Your Ref.: TPB/A/TY/153
Our Ref: PLAS/ADL/CK/CL(13-12462) (Task 6)

The Secretary
Town Planning Board
15/F North Point Government Offices
333 Java Road North Point
Hong Kong

12 August 2026

By Email & By Hand

Dear Sirs

APPLICATION FOR PERMISSION
UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP 131)
RENEWAL OF PLANNING APPROVAL FOR TEMPORARY CONCRETE BATCHING PLANT
FOR A PERIOD OF 5 YEARS AT TSING YI TOWN LOT NO. 98
NOS. 14-18 TSING TIM STREET, TSING YI, NEW TERRITORIES
(APPLICATION NO. A/TY/153 – FURTHER INFORMATION 1)

We refer to the captioned planning application No. A/TY/153.

Further to our original submission received by the Town Planning Board ("TPB") on 13 July 2026, we hereby submit Further Information (1) to support this application.

Attachment I	Response-to-Comment table addressing comments from the Fire Services Department (FSD), Transport Department (TD) and Environmental Protection Department (EPD)	
	Appendix I	FS 251
	Appendix II	Response-to-Comment on Traffic Comments
	Appendix III	Revised Traffic Impact Assessment
	Appendix IV	Revised Supporting Planning Statement (excluding appendices)

knightfrank.com.hk
4/F Shui On Centre, 6-8 Harbour Road, Wanchai, Hong Kong
香港灣仔港灣道6-8號瑞安中心4字樓
T 電話 +852 2840 1177 F 傳真 +852 2840 0600

Your partners in property
Regulated by RICS

Knight Frank Petty Limited EAA Lic No C-010431
C P Property Management Limited
Knight Frank Hong Kong Limited EAA Lic No C-013197
Knight Frank Asset Appraisal Limited
Knight Frank (Services) Limited EAA Lic No C-012848

12 August 2026
The Secretary
Town Planning Board

Should there be any queries, please feel free to contact the undersigned or our Ms Charlotte Lau at [redacted]

Yours faithfully
For and on behalf of
Knight Frank Petty Limited

Calvin Kan MHKIP MRTPI RPP
Associate Director
Planning & Land Advisory Services
[redacted]
D [redacted]

Encs

cc	Client	(By email only)
	Tsuen Wan and West Kowloon District Planning Office Attention: Mr Cecil Chow	(By email only)
	FSD	(By email only)
	TD	(By email only)
	EPD	(By email only)

Attachment I
R-to-C Table addressing comments from FSD, TD and EPD

APPLICATION FOR PERMISSION
UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP. 131)
RENEWAL OF PLANNING APPROVAL FOR TEMPORARY CONCRETE BATCHING PLANT
FOR A PERIOD OF 5 YEARS AT TSING YI TOWN LOT NO. 98, NOS. 14 – 18 TSING TIM STREET, TSING YI, NEW TERRITORIES
(APPLICATION NO. A/TY/153 – FURTHER INFORMATION 1)

Comments	Response(s)
Fire Services Department (FSD) **Received on 27 July 2026** **Contact: Mr. Lam Ho | Tel: 2733 7758**	
1. FSD has the following comments from fire safety point of view: The applicant is advised to provide all relevant FS251 for further processing.	Noted, please refer to **Appendix I – FS 251**.
Transport Department (TD) **Received on 31 July 2026** **Contact: Mr Kinox Wong | Tel: 2399 2425**	
Appendix II Traffic Impact Assessment (TIA) 1. Table 3.1 - Please clarify the footnotes for J7* and J14(3). Besides, please review the naming of J14 as the road connecting Tsing Yi Road and Tsing Yi Hong Wan Road has already been opened to the public. 2. Table 5.1 - For the sake of conservatism, please round up the traffic generation in pcu/hr to the nearest integer (i.e. 3) for the cement tanker.	Please refer to **Appendix II – R-to-C on Traffic Comments and Appendix III – Revised Traffic Impact Assessment.**

Comments	Response(s)
<u>Environmental Protection Department (EPD)</u> **Received on 4 August 2026** **Contact: Ms Tiffany Cheung | Tel: 2835 1836**	
EPD has the following comments from environmental protection perspective: As presented in the R-t-C (Appendix VII to the Supporting Planning Statement (SPS), 15 tons of slurry in addition to the 30 tons waste cement will be generated and disposed of. For proper record, please include the 15 tons of slurry under the "Waste" of Section 5.8 of SPS and supplement the necessary pre-treatment before disposal at TM38 fill bank as appropriate.	Comments have been incorporated into the Supporting Planning Statement (**Appendix IV – Revised Supporting Planning Statement**). Approximately 30 tonnes of waste concrete per day will undergo filter-press dewatering prior to disposal. The resulting mud cake will be disposed of at the TM38 Fill Bank in accordance with the relevant statutory requirements. The Applicant has obtained the admission ticket for the disposal of waste concrete. Separately, approximately 15 tonnes of slurry per day on average will be disposed of at the TM38 Landfill without pre-treatment. The Applicant has also obtained the relevant waste chit ticket for slurry disposal and will comply with the relevant statutory requirements for slurry disposal.

Appendix I
FS 251

20260409(03225)

消防處檔號:_____
FSD Ref.

消防(裝置及設備)規例(第九條(1)款)消防裝置及設備證書
FIRE SERVICE (INSTALLATIONS AND EQUIPMENT) REGULATIONS (REGULATION 9(1))
CERTIFICATE OF FIRE SERVICE INSTALLATION AND EQUIPMENT

序號 Serial Number: 034705040000 260072

COPY

顧客姓名 Name of Client: Anderson Concrete Limited

樓宇地址 Address of Building:
座 Block: [ ]
樓宇名稱 Name of Building: A Concrete Batching Plant
屋邨/鄉村名稱 Name of Estate/Village: [ ]
門牌號數及街道/地段 Number and Name of Street/Lot: No. 14-18 Tsing Tim Street / TYTL98
地區 District: Tsing Yi
[ ] 香港 HK [ ] 九龍 K [✓] 新界 NT

持牌/註冊處所類型(如適用) Type of Licensed/Registered Premises (If applicable)
請在合適空格內填上「✓」號 Please tick the appropriate "box"

- [ ] 簡樸房 Basic Housing Unit
- [ ] 危險品倉 Dangerous Goods Store
- [ ] 食物業處所 Food Premises
- [ ] 校舍 School Premises
- [ ] 幼兒中心 Child Care Centre
- [ ] 酒店 Hotel
- [ ] 會社 Club
- [ ] 木料倉 Timber Store
- [ ] 電器廢物處置 E-waste Disposal
- [ ] 改建校舍 Non-designed School
- [ ] 私營骨灰安置所 Private Columbaria
- [ ] 賓館 Guesthouse
- [ ] 床位寓所 Bedspace Apartment
- [ ] 危險品車輛 Dangerous Good Vehicle
- [ ] 公眾娛樂場所 Place of Public Entertainment
- [ ] 安老院舍 Residential Care Home for the Elderly
- [ ] 殘疾院舍 Residential Care Home for Persons with
- [ ] 卡拉 OK 場所 Karaoke Establishment

第一部 只適用於年檢事項 Part 1 Annual Inspection ONLY

根據《消防(裝置及設備)規例》第八條(1)(b)款，擁有裝置在任何處所內的任何消防裝置或設備的人，須每12個月由一名註冊承辦商檢查該等消防裝置或設備至少一次。
In accordance with Regulation 8(1)(b) of Fire Service (Installations and Equipment) Regulations, the owner of any fire service installation or equipment which is installed in any premises shall have such fire service installation or equipment inspected by a registered contractor at least once in every 12 months.

編碼 Code (1-35)	裝置類型 Type of FSI	位置 Location(s)	狀況評述 Comment on Condition	完成日期 Completion Date (DD/MM/YYYY)	到期日 Due Date (DD/MM/YYYY)
11	應急照明系統 (58 nos.)	Whole Building	Conforms with FSD requirements (defects see part 3)	11/04/2026	10/04/2027
12	出口指示牌 (22 nos.)	Whole Building	Conforms with FSD requirements (defects see part 3)	11/04/2026	10/04/2027
13	火警警報系統	Whole Building	Conforms with FSD requirements	11/04/2026	10/04/2027

第二部 Part 2 裝置/保養/修理/檢查工作 Installation/Maintenance/Repair/Inspection work

編碼 Code (1-35)	裝置類型 Type of FSI	位置 Location(s)	完成之工作內容 Nature of Work Carried out	狀況評述 Comment on Condition	完成日期 Completion Date (DD/MM/YYYY)	消防裝置關閉/嚴重損壞/恢復通知書消防處檔案編號 FSD serial number of Notification of FSI Shutdown/Major Defect/Resumption
			NIL			

第三部 Part 3 欠妥事項 Defects

編碼 Code (1-35)	裝置類型 Type of FSI	位置 Location(s)	欠妥事項 Defects (請以「*」註明主要系統嚴重損壞 Please indicate major defects in major system with a "*" sign)	欠妥事項評述 Comment on Defects	消防裝置關閉/嚴重損壞/恢復通知書消防處檔案編號 FSD serial number of Notification of FSI Shutdown/Major Defect/Resumption
11	應急照明系統	6/F x2, 3/F, 2/F	應急照明燈 (損壞) x 4	需更換	
12	出口指示牌	6/F, 4/F, 3/F	出口指示牌 (損壞) x 3	需更換	
34	街道消防栓系統	G/F	街道消防栓 (損壞) x 1	需更換	

本人/我們藉此聲明，上述之消防裝置/設備經測試及/或檢查，其運作狀況符合消防處處長訂明適用於該連築物/處所的《最低限度之消防裝置及設備守則》中的規格/要求，以及最新的《裝置及設備之檢查、測試及保養守則》中的要求，以證明其性能良好，除在第三部分中詳列的裝置/設備欠妥事項(如有)，

I/We hereby declare that the above installations/equipment has/have been tested and/or inspected, with its/their working conditions certified in conformance with the specifications/requirements in the Code of Practice for Minimum Fire Service Installations and Equipment applicable to the building/premises and the requirements in the latest Code of Practice for Inspection, Testing and Maintenance of Installations and Equipment prescribed by the Director of Fire Services to be in efficient working order except defect(s) of the installations/equipment, if any, detailed in Part 3

請將此證書張貼於大廈或處所**當眼處**以供消防處人員查核
Please display this certificate at a conspicuous place in the building or premises for FSD's inspection.

獲授權簽署人簽署 Signature of Authorized Signatory: 張元華

Chung Kwun F.S. Eng. Co. 中冠消防工程有限公司

獲授權簽署人姓名 Name of Authorized Signatory: Cheung Yuen Wa

註冊編號 Registration No.: RC1/0347;RC2/0504

註冊消防裝置承辦商名稱 Name of Registered Fire Service Installation Contractor: Chung Kwun F.S. Engineering Co. Ltd.

聯絡電話 Telephone: [redacted]

電郵地址 Email address: [redacted]

日期 Date: 13/04/2026

備註 Remark:

COPY

附錄 Appendix

序號 Serial Number

0347050400002600 72

第一部 只適用於年檢事項 Part 1 Annual Inspection ONLY			根據《消防（裝置及設備）規例》第八條(1)(b)款，擁有裝置在任何處所內的任何消防裝置或設備的人，須每 12 個月由一名註冊承辦商檢查該等消防裝置或設備至少一次。 In accordance with Regulation 8(1)(b) of Fire Service (Installations and Equipment) Regulations, the owner of any fire service installation or equipment which is installed in any premises shall have such fire service installation or equipment inspected by a registered contractor at least once in every 12 months.		
編碼 Code (1-35)	裝置類型 Type of FSI	位置 Location(s)	狀況評述 Comment on Condition	完成日期 Completion Date (DD/MM/YYYY)	到期日 Due Date (DD/MM/YYYY)
16	消防栓/喉轆系統	Whole Building	Conforms with FSD requirements	11/04/2026	10/04/2027
34	街道消防栓系統 (2 nos.)	Whole Building	Conforms with FSD requirements (defects see part 3)	11/04/2026	10/04/2027

COPY

編碼 Code	裝置類型 Type of FSI
1	聲響/視象警報系統 Audio/Visual Advisory System
2	自動啟動裝置 Automatic Actuating Device
3	不含水的滅火劑自動固定裝置 Automatic Fixed Installation other than Water
4	用水作滅火劑的自動固定裝置 Automatic Fixed Installation using Water
5	集水花灑系統 Deluge System
6	水簾系統 Drencher System
7	乾喉系統 Dry Riser System
8	塵埃偵測系統 Dust Detection System
9	機械式排煙系統 Dynamic Smoke Extraction System
10	應急發電機 Emergency Generator
11	應急照明系統 Emergency Lighting
12	出口指示牌 Exit Sign
13	火警警報系統 Fire Alarm System (MFA)
14	消防管制中心 Fire Control Centre
15	火警偵測系統 Fire Detection System
16	消防栓/喉轆系統 Fire Hydrant/Hose Reel System
17	防火捲閘 Fire Shutter
18	保留 Reserved
19	認可的自動操作固定器具 Fixed Automatically Operated Approved Appliance
20	固定泡沫系統 Fixed Foam System
21	氣體偵測系統 Gas Detection System
22	氣體排放系統 Gas Extraction System
23	消防喉轆 Hose Reel
24	手提滅火筒 Portable Fire Extinguisher
25	認可的人手操作手提器具 Portable Hand-operated Approved Appliance
26	樓梯增壓 Pressurization of Staircase
27	裝有固定水泵的環狀水管系統 Ring Main System with Fixed Pump(s)
28	花灑系統 Sprinkler System
29	靜態式排煙系統 Static Smoke Extraction System
30	供水缸 Supply Tank
31	通風/空氣調節控制系統 Ventilation/Air Conditioning Control System
32	噴水系統 Water Spray System
33	供水 Water Supply
34	街道消防栓系統 Street Fire Hydrant System
35	其他 Others_____

消防處檔號:_____
FSD Ref.

消防(裝置及設備)規例(第九條(1)款)消防裝置及設備證書
FIRE SERVICE (INSTALLATIONS AND EQUIPMENT) REGULATIONS (REGULATION 9(1))
CERTIFICATE OF FIRE SERVICE INSTALLATION AND EQUIPMENT

序號 Serial Number
000000000126 260058

COPY

顧客姓名 Name of Client: Anderson Concrete Limited

樓宇地址 Address of Building
座 Block: [ ]
樓宇名稱 Name of Building: A Concrete Batching Plant
屋邨/鄉村名稱 Name of Estate/Village: [ ]
門牌號數及街道/地段 Number and Name of Street/Lot: No. 14-18 Tsing Tim Street / TYTL98
地區 District: Tsing Yi
☐ 香港 HK ☐ 九龍 K ☑ 新界 NT

持牌/註冊處所類型(如適用) Type of Licensed/Registered Premises (If applicable)
請在合適空格內填上「✓」號 Please tick the appropriate "box"

- ☐ 簡樸房 Basic Housing Unit
- ☐ 危險品倉 Dangerous Goods Store
- ☐ 食物業處所 Food Premises
- ☐ 校舍 School Premises
- ☐ 幼兒中心 Child Care Centre
- ☐ 酒店 Hotel
- ☐ 會社 Club
- ☐ 木料倉 Timber Store
- ☐ 電器廢物處置 E-waste Disposal
- ☐ 改建校舍 Non-designed School
- ☐ 私營骨灰安置所 Private Columbaria
- ☐ 賓館 Guesthouse
- ☐ 床位寓所 Bedspace Apartment
- ☐ 危險品車輛 Dangerous Good Vehicle
- ☐ 公眾娛樂場所 Place of Public Entertainment
- ☐ 安老院舍 Residential Care Home for the Elderly
- ☐ 殘疾院舍 Residential Care Home for Persons with
- ☐ 卡拉 OK 場所 Karaoke Establishment

第一部 只適用於年檢事項 Part 1 Annual Inspection ONLY

根據《消防(裝置及設備)規例》第八條(1)(b)款,擁有裝置在任何處所內的任何消防裝置或設備的人,須每12個月由一名註冊承辦商檢查該等消防裝置或設備至少一次。
In accordance with Regulation 8(1)(b) of Fire Service (Installations and Equipment) Regulations, the owner of any fire service installation or equipment which is installed in any premises shall have such fire service installation or equipment inspected by a registered contractor at least once in every 12 months.

編碼 Code (1-35)	裝置類型 Type of FSI	位置 Location(s)	狀況評述 Comment on Condition	完成日期 Completion Date (DD/MM/YYYY)	到期日 Due Date (DD/MM/YYYY)
24	手提滅火筒 5KG CO2 F.E. (13 nos.)	(See attachment)	Conforms with FSD requirements	11/04/2026	10/04/2027
24	手提滅火筒 2KG D.P. F.E (2 nos.)	(See attachment)	Conforms with FSD requirements	11/04/2026	10/04/2027
25	認可的人手操作手提器具(Sand Bucket 2 nos.	(See attachment)	Conforms with FSD requirements	11/04/2026	10/04/2027

第二部 Part 2 裝置/保養/修理/檢查工作 Installation/Maintenance/Repair/Inspection work

編碼 Code (1-35)	裝置類型 Type of FSI	位置 Location(s)	完成之工作內容 Nature of Work Carried out	狀況評述 Comment on Condition	完成日期 Completion Date (DD/MM/YYYY)	消防裝置關閉/嚴重損壞/恢復通知書消防處檔案編號 FSD serial number of Notification of FSI Shutdown/Major Defect/Resumption
			NIL			

第三部 Part 3 欠妥事項 Defects

編碼 Code (1-35)	裝置類型 Type of FSI	位置 Location(s)	欠妥事項 Defects (請以「*」註明主要系統嚴重損壞 Please indicate major defects in major system with a "*" sign)	欠妥事項評述 Comment on Defects	消防裝置關閉/嚴重損壞/恢復通知書消防處檔案編號 FSD serial number of Notification of FSI Shutdown/Major Defect/Resumption
			NIL		

本人/我們藉此聲明,上述之消防裝置/設備經測試及/或檢查,其運作狀況符合消防處處長訂明適用於該建築物/處所的《最低限度之消防裝置及設備守則》中的規格/要求,以及最新的《裝置及設備之檢查、測試及保養守則》中的要求,以證明其性能良好,除在第三部分中評列的裝置/設備欠妥事項(如有)。

I/We hereby declare that the above installations/equipment has/have been tested and/or inspected, with its/their working conditions certified in conformance with the specifications/requirements in the Code of Practice for Minimum Fire Service Installations and Equipment applicable to the building/premises and the requirements in the latest Code of Practice for Inspection, Testing and Maintenance of Installations and Equipment prescribed by the Director of Fire Services to be in efficient working order except defect(s) of the installations/equipment, if any, detailed in Part 3.

請將此證書張貼於大廈或處所**當眼處**以供消防處人員查核
Please display this certificate at a conspicuous place in the building or premises for FSD's inspection.

獲授權簽署人簽署 Signature of Authorized Signatory: [signature] [Chung Fu Fire Eqpt. Co. Limited 中冠消防工程有限公司]

獲授權簽署人姓名 Name of Authorized Signatory: Chung Chok Yau

註冊編號 Registration No.: RC3/0126

註冊消防裝置承辦商名稱 Name of Registered Fire Service Installation Contractor: 鍾竹柔

聯絡電話 Telephone: [redacted]

電郵地址 Email address: [redacted]

日期 Date: 13/04/2026

備註 Remark:

F.S. 251 (Rev. 1 2025)

中冠消防工程有限公司
Chung Kwun F. S. Eng. Co., Ltd
Room G, 3/F., On Fook Industrial Building, 41-45 Kwai Fung Crescent, Kwai Chung, N.T.
Tel: 3755 4397, 2111 1817, 3755 4399 Fax: 3755 4363 Email: info@chungkwunco.com.hk

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客戶名稱： **Anderson Concrete Limited** 日期： **11/4/2026**

項目： **手提滅火筒週年檢查**

地點： **A Concrete Batching Plant, No. 14-18 Tsing Tim Street / TYTL98, Tsing Yi**

位置： **B/F - R/F** **FS251: 000000000126-260058**

項目	樓層	位置	手提裝置	製造年份	正常	損壞	過五年
1	G/F	Plant Area	Sand Bucket	-	X		
2	G/F	Plant Area	Sand Bucket	-	X		
3	G/F	Transfer Room	5KG CO2	2022	X		
4	G/F	Filter Press Room	5KG CO2	2022	X		
5	G/F	Main Tower	2KG Dry Powder	2025	X		
6	G/F	F.S. Pump Room	5KG CO2	2022	X		
7	1/F	Control Room A	5KG CO2	2022	X		
8	1/F	Control Room B	5KG CO2	2022	X		
9	1/F	Switch Room	5KG CO2	2022	X		
10	1/F	Main Tower	5KG CO2	2022	X		
11	2/F	Main Tower	5KG CO2	2022	X		
12	3/F	Main Tower	5KG CO2	2022	X		
13	3/F	Main Tower	2KG Dry Powder	2025	X		
14	4/F	Main Tower	5KG CO2	2022	X		
15	5/F	Main Tower	5KG CO2	2022	X		
16	6/F	Main Tower	5KG CO2	2022	X		
17	R/F	Main Tower	5KG CO2	2022	X		

編碼 Code	裝置類型 Type of FSI
1	聲響/視象警報系統 Audio/Visual Advisory System
2	自動啟動裝置 Automatic Actuating Device
3	不含水的滅火劑自動固定裝置 Automatic Fixed Installation other than Water
4	用水作滅火劑的自動固定裝置 Automatic Fixed Installation using Water
5	集水花灑系統 Deluge System
6	水簾系統 Drencher System
7	乾喉系統 Dry Riser System
8	塵埃偵測系統 Dust Detection System
9	機械式排煙系統 Dynamic Smoke Extraction System
10	應急發電機 Emergency Generator
11	應急照明系統 Emergency Lighting
12	出口指示牌 Exit Sign
13	火警警報系統 Fire Alarm System (MFA)
14	消防管制中心 Fire Control Centre
15	火警偵測系統 Fire Detection System
16	消防栓/喉轆系統 Fire Hydrant/Hose Reel System
17	防火捲閘 Fire Shutter
18	保留 Reserved
19	認可的自動操作固定器具 Fixed Automatically Operated Approved Appliance
20	固定泡沫系統 Fixed Foam System
21	氣體偵測系統 Gas Detection System
22	氣體排放系統 Gas Extraction System
23	消防喉轆 Hose Reel
24	手提滅火筒 Portable Fire Extinguisher
25	認可的人手操作手提器具 Portable Hand-operated Approved Appliance
26	樓梯增壓 Pressurization of Staircase
27	裝有固定水泵的環狀水管系統 Ring Main System with Fixed Pump(s)
28	花灑系統 Sprinkler System
29	靜態式排煙系統 Static Smoke Extraction System
30	供水缸 Supply Tank
31	通風/空氣調節控制系統 Ventilation/Air Conditioning Control System
32	噴水系統 Water Spray System
33	供水 Water Supply
34	街道消防栓系統 Street Fire Hydrant System
35	其他 Others_____

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Appendix II
R-to-C on Traffic Comments

S16 Planning Application for Renewal of Temporary Concrete Batching Plant at Tsing Yi Town Lot 98, Nos. 14-18 Tsing Tim Street, Tsing Yi For a Period of 5 Years

Summary of 'Responses to Comments' (August 2026)

Comments of Transport Department Dated 29 June 2026		Our Responses
Traffic Impact Assessment		
1.	Table 3.1- Please clarify the footnotes for J7* and J14(3). Besides, please review the naming for J14 as the road connecting Tsing Yi Road and Tsing Yi Hong Wan Road has already been opened to the public.	The footnotes for J7 and J14 are no longer necessary and were deleted from **Table 3.1**. The naming for J14 (and also RA3) were revised as follows: J14: Tsing Yi Road / Unnamed Road RA3: Tsing Yi Hong Wan Road / Unnamed Road
2.	Table 5.1- For the sake of conservatism, please round up the traffic generation in pcu/hr to the nearest integer (i.e. 3) for the cement tanker.	Noted and revised accordingly.

Appendix III
Revised Traffic Impact Assessment

S16 Planning Application for Renewal of Temporary Concrete Batching Plant at Tsing Yi Town Lot 98, Nos. 14-18 Tsing Tim Street, Tsing Yi For a Period of 5 Years

Traffic Impact Assessment

Final Report

August 2026

CTA Consultants Limited
志達顧問有限公司

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1. INTRODUCTION

1.1 Background

1.1.1 The subject site is situated at Tsing Yi Town Lot No. 98, Nos. 14-18 Tsing Tim Street, Tsing Yi. The planning application of the concrete batching plant had been approved on 24/09/2021 (Approved Planning Application no.: A/TY/145). The plant is currently operating and the planning permission will be expired on 15.10.2026. In this connection, a section 16 planning application for a temporary period of 5 years up to 2031 is submitted to avoid adverse impact caused to the continuous operation of the Use.

1.1.2 CTA Consultants Limited (CTA) is commissioned to undertake a Traffic Impact Assessment (TIA) study for assessing the traffic impact and to propose any feasible measures if necessary.

1.2 Study Objectives

1.2.1 The main objectives of this study are as follows:

- to carry out a traffic impact assessment to identify the acceptability of the concrete batching plant in traffic terms;
- to assess the existing traffic conditions in the vicinity of the plant;
- to forecast traffic demands in the adjacent road network in the design year 2031;
- to assess the impacts of traffic generated by the adjacent new developments in the road network; and
- to propose any traffic improvement measures for alleviating any foreseeable traffic problems if necessary.

1.3 Structure of the Report

1.3.1 Following this introductory chapter, there are SIX further chapters.

- **Chapter 2 – THE DEVELOPMENT**, which presents the site location, layout and production information of the concrete batching plant.

- **Chapter 3 – EXISTING TRAFFIC CONDITION**, which describes the existing local road network, in the vicinity of Study Area, presents a summary of the traffic count survey and assesses the existing traffic conditions.

- **Chapter 4 – THE FUTURE TRAFFIC CONDITIONS**, which estimates the future traffic flows on the surrounding road network.

- **Chapter 5 – TRAFFIC IMPACT ASSESSMENT**, which discusses the methodology for the future traffic forecasts.

- **Chapter 6 – SUMMARY AND CONCLUCION**, which summarizes the findings of the study and presents the conclusions regarding the traffic issues associated with the plant.

2. THE PROPOSED DEVELOPMENT

2.1 Site Location

2.2.1 The concrete batching plant is located at Tsing Yi Town Lot No. 98, Nos. 14-18 Tsing Tim Street, Tsing Yi., which is illustrated diagrammatically in **Figure 1.1**. The development is located at the western seaside of Tsing Yi, which can only be accessed by Sai Tso Wan Road.

2.2 Development Proposal

2.2.2 The layout of the existing plant is illustrated diagrammatically in **Figure 2.1**.

2.2.3 The planning approval for the existing concrete batching plant is scheduled to be renewed from 15.10.2026 to another 5 years to 2031.

2.2.4 There is no material change in operational parameters since the previous temporary approval (A/TY/145) granted in 2021. The normal operation hours remain unchanged from 7:00am to 7:00pm, from Mondays to Saturdays and occasionally during night time and on Sundays/public holidays. The hourly maximum production capacity of the concrete batching plant is 88.8m^3/hr.

2.3 Traffic Arrangement

2.3.1 The GFA of the concrete batching plant is not more than 980m^2.

2.3.2 The following types of parking spaces will be provided within the plant to facilitate the operation of the proposed Concrete Batching Plant:

- 9 nos. of Private Car Parking Spaces;
- 1 no. of Trailer Parking Space;
- 6 nos. of Parking Spaces for concrete mixer trucks; and
- 3 nos. of Loading/ Unloading Spaces (including 2 under the production bays)

3. EXISTING TRAFFIC CONDITIONS

3.1 Existing Road Network

3.1.1 The existing road network in the vicinity of the plant is shown in **Figure 3.1**.

3.1.2 Tsing Yi Road West is a dual-2 district distributor connecting Sai Tso Wan Road with Tsing Tsuen Road. It serves as a major road link connecting Tsing Yi Town Centre to Tsing Yi west area.

3.1.3 Sai Tso Wan Road is a 2-lane local road connecting Sai Tso Wan area and Tsing Yi Road West/Tsing Yi Road. It is a major road link providing access to/from numerous sites in Sai Tso Wan area.

3.1.4 Tsing Tim Street is a 2-lane Local Road branching off from Sai Tso Wan Road. It serves as a road link providing access between proposed plant and other development sites along Tsing Tim Street with Sai Tso Wan Road.

3.2 Critical Junctions

3.2.1 In order to establish the existing traffic condition in the vicinity, traffic survey in the forms of manual classification counts was conducted at 24 critical junctions. The location of the surveyed junctions is indicated in **Figure 3.1** and their existing junction layout arrangements are given in **Figures 3.2** to **3.25** respectively.

Table 3.1 Identified Critical Junctions

Ref.	Junction	Type	Figure No.
J1	Cheung Tsing Highway / Tsing Yi Road West	Signalized	3.2
J2	Tsing Yi Road / Tsing Yi Hong Wan Road / Tsing Sha Highway	Signalized	3.3
J3	Tsing Sheung Road / Tsing Yi Road Priority	Priority	3.4
J4	Sai Tso Wan Road / Tsing Yi Road / Tsing Yi Road West	Signalized	3.5
J5	Entrance of VEC / Sai Tso Wan Road	Signalized	3.6
J6	Tsing Tim Street / Sai Tso Wan Road	Priority	3.7
J7	Tsing Yi Road West / Tsing Chin Street	Priority	3.8
J8	Tsing Yi Road West / Ching Hong Road	Signalized	3.9
J9	Tsing Yi Road West / Liu To Road	Signalized	3.10
J10	Tsing Yi Road West / Fung Shue Wo Road	Signalized	3.11
J11	Tsing Yi Heung Sze Wui Road / Cheung Wan Street	Signalized	3.12
J12	Tsing Yi Heung Sze Wui Road / Chung Mei Road	Signalized	3.13
J13	Tsing Yi Road / Tsing Keung Street	Priority	3.14
J14	Tsing Yi Road / Unnamed Road	Signalized	3.15
RA1	Tsing Yi Interchange	Roundabout	3.16
RA2	Tsing Yi Road West / Tsing Yi Hong Wan Road / Tsing Sha Highway	Roundabout	3.17
RA3	Tsing Yi Hong Wan Road / Unnamed Road	Roundabout	3.18
RA4	Hong Wan Road / Tsing Ko Road	Roundabout	3.19
RA5	Tam Kon Shan Interchange	Roundabout	3.20
RA6	Tsing Yi Heung Sze Wui Road / Fung Shue Wo Road / Tsing King Road	Roundabout	3.21
RA7	Tsing Sheung Road / Tsing Yi Hong Wan Road	Roundabout	3.22
RA8	Ching Hong Road / Tsing Yi Road	Roundabout	3.23
RA9	Tam Kon Shan Road / Tsing Yi North Costal Road	Roundabout	3.24
RA10	Tsing Ko Road / Tsing Sheung Road	Roundabout	3.25

3.2.2 Surveys had been conducted during the morning, logistic and evening peak periods of on 11 June 2026. The surveys provide details of the traffic situation in the nearby area. Based on surveyed traffic flows, it was found that the AM, logistic and PM peak hour occurred from 08:30 to 09:30, 11:15 to 12:15 and 17:30 to 18:30 respectively. The results of the observed traffic flows are presented in **Figure 3.26.**

3.2.3 Based on the observed traffic flows in **Figure 3.26,** the junction capacity assessments have been carried out and the existing operational performance of the critical junctions is listed in **Table 3.2** below.

Table 3.2 Existing Operational Performance of Identified Critical Junctions in 2026

Ref.	Junction	Method of Control	Year 2026 Observed Case		
			RC/RFC[1]		
			AM Peak	Logistic Peak	PM Peak
J1	Cheung Tsing Highway / Tsing Yi Road West	Signalized	46%	42%	121%
J2	Tsing Yi Road / Tsing Yi Hong Wan Road / Tsing Sha Highway	Signalized	137%	141%	225%
J3	Tsing Sheung Road / Tsing Yi Road Priority	Priority	0.36	0.33	0.38
J4	Sai Tso Wan Road / Tsing Yi Road / Tsing Yi Road West	Signalized	64%	34%	149%
J5	Entrance of VEC / Sai Tso Wan Road	Signalized	138%	188%	92%
J6	Tsing Tim Street / Sai Tso Wan Road	Priority	0.25	0.24	0.17
J7	Tsing Yi Road West / Tsing Chin Street[2]	Priority	-	-	-
J8	Tsing Yi Road West / Ching Hong Road	Signalized	89%	85%	120%
J9	Tsing Yi Road West / Liu To Road	Signalized	24%	60%	37%
J10	Tsing Yi Road West / Fung Shue Wo Road	Signalized	38%	61%	53%
J11	Tsing Yi Heung Sze Wui Road / Cheung Wan Street	Signalized	16%	8%	37%
J12	Tsing Yi Heung Sze Wui Road / Chung Mei Road	Signalized	48%	131%	77%
J13	Tsing Yi Road / Tsing Keung Street	Priority	0.32	0.25	0.13
J14	Tsing Yi Road / Unnamed Road	Signalized	139%	152%	223%
RA1	Tsing Yi Interchange (North)	Roundabout	0.77	0.58	0.56
	Tsing Yi Interchange (South)	Roundabout	0.70	0.47	0.58
RA2	Tsing Yi Road West / Tsing Yi Hong Wan Road / Tsing Sha Highway	Roundabout	0.41	0.34	0.36
RA3	Tsing Yi Hong Wan Road / Unnamed Road	Roundabout	0.46	0.41	0.43
RA4	Hong Wan Road / Tsing Ko Road	Roundabout	0.31	0.28	0.30
RA5	Tam Kon Shan Interchange	Roundabout	0.42	0.37	0.38
RA6	Tsing Yi Heung Sze Wui Road / Fung Shue Wo Road / Tsing King Road	Roundabout	0.49	0.39	0.54
RA7	Tsing Sheung Road / Tsing Yi Hong Wan Road	Roundabout	0.09	0.10	0.11
RA8	Ching Hong Road / Tsing Yi Road	Roundabout	0.34	0.25	0.24
RA9	Tam Kon Shan Road / Tsing Yi North Costal Road	Roundabout	0.10	0.12	0.07
RA10	Tsing Ko Road / Tsing Sheung Road	Roundabout	0.18	0.17	0.19

Note: (1) RC = Reserve Capacity; RFC = Ratio of Flow to Capacity for Priority Junction
(2) Only ingress traffic is allowed on Tsing Chin Street. No traffic conflicts or delay is expected in this location. Therefore, no junction assessment is required.

3.2.1 The results in **Table 3.2** show that the junctions are now operating with ample capacities in peak hours except J11.

3.3 Public Transport Services in the Vicinity

3.3.1 Limited road-based public transport services are currently operating in the vicinity of the plant. Only one GMB route is operating close to the plant (within 500m radius from the plant) and the details of the GMB route are presented in **Table 3.3** below.

Table 3.3 Existing Road-based Public Transport Services in the Vicinity

Service	Route	Origin - Destination	Frequency (min)
GMB	88M	Kwai Fong Station – Sai Tso Wan Road (Hong Kong Unit Dockyard)	5 – 15

4. THE FUTURE TRAFFIC CONDITIONS

4.1 Design year

4.1.1 The concrete batching plant is currently operating. The applicant intends to apply for 5-years operation period, i.e. until 2031. Therefore, the design year of 2031 is adopted for this study.

4.2 Design Traffic Flows

4.2.1 To estimate the 2031 traffic flows in the local road network, an appropriate growth factor has to be identified for the area in the first instance based on historical trend and planning data.

Historical Trend

4.2.2 Transport Department has traffic count stations in the vicinity of the proposed development. The traffic counts reported in the Annual Traffic Census (ATC) over a period of 5 years, between 2018 and 2024 are summarized in **Table 4.1**.

Table 4.1 Historical Traffic Data from Annual Traffic Census

ATC Stn	Road Name	Annual Average Daily Traffic (AADT)							Avg. Annual Growth Rate
		2018	2019	2020	2021	2022	2023	2024	
5312	Tsing Sha Highway near Tsing Yi Road Expressway (Tsing Sha Highway Nr Stonecutters Bridge - Roundabout Nr Tsing Yi Rd)	15,920	14,750	12,580*	12,220*	11,790*	14,260	14,820	-1.19%
5655	Ching Hong Road Local Distributor (Tsing Yi Rd W - Chung Mei Rd)	12,820*	12,770*	12,420	13,360	13,230*	13,680*	13,880	1.33%
5849	Tsing Yi Rd W (Tsing Nam St - Ching Hong Road)	15,640*	15,580*	15,430*	13,690	15,820	16,350*	16,590	0.99%
6113	Tsing Yi Road (Tsing Yi Rd nr. Dow Chemical - Tsing Yi Hong Wan Rd)	11,720	11,680*	11,570*	12,020*	11,520	13,250	13,440	2.31%
6643	Sai Tso Wan Road (Tsing Yi Rd-Dockyard Front Gate)	10,030	8,390	8,960	9,410	11,200	10,200	11,330	2.05%
Total		**66,130**	**63,170**	**60,960**	**60,700**	**63,560**	**67,740**	**70,060**	**0.97%**

*AADT estimated by Growth Factor

4.2.1 As shown in **Table 4.1**, the average annual traffic growth pattern in the vicinity of the development shows a growth trend of +0.97% per year.

2021-Based TPEDM planning data

4.2.2 Reference has also been made to the latest 2021-Based Territorial Population Employment Data Matrices (TPEDM) planning data published by the Planning Department for projection of population and employment within the study district. The average annual growth rates in terms of population and employment from 2021 to 2031 are tabulated in **Table 4.2**.

Table 4.2 2021-based Planning Data from 2026 to 2031

Kwai Tsing District			
Data	**Year**		**Average Annual Growth Rate**
	2026	**2031**	
Population	488,750	483,050	-0.23%
Employment	223,400	227,800	+0.39%
Total	**712,150**	**710,850**	**-0.04%**

4.2.3 From **Table 4.2**, it is found that the average annual growth rates of population and employment in Tsing Yi from year 2026 to 2031 are -0.04% per annum.

Adopted Growth Rate

4.2.3 A.A.D.T. of ATC indicates that the traffic flow of the local road network has an average annual growth rate of +0.97%.

4.2.4 Whilst, the planning data indicates that the population and employment of the study area are expected to grow with an average annual growth rate of -0.26% and +0.06% respectively.

4.2.5 As a conservative approach, annual growth rate **+1.0%** p.a. has been adopted for projecting traffic forecasts. It is deemed sufficient to allow for any unexpected future growth as a result of some changes in land use or development in the study area.

4.3 Planned / Committed Future Developments

4.3.1 There are numbers of planned/committed future developments in vicinity. The updated planning parameters are shown in **Table 4.3**. The locations of these future developments are shown in **Figure 4.1**.

4.3.2 The traffic trips generated from these planned/committed developments are estimated and shown in **Table 4.4**.

4.3.3 These traffic trips were assigned to the road network to obtain the reference traffic in the design year.

Table 4.3 Development Schedule of Planned Development at Vicinity

Ref.	Development Site / Planning Application No.	Use	Development Parameters	Completion Year
A	Ching Hong Road North Public Housing Development	Public Housing	Phase 3: 1680 units Phase 4: 770 units	2029 2030-31
			Retail: 2000m^2 Social Welfare Facilities	2024 - 2029
B	Housing Development at Tsing Yi Road West	Public Housing	3,400 units	2034/35
C	Y/TY/2 - Tsing Yi Town Lot 80 and 108RP (Phase 1)	Private Housing	5,048 units	2028
	Y/TY/2 - Tsing Yi Town Lot 80 and 108RP (Phase 2)	Public Housing	4,704 units	2036
		Private Housing	5,323 units	2036
D	Multi-storey Complex for Container Storage and Cargo Handling at Tsing Hung Road (TYTL No.202)	Container Storage and Cargo Handling	Site area: 44,318 m^2 Max. GFA: 227,836 m^2	2031
E	Tsing Yi – Lantau Link	Infrastructure	-	2033 (Construction traffic may occur at about 2027)
F	A/TY/152	Asphalt Plant	100 tonnes/hr	Under Operation
G	A/TY/147	Concrete Batching Plant	300m^3/hr (240m^3/hr as limited by SP License)	Under Operation
H	A/TY/148	Asphalt Plant	260 tonnes/hr (208 tones/hr as limited by SP License)	Under Operation
I	A/TY/149	Concrete Batching Plant	250 m^3/hr	Under Operation
J	A/TY/151	Concrete Batching Plant	240 m^3/hr	Under Operation

4.3.4 Y/TY/2 - Tsing Yi Town Lot 80 and 108RP (Ref. C) is still under planning application and not approved yet. Also, Housing Development at Tsing Yi Road West (Ref. B) is beyond our design year. Thus, they would not be included in this assessment. A/TY/147, A/TY/148, A/TY/149, A/TY/151 and A/TY/152 (Ref. F to J) are renewal applications which are already under operation and thus no new trips will be formed. The construction traffic of Tsing Yi – Lantau Link (Ref. E) is reviewed and considered. It would not give significant impact to the road network.

4.3.5 The trip generations and attractions of the adjacent development are summarized in **Table 4.4**.

Table 4.4 Estimated Traffic Generations of Planned Vicinity Development

Development Type			Average Flat Size m^2	Unit	Trip Rate			
					AM Peak		PM Peak	
					Gen.	Att.	Gen.	Att.
Public Rental			40	Pcu/hr/flat	0.0432	0.0326	0.0237	0.0301
Retail			-	pcu/hr/100 sqm GFA	0.2296	0.2434	0.3100	0.3563
Industrial			-	pcu/hr/100 sqm GFA	0.0926	0.1386	0.1350	0.1049
Developments					**Trips (Pcu/hr)**			
A	Ching Hong Road North Public Housing Development	Phase 3			73	55	40	51
		Phase 4			33	25	18	23
		Retail			5	5	6	7
		Kindergarten(1)			30	30	30	30
		Social Welfare Facilities (2)			10	10	10	10
D	Multi-storey Complex for Container Storage and Cargo Handling at Tsing Hung Road (TYTL No.202)				211	316	308	239
E	Tsing Yi – Lantau Link Construction Vehicles(3)				15	15	15	15

Note: (1) Reference from other public housing TIA reports (Sheung Shui Area 4 and 30)

(2) Nominal Trips

(3) Assume 1 construction vehicle per 10 min per bound, i.e. 6 veh/hr. For 2.5 pcu factor, 15 pcu/h.

4.2.4 The locations of planned developments in the vicinity are shown diagrammatically in **Figure 4.1**.

4.3.6 The 2031 reference flows are then derived by applying the annual growth rate plus the additional traffic generations of the developments in Tsing Yi.

2031 Reference Flows (without the Plant)	**=**	**2026 Observed Flows**	**x**	**Adopted Growth Factor (i.e. +1% p.a. for 5 years)**	**+**	**Traffic Flows of Proposed Developments at Tsing Yi**

4.4 Development Traffic Flows

4.2.5 It is noted that this application is for the planning renewal only, the concrete plant is currently in operation, hence **no additional traffic** would be added to the road network by this plant under this application. Therefore, 2031 design flow are then directly derived by applying the annual growth rate plus the additional traffic generations of the adjacent developments.

2031 Design Flows = 2031 Reference Flows

4.5 Planned Junction Improvement Scheme

4.5.1 Different planned junction improvement schemes will be carried out under different projects. They are summarized in **Table 4.5** below:

Table 4.5 Planned Junction Improvement Schemes

Ref.	Junction	Project Proponents	Target Completion Year	Figure No.
J2	Tsing Hung Road / Tsing Yi Road	Multi-storey Complex for Container Storage and Cargo Handling at Tsing Hung Road (TYTL No.202)	2031	**4.2**
J8	Tsing Yi Road West / Ching Hong Road	Tsing Yi Road West Public Housing Development	2029	**4.3**
J10(1)	Tsing Yi Road West/ Fung Shue Wo Road	Ching Hong Road North Public Housing Development	2030/31	**4.4**
RA1(1)	Tsing Yi Interchange (South)	Ching Hong Road North Public Housing Development	2030/31	**4.5**
RA2	Tsing Yi Road West / Tsing Yi Hong Wan Road / Tsing Sha Highway	Highways Department (PWP Item 6866TH)	Under Review (Original gazetted in 2019. Postponed due to COVID-19)	**4.6**

Notes: (1) Based on District Council discussion paper 7/D/2024 (PWP Item No.B839)

5. TRAFFIC IMPACT ASSESSMENT

5.1 Traffic Generation Calculation

5.1.1 As there is no change in the operation scale of the plant, no additional trips are generated. The traffic generation adopted in the approved TIA for the existing plant (A/TY/145) is summarized in **Table 5.1** below for reference:

Table 5.1 Adopted Hourly Traffic Generation of the Concrete Batching Plant

Types of Vehicles	Traffic Generation [veh/hr (pcu/hr)]					
	AM Peak		Noon Peak		PM Peak	
	Gen.	Att.	Gen.	Att.	Gen.	Att.
Concrete Mixer Truck	12 (30)	12 (30)	12 (30)	12 (30)	12 (30)	12 (30)
Aggregate Tipper Trucks	2 (5)	2 (5)	2 (5)	2 (5)	2 (5)	2 (5)
Cement Tanker	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)
Private Car	0 (0)	2 (2)	1(1)	1(1)	2 (2)	0 (0)
Total	**15 (38)**	**17 (40)**	**16 (39)**	**16 (39)**	**17 (40)**	**15 (38)**
Maximum	**Gen.**			**Att.**		
	17 (40)			**17 (40)**		

Notes: (1) PCU factor of 2.5 has been adopted for HGV and concrete mixer.

(2) Assuming the concrete average carrying capacity of each concrete mixer truck is 7.4m^3.

5.2 Operational Assessment

5.2.1 Based on the design traffic flows in **Figure 5.1**, a junction capacity assessment is carried out for the key junctions and the results of the assessment are summarized in **Table 5.2** below. The ingress and egress routes are shown in **Figure 5.2**.

Table 5.2 Junction Performance of Critical Junctions in Design Year 2031

Ref.	Junction	Method of Control	Year 2031 Design Case RC/RFC(1)		
			AM Peak	Logistic Peak	PM Peak
J1	Cheung Tsing Highway / Tsing Yi Road West	Signalized	34%	30%	96%
J2	Tsing Yi Road / Tsing Yi Hong Wan Road / Tsing Sha Highway(3)	Signalized	54%	73%	103%
J3	Tsing Sheung Road / Tsing Yi Road Priority	Priority	0.39	0.34	0.41
J4	Sai Tso Wan Road / Tsing Yi Road / Tsing Yi Road West	Signalized	56%	28%	137%
J5	Entrance of VEC / Sai Tso Wan Road	Signalized	126%	175%	82%
J6	Tsing Tim Street / Sai Tso Wan Road	Priority	0.27	0.25	0.18
J7	Tsing Yi Road West / Tsing Chin Street(2)	Priority	-	-	-
J8	Tsing Yi Road West / Ching Hong Road(3)	Signalized	69%	66%	97%
J9	Tsing Yi Road West / Liu To Road	Signalized	18%	53%	30%
J10	Tsing Yi Road West / Fung Shue Wo Road(3)	Signalized	68%	95%	87%
J11	Tsing Yi Heung Sze Wui Road / Cheung Wan Street	Signalized	**10%**	**3%**	30%
J12	Tsing Yi Heung Sze Wui Road / Chung Mei Road	Signalized	31%	95%	57%
J13	Tsing Yi Road / Tsing Keung Street	Priority	0.33	0.27	0.14
J14	Tsing Yi Road / Unnamed Road	Signalized	127%	139%	207%
RA1	Tsing Yi Interchange (North)	Roundabout	0.82	0.62	0.59
	Tsing Yi Interchange (South) (3)	Roundabout	0.50	0.40	0.41
RA2	Tsing Yi Road West / Tsing Yi Hong Wan Road / Tsing Sha Highway(3)	Roundabout	0.50	0.40	0.39
RA3	Tsing Yi Hong Wan Road / Unnamed Road	Roundabout	0.48	0.43	0.45
RA4	Hong Wan Road / Tsing Ko Road	Roundabout	0.32	0.29	0.32
RA5	Tam Kon Shan Interchange	Roundabout	0.44	0.40	0.40
RA6	Tsing Yi Heung Sze Wui Road / Fung Shue Wo Road / Tsing King Road	Roundabout	0.52	0.41	0.57
RA7	Tsing Sheung Road / Tsing Yi Hong Wan Road	Roundabout	0.10	0.10	0.12
RA8	Ching Hong Road / Tsing Yi Road	Roundabout	0.38	0.27	0.25
RA9	Tam Kon Shan Road / Tsing Yi North Costal Road	Roundabout	0.11	0.13	0.08
RA10	Tsing Ko Road / Tsing Sheung Road	Roundabout	0.19	0.18	0.20

Note: (1) RC = Reserve Capacity; RFC = Ratio of Flow to Capacity for Priority Junction
(2) Only ingress traffic is allowed on Tsing Chin Street. No traffic conflicts or delay is expected in this location. Therefore, no junction assessment is required.
(3) Planned improvement scheme in Figures 4.2 to 4.6 were considered

5.2.2 Based on the assessment presented in **Table 5.2**, all junctions will be operating with ample capacities during design year except AM and logistic peak of J11.

5.2.3 It is revealed that J11 is already over its capacity at present. This is due to J11 is the only junction connecting to the industrial area along Cheung Wan Street/Cheung Tat Road/Cheung Fai Road. All the traffic are required to left turn from Tsing Yi Heung Sze Wui Road southbound to Cheung Wan Street and create a queue. Also, the weaving between the queue and the bus movement to/from the Greenfield Garden bus stop also worsen the situation.

5.2.4 According to DC paper 43/D/2024 and 54/2024, this issue was raised by DC members. TD responded that they will continue monitoring the traffic situation and study the feasibility of creating a new entrance road at Tsing Yi Road, if necessary.

5.2.5 As the concrete batching plant is already under operation for many years without affecting the public road and renewal applications of this plant has been applied and approved for many times. Also, the development parameter is no change under this renewal application, no additional traffic impact will be caused by the plant.

5.3 Traffic Management Plan

5.3.1 Detailed Traffic Management Plan will be formulated and submitted to Transport Department separately.

6. SUMMARY AND CONCLUSION

6.1 Summary

6.1.1 The Applicant would like to submit a S16 planning application for a 5-year renewal for the current concrete batching plant at Tsing Yi Town Lot No. 98, Nos. 14-18 Tsing Tim Street, Tsing Yi (Approved Planning Application no. A/TY/145)

6.1.2 CTA Consultants Ltd. (CTA) is therefore commissioned as traffic consultant to prepare the Traffic Impact Assessment (TIA) to support the planning application.

6.1.3 To appraise the existing traffic conditions, a traffic count survey was conducted in the surrounding road network of the proposed plant. Moreover, current operational performance of the critical junctions was assessed with the observed traffic flows. The operational assessment results revealed that all critical junctions are at present operating with adequate capacities except J11.

6.1.4 In order to assess the impact of the development related traffic on the local road network, the 5th year after the approval of renewal application of the plant (i.e. year 2031) has been adopted as the design year for this study.

6.1.5 To reveal the traffic impact of various proposed developments in the vicinity, traffic generations by the proposed developments in the vicinity have also been taken into consideration.

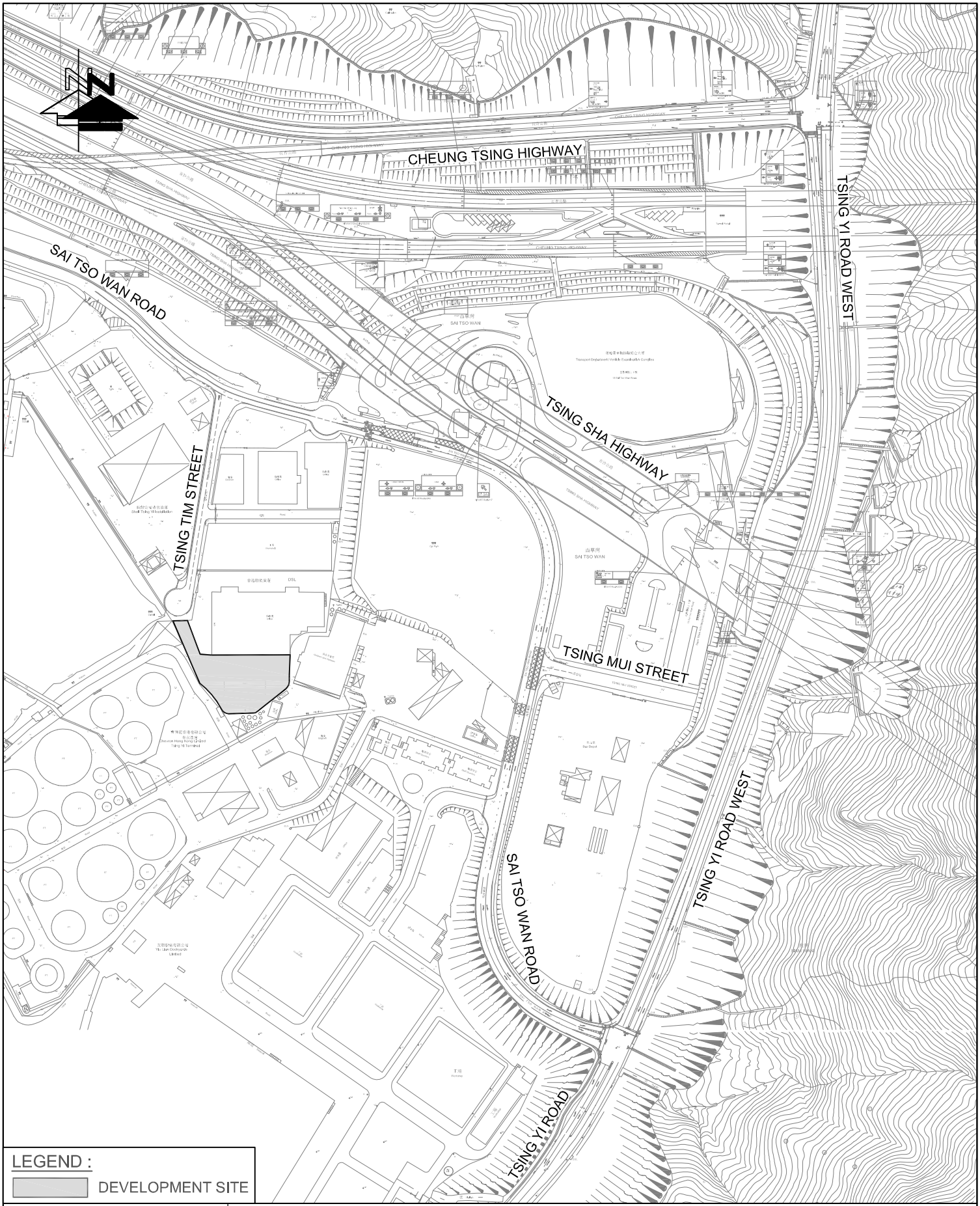
6.1.6 It is noted that the concrete plant is already operating currently, thus **no additional traffic** would be added to the road network by this plant under this application and 2031 design flows are the same as reference flows. It is noted that growth rate is also applied to the existing trips of the application plant as conservative approach.

6.1.7 All the assessed junctions will be operating with ample spare capacity in design year except AM and logistic peak of J11, but our plant is already under operation for many years without affecting the public road and renewal applications of this plant has been applied and approved for many times. Also, the development parameter is no change under this renewal application, no additional traffic impact will be caused by the plant and therefore would not worsen the case.

6.2 Conclusion

6.2.1 In conclusion, this Traffic Impact Assessment (TIA) has demonstrated that the application plant will not generate additional traffic to the surrounding road network and the junctions in vicinity would have ample capacities during design year 2031.

6.2.2 Hence, it is concluded that the renewal of the plant at the Application Site is acceptable from traffic engineering view point.



LEGEND :

DEVELOPMENT SITE

FIGURE NO.: 1.1	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: SITE LOCATION PLAN
SCALE: 1:4000 @A4 / DATE: 31 MAR 2026	CTA Consultants Limited 志達顧問有限公司

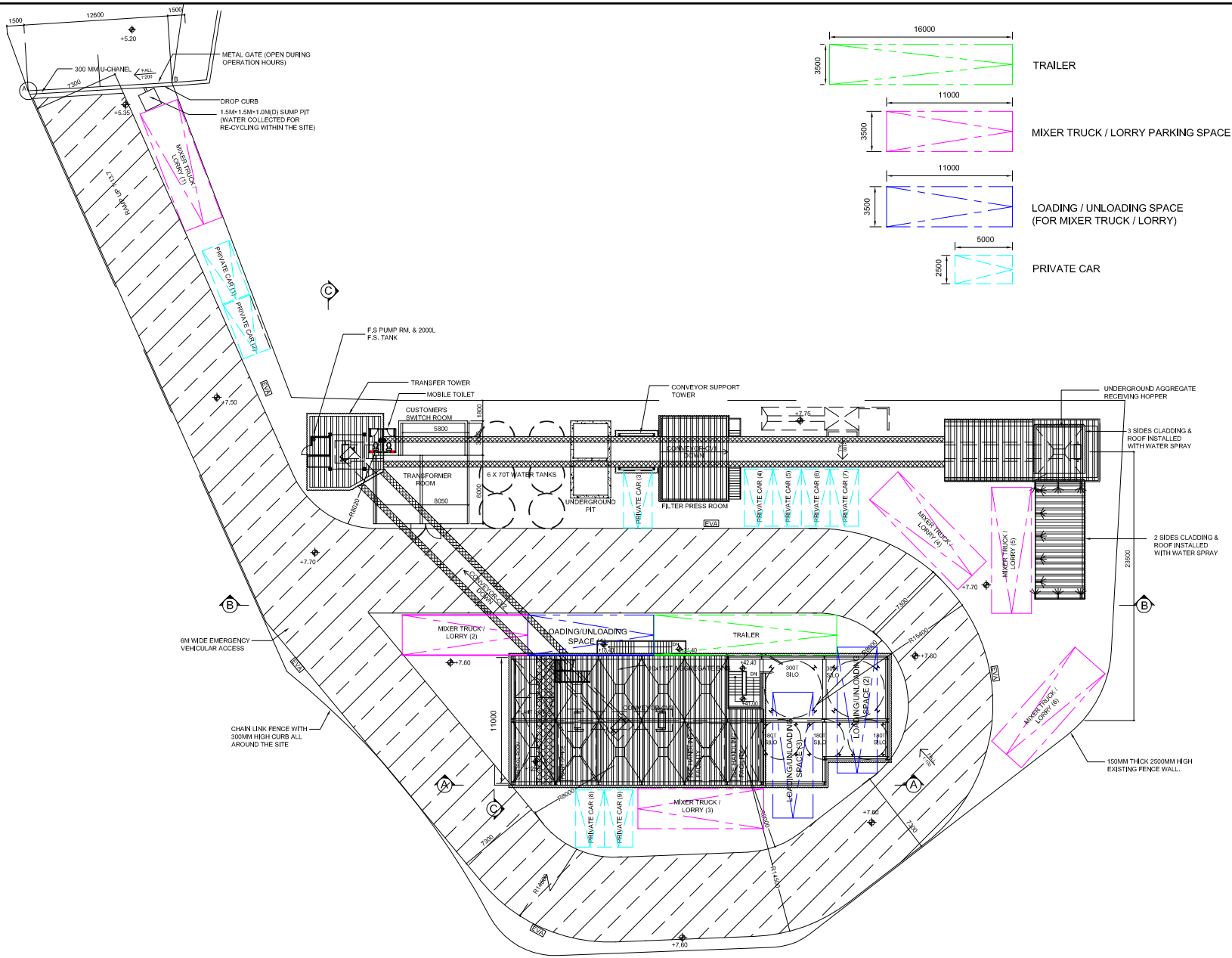


FIGURE NO.: 2.1	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING LAYOUT OF THE CONCRETE BATCHING PLANT
SCALE: 1:500 @A4	DATE: 28 APR 2026

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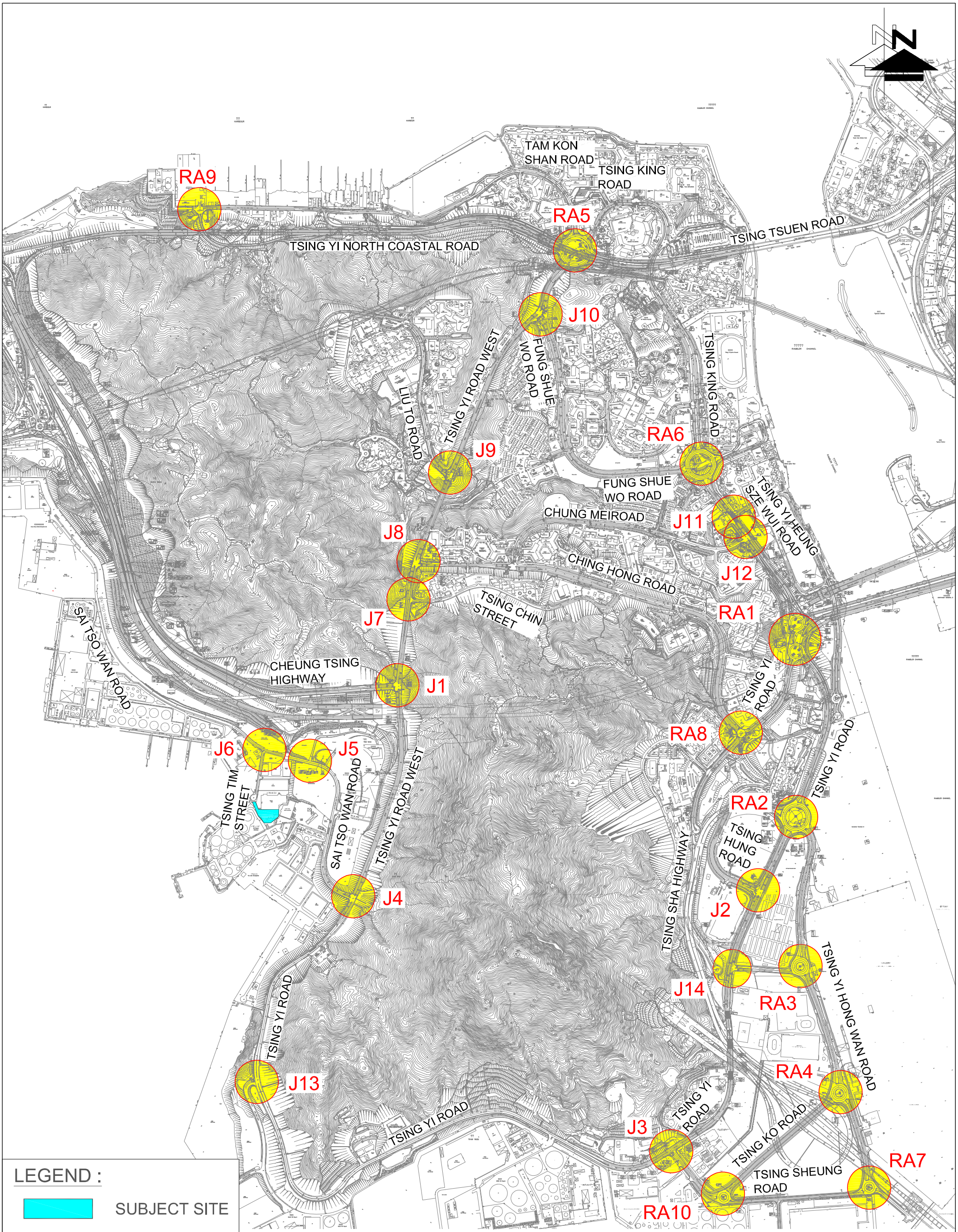

LEGEND :

SUBJECT SITE

FIGURE NO.: 3.1	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: CRITICAL JUNCTION
SCALE: 1 : 12000 @A3	DATE: 08 JUN 2026

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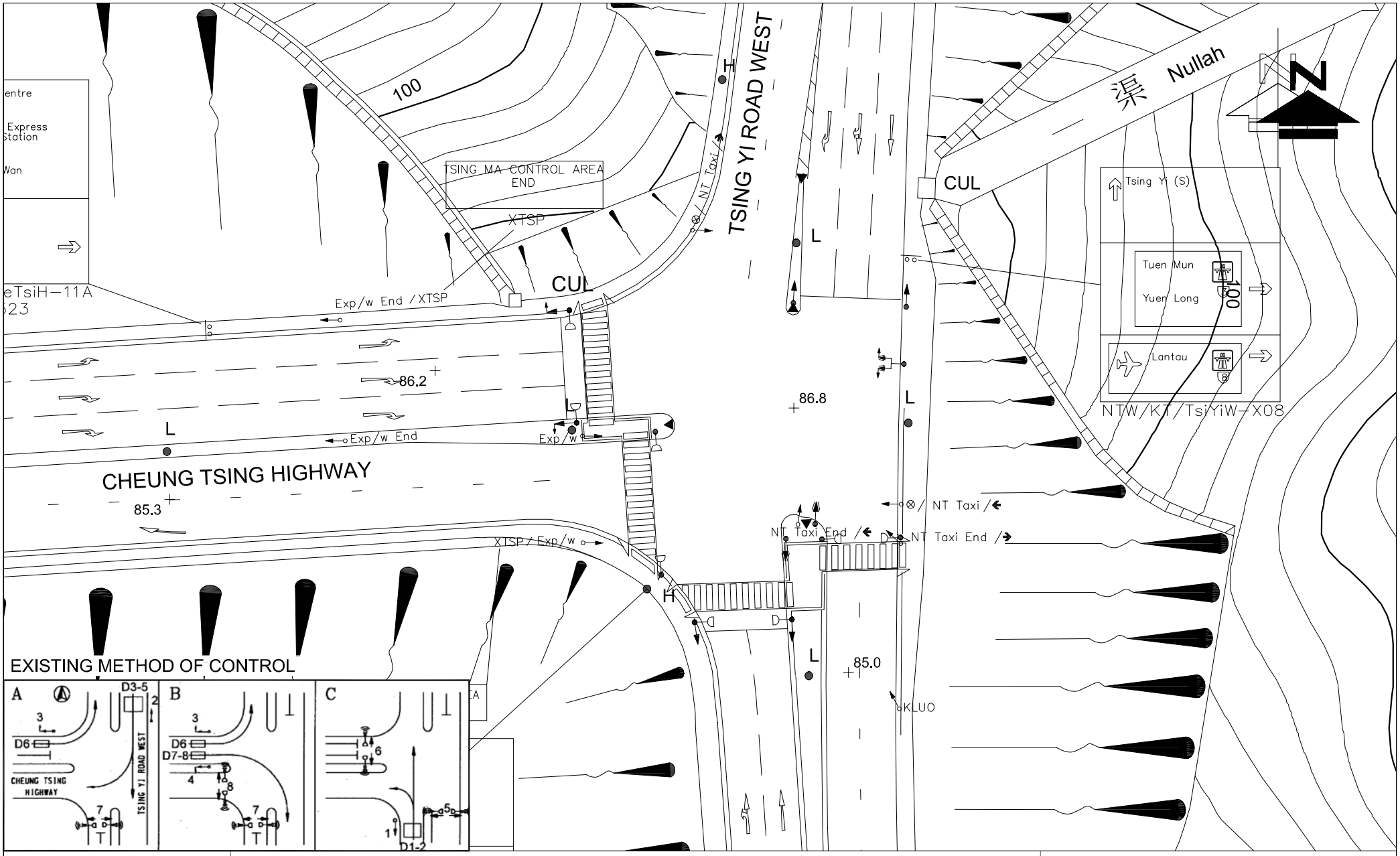

FIGURE NO.: 3.2	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI ROAD WEST / CHEUNG TSING HIGHWAY (J1)
SCALE: 1 : 500 @A4	DATE: 08 JUN 2026

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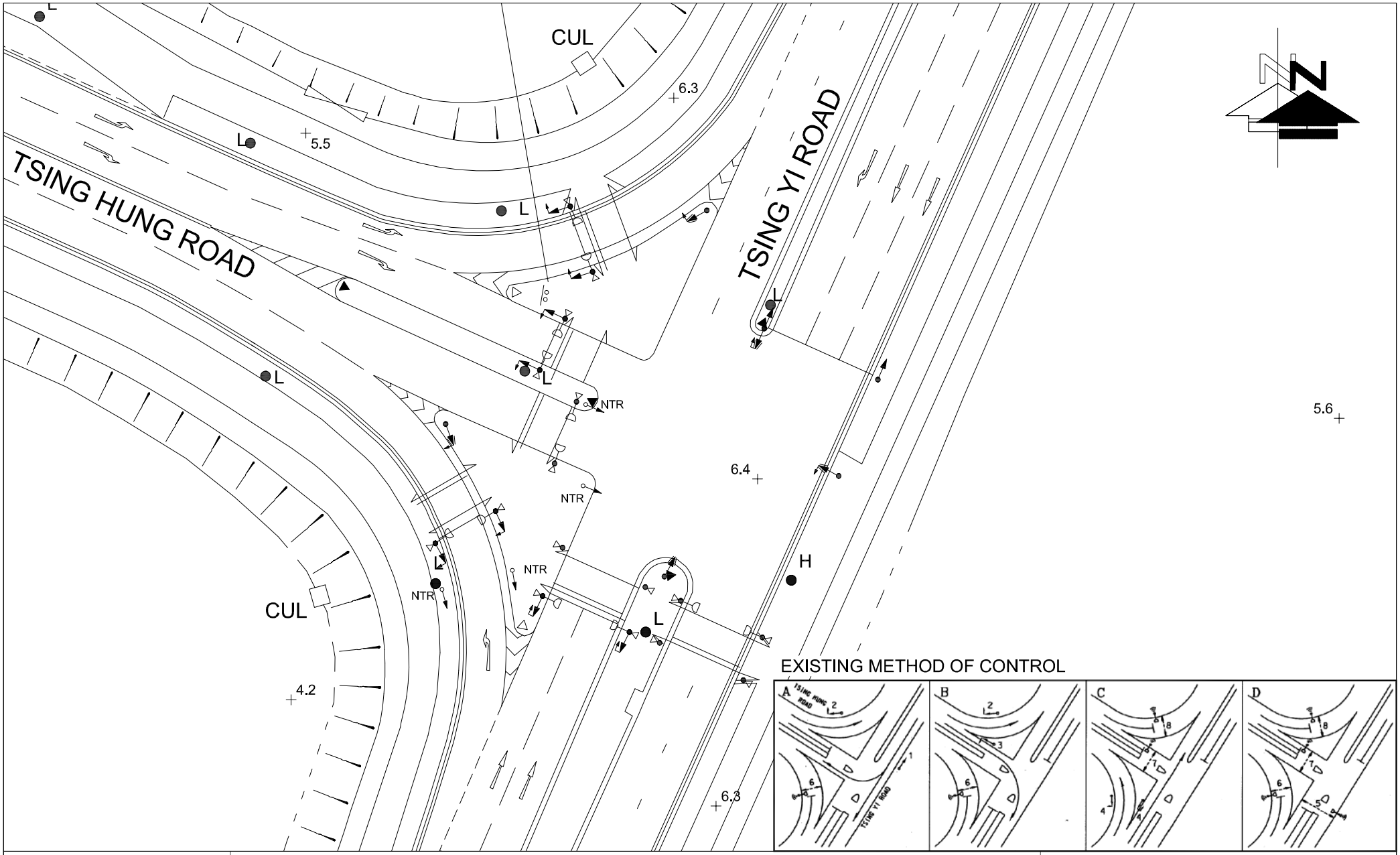

FIGURE NO.: 3.3	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING HUNG ROAD / TSING YI ROAD (J2)
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 08 JUN 2026

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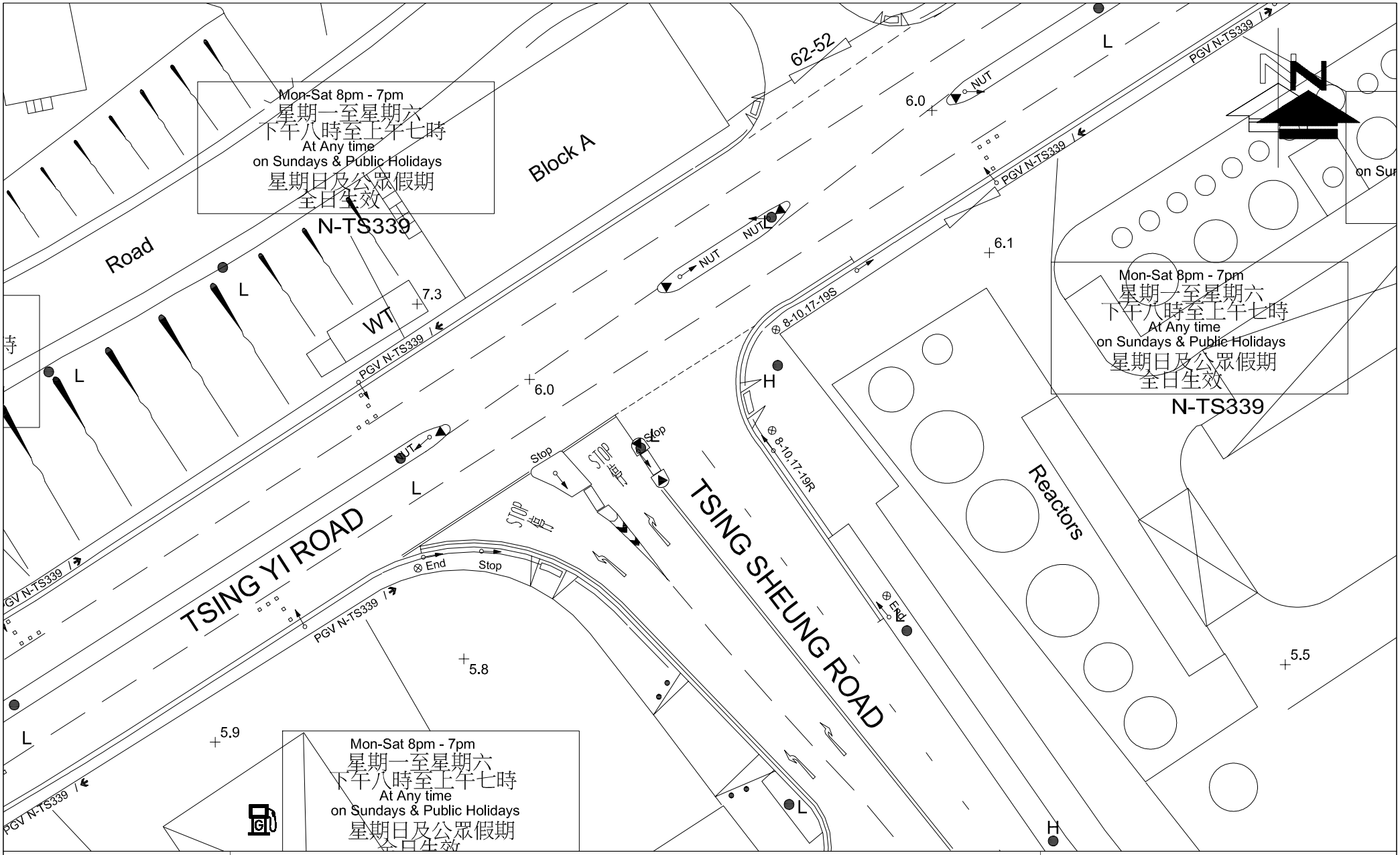

FIGURE NO.: 3.4	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING SHEUNG ROAD / TSING YI ROAD (J3)
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 08 JUN 2026

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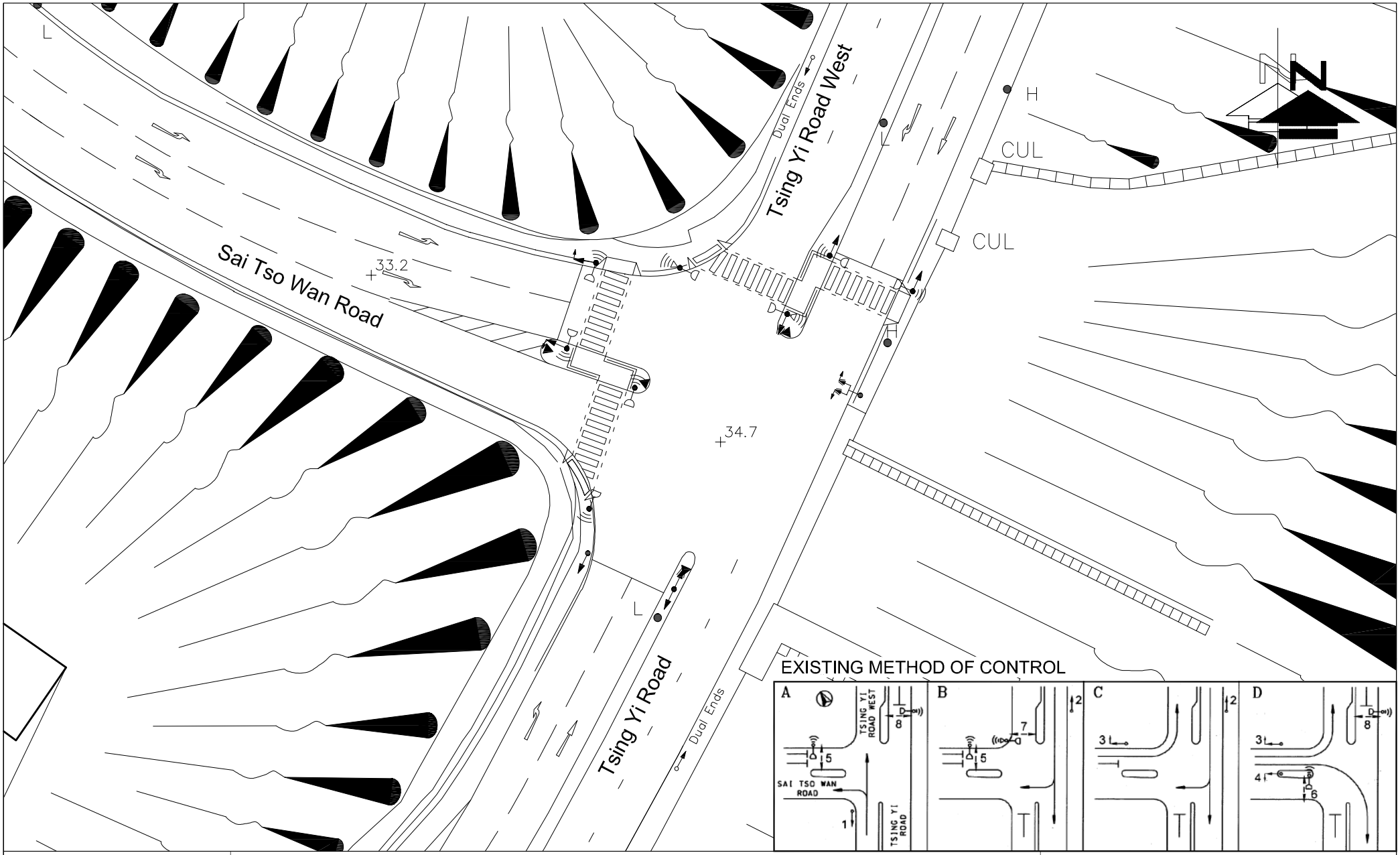

FIGURE NO.: 3.5	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF SAI TSO WAN ROAD / TSING YI ROAD WEST / TSING YI ROAD (J4)
SCALE: 1 : 500 @A4	DATE: 08 JUN 2026

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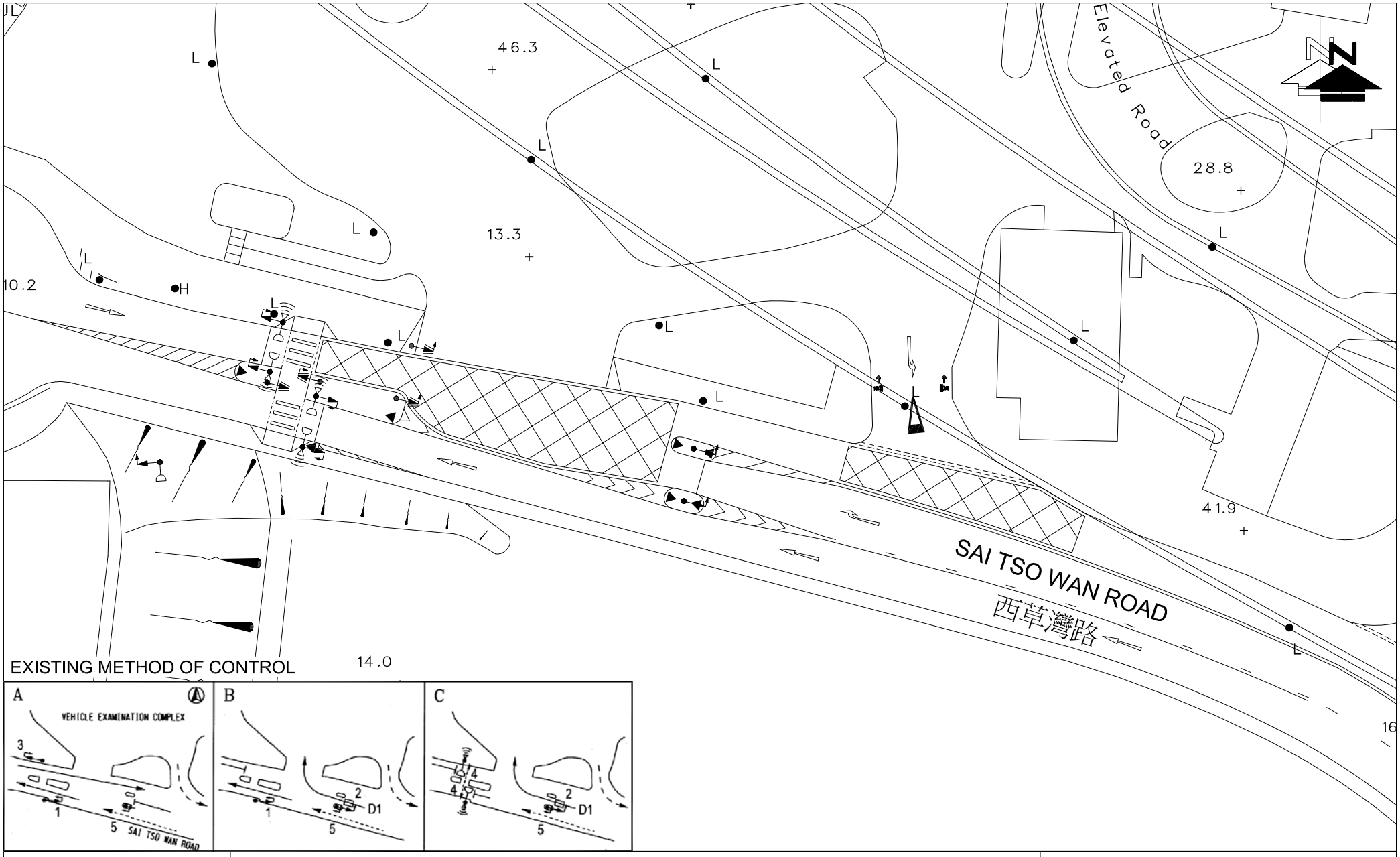

EXISTING METHOD OF CONTROL

FIGURE NO.: 3.6	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF ENTRANCE OF VEC / SAI TSO ROAD (J5)
SCALE: 1 : 500 @A4	DATE: 08 JUN 2026

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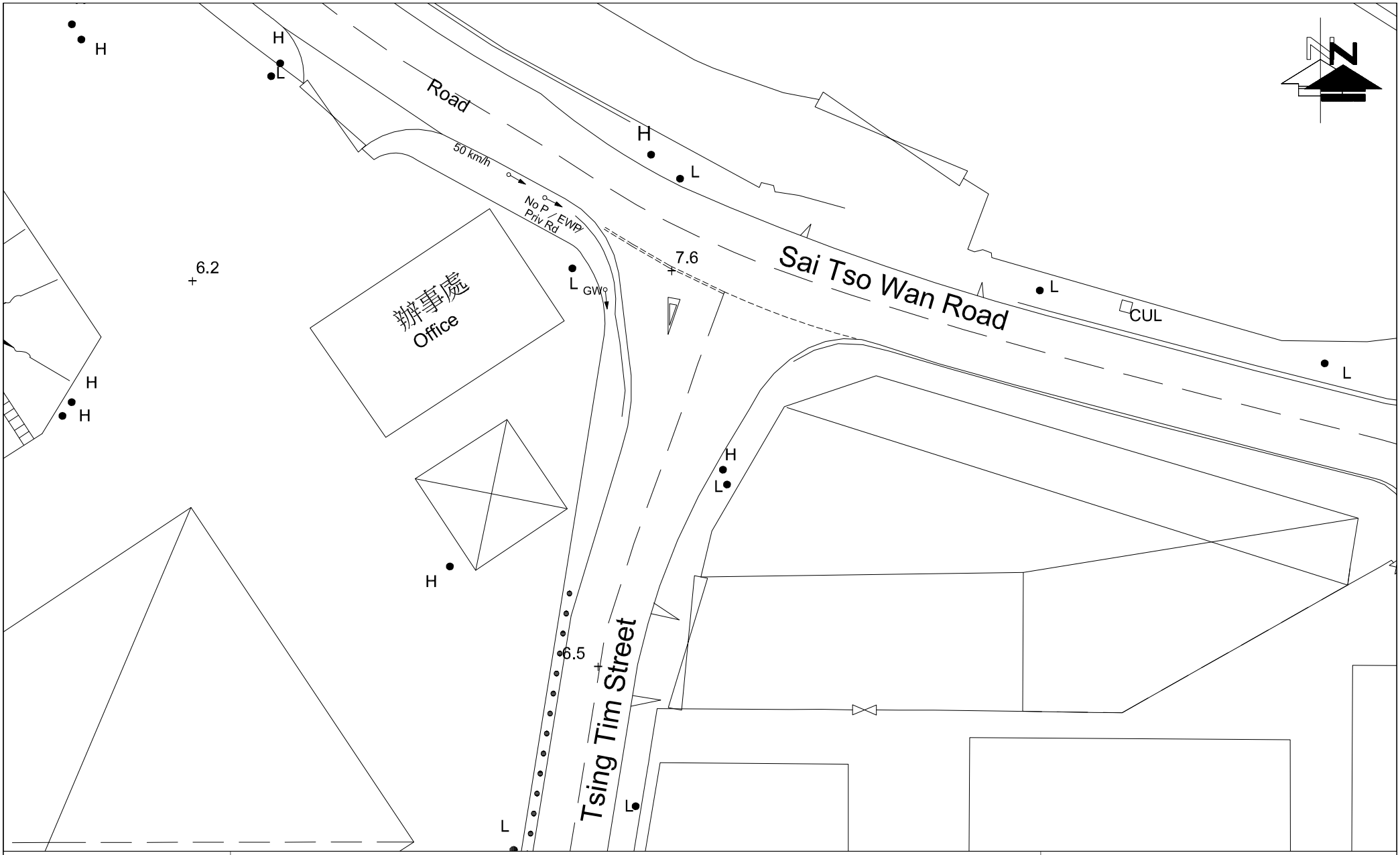

FIGURE NO.: 3.7	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING TIM STREET / SAI TSO WAN ROAD (J6)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 08 JUN 2026	

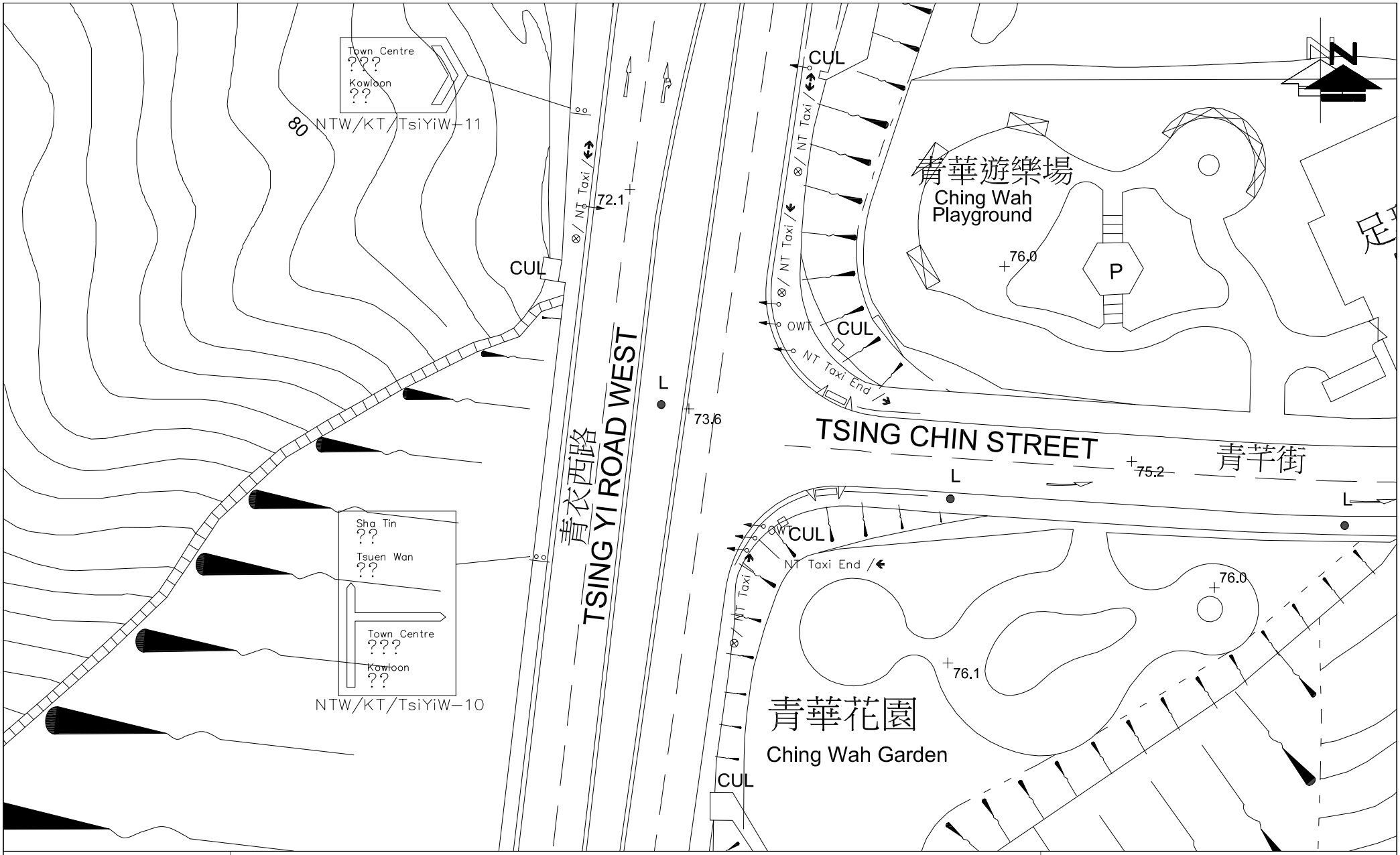

FIGURE NO.: 3.8	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF YI ROAD WEST / TSING CHIN STREET (J7)	
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 08 JUN 2026	

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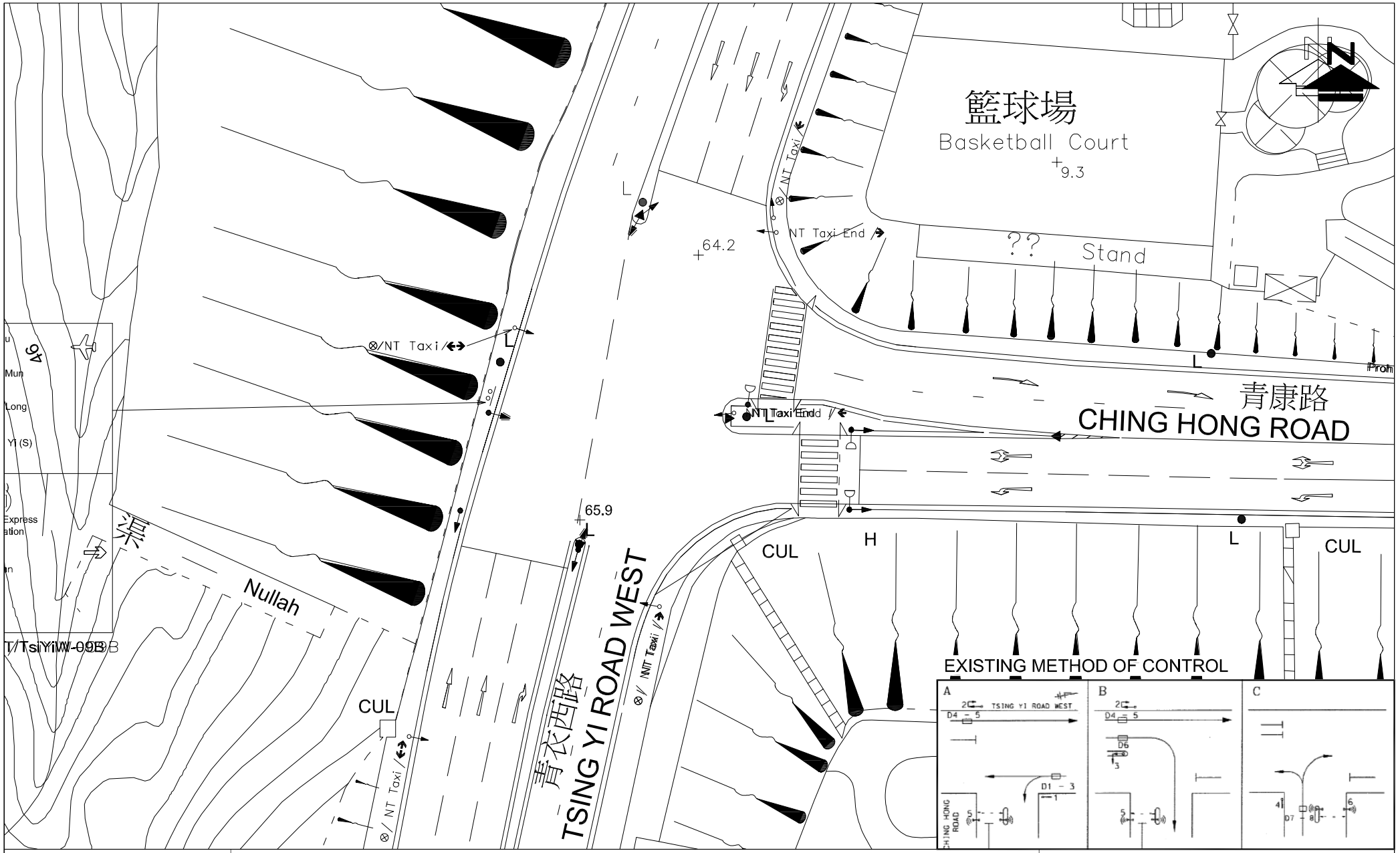

FIGURE NO.: 3.9	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI ROAD WEST / CHING HONG ROAD (J8)
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 08 JUN 2026

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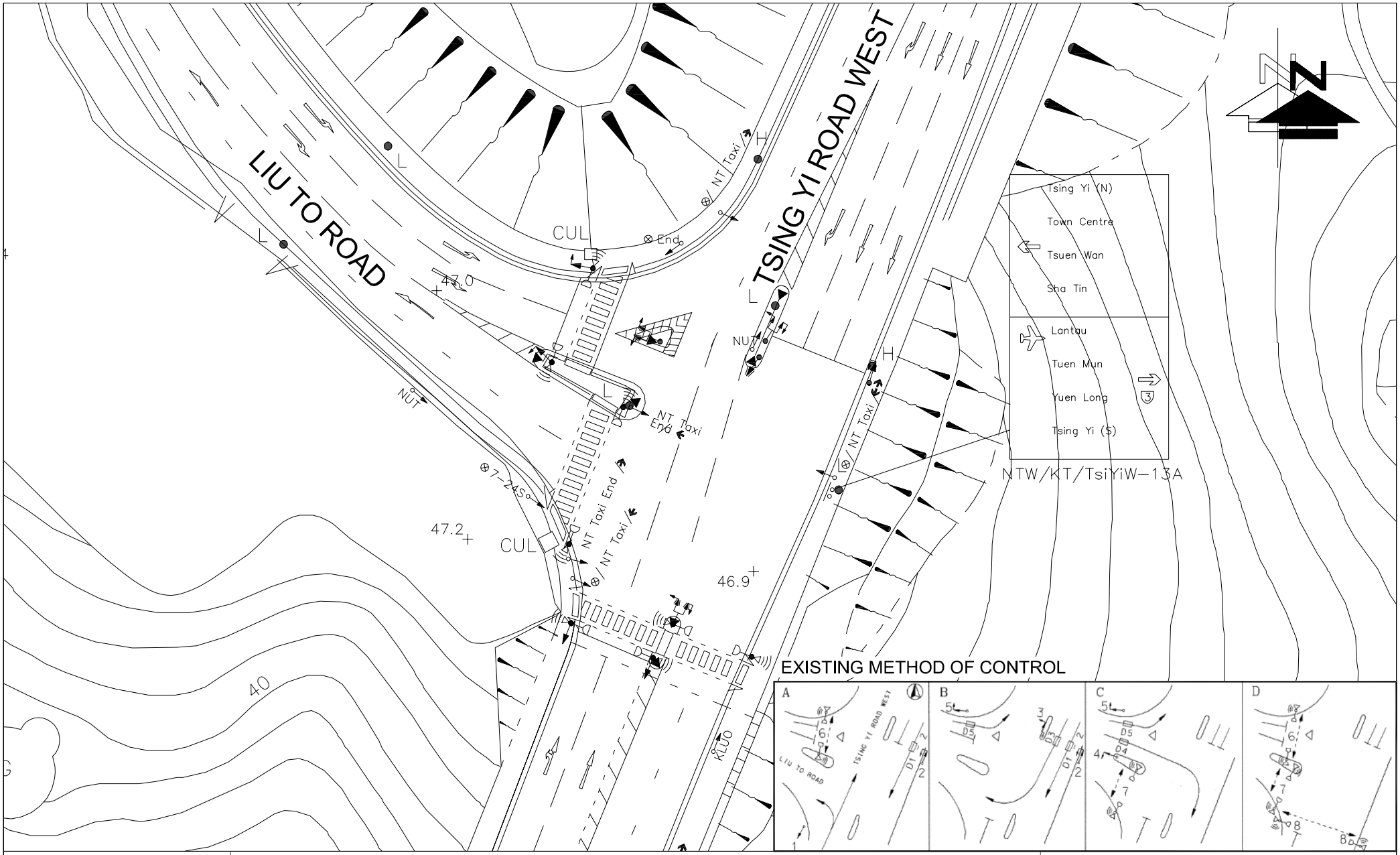

FIGURE NO.: 3.10	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI ROAD WEST / LIU TO ROAD (J9)
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 08 JUN 2026

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EXISTING METHOD OF CONTROL

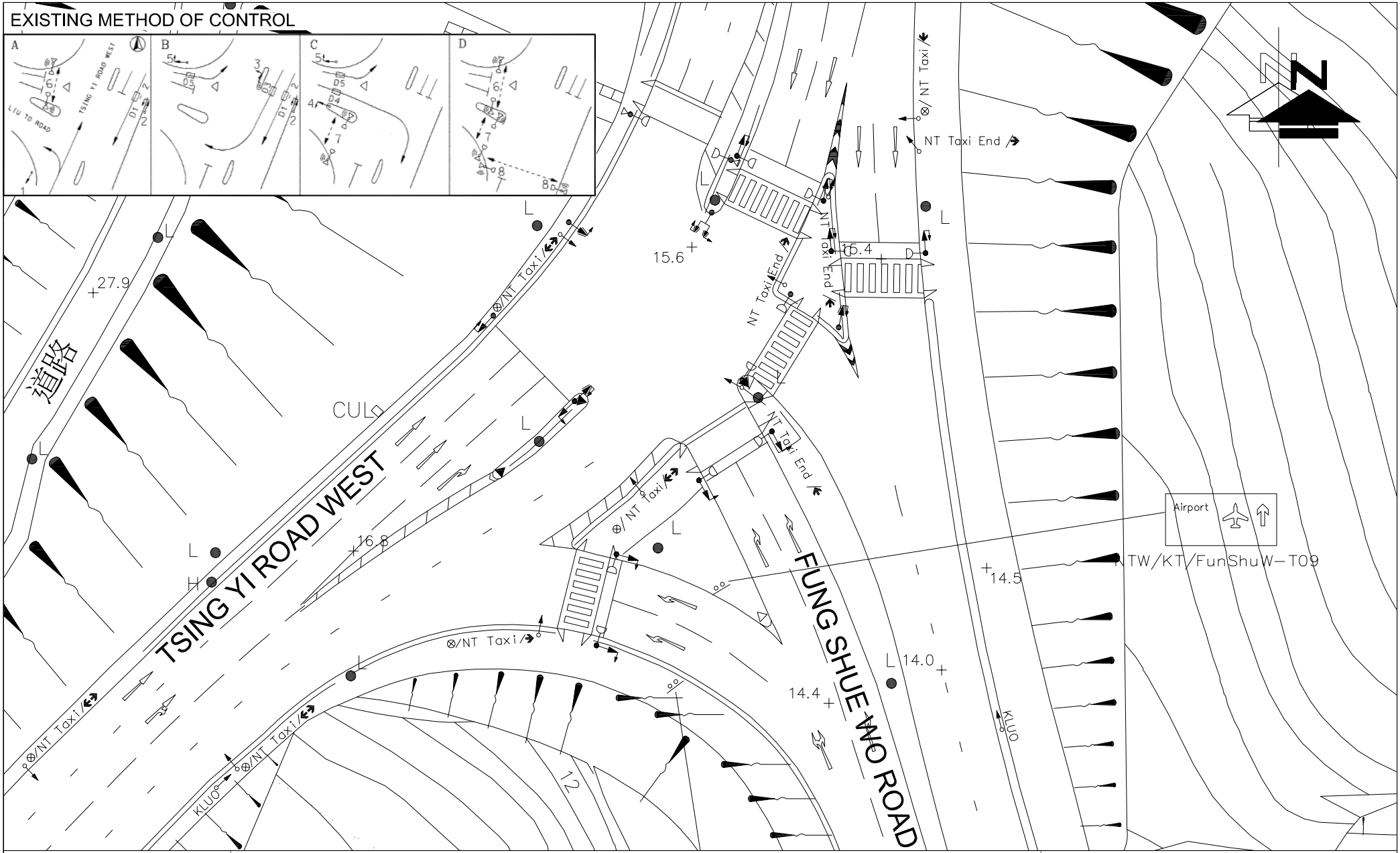

FIGURE NO.: 3.11	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI ROAD WEST / FUNG SHUE WO ROAD (J10)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 08 JUN 2026	

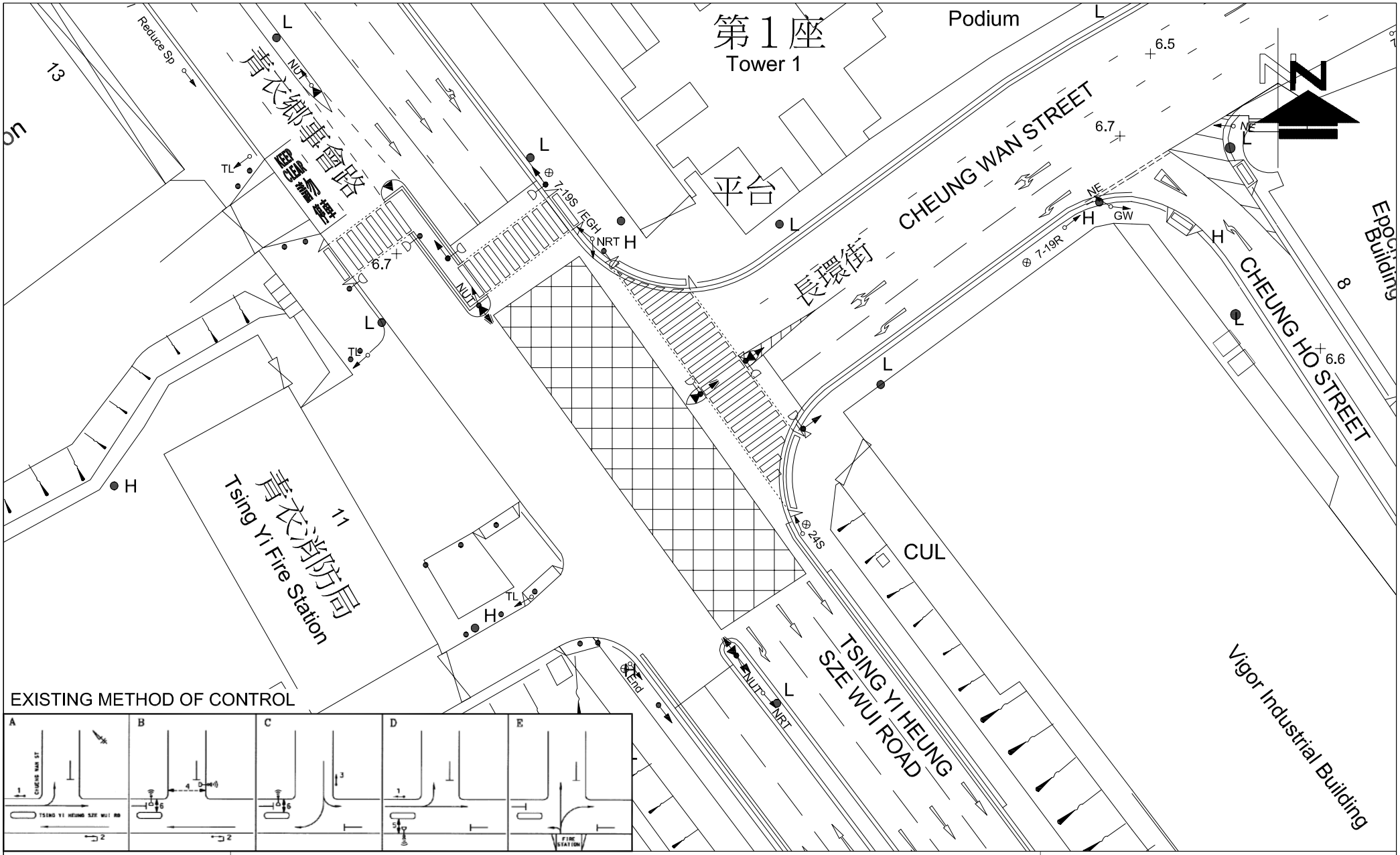

FIGURE NO.: 3.12	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI HEUNG SZE WUI ROAD / CHEUNG WAN STREET (J11)
SCALE: 1 : 500 @A4	DATE: 08 JUN 2026

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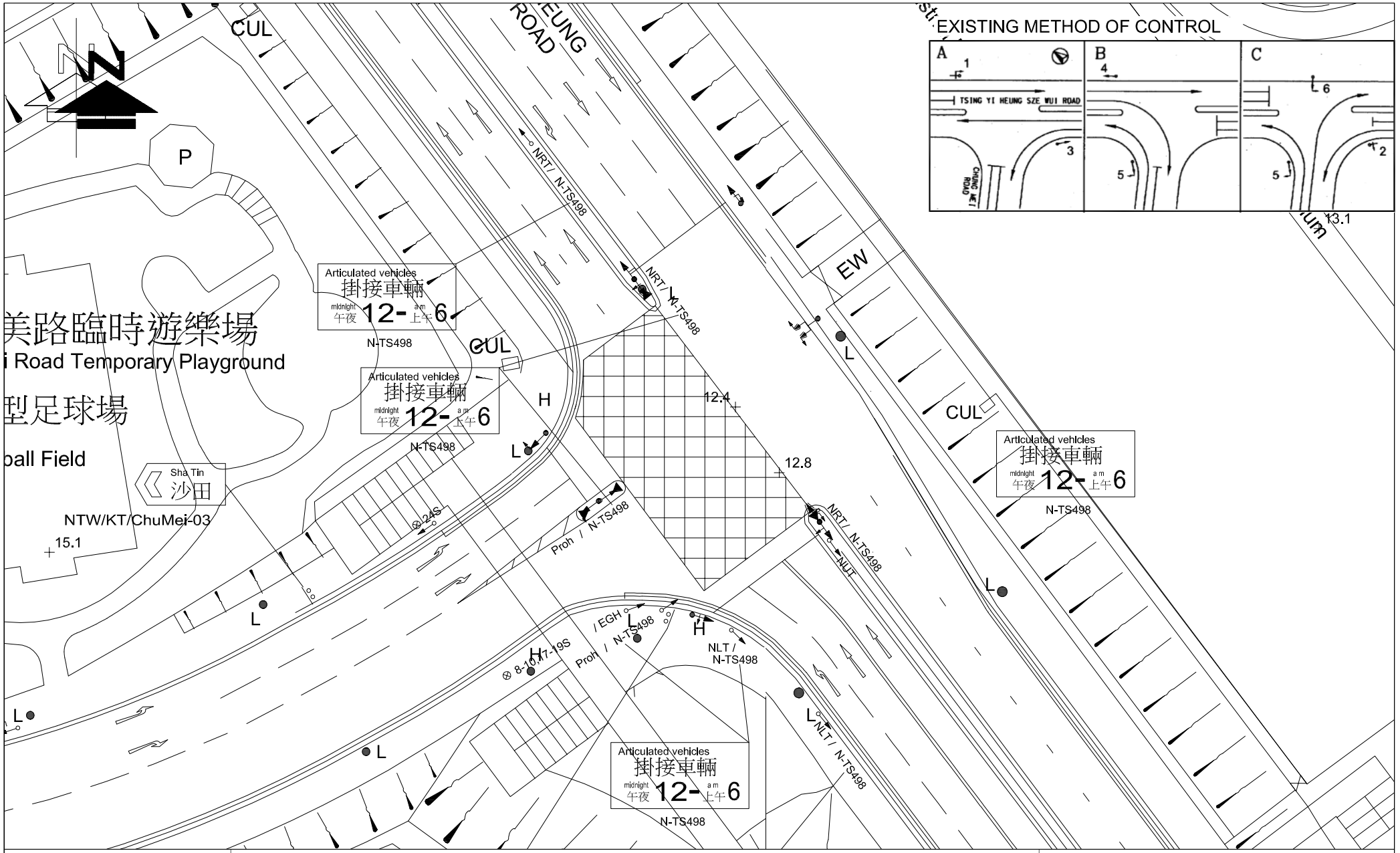

FIGURE NO.: 3.13	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI HEUNG SZE WUI ROAD / CHUNG MEI STREET (J12)	
SCALE: 1 : 500 @A4	DATE: 08 JUN 2026	

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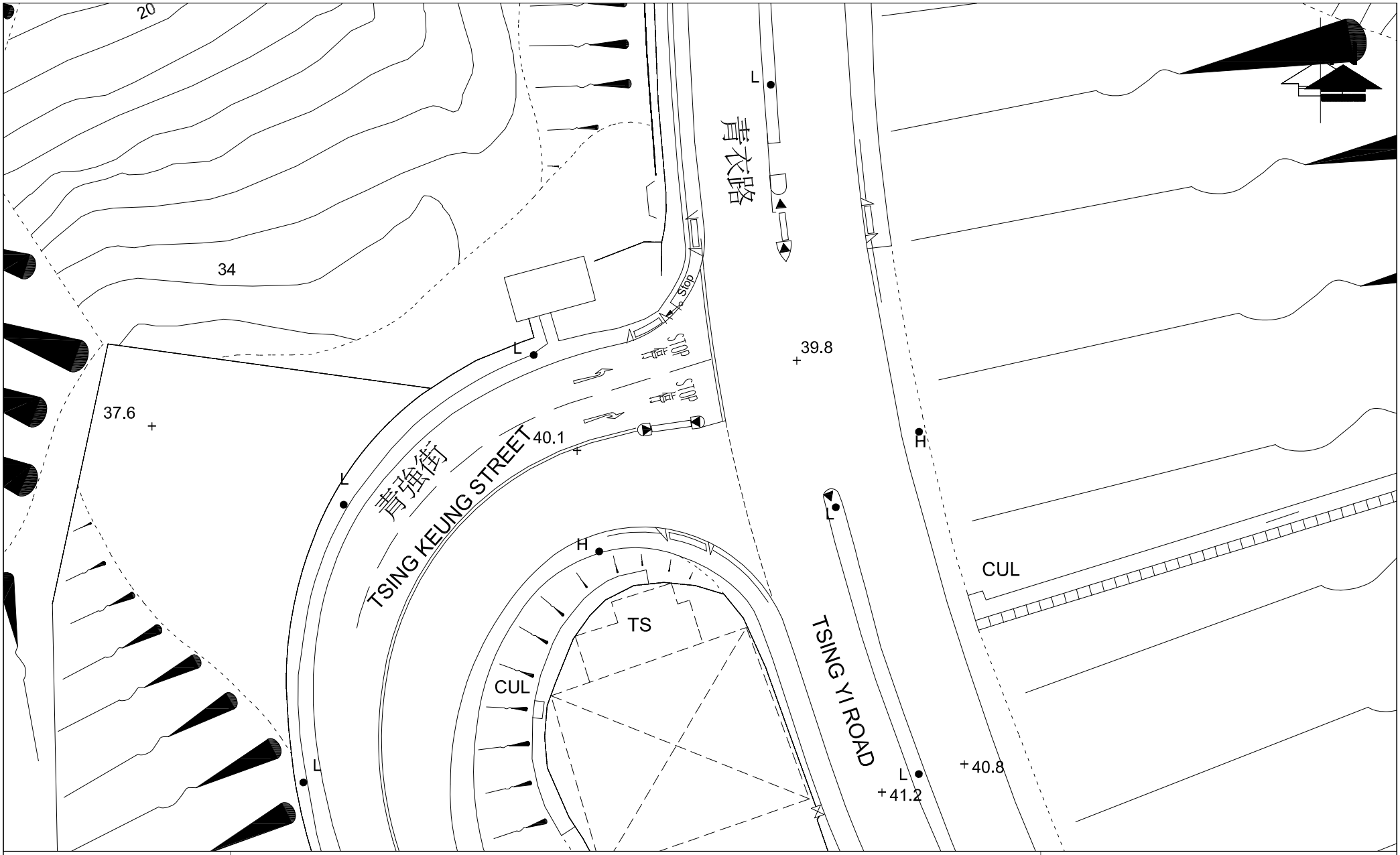

FIGURE NO.: 3.14	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YIP ROAD / TSING KEUNG STREET (J13)
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 08 JUN 2026

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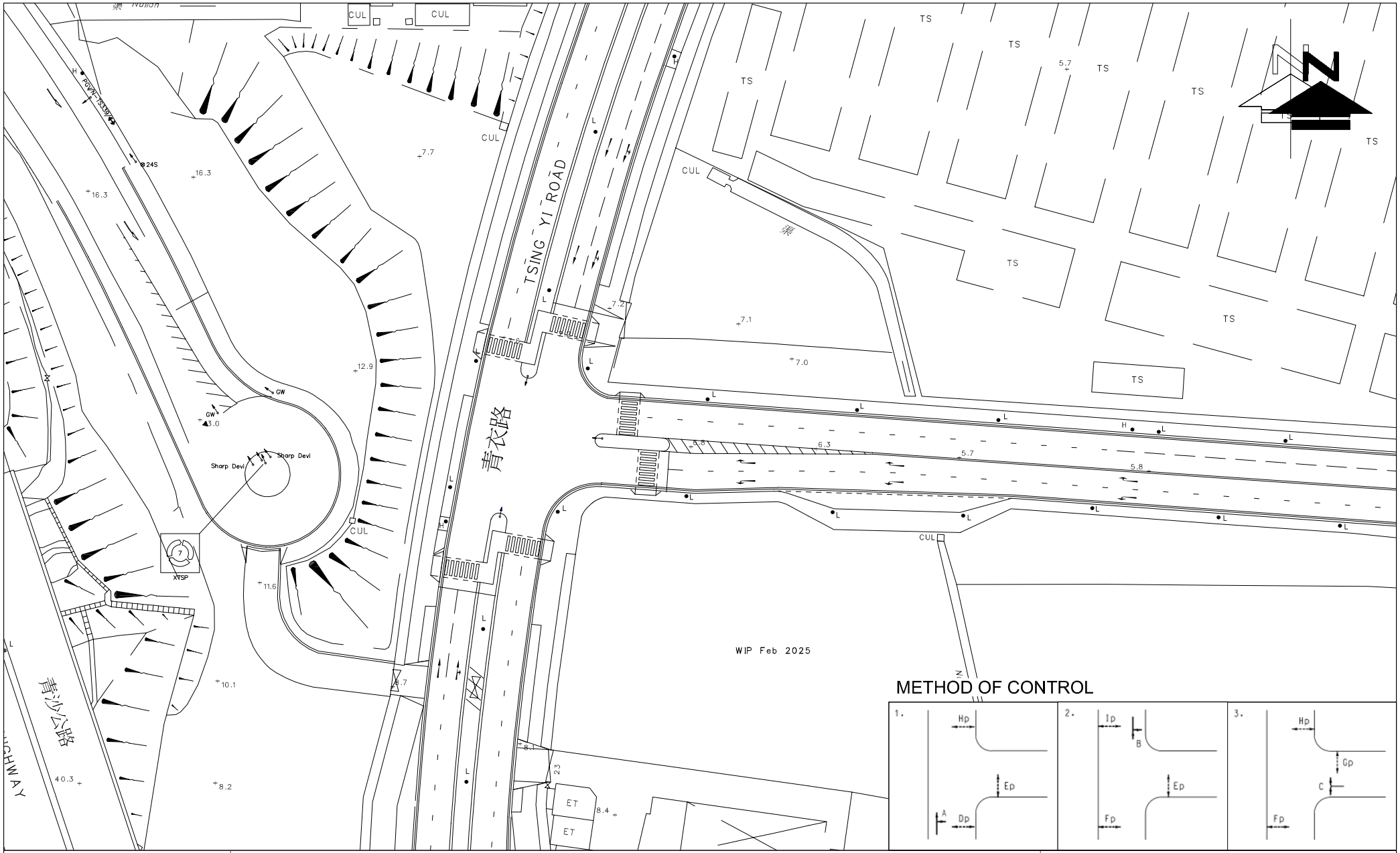

FIGURE NO.: 3.15	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI ROAD / UNNAMED ROAD (J14)
SCALE: 1 : 1000 (IN A4 SIZE)	DATE: 29 JUN 2026

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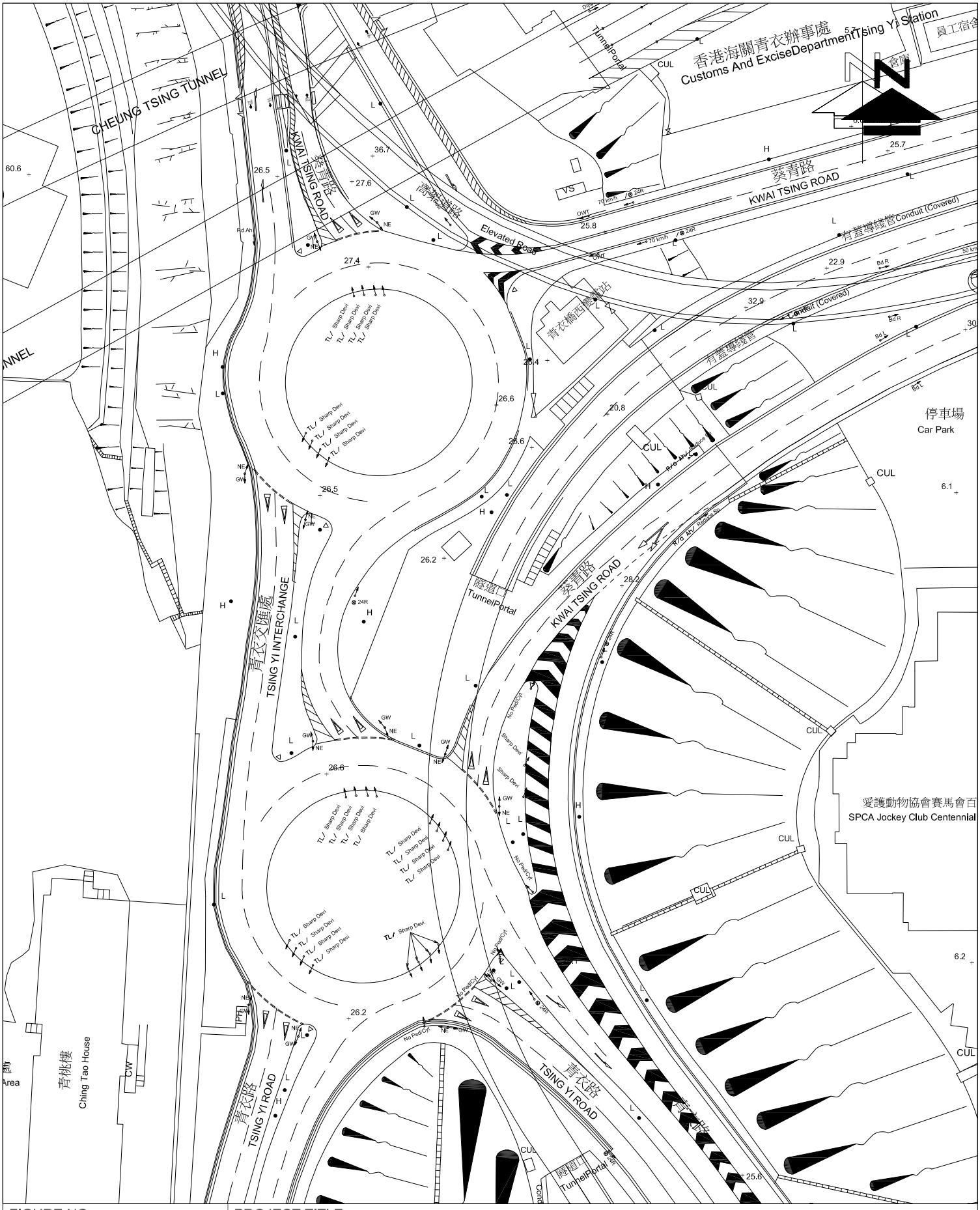

FIGURE NO.: 3.16	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF SING YI INTERCHANGE (RA1)
SCALE: 1 : 1000 (IN A4 SIZE) / DATE: 08 JUN 2026	CTA Consultants Limited 志達顧問有限公司

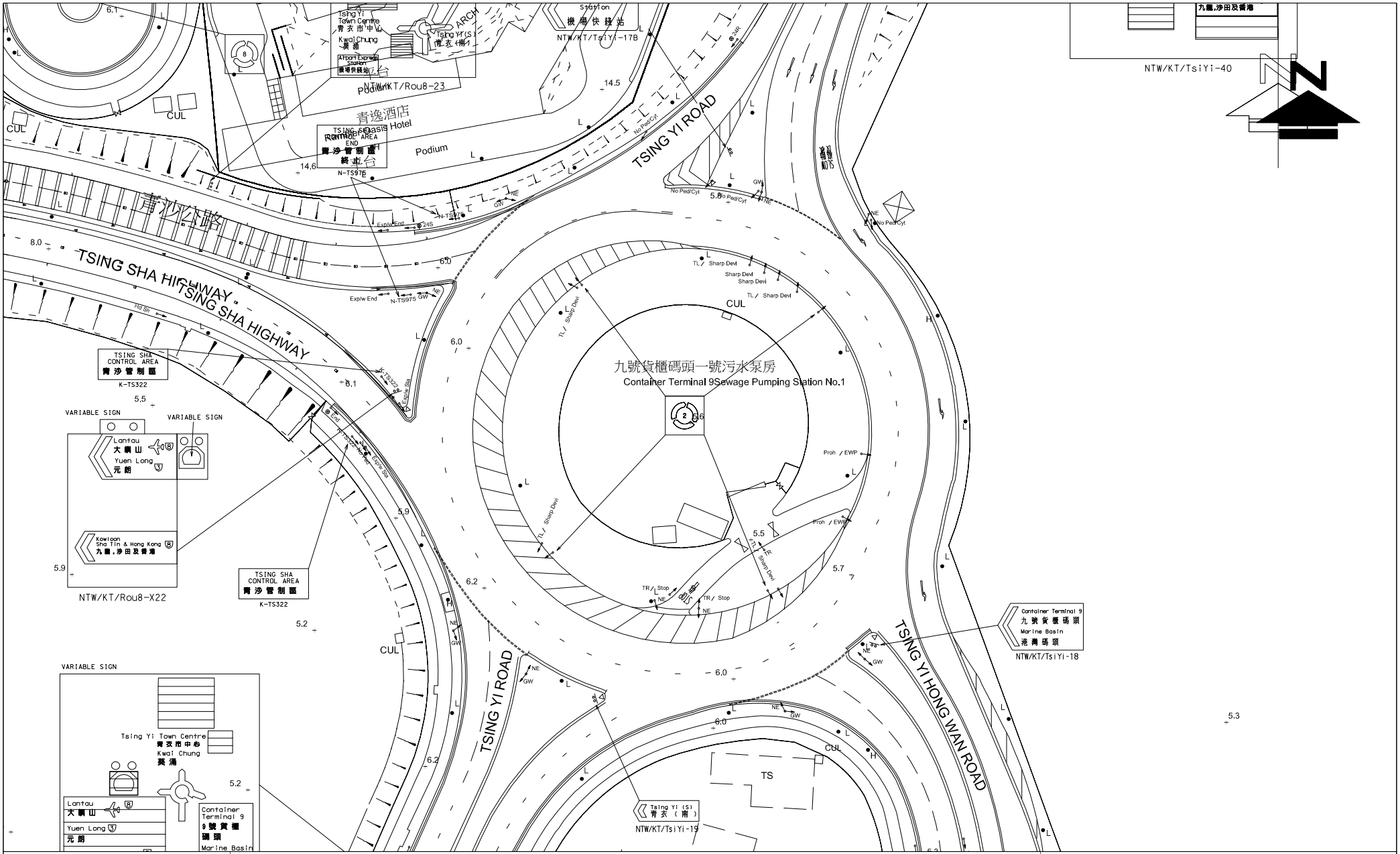

FIGURE NO.: 3.17	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI ROAD WEST / TSING YI HONG WAN ROAD / TSING SHA HIGHWAY (RA2)
SCALE: 1 : 1000 (IN A4 SIZE)	DATE: 08 JUN 2026

CTA Consultants Limited
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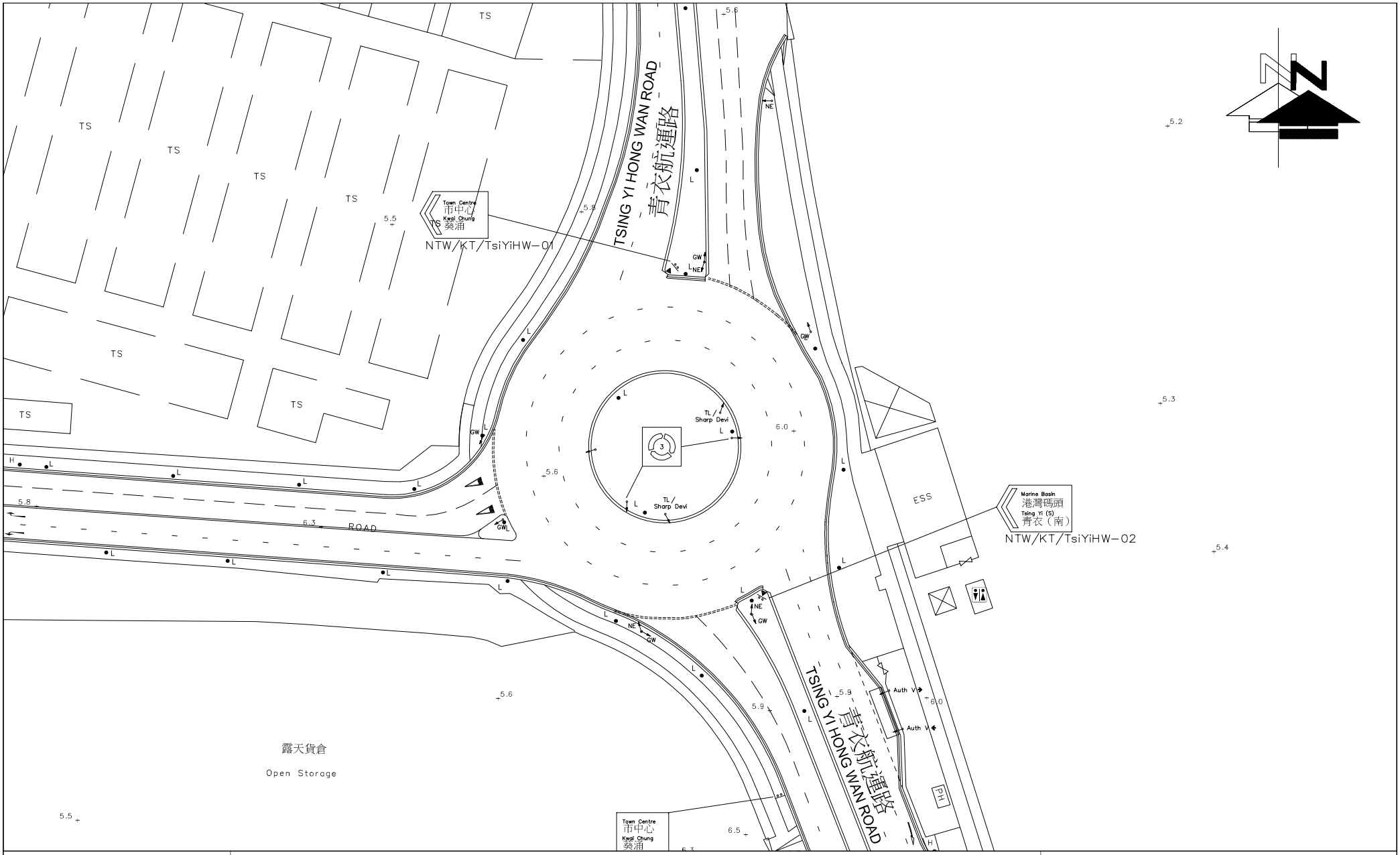

FIGURE NO.: 3.18	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI HONG WAN ROAD / UNNAMED ROAD (RA3)	
SCALE: 1 : 1000 (IN A4 SIZE)	DATE: 29 JUN 2026	

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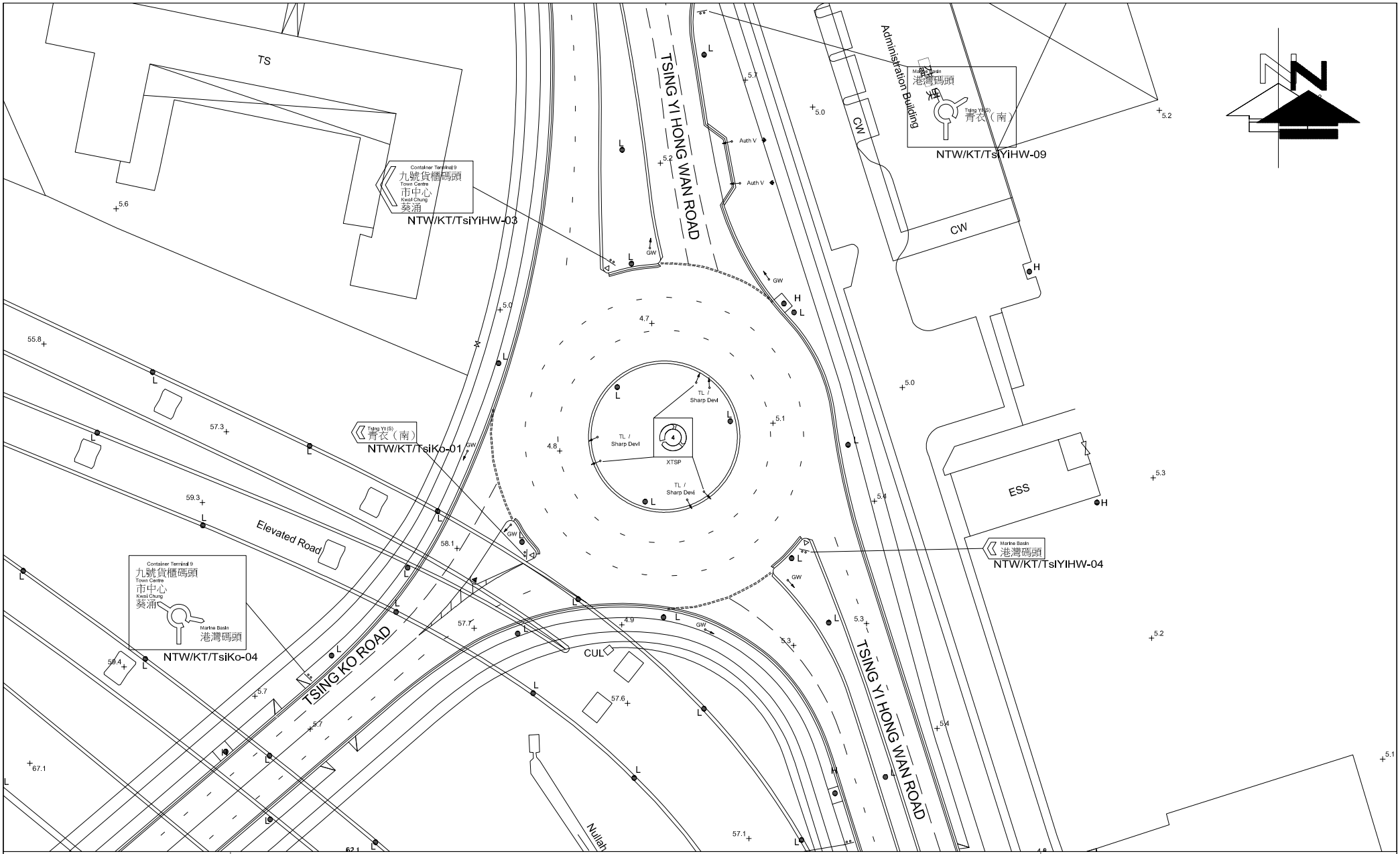

FIGURE NO.: 3.19	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI HONG WAN ROAD / TSING KO ROAD (RA4)	
SCALE: 1 : 1000 (IN A4 SIZE)	DATE: 08 JUN 2026	

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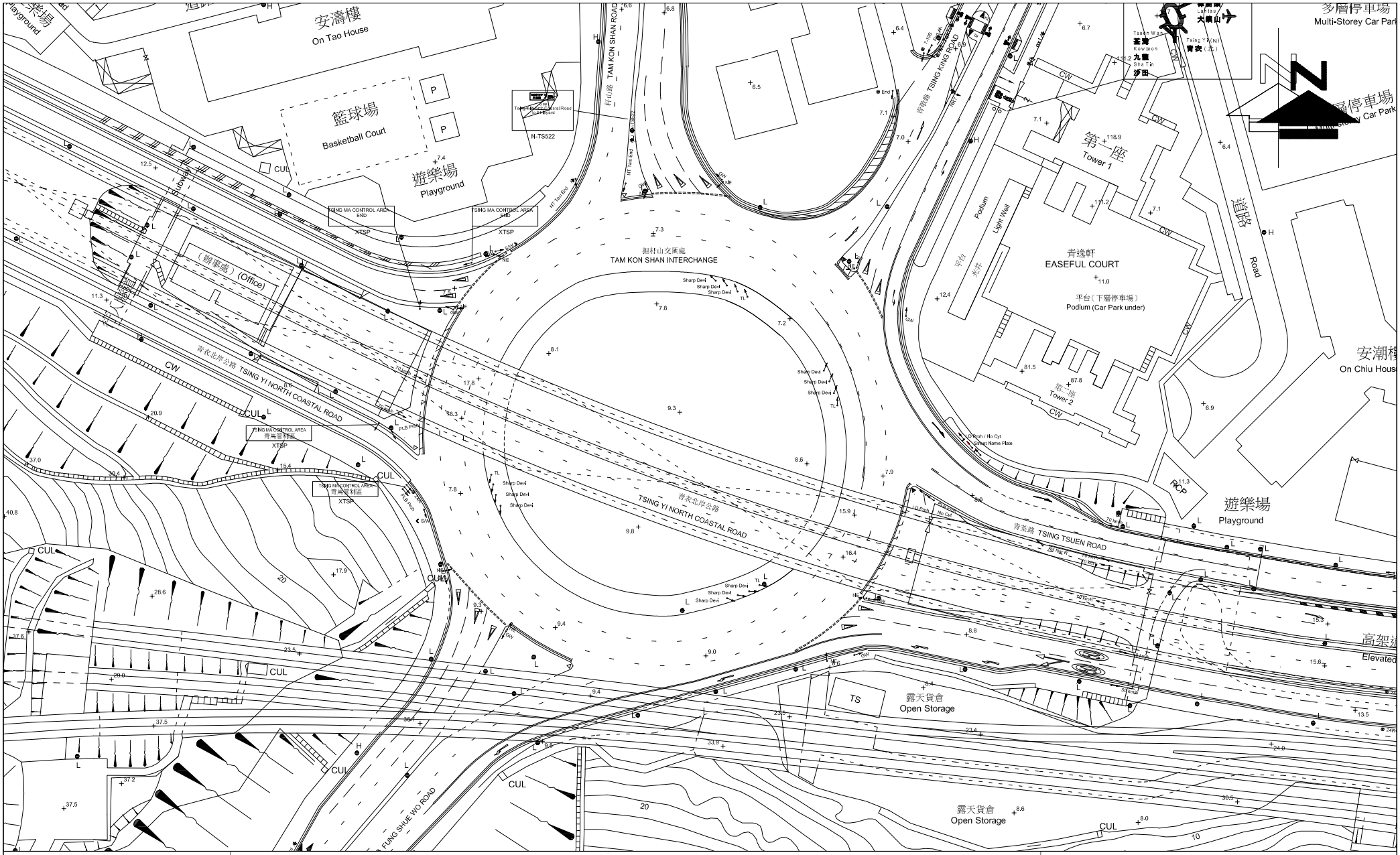

FIGURE NO.: 3.20	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TAM KON SHAN INTERCHANGE (RA5)	
SCALE: 1 : 1200 (IN A4 SIZE)	DATE: 08 JUN 2026	

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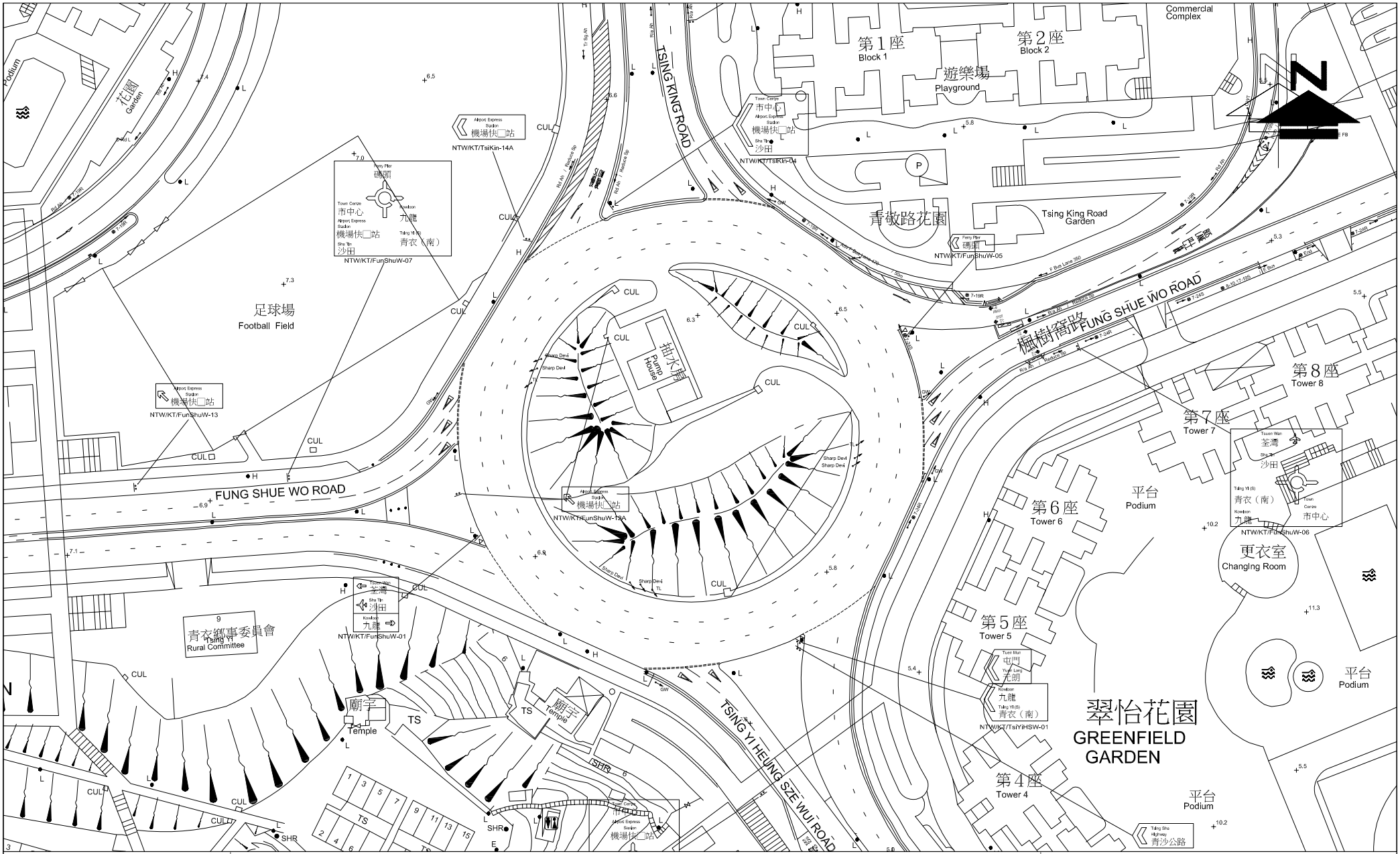

FIGURE NO.: 3.21	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING YI HEUNG SZE WUI ROAD / FUNG SHUE WO ROAD / TSING KING ROAD (RA6)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 1200 (IN A4 SIZE)	DATE: 08 JUN 2026	

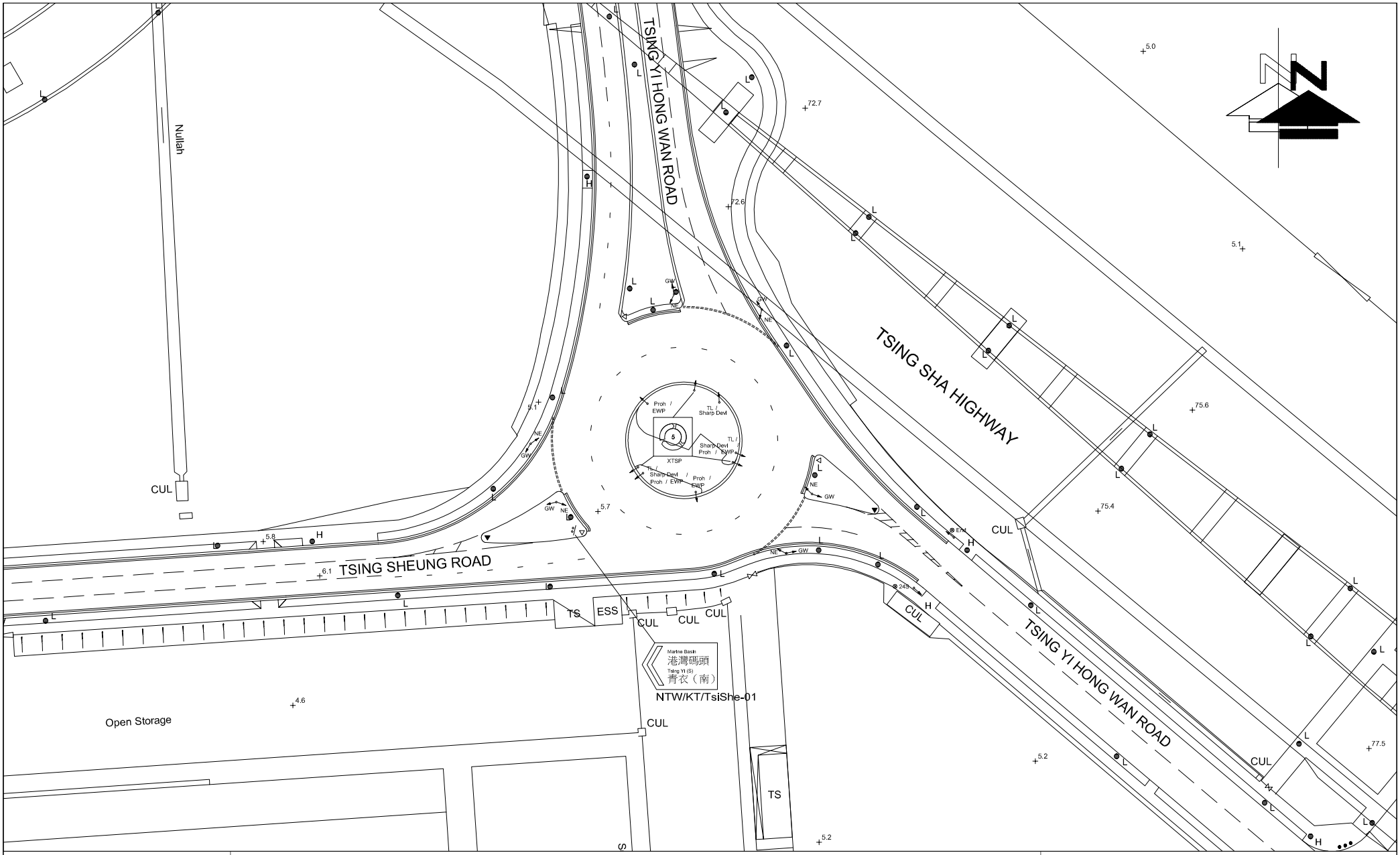

FIGURE NO.: 3.22	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING SHEUNG ROAD / TSING YI HONG WAN ROAD (RA7)	
SCALE: 1 : 1000 (IN A4 SIZE)	DATE: 08 JUN 2026	

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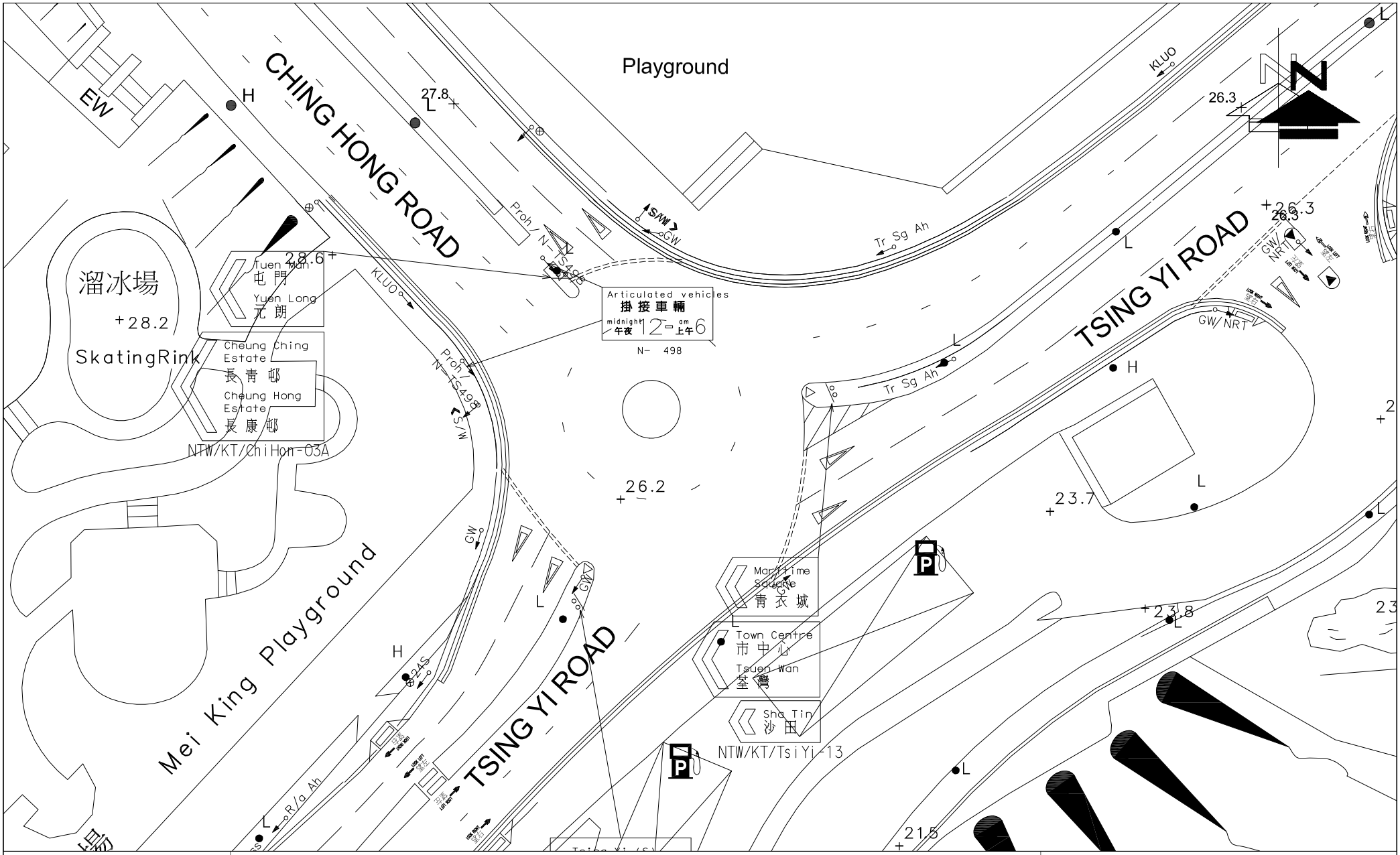

FIGURE NO.: 3.23	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF CHING HONG ROAD / TSING YI ROAD (RA8)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 08 JUN 2026	

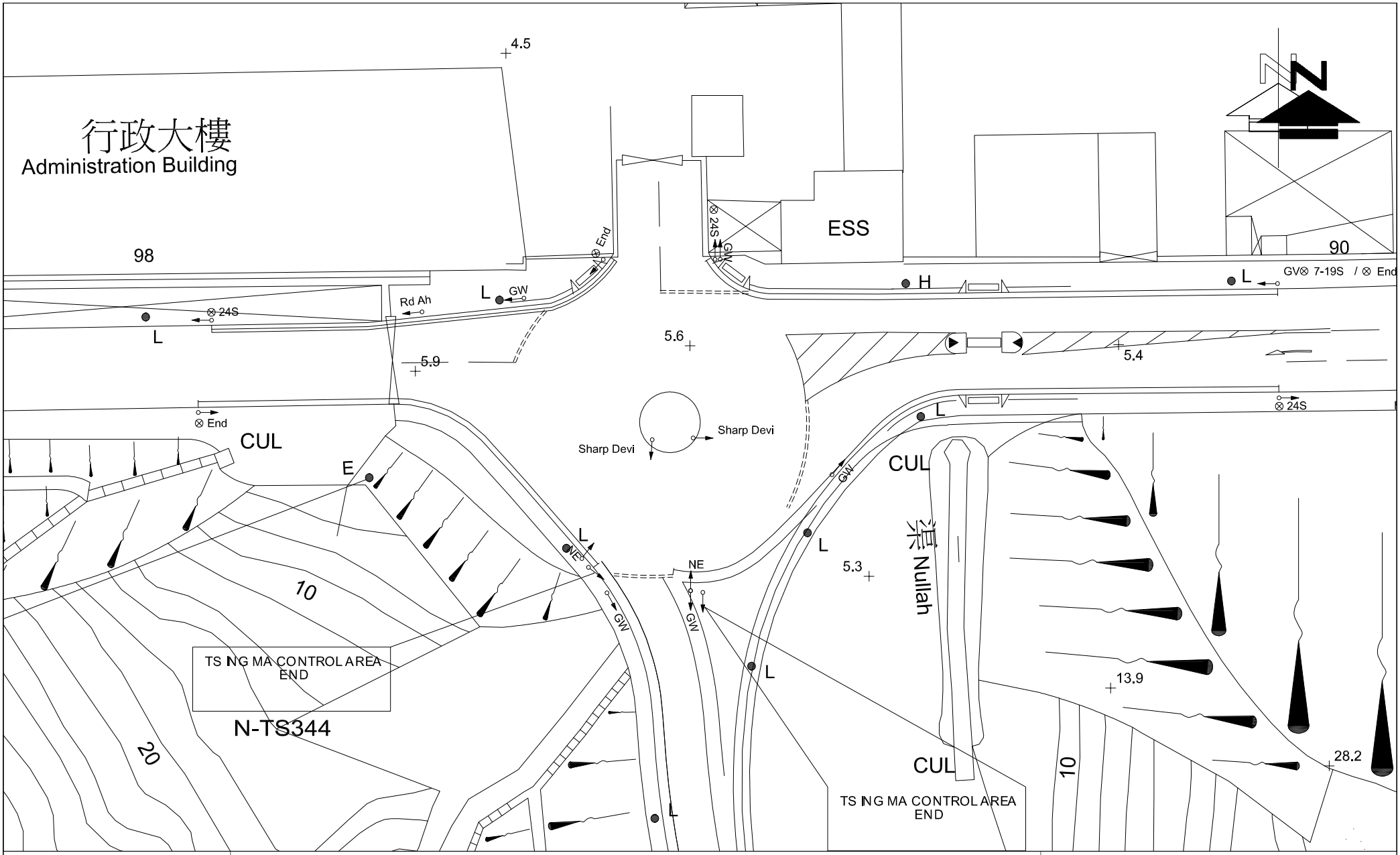

FIGURE NO.: 3.24	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TAM KON SHAN ROAD / TSING YI NORTH COSTAL ROAD (RA9)	
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 08 JUN 2026	

CTA Consultants Limited
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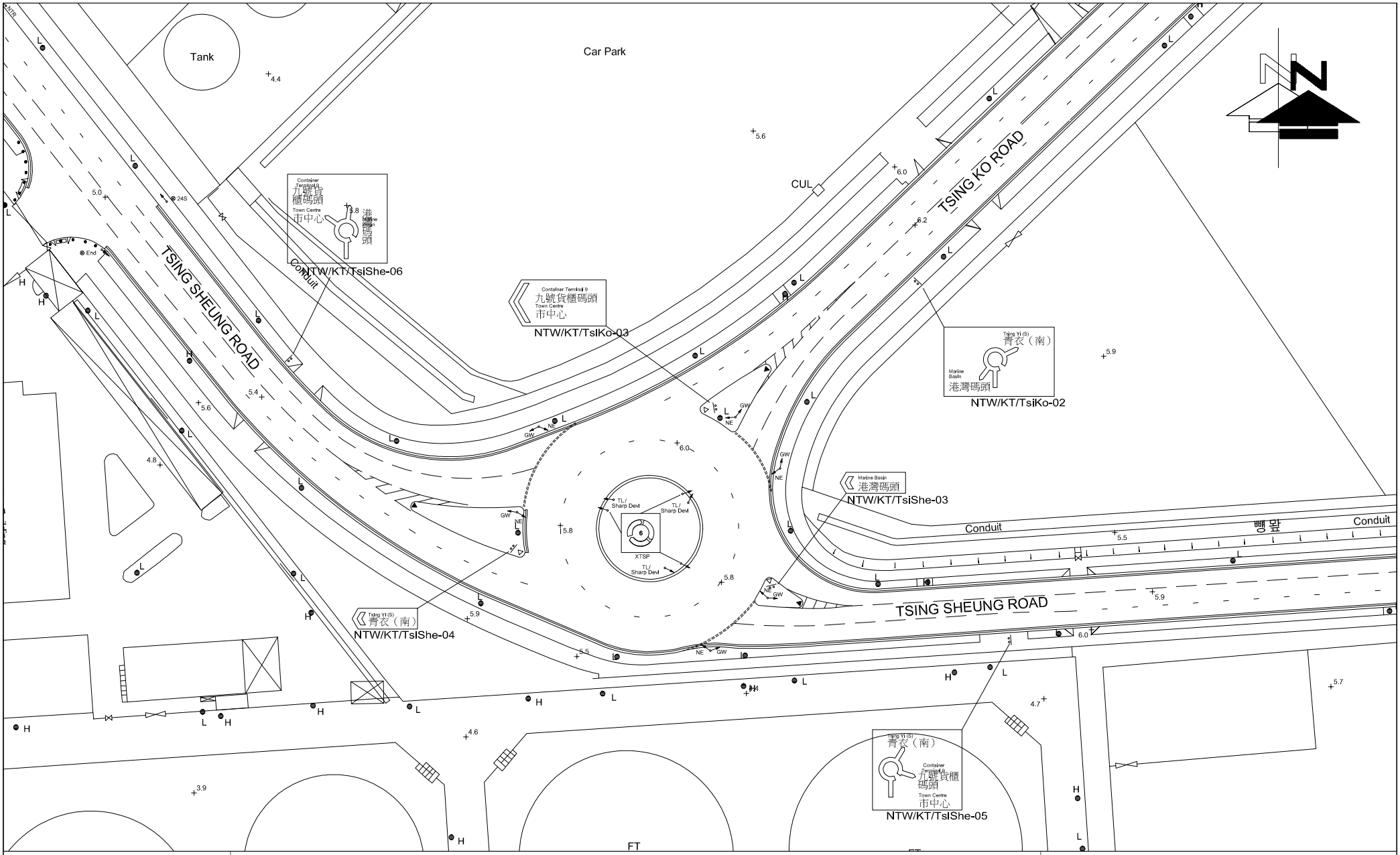
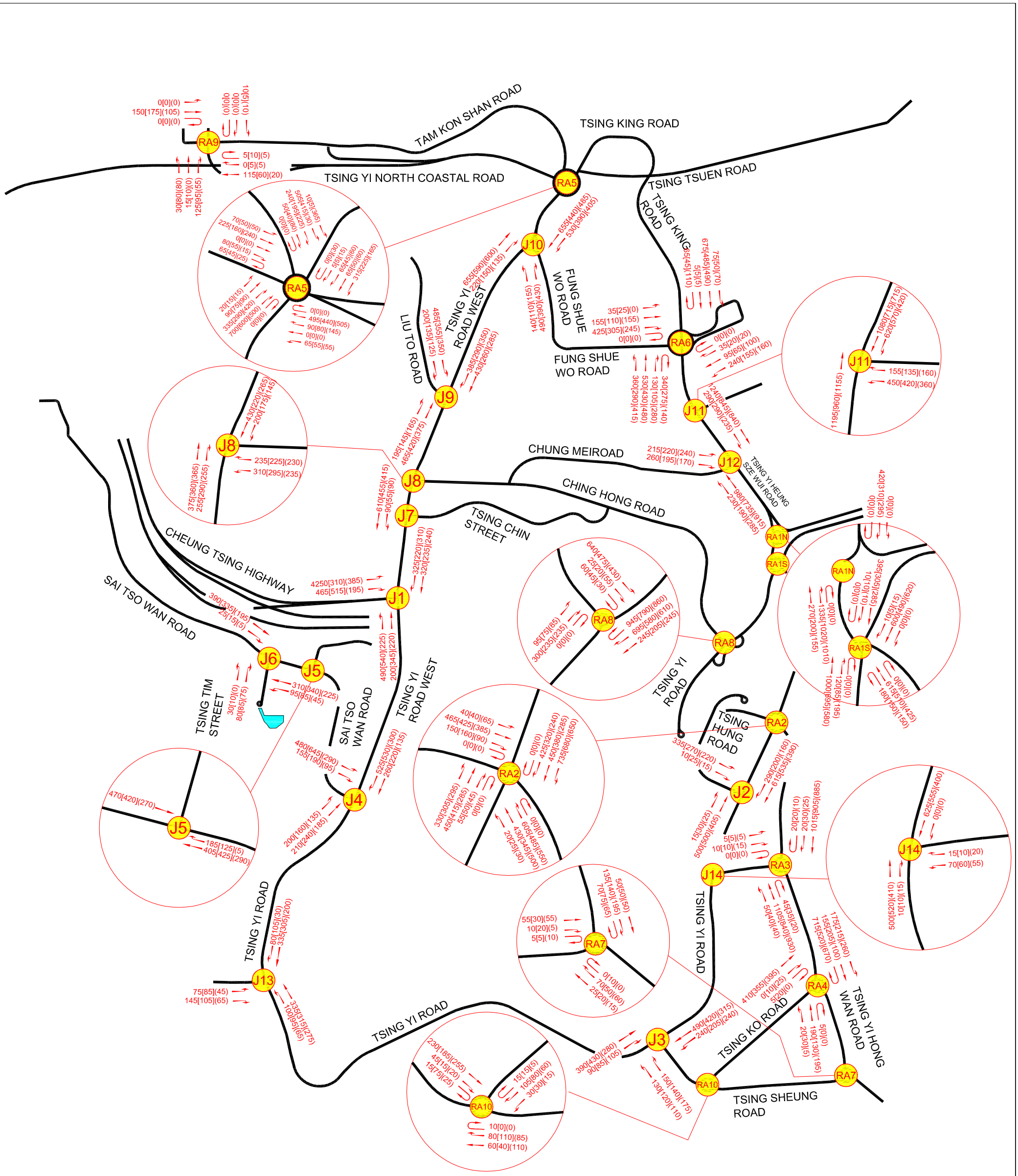


FIGURE NO.: 3.25	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145	
PROJECT NO.: 26011HK	DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TSING KO ROAD / TSING SHEUNG ROAD (RA10)	CTA Consultants Limited 志達顧問有限公司
SCALE: 1 : 1000 (IN A4 SIZE)	DATE: 08 JUN 2026	



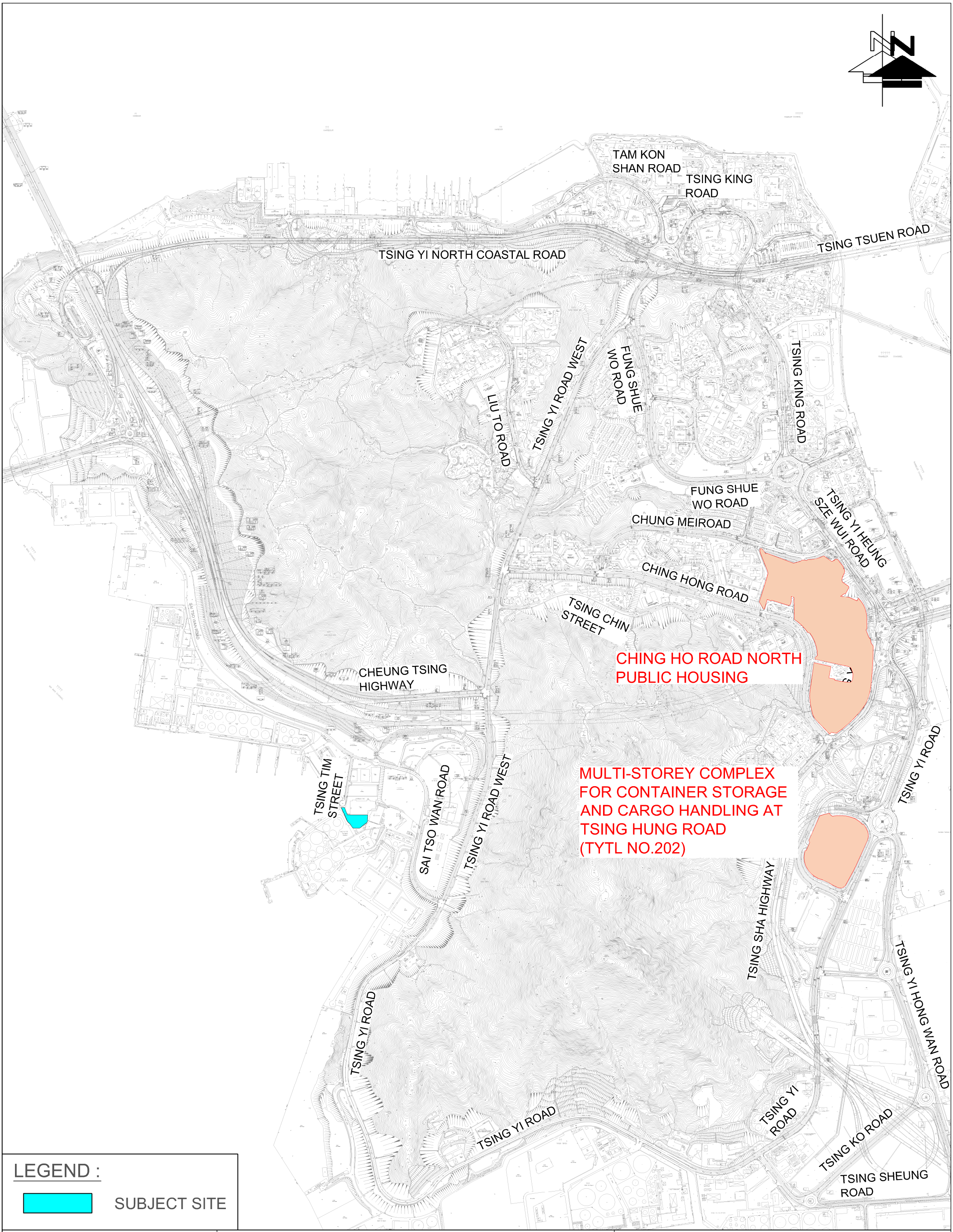
LEGEND :

SUBJECT SITE

530(500)[455] AM [LOGISTIC](PM) TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 3.26	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A/TY/1 43
PROJECT NO.: 26011HK	DRAWING TITLE: 2026 OBSERVED TRAFFIC FLOW
SCALE: N.T.S. @ A3	DATE: 12 JUN 2026

CTA Consultants Limited 志達顧問有限公司



LEGEND :

SUBJECT SITE

FIGURE NO.: 4.1	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: PLANNED DEVELOPMENT IN VICINITY
SCALE: 1 : 12000 @A3	DATE: 10 JUN 2026

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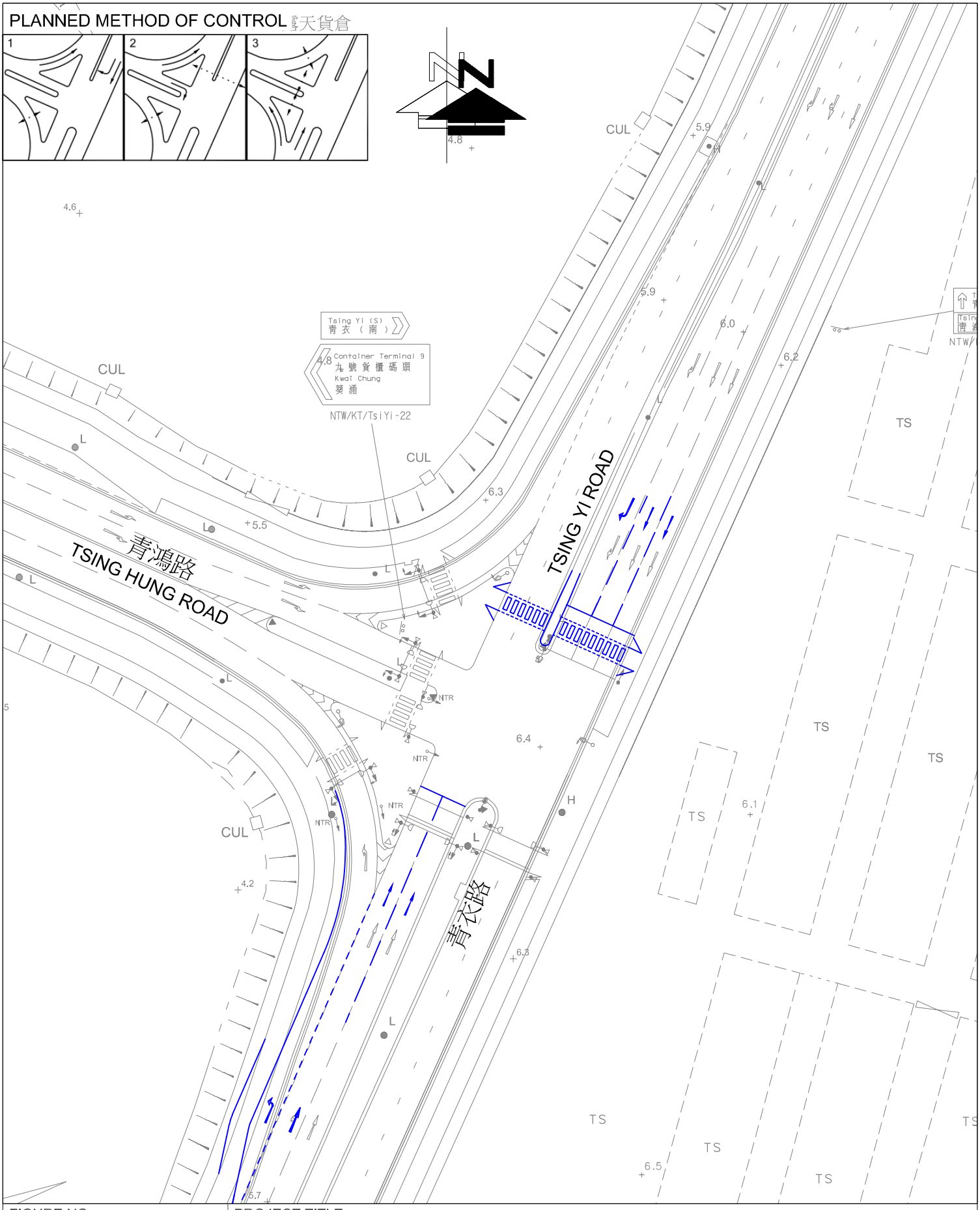

FIGURE NO.: 4.2	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: PLANNED JUNCTION IMPROVEMENT OF TSING HUNG ROAD / TSING YI ROAD (J2)
SCALE: 1 : 750 (IN A4 SIZE) / DATE: 10 JUN 2026	CTA Consultants Limited 志達顧問有限公司

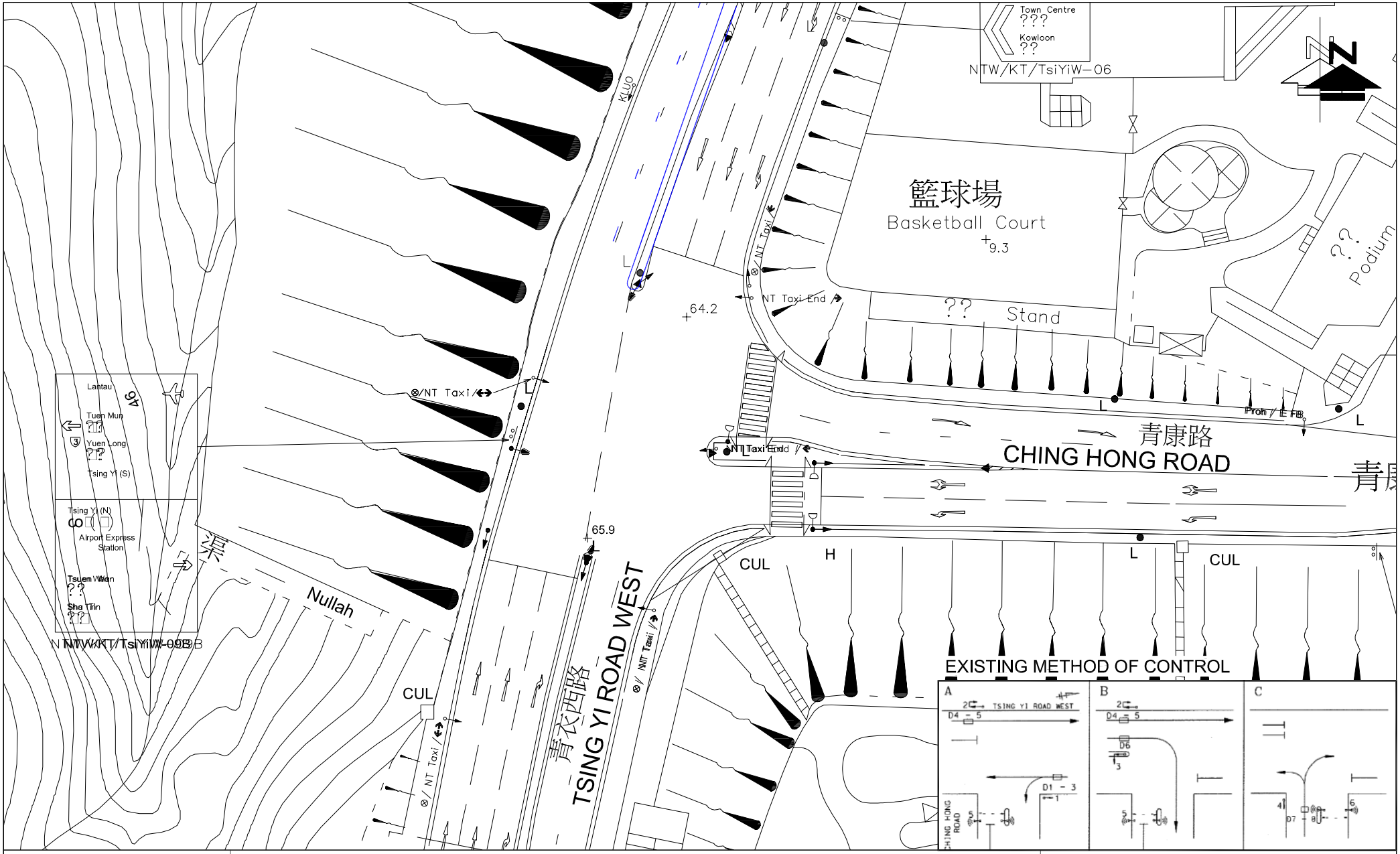

FIGURE NO.: 4.3	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: PLANNED JUNCTION IMPROVEMENT OF TSING YI ROAD WEST / CHING HONG ROAD (J8)
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 10 JUN 2026

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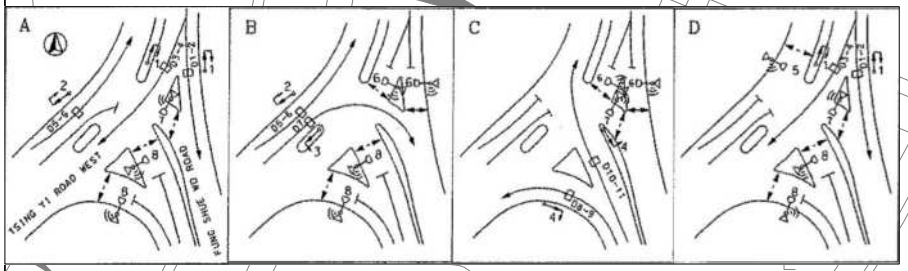
PLANNED METHOD OF CONTROL



TSING YI ROAD WEST

FUNG SHUE WO ROAD

道路

CUL

NT Taxi End

Airport

NTW/KT/FunShuW-T09

KLUO

FIGURE NO.: 4.4	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: PLANNED JUNCTION IMPROVEMENT OF TSING YI ROAD WEST / FUNG SHUE WO ROAD (J10)
SCALE: 1 : 500 (IN A4 SIZE)	DATE: 10 JUN 2026

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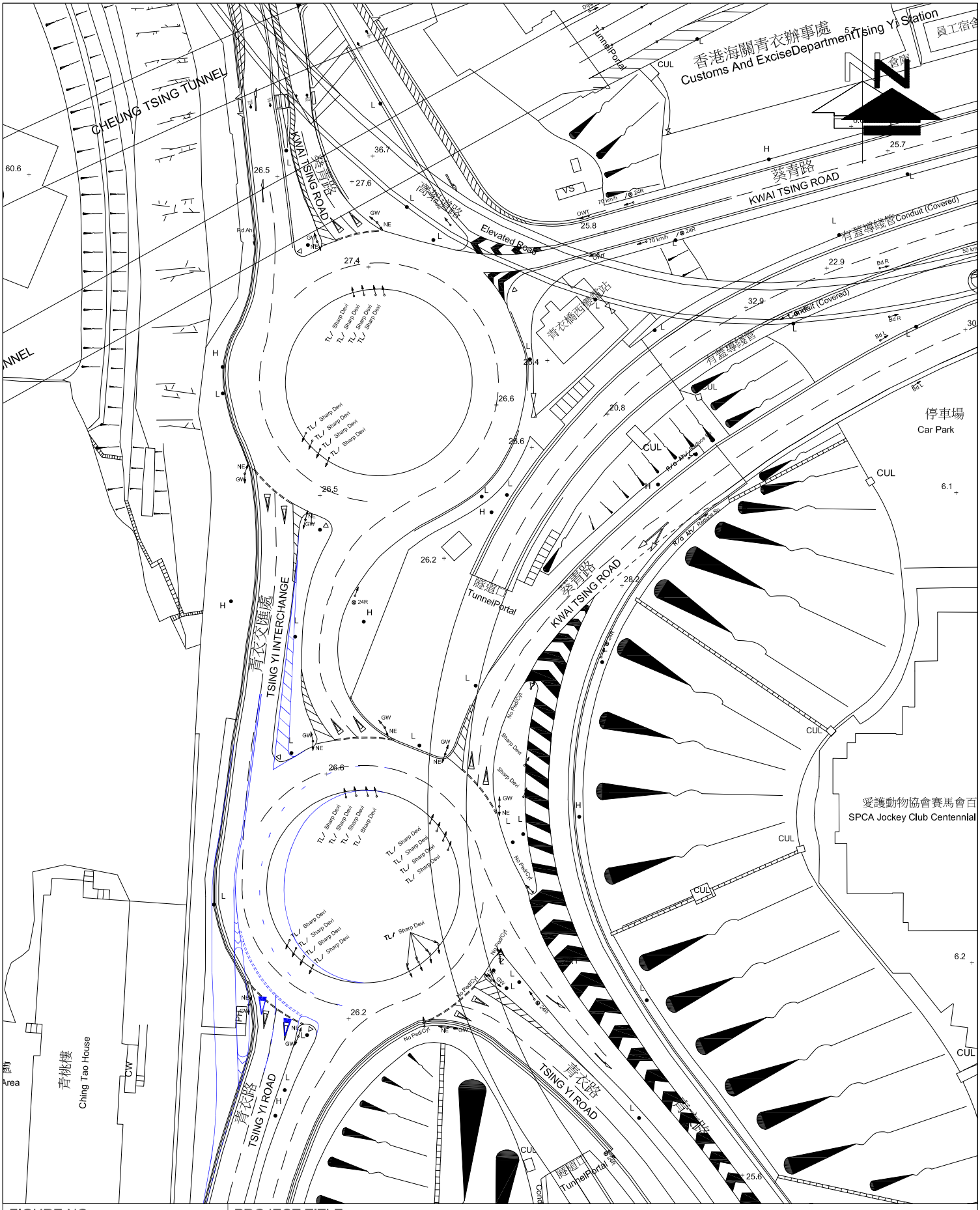


FIGURE NO.: 4.5	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: PLANNED JUNCTION IMPROVEMENT OF TSING YI INTERCHANGE (RA1)
SCALE: 1 : 1000 (IN A4 SIZE) / DATE: 10 JUN 2026	CTA Consultants Limited 志達顧問有限公司

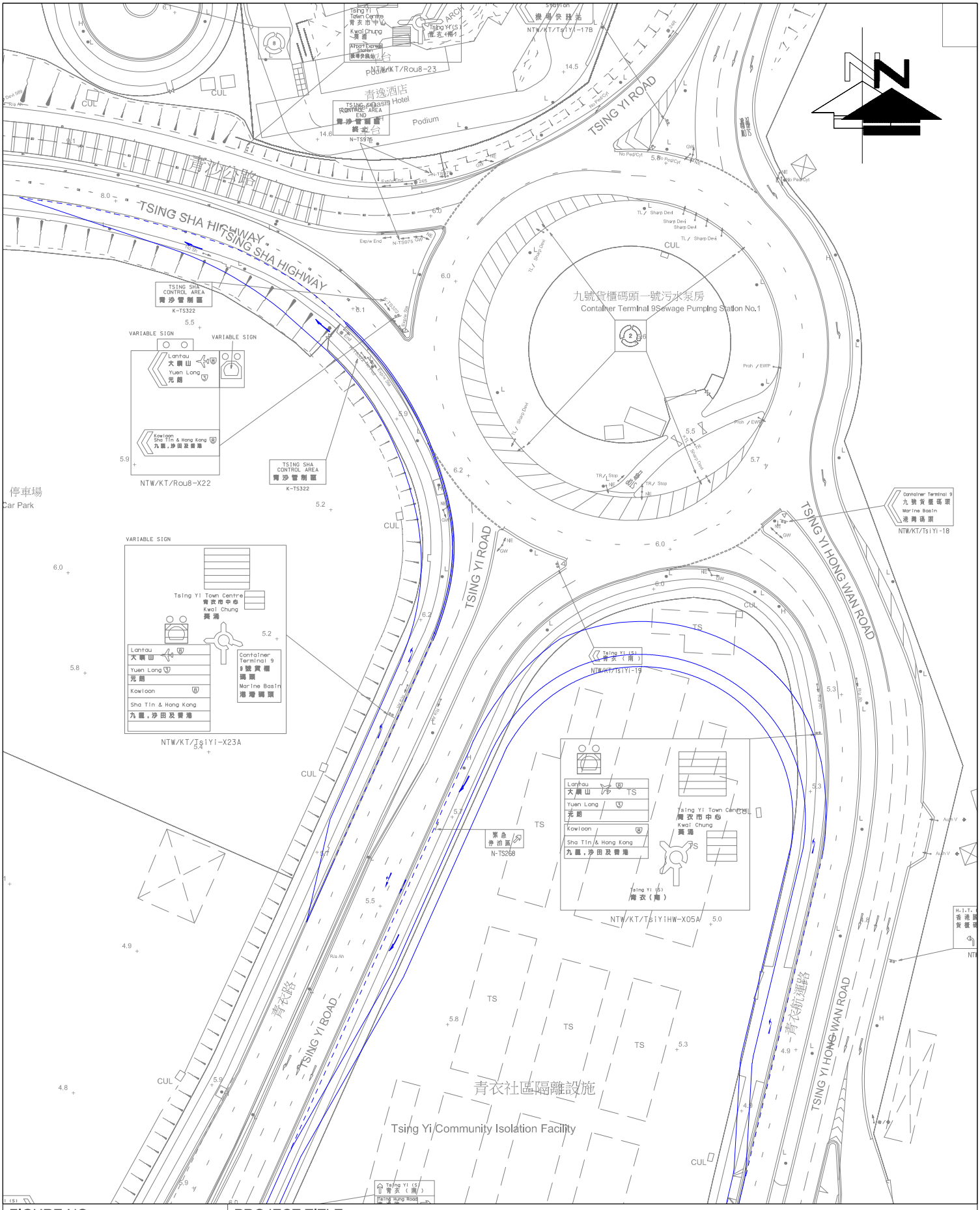
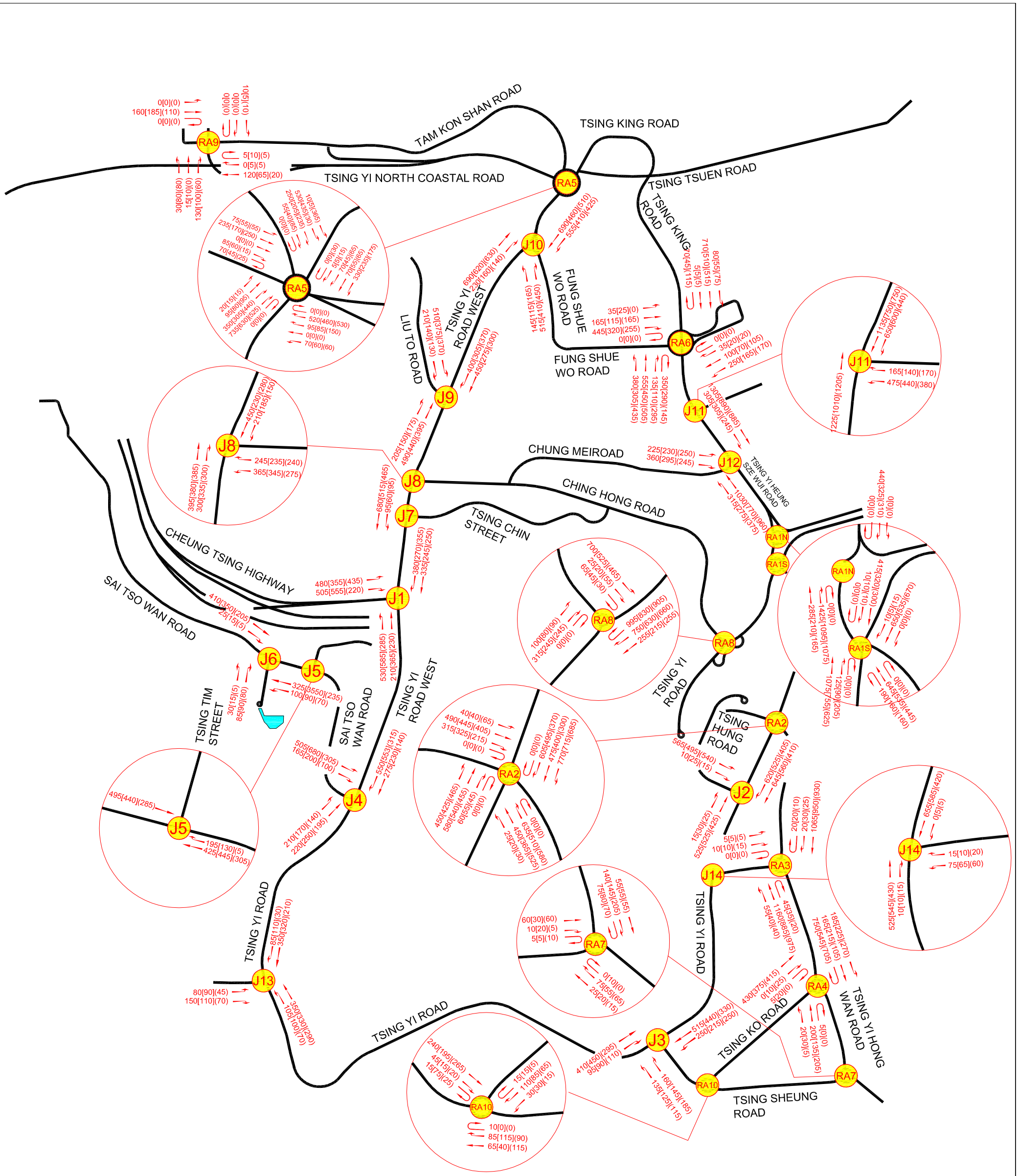


FIGURE NO.: 4.6	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: PLANNED JUNCTION IMPROVEMENT OF TSING YI ROAD WEST / TSING YI HONG WAN ROAD / TSING SHA HIGHWAY (RA2)
SCALE: 1 : 1200 (IN A4 SIZE) / DATE: 10 JUN 2026	CTA Consultants Limited 志達顧問有限公司

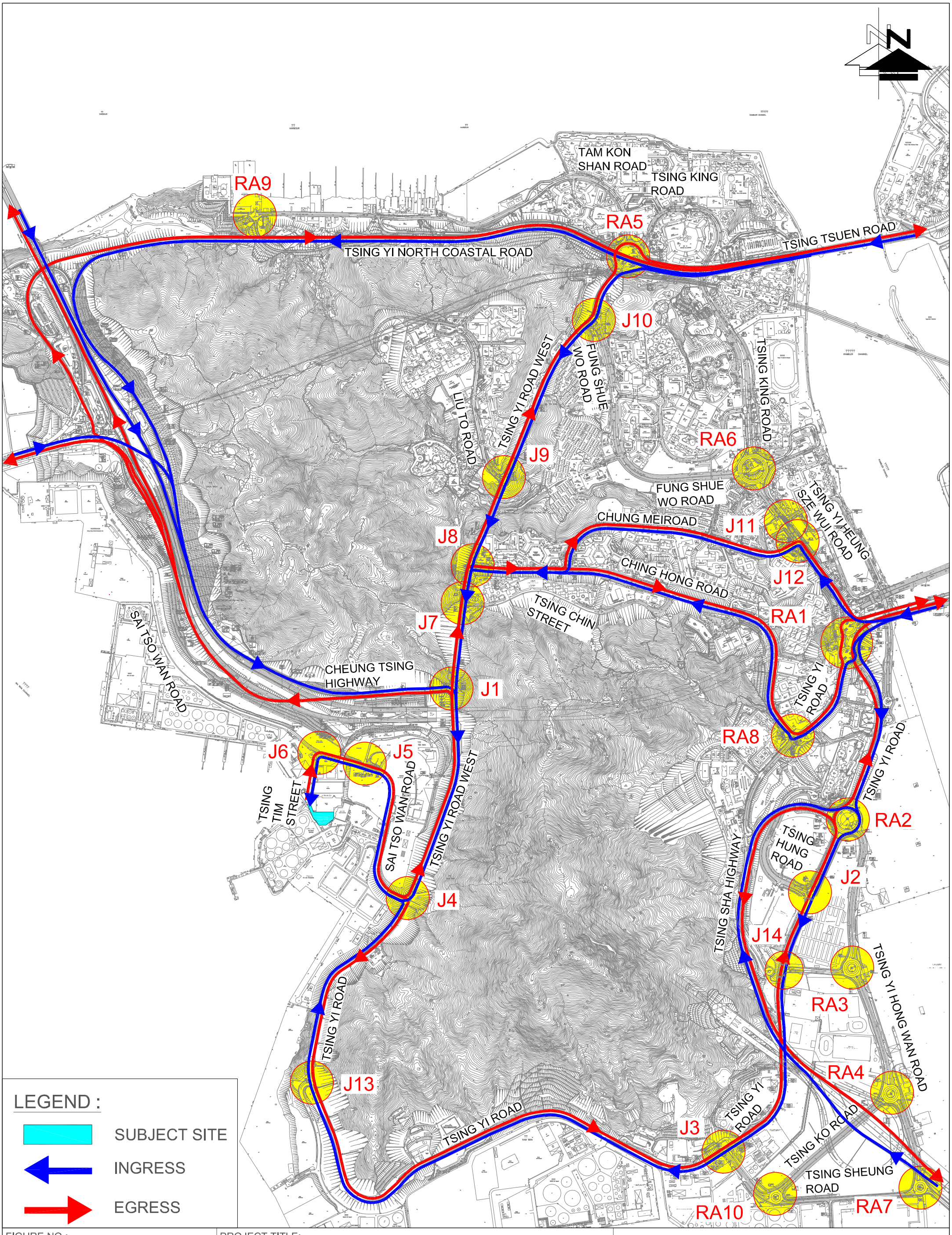


LEGEND :

SUBJECT SITE

530(500)[455] AM [LOGISTIC](PM) TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.: 5.1	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A/TY/1 43
PROJECT NO.: 26011HK	DRAWING TITLE: 2031 DESIGN TRAFFIC FLOW
SCALE: N.T.S. @ A3 / DATE: 12 JUN 2026	CTA Consultants Limited 志達顧問有限公司



LEGEND :

- SUBJECT SITE
- INGRESS
- EGRESS

FIGURE NO.: 5.2	PROJECT TITLE: Concrete Batching Plant at Tsing Yi - Renewal Application A / TY / 145
PROJECT NO.: 26011HK	DRAWING TITLE: TRAFFIC ROUTINGS
SCALE: 1 : 12000 @A3	DATE: 10 JUN 2026

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Appendix 1

Junction Calculation Sheets

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J1) Tsing Yi Road West / Cheung Tsing Highway**

Description: **2026 Observed Traffic Flow**

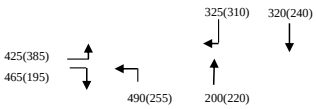
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) A.M.	Pro. Turning (%) P.M.	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) A.M.	Revised Saturation Flow (pcu/hr) P.M.	Total Revised Saturation Flow (pcu/hr) A.M.	Total Revised Saturation Flow (pcu/hr) P.M.	A.M. Peak Flow (pcu/hr)	A.M. Peak y Value	A.M. Peak Critical y	P.M. Peak Flow (pcu/hr)	P.M. Peak y Value	P.M. Peak Critical y
Tsing Yi Road West	S		2	A	3.5	0	0	0	1	0%	0%	1965	6135	1965	1965	5890	5865	215	0.109	0.110	184	0.094	0.094
	S		2	A	3.3	0	20	0	0	52%	70%	2085	0	2005	1980	0	0	220	0.110		186	0.094	
	S		2	A	3.3	0	17.5	0	0	100%	100%	2085	0	1920	1920	0	0	210	0.109		180	0.094	
Cheung Tsing Highway	E		3	A,B	3.4	20	0	0	1	100%	100%	1955	1955	1820	1820	1820	1820	425	0.234		385	0.212	
	E		4	B	3.5	0	30	0	0	100%	100%	2105	4210	2005	2005	3990	3990	234	0.117		98	0.049	
			4	B	3.5	0	25	0	0	100%	100%	2105	0	1985	1985	0	0	231	0.117	0.117	97	0.049	0.049
Tsing Yi Road West	N		1	C	3.6	20	0	6.5	1	100%	100%	1702	3544	1585	1585	3425	3425	490	0.309	0.309	255	0.161	0.161
	N		1	C	3.6	0	0	6.5	0	0%	0%	1842	0	1840	1840	0	0	200	0.109		220	0.120	
																				*			*

Pedestrian crossing

5P	C	Min. Green time = 5GM + 10FG = 15s
6P	C	Min. Green time = 5GM + 6FG = 11s
7P	A.B	Min. Green time = 5GM + 9FG = 14s
8P	B	Min. Green time = 5GM + 10FG = 15s

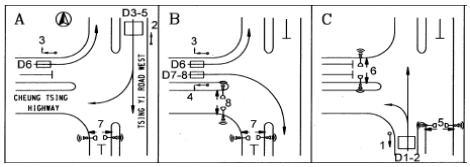
Notes:

Traffic Flow (pcu / hr)



	A.M. Check Phase A,B,C	A.M. Check Phase AB,C	P.M. Check Phase A,B,C	P.M. Check Phase AB,C
ey	0.535	0.543	0.304	0.372
L (sec)	13	9	13	9
C (sec)	100	100	105	105
y pract.	0.783	0.819	0.789	0.823
R.C. (%)	**46%**	**51%**	**160%**	**121%**

Stage / Phase Diagrams



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

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

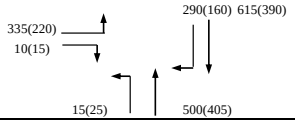
Junction: **(J2) Tsing Hung Road / Tsing Yi Road**
Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Tsing Yi Road	S		1	A	3.5	0.0	0	1	0%	0%	1965	4070	1965	1965	4070	4070	297	0.151		188	0.096	
	S		1	A	3.5	0.0	0	0	0%	0%	2105	0	2105	2105	0	0	318	0.151		202	0.096	
	S		1	A	3.6	0.0	18	0	100%	100%	2115	2115	1950	1950	1950	1950	290	0.149		160	0.082	0.096
Tsing Yi Road	N		4	C	4.0	30.0	0	1	100%	100%	2015	2015	1920	1920	1920	1920	15	0.008		25	0.013	
	N		4	C	3.5	0.0	0	0	0%	0%	2105	4210	2105	2105	4210	4210	250	0.119	0.119	203	0.096	
	N		4	C	3.5	0.0	0	0	0%	0%	2105	0	2105	2105	0	0	250	0.119		203	0.096	0.096
Tsing Hung Road	E		2	A,B	3.3	25.0	0	1	100%	100%	1945	1945	1835	1835	1835	1835	335	0.183	0.183	220	0.120	
	E		3	B	4.0	0.0	22	0	100%	100%	2155	2155	2015	2015	2015	2015	10	0.005		15	0.007	
Pedestrian Crossing			5P	D																		
			6P	A,B,D																		
			7P	C,D																		
			8P	C,D																		

Min. Green time = 5GM + 7FG = 12s
Min. Green time = 5GM + 5FG = 10s
Min. Green time = 5GM + 10FG = 15s
Min. Green time = 5GM + 5FG = 10s

Notes:

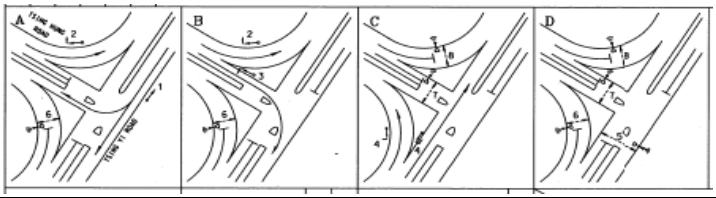
Traffic Flow (pcu / hr) Weekday AM Peak



	A,B,C,D	AB,C,D
AM Peak Check Phase		
εy	0.275	0.301
L (sec)	33	22
C (sec)	120	120
y pract.	0.653	0.735
R.C. (%)	**137%**	**144%**

	A,B,C,D	AB,C,D
PM Peak Check Phase		
εy	0.178	0.216
L (sec)	33	22
C (sec)	100	100
y pract.	0.603	0.702
R.C. (%)	**238%**	**225%**

Stage / Phase Diagrams



I/G = 2		I/G = 5	I/G = 5 + 12		
I/G = 2	I/G = 6 + Min. G 5	I/G = 5	I/G = 5 + 12		

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

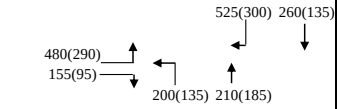
Junction: **(J4) Sai Tso Wan Road / Tsing Yi Road West / Tsing Yi Road**

Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) A.M.	Pro. Turning (%) P.M.	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) A.M.	Revised Saturation Flow (pcu/hr) P.M.	A.M. Peak Flow (pcu/hr)	A.M. Peak y Value	A.M. Peak Critical y	P.M. Peak Flow (pcu/hr)	P.M. Peak y Value	P.M. Peak Critical y
Tsing Yi Road	NE		1	A	4.5	15	0	6.5	1	100%	100%	1792	1792	1630	1630	200	0.123	0.123	135	0.083	0.102
	NE		1	A	3.4	0	0	6.5	0	0%	0%	1822	1822	1820	1820	210	0.115		185	0.102	
Sai Tso Wan Road	NW		3	C,D	3.8	15	0	0	1	100%	100%	1995	1995	1815	1815	480	0.264		290	0.160	
	NW		4	D	3.8	0	25	0	0	100%	100%	2135	2135	2015	2015	155	0.077	0.077	95	0.047	0.047
Tsing Yi Road West	SE		2	B,C	3.4	0	0	0	1	0%	0%	1955	1955	1955	1955	260	0.133		135	0.069	
	SE		2	B,C	3.7	0	25	0	0	100%	100%	2125	2125	2005	2005	525	0.262	0.262	300	0.150	0.150
Pedestrian crossing			5p	A,B		Min. Green time = 5GM + 8FG = 13s															
			6p	D		Min. Green time = 5GM + 10FG = 15s															
			7p	B,C		Min. Green time = 5GM + 9FG = 14s															
			8p	A,D		Min. Green time = 5GM + 7FG = 12s															

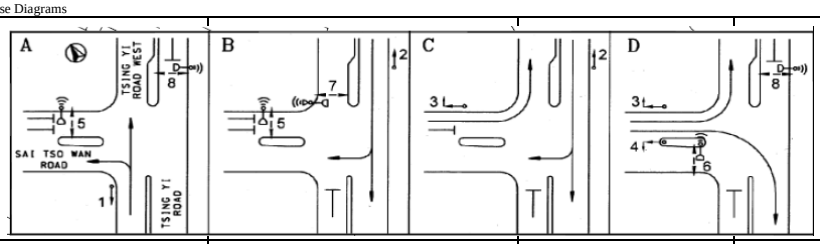
Notes:

Traffic Flow (pcu / hr)



	A,BC,D	A,B,CD		A,BC,D	A,B,CD
	A.M. Check Phase			P.M. Check Phase	
εy	0.461	0.387	εy	0.298	0.261
L (sec)	19	30	L (sec)	19	30
C (sec)	120	120	C (sec)	110	110
y pract.	0.758	0.675	y pract.	0.745	0.655
R.C. (%)	**64%**	**74%**	R.C. (%)	**149%**	**150%**

Stage / Phase Diagrams



I/G = 7	I/G = 10		I/G = 5	

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

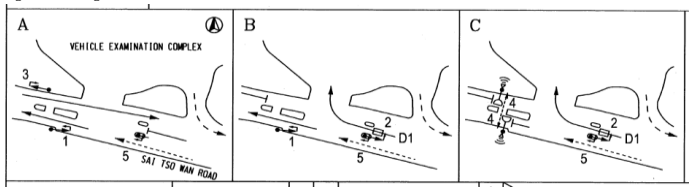
Junction: **(J5) Sai Tso Wan Road Near VEC**

Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Sai Tso Wan Road	EB	→	3	A	4.0	0.0	0	1	0%	0%	2015	2015	2015	2015	2015	2015	470	0.233	0.233	270	0.134	
Sai Tso Wan Road	WB	↰	2	B,C	4.0	0.0	10	0	100%	100%	2155	2155	1875	1875	1875	1875	185	0.099	0.099	5	0.003	
	WB	←	1	A,B	4.0	0.0	0	1	0%	0%	2015	2015	2015	2015	2015	2015	405	0.201		290	0.144	0.144
Pedestrian Crossing		↕	4P	C		Green time = 13Gm + 5 FGm = 18s																

		A,BC	AB,C		A,BC	AB,C
Notes:	Traffic Flow (pcu / hr) AM (PM) Peak	AM Peak Check Phase			PM Peak Check Phase	
(None)	470(270) →	εy	0.332	0.201	εy	0.134	0.144
	↰ 185(5)	L (sec)	11	25	L (sec)	65	25
	← 390(195)	C (sec)	91	91	C (sec)	91	91
		y pract.	0.791	0.653	y pract.	0.257	0.653
		R.C. (%)	**138%**	**225%**	R.C. (%)	**92%**	**354%**

Stage / Phase Diagrams



I/G = 3		I/G = 5 + Ped 18s	
I/G = 2	I/G = 3+ Stage Time 61s		

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

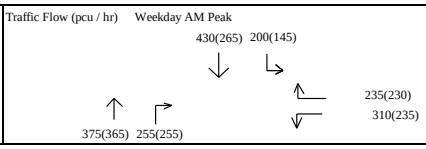
Junction: **(J8) Tsing Yi Road West / Ching Hong Road**

Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Tsing Yi Road West	S	↓	1	A	3.0	0.0	0	5.5	0	0%	0%	1824	3698	1824	1824	3698	3698	212	0.116	0.131	131	0.072	0.095
	S	↓	1	A	3.5	0.0	0	5.5	0	0%	0%	1874	0	1874	1874	0	0	218	0.116		134	0.072	
	S	↳	1	A	3.7	10.0	0	5.5	1	100%	100%	1754	1754	1525	1525	1525	1525	200	0.131		145	0.095	
Tsing Yi Road West	N	↑	2	A,B	3.5	0.0	0	0	1	0%	0%	1965	4070	1965	1965	4070	4070	181	0.092		176	0.090	
	N	↑	2	A,B	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	194	0.092		189	0.090	
	N	↱	3	B	3.3	0.0	18	0	0	100%	100%	2085	2085	1925	1925	1925	1925	255	0.132	0.132	255	0.132	0.132
Ching Hong Road	W	↰	4	C	3.4	18.0	20	0	0	18% / 82%	5% / 95%	2095	0	1945	1950	0	0	285	0.147	0.147	243	0.125	0.125
	W	↙	4	C	3.4	15.0	0	0	1	100%	100%	1955	4050	1775	1775	3720	3725	260	0.146		222	0.125	
Pedestrian crossing		↕	5P	A,B		Min. Green time = 11GM + 8FG = 19s																	
		⇕	6P	C		Min. Green time = 5GM + 12FG = 17s																	

Notes:

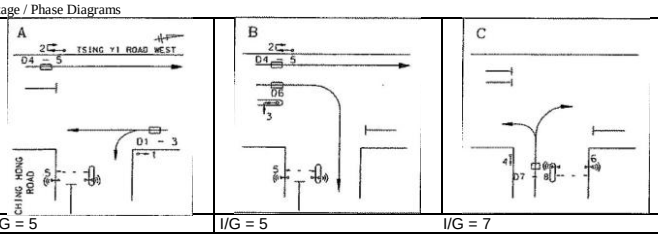
Traffic Flow (pcu / hr) Weekday AM Peak



AM Peak Check Phase	
εy	0.410
L (sec)	14
C (sec)	100
y pract.	0.774
R.C. (%)	**89%**

PM Peak Check Phase	
εy	0.352
L (sec)	14
C (sec)	100
y pract.	0.774
R.C. (%)	**120%**

Stage / Phase Diagrams



I/G = 5 I/G = 5 I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

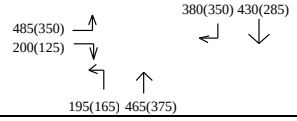
Junction: **(J9) Tsing Yi Road West / Liu To Road**

Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Tsing Yi Road West	S		2	A,B	3.3	0.0	0	5	1	0%	0%	1735	3610	1735	1735	3610	3610	207	0.119		137	0.079	
	S		2	A,B	3.3	0.0	0	5	0	0%	0%	1875	0	1875	1875	0	0	223	0.119		148	0.079	
	S		3	B	3.3	0.0	22	5	0	100%	100%	1875	1875	1755	1755	1755	1755	380	0.217	0.217	350	0.199	0.199
Tsing Yi Road West	N		1	A	3.2	10.0	0	0	1	66%	68%	1935	4100	1760	1755	3925	3920	296	0.168	0.168	242	0.138	0.138
	N		1	A	4.1	0.0	0	0	0	0%	0%	2165	0	2165	2165	0	0	364	0.168		298	0.138	
Liu To Road	E		5	B,C	3.2	10.0	0	0	1	100%	100%	1935	1935	1685	1685	1685	1685	485	0.288		350	0.208	
	E		4	C	4.1	0.0	18	0	0	100%	100%	2165	2165	2000	2000	2000	2000	200	0.100	0.100	125	0.063	0.063
Pedestrian crossing			6P	A,D		AM: Green time = 49GM + 9FG = 58s, PM: Green time = 46GM + 9FG = 55s																	
			7P	C,D		AM: Green time = 51GM + 13FG = 64s, PM: Green time = 28GM + 13FG = 41s																	
			8P	D		Green time = 10GM + 8FG = 18s																	
Pedestrian Crossing																							
														A,BC,D	A,B,C,D						A,BC,D	A,B,C,D	

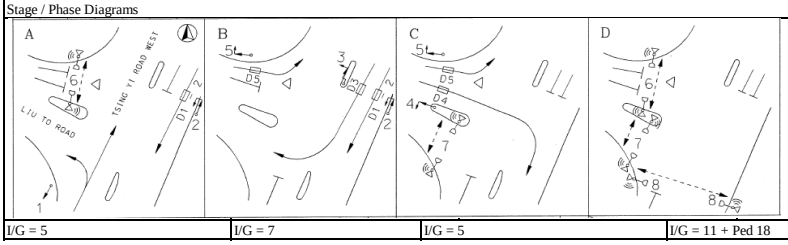
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



AM Peak Check Phase			PM Peak Check Phase		
εy	0.456	0.485	εy	0.345	0.400
L (sec)	39	43	L (sec)	39	43
C (sec)	130	130	C (sec)	110	110
y pract.	0.630	0.602	y pract.	0.581	0.548
R.C. (%)	**38%**	**24%**	R.C. (%)	**68%**	**37%**

Stage / Phase Diagrams



I/G = 5	I/G = 7	I/G = 5	I/G = 11 + Ped 18

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J10) Tsing Yi Road West / Fung Shue Wo Road**

Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Site Factor	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Fung Shue Wo Road	S	↓	1	A,D	4.1	0.0	0	3	0	0%	0%	1	2039	4058	2039	2039	4058	4058	329	0.161	0.231	176	0.086	0.176
(To Tsing Yi Road West)	S	↓	1	A,D	3.9	0.0	0	3	0	0%	0%	1	2019	0	2019	2019	0	0	326	0.161		174	0.086	
Fung Shue Wo Road	S	↓	1	A,D	4.0	0.0	0	3	1	0%	0%	1	1889	2294.8	1889	1889	2294.8	2294.8	436	0.231		333	0.176	
(To Fung Shue Wo Road)	S	↓	1	A,D	4.0	0.0	0	3	0	0%	0%	0.2	405.8	0	405.8	405.8	0	0	94	0.231		72	0.176	
Tsing Yi Road West	N	↑	2	A,B	3.5	0.0	0	0	1	0%	0%	1	1965	2491.3	1965	1965	2491.25	2491.25	517	0.263		473	0.241	
	N	↑	2	A,B	3.5	0.0	0	0	0	0%	0%	0.25	526.25	0	526.25	526.25	0	0	138	0.263		127	0.241	
	N	↱	3	B	3.6	0.0	18	0	0	100%	100%	1	2115	2115	1950	1950	1950	1950	220	0.113	0.113	135	0.069	0.069
Fung Shue Wo Road	N	↰	4	C	3.8	35.0	0	3	1	100%	100%	1	1869	2193.6	1790	1790	2100	2100	119	0.067		132	0.074	
	N	↰	4	C	4.0	38.0	0	3	0	100%	100%	0.16	324.64	0	310	310	0	0	21	0.067		23	0.074	
Fung Shue Wo Road	N	↱	4	C	3.6	0.0	43	3	0	100%	100%	0.23	457.47	2446.5	440	440	2355	2355	92	0.208	0.208	80	0.183	0.183
	N	↱	4	C	3.6	0.0	40	3	0	100%	100%	1	1989	0	1915	1915	0	0	398	0.208		350	0.183	

Pedestrian crossing

←- - -→	5p	D	Min. Green time = 5GM + 8FG = 13s
←- - -→	6P	B,C	Min. Green time = 5GM + 8FG = 13s
↑ ↓	7P	A,C,D	Min. Green time = 5GM + 7FG = 12s
↑ ↓	8P	A,B,D	Min. Green time = 5GM + 8FG = 13s

Notes:

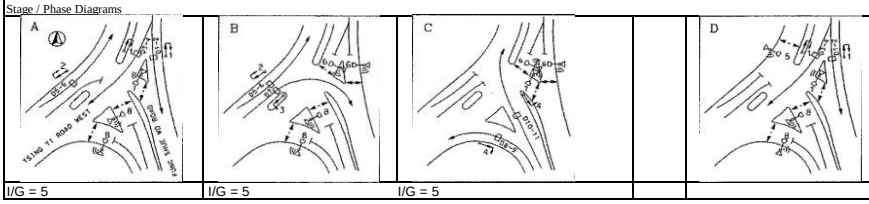
Traffic Flow (pcu / hr) — Weekday AM Peak

655(485) 530(405)

655(600) 220(135) 140(155) 490(430)

	AM Peak Check Phase AD,B,C	AM Peak Check Phase AB,C,D	PM Peak Check Phase AD,B,C	PM Peak Check Phase AB,C,D
εy	0.552	0.471	0.428	0.423
L (sec)	12	28	12	28
C (sec)	100	100	100	100
y pract.	0.792	0.648	0.792	0.648
R.C. (%)	**44%**	**38%**	**85%**	**53%**

Stage / Phase Diagrams



I/G = 5 I/G = 5 I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J11) Tsing Yi Heung Sze Wui Road / Cheung Wan Street**

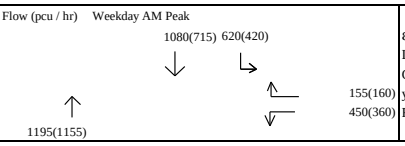
Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Tsing Yi Heung Sze Wui Road	N		2	A,B	3.5	0.0	0	0	1	0%	0%	1965	4070	1965	1965	4070	4070	577	0.294		558	0.284	0.284
	N		2	A,B	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	618	0.294		597	0.284	
Cheung Wan Street	W		3	C	3.5	18.0	20	0	0	51% / 49%	41% / 59%	2105	0	1950	1950	0	0	316	0.162	0.162	272	0.139	0.139
	W		3	C	3.5	15.0	0	0	1	100%	100%	1965	4070	1785	1785	3735	3735	289	0.162		248	0.139	
Tsing Yi Heung Sze Wui Road	S		1	A,D	3.5	10.0	0	0	1	100%	100%	1965	6175	1710	1710	5920	5920	620	0.363	0.363	420	0.246	
	S		1	A,D	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	540	0.257		358	0.170	
	S		1	A,D	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	540	0.257		358	0.170	
Pedestrian crossing			4P	B		AM: Green time = 12GM + 11FG = 23s, PM: Green time = 12GM + 11FG = 23s																	
			5P	D		AM: Green time = 6GM + 8FG = 14s, PM: Green time = 10GM + 8FG = 18s																	
			6P	B,C		AM: Green time = 45GM + 10FG = 55s, AM: Green time = 41GM + 10FG = 51s																	

AB,C,D AD,B,C AB,C,D AD,B,C

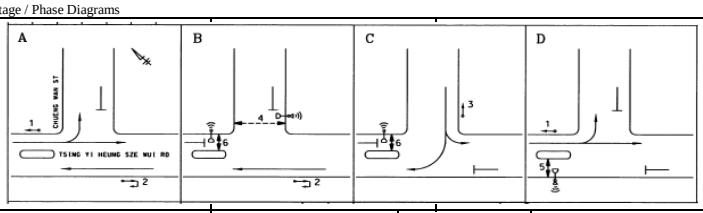
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



AM Peak Check Phase			PM Peak Check Phase		
εy	0.456	0.525	εy	0.423	0.385
L (sec)	31	37	L (sec)	35	37
C (sec)	114	114	C (sec)	100	100
y pract.	0.655	0.608	y pract.	0.585	0.567
R.C. (%)	**44%**	**16%**	R.C. (%)	**38%**	**47%**

Stage / Phase Diagrams



	I/G = 8 + Ped 23	I/G = 3	I/G = 5
I/G = 2		I/G = 5	I/G = 12 + Ped 18

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J12) Tsing Yi Heung Sze Wui Road / Chung Mei Road**

Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		(%) uphill Gradient	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)		AM Peak			PM Peak		
						Left	Right			AM	PM			AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Chung Mei Road	E		5	B,C	3.3	10.0	0	0	1	100%	100%	1945	1945	1690	1690	1690	1690	215	0.127		240	0.142	
	E		6	C	3.3	0.0	18	0	0	100%	100%	2085	2085	1925	1925	1925	1925	265	0.138	0.138	170	0.088	0.088
Tsing Yi Heung Sze Wui Road	N		2	A,C	3.3	25.0	0	0	1	100%	100%	1945	1945	1835	1835	1835	1835	230	0.125		285	0.155	
	N		3	A	3.5	0.0	0	0	0	0%	0%	2105	4210	2105	2105	4210	4210	490	0.233	0.233	458	0.217	0.217
	N		3	A	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	490	0.233		458	0.217	
Tsing Yi Heung Sze Wui Road	S		1	A,B	3.5	0.0	0	3	1	0%	0%	1839	3818	1839	1839	3818	3818	597	0.325		405	0.220	
	S		1	A,B	3.5	0.0	0	3	0	0%	0%	1979	0	1979	1979	0	0	643	0.325		435	0.220	
	S		4	B	3.5	0.0	22	3	0	100%	100%	1979	1979	1855	1855	1855	1855	290	0.156	0.156	235	0.127	0.127

Notes:

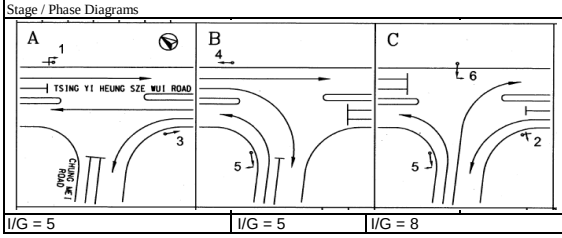
Traffic Flow (pcu / hr) Weekday AM Peak

215(240)
265(170)
290(235) 1240(840)
230(285) 980(915)

AM Peak Check Phase	
εy	0.527
L (sec)	15
C (sec)	114
y pract.	0.782
R.C. (%)	**48%**

PM Peak Check Phase	
εy	0.432
L (sec)	15
C (sec)	100
y pract.	0.765
R.C. (%)	**77%**

Stage / Phase Diagrams



I/G = 5 | I/G = 5 | I/G = 8

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J14) Tsing Yi Road / Planned New Road**

Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Tsing Yi Road	N		A	1	3.5	0.0	0	0	1	0%	0%	1965	4070	1965	1965	4065	4065	246	0.125	0.126	205	0.105	0.105
	N		A	1	3.5	0.0	40	0	0	4%	7%	2105	0	2100	2100	0	0	264	0.126		220	0.105	
Planned New Road	W		C	3	3.5	0.0	18	0	0	100%	100%	2105	2105	1945	1945	1945	1945	15	0.008		20	0.010	
	W		C	3	3.5	10.0	0	0	1	100%	100%	1965	1965	1710	1710	1710	1710	70	0.041	0.041	55	0.032	0.032
Tsing Yi Road	S		B	2	3.5	10.0	0	0	1	0%	3%	1965	4070	1965	1955	4070	4060	302	0.154	0.154	195	0.100	0.100
	S		B	2	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	323	0.154		210	0.100	

Pedestrian crossing	Dp	1	AM: Green time = 26GM + 7FG = 33s, PM: Green time = 32GM + 7FG = 39s
	EP	1,2	AM: Green time = 76GM + 7FG = 83s, PM: Green time = 82GM + 7FG = 89s
	Fp	2,3	AM: Green time = 70GM + 7FG = 77s, PM: Green time = 64GM + 7FG = 71s
	Gp	3	AM: Green time = 22GM + 7FG = 29s, PM: Green time = 16GM + 7FG = 23s
	Hp	1,3	AM: Green time = 66GM + 7FG = 73s, PM: Green time = 66GM + 7FG = 73s
	Ip	2	AM: Green time = 32GM + 7FG = 39s, PM: Green time = 32GM + 7FG = 39s

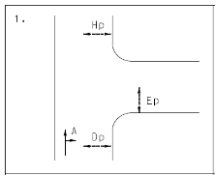
Notes:

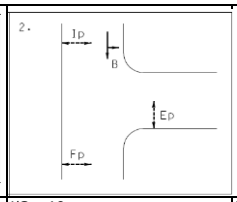
Traffic Flow (pcu / hr) Weekday AM Peak

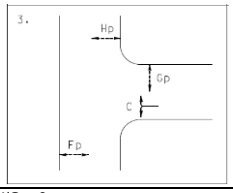
AM Peak Check Phase	
εy	0.320
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	**139%**

PM Peak Check Phase	
εy	0.237
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	**223%**

Stage / Phase Diagrams







I/G = 5 | I/G = 10 | I/G = 6

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J1) Cheung Tsing Highway / Tsing Yi Road West**

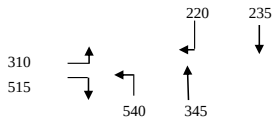
Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak	Revised Saturation Flow (pcu/hr)	Total Revised Saturation Flow (pcu/hr) Logistic Peak	Total Revised Saturation Flow (pcu/hr)	Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road West	S		2	A	3.5	0	0	0	1	0%	1965	6135	1965		5900		152	0.077	0.077			
	S		2	A	3.3	0	20	0	0	46%	2085	0	2015		0		155	0.077				
	S		2	A	3.3	0	17.5	0	0	100%	2085	0	1920		0		148	0.077				
Cheung Tsing Highway	E		3	A,B	3.4	20	0	0	1	100%	1955	1955	1820		1820		310	0.170				
	E		4	B	3.5	0	30	0	0	100%	2105	4070	2005		3860		268	0.133				
	E		4	B	3.5	0	25	0	1	100%	1965	0	1855		0		247	0.133	0.133			
Tsing Yi Road West	N		1	C	3.6	20	0	6.5	1	100%	1702	3544	1585		3425		540	0.341	0.341			
	N		1	C	3.6	0	0	6.5	0	0%	1842	0	1840		0		345	0.188				
Pedestrian crossing			5P	C		Min. Green time = 5GM + 10FG = 15s																
			6P	C		Min. Green time = 5GM + 6FG = 11s																
			7P	A.B		Min. Green time = 5GM + 9FG = 14s																
			8P	B		Min. Green time = 5GM + 10FG = 15s																

A,B,C AB,C

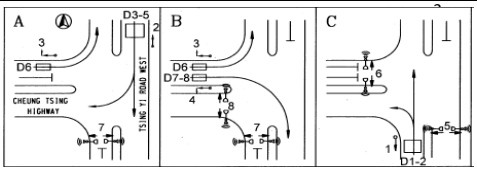
Notes:

Traffic Flow (pcu / hr)



Logistic Peak Check Phase		
εy	0.551	0.511
L (sec)	13	9
C (sec)	100	100
y pract.	0.783	0.819
R.C. (%)	**42%**	**60%**

Stage / Phase Diagrams



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

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J2) Tsing Hung Road / Tsing Yi Road**

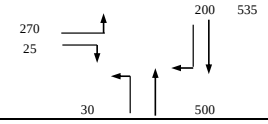
Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Total Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road	S		1	A	3.5	0.0	0	1	0%	1965	4070	1965		4070		258	0.131				
	S		1	A	3.5	0.0	0	0	0%	2105	0	2105		0		277	0.131				
	S		1	A	3.6	0.0	18	0	100%	2115	2115	1950		1950		200	0.103	0.131			
Tsing Yi Road	N		4	C	4.0	30.0	0	1	100%	2015	2015	1920		1920		30	0.016				
	N		4	C	3.5	0.0	0	0	0%	2105	4210	2105		4210		250	0.119				
	N		4	C	3.5	0.0	0	0	0%	2105	0	2105		0		250	0.119	0.119			
Tsing Hung Road	E		2	A,B	3.3	25.0	0	1	100%	1945	1945	1835		1835		270	0.147				
	E		3	B	4.0	0.0	22	0	100%	2155	2155	2015		2015		25	0.012				
Pedestrian Crossing			5P	D		Min. Green time = 5GM + 7FG = 12s															
			6P	A,B,D		Min. Green time = 5GM + 5FG = 10s															
			7P	C,D		Min. Green time = 5GM + 10FG = 15s															
			8P	C,D		Min. Green time = 5GM + 5FG = 10s															

A,B,C,D AB,C,D

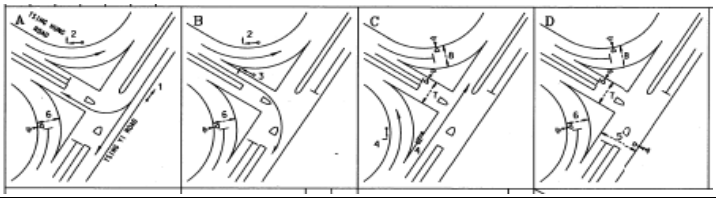
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



Logistic Peak Check Phase	A,B,C,D	AB,C,D
εy	0.250	0.266
L (sec)	33	22
C (sec)	100	100
y pract.	0.603	0.702
R.C. (%)	**141%**	**164%**

Stage / Phase Diagrams



I/G = 2	I/G = 6 + Min. G 5	I/G = 5	I/G = 5 + 12

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

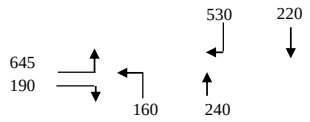
Junction: **(J4) Sai Tso Wan Road / Tsing Yi Road West / Tsing Yi Road**

Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y			
Tsing Yi Road	NE		1	A	4.5	15	0	6.5	1	100%	1792	1792	1630		160	0.098	0.132			
	NE		1	A	3.4	0	0	6.5	0	0%	1822	1822	1820		240	0.132				
Sai Tso Wan Road	NW		3	C,D	3.8	15	0	0	1	100%	1995	1995	1815		645	0.355				
	NW		4	D	3.8	0	25	0	0	100%	2135	2135	2015		190	0.094	0.094			
Tsing Yi Road West	SE		2	B,C	3.4	0	0	0	1	0%	1955	1955	1955		220	0.113				
	SE		2	B,C	3.7	0	25	0	0	100%	2125	2125	2005		530	0.264	0.264			
Pedestrian crossing			5p	A,B	Min. Green time = 5GM + 8FG = 13s															
			6p	D	Min. Green time = 5GM + 10FG = 15s															
			7p	B,C	Min. Green time = 5GM + 9FG = 14s															
			8p	A,D	Min. Green time = 5GM + 7FG = 12s															

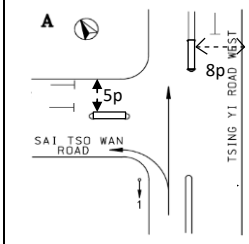
Notes:

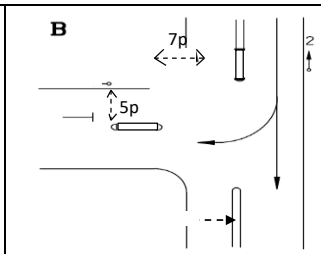
Traffic Flow (pcu / hr)

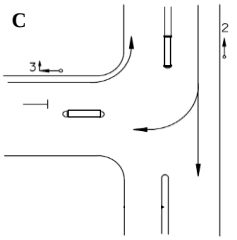


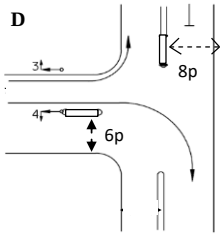
Logistic Peak Check Phase		
εy	0.491	0.487
L (sec)	19	30
C (sec)	110	110
y pract.	0.745	0.655
R.C. (%)	52%	34%

Stage / Phase Diagrams









I/G = 5	I/G =5		I/G = 5	
I/G = 5	I/G =8+12	I/G = 2		

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J5) Sai Tso Wan Road Near VEC**

Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak	Revised Saturation Flow (pcu/hr)	Total Revised Saturation Flow (pcu/hr) Logistic Peak	Total Revised Saturation Flow (pcu/hr)	Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y			
Sai Tso Wan Road	EB	→	3	A	4.0	0.0	0	1	0%	2015	2015	2015		2015		420	0.208	0.208			
Sai Tso Wan Road	WB	↰	2	B,C	4.0	0.0	10	0	100%	2155	2155	1875		1875		125	0.067				
Sai Tso Wan Road	WB	←	1	A,B	4.0	0.0	0	1	0%	2015	2015	2015		2015		425	0.211	0.211			
Pedestrian Crossing		↕	4P	C		Green time = 13Gm + 5 FGm = 18s															

	A,BC	AB,C
Logistic Peak Check Phase		
εy	0.275	0.211
L (sec)	11	25
C (sec)	91	91
y pract.	0.791	0.653
R.C. (%)	**188%**	**209%**

Notes:

(None)

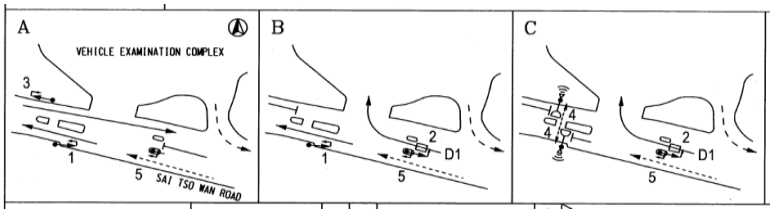
Traffic Flow (pcu / hr) AM (PM) Peak

420 →

↰ 125

← 190

Stage / Phase Diagrams



I/G = 6	I/G = 7		
I/G = 3	I/G = 7	I/G = 5 + Ped 18s	

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

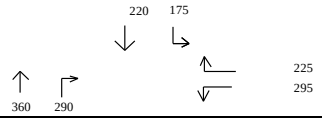
Junction: **(J8) Tsing Yi Road West / Ching Hong Road**

Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak	Revised Saturation Flow (pcu/hr)	Total Revised Saturation Flow (pcu/hr) Logistic Peak	Total Revised Saturation Flow (pcu/hr)	Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road West	S		1	A	3.0	0.0	0	5.5	0	0%	1824	3698	1824		3698		109	0.059	0.115			
	S		1	A	3.5	0.0	0	5.5	0	0%	1874	0	1874		0		111	0.059				
	S		1	A	3.7	10.0	0	5.5	1	100%	1754	1754	1525		1525		175	0.115				
Tsing Yi Road West	N		2	A,B	3.5	0.0	0	0	1	0%	1965	4070	1965		4070		174	0.088				
	N		2	A,B	3.5	0.0	0	0	0	0%	2105	0	2105		0		186	0.088				
	N		3	B	3.3	0.0	18	0	0	100%	2085	2085	1925		1925		290	0.151	0.151			
Ching Hong Road	W		4	C	3.4	18.0	20	0	0	17% / 83%	2095	0	1945		0		272	0.140	0.140			
	W		4	C	3.4	15.0	0	0	1	100%	1955	4050	1775		3720		248	0.140				
Pedestrian crossing			5P	A,B		Min. Green time = 11GM + 8FG = 19s																
			6P	C		Min. Green time = 5GM + 12FG = 17s																

Notes:

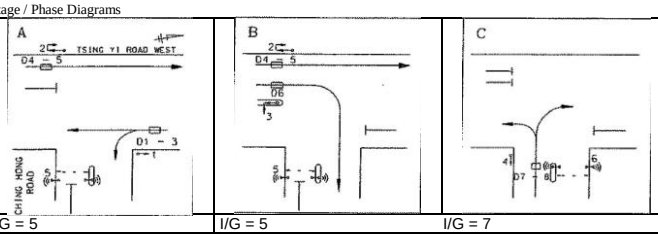
Traffic Flow (pcu / hr) Weekday AM Peak



Logistic Peak Check Phase

εy	0.405
L (sec)	12
C (sec)	71
y pract.	0.748
R.C. (%)	**85%**

Stage / Phase Diagrams



I/G = 5 I/G = 5 I/G = 7

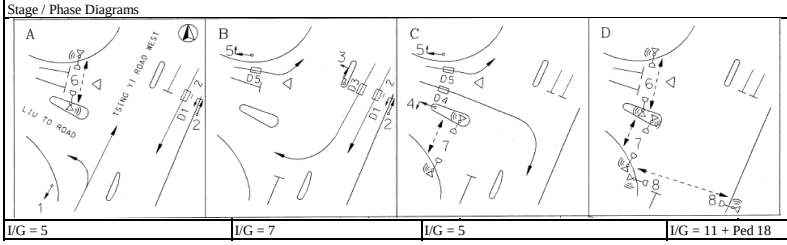
TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **J9 - Tsing Yi Road West / Liu To Road**
Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Total Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road West	S		2	A,B	3.3	0.0	0	5	1	0%	1735	3610	1735		3610		125	0.072				
	S		2	A,B	3.3	0.0	0	5	0	0%	1875	0	1875		0		135	0.072				
	S		3	B	3.3	0.0	22	5	0	100%	1875	1875	1755		1755		290	0.165	0.165			
Tsing Yi Road West	N		1	A	3.2	10.0	0	0	1	57%	1935	4100	1785		3950		255	0.143	0.143			
	N		1	A	4.1	0.0	0	0	0	0%	2165	0	2165		0		310	0.143				
Liu To Road	E		5	B,C	3.2	10.0	0	0	1	100%	1935	1935	1685		1685		355	0.211				
	E		4	C	4.1	0.0	18	0	0	100%	2165	2165	2000		2000		135	0.068	0.068			
Pedestrian crossing			6P	A,D		Green time = 46GM + 9FG = 55s																
			7P	C,D		Green time = 31GM + 13FG = 44s																
			8P	D		Green time = 10GM + 8FG = 18s																
Pedestrian Crossing																						

			A,BC,D	A,B,C,D
Notes:	Traffic Flow (pcu / hr) Weekday AM Peak	Logistic Peak Check Phase	εy	0.354	0.376
	355, 135, 145, 420, 290, 260		L (sec)	39	43
			C (sec)	130	130
			y pract.	0.630	0.602
			R.C. (%)	**78%**	**60%**

Stage / Phase Diagrams



I/G = 5	I/G = 7	I/G = 5	I/G = 11 + Ped 18

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **J10 - Tsing Yi Road West / Fung Shue Wo Road**
Description: **2026 Observed Traffic Flow**

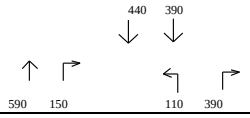
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Site Factor	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Total Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Fung Shue Wo Road	S	↓	1	A,D	4.1	0.0	0	3	0	0%	1	2039	4058	2039		4058		221	0.108	0.170			
(To Tsing Yi Road West)	S	↓	1	A,D	3.9	0.0	0	3	0	0%	1	2019	0	2019		0		219	0.108				
Fung Shue Wo Road	S	↓	1	A,D	4.0	0.0	0	3	1	0%	1	1889	2294.8	1889		2294.8		321	0.170				
(To Fung Shue Wo Road)	S	↓	1	A,D	4.0	0.0	0	3	0	0%	0.2	405.8	0	405.8		0		69	0.170				
Tsing Yi Road West	N	↑	2	A,B	3.5	0.0	0	0	1	0%	1	1965	2491.3	1965		2491.25		465	0.237				
	N	↑	2	A,B	3.5	0.0	0	0	0	0%	0.25	526.25	0	526.25		0		125	0.237				
	N	↱	3	B	3.6	0.0	18	0	0	100%	1	2115	2115	1950		1950		150	0.077	0.077			
Fung Shue Wo Road	N	↰	4	C	3.8	35.0	0	3	1	100%	1	1869	2193.6	1790		2100		94	0.052				
	N	↰	4	C	4.0	38.0	0	3	0	100%	0.16	324.64	0	310		0		16	0.052				
Fung Shue Wo Road	N	↱	4	C	3.6	0.0	43	3	0	100%	0.23	457.47	2446.5	440		2355		73	0.166	0.166			
	N	↱	4	C	3.6	0.0	40	3	0	100%	1	1989	0	1915		0		317	0.166				

Pedestrian crossing	5p	D	Min. Green time = 5s (G) + 8s (FS) = 13s
	6P	B,C	Min. Green time = 5s (G) + 8s (FS) = 13s
	7P	A,C,D	Min. Green time = 5s (G) + 8s (FS) = 13s
	8P	A,B,D	Min. Green time = 5s (G) + 7s (FS) = 12s

AD,B,C AB,C,D

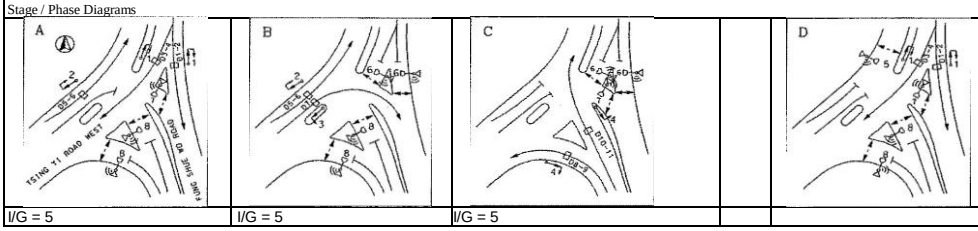
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



Logistic Peak Check Phase		
εy	0.412	0.402
L (sec)	12	28
C (sec)	90	100
y pract.	0.780	0.648
R.C. (%)	89%	61%

Stage / Phase Diagrams



I/G = 5 I/G = 5 I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J11) Tsing Yi Heung Sze Wui Road / Cheung Wan Street**

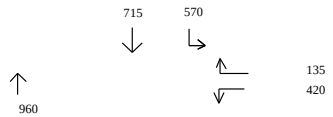
Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Total Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Heung Sze Wui Road	N	↑	2	A,B	3.5	0.0	0	0	1	0%	1965	4070	1965		4070		463	0.236				
	N	↑	2	A,B	3.5	0.0	0	0	0	0%	2105	0	2105		0		497	0.236				
Cheung Wan Street	W	↰↓	3	C	3.5	18.0	20	0	0	53% / 47%	2105	0	1950		0		290	0.149	0.149			
	W	↓	3	C	3.5	15.0	0	0	1	100%	1965	4070	1785		3735		265	0.149				
Tsing Yi Heung Sze Wui Road	S	↓→	1	A,D	3.0	10.0	0	0	1	100%	1915	6025	1665		5775		570	0.342	0.342			
	S	↓	1	A,D	3.0	0.0	0	0	0	0%	2055	0	2055		0		358	0.174				
	S	↓	1	A,D	3.0	0.0	0	0	0	0%	2055	0	2055		0		358	0.174				
Pedestrian crossing		↔ ↕	4P	B		Green time = 12GM + 11FG = 23s																
			5P	D		Green time = 8GM + 8FG = 16s																
			6P	B,C		Green time = 42GM + 10FG = 52s																

AB,C,D AD,B,C

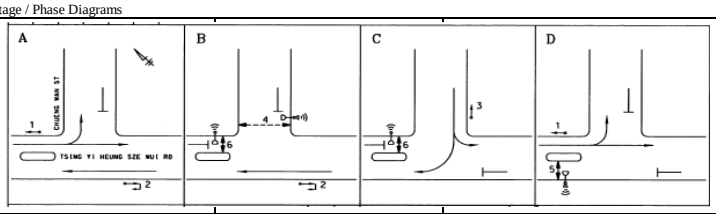
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



Logistic Peak Check Phase		
εy	0.384	0.491
L (sec)	33	37
C (sec)	90	90
y pract.	0.570	0.530
R.C. (%)	**48%**	**8%**

Stage / Phase Diagrams



I/G = 2 | I/G = 5 | I/G = 12 + Ped 16

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J12) Tsing Yi Heung Sze Wui Road / Chung Mei Road**
Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		(%) uphill Gradient	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)		Logistic Peak					
						Left	Right			Logistic Peak			Logistic Peak		Logistic Peak		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Chung Mei Road	E		5	B,C	3.3	10.0	0	0	1	100%	1945	1945	1690		1690		220	0.130				
	E		6	C	3.3	0.0	18	0	0	100%	2085	2085	1925		1925		205	0.106	0.106			
Tsing Yi Heung Sze Wui Road	N		2	A,C	3.3	25.0	0	0	1	100%	1945	1945	1835		1835		190	0.104				
	N		3	A	3.5	0.0	0	0	0	0%	2105	4210	2105		4210		158	0.075	0.075			
	N		3	A	3.5	0.0	0	0	0	0%	2105	0	2105		0		158	0.075				
Tsing Yi Heung Sze Wui Road	S		1	A,B	3.5	0.0	0	3	1	0%	1839	3818	1839		3818		147	0.080				
	S		1	A,B	3.5	0.0	0	3	0	0%	1979	0	1979		0		158	0.080				
	S		4	B	3.5	0.0	22	3	0	100%	1979	1979	1855		1855		290	0.156	0.156			
Pedestrian crossing																						

Notes:

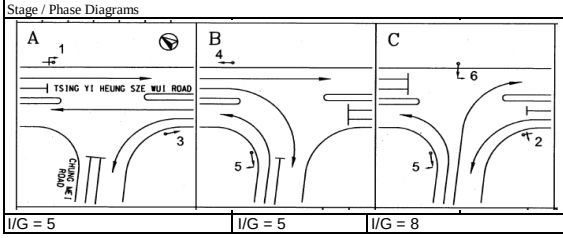
Traffic Flow (pcu / hr) Weekday AM Peak

220 205 290 845.00 190 735

Logistic Peak Check Phase

εy	0.338
L (sec)	15
C (sec)	114
y pract.	0.782
R.C. (%)	**131%**

Stage / Phase Diagrams



I/G = 5 I/G = 5 I/G = 8

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

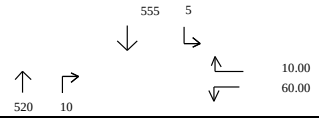
Junction: **(J14) Tsing Yi Road / Planned New Road**
Description: **2026 Observed Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak	Revised Saturation Flow (pcu/hr)	Total Revised Saturation Flow (pcu/hr) Logistic Peak	Total Revised Saturation Flow (pcu/hr)	Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road	N		A	1	3.5	0.0	0	0	1	0%	1965	4070	1965		4065		256	0.130	0.130			
	N		A	1	3.5	0.0	40	0	0	4%	2105	0	2100		0		274	0.130				
Planned New Road	W		C	3	3.5	0.0	18	0	0	100%	2105	2105	1945		1945		10	0.005				
	W		C	3	3.5	10.0	0	0	1	100%	1965	1965	1710		1710		60	0.035	0.035			
Tsing Yi Road	S		B	2	3.5	10.0	0	0	1	2%	1965	4070	1960		4065		270	0.138	0.138			
	S		B	2	3.5	0.0	0	0	0	0%	2105	0	2105		0		290	0.138				

Pedestrian crossing	Dp	1	Green time = 28GM + 7FG = 35s
	EP	1,2	Green time = 78GM + 7FG = 85s
	Fp	2,3	Green time = 68GM + 7FG = 75s
	Gp	3	Green time = 20GM + 7FG = 27s
	Hp	1,3	Green time = 66GM + 7FG = 73s
	Ip	2	Green time = 32GM + 7FG = 39s

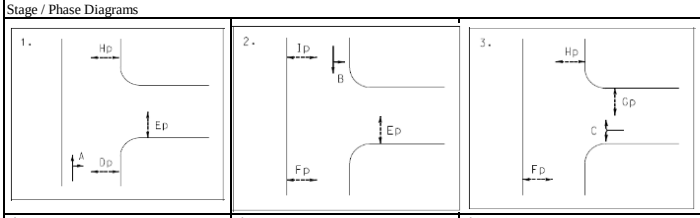
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



AM Peak Check Phase	
Σy	0.303
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	**152%**

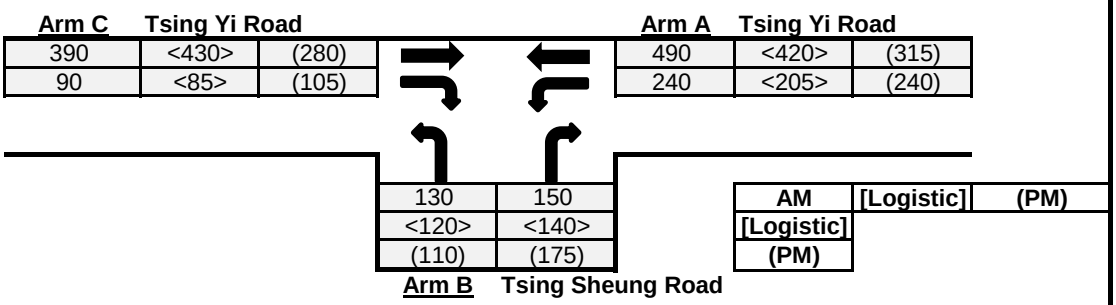
Stage / Phase Diagrams



I/G = 5 | I/G = 10 | I/G = 6

Priority Junction Calculation

Junction :	(J3) Tsing Yi Road / Tsing Sheung Road	Job No.:	26011HK
Scenario :	2026 Observed Traffic Flow		



The predictive equations of capacity of movement are:

Q-BA = D(627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB))
Q-BC = E(745 - Y(0.364q-AC + 0.144q-AB))
Q-CB = F(745 - 0.364Y(q-AC + q-AB))

The geometric parameters represented by D, E, F are:

D = (1 + 0.094(w-BA - 3.65))(1 + 0.0009(V-rBA - 120))(1 + 0.0006(V-IBA - 150))
E = (1 + 0.094(w-BC - 3.65))(1 + 0.0009(V-rBC - 120))
F = (1 + 0.094(w-CB - 3.65))(1 + 0.0009(V-rCB - 120))

where

Y = 1 - 0.0345W
q-AB, etc = the design flow of movement AB, etc
W = major road width
W-CR = central reserve width
w-BA, etc = lane width to vehicle
v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc
v-IBA = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	**Input**					**Calculated**	
W	14	V-rBA	30	w-BA	4.5	D	0.933
W-CR	0	V-IBA	50	w-BC	4.5	E	1.012
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)	0	V-rBC	50	w-CB	0	F	0.616
Minor Road Share LT&RT? (Yes: 1, No: 0)	0	V-rCB	50			Y	0.517

Analysis :	**Traffic Flow pcu/hr**	**AM**	**Logistic**	**PM**	**Capacity pcu/hr**	**AM**	**Logistic**	**PM**	
	q-CA	390	430	280	Q-BA	417	428	456	
	q-CB	90	85	105	Q-BC	642	658	676	
	q-AB	240	205	240	Q-CB	374	386	394	
	q-AC	490	420	315	Q-CA	N/A	N/A	N/A	(If C-B blocked C-
	q-BA	150	140	175	Q-BAC	N/A	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	130	120	110					
	f	0.464	0.462	0.386					

Results :	**Ratio of Flow-to-Capacity**	**AM**	**Logistic**	**PM**
	B-A	0.36	0.33	0.38
	B-C	0.20	0.18	0.16
	C-B	0.24	0.22	0.27
	C-A	N/A	N/A	N/A
	B-AC	N/A	N/A	N/A
	Critical DFC	**0.36**	**0.33**	**0.38**

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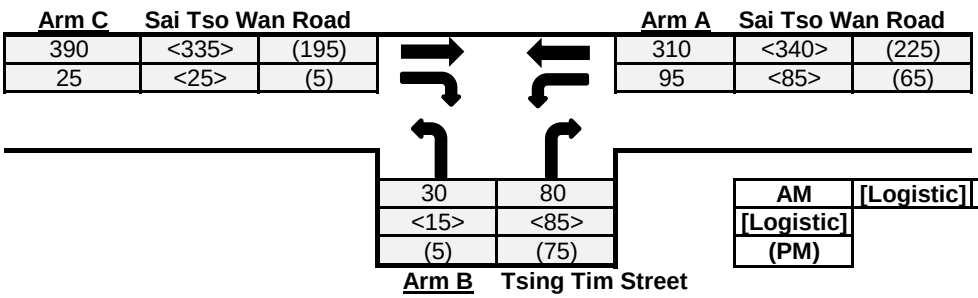
Priority Junction Calculation

Junction :	(J6) Sai Tso Wan Road / Tsing Tim Street	Job No.:	26011HK
Scenario :	2026 Observed Traffic Flow		



The predictive equations of capacity of movement are:

Q-BA = D(627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB))
Q-BC = E(745 - Y(0.364q-AC + 0.144q-AB))
Q-CB = F(745 - 0.364Y(q-AC + q-AB))

The geometric parameters represented by D, E, F are:

D = (1 + 0.094(w-BA - 3.65))(1 + 0.0009(V-rBA - 120))(1 + 0.0006(V-IBA - 150))
E = (1 + 0.094(w-BC - 3.65))(1 + 0.0009(V-rBC - 120))
F = (1 + 0.094(w-CB - 3.65))(1 + 0.0009(V-rCB - 120))

where

Y = 1 - 0.0345W
q-AB, etc = the design flow of movement AB, etc
W = major road width
W-CR = central reserve width
w-BA, etc = lane width to vehicle
v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc
v-IBA = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	**Input**					**Calculated**	
W	7	V-rBA	50	w-BA	3.6	D	0.877
W-CR	0	V-IBA	50	w-BC	3.6	E	0.933
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)	0	V-rBC	50	w-CB	0	F	0.616
Minor Road Share LT&RT? (Yes: 1, No: 0)	1	V-rCB	50			Y	0.759

Analysis :	**Traffic Flow pcu/hr**	**AM**	**Logistic**	**PM**	**Capacity pcu/hr**	**AM**	**Logistic**	**PM**	
	q-CA	390	335	195	Q-BA	397	400	458	
	q-CB	25	25	5	Q-BC	605	599	630	
	q-AB	95	85	65	Q-CB	390	386	409	
	q-AC	310	340	225	Q-CA	N/A	N/A	N/A	(If C-B blocked C-
	q-BA	80	85	75	Q-BAC	439	421	466	(If Minor Road Share LT&RT)
	q-BC	30	15	5					
	f	0.273	0.150	0.063					

Results :	**Ratio of Flow-to-Capacity**	**AM**	**Logistic**	**PM**
	B-A	N/A	N/A	N/A
	B-C	N/A	N/A	N/A
	C-B	0.06	0.06	0.01
	C-A	N/A	N/A	N/A
	B-AC	0.25	0.24	0.17
	Critical DFC	**0.25**	**0.24**	**0.17**

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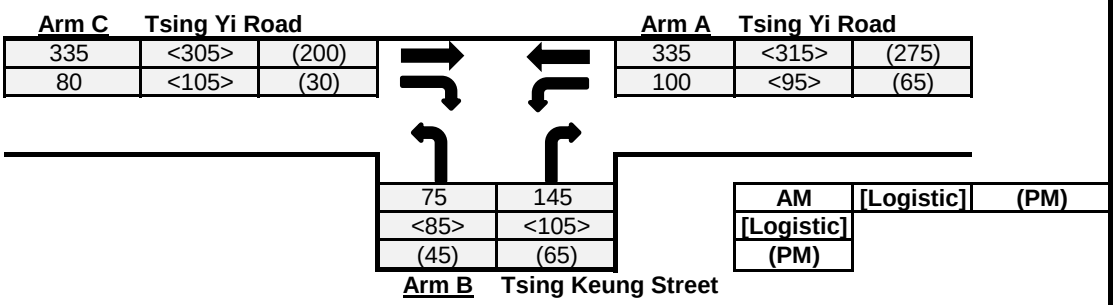
Priority Junction Calculation

Junction :	(J13) Tsing Yi Road / Tsing Keung Street	Job No.:	26011HK
Scenario :	2026 Observed Traffic Flow		



The predictive equations of capacity of movement are:

Q-BA = D(627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB))
Q-BC = E(745 - Y(0.364q-AC + 0.144q-AB))
Q-CB = F(745 - 0.364Y(q-AC + q-AB))

The geometric parameters represented by D, E, F are:

D = (1 + 0.094(w-BA - 3.65))(1 + 0.0009(V-rBA - 120))(1 + 0.0006(V-IBA - 150))
E = (1 + 0.094(w-BC - 3.65))(1 + 0.0009(V-rBC - 120))
F = (1 + 0.094(w-CB - 3.65))(1 + 0.0009(V-rCB - 120))

where

Y = 1 - 0.0345W
q-AB, etc = the design flow of movement AB, etc
W = major road width
W-CR = central reserve width
w-BA, etc = lane width to vehicle
v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc
v-IBA = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	**Input**						**Calculated**	
W	15	V-rBA	50	w-BA	4	D	0.910
W-CR	0	V-IBA	50	w-BC	4	E	0.968
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)	0	V-rBC	50	w-CB	0	F	0.616
Minor Road Share LT&RT? (Yes: 1, No: 0)	0	V-rCB	50			Y	0.483

Analysis :	**Traffic Flow pcu/hr**	**AM**	**Logistic**	**PM**	**Capacity pcu/hr**	**AM**	**Logistic**	**PM**	
	q-CA	335	305	200	Q-BA	459	459	495	
	q-CB	80	105	30	Q-BC	657	661	670	
	q-AB	100	95	65	Q-CB	412	414	422	
	q-AC	335	315	275	Q-CA	N/A	N/A	N/A	(If C-B blocked C-
	q-BA	145	105	65	Q-BAC	N/A	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	75	85	45					
	f	0.341	0.447	0.409					

Results :	**Ratio of Flow-to-Capacity**	**AM**	**Logistic**	**PM**
	B-A	0.32	0.23	0.13
	B-C	0.11	0.13	0.07
	C-B	0.19	0.25	0.07
	C-A	N/A	N/A	N/A
	B-AC	N/A	N/A	N/A
	Critical DFC	**0.32**	**0.25**	**0.13**

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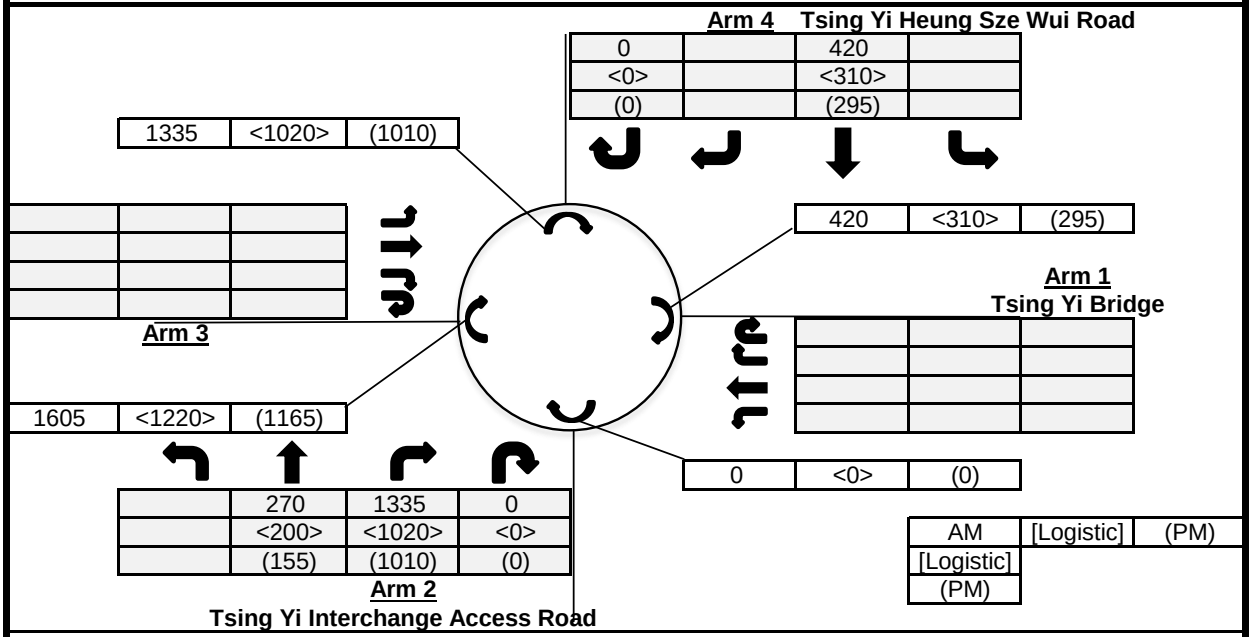
Roundabout Junction Calculation

Junction : (RA1) Tsing Yi Interchange (North) Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)			6		6
E	=	Entry width (m)			7		7
L	=	Effective length of flare (m)			5		5
R	=	Entry radius			62		41
D	=	Inscribed circle diameter (m)			60		60
A	=	Entry angle (degree)			27		60
Q	=	Entry flow (pcu/hr)	AM		1605		420
			Logistic		1220		310
			PM		1165		295
Qc	=	Circulating flow	AM		0		1335
		across entry (pcu/hr)	Logistic		0		1020
			PM		0		1010

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L			0.32		0.32
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)			1.04		0.92
X_2	=	V+((E-V)/(1+2*S))			6.61		6.61
M	=	Exp((D-60)/10)			1.00		1.00
F	=	303*X_2			2003		2003
Td	=	1+(0.5/(1+M))			1.25		1.25
Fc	=	0.21*Td*(1+0.2*X_2)			0.61		0.61
Qe	=	Capacity = K*(F-Fc*Qc)	AM		2090		1095
			Logistic		2090		1272
			PM		2090		1277
DFC	=	Entry Flow/Capacity = Q/Qe	AM		0.77		0.38
			Logistic		0.58		0.24
			PM		0.56		0.23

DFC of Critical Approach = AM 0.77
Logistic 0.58
PM 0.56

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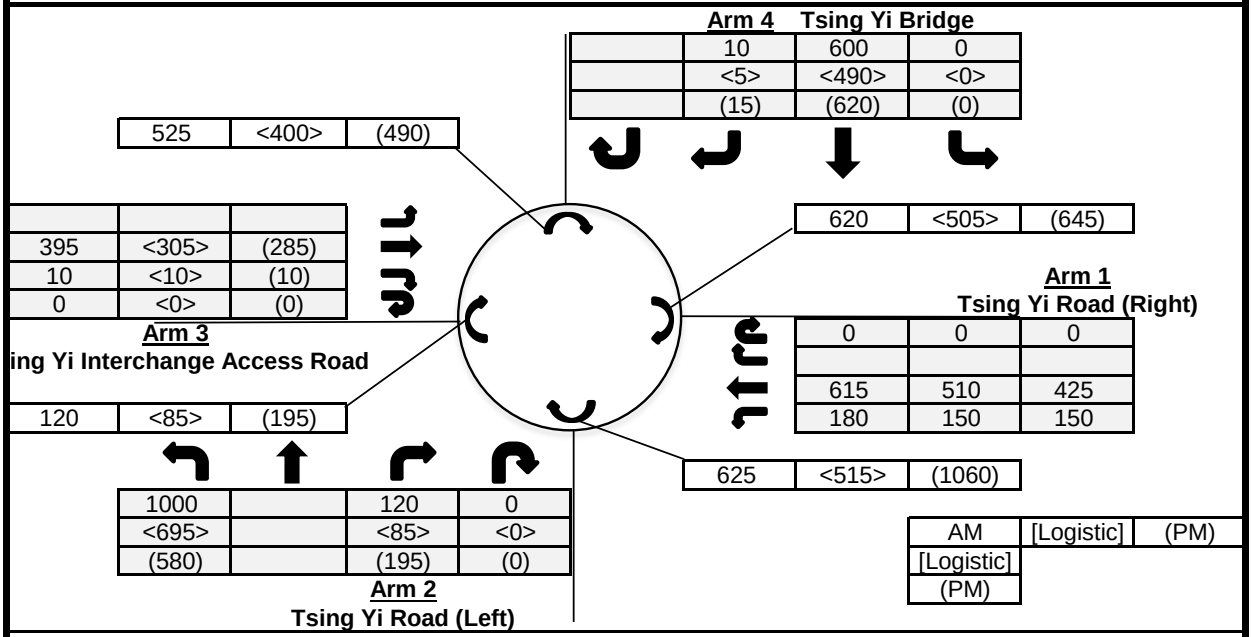
Roundabout Junction Calculation

Junction : (RA1) Tsing Yi Interchange (South) Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)		7	6.8	7	6
E	=	Entry width (m)		7.2	7	7.3	6.3
L	=	Effective length of flare (m)		5	5	5	5
R	=	Entry radius		23	25	24	44
D	=	Inscribed circle diameter (m)		60	60	60	60
A	=	Entry angle (degree)		43	54	27	23
Q	=	Entry flow (pcu/hr)	AM	795	1120	405	610
			Logistic	660	780	315	495
			PM	575	775	295	635
Qc	=	Circulating flow	AM	620	625	120	525
		across entry (pcu/hr)	Logistic	505	515	85	400
			PM	645	1060	195	490

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L		0.06	0.06	0.10	0.10
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		0.96	0.93	1.02	1.05
X_2	=	V+((E-V)/(1+2*S))		7.18	6.98	7.25	6.25
M	=	Exp((D-60)/10)		1.00	1.00	1.00	1.00
F	=	303*X_2		2175	2114	2197	1894
Td	=	1+(0.5/(1+M))		1.25	1.25	1.25	1.25
Fc	=	0.21*Td*(1+0.2*X_2)		0.64	0.63	0.64	0.59
Qe	=	Capacity = K*(F-Fc*Qc)	AM	1709	1595	2159	1665
			Logistic	1780	1659	2182	1742
			PM	1694	1341	2110	1687
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.47	0.70	0.19	0.37
			Logistic	0.37	0.47	0.14	0.28
			PM	0.34	0.58	0.14	0.38

DFC of Critical Approach = AM 0.70
Logistic 0.47
PM 0.58

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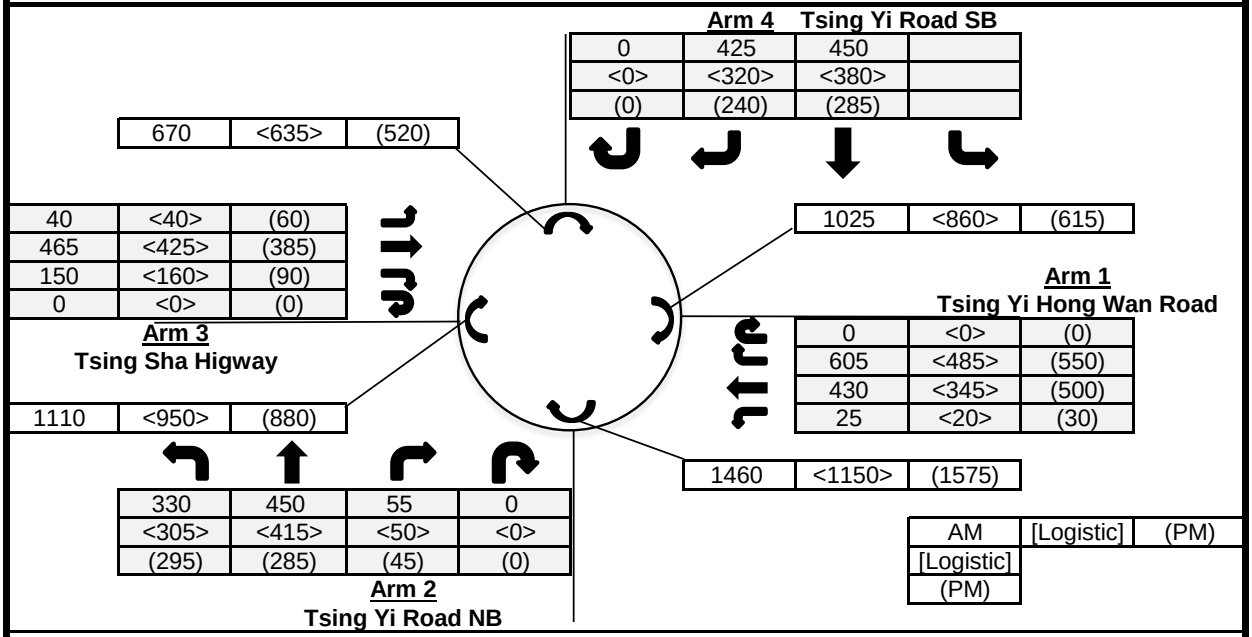
Roundabout Junction Calculation

Junction : (RA2) Tsing Yi Road / Tsing Yi Hong Wan Road / Tsing Sha Hig Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)		7.3	7.1	7.3	7.3
E	=	Entry width (m)		13.5	12	9.5	10
L	=	Effective length of flare (m)		30	15	30	15
R	=	Entry radius		45	97	52	34
D	=	Inscribed circle diameter (m)		100	100	100	100
A	=	Entry angle (degree)		29	32	31	46
Q	=	Entry flow (pcu/hr)	AM	1060	835	655	875
			Logistic	850	770	625	700
			PM	1080	625	535	525
Qc	=	Circulating flow	AM	1025	1460	1110	670
		across entry (pcu/hr)	Logistic	860	1150	950	635
			PM	615	1575	880	520

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L		0.33	0.52	0.12	0.29
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		1.03	1.03	1.03	0.96
X_2	=	V+((E-V)/(1+2*S))		11.03	9.50	9.08	9.01
M	=	Exp((D-60)/10)		54.60	54.60	54.60	54.60
F	=	303*X_2		3343	2877	2752	2731
Td	=	1+(0.5/(1+M))		1.01	1.01	1.01	1.01
Fc	=	0.21*Td*(1+0.2*X_2)		0.68	0.61	0.60	0.59
Qe	=	Capacity = K*(F-Fc*Qc)	AM	2727	2043	2145	2251
			Logistic	2843	2240	2243	2271
			PM	3014	1971	2286	2336
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.39	0.41	0.31	0.39
			Logistic	0.30	0.34	0.28	0.31
			PM	0.36	0.32	0.23	0.22

DFC of Critical Approach = AM 0.41
Logistic 0.34
PM 0.36

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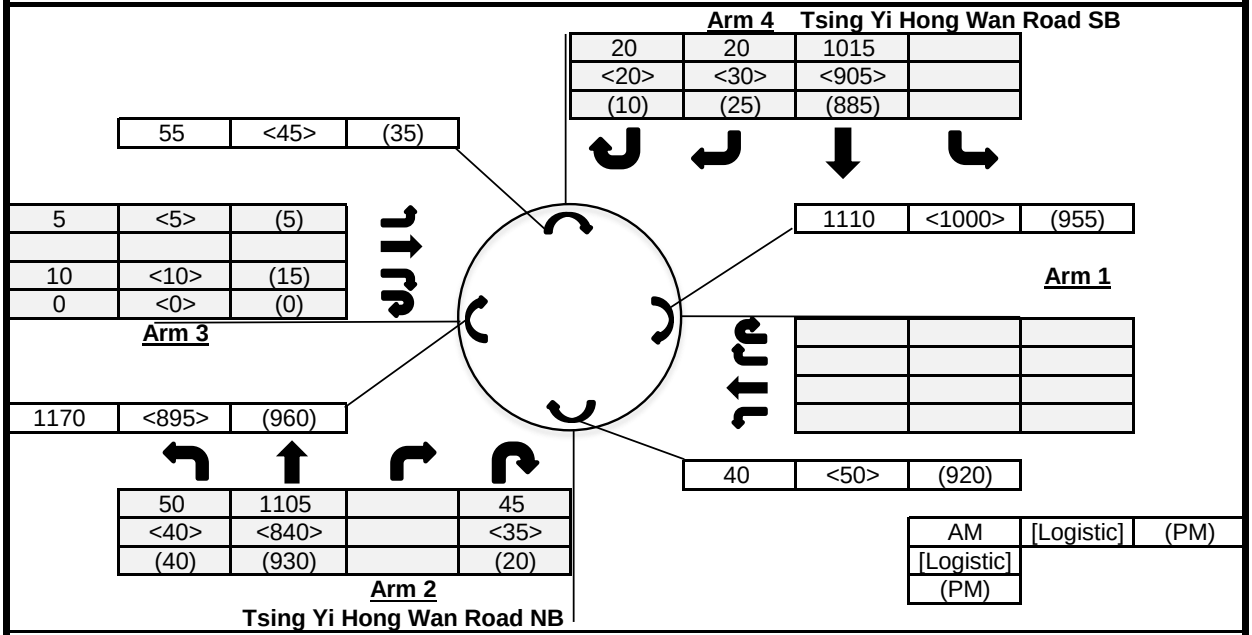
Roundabout Junction Calculation

Junction : (RA3) Tsing Yi Hong Wan Road Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)			7	7.3	7.3
E	=	Entry width (m)			14	13	12
L	=	Effective length of flare (m)			20	10	2
R	=	Entry radius			65	25	75
D	=	Inscribed circle diameter (m)			68	68	68
A	=	Entry angle (degree)			53	60	46
Q	=	Entry flow (pcu/hr)	AM		1200	15	1055
			Logistic		915	15	955
			PM		990	20	920
Qc	=	Circulating flow	AM		40	1170	55
		across entry (pcu/hr)	Logistic		50	895	45
			PM		920	960	35

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L			0.56	0.91	3.76
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)			0.95	0.91	0.98
X_2	=	V+((E-V)/(1+2*S))			10.30	9.32	7.85
M	=	Exp((D-60)/10)			2.23	2.23	2.23
F	=	303*X_2			3121	2823	2379
Td	=	1+(0.5/(1+M))			1.16	1.16	1.16
Fc	=	0.21*Td*(1+0.2*X_2)			0.74	0.69	0.62
Qe	=	Capacity = K*(F-Fc*Qc)	AM		2950	1821	2299
			Logistic		2943	1994	2305
			PM		2326	1953	2311
DFC	=	Entry Flow/Capacity = Q/Qe	AM		0.41	0.01	0.46
			Logistic		0.31	0.01	0.41
			PM		0.43	0.01	0.40

DFC of Critical Approach = AM 0.46
Logistic 0.41
PM 0.43

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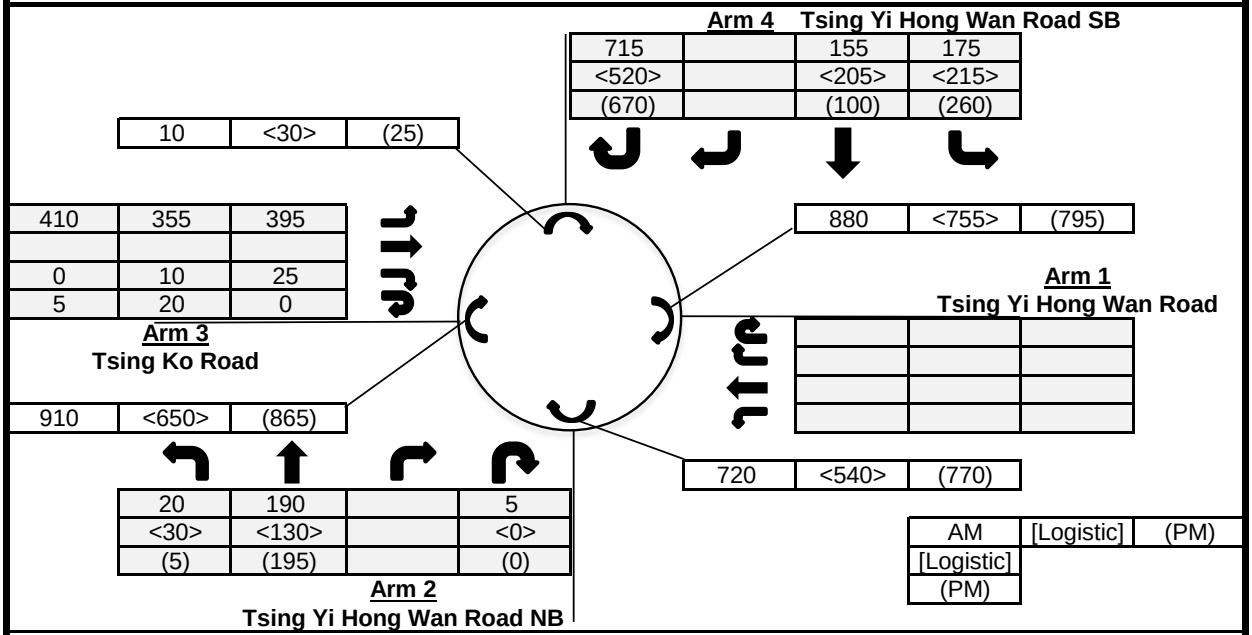
Roundabout Junction Calculation

Junction : (RA4) Tsing Yi Hong Wan Road / Tsing Ko Road Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)			6.7	6.3	7.3
E	=	Entry width (m)			13.5	12.5	15
L	=	Effective length of flare (m)			18	30	30
R	=	Entry radius			47	100	75
D	=	Inscribed circle diameter (m)			68	68	68
A	=	Entry angle (degree)			41	22	46
Q	=	Entry flow (pcu/hr)	AM		215	415	1045
			Logistic		160	385	940
			PM		200	420	1030
Qc	=	Circulating flow	AM		720	910	10
		across entry (pcu/hr)	Logistic		540	650	30
			PM		770	865	25

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L			0.60	0.33	0.41
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)			0.99	1.07	0.98
X_2	=	V+((E-V)/(1+2*S))			9.78	10.03	11.53
M	=	Exp((D-60)/10)			2.23	2.23	2.23
F	=	303*X_2			2963	3040	3493
Td	=	1+(0.5/(1+M))			1.16	1.16	1.16
Fc	=	0.21*Td*(1+0.2*X_2)			0.72	0.73	0.80
Qe	=	Capacity = K*(F-Fc*Qc)	AM		2422	2535	3416
			Logistic		2550	2737	3401
			PM		2387	2570	3405
DFC	=	Entry Flow/Capacity = Q/Qe	AM		0.09	0.16	0.31
			Logistic		0.06	0.14	0.28
			PM		0.08	0.16	0.30

DFC of Critical Approach = AM 0.31
Logistic 0.28
PM 0.30

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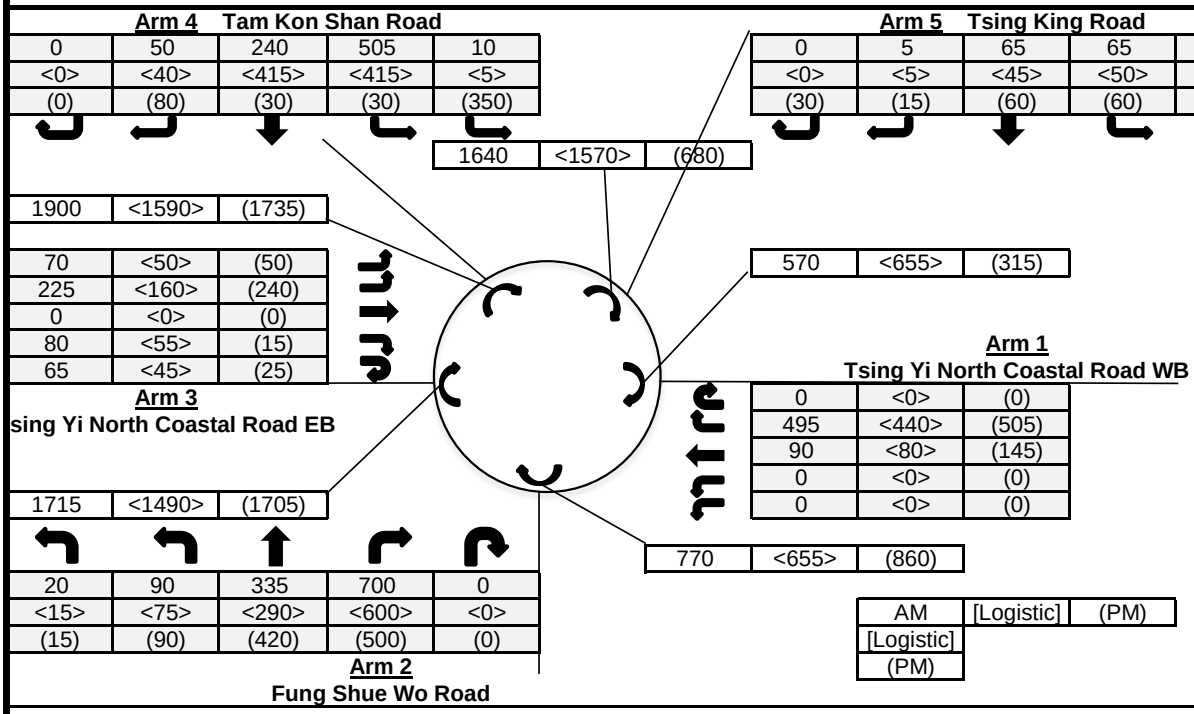
Roundabout Junction Calculation

Junction : (RA5) Tam Kon Shan Interchange Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4	Arm 5
V	=	Approach half width (m)		7	7.3	5.5	7.3	7
E	=	Entry width (m)		9	13.5	7.5	13.5	11
L	=	Effective length of flare (m)		9	20	11	50	10
R	=	Entry radius		100	35	45	35	45
D	=	Inscribed circle diameter (m)		100	100	100	100	100
A	=	Entry angle (degree)		30	25	25	45	45
Q	=	Entry flow (pcu/hr)	AM	585	1145	440	805	135
			Logistic	520	980	310	875	100
			PM	650	1025	330	490	165
Qc	=	Circulating flow	AM	570	770	1715	1900	1640
		across entry (pcu/hr)	Logistic	655	655	1490	1590	1570
			PM	315	860	1705	1735	680

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4	Arm 5
S	=	Sharpness of flare = 1.6*(E-V)/L		0.36	0.50	0.29	0.20	0.64
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		1.04	1.04	1.04	0.97	0.98
X_2	=	V+((E-V)/(1+2*S))		8.17	10.41	6.76	11.74	8.75
M	=	Exp((D-60)/10)		54.60	54.60	54.60	54.60	54.60
F	=	303*X_2		2475	3155	2050	3557	2653
Td	=	1+(0.5/(1+M))		1.01	1.01	1.01	1.01	1.01
Fc	=	0.21*Td*(1+0.2*X_2)		0.56	0.65	0.50	0.71	0.58
Qe	=	Capacity = K*(F-Fc*Qc)	AM	2241	2754	1248	2140	1654
			Logistic	2192	2832	1365	2353	1694
			PM	2389	2693	1253	2254	2200
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.26	0.42	0.35	0.38	0.08
			Logistic	0.24	0.35	0.23	0.37	0.06
			PM	0.27	0.38	0.26	0.22	0.07

DFC of Critical Approach = AM 0.42
Logistic 0.37
PM 0.38

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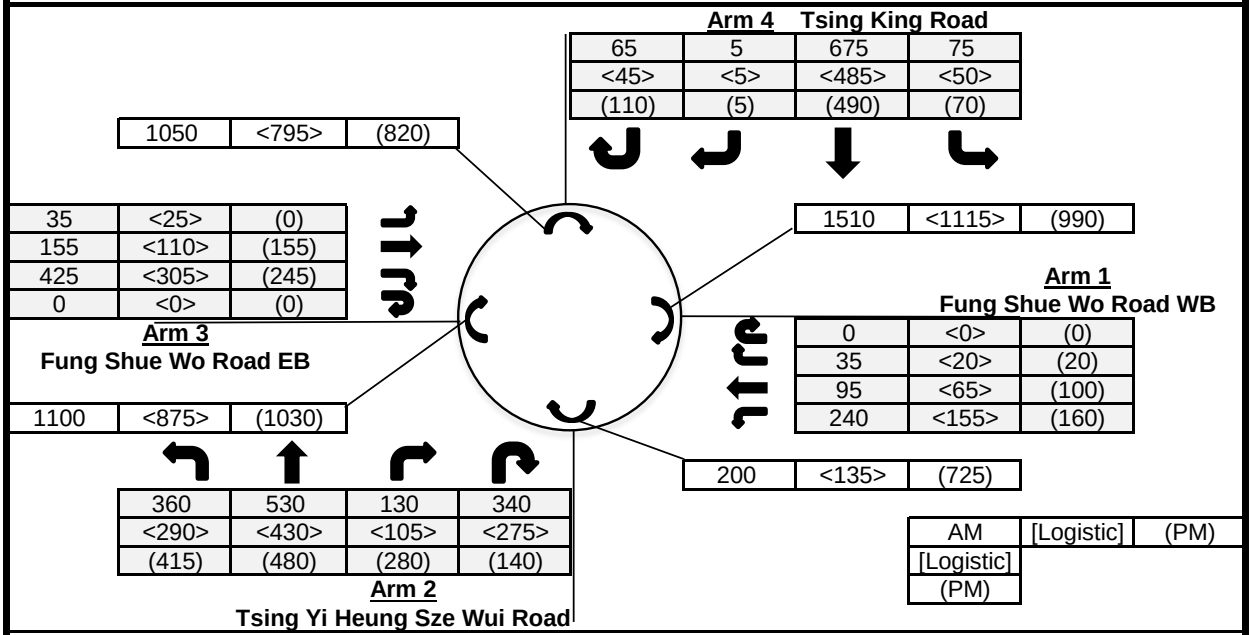
Roundabout Junction Calculation

Junction : (RA6) Tsing King Road / Fung Shue Wo Road Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)		6.7	7.3	7.3	6.9
E	=	Entry width (m)		9.7	10	9.2	8.9
L	=	Effective length of flare (m)		16	20	14	16
R	=	Entry radius		55	71	60	62
D	=	Inscribed circle diameter (m)		100	100	100	100
A	=	Entry angle (degree)		36	30	18	25
Q	=	Entry flow (pcu/hr)	AM	370	1360	615	820
			Logistic	240	1100	440	585
			PM	280	1315	400	675
Qc	=	Circulating flow	AM	1510	200	1100	1050
		across entry (pcu/hr)	Logistic	1115	135	875	795
			PM	990	725	1030	820

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L		0.30	0.22	0.22	0.20
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		1.01	1.04	1.07	1.05
X_2	=	V+((E-V)/(1+2*S))		8.58	9.19	8.62	8.33
M	=	Exp((D-60)/10)		54.60	54.60	54.60	54.60
F	=	303*X_2		2598	2783	2613	2524
Td	=	1+(0.5/(1+M))		1.01	1.01	1.01	1.01
Fc	=	0.21*Td*(1+0.2*X_2)		0.58	0.60	0.58	0.56
Qe	=	Capacity = K*(F-Fc*Qc)	AM	1747	2757	2125	2028
			Logistic	1977	2797	2265	2179
			PM	2050	2430	2168	2164
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.21	0.49	0.29	0.40
			Logistic	0.12	0.39	0.19	0.27
			PM	0.14	0.54	0.18	0.31

DFC of Critical Approach = AM 0.49
Logistic 0.39
PM 0.54

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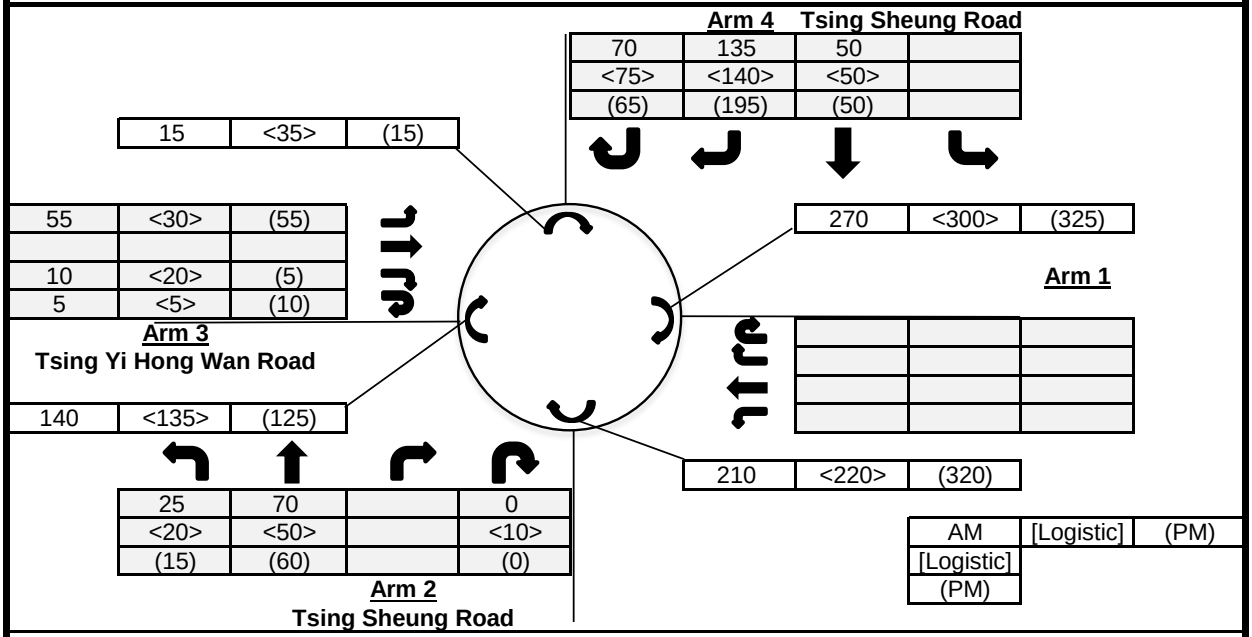
Roundabout Junction Calculation

Junction : (RA7) Tsing Yi Hong Wan Road / Tsing Sheung Road Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)			5.2	3	6.7
E	=	Entry width (m)			9	8.4	12
L	=	Effective length of flare (m)			25	15	23
R	=	Entry radius			63	55	11.6
D	=	Inscribed circle diameter (m)			53	53	53
A	=	Entry angle (degree)			33	48	38
Q	=	Entry flow (pcu/hr)	AM		95	70	255
			Logistic		80	55	265
			PM		75	70	310
Qc	=	Circulating flow	AM		210	140	15
		across entry (pcu/hr)	Logistic		220	135	35
			PM		320	125	15

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L			0.24	0.58	0.37
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)			1.02	0.97	0.94
X_2	=	V+((E-V)/(1+2*S))			7.76	5.51	9.75
M	=	Exp((D-60)/10)			0.50	0.50	0.50
F	=	303*X_2			2350	1669	2954
Td	=	1+(0.5/(1+M))			1.33	1.33	1.33
Fc	=	0.21*Td*(1+0.2*X_2)			0.71	0.59	0.83
Qe	=	Capacity = K*(F-Fc*Qc)	AM		2251	1537	2756
			Logistic		2243	1540	2741
			PM		2170	1546	2756
DFC	=	Entry Flow/Capacity = Q/Qe	AM		0.04	0.05	0.09
			Logistic		0.04	0.04	0.10
			PM		0.03	0.05	0.11

DFC of Critical Approach = AM 0.09 / Logistic 0.10 / PM 0.11

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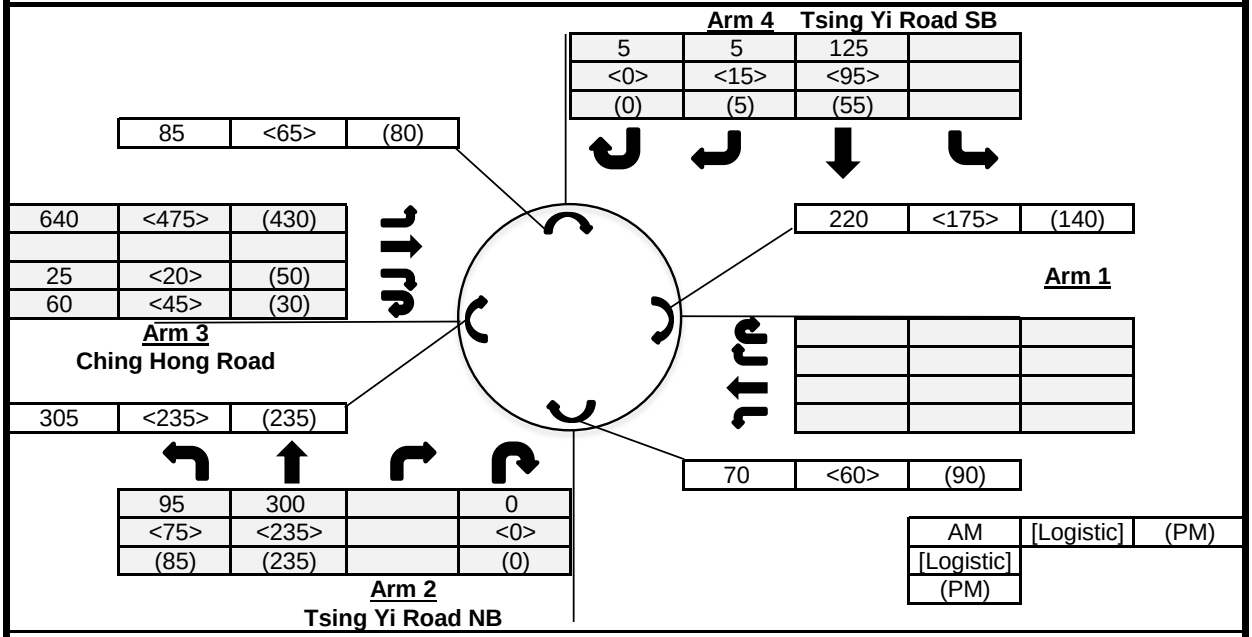
Roundabout Junction Calculation

Junction : (RA8) Tsing Yi Road / Ching Hong Road Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)			4.5	7.3	7
E	=	Entry width (m)			9	8.5	8.5
L	=	Effective length of flare (m)			25	4	16
R	=	Entry radius			24.5	30	100
D	=	Inscribed circle diameter (m)			30	30	30
A	=	Entry angle (degree)			44	40	27
Q	=	Entry flow (pcu/hr)	AM		395	725	135
			Logistic		310	540	110
			PM		320	510	60
Qc	=	Circulating flow	AM		70	305	85
		across entry (pcu/hr)	Logistic		60	235	65
			PM		90	235	80

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L			0.29	0.48	0.15
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)			0.96	0.98	1.05
X_2	=	V+((E-V)/(1+2*S))			7.36	7.91	8.15
M	=	Exp((D-60)/10)			0.05	0.05	0.05
F	=	303*X_2			2229	2397	2471
Td	=	1+(0.5/(1+M))			1.48	1.48	1.48
Fc	=	0.21*Td*(1+0.2*X_2)			0.77	0.80	0.82
Qe	=	Capacity = K*(F-Fc*Qc)	AM		2089	2114	2520
			Logistic		2096	2169	2537
			PM		2074	2169	2525
DFC	=	Entry Flow/Capacity = Q/Qe	AM		0.19	0.34	0.05
			Logistic		0.15	0.25	0.04
			PM		0.15	0.24	0.02

DFC of Critical Approach = AM 0.34
Logistic 0.25
PM 0.24

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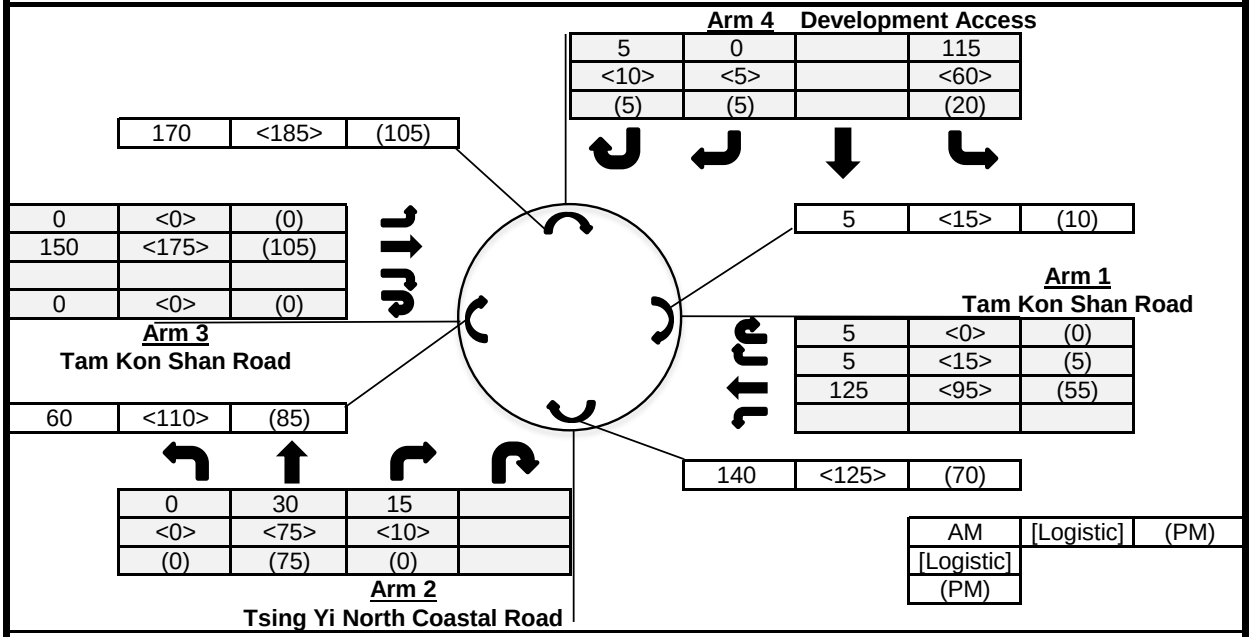
Roundabout Junction Calculation

Junction : (RA9) Tam Kon Shan Road Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)		3.3	4	3.4	4.2
E	=	Entry width (m)		6.7	4.9	5.8	5.4
L	=	Effective length of flare (m)		10	10	10	10
R	=	Entry radius		32	97	52	34
D	=	Inscribed circle diameter (m)		30	30	30	30
A	=	Entry angle (degree)		34	32	31	46
Q	=	Entry flow (pcu/hr)	AM	135	45	150	120
			Logistic	110	85	175	75
			PM	60	75	105	30
Qc	=	Circulating flow	AM	5	140	60	170
		across entry (pcu/hr)	Logistic	15	125	110	185
			PM	10	70	85	105

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L		0.54	0.14	0.38	0.19
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		1.00	1.03	1.03	0.96
X_2	=	V+((E-V)/(1+2*S))		4.93	4.70	4.76	5.07
M	=	Exp((D-60)/10)		0.05	0.05	0.05	0.05
F	=	303*X_2		1493	1424	1442	1535
Td	=	1+(0.5/(1+M))		1.48	1.48	1.48	1.48
Fc	=	0.21*Td*(1+0.2*X_2)		0.62	0.60	0.61	0.62
Qe	=	Capacity = K*(F-Fc*Qc)	AM	1497	1382	1443	1379
			Logistic	1491	1392	1412	1370
			PM	1494	1426	1427	1418
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.09	0.03	0.10	0.09
			Logistic	0.07	0.06	0.12	0.05
			PM	0.04	0.05	0.07	0.02

DFC of Critical Approach = AM 0.10
Logistic 0.12
PM 0.07

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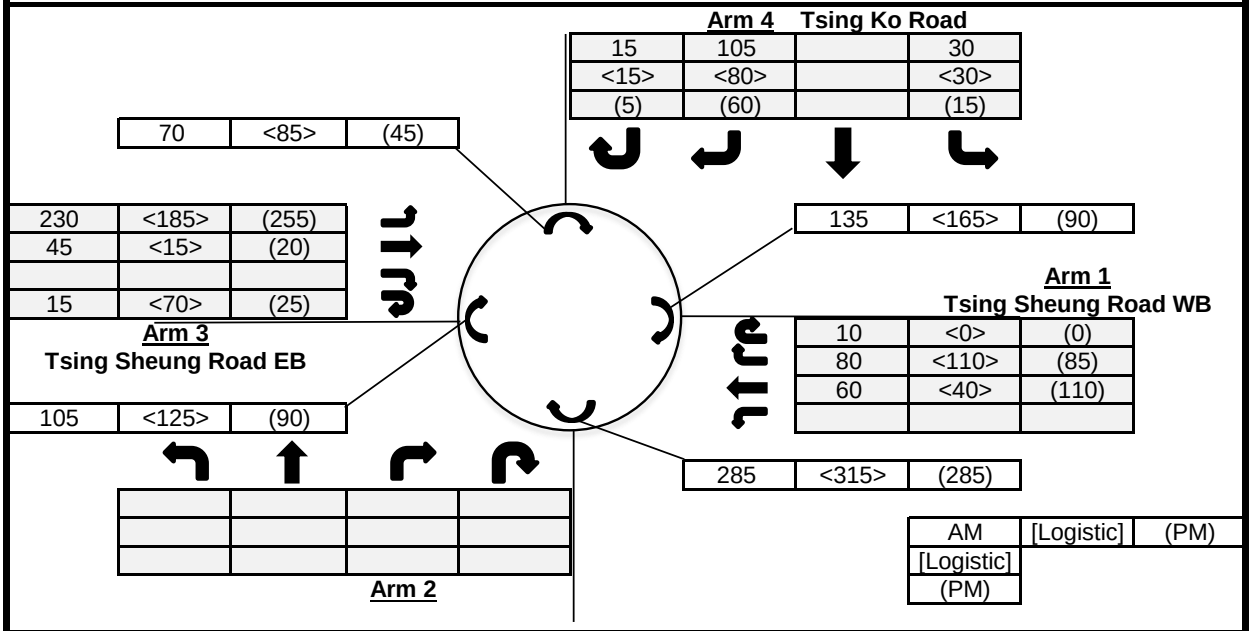
Roundabout Junction Calculation

Junction : (RA10) Tsing Sheung Road / Tsing Ko Road Job No.: 26011HK

Scenario : 2026 Observed Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)		6.6		5.6	6.4
E	=	Entry width (m)		12.9		5.1	11.6
L	=	Effective length of flare (m)		18		30	30
R	=	Entry radius		47		67.3	75
D	=	Inscribed circle diameter (m)		50		50	50
A	=	Entry angle (degree)		41		22	46
Q	=	Entry flow (pcu/hr)	AM	150		290	150
			Logistic	150		270	125
			PM	195		300	80
Qc	=	Circulating flow	AM	135		105	70
		across entry (pcu/hr)	Logistic	165		125	85
			PM	90		90	45

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L		0.56		-0.03	0.28
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		0.99		1.06	0.98
X_2	=	V+((E-V)/(1+2*S))		9.57		5.07	9.74
M	=	Exp((D-60)/10)		0.37		0.37	0.37
F	=	303*X_2		2900		1537	2953
Td	=	1+(0.5/(1+M))		1.37		1.37	1.37
Fc	=	0.21*Td*(1+0.2*X_2)		0.84		0.58	0.85
Qe	=	Capacity = K*(F-Fc*Qc)	AM	2759		1568	2837
			Logistic	2734		1556	2824
			PM	2797		1577	2857
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.05		0.18	0.05
			Logistic	0.05		0.17	0.04
			PM	0.07		0.19	0.03

DFC of Critical Approach = AM 0.18
Logistic 0.17
PM 0.19

CTA Consultants Ltd.

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J1) Tsing Yi Road West / Cheung Tsing Highway**

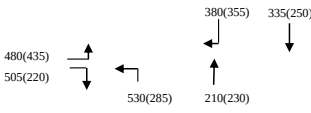
Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) A.M.	Pro. Turning (%) P.M.	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) A.M.	Revised Saturation Flow (pcu/hr) P.M.	Total Revised Saturation Flow (pcu/hr) A.M.	Total Revised Saturation Flow (pcu/hr) P.M.	A.M. Peak Flow (pcu/hr)	A.M. Peak y Value	A.M. Peak Critical y	P.M. Peak Flow (pcu/hr)	P.M. Peak y Value	P.M. Peak Critical y
Tsing Yi Road West	S		2	A	3.5	0	0	0	1	0%	0%	1965	6135	1965	1965	5880	5855	239	0.122	0.122	203	0.103	0.103
	S		2	A	3.3	0	20	0	0	60%	77%	2085	0	1995	1970	0	0	243	0.122		204	0.103	
	S		2	A	3.3	0	17.5	0	0	100%	100%	2085	0	1920	1920	0	0	233	0.122		198	0.103	
Cheung Tsing Highway	E		3	A,B	3.4	20	0	0	1	100%	100%	1955	1955	1820	1820	1820	1820	480	0.264		435	0.239	
	E		4	B	3.5	0	30	0	0	100%	100%	2105	4210	2005	2005	3990	3990	254	0.127		111	0.055	
			4	B	3.5	0	25	0	0	100%	100%	2105	0	1985	1985	0	0	251	0.127	0.127	109	0.055	0.055
Tsing Yi Road West	N		1	C	3.6	20	0	6.5	1	100%	100%	1702	3544	1585	1585	3425	3425	530	0.334	0.334	285	0.180	0.180
	N		1	C	3.6	0	0	6.5	0	0%	0%	1842	0	1840	1840	0	0	210	0.114		230	0.125	
																				*			*

Pedestrian crossing	5P	C	Min. Green time = 5GM + 10FG = 15s
	6P	C	Min. Green time = 5GM + 6FG = 11s
	7P	A.B	Min. Green time = 5GM + 9FG = 14s
	8P	B	Min. Green time = 5GM + 10FG = 15s

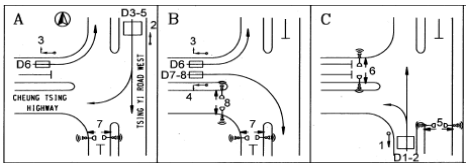
Notes:

Traffic Flow (pcu / hr)



A.M. Check Phase	A,B,C	AB,C	P.M. Check Phase	A,B,C	AB,C
ey	0.583	0.598	ey	0.338	0.419
L (sec)	13	9	L (sec)	13	9
C (sec)	100	100	C (sec)	105	105
y pract.	0.783	0.819	y pract.	0.789	0.823
R.C. (%)	**34%**	**37%**	R.C. (%)	**133%**	**96%**

Stage / Phase Diagrams



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

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

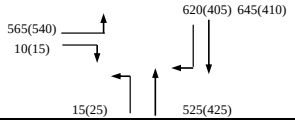
Junction: **(J2) Tsing Hung Road / Tsing Yi Road**

Description: **2031 Design Traffic Flow** **(With Planned Improvement)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Tsing Yi Road	S		1	A	3.5	0.0	0	1	0%	0%	1965	4070	1965	1965	4070	4070	311	0.158	0.318	198	0.101	0.208
	S		1	A	3.5	0.0	0	0	0%	0%	2105	0	2105	2105	0	0	334	0.158		212	0.101	
	S		1	A	3.6	0.0	18	0	100%	100%	2115	2115	1950	1950	1950	1950	620	0.318		405	0.208	
Tsing Yi Road	N		4	C	4.0	30.0	0	1	100%	100%	2015	2015	1920	1920	1920	1920	15	0.008		25	0.013	
	N		4	C	3.5	0.0	0	0	0%	0%	2105	4210	2105	2105	4210	4210	263	0.125	0.125	213	0.101	0.101
	N		4	C	3.5	0.0	0	0	0%	0%	2105	0	2105	2105	0	0	263	0.125		213	0.101	
Tsing Hung Road	E		2	A,B	3.3	25.0	0	1	100%	100%	1945	1945	1835	1835	1835	1835	565	0.308		540	0.294	
	E		3	B	4.0	0.0	22	0	100%	100%	2155	2155	2015	2015	2015	2015	10	0.005		15	0.007	
Pedestrian Crossing			5P	D		Min. Green time = 5GM + 7FG = 12s																
			6P	A,B,D		Min. Green time = 5GM + 5FG = 10s																
			7P	C,D		Min. Green time = 5GM + 10FG = 15s																
			8P	C,D		Min. Green time = 5GM + 5FG = 10s																

Notes:

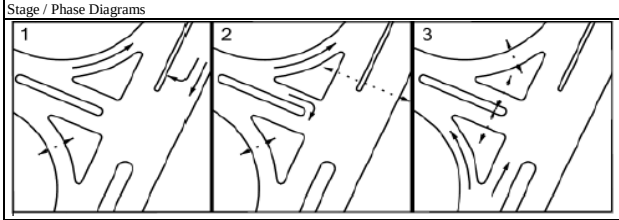
Traffic Flow (pcu / hr) Weekday AM Peak



AM Peak Check Phase	AB,C	A,B,C
εy	0.433	0.443
L (sec)	11	29
C (sec)	120	120
y pract.	0.818	0.683
R.C. (%)	**89%**	**54%**

PM Peak Check Phase	AB,C	A,B,C
εy	0.395	0.309
L (sec)	11	29
C (sec)	100	100
y pract.	0.801	0.639
R.C. (%)	**103%**	**107%**

Stage / Phase Diagrams



I/G = 5 I/G=3 + Ped 21 I/G = 2

I/G = 5 I/G=3 + Ped 21 I/G = 2

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

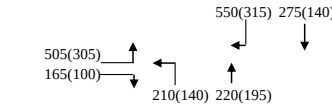
Junction: **(J4) Sai Tso Wan Road / Tsing Yi Road West / Tsing Yi Road**

Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) A.M.	Pro. Turning (%) P.M.	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) A.M.	Revised Saturation Flow (pcu/hr) P.M.	A.M. Peak Flow (pcu/hr)	A.M. Peak y Value	A.M. Peak Critical y	P.M. Peak Flow (pcu/hr)	P.M. Peak y Value	P.M. Peak Critical y
Tsing Yi Road	NE		1	A	4.5	15	0	6.5	1	100%	100%	1792	1792	1630	1630	210	0.129	0.129	140	0.086	0.107
	NE		1	A	3.4	0	0	6.5	0	0%	0%	1822	1822	1820	1820	220	0.121		195	0.107	
Sai Tso Wan Road	NW		3	C,D	3.8	15	0	0	1	100%	100%	1995	1995	1815	1815	505	0.278		305	0.168	
	NW		4	D	3.8	0	25	0	0	100%	100%	2135	2135	2015	2015	165	0.082	0.082	100	0.050	0.050
Tsing Yi Road West	SE		2	B,C	3.4	0	0	0	1	0%	0%	1955	1955	1955	1955	275	0.141		140	0.072	
	SE		2	B,C	3.7	0	25	0	0	100%	100%	2125	2125	2005	2005	550	0.274	0.274	315	0.157	0.157
Pedestrian crossing			5p	A,B		Min. Green time = 5GM + 8FG = 13s															
			6p	D		Min. Green time = 5GM + 10FG = 15s															
			7p	B,C		Min. Green time = 5GM + 9FG = 14s															
			8p	A,D		Min. Green time = 5GM + 7FG = 12s															

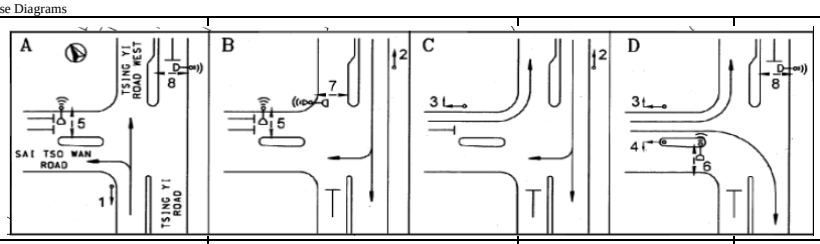
Notes:

Traffic Flow (pcu / hr)



	A,BC,D	A,B,CD		A,BC,D	A,B,CD
	A.M. Check Phase			P.M. Check Phase	
εy	0.485	0.407	εy	0.314	0.275
L (sec)	19	30	L (sec)	19	30
C (sec)	120	120	C (sec)	110	110
y pract.	0.758	0.675	y pract.	0.745	0.655
R.C. (%)	**56%**	**66%**	R.C. (%)	**137%**	**138%**

Stage / Phase Diagrams



I/G = 7	I/G = 10		I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J5) Sai Tso Wan Road Near VEC**

Description: **2031 Design Traffic Flow**

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)		AM Peak			PM Peak		
						Left	Right		AM	PM			AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Sai Tso Wan Road	EB	→	3	A	4.0	0.0	0	1	0%	0%	2015	2015	2015	2015	2015	2015	495	0.246	0.246	285	0.141	
Sai Tso Wan Road	WB	↰	2	B,C	4.0	0.0	10	0	100%	100%	2155	2155	1875	1875	1875	1875	195	0.104	0.104	5	0.003	
	WB	←	1	A,B	4.0	0.0	0	1	0%	0%	2015	2015	2015	2015	2015	2015	425	0.211		305	0.151	0.151
Pedestrian Crossing		↕	4P	C		Green time = 13Gm + 5 FGm = 18s																

	A,BC	AB,C		A,BC	AB,C
AM Peak Check Phase			PM Peak Check Phase		
εy	0.350	0.211	εy	0.141	0.151
L (sec)	11	25	L (sec)	65	25
C (sec)	91	91	C (sec)	91	91
y pract.	0.791	0.653	y pract.	0.257	0.653
R.C. (%)	**126%**	**209%**	R.C. (%)	**82%**	**331%**

Notes:
(None)

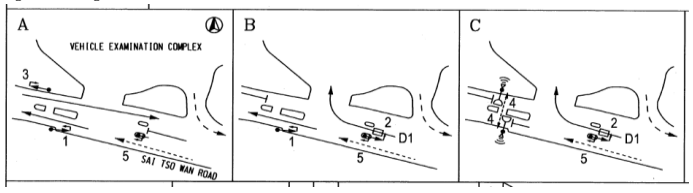
Traffic Flow (pcu / hr) AM (PM) Peak

495(285) →

↰ 195(5)

← 410(205)

Stage / Phase Diagrams



I/G = 3		I/G = 5 + Ped 18s	
I/G = 2	I/G = 3+ Stage Time 61s		

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

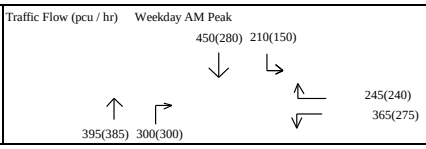
Junction: **(J8) Tsing Yi Road West / Ching Hong Road**

Description: **2031 Design Traffic Flow (With Planned Improvement)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		(%) uphill Gradient	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)		AM Peak			PM Peak		
						Left	Right			AM	PM			AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road West	S		1	A	3.5	0.0	0	5.5	0	0%	0%	1874	3748	1874	1874	3748	3748	225	0.120	0.138	115	0.061	0.098
	S		1	A	3.5	0.0	0	5.5	0	0%	0%	1874	0	1874	1874	0	0	225	0.120		115	0.061	
	S		1	A	3.7	10.0	0	5.5	1	100%	100%	1754	1754	1525	1525	1525	1525	210	0.138		150	0.098	
Tsing Yi Road West	N		2	A,B	3.5	0.0	0	0	1	0%	0%	1965	4070	1965	1965	4070	4070	191	0.097		186	0.095	
	N		2	A,B	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	204	0.097		199	0.095	
	N		3	B	3.3	0.0	18	0	0	100%	100%	2085	2085	1925	1925	1925	1925	300	0.156	0.156	300	0.156	0.156
Ching Hong Road	W		4	C	3.4	18.0	20	0	0	23% / 77%	11% / 89%	2095	0	1945	1945	0	0	319	0.164	0.164	269	0.139	0.139
	W		4	C	3.4	15.0	0	0	1	100%	100%	1955	4050	1775	1775	3720	3720	291	0.164		246	0.138	
Pedestrian crossing			5P	A,B		Min. Green time = 11GM + 8FG = 19s																	
			6P	C		Min. Green time = 5GM + 12FG = 17s																	

Notes:

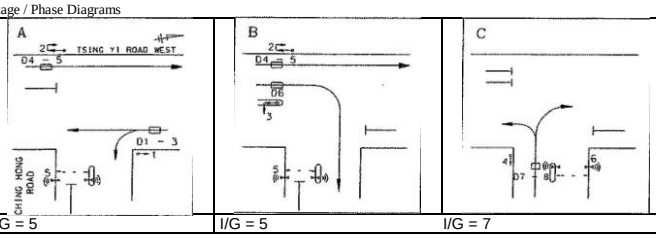
Traffic Flow (pcu / hr) Weekday AM Peak



AM Peak Check Phase	
εy	0.458
L (sec)	14
C (sec)	100
y pract.	0.774
R.C. (%)	**69%**

PM Peak Check Phase	
εy	0.393
L (sec)	14
C (sec)	100
y pract.	0.774
R.C. (%)	**97%**

Stage / Phase Diagrams



I/G = 5 I/G = 5 I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

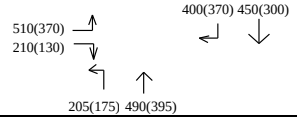
Junction: **(J9) Tsing Yi Road West / Liu To Road**

Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Tsing Yi Road West	S		2	A,B	3.3	0.0	0	5	1	0%	0%	1735	3610	1735	1735	3610	3610	216	0.125		144	0.083	
	S		2	A,B	3.3	0.0	0	5	0	0%	0%	1875	0	1875	1875	0	0	234	0.125		156	0.083	
	S		3	B	3.3	0.0	22	5	0	100%	100%	1875	1875	1755	1755	1755	1755	400	0.228	0.228	370	0.211	0.211
Tsing Yi Road West	N		1	A	3.2	10.0	0	0	1	66%	69%	1935	4100	1760	1755	3925	3920	312	0.177	0.177	255	0.145	0.145
	N		1	A	4.1	0.0	0	0	0	0%	0%	2165	0	2165	2165	0	0	383	0.177		315	0.145	
Liu To Road	E		5	B,C	3.2	10.0	0	0	1	100%	100%	1935	1935	1685	1685	1685	1685	510	0.303		370	0.220	
	E		4	C	4.1	0.0	18	0	0	100%	100%	2165	2165	2000	2000	2000	2000	210	0.105	0.105	130	0.065	0.065
Pedestrian crossing			6P	A,D		AM: Green time = 49GM + 9FG = 58s, PM: Green time = 46GM + 9FG = 55s																	
			7P	C,D		AM: Green time = 51GM + 13FG = 64s, PM: Green time = 28GM + 13FG = 41s																	
			8P	D		Green time = 10GM + 8FG = 18s																	
Pedestrian Crossing																							
														A,BC,D	A,B,C,D						A,BC,D	A,B,C,D	

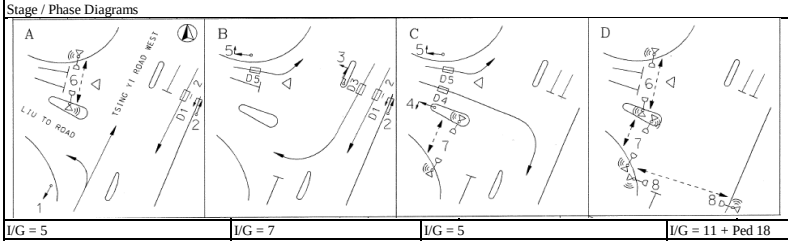
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



AM Peak Check Phase			PM Peak Check Phase		
εy	0.480	0.510	εy	0.365	0.421
L (sec)	39	43	L (sec)	39	43
C (sec)	130	130	C (sec)	110	110
y pract.	0.630	0.602	y pract.	0.581	0.548
R.C. (%)	**31%**	**18%**	R.C. (%)	**59%**	**30%**

Stage / Phase Diagrams



I/G = 5	I/G = 7	I/G = 5	I/G = 11 + Ped 18

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J10) Tsing Yi Road West / Fung Shue Wo Road**

Description: **2031 Design Traffic Flow (With Planned Improvement)**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		(%) uphill Gradient	Nearside 0/1	Pro. Turning (%)		Site Factor	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
						Left	Right			AM	PM				AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Fung Shue Wo Road	S	↓	1	A,D	4.1	0.0	0	3	0	0%	0%	1	2039	4058	2039	2039	4058	4058	347	0.170	0.170	186	0.091	0.108
(To Tsing Yi Road West)	S	↓	1	A,D	3.9	0.0	0	3	0	0%	0%	1	2019	0	2019	2019	0	0	343	0.170		184	0.091	
Fung Shue Wo Road	S	↓	1	A,D	4.0	0.0	0	3	1	0%	0%	1	1889	3918	1889	1889	3918	3918	268	0.142		205	0.108	
(To Fung Shue Wo Road)	S	↓	1	A,D	4.0	0.0	0	3	0	0%	0%	1	2029	0	2029	2029	0	0	287	0.142		220	0.108	
Tsing Yi Road West	N	↑	2	A,B	3.5	0.0	0	0	1	0%	0%	1	1965	2722.8	1965	1965	2722.8	2722.8	498	0.253		455	0.231	
	N	↑	2	A,B	3.5	0.0	0	0	0	0%	0%	0.36	757.8	0	757.8	757.8	0	0	192	0.253		175	0.231	
	N	↱	3	B	3.6	0.0	18	0	0	100%	100%	1	2115	2115	1950	1950	1950	1950	230	0.118	0.118	140	0.072	0.072
Fung Shue Wo Road	N	↰	4	C	4.0	35.0	0	3	1	100%	100%	1	1889	2213.6	1810	1810	2120	2120	124	0.068		141	0.078	
	N	↰	4	C	4.0	38.0	0	3	0	100%	100%	0.16	324.64	0	310	310	0	0	21	0.068		24	0.078	
Fung Shue Wo Road	N	↱	4	C	4.0	0.0	43	3	0	100%	100%	1	2029	4058	1960	1960	3915	3915	258	0.132	0.132	225	0.115	0.115
	N	↱	4	C	4.0	0.0	40	3	0	100%	100%	1	2029	0	1955	1955	0	0	257	0.132		225	0.115	

Pedestrian crossing	5p	D	Min. Green time = 5GM + 8FG = 13s
	6P	B,C	Min. Green time = 5GM + 8FG = 13s
	7P	A,C,D	Min. Green time = 5GM + 7FG = 12s
	8P	A,B,D	Min. Green time = 5GM + 8FG = 13s

Notes:

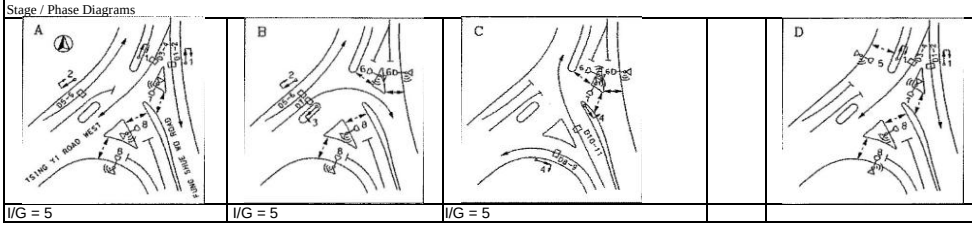
Traffic Flow (pcu / hr) Weekday AM Peak

690(510) 555(425)

690(630) 230(140) 145(165) 515(450)

	AM Peak Check Phase			PM Peak Check Phase		
		AD,B,C	AB,C,D		AD,B,C	AB,C,D
εy		0.420	0.385	εy	0.295	0.346
L (sec)		12	28	L (sec)	12	28
C (sec)		100	100	C (sec)	100	100
y pract.		0.792	0.648	y pract.	0.792	0.648
R.C. (%)		89%	68%	R.C. (%)	168%	87%

Stage / Phase Diagrams



I/G = 5 I/G = 5 I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

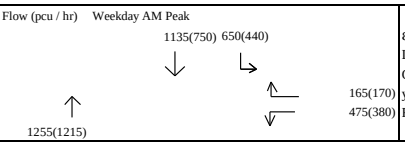
Junction: **(J11) Tsing Yi Heung Sze Wui Road / Cheung Wan Street**

Description: **2031 Design Traffic Flow**

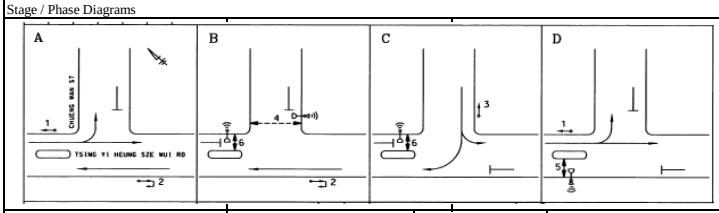
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Tsing Yi Heung Sze Wui Road	N	↑	2	A,B	3.5	0.0	0	0	1	0%	0%	1965	4070	1965	1965	4070	4070	606	0.308		587	0.299	0.299
	N	↑	2	A,B	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	649	0.308		628	0.299	
Cheung Wan Street	W	↕↰	3	C	3.5	18.0	20	0	0	51% / 49%	41% / 59%	2105	0	1950	1950	0	0	334	0.171	0.171	287	0.147	0.147
	W	↓↰	3	C	3.5	15.0	0	0	1	100%	100%	1965	4070	1785	1785	3735	3735	306	0.171		263	0.147	
Tsing Yi Heung Sze Wui Road	S	↓→	1	A,D	3.5	10.0	0	0	1	100%	100%	1965	6175	1710	1710	5920	5920	650	0.380	0.380	440	0.257	
	S	↓	1	A,D	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	568	0.270		375	0.178	
	S	↓	1	A,D	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	568	0.270		375	0.178	
Pedestrian crossing		←→	4P	B		AM: Green time = 12GM + 11FG = 23s, PM: Green time = 12GM + 11FG = 23s																	
		↕	5P	D		AM: Green time = 6GM + 8FG = 14s, PM: Green time = 10GM + 8FG = 18s																	
		↕	6P	B,C		AM: Green time = 45GM + 10FG = 55s, AM: Green time = 41GM + 10FG = 51s																	

																		AB,C,D	AD,B,C		AB,C,D	AD,B,C	
Notes:																		AM Peak Check Phase			PM Peak Check Phase		
																		εy	0.480	0.551	εy	0.446	0.405
																		L (sec)	31	37	L (sec)	35	37
																		C (sec)	114	114	C (sec)	100	100
																		y pract.	0.655	0.608	y pract.	0.585	0.567
																		R.C. (%)	**37%**	**10%**	R.C. (%)	**31%**	**40%**

Traffic Flow (pcu / hr) Weekday AM Peak



Stage / Phase Diagrams



	I/G = 8 + Ped 23	I/G = 3	I/G = 5
I/G = 2		I/G = 5	I/G = 12 + Ped 18

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J12) Tsing Yi Heung Sze Wui Road / Chung Mei Road**
Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m)		(%) uphill Gradient	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)		AM Peak			PM Peak		
						Left	Right			AM	PM			AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Chung Mei Road	E		5	B,C	3.3	10.0	0	0	1	100%	100%	1945	1945	1690	1690	1690	1690	225	0.133		250	0.148	
	E		6	C	3.3	0.0	18	0	0	100%	100%	2085	2085	1925	1925	1925	1925	365	0.190	0.190	245	0.127	0.127
Tsing Yi Heung Sze Wui Road	N		2	A,C	3.3	25.0	0	0	1	100%	100%	1945	1945	1835	1835	1835	1835	315	0.172		375	0.204	
	N		3	A	3.5	0.0	0	0	0	0%	0%	2105	4210	2105	2105	4210	4210	515	0.245	0.245	480	0.228	0.228
	N		3	A	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	515	0.245		480	0.228	
Tsing Yi Heung Sze Wui Road	S		1	A,B	3.5	0.0	0	3	1	0%	0%	1839	3818	1839	1839	3818	3818	629	0.342		426	0.232	
	S		1	A,B	3.5	0.0	0	3	0	0%	0%	1979	0	1979	1979	0	0	676	0.342		459	0.232	
	S		4	B	3.5	0.0	22	3	0	100%	100%	1979	1979	1855	1855	1855	1855	305	0.164	0.164	245	0.132	0.132

Notes:

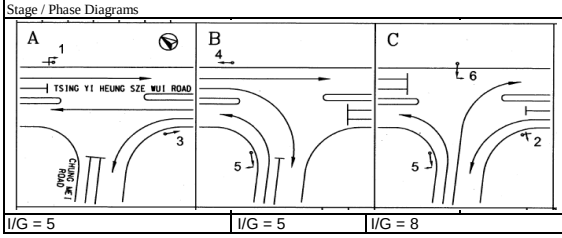
Traffic Flow (pcu / hr) — Weekday AM Peak

225(250)
365(245)
305(245) 1305(885)
315(375) 1030(960)

AM Peak Check Phase	
εy	0.599
L (sec)	15
C (sec)	114
y pract.	0.782
R.C. (%)	**31%**

PM Peak Check Phase	
εy	0.487
L (sec)	15
C (sec)	100
y pract.	0.765
R.C. (%)	**57%**

Stage / Phase Diagrams



I/G = 5 | I/G = 5 | I/G = 8

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J14) Tsing Yi Road / Planned New Road**

Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) AM	Pro. Turning (%) PM	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	Total Revised Saturation Flow (pcu/hr) AM	Total Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Tsing Yi Road	N		A	1	3.5	0.0	0	0	1	0%	0%	1965	4070	1965	1965	4065	4065	258	0.132	0.132	215	0.109	0.109
	N		A	1	3.5	0.0	40	0	0	4%	7%	2105	0	2100	2100	0	0	277	0.132		230	0.109	
Planned New Road	W		C	3	3.5	0.0	18	0	0	100%	100%	2105	2105	1945	1945	1945	1945	15	0.008		20	0.010	
	W		C	3	3.5	10.0	0	0	1	100%	100%	1965	1965	1710	1710	1710	1710	75	0.044	0.044	60	0.035	0.035
Tsing Yi Road	S		B	2	3.5	10.0	0	0	1	0%	2%	1965	4070	1965	1960	4070	4065	316	0.161	0.161	205	0.104	0.105
	S		B	2	3.5	0.0	0	0	0	0%	0%	2105	0	2105	2105	0	0	339	0.161		220	0.105	

Pedestrian crossing	Dp	1	AM: Green time = 26GM + 7FG = 33s, PM: Green time = 32GM + 7FG = 39s
	EP	1,2	AM: Green time = 76GM + 7FG = 83s, PM: Green time = 82GM + 7FG = 89s
	Fp	2,3	AM: Green time = 70GM + 7FG = 77s, PM: Green time = 64GM + 7FG = 71s
	Gp	3	AM: Green time = 22GM + 7FG = 29s, PM: Green time = 16GM + 7FG = 23s
	Hp	1,3	AM: Green time = 66GM + 7FG = 73s, PM: Green time = 66GM + 7FG = 73s
	Ip	2	AM: Green time = 32GM + 7FG = 39s, PM: Green time = 32GM + 7FG = 39s

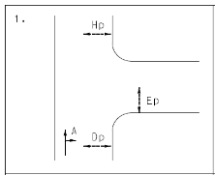
Notes:

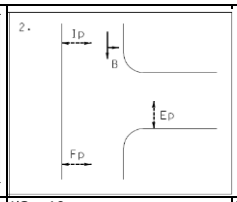
Traffic Flow (pcu / hr) Weekday AM Peak

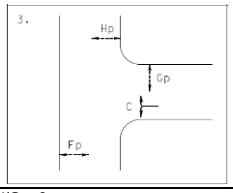
AM Peak Check Phase	
εy	0.336
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	**127%**

PM Peak Check Phase	
εy	0.249
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	**207%**

Stage / Phase Diagrams







I/G = 5 | I/G = 10 | I/G = 6

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

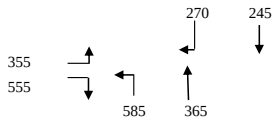
Junction: **(J1) Cheung Tsing Highway / Tsing Yi Road West**

Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak	Revised Saturation Flow (pcu/hr)	Total Revised Saturation Flow (pcu/hr) Logistic Peak	Total Revised Saturation Flow (pcu/hr)	Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road West	S		2	A	3.5	0	0	0	1	0%	1965	6135	1965		5885		172	0.088	0.088			
	S		2	A	3.3	0	20	0	0	58%	2085	0	2000		0		175	0.087				
	S		2	A	3.3	0	17.5	0	0	100%	2085	0	1920		0		168	0.088				
Cheung Tsing Highway	E		3	A,B	3.4	20	0	0	1	100%	1955	1955	1820		1820		355	0.195				
	E		4	B	3.5	0	30	0	0	100%	2105	4070	2005		3860		288	0.144				
	E		4	B	3.5	0	25	0	1	100%	1965	0	1855		0		267	0.144	0.144			
Tsing Yi Road West	N		1	C	3.6	20	0	6.5	1	100%	1702	3544	1585		3425		585	0.369	0.369			
	N		1	C	3.6	0	0	6.5	0	0%	1842	0	1840		0		365	0.198				
Pedestrian crossing			5P	C		Min. Green time = 5GM + 10FG = 15s																
			6P	C		Min. Green time = 5GM + 6FG = 11s																
			7P	A.B		Min. Green time = 5GM + 9FG = 14s																
			8P	B		Min. Green time = 5GM + 10FG = 15s																

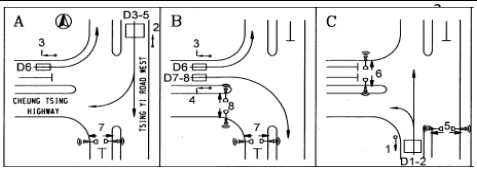
Notes:

Traffic Flow (pcu / hr)



Logistic Peak Check Phase	A,B,C	AB,C
εy	0.600	0.564
L (sec)	13	9
C (sec)	100	100
y pract.	0.783	0.819
R.C. (%)	**30%**	**45%**

Stage / Phase Diagrams



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

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J2) Tsing Hung Road / Tsing Yi Road**

Description: **2031 Design Traffic Flow** **(With Planned Improvement)**

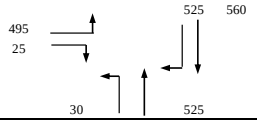
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Total Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road	S		1	A	3.5	0.0	0	1	0%	1965	4070	1965		4070		270	0.138	0.269			
	S		1	A	3.5	0.0	0	0	0%	2105	0	2105		0		290	0.138				
	S		1	A	3.6	0.0	18	0	100%	2115	2115	1950		1950		525	0.269				
Tsing Yi Road	N		4	C	4.0	30.0	0	1	100%	2015	2015	1920		1920		30	0.016				
	N		4	C	3.5	0.0	0	0	0%	2105	4210	2105		4210		263	0.125	0.125			
	N		4	C	3.5	0.0	0	0	0%	2105	0	2105		0		263	0.125				
Tsing Hung Road	E		2	A,B	3.3	25.0	0	1	100%	1945	1945	1835		1835		495	0.270				
	E		3	B	4.0	0.0	22	0	100%	2155	2155	2015		2015		25	0.012				

Pedestrian Crossing

5P	D	Min. Green time = 5GM + 7FG = 12s
6P	A,B,D	Min. Green time = 5GM + 5FG = 10s
7P	C,D	Min. Green time = 5GM + 10FG = 15s
8P	C,D	Min. Green time = 5GM + 5FG = 10s

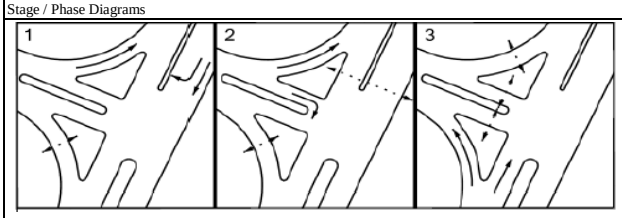
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



AM Peak Check Phase	AB,C	A,B,C
εy	0.394	0.394
L (sec)	11	29
C (sec)	120	120
y pract.	0.818	0.683
R.C. (%)	**107%**	**73%**

Stage / Phase Diagrams



I/G = 5 I/G=3 + Ped 21 I/G = 2

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J4) Sai Tso Wan Road / Tsing Yi Road West / Tsing Yi Road**

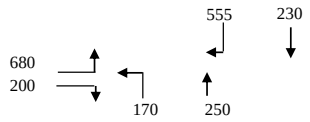
Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y			
Tsing Yi Road	NE		1	A	4.5	15	0	6.5	1	100%	1792	1792	1630		170	0.104	0.137			
	NE		1	A	3.4	0	0	6.5	0	0%	1822	1822	1820		250	0.137				
Sai Tso Wan Road	NW		3	C,D	3.8	15	0	0	1	100%	1995	1995	1815		680	0.375				
	NW		4	D	3.8	0	25	0	0	100%	2135	2135	2015		200	0.099	0.099			
Tsing Yi Road West	SE		2	B,C	3.4	0	0	0	1	0%	1955	1955	1955		230	0.118				
	SE		2	B,C	3.7	0	25	0	0	100%	2125	2125	2005		555	0.277	0.277			

Pedestrian crossing	5p	A,B	Min. Green time = 5GM + 8FG = 13s
	6p	D	Min. Green time = 5GM + 10FG = 15s
	7p	B,C	Min. Green time = 5GM + 9FG = 14s
	8p	A,D	Min. Green time = 5GM + 7FG = 12s

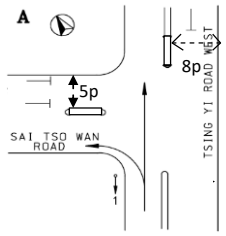
Notes:

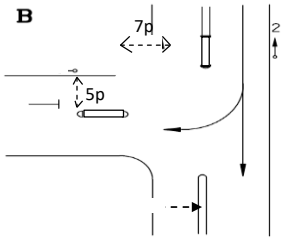
Traffic Flow (pcu / hr)

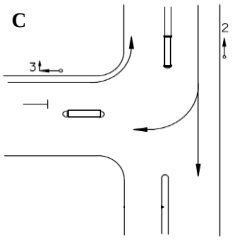


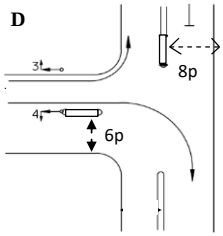
Logistic Peak Check Phase		
εy	0.513	0.512
L (sec)	19	30
C (sec)	110	110
y pract.	0.745	0.655
R.C. (%)	45%	28%

Stage / Phase Diagrams









I/G = 5	I/G =5		I/G = 5	
I/G = 5	I/G =8+12	I/G = 2		

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J5) Sai Tso Wan Road Near VEC**

Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak	Revised Saturation Flow (pcu/hr)	Total Revised Saturation Flow (pcu/hr) Logistic Peak	Total Revised Saturation Flow (pcu/hr)	Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Sai Tso Wan Road	EB	→	3	A	4.0	0.0	0	1	0%	2015	2015	2015		2015		440	0.218	0.218			
Sai Tso Wan Road	WB	↖	2	B,C	4.0	0.0	10	0	100%	2155	2155	1875		1875		130	0.069				
Sai Tso Wan Road	WB	←	1	A,B	4.0	0.0	0	1	0%	2015	2015	2015		2015		445	0.221	0.221			
Pedestrian Crossing		↕	4P	C		Green time = 13Gm + 5 FGm = 18s															

	A,BC	AB,C
Logistic Peak Check Phase		
εy	0.288	0.221
L (sec)	11	25
C (sec)	91	91
y pract.	0.791	0.653
R.C. (%)	**175%**	**196%**

Notes:

(None)

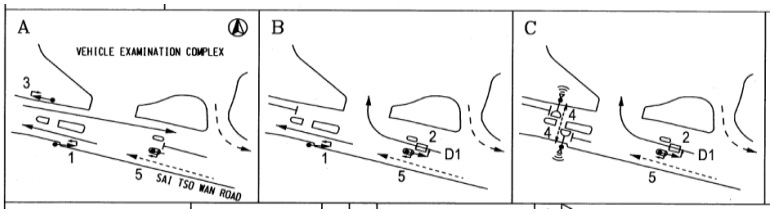
Traffic Flow (pcu / hr) AM (PM) Peak

440 →

↖ 130

← 200

Stage / Phase Diagrams



I/G = 6	I/G = 7		
I/G = 3	I/G = 7	I/G = 5 + Ped 18s	

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

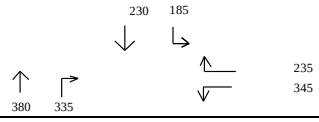
Junction: **(J8) Tsing Yi Road West / Ching Hong Road**

Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak	Revised Saturation Flow (pcu/hr)	Total Revised Saturation Flow (pcu/hr) Logistic Peak	Total Revised Saturation Flow (pcu/hr)	Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road West	S	↓	1	A	3.5	0.0	0	5.5	0	0%	1874	3748	1874		3748		75	0.040	0.121			
	S	↓	1	A	3.5	0.0	0	5.5	0	0%	1874	0	1874		0		75	0.040				
	S	↳	1	A	3.7	10.0	0	5.5	1	100%	1754	1754	1525		1525		185	0.121				
Tsing Yi Road West	N	↑	2	A,B	3.5	0.0	0	0	1	0%	1965	4070	1965		4070		183	0.093				
	N	↑	2	A,B	3.5	0.0	0	0	0	0%	2105	0	2105		0		197	0.093				
	N	↱	3	B	3.3	0.0	18	0	0	100%	2085	2085	1925		1925		335	0.174	0.174			
Ching Hong Road	W	↰↑	4	C	3.4	18.0	20	0	0	23% / 77%	2095	0	1945		0		303	0.156	0.156			
	W	↰	4	C	3.4	15.0	0	0	1	100%	1955	4050	1775		3720		277	0.156				
Pedestrian crossing		↕	5P	A,B		Min. Green time = 11GM + 8FG = 19s																
		↕	6P	C		Min. Green time = 5GM + 12FG = 17s																

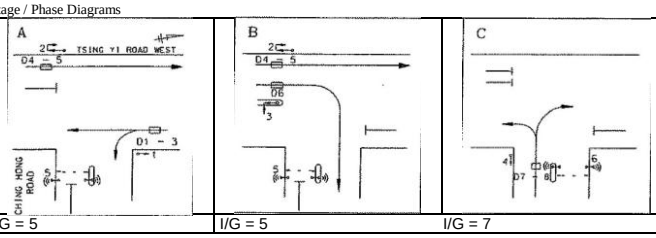
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



Logistic Peak Check Phase	
εy	0.451
L (sec)	12
C (sec)	71
y pract.	0.748
R.C. (%)	**66%**

Stage / Phase Diagrams



I/G = 5 I/G = 5 I/G = 7

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **J9 - Tsing Yi Road West / Liu To Road**

Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Total Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road West	S		2	A,B	3.3	0.0	0	5	1	0%	1735	3610	1735		3610		132	0.076				
	S		2	A,B	3.3	0.0	0	5	0	0%	1875	0	1875		0		143	0.076				
	S		3	B	3.3	0.0	22	5	0	100%	1875	1875	1755		1755		305	0.174	0.174			
Tsing Yi Road West	N		1	A	3.2	10.0	0	0	1	56%	1935	4100	1785		3950		267	0.149	0.149			
	N		1	A	4.1	0.0	0	0	0	0%	2165	0	2165		0		323	0.149				
Liu To Road	E		5	B,C	3.2	10.0	0	0	1	100%	1935	1935	1685		1685		375	0.223				
	E		4	C	4.1	0.0	18	0	0	100%	2165	2165	2000		2000		140	0.070	0.070			

Pedestrian crossing

6P A,D Green time = 46GM + 9FG = 55s

7P C,D Green time = 31GM + 13FG = 44s

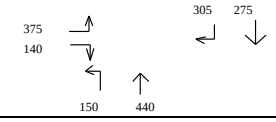
8P D Green time = 10GM + 8FG = 18s

Pedestrian Crossing

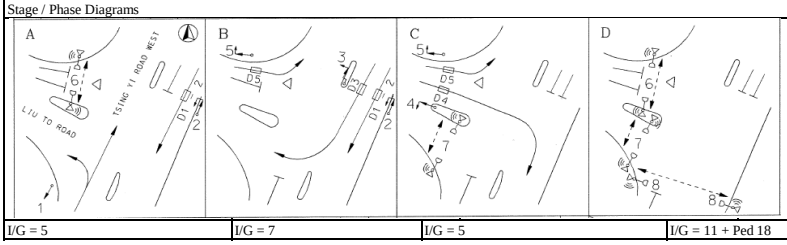
	A,BC,D	A,B,C,D
Logistic Peak Check Phase		
εy	0.372	0.393
L (sec)	39	43
C (sec)	130	130
y pract.	0.630	0.602
R.C. (%)	**69%**	**53%**

Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



Stage / Phase Diagrams



I/G = 5	I/G = 7	I/G = 5	I/G = 11 + Ped 18

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **J10 - Tsing Yi Road West / Fung Shue Wo Road**

Description: **2031 Design Traffic Flow (With Planned Improvement)**

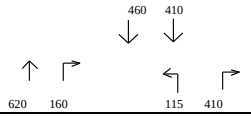
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Site Factor	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Total Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Fung Shue Wo Road	S	↓	1	A,D	4.1	0.0	0	3	0	0%	1	2039	4058	2039		4058		231	0.113	0.113			
(To Tsing Yi Road West)	S	↓	1	A,D	3.9	0.0	0	3	0	0%	1	2019	0	2019		0		229	0.113				
Fung Shue Wo Road	S	↓	1	A,D	4.0	0.0	0	3	1	0%	1	1889	3918	1889		3918		198	0.105				
(To Fung Shue Wo Road)	S	↓	1	A,D	4.0	0.0	0	3	0	0%	1	2029	0	2029		0		212	0.105				
Tsing Yi Road West	N	↑	2	A,B	3.5	0.0	0	0	1	0%	1	1965	2722.8	1965		2722.8		447	0.228				
	N	↑	2	A,B	3.5	0.0	0	0	0	0%	0.36	757.8	0	757.8		0		173	0.228				
	N	↱	3	B	3.6	0.0	18	0	0	100%	1	2115	2115	1950		1950		160	0.082	0.082			
Fung Shue Wo Road	N	↰	4	C	4.0	35.0	0	3	1	100%	1	1889	2213.6	1810		2120		98	0.054				
	N	↰	4	C	4.0	38.0	0	3	0	100%	0.16	324.64	0	310		0		17	0.054				
Fung Shue Wo Road	N	↱	4	C	4.0	0.0	43	3	0	100%	1	2029	4058	1960		3915		205	0.105	0.105			
	N	↱	4	C	4.0	0.0	40	3	0	100%	1	2029	0	1955		0		205	0.105				

Pedestrian crossing	5p	D	Min. Green time = 5s (G) + 8s (FS) = 13s
	6P	B,C	Min. Green time = 5s (G) + 8s (FS) = 13s
	7P	A,C,D	Min. Green time = 5s (G) + 8s (FS) = 13s
	8P	A,B,D	Min. Green time = 5s (G) + 7s (FS) = 12s

AD,B,C AB,C,D

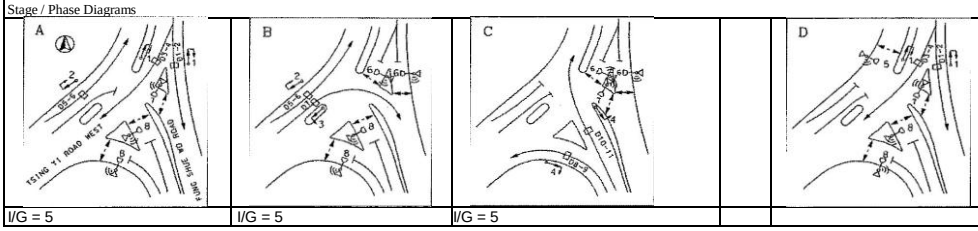
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



Logistic Peak Check Phase		
εy	0.300	0.332
L (sec)	12	28
C (sec)	90	100
y pract.	0.780	0.648
R.C. (%)	160%	95%

Stage / Phase Diagrams



I/G = 5 I/G = 5 I/G = 5

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J11) Tsing Yi Heung Sze Wui Road / Cheung Wan Street**

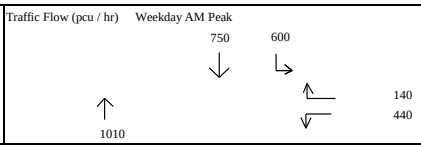
Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Total Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Heung Sze Wui Road	N	↑	2	A,B	3.5	0.0	0	0	1	0%	1965	4070	1965		4070		488	0.248				
	N	↑	2	A,B	3.5	0.0	0	0	0	0%	2105	0	2105		0		522	0.248				
Cheung Wan Street	W	↰↓	3	C	3.5	18.0	20	0	0	54% / 46%	2105	0	1950		0		303	0.155	0.155			
	W	↓	3	C	3.5	15.0	0	0	1	100%	1965	4070	1785		3735		277	0.155				
Tsing Yi Heung Sze Wui Road	S	↓→	1	A,D	3.0	10.0	0	0	1	100%	1915	6025	1665		5775		600	0.360	0.360			
	S	↓	1	A,D	3.0	0.0	0	0	0	0%	2055	0	2055		0		375	0.182				
	S	↓	1	A,D	3.0	0.0	0	0	0	0%	2055	0	2055		0		375	0.182				
Pedestrian crossing		↔	4P	B		Green time = 12GM + 11FG = 23s																
		↕	5P	D		Green time = 8GM + 8FG = 16s																
		↕	6P	B,C		Green time = 42GM + 10FG = 52s																

AB,C,D AD,B,C

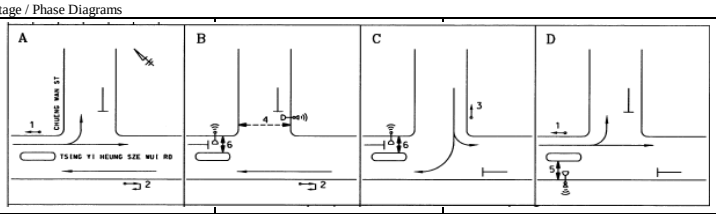
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



Logistic Peak Check Phase		
εy	0.403	0.516
L (sec)	33	37
C (sec)	90	90
y pract.	0.570	0.530
R.C. (%)	**41%**	**3%**

Stage / Phase Diagrams



I/G = 2 | I/G = 5 | I/G = 12 + Ped 16

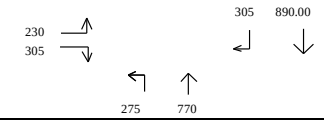
TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J12) Tsing Yi Heung Sze Wui Road / Chung Mei Road**
Description: **2031 Design Traffic Flow**

Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Total Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Chung Mei Road	E		5	B,C	3.3	10.0	0	0	1	100%	1945	1945	1690		1690		230	0.136				
	E		6	C	3.3	0.0	18	0	0	100%	2085	2085	1925		1925		305	0.158	0.158			
Tsing Yi Heung Sze Wui Road	N		2	A,C	3.3	25.0	0	0	1	100%	1945	1945	1835		1835		275	0.150				
	N		3	A	3.5	0.0	0	0	0	0%	2105	4210	2105		4210		165	0.078	0.078			
	N		3	A	3.5	0.0	0	0	0	0%	2105	0	2105		0		165	0.078				
Tsing Yi Heung Sze Wui Road	S		1	A,B	3.5	0.0	0	3	1	0%	1839	3818	1839		3818		154	0.084				
	S		1	A,B	3.5	0.0	0	3	0	0%	1979	0	1979		0		166	0.084				
	S		4	B	3.5	0.0	22	3	0	100%	1979	1979	1855		1855		305	0.164	0.164			
Pedestrian crossing																						

Notes:

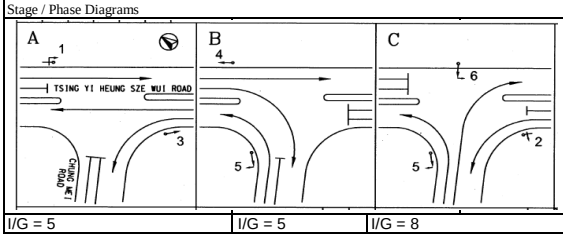
Traffic Flow (pcu / hr) Weekday AM Peak



Logistic Peak Check Phase

εy	0.401
L (sec)	15
C (sec)	114
y pract.	0.782
R.C. (%)	**95%**

Stage / Phase Diagrams



I/G = 5 | I/G = 5 | I/G = 8

TRAFFIC SIGNALS CALCULATION Job No: 26011HK **CTA Consultants Ltd.**

Junction: **(J14) Tsing Yi Road / Planned New Road**
Description: **2031 Design Traffic Flow**

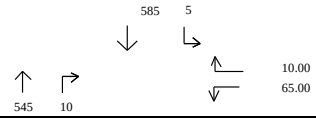
Approach	Direction	Movement notation	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	(%) uphill Gradient	Nearside 0/1	Pro. Turning (%) Logistic Peak	Saturation Flow (pcu/hr)	Total Saturation Flow (pcu/hr)	Revised Saturation Flow (pcu/hr) Logistic Peak		Total Revised Saturation Flow (pcu/hr) Logistic Peak		Logistic Peak Flow (pcu/hr)	Logistic Peak y Value	Logistic Peak Critical y	Flow (pcu/hr)	y Value	Critical y
Tsing Yi Road	N	↑	A	1	3.5	0.0	0	0	1	0%	1965	4070	1965		4065		268	0.136	0.137			
	N	↑→	A	1	3.5	0.0	40	0	0	3%	2105	0	2100		0		287	0.137				
Planned New Road	W	←	C	3	3.5	0.0	18	0	0	100%	2105	2105	1945		1945		10	0.005				
	W	↓	C	3	3.5	10.0	0	0	1	100%	1965	1965	1710		1710		65	0.038	0.038			
Tsing Yi Road	S	↓→	B	2	3.5	10.0	0	0	1	2%	1965	4070	1960		4065		284	0.145	0.145			
	S	↓	B	2	3.5	0.0	0	0	0	0%	2105	0	2105		0		306	0.145				

Pedestrian crossing	↔	Dp	1
	↕	EP	1,2
	↔	Fp	2,3
	↕	Gp	3
	↔	Hp	1,3
	↔	Ip	2

Green time = 28GM + 7FG = 35s
Green time = 78GM + 7FG = 85s
Green time = 68GM + 7FG = 75s
Green time = 20GM + 7FG = 27s
Green time = 66GM + 7FG = 73s
Green time = 32GM + 7FG = 39s

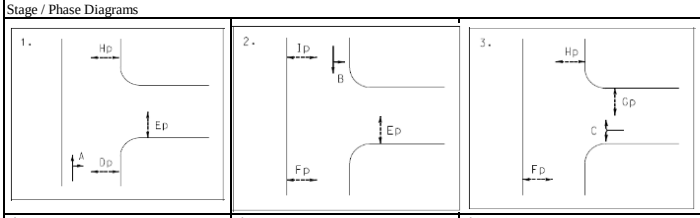
Notes:

Traffic Flow (pcu / hr) Weekday AM Peak



AM Peak Check Phase	
Σy	0.320
L (sec)	18
C (sec)	120
y pract.	0.765
R.C. (%)	**139%**

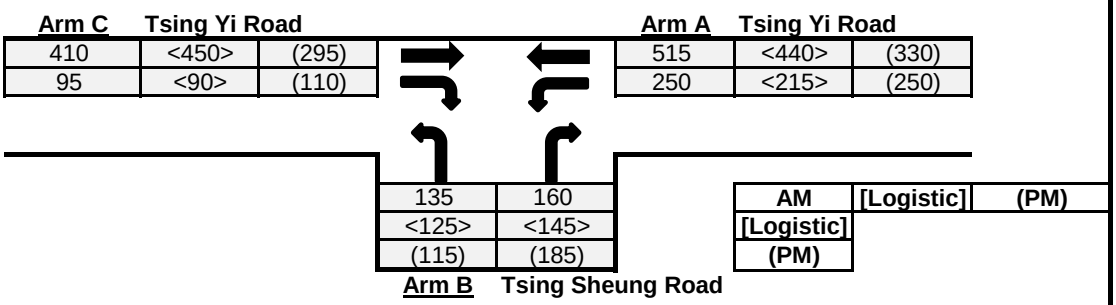
Stage / Phase Diagrams



I/G = 5	I/G = 10	I/G = 6

Priority Junction Calculation

Junction :	(J3) Tsing Yi Road / Tsing Sheung Road	Job No.:	26011HK
Scenario :	2031 Design Traffic Flow		



The predictive equations of capacity of movement are:

Q-BA = D(627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB))
Q-BC = E(745 - Y(0.364q-AC + 0.144q-AB))
Q-CB = F(745 - 0.364Y(q-AC + q-AB))

The geometric parameters represented by D, E, F are:

D = (1 + 0.094(w-BA - 3.65))(1 + 0.0009(V-rBA - 120))(1 + 0.0006(V-IBA - 150))
E = (1 + 0.094(w-BC - 3.65))(1 + 0.0009(V-rBC - 120))
F = (1 + 0.094(w-CB - 3.65))(1 + 0.0009(V-rCB - 120))

where

Y = 1 - 0.0345W
q-AB, etc = the design flow of movement AB, etc
W = major road width
W-CR = central reserve width
w-BA, etc = lane width to vehicle
v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc
v-IBA = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	**Input**						**Calculated**	
W	14	V-rBA	30	w-BA	4.5	D	0.933
W-CR	0	V-IBA	50	w-BC	4.5	E	1.012
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)	0	V-rBC	50	w-CB	0	F	0.616
Minor Road Share LT&RT? (Yes: 1, No: 0)	0	V-rCB	50			Y	0.517

Analysis :	**Traffic Flow pcu/hr**	**AM**	**Logistic**	**PM**	**Capacity pcu/hr**	**AM**	**Logistic**	**PM**	
	q-CA	410	450	295	Q-BA	408	420	449	
	q-CB	95	90	110	Q-BC	637	654	672	
	q-AB	250	215	250	Q-CB	370	383	391	
	q-AC	515	440	330	Q-CA	N/A	N/A	N/A	(If C-B blocked C-
	q-BA	160	145	185	Q-BAC	N/A	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	135	125	115					
	f	0.458	0.463	0.383					

Results :	**Ratio of Flow-to-Capacity**	**AM**	**Logistic**	**PM**
	B-A	0.39	0.34	0.41
	B-C	0.21	0.19	0.17
	C-B	0.26	0.24	0.28
	C-A	N/A	N/A	N/A
	B-AC	N/A	N/A	N/A
Critical DFC		**0.39**	**0.34**	**0.41**

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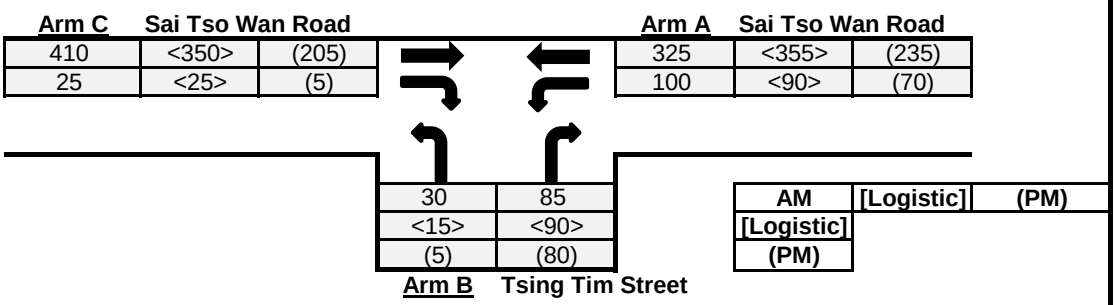
Priority Junction Calculation

Junction :	(J6) Sai Tso Wan Road / Tsing Tim Street	Job No.:	26011HK
Scenario :	2031 Design Traffic Flow		



The predictive equations of capacity of movement are:

Q-BA = D(627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB))
Q-BC = E(745 - Y(0.364q-AC + 0.144q-AB))
Q-CB = F(745 - 0.364Y(q-AC + q-AB))

The geometric parameters represented by D, E, F are:

D = (1 + 0.094(w-BA - 3.65))(1 + 0.0009(V-rBA - 120))(1 + 0.0006(V-IBA - 150))
E = (1 + 0.094(w-BC - 3.65))(1 + 0.0009(V-rBC - 120))
F = (1 + 0.094(w-CB - 3.65))(1 + 0.0009(V-rCB - 120))

where

Y = 1 - 0.0345W
q-AB, etc = the design flow of movement AB, etc
W = major road width
W-CR = central reserve width
w-BA, etc = lane width to vehicle
v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc
v-IBA = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	**Input**						**Calculated**	
W	7	V-rBA	50	w-BA	3.6	D	0.877
W-CR	0	V-IBA	50	w-BC	3.6	E	0.933
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)	0	V-rBC	50	w-CB	0	F	0.616
Minor Road Share LT&RT? (Yes: 1, No: 0)	1	V-rCB	50			Y	0.759

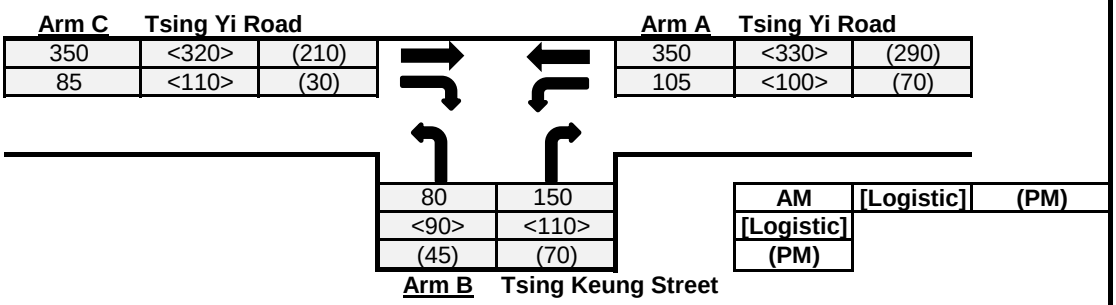
Analysis :	**Traffic Flow pcu/hr**	**AM**	**Logistic**	**PM**	**Capacity pcu/hr**	**AM**	**Logistic**	**PM**	
	q-CA	410	350	205	Q-BA	390	393	453	
	q-CB	25	25	5	Q-BC	601	594	627	
	q-AB	100	90	70	Q-CB	386	383	407	
	q-AC	325	355	235	Q-CA	N/A	N/A	N/A	(If C-B blocked C-
	q-BA	85	90	80	Q-BAC	430	413	461	(If Minor Road Share LT&RT)
	q-BC	30	15	5					
	f	0.261	0.143	0.059					

Results :	**Ratio of Flow-to-Capacity**	**AM**	**Logistic**	**PM**
	B-A	N/A	N/A	N/A
	B-C	N/A	N/A	N/A
	C-B	0.06	0.07	0.01
	C-A	N/A	N/A	N/A
	B-AC	0.27	0.25	0.18
	Critical DFC	**0.27**	**0.25**	**0.18**

CTA Consultants Ltd.

Priority Junction Calculation

Junction :	(J13) Tsing Yi Road / Tsing Keung Street	Job No.:	26011HK
Scenario :	2031 Design Traffic Flow		



The predictive equations of capacity of movement are:

Q-BA = D(627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB))
Q-BC = E(745 - Y(0.364q-AC + 0.144q-AB))
Q-CB = F(745 - 0.364Y(q-AC + q-AB))

The geometric parameters represented by D, E, F are:

D = (1 + 0.094(w-BA - 3.65))(1 + 0.0009(V-rBA - 120))(1 + 0.0006(V-IBA - 150))
E = (1 + 0.094(w-BC - 3.65))(1 + 0.0009(V-rBC - 120))
F = (1 + 0.094(w-CB - 3.65))(1 + 0.0009(V-rCB - 120))

where

Y = 1 - 0.0345W
q-AB, etc = the design flow of movement AB, etc
W = major road width
W-CR = central reserve width
w-BA, etc = lane width to vehicle
v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc
v-IBA = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	**Input**						**Calculated**	
W	15	V-rBA	50	w-BA	4	D	0.910
W-CR	0	V-IBA	50	w-BC	4	E	0.968
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)	0	V-rBC	50	w-CB	0	F	0.616
Minor Road Share LT&RT? (Yes: 1, No: 0)	0	V-rCB	50			Y	0.483

Analysis :	**Traffic Flow pcu/hr**	**AM**	**Logistic**	**PM**	**Capacity pcu/hr**	**AM**	**Logistic**	**PM**	
	q-CA	350	320	210	Q-BA	453	454	492	
	q-CB	85	110	30	Q-BC	654	658	667	
	q-AB	105	100	70	Q-CB	409	412	420	
	q-AC	350	330	290	Q-CA	N/A	N/A	N/A	(If C-B blocked C-
	q-BA	150	110	70	Q-BAC	N/A	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	80	90	45					
	f	0.348	0.450	0.391					

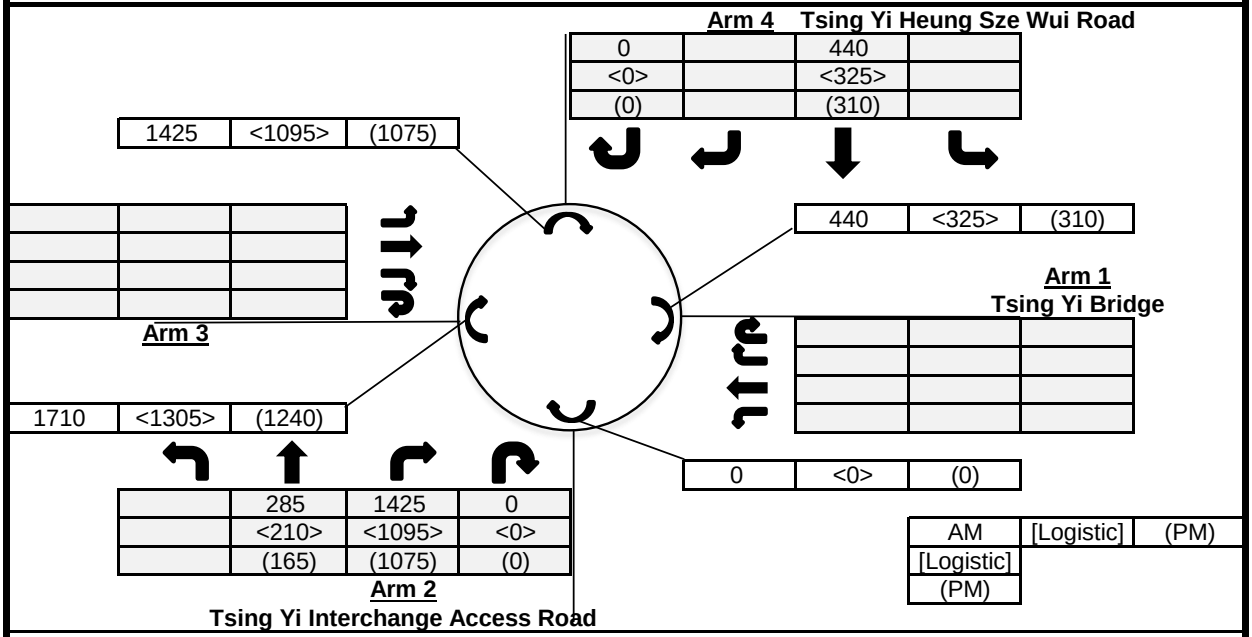
Results :	**Ratio of Flow-to-Capacity**	**AM**	**Logistic**	**PM**
	B-A	0.33	0.24	0.14
	B-C	0.12	0.14	0.07
	C-B	0.21	0.27	0.07
	C-A	N/A	N/A	N/A
	B-AC	N/A	N/A	N/A
Critical DFC		**0.33**	**0.27**	**0.14**

CTA Consultants Ltd.

Roundabout Junction Calculation

Junction : (RA1) Tsing Yi Interchange (North) Job No.: 26011HK

Scenario : 2031 Design Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)			6		6
E	=	Entry width (m)			7		7
L	=	Effective length of flare (m)			5		5
R	=	Entry radius			62		41
D	=	Inscribed circle diameter (m)			60		60
A	=	Entry angle (degree)			27		60
Q	=	Entry flow (pcu/hr)	AM		1710		440
			Logistic		1305		325
			PM		1240		310
Qc	=	Circulating flow	AM		0		1425
		across entry (pcu/hr)	Logistic		0		1095
			PM		0		1075

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L			0.32		0.32
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)			1.04		0.92
X_2	=	V+((E-V)/(1+2*S))			6.61		6.61
M	=	Exp((D-60)/10)			1.00		1.00
F	=	303*X_2			2003		2003
Td	=	1+(0.5/(1+M))			1.25		1.25
Fc	=	0.21*Td*(1+0.2*X_2)			0.61		0.61
Qe	=	Capacity = K*(F-Fc*Qc)	AM		2090		1045
			Logistic		2090		1230
			PM		2090		1241
DFC	=	Entry Flow/Capacity = Q/Qe	AM		0.82		0.42
			Logistic		0.62		0.26
			PM		0.59		0.25

DFC of Critical Approach = AM 0.82
Logistic 0.62
PM 0.59

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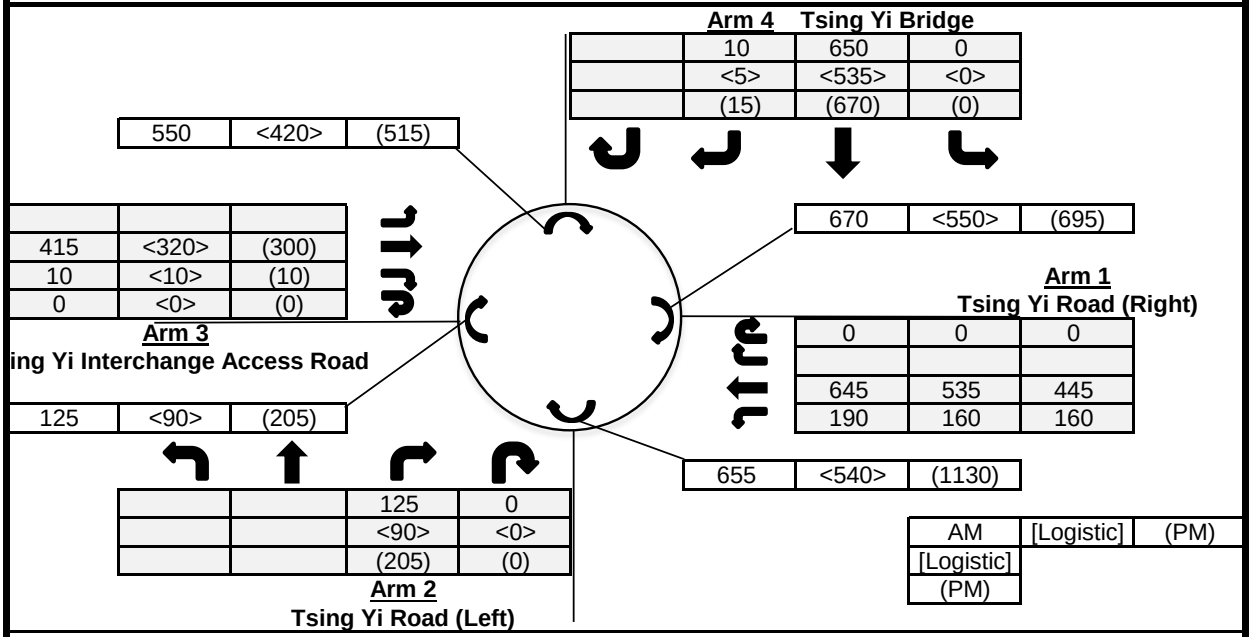
Roundabout Junction Calculation

Junction : (RA1) Tsing Yi Interchange (South) Job No.: 26011HK

Scenario : 2031 Design Traffic Flow (Planned Improvement)



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)		7	7.3	7	6
E	=	Entry width (m)		7.2	10.6	7.3	6.3
L	=	Effective length of flare (m)		5	17	5	5
R	=	Entry radius		23	60	24	44
D	=	Inscribed circle diameter (m)		60	60	60	60
A	=	Entry angle (degree)		43	55	27	23
Q	=	Entry flow (pcu/hr)	AM	835	125	425	660
			Logistic	695	90	330	540
			PM	605	205	310	685
Qc	=	Circulating flow	AM	670	655	125	550
		across entry (pcu/hr)	Logistic	550	540	90	420
			PM	695	1130	205	515

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L		0.06	0.31	0.10	0.10
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		0.96	0.95	1.02	1.05
X_2	=	V+((E-V)/(1+2*S))		7.18	9.34	7.25	6.25
M	=	Exp((D-60)/10)		1.00	1.00	1.00	1.00
F	=	303*X_2		2175	2829	2197	1894
Td	=	1+(0.5/(1+M))		1.25	1.25	1.25	1.25
Fc	=	0.21*Td*(1+0.2*X_2)		0.64	0.75	0.64	0.59
Qe	=	Capacity = K*(F-Fc*Qc)	AM	1679	2209	2156	1649
			Logistic	1752	2291	2179	1730
			PM	1663	1871	2104	1671
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.50	0.06	0.20	0.40
			Logistic	0.40	0.04	0.15	0.31
			PM	0.36	0.11	0.15	0.41

DFC of Critical Approach = AM 0.50
Logistic 0.40
PM 0.41

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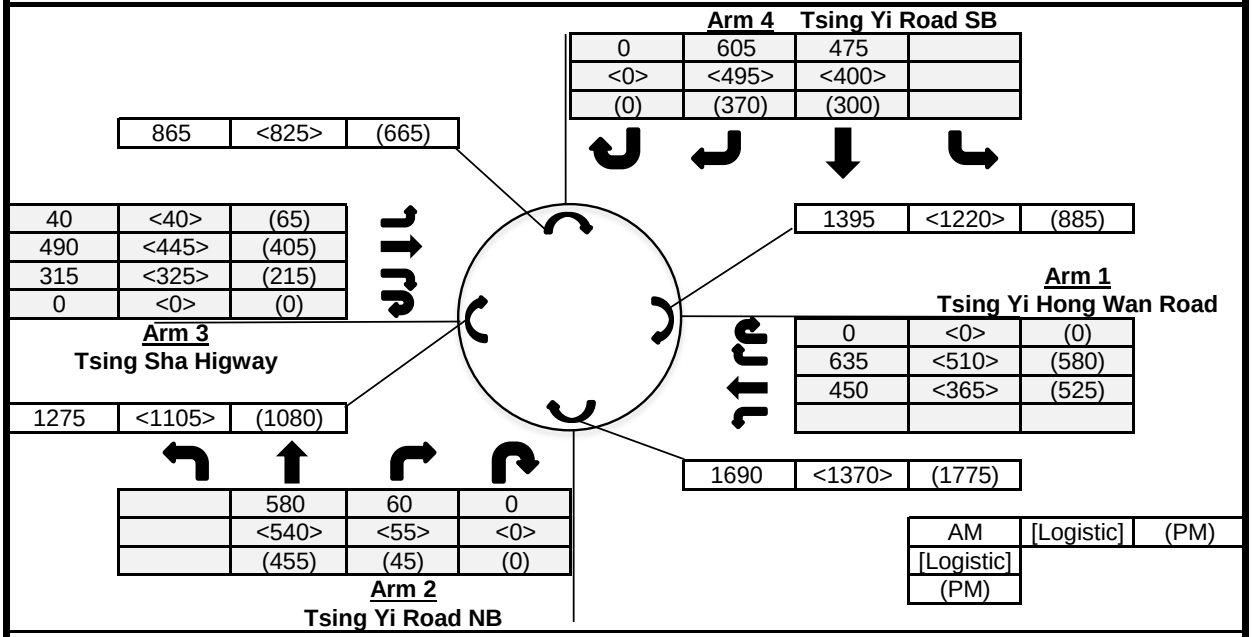
Roundabout Junction Calculation

Junction : (RA2) Tsing Yi Road / Tsing Yi Hong Wan Road / Tsing Sha Hig Job No.: 26011HK

Scenario : 2031 Design Traffic Flow (With Planned Improvement)



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)		7.3	7.1	7.3	7.3
E	=	Entry width (m)		13.5	12	9.5	10
L	=	Effective length of flare (m)		30	15	30	15
R	=	Entry radius		45	97	52	34
D	=	Inscribed circle diameter (m)		100	100	100	100
A	=	Entry angle (degree)		29	32	31	46
Q	=	Entry flow (pcu/hr)	AM	1085	640	845	1080
			Logistic	875	595	810	895
			PM	1105	500	685	670
Qc	=	Circulating flow	AM	1395	1690	1275	865
		across entry (pcu/hr)	Logistic	1220	1370	1105	825
			PM	885	1775	1080	665

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L		0.33	0.52	0.12	0.29
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		1.03	1.03	1.03	0.96
X_2	=	V+((E-V)/(1+2*S))		11.03	9.50	9.08	9.01
M	=	Exp((D-60)/10)		54.60	54.60	54.60	54.60
F	=	303*X_2		3343	2877	2752	2731
Td	=	1+(0.5/(1+M))		1.01	1.01	1.01	1.01
Fc	=	0.21*Td*(1+0.2*X_2)		0.68	0.61	0.60	0.59
Qe	=	Capacity = K*(F-Fc*Qc)	AM	2468	1898	2044	2139
			Logistic	2591	2101	2148	2162
			PM	2825	1844	2163	2253
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.44	0.34	0.41	0.50
			Logistic	0.34	0.28	0.38	0.41
			PM	0.39	0.27	0.32	0.30

DFC of Critical Approach = AM 0.50 | Logistic 0.41 | PM 0.39

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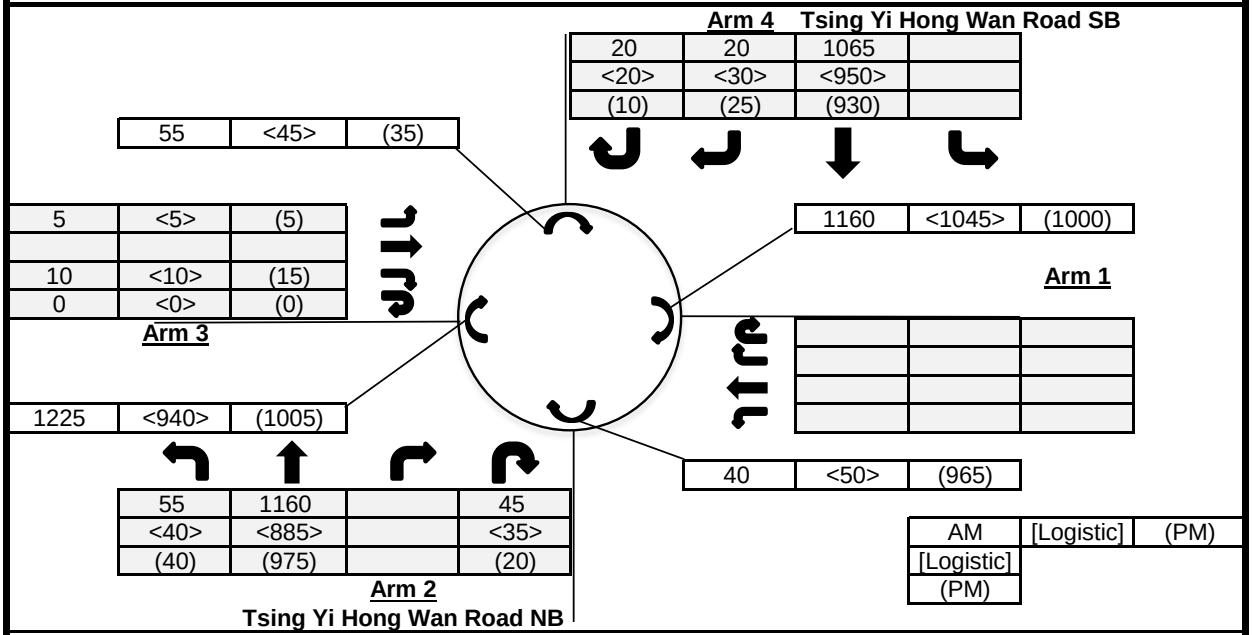
Roundabout Junction Calculation

Junction : (RA3) Tsing Yi Hong Wan Road Job No.: 26011HK

Scenario : 2031 Design Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)			7	7.3	7.3
E	=	Entry width (m)			14	13	12
L	=	Effective length of flare (m)			20	10	2
R	=	Entry radius			65	25	75
D	=	Inscribed circle diameter (m)			68	68	68
A	=	Entry angle (degree)			53	60	46
Q	=	Entry flow (pcu/hr)	AM		1260	15	1105
			Logistic		960	15	1000
			PM		1035	20	965
Qc	=	Circulating flow	AM		40	1225	55
		across entry (pcu/hr)	Logistic		50	940	45
			PM		965	1005	35

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L			0.56	0.91	3.76
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)			0.95	0.91	0.98
X_2	=	V+((E-V)/(1+2*S))			10.30	9.32	7.85
M	=	Exp((D-60)/10)			2.23	2.23	2.23
F	=	303*X_2			3121	2823	2379
Td	=	1+(0.5/(1+M))			1.16	1.16	1.16
Fc	=	0.21*Td*(1+0.2*X_2)			0.74	0.69	0.62
Qe	=	Capacity = K*(F-Fc*Qc)	AM		2950	1787	2299
			Logistic		2943	1966	2305
			PM		2295	1925	2311
DFC	=	Entry Flow/Capacity = Q/Qe	AM		0.43	0.01	0.48
			Logistic		0.33	0.01	0.43
			PM		0.45	0.01	0.42

DFC of Critical Approach = AM 0.48
Logistic 0.43
PM 0.45

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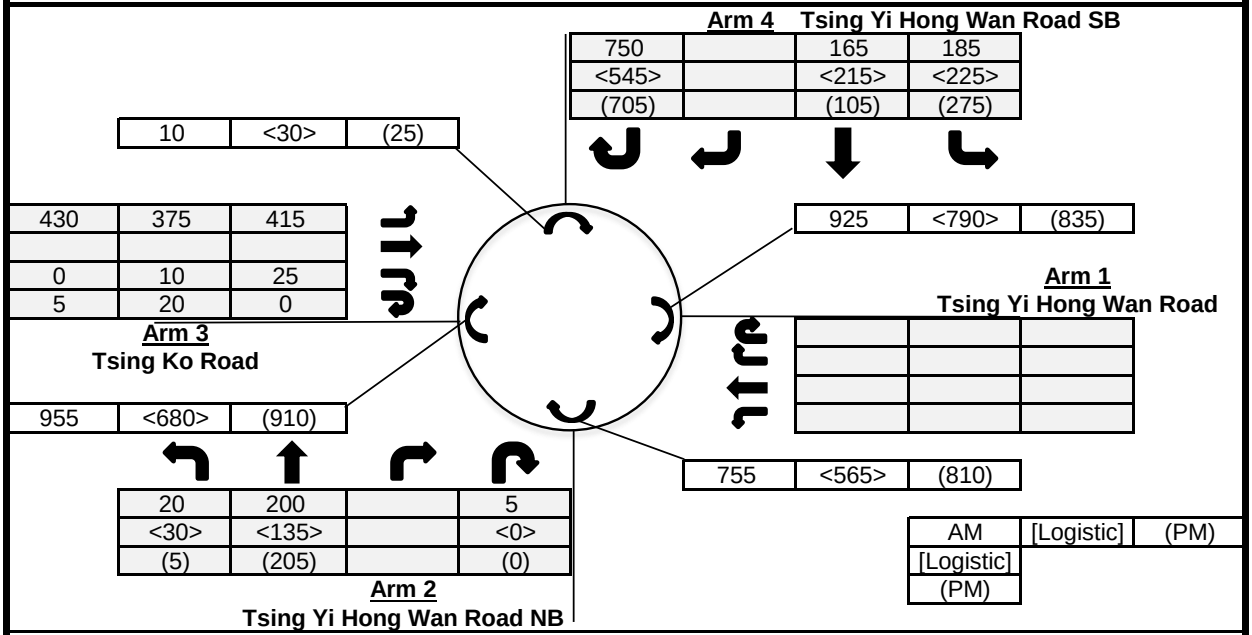
Roundabout Junction Calculation

Junction : (RA4) Tsing Yi Hong Wan Road / Tsing Ko Road Job No.: 26011HK

Scenario : 2031 Design Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)			6.7	6.3	7.3
E	=	Entry width (m)			13.5	12.5	15
L	=	Effective length of flare (m)			18	30	30
R	=	Entry radius			47	100	75
D	=	Inscribed circle diameter (m)			68	68	68
A	=	Entry angle (degree)			41	22	46
Q	=	Entry flow (pcu/hr)	AM		225	435	1100
			Logistic		165	405	985
			PM		210	440	1085
Qc	=	Circulating flow	AM		755	955	10
		across entry (pcu/hr)	Logistic		565	680	30
			PM		810	910	25

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L			0.60	0.33	0.41
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)			0.99	1.07	0.98
X_2	=	V+((E-V)/(1+2*S))			9.78	10.03	11.53
M	=	Exp((D-60)/10)			2.23	2.23	2.23
F	=	303*X_2			2963	3040	3493
Td	=	1+(0.5/(1+M))			1.16	1.16	1.16
Fc	=	0.21*Td*(1+0.2*X_2)			0.72	0.73	0.80
Qe	=	Capacity = K*(F-Fc*Qc)	AM		2397	2500	3416
			Logistic		2532	2714	3401
			PM		2358	2535	3405
DFC	=	Entry Flow/Capacity = Q/Qe	AM		0.09	0.17	0.32
			Logistic		0.07	0.15	0.29
			PM		0.09	0.17	0.32

DFC of Critical Approach = AM 0.32
Logistic 0.29
PM 0.32

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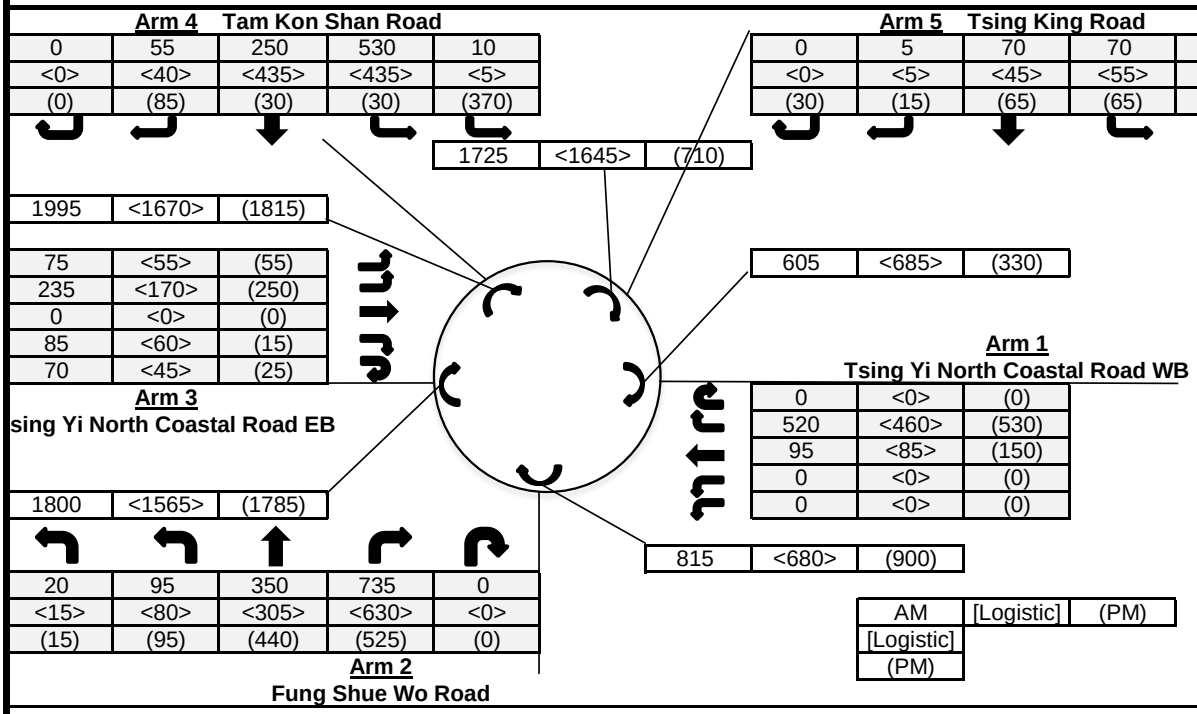
Roundabout Junction Calculation

Junction : (RA5) Tam Kon Shan Interchange Job No.: 26011HK

Scenario : 2031 Design Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4	Arm 5
V	=	Approach half width (m)		7	7.3	5.5	7.3	7
E	=	Entry width (m)		9	13.5	7.5	13.5	11
L	=	Effective length of flare (m)		9	20	11	50	10
R	=	Entry radius		100	35	45	35	45
D	=	Inscribed circle diameter (m)		100	100	100	100	100
A	=	Entry angle (degree)		30	25	25	45	45
Q	=	Entry flow (pcu/hr)	AM	615	1200	465	845	145
			Logistic	545	1030	330	915	105
			PM	680	1075	345	515	175
Qc	=	Circulating flow	AM	605	815	1800	1995	1725
		across entry (pcu/hr)	Logistic	685	680	1565	1670	1645
			PM	330	900	1785	1815	710

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4	Arm 5
S	=	Sharpness of flare = 1.6*(E-V)/L		0.36	0.50	0.29	0.20	0.64
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		1.04	1.04	1.04	0.97	0.98
X_2	=	V+((E-V)/(1+2*S))		8.17	10.41	6.76	11.74	8.75
M	=	Exp((D-60)/10)		54.60	54.60	54.60	54.60	54.60
F	=	303*X_2		2475	3155	2050	3557	2653
Td	=	1+(0.5/(1+M))		1.01	1.01	1.01	1.01	1.01
Fc	=	0.21*Td*(1+0.2*X_2)		0.56	0.65	0.50	0.71	0.58
Qe	=	Capacity = K*(F-Fc*Qc)	AM	2221	2723	1204	2075	1606
			Logistic	2175	2815	1326	2298	1652
			PM	2381	2665	1211	2199	2183
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.28	0.44	0.39	0.41	0.09
			Logistic	0.25	0.37	0.25	0.40	0.06
			PM	0.29	0.40	0.28	0.23	0.08

DFC of Critical Approach = AM 0.44
Logistic 0.40
PM 0.40

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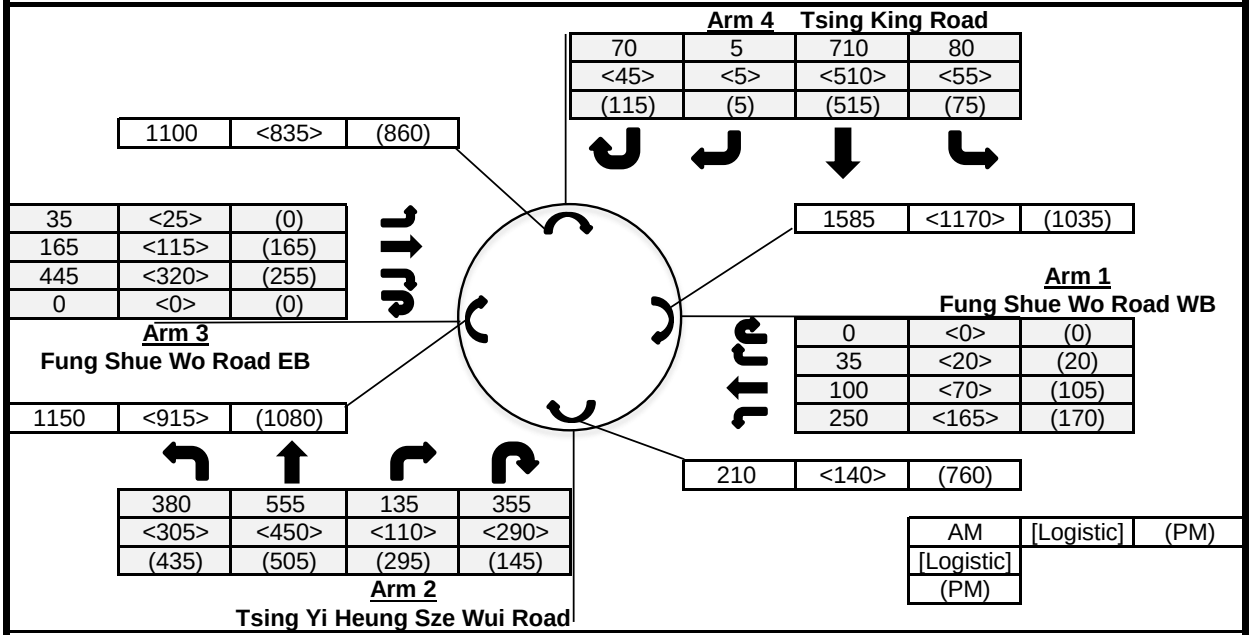
Roundabout Junction Calculation

Junction : (RA6) Tsing King Road / Fung Shue Wo Road Job No.: 26011HK

Scenario : 2031 Design Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)		6.7	7.3	7.3	6.9
E	=	Entry width (m)		9.7	10	9.2	8.9
L	=	Effective length of flare (m)		16	20	14	16
R	=	Entry radius		55	71	60	62
D	=	Inscribed circle diameter (m)		100	100	100	100
A	=	Entry angle (degree)		36	30	18	25
Q	=	Entry flow (pcu/hr)	AM	385	1425	645	865
			Logistic	255	1155	460	615
			PM	295	1380	420	710
Qc	=	Circulating flow	AM	1585	210	1150	1100
		across entry (pcu/hr)	Logistic	1170	140	915	835
			PM	1035	760	1080	860

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L		0.30	0.22	0.22	0.20
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		1.01	1.04	1.07	1.05
X_2	=	V+((E-V)/(1+2*S))		8.58	9.19	8.62	8.33
M	=	Exp((D-60)/10)		54.60	54.60	54.60	54.60
F	=	303*X_2		2598	2783	2613	2524
Td	=	1+(0.5/(1+M))		1.01	1.01	1.01	1.01
Fc	=	0.21*Td*(1+0.2*X_2)		0.58	0.60	0.58	0.56
Qe	=	Capacity = K*(F-Fc*Qc)	AM	1704	2750	2094	1998
			Logistic	1945	2794	2240	2155
			PM	2023	2408	2137	2141
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.23	0.52	0.31	0.43
			Logistic	0.13	0.41	0.21	0.29
			PM	0.15	0.57	0.20	0.33

DFC of Critical Approach = AM 0.52
Logistic 0.41
PM 0.57

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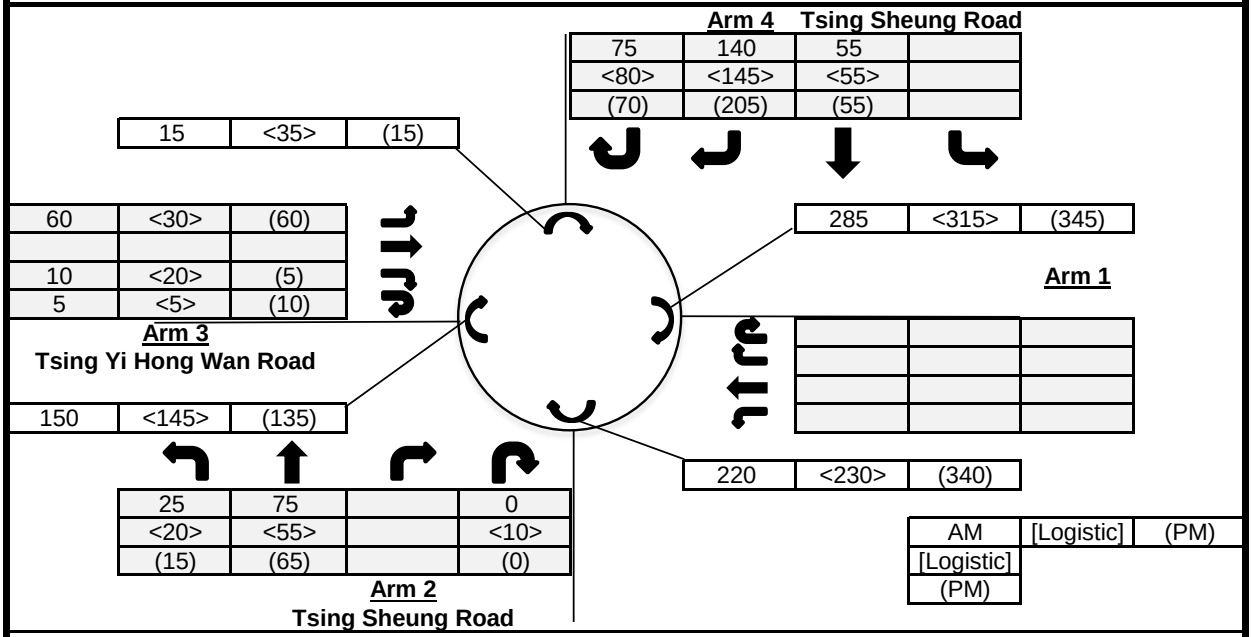
Roundabout Junction Calculation

Junction : (RA7) Tsing Yi Hong Wan Road / Tsing Sheung Road Job No.: 26011HK

Scenario : 2031 Design Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)			5.2	3	6.7
E	=	Entry width (m)			9	8.4	12
L	=	Effective length of flare (m)			25	15	23
R	=	Entry radius			63	55	11.6
D	=	Inscribed circle diameter (m)			53	53	53
A	=	Entry angle (degree)			33	48	38
Q	=	Entry flow (pcu/hr)	AM		100	75	270
			Logistic		85	55	280
			PM		80	75	330
Qc	=	Circulating flow	AM		220	150	15
		across entry (pcu/hr)	Logistic		230	145	35
			PM		340	135	15

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L			0.24	0.58	0.37
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)			1.02	0.97	0.94
X_2	=	V+((E-V)/(1+2*S))			7.76	5.51	9.75
M	=	Exp((D-60)/10)			0.50	0.50	0.50
F	=	303*X_2			2350	1669	2954
Td	=	1+(0.5/(1+M))			1.33	1.33	1.33
Fc	=	0.21*Td*(1+0.2*X_2)			0.71	0.59	0.83
Qe	=	Capacity = K*(F-Fc*Qc)	AM		2243	1531	2756
			Logistic		2236	1534	2741
			PM		2156	1540	2756
DFC	=	Entry Flow/Capacity = Q/Qe	AM		0.04	0.05	0.10
			Logistic		0.04	0.04	0.10
			PM		0.04	0.05	0.12

DFC of Critical Approach = AM 0.10
Logistic 0.10
PM 0.12

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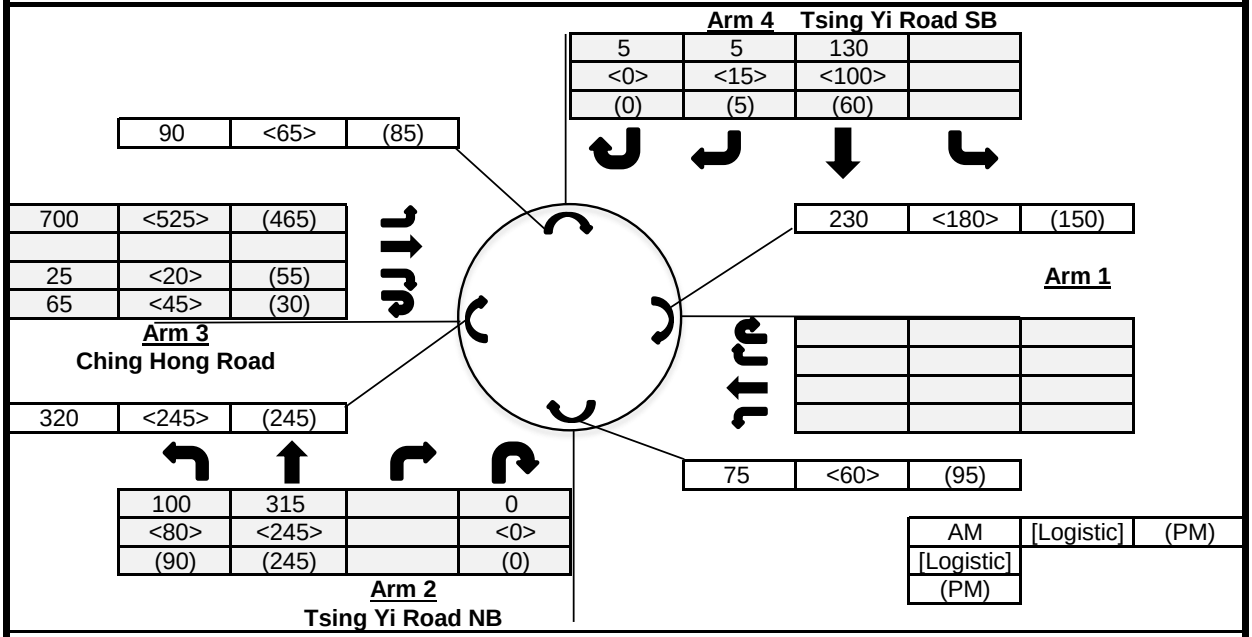
Roundabout Junction Calculation

Junction : (RA8) Tsing Yi Road / Ching Hong Road Job No.: 26011HK

Scenario : 2031 Design Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)			4.5	7.3	7
E	=	Entry width (m)			9	8.5	8.5
L	=	Effective length of flare (m)			25	4	16
R	=	Entry radius			24.5	30	100
D	=	Inscribed circle diameter (m)			30	30	30
A	=	Entry angle (degree)			44	40	27
Q	=	Entry flow (pcu/hr)	AM		415	790	140
			Logistic		325	590	115
			PM		335	550	65
Qc	=	Circulating flow	AM		75	320	90
		across entry (pcu/hr)	Logistic		60	245	65
			PM		95	245	85

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L			0.29	0.48	0.15
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)			0.96	0.98	1.05
X_2	=	V+((E-V)/(1+2*S))			7.36	7.91	8.15
M	=	Exp((D-60)/10)			0.05	0.05	0.05
F	=	303*X_2			2229	2397	2471
Td	=	1+(0.5/(1+M))			1.48	1.48	1.48
Fc	=	0.21*Td*(1+0.2*X_2)			0.77	0.80	0.82
Qe	=	Capacity = K*(F-Fc*Qc)	AM		2085	2102	2516
			Logistic		2096	2161	2537
			PM		2071	2161	2520
DFC	=	Entry Flow/Capacity = Q/Qe	AM		0.20	0.38	0.06
			Logistic		0.16	0.27	0.05
			PM		0.16	0.25	0.03

DFC of Critical Approach = AM 0.38
Logistic 0.27
PM 0.25

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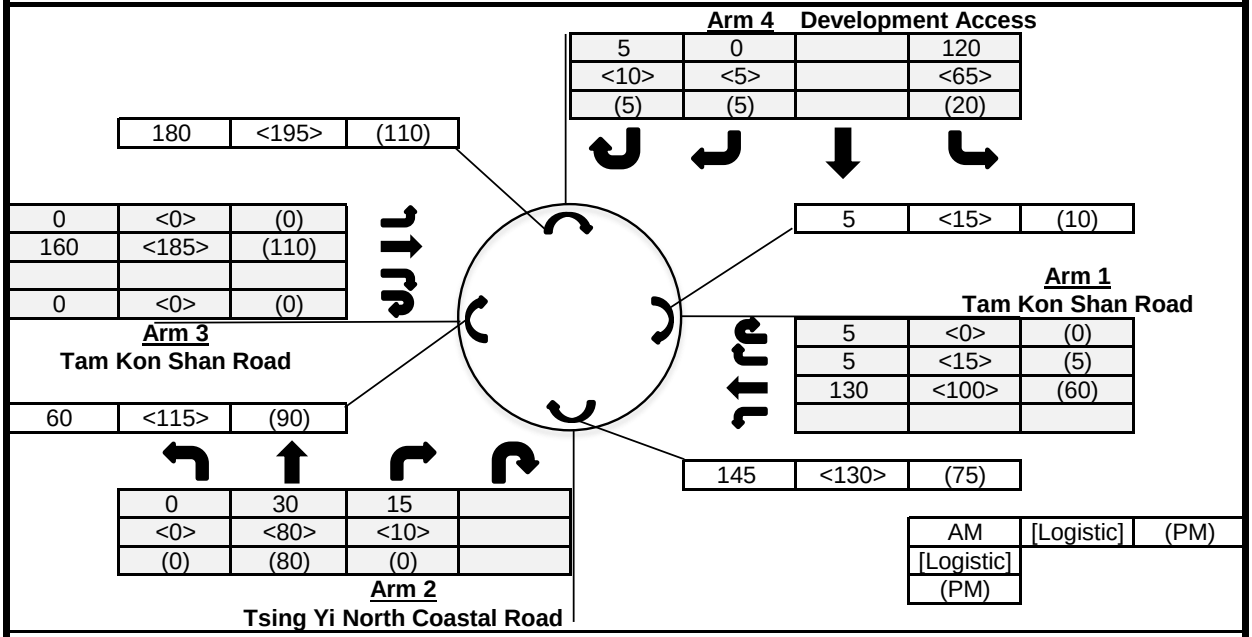
Roundabout Junction Calculation

Junction : (RA9) Tam Kon Shan Road Job No.: 26011HK

Scenario : 2031 Design Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)		3.3	4	3.4	4.2
E	=	Entry width (m)		6.7	4.9	5.8	5.4
L	=	Effective length of flare (m)		10	10	10	10
R	=	Entry radius		32	97	52	34
D	=	Inscribed circle diameter (m)		30	30	30	30
A	=	Entry angle (degree)		34	32	31	46
Q	=	Entry flow (pcu/hr)	AM	140	45	160	125
			Logistic	115	90	185	80
			PM	65	80	110	30
Qc	=	Circulating flow	AM	5	145	60	180
		across entry (pcu/hr)	Logistic	15	130	115	195
			PM	10	75	90	110

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L		0.54	0.14	0.38	0.19
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		1.00	1.03	1.03	0.96
X_2	=	V+((E-V)/(1+2*S))		4.93	4.70	4.76	5.07
M	=	Exp((D-60)/10)		0.05	0.05	0.05	0.05
F	=	303*X_2		1493	1424	1442	1535
Td	=	1+(0.5/(1+M))		1.48	1.48	1.48	1.48
Fc	=	0.21*Td*(1+0.2*X_2)		0.62	0.60	0.61	0.62
Qe	=	Capacity = K*(F-Fc*Qc)	AM	1497	1379	1443	1373
			Logistic	1491	1388	1408	1364
			PM	1494	1423	1424	1415
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.09	0.03	0.11	0.09
			Logistic	0.08	0.06	0.13	0.06
			PM	0.04	0.06	0.08	0.02

DFC of Critical Approach = AM 0.11
Logistic 0.13
PM 0.08

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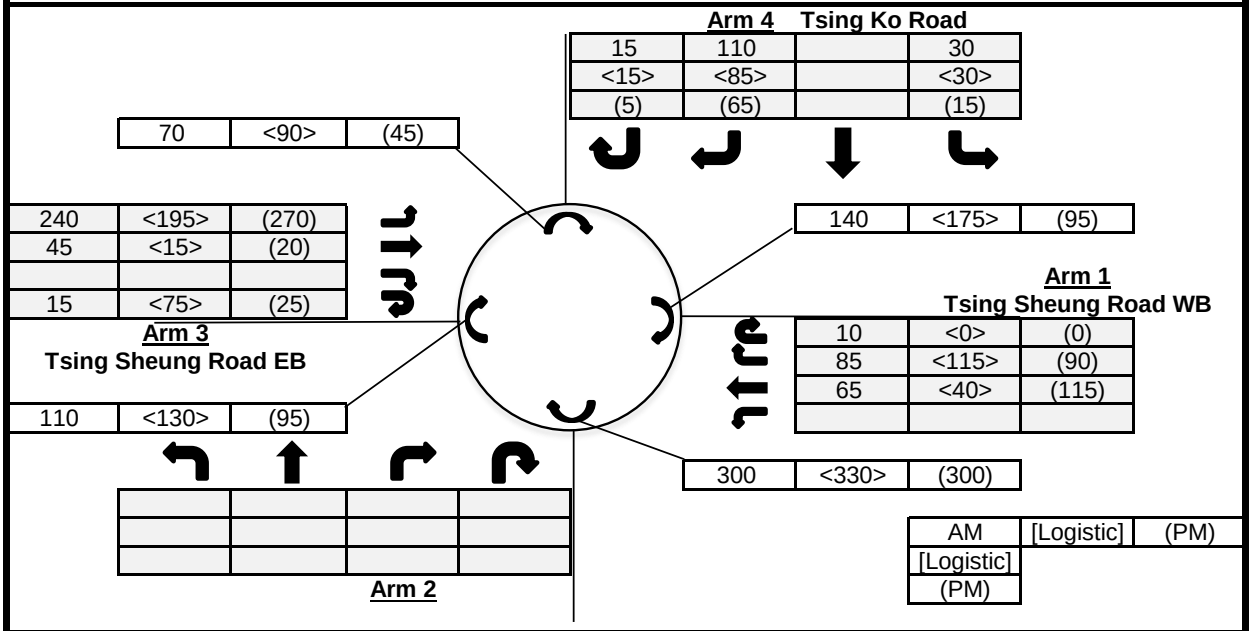
Roundabout Junction Calculation

Junction : (RA10) Tsing Sheung Road / Tsing Ko Road Job No.: 26011HK

Scenario : 2031 Design Traffic Flow



Input Parameters				Arm 1	Arm 2	Arm 3	Arm 4
V	=	Approach half width (m)		6.6		5.6	6.4
E	=	Entry width (m)		12.9		5.1	11.6
L	=	Effective length of flare (m)		18		30	30
R	=	Entry radius		47		67.3	75
D	=	Inscribed circle diameter (m)		50		50	50
A	=	Entry angle (degree)		41		22	46
Q	=	Entry flow (pcu/hr)	AM	160		300	155
			Logistic	155		285	130
			PM	205		315	85
Qc	=	Circulating flow	AM	140		110	70
		across entry (pcu/hr)	Logistic	175		130	90
			PM	95		95	45

Output Parameters				Arm 1	Arm 2	Arm 3	Arm 4
S	=	Sharpness of flare = 1.6*(E-V)/L		0.56		-0.03	0.28
K	=	1-0.00347*(A-30)-0.978*(1/R-0.05)		0.99		1.06	0.98
X_2	=	V+((E-V)/(1+2*S))		9.57		5.07	9.74
M	=	Exp((D-60)/10)		0.37		0.37	0.37
F	=	303*X_2		2900		1537	2953
Td	=	1+(0.5/(1+M))		1.37		1.37	1.37
Fc	=	0.21*Td*(1+0.2*X_2)		0.84		0.58	0.85
Qe	=	Capacity = K*(F-Fc*Qc)	AM	2755		1565	2837
			Logistic	2726		1552	2820
			PM	2792		1574	2857
DFC	=	Entry Flow/Capacity = Q/Qe	AM	0.06		0.19	0.05
			Logistic	0.06		0.18	0.05
			PM	0.07		0.20	0.03

DFC of Critical Approach = AM 0.19 | Logistic 0.18 | PM 0.20

CTA Consultants Ltd.

Appendix 2

Tsing Yi School Schedules

保良局陳百強伉儷青衣學校
二零二五至二零二六年度學校校曆表

2025年6月23日編訂

	週次	日	一	二	三	四	五	六	摘　要
九月	1		1	2	3	4	5	6	
	2	7	8	9	10	11	12	13	
	3	14	15	16	17	18	19	20	
	4	21	22	23	24	25	26	27	
	5	28	29	30					
十月					1	2	3	4	1/10 國慶日，放假1天 6/10 學校自決假期，放假1天 7/10 中秋節翌日，放假1天 10/10 教職發展日，學生不用上課 16/10 學校資訊日 29/10 重陽節，放假1天 31/10 保良局特殊學校聯校運動會
	6	5	6	7	8	9	10	11	
	7	12	13	14	15	16	17	18	
	8	19	20	21	22	23	24	25	
	9	26	27	28	29	30	31		
十一月								1	
	10	2	3	4	5	6	7	8	
	11	9	10	11	12	13	14	15	
	12	16	17	18	19	20	21	22	
	13	23	24	25	26	27	28	29	
	14	30							
十二月			1	2	3	4	5	6	
	15	7	8	9	10	11	12	13	8/12 立法會換屆選舉翌日，放假1天 12/12 教職發展日，學生不用上課
	16	14	15	16	17	18	19	20	
	17	21	22	23	24	25	26	27	24/12-3/1 聖誕節及新年假期，放假11天
	18	28	29	30	31				
一月						1	2	3	
	19	4	5	6	7	8	9	10	
	20	11	12	13	14	15	16	17	
	21	18	19	20	21	22	23	24	
	22	25	26	27	28	29	30	31	
二月	23	1	2	3	4	5	6	7	
	24	8	9	10	11	12	13	14	13/2-24/2 農曆新年假期，放假12天
	25	15	16	17	18	19	20	21	
	26	22	23	24	25	26	27	28	

	週次	日	一	二	三	四	五	六	摘　要
三月	27	1	2	3	4	5	6	7	
	28	8	9	10	11	12	13	14	13/3 學校自決假期，放假1天
	29	15	16	17	18	19	20	21	
	30	22	23	24	25	26	27	28	
	31	29	30	31					
四月					1	2	3	4	2/4-14/4 清明節及復活節假期，放假13天
	32	5	6	7	8	9	10	11	
	33	12	13	14	15	16	17	18	
	34	19	20	21	22	23	24	25	
	35	26	27	28	29	30			
五月							1	2	1/5 勞動節，放假1天
	36	3	4	5	6	7	8	9	
	37	10	11	12	13	14	15	16	
	38	17	18	19	20	21	22	23	
	39	24	25	26	27	28	29	30	25/5 佛誕翌日，放假1天
	40	31							
六月			1	2	3	4	5	6	5/6 保良局特殊學校聯校畢業禮(首選)
	41	7	8	9	10	11	12	13	12/6 保良局特殊學校聯校畢業禮(次選)
	42	14	15	16	17	18	19	20	19/6 端午節，放假1天
	43	21	22	23	24	25	26	27	24/6 學校教學成果日 26/6 學校自決假期，放假1天
	44	28	29	30					
七月					1	2	3	4	1/7 香港特區成立紀念日，放假1天
	45	5	6	7	8	9	10	11	
	46	12	13	14	15	16	17	18	16/7-31/8 暑假，放假47天
	47	19	20	21	22	23	24	25	
	48	26	27	28	29	30	31		
八月								1	
	49	2	3	4	5	6	7	8	
	50	9	10	11	12	13	14	15	
	51	16	17	18	19	20	21	22	
	52	23	24	25	26	27	28	29	
	53	30	31						

公眾假期　學校自決假期　△教職發展日　╳學校假期

學生全年上課日：190日　本學年擬訂學校假期合計：94日（包括3日學校自決假期）

教職發展日，學生不用上課：2日

東華三院黃士心小學 2025/2026 年度校曆表

下學期

月份	週次	星期							行事要目
		日	一	二	三	四	五	六	
2026 二月	一	1	2△	3D	4E	5F	6G	7	2/2 下學期開始, 2/2 東華三院聯校專業發展日
	二	8	9A	10B	11C	12△	13	14	12/2 幼小同樂迎新春 13/2-23/2 農曆新年假期共 11 天
	三	15	16	17*	18*	19*	20	21	
	四	22	23	24D	25E	26F	27G	28△	28/2 東華三院小學足球同樂日
三月	五	1	2A	3B	4C⊕	5#	6#	7	4/3 總評周前一天半天課, 5,6,9,10/3 總評二
	六	8	9#	10#	11D	12E	13F	14	
	七	15	16G	17A	18B	19C	20D	21	
	八	22	23E	24F	25G	26A	27B	28	
	九	29	30C	31△					31/3 士心運動會
四月	十				1	2	3*	4*	1/4-11/4 復活節及清明節假期共 11 天
	十一	5*	6*	7*	8	9	10	11	
	十二	12	13D	14E	15F	16G	17A	18	13/4 小六家長日(2)及小六升中家長講座
	十三	19	20B	21C	22D	23△	24△	25△	23/4 閱讀日 24/4 東華三院小學聯校畢業禮 25/4 小一至小五家長日(2)及小五升中講座
	十四	26	27E	28F	29G	30A			
五月	十四						1*	2	1/5 勞動節假期 1 天
	十五	3	4B	5C	6D	7E	8F	9△	6/5 或 7/5 小三全港性系統評估(說話及視聽資訊) 9/5 FUNDAY 同樂日
	十六	10	11G	12A	13B	14C	15D	16	
	十七	17	18E	19F	20G	21A	22△	23△	22/5 綜藝薈萃展才華綵排, 23/5 綜藝薈萃展才華
	十八	24	25*	26B	27C	28D	29E	30	25/5 佛誕翌日假期 1 天
	十九	31							
六月	十九		1F	2G	3A⊕	4#	5#	6	3/6 總評周前一天半天課, 4,5,8,9/6 總評三
	二十	7	8#	9#	10B	11C	12D	13	
	廿一	14	15E	16F	17G	18A	19*	20	15/6 及 16/6 小三全港性系統評估(紙筆評估), 19/6 端午節假期 1 天
	廿二	21	22⊕	23⊕	24⊕	25⊕	26⊕	27	22/6-10/7 試後活動(半日)
	廿三	28	29⊕	30⊕					
七月	廿三				1*	2⊕	3⊕	4	1/7 香港特別行政區成立紀念日假期 1 天
	廿四	5	6⊕	7⊕	8⊕	9⊕	10⊕	11△	6/7 小六畢業典禮, 7/7 中學學位分配結果公布 9/7 小一至小五家長日(3), 9/7-10/7 向獲派中學註冊 10/7 結業禮及家長教師會會員大會, 11/7 校友會活動
	廿五	12	13	14	15	16	17	18	13/7-31/8 暑假共 50 日, 14/7 中一入學前香港學科測驗
		19	20	21	22	23	24	25	
		26	27	28	29	30	31		
八月								1	
		2	3	4	5	7	8	9	
		9	10	11	12	13	14	15	
		16	17	18	19	20	21	22	
		23	24	25	26	27	28	29	
		30	31						

附註

1. 本校曆表中"藍字"表示學校假期，"*"表示公眾假期，"⊕"表示半天上課，"△"表示特別活動，"#"表示總評，"綠字"表示待訂活動。
2. 全年上課總日數為 190 日，部份項目有待更新，如有修訂，將會另行通知。

二零二五至二零二六年度校曆

二零二五至二零二六年度校曆

月份	日	一	二	三	四	五	六	周次	假期	學術周/學科活動	訓育主題	學校活動
三月	1	2	3	[4]	(5)	6	7	15	13/3 陸運會後假期	**音樂科學術周**(2-4/3)	**崇德淬鍊，迸發** ***LSTLCW* 梁中人光彩** 遵章守紀 博施濟眾	2-17/3 中六級試卷評講 5,12/3 陸運會初賽及決賽
	8	9	10	11	(12)	13	14					16-17/3 誓師大會
	15	16	17	[18]	19	20	21	16				17-19/3 下學期統測(中一及中二級)
	22	23	24	25	26	[27]	28	17		**地理科學術周**(24-26/3)	輔導組	17-20/3 下學期統測(中三級)
	29	30	31						30/3-7/4 復活節假期		德育、公民及國民教育組	23-26/3 關愛共融周
四月				1	2	*3	*4			**圖書館科活動**：下學期作家講座	**崇德淬鍊，迸發** ***LSTLCW* 梁中人光彩**	
	5	*6	*7	8	9	10	11		6/4 清明節翌日		遵章守紀 博施濟眾	8/4 香港中學文憑考試第一科開考
	12	#13	#14	15	[16]	17	18	18				13-14/4 社際排球比賽(初級組)
	19	20	21	22	23	24	25			**公社系列學術周**(27-30/4)	輔導組	24/4 中一級家長晚會
	26	[27]	28	29	30			19			德育、公民及國民教育組	28 或 29/4 中三級全港性系統評估：說話部分
五月						*1	2		1/5 勞動節	**物理、化學、生物及科學科學術周**(4-7/5) **科技教育學習領域學術周**(11-14/5) **英文日**(21/5)	**崇德淬鍊，迸發** ***LSTLCW* 梁中人光彩**	
	3	4	5	6	[7]	8	9	20			昂揚奮進 釋放潛能	12/5 社際戲劇比賽
	10	11	#12	13	14	15	16					23/5 中六級畢業典禮
	17	[18]	19	20	21	22	23	21				29/5 下學期活動完結
	24	*25	26	27	[28]	29	30	22	25/5 佛誕翌日		活動組	
	31											
六月		1	2	3	4	5	6				**崇德淬鍊，迸發** ***LSTLCW* 梁中人光彩**	2-4/6 考試前特別上課時間表(2:30 p.m.放學)
	7	8	9	10	11	12	13					3/6 下學期三好學生獎勵計劃暨進步獎頒獎典禮
	14	15	16	17	18	*19	20		19/6 端午節		昂揚奮進 釋放潛能	4-18/6 期終考試(中三級)
	21	22	23	24	25	26	27					5-18/6 期終考試(中一、二、四、五級)
	28	29	30								活動組	17-18/6 中三級全港性系統評估：紙筆部分 22-24/6 評講考試表現 25/6 升留級會議 25/6-9/7 試後活動及上課 社際音樂比賽
七月				*1	2	3	4		1/7 香港特別行政區成立紀念日			6/7 中六級放榜前輔導日
	5	6	7	8	9	10	11					8-10/7 派發成績表
	12	13	14	15	16	17	18		13/7-31/8 暑假			10/7 結業頒獎禮
	19	20	21	22	23	24	25					15/7 香港中學文憑考試放榜
	26	27	28	29	30	31						
八月							1					
	2	3	4	5	6	7	8					19/8 第一次校務會議
	9	10	11	12	13	[14]	15					
	16	17	18	19	20	21	22					1/9/2026(星期二)開學禮
	23	24	25	26	27	28	29					
	30	31										

說明： [ ] 循環周第一天　　* 公眾假期　　— 學校假期

( ) 學校活動日　　# 社際比賽　　@ 班際比賽

聖公會青衣邨何澤芸小學2025/2026年度下學期校曆表

△ 特別事項　紅字假期　__考試

23.1.2026

週次	月份	星期 日	一	二	三	四	五	六	假期及行事備忘	假期日數	學術比賽及活動	訓育中心
1	2026 一月	25	26△	27	28	29	30	31	26/1下學期開學日			同理心 團結及
2	二月	1	2	3	4△	5	6	7	4/2 跨學科研習日			尊重他人 承擔及
3		8	9	10△	11△	12	13	14	10/2 中華薈萃日 11/2 教師發展日 12 -21/2 農曆新年假期	11		
4		15	16	17	18	19	20	21				
5		22	23	24	25	26	27	28	評估二			
6	三月	1	2	3	4	5	6	7				堅毅及誠信
7		8	9	10	11	12	13	14	9-12/3 考試二 六年級呈分試			
8		15	16	17	18	19	20△	21	20/3 參觀日		中文作文比賽	
9		22	23	24	25	26	27	28				
10		29	30	31△					31/3 復活節崇拜			
	四月				1	2	3	4	1-11/4 復活節假期	11		虛懷及渴慕
11		5	6	7	8	9	10	11	6/4 清明節翌日			
12		12	13	14△	15	16	17	18	14/4 校運會 15/4 校運會翌日假期	1		
13		19	20	21	22	23	24	25△	25/4 家長日			
14		26	27	28	29	30						
	五月						1	2	1/5 勞動節	1		自省及超越
15		3	4	5	6△	7△	8	9	6/5 或 7/5 TSA(P.3) 說話、視訊評估			
16		10	11	12	13	14	15△	16	15/5 聖公會堂校社服教師發展日	1		
17		17	18	19	20	21	22	23	評估三 聯校畢業禮 (待定)			
18		24	25	26	27	28	29	30	25/5 佛誕翌日	1	數學比賽	
19		31										
	六月		1	2	3	4	5	6	2-5/6 考試三 五年級呈分試			敬師及孝親
20		7	8	9	10	11	12	13	8-12/6 宗教週			
21		14	15△	16△	17	18	19	20	15/6及16/6 TSA 紙筆評估 P.3 16-18/6 畢業營 19/6 端午節	1	資訊科技比賽	
22		21	22△	23△	24△	25△	26△	27	22/6 起半天上課 23-24/6 STEAM DAY			
23		28	29△	30△								
	七月				1	2△	3△	4△	1/7 香港特別行政區成立紀念日 2/7畢業崇拜及畢業聚餐 3/7 六年級畢業典禮綵排日 4/7 六年級畢業典禮	1		
24		5	6△	7△	8△	9△	10△	11	6/7 結業頒獎禮綵排日 7/7 公佈升中派位結果 8/7 結業頒獎禮 9/7 散學禮 10/7 全方位多元學習日			
		12	13	14	15	16	17	18	13/7-31/8 暑假	50		
		19	20	21	22	23	24	25				
		26	27	28	29	30	31					
	八月							1				
		2	3	4	5	6	7	8				
		9	10	11	12	13	14	15				
		16	17	18	19	20	21	22				
		23	24	25	26	27	28	29				
		30	31									

2023-2024 學生行事曆（3-7 月）

郭怡雅神父紀念學校

月份	循環週次	月訓	日	一	二	三	四	五	六	假　期	評　估 / 注意事項
三月		堅毅						① DS	2	26/3-6/4 清明節及復活節假期 25/3 教師發展日	5-6/3 試後活動暨全方位活動日 16/3 家教會會員大會 18/3 主保瞻禮日暨校慶日 19/3-23/3 姊妹學校跨境交流 20-22/3 小六教育營 21/3-22/3 小四內地考察團
	3		3	④ DS	⑤ DS	⑥ DS	7 D1	8 D2	9		
	4		10	11 D3	12 D4	13 D5	14 D6	15 D1	16		
			17	⑱ DS	19 D2	20 D3	21 D4	22 D5	23		
			24	25	26	27	28	29	30		
			31								
四月		誠信		1	2	3	4	5	6		12/4 全民國家安全教育日活動暨升旗禮 12/4 小六升中選校家長會 20/4 小一至小五家長日 20/4 小五呈分考試家長會 20/4 小六升中選校家長面談 23/4 閱讀嘉年華 26/4 校運會
	5		7	8 D6	9 D1	10 D2	11 D3	12 D4	13		
	6		14	15 D5	16 D6	17 D1	18 D2	19 D3	20		
			21	22 D4	㉓ DS	24 D5	25 D6	㉖ DS	27		
	7		28	29 D1	30 D2						
五月		孝順				1	2 D3	3 D4	4	1/5 勞動節 15/5 佛誕	24/5 課外活動最後一課 31/5 輔導課最後一課
	8		5	6 D5	7 D6	8 D1	9 D2	10 D3	11		
	9		12	13 D4	14 D5	15	16 D6	17 D1	18		
			19	20 D2	21 D3	22 D4	23 D5	24 D6	25		
	10		26	27 D1	28 D2	29 D3	30 D4	31 D5			
六月		關愛							1	10/6 端午節	4-7/6 P.1-P.4 第三次考試 P.5 呈分試 P.6 畢業評估 24/6-15/7 試後活動 28/6 特區成立紀念日升旗禮
			2	3 D6	④ DS	⑤ DS	⑥ DS	⑦ DS	8		
	11		9	10	11 D1	⑫ DS	⑬ DS	14 D2	15		
	12		16	17 D3	18 D4	19 D5	20 D6	21 D1	22		
			23	㉔ DS	㉕ DS	㉖ DS	㉗ DS	㉘ DS	29		
			30								
七月		感恩珍惜		1	② DS	③ DS	④ DS	⑤ DS	6	1/7 特區成立紀念日 16/7-31/8 暑假開始	5/7 畢業綵排 6/7 畢業禮(13/7 後備) 6/7 校友會會員大會 9/7 升中放榜 11/7 結業頒獎禮 11-12/7 升中註冊 12/7 才藝繽紛 Show 16/7 中一入學前香港學科測驗
			7	⑧ DS	⑨ DS	⑩ DS	⑪ DS	⑫ DS	13		
			14	⑮ DS	16	17	18	19	20		
			21	22	23	24	25	26	27		
			28	29	30	31					

學校假期　學校自決假期　教師發展日　① 半天上課：12：30 放學

DS：特別日子，上課內容另有安排

青 衣 商 會 小 學

Tsing Yi Trade Association Primary School

2025-2026

2nd Term School Calendar 下學期校曆表

月份 Month	週次 Week		日 Sun	一 Mon	二 Tue	三 Wed	四 Thu	五 Fri	六 Sat	月訓 Monthly Focus	事項	Events
一月 JAN	一	1st	25	26	27	28	29	30	31	堅毅 Perseverance	26/1 下學期開始，下午 12:30 放學	26/1 Start of the Second Term 12:30pm dismiss
二月 FEB	二	2nd	1	2	3	4	5	6	7	和平友愛 Peace & Kindliness	13/2 中華文化日-2 及盆菜宴,下午 2:00 放學 16/2-28/2 農曆新年假期	13/2 Chinese Cultural Day-2 & Poon Choi Feast 2:00pm dismiss 16/2-28/2 Lunar New Year Holidays
	三	3rd	8	9	10	11	12	13	14			
	四	4th	15	16	17	18	19	20	21			
	五	5th	22	23	24	25	26	27	28			
三月 MAR	六	6th	1	2	3	4	5	6	7	團結 Unity	12/3-13/3 及 16/3-17/3 P.1 第一次考試、P.2-P.6 第二次考試	12/3-13/3 & 16/3-17/3 P.1 First Exam, P.2-P.6 Second Exam
	七	7th	8	9	10	11	12	13	14			
	八	8th	15	16	17	18	19	20	21			
	九	9th	22	23	24	25	26	27	28			
	十	10th	29	30	31							
四月 APR						1	2	3	4	承擔 Commitment	1/4-8/4 復活節及清明節假期 5/4 清明節 24/4 家長日	1/4-8/4 Easter and Ching Ming Holidays 5/4 Ching Ming Festival 24/4 Parents' Day
	十一	11th	5	6	7	8	9	10	11			
	十二	12th	12	13	14	15	16	17	18			
	十三	13th	19	20	21	22	23	24	25			
	十四	14th	26	27	28	29	30					
五月 MAY								1	2	孝親 Filial Piety	1/5 勞動節 6/5 或 7/5 小三 TSA 說話及視訊評估 24/5 佛誕 25/5 佛誕翌日	1/5 Labour Day 6/5 or 7/5 TSA Oral and Audio-visual Assessment (Primary 3) 24/5 The Birthday of the Buddha 25/5 The day following the Birthday of the Buddha
	十五	15th	3	4	5	6	7	8	9			
	十六	16th	10	11	12	13	14	15	16			
	十七	17th	17	18	19	20	21	22	23			
	十八	18th	24	25	26	27	28	29	30			
	十九	19th	31									
六月 JUN				1	2	3	4	5	6	尊重他人 Respect for Others	1/6-4/6 小一第二次考試；小二至小六第三次考試 15/6-16/6 小三 TSA 筆試評估 19/6 端午節 22/6-10/7 半天課 24/6 聯校畢業典禮	1/6-4/6 P.1 Second Exam, P.2-P.6 Third Exam 15/6-16/6 TSA Written Assessment (Primary 3) 19/6 Tuen Ng Festival 22/6-10/7 Half-day School 24/6 Joint Schools Graduation Ceremony
	二十	20th	7	8	9	10	11	12	13			
	廿一	21st	14	15	16	17	18	19	20			
	廿二	22nd	21	22	23	24	25	26	27			
	廿三	23rd	28	29	30							
七月 JUL						1	2	3	4	善用餘暇 Delight in Leisure	1/7 香港特別行政區成立紀念日 3/7 P6 畢業禮暨 P1-P5 結業禮 7/7 公布中學學位分配結果 9/7-10/7 向中學註冊 14/7 中一入學前香港學科測驗(教育局暫定) 13/7-31/8 暑假	1/7 Hong Kong Special Administrative Region Establishment Day 3/7 P6 Graduation Ceremony P1-P5 Year End Ceremony 7/7 Release of Secondary One places allocation results 9/7-10/7 Secondary One Admission Registration 14/7 Pre-Secondary One Hong Kong Attainment Test (TBC by EDB) 13/7-31/8 Summer Holidays
	廿四	24th	5	6	7	8	9	10	11			
	廿五	25th	12	13	14	15	16	17	18			
	廿六	26th	19	20	21	22	23	24	25			
	廿七	27th	26	27	28	29	30	31				

註：紅色日子為假期，不用上課。著黃色底日子為考試日。 半天課日子，學生於下午 12:30 放學。

Remarks：The holidays are in red, no school on these days. The exam days are marked in yellow grids.
Students dismiss at 12:30 pm on the days of half-day school.

Appendix IV
Revised Supporting Planning Statement

APPLICATION FOR PERMISSION UNDER SECTION 16
OF THE TOWN PLANNING ORDINANCE (CAP. 131)

RENEWAL OF PLANNING APPROVAL FOR TEMPORARY CONCRETE BATCHING PLANT FOR A PERIOD OF 5 YEARS AT 14 – 18 TSING TIM STREET, TSING YI TOWN LOT NO. 98, TSING YI, NEW TERRITORIES ON THE APPROVED TSING YI OUTLINE ZONING PLAN NO. S/TY/32

SUPPORTING PLANNING STATEMENT

AUGUST 2026

August 2026
Town Planning Board
Secretary

Executive Summary

This Application is submitted to the Town Planning Board ("TPB") under Section 16 of the Town Planning Ordinance by the Applicant who seeks renewal of planning approval for the current 'Concrete Batching Plant' use ("the Use") at 14 – 18 Tsing Tim Street, Tsing Yi Town Lot No. 98, Tsing Yi, New Territories ("the Application Site") for a period of five years. The Application Site is about 3,355m^2 in size and currently zoned "Industrial" ("I") on the approved Tsing Yi Outline Zoning Plan ("OZP") No. S/TY/32. According to the Notes of the OZP, 'Concrete Batching Plant' is a Column 2 use within the "I" zone, thus planning permission is required from TPB.

The Application Site is subject to a previous planning application No. A/TY/145 for the same use which was approved on 24 September 2021 for a period of five years until 14 October 2026. All approval conditions under the previous planning approval have been complied with. The continuance of the Use will not cause changes to the development parameters of the Application Site.

The Use under this Application supports the local construction sector to meet the growing demand for concrete products arising from the upcoming large-scale infrastructure projects. The Application Site is located at a remote industrial area in the western part of Tsing Yi. The range of high hills at the central part of Tsing Yi Island will serve as a partition to block off potential environmental impacts and disturbances to the residential areas in the north-eastern part of Tsing Yi. As the Use has commenced operation since 2015, assessments of surrounding planned / committed developments subsequent to the Use should have been taken into account its existence. The required technical assessments concluded that no adverse impacts would be induced to the surrounding area since the previous approval.

In view of above, favorable consideration by the TPB is hereby sought to approve this Application.

August 2026
Town Planning Board
Secretary

內容摘要

申請人按<<城市規劃條例>>第 16 條向城市規劃委員會（『城規會』）提交規劃許可申請將新界青衣清甜街 14 – 18 號青衣市地段第 98 號(『申請地點』）為期五年的臨時混凝土配料廠規劃許可續期(『有關用途』）。申請地點地盤面積約 3,355 平方米及位於青衣分區計劃大綱核准圖編號 S/TY/32（『大綱圖』）上的『工業』用途地帶內。根據大綱圖，在『工業』用途地帶內，「混凝土配料廠」屬於第二欄用途，因此有需要獲得城規會的規劃許可。

申請地點的先前規劃申請 (No. A/TY/145) 作相同用途於 2021 年 9 月 24 日獲批，為期五年，至 2026 年 10 月 14 日。所有先前的規劃許可附帶條件均已履行。申請地點繼續用作本用途將不會對現有混凝土配料廠的發展參數有任何改動。

本申請將支援本地建築行業，以滿足將來大型基礎設施項目落成對混凝土產品不斷增長的需求。申請地點位於青衣西部的較偏遠工業區域，青衣島中部的山脊可阻擋混凝土配料廠潛在的環境影響及對青衣東北部住宅區域的滋擾。有關的混凝土配料廠自 2015 年開始營運，附近一帶隨後開展的擬議發展的技術評估應已考慮到有關用途。本申請附屬的技術評估斷定混凝土配料廠自先前規劃許可以來不會為周邊環境帶來負面影響。

基於上述情況，以及規劃綱領內的詳細規劃理據，申請人懇請城規會給予考慮批准是次規劃申請。

（中英文版如有差異，皆以英文版本爲準。）

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1 Introduction

1.1 Background

This Application is submitted under section 16 of the Town Planning Ordinance (Cap.131) on behalf of Liway Guide Limited ("the Applicant") to seek renewal of planning approval (No. A/TY/145) from the Town Planning Board ("TPB") for temporary concrete batching plant for a period of 5 years at 14 -18 Tsing Tim Street, Tsing Yi Town Lot No. 98, Tsing Yi, New Territories ("the Application Site"). The Applicant intends to continue the operation of the current temporary concrete batching plant under application no. A/TY/145 at the Application Site. The Application Site falls within an area currently zoned "Industrial" ("I") on the approved Tsing Yi Outline Zoning Plan ("OZP") No. S/TY/32 ("the OZP"). According to the Notes of the OZP, 'Concrete Batching Plant' use ('the Use') is a Column 2 use under the "I" zone which requires planning permission from TPB.

1.2 Statement Structure

This Supporting Planning Statement consists of six sections. Following the introduction, **Section 2** will cover the descriptions of the Application Site and its surrounding context. **Section 3** will elaborate on the respective planning context within which this Application is subject to. The current use will be presented in **Section 4**, which is followed by the relevant justifications in **Section 5**. The Statement will be concluded in **Section 6**. The following technical assessments and supplementary materials are attached along with the Statement in supporting this Application:-

- Schematic Drawings (**Appendix I**)
- Traffic Impact Assessment ("TIA") Report (**Appendix II**)
- Traffic Management Plan (**Appendix III**)
- Approval Letter of Planning Application No. A/TY/145 (**Appendix IV**)
- Approval Letter regarding Compliance of Approval Condition (b) and (c) (**Appendix V**)
- Certificate of FS 251 (**Appendix VI**)
- Response to Comments received during the Pre-Submission Enquiry (**Appendix VII**)

2 The Application Site and its Surroundings

2.1 Application Site

The Application Site is located at a remote industrial area in the western part of Tsing Yi. It has an area of about 3,355m^2. The Application Site is currently occupied by an existing concrete batching plant under approved Application No. A/TY/145. The Application Site is mainly accessible from Tsing Tim Street in the northwest and connects with Sai Tso Wan Road.

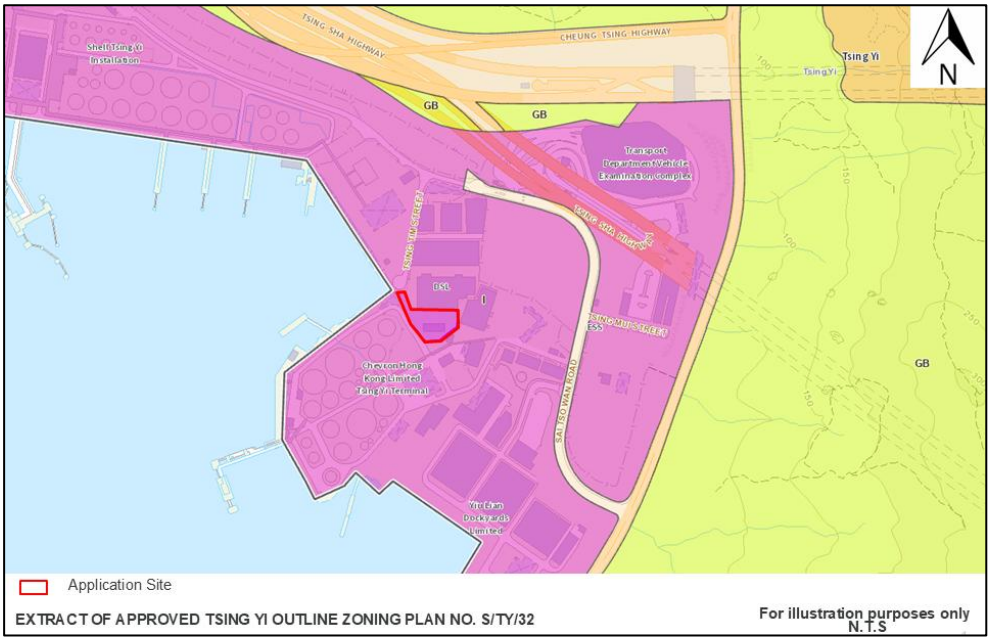

Figure 1: Location Plan of the Application Site

2.2 Land Status

The Application Site, TYTL No. 98 ("the Lot") held under New Grant No. TW6325, is restricted for the purposes of industrial or godown or both excluding any offensive trades. No building(s) shall be erected on the Lot except a factory or factories or a godown or godowns or both, ancillary offices and such canteen and other welfare facilities but excluding residential quarters for workmen employed on the Lot and also such quarters as may be required for watchman or caretakers. The maximum PR of any building or buildings erected or to be erected on the Lot shall not exceed 2.5 and the total site coverage of any building or buildings erected or to be erected on the Lot shall not exceed 60% of the area of the Lot.

A temporary waiver dated 3.9.2020 for a term of three years certain from 19.1.2018 and thereafter quarterly was granted to the applicant to permit the parking, loading and unloading spaces (which are infringe of the lease restriction on the prescribed dimensions of such parking, loading and unloading spaces to be provided within the Lot) for the existing development (i.e. a concrete batching plant). Upon TPB's approval on the subject application, the said wavier will continue to have effect at a payment of waiver fee by the Applicant.

2.3 Surrounding Environment

The surrounding areas have the following characteristics:

a) To its immediate north, east and southeast are industrial buildings mainly for godown, workshop and office purposes;

b) To its northeast is an open-air carpark under short term tenancy. To its further northeast across Sai Tso Wan Road and Tsing Sha Highway, is the Transport Department Vehicle Examination Complex;

c) To its northwest is Shell Tsing Yi Installation;

d) To the further northwest is the Hong Kong United Dockyards Limited where applications for three concrete batching plants (A/TY/147, A/TY/149 and A/TY/151) and two asphalt plants (A/TY/148 and A/TY/152) all on a temporary basis for a period of five years, were approved by the Committee between July 2024 and July 2025.

e) To its immediate southwest is Chevron Hong Kong Limited Tsing Yi Terminal; and

f) To its further south is Yiu Lian Dockyards Limited Tsing Yi Terminal.

2.4 Previous Planning Applications

There are four previous planning applications for temporary concrete batching plants covering the Application Site / part of the Application Site (Application No. A/TY/85, A/TY/123, A/TY/132 and A/TY/145). All the approval conditions of the latest previous planning application no. A/TY/145 have been complied with. The approval letter regarding the compliance with relevant approval conditions from the Planning Department is attached at **Appendix V**.

Application No.	Applied Use / Development	Decision
A/TY/85	Redevelopment of an Existing Concrete Batching Plant	Approved with Conditions until 24.10.2007
A/TY/123	Proposed Temporary Concrete Batching Plant for a Period of 3 Years	Approved with Conditions until 28.11.2017
A/TY/132	Proposed Temporary Concrete Batching Plant for a Period of 5 Years	Approved with Conditions until 14.10.2021
A/TY/145	Renewal of Planning Approval for Temporary Concrete Batching Plant for a Period of 5 Years	Approved with Conditions until 14.10.2026

Figure 2: Details of Previous Applications

2.5 Similar Planning Applications

There are 17 similar planning applications (No. A/TY/32, A/TY/58, A/TY/59, A/TY/101, A/TY/102, A/TY/110, A/TY/112, A/TY/117, A/TY/119, A/TY/126, A/TY/128, A/TY/136, A/TY/139, A/TY/143, A/TY/147, A/TY/149 and A/TY/151) for concrete batching plant use within the "I" zone on the Tsing Yi OZP. Among all applications, three applications (No. A/TY/32, A/TY/58 and A/TY/59) approved on a permanent basis between January 1995 and May 2000 were subsequently not implemented and the planning permissions were lapsed.

The rest of the applications, except application no. A/TY/101, were approved with conditions by TPB for a period of 3 years or 5 years between February 2008 and July 2025. In general, the approvals were granted on the grounds that developments were generally in line with the planning intention of the "I" zone; considered not incompatible with the surrounding industrial related development; and no adverse comments from relevant government departments were received.

While application no. A/TY/101 was rejected in September 2007 as the development with a special mode of operation was not compatible with the adjacent proposed recreation and tourism-related uses to the north-west of the site from the land use compatibility point of view; and the traffic impact assessment submitted was not acceptable in demonstrating that the development would not generate adverse traffic impact on the surrounding area.

Application No.	Applied Use / Development	Decision
A/TY/32	Cement Manufacturing and Concrete Batching Plant	Approved with Conditions
A/TY/58	Proposed Asphalt Concrete Batching and Cement Manufacturing Plant	Approved with Conditions
A/TY/59	Proposed Asphalt Concrete Batching and Cement Manufacturing Plant	Approved with Conditions
A/TY/101	Concrete Batching Plant	Rejected on 28.9.2007
A/TY/102	Temporary Concrete Batching Plant for a Period of 3 Years	Approved with Conditions
A/TY/110	Renewal of Planning Approval for Temporary Concrete Batching Plant Use for a Period of 3 Years	Approved with Conditions
A/TY/112	Temporary Concrete Batching Plant for a period of 3 years	Approved with Conditions *revoked on 24.6.2012
A/TY/117	Proposed Temporary Concrete Batching Plant for a Period of 3 Years	Approved with Conditions *revoked on 6.10.2014
A/TY/119	Temporary Concrete Batching Plant for a Period of 3 Years	Approved with Conditions

A/TY/126	Proposed Temporary Concrete Batching Plant for a Period of 5 Years	Approved with Conditions
A/TY/128	Temporary Concrete Batching Plant for a Period of 5 Years	Approved with Conditions
A/TY/136	Proposed Temporary Concrete Batching Plant for a Period of 5 Years	Approved with Conditions
A/TY/139	Temporary Concrete Batching Plant for a Period of 5 Years	Approved with Conditions
A/TY/143	Renewal of Planning Approval for Temporary Concrete Batching Plant for a Period of Five Years	Approved with Conditions
A/TY/147	Renewal of Planning Approval for Temporary Concrete Batching Plant for a Period of 5 Years	Approved with Conditions
A/TY/149	Renewal of Planning Approval for Temporary Concrete Batching Plant for a Period of 5 Years	Approved with Conditions
A/TY/151	Renewal of Planning Approval for Temporary Concrete Batching Plant for a Period of 5 Years	Approved with Conditions

**A/TY/112 revoked due to non-compliance with approval conditions in relation to the implementation of the operation control and traffic management measures, and landscape proposal, and provision of emergency vehicular access, water supplies for fire fighting and fire service installations proposals.*

**A/TY/117 revoked due to non-compliance with approval conditions in relation to the implementation of water supplies for fire fighting and fire service installations proposals.*

Figure 3: Details of Similar Applications

3 Planning Context

3.1 Planning Intention

The planning context has largely remained unchanged since the previous approved application No. A/TY/145. According to the OZP, the planning intention of the subject "I" zone is intended primarily for general industrial uses to ensure an adequate supply of industrial floor space to meet demand from production-oriented industries. Information technology and telecommunications industries and office related to industrial use are also always permitted in this zone.

3.2 Statutory Planning Control

According to the OZP, within the subject "I" zone, no new development, or addition, alteration and / or modification to or redevelopment of an existing building shall result in a total development and / or redevelopment in excess of a maximum plot ratio of 9.5, or the plot ratio of the existing building, whichever is the greater.

3.3 Town Planning Board Guideline No. 34D ("TPB PG-No.34D")

With reference to the TPB PG-No. 34D on Renewal of Planning Approval, a streamlined approach could be adopted in which no new technical assessments will be required to support the application. The guideline also sets out the criteria in assessing the planning renewal application as follows:

(a) whether there has been any material change in planning circumstances since the previous temporary approval was granted (such as a change in the planning policy/land-use zoning for the area) or a change in the land uses of the surrounding areas;

(b) whether there are any adverse planning implications arising from the renewal of the planning approval (such as pre-emption of planned permanent development);

(c) whether the planning conditions under pervious approval have been complied with to the satisfaction of relevant Government departments within the specified time limits;

(d) whether the approval period sought is reasonable; and

(e) any other relevant consideration.

3.4 Hong Kong Planning Standard and Guidelines

According to the Chapter 5 of Hong Kong Planning Standards and Guidelines ("HKPSG"), 'Concrete Batching Plant' could be classified as a special industrial activity. It mainly engages in heavy industries and the handling bulky commodities, raw materials and/or dangerous goods. Special industries are generally capital intensive, land intensive and often have special infrastructure and locational requirements. Subject to functional requirements, the location of special industries should be: (a) land extensive; (b) remote from residential areas; (c) preferably in the western quadrant of residential areas; (d) preferably in areas with good air dispersion capacities and where pollution is not serious; (e) sites with deep water frontage; and (f) directly assessed to sea transport and a safe navigational approach route for ships must be available.

According to Chapter 9 of the HKPSG, concrete batching plants are considered sources of dusty air pollution. It is suggested that air polluting industries should be located to the west or southwest of the main urban centres and new towns. These industries should preferably not be located in

topographically-confined areas. Adequate buffer areas should be given between the air-polluting uses and sensitive receivers.

3.5 Territorial Context

To unleash the development potential of Hong Kong, a number of large-scale public infrastructures and developments have been/ will be commenced, including the Tsing Yi – Lantau Link, Northern Metropolis (including New Territories North, Kwu Tung North, Fanling North, San Tin Technopole, Yuen Long South), and Tseung Kwan O Area 137 etc. These major public projects will significantly increase demand for concrete in the coming years.

With reference to the Long-Term Housing Strategy ("LTHS") Annual Progress Report 2025, the total housing supply target for the next decade will be 420,000 units. Since concrete mix is one of the main construction materials used for buildings, a stable concrete supply is essential to meet the increasing housing need. According to the Civil Engineering and Development Department's (CEDD) "Study on Land Requirements for Construction Industry", the demand for concrete would increase 20% by 2030. In longer terms, the reclamation projects outside the Victoria Harbour will also require abundant supply of concrete.

Additionally, the Government aims to play an active role in the development of the Guangdong-Hong Kong-Macao Greater Bay Area and hence there will be a strong demand for professional and infrastructure services including the construction sector for various projects.

4 The Current Use

The Applicant intends to continue the operation of the Use at the Application Site, which has a site area of about 3,355m^2, on a temporary basis for further 5 years. There will be no changes in the development parameters, e.g. site coverage, building height or plot ratio, in relation to the continuation of the Use at the Application Site as compared to the last planning approval under application no. A/TY/145, as listed in the table below.

Development Parameters	**Last Approval Scheme A/TY/145**	**Current Application**
Site Area	About 3,355m^2	No Changes
Site Coverage	Not more than 26%	
Gross Floor Area	Not more than 980m^2	
Plot Ratio	Not more than 0.3	
Maximum Building Height of the Structure(s)	Not more than 44.9mPD (Not more than 37.5m)	
No. of Private Car Parking Spaces	9	

No. Concrete Truck/Lorry Parking Spaces	6	
No. of Trailer Parking Spaces	1	
No. of Loading / Unloading Bays for Concrete Truck/Lorry	3	

Figure 4: Development Parameters of the Use

According to the applicant, the layout, development parameters, and operational parameters of the concrete batching plant remain unchanged compared with those approved under planning application A/TY/145. The concrete batching plant comprises cement overhead silos, aggregate bins, admixture tanks, an ice-handling facility, a customer switch room, transfer towers, conveyor belts, water tanks, and truck washing and waste management facilities, including a concrete reclaimer and a filter press room, etc. The total production capacity remains the same as that approved under the last planning approval, i.e. 88.8 m^3 per hour.

The plants operates from 7:00am to 7:00pm from Mondays to Saturdays, and occasionally during night time and on Sundays/public holidays, if required. The number of workers at the plant is limited to 10. A total of nine private car parking spaces, six concrete truck/lorries parking spaces, one trailer parking space and three loading/unloading spaces for concrete trucks/lorries will be provided within the site (**Appendix I**).

The Traffic Impact Assessment and Traffic Management Plan, as set out in **Appendices II and III**, concluded that no adverse traffic impacts would be induced in the surrounding area. Proper design layout, traffic arrangement, environmental measures, and fire services installations will continue to be provided to ensure that no insurmountable impacts occur and to prevent fire risks.

5 Justifications

5.1 No Material Change Since Previous Approval

The development parameters of the current concrete batching plant at the Application Site will remain unchanged. There is no significant change in planning circumstances since the latest temporary approval granted in 2021 such as land use zoning, planning policy and the land use in the vicinity. Approval of this Application is in line with the TPB's previous decisions.

5.2 Compliance with Planning Conditions

The plant has been well-managed and has received no complaints in past years. The Applicant has complied with all the approval conditions of the latest previous application No. A/TY/145, including but not limited to the approval conditions related to the submission of a traffic management plan including contingency plan and associated mitigation measures and traffic facilities, and the implementation of the approved traffic management plan during the operation period of the concrete batching plant.

5.3 Adoption of Streamlined Approach for the Application

The Use at the Application Premises has been operating since 2015. According to TPB PG-No. 34D for renewal of planning approval, a streamlined approach (i.e. no need to undertake new technical assessments to support the s.16 application) could be adopted provided that there are no material changes in planning circumstances, adverse planning implications or non-compliance with planning conditions of previous approval. As such, updated technical assessments are considered suffice to support the subject renewal planning application.

5.4 In Line with the Planning Intention and Compatible with Surrounding Area

The Application Site is zoned "I" on the OZP and the Use falls under Column 2 which may be permitted with or without conditions on application to TPB. The subject "I" zone is intended primarily for general industrial uses to ensure an adequate supply of industrial floor space to meet demand from production-oriented industries. In this connection, the Use is generally in line with the planning intention.

Although the Application Site is located in proximity to rezoning application area (i.e. Y/TY/2) for the proposed comprehensive private residential and public housing development, together with a marina and supporting community facilities at Tsing Yi Town Lot 80 and 108 RP and adjoining Government Land, the rezoning application is currently undergoing public inspection, and the implementation of the proposed development remains uncertain. Furthermore, the Tsing Yi – Lantau Link ("TYLL"), which would encompass the Application Site to the northeast under the proposed alignment, is currently under study. Overall, the temporary nature of the Use will not prejudice the long-term planning of the area.

Moreover, the Application Site is situated in an industrial area that includes a cluster of concrete batching plants and asphalt plants. It is separated from any sensitive receivers by a range of hills, located over 1000m from the residential development in the north-eastern part of Tsing Yi. As a result, the likelihood of any adverse environmental impact arising from the Use is unlikely.

5.5 Meeting the Demand of Local Construction Industry

The Use provides a timely delivery of ready-mixed concrete in Hong Kong, which is crucial to the construction industry. There will be an increasing demand for construction materials, including concrete, due to the implementation of large-scale projects in Hong Kong, such as the Tsing Yi – Lantau Link, Northern Metropolis (including New Territories North, Kwu Tung North, Fanling North, San Tin Technopole and Yuen Long South), and Tseung Kwan O Area 137 etc. Given the strong demand for concrete mix, the planning permission for the current batching operation should be renewed to ensure a steady supply that supports the local construction industry.

5.6 Strategic location of the Application Site for the Proposed Development

The Application Site is strategically located at the centre of Hong Kong, with relatively equidistance to major construction sites in Kowloon East, North District, North Lantau and Northern Hong Kong Island. Also, the convenient access provided by the strategic road network in Tsing Yi is considered desirable for the concrete batching plant development and will enhance the efficiency to distribute ready mixed concrete to various areas of Hong Kong.

According to Chapter 5 and 9 of the HKPSG, a concrete batching plant can be classified as a 'special industrial activity' and is recognized as a source of dusty air pollution. The Application Site meets all the locational requirements for the current use. It is situated at a remoting area of Tsing Yi West industrial area and in the western quadrant in relation to the residential area of Tsing Yi, thereby satisfying the downwind requirement for most of the year.

The Application Site is not positioned in an area that is susceptible to severe air pollution and is not within a topographically confined airshed. The range of high hills at the centre part of Tsing Yi Island serves as a partition to block off potential environmental impacts and disturbances to the residential areas in the north-eastern part of Tsing Yi.

5.7 Approved Planning Applications for Concrete Batching Plants Nearby

Since 2008, all the previous and similar planning applications for concrete batching plants within the same Site and other "I" zones within the same OZP have been approved based on the grounds that the developments were generally in line with the planning intention of the "I" zone; considered not incompatible with the surrounding industrial related developments; and no adverse comments were received from relevant Government departments. The approval of this planning application is in line with TPB's previous decisions.

5.8 No Adverse Impacts

Since there have been no changes to the development parameters compared to the previously approved scheme No. A/TY/145, the current development is not expected to generate any adverse impacts in terms of traffic, air, water quality, waste or risk.

<u>Traffic</u>

The traffic impact assessment and traffic management plan have confirmed that the Use will not generate additional traffic on the surrounding road network. The contingency plan and traffic facilities outlined in the traffic management plan will be implemented accordingly. Therefore, no additional adverse traffic impact is anticipated.

Air

In terms of environment, no additional emission sources have been identified, as there are no changes to the current development. Also, there has been no change in the surrounding and nearby uses since the previous application. With the implementation of the mitigation measures discussed in the previously approved Environmental Assessment, no adverse environmental impacts due to the operation of the development are anticipated.

Water Quality

Furthermore, no wastewater will be discharged from the plant during operation, as all wastewater will be recycled. Wastewater generated from mixer truck cleaning, wheel washing, general site cleaning, and truck cleaning upon exit is collected and treated using on-site wastewater recycling system and a recycled water tank for recycling and reuse.

Wastewater from mixer truck cleaning is treated by a mobile slurry separator to separate the aggregate, followed by a filter press to capture cement particles. The resulting clear water is collected in water tanks for recycling. The existing concrete batching plant has been designed to retain all wastewater and surface runoff within the facility, with all water collected in pits for recycling; thus, no water is discharged from the plant.

Domestic sewage from the workforce is collected by modular toilets, temporarily stored, and treated using a Membrane Bio-reactor (MBR) before being transported away by vacuum tanker for proper disposal at outlets approved by the Drainage Services Department (DSD).

Waste

The majority of solid waste generated from plant operations consists of waste concrete, slurry, chemical waste from the maintenance of on-site plant, and general refuse from site workers. Waste aggregates separated from the wastewater are reused in production to minimize waste generation. Dried cement captured by the filter press from wastewater will be disposed of by waste disposal trucks. Approximately 30 tonnes of waste concrete per day will undergo filter-press dewatering prior to disposal. The resulting mud cake will be disposed of at the TM38 Fill Bank in accordance with the relevant statutory requirements. The Applicant has obtained the admission ticket for the disposal of waste concrete. Separately, approximately 15 tonnes of slurry per day on average will be disposed of at the TM38 Landfill without pre-treatment. The Applicant has also obtained the relevant waste chit ticket for slurry disposal and will comply with the relevant statutory requirements for slurry disposal. Chemical waste is expected only during rare maintenance and repair due to equipment breakdown. However, the temporary concrete batching plant has already registered as a chemical waste producer. A licensed chemical waste collector is engaged for the proper disposal of chemical waste, and records of “Trip Tickets” are maintained in the site office.

General refuse is collected in on-site enclosed rubbish bins and picked up by the waste collector daily or every two days to minimize odors, pests, and litter. Provided that mitigation measures discussed in the previously approved Environmental Assessment are properly implemented in the handling and

disposal of generated waste, no adverse environmental impacts associated with solid waste management are anticipated.

Risk

For risks aspect, there will be no change in the working population of the plant as compared with the previously approved Application No. A/TY/145 (i.e. 10 workers), and hence the risk level on the plant is considered acceptable.

6 Conclusion

The subject Application is submitted to seek TPB's permission for renewal of the planning approval for a period of 5 years at 14 – 18 Tsing Tim Street, TYTL No. 98, Tsing Yi, New Territories, to continue the operation of the Use under the previously approved planning application No. A/TY/145, which will be valid until 14 October 2026. There is no material change to the development parameters of the Application Site. Besides, all the planning conditions under previous approval have been complied with. The Use under this Application supports the local construction sector in order to meet the growing demand for concrete products. It is of temporary nature and compatible with its surrounding environment in terms of land use, traffic, and environmental aspects. Moreover, the Use at the Application Site is also supported by previous applications and similar applications. In view of above, favourable consideration by the TPB is hereby sought to approve this Application.

7 Appendices

Appendix I	Schematic Drawings
Appendix II	Traffic Impact Assessment ("TIA") Report
Appendix III	Traffic Management Plan
Appendix IV	Approval Letter of Planning Application No. A/TY/145
Appendix V	Approval Letter regarding Compliance of Approval Condition (b) and (c)
Appendix VI	Certificate of FS 251
Appendix VII	Response to Comments received during the Pre-Submission Enquiry