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收件者: tpbpd/PLAND
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主旨: [FI] S.16 Planning Application No. A/YL-KTN/1213 - Further Information
附件: FI2 for A_YL-KTN_1213 (20260611).pdf
類別: Internet Email

Dear Sir,

We are writing to submit a response-to-comments table, a traffic impact assessment report and a fire service installations proposal of the subject application for the consideration of Government departments (*attached*).

Should you require more information, please do not hesitate to contact us. Thank you for your kind attention.

Kind Regards,

Danny NG | Town Planner
R-riches Group (HK) Limited

R-riches Property Consultants Limited | R-riches Planning Limited | R-riches Construction Limited

[REDACTED]

Our Ref. : DD107 Lot 1866 S.A & VL
Your Ref. : TPB/A/YL-KTN/1213

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

By Email

11 June 2026

Dear Sir,

2nd Further Information

**Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years
in “Comprehensive Development Area (1)” Zone,
Various Lots in D.D. 107 and Adjoining Government Land, Kam Tin, Yuen Long, New Territories**

(S.16 Planning Application No. A/YL-KTN/1213)

We are writing to submit a response-to-comments table, a traffic impact assessment (TIA) report and a fire service installations proposal of the subject application for the consideration of Government departments (**Appendices I to III**).

Should you require more information regarding the application, please contact the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

For and on behalf of
R-riches Planning Limited



Danny NG
Town Planner

cc DPO/FSYLE, PlanD

(Attn.: Ms. Andrea YAN
(Attn.: Mr. David CHENG
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email: awyyan@pland.gov.hk)
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2nd Further Information

**Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years
in “Comprehensive Development Area (1)” Zone,
Various Lots in D.D. 107 and Adjoining Government Land, Kam Tin, Yuen Long, New Territories**

(S.16 Planning Application No. A/YL-KTN/1213)

1. The applicant would like to submit a response-to-comments table for the consideration of Government departments:

Comments of the Commissioner of Transport (C for T) Contact Person: Mr. Phil CAI, Tel.: 2399 2421)		
(1)	<p>Given the size of the development, the applicant should provide a traffic review to assess the traffic impact to Castle Peak Road - Tam Mi and the local access.</p> <p>The applicant should provide the reference for the envisage trip attraction and generation.</p>	<p>Noted. A traffic impact assessment of the application site is enclosed for your reference at Appendix II.</p>

**S16 Planning Application for Proposed Temporary Public
Vehicle Park (Excluding Container Vehicle) for a Period
of 5 Years in Various Lots in D.D. 107 and
Adjoining Government Land, Cheung Chun San Tsuen,
Kam Tin, Yuen Long, N.T.
(Application No. A/YL-KTN/1213)**

TIA Report

June 2026



CTA Consultants Limited

志達顧問有限公司

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1. INTRODUCTION

1.1 Background

1.1.1 CTA Consultants Limited (“CTA”) is commissioned to carry out a Traffic Impact Assessment report for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (hereafter called “the temporary PVP”). The temporary PVP is bounded by Shui Mei Road to the north, Cheung Chun San Tsuen to the south and Park Yoho Tower 8A/8B to the west as shown in **Figure 1.1**.

1.1.2 The applicant site is currently in operation with approximately 132 nos. of parking spaces, it is proposed to increase to 220 nos. of parking spaces (i.e. 218 nos. of private car parking spaces and 2 nos. of light goods vehicle parking spaces), with increase of 88 nos. of parking spaces (hereafter called “the proposed increase number of parking spaces at the temporary PVP”).

1.2 Study Objectives

1.2.1 The main objectives of this study are as follows:

- to assess the existing traffic conditions in the vicinity of the temporary PVP;
- to forecast traffic demands on the adjacent road network in the design year 2031;
- to estimate the likely traffic generated due to the increase number of parking spaces at the temporary PVP;
- to assess the possible impacts of traffic generation due to the increase number of parking spaces at the temporary PVP on the adjacent road network; and
- to recommend improvement measures, if necessary, to alleviate any foreseeable traffic problems on the road network.



2. THE PROPOSED INCREASE NUMBER OF PARKING SPACES AT THE TEMPORARY PVP

2.1 Site Location

2.1.1 The temporary PVP is located at Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. It is bounded by Shui Mei Road to the north, Cheung Chun San Tsuen to the south and Park Yoho Tower 8A/8B to the west as shown in **Figure 1.1**.

2.2 Development Parameters

2.2.1 Development parameters of the proposed increase number of parking spaces at the temporary PVP are summarized in **Table 2.1**.

Table 2.1 Development Parameters

Site Location	Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T.
Existing and Proposed Use	Temporary PVP
Existing Number of Parking Spaces [A]	~132
Proposed Number of Parking Spaces [B]	Private car parking spaces: 218 LGV parking spaces: 2 Total parking spaces: 220
Net Difference [B]-[A]	+88

2.2.2 It is anticipated that the proposed increase number of parking spaces at the temporary PVP for a period of 5 years, until year 2031. Therefore, design year 2031 is adopted for assessments.



2.3 Internal Transport Facilities Provisions

2.3.1 The ground floor layout plan of the temporary PVP (with the proposed increase number of parking spaces) showing the internal transport provision is shown in **Figure 2.1**.

2.4 Proposed Vehicular Access

2.4.1 The existing vehicular access of 6m wide, connecting to Shui Mei Road which is linking to Castle Peak Road – Tam Mei, will be adopted for the temporary PVP (with the proposed increase number of parking spaces). Location of the vehicular access is shown diagrammatically in **Figure 2.1**.

2.5 Swept Path Analysis

2.5.1 Swept path analysis for LGV is shown in **Figure SP-01**. The swept path analysis demonstrates it is feasible to maneuver LGV within the temporary PVP (with the proposed increase number of parking spaces).



3. THE EXISTING TRAFFIC CONDITIONS

3.1 Critical Junctions

3.1.1 Four junctions were identified to be critical for the traffic impact assessment due to the proposed increase number of parking spaces at the temporary PVP which are listed **Table 3.1** and illustrated diagrammatically in **Figure 3.1**. Their existing junction arrangements and Method of Control (MOC) are shown in **Figure 3.2** to **Figure 3.6** respectively.

Table 3.1 Identified Critical Junction

Ref.	Junction	Type	Figure No.
J1	Sam Tam Road / Sha Po Tsuen Road	Priority	3.2
J2	Castle Peak Road – Tam Mei / Sam Tam	Signal	3.3
J3	Castle Peak Road – Tam Mei (Southbound) / Access Road to Application Site	Priority	3.4
J4A	Castle Peak Road – Tam Mei (Southbound) / Ko Po Path	Priority	3.5
J4B	Castle Peak Road – Tam Mei (Northbound) / Nam Sang Wai Road	Priority	3.6

3.1.2 In order to establish the existing traffic condition in the above-mentioned critical junctions, traffic survey in form of manual classified count was conducted. The traffic survey was carried out during the morning and evening peak periods (7:30am to 9:30 am and 5pm to 7pm) on a typical weekday on 14 May 2026. Analysis of the observed traffic data indicates that the AM and PM peak hour flows occurred from 8am to 9am and 5:15pm to 6:15pm respectively. The observed traffic flows are presented in **Figure 3.7**.

3.1.3 Existing operational performance of the critical junctions are listed in **Table 3.2** and the junction calculation sheets are attached in **Appendix A**.



Table 3.2 Operational Performance of Identified Critical Junctions in 2026

Ref.	Junction	Method of Control	Year 2026 Existing RC/DFC ⁽¹⁾	
			AM Peak	PM Peak
J1	Sam Tam Road / Sha Po Tsuen Road	Priority	0.13	0.06
J2	Castle Peak Road – Tam Mei / Sam Tam	Signal	73%	73%
J3	Castle Peak Road – Tam Mei (Southbound) / Access Road to Application Site	Priority	0.35	0.26
J4A	Castle Peak Road – Tam Mei (Southbound) / Ko Po Path	Priority	0.39	0.12
J4B	Castle Peak Road – Tam Mei (Northbound) / Nam Sang Wai Road	Priority	0.07	0.09

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

3.1.4 The assessment results in **Table 3.2** indicate that all critical junctions are at present operating with ample capacities during the peak hours.



4. THE FUTURE TRAFFIC CONDITIONS

4.1 Design Year

4.1.1 It is anticipated that the proposed increase number of parking spaces at the temporary PVP for a period of 5 years, until year 2031. Therefore, design year 2031 is adopted for assessments.

4.2 Traffic Forecasts

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

- I. Historical traffic growth in Annual Traffic Census (ATC) published by the Transport Department (TD).
- II. 2021-Based Territorial Population and Employment Data Matrices (TPEDM) published by the Planning Department.

Annual Traffic Census

4.2.2 Numerous traffic count stations are located in the vicinity of the proposed redevelopment and the traffic counts of the concerned stations reported in the Annual Traffic Census (ATC) over a period of 6 years, between 2016 and 2024 are summarized in **Table 4.1**.



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

ATC Stn	Road Name	Annual Average Daily Traffic (AADT)						Avg. Annual Growth Rate
		2016	2017	2018	2022	2023	2024	
5019	Castle Peak Road - Yuen Long (from Yuen Long On Lok Road to Kam Tin Road)	31,990	30,040	29,300	28,180	55,700	57,460	7.60%
5016	San Tin Highway, Castle Peak Road & San Tam Road (from Kam Tin Road to Fairview Park Boulevard)	92,230	90,650	86,230	82,820	88,760	-(3)	1.69%
5044	San Tin Highway (from Fung Kat Heung to Fairview Park Boulevard)	-(3)	-(3)	-(3)	-(3)	-(3)	89,230	-(3)
5045	Castle Peak Road - Tam Mi (from Kam Tin Road to Fairview Park Boulevard)	-(3)	-(3)	-(3)	-(3)	-(3)	5,040	-(3)
5046	San Tam Road (from Kam Tin Road to Fairview Park Boulevard)	-(3)	-(3)	-(3)	-(3)	-(3)	11,230	-(3)
Total		124,220	120,690	115,530	111,000	144,460	162,960	3.45%

Notes:

- (1) * AADT estimated by Growth factor.
- (2) Traffic volumes for Year 2019 to Year 2021 may be suppressed by the special working arrangement implemented during the COVID-19 outbreak period and/or social event outbreak, therefore AADT from Year 2019 to Year 2021 are not adopted.
- (3) ATC Station 5016 was replaced by ATC Stations 5044, 5045 & 5046 in Year 2024.

Planning Data

4.2.3 Reference has also been made to the 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 from years 2026 to 2031. The average annual growth rates in terms of population and employment from 2026 to 2031 are tabulated in **Table 4.2**.



Table 4.2 TPEDM Planning Data from 2026 to 2031

Zone	Population		Avg. Annual Growth Rate	Employment		Avg. Annual Growth Rate
	2026	2031		2026	2031	
Yuen Long	685,000	760,600	2.12%	238,500	258,200	1.60%

Adopted Growth Rate

- 4.2.4 A.A.D.T. of ATC indicates that the traffic flows in the local road network has an average annual growth rate of +3.45% from 2016 to 2024.
- 4.2.5 Whilst, the planning data indicates that the population and employment data of the study area are expected to grow with an average annual growth rate of 2.12% and 1.60% respectively from 2026 to 2031.
- 4.2.6 As a conservative approach, annual growth rate of **+3.45%** p.a. is adopted.

4.3 Reference Traffic Flows

- 4.3.1 The 2031 reference traffic flows are then derived by the following and presented diagrammatically in **Figure 4.1**.

$$\begin{array}{l}
 \text{2031} \\
 \text{Reference Traffic} \\
 \text{Flows} \\
 \text{(Without Proposed} \\
 \text{Increase number of} \\
 \text{parking spaces at} \\
 \text{the temporary PVP)}
 \end{array}
 = (
 \begin{array}{l}
 \text{2026} \\
 \text{Observed} \\
 \text{Traffic} \\
 \text{Flows}
 \end{array}
 \times
 \begin{array}{l}
 \text{Adopted} \\
 \text{Growth Factor} \\
 \text{(i.e. +3.45\%} \\
 \text{for 5 years)}
 \end{array}
) +
 \begin{array}{l}
 \text{Traffic Flows} \\
 \text{of Planned} \\
 \text{Adjacent} \\
 \text{Development}
 \end{array}$$



4.4 Traffic Generations and Attractions of Proposed Increase Number of Parking Spaces at the temporary PVP

4.4.1 In order to estimate the traffic generations and attractions of the proposed increase number of parking spaces at the temporary PVP, reference has been made to the trip generation rates of the trip rates of the existing temporary PVP (the application site) and summarized in **Table 4.3**.

Table 4.3 Traffic Trip Rates of Existing Temporary PVP

Temporary PVP	Unit	AM Peak hour		PM Peak hour	
		GEN	ATT	GEN	ATT
Existing	pcu/hr/parking space	0.15	0.02	0.03	0.07

4.4.2 Based on the trip rates in **Table 4.3** and the proposed increase number of parking spaces at the temporary PVP parameters listed in **Table 2.1**, the estimated generation and attraction due to the proposed increase number of parking spaces at the temporary PVP are summarized in **Table 4.4**.

Table 4.4 Estimated Net Difference of Traffic Generation and Attraction of Proposed Increase Number of Parking Spaces at the Temporary PVP

Proposed	Unit	AM Peak hour		PM Peak hour	
		GEN	ATT	GEN	ATT
+88 parking spaces	pcu/hr	+14	+2	+3	+7



4.5 Design Traffic Forecasts

4.5.1 The traffic generated by the proposed increase number of parking spaces at the temporary PVP was then superimposed onto the 2031 reference traffic flows (without proposed increase number of parking spaces at the temporary PVP) to derive the 2031 design traffic flows (with proposed increase number of parking spaces at the temporary PVP).

$$\begin{array}{l} \text{2031 Design} \\ \text{Traffic Flows} \\ \text{(With Proposed} \\ \text{Increase number of} \\ \text{parking spaces at the} \\ \text{temporary PVP)} \end{array} = \begin{array}{l} \text{2031 Reference} \\ \text{Traffic Flows} \\ \text{(Without Proposed} \\ \text{Increase number of} \\ \text{parking spaces at the} \\ \text{temporary PVP)} \end{array} + \begin{array}{l} \text{Net Difference} \\ \text{Traffic Flows of} \\ \text{Proposed} \\ \text{Increase number} \\ \text{of parking spaces} \\ \text{at the temporary} \\ \text{PVP} \end{array}$$

4.5.2 The 2031 design traffic flows (with proposed increase number of parking spaces at the temporary PVP) is shown in **Figure 4.2**.



5. TRAFFIC IMPACT ASSESSMENT

5.1 Operational Assessment

5.1.1 To assess the traffic impact due to the proposed increase number of parking spaces at the temporary PVP, operational performance assessments of the critical junctions are identified in **Chapter 3** are carried out for both reference (without proposed increase number of parking spaces at the temporary PVP) and design (with proposed increase number of parking spaces at the temporary PVP) scenarios in year 2031. The results are summarized in **Table 5.1** and the junction calculation sheets are attached in **Appendix A**.

Table 5.1 Operational Performance of Identified Critical Junctions in Year 2031 (With and Without Proposed Increase Number of Parking Spaces at the Temporary PVP)

Ref.	Junction	Method of Control	Year 2031 RC/DFC ⁽¹⁾			
			Reference Scenario (Without Proposed Increase Number of Parking Spaces at the Temporary PVP)		Design Scenario (With Proposed Increase Number of Parking Spaces at the Temporary PVP)	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Sam Tam Road / Sha Po Tsuen Road	Priority	0.16	0.08	0.16	0.08
J2	Castle Peak Road – Tam Mei / Sam Tam	Signal	46%	46%	46%	46%
J3	Castle Peak Road – Tam Mei (Southbound) / Access Road to Application Site	Priority	0.47	0.35	0.49	0.35
J4A	Castle Peak Road – Tam Mei (Southbound) / Ko Po Path	Priority	0.61	0.18	0.62	0.18
J4B	Castle Peak Road – Tam Mei (Northbound) / Nam Sang Wai Road	Priority	0.10	0.12	0.10	0.12

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



5.1.2 The assessment results in **Table 5.1** revealed that all critical junctions would still operate within their capacities in both reference scenario (without proposed increase number of parking spaces at the temporary PVP) and design scenario (with proposed increase number of parking spaces at the temporary PVP) in 2031 during the peak hours.



6. SUMMARY AND CONCLUSION

6.1 Summary

- 6.1.1 CTA Consultants Limited (CTA) is commissioned as the traffic consultant to prepare the Traffic Impact Assessment (TIA) and provide technical justifications in supporting the planning application from traffic engineering point of view.
- 6.1.2 To appraise the existing traffic condition, manual-classified counting surveys were conducted at critical junctions in 2026. Current operational performance of the critical junctions has been assessed. The results reveal that all critical junctions are at present operating within its capacities.
- 6.1.3 Assessment of operational performance of the critical junctions revealed that all critical junctions would still operate within their capacities in both reference scenario (without proposed increase number of parking spaces at the temporary PVP) and design scenario (with proposed increase number of parking spaces at the temporary PVP) in 2031.
- 6.1.4 The peak traffic generated by the proposed increase number of parking spaces at the temporary PVP is small and would induce insignificant impact on the surrounding road network.
- 6.1.5 Therefore, the application is supported from the traffic points of view.

6.2 Conclusion

- 6.2.1 In conclusion, this TIA has demonstrated that the related traffic trips related to the proposed increase number of parking spaces at the temporary PVP can be absorbed by the nearby road network and no significant traffic impact will be induced.
- 6.2.2 Therefore, the proposed increase number of parking spaces at the temporary PVP is reckoned feasible from traffic engineering point of view.



FIGURE NO.:		1.1
PROJECT NO.:		26040HK
SCALE:	DATE:	
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PROJECT TITLE: S16 Planning Application for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (Application No. A/YL-KTN/1213)

DRAWING TITLE:

SITE LOCATION PLAN



CTA Consultants Limited
志達顧問有限公司

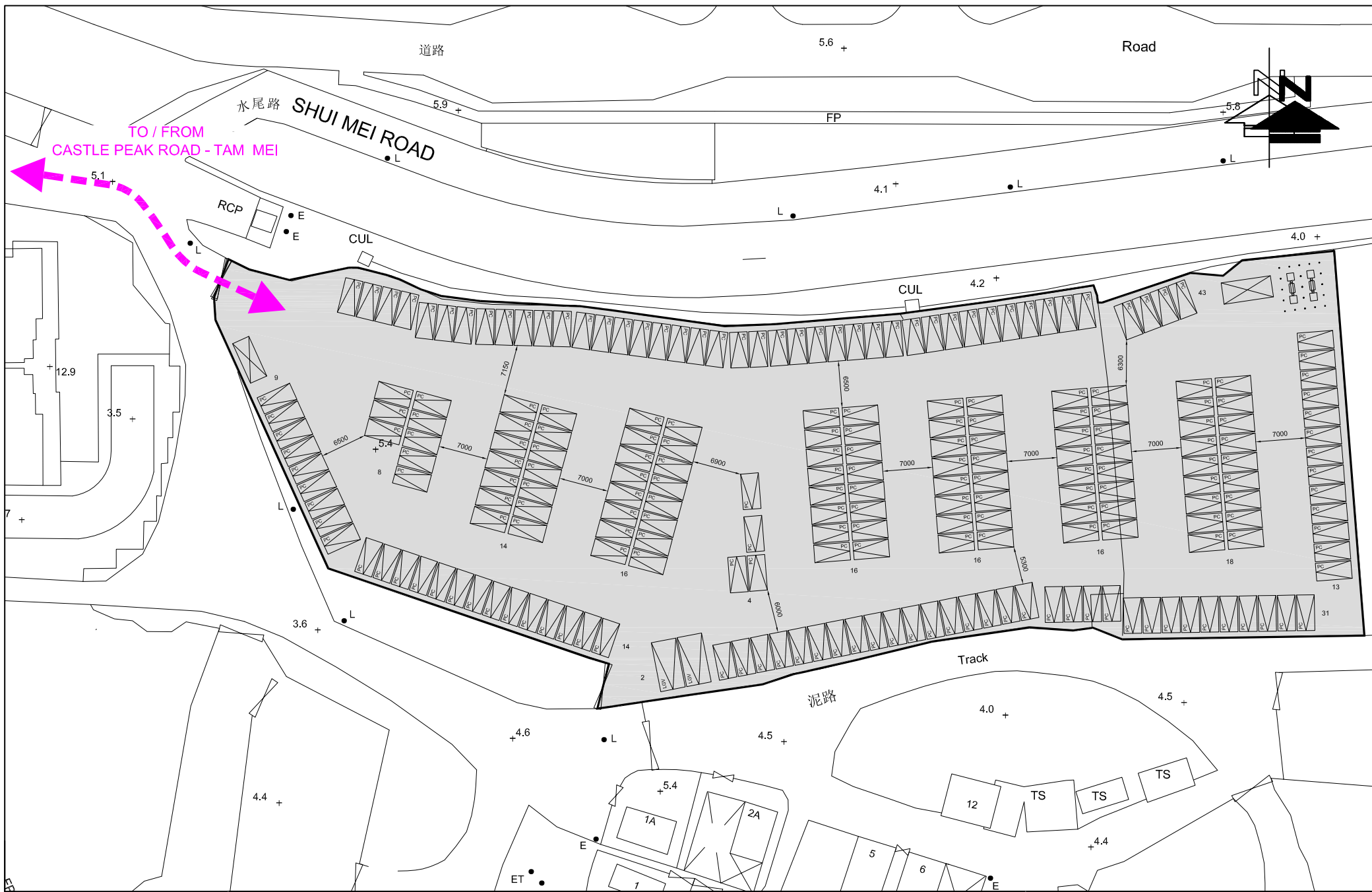


FIGURE NO.:		2.1
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DRAWING TITLE: PROPOSED VEHICULAR ACCESS FOR PROPOSED INCREASE NUMBER OF PARKING SPACES AT THE TEMPORARY PVP	



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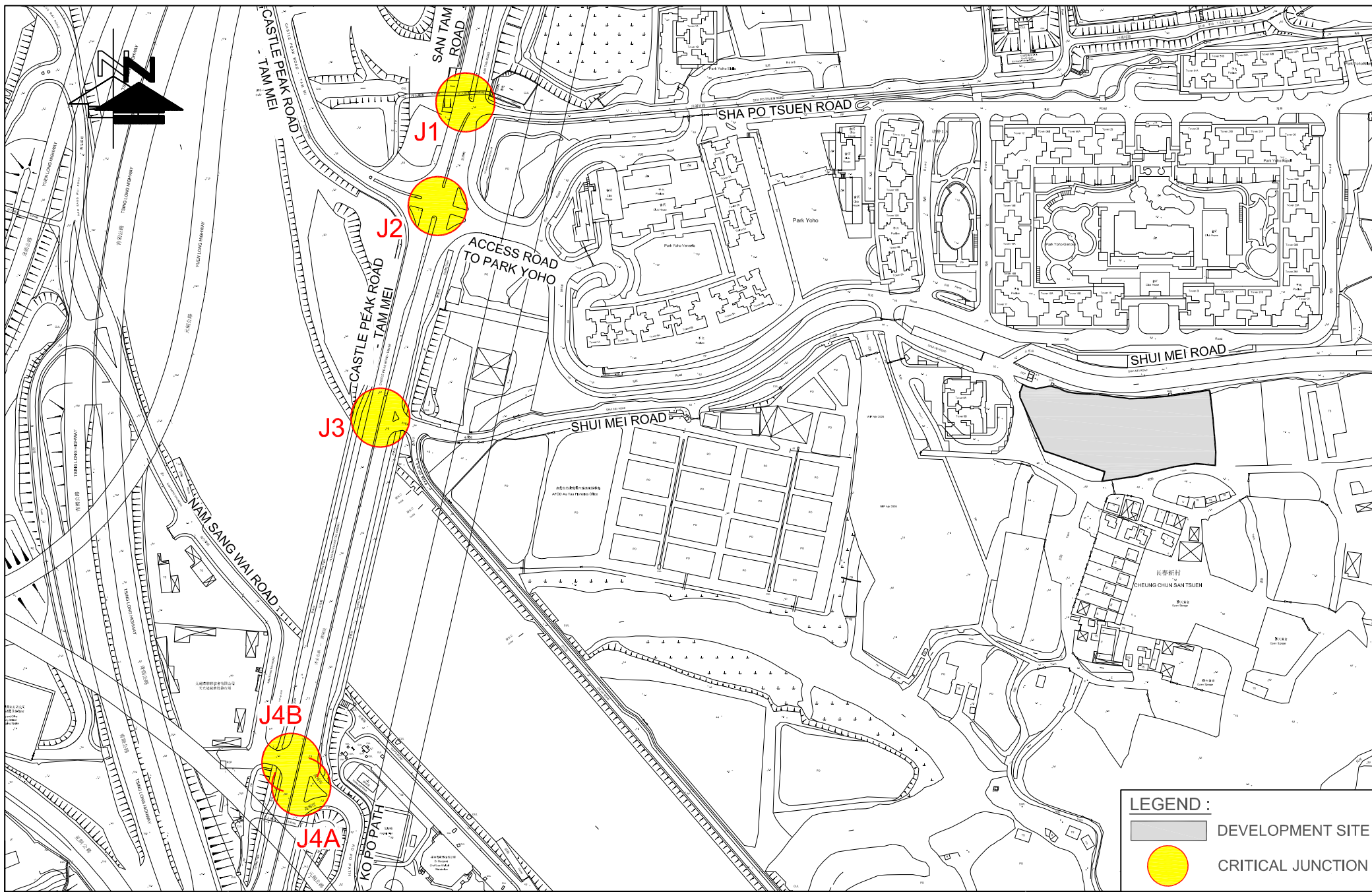


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DRAWING TITLE:	
IDENTIFIED CRITICAL JUNCTIONS	

CTA Consultants Limited
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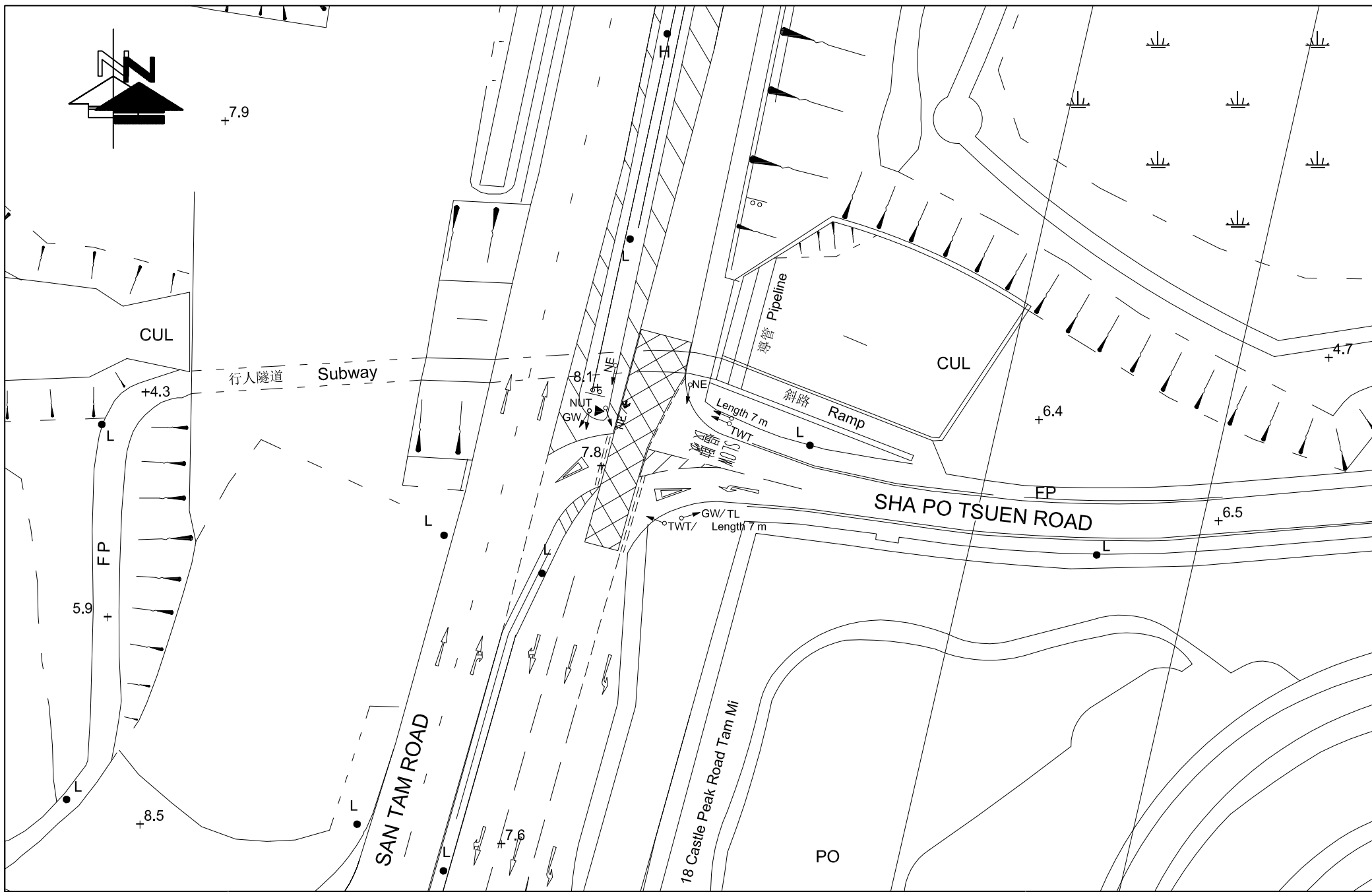
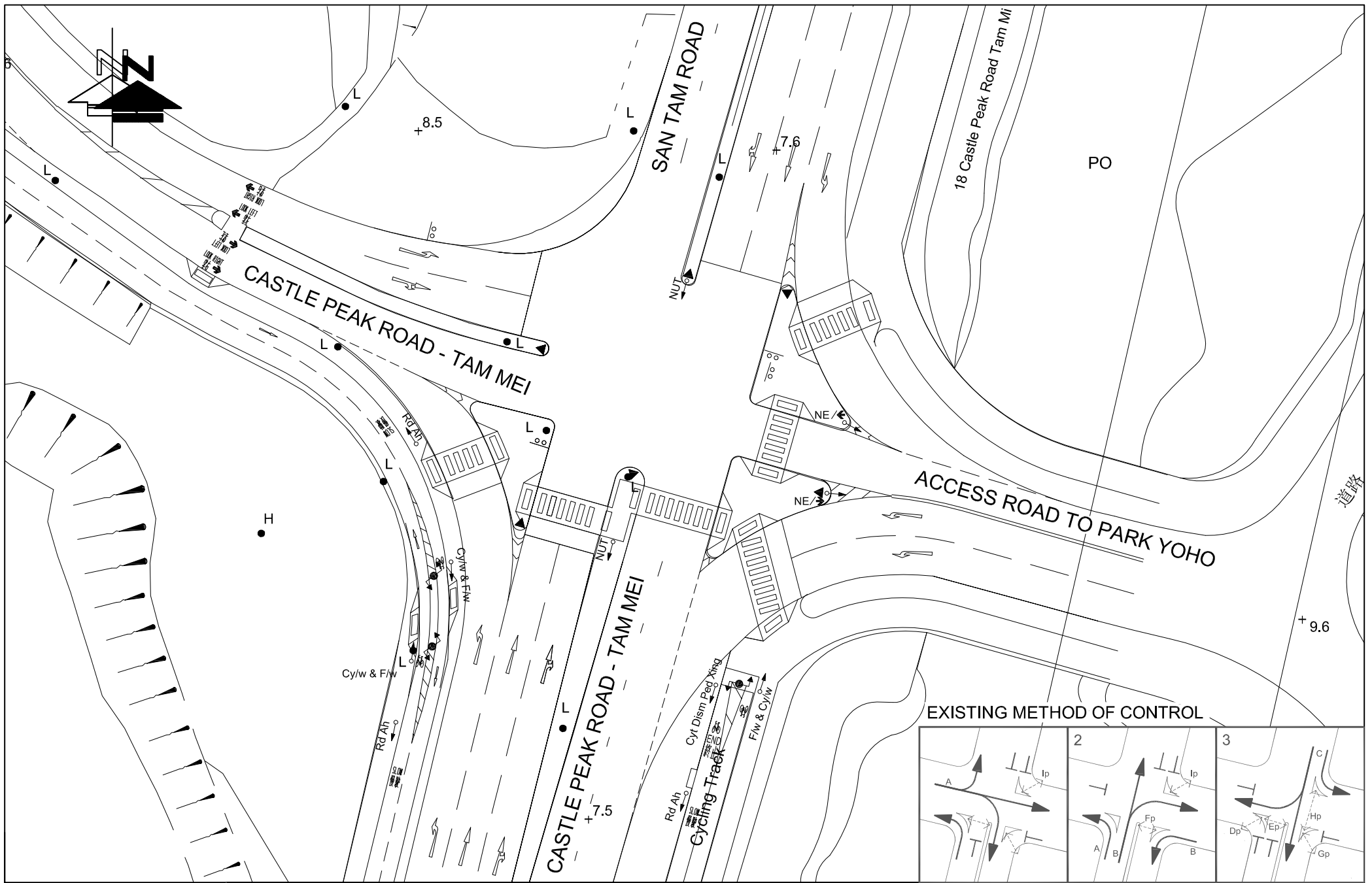


FIGURE NO.:	3.2
PROJECT NO.:	26040HK
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PROJECT TITLE:	S16 Planning Application for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (Application No. A/YL-KTN/1213)
DRAWING TITLE:	EXISTING JUNCTION LAYOUT OF SAN TAM ROAD / SHA PO TSUEN ROAD (J1)



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EXISTING METHOD OF CONTROL

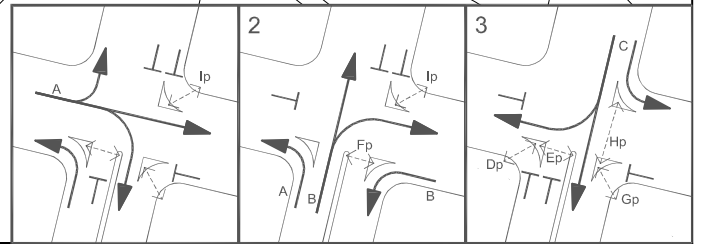


FIGURE NO.:		3.3
PROJECT NO.:		26040HK
SCALE:	DATE:	
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PROJECT TITLE: S16 Planning Application for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (Application No. A/YL-KTN/1213)

DRAWING TITLE: **EXISTING JUNCTION LAYOUT OF
CASTLE PEAK ROAD - TAM MEI / SAN TAM ROAD / ACCESS ROAD (J2)**

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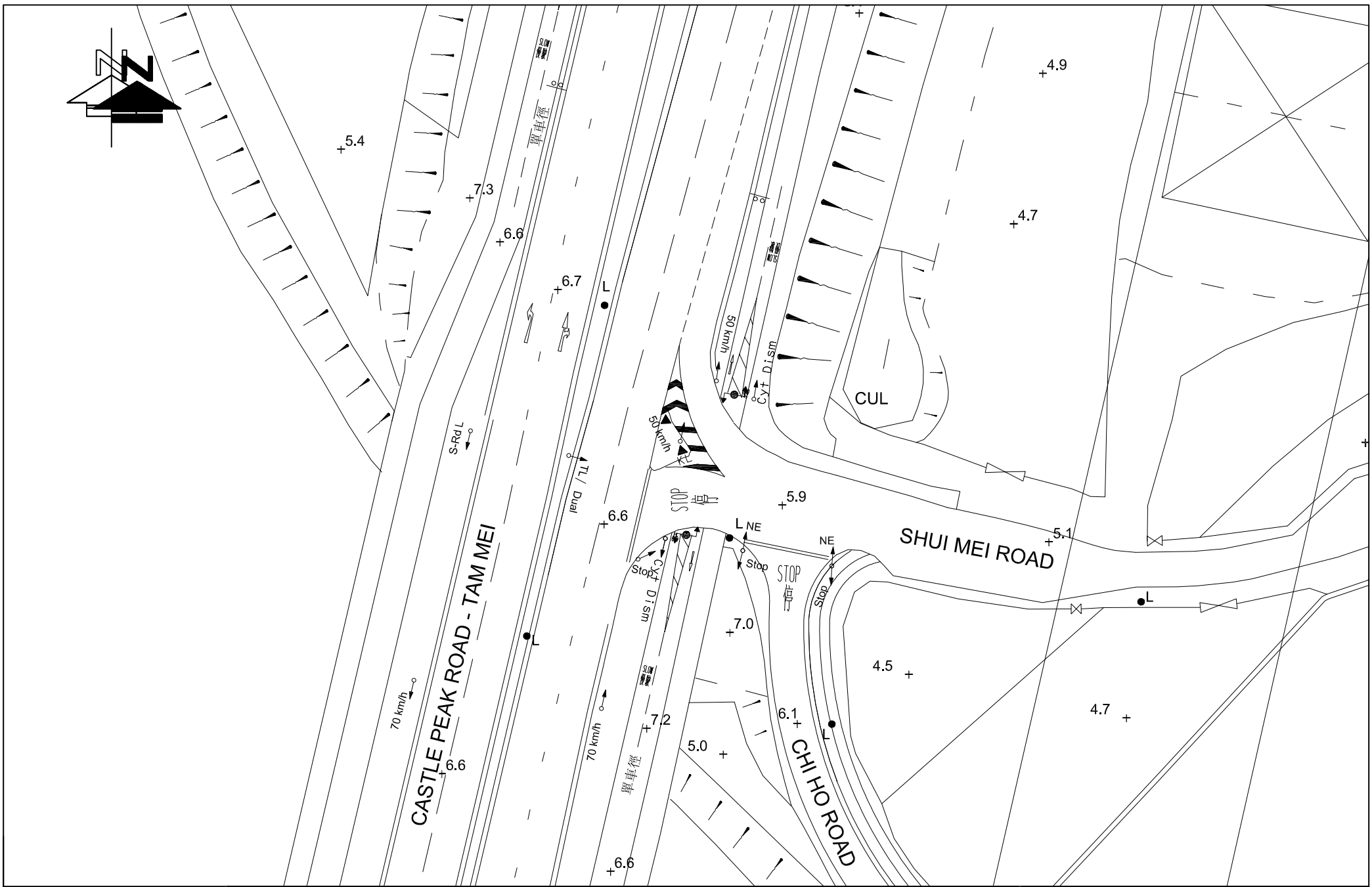


FIGURE NO.:		3.4
PROJECT NO.:		26040HK
SCALE:	DATE:	
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PROJECT TITLE: S16 Planning Application for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (Application No. A/YL-KTN/1213)

DRAWING TITLE: **EXISTING JUNCTION LAYOUT OF
CASTLE PEAK ROAD - TAM MEI / SHUI MEI ROAD (J3)**



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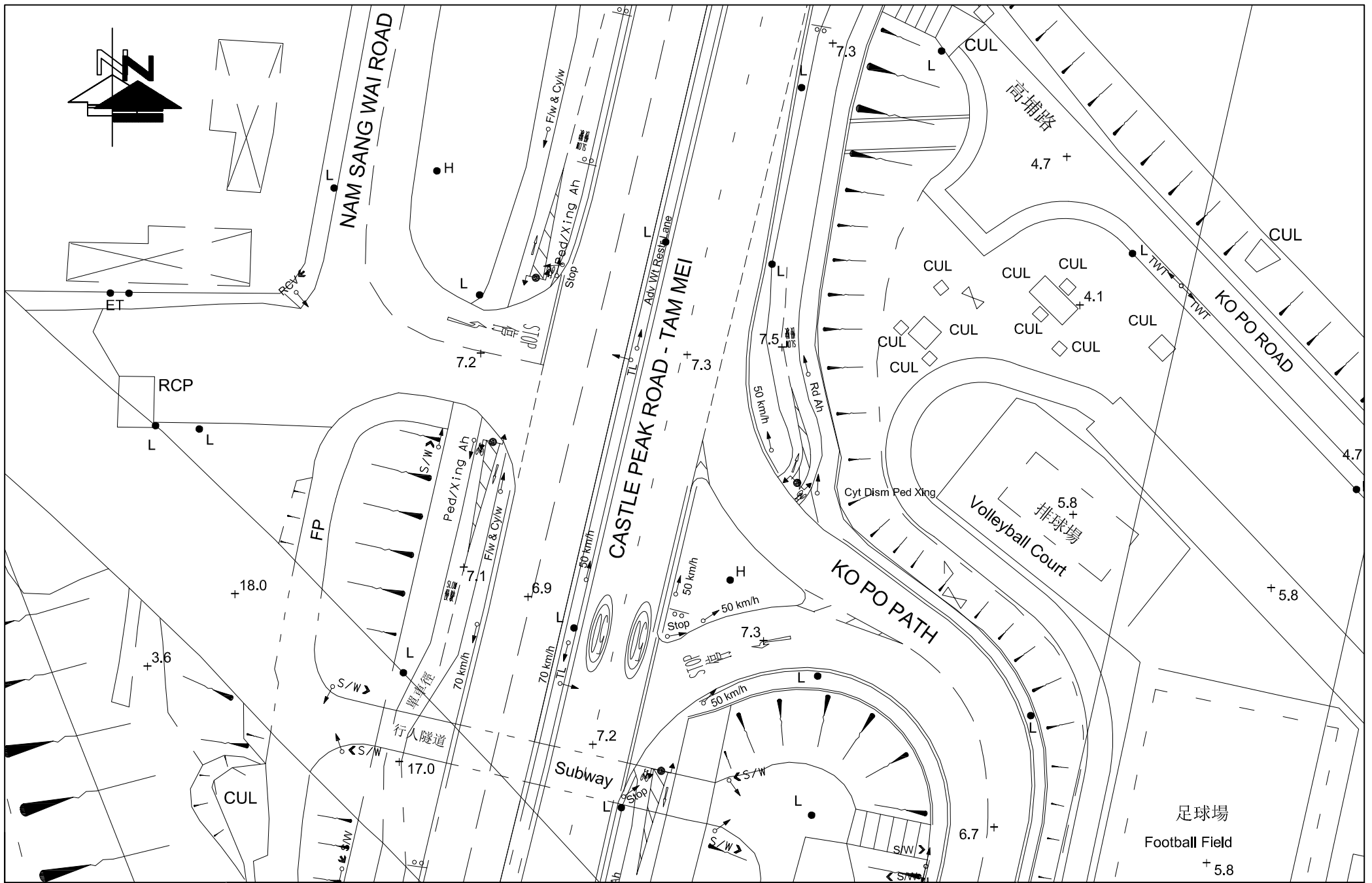


FIGURE NO.:		3.5
PROJECT NO.:		26040HK
SCALE:	DATE:	
1 : 500 @A4	26 MAY 2026	

PROJECT TITLE: S16 Planning Application for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (Application No. A/YL-KTN/1213)

DRAWING TITLE: **EXISTING JUNCTION LAYOUT OF
CASTLE PEAK ROAD - TAM MEI (SOUTHBOUND) / KO PO PATH (J4A)**



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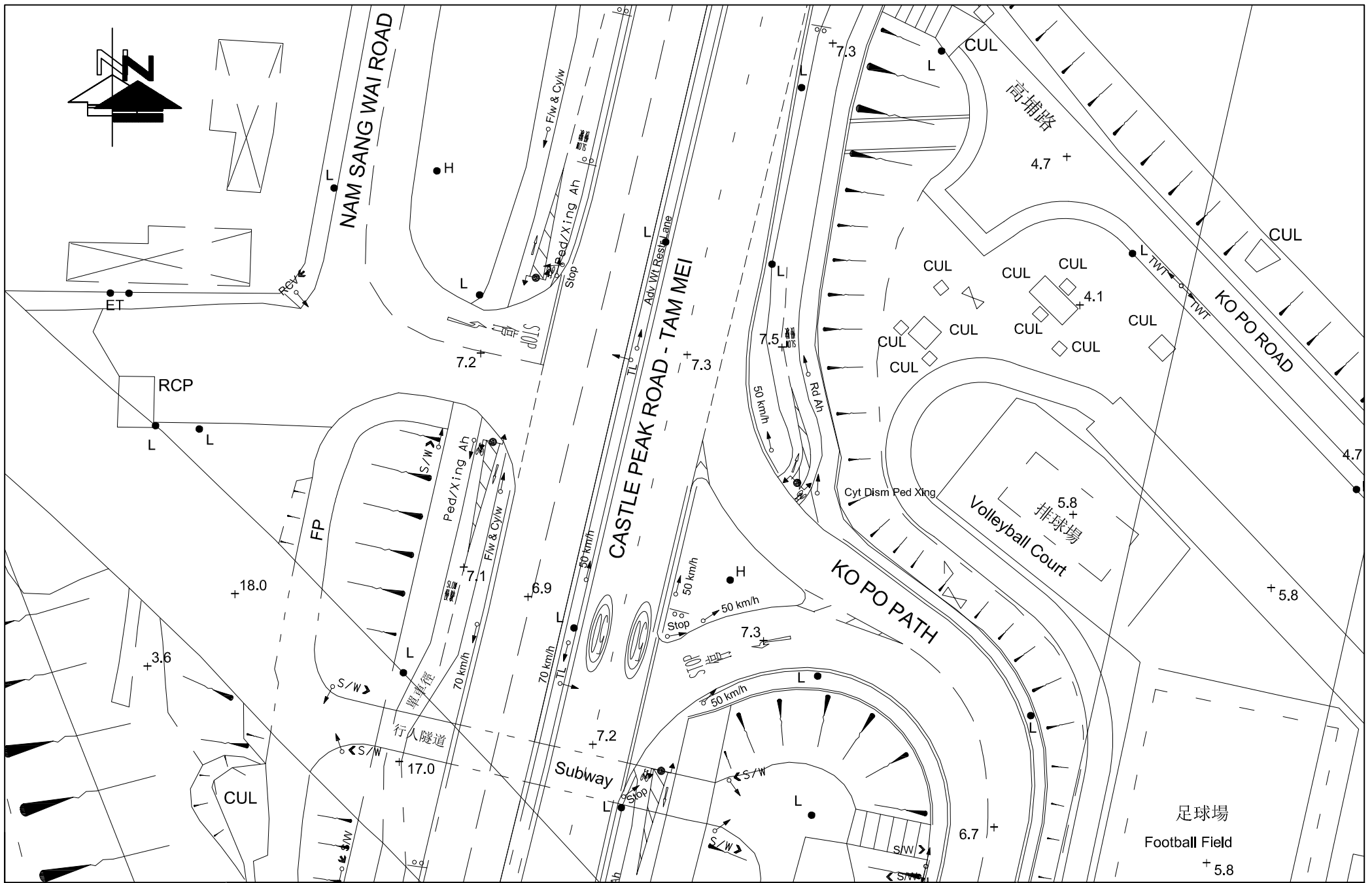


FIGURE NO.: 3.6		PROJECT TITLE: S16 Planning Application for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (Application No. A/YL-KTN/1213)
PROJECT NO.: 26040HK		DRAWING TITLE: EXISTING JUNCTION LAYOUT OF CASTLE PEAK ROAD - TAM MEI (NORTHBOUND) / NAM SANG WAI ROAD (J4B)
SCALE: 1 : 500 @A4	DATE: 26 MAY 2026	

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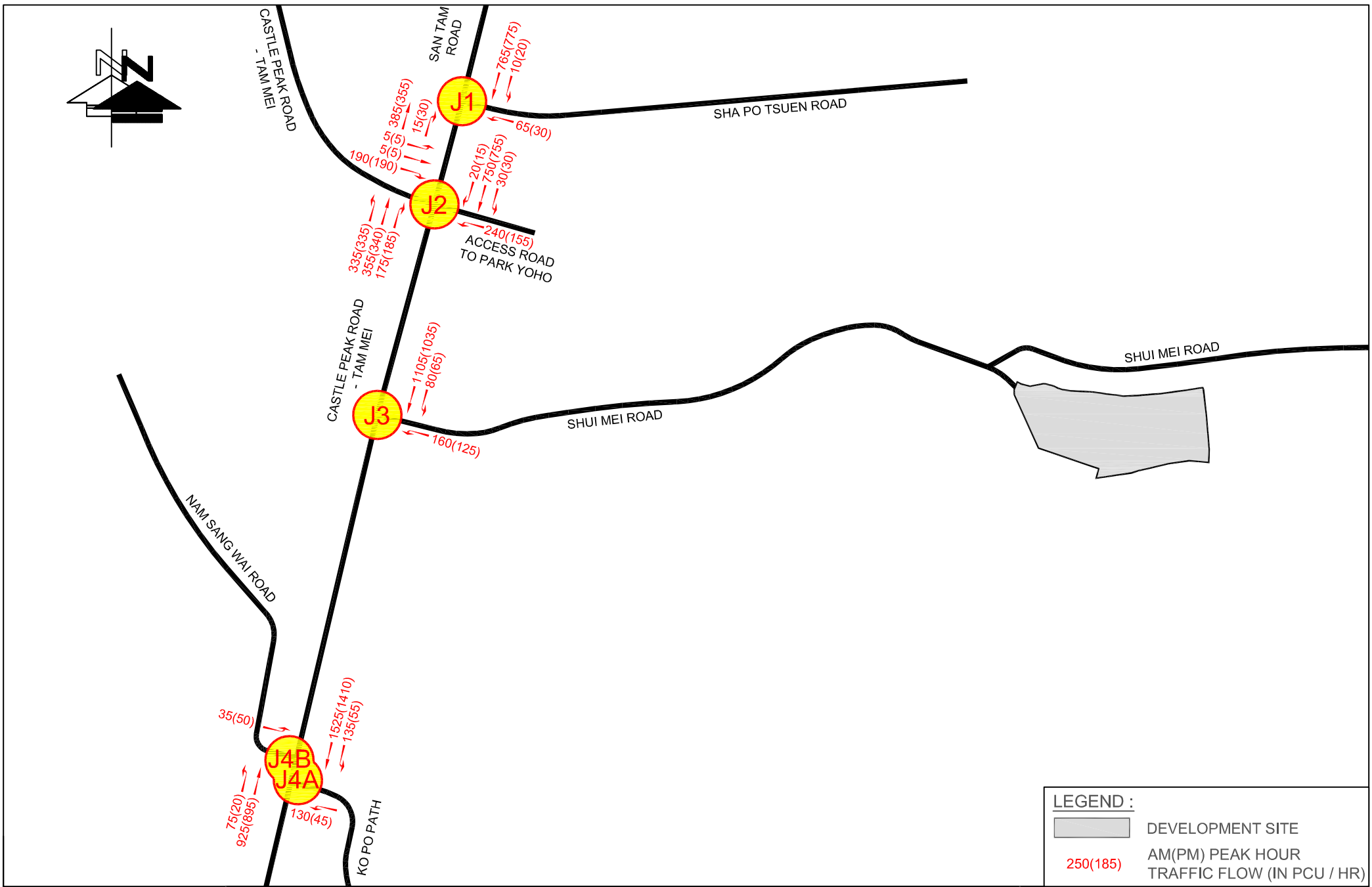
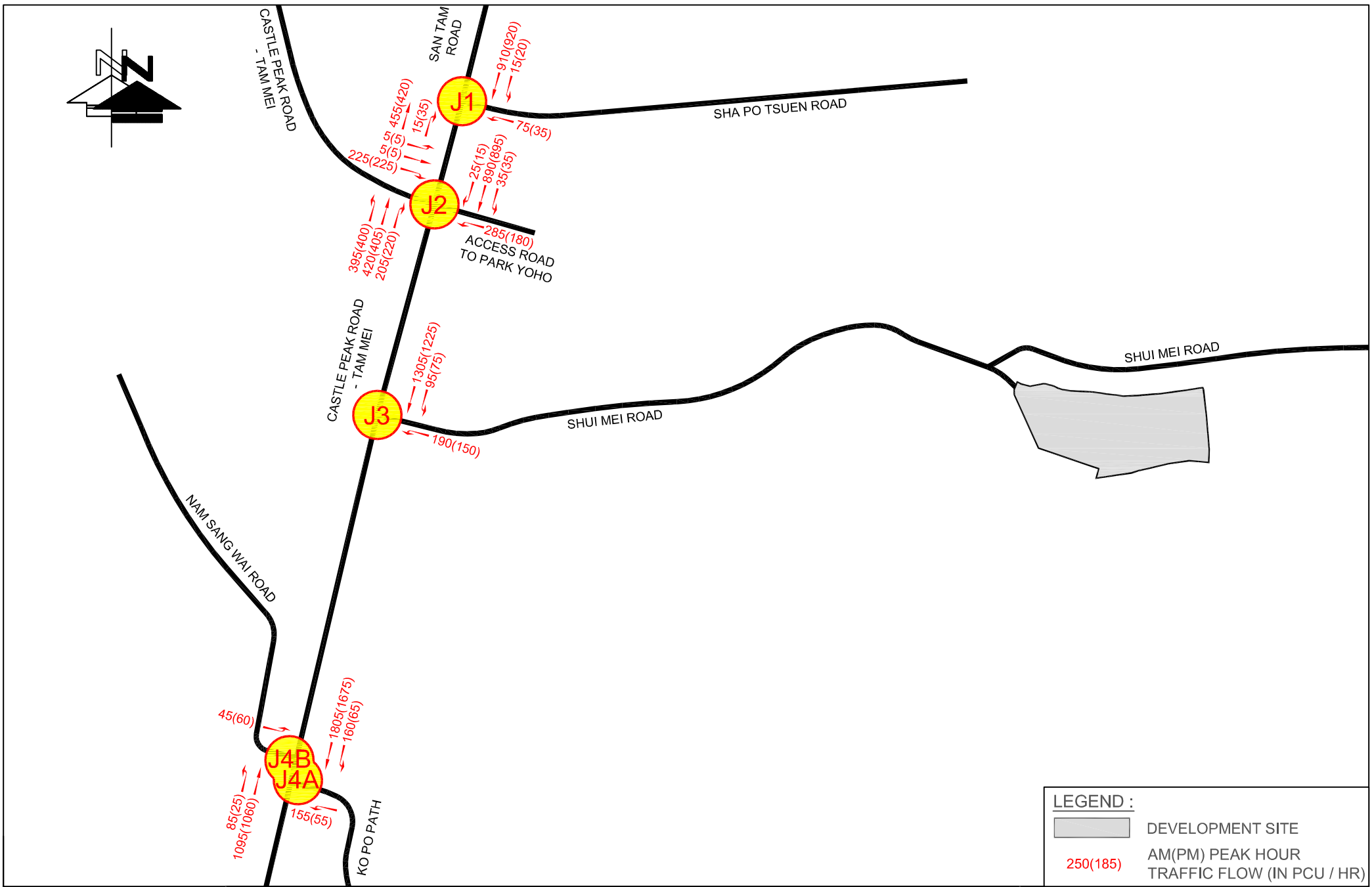


FIGURE NO.:	3.7	PROJECT TITLE: S16 Planning Application for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (Application No. A/YL-KTN/1213)
PROJECT NO.:	26040HK	DRAWING TITLE:
SCALE:	N.T.S. @A4	2026 OBSERVED TRAFFIC FLOWS
DATE:	10 JUN 2026	

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LEGEND :

- DEVELOPMENT SITE
- 250(185) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU / HR)

FIGURE NO.:	4.1	PROJECT TITLE: S16 Planning Application for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (Application No. A/YL-KTN/1213)
PROJECT NO.:	26040HK	DRAWING TITLE:
SCALE:	DATE:	2031 REFERENCE TRAFFIC FLOWS
N.T.S. @A4	10 JUN 2026	



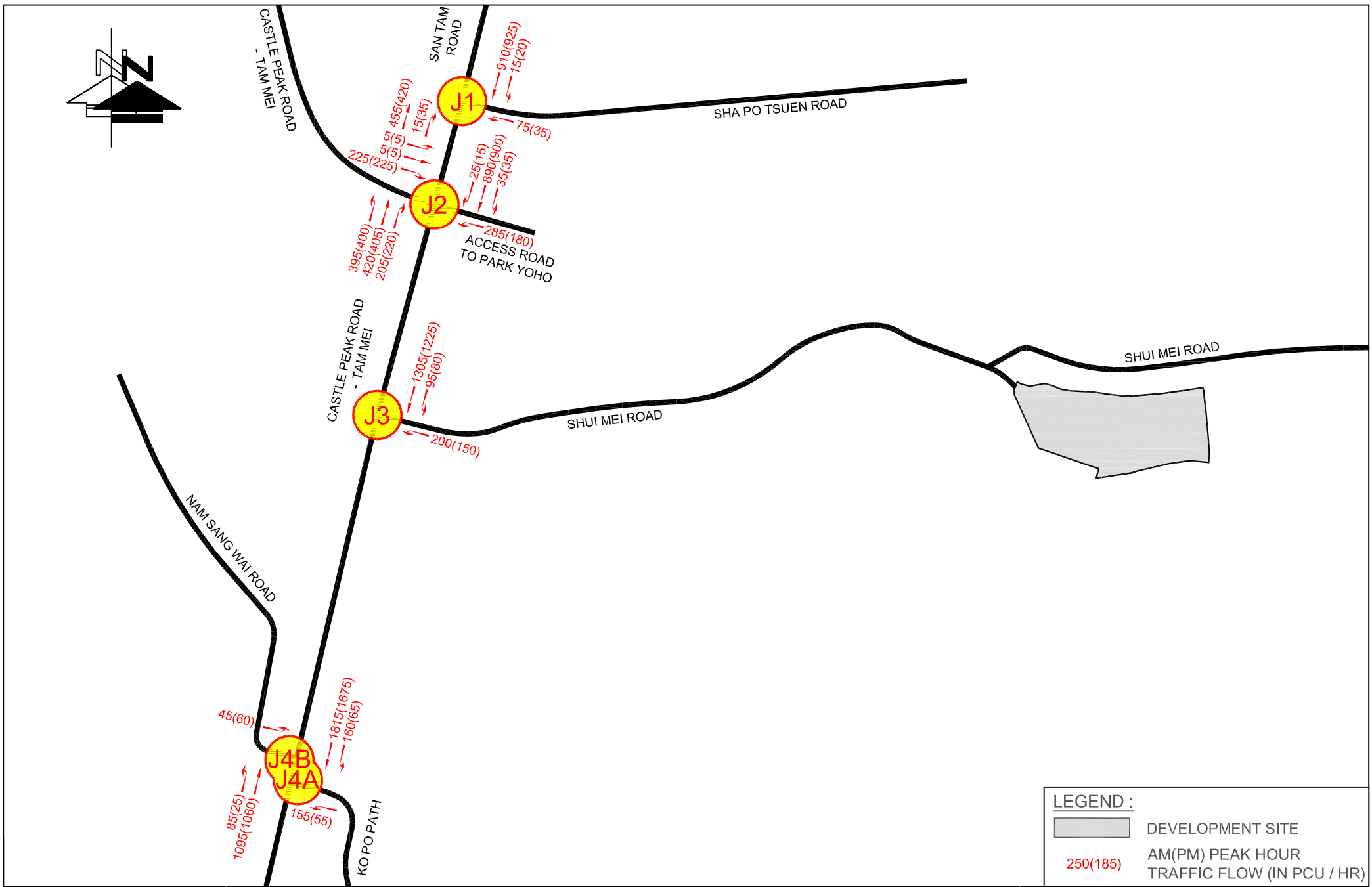
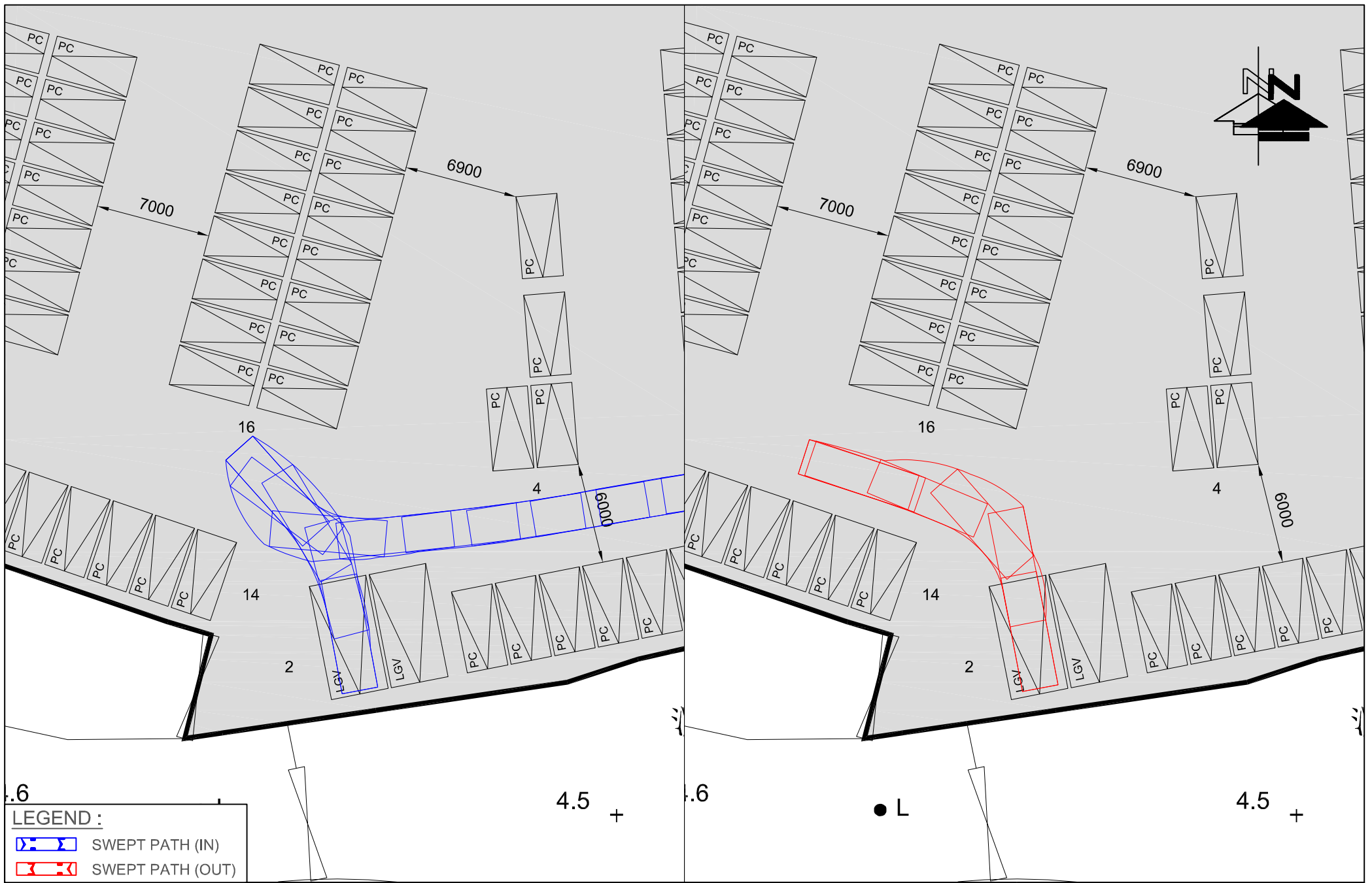


FIGURE NO.:	4.2
PROJECT NO.:	26040HK
SCALE:	N.T.S. @A4
DATE:	10 JUN 2026

PROJECT TITLE:	S16 Planning Application for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (Application No. A/YL-KTN/1213)
DRAWING TITLE:	2031 DESIGN TRAFFIC FLOWS

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LEGEND :

	SWEPT PATH (IN)
	SWEPT PATH (OUT)

FIGURE NO.:	SP-01
PROJECT NO.:	26040HK
SCALE:	DATE:
1 : 300 @A4	10 JUN 2026

PROJECT TITLE: S16 Planning Application for Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T. (Application No. A/YL-KTN/1213)
DRAWING TITLE: SWEPT PATH ANALYSIS OF LGV



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S16 Planning Application for Proposed Temporary Public Vehicle Park
(Excluding Container Vehicle) for a Period of 5 Years in Various Lots in D.D. 107 and
Adjoining Government Land, Cheung Chun San Tsuen, Kam Tin, Yuen Long, N.T.
(Application No. A/YL-KTN/1213)

TIA Report

We commit We deliver

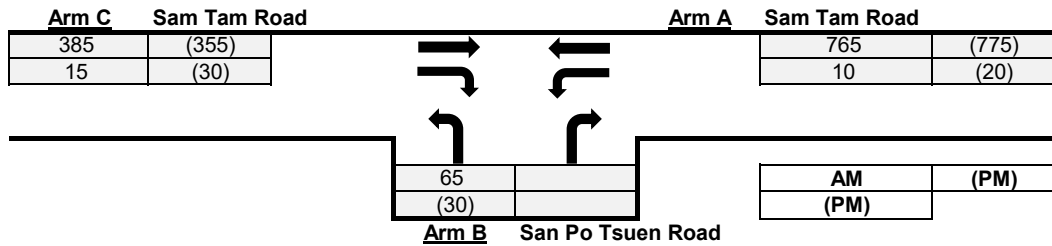
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APPENDIX A

Junction Calculation Sheets

Priority Junction Calculation

Junction : Sam Tam Road / Sha Po Tsuen Road (Jn 1) Job No.: 26040HK
 Scenario : 2026 Observed Traffic Flows



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	8	V-rBA	50	w-BA	0	D	0.579
	W-CR	0	V-IBA	50	w-BC	3.8	E	0.923
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)		0	V-rBC	20	w-CB	4.5	F	1.012
Minor Road Share LT&RT? (Yes: 1, No: 0)		0	V-rCB	50			Y	0.724

Analysis :	Traffic Flow	AM	PM	Capacity	AM	PM	
	pcu/hr			pcu/hr			
	q-CA	385	355	Q-BA	205	203	
	q-CB	15	30	Q-BC	500	497	
	q-AB	10	20	Q-CB	547	542	
	q-AC	765	775	Q-CA	N/A	N/A	(If C-B blocked C-A)
	q-BA	0	0	Q-BAC	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	65	30				
	f	1.000	1.000				

Results :	Ratio of Flow-to-Capacity	AM	PM
	B-A	0.00	0.00
	B-C	0.13	0.06
	C-B	0.03	0.06
	C-A	N/A	N/A
	B-AC	N/A	N/A

Critical DFC

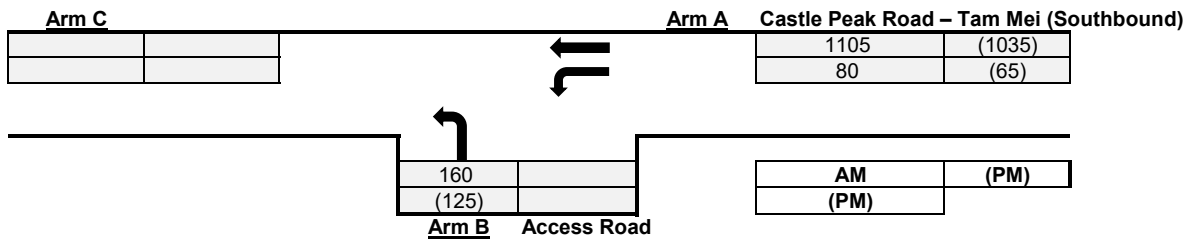
0.13

0.06

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Priority Junction Calculation

Junction : Castle Peak Road – Tam Mei (Southbound) / Access Road to Application Site (Jn 3) Job No.: 26040HK
 Scenario : 2026 Observed Traffic Flows



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	7.5	D 0.579
W-CR		E 1.056
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)		F 0.616
Minor Road Share LT&RT? (Yes: 1, No: 0)		Y 0.741
V-rBA	50	
V-IBA	50	
V-rBC	50	
V-rCB	50	
w-BA	0	
w-BC	5	
w-CB	0	

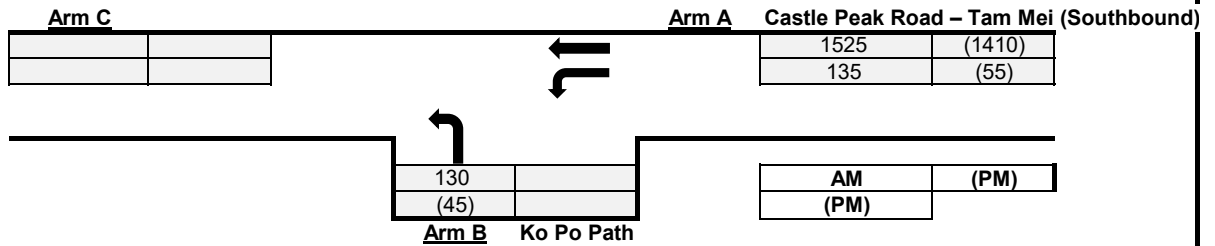
Analysis :	Traffic Flow	AM	PM	Capacity	AM	PM
	pcu/hr			pcu/hr		
q-CA	0	0	Q-BA	185	197	(If C-B blocked C-A) (If Minor Road Share LT&RT)
q-CB	0	0	Q-BC	463	484	
q-AB	80	65	Q-CB	262	276	
q-AC	1105	1035	Q-CA	N/A	N/A	
q-BA	0	0	Q-BAC	N/A	N/A	
q-BC	160	125				
f	1.000	1.000				

Results :	Ratio of Flow-to-Capacity	AM	PM
B-A		0.00	0.00
B-C		0.35	0.26
C-B		0.00	0.00
C-A		N/A	N/A
B-AC		N/A	N/A

Critical DFC **0.35** **0.26**

Priority Junction Calculation

Junction : Castle Peak Road – Tam Mei (Southbound) / Ko Po Path (Jn 4A) Job No.: 26040HK
 Scenario : 2026 Observed Traffic Flows



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	7.68	D 0.533
W-CR		E 1.033
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)		F 0.586
Minor Road Share LT&RT? (Yes: 1, No: 0)		Y 0.735

Analysis :	Traffic Flow		Capacity		
	AM	PM	AM	PM	
pcu/hr					
q-CA	0	0	Q-BA	109	130
q-CB	0	0	Q-BC	333	374
q-AB	135	55	Q-CB	176	207
q-AC	1525	1410	Q-CA	N/A	N/A
q-BA	0	0	Q-BAC	N/A	N/A
q-BC	130	45			
f	1.000	1.000			

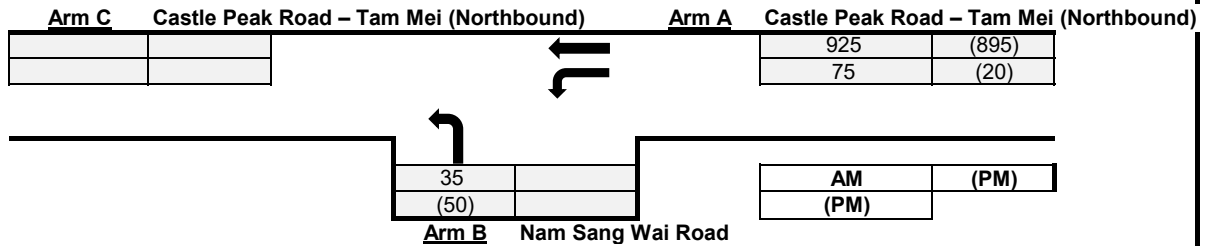
(If C-B blocked C-A)
(If Minor Road Share LT&RT)

Results :	Ratio of Flow-to-Capacity	AM	PM
B-A		0.00	0.00
B-C		0.39	0.12
C-B		0.00	0.00
C-A		N/A	N/A
B-AC		N/A	N/A

Critical DFC **0.39** **0.12**

Priority Junction Calculation

Junction : Castle Peak Road – Tam Mei (Northbound) / Nam Sang Wai Road (Jn 4B) Job No.: 26040HK
 Scenario : 2026 Observed Traffic Flows



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	7.68	V-rBA	50	w-BA		D	0.579
	W-CR		V-IBA	50	w-BC	5	E	1.056
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)			V-rBC	50	w-CB		F	0.616
Minor Road Share LT&RT? (Yes: 1, No: 0)			V-rCB	50			Y	0.735

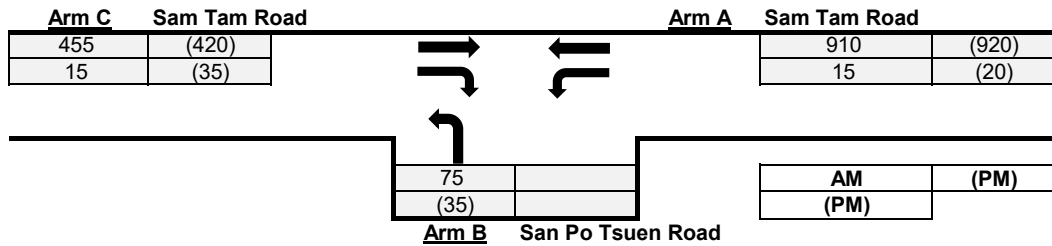
Analysis :	Traffic Flow	AM	PM	Capacity	AM	PM	
	pcu/hr			pcu/hr			
	q-CA	0	0	Q-BA	215	223	
	q-CB	0	0	Q-BC	517	532	
	q-AB	75	20	Q-CB	294	308	
	q-AC	925	895	Q-CA	N/A	N/A	(If C-B blocked C-A)
	q-BA	0	0	Q-BAC	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	35	50				
	f	1.000	1.000				

Results :	Ratio of Flow-to-Capacity	AM	PM
	B-A	0.00	0.00
	B-C	0.07	0.09
	C-B	0.00	0.00
	C-A	N/A	N/A
	B-AC	N/A	N/A

Critical DFC 0.07 0.09

Priority Junction Calculation

Junction :	Sam Tam Road / Sha Po Tsuen Road (Jn 1)	Job No.:	26040HK
Scenario :	2031 Reference Traffic Flows		



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	8	D 0.579
W-CR	0	E 0.923
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)	0	F 1.012
Minor Road Share LT&RT? (Yes: 1, No: 0)	0	Y 0.724
V-rBA	50	
V-IBA	50	
w-BA		
w-BC	3.8	
V-rBC	20	
w-CB	4.5	
V-rCB	50	

Analysis :	Traffic Flow	AM	PM	Capacity	AM	PM	
	pcu/hr			pcu/hr			
q-CA	455	420	Q-BA	176	173		
q-CB	15	35	Q-BC	465	462		
q-AB	15	20	Q-CB	507	503		
q-AC	910	920	Q-CA	N/A	N/A		(If C-B blocked C-A)
q-BA	0	0	Q-BAC	N/A	N/A		(If Minor Road Share LT&RT)
q-BC	75	35					
f	1.000	1.000					

Results :	Ratio of Flow-to-Capacity	AM	PM
B-A		0.00	0.00
B-C		0.16	0.08
C-B		0.03	0.07
C-A		N/A	N/A
B-AC		N/A	N/A

Critical DFC

0.16

0.08

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TRAFFIC SIGNALS CALCULATION

Job No: 26040HK

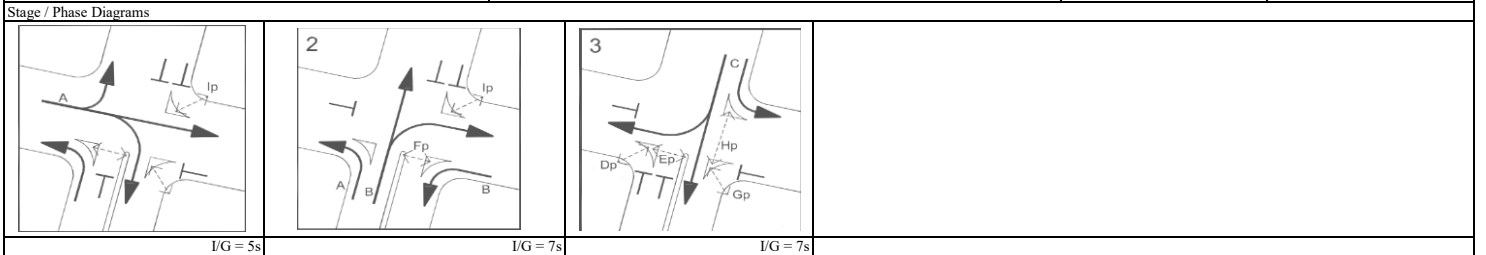
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Junction: **Castle Peak Road – Tam Mei / San Tam Road (J2)**

Description: **2031 Reference Traffic Flows**

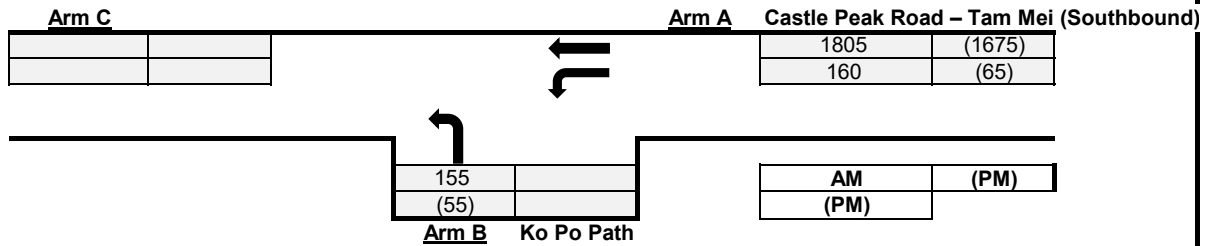
Approach	Direction	Movement notation	Phase	Stage	Width (m)		Radius (m)	Nearside 0/1	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak		
					Left	Right			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
					Castle Peak Road - Tam Mei	EB			↔	A	1	3.5	15	0	1	100%	100%	270	270	270
	EB	↔	A	1	3.3	0	13	0	98%	98%	1875	1875	1875	1875	230	0.123	0.123	230	0.123	0.123
Castle Peak Road - Tam Mei	NB	↔	A	1,2	3.3	25	0	1	100%	100%	1835	1835	1835	1835	395	0.215	0.156	400	0.218	0.156
	NB	↔	B	2	3.3	0	0	0	0%	0%	2085	2085	4020	4005	324	0.156	0.156	325	0.156	0.156
	NB	↔	B	2	3.3	0	13	0	68%	73%	1935	1920	0	0	301	0.155		300	0.156	
Access Road to Park YOHO	WB	↔	B	2	3.3	20	0	1	100%	100%	1810	1810	3750	3750	138	0.076		87	0.048	
	WB	↔	B	2	3.3	20	0	0	100%	100%	1940	1940	0	0	147	0.076		93	0.048	
San Tam Road	SB	↔	C	3	3.3	0	0	0	0%	0%	2085	2085	4165	4165	458	0.220	0.220	455	0.218	0.218
	SB	↔	C	3	3.3	0	25	0	5%	3%	2080	2080	0	0	457	0.220		455	0.219	
	SB	↔	C	3	3.3	25	0	1	100%	100%	1835	1835	1835	1835	35	0.019		35	0.019	
*Pedestrian Crossing	↔	Dp	3		Min. Crossing Time = 5GM + 5FGM = 10s															
	↔	Ep	1,3		Min. Crossing Time = 5GM + 6FGM = 11s															
	↔	Fp	2		Min. Crossing Time = 5GM + 7FGM = 12s															
	↔	Gp	1,3		Min. Crossing Time = 5GM + 6FGM = 11s															
	↔	Hp	3		Min. Crossing Time = 5GM + 5FGM = 10s															
	↔	Ip	1,2		Min. Crossing Time = 5GM + 5FGM = 10s															

Notes:	Traffic Flow (pcu / hr)	[AM (PM)]	AM Check Phase	PM Check Phase
			Ey 0.498 L (sec) 16 C (sec) 83 y pract. 0.727 R.C. (%) 46%	Ey 0.497 L (sec) 16 C (sec) 83 y pract. 0.727 R.C. (%) 46%



Priority Junction Calculation

Junction : Castle Peak Road – Tam Mei (Southbound) / Ko Po Path (Jn 4A) Job No.: 26040HK
 Scenario : 2031 Reference Traffic Flows



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	7.68	V-rBA		D	0.551
	W-CR		V-IBA	50	E	1.033
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)			V-rBC	27	F	0.586
Minor Road Share LT&RT? (Yes: 1, No: 0)			V-rCB		Y	0.735

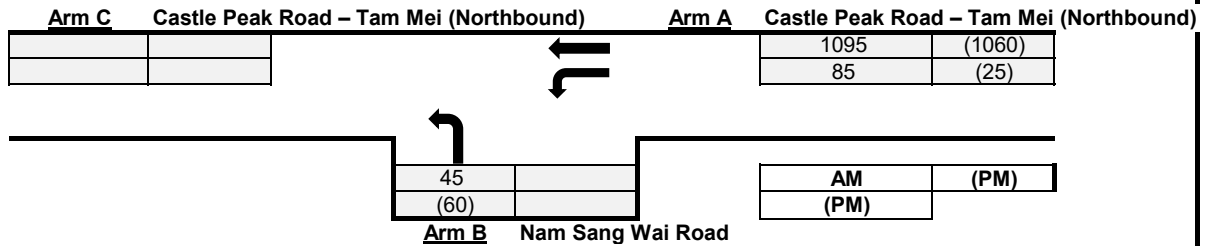
Analysis :	Traffic Flow	AM	PM	Capacity	AM	PM	
	pcu/hr			pcu/hr			
	q-CA	0	0	Q-BA	70	95	
	q-CB	0	0	Q-BC	253	299	
	q-AB	160	65	Q-CB	128	164	
	q-AC	1805	1675	Q-CA	N/A	N/A	(If C-B blocked C-A)
	q-BA	0	0	Q-BAC	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	155	55				
	f	1.000	1.000				

Results :	Ratio of Flow-to-Capacity	AM	PM
	B-A	0.00	0.00
	B-C	0.61	0.18
	C-B	0.00	0.00
	C-A	N/A	N/A
	B-AC	N/A	N/A

Critical DFC **0.61** **0.18**

Priority Junction Calculation

Junction : Castle Peak Road – Tam Mei (Northbound) / Nam Sang Wai Road (Jn 4B) Job No.: 26040HK
 Scenario : 2031 Reference Traffic Flows



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	7.68	V-rBA	50	w-BA	D	0.579
	W-CR		V-IBA	50	w-BC	E	1.056
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)			V-rBC	50	w-CB	F	0.616
Minor Road Share LT&RT? (Yes: 1, No: 0)			V-rCB	50		Y	0.735

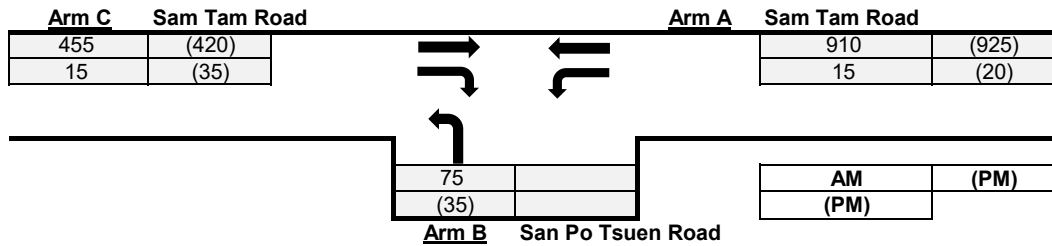
Analysis :	Traffic Flow	AM	PM	Capacity	AM	PM	
	pcu/hr			pcu/hr			
	q-CA	0	0	Q-BA	188	197	
	q-CB	0	0	Q-BC	468	484	
	q-AB	85	25	Q-CB	264	280	
	q-AC	1095	1060	Q-CA	N/A	N/A	(If C-B blocked C-A)
	q-BA	0	0	Q-BAC	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	45	60				
	f	1.000	1.000				

Results :	Ratio of Flow-to-Capacity	AM	PM
	B-A	0.00	0.00
	B-C	0.10	0.12
	C-B	0.00	0.00
	C-A	N/A	N/A
	B-AC	N/A	N/A

Critical DFC 0.10 0.12

Priority Junction Calculation

Junction : Sam Tam Road / Sha Po Tsuen Road (Jn 1) Job No.: 26040HK
 Scenario : 2031 Design Traffic Flows



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	8	D 0.579
W-CR	0	E 0.923
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)	0	F 1.012
Minor Road Share LT&RT? (Yes: 1, No: 0)	0	Y 0.724
V-rBA	50	
V-IBA	50	
w-BA		
w-BC	3.8	
V-rBC	20	
w-CB	4.5	
V-rCB	50	

Analysis :	Traffic Flow	AM	PM	Capacity	AM	PM	
	pcu/hr			pcu/hr			
q-CA	455	420	Q-BA	176	173		
q-CB	15	35	Q-BC	465	461		
q-AB	15	20	Q-CB	507	502		
q-AC	910	925	Q-CA	N/A	N/A		(If C-B blocked C-A)
q-BA	0	0	Q-BAC	N/A	N/A		(If Minor Road Share LT&RT)
q-BC	75	35					
f	1.000	1.000					

Results :	Ratio of Flow-to-Capacity	AM	PM
B-A		0.00	0.00
B-C		0.16	0.08
C-B		0.03	0.07
C-A		N/A	N/A
B-AC		N/A	N/A

Critical DFC

0.16

0.08

TRAFFIC SIGNALS CALCULATION

Job No: 26040HK

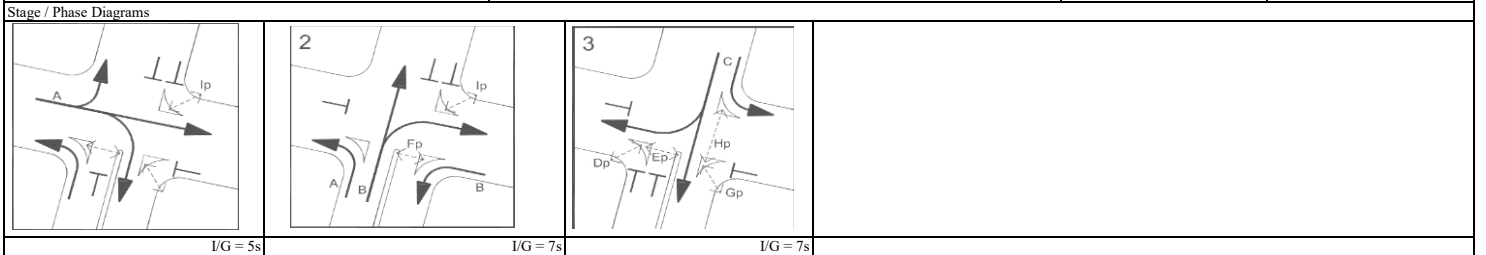
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Junction: **Castle Peak Road – Tam Mei / San Tam Road (J2)**

Description: **2031 Design Traffic Flows**

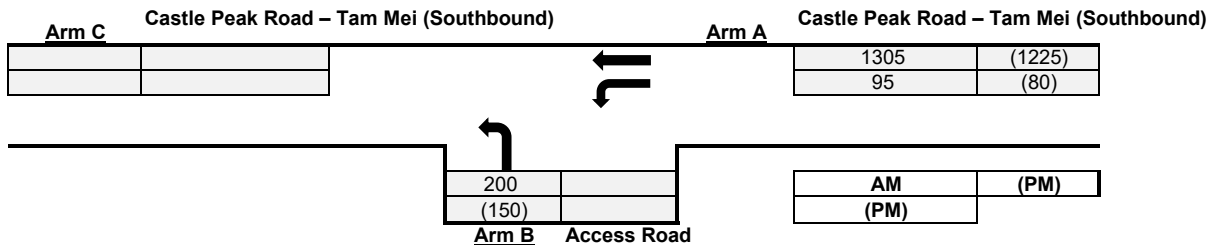
Approach	Direction	Movement notation	Phase	Stage	Width (m)		Radius (m)	Nearside 0/1	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Total Revised Saturation Flow (pcu/hr)		A.M. Peak			P.M. Peak		
					Left	Right			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
					Castle Peak Road - Tam Mei	EB			↔	A	1	3.5	15	0	1	100%	100%	270	270	270
	EB	↔	A	1	3.3	0	13	0	98%	98%	1875	1875	1875	1875	230	0.123	0.123	230	0.123	0.123
Castle Peak Road - Tam Mei	NB	↔	A	1,2	3.3	25	0	1	100%	100%	1835	1835	1835	1835	395	0.215	0.156	400	0.218	0.156
	NB	↔	B	2	3.3	0	0	0	0%	0%	2085	2085	4020	4005	324	0.156	0.156	325	0.156	0.156
	NB	↔	B	2	3.3	0	13	0	68%	73%	1935	1920	0	0	301	0.155		300	0.156	
Access Road to Park YOHO	WB	↔	B	2	3.3	20	0	1	100%	100%	1810	1810	3750	3750	138	0.076		87	0.048	
	WB	↔	B	2	3.3	20	0	0	100%	100%	1940	1940	0	0	147	0.076		93	0.048	
San Tam Road	SB	↔	C	3	3.3	0	0	0	0%	0%	2085	2085	4165	4165	458	0.220	0.220	458	0.220	0.220
	SB	↔	C	3	3.3	0	25	0	5%	3%	2080	2080	0	0	457	0.220		457	0.220	
	SB	↔	C	3	3.3	25	0	1	100%	100%	1835	1835	1835	1835	35	0.019		35	0.019	
*Pedestrian Crossing	↔	Dp	3						Min. Crossing Time = 5GM + 5FGM = 10s											
	↔	Ep	1,3						Min. Crossing Time = 5GM + 6FGM = 11s											
	↔	Fp	2						Min. Crossing Time = 5GM + 7FGM = 12s											
	↔	Gp	1,3						Min. Crossing Time = 5GM + 6FGM = 11s											
	↔	Hp	3						Min. Crossing Time = 5GM + 5FGM = 10s											
	↔	Ip	1,2						Min. Crossing Time = 5GM + 5FGM = 10s											

Notes:	Traffic Flow (pcu / hr)	[AM (PM)]	AM Check Phase	PM Check Phase
			Ey 0.498 L (sec) 16 C (sec) 83 y pract. 0.727 R.C. (%) 46%	Ey 0.498 L (sec) 16 C (sec) 83 y pract. 0.727 R.C. (%) 46%



Priority Junction Calculation

Junction : Castle Peak Road – Tam Mei (Southbound) / Access Road to Application Site (Jn 3) Job No.: 26040HK
 Scenario : 2031 Design Traffic Flows



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	7.5	V-rBA	50	D	0.579
	W-CR		V-IBA	50	E	1.056
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)			V-rBC	50	F	0.616
Minor Road Share LT&RT? (Yes: 1, No: 0)			V-rCB	50	Y	0.741

Analysis :	Traffic Flow	AM	PM	Capacity	AM	PM	
	pcu/hr			pcu/hr			
	q-CA	0	0	Q-BA	153	167	
	q-CB	0	0	Q-BC	404	429	
	q-AB	95	80	Q-CB	226	242	
	q-AC	1305	1225	Q-CA	N/A	N/A	(If C-B blocked C-A)
	q-BA	0	0	Q-BAC	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	200	150				
	f	1.000	1.000				

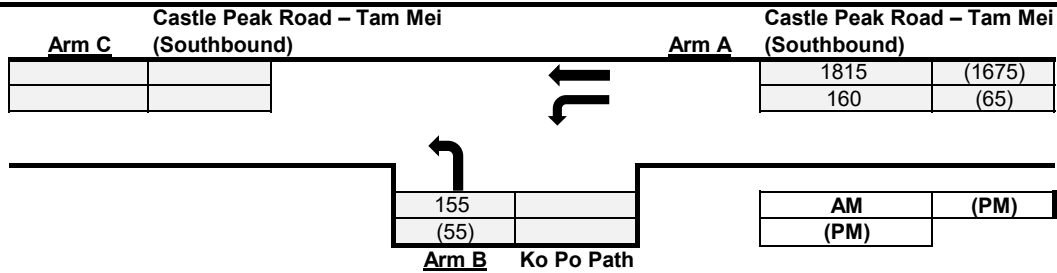
Results :	Ratio of Flow-to-Capacity	AM	PM
	B-A	0.00	0.00
	B-C	0.49	0.35
	C-B	0.00	0.00
	C-A	N/A	N/A
	B-AC	N/A	N/A

Critical DFC **0.49** **0.35**

Priority Junction Calculation

Junction : Castle Peak Road – Tam Mei (Southbound) / Ko Po Path (Jn 4A) Job No.: 26040HK

Scenario : 2031 Design Traffic Flows



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	7.68	V-rBA		D	0.551
	W-CR		V-IBA	50	E	1.033
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)			V-rBC	27	F	0.586
Minor Road Share LT&RT? (Yes: 1, No: 0)			V-rCB		Y	0.735

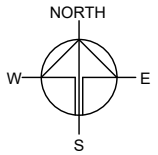
Analysis :	Traffic Flow	AM	PM	Capacity	AM	PM	
	pcu/hr			pcu/hr			
	q-CA	0	0	Q-BA	69	95	
	q-CB	0	0	Q-BC	250	299	
	q-AB	160	65	Q-CB	127	164	
	q-AC	1815	1675	Q-CA	N/A	N/A	(If C-B blocked C-A)
	q-BA	0	0	Q-BAC	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	155	55				
	f	1.000	1.000				

Results :	Ratio of Flow-to-Capacity	AM	PM
	B-A	0.00	0.00
	B-C	0.62	0.18
	C-B	0.00	0.00
	C-A	N/A	N/A
	B-AC	N/A	N/A

Critical DFC **0.62** **0.18**

Priority Junction Calculation

Junction :	Castle Peak Road – Tam Mei (Northbound) / Nam Sang Wai Road (Jn 4B)	Job No.:	26040HK				
Scenario :	2031 Design Traffic Flows						
<p>The predictive equations of capacity of movement are:</p> $Q-BA = D(627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB))$ $Q-BC = E(745 - Y(0.364q-AC + 0.144q-AB))$ $Q-CB = F(745 - 0.364Y(q-AC + q-AB))$							
<p>The geometric parameters represented by D, E, F are:</p> $D = (1 + 0.094(w-BA - 3.65))(1 + 0.0009(V-rBA - 120))(1 + 0.0006(V-IBA - 150))$ $E = (1 + 0.094(w-BC - 3.65))(1 + 0.0009(V-rBC - 120))$ $F = (1 + 0.094(w-CB - 3.65))(1 + 0.0009(V-rCB - 120))$							
<p>where</p> <p>Y = 1 - 0.0345W</p> <p>q-AB, etc = the design flow of movement AB, etc</p> <p>W = major road width</p> <p>W-CR = central reserve width</p> <p>w-BA, etc = lane width to vehicle</p> <p>v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc</p> <p>v-IBA = visibility to the left for waiting vehicles in stream BA, etc</p>							
Geometry :	<u>Input</u>		<u>Calculated</u>				
	W	7.68	D	0.579			
	W-CR		E	1.056			
C-B blocked C-A, residual width <2.5m? (Yes: 1, No: 0)			F	0.616			
Minor Road Share LT&RT? (Yes: 1, No: 0)			Y	0.735			
Analysis :	Traffic Flow	AM	PM	Capacity	AM	PM	
	pcu/hr			pcu/hr			
	q-CA	0	0	Q-BA	188	197	
	q-CB	0	0	Q-BC	468	484	
	q-AB	85	25	Q-CB	264	280	
	q-AC	1095	1060	Q-CA	N/A	N/A	(If C-B blocked C-A)
	q-BA	0	0	Q-BAC	N/A	N/A	(If Minor Road Share LT&RT)
	q-BC	45	60				
	f	1.000	1.000				
Results :	Ratio of Flow-to-Capacity			AM	PM		
				B-A	0.00	0.00	
				B-C	0.10	0.12	
				C-B	0.00	0.00	
				C-A	N/A	N/A	
				B-AC	N/A	N/A	
Critical DFC				0.10	0.12		
CTA Consultants Ltd.							

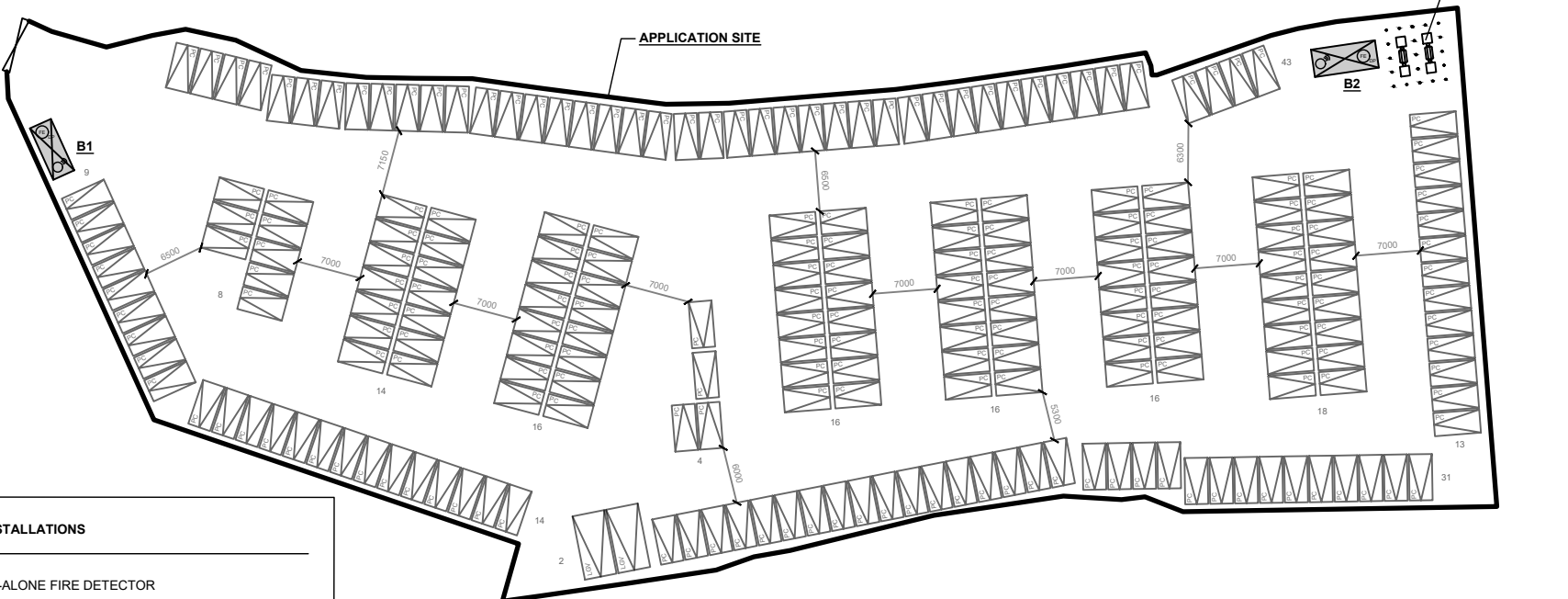


DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 7,364 m ²	(ABOUT)
COVERED AREA	: 36 m ²	(ABOUT)
UNCOVERED AREA	: 7,328 m ²	(ABOUT)
PLOT RATIO	: 0.01	(ABOUT)
SITE COVERAGE	: 1 %	(ABOUT)
NO. OF STRUCTURE	: 2	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 36 m ²	(ABOUT)
TOTAL GFA	: 36 m ²	(ABOUT)
BUILDING HEIGHT	: 3 m	(ABOUT)
NO. OF STOREY	: 1	

STRUCTURE	USE	COVERED AREA	GROSS FLOOR AREA	BUILDING HEIGHT
B1	CARETAKER OFFICE	15 m ² (ABOUT)	15 m ² (ABOUT)	3 m (ABOUT)(1-STOREY)
B2	METER ROOM	21 m ² (ABOUT)	21 m ² (ABOUT) ²	3 m (ABOUT)(1-STOREY)
TOTAL		36 m² (ABOUT)	36 m² (ABOUT)	

INGRESS / EGRESS
6 m (ABOUT)(W)



FIRE SERVICE INSTALLATIONS

- STAND-ALONE FIRE DETECTOR
- 4 KG DRY POWDER TYPE FIRE EXTINGUISHER

FS NOTES:

- SUFFICIENT STAND-ALONE FIRE DETECTOR SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDING IN ACCORDANCE WITH "STAND-ALONE FIRE DETECTOR GENERAL GUIDELINES ON PURCHASE, INSTALLATION & MAINTENANCE [SEP 2021]".
- IN RELATION TO 1) ABOVE, WHERE TWO OR MORE STAND-ALONE FIRE DETECTORS ARE INSTALLED IN AN ENCLOSED STRUCTURE, ALL STAND-ALONE DETECTORS SHALL BE INTERCONNECTED (EITHER WIRED OR WIRELESSLY) SUCH THAT WHEN ONE OF THE STAND-ALONE FIRE DETECTOR IS TRIGGERED, ALL CONNECTED STAND-ALONE FIRE DETECTORS SHALL SOUND AN ALARM SIMULTANEOUSLY.
- PORTABLE HAND-OPERATED APPROVED APPLIANCE SHALL BE PROVIDED AS REQUIRED BY OCCUPANCY.
- ACCESS IS PROVIDED FOR EMERGENCY VEHICLE TO REACH 30m OF ALL PART OF STRUCTURES.

PARKING AND LOADING/UNLOADING PROVISION

NO. OF PRIVATE CAR PARKING SPACE	: 209
DIMENSION OF PARKING SPACE	: 5 m (L) X 2.5 m (W)
NO. OF LIGHT GOODS VEHICLE PARKING SPACE	: 2
DIMENSION OF PARKING SPACE	: 7 m (L) X 3.5 m (W)

LEGEND

- APPLICATION SITE
- STRUCTURE
- PARKING SPACE (PC)
- PARKING SPACE (LGV)
- INGRESS / EGRESS

SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY.

PLANNING CONSULTANT



PROJECT

TEMPORARY PUBLIC VEHICLE PARK (EXCLUDING CONTAINER VEHICLE) FOR A PERIOD OF 5 YEARS

SITE LOCATION

VARIOUS LOTS IN D.D. 107 AND ADJOINING GOVERNMENT LAND, KAM TIN, YUEN LONG, NEW TERRITORIES

SCALE
1 : 750 @ A4

DRAWN BY DN	DATE 27.4.2026
REVISED BY	DATE
APPROVED BY	DATE

DWG. TITLE
FSIs Proposal

DWG NO. Appendix II	VER. 001
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