kok Road/ Tung Tsz Road	Priority	0.49	0.24
C	Ting Kok Road/ Sam Mun Tsai Road	Signal	>100%	>100%
D	Ting Kok Road/ Lo Fai Road	Signal	56%	84%
E	Ting Kok Road/ Dai Kwai Street	Signal	19%	22%
F	Ting Kok Road/ Dai Fat Street	Signal	20%	47%
G	Ting Kok Road/ Fung Yuen Road	Signal	21%	23%
H	Ting Kok Road/ Yuen Shin Road/ Dai Fuk Street	Signal	31%	33%
I	Yuen Shin Road/ Dai Fat Street	Signal	25%	48%
J	Yuen Shin Road/ Tai Po Tai Wo Road	Signal	27%	44%

Note:

(1) RC = Reserve Capacity for Signalized Junction

RFC = Ratio of Flow to Capacity for Priority Junction

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



4. THE FUTURE TRAFFIC CONDITIONS

4.1 Design Year

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

4.2 Traffic Forecasts

- 4.2.1 The traffic growth can be estimated by applying growth factor, based on the following information source:
- I. 2019-Based Territory Population and Employment Data Matrices (TPEDM) published by the Planning Department

Territory Population and Employment Data Matrices

- 4.2.2 Reference has been made to the latest 2019-Based Territorial Population Employment Data Matrices (TPEDM) planning data published by the Planning Department for years 2019 and 2031 in the study district. The average annual growth rates in terms of population and employment from 2019 to 2031 are tabulated in **Table 4.1**.

Table 4.1 TPEDM Planning Data from 2019 to 2031

Zone	Population					Employment						
	2019	2026	2031	Avg. Annual Growth Rate			2019	2026	2031	Avg. Annual Growth Rate		
				From 2019 to 2026	From 2026 to 2031	From 2019 to 2031				From 2019 to 2026	From 2026 to 2031	From 2019 to 2031
Tai Po	250,050	285,850	263,800	+1.93%	-1.59%	0.45%	86,750	83,700	78,550	-0.51%	-1.26%	-0.82%

- 4.2.3 As shown in the above table, the average annual growth rates of population for the area from year 2019 to 2026 and 2026 to 2031 are +1.93% and -1.59% per annum respectively. The average annual growth rates of employment for the area from year 2019 to 2026 and 2026 to 2031 are -0.51% and -1.26% per annum respectively.



Adopted Growth Rate

- 4.2.4 As a conservative approach, annual growth +1.93% p.a. is adopted rate for traffic flows from existing to 2026 and annual growth +0.5% p.a. is adopted rate for traffic flows from 2026 to 2033.

4.3 Traffic Generations of Adjacent New Developments

- 4.3.1 To fully reflect the growth traffic, trip generation of the future vicinity developments have been taken into consideration. The major planned development is detailed in **Figure 4.1** and the estimated trip rate with reference to TPDM and trips of the adjacent planned developments are shown in **Table 4.2** and **Table 4.3** respectively.

Table 4.2 Estimated Trip Rates of Planned Adjacent Developments

Approved Planning Application No.	Location	Use	Assumed GFA & Flat no.	Units	Trip Rates			
					AM Peak		PM Peak	
					Gen.	Att.	Gen.	Att.
A/TP/672	Governme nt land at Area and Chung Nga Road East, Tai Po, New Territories	Public Housing	~316, 519m ² 7,431 flats (av. flat size: 40m ²)	pcu/hr/flat	0.0432 ⁽¹⁾	0.0326 ⁽¹⁾	0.0237 ⁽¹⁾	0.0301 ⁽¹⁾
		Retail / Shopping Complex	~29,234 m ²	pcu/hr/100 sq m GFA	0.2296	0.2434	0.31	0.3563
A/TP/700	Chung Nga Road West	Public Housing	1,292 flats (av. Flat size: 40m ²)	pcu/hr/flat	0.0432 ⁽¹⁾	0.0326 ⁽¹⁾	0.0237 ⁽¹⁾	0.0301 ⁽¹⁾
		Retail / Shopping Complex	~800m ²	pcu/hr/100 sq m GFA	0.2296	0.2434	0.31	0.3563
		Primary School	-	pcu/hr/ classroom	0.5670 ⁽²⁾	1.000 ⁽²⁾	0.333 ⁽²⁾	0.167 ⁽²⁾
A/NE-TK/753	Governme nt Land in D.D 26, Shuen Wan, Tai Po, New Territories	Proposed Temporary Residential Institution (Transitional Housing) for a period of 5 years	~ 6082.4 m ² 276 flats	-	- ⁽³⁾	- ⁽³⁾	- ⁽³⁾	- ⁽³⁾
A/NE-TK/702	Various Lots in D.D.26,	Proposed Temporary Residential	~ 21,551 m ² 1,236 flats	-	- ⁽³⁾	- ⁽³⁾	- ⁽³⁾	- ⁽³⁾



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Approved Planning Application No.	Location	Use	Assumed GFA & Flat no.	Units	Trip Rates			
					AM Peak		PM Peak	
					Gen.	Att.	Gen.	Att.
-	Wong Yue Tan	Institution (Transitional Housing) with Filing and Excavation Land for a period of 5 years	-	-	-	-	-	-
LSPS/001	Lo Fai Road and Ting Kok Road	Private Housing	~ 23,000 m ² 460 flats	pcu/hr/flat	0.1021 ⁽⁴⁾	0.0709 ⁽⁴⁾	0.0415 ⁽⁴⁾	0.0464 ⁽⁴⁾
		Public Housing	~ 64,522 m ² 1,290 flats	pcu/hr/flat	0.0622 ⁽⁵⁾	0.0426 ⁽⁵⁾	0.0297 ⁽⁵⁾	0.0401 ⁽⁵⁾
		GIC	-	-	-	-	-	-
-	Area 33, Tai Po	Construction Industry Council Training Academy Tai Po Training Ground	-	-	-	-	-	-
-	Tai Po Town Lot 246 (Ex-Shuen Wan Landfill Site)	Golf Course	-	-	-	-	-	-
-	Area 33, Tai Po	Football-cum-rugby pitch/underground public vehicle park 400 car spaces	-	Pcu/hr/ parking space	0.0771 ⁽⁶⁾	0.0907 ⁽⁶⁾	0.0493 ⁽⁶⁾	0.0811 ⁽⁶⁾
-	On Pong Road	Community health centre	4,447m ²	pcu/hr/100 sq m GFA	0.235 ⁽⁷⁾	0.235 ⁽⁷⁾	0.23 ⁽⁷⁾	0.115 ⁽⁷⁾
-	Future Phase of CDA(1) Zone	Private Housing	~ 14,011 m ² 220 flats	pcu/hr/flat	0.0778 ⁽⁸⁾	0.063 ⁽⁸⁾	0.063 ⁽⁸⁾	0.0593 ⁽⁸⁾

Notes:

- (1) Trip rates for public housing development of 40m² is adopted.
- (2) Adopted trip rate of primary school in Queen's Hill.
- (3) Adopted trip generations and attractions from TIA report of the relevant planning application.
- (4) Upper limit trip rates for private housing development of 60m² is adopted.
- (5) Trip rates for public housing development of 50m² is adopted.
- (6) Based on surveyed trip rate at Tai Po Tung Cheong Street Sports Centre Public Vehicle



- Park.
- (7) Adopted trip rate of community health centre in the approved TIA report for Queen's Hill, Fanling.
- (8) Adopted trip rate of Mont Vert.

Table 4.3 Estimated Trip Generations and Attractions of Planned Adjacent Developments

Approved Planning Application No.	Location	Development	Assumed GFA & Flat no.	Trips			
				AM Peak (pcu/hr)		PM Peak (pcu/hr)	
				Gen.	Att.	Gen.	Att.
A/TP/672	Government land at Area and Chung Nga Road East, Tai Po, New Territories	Public Housing	~316, 519m ² 7,431 flats (av. flat size: 50m ²)	322	243	177	224
		Retail / Shopping Complex	~29,234 m ²	68	72	91	105
A/TP/700	Chung Nga Road West	Public Housing	1,292 flats (av. Flat size: 40m ²)	56	43	31	39
		Retail and GIC	~800m ²	2	2	3	3
		Primary School	pcu/hr/ classroom	18	30	10	6
A/NE-TK/753	Government Land in D.D 26, Shuen Wan, Tai Po, New Territories	Proposed Temporary Residential Institution (Transitional Housing) for a period of 5 years	~ 6082.4 m ² 276 flats	1 ⁽¹⁾	3 ⁽¹⁾	2 ⁽¹⁾	3 ⁽¹⁾
A/NE-TK/702	Various Lots in D.D.26, Wong Yue Tan	Proposed Temporary Residential Institution (Transitional Housing) with Filing and Excavation Land for a period of 5 years	~ 21,551 m ² 1,236 flats	46 ⁽¹⁾	36 ⁽¹⁾	36 ⁽¹⁾	36 ⁽¹⁾
LSPS/001	Lo Fai Road and Ting Kok Road	Private Housing	~ 23,000 m ² 460 flats	47	33	20	22



Approved Planning Application No.	Location	Development	Assumed GFA & Flat no.	Trips			
				AM Peak (pcu/hr)		PM Peak (pcu/hr)	
				Gen.	Att.	Gen.	Att.
		Public Housing	~ 64,522 m ² 1,290 flats	81	55	39	52
		GIC (RCHE)	-	2 ⁽²⁾	2 ⁽²⁾	3 ⁽²⁾	2 ⁽²⁾
-	Area 33, Tai Po	Construction Industry Council Training Academy Tai Po Training Ground	-	23 ⁽³⁾	23 ⁽³⁾	23 ⁽³⁾	23 ⁽³⁾
-	Tai Po Town Lot 246 (Ex-Shuen Wan Landfill Site)	Golf Course	-	8 ⁽⁴⁾	32 ⁽⁴⁾	50 ⁽⁴⁾	26 ⁽⁴⁾
-	Area 33, Tai Po	Football-cum-rugby pitch/underground public vehicle park 400 car spaces	-	31	37	20	33
-	On Pong Road	Community health centre	4,447m ²	11	11	11	6
-	Future Phase of CDA(1) Zone	Private Housing	~ 14,011 m ² 220 flats	17	14	14	13

Note:

- (1)Extracted from TIA report of the relevant planning application.
- (2)Based on traffic survey result at Pok Oi Hospital Yeung Chun Pui Care and Attention Home.
- (3)Based on previous study on Construction Industry Council Training Academy.
- (4)Based on approved TIA

4.4 Planned Junction Layout under Planned Project

4.4.1 Junction Fung Yuen Road / Ting Kok Road (G) will be modified according to the TIA report (January 2021) of approved A/NE-TK/702 at Wong Yue Tan, Tai Po and the TIA report (August 2022) of approved A/NE-TK/753 at Shuen Wan, Tai Po as shown in **Figure 4.2**. It is anticipated that the planned junction layout would be in place for



reference and design year 2033 (the commissioned year of the proposed development) for the assessments. A sensitivity assessment for the junction without modification will be included.

- 4.4.2 It is noted that Fung Yuen CDA (1) of about 1,800 units is undergoing planning application. Based on the latest traffic generation and attraction of 143 pcu/hr and 118 pcu/hr during AM peak hour and traffic generation and attraction of 123 pcu/hr and 114 pcu/hr during PM peak hour, another sensitivity assessment would be carried out.

4.5 Reference Traffic Flows

- 4.5.1 2033 reference traffic flows are then derived by the following and presented diagrammatically in **Figure 4.3**.

$$\begin{array}{l} \text{2033} \\ \text{Reference} \\ \text{Traffic Flows} \\ (\text{Without} \\ \text{Proposed} \\ \text{Development}) \end{array} = \left(\begin{array}{l} \text{2024} \\ \text{Observed} \\ \text{Traffic} \\ \text{Flows} \end{array} \times \begin{array}{l} \text{Adopted} \\ \text{Growth} \\ \text{Factor} \\ (\text{i.e. +1.93\%} \\ \text{for 2 year}) \end{array} \times \begin{array}{l} \text{Adopted} \\ \text{Growth} \\ \text{Factor} \\ (\text{i.e. +0.5\%} \\ \text{for 7 year}) \end{array} \right) + \begin{array}{l} \text{Traffic Flows of} \\ \text{Planned} \\ \text{Adjacent} \\ \text{Developments} \end{array}$$

4.6 Traffic Generations and Attractions of Proposed Development

- 4.6.1 To estimate the trip generations of the proposed development, reference has been made to the trip generation rates of the existing Tung Wah Group of Hospitals Shuen Wan Complex for the Elderly which comprises Pao Siu Loong Care and Attention Home, Wu York Yu Care and Attention Home, and Wu Chiang Wai Fong Care and Attention Home in the same district with similar proximity to public transport. The adopted trip generation rates and the estimated net generation and attraction due to the proposed development are summarized in **Table 4.4**.

Table 4.4 Adopted Generation and Attraction Trip Rates of Proposed Development

Reference Site	AM Peak		PM Peak	
	Generation (pcu/hr/bed)	Attraction (pcu/hr/bed)	Generation (pcu/hr/bed)	Attraction (pcu/hr/bed)
Adopted Rate	0.029	0.039	0.051	0.035

4.6.2 Based on **Table 4.4**, the estimated traffic generation and attraction due to the proposed development are summarized in **Table 4.5**.

Table 4.5 Estimated Traffic Generation and Attraction of Proposed Development

Proposed Development	AM Peak		PM Peak	
	Generation (pcu/hr)	Attraction (pcu/hr)	Generation (pcu/hr)	Attraction (pcu/hr)
~28 nos. of suites and ~225 nos. of beds	8	10	13	9

4.6.3 It is anticipated that the proposed development would generate and attract 8 pcu/hr and 10 pcu/hr during AM peak hour respectively, and generate and attract 13 pcu/hr and 9 pcu/hr during PM peak hour respectively.

4.7 Design Traffic Flows

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

$$\begin{array}{ccc}
 \textbf{2033 Design Traffic Flows} & \textbf{2033 Reference Traffic Flows} & \textbf{Proposed} \\
 (\textbf{With Proposed}) & = & (\textbf{Without Proposed}) + \textbf{Development} \\
 & & \textbf{Traffic Flows}
 \end{array}$$

4.7.2 Year 2033 design traffic flows (with proposed development) are shown in **Figure 4.4**.



5. TRAFFIC IMPACT ASSESSMENT

5.1 Operational Assessment

5.1.1 To assess the potential traffic impact due to the proposed development, capacity analysis of the identified critical junction and road links for both reference (without proposed development) and design scenarios (with proposed development) in year 2033 were carried out. The results are summarized in **Table 5.1**, and the junction calculation sheets are attached in **Appendix A**.

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

Ref.	Junction	Method of Control	Year 2033 RC/RFC ⁽¹⁾			
			Reference Scenario (Without Proposed Development)		Design Scenario (With Proposed Development)	
			AM Peak	PM Peak	AM Peak	PM Peak
A	Tung Tsz Road/ Universal Gate Road	Priority	0.03	0.05	0.04	0.07
B	Ting Kok Road/ Tung Tsz Road	Priority	0.57	0.27	0.59	0.31
C	Ting Kok Road/ Sam Mun Tsai Road	Signal	>100%	>100%	>100%	>100%
D	Ting Kok Road/ Lo Fai Road	Signal	30%	53%	29%	51%
E	Ting Kok Road/ Dai Kwai Street	Signal	-1%	3%	-2%	2%
F	Ting Kok Road/ Dai Fat Street	Signal	0%	20%	-1%	19%
G	Ting Kok Road/ Fung Yuen Road	Signal	Without Junction Modification ⁽²⁾	1%	1%	1%
			With Junction Modification ⁽³⁾	-1%	-1%	-1%
			With Junction Modification ⁽³⁾ and with Fung Yuen CDA (1) ⁽⁴⁾	-14%	-12%	-14%



Ref.	Junction	Method of Control	Year 2033 RC/RFC ⁽¹⁾			
			Reference Scenario (Without Proposed Development)		Design Scenario (With Proposed Development)	
			AM Peak	PM Peak	AM Peak	PM Peak
H	Ting Kok Road/ Yuen Shin Road/ Dai Fuk Street	Signal	7%	3%	7%	2%
I	Yuen Shin Road/ Dai Fat Street	Signal	6%	21%	5%	20%
J	Yuen Shin Road/ Tai Po Tai Wo Road	Signal	12%	24%	12%	24%

Notes:

(1) RC = Reserve Capacity for Signalized Junction
 RFC = Ratio of Flow to Capacity for Priority Junction

(2) Junction without modification as sensitivity test.

(3) Reference has been made to the planned junction improvement works mentioned in **Section 4.4.1**.

(4) Consideration of Fung Yuen CDA (1) of about 1,800 units which is undergoing planning application as sensitivity test, refer to **Section 4.4.2** for details.

- 5.1.2 The assessment results in **Table 5.1** revealed that all critical junctions would still operate within their capacities in both reference scenario (without proposed development) and design scenario (with proposed development) in 2033 during the peak hours except the following junctions:
- Junction Ting Kok Road/ Dai Kwai Street (E)
 - Junction Ting Kok Road/ Dai Fat Street (F)
 - Junction Ting Kok Road/ Fung Yuen Road (G)
 - Junction Ting Kok Road/ Yuen Shin Road/ Dai Fuk Street (H)
 - Junction Yuen Shin Road/ Dai Fat Street (I)
 - Junction Yuen Shin Road/ Tai Po Tai Wo Road (J)

- 5.1.3 Junction E will have negative RC during AM peak hour on weekday without and with the proposed development, and will be approaching to its capacity with $RC < 15\%$ but still positive during PM peak hour on weekday without and with the proposed development.



- 5.1.4 Junction F will have RC of 0% without the proposed development and -1% with the proposed development during AM peak hour on weekday.
- 5.1.5 Junction G without planned junction modification, will be approaching to its capacity with RC <15% but still positive during AM and PM peak hours on weekday without and with the proposed development. Junction G with planned junction modification, will have negative RC during AM and PM peak hours on weekday without and with the proposed development. With consideration of Fung Yuen CDA (1) which is undergoing planning application mentioned in **Section 4.4** as sensitivity test, Junction G with planned junction modification will be overcapacity with negative RC during AM and PM peak hours on weekday without and with the proposed development.
- 5.1.6 Junction H will be approaching to its capacity with RC <15% but still positive during AM and PM peak hours on weekday without and with the proposed development.
- 5.1.7 Junction I and Junction J will be approaching to its capacity with RC <15% but still positive during AM peak hour on weekday without and with the proposed development.
- 5.1.8 It is anticipated that the proposed development would generate and attract 8 pcu/hr and 10 pcu/hr during AM peak hour respectively, and generate and attract 13 pcu/hr and 9 pcu/hr during PM peak hour respectively.
- 5.1.9 The peak traffic generated by the proposed development is small and would induce insignificant impact on the surrounding road network.



6. SUMMARY AND CONCLUSION

6.1 Summary

- 6.1.1 CTA Consultants Limited (CTA) is commissioned as the traffic consultant to prepare the Traffic Impact Assessment Report and provide technical justifications in supporting the proposed development from traffic engineering point of view.
- 6.1.2 To appraise the existing traffic condition, manual-classified counting surveys were conducted at critical junctions in 2024. Current operational performance of the critical junctions has been assessed. The results reveal all critical junctions are at present operating within their capacities during peak hours.
- 6.1.3 The assessment results revealed that all critical junctions would still operate within their capacities in both reference scenario (without proposed development) and design scenario (with proposed development) in 2033 during the peak hours except the following junctions:
- Junction Ting Kok Road/ Dai Kwai Street (E)
 - Junction Ting Kok Road/ Dai Fat Street (F)
 - Junction Ting Kok Road/ Fung Yuen Road (G)
 - Junction Ting Kok Road/ Yuen Shin Road/ Dai Fuk Street (H)
 - Junction Yuen Shin Road/ Dai Fat Street (I)
 - Junction Yuen Shin Road/ Tai Po Tai Wo Road (J)
- 6.1.4 Junction E will have negative RC during AM peak hour on weekday without and with the proposed development, and will be approaching to its capacity with $RC < 15\%$ but still positive during PM peak hour on weekday without and with the proposed development.
- 6.1.5 Junction F will have RC of 0% without the proposed development and -1% with the proposed development during AM peak hour on weekday.
- 6.1.6 Junction G without planned junction modification, will be approaching to its capacity with $RC < 15\%$ but still positive during AM and PM peak hours on weekday without and with the proposed development. Junction G with planned junction modification,

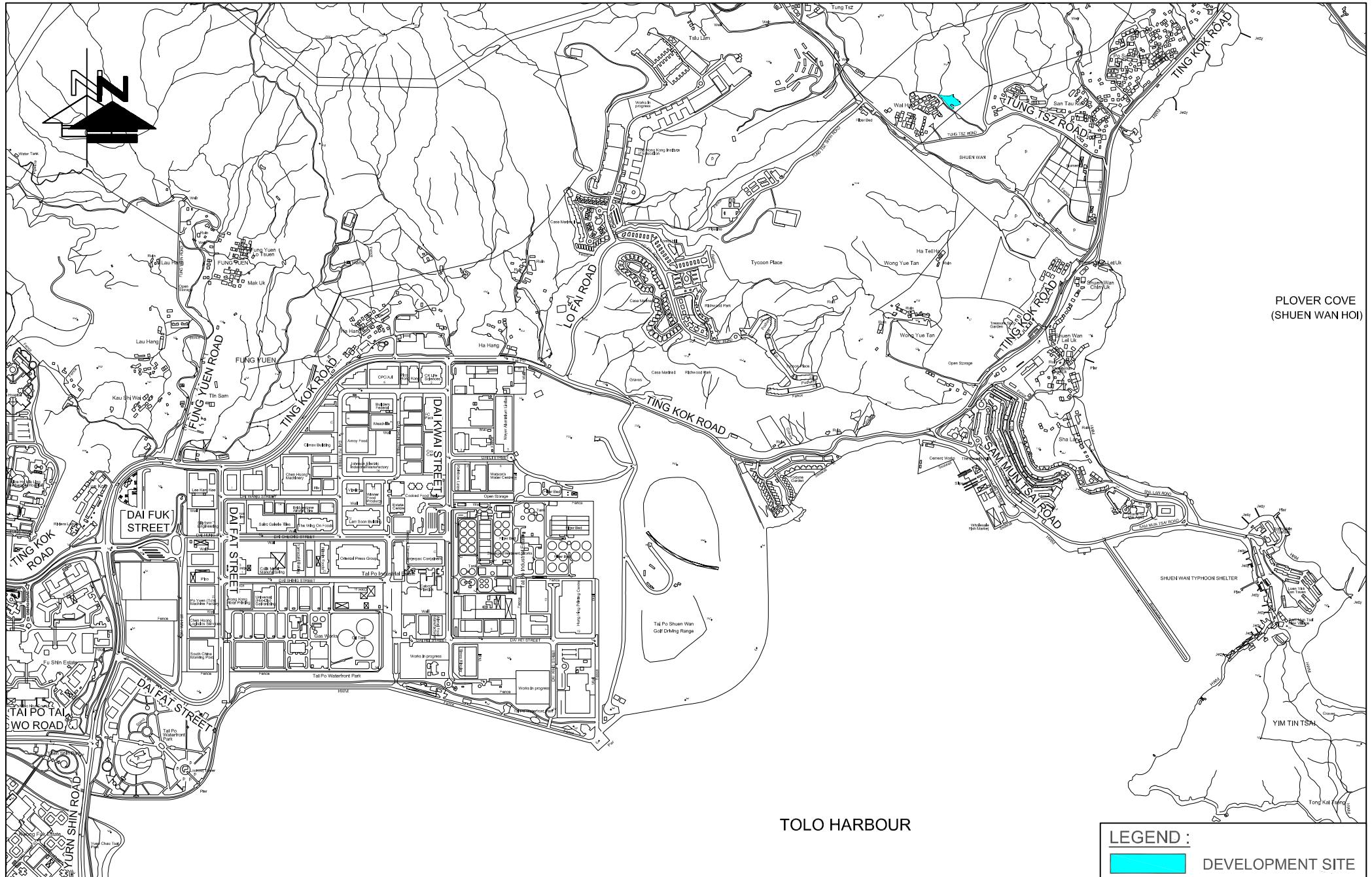


will have negative RC during AM and PM peak hours on weekday without and with the proposed development. With consideration of Fung Yuen CDA (1) which is undergoing planning application as sensitivity test, Junction G with planned junction modification will be overcapacity with negative RC during AM and PM peak hours on weekday without and with the proposed development.

- 6.1.7 Junction H will be approaching to its capacity with RC <15% but still positive during AM and PM peak hours on weekday without and with the proposed development.
- 6.1.8 Junction I and Junction J will be approaching to its capacity with RC <15% but still positive during AM peak hour on weekday without and with the proposed development.
- 6.1.9 It is anticipated that the proposed development would generate and attract 8 pcu/hr and 10 pcu/hr during AM peak hour respectively, and generate and attract 13 pcu/hr and 9 pcu/hr during PM peak hour respectively.
- 6.1.10 The peak traffic generated by the proposed development is small and would induce insignificant impact on the surrounding road network.

6.2 Conclusion

- 6.2.1 In conclusion, this Traffic Impact Assessment Report 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.
- 6.2.2 Therefore, the proposed development is reckoned feasible from traffic engineering point of view.



LEGEND :
 DEVELOPMENT SITE

FIGURE NO.:

1.1

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T

PROJECT NO.:

24093HK

DRAWING TITLE:

SCALE:

1:16000 @A4

DATE:

03 DEC 2024

SITE LOCATION PLAN



CTA Consultants Limited
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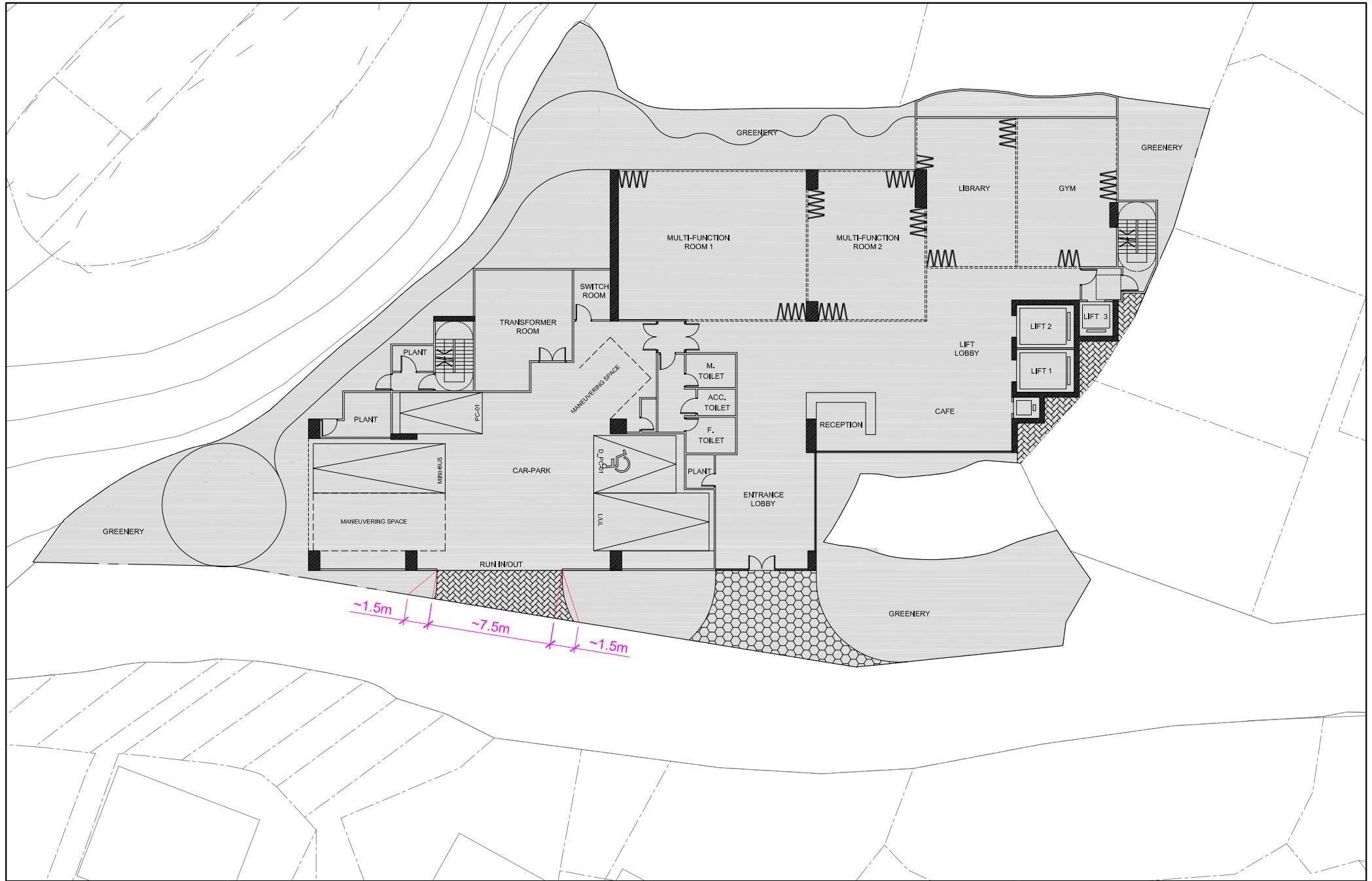


FIGURE NO.:

2.1

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T

PROJECT NO.:

24093HK

DRAWING TITLE:

LAYOUT PLAN OF PROPOSED DEVELOPMENT

SCALE:
1:300 @A4

DATE:
18 DEC 2024



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志達顧問有限公司

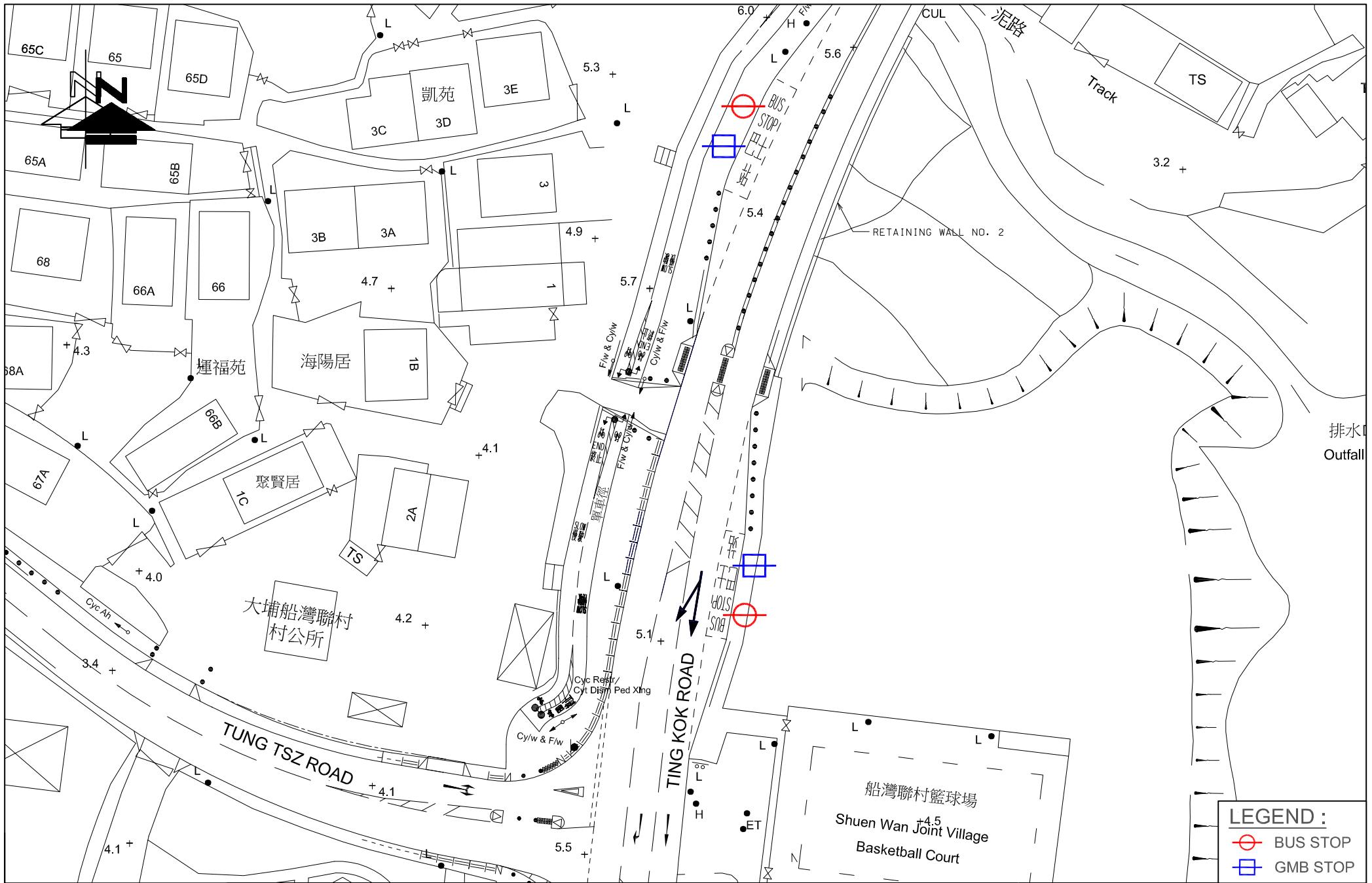


FIGURE NO.:

2.2

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T.

PROJECT NO.

第1章

DRAWING TITLE

EXISTING PUBLIC TRANSPORT FACILITIES

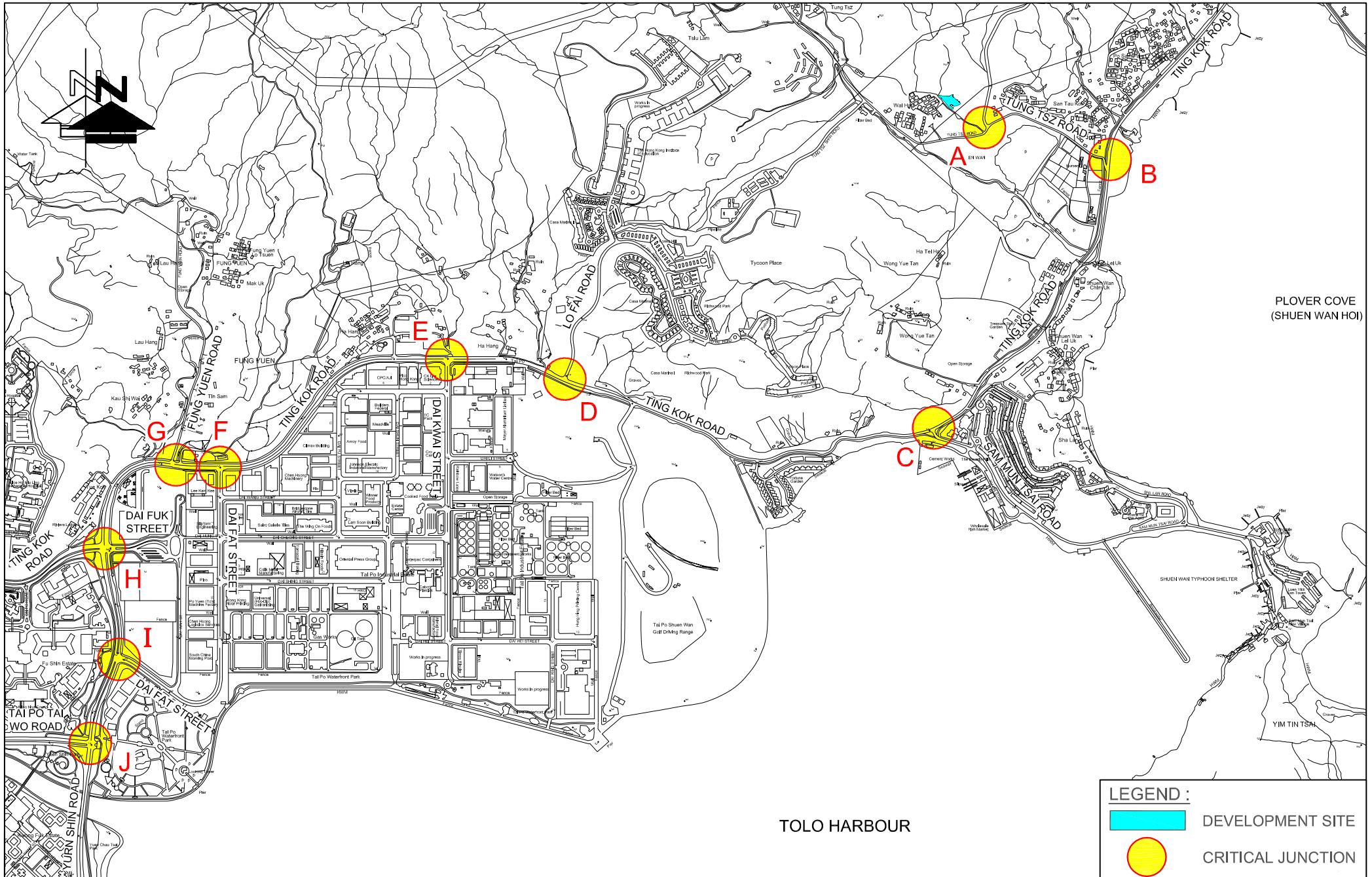


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LEGEND :

 BUS STOP

GMB STORE



TOLO HARBOUR

LEGEND :

■ DEVELOPMENT SITE

○ CRITICAL JUNCTION

FIGURE NO.:

3.1

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T

PROJECT NO.:

24093HK

DRAWING TITLE:

SCALE:
1:16000 @A4

DATE:
03 DEC 2024

IDENTIFIED CRITICAL JUNCTIONS



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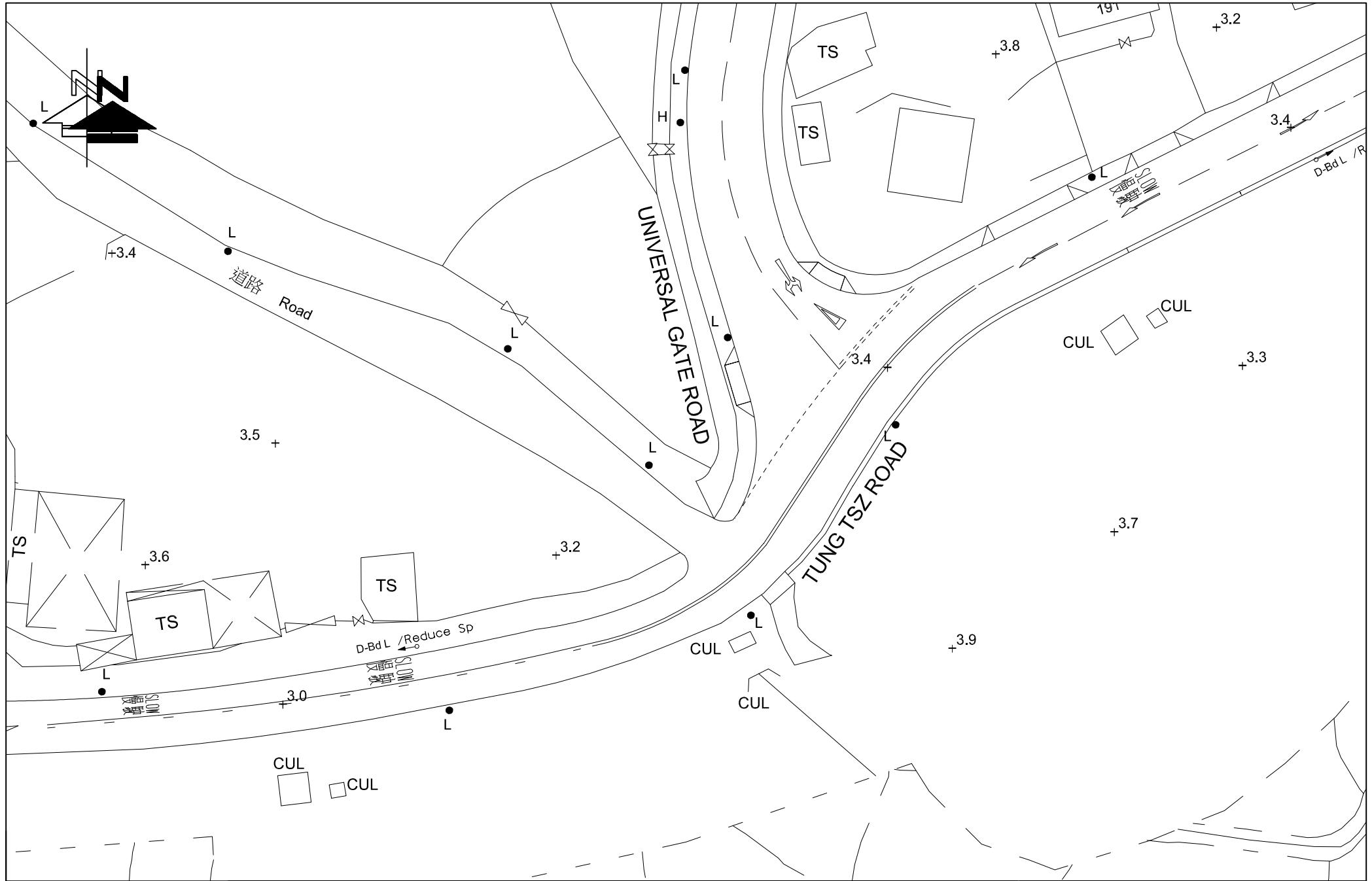


FIGURE NO.:

3.2

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T

PROJECT NO.:

24093HK

DRAWING TITLE:

EXISTING JUNCTION LAYOUT OF
TUNG TSZ ROAD / UNIVERSAL GATE ROAD (A)

SCALE:
1:500 @A4

DATE:
04 DEC 2024



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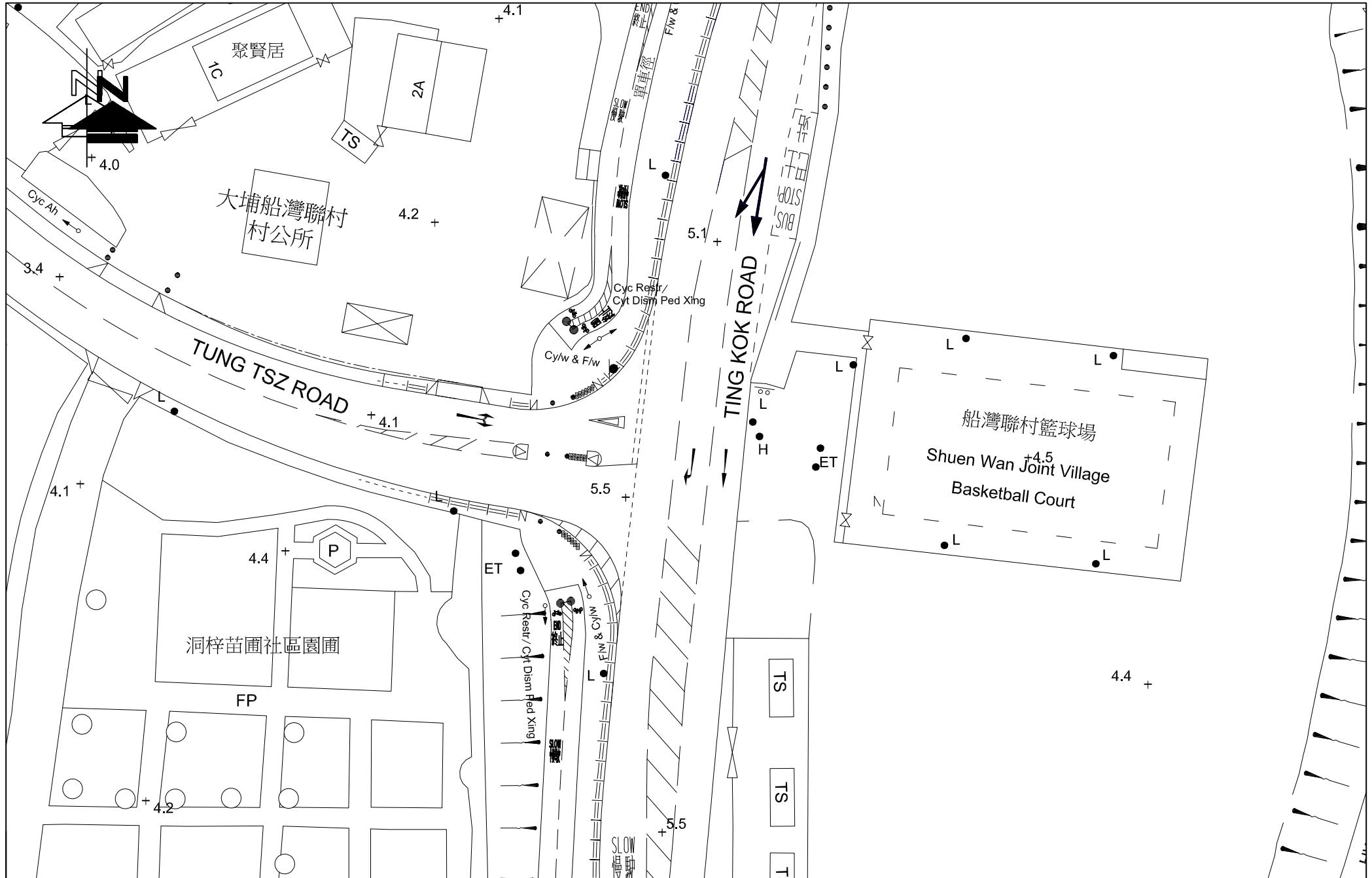


FIGURE NO.:

3.3

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T

PROJECT NO.:

24093HK

DRAWING TITLE:

EXISTING JUNCTION LAYOUT OF
TING KOK ROAD / TUNG TSZ ROAD (B)

SCALE:
1:500 @A4

DATE:
13 DEC 2024



CTA Consultants Limited
志達顧問有限公司

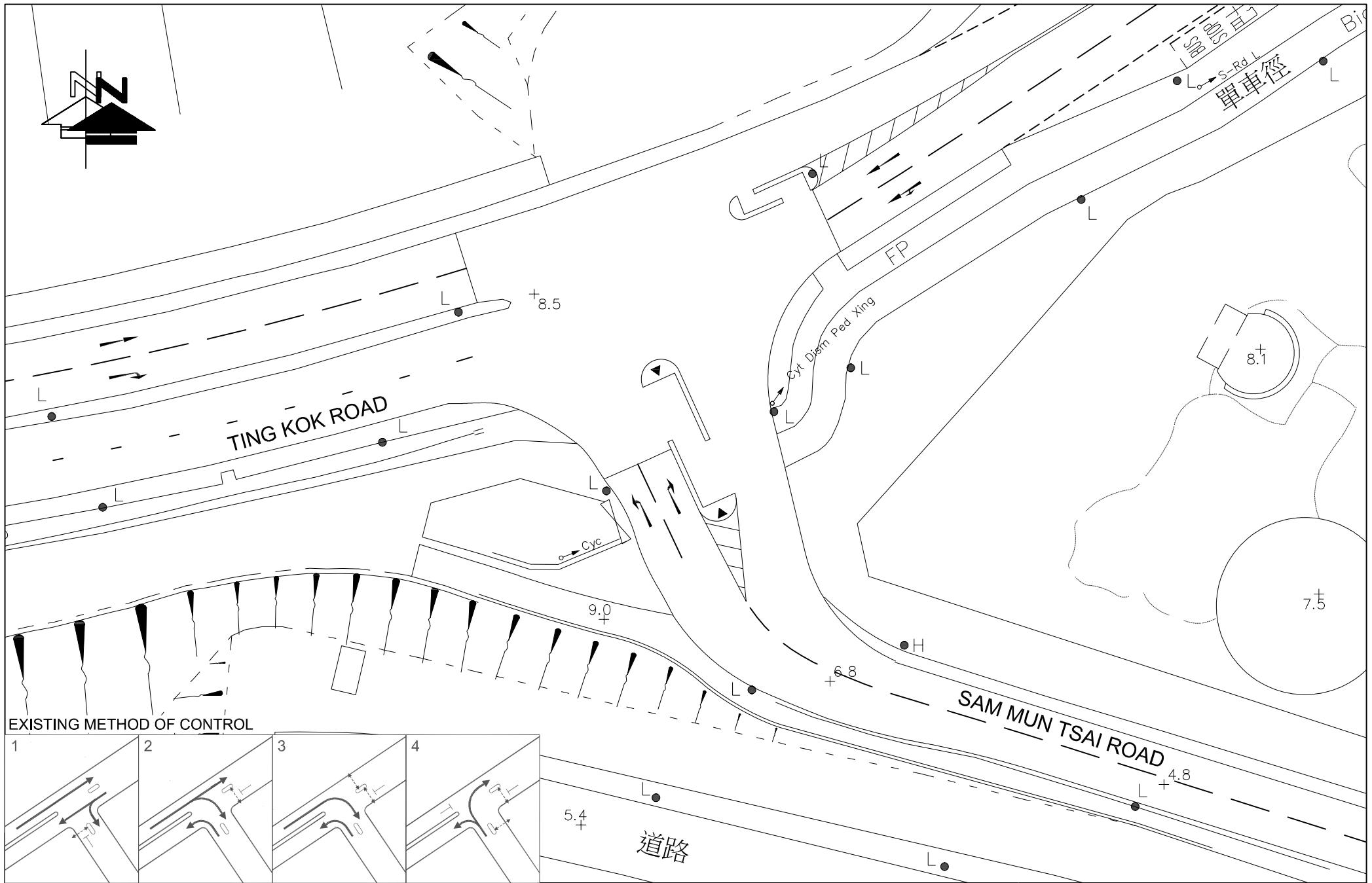


FIGURE NO.:

3.4

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T.

PROJECT NO.:

34093HK

DRAWING TITLE:

EXISTING JUNCTION LAYOUT OF TING KOK ROAD / SAM MUN TSAI ROAD (C)



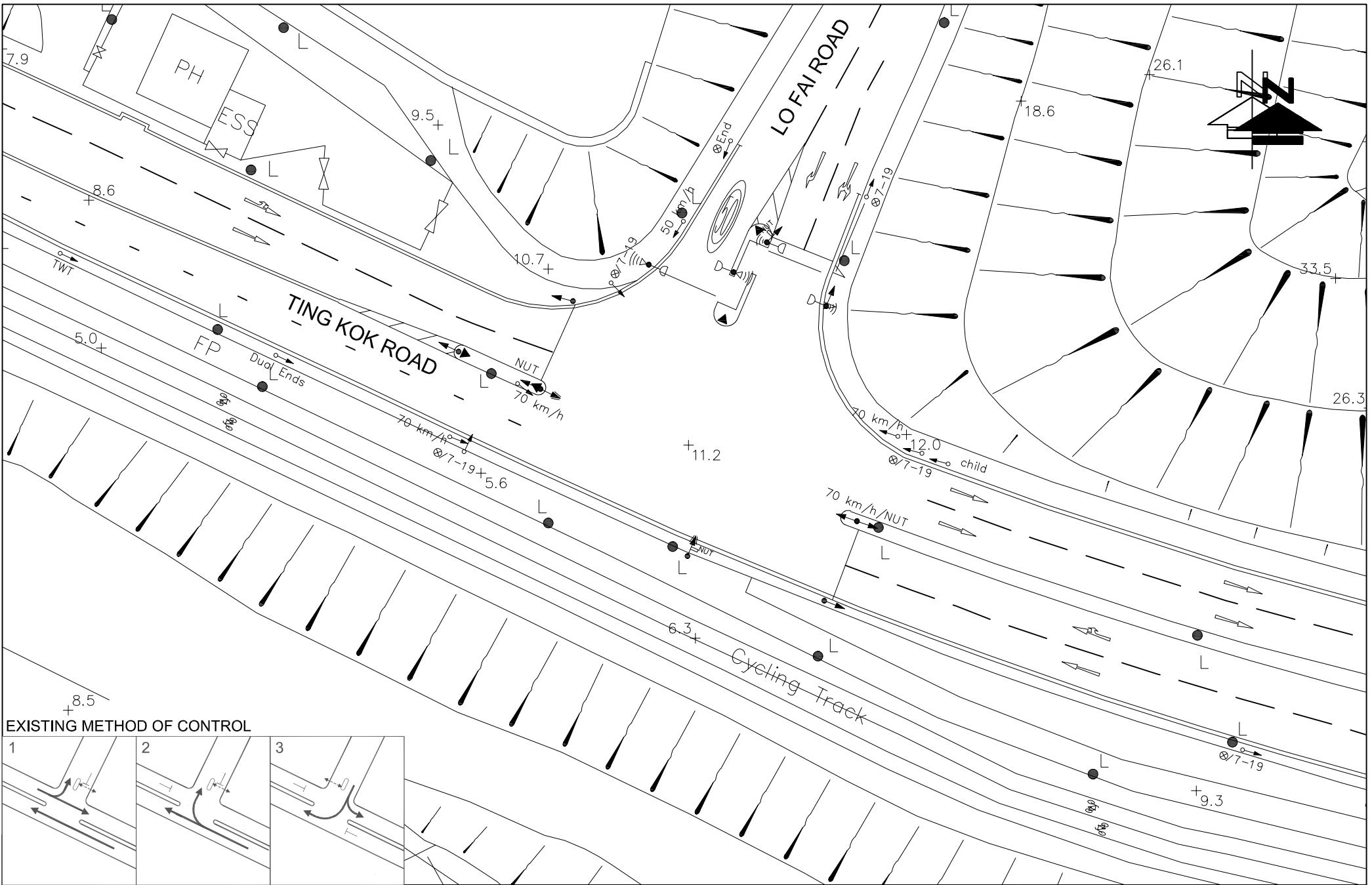
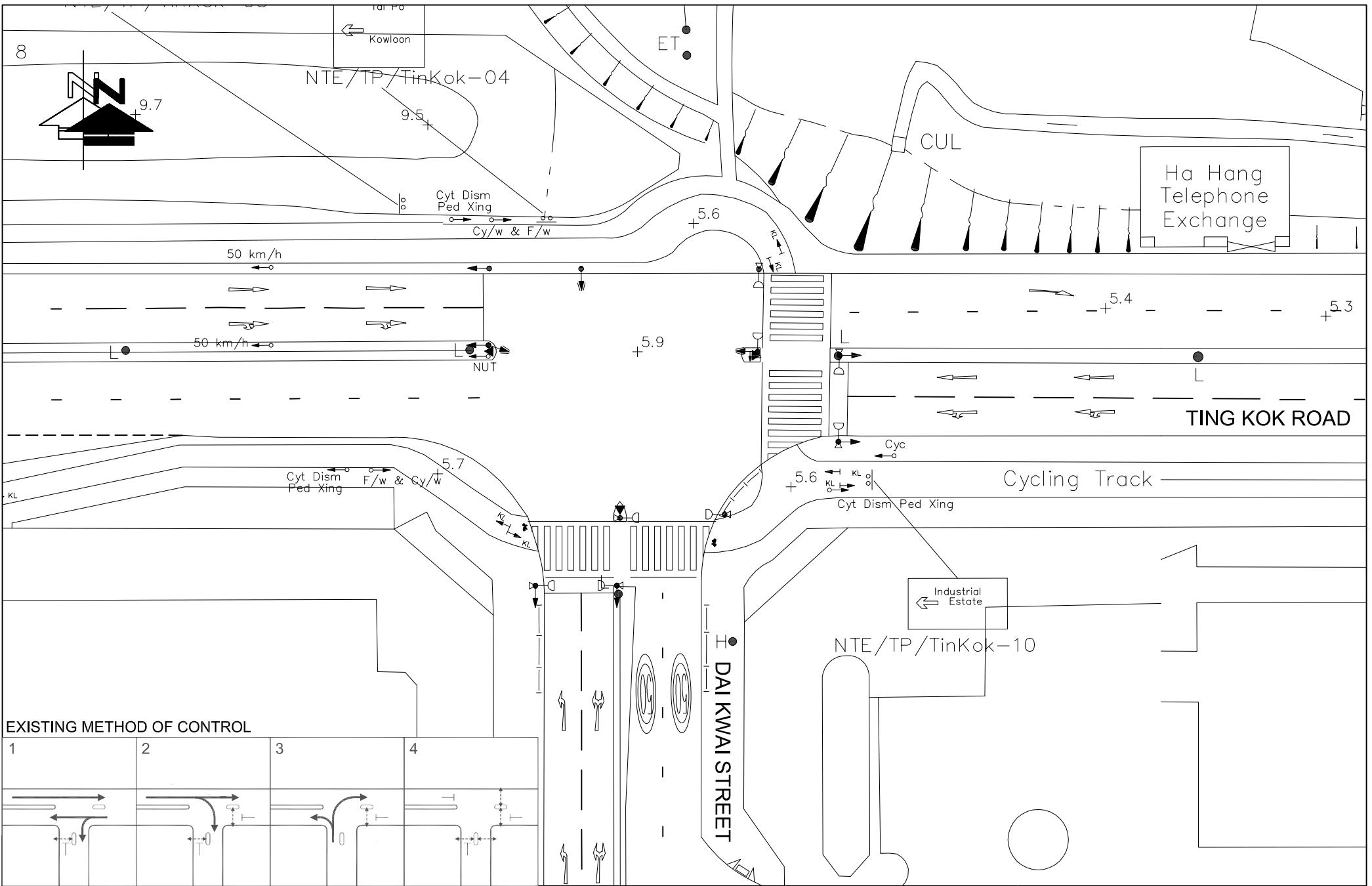


FIGURE NO.: **3.5**
PROJECT NO.: 24093HK
SCALE: 1: 500 @ A4

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T.

DRAWING TITLE:

**EXISTING JUNCTION LAYOUT OF
TING KOK ROAD / LO FAI ROAD (D)**



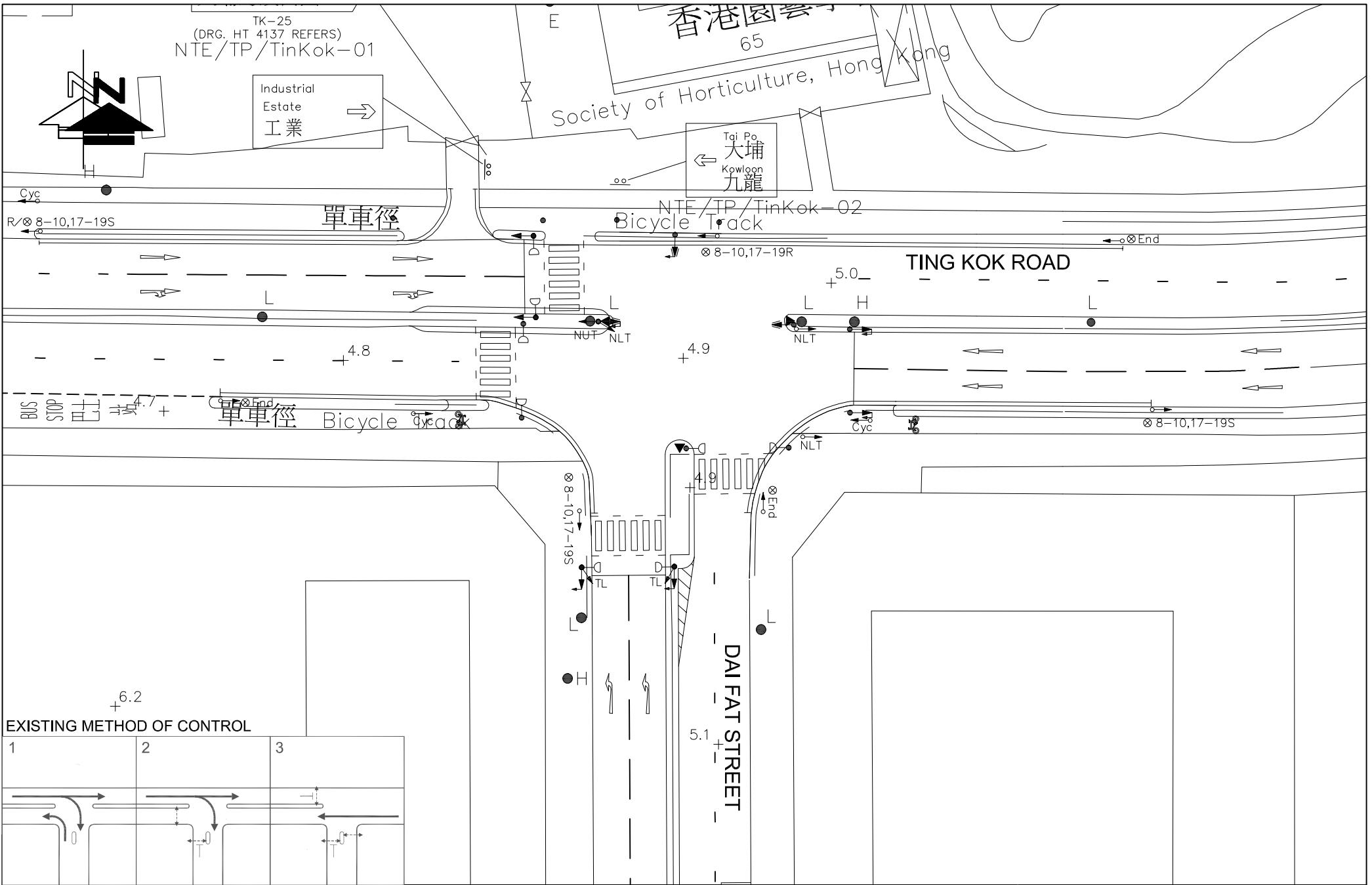


FIGURE NO.: 3.7

PROJECT NO.: 24093HK

SCALE: 1: 500 @A4

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tszi Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tszi, Tai Po, N.T

DRAWING TITLE:

EXISTING JUNCTION LAYOUT OF
TING KOK ROAD / DAI FAT STREET (F)

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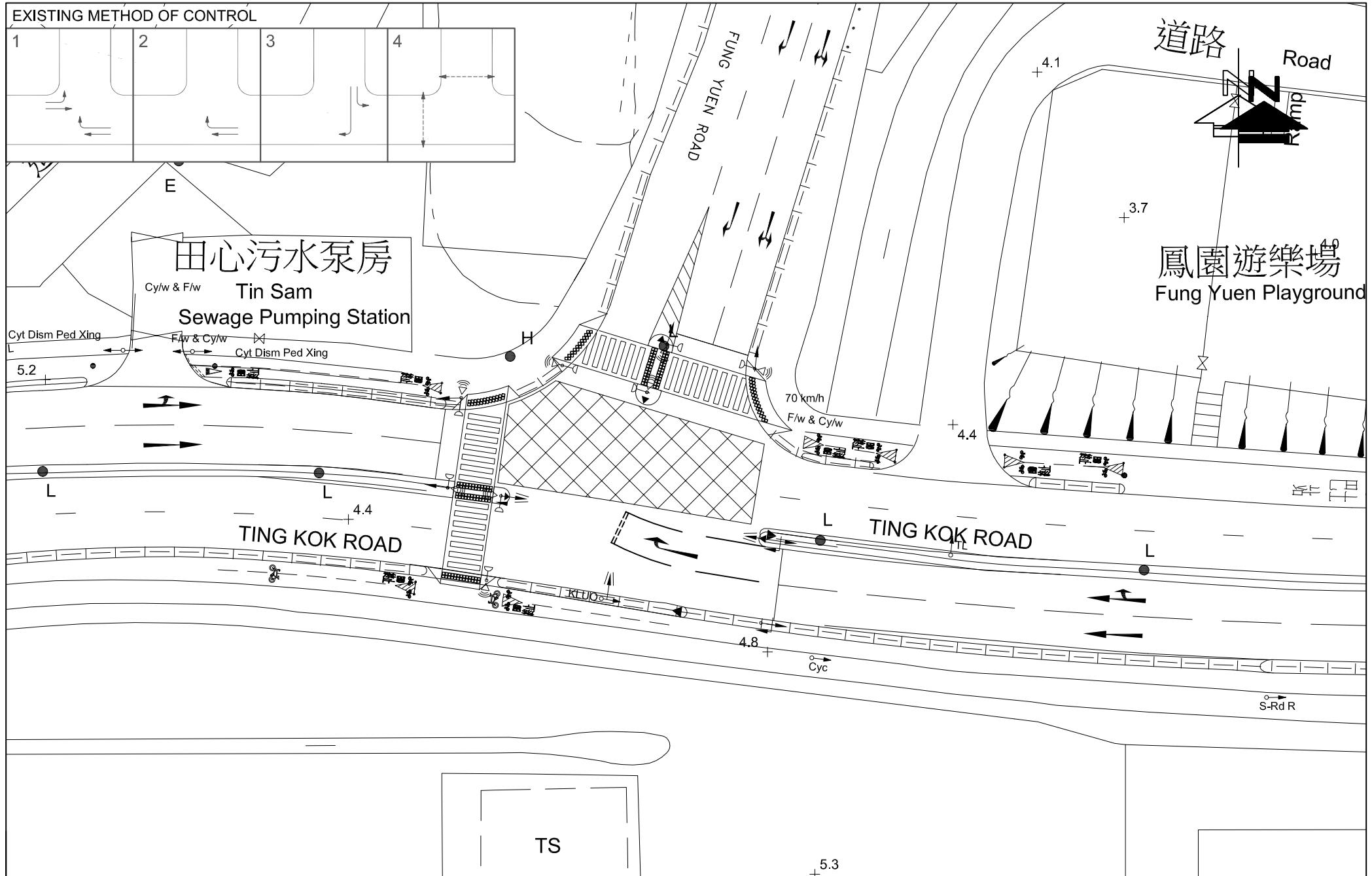


FIGURE NO.:

3.8

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T

PROJECT NO.:

24093HK

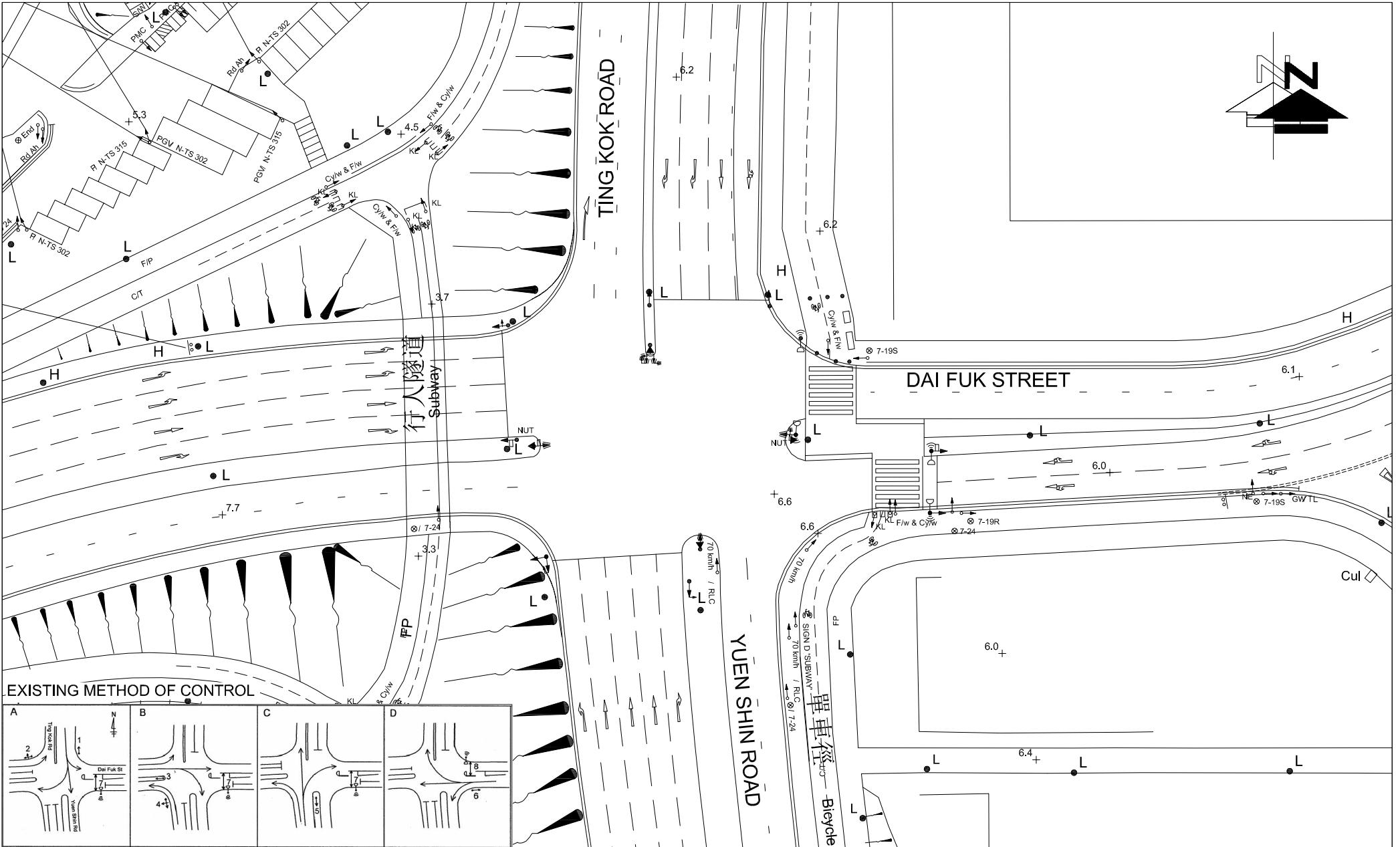
DRAWING TITLE:

SCALE:
1:500 @A4

DATE:
03 DEC 2024



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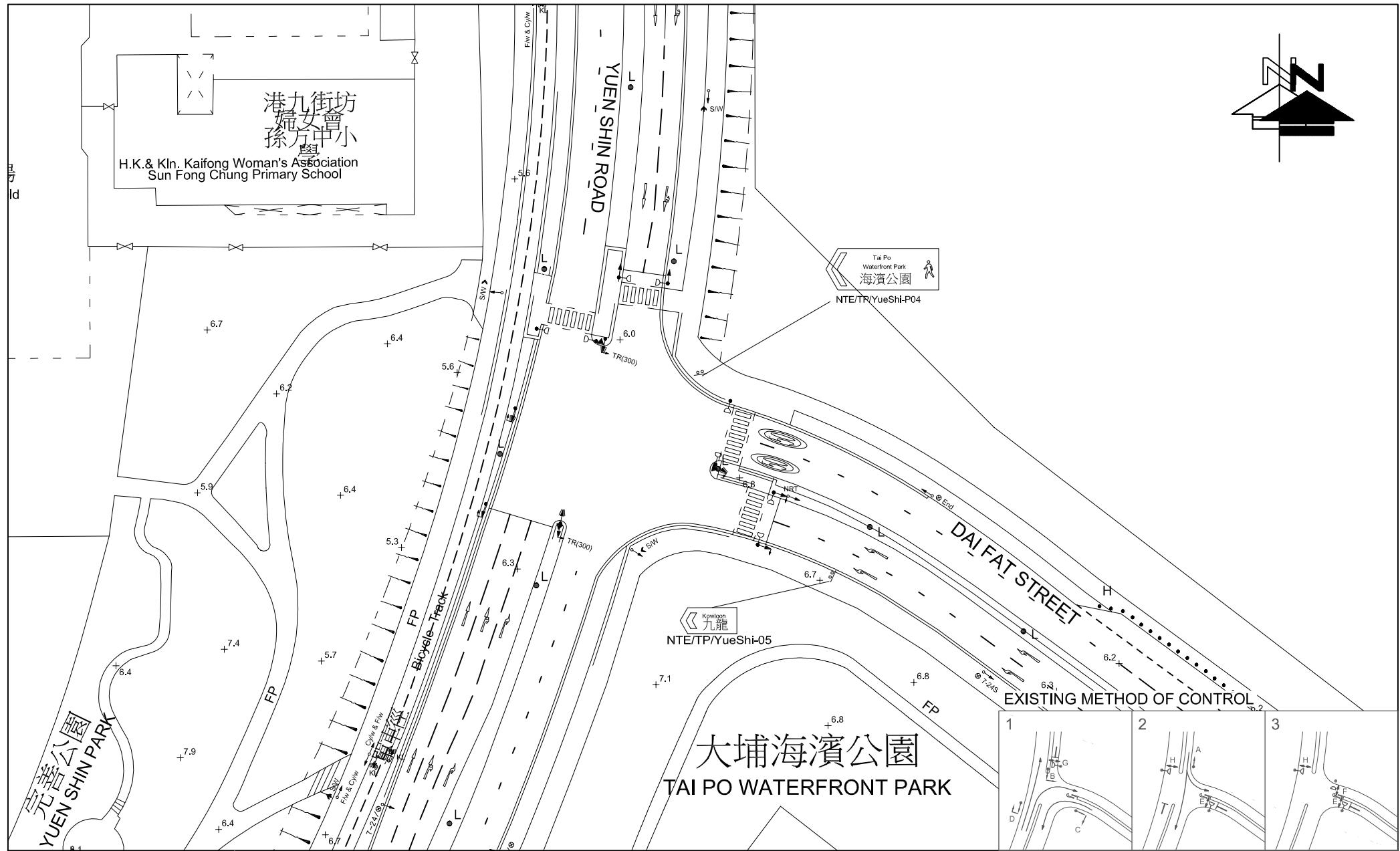


FIGURE NO.:	3.10	PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T
PROJECT NO.:	24093HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF YUEN SHIN ROAD / DAI FAT STREET (I)
SCALE: 1 : 800 @A4	DATE: 16 DEC 2024	

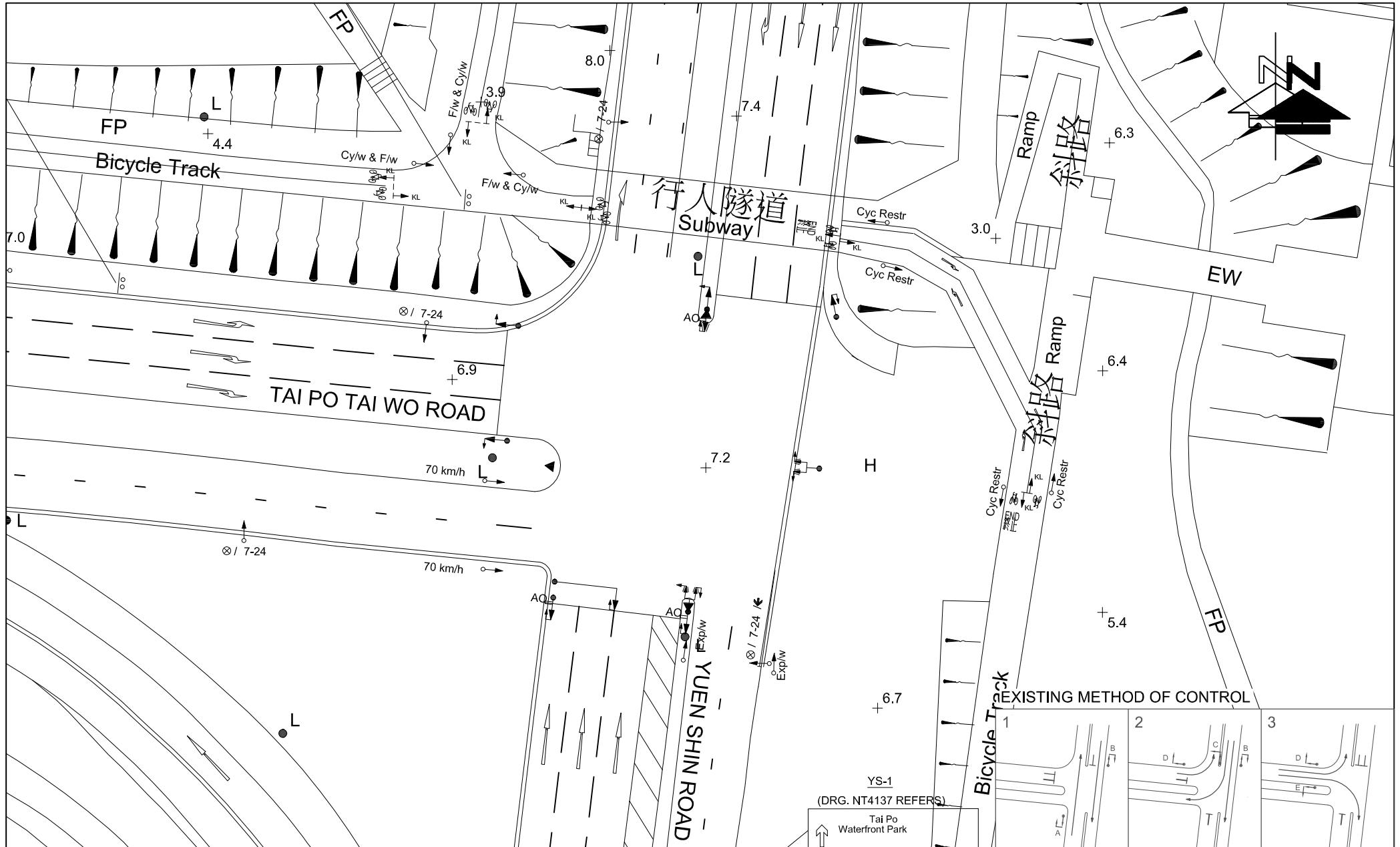


FIGURE NO.:

3.11

PROJECT TITLE:

S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T.

PROJECT NO.:

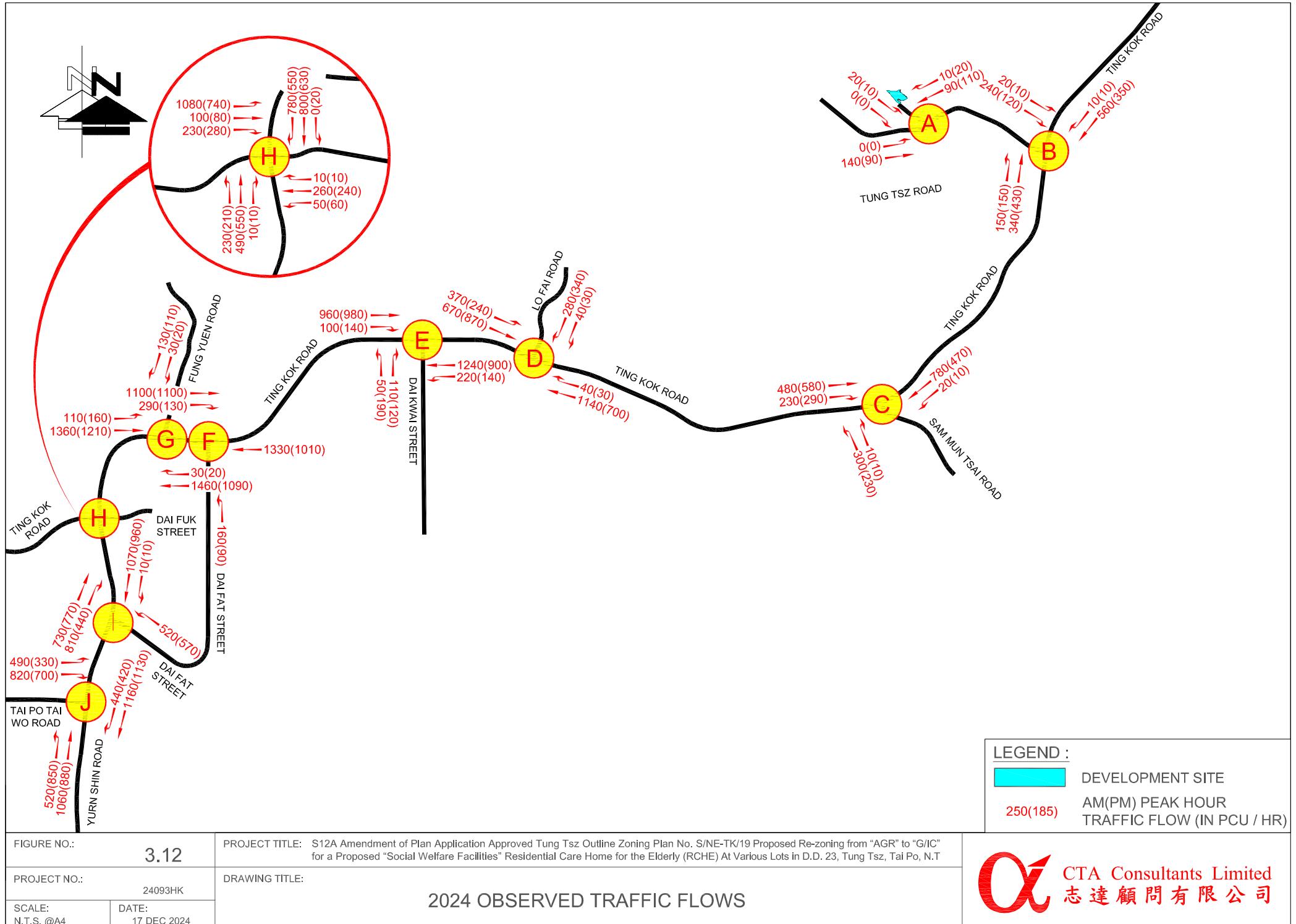
24093HK

DRAWING TITLE:

EXISTING JUNCTION LAYOUT OF YUEN SHIN ROAD / TAI PO TAI WO ROAD (J)

SCALE:
1 : 500 @ A4

DATE:
16 DEC 2024



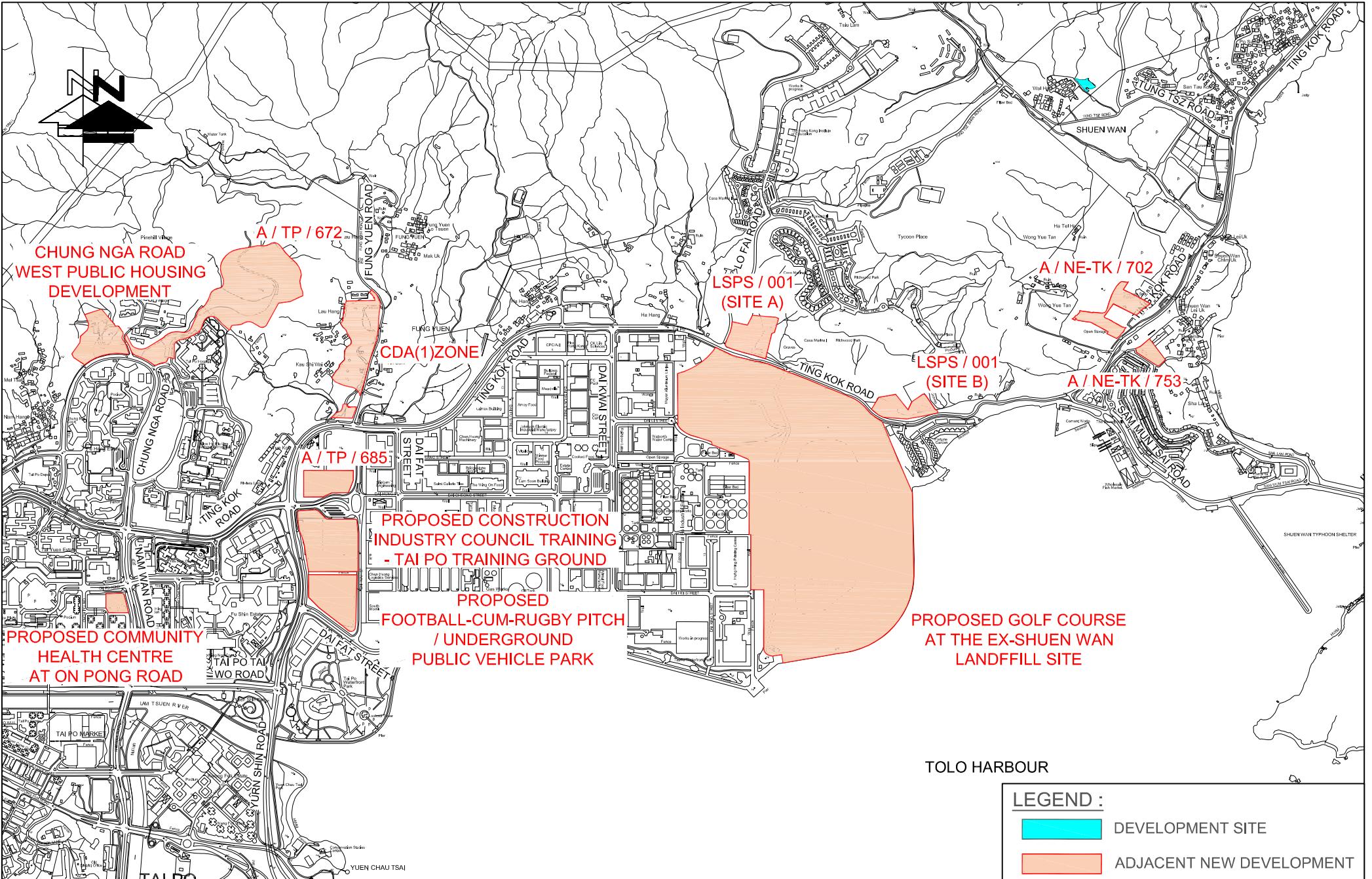


FIGURE NO.:	4.1	PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T.
PROJECT NO.:	24093HK	DRAWING TITLE:
SCALE: 1:20000 @A4	DATE: 03 DEC 2024	PLANNED MAJOR DEVELOPMENTS IN THE VICINITY



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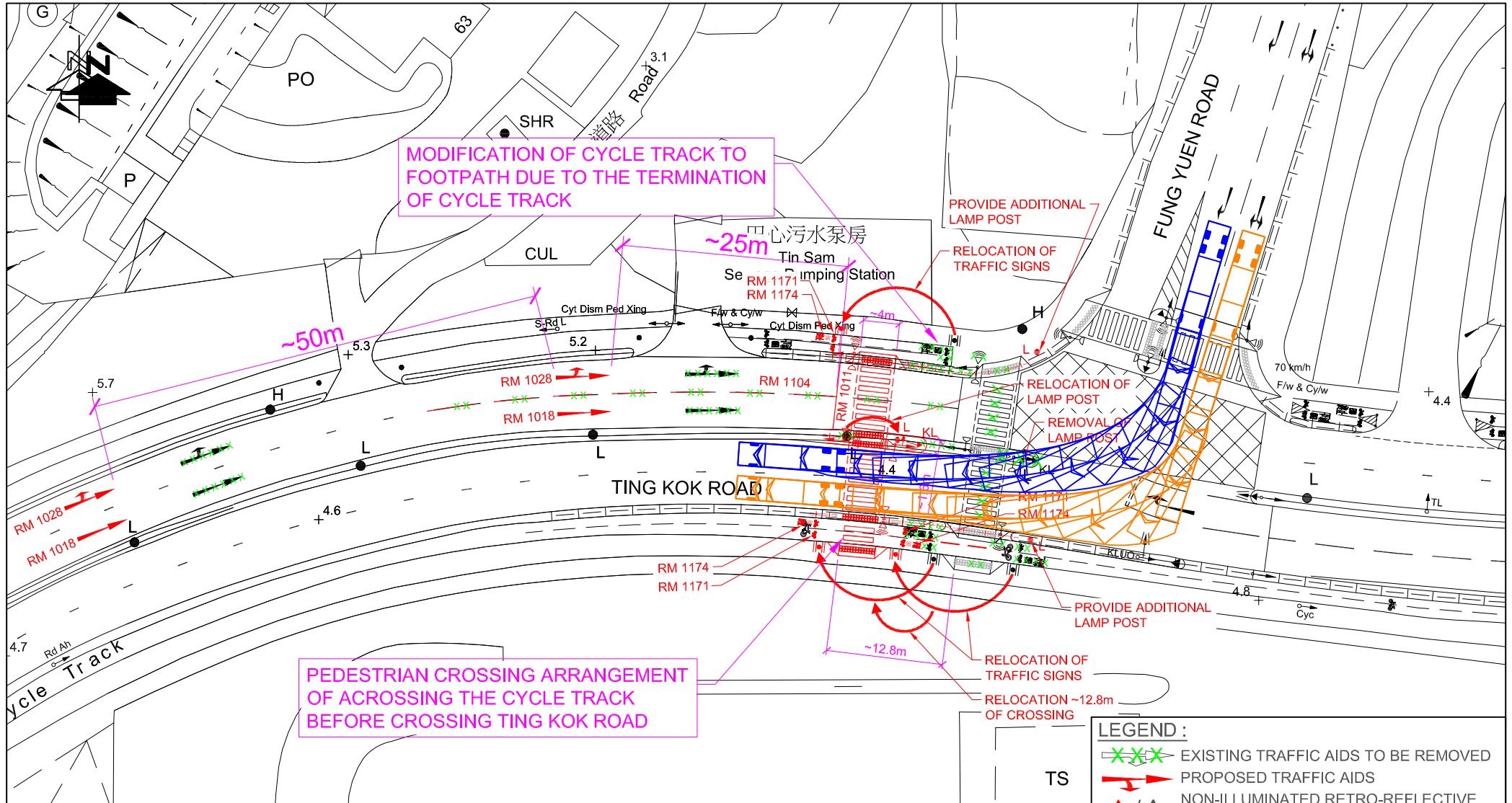


FIGURE NO.:	4.2	PROJECT TITLE:	S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/I/C" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T	
PROJECT NO.:	24093HK	DRAWING TITLE:	PLANNED JUNCTION LAYOUT OF TING KOK ROAD / FUNG YUEN ROAD (G) UNDER PLANNING APPLICATION No. A / NE-TK / 702	
SCALE:	1: 600 @A4	DATE:	20 DEC 2024	

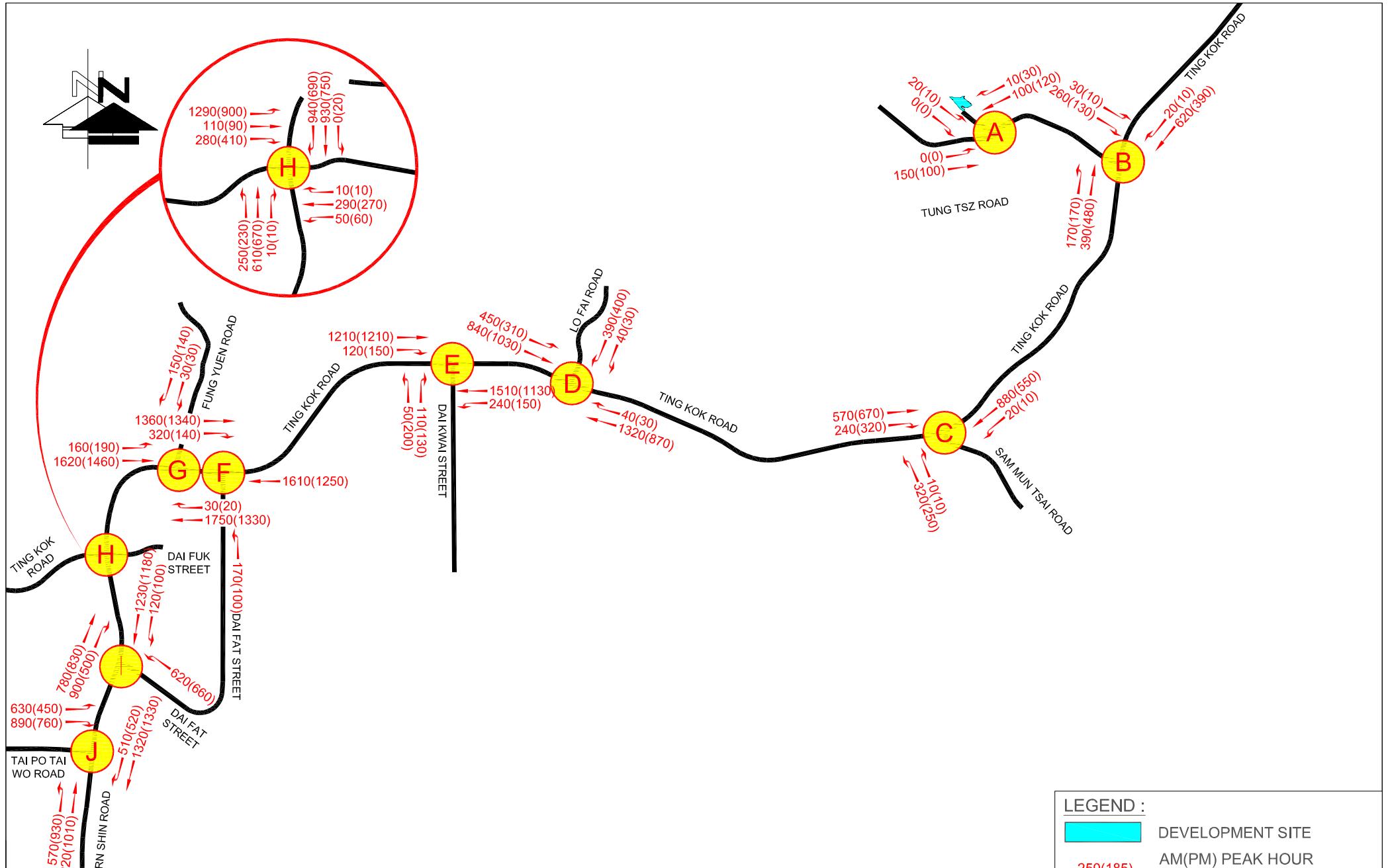


FIGURE NO.:

4.3

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T.

PROJECT NO.:

24093HK

DRAWING TITLE:

SCALE:
N.T.S. @A4

DATE:
30 DEC 2024

2033 REFERENCE TRAFFIC FLOWS



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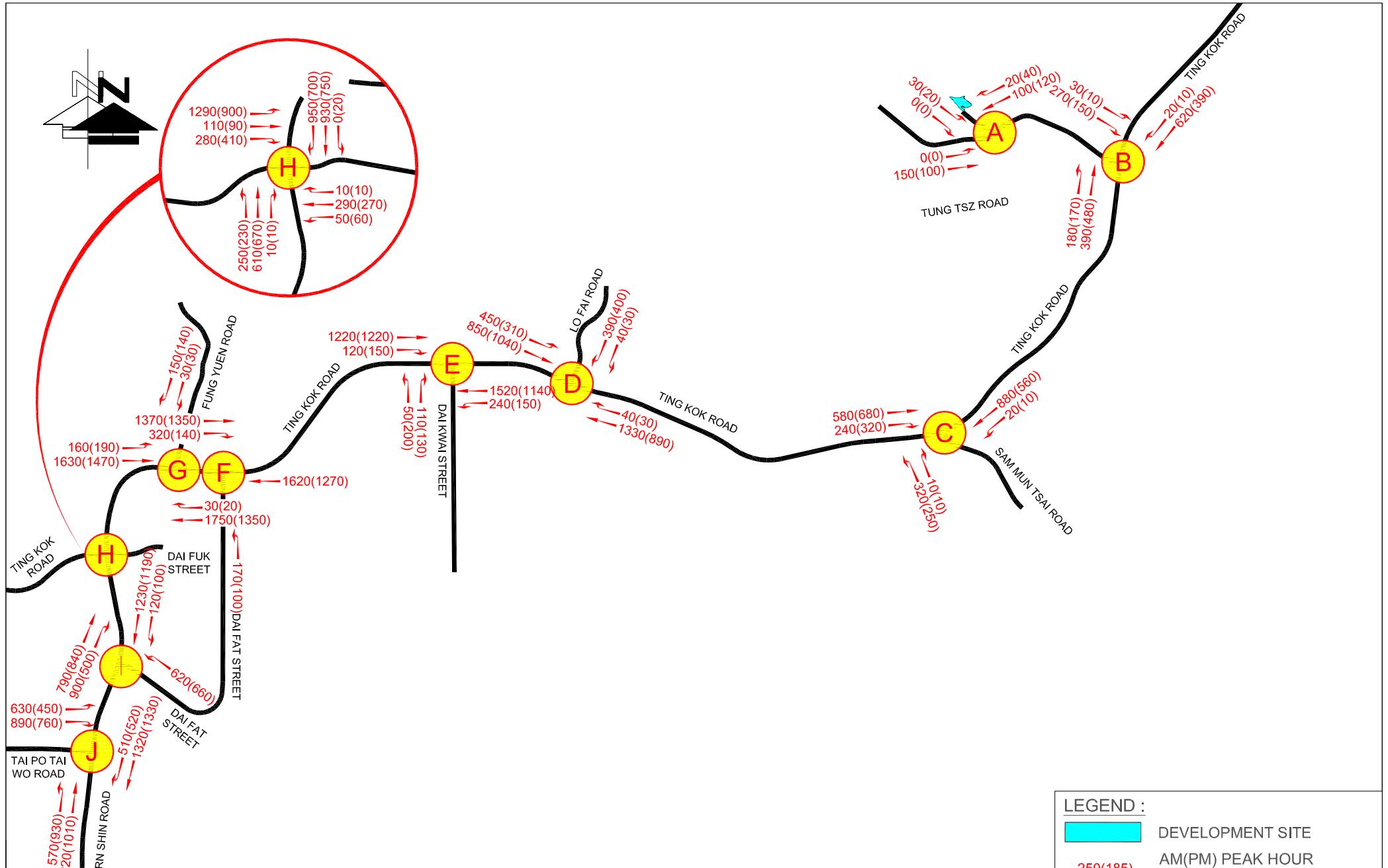


FIGURE NO.:

4.4

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T.

PROJECT NO.:

24093HK

DRAWING TITLE:

SCALE:
N.T.S. @A4DATE:
30 DEC 2024

2033 DESIGN TRAFFIC FLOWS

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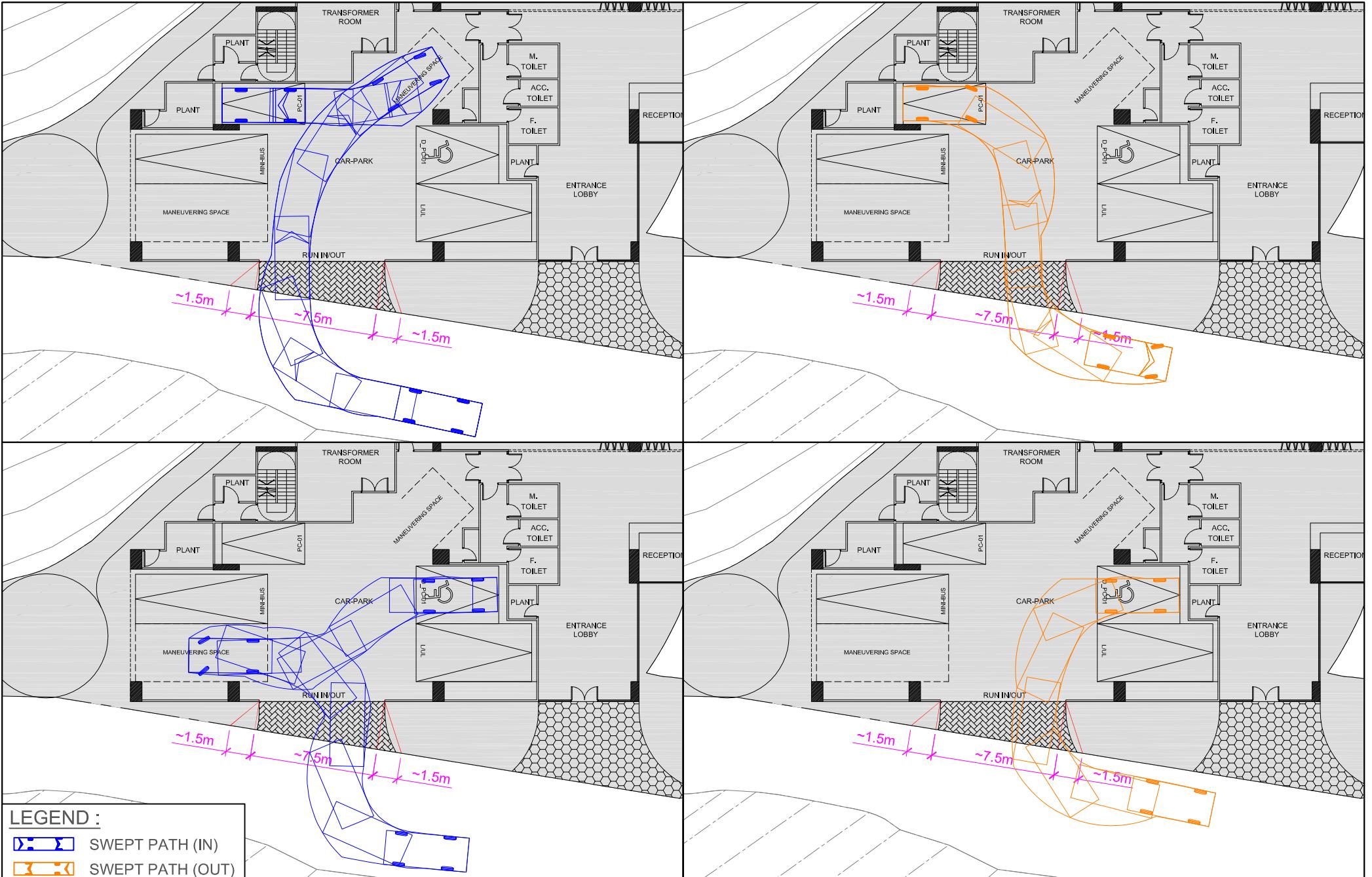


FIGURE NO.:

SP-01

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T.

PROJECT NO.:

24093HK

DRAWING TITLE:

SWEPT PATH ANALYSIS OF PRIVATE VEHICLE

SCALE:
1:300 @A4

DATE:
18 DEC 2024



FIGURE NO.:

SP-02

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T.

PROJECT NO.:

24093HK

DRAWING TITLE:

SCALE:
1:300 @A4

DATE:
18 DEC 2024

SWEPT PATH ANALYSIS OF MINI BUS



FIGURE NO.:

SP-03

PROJECT TITLE: S12A Amendment of Plan Application Approved Tung Tsz Outline Zoning Plan No. S/NE-TK/19 Proposed Re-zoning from "AGR" to "G/IC" for a Proposed "Social Welfare Facilities" Residential Care Home for the Elderly (RCHE) At Various Lots in D.D. 23, Tung Tsz, Tai Po, N.T.

PROJECT NO.:

24093HK

DRAWING TITLE:

SWEPT PATH ANALYSIS OF 7m VEHICLE

SCALE:
1:300 @A4

DATE:
18 DEC 2024



APPENDIX A

Junction Calculation Sheets

Junctions 8
PICADY 8 - Priority Intersection Module
Version: 8.0.5.523 [19102,19/06/2015] © Copyright TRL Limited, 2024
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

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: 24093 JnA.arc8

Path: \\CTA_NAS01\\Project\\CTA Consultants Limited\\CTA - Project\\24093HK (knc) - S12A Re-zoning from AGR to GIC for a Prop Social Welfare Facilities (RCHE) at Tung Tsz, Tai Po\\Calculation\\2024-12-30

Report generation date: 30/12/2024 12:37:18

- » Jn A - Existing 2024, AM
- » Jn A - Existing 2024, PM
- » Jn A - Reference 2033, AM
- » Jn A - Reference 2033, PM
- » Jn A - Design 2033, AM
- » Jn A - Design 2033, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Jn A - Design 2033								
Stream B-AC	0.04	5.14	0.04	A	0.03	4.97	0.03	A
Stream C-AB	0.04	6.53	0.04	A	0.08	6.60	0.07	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Jn A - Existing 2024								
Stream B-AC	0.03	5.05	0.03	A	0.01	4.88	0.01	A
Stream C-AB	0.02	6.41	0.02	A	0.04	6.37	0.03	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Jn A - Reference 2033								
Stream B-AC	0.03	5.07	0.03	A	0.01	4.90	0.01	A
Stream C-AB	0.02	6.43	0.02	A	0.06	6.50	0.05	A
Stream C-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 - Existing 2024, AM " model duration: 8:00 - 9:30

"D2 - Existing 2024, PM" model duration: 8:00 - 9:30

"D3 - Reference 2033, AM" model duration: 8:00 - 9:30

"D4 - Reference 2033, PM" model duration: 8:00 - 9:30

"D5 - Design 2033, AM" model duration: 8:00 - 9:30

"D6 - Design 2033, PM" model duration: 8:00 - 9:30

Run using Junctions 8.0.5.523 at 30/12/2024 12:37:14

File summary

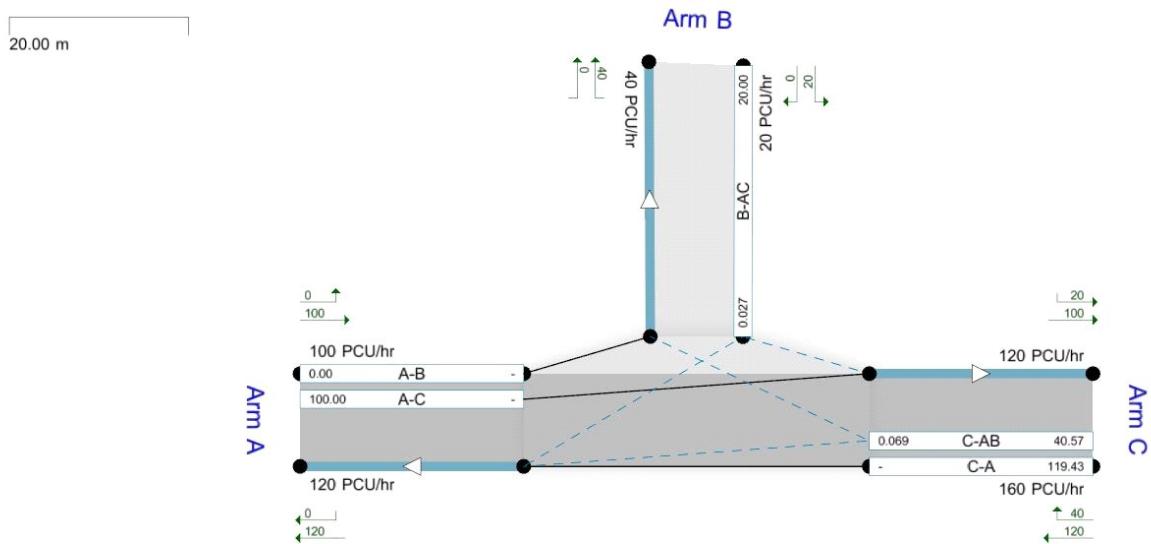
Title	(untitled)
Location	
Site Number	
Date	7/6/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	user
Description	

Analysis Options

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

Units

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



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

The junction diagram reflects the last run of ARCADY.

Jn A - Existing 2024, 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
Jn A	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
Existing 2024, AM	Existing 2024	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	Ting Kok Road	T-Junction	Two-way	A,B,C	5.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Tung Tsz Road (EB)		Major
B	B	Access Road		Minor
C	C	Tung Tsz Road (WB)		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	6.60		0.00		2.20	50.00	✓	1.00

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	4.80										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	611.947	0.109	0.274	0.173	0.392
1	B-C	773.526	0.115	0.292	-	-
1	C-B	602.919	0.228	0.228	-	-

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	✓	140.00	100.000
B	FLAT	✓	20.00	100.000
C	FLAT	✓	100.00	100.000

Turning Proportions

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

From	To		
	A	B	C
A	0.000	0.000	140.000
B	0.000	0.000	20.000
C	90.000	10.000	0.000

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

From	To		
	A	B	C
A	0.00	0.00	1.00
B	0.00	0.00	1.00
C	0.90	0.10	0.00

Vehicle Mix

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

From	To		
	A	B	C
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			
From		A	B	C
	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	0.03	5.05	0.03	A
C-AB	0.02	6.41	0.02	A
C-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	20.00	19.89	0.00	732.66	0.027	0.03	5.050	A
C-AB	10.03	9.96	0.00	572.14	0.018	0.02	6.403	A
C-A	89.97	89.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	140.00	140.00	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	20.00	20.00	0.00	732.66	0.027	0.03	5.050	A
C-AB	10.03	10.03	0.00	572.14	0.018	0.02	6.403	A
C-A	89.97	89.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	140.00	140.00	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	20.00	20.00	0.00	732.66	0.027	0.03	5.050	A
C-AB	10.03	10.03	0.00	572.14	0.018	0.02	6.403	A
C-A	89.97	89.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	140.00	140.00	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	20.00	20.00	0.00	732.66	0.027	0.03	5.052	A
C-AB	10.03	10.03	0.00	572.14	0.018	0.02	6.403	A
C-A	89.97	89.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	140.00	140.00	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	20.00	20.00	0.00	732.66	0.027	0.03	5.052	A
C-AB	10.03	10.03	0.00	572.14	0.018	0.02	6.406	A
C-A	89.97	89.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	140.00	140.00	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	20.00	20.00	0.00	732.66	0.027	0.03	5.052	A
C-AB	10.03	10.03	0.00	572.14	0.018	0.02	6.406	A
C-A	89.97	89.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	140.00	140.00	0.00	-	-	-	-	-

Jn A - Existing 2024, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Jn A	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
Existing 2024, PM	Existing 2024	PM		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	Ting Kok Road	T-Junction	Two-way	A,B,C	5.88	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Tung Tsz Road (EB)		Major
B	B	Access Road		Minor
C	C	Tung Tsz Road (WB)		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	6.60		0.00		2.20	50.00	✓	1.00

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	4.80										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	611.947	0.109	0.274	0.173	0.392
1	B-C	773.526	0.115	0.292	-	-
1	C-B	602.919	0.228	0.228	-	-

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	✓	90.00	100.000
B	FLAT	✓	10.00	100.000
C	FLAT	✓	130.00	100.000

Turning Proportions

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

From	To			
		A	B	C
A	0.000	0.000	90.000	
B	0.000	0.000	10.000	
C	110.000	20.000	0.000	

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

From	To			
		A	B	C
A	0.00	0.00	1.00	
B	0.00	0.00	1.00	
C	0.85	0.15	0.00	

Vehicle Mix

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

From	To			
		A	B	C
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)

From	To			
		A	B	C
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	0.01	4.88	0.01	A
C-AB	0.03	6.37	0.04	A
C-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	10.00	9.95	0.00	747.26	0.013	0.01	4.882	A
C-AB	20.13	19.99	0.00	584.99	0.034	0.04	6.369	A
C-A	109.87	109.87	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	90.00	90.00	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	10.00	10.00	0.00	747.26	0.013	0.01	4.882	A
C-AB	20.13	20.13	0.00	584.99	0.034	0.04	6.372	A
C-A	109.87	109.87	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	90.00	90.00	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	10.00	10.00	0.00	747.26	0.013	0.01	4.882	A
C-AB	20.13	20.13	0.00	584.99	0.034	0.04	6.374	A
C-A	109.87	109.87	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	90.00	90.00	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	10.00	10.00	0.00	747.26	0.013	0.01	4.882	A
C-AB	20.13	20.13	0.00	584.99	0.034	0.04	6.372	A
C-A	109.87	109.87	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	90.00	90.00	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	10.00	10.00	0.00	747.26	0.013	0.01	4.882	A
C-AB	20.13	20.13	0.00	584.99	0.034	0.04	6.374	A
C-A	109.87	109.87	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	90.00	90.00	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	10.00	10.00	0.00	747.26	0.013	0.01	4.882	A
C-AB	20.13	20.13	0.00	584.99	0.034	0.04	6.374	A
C-A	109.87	109.87	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	90.00	90.00	0.00	-	-	-	-	-

Jn A - Reference 2033, 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
Jn A	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
Reference 2033, AM	Reference 2033	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	Ting Kok Road	T-Junction	Two-way	A,B,C	5.52	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Tung Tsz Road (EB)		Major
B	B	Access Road		Minor
C	C	Tung Tsz Road (WB)		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	6.60		0.00		2.20	50.00	✓	1.00

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	4.80										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	611.947	0.109	0.274	0.173	0.392
1	B-C	773.526	0.115	0.292	-	-
1	C-B	602.919	0.228	0.228	-	-

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	✓	150.00	100.000
B	FLAT	✓	20.00	100.000
C	FLAT	✓	110.00	100.000

Turning Proportions

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

From	To		
	A	B	C
A	0.000	0.000	150.000
B	0.000	0.000	20.000
C	100.000	10.000	0.000

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

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

Vehicle Mix

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

From	To		
	A	B	C
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)

From	To		
	A	B	C
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	0.03	5.07	0.03	A
C-AB	0.02	6.43	0.02	A
C-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	20.00	19.89	0.00	729.74	0.027	0.03	5.071	A
C-AB	10.03	9.96	0.00	569.99	0.018	0.02	6.428	A
C-A	99.97	99.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	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	20.00	20.00	0.00	729.74	0.027	0.03	5.071	A
C-AB	10.03	10.03	0.00	569.99	0.018	0.02	6.428	A
C-A	99.97	99.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	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	20.00	20.00	0.00	729.74	0.027	0.03	5.071	A
C-AB	10.03	10.03	0.00	569.99	0.018	0.02	6.428	A
C-A	99.97	99.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	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	20.00	20.00	0.00	729.74	0.027	0.03	5.071	A
C-AB	10.03	10.03	0.00	569.99	0.018	0.02	6.428	A
C-A	99.97	99.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	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	20.00	20.00	0.00	729.74	0.027	0.03	5.071	A
C-AB	10.03	10.03	0.00	569.99	0.018	0.02	6.428	A
C-A	99.97	99.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	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	20.00	20.00	0.00	729.74	0.027	0.03	5.071	A
C-AB	10.03	10.03	0.00	569.99	0.018	0.02	6.428	A
C-A	99.97	99.97	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	0.00	-	-	-	-	-

Jn A - Reference 2033, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Jn A	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
Reference 2033, PM	Reference 2033	PM		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	Ting Kok Road	T-Junction	Two-way	A,B,C	6.10	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Tung Tsz Road (EB)		Major
B	B	Access Road		Minor
C	C	Tung Tsz Road (WB)		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	6.60		0.00		2.20	50.00	✓	1.00

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	4.80										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	611.947	0.109	0.274	0.173	0.392
1	B-C	773.526	0.115	0.292	-	-
1	C-B	602.919	0.228	0.228	-	-

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	✓	100.00	100.000
B	FLAT	✓	10.00	100.000
C	FLAT	✓	150.00	100.000

Turning Proportions

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

From	To		
	A	B	C
A	0.000	0.000	100.000
B	0.000	0.000	10.000
C	120.000	30.000	0.000

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

From	To		
	A	B	C
A	0.00	0.00	1.00
B	0.00	0.00	1.00
C	0.80	0.20	0.00

Vehicle Mix

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

	To		
From	A	B	C
	1.000	1.000	1.000
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		
From	A	B	C
	0.0	0.0	0.0
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	0.01	4.90	0.01	A
C-AB	0.05	6.50	0.06	A
C-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	10.00	9.95	0.00	744.34	0.013	0.01	4.901	A
C-AB	30.32	30.10	0.00	584.36	0.052	0.05	6.495	A
C-A	119.68	119.68	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	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	10.00	10.00	0.00	744.34	0.013	0.01	4.901	A
C-AB	30.32	30.32	0.00	584.36	0.052	0.05	6.496	A
C-A	119.68	119.68	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	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	10.00	10.00	0.00	744.34	0.013	0.01	4.903	A
C-AB	30.32	30.32	0.00	584.36	0.052	0.05	6.496	A
C-A	119.68	119.68	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	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	10.00	10.00	0.00	744.34	0.013	0.01	4.903	A
C-AB	30.32	30.32	0.00	584.36	0.052	0.06	6.499	A
C-A	119.68	119.68	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	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	10.00	10.00	0.00	744.34	0.013	0.01	4.903	A
C-AB	30.32	30.32	0.00	584.36	0.052	0.06	6.499	A
C-A	119.68	119.68	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	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	10.00	10.00	0.00	744.34	0.013	0.01	4.903	A
C-AB	30.32	30.32	0.00	584.36	0.052	0.06	6.499	A
C-A	119.68	119.68	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	0.00	-	-	-	-	-

Jn A - Design 2033, 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
Jn A	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
Design 2033, AM	Design 2033	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	Ting Kok Road	T-Junction	Two-way	A,B,C	5.70	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Tung Tsz Road (EB)		Major
B	B	Access Road		Minor
C	C	Tung Tsz Road (WB)		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	6.60		0.00		2.20	50.00	✓	1.00

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	4.80										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	611.947	0.109	0.274	0.173	0.392
1	B-C	773.526	0.115	0.292	-	-
1	C-B	602.919	0.228	0.228	-	-

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	✓	150.00	100.000
B	FLAT	✓	30.00	100.000
C	FLAT	✓	120.00	100.000

Turning Proportions

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

From	To		
	A	B	C
A	0.000	0.000	150.000
B	0.000	0.000	30.000
C	100.000	20.000	0.000

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

From	To		
	A	B	C
A	0.00	0.00	1.00
B	0.00	0.00	1.00
C	0.83	0.17	0.00

Vehicle Mix

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

From	To		
	A	B	C
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	0.04	5.14	0.04	A
C-AB	0.04	6.53	0.04	A
C-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	30.00	29.83	0.00	729.74	0.041	0.04	5.142	A
C-AB	20.12	19.98	0.00	571.19	0.035	0.04	6.529	A
C-A	99.88	99.88	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	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	30.00	30.00	0.00	729.74	0.041	0.04	5.144	A
C-AB	20.12	20.12	0.00	571.19	0.035	0.04	6.531	A
C-A	99.88	99.88	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	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	30.00	30.00	0.00	729.74	0.041	0.04	5.144	A
C-AB	20.12	20.12	0.00	571.19	0.035	0.04	6.534	A
C-A	99.88	99.88	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	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	30.00	30.00	0.00	729.74	0.041	0.04	5.144	A
C-AB	20.12	20.12	0.00	571.19	0.035	0.04	6.534	A
C-A	99.88	99.88	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	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	30.00	30.00	0.00	729.74	0.041	0.04	5.144	A
C-AB	20.12	20.12	0.00	571.19	0.035	0.04	6.531	A
C-A	99.88	99.88	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	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	30.00	30.00	0.00	729.74	0.041	0.04	5.144	A
C-AB	20.12	20.12	0.00	571.19	0.035	0.04	6.534	A
C-A	99.88	99.88	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	150.00	150.00	0.00	-	-	-	-	-

Jn A - Design 2033, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Jn A	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
Design 2033, PM	Design 2033	PM		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	Ting Kok Road	T-Junction	Two-way	A,B,C	6.07	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Tung Tsz Road (EB)		Major
B	B	Access Road		Minor
C	C	Tung Tsz Road (WB)		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	6.60		0.00		2.20	50.00	✓	1.00

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	4.80										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	611.947	0.109	0.274	0.173	0.392
1	B-C	773.526	0.115	0.292	-	-
1	C-B	602.919	0.228	0.228	-	-

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	✓	100.00	100.000
B	FLAT	✓	20.00	100.000
C	FLAT	✓	160.00	100.000

Turning Proportions

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

From	To			
		A	B	C
A	0.000	0.000	100.000	
B	0.000	0.000	20.000	
C	120.000	40.000	0.000	

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

From	To			
		A	B	C
A	0.00	0.00	1.00	
B	0.00	0.00	1.00	
C	0.75	0.25	0.00	

Vehicle Mix

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

From	To			
		A	B	C
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)

From	To			
		A	B	C
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	0.03	4.97	0.03	A
C-AB	0.07	6.60	0.08	A
C-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	20.00	19.89	0.00	744.34	0.027	0.03	4.969	A
C-AB	40.57	40.27	0.00	585.75	0.069	0.07	6.597	A
C-A	119.43	119.43	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	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	20.00	20.00	0.00	744.34	0.027	0.03	4.969	A
C-AB	40.57	40.57	0.00	585.75	0.069	0.07	6.605	A
C-A	119.43	119.43	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	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	20.00	20.00	0.00	744.34	0.027	0.03	4.969	A
C-AB	40.57	40.57	0.00	585.75	0.069	0.07	6.605	A
C-A	119.43	119.43	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	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	20.00	20.00	0.00	744.34	0.027	0.03	4.971	A
C-AB	40.57	40.57	0.00	585.75	0.069	0.07	6.602	A
C-A	119.43	119.43	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	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	20.00	20.00	0.00	744.34	0.027	0.03	4.971	A
C-AB	40.57	40.57	0.00	585.75	0.069	0.07	6.605	A
C-A	119.43	119.43	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	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	20.00	20.00	0.00	744.34	0.027	0.03	4.971	A
C-AB	40.57	40.57	0.00	585.75	0.069	0.08	6.602	A
C-A	119.43	119.43	0.00	-	-	-	-	-
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	100.00	100.00	0.00	-	-	-	-	-

Junctions 8
PICADY 8 - Priority Intersection Module
Version: 8.0.5.523 [19102,19/06/2015] © Copyright TRL Limited, 2024
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Filename: 24093 JnB.arc8

Path: \\CTA_NAS01\\Project\\CTA Consultants Limited\\CTA - Project\\24093HK (knc) - S12A Re-zoning from AGR to GIC for a Prop Social Welfare Facilities (RCHE) at Tung Tsz, Tai Po\\Calculation\\2024-12-30

Report generation date: 30/12/2024 14:37:27

- » Jn B - Existing 2024, AM
- » Jn B - Existing 2024, PM
- » Jn B - Reference 2033, AM
- » Jn B - Reference 2033, PM
- » Jn B - Design 2033, AM
- » Jn B - Design 2033, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Jn B - Design 2033								
Stream B-AC	1.43	17.23	0.59	C	0.44	9.98	0.31	A
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.03	5.98	0.03	A	0.02	6.07	0.02	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Jn B - Existing 2024								
Stream B-AC	0.94	13.10	0.49	B	0.31	8.68	0.24	A
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.02	5.71	0.02	A	0.02	5.91	0.02	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Jn B - Reference 2033								
Stream B-AC	1.31	16.32	0.57	C	0.37	9.43	0.27	A
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.03	5.96	0.03	A	0.02	6.07	0.02	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 - Existing 2024, AM " model duration: 8:00 - 9:30

"D2 - Existing 2024, PM" model duration: 8:00 - 9:30

"D3 - Reference 2033, AM" model duration: 8:00 - 9:30

"D4 - Reference 2033, PM" model duration: 8:00 - 9:30

"D5 - Design 2033, AM" model duration: 8:00 - 9:30

"D6 - Design 2033, PM" model duration: 8:00 - 9:30

Run using Junctions 8.0.5.523 at 30/12/2024 14:37:23

File summary

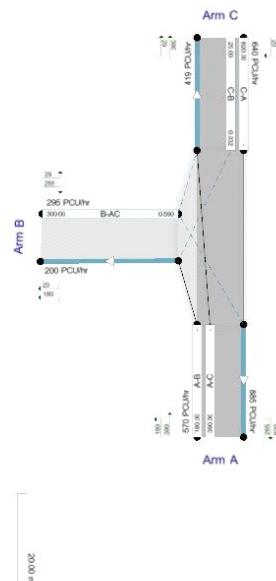
Title	(untitled)
Location	
Site Number	
Date	7/6/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	user
Description	

Analysis Options

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

Units

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



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

The junction diagram reflects the last run of ARCADY.

Jn B - Existing 2024, 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
Jn B	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
Existing 2024, AM	Existing 2024	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	Ting Kok Road	T-Junction	Two-way	A,B,C	12.83	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Ting Kok Road (NB)		Major
B	B	Tung Tsz Road		Minor
C	C	Ting Kok Road (SB)		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	10.70		0.00	✓	3.50	150.00		

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										150	150

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	725.644	0.105	0.266	0.167	0.380
1	B-C	862.208	0.105	0.266	-	-
1	C-B	754.327	0.233	0.233	-	-

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	✓	490.00	100.000
B	FLAT	✓	260.00	100.000
C	FLAT	✓	570.00	100.000

Turning Proportions

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

From	To		
	A	B	C
A	0.000	150.000	340.000
B	240.000	0.000	20.000
C	560.000	10.000	0.000

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

From	To		
	A	B	C
A	0.00	0.31	0.69
B	0.92	0.00	0.08
C	0.98	0.02	0.00

Vehicle Mix

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

From	To		
	A	B	C
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			
From		A	B	C
	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	0.49	13.10	0.94	B
C-A	-	-	-	-
C-B	0.02	5.71	0.02	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	260.00	256.32	0.00	534.82	0.486	0.92	12.765	B
C-A	560.00	560.00	0.00	-	-	-	-	-
C-B	10.00	9.94	0.00	640.40	0.016	0.02	5.710	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	340.00	340.00	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	260.00	259.95	0.00	534.80	0.486	0.93	13.091	B
C-A	560.00	560.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	640.40	0.016	0.02	5.710	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	340.00	340.00	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	260.00	259.98	0.00	534.80	0.486	0.94	13.097	B
C-A	560.00	560.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	640.40	0.016	0.02	5.710	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	340.00	340.00	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	260.00	259.99	0.00	534.80	0.486	0.94	13.099	B
C-A	560.00	560.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	640.40	0.016	0.02	5.710	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	340.00	340.00	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	260.00	259.99	0.00	534.80	0.486	0.94	13.099	B
C-A	560.00	560.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	640.40	0.016	0.02	5.710	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	340.00	340.00	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	260.00	260.00	0.00	534.80	0.486	0.94	13.099	B
C-A	560.00	560.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	640.40	0.016	0.02	5.710	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	340.00	340.00	0.00	-	-	-	-	-

Jn B - Existing 2024, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Jn B	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
Existing 2024, PM	Existing 2024	PM		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	Ting Kok Road	T-Junction	Two-way	A,B,C	8.48	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Ting Kok Road (NB)		Major
B	B	Tung Tsz Road		Minor
C	C	Ting Kok Road (SB)		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	10.70		0.00	✓	3.50	150.00		

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										150	150

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	725.644	0.105	0.266	0.167	0.380
1	B-C	862.208	0.105	0.266	-	-
1	C-B	754.327	0.233	0.233	-	-

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	✓	580.00	100.000
B	FLAT	✓	130.00	100.000
C	FLAT	✓	360.00	100.000

Turning Proportions

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

From	To			
		A	B	C
A	0.000	150.000	430.000	
B	120.000	0.000	10.000	
C	350.000	10.000	0.000	

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

From	To			
		A	B	C
A	0.00	0.26	0.74	
B	0.92	0.00	0.08	
C	0.97	0.03	0.00	

Vehicle Mix

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

From	To			
		A	B	C
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)

From	To			
		A	B	C
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	0.24	8.68	0.31	A
C-A	-	-	-	-
C-B	0.02	5.91	0.02	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	130.00	128.76	0.00	544.66	0.239	0.31	8.629	A
C-A	350.00	350.00	0.00	-	-	-	-	-
C-B	10.00	9.93	0.00	619.47	0.016	0.02	5.906	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	430.00	430.00	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	130.00	129.99	0.00	544.64	0.239	0.31	8.681	A
C-A	350.00	350.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	619.47	0.016	0.02	5.906	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	430.00	430.00	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	130.00	130.00	0.00	544.64	0.239	0.31	8.681	A
C-A	350.00	350.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	619.47	0.016	0.02	5.906	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	430.00	430.00	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	130.00	130.00	0.00	544.64	0.239	0.31	8.681	A
C-A	350.00	350.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	619.47	0.016	0.02	5.908	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	430.00	430.00	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	130.00	130.00	0.00	544.64	0.239	0.31	8.681	A
C-A	350.00	350.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	619.47	0.016	0.02	5.908	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	430.00	430.00	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	130.00	130.00	0.00	544.64	0.239	0.31	8.681	A
C-A	350.00	350.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	619.47	0.016	0.02	5.908	A
A-B	150.00	150.00	0.00	-	-	-	-	-
A-C	430.00	430.00	0.00	-	-	-	-	-

Jn B - Reference 2033, 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
Jn B	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
Reference 2033, AM	Reference 2033	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	Ting Kok Road	T-Junction	Two-way	A,B,C	15.65	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Ting Kok Road (NB)		Major
B	B	Tung Tsz Road		Minor
C	C	Ting Kok Road (SB)		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	10.70		0.00	✓	3.50	150.00		

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										150	150

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	725.644	0.105	0.266	0.167	0.380
1	B-C	862.208	0.105	0.266	-	-
1	C-B	754.327	0.233	0.233	-	-

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	✓	560.00	100.000
B	FLAT	✓	290.00	100.000
C	FLAT	✓	640.00	100.000

Turning Proportions

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

From	To		
	A	B	C
A	0.000	170.000	390.000
B	260.000	0.000	30.000
C	620.000	20.000	0.000

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

From	To		
	A	B	C
A	0.00	0.30	0.70
B	0.90	0.00	0.10
C	0.97	0.03	0.00

Vehicle Mix

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

From	To		
	A	B	C
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)

From	To		
	A	B	C
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	0.57	16.32	1.31	C
C-A	-	-	-	-
C-B	0.03	5.96	0.03	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	290.00	284.95	0.00	510.54	0.568	1.26	15.634	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	19.87	0.00	624.12	0.032	0.03	5.956	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	390.00	390.00	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	290.00	289.90	0.00	510.50	0.568	1.29	16.299	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	624.12	0.032	0.03	5.958	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	390.00	390.00	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	290.00	289.96	0.00	510.50	0.568	1.30	16.312	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	624.12	0.032	0.03	5.958	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	390.00	390.00	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	290.00	289.98	0.00	510.50	0.568	1.30	16.316	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	624.12	0.032	0.03	5.958	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	390.00	390.00	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	290.00	289.99	0.00	510.50	0.568	1.30	16.320	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	624.12	0.032	0.03	5.958	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	390.00	390.00	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	290.00	289.99	0.00	510.50	0.568	1.31	16.321	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	624.12	0.032	0.03	5.958	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	390.00	390.00	0.00	-	-	-	-	-

Jn B - Reference 2033, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Jn B	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
Reference 2033, PM	Reference 2033	PM		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	Ting Kok Road	T-Junction	Two-way	A,B,C	9.20	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Ting Kok Road (NB)		Major
B	B	Tung Tsz Road		Minor
C	C	Ting Kok Road (SB)		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	10.70		0.00	✓	3.50	150.00		

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										150	150

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	725.644	0.105	0.266	0.167	0.380
1	B-C	862.208	0.105	0.266	-	-
1	C-B	754.327	0.233	0.233	-	-

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	✓	650.00	100.000
B	FLAT	✓	140.00	100.000
C	FLAT	✓	400.00	100.000

Turning Proportions

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

From	To		
	A	B	C
A	0.000	170.000	480.000
B	130.000	0.000	10.000
C	390.000	10.000	0.000

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

From	To		
	A	B	C
A	0.00	0.26	0.74
B	0.93	0.00	0.07
C	0.98	0.03	0.00

Vehicle Mix

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

From	To		
	A	B	C
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)

From	To		
	A	B	C
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	0.27	9.43	0.37	A
C-A	-	-	-	-
C-B	0.02	6.07	0.02	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	140.00	138.55	0.00	521.90	0.268	0.36	9.358	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	9.93	0.00	603.20	0.017	0.02	6.068	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	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	140.00	139.99	0.00	521.87	0.268	0.36	9.426	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	603.20	0.017	0.02	6.068	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	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	140.00	140.00	0.00	521.87	0.268	0.36	9.426	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	603.20	0.017	0.02	6.068	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	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	140.00	140.00	0.00	521.87	0.268	0.37	9.426	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	603.20	0.017	0.02	6.070	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	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	140.00	140.00	0.00	521.87	0.268	0.37	9.426	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	603.20	0.017	0.02	6.070	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	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	140.00	140.00	0.00	521.87	0.268	0.37	9.426	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	603.20	0.017	0.02	6.070	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	0.00	-	-	-	-	-

Jn B - Design 2033, 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
Jn B	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
Design 2033, AM	Design 2033	AM		FLAT	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	Ting Kok Road	T-Junction	Two-way	A,B,C	16.53	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Ting Kok Road (NB)		Major
B	B	Tung Tsz Road		Minor
C	C	Ting Kok Road (SB)		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	10.70		0.00	✓	3.50	150.00		

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										150	150

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	725.644	0.105	0.266	0.167	0.380
1	B-C	862.208	0.105	0.266	-	-
1	C-B	754.327	0.233	0.233	-	-

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	✓	570.00	100.000
B	FLAT	✓	300.00	100.000
C	FLAT	✓	640.00	100.000

Turning Proportions

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

From	To		
	A	B	C
A	0.000	180.000	390.000
B	270.000	0.000	30.000
C	620.000	20.000	0.000

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

From	To		
	A	B	C
A	0.00	0.32	0.68
B	0.90	0.00	0.10
C	0.97	0.03	0.00

Vehicle Mix

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

From	To		
	A	B	C
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			
From		A	B	C
	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	0.59	17.23	1.43	C
C-A	-	-	-	-
C-B	0.03	5.98	0.03	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	300.00	294.50	0.00	508.87	0.590	1.37	16.407	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	19.87	0.00	621.80	0.032	0.03	5.979	A
A-B	180.00	180.00	0.00	-	-	-	-	-
A-C	390.00	390.00	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	300.00	299.88	0.00	508.82	0.590	1.40	17.202	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	621.80	0.032	0.03	5.981	A
A-B	180.00	180.00	0.00	-	-	-	-	-
A-C	390.00	390.00	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	300.00	299.96	0.00	508.82	0.590	1.41	17.220	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	621.80	0.032	0.03	5.981	A
A-B	180.00	180.00	0.00	-	-	-	-	-
A-C	390.00	390.00	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	300.00	299.98	0.00	508.82	0.590	1.42	17.227	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	621.80	0.032	0.03	5.981	A
A-B	180.00	180.00	0.00	-	-	-	-	-
A-C	390.00	390.00	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	300.00	299.99	0.00	508.82	0.590	1.42	17.230	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	621.80	0.032	0.03	5.981	A
A-B	180.00	180.00	0.00	-	-	-	-	-
A-C	390.00	390.00	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	300.00	299.99	0.00	508.82	0.590	1.43	17.232	C
C-A	620.00	620.00	0.00	-	-	-	-	-
C-B	20.00	20.00	0.00	621.80	0.032	0.03	5.981	A
A-B	180.00	180.00	0.00	-	-	-	-	-
A-C	390.00	390.00	0.00	-	-	-	-	-

Jn B - Design 2033, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Jn B	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
Design 2033, PM	Design 2033	PM		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	Ting Kok Road	T-Junction	Two-way	A,B,C	9.75	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Ting Kok Road (NB)		Major
B	B	Tung Tsz Road		Minor
C	C	Ting Kok Road (SB)		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	10.70		0.00	✓	3.50	150.00		

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										150	150

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	725.644	0.105	0.266	0.167	0.380
1	B-C	862.208	0.105	0.266	-	-
1	C-B	754.327	0.233	0.233	-	-

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	✓	650.00	100.000
B	FLAT	✓	160.00	100.000
C	FLAT	✓	400.00	100.000

Turning Proportions

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

From	To			
		A	B	C
A	0.000	170.000	480.000	
B	150.000	0.000	10.000	
C	390.000	10.000	0.000	

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

From	To			
		A	B	C
A	0.00	0.26	0.74	
B	0.94	0.00	0.06	
C	0.98	0.03	0.00	

Vehicle Mix

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

From	To			
		A	B	C
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)

From	To			
		A	B	C
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	0.31	9.98	0.44	A
C-A	-	-	-	-
C-B	0.02	6.07	0.02	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	160.00	158.25	0.00	520.54	0.307	0.44	9.891	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	9.93	0.00	603.20	0.017	0.02	6.068	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	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	160.00	159.99	0.00	520.51	0.307	0.44	9.985	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	603.20	0.017	0.02	6.068	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	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	160.00	160.00	0.00	520.51	0.307	0.44	9.985	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	603.20	0.017	0.02	6.068	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	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	160.00	160.00	0.00	520.51	0.307	0.44	9.985	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	603.20	0.017	0.02	6.070	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	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	160.00	160.00	0.00	520.51	0.307	0.44	9.985	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	603.20	0.017	0.02	6.070	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	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	160.00	160.00	0.00	520.51	0.307	0.44	9.985	A
C-A	390.00	390.00	0.00	-	-	-	-	-
C-B	10.00	10.00	0.00	603.20	0.017	0.02	6.070	A
A-B	170.00	170.00	0.00	-	-	-	-	-
A-C	480.00	480.00	0.00	-	-	-	-	-

TRAFFIC SIGNALS CALCULATION												CTA Consultants Ltd.										
												Job No: 24093HK										
Junction: Ting Kok Road / Sam Mun Tsai Road (C)												Description: 2024 Observed Traffic Flows										
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Nearside 0/1	Pro. Turning (%)	A.M.	P.M.	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)	Total Revised Saturation Flow (pcu/hr)	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Ting Kok Road	E	→	A	1,2	3.5	0	0	1	0%	0%	1965	1965	1965	1965	1965	1965	480	0.244		580	0.295	
Ting Kok Road	E	↓\	B	2,3	3.2	0	23	0	100%	100%	2072.3	2072.3	1945	1945	1945	1945	230	0.118		290	0.149	
Ting Kok Road	W	←	C	1	3.7	0	0	0	0%	0%	2123.7	0	2125	2125	0	0	415	0.195	0.195	249	0.117	0.117
Ting Kok Road	W	↓\	C	1	3.7	15	0	1	5%	4%	1983.7	4107.4	1975	1975	4100	4100	385	0.195		231	0.117	
Sam Mun Tsai Road	N	↖\	D	2,3,4	4.5	38	0	1	100%	100%	2065	2065	1985	1985	1985	1985	300	0.151	0.151	230	0.116	0.116
Sam Mun Tsai Road	N	↑\	E	4	3.5	0	17	1	100%	100%	1965	1965	1800	1800	1800	1800	10	0.006		10	0.006	

Notes:	Traffic Flow (pcu / hr)	AM(PM)	A.M. Check Phase	P.M. Check Phase
	480(580) → 230(290) ↓\	780(470) 20(10) ↘\	εy 0.346 L (sec) 8 C (sec) 88 y pract. 0.818 R.C. (%) 136%	εy 0.233 L (sec) 8 C (sec) 88 y pract. 0.818 R.C. (%) 251%

Stage / Phase Diagrams				

TRAFFIC SIGNALS CALCULATION

Job No: 24093HK

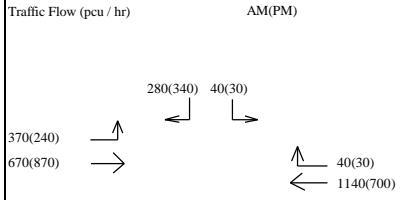
CTA Consultants Ltd.

Junction: Ting Kok Road / Lo Fai Road (D)

Description: 2024 Observed Traffic Flows

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Nearside / Offside	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak			
								A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Ting Kok Road	E		A	1	4.0	15	0	1	75%	45%	2018	4113	1875	1930	3970	4025	491	0.262	0.262	532	0.276	0.276
Ting Kok Road	E		A	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	549	0.262	0.262	578	0.276	0.276
Ting Kok Road	W		B	1	3.5	0	0	1	0%	0%	1965	4070	1965	1965	4045	4005	515	0.262	0.262	542	0.276	0.276
Ting Kok Road	W		C	2	3.5	0	0	1	0%	0%	1965	4070	1965	1965	4045	4005	323	0.164	0.164	92	0.047	0.047
Ting Kok Road	W		C	2	3.5	0	15	0	12%	31%	2105	0	2080	2040	0	0	342	0.164	0.164	96	0.047	0.047
Lo Fai Road	S		D	3	3.5	15	25	0	5% / 75%	6% / 84%	2105	4210	1965	1975	3925	3935	160	0.082	0.082	186	0.094	0.094
Lo Fai Road	S		D	3	3.5	0	20	0	100%	100%	2105	0	1960	1960	0	0	160	0.081	0.081	184	0.094	0.094

Notes:



A.M. Check Phase

$$\varepsilon_y = 0.508$$

L (sec) 14

C (sec) 120

y pract. 0.795

R.C. (%) 56%

P.M. Check Phase

ε_y 0.417

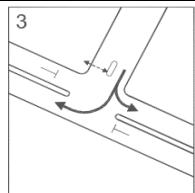
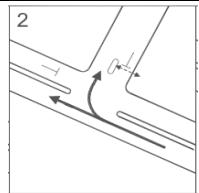
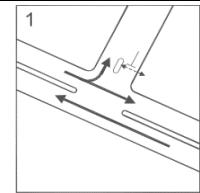
— (sec) 14

C (sec) 96

v pract. 0.769

C. (%) 84%

Stage / Phase Diagrams



I/G = 5s

I/G = 6s

-6s

TRAFFIC SIGNALS CALCULATION

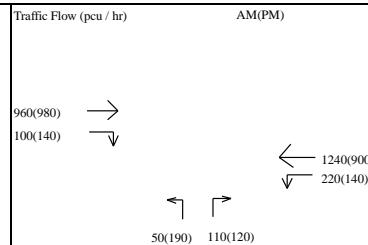
Job No: 24093HK

CTA Consultants Ltd.

Junction: **Ting Kok Road / Dai Kwai Street (E)**
Description: **2024 Observed Traffic Flows**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)			Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)			A.M. Peak			P.M. Peak		
						Left	Right	Nearside / 01	A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Ting Kok Road	E	→	A	1	3.5	0	0	1	0%	0%	1965	4070	1965	1965	0	0	709	0.361	0.361	503	0.256	0.256	
Ting Kok Road	E	↓→	B	2	3.5	0	0	1	0%	0%	1965	4070	1965	1965	3985	4000	173	0.088	0.088	303	0.154	0.154	
Ting Kok Road	E	↖↓	B	2	3.5	0	20	0	56%	45%	2105	0	2020	2035	0	0	178	0.088	0.088	314	0.154	0.154	
Ting Kok Road	W	↑←	C	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	755	0.360	0.360	537	0.256	0.256	
Ting Kok Road	W	↑↓	C	1	4.0	15	0	1	31%	28%	2018	4113	1955	1965	4050	4060	705	0.361	0.361	503	0.256	0.256	
Dai Kwai Street	N	↑↖	D	3	3.2	20	20	1	0% / 100%	23% / 77%	1935	0	1800	1800	0	0	110	0.061	0.061	157	0.087	0.087	
Dai Kwai Street	N	↑↑	D	3	3.2	15	0	1	100%	100%	1935	3870	1760	1760	3560	3560	50	0.028	0.028	153	0.087	0.087	

Notes:



A.M. Check Phase

P.M. Check Phase

εy 0.510

y 0.498

L (sec) 39
 C (sec) 120

(sec) 39

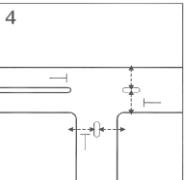
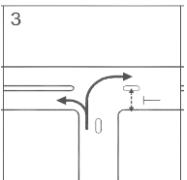
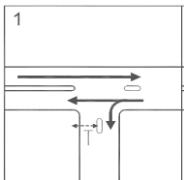
y pract. 0.608

act. 0.608

R.C. (%) 19%

(%) 22%

Stage / Phase Diagrams



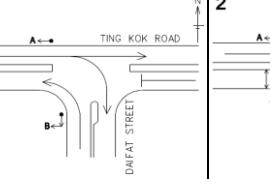
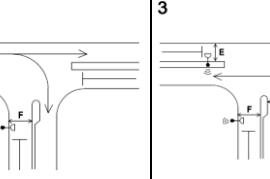
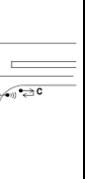
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I/G = 6s

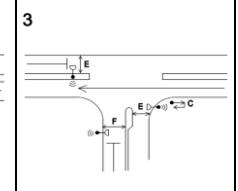
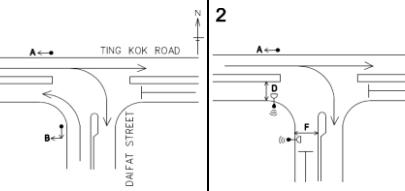
/G = 6s

5

G = 18s

TRAFFIC SIGNALS CALCULATION												Job No: 24093HK								CTA Consultants Ltd.					
Junction: Ting Kok Road / Dai Fat Street (F)												Description: 2024 Observed Traffic Flows													
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Near side 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak						
								Left	Right			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y				
Ting Kok Road	E		A	1,2	3.5	0	0	1	0%	0%	1965	4070	1965	1965	3985	4025	685	0.349	0.349	600	0.305	0.306			
Ting Kok Road	E		A	1,2	3.5	0	15	0	41%	21%	2105	0	2020	2060	0	0	705	0.349		630	0.306				
Ting Kok Road	W		B	3	3.5	0	0	0	0%	0%	2103.6	4100.6	2103.6	2103.6	4100.6	4100.6	682	0.324	0.324	518	0.246	0.246			
Ting Kok Road	W		B	3	3.8	0	0	1	0%	0%	1997	0	1997	1997	0	0	648	0.324		492	0.246				
Dai Fat Street	N		C	1	3.5	15	0	0	100%	100%	2105	4210	1915	1915	3875	3875	79	0.041		44	0.023				
Dai Fat Street	N		C	1	3.5	20	0	0	100%	100%	2105	0	1960	1960	0	0	81	0.041		46	0.023				
Notes:												Traffic Flow (pcu / hr)				AM(PM)		A.M. Check Phase			P.M. Check Phase				
												1100(1100)		290(130)				ϵ_y	0.673	L (sec)	10	ϵ_y	0.552	C (sec)	100
																		y pract.	0.810	R.C. (%)	20%	y pract.	0.810	R.C. (%)	47%
Stage / Phase Diagrams																									
																									
I/G = 0	I/G = 6s	I/G = 6s																							

Stage / Phase Diagrams



TRAFFIC SIGNALS CALCULATION												Job No: 24093HK CTA Consultants Ltd.																	
												Junction: Ting Kok Road / Fung Yuen Road (G) Description: 2024 Observed Traffic Flows																	
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak									
						Left	Right		A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y							
Ting Kok Road	E		1	A	3.5	17	0	1	16%	25%	1965	4080	1940	1925	4055	4040	703	0.362	0.365	652	0.339	0.339							
Ting Kok Road	E		1	A	3.6	0	0	0	0%	0%	2115	0	2115	2115	0	0	767	0.363		718	0.339								
Ting Kok Road	W		2,3	A,B	3.6	0	19	0	4%	3%	2115	0	2110	2110	0	0	769	0.365		573	0.272								
Ting Kok Road	W		2	A,B	3.6	0	0	1	0%	0%	1975	4090	1975	1975	4085	4085	721	0.365		537	0.272								
Fung Yuen Road	S		4	C	3.6	11	14	1	39% / 61%	32% / 68%	1975	4090	1765	1770	3710	3715	76	0.043	0.043	62	0.035	0.035							
Fung Yuen Road	S		4	C	3.6	0	17	0	100%	100%	2115	0	1945	1945	0	0	84	0.043		68	0.035								
Pedestrian Crossing	5p	D				Min. Crossing Time = 8Gm + 8FGm = 16s						Min. Crossing Time = 11Gm + 10FGm = 21s																	
Notes:												Traffic Flow (pcu / hr)				AM(PM)		A.M. Check Phase			P.M. Check Phase								
																ε_y	0.408	ε_y	0.374	L (sec)	47	L (sec)	47						
																C (sec)	104	C (sec)	96	y pract.	0.493	y pract.	0.459						
																R.C. (%)	21%	R.C. (%)	23%										
Stage / Phase Diagrams																													
A			B			C			D																				
I/G = 4s	I/G = 6s+5s			I/G = 6s			I/G = 12s+16s																						

TRAFFIC SIGNALS CALCULATION

Job No: 24093HK

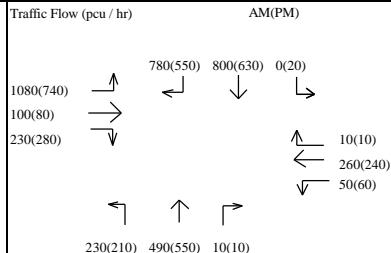
CTA Consultants Ltd.

Junction: Ting Kok Road / Yuen Shin Road / Dai Fuk Street (H)

Description: **2024 Observed Traffic Flows**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak		
						Left	Right		A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Ting Kok Road	E	↑	A	1,2	3.5	15	0	0	100%	100%	2105	4210	1915	1915	3875	3875	534	0.279		366	0.191	
Ting Kok Road	E	→↑	A	1,2	3.5	20	0	0	100%	100%	2105	0	1960	1960	0	0	546	0.279		374	0.191	
Ting Kok Road	E	↓↓	B	2	3.5	0	0	1	0%	0%	1965	1965	1965	1965	1965	1965	100	0.051		80	0.041	
Ting Kok Road	E	↓↓	B	2	3.1	0	20	0	100%	100%	2067	2067	1925	1925	1925	1925	230	0.119	0.119	280	0.145	0.145
Yuen Shin Road	N	↖↑	C	2,3	3.5	15	0	1	100%	100%	1965	1965	1785	1785	1785	1785	230	0.129		210	0.118	
Yuen Shin Road	N	→→→	D	3	3.1	0	0	1	0%	0%	1927	6111	1927	1927	6111	6111	155	0.080	0.080	173	0.090	0.090
Yuen Shin Road	N	→→→	D	3	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	168	0.080		189	0.090	
Yuen Shin Road	N	→→→	D	3	3.3	0	0	0	0%	0%	2089	0	2089	2089	0	0	168	0.080		188	0.090	
Yuen Shin Road	N	↗	D	3	3.5	0	20	0	100%	100%	2105	2105	1960	1960	1960	1960	10	0.005		10	0.005	
Dai Fuk Street	W	↑↑	E	4	3.0	17	0	1	33%	41%	1915	4000	1860	1850	3935	3925	151	0.081		146	0.079	
Dai Fuk Street	W	↑↓	E	4	3.3	0	17	0	6%	6%	2085	0	2075	2075	0	0	169	0.081		164	0.079	
Ting Kok Road	S	↑↑	F	1	3.5	0	22	1	100%	100%	1965	3930	1835	1835	3655	3655	392	0.213	0.213	276	0.150	0.159
Ting Kok Road	S	↑↑	F	1	3.5	0	19	1	100%	100%	1965	0	1820	1820	0	0	388	0.213		274	0.150	
Ting Kok Road	S	↖↖	F	1	4.0	15	0	1	0%	6%	2018	4113	2020	2005	4115	4100	393	0.194		318	0.159	
Ting Kok Road	S	↖↖	F	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	407	0.195		332	0.159	

Notes:



A.M. Check Phase

P.M. Check Phase

$$\varepsilon_y = 0.413$$

ε_y 0.394

L (sec) 40

L (sec) 40

C (sec) 100

C (sec) 96

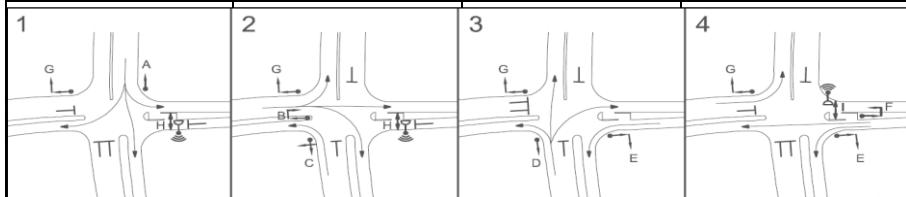
y pract. 0.540

y pract. 0.525

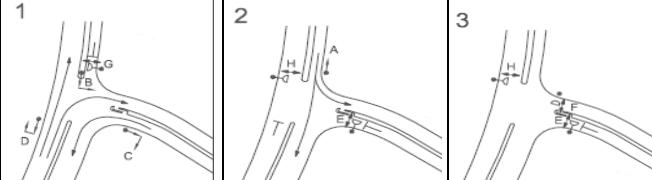
R.C. (%) 51%

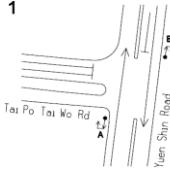
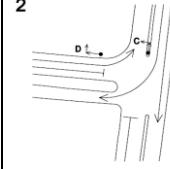
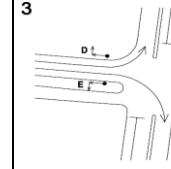
R.C. (%) 33%

Stage / Phase Diagrams



I/G = 7s



TRAFFIC SIGNALS CALCULATION												Job No: 24093HK										CTA Consultants Ltd.			
Junction: Tai Po Tai Wo Road / Yuen Shin Road (J)												Description: 2024 Observed Traffic Flows													
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Near side 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak						
								A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y				
Tai Po Tai Wo Road	E	↑	A	2,3	5.8	15	0	1	100%	100%	2199	2199	2000	2000	2000	2000	490	0.245	0.214	330	0.165	0.183			
Tai Po Tai Wo Road	E	↓\	B	3	3.5	0	15	0	100%	100%	2105	4210	1915	1915	3830	3830	410	0.214		350	0.183				
Tai Po Tai Wo Road	E	↓\	B	3	3.5	0	15	0	100%	100%	2105	0	1915	1915	0	0	410	0.214		350	0.183				
Yuen Shin Road	N	→	C	1	3.1	0	0	1	0%	0%	1927	6111	1927	1927	6111	6111	334	0.173	0.173	277	0.144	0.144			
Yuen Shin Road	N	→	C	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	363	0.173		302	0.144				
Yuen Shin Road	N	→	C	1	3.3	0	0	0	0%	0%	2089	0	2089	2089	0	0	362	0.173		301	0.144				
Yuen Shin Road	S	└─┐	D	2	3.1	0	20	0	100%	100%	2067	2067	1925	1925	1925	1925	440	0.229	0.229	420	0.218	0.218			
Yuen Shin Road	S	└─┐	E	1,2	3.5	0	0	0	0%	0%	2103.6	4100.6	2103.6	2103.6	4100.6	4100.6	595	0.283		580	0.276				
Yuen Shin Road	S	└─┐	E	1,3	3.8	0	0	1	0%	0%	1997	0	1997	1997	0	0	565	0.283		550	0.276				
Notes:								Traffic Flow (pcu / hr) AM(PM)								A.M. Check Phase			P.M. Check Phase						
								440(420) 1160(1130) 490(330) 820(700) 520(850) 1060(880)								εy	0.616		εy	0.545					
								L (sec)								L (sec)	13		C (sec)	100					
								y pract.								y pract.	0.783		R.C. (%)	27%					
																R.C. (%)	44%								
Stage / Phase Diagrams																									
																									
I/G = 5s	I/G = 5s		I/G = 6s																						

TRAFFIC SIGNALS CALCULATION Job No: 24093HK **CTA Consultants Ltd.**

Junction: Ting Kok Road / Sam Mun Tsai Road (C)

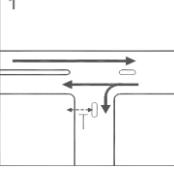
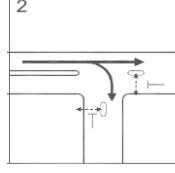
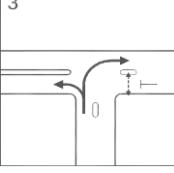
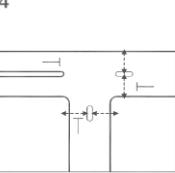
Description: 2033 Reference Traffic Flows

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Nearside 0/1	Pro. Turning (%)	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak				
											A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y		
Ting Kok Road	E	→	A	1,2	3.5	0	0	1	0%	0%	1965	1965	1965	1965	1965	570	0.290		670	0.341		
Ting Kok Road	E	↓\	B	2,3	3.2	0	23	0	100%	100%	2072.3	2072.3	1945	1945	1945	240	0.123		320	0.165		
Ting Kok Road	W	←	C	1	3.7	0	0	0	0%	0%	2123.7	0	2125	2125	0	0	466	0.219	0.220	290	0.136	0.137
Ting Kok Road	W	↓\	C	1	3.7	15	0	1	5%	4%	1983.7	4107.4	1975	1975	4100	4100	434	0.220		270	0.137	
Sam Mun Tsai Road	N	↖\	D	2,3,4	4.5	38	0	1	100%	100%	2065	2065	1985	1985	1985	320	0.161	0.161	250	0.126	0.126	
Sam Mun Tsai Road	N	↑\	E	4	3.5	0	17	1	100%	100%	1965	1965	1800	1800	1800	10	0.006		10	0.006		

Notes:	Traffic Flow (pcu / hr) AM(PM)	A.M. Check Phase	P.M. Check Phase
	570(670) → 240(320) ↓\	εy 0.381 L (sec) 8 C (sec) 88 y pract. 0.818 R.C. (%) 115%	εy 0.263 L (sec) 8 C (sec) 88 y pract. 0.818 R.C. (%) 212%
	880(550) ← 20(10) ↓\		
	320(250) 10(10)		

Stage / Phase Diagrams				
	1 L/G = 5s		2 L/G = 0s	
	3 L/G = 0s		4 L/G = 5s	

TRAFFIC SIGNALS CALCULATION												Job No: 24093HK								CTA Consultants Ltd.			
Junction: Ting Kok Road / Lo Fai Road (D)												Description: 2033 Reference Traffic Flows											
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		Near side 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak			
						Left	Right		A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Ting Kok Road	E		A	1	4.0	15	0	1	74%	48%	2018	4113	1880	1925	3975	4020	610	0.324	0.325	642	0.333	0.333	
Ting Kok Road	E		A	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	680	0.325		698	0.333		
Ting Kok Road	W		B	1	3.5	0	0	1	0%	0%	1965	4070	1965	1965	4050	4020	638	0.324		655	0.333		
Ting Kok Road	W		C	2	3.5	0	0	1	0%	0%	1965	4070	1965	1965	4050	4020	351	0.178		120	0.061		
Ting Kok Road	W		C	2	3.5	0	15	0	11%	24%	2105	0	2085	2055	0	0	372	0.178	0.178	125	0.061	0.061	
Lo Fai Road	S		D	3	3.5	15	25	0	9% / 814%	/ 86%	2105	4210	1970	1975	3930	3935	216	0.109	0.109	216	0.109	0.109	
Lo Fai Road	S		D	3	3.5	0	20	0	100%	100%	2105	0	1960	1960	0	0	214	0.109		214	0.109		
Notes:						Traffic Flow (pcu / hr)						AM(PM)				A.M. Check Phase			P.M. Check Phase				
																εy	0.613		εy	0.504			
																L (sec)	14		L (sec)	14			
																C (sec)	120		C (sec)	96			
																y pract.	0.795		y pract.	0.769			
																R.C. (%)	30%		R.C. (%)	53%			
Stage / Phase Diagrams																							
I/G = 5s		I/G = 6s		I/G = 6s																			

TRAFFIC SIGNALS CALCULATION													CTA Consultants Ltd.									
													Job No: 24093HK									
													Junction: Ting Kok Road / Dai Kwai Street (E)									
													Description: 2033 Reference Traffic Flows									
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)	Total Revised Saturation Flow (pcu/hr)		A.M. Peak		P.M. Peak					
								A.M.	P.M.				A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y		
Ting Kok Road	E	→	A	1	3.5	0	0	1	0%	0%	1965	4070	1965	1965	0	0	849	0.432	0.432	619	0.315	0.315
Ting Kok Road	E	→	B	2	3.5	0	0	1	0%	0%	1965	4070	1965	1965	3995	4010	237	0.121	0.121	363	0.185	0.185
Ting Kok Road	E	↓	B	2	3.5	0	20	0	49%	40%	2105	0	2030	2045	0	0	245	0.121	0.121	378	0.185	0.185
Ting Kok Road	W	←	C	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	904	0.431	0.431	660	0.315	0.315
Ting Kok Road	W	↓	C	1	4.0	15	0	1	28%	24%	2018	4113	1960	1970	4055	4065	846	0.432	0.432	620	0.315	0.315
Dai Kwai Street	N	↖	D	3	3.2	20	20	1	0% / 100%	22% / 78%	1935	0	1800	1800	0	0	110	0.061	0.061	167	0.093	0.093
Dai Kwai Street	N	↑	D	3	3.2	15	0	1	100%	100%	1935	3870	1760	1760	3560	3560	50	0.028	0.028	163	0.093	0.093
Notes:													Traffic Flow (pcu / hr)		AM(PM)		A.M. Check Phase		P.M. Check Phase			
													εy	0.613	εy	0.592	L (sec)	39	L (sec)	39		
													εy	0.613	εy	0.592	C (sec)	120	C (sec)	120		
													y pract.	0.608	y pract.	0.608	R.C. (%)	-1%	R.C. (%)	3%		
													1210(1210)	→	1510(1130)	↙	50(200)	110(130)	240(150)			
Stage / Phase Diagrams																						
																						
I/G = 6s	I/G = 6s	I/G = 12s	I/G = 18s																			

TRAFFIC SIGNALS CALCULATION

Job No: 24093HK

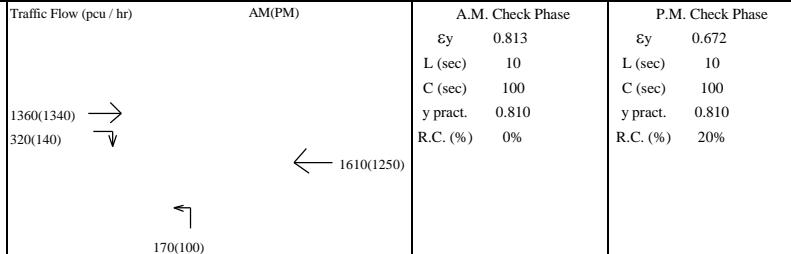
CTA Consultants Ltd.

Junction: Ting Kok Road / Dai Fat Street (F)

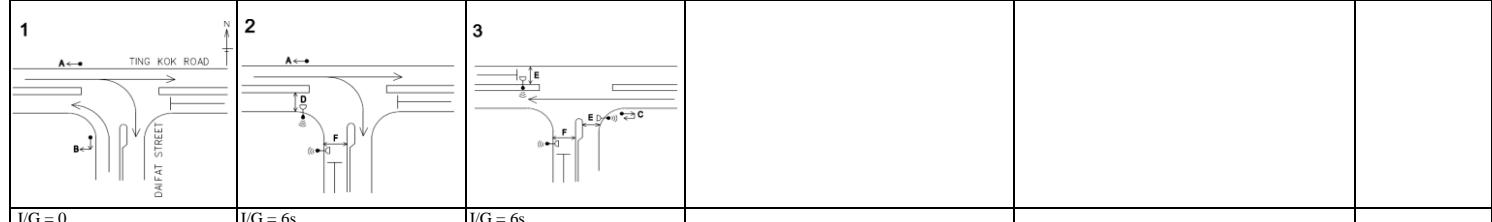
Description: **2033 Reference Traffic Flows**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak			
								A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Ting Kok Road	E		A	1,2	3.5	0	0	1	0%	0%	1965	4070	1965	1965	3995	4030	827	0.421	0.421	721	0.367	0.367
Ting Kok Road	E		A	1,2	3.5	0	15	0	37%	18%	2105	0	2030	2065	0	0	853	0.420		759	0.367	
Ting Kok Road	W		B	3	3.5	0	0	0	0%	0%	2103.6	4100.6	2103.6	2103.6	4100.6	4100.6	826	0.393	0.393	641	0.305	0.305
Ting Kok Road	W		B	3	3.8	0	0	1	0%	0%	1997	0	1997	1997	0	0	784	0.393		609	0.305	
Dai Fat Street	N		C	1	3.5	15	0	0	100%	100%	2105	4210	1915	1915	3875	3875	84	0.044		49	0.026	
Dai Fat Street	N		C	1	3.5	20	0	0	100%	100%	2105	0	1960	1960	0	0	86	0.044		51	0.026	

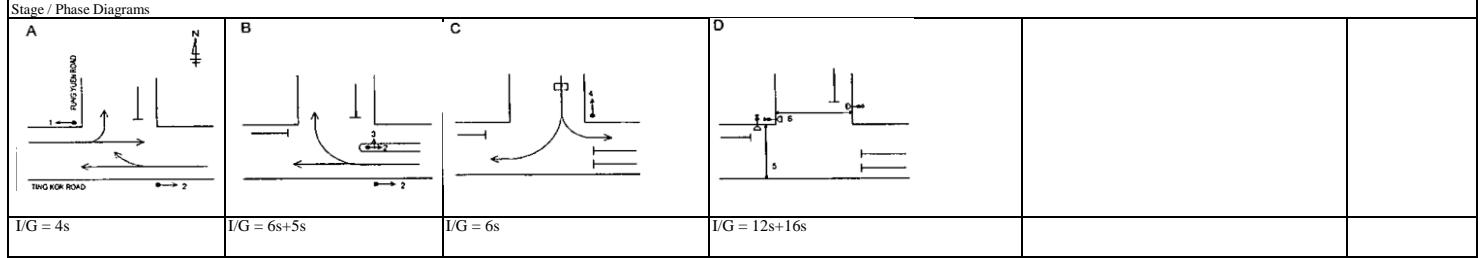
Notes:



Stage / Phase Diagrams



TRAFFIC SIGNALS CALCULATION										Job No: 24093HK		CTA Consultants Ltd.										
Junction: Ting Kok Road / Fung Yuen Road (G)										Description: 2033 Reference Traffic Flows												
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak			
								A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Ting Kok Road	E		1	A	3.5	17	0	1	19%	24%	1965	4080	1935	1925	4050	4040	850	0.439	0.440	786	0.408	0.409
Ting Kok Road	E		1	A	3.6	0	0	0	0%	0%	2115	0	2115	2115	0	0	930	0.440	0.440	864	0.409	0.409
Ting Kok Road	W		2,3	A,B	3.6	0	19	0	3%	3%	2115	0	2110	2110	0	0	919	0.436	0.436	697	0.330	0.330
Ting Kok Road	W		2	A,B	3.6	0	0	1	0%	0%	1975	4090	1975	1975	4085	4085	861	0.436	0.436	653	0.330	0.330
Fung Yuen Road	S		4	C	3.6	11	14	1	35% / 65%	37% / 63%	1975	4090	1770	1765	3715	3710	86	0.048	0.048	81	0.046	0.046
Fung Yuen Road	S		4	C	3.6	0	17	0	100%	100%	2115	0	1945	1945	0	0	94	0.048	0.048	89	0.046	0.046
Pedestrian Crossing				5p	D	Min. Crossing Time = 8Gm + 8FGm = 16s						6p D				Min. Crossing Time = 11Gm + 10FGm = 21s						
Notes:										Traffic Flow (pcu/hr)		AM(PM)		A.M. Check Phase			P.M. Check Phase					
										150(140) 30(30)		← →		Ey 0.488			Ey 0.454					
										160(190) 1620(1460)		↑ ↓		L(sec) 47			L(sec) 47					
										30(20) ← → 1750(1330)		↑ ↓		C(sec) 104			C(sec) 96					
										y pract. 0.493		↑ ↓		y pract. 0.459			R.C. (%) 1%					
										R.C. (%) 1%		↑ ↓		R.C. (%) 1%								



TRAFFIC SIGNALS CALCULATION

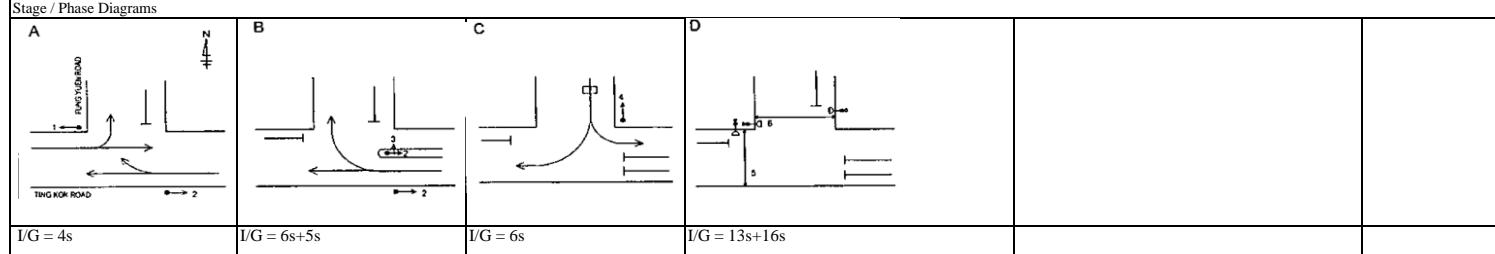
Job No: 24093HK

CTA Consultants Ltd.

Junction: **Ting Kok Road / Fung Yuen Road (Jn G)**

Description: **2029 Reference Traffic Flows (Shifting of Crossing at Ting Kok Road)**

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TRAFFIC SIGNALS CALCULATION

Job No: 24093HK

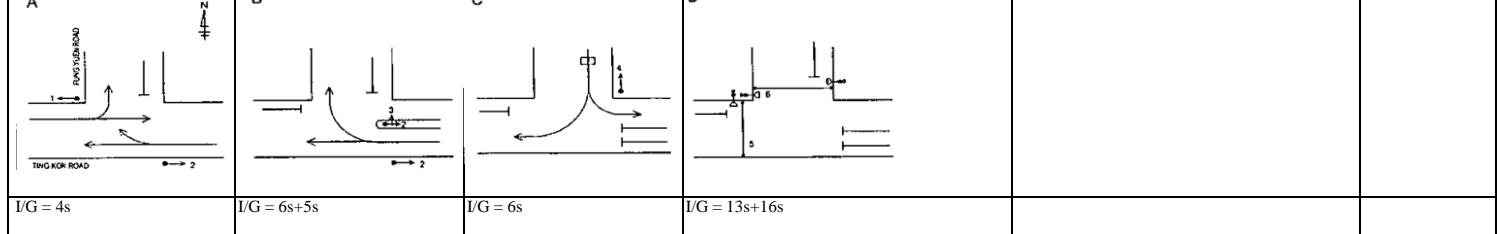
CTA Consultants Ltd.

Junction: Ting Kok Road / Fung Yuen Road (Jn G)

Description: 2029 Reference Traffic Flows (Shifting of Crossing at Ting Kok Road)(With Fung Yuen CDA (I))

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak			
						Left	Right		A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Ting Kok Road	E		1	A	3.5	17	0	1	30%	35%	1965	4080	1915	1905	4030	4020	898	0.469	0.469	830	0.435	0.435	
Ting Kok Road	E		1	A	3.6	0	0	0	0%	0%	2115	0	2115	2115	0	0	992	0.469	0.469	920	0.435	0.435	
Ting Kok Road	W		2,3	A,B	3.6	0	19	0	4%	4%	2115	0	2110	2110	0	0	924	0.438	0.438	702	0.333	0.333	
Ting Kok Road	W		2	A,B	3.6	0	0	1	0%	0%	1975	4090	1975	1975	4085	4085	866	0.438	0.438	658	0.333	0.333	
Fung Yuen Road	S		4	C	3.6	11	14	1	7% / 63%	0% / 70%	1975	4090	1765	1770	3710	3715	162	0.092	0.092	133	0.075	0.075	
Fung Yuen Road	S		4	C	3.6	0	17	0	100%	100%	2115	0	1945	1945	0	0	178	0.092	0.092	147	0.075	0.075	
Pedestrian Crossing	5p	D							Min. Crossing Time = 8Gm + 8FGm = 16s														
	6p	D							Min. Crossing Time = 11Gm + 10FGm = 21s														
Notes:						Traffic Flow (pcu / hr)						AM(PM)				A.M. Check Phase			P.M. Check Phase				
																ϵ_y 0.561			ϵ_y 0.511				
												L (sec) 48				L (sec) 48			C (sec) 104				
												y pract. 0.485				y pract. 0.450			R.C. (%) -14%				
												R.C. (%) -12%											
Stage / Phase Diagrams																							
I/G = 4s	I/G = 6s+5s	I/G = 6s	I/G = 13s+16s																				

Stage / Phase Diagrams



TRAFFIC SIGNALS CALCULATION

Job No: 24093HK

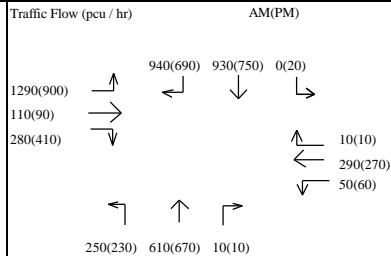
CTA Consultants Ltd.

Junction: Ting Kok Road / Yuen Shin Road / Dai Fuk Street (H)

Description: **2033 Reference Traffic Flows**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Nearside / Offside	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak			
								A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Ting Kok Road	E	↑	A	1,2	3.5	15	0	0	100%	100%	2105	4210	1915	1915	3875	3875	638	0.333	445	0.232		
Ting Kok Road	E	↓	A	1,2	3.5	20	0	0	100%	100%	2105	0	1960	1960	0	0	652	0.333	455	0.232		
Ting Kok Road	E	↓	B	2	3.5	0	0	1	0%	0%	1965	1965	1965	1965	1965	1965	110	0.056	90	0.046		
Ting Kok Road	E	↓	B	2	3.1	0	20	0	100%	100%	2067	2067	1925	1925	1925	1925	280	0.145	410	0.213	0.213	
Yuen Shin Road	N	↑	C	2,3	3.5	15	0	1	100%	100%	1965	1965	1785	1785	1785	1785	250	0.140	230	0.129		
Yuen Shin Road	N	→→→	D	3	3.1	0	0	1	0%	0%	1927	6111	1927	1927	6111	6111	192	0.100	0.100	211	0.110	0.110
Yuen Shin Road	N	→→→	D	3	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	209	0.100	230	0.110		
Yuen Shin Road	N	→→→	D	3	3.3	0	0	0	0%	0%	2089	0	2089	2089	0	0	209	0.100	229	0.110		
Yuen Shin Road	N	→	D	3	3.5	0	20	0	100%	100%	2105	2105	1960	1960	1960	1960	10	0.005	10	0.005		
Dai Fuk Street	W	↑↑	E	4	3.0	17	0	1	30%	37%	1915	4000	1865	1855	3940	3930	166	0.089	160	0.086		
Dai Fuk Street	W	↑↓	E	4	3.3	0	17	0	5%	6%	2085	0	2075	2075	0	0	184	0.089	180	0.087		
Ting Kok Road	S	↑↓	F	1	3.5	0	22	1	100%	100%	1965	3930	1835	1835	3655	3655	472	0.257	0.257	346	0.189	0.189
Ting Kok Road	S	↑↓	F	1	3.5	0	19	1	100%	100%	1965	0	1820	1820	0	0	468	0.257	344	0.189		
Ting Kok Road	S	↑↓	F	1	4.0	15	0	1	0%	5%	2018	4113	2020	2005	4115	4100	456	0.226	377	0.188		
Ting Kok Road	S	↑↓	F	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	474	0.226	393	0.188		

Notes:



A.M. Check Phase

P.M. Check Phase

ε_y 0.50

ε_y 0.511

L (sec) 40

ω (sec) 40

C (sec) 10

C (sec) 96

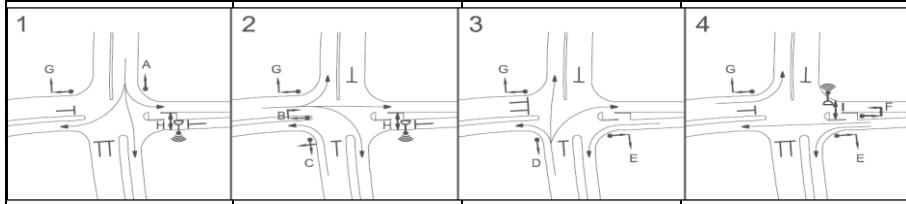
y pract. 0.54

pract. 0.525

R.C. (%) 7%

C. (%) 5%

Stage / Phase Diagrams

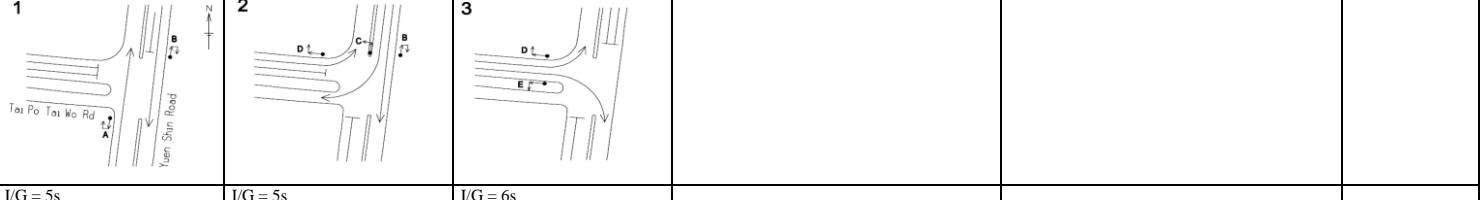


I/G = 7s

TRAFFIC SIGNALS CALCULATION											CTA Consultants Ltd.																		
Junction: Yuen Shin Road / Dai Fat Road (I)											Job No: 24093HK																		
Description: 2033 Reference Traffic Flows																													
Approach		Direction		Movement notation		Phase		Stage		Radius (m)		Nearside 0/1		Pro. Turning (%)		Saturation Flow (pcu/hr)		Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak		P.M. Peak					
Yuen Shin Road		N	↑	A	1	4.0	0	0	0	0%	0%	2155	6465	2155	2155	6355	6385	570	0.264	0.264	449	0.208	0.208						
Yuen Shin Road		N	↓	A	1	4.0	0	50	0	62%	15%	2155	0	2115	2145	0	0	559	0.264	0.264	447	0.208	0.208						
Yuen Shin Road		N	↖	A	1	4.0	0	45	0	100%	100%	2155	0	2085	2085	0	0	551	0.264	0.264	434	0.208	0.208						
Dai Fat Street		W	↙	B	1	3.5	15	0	0	100%	100%	2105	4210	1915	1915	3875	3875	306	0.160	0.160	326	0.170	0.170						
Dai Fat Street		W	↓	B	1	3.5	20	0	0	100%	100%	2105	0	1960	1960	0	0	314	0.160	0.160	334	0.170	0.170						
Yuen Shin Road		S	↓	C	2	4.0	15	0	1	18%	16%	2018	4113	1980	1985	4075	4080	656	0.331	0.331	623	0.314	0.314						
Yuen Shin Road		S	↓	C	2	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	694	0.331	0.331	657	0.314	0.314						
Notes:											Traffic Flow (pcu / hr)		AM(PM)		A.M. Check Phase		P.M. Check Phase												
											εy 0.596		εy 0.522																
											L(sec) 30		L(sec) 30																
											C(sec) 100		C(sec) 100																
											y pract. 0.630		y pract. 0.630																
											R.C. (%) 6%		R.C. (%) 21%																
											780(830)		1230(1180)		120(100)		620(660)												
											↑		↓																
											↑		↑																
											900(500)		900(500)																
Stage / Phase Diagrams																													
I/G = 7s		I/G = 10s		I/G = 15s																									

TRAFFIC SIGNALS CALCULATION												Job No: 24093HK										CTA Consultants Ltd.			
Junction: Tai Po Tai Wo Road / Yuen Shin Road (J)												Description: 2033 Reference Traffic Flows													
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Near side 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak						
								A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y				
Tai Po Tai Wo Road	E	↑	A	2,3	5.8	15	0	1	100%	100%	2199	2199	2000	2000	2000	2000	630	0.315	0.232	450	0.225	0.198			
Tai Po Tai Wo Road	E	↓\	B	3	3.5	0	15	0	100%	100%	2105	4210	1915	1915	3830	3830	445	0.232	0.232	380	0.198	0.198			
Tai Po Tai Wo Road	E	↓\	B	3	3.5	0	15	0	100%	100%	2105	0	1915	1915	0	0	445	0.232	0.232	380	0.198	0.198			
Yuen Shin Road	N	→	C	1	3.1	0	0	1	0%	0%	1927	6111	1927	1927	6111	6111	385	0.200	0.200	318	0.165	0.165			
Yuen Shin Road	N	→	C	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	418	0.200	0.200	346	0.165	0.165			
Yuen Shin Road	N	→	C	1	3.3	0	0	0	0%	0%	2089	0	2089	2089	0	0	417	0.200	0.200	345	0.165	0.165			
Yuen Shin Road	S	└─┐	D	2	3.1	0	20	0	100%	100%	2067	2067	1925	1925	1925	1925	510	0.265	0.265	520	0.270	0.270			
Yuen Shin Road	S	└─┐	E	1,2	3.5	0	0	0	0%	0%	2103.6	4100.6	2103.6	2103.6	4100.6	4100.6	677	0.322	0.322	682	0.324	0.324			
Yuen Shin Road	S	└─┐	E	1,3	3.8	0	0	1	0%	0%	1997	0	1997	1997	0	0	643	0.322	0.322	648	0.324	0.324			
Notes:												Traffic Flow (pcu / hr)				AM(PM)			A.M. Check Phase			P.M. Check Phase			
																Ey 0.697			Ey 0.634						
																L (sec) 13			L (sec) 13						
																C (sec) 100			C (sec) 100						
																y pract. 0.783			y pract. 0.783						
																R.C. (%) 12%			R.C. (%) 24%						
Stage / Phase Diagrams																									
1	2	3																							
I/G = 5s	I/G = 5s	I/G = 6s																							

Stage / Phase Diagrams



TRAFFIC SIGNALS CALCULATION Job No: 24093HK **CTA Consultants Ltd.**

Junction: Ting Kok Road / Sam Mun Tsai Road (C)

Description: 2033 Design Traffic Flows

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Nearside 0/1	Pro. Turning (%)	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak				
											A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y		
Ting Kok Road	E	→	A	1,2	3.5	0	0	1	0%	0%	1965	1965	1965	1965	1965	580	0.295		680	0.346		
Ting Kok Road	E	↓\	B	2,3	3.2	0	23	0	100%	100%	2072.3	2072.3	1945	1945	1945	240	0.123		320	0.165		
Ting Kok Road	W	←	C	1	3.7	0	0	0	0%	0%	2123.7	0	2125	2125	0	0	466	0.219	0.220	295	0.139	0.139
Ting Kok Road	W	↓\	C	1	3.7	15	0	1	5%	4%	1983.7	4107.4	1975	1975	4100	4100	434	0.220		275	0.139	
Sam Mun Tsai Road	N	↖\	D	2,3,4	4.5	38	0	1	100%	100%	2065	2065	1985	1985	1985	1985	320	0.161	0.161	250	0.126	0.126
Sam Mun Tsai Road	N	↑\	E	4	3.5	0	17	1	100%	100%	1965	1965	1800	1800	1800	1800	10	0.006		10	0.006	

Notes:	Traffic Flow (pcu / hr) AM(PM)	A.M. Check Phase	P.M. Check Phase
	580(680) → 240(320) ↓\	εy 0.381 L (sec) 8 C (sec) 88 y pract. 0.818 R.C. (%) 115%	εy 0.265 L (sec) 8 C (sec) 88 y pract. 0.818 R.C. (%) 209%

Stage / Phase Diagrams	1	2	3	4		
I/G = 5s	I/G = 0s	I/G = 0s	I/G = 5s			

TRAFFIC SIGNALS CALCULATION											Job No: 24093HK										CTA Consultants Ltd.			
Junction: Ting Kok Road / Lo Fai Road (D)											Description: 2033 Design Traffic Flows													
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Near side 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak					
								A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y			
Ting Kok Road	E		A	1	4.0	15	0	1	73%	48%	2018	4113	1880	1925	3975	4020	615	0.327	0.327	647	0.336	0.336		
Ting Kok Road	E		A	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	685	0.327		703	0.336			
Ting Kok Road	W		B	1	3.5	0	0	1	0%	0%	1965	4070	1965	1965	4050	4025	643	0.327		660	0.336			
Ting Kok Road	W		C	2	3.5	0	0	1	0%	0%	1965	4070	1965	1965	4050	4025	353	0.180		127	0.065			
Ting Kok Road	W		C	2	3.5	0	15	0	11%	23%	2105	0	2085	2060	0	0	374	0.179	0.180	133	0.065	0.065		
Lo Fai Road	S		D	3	3.5	15	25	0	9% / 814% / 86%	814% / 86%	2105	4210	1970	1975	3930	3935	216	0.109	0.109	216	0.109	0.109		
Lo Fai Road	S		D	3	3.5	0	20	0	100%	100%	2105	0	1960	1960	0	0	214	0.109		214	0.109			
Notes:											Traffic Flow (pcu / hr)		AM(PM)		A.M. Check Phase			P.M. Check Phase						
															ϵ_y	0.616		ϵ_y	0.510					
															L (sec)	14		L (sec)	14					
															C (sec)	120		C (sec)	96					
															y pract.	0.795		y pract.	0.769					
															R.C. (%)	29%		R.C. (%)	51%					
Stage / Phase Diagrams																								
I/G = 5s		I/G = 6s		I/G = 6s																				

TRAFFIC SIGNALS CALCULATION

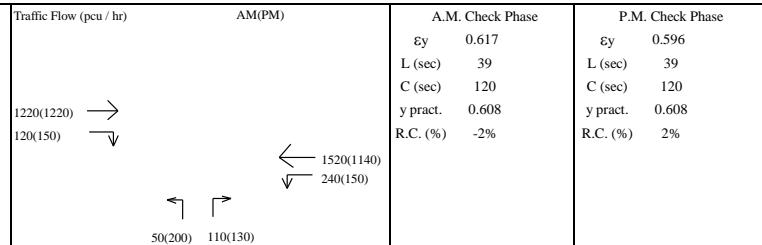
Job No: 24093HK

CTA Consultants Ltd.

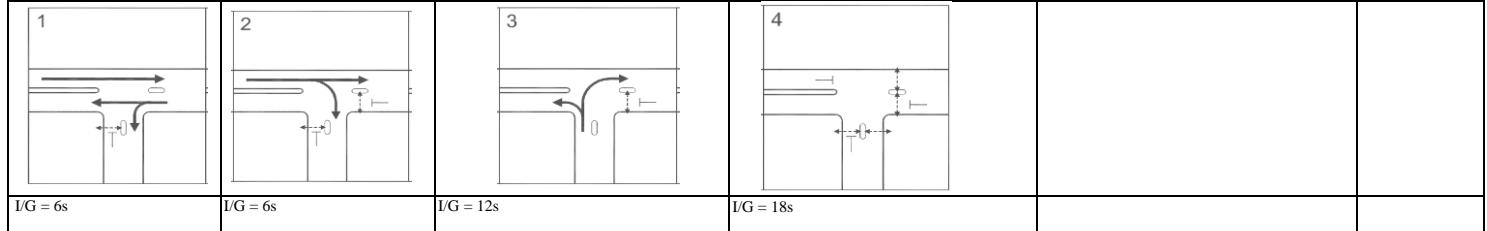
Junction: **Ting Kok Road / Dai Kwai Street (E)**
Description: **2033 Design Traffic Flows**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		Nearside / 1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak		
						Left	Right		A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Ting Kok Road	E	→	A	1	3.5	0	0	1	0%	0%	1965	4070	1965	1965	0	0	852	0.433	0.434	624	0.317	0.317
Ting Kok Road	E	↓→	B	2	3.5	0	0	1	0%	0%	1965	4070	1965	1965	3995	4010	240	0.122	0.122	366	0.186	0.186
Ting Kok Road	E	↖→	B	2	3.5	0	20	0	48%	39%	2105	0	2030	2045	0	0	248	0.122	0.122	381	0.186	0.186
Ting Kok Road	W	↑←	C	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	909	0.434	0.434	665	0.317	0.317
Ting Kok Road	W	↑↓	C	1	4.0	15	0	1	28%	24%	2018	4113	1965	1970	4060	4065	851	0.433	0.433	625	0.317	0.317
Dai Kwai Street	N	↑↖	D	3	3.2	20	20	1	0% / 100%	22% / 78%	1935	0	1800	1800	0	0	110	0.061	0.061	167	0.093	0.093
Dai Kwai Street	N	↑↑	D	3	3.2	15	0	1	100%	100%	1935	3870	1760	1760	3560	3560	50	0.028	0.028	163	0.093	0.093

Notes:



Stage / Phase Diagrams



TRAFFIC SIGNALS CALCULATION

Job No: 24093HK

CTA Consultants Ltd.

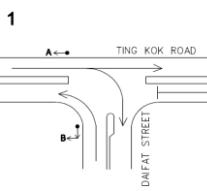
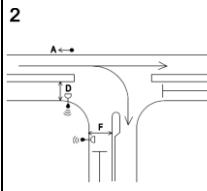
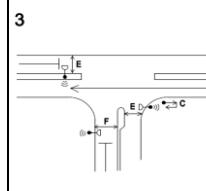
Junction: Ting Kok Road / Dai Fat Street (F)
 Description: 2033 Design Traffic Flows

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Near side 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak			
								Left	Right			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Ting Kok Road	E		A	1,2	3.5	0	0	1	0%	0%	1965	4070	1965	1965	3995	4030	831	0.423	0.423	726	0.370	0.370
Ting Kok Road	E		A	1,2	3.5	0	15	0	37%	18%	2105	0	2030	2065	0	0	859	0.423		764	0.370	
Ting Kok Road	W		B	3	3.5	0	0	0	0%	0%	2103.6	4100.6	2103.6	2103.6	4100.6	4100.6	831	0.395	0.395	652	0.310	0.310
Ting Kok Road	W		B	3	3.8	0	0	1	0%	0%	1997	0	1997	1997	0	0	789	0.395		618	0.310	
Dai Fat Street	N		C	1	3.5	15	0	0	100%	100%	2105	4210	1915	1915	3875	3875	84	0.044		49	0.026	
Dai Fat Street	N		C	1	3.5	20	0	0	100%	100%	2105	0	1960	1960	0	0	86	0.044		51	0.026	

Notes:

Traffic Flow (pcu / hr)	AM(PM)	A.M. Check Phase	P.M. Check Phase
1370(1350) →		εy 0.818	εy 0.680
320(140) ↓		L (sec) 10	L (sec) 10
		C (sec) 100	C (sec) 100
		y pract. 0.810	y pract. 0.810
		R.C. (%) -1%	R.C. (%) 19%
	← 1620(1270)		
	170(100)		

Stage / Phase Diagrams

				
I/G = 0	I/G = 6s	I/G = 6s		

TRAFFIC SIGNALS CALCULATION												Job No: 24093HK CTA Consultants Ltd.													
Junction: Ting Kok Road / Fung Yuen Road (G) Description: 2033 Design Traffic Flows																									
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		Nearside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak					
						Left	Right		A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y			
Ting Kok Road	E		1	A	3.5	17	0	1	19%	24%	1965	4080	1935	1925	4050	4040	855	0.442	0.442	791	0.411	0.411			
Ting Kok Road	E		1	A	3.6	0	0	0	0%	0%	2115	0	2115	2115	0	0	935	0.442	0.442	869	0.411	0.411			
Ting Kok Road	W		2,3	A,B	3.6	0	19	0	3%	3%	2115	0	2110	2110	0	0	919	0.436		708	0.335				
Ting Kok Road	W		2	A,B	3.6	0	0	1	0%	0%	1975	4090	1975	1975	4085	4085	861	0.436		662	0.335				
Fung Yuen Road	S		4	C	3.6	11	14	1	35% / 65%	37% / 63%	1975	4090	1770	1765	3715	3710	86	0.048	0.048	81	0.046	0.046			
Fung Yuen Road	S		4	C	3.6	0	17	0	100%	100%	2115	0	1945	1945	0	0	94	0.048		89	0.046				
Pedestrian Crossing	5p	D							Min. Crossing Time = 8Gm + 8FGm = 16s																
	6p	D							Min. Crossing Time = 11Gm + 10FGm = 21s																
Notes:												Traffic Flow (pcu / hr)		AM(PM)		A.M. Check Phase		P.M. Check Phase							
												Ey 0.491		Ey 0.457		L (sec) 47		L (sec) 47		C (sec) 104		C (sec) 96			
												y pract. 0.493		y pract. 0.459		R.C. (%) 1%		R.C. (%) 1%							
Stage / Phase Diagrams												150(140) 30(30)		160(190) 30(20)		1630(1470) ← 1750(1350)									
A																									
I/G = 4s	I/G = 6s+5s			I/G = 6s			I/G = 12s+16s																		

TRAFFIC SIGNALS CALCULATION

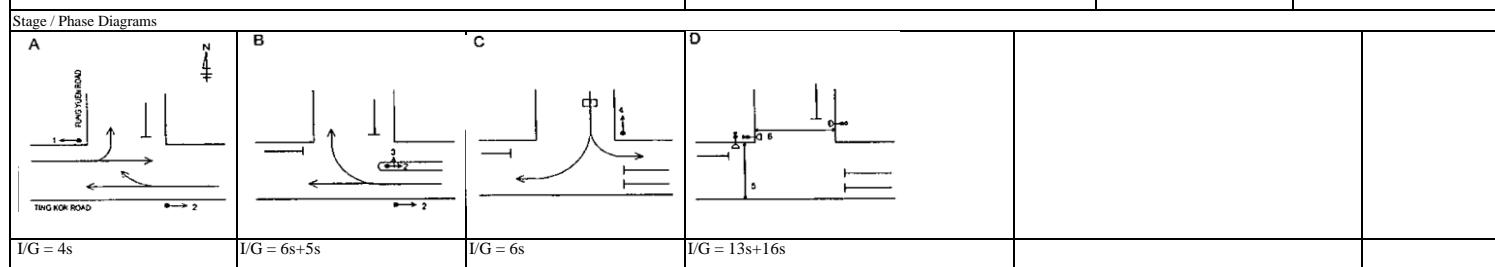
Job No: 24093HK

CTA Consultants Ltd.

Junction: Ting Kok Road / Fung Yuen Road (Jn G)

Description: **2029 Reference Traffic Flows (Shifting of Crossing at Ting Kok Road)**

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TRAFFIC SIGNALS CALCULATION

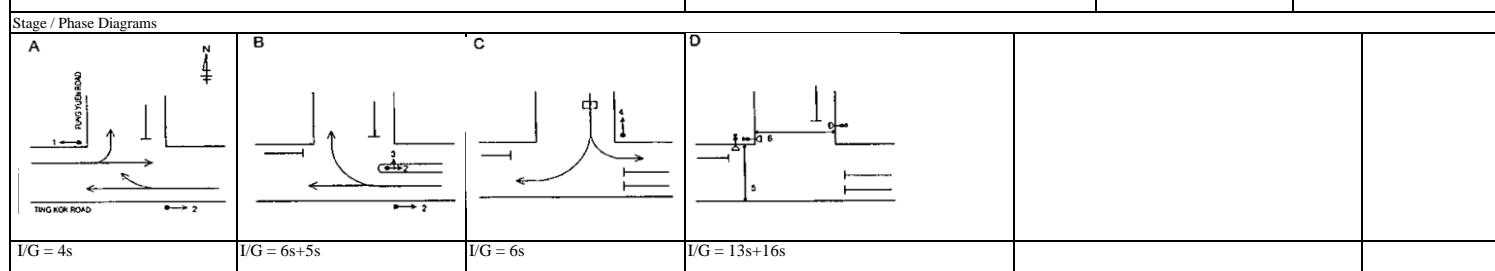
Job No: 24093HK

CTA Consultants Ltd.

Junction: Ting Kok Road / Fung Yuen Road (Jn G)

Description: 2029 Design Traffic Flows (Shifting of Crossing at Ting Kok Road)(With Fung Yuen CDA (1))

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TRAFFIC SIGNALS CALCULATION

Job No: 24093HK

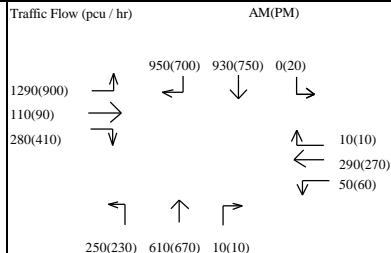
CTA Consultants Ltd.

Junction: Ting Kok Road / Yuen Shin Road / Dai Fuk Street (H)

Description: **2033 Design Traffic Flows**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Nearside / Offside	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak			
								A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Ting Kok Road	E	↑	A	1,2	3.5	15	0	0	100%	100%	2105	4210	1915	1915	3875	3875	638	0.333	445	0.232		
Ting Kok Road	E	↓	A	1,2	3.5	20	0	0	100%	100%	2105	0	1960	1960	0	0	652	0.333	455	0.232		
Ting Kok Road	E	↓	B	2	3.5	0	0	1	0%	0%	1965	1965	1965	1965	1965	1965	110	0.056	90	0.046		
Ting Kok Road	E	↓	B	2	3.1	0	20	0	100%	100%	2067	2067	1925	1925	1925	1925	280	0.145	410	0.213	0.213	
Yuen Shin Road	N	↑	C	2,3	3.5	15	0	1	100%	100%	1965	1965	1785	1785	1785	1785	250	0.140	230	0.129		
Yuen Shin Road	N	→→→	D	3	3.1	0	0	1	0%	0%	1927	6111	1927	1927	6111	6111	192	0.100	0.100	211	0.110	0.110
Yuen Shin Road	N	→→→	D	3	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	209	0.100	230	0.110		
Yuen Shin Road	N	→→→	D	3	3.3	0	0	0	0%	0%	2089	0	2089	2089	0	0	209	0.100	229	0.110		
Yuen Shin Road	N	→	D	3	3.5	0	20	0	100%	100%	2105	2105	1960	1960	1960	1960	10	0.005	10	0.005		
Dai Fuk Street	W	↑↑	E	4	3.0	17	0	1	30%	37%	1915	4000	1865	1855	3940	3930	166	0.089	160	0.086		
Dai Fuk Street	W	↑↓	E	4	3.3	0	17	0	5%	6%	2085	0	2075	2075	0	0	184	0.089	180	0.087		
Ting Kok Road	S	↑↓	F	1	3.5	0	22	1	100%	100%	1965	3930	1835	1835	3655	3655	477	0.260	0.260	351	0.192	0.192
Ting Kok Road	S	↑↓	F	1	3.5	0	19	1	100%	100%	1965	0	1820	1820	0	0	473	0.260	349	0.192		
Ting Kok Road	S	↑↓	F	1	4.0	15	0	1	0%	5%	2018	4113	2020	2005	4115	4100	456	0.226	377	0.188		
Ting Kok Road	S	↑↓	F	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	474	0.226	393	0.188		

Notes:



A.M. Check Phase

P.M. Check Phase

ε_y 0.505

ε_y 0.514

L (sec) 40

L (sec) 40

C (sec) 100

C (sec) 96

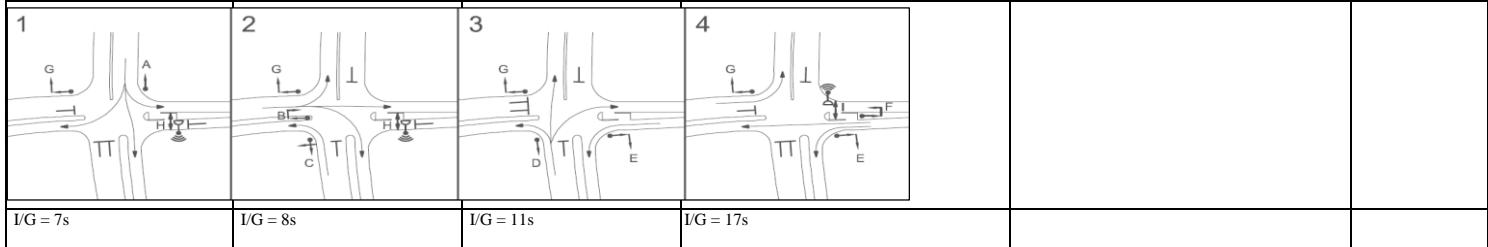
y pract. 0.540

y pract. 0.525

R.C. (%) /%

R.C. (%) 2%

Stage / Phase Diagrams



TRAFFIC SIGNALS CALCULATION												CTA Consultants Ltd.													
Junction: Yuen Shin Road / Dai Fat Road (I)												Job No: 24093HK													
Description: 2033 Design Traffic Flows																									
Approach		Direction		Movement notation		Phase		Stage		Radius (m)		Nearside 0/1		Pro. Turning (%)		Saturation Flow (pcu/hr)		Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak		P.M. Peak	
Approach	Movement notation	Phase	Stage	Radius (m)	Nearside 0/1	A.M.	P.M.	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y			
Yuen Shin Road	N	A	1	4.0	0	0	0	0%	0%	2155	6465	2155	2155	6355	6385	573	0.266	0.266	452	0.210	0.210				
Yuen Shin Road	N	A	1	4.0	0	50	0	61%	14%	2155	0	2115	2145	0	0	563	0.266		450	0.210					
Yuen Shin Road	N	A	1	4.0	0	45	0	100%	100%	2155	0	2085	2085	0	0	554	0.266		437	0.210					
Dai Fat Street	W	B	1	3.5	15	0	0	100%	100%	2105	4210	1915	1915	3875	3875	306	0.160		326	0.170					
Dai Fat Street	W	B	1	3.5	20	0	0	100%	100%	2105	0	1960	1960	0	0	314	0.160		334	0.170					
Yuen Shin Road	S	C	2	4.0	15	0	1	18%	16%	2018	4113	1980	1985	4075	4080	656	0.331	0.331	628	0.316	0.316				
Yuen Shin Road	S	C	2	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	694	0.331		662	0.316					
Notes:												Traffic Flow (pcu / hr)				AM(PM)		A.M. Check Phase		P.M. Check Phase					
												1230(1190) 120(100)			Ey 0.597	Ey 0.526	L(sec) 30	L(sec) 30	C(sec) 100	C(sec) 100	y pract. 0.630	y pract. 0.630	R.C. (%) 5%	R.C. (%) 20%	
														790(840) 900(500)			620(660)								
Stage / Phase Diagrams																									
I/G = 7s			I/G = 10s			I/G = 15s																			

TRAFFIC SIGNALS CALCULATION

Job No: 24093HK

CTA Consultants Ltd.

Junction: **Tai Po Tai Wo Road / Yuen Shin Road (J)**

Description: **2033 Design Traffic Flows**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)	Neartside 0/1	Pro. Turning (%)		Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak			
								A.M.	P.M.			A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Tai Po Tai Wo Road	E	↑	A	2,3	5.8	15	0	1	100%	100%	2199	2199	2000	2000	2000	2000	630	0.315	0.232	450	0.225	0.198
Tai Po Tai Wo Road	E	↓	B	3	3.5	0	15	0	100%	100%	2105	4210	1915	1915	3830	3830	445	0.232		380	0.198	
Tai Po Tai Wo Road	E	↓	B	3	3.5	0	15	0	100%	100%	2105	0	1915	1915	0	0	445	0.232		380	0.198	
Yuen Shin Road	N	→	C	1	3.1	0	0	1	0%	0%	1927	6111	1927	1927	6111	6111	385	0.200	0.200	318	0.165	0.165
Yuen Shin Road	N	→	C	1	3.4	0	0	0	0%	0%	2095	0	2095	2095	0	0	418	0.200		346	0.165	
Yuen Shin Road	N	→	C	1	3.3	0	0	0	0%	0%	2089	0	2089	2089	0	0	417	0.200		345	0.165	
Yuen Shin Road	S	↑	D	2	3.1	0	20	0	100%	100%	2067	2067	1925	1925	1925	1925	510	0.265	0.265	520	0.270	0.270
Yuen Shin Road	S	↓	E	1,2	3.5	0	0	0	0%	0%	2103.6	4100.6	2103.6	2103.6	4100.6	4100.6	677	0.322		682	0.324	
Yuen Shin Road	S	↓	E	1,3	3.8	0	0	1	0%	0%	1997	0	1997	1997	0	0	643	0.322		648	0.324	

Notes:

Traffic Flow (pcu / hr)

AM(F)

510(520) 1320(1330)

630(450) 890(760)

570(930) 1220(1010)

A.M. Check Phase

P.M. Check Phase

ε_y 0.697

$$\varepsilon_y = 0.634$$

L (sec) 13

L (sec) 13

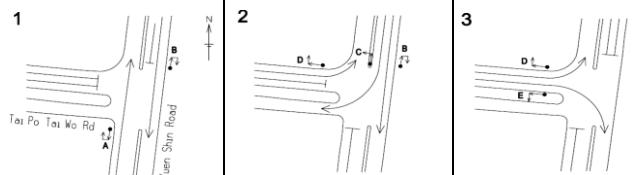
C (sec) 100

C (sec) 100

y pract. 0.783

y pract. 0.783

Stage / Phase Diagrams



I/G = 5s

I/G = 5s I/G = 6s