Annex G

Updated Report of the Traffic Impact Assessment

Reference number CHK50868310/PTC/L2500853/sys

18/12/2025

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D. 104 AND ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

TRAFFIC IMPACT ASSESSMENT

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1. INTRODUCTION

1.1 Background

1.1.1 The application site comprises lot No. 4822 in D.D. 104 and adjoining government Land, east Kam Pok Road, Mai Po, Yuen Long, as indicated in **Drawing 1.1**. It falls within an area zoned as "Residential (Group D)" on the Approved Mai Po and Fairview Park Outline Zoning Plan No. S/YL-MP/8.

1.1.2 The application site is the subject of a previous approved Section 16 planning application (No. A/YL-MP/287) for a residential development of 65 houses (Approved Scheme). The Applicant proposes to increase its domestic plot ratio from 0.2 to 1.5. Under the current scheme, the proposed development will provide 5 medium-rise residential blocks with total 1,303 units, a 6-classroom kindergarten and a Neighbourhood Elderly Centre ("NEC").

1.1.3 MVA Hong Kong Limited has been commissioned by the Applicant to carry out a traffic impact assessment to assess the traffic impact for the proposed residential development to support this rezoning application.

1.2 Study Objectives

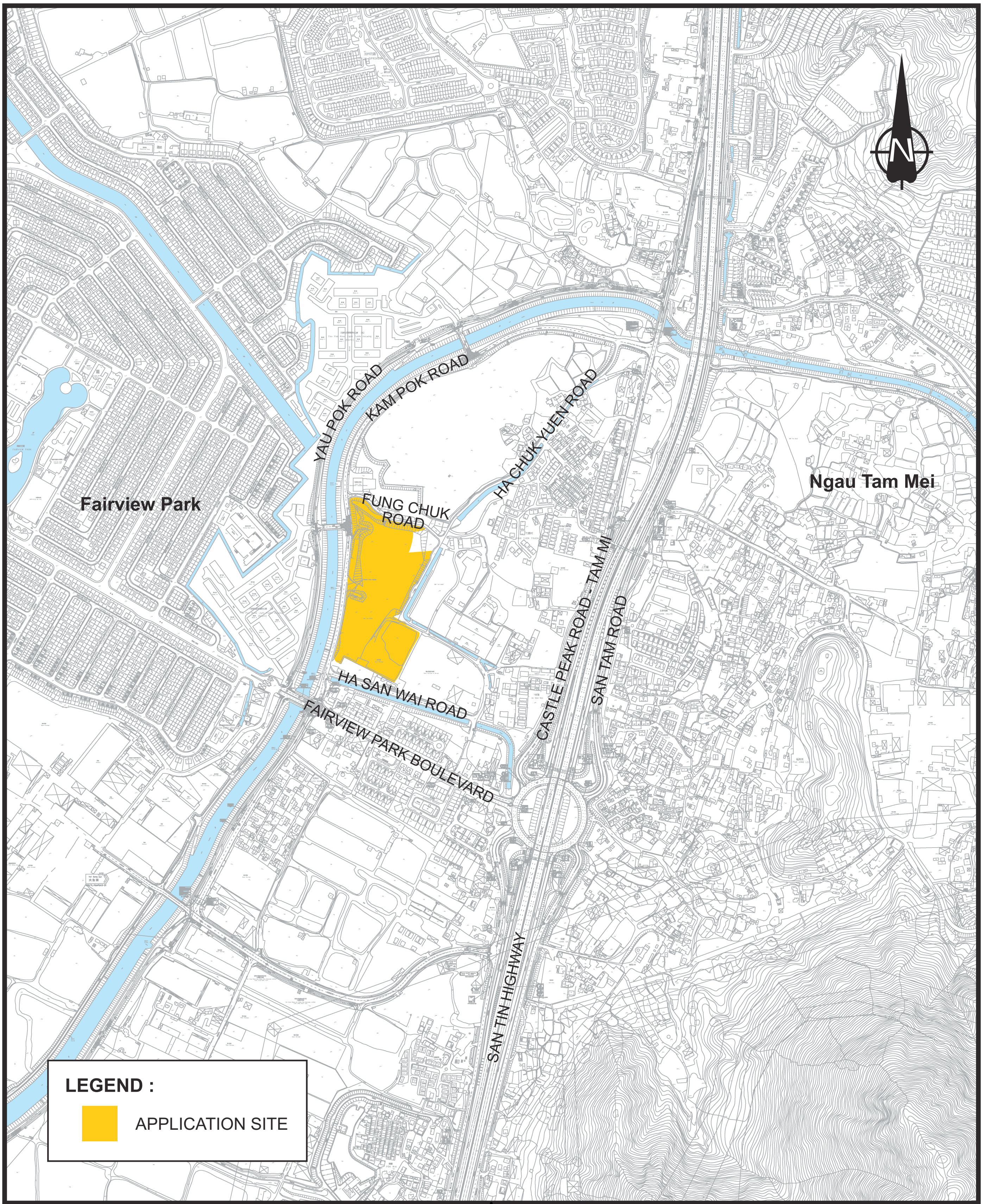
1.2.1 The objectives of this study are summarised as follows:

- review the current traffic condition and circulation pattern in the adjacent local road network;
- review the proposed development schedule;
- produce future traffic forecasts on the adjacent local road network with considerations of the planned developments in the vicinity; and
- investigate the traffic impact on the adjacent local road network with operation of the proposed development at Design Year, including the cumulative traffic impact induced by the proposed/potential residential developments in the locality.

1.3 Report Structure

1.3.1 Following this introductory chapter, there are five further chapters:

- **Chapter 2** – Proposed Development, presents the development parameters and the internal transport provisions of the proposed scheme;
- **Chapter 3** – Traffic Context, describes the current traffic condition in the vicinity;
- **Chapter 4** – Traffic Forecasting, describes the methodology of traffic forecasting exercise and presents the results;
- **Chapter 5** – Traffic Impact Assessment, presents the assessment findings of the anticipated traffic condition upon occupation of the proposed development, and suggests, if necessary, improvement measures to alleviate the foreseeable traffic problem;
- **Chapter 6** –Conclusion, summarises the study findings and presents the conclusion accordingly.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Fairview Park
Ngau Tam Mei
YAU POK ROAD
KAM POK ROAD
HA CHUK YUEN ROAD
FUNG CHUK ROAD
HA SAN WAI ROAD
FAIRVIEW PARK BOULEVARD
CASTLE PEAK ROAD - TAM MI
SAN TAM ROAD
SAN TIN HIGHWAY
LEGEND :
🟨 APPLICATION SITE

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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D.104 AND ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

SITE LOCATION

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2. PROPOSED DEVELOPMENT

2.1 Site Location

2.1.1 As indicated in **Drawing 1.1**, the application site is bounded by Kam Pok Road to its west, Fung Chuk Road to its north, Ha Chuk Yuen Road to its east and Ha San Wai Road to its south.

2.2 Development Parameters

2.2.1 The application site has a total land area of about 37,870m^2. It will be developed into a medium-rise residential development of about 1,303 units with an average flat size of about 43.6m^2. Comparison on the key development parameters between the approved and proposed schemes are summarized in **Table 2.1**. The proposed scheme is anticipated to complete in year 2031. The Master Layout Plan (MLP) is illustrated in **Drawing 2.1** respectively.

Table 2.1 Key Development Parameters

Item	Approved Scheme (A/YL-MP/287)	Proposed Scheme
Domestic Plot Ratio	0.2	1.5
Domestic GFA	7,540.4m^2	56,805m^2
No. of Unit	65 house	1,303 flats
Average flat Size (GFA)	about 116 m^2	about 43.6 m^2
Kindergarten	-	a 6-classroom kindergarten
GIC	-	a NEC

2.3 Vehicular Access Arrangement

2.3.1 The vehicular access arrangements in the current proposed scheme basically follow the approved scheme and those under the present government lease of the application site. Two vehicular accesses are proposed for the proposed development. The vehicular access at Kam Pok Road is the main access for residential use and kindergarten. Whilst, the second vehicular access at Ha Chuk Yuen Road is reserved for the proposed NEC and other serving vehicle. The locations of these two proposed vehicular accesses are illustrated in **Drawing No. 2.1**.

2.3.2 Currently, vehicles exceeding 7m in length are prohibited from accessing Ha Chuk Yuen Road. Swept path analysis for a 12.8m long vehicle and a 7m long vehicle have been conducted at the main entrance and second entrance respectively in **Appendix A**. The result demonstrated that sufficient manoeuvirng space has been provided for vehicles turning into and out from the proposed vehicular accesses.

2.3.3 Considering Fairview Park Boulevard is a private road, a directional sign will be provided at the development egress within the site to alert drivers to avoid using the private road to access Fairview Park Interchange as shown in **Appendix B**.

2.4 Internal Transport Facility

2.4.1 The proposed development would be provided with internal transport facilities in accordance with the latest Hong Kong Planning Standards and Guidelines (HKPSG) and the comments from Transport Department. The proposed provisions are summarised in **Table 2.2**.

Table 2.2 Proposed Internal Transport Facility Provisions

Item	High-end of HKPSG Requirements					Parameters	Provision (nos.)
Residential *Development*							
Private Car	GPS(1)	R1(1)		R2(1)	R3(1)		
	1 space per 4 units	$FS \leq 40m^2$	0.5	1	1.1	407 units	56
		$40m^2<FS\leq70m^2$	1.2			896 units	296
Visitor Parking	5 spaces for each block with more than 75 units					5 blocks	25
						Total	377 *(2)*
Motorcycle Parking	1 space per 10 residential car parking spaces*(3)*					352 spaces	36
HGV Loading/ Unloading Bays	1 bay per residential block					5 blocks	5
Bicycle Parking Space	1 space per 7.5 flats*(3)*					1,303 units	174
Kindergarten							
Private Car	1 space per 4 classrooms					6 classrooms	2
Lay-by for taxis and Private Car	1 for every 5 classrooms					6 classrooms	2
Lay-by for school buses	5 lay-bys of size 3m x 7m for mini-bus/nanny van					-	5 lay-bys of size 3m x 7m

Remarks:

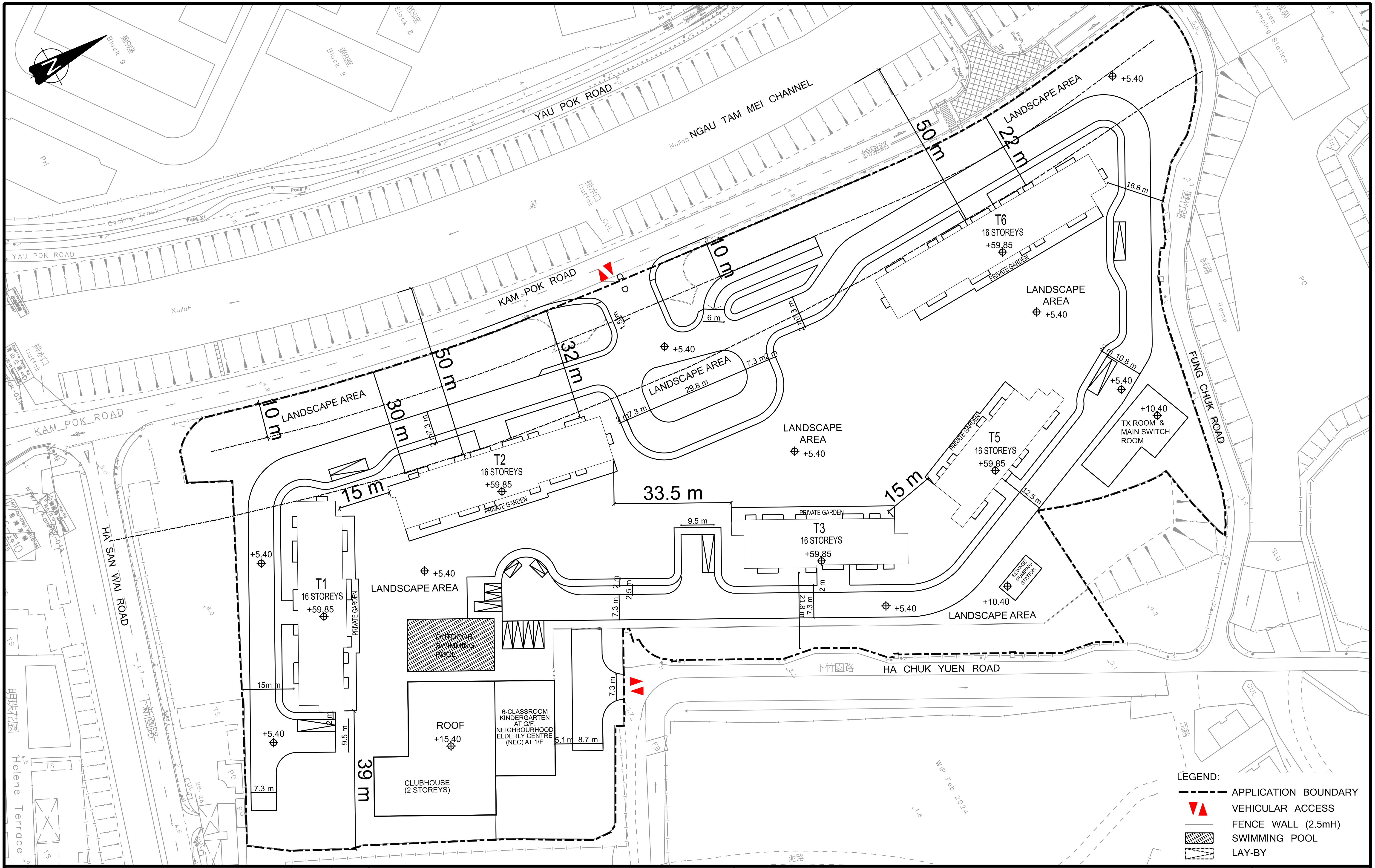
(1) Parking Requirement = GPS x R1 x R2 x R3, where GPS = 1 car space per 4 flats, R1=1.2 for flat size $40m^2<FS\leq70m^2$, R2=1 for the site outside a 500-radius of rail station, R3=1.1 for domestic plot ratio $1<PR\leq2$.

(2) Minimum 5 accessible parking spaces will be reserved for persons with disabilities with reference to HKPSG (at least 1 space for visitor parking).

(3) Based on the comments from TD.

2.4.2 The proposed NEC would mainly serve local residents. Nil parking provision is proposed for NEC with reference to the recently agreed rezoning application (No. Y/YL-MP/10) nearby.

2.4.3 Under the current MLP, the residential carpark would be located in the basement, whilst the loading/unloading bays would be located on the ground floor level along 7.3m wide main internal driveway. For kindergarten carpark and drop-off area, it would be located on ground floor level at the southern end of the main driveway, which will not cause potential traffic queue back onto Kam Pok Road.


YAU POK ROAD
NGAU TAM MEI CHANNEL
KAM POK ROAD
HA SAN WAI ROAD
FUNG CHUK ROAD
HA CHUK YUEN ROAD
下竹園路
錦攀路
Nullah
Cycling Track
Outfall
排水口
Block 9
第9座
Block 8
第8座
明珠花園
Helene Terrace
Yuen Pumping Station
LANDSCAPE AREA
LANDSCAPE AREA
LANDSCAPE AREA
LANDSCAPE AREA
LANDSCAPE AREA
LANDSCAPE AREA
T1
16 STOREYS
+59.85
T2
16 STOREYS
+59.85
T3
16 STOREYS
+59.85
T5
16 STOREYS
+59.85
T6
16 STOREYS
+59.85
PRIVATE GARDEN
OUTDOOR SWIMMING POOL
ROOF
+15.40
CLUBHOUSE
(2 STOREYS)
6-CLASSROOM KINDERGARTEN AT G/F, NEIGHBOURHOOD ELDERLY CENTRE (NEC) AT 1/F
TX ROOM & MAIN SWITCH ROOM
+10.40
SEWAGE PUMPING STATION
+10.40
+5.40
50 m
50 m
32 m
30 m
10 m
10 m
22 m
15 m
15 m
33.5 m
39 m
16.8 m
10.8 m
12.5 m
29.8 m
9.5 m
8.7 m
5.1 m
7.3 m
6 m
2 m
2.5 m
21.8 m
15m
15m
LEGEND:
APPLICATION BOUNDARY
VEHICULAR ACCESS
FENCE WALL (2.5mH)
SWIMMING POOL
LAY-BY

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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT
LOT NO. 4822 IN D.D. 104 AND ADJOINING GOVERNMENT LAND,
EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

MASTER LAYOUT PLAN

SYSTRA MVA

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3. TRAFFIC CONTEXT

3.1 Surrounding Road Network

3.1.1 With the traffic management measure as described in **Section 2.3.3**, the development traffic from San Tin Highway would access the site via Castle Peak Road – Tam Mi Section and Kam Pok Road. The major ingress and egress routes of the application site are illustrated in **Drawing 3.1**.

3.1.2 Kam Pok Road is a standard single-two lane carriageway of 7.3m wide with a 2m wide footpath along its eastern side. It mainly serves the local developments in the vicinity.

3.1.3 Ha Chuk Yuen Road and Fung Chuk Road are single track access roads. Vehicles exceeding 7m in length are prohibited from accessing these roads.

3.1.4 Fairview Park Boulevard is a dual 2-lane carriageway. It connects the traffic from San Tin Highway to the local developments including Fairview Park.

3.2 Existing Traffic Condition

3.2.1 A total of seven local junctions and six road links have been identified with reference to the major ingress and egress routes of the proposed development for assessment purposes. The key local junctions are listed in **Table 3.1**, whilst their locations are indicated in **Drawing 3.2**.

Table 3.1 Identified Local Key Junctions and Road Links

Ref.(1)	Junction	Type	Drawing No.
Junction			
J1	Fairview Park Interchange	Roundabout	3.3
J2	Fairview Park Boulevard / Kam Pok Road	Signal	3.4
J3	Kam Pok Road / Vehicular Bridge (South)	Signal	3.5
J4	Kam Pok Road / Vehicular Bridge (North)	Signal	3.6
J5	Kam Pok Road / Ha Chuk Yuen Road	Priority	3.7
J6	Castle Peak Road / Kam Pok Road	Priority	3.7
J7	Kam Pok Road / Fung Chuk Road	Priority	3.8
Road Link			
L1	Castle Peak Road – Tam Mi	Single-2	3.2
L2	Fairview Park Boulevard	Dual-2	3.2
L3	Kam Pok Road	Single 2	3.2
L4	Fung Chuk Road	Single track	3.2
L5	Ha Chuk Yuen Road	Single track	3.2
L6	San Tin Highway	Dual-3	3.2

Remark: (1) Locations refer to **Drawing 3.2**.

Traffic Surveys

3.2.2 A manual classified traffic survey was conducted at the identified junctions and road links to establish the current traffic condition in the vicinity of the site. The survey was carried out during 07:30-09:30 and 17:00-19:00 in the morning and evening peak hour periods on a typical weekday in April 2025.

3.2.3 The results of the survey have indicated that the morning and evening peak hours occur during 08:00 – 09:00 and 17:45 – 18:45 respectively. Based on the survey result, the year 2025 peak-hour traffic flows are shown in **Drawing 3.9.**

Junction Operational Performance

3.2.4 Junction capacity assessments have been conducted to evaluate the current operational performance of the identified junctions. The assessment results are summarised in **Table 3.2**.

Table 3.2 Current Junction Operational Performance

Ref. $^{(1)}$	Junction	Type	RC/RFC $^{(2)}$	
			AM Peak	PM Peak
J1	Fairview Park Interchange	Roundabout	0.56	0.55
J2	Fairview Park Boulevard / Kam Pok Road	Signal	85%	69%
J3	Kam Pok Road / Vehicular Bridge (South)	Signal	>100%	>100%
J4	Kam Pok Road / Vehicular Bridge (North)	Signal	>100%	>100%
J5	Kam Pok Road / Ha Chuk Yuen Road	Priority	0.05	0.05
J6	Castle Peak Road / Kam Pok Road	Priority	0.13	0.12
J7	Kam Pok Road / Fung Chuk Road	Priority	0.01	0.01

Remarks: (1) Refer to **Drawing 3.2** for junction locations.
(2) RC = reserved capacity for signal junction, RFC = ratio-of-flow to capacity for roundabout/priority junction.

3.2.5 The assessment results in **Table 3.2** indicated that all the identified key junctions are currently operating within capacities during peak hours.

Road Link Operational Performance

3.2.6 Besides, road link assessments have also been conducted to evaluate the current operational performance of the identified links. The Volume to Capacity (V/C) ratios of each identified road links have been evaluated and the results are summarised in **Table 3.3**.

Table 3.3 Current Road Link Operational Performance

Ref.$^{(1)}$	Road Link	Dir	Link Capacity (pcu/hr)	Observed Flows (pcu/hr)		V/C Ratio	
				AM	PM	AM	PM
L1	Castle Peak Road – Tam Mi	Two-way	2,125$^{(2)}$	895	720	0.42	0.34
L2	Fairview Park Boulevard	EB	2,600$^{(3)}$	870	675	0.33	0.26
		WB	2,600$^{(3)}$	575	805	0.22	0.31
L3	Kam Pok Road	Two-way	1,800$^{(4)}$	145	135	0.08	0.08
L4	Fung Chuk Road	Two-way	100$^{(5)}$	5	10	0.05	0.1
L5	Ha Chuk Yuen Road	Two-way	100$^{(5)}$	5	10	0.05	0.1
L6	San Tin Highway	NB	6,100$^{(6)}$	4905	4985	0.80	0.82
		SB	6,100$^{(6)}$	5080	4595	0.83	0.75

Remarks: (1) Refer to **Drawing 3.2**.
(2) Road capacity for single 2-lane rural road, with consideration of roadside activities.
(3) Road capacity for dual-2 lane local distributor.
(4) Road capacity for single-2 lane local distributor.
(5) Road capacity for single-track access road.
(6) Road capacity for dual-3 lane trunk road.

3.2.7 The assessment results in **Table 3.3** indicated that all the identified sections are currently operating within capacities.

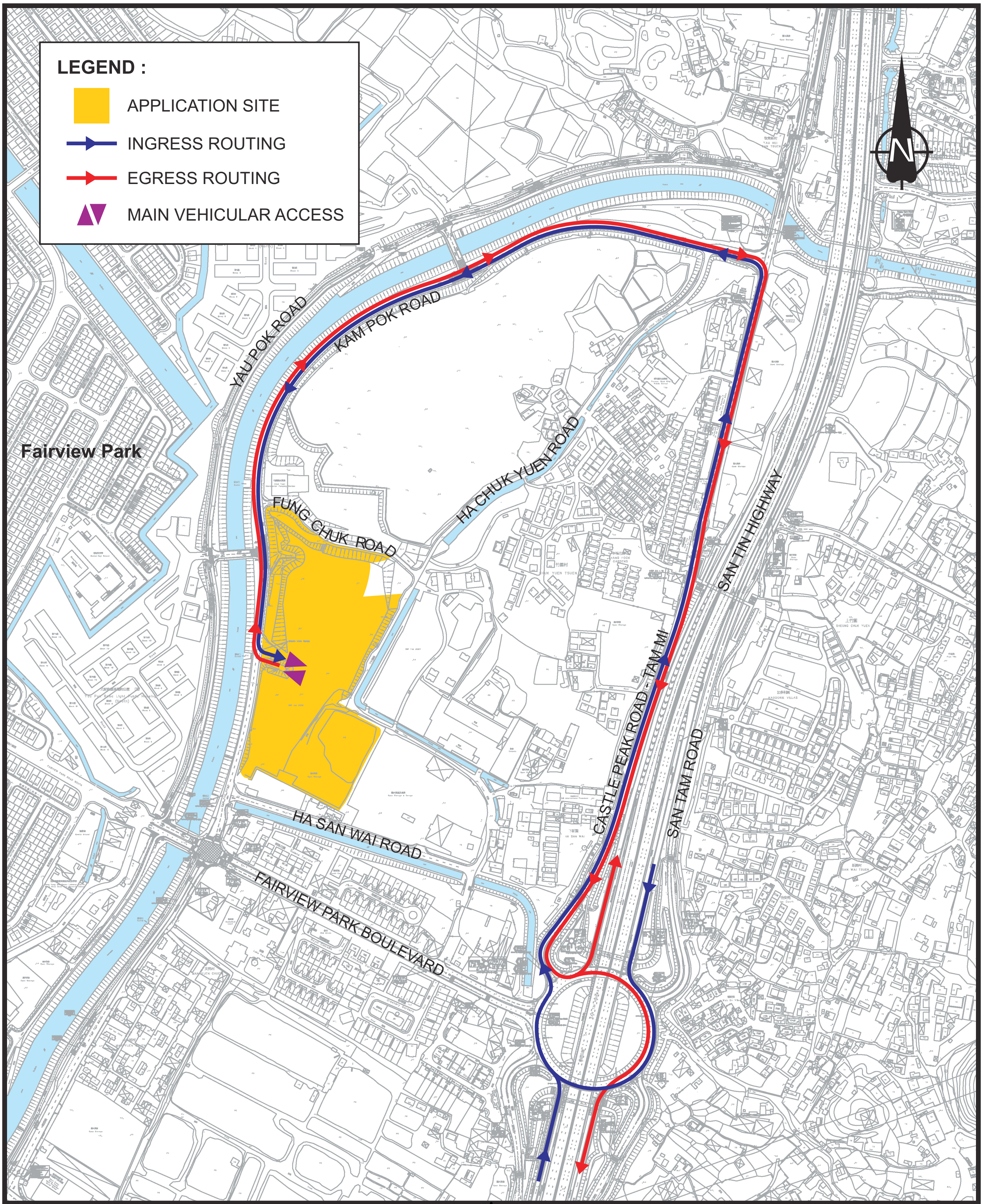
3.3 Existing Public Transport Services

3.3.1 Franchised bus and minibus are the major public transport services in the vicinity of the site. The nearby public transport facilities of the site are indicated in **Drawing 3.10**, whilst the details and servicing schedules are summarised in **Table 3.4**.

Table 3.4 Existing Public Transport Services

Route	Origin/Destination	Frequency (min.)	Remark
Franchised Bus			
76[(1)]	Yau Pok Road Public Housing (South) Terminus <–> Sheung Shui Station (Choi Yuen Road)	30	Circular Route
76K	Ching Ho Estate <–> Long Ping Estate	20-30	-
268[(1)]	Yau Pok Road Public Housing (South) Terminus <–> Pat Heung Road	30-35	
976	Lok Ma Chau (San Tin) <–> Sai Wan Ho	-	Monday to Friday (except public holidays); From Lok Ma Chau (San Tin): 06:25, 07:15, 07:45 From Sai Wan Ho: 18:10, 18:40, 19:10
976A	Lok Ma Chau (San Tin) <–> Siu Sai Wan (Island Resort)	-	Monday to Friday (except public holidays); From Lok Ma Chau (San Tin): 06:55 From Siu Sai Wan (Island Resort): 17:30
Green Minibus			
36	Yuen Long (Fook Hong St) <–> Tai Sang Wai	15-20	-
36A[(1)]	Yuen Long (Fook Hong Street) <–> Yau Pok Road Light Public Housing	20	Evening Departures (omits Kik Yeung Road);
37	Yuen Long (Fook Hong St) <–> Yau Tam Mei	15-20	-
38	Yuen Long (Fook Hong St) <–> Tai Sang Wai (W)	15-20	-
75	Yuen Long (Fook Hong Street) <–> Lok Ma Chau Spur Line Public Transport Interchange	15-30	-
76	Yuen Long (Fook Hong Street) <–> Siu Hum Tsuen	15-20	-

Remark: (1) The routes were introduced for temporary Light Public Housing at Yau Pok Road.


LEGEND :
APPLICATION SITE
INGRESS ROUTING
EGRESS ROUTING
MAIN VEHICULAR ACCESS
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Fairview Park
YAU POK ROAD
KAM POK ROAD
FUNG CHUK ROAD
HA CHUK YUEN ROAD
SAN TIN HIGHWAY
CASTLE PEAK ROAD - TAM MI
SAN TAM ROAD
HA SAN WAI ROAD
FAIRVIEW PARK BOULEVARD

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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D.104 AND ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

MAJOR INGRESS AND EGRESS ROUTES

Designed HZF	Checked PTC	Scale NTS	Date JUN 2025	Drawing No. 3.1	Rev. A

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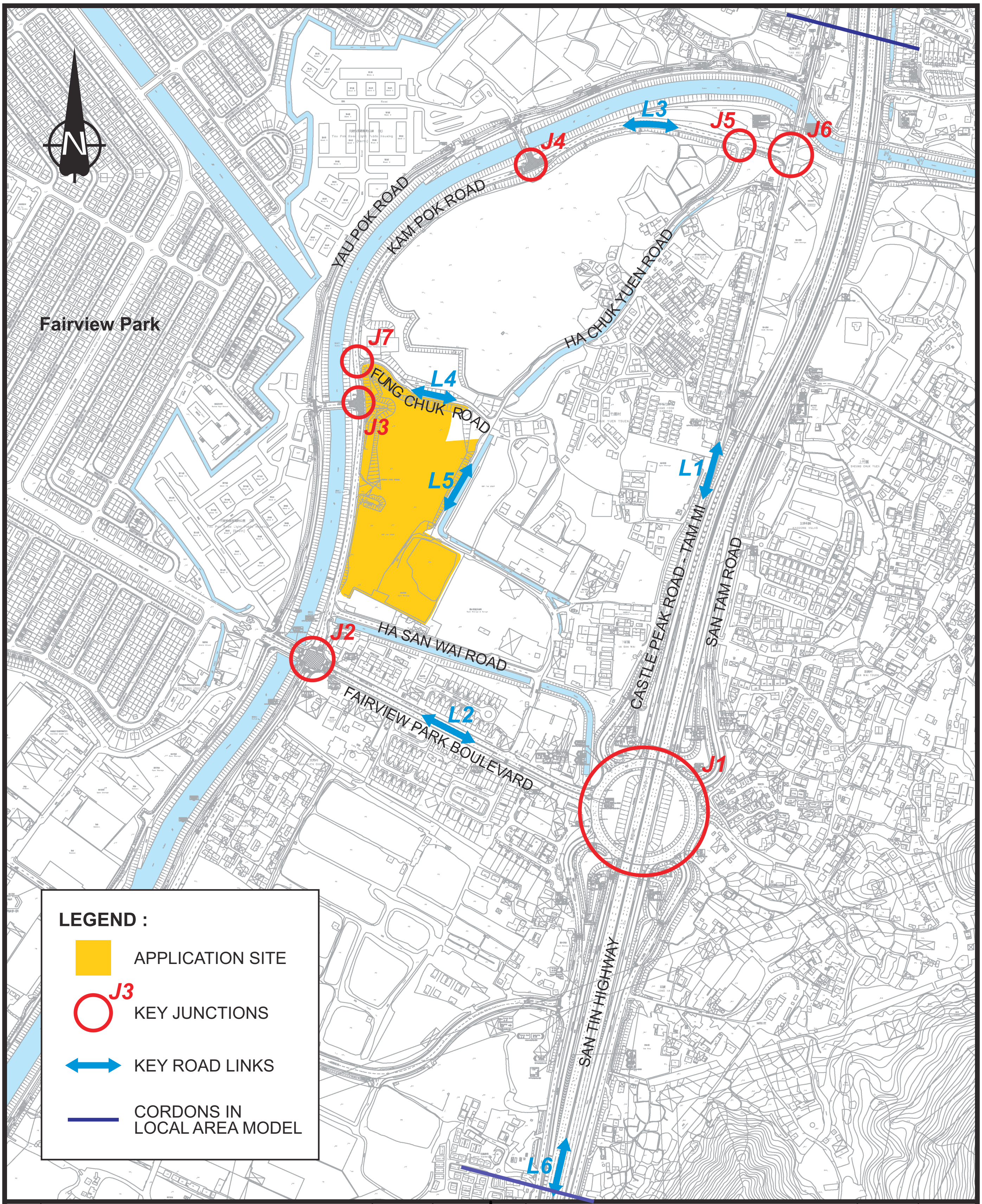
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YAU POK ROAD
KAM POK ROAD
HA CHUK YUEN ROAD
FUNG CHUK ROAD
HA SAN WAI ROAD
FAIRVIEW PARK BOULEVARD
CASTLE PEAK ROAD - TAM MI
SAN TAM ROAD
SAN TIN HIGHWAY
J1
J2
J3
J4
J5
J6
J7
L1
L2
L3
L4
L5
L6
LEGEND :
APPLICATION SITE
J3
KEY JUNCTIONS
KEY ROAD LINKS
CORDONS IN LOCAL AREA MODEL

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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D.104 AND ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

IDENTIFIED KEY JUNCTIONS AND ROAD LINKS

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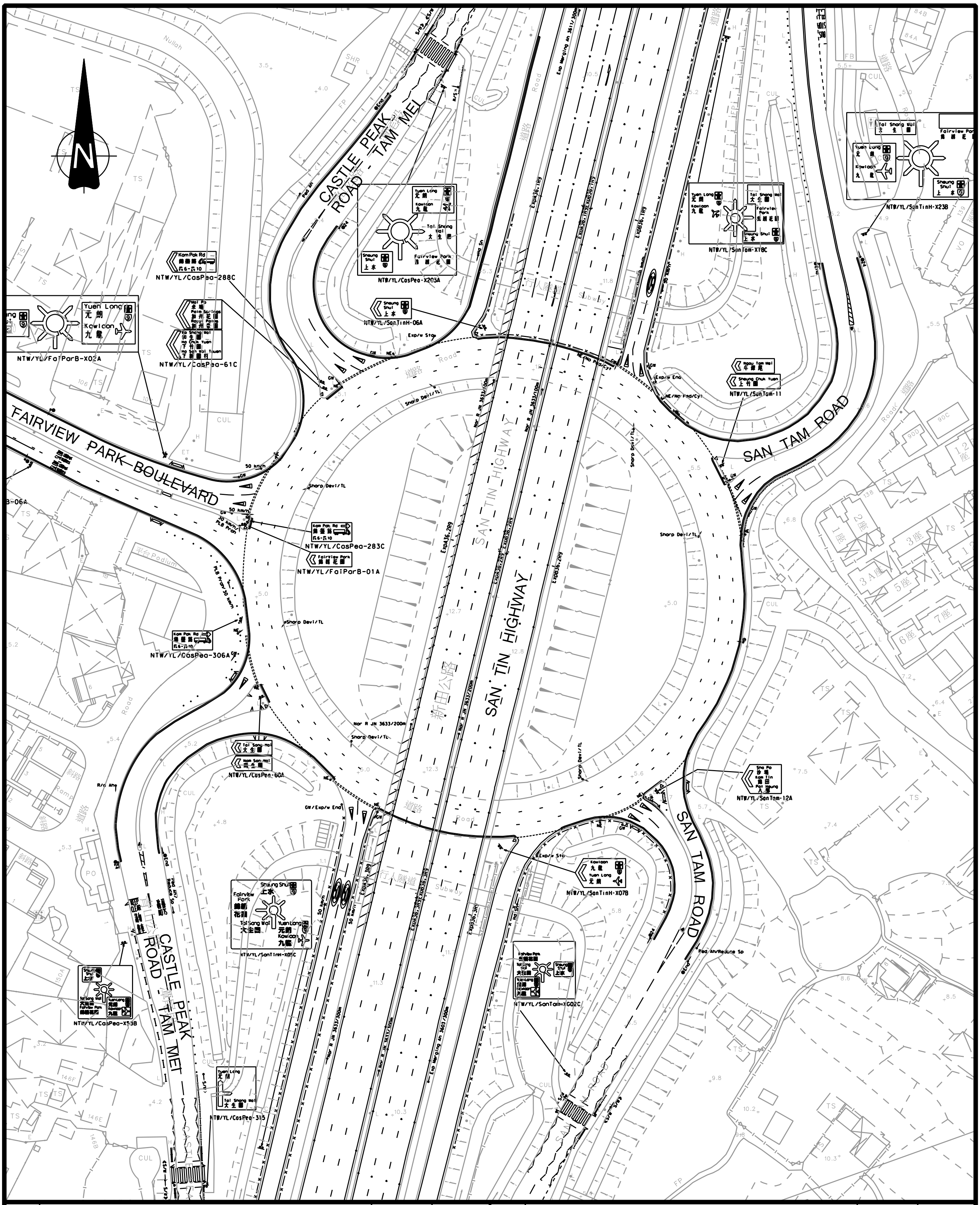
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CASTLE PEAK ROAD - TAM MI
FAIRVIEW PARK BOULEVARD
SAN TIN HIGHWAY
新田公路
SAN TAM ROAD
CASTLE PEAK ROAD - TAM MI
NTW/YL/CasPea-288C
NTW/YL/CasPea-X203A
NTW/YL/SanTinH-06A
NTW/YL/SanTam-X18C
NTW/YL/SanTinH-X23B
NTW/YL/FaiParB-X02A
NTW/YL/CasPea-61C
NTW/YL/SanTam-11
NTW/YL/CasPea-283C
NTW/YL/FaiParB-01A
NTW/YL/CasPea-306A
NTW/YL/CasPea-60A
NTW/YL/SanTam-12A
NTW/YL/SanTinH-X07B
NTW/YL/SanTinH-X05C
NTW/YL/SanTam-X02C
NTW/YL/CasPea-X53B
NTW/YL/CasPea-315
Yuen Long
元朗
Kowloon
九龍
Tai Shang Wai
大生圍
Sheung Shui
上水
Fairview Park
錦綉花園
Kam Pok Rd
錦壆路
Sharp Devi/TL
50 km/h

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D. 104 AND
ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

EXISTING JUNCTION LAYOUT OF FAIRVIEW PARK INTERCHANGE (J1)

SYSTRA MVA

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	1:1500(A4)	JUN 2025	3.3	-

Original Size : A4

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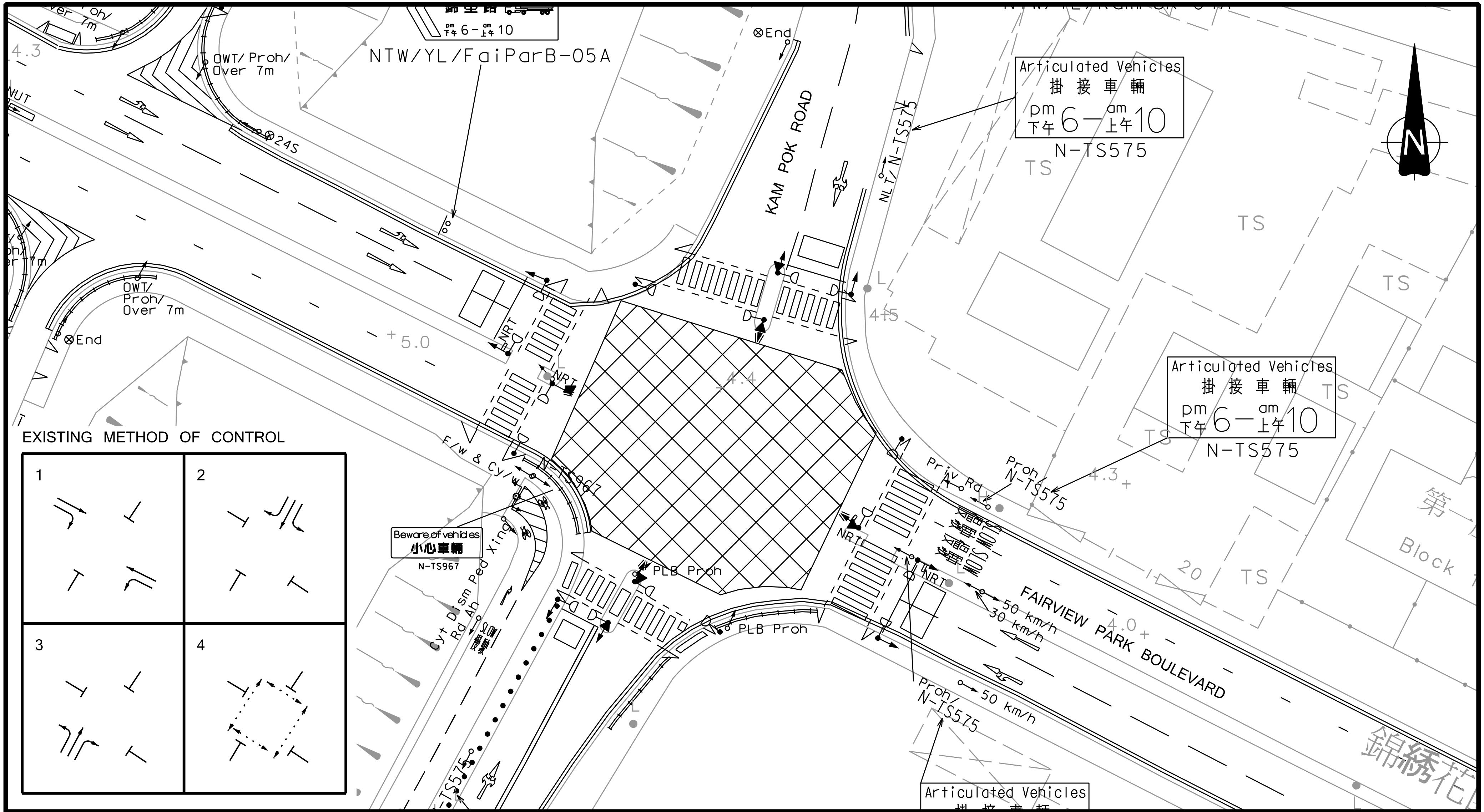
NTW/YL/FaiParB-05A
OWT/ Proh/ Over 7m
OWT/ Proh/ Over 7m
⊗End
⊗End
KAM POK ROAD
NLT/ N-TS575
Articulated Vehicles
掛 接 車 輛
pm 下午 6 — am 上午 10
N-TS575
Articulated Vehicles
掛 接 車 輛
pm 下午 6 — am 上午 10
N-TS575
TS
NRT
NRT
NRT
NRT
5.0
4.4
4.5
4.3
4.0
20
F/w & Cy/w
N-TS967
Beware of vehicles
小心車輛
N-TS967
Cyt Dism Ped Xing
Rd Ah
PLB Proh
PLB Proh
Priv Rd
Proh/ N-TS575
Proh/ N-TS575
FAIRVIEW PARK BOULEVARD
50 km/h
30 km/h
50 km/h
N-TS575
Articulated Vehicles
Block
N
EXISTING METHOD OF CONTROL
1
2
3
4

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED RESIDENTIAL DEVELOPMENT
AT LOT NO. 4822 IN D.D. 104 AND
ADJOINING GOVERNMENT LAND,
EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

EXISTING JUNCTION LAYOUT OF KAM POK ROAD / FAIRVIEW PARK BOULEVARD (J2)

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	1:500(A4)	JUN 2025	3.4	-

SYSTRA MVA

Original Size : A4

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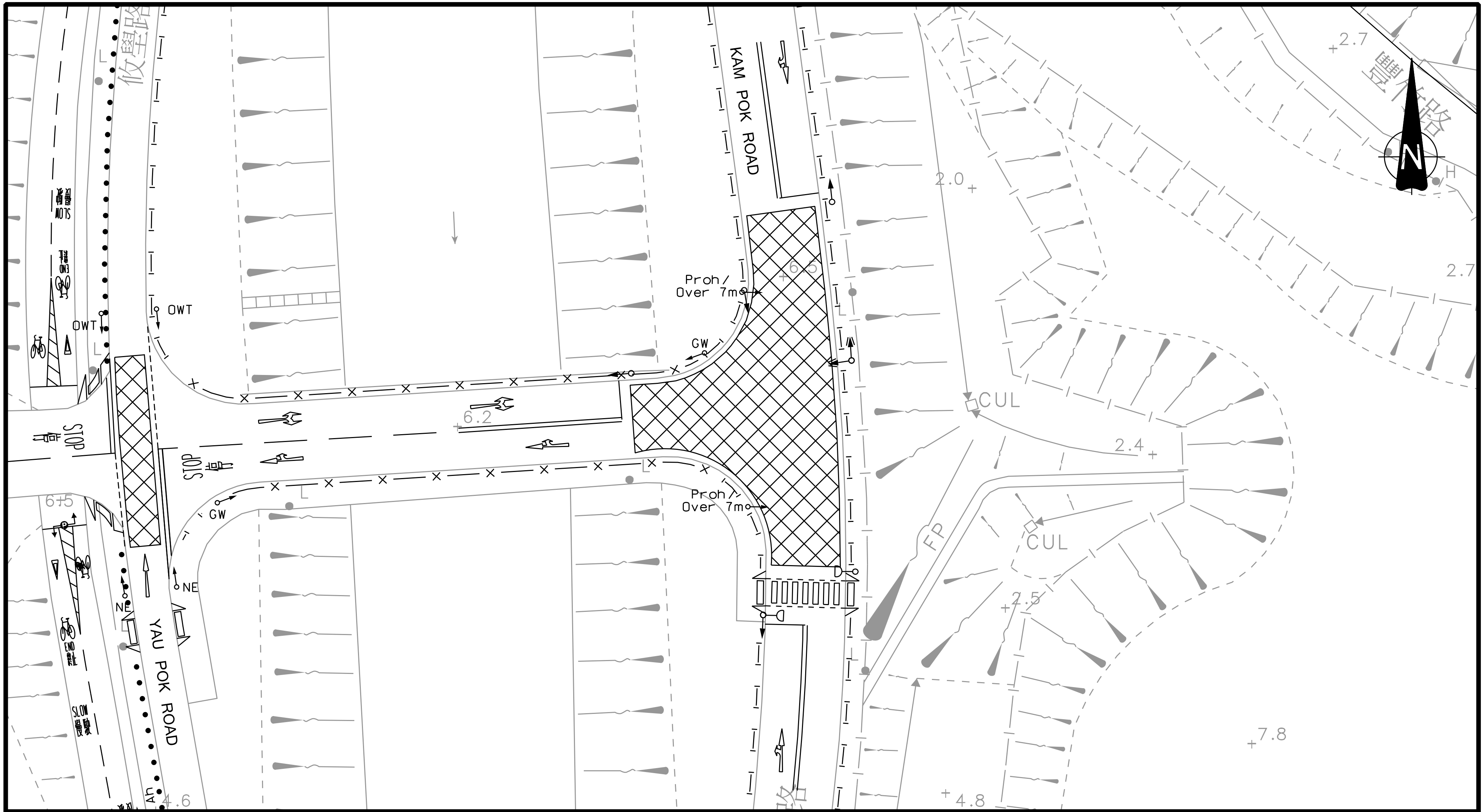
KAM POK ROAD
YAU POK ROAD
N
H
2.7
2.7
2.0
6.5
Proh/
Over 7m
GW
OWT
OWT
6.2
STOP
STOP
2.4
CUL
CUL
FP
2.5
Proh/
Over 7m
GW
NE
NE
6.5
SLOW
END
7.8
4.8
4.6
L

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED RESIDENTIAL DEVELOPMENT
AT LOT NO. 4822 IN D.D. 104 AND ADJOINING
GOVERNMENT LAND, EAST OF KAM POK ROAD,
MAI PO, YUEN LONG

Drawing Title

EXISTING JUNCTION LAYOUT OF KAM POK ROAD / VEHICULAR BRIDGE - SOUTH (J3)

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	1:500(A4)	JUN 2025	**3.5**	-

SYSTRA MVA

Original Size : A4

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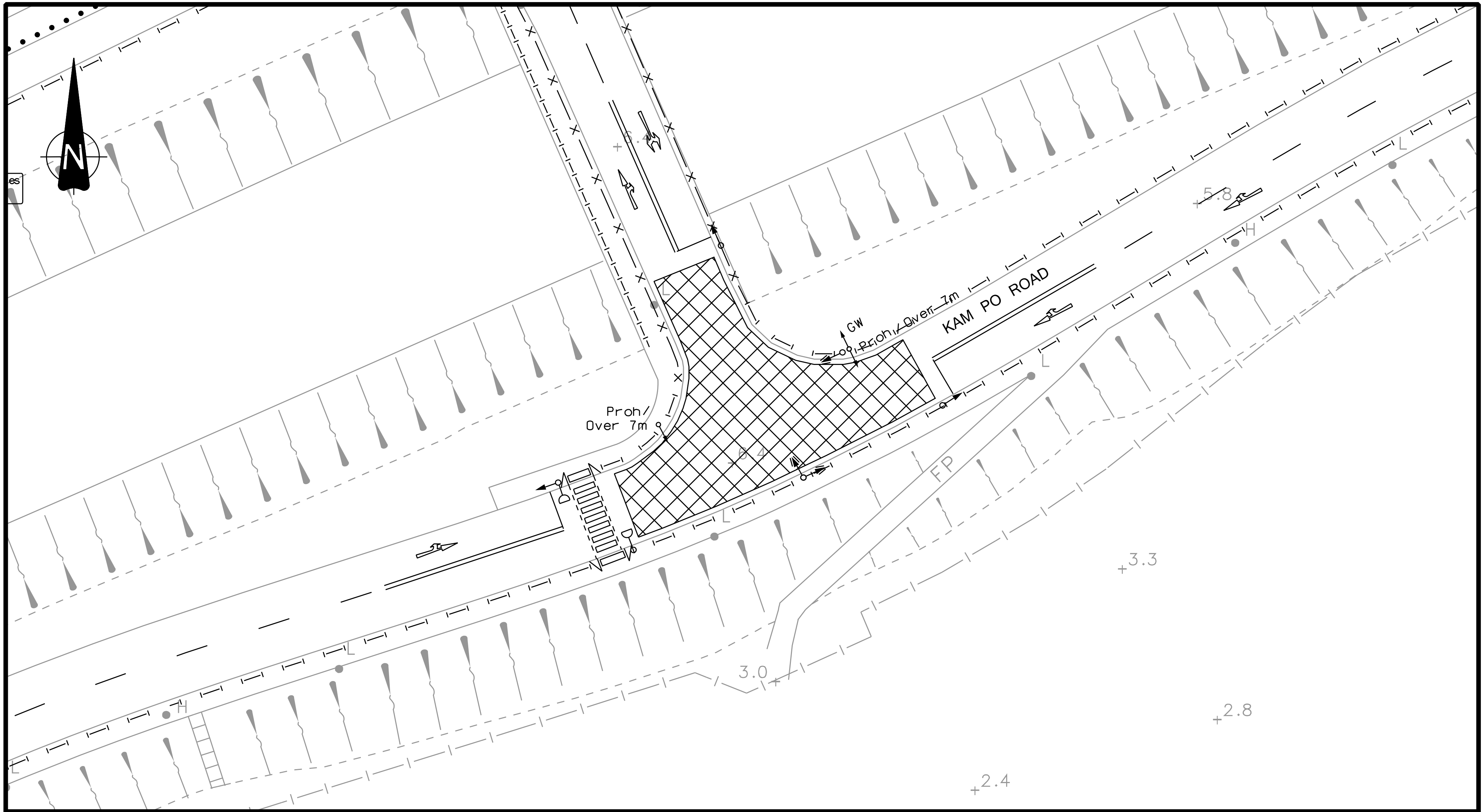
KAM PO ROAD
Proh/ Over 7m
Proh/
Over 7m
GW
FP
L
H
6.4
5.8
6.4
3.3
3.0
2.8
2.4
N

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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT
LOT NO. 4822 IN D.D. 104 AND
ADJOINING GOVERNMENT LAND,
EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

EXISTING JUNCTION LAYOUT OF KAM PO ROAD / VEHICULAR BRDIGE - NORTH (J4)

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	1:500(A4)	JUN 2025	3.6	-

SYSTRA MVA

Original Size : A4

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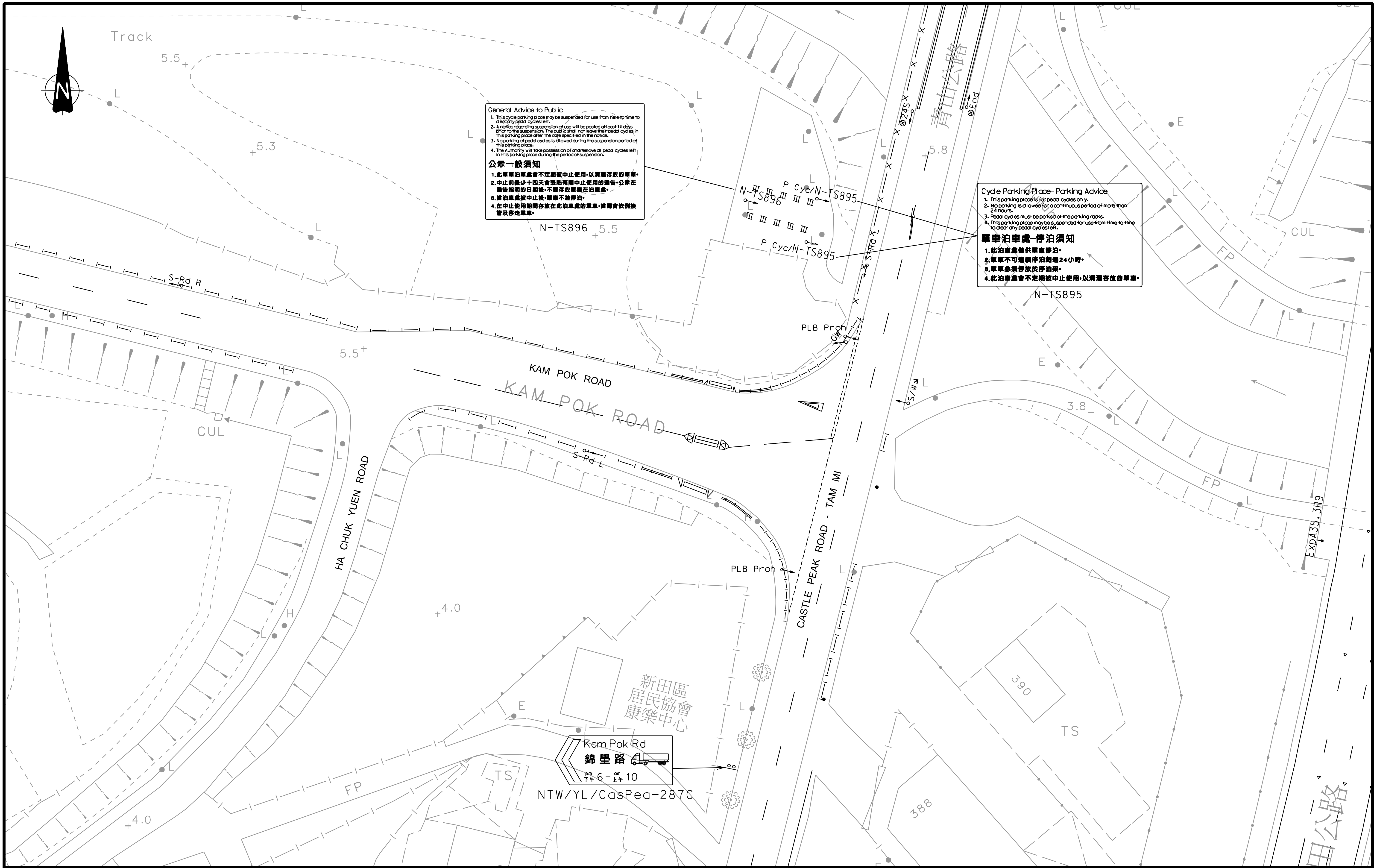
Track
N
KAM POK ROAD
HA CHUK YUEN ROAD
CASTLE PEAK ROAD - TAM MI
青山公路
CUL
FP
TS
390
388
PLB Proh
S-Rd R
S-Rd L
P Cyc/N-TS895
N-TS896
N-TS895
End
ExpA35.3R9
新田區居民協會康樂中心
Kam Pok Rd
錦壆路
pm 下午 6 - am 上午 10
NTW/YL/CasPea-287C
General Advice to Public
1. This cycle parking place may be suspended for use from time to time to clear any pedal cycles left.
2. A notice regarding suspension of use will be posted at least 14 days prior to the suspension. The public shall not leave their pedal cycles in this parking place after the date specified in the notice.
3. No parking of pedal cycles is allowed during the suspension period of this parking place.
4. The Authority will take possession of and remove all pedal cycles left in this parking place during the period of suspension.
公眾一般須知
1.此單車泊車處會不定期被中止使用，以清理存放的單車。
2.中止前最少十四天會張貼有關中止使用的通告。公眾在通告指明的日期後，不要存放單車在泊車處。
3.當泊車處被中止後，單車不准停泊。
4.在中止使用期間存放在此泊車處的單車，當局會依例接管及移走單車。
Cycle Parking Place- Parking Advice
1. This parking place is for pedal cycles only.
2. No parking is allowed for a continuous period of more than 24 hours.
3. Pedal cycles must be parked at the parking racks.
4. This parking place may be suspended for use from time to time to clear any pedal cycles left.
單車泊車處—停泊須知
1.此泊車處僅供單車停泊。
2.單車不可連續停泊超過24小時。
3.單車必須停放於停泊架。
4.此泊車處會不定期被中止使用，以清理存放的單車。
5.5
5.3
5.8
3.8
4.0

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PRINTED BY: lho1 DATE: 5 Jun 2025 TIME: 16:56:35

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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT
LOT NO. 4822 IN D.D. 104 AND ADJOINING GOVERNMENT LAND,
EAST OF KAM POK ROAD, MAI PO, YUEN LONG

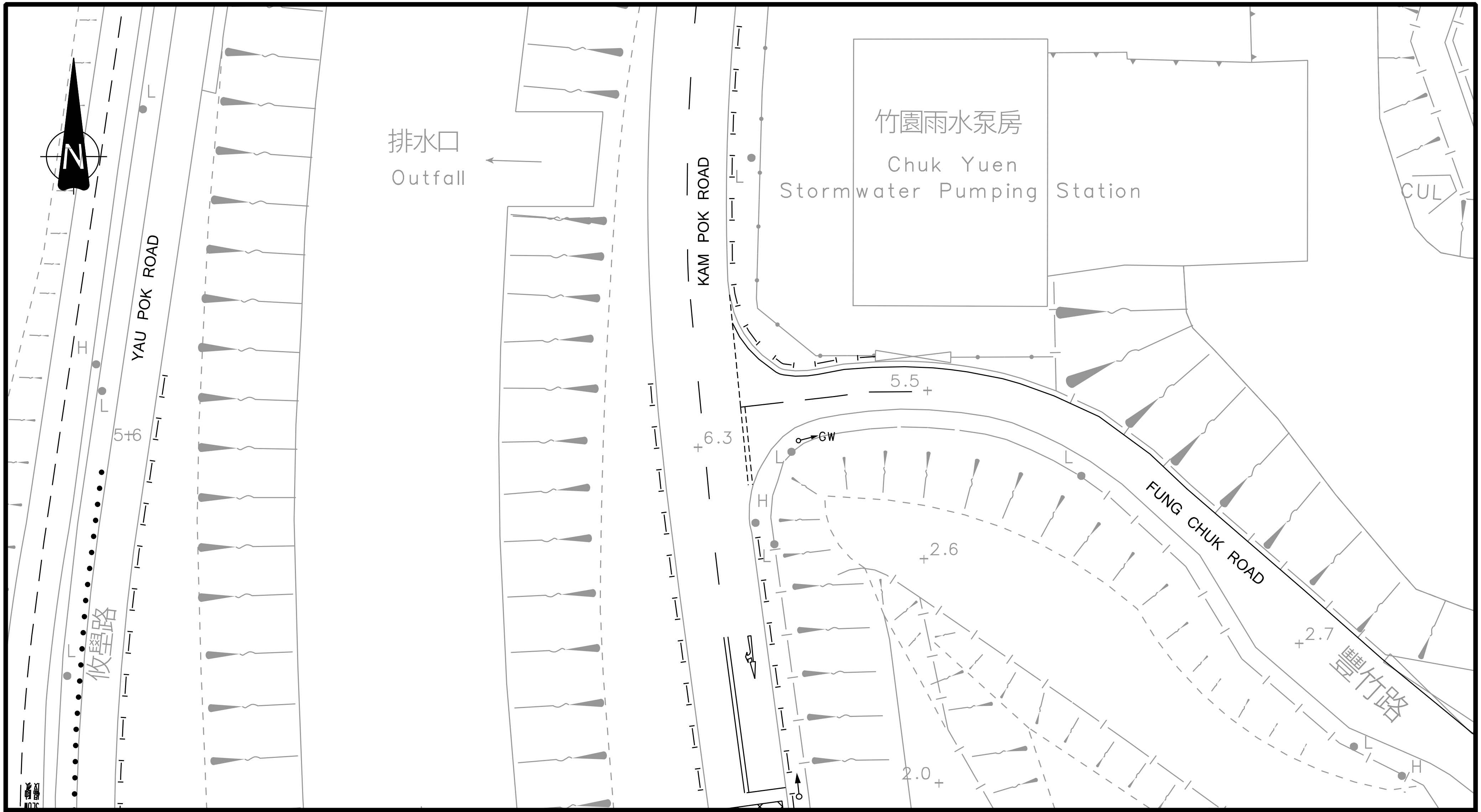
Drawing Title

EXISTING JUNCTION LAYOUT OF KAM POK ROAD / HA CHUK YUEN ROAD (J5) AND KAM POK ROAD / CASTLE PEAK ROAD - TAM MI (J6)

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	1:500(A3)	JUN 2025	3.7	-

SYSTRA MVA

Original Size : A3


N
YAU POK ROAD
攸壆路
排水口
Outfall
KAM POK ROAD
竹園雨水泵房
Chuk Yuen
Stormwater Pumping Station
CUL
FUNG CHUK ROAD
豐竹路
5.6
6.3
5.5
2.6
2.7
2.0
GW
L
H

Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT
LOT NO. 4822 IN D.D. 104 AND
ADJOINING GOVERNMENT LAND,
EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

EXISTING JUNCTION LAYOUT OF KAM POK ROAD / FUNG CHUK ROAD (J7)

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	1:500(A4)	DEC 2025	3.8	-

SYSTRA MVA

Original Size : A4

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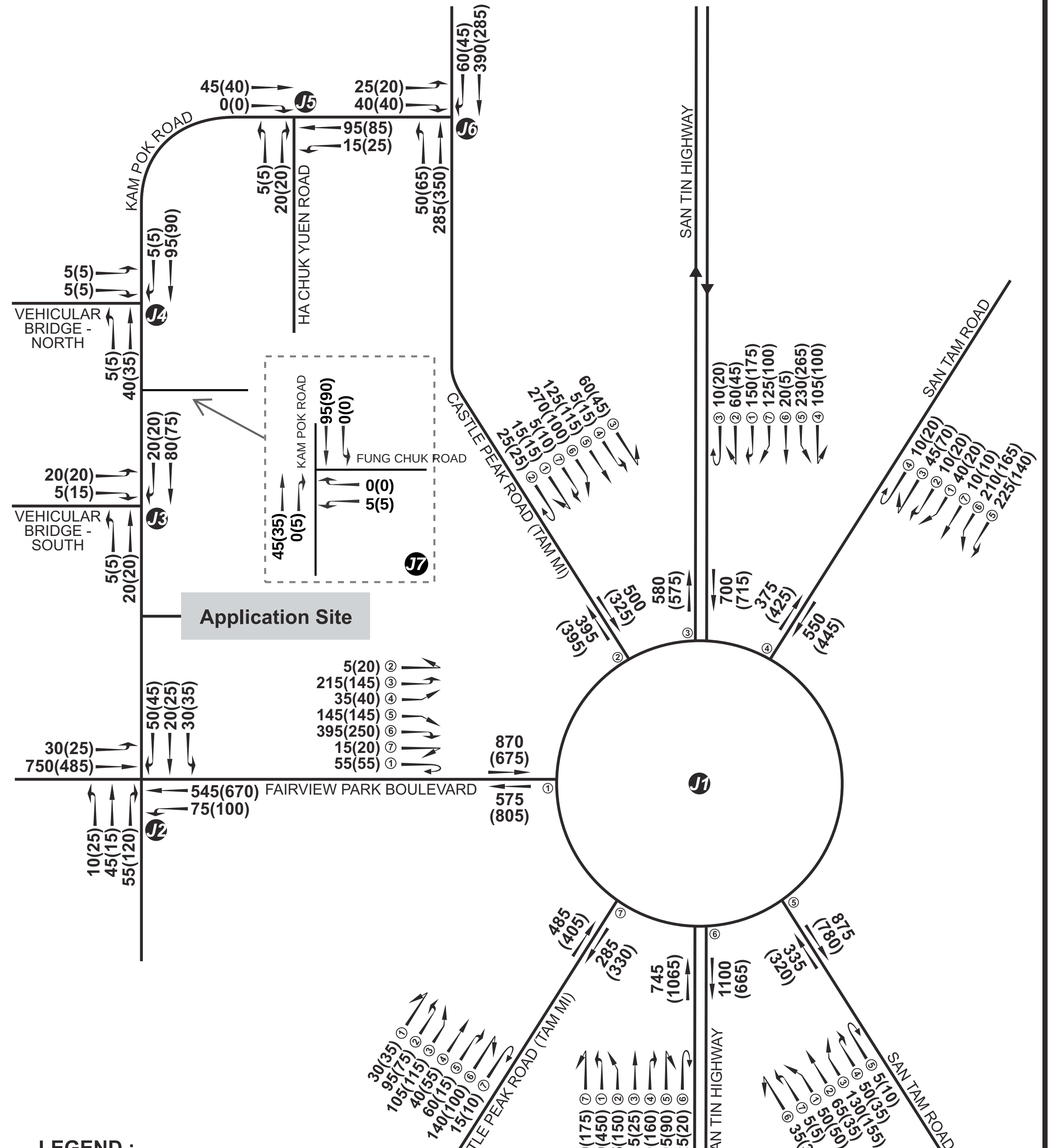
KAM POK ROAD
HA CHUK YUEN ROAD
SAN TIN HIGHWAY
CASTLE PEAK ROAD (TAM MI)
SAN TAM ROAD
FAIRVIEW PARK BOULEVARD
VEHICULAR BRIDGE - NORTH
VEHICULAR BRIDGE - SOUTH
FUNG CHUK ROAD
Application Site
J1
J2
J3
J4
J5
J6
J7
45(40)
0(0)
95(85)
15(25)
5(5)
20(20)
25(20)
40(40)
60(45)
390(285)
50(65)
285(350)
5(5)
5(5)
5(5)
95(90)
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40(35)
20(20)
5(15)
20(20)
80(75)
5(5)
20(20)
95(90)
0(0)
0(0)
5(5)
45(35)
0(5)
30(25)
750(485)
50(45)
20(25)
30(35)
545(670)
75(100)
10(25)
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55(120)
5(20) ②
215(145) ③
35(40) ④
145(145) ⑤
395(250) ⑥
15(20) ⑦
55(55) ①
870 (675)
575 (805)
60(45) ③
5(15) ④
125(115) ⑤
270(100) ⑥
5(10) ⑦
15(15) ①
25(25) ②
395 (395)
500 (325)
③ 10(20)
② 60(45)
① 150(175)
⑦ 125(100)
⑥ 20(5)
⑤ 230(265)
④ 105(100)
580 (575)
700 (715)
④ 10(20)
③ 45(70)
② 10(20)
① 40(20)
⑦ 10(10)
⑥ 210(165)
⑤ 225(140)
375 (425)
550 (445)
485 (405)
285 (330)
30(35) ①
95(75) ②
105(115) ③
40(55) ④
60(15) ⑤
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15(10) ⑦
745 (1065)
1100 (665)
110(175) ⑦
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135(150) ②
15(25) ③
130(160) ④
95(90) ⑤
25(20) ⑥
875 (780)
335 (320)
⑤ 5(10)
④ 50(35)
③ 130(155)
② 65(35)
① 50(50)
⑦ 5(5)
⑥ 35(35)
① ② ③ ④ ⑤ ⑥ ⑦

LEGEND :

30(35)	AM(PM) PEAK HOUR TRAFFIC FLOWS (PCU/HR)

Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D.104 AND
ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

YEAR 2025 OBSERVED TRAFFIC FLOWS

SYSTRA MVA

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	NTS	DEC 2025	3.9	-

CHK50868310/TIA/F39.CDR/LLH/11DEC25

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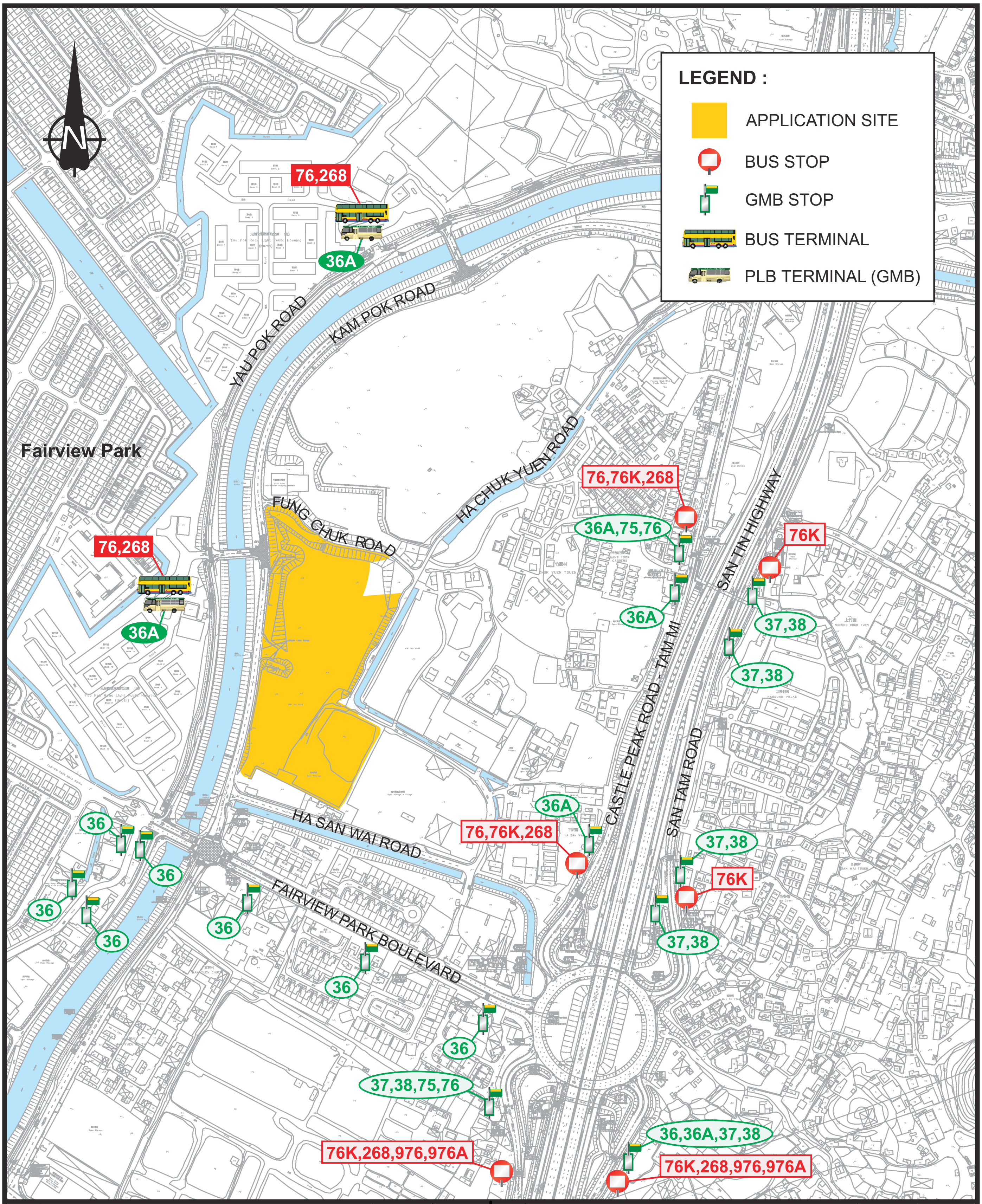
N
LEGEND :
APPLICATION SITE
BUS STOP
GMB STOP
BUS TERMINAL
PLB TERMINAL (GMB)
Fairview Park
YAU POK ROAD
KAM POK ROAD
FUNG CHUK ROAD
HA CHUK YUEN ROAD
HA SAN WAI ROAD
FAIRVIEW PARK BOULEVARD
CASTLE PEAK ROAD - TAM MI
SAN TAM ROAD
SAN TIN HIGHWAY
76,268
36A
76,268
36A
76,76K,268
36A,75,76
36A
76K
37,38
37,38
36A
76,76K,268
37,38
76K
37,38
36
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36
36
36
36
36
37,38,75,76
36,36A,37,38
76K,268,976,976A
76K,268,976,976A

Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D.104 AND
ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

EXISTING PUBLIC TRANSPORT SERVICES

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	NTS	DEC 2025	3.10	-

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Original Size : A4

4. TRAFFIC FORECASTING

4.1 Design Year

4.1.1 The tentative completion year of the proposed development is year 2031. Hence, the design year of 2034 three years upon operation of the proposed development, has been adopted for traffic forecast and assessment purposes.

4.2 Traffic forecast

Toll Plans Changes for Tai Lam Tunnel

4.2.1 The Government has taken over the Tai Lam Tunnel on 31 May 2025 and implemented new tolls with substantially reduced tolls for all vehicle types. With reference to the preliminary traffic assessment under Legislative Council paper No. CB(1)976/2024(05), it is anticipated that some traffic flows at Tolo Highway (Tai Po Kau section) would be diverted onto Tai Lam Tunnel upon Government's takeover. With reference to the result of the above-mentioned assessment, adjustment due to new tolls has been applied into the traffic forecast to reflect the situation accordingly.

Effect of Northern Link (NOL)

4.2.2 The planned NOL Main Line will be an railway of about 10.7km long, connecting the existing Kam Sheung Road Station of the Tuen Ma Line and the planned Kwu Tung Station of the East Rail Line, with three intermediate stations at San Tin, Ngau Tam Mei and Au Tau. The NOL Main Line would become the public transportation backbone in the Northern Metropolis (NM) and connect East Rail Line and Tuen Ma Line, forming a railway loop linking the New Territories and the Kowloon urban areas. The NOL Main Line is anticipated for commissioning in Year 2034. The impact of NOL has been considered in the 2-tier model from nearby approved planning application, Y/YL-MP/10.

Effect of Northern Metropolis (NM) Highway

4.2.3 The planned NM Highway is a major east-west corridor of about 24 km long, linking the development nodes in the NM including Ngau Tam Mei, San Tin Technopole, Kwu Tung North/Fanling North and New Territories North New Town. Upon commissioning of the NM Highway, it would divert traffic flows between the New Territories East and West during peak hours, thereby alleviating the traffic pressure on existing major highways, in particular for San Tin Highway.

4.2.4 The San Tin Section of NM Highway is expected to be commissioned in Year 2036 while its remaining sections are expected to be commissioned in 2039 and beyond. As the NM Highway will be commissioned after the design year 2034, the impact of NM has not been reflected in the traffic forecast. Nevertheless, the existing road and junction performance is expected to be improved significantly after its commissioning.

Adjacent Planned/Committed Developments

- *San Tin Technopole*

4.2.5 San Tin Technopole, located at the core of the NM, is planned as a hub for clustered innovation and technology development in the San Tin area. According to the preliminary phasing plan under the relevant government study (**Appendix C**), the project is planned to be implemented in three phases – Initial Phase, Main Phase and Remaining Phase. The population intakes for

Initial Phase, Main Phase and Remaining Phase are anticipated in 2031, 2034 and 2039 respectively. Considering that the developments in Initial Phase and Main Phase would be completed on or before the design year 2034, the Year 2034 traffic forecast has been updated to include the relevant trips of San Tin Technopole.

- *Ngau Tam Mei New Development Area (NTM NDA)*

4.2.6 The NTM NDA is planned for the development of the NM University Town with integrated residential neighbourhood. The planned Ngau Tam Mei Station of NOL Main Line would be located around the integrated residential community to serve the residents in the areas. The first population intake will take place gradually from 2034 to tie in with the commissioning of the NOL Main Line.

4.2.7 According to the broad land use concept plan, the NTM NDA is expected to be served by the planned NM Highway, and connected to San Tin Highway and San Tin Technopole. The relevant trips at design year 2034 have been included in the 2-tier model from nearby approved planning application, Y/YL-MP/10.

- *Other Planned/Committed Developments.*

4.2.8 Apart from the above, there are other planned developments located in the vicinity of the site that are expected to be completed by year 2034 according to the latest available information from public domain. The planned/committed developments which have been considered in the forecast and estimated trips of these committed developments are listed in **Table 4.1.**

Table 4.1 Estimated Trip Generations of Planned/Committed Developments

Ref.	Planned/Committed Developments	Key Development Parameters	Estimated Two-way Trip Generations (pcu/hr)	
			AM Peak	PM Peak
1	Tung Shing Lei Development (A/YL-NSW/274)	• 1,518 residential units (average flat size = about 46 m^2)	222	151
2	Sha Po North Phase 2 Residential Development (A/YL-KTN/663)	• 1,154 residential units (average flat size = about 42.57m^2)	132	76
3	Residential Development at west of Castle Peak Road - Tam Mi, Yuen Long (Y/YL-NSW/9)	• 3,115 residential units • 2900m^2 retail GFA • 1 primary school, 1 kindergarten • Soy Factory	467	249
4	Kam Tin South Priority Sites Development	• 9,060 units of public housing (average flat size = about 50 m^2) • 2,200 units of private housing (average flat size = about 70 m^2)	1,260	816
5	Residential Development at west of Castle Peak Road - Tam Mi, Yuen Long (Y/YL-NSW/8)	• 6,825 residential units • 3950m^2 retail GFA • 2 GIC facilities and 1 kindergarten	872	499
6	Tung Shing Lei Land Sharing Pilot Scheme Application No. LSPS/002	• 1,261 units of private housing (average flat size = about 40 m^2) • 1,868 units of public housing (average flat size = about 50 m^2)	357	236
7	Sha Po North Comprehensive Residential Development (A/YL-KTN/604)	• 3,891 residential units (average flat size = about 49 m^2) • 5,500 m^2 retail GFA	491	312
8	Sha Po Public Housing Development	• 16,300 Flats • 20,668 m^2 retail GFA • 5 Kindergarten and 1 Primary School • 38,384 m^2 Welfare Facilities • 19,267 m^2 GIC	2,540	1,870

Ref.	Planned/Committed Developments	Key Development Parameters	Estimated Two-way Trip Generations (pcu/hr)	
			AM Peak	PM Peak
9	Kam Tin North Residential Development (A/YL-KTN/791)	• 330 flats and 87 houses (average flat/house size = about 38.73 m^2)	38	21
10	Residential Development at Sha Po South (A/YL-KTN/964)	• 615 residential units (average flat size = about 38 m^2)	78	50
11	Development at Wing Kei Tsuen, Nam Sang Wai, Yuen Long (Y/YL-NSW/7)	• 1,997 residential units (average flat size = 48.9 m^2)	252	157
12	Residential Development at Tung Shing Lei, Nam Sang Wai, Yuen Long (A/YL-NSW/293)	• 3,566 Flats • 9 Houses • 5,358 Non Domestic GFA	434	272
13	Comprehensive Development Scheme at north of Kam Pok Road East, Pok Wai, Yuen Long (A/YL-NSW/314)	• 90 residential units	49	52
14	Ngau Tam Mei Area New Development Area(1)	• Population: 9,600 – 10,800 • No. of Flats: 3,600 – 3,900	550	330
14	Social Welfare Facilities at Siu Sheung Road, Nam Sang Wai, Yuen Long (A/YL-NSW/303)	• 127 beds for Residential Care Home for the Elderly • 100 beds for senior hostel	31	27
15	Social Welfare Facilities at Siu Sheung Road, Nam Sang Wai, Yuen Long (A/YL-NSW/292)	• 9,180 m^2 GFA	50	48
16	Residential Care Homes for the Elderly at 81 San Tam Road, Ngau Tam Mei, Yuen Long (Y/YL-NTM/9)	• 142 beds (5,400 m^2 GFA)	20	20
17	Residential Development at Yau Pok Road, Yuen Long (Y/YL-MP/3)(2)	• 106 houses	53	49
18	Proposed Residential Development at Kam Pok Road, Yuen Long (Y/YL-MP/10)	• 2,322 residential units (average flat size = about 42.4 m^2) • 2,363m^2 retail GFA • 1 kindergarten and 1 NEC	448	250
19	Proposed Comprehensive Development at Wo Shang Wai, Yuen Long (Y/YL-MP/9)	• 3,562 residential units (average flat size = about 75 m^2) • a 100-place Residential Care Home for the elderly	644	447
20	San Tin Technopole(3)	• 120,000 employment • ~760,000m^2 Logistics & Storage and Workshop • Public housing of ~25,800 units • Private housing of ~12,200 units	10,170	7,560

Remarks:

(1) The Ngau Tam Mei New Development Area anticipates a new population of about 32,000 to 36,000, accommodated within about 12,000 to 13,000 new residential units. According to LegCo paper No. CB(1) 1487/2024(04), it is noted that the first population intake will take place gradually from 2034 to tie in with the commissioning of the NOL Main Line. Therefore, it is assumed that 30% of the Comprehensive Residential Neighbourhood in close vicinity of the planned Ngau Tam Mei Station, will be in place in year 2034.

(2) The site is currently occupied by the existing temporary Light Public Housing at Yau Pok Road. The surveyed trip generations of Light Public Housing were separately excluded from the traffic forecast.

(3) According to the "EIA study of First Phase Development of the New Territories North – San Tin / Lok Ma Chau Development Node – Investigation", the population intakes for Initial Phase and Main Phase are anticipated on or before 2034. The development schedules under Initial and Main Phases are assumed based on the planning assumptions in the revised RODP.

Proposed Development Flows

4.2.9 The proposed development will provide 1,303 units with an average flat size of about 43.6m^2 a kindergarten and a NEC. In order to estimate the trips of the proposed development for residential portion, reference has been made to the trip rates in Transport Planning Design Manual (TPDM) published by the TD.

4.2.10 For kindergarten, a trip generation survey has been conducted at the existing similar kindergarten in Yuen Long, Saint Lorraine Kindergarten (Yuen Long) in December 2025. The surveyed trip rates are summarized in **Table 4.2**. The adopted trip rates of kindergarten under the Planning Application Y/YL-MP/10 are also listed below for comparison.

Table 4.2 Trip Rates of Kindergarten

	Trip Rate (pcu/hr/student)			
	AM Peak		**PM Peak**	
	Gen	**Attr**	**Gen**	**Attr**
Existing Saint Lorraine Kindergarten (Yuen Long)	8	8	1	1
Trip rates with reference to the TIA report under Planning Application Y/YL-MP/10	26	26	1	1

4.2.11 Based on **Table 4.2**, the trip rates with reference to the planning application Y/YL-MP/10 are higher and has been adopted for conservative approach. The adopted trip rates are presented in **Table 4.3**.

Table 4.3 Adopted Trip Rates

Use	**Unit**	**Trip Rate**			
		AM Peak		**PM Peak**	
		Gen	**Attr**	**Gen**	**Attr**
Residential (1)	(pcu/hr/flat)	0.0718	0.0425	0.0286	0.037
Kindergarten(2)	(pcu/hr/100 student)	26	26	1	1

Remarks: (1) Mean value of trip rates for Private Housing R(A) with average flat size of 60m^2 from TPDM is adopted.
(2) Adopted trip rates with reference to the TIA report under Planning Application Y/YL-MP/10.

4.2.12 For the proposed NEC, considering that the target group is mainly the elderly living in the locality and the corresponding peak hour would not overlap with the commuting peak hours, it is anticipated that its trip generations are limited during the commuting peak hours.

4.2.13 Based on the above adopted trips rates, the trip generations of the proposed development is estimated. **Table 4.4** summarises the estimated trip generations of the proposed scheme against the approved scheme.

Table 4.4 Estimated Trip Generation of Proposed Development

Scheme	Development Parameter		Estimated Trip Generations (pcu/hr)			
			AM Peak		PM Peak	
			Gen	Attr	Gen	Attr
Approved Scheme	Residential(1)	65 houses	15	9	9	11
Proposed Scheme	Residential	1,303 units	94	55	37	48
	Kindergarten	6 classrooms	47	47	5	5
	NEC(2)		10	10	10	10
	Shuttle bus Service(3)		22	22	22	22
		Total	173	134	74	85
Difference (Proposed Scheme – Approved Scheme)			+158	+125	+65	+74

Remarks: (1) Trip generation extracted from the TIA report for the approved scheme.
(2) Nominal Trips.
(3) Shuttle bus service is proposed to serve the proposed development. Details of the shuttle bus trips refers to **Section 4.2.4**.

4.2.14 Compared to the approved scheme, the proposed scheme would generate an additional two-way trips of 283 pcu/hr and 139 pcu/hr during the morning and evening peak hour periods respectively as indicated in **Table 4.4.**

Trips of Public Transport

4.2.15 With reference to Travel Characteristics Survey 2011 (TCS 2011) published by TD, the pedestrian trips of the proposed development during peak hour is derived as shown in **Table 4.5.**

Table 4.5 Anticipated Peak-Hour Pedestrian Trips of the Proposed development

Location	Estimated Population(1) [i]	Average daily mechanized trips per person(2) [ii]	Peak hour factor(3) [iii]	Peak hour Pedestrian Trips (pax/hr) =[i] x [ii] x [iii]
Proposed Development (1,303 units)	3,519	1.83	12%	773

Remarks: (1) Adopting the average domestic household size of 2.7.
(2) Average daily mechanised trips per person as extracted from TCS 2011.
(3) Weekday morning peak hour factor for all merchandised trips of 20% as a conservative approach (with reference to TCS 2011) and peak direction split of 60% assumed (i.e. 1-way Peak hour factor = 20% x 60% = 12%).

4.2.16 Based on the calculation in **Table 4.5**, it is anticipated that the pedestrian trips of the proposed development is 773 pax/hr during peak hour.

4.2.17 To identify the transport mode shares in local area, reference has been made to the Population Census 2021 published by Census and Statistics Department. The transport modal splits of Yuen Long District are reviewed and summarized in **Table 4.6**.

Table 4.6 Transport Modal Split of Yuen Long District

Transport Mode	Main Mode of Transport	Modal Split[(1)(2)]
PT Mode (81.7%)	Mass Transit Railway (MTR/Light Rail)	48.3%
	Coach	4.1%
	Franchised Bus	25.8%
	Public light bus	3.5%
Non-PT Mode (18.3%)	Private car / Passenger van/ Taxi	11%
	On foot only	7.3%
	Total	100%

Note : (1) With reference to the data in Population Census 2021.
(2) The transport mode "Ferry/Vessel" and "Others" has been excluded from the data in the Population Census.

4.2.18 As shown in **Table 4.6**, the modal splits for PT mode is 81.7%. Considering the existing available public transport modes in the study area, the PT mode are further split to "short-haul" and "long-haul" services as summarized in **Table 4.7**.

4.2.19 By applying the derived modal splits to the estimated peak-hour pedestrian trips of the proposed development in **Table 4.5**, the pedestrian trips of the proposed development by transport mode are shown in **Table 4.7**.

Table 4.7 Transport Modal Split of Proposed Development

Transport Mode		Modal Split(1)	Peak-hour Pedestrian Trip of the Proposed Development
PT Mode (81.7%)	Short-Haul Service	52.4%(2)	405
	Long-Haul Service	29.3%(3)	227
Non-PT Mode		18.3%	141
	Total	100%	773

Remarks:
(1) Refer to **Table 4.6**.
(2) Split of short-haul service refer to the shuttle bus to the nearby railway station, which includes the modal splits of railway and coach services.
(3) Split of long-haul service includes the modal splits of franchise bus and public light bus.

4.2.20 Based on the calculation in **Table 4.7**, it is anticipated that the PT demand of the proposed development is 632 pax/hr during peak hour.

4.2.21 According to the recently agreed rezoning application Y/YL-MP/10 nearby, a new transport layby is planned to be provided within the applicant site of Y/YL-MP/10. Under its TIA report, a long-haul bus service to/from urban areas (such as, Hong Kong Island, Kowloon and Kowloon East) and a short-haul bus service to/from Yuen Long Station PTI are proposed to serve the future public transport demand in the area. The proposed bus frequency for both short-haul and long-haul bus services are 15 veh/hr and 8 veh/hr respectively, which has taken into account of the future transport demand arising from the 3 application sites of Y/YL-MP/7, Y/YL-MP/MP/8 and Y/YL-MP/MP/10 nearby.

4.2.22 By taking into account the bus demand arising from the nearby 3 application sites, the anticipated peak-hour bus demand in the area is calculated and summarized in **Table 4.8**.

Table 4.8 Transport Modal Split of Proposed Development

Bus Service	Anticipated Peak-hour Bus Demand arising from the nearby application sites[1] (pax/hr)	Anticipated Peak-hour Bus Demand arising from the proposed development[2]	Total Peak-hour Bus Demand
Short-Haul Bus Service to/from Yuen Long Station PTI	1350	405	1755
Long-Haul Bus Service to/from Urban Areas	727	227	954

Remarks:

(1) Extracted from the TIA report of the approved application site Y/YL-MP/10. The nearby application sites include Y/YL-MP/7, Y/YL-MP/MP/8 and Y/YL-MP/MP/10.

(2) Refer to **Table 4.7**.

4.2.23 To cater the future public transport demand of the proposed development, enhancement of the above-mentioned short-haul and long-haul bus services are suggested. According to assessment result in **Table 4.8**, it is suggested to increase the bus trip of short-haul and long-haul bus service to 20 veh/hr and 11 veh/hr based on a bus capacity of 90 pax/hr. The actual frequency of bus services is subject to the Transport Department's review at a later stage.

4.2.24 The application site will be located about 1 km radius of future Ngau Tam Mei Station upon completion of Northern Link (NOL) project in year 2034. Apart from the above-mentioned bus services, a circular shuttle bus route travelling between the application site and the future public transport interchange near Ngau Tam Mei Station is also suggested for further enhancement. A layby for residents' shuttle bus service/potential bus service will be reserved within the site for pick-up/drop-off. The arrangement of the shuttle bus service is subject to the future application to TD and the future bus route plan in the area.

4.2.25 Under the traffic forecast, the trips of the shuttle bus service has been included in the traffic forecast to present the conservative approach. By adopting the occupancy of 60 persons/coach, an additional trip of 11 coach/hr during peak hours will be included.

Year 2034 Traffic Forecast

4.2.26 In order to produce the traffic forecast at the design year of 2034, 2-tier model approach (i.e Strategic Transport Model (STM) and Local Area Model (LAM)) have been adopted. For LAM, the TD's Base District Traffic Models (BDTM) "NTW1" covering Tuen Man and Yuen Long Area have been adopted for the study. The NTW1 traffic model was cordoned off and fine tuned to produce a LAM for providing traffic flows within the study area. The base year traffic flows have been validated against the observed traffic count records and the traffic flows from the application Y/YL-MP/10 to ensure the base year models replicates the existing traffic flows and patterns before the model is used to produce traffic forecast.

4.2.27 For STM, reference has been made to the 2-tier model from the recently agreed rezoning application Y/YL-MP/10 nearby for developing the traffic flows crossing the cordons for local area traffic modelling. The locations of the cordons are shown in **Drawing 3.2**. As the 2-tier model from Y/YL-MP/10 are not developed based on the latest 2021-based TPEDM planning assumptions, a growth factor of 1.05 has been derived from **Table 4.9** and applied to the year 2034 traffic flows to reflect the latest 2021-based TPEDM planning assumptions.

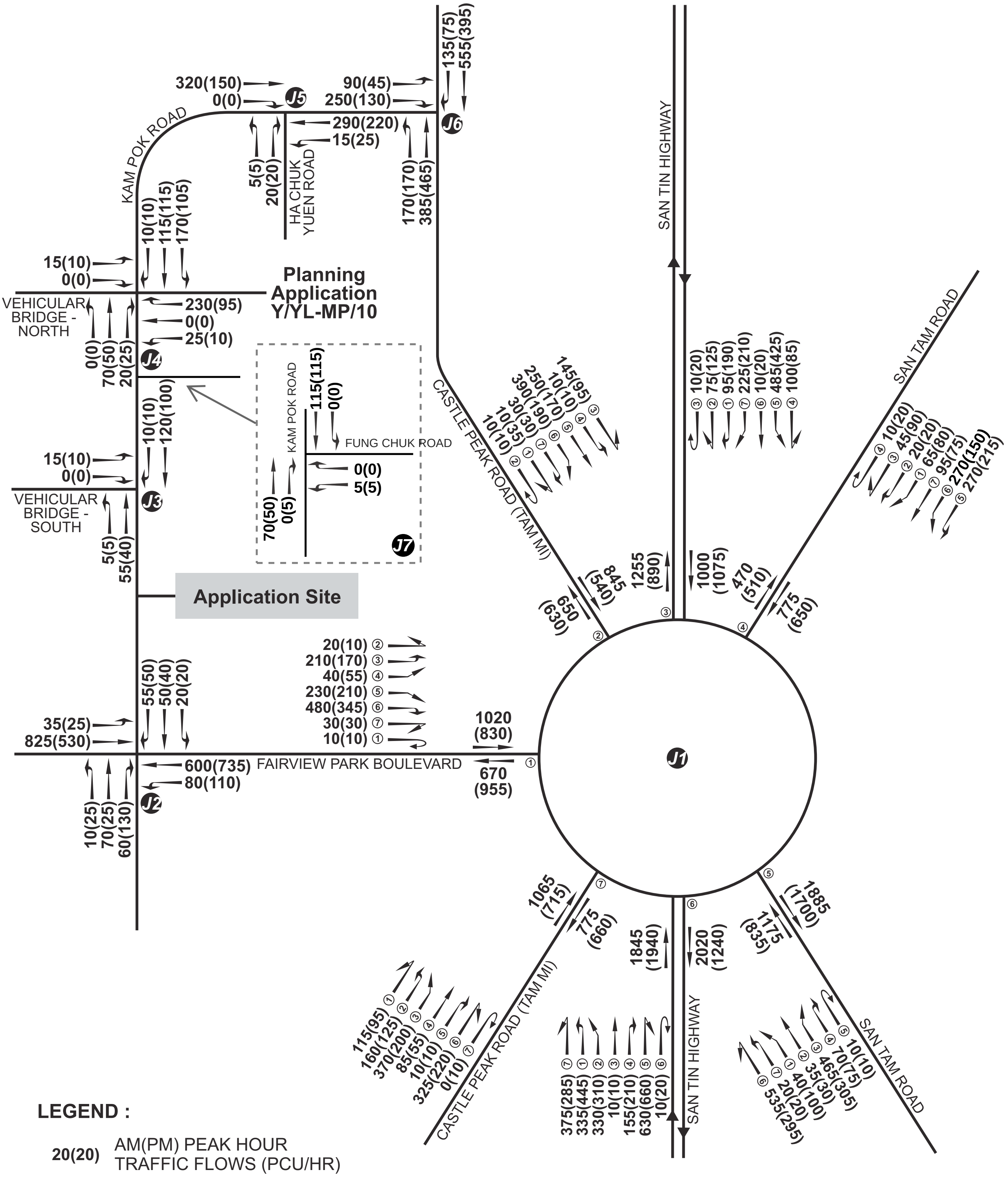
Table 4.9 Comparison of 2019-based and 2021-based TPEDM Planning Assumptions

Region	2019-Based TPEDM		2021-Based TPEDM		Growth Factor	
	Year 2031		Year 2031			
	Population	Employment	Population	Employment	Population	Employment
Northwest New Territories	1,396,650	393,100	1,347,800	413,350	0.97	1.05 (adopted)

Remark: (1) Planning data is obtained from the official website from Planning Department.

4.2.28 The traffic trips induced from the identified planned/committed developments as tabulated in **Table 4.1** and the trips of the approved scheme of the application site have been included in the LAM. The 2034 reference traffic flows (with approved scheme) are shown in **Drawing 4.1**.

4.2.29 The net increase of the development trips due to proposed scheme as derived in **Table 4.2** are superimposed onto the year 2034 reference traffic flows, to produce the anticipated year 2034 design traffic flows. The net increase in the development flows between the approved and proposed schemes are presented in **Drawing 4.2** whilst the year 2034 design traffic flows (with proposed scheme) are shown in **Drawing 4.3**.


KAM POK ROAD
320(150)
0(0)
J5
90(45)
250(130)
135(75)
555(395)
J6
290(220)
15(25)
5(5)
20(20)
HA CHUK YUEN ROAD
170(170)
385(465)
SAN TIN HIGHWAY
10(10)
115(115)
170(105)
15(10)
0(0)
Planning Application Y/YL-MP/10
VEHICULAR BRIDGE - NORTH
230(95)
0(0)
25(10)
0(0)
70(50)
20(25)
J4
10(10)
120(100)
KAM POK ROAD
115(115)
0(0)
FUNG CHUK ROAD
0(0)
5(5)
70(50)
0(5)
J7
15(10)
0(0)
VEHICULAR BRIDGE - SOUTH
J3
5(5)
55(40)
Application Site
CASTLE PEAK ROAD (TAM MI)
145(95) ③
10(10) ④
250(170) ⑤
390(190) ⑥
30(30) ⑦
10(35) ①
10(10) ②
③ 10(20)
② 75(125)
① 95(190)
⑦ 225(210)
⑥ 10(20)
⑤ 485(425)
④ 100(85)
SAN TAM ROAD
④ 10(20)
③ 45(90)
② 20(20)
① 65(80)
⑦ 95(75)
⑥ 270(150)
⑤ 270(215)
650 (630)
845 (540)
1255 (890)
1000 (1075)
470 (510)
775 (650)
①
②
③
④
⑤
⑥
⑦
55(50)
50(40)
20(20)
35(25)
825(530)
20(10) ②
210(170) ③
40(55) ④
230(210) ⑤
480(345) ⑥
30(30) ⑦
10(10) ①
1020 (830)
670 (955)
600(735)
80(110)
FAIRVIEW PARK BOULEVARD
J2
10(25)
70(25)
60(130)
J1
1065 (715)
775 (660)
1845 (1940)
2020 (1240)
1175 (835)
1885 (1700)
115(95) ①
160(125) ②
370(200) ③
85(55) ④
10(10) ⑤
325(220) ⑥
0(10) ⑦
CASTLE PEAK ROAD (TAM MI)
375(285) ⑦
335(445) ①
330(310) ②
10(10) ③
155(210) ④
630(660) ⑤
10(20) ⑥
SAN TIN HIGHWAY
⑥ 535(295)
⑦ 20(20)
① 40(100)
② 35(30)
③ 465(305)
④ 70(75)
⑤ 10(10)
SAN TAM ROAD

LEGEND :

20(20) AM(PM) PEAK HOUR TRAFFIC FLOWS (PCU/HR)

Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
-	-	-	-	-	-	-	-
A	TRAFFIC FLOWS UPDATED	PTC	11DEC25	-	-	-	-

Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D.104 AND
ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

YEAR 2034 REFERENCE TRAFFIC FLOWS

SYSTRA MVA

Designed	Checked	Scale	Date	Drawing No.	Rev.
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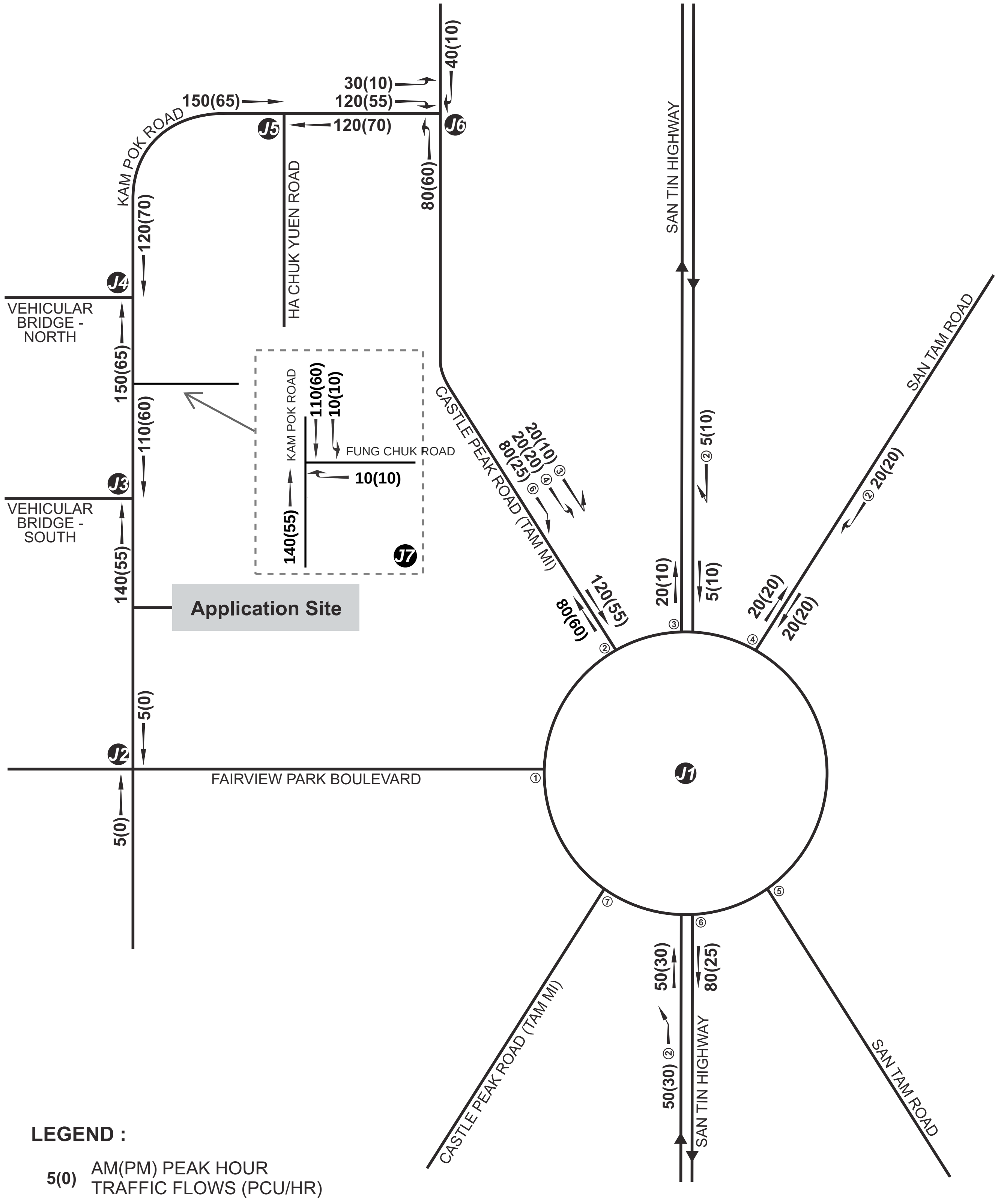
CHK50868310/TIA/F41-A.CDR/LLH/11DEC25

Original Size : A4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J5
J6
80(60)
KAM POK ROAD
120(70)
HA CHUK YUEN ROAD
SAN TIN HIGHWAY
J4
VEHICULAR BRIDGE - NORTH
150(65)
110(60)
KAM POK ROAD
110(60)
10(10)
FUNG CHUK ROAD
10(10)
140(55)
J7
CASTLE PEAK ROAD (TAM MI)
20(10)
20(20)
80(25)
③ ④ ⑥
② 5(10)
SAN TAM ROAD
② 20(20)
J3
VEHICULAR BRIDGE - SOUTH
140(55)
Application Site
120(55)
80(60)
20(10)
5(10)
20(20)
20(20)
② ③ ④
5(0)
J2
FAIRVIEW PARK BOULEVARD
①
J1
5(0)
⑦ ⑤ ⑥
50(30)
80(25)
50(30) ②
CASTLE PEAK ROAD (TAM MI)
SAN TIN HIGHWAY
SAN TAM ROAD
LEGEND :
5(0) AM(PM) PEAK HOUR TRAFFIC FLOWS (PCU/HR)

Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
-	-	-	-	-	-	-	-
A	TRAFFIC FLOWS UPDATED	PTC	11DEC25	-	-	-	-

Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D.104 AND
ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

DEVELOPMENT TRAFFIC FLOWS (NET INCREASE)

SYSTRA MVA

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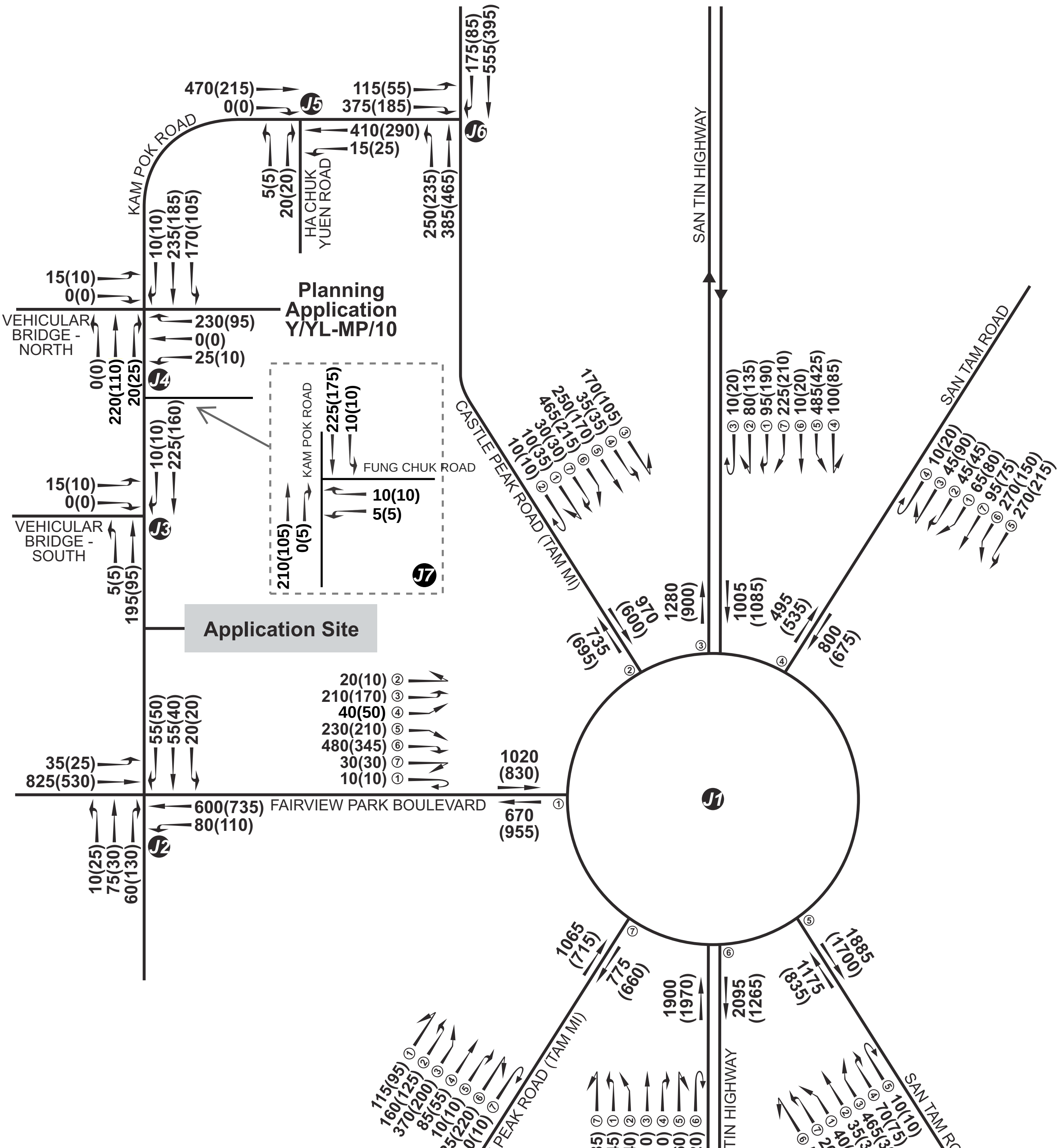
KAM POK ROAD
J5
470(215)
0(0)
115(55)
375(185)
175(85)
555(395)
J6
410(290)
15(25)
5(5)
20(20)
HA CHUK YUEN ROAD
250(235)
385(465)
10(10)
235(185)
170(105)
15(10)
0(0)
230(95)
0(0)
25(10)
VEHICULAR BRIDGE - NORTH
0(0)
220(110)
20(25)
J4
Planning Application Y/YL-MP/10
KAM POK ROAD
225(175)
10(10)
FUNG CHUK ROAD
10(10)
5(5)
210(105)
0(5)
J7
10(10)
225(160)
15(10)
0(0)
VEHICULAR BRIDGE - SOUTH
J3
5(5)
195(95)
Application Site
SAN TIN HIGHWAY
CASTLE PEAK ROAD (TAM MI)
③ 170(105)
④ 35(35)
⑥ 250(170)
⑦ 465(215)
① 30(30)
② 10(35)
10(10)
③ 10(20)
② 80(135)
① 95(190)
⑦ 225(210)
⑥ 10(20)
⑤ 485(425)
④ 100(85)
SAN TAM ROAD
④ 10(20)
③ 45(90)
② 45(45)
① 65(80)
⑦ 95(75)
⑥ 270(150)
⑤ 270(215)
735 (695)
970 (600)
1280 (900)
1005 (1085)
495 (535)
800 (675)
②
③
④
55(50)
55(40)
20(20)
35(25)
825(530)
600(735)
80(110)
J2
10(25)
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20(10) ②
210(170) ③
40(50) ④
230(210) ⑤
480(345) ⑥
30(30) ⑦
10(10) ①
1020 (830)
FAIRVIEW PARK BOULEVARD
670 (955)
①
J1
⑦
⑥
⑤
1065 (715)
775 (660)
1900 (1970)
2095 (1265)
1175 (835)
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CASTLE PEAK ROAD (TAM MI)
⑦ 375(285)
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SAN TIN HIGHWAY
⑤ 10(10)
④ 70(75)
③ 465(305)
② 35(30)
① 40(100)
⑦ 20(20)
⑥ 535(295)
SAN TAM ROAD

LEGEND :

20(20)	AM(PM) PEAK HOUR TRAFFIC FLOWS (PCU/HR)

-	-	-	-	-	-	-	-
A	TRAFFIC FLOWS UPDATED	PTC	11DEC25	-	-	-	-
Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D.104 AND
ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

YEAR 2034 DESIGN TRAFFIC FLOWS

SYSTRA MVA

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	NTS	JUL 2025	4.3	A

5. TRAFFIC IMPACT ASSESSMENT

5.1 Traffic Impact Assessment

5.1.1 To investigate the traffic impact of the proposed development on the surrounding road network at the design year 2034, operational performance of the identified key local junctions and critical links have been assessed for both reference and design scenarios.

Planned Improvement at Fairview Park Interchange (J1)

5.1.2 According to RNTPC Paper No. 10/22 dated 9 December 2022 for the CEDD's project "Agreement No. CE 10/2020 (CE)- Site Formation and Infrastructure Works for Proposed Public Housing Developments at Sha Po, Shap Pat Heung and Tai Kei Leng, Yuen Long – Feasibility Study", an improvement works has been planned to Fairview Park Interchange (J1) as illustrated in **Drawing 5.1**. Under the improvement scheme, the southern arm of San Tam Road and the approach arms of Castle Peak Road – Tam Mi (northbound) and San Tin Highway Slip Road (southbound) would be widened. An additional exclusive left-turn lane at San Tin Highway Slip Road (northbound) would also be provided.

5.1.3 Besides, further improvement to this planned junction (J1) has been proposed under the recently agreed rezoning application no. Y/YL-MP/10 as illustrated in **Drawing 5.1**. This improvement works is expected to be completed prior to its commissioning (i.e. before the year 2034). Thus, this planned improvement layout has been adopted in the assessment.

Planned Improvements at junction Kam Pok Road/Vehicular Bridge (North) (J4) and junction Castle Peak Road/Kam Pok Road (J6)

5.1.4 Apart from junction J1, two additional junction improvements for Kam Pok Road/Vehicular Bridge (North) (J4) and Castle Peak Road/Kam Pok Road (J6) have also been proposed under the agreed rezoning application no. Y/YL-MP/10.

5.1.5 For junction Kam Pok Road/Vehicular Bridge (North) (J4), the existing 3-arm signal-controlled junction is planned to be converted to 4-arm junction, and an additional exclusive left-turn lane would be provided at the approach arm of Kam Pok Road westbound. The planned junction improvement layout is illustrated in **Drawing 5.2**. For junction Castle Peak Road/Kam Pok Road (J6), separate turning would be allowed at the approach arm of Yau Pok Road as illustrated in **Drawing 5.3**. These planned junction improvement works have been adopted in the assessment.

Junction Operational Performance

5.1.6 Based on the existing/planned layouts, the junction assessment results for the 2034 reference and design scenarios are summarized in **Table 5.1**. The junction calculation sheets are attached in **Appendix D**.

Table 5.1 Junction Operational Performance at Year 2034

Ref (2)	Junction	Junction Type	2034 RC/RFC(1)			
			Reference (with approved Scheme)		Design (with Proposed Scheme)	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Fairview Park Interchange(3)	Roundabout	0.87	0.90	0.96	0.92
J2	Fairview Park Boulevard / Kam Pok Road	Signal	61%	55%	59%	54%
J3	Kam Pok Road / Vehicular Bridge (South)	Signal	>100%	>100%	90%	>100%
J4	Kam Pok Road / Vehicular Bridge (North)(4)	Signal	>100%	>100%	57%	>100%
J5	Kam Pok Road / Ha Chuk Yuen Road	Priority	0.06	0.06	0.07	0.06
J6	Castle Peak Road / Kam Pok Road(5)	Priority	0.71	0.34	1.14	0.50
J7	Kam Pok Road / Fung Chuk Road	Priority	0.01	0.01	0.04	0.04

Remarks: (1) RC = reserve capacity, RFC = ratio of flow to capacity.
(2) Locations refer to **Drawing 3.2**.
(3) Based on the planned junction layout as illustrated in **Drawing 5.1**.
(4) Based on the planned junction layout as illustrated in **Drawing 5.2**.
(5) Based on the planned junction layout as illustrated in **Drawing 5.3**.

5.1.7 The results of the assessment as shown in **Table 5.1** indicated that all identified key junctions would operate within capacities under reference case (with approved scheme) and design case (with proposed scheme), except the junction Fairview Park Interchange (J1) and Castle Peak Road/Kam Pok Road (J6).

Road Link Performance

5.1.8 Apart from junction capacity assessment, the road link operation performance was also undertaken for both reference and design scenarios. Based on the existing road layouts with traffic forecast, the results of the assessment are summarized in **Tables 5.2**.

Table 5.2 Year 2034 Road Link Operational Performance for Reference Case and Design Case

Ref. (1)	Road Link	Dir	Link Capacity (pcu/hr)	Reference Case (with Approved Scheme)				Design Case (with Current Scheme)			
				Traffic Flows (pcu/hr)		V/C Ratio		Traffic Flows (pcu/hr)		V/C Ratio	
				AM	PM	AM	PM	AM	PM	AM	PM
L1	Castle Peak Road – Tam Mi	2-way	2,125(2)	1,500	1,175	0.71	0.55	1,705	1,295	0.80	0.61
L2	Fairview Park Boulevard	EB	2,600(3)	1,020	830	0.39	0.32	1,020	830	0.39	0.32
		WB	2,600(3)	670	955	0.26	0.37	670	955	0.26	0.37
L3	Kam Pok Road	2-way	1,800(4)	615	380	0.34	0.21	885	515	0.49	0.29
L4	Fung Chuk Road	2-way	100(5)	5	10	0.05	0.1	25	30	0.25	0.30
L5	Ha Chuk Yuen Road	2-way	100(5)	5	10	0.05	0.1	25	30	0.25	0.30

Ref. (1)	Road Link	Dir	Link Capacity (pcu/hr)	Reference Case (with Approved Scheme)				Design Case (with Current Scheme)			
				Traffic Flows (pcu/hr)		V/C Ratio		Traffic Flows (pcu/hr)		V/C Ratio	
				AM	PM	AM	PM	AM	PM	AM	PM
L6	San Tin Highway	NB	6,100(6)	6885	6295	1.13	1.03	6935	6325	1.14	1.04
		SB	6,100(6)	6090	5485	1.00	0.90	6170	5510	1.01	0.90

Remarks: (1) Refer to **Drawing 3.2**.
(2) Road capacity for single 2-lane rural road, with consideration of roadside activities.
(3) Road capacity for dual-2 lane local distributor.
(4) Road capacity for single-2 lane local distributor.
(5) Road capacity for single-track access road.
(6) Road capacity for dual-3 lane trunk road.

5.1.9 The results of the assessment as shown in **Table 5.2** indicated that all identified road links, except San Tin Highway (L1) would operate within capacities under reference case (with approved scheme) and design case (with current scheme).

5.1.10 Under the design year 2034, the v/c ratio of San Tin Highway would reach between 1.0 and 1.2, meaning that the traffic speed would be reduced, but would still be manageable. As mentioned in **Section 4.2**, a NM Highway has been planned by the government, and the traffic pressure at the existing San Tin Highway would be alleviated upon commissioning of NM Highway.

Queue Length Assessment

5.1.11 Queue length assessment at the approach arms of the identified junctions has been conducted for both reference and designs scenarios. The results are summarized in **Table 5.3**.

Table 5.3 Year 2034 Queue Length Assessment for Reference Case and Design Case

Ref. (1)	Approach Arm	Road Length of each lane	Year 2034 Average Queue Length (m)			
			Reference Case (with Approved Scheme)		Design Case (with Current Scheme)	
			AM	PM	AM	PM
J1	Fairview Park Boulevard	391	163	8	215	9
	Castle Peak Road - Tam Mi (SB)	590	26	2	76	3
	San Tin Highway Slip Road (SB)	329	52	17	75	20
	San Tam Road (SB)	563	165	9	217	11
	San Tam Road (NB)	202	13	4	14	4
	San Tin Highway Slip Road (NB)	410	19	146	25	212
	Castle Peak Road - Tam Mi (NB)	840	47	10	75	10
J2	Fairview Park Boulevard (EB)	40	54	35	54	35
	Fairview Park Boulevard (WB)	252	43	54	43	54
	Kam Pok Road (SB)	39	22	20	23	20
	Kam Pok Road (NB)	160	25	30	26	31
J3	Vehicular Bridge (EB)	55	1	1	1	1
	Kam Pok Rd (SB)	35	9	7	18	12
	Kam Pok Rd (NB)	78	5	4	16	9

Ref. (1)	Approach Arm	Road Length of each lane	Year 2034 Average Queue Length (m)			
			Reference Case (with Approved Scheme)		Design Case (with Current Scheme)	
			AM	PM	AM	PM
J4	Vehicular Bridge (SB)	54	2	1	2	1
	Kam Pok Road (EB)	334	13	10	28	16
	R(D) Site Access	27	13	3	15	7
	Kam Pok Road (WB)	242	17	12	25	16
J5	Ha Chuk Yuen Road	226	0	0	0	0
J6	Kam Pok Road	59	13	2	186	4
J7	Fung Chuk Road	192	0	0	0	0

5.1.12 The results of the assessment as shown in **Table 5.3** indicated that no traffic queue back to the adjacent junction is anticipated during peak hour under reference case (with approved scheme) and design case (with current scheme), except the approach arm of Fairview Park Boulevard (EB) at J2 and the minor arm of Kam Pok Road at J6. For the approach arm of Fairview Park Boulevard (EB), no development trip will pass through. As shown in **Table 5.3**, the anticipated average queue lengths at the approach arm of Fairview Park Boulevard (EB) at J2 are the same under both reference and design cases.

Proposed Junction Improvements for Fairview Park Interchange (J1) and Castle Peak Road/Kam Pok Road (J6)

5.1.13 To resolve the foreseeable traffic problems, local junction improvement measures have been proposed for the planned junctions Fairview Park Interchange (J1) and Castle Peak Road / Kam Pok Road (J6).

5.1.14 For the planned junction Fairview Park Interchange (J1), it is proposed to widen the approach arms of Fairview Park Boulevard, San Tin Highway Slip Road northbound and San Tam Road southbound, and also provide an exclusive left-turn for San Tin Highway Slip Road southbound to enhance the junction capacity. Details of the improvement scheme are shown in **Drawing 5.4.** For Castle Peak Road/Kam Pok Road (J6), it is proposed to convert the junction from priority-controlled to mini roundabout. Details of the improvement scheme are shown in **Drawing 5.5**. The proposed junction improvements will be implemented by the proposed development.

5.1.15 The operational performances of the junction Fairview Park Interchange (J1) and Castle Peak Road/Kam Pok Road (J6) were re-assessed based on the proposed improvement schemes. The results are summarized in **Table 5.4.**

Table 5.4 Year 2034 Junction Operational Performance with Proposed Improvement Scheme

Ref.	Junction	Type	2034 Design Case	
			Reserve Capacity (RC)	
			AM Peak	PM Peak
J1	Fairview Park Interchange(1)	Roundabout	0.84	0.81
J6	Castle Peak Road / Kam Pok Road(2)	Roundabout	0.51	0.54

Remarks: (1) Based on the proposed junction improvement works on **Drawing 5.4**.
(2) Based on the proposed junction improvement works on **Drawing 5.5**.

5.1.16 The results of the junction assessment as shown in **Table 5.4** indicated that the junction Fairview Park Interchange (J1) and Castle Peak Road/Kam Pok Road (J6) could be alleviated with the proposed improvement schemes at the design year 2034.

5.2 Sensitivity Test 1

5.2.1 It is noted that the rezoning applications under nos. Y/YL-MP/7, Y/YL-MP/8 in close vicinity to the site are currently under processing for increasing their development densities. Thus, a sensitivity test was conducted to assess the traffic impact by assuming these potential residential developments will be completed before the design year 2034. The locations of the potential sites are illustrated in **Drawing 5.6**.

5.2.2 The development schedules and estimated trip generations of these planning applications are summarized in **Table 5.5**. The estimated trip generations were included in the traffic forecast for Sensitivity Test 1. The year 2034 design traffic flows under Sensitivity Test 1 is shown in **Drawing 5.7**.

Table 5.5 Estimated Trip Generations of Potential Residential Developments

Planning Application	Current Zoning	Proposed Domestic Plot Ratio	No. of Units.	Trip Generations (pcu/hr) (1)			
				AM Peak		PM Peak	
				GEN	ATTR	GEN	ATTR
Proposed Residential Development at west of Yau Pok Road (Y/YL-MP/7 & MP/8)(2)	REC & R(C)	about 1.2	2,477	246	174	109	131

Remarks: (1) Trip Generations extracted from the latest submitted TIA report of the planning application.
(2) The site is the subject of the previous approved planning application Y/YL-MP/3. Trip generations of the previous approved applications were excluded separately from the traffic forecast.

Junction Operational Performance for Sensitivity Test 1

5.2.3 Based on the existing/planned layouts, the results of the junction assessment for the design case under Sensitivity Test 1 are summarized in **Table 5.6**. The junction calculation sheets are attached in **Appendix D**.

Table 5.6 Junction Operational Performance at Year 2034 under Sensitivity Test 1

Ref(2)	Junction	2034 RC/RFC(1)	
		Design Case under Sensitivity Test 1	
		AM Peak	PM Peak
J1	Fairview Park Interchange (3)	0.98	0.84
J2	Fairview Park Boulevard / Kam Pok Road	56%	52%
J3	Kam Pok Road / Vehicular Bridge (South)	40%	>100%
J4	Kam Pok Road / Vehicular Bridge (North) (4)	13%	>100%
J5	Kam Pok Road / Ha Chuk Yuen Road	0.08	0.07
J6	Castle Peak Road / Kam Pok Road(5)	0.61	0.62
J7	Kam Pok Road / Fung Chuk Road	0.04	0.04

Remarks:
(1) RC = reserve capacity, RFC = ratio of flow to capacity.
(2) Locations refer to **Drawing 3.2**.
(3) Based on the proposed junction layout as illustrated in **Drawing 5.4**.
(4) Based on the planned junction layout as illustrated in **Drawing 5.2**.
(5) Based on the proposed junction layout as illustrated in **Drawing 5.5.**

5.2.4 The results of the assessment as shown in **Table 5.6** indicated that all identified key junctions would operate within capacities under the design case in Sensitivity Test 1, except Fairview Park Interchange (J1).

Road Link Performance for Sensitivity Test 1

5.2.5 Apart from junction capacity assessment, the road link operation performance was also undertaken for both reference and design scenarios. Based on the existing road layouts with traffic forecast, the results of the assessment are summarized in **Table 5.7**.

Table 5.7 Year 2034 Road Link Operational Performance for Design Case under Sensitivity Test 1

Ref. (1)	Road Link	Dir	Link Capacity (pcu/hr)	Design Case under Sensitivity Test 1			
				Traffic Flows (pcu/hr)		V/C Ratio	
				AM	PM	AM	PM
L1	Castle Peak Road – Tam Mi	2-way	2,125(2)	1,950	1,445	0.92	0.68
L2	Fairview Park Boulevard	EB	2,600(3)	1,020	830	0.39	0.32
		WB	2,600(3)	670	955	0.26	0.37
L3	Kam Pok Road	2-way	1,800(4)	1235	705	0.69	0.39
L4	Fung Chuk Road	2-way	100(5)	25	30	0.25	0.30
L5	Ha Chuk Yuen Road	2-way	100(5)	25	30	0.25	0.30
L6	San Tin Highway	NB	6,100(6)	7015	6390	1.15	1.05
		SB	6,100(6)	6295	5560	1.03	0.91

Remarks: (1) Refer to **Drawing 3.2**.
(2) Road capacity for single 2-lane rural road, with consideration of roadside activities.
(3) Road capacity for dual-2 lane local distributor.
(4) Road capacity for single-2 lane local distributor.
(5) Road capacity for single-track access road.
(6) Road capacity for dual-3 lane trunk road.

5.2.6 The assessment results in **Table 5.7** indicated that all identified road links except San Tin Highway (L6) would operate within capacities under the design case in Sensitivity Test 1. Similar to the design case, the v/c ratio of San Tin Highway would reach between 1.0 and 1.2 under the design 2034 meaning that the traffic speed would be reduced, but would still be manageable. The traffic pressure at the existing San Tin Highway would be alleviated upon commissioning of NM Highway.

Suggested Junction Improvement for Fairview Park Interchange (J1)

5.2.7 To resolve the foreseeable traffic problem under the sensitivity test, a local junction improvement measure has been suggested for the proposed junction Fairview Park Interchange (J1). It is further proposed to widen the approach arms of Castle Peak Road – Tam Mi northbound and provide an exclusive left-turn for Castle Peak Road – Tam Mei southbound to enhance the junction capacity. Details of junction improvement scheme are shown in **Drawing 5.8**.

5.2.8 The operational performance of the junction Fairview Park Interchange (J1) was re-assessed based on the suggested improvement scheme. The result is summarized in **Table 5.8.**

Table 5.8 Year 2034 Junction Operational Performance with Suggested Improvement Scheme

Ref.	Junction	Type	2034 Design Case Ratio of flow to capacity AM Peak	 PM Peak
J1	Fairview Park Interchange (1)	Roundabout	0.84	0.84

Remarks: (1) Based on the suggested junction improvement works on **Drawing 5.8**.

5.2.9 The results of the junction assessment as shown in **Table 5.8** indicated that the junction Fairview Park Interchange (J1) could be alleviated with the suggested improvement scheme at the design year 2034.

5.3 Pedestrian Assessment

5.3.1 The footpaths at Kam Pok Road and Fairview Park Boulevard would be the main pedestrian route to/from the application site. Two sections of the concerned footpaths have been identified for assessment and the location of the two sections are shown in **Drawing 5.9**. Based on a pedestrian head count survey on a typical weekday in April 2025, the observed two-way pedestrian flows at the concerned footpaths during the critical AM peak hour are summarized in **Table 5.9**. The observed pedestrian flows are found to be minimal.

Table 5.9 Observed Pedestrian Flows during Peak Hours

Ref(1)	Section	Existing Footpath Width	Observed Two-way Pedestrian Flows during AM Peak (ped/hr)
P1	Kam Pok Road	1.5m	75
P2	Fairview Park Boulevard	2m	45

Remark: (1) Locations refer to **Drawing 5.9**.

5.3.2 The proposed development will provide 1,303 units with about 3,519 population. There is a planned residential development at Kam Pok Road (i.e. approved planning application Y/YL-MP/10) to the north of the application site. Two other application sites under rezoning applications nos. Y/YL-MP/7 & Y/YL-MP/8 are also located in the close proximity to the site. The estimated pedestrian trips of the proposed development together with these planned/potential developments are summarised in **Table 5.10**.

Table 5.10 Estimated Pedestrian Trips during Peak Hours

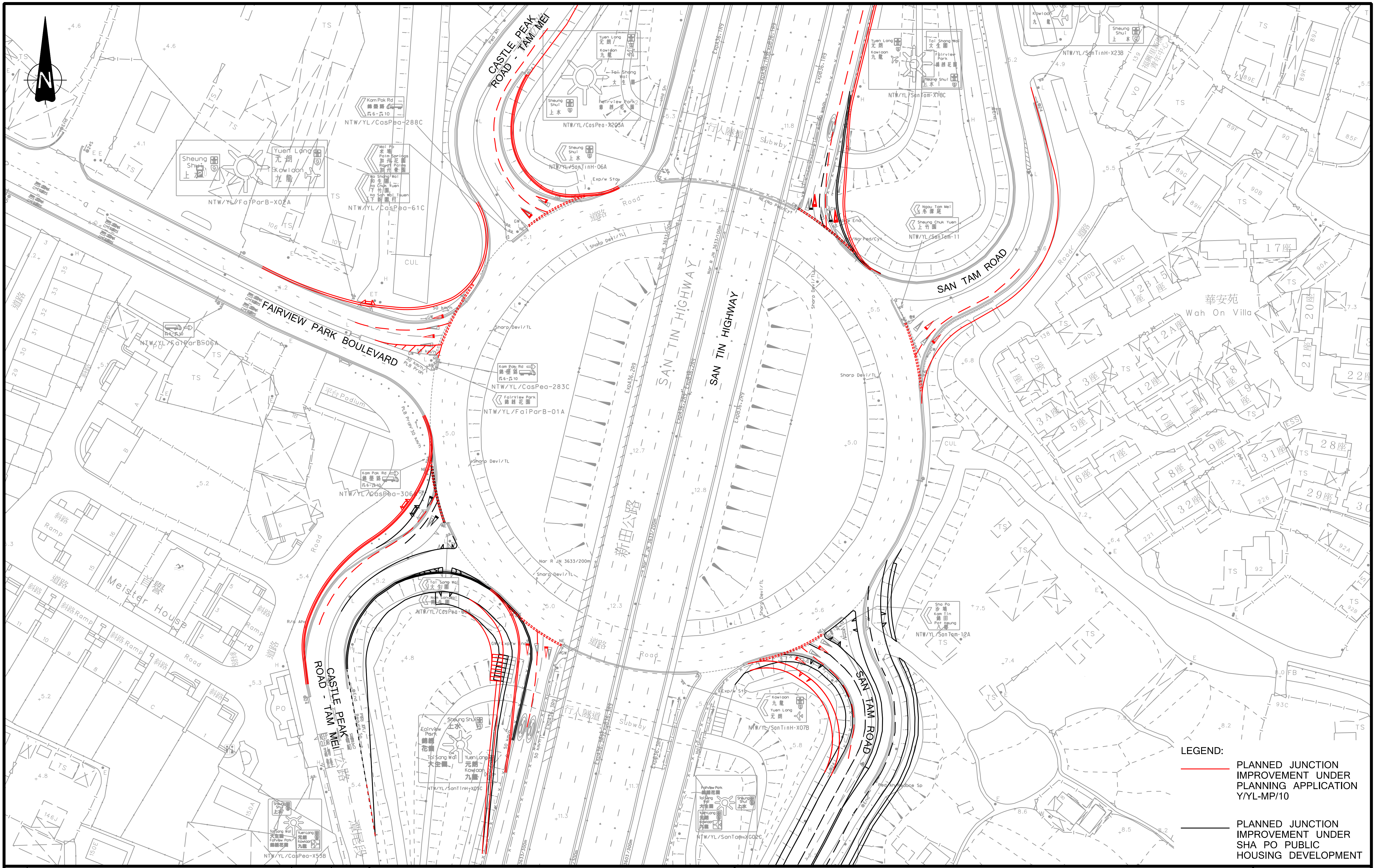
Development	No. of Units	Estimated Population	Estimated Pedestrian Trips during peak hours (ped/hr)
Proposed Development	1,303	3,519(1)	773(1)
Planned Residential Development at Kam Pok Road with Transport Layby (Approved planning application Y/YL-MP/10)	2,322	6,270(2)	1,005 for PT trips and 372 non-PT trips(2)
Potential Residential Development at Yau Pok Road with Transport Laybys under planning applications Y/YL-MP/7 & Y/YL-MP/8	2,477	6,688(2)	1,072 for PT trips and 397 for non-PT trips(2)

Remark:

(1) Refer to **Table 4.5**.

(2) Information extracted from its planning application.

5.3.3 As discussed in **Section 4.2.5**, the public transport demands of the planned/potential developments (i.e. Y/YL-MP/7, Y/YL-MP/8 & Y/YL-MP/10) would be served by the future bus services in their proposed Transport Layby within their sites. By assuming that all the pedestrian trips of the proposed development and the non-PT trips of the adjacent developments would all be loaded into the two concerned footpaths for a worst-case scenario, the pedestrian trips generated from all the proposed/planned/potential developments to the nearby footpaths are 1542 ped/hr (i.e. 773 + 372 + 397 = 1542) during peak hours. The 1.5m wide footpaths at Kam Pok Road, which can serve at a capacity of 2970 ped/hr based on satisfactory LOS C at flow rate of 33 ped/min/m, and the 2m wide footpath at Fairview Park Boulevard, which can serve at a capacity of 3,960 based on satisfactory LOS C at flow rate of 33 ped/min/m, should have sufficient capacities to cater for the future pedestrian demands in the area.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FAIRVIEW PARK BOULEVARD
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CASTLE PEAK ROAD - TAM MEI
SAN TAM ROAD
NTW/YL/FaiParB-X02A
NTW/YL/CasPea-288C
NTW/YL/CasPea-61C
NTW/YL/SanTinH-X05A
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NTW/YL/SanTam-X02C
Wah On Villa
Meister House
Subway
Subway

LEGEND:

🟥	PLANNED JUNCTION IMPROVEMENT UNDER PLANNING APPLICATION Y/YL-MP/10
―	PLANNED JUNCTION IMPROVEMENT UNDER SHA PO PUBLIC HOUSING DEVELOPMENT

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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT
LOT NO. 4822 IN D.D. 104 AND ADJOINING GOVERNMENT LAND,
EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

PLANNED JUNCTION IMPROVEMENT LAYOUT OF
FAIRVIEW PARK INTERCHANGE (J1)

SYSTRA MVA

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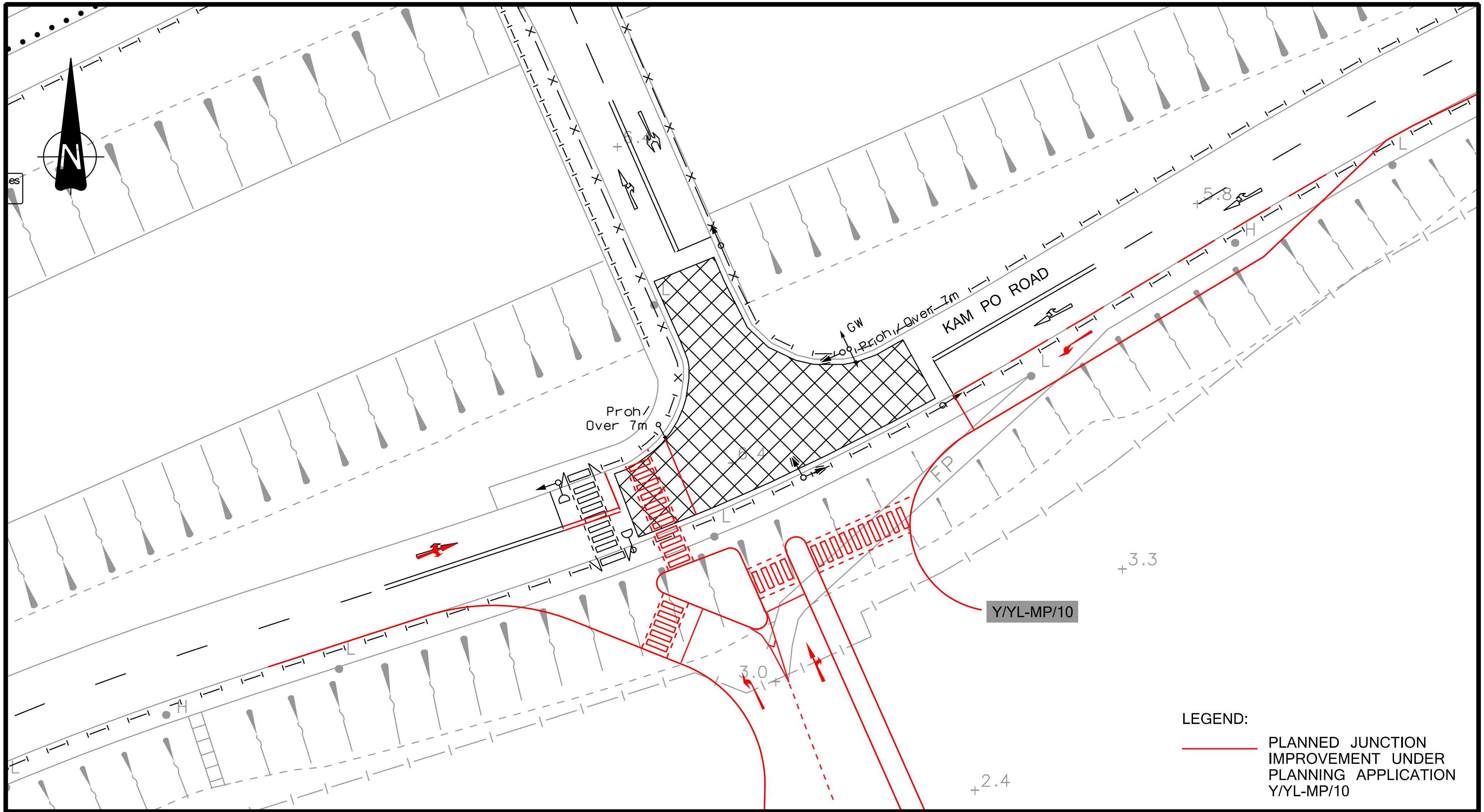

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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT
LOT NO. 4822 IN D.D. 104 AND
ADJOINING GOVERNMENT LAND,
EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

PLANNED JUNCTION IMPROVEMENT LAYOUT OF KAM POK ROAD / VEHICULAR BRDIGE - NORTH / VEHICULAR ACCESS (J4)

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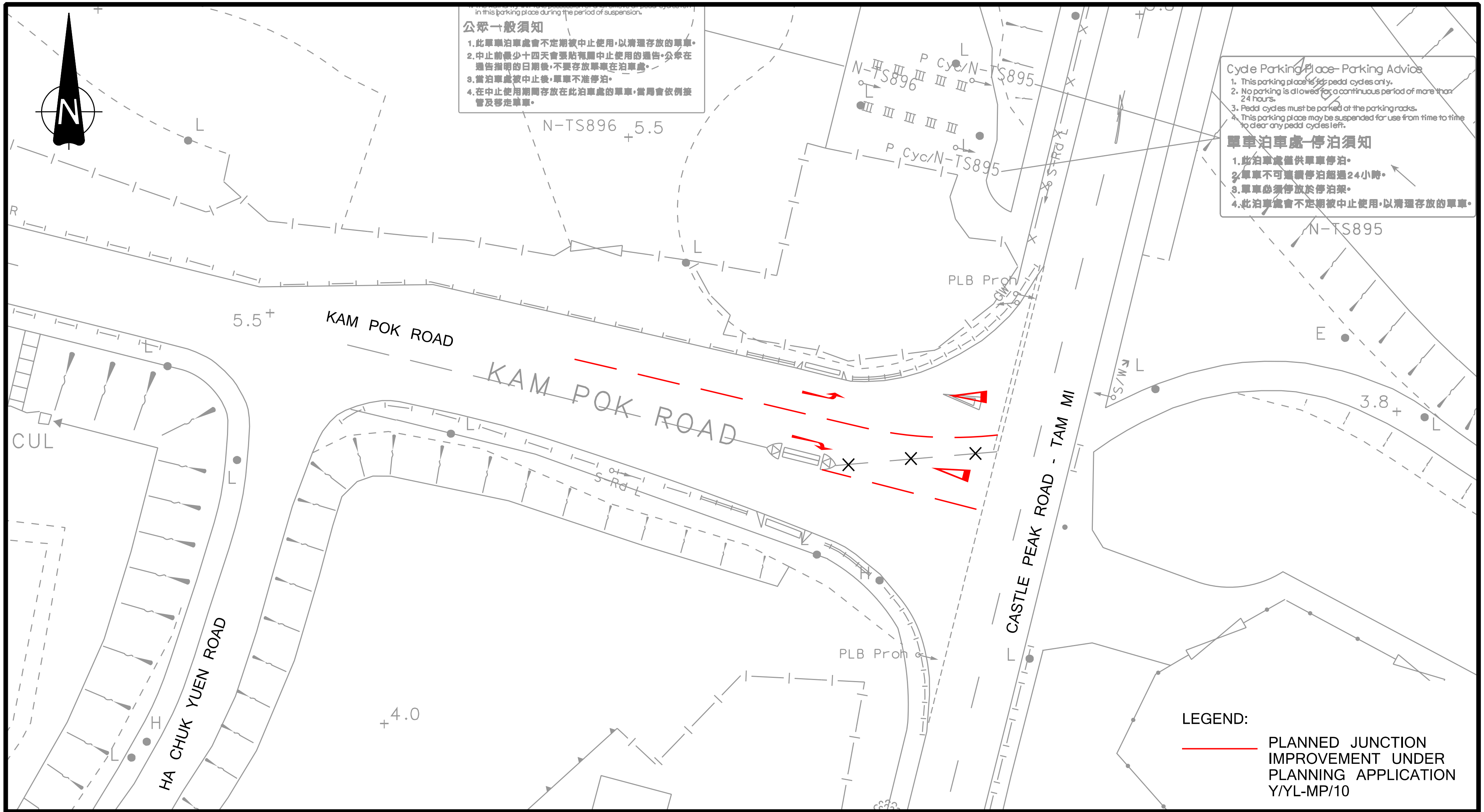
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HA CHUK YUEN ROAD
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P Cyc/N-TS895
PLB Proh
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LEGEND:
PLANNED JUNCTION IMPROVEMENT UNDER PLANNING APPLICATION Y/YL-MP/10
公眾一般須知
1.此單車泊車處會不定期被中止使用，以清理存放的單車。
2.中止前最少十四天會張貼有關中止使用的通告。公眾在通告指明的日期後，不要存放單車在泊車處。
3.當泊車處被中止後，單車不准停泊。
4.在中止使用期間存放在此泊車處的單車，當局會依例接管及移走單車。
Cycle Parking Place - Parking Advice
1. This parking place is for pedal cycles only.
2. No parking is allowed for a continuous period of more than 24 hours.
3. Pedal cycles must be parked at the parking racks.
4. This parking place may be suspended for use from time to time to clear any pedal cycles left.
單車泊車處-停泊須知
1.此泊車處僅供單車停泊。
2.單車不可連續停泊超過24小時。
3.單車必須停放於停泊架。
4.此泊車處會不定期被中止使用，以清理存放的單車。

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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT
AT LOT NO. 4882 IN D.D. 104 AND
ADJOINING GOVERNMENT LAND,
EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

PLANNED JUNCTION IMRPOVEMENT LAYOUT OF KAM POK ROAD / CASTLE PEAK ROAD - TAM MI (J6)

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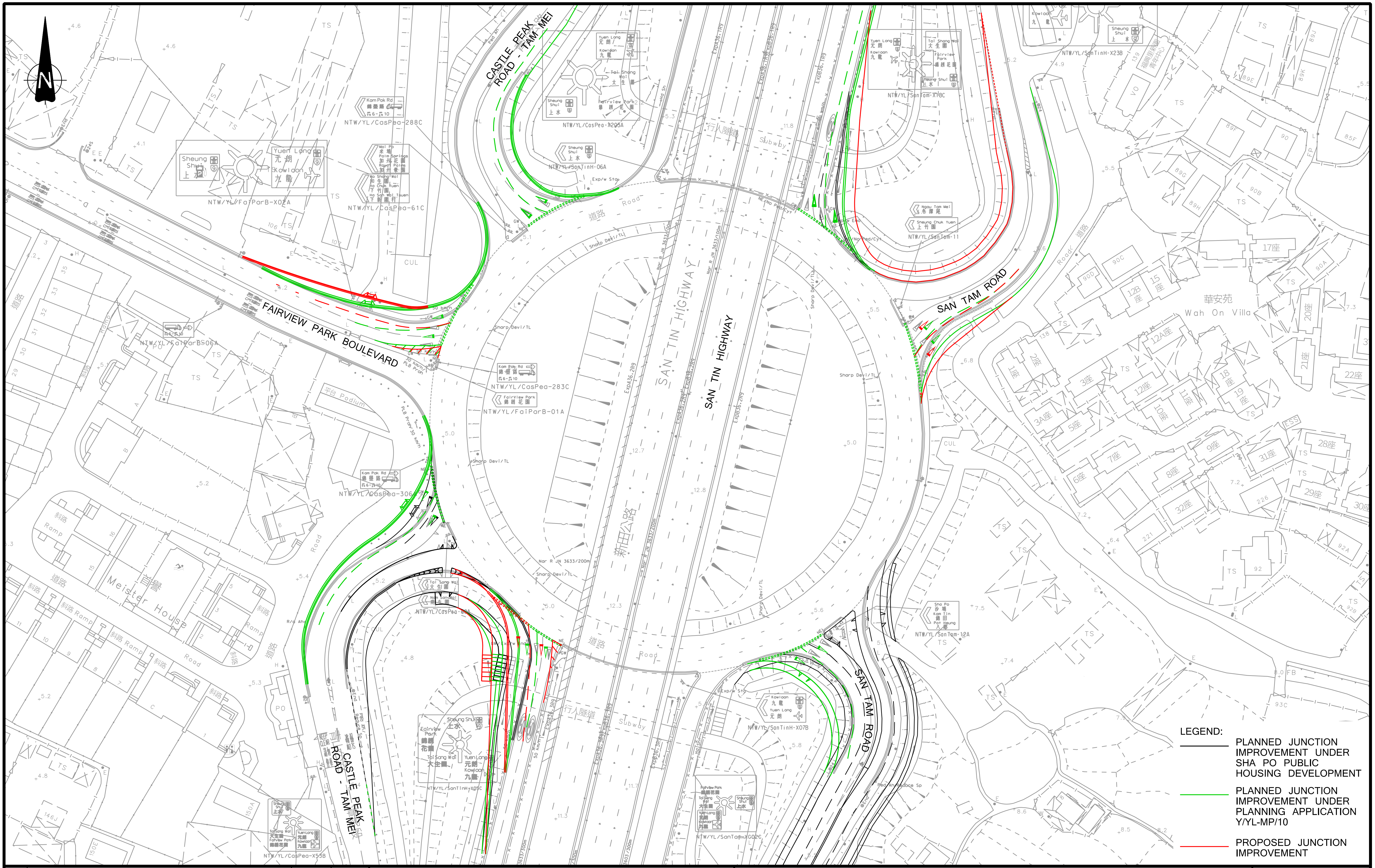
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SAN TAM ROAD
SAN TAM ROAD
CASTLE PEAK ROAD - TAM MEI
Meister House
華安苑
Wah On Villa
Subway
行人隧道
NTW/YL/FaiParB-X02A
NTW/YL/CasPea-288C
NTW/YL/CasPea-X205A
NTW/YL/SanTinH-06A
NTW/YL/CasPea-61C
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▬	PLANNED JUNCTION IMPROVEMENT UNDER SHA PO PUBLIC HOUSING DEVELOPMENT
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🟥	PROPOSED JUNCTION IMPROVEMENT

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Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D. 104 AND ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

PROPOSED JUNCTION IMPROVEMENT LAYOUT OF FAIRVIEW PARK INTERCHANGE (J1)

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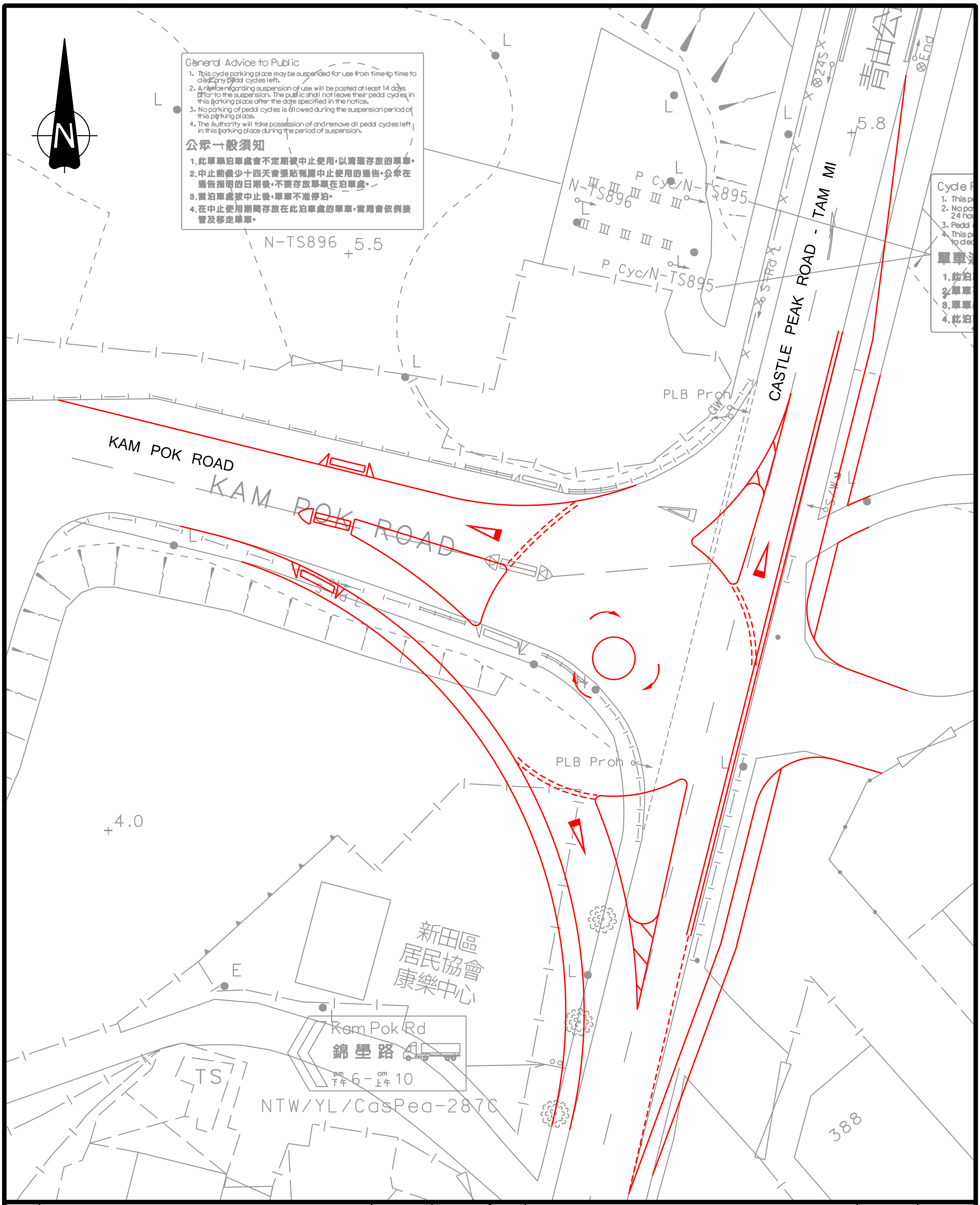
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General Advice to Public
1. This cycle parking place may be suspended for use from time to time to clear any pedal cycles left.
2. A notice regarding suspension of use will be posted at least 14 days prior to the suspension. The public shall not leave their pedal cycles in this parking place after the date specified in the notice.
3. No parking of pedal cycles is allowed during the suspension period of this parking place.
4. The Authority will take possession of and remove all pedal cycles left in this parking place during the period of suspension.
公眾一般須知
1.此單車泊車處會不定期被中止使用，以清理存放的單車。
2.中止前最少十四天會張貼有關中止使用的通告。公眾在通告指明的日期後，不要存放單車在泊車處。
3.當泊車處被中止後，單車不准停泊。
4.在中止使用期間存放在此泊車處的單車，當局會依例接管及移走單車。
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Project Title
PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4882 IN D.D. 104 AND
ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

PROPOSED JUNCTION IMPROVEMENT LAYOUT OF KAM POK ROAD / CASTLE PEAK ROAD - TAM MI (J6)

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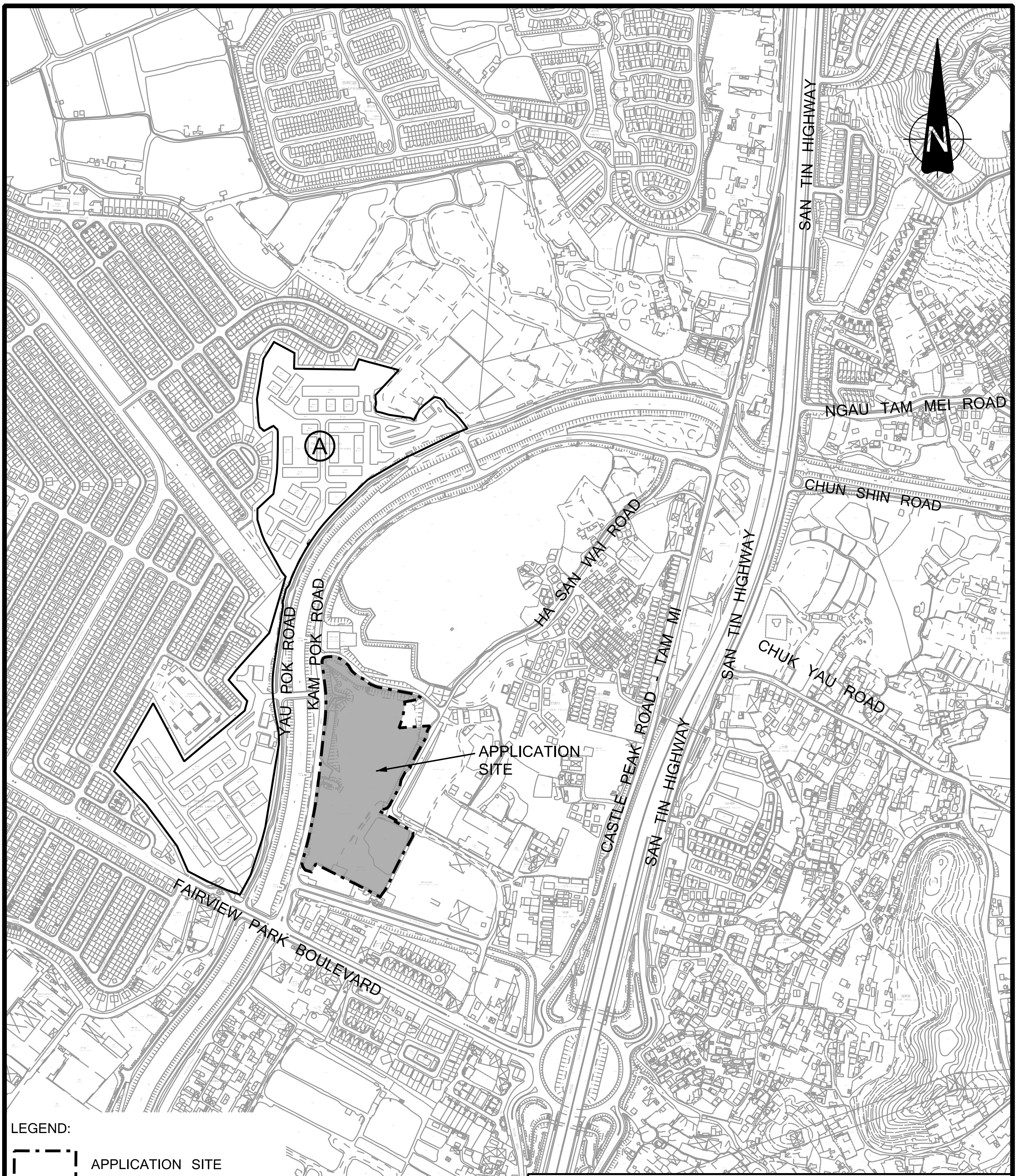
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KAM POK ROAD
CASTLE PEAK ROAD - TAM MI
SAN TIN HIGHWAY
CHUK YAU ROAD
FAIRVIEW PARK BOULEVARD

LEGEND:

▭ APPLICATION SITE

▭ POTENTIAL DEVELOPMENT

POTENTIAL DEVELOPMENTS:

A) PROPOSED RESIDENTIAL DEVELOPMENTS IN REC & R(C) ZONES AT YAU POK ROAD (Y/YL-MP/7 & MP/8).

A	MINOR AMENDMENT	PTC	08DEC25	-	-	-	-
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Project Title
PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D. 104 AND ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

LOCATIONS OF POTENTIAL DEVELOPMENTS

SYSTRA MVA

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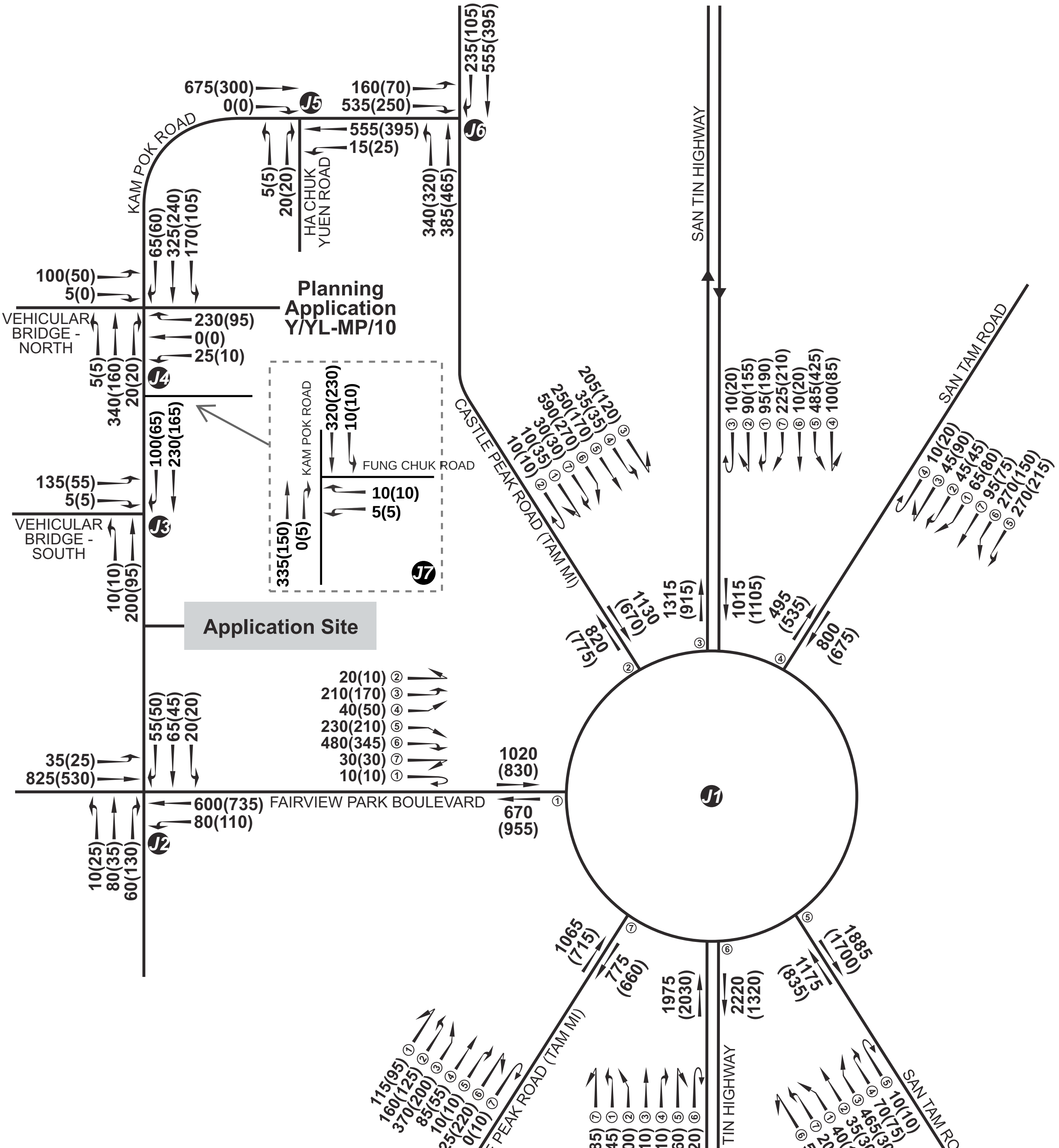
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HA CHUK YUEN ROAD
340(320)
385(465)
KAM POK ROAD
65(60)
325(240)
170(105)
100(50)
5(0)
230(95)
0(0)
25(10)
VEHICULAR BRIDGE - NORTH
5(5)
340(160)
20(20)
J4
Planning Application Y/YL-MP/10
100(65)
230(165)
135(55)
5(5)
VEHICULAR BRIDGE - SOUTH
J3
10(10)
200(95)
KAM POK ROAD
320(230)
10(10)
FUNG CHUK ROAD
10(10)
5(5)
335(150)
0(5)
J7
Application Site
55(50)
65(45)
20(20)
35(25)
825(530)
600(735)
80(110)
FAIRVIEW PARK BOULEVARD
10(25)
80(35)
60(130)
J2
20(10) ②
210(170) ③
40(50) ④
230(210) ⑤
480(345) ⑥
30(30) ⑦
10(10) ①
1020 (830)
670 (955)
①
J1
CASTLE PEAK ROAD (TAM MI)
205(120) ③
35(35) ④
250(170) ⑤
590(270) ⑥
30(30) ⑦
10(35) ①
10(10) ②
820 (775)
1130 (670)
②
SAN TIN HIGHWAY
③ 10(20)
② 90(155)
① 95(190)
⑦ 225(210)
⑥ 10(20)
⑤ 485(425)
④ 100(85)
1315 (915)
1015 (1105)
③
SAN TAM ROAD
④ 10(20)
③ 45(90)
② 45(45)
① 65(80)
⑦ 95(75)
⑥ 270(150)
⑤ 270(215)
495 (535)
800 (675)
④
⑤
1885 (1700)
1175 (835)
SAN TAM ROAD
⑤ 10(10)
④ 70(75)
③ 465(305)
② 35(30)
① 40(100)
⑦ 20(20)
⑥ 535(295)
⑥
1975 (2030)
2220 (1320)
SAN TIN HIGHWAY
375(285) ⑦
335(445) ①
460(400) ②
10(10) ③
155(210) ④
630(660) ⑤
10(20) ⑥
⑦
1065 (715)
775 (660)
CASTLE PEAK ROAD (TAM MI)
115(95) ①
160(125) ②
370(200) ③
85(55) ④
10(10) ⑤
325(220) ⑥
0(10) ⑦

LEGEND :

20(20) AM(PM) PEAK HOUR TRAFFIC FLOWS (PCU/HR)

Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
-	-	-	-	-	-	-	-
A	TRAFFIC FLOWS UPDATED	PTC	11DEC25	-	-	-	-

Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D.104 AND
ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

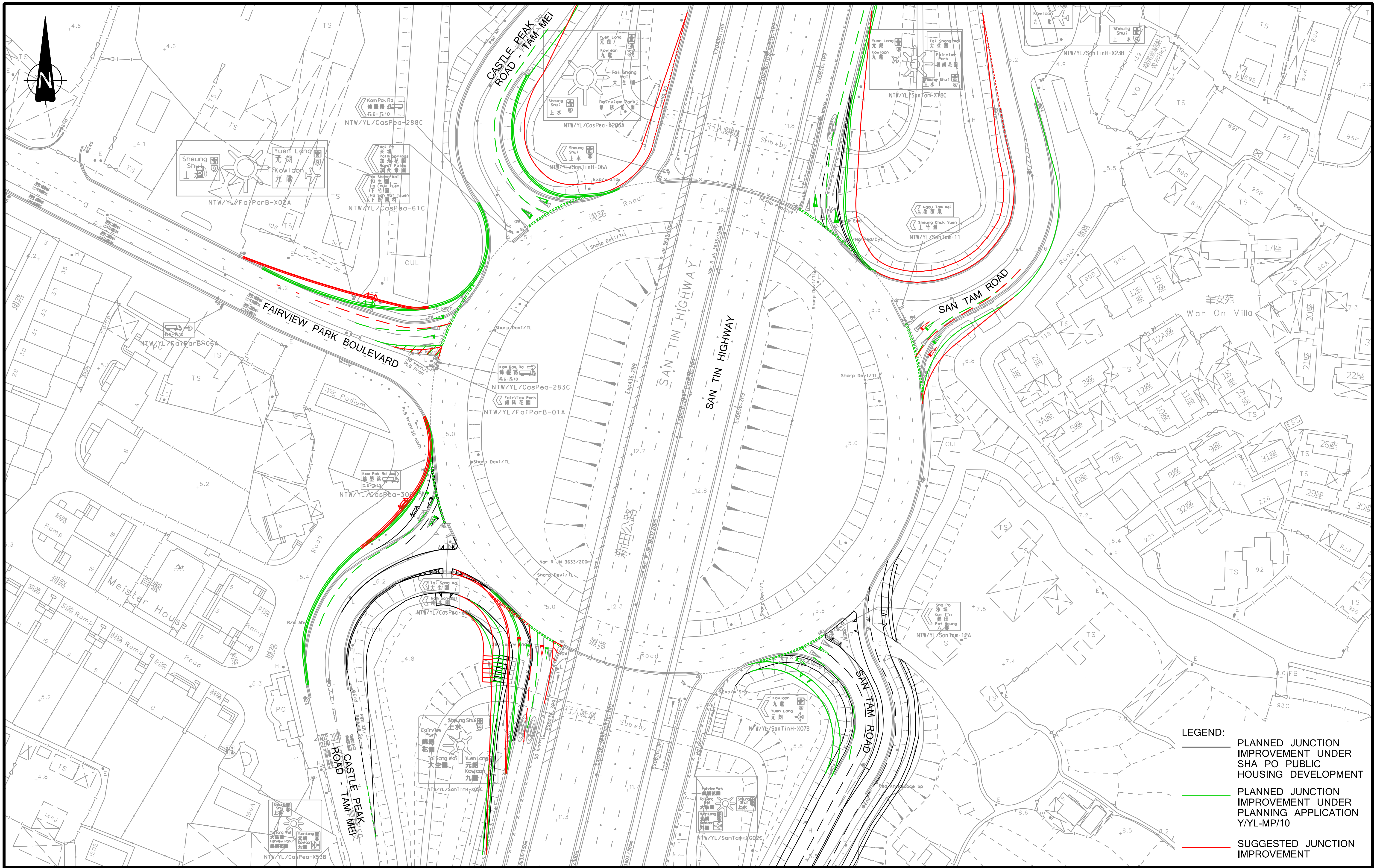
Drawing Title

YEAR 2034 DESIGN TRAFFIC FLOWS (SENSITIVITY TEST 1)

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	NTS	JUL 2025	5.7	A

SYSTRA MVA

Original Size : A4


N
CASTLE PEAK ROAD - TAM MEI
FAIRVIEW PARK BOULEVARD
SAN TIN HIGHWAY
新田公路
SAN TAM ROAD
華安苑
Wah On Villa
Meister House
Subway
行人隧道
NTW/YL/FaiParB-X02A
NTW/YL/CasPea-288C
NTW/YL/CasPea-61C
NTW/YL/CasPea-X205A
NTW/YL/SanTinH-06A
NTW/YL/SanTinH-X23B
NTW/YL/SanTam-X18C
NTW/YL/SanTam-11
NTW/YL/FaiParB-06A
NTW/YL/CasPea-283C
NTW/YL/FaiParB-01A
NTW/YL/CasPea-30
NTW/YL/CasPea-X55B
NTW/YL/SanTinH-X05C
NTW/YL/SanTinH-X07B
NTW/YL/SanTam-X02C
NTW/YL/SanTam-12A

LEGEND:

- — PLANNED JUNCTION IMPROVEMENT UNDER SHA PO PUBLIC HOUSING DEVELOPMENT
- 🟩 PLANNED JUNCTION IMPROVEMENT UNDER PLANNING APPLICATION Y/YL-MP/10
- 🟥 SUGGESTED JUNCTION IMPROVEMENT

FILENAME: C:\Users\lkwong\OneDrive - SystraGroup\Working\20251218\CHK50868310\TIA\F58.dgn
PRINTED BY: lkwong DATE: 18-Dec-25 TIME: 5:27:08 PM

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT
LOT NO. 4822 IN D.D. 104 AND ADJOINING GOVERNMENT LAND,
EAST OF KAM POK ROAD, MAI PO, YUEN LONG

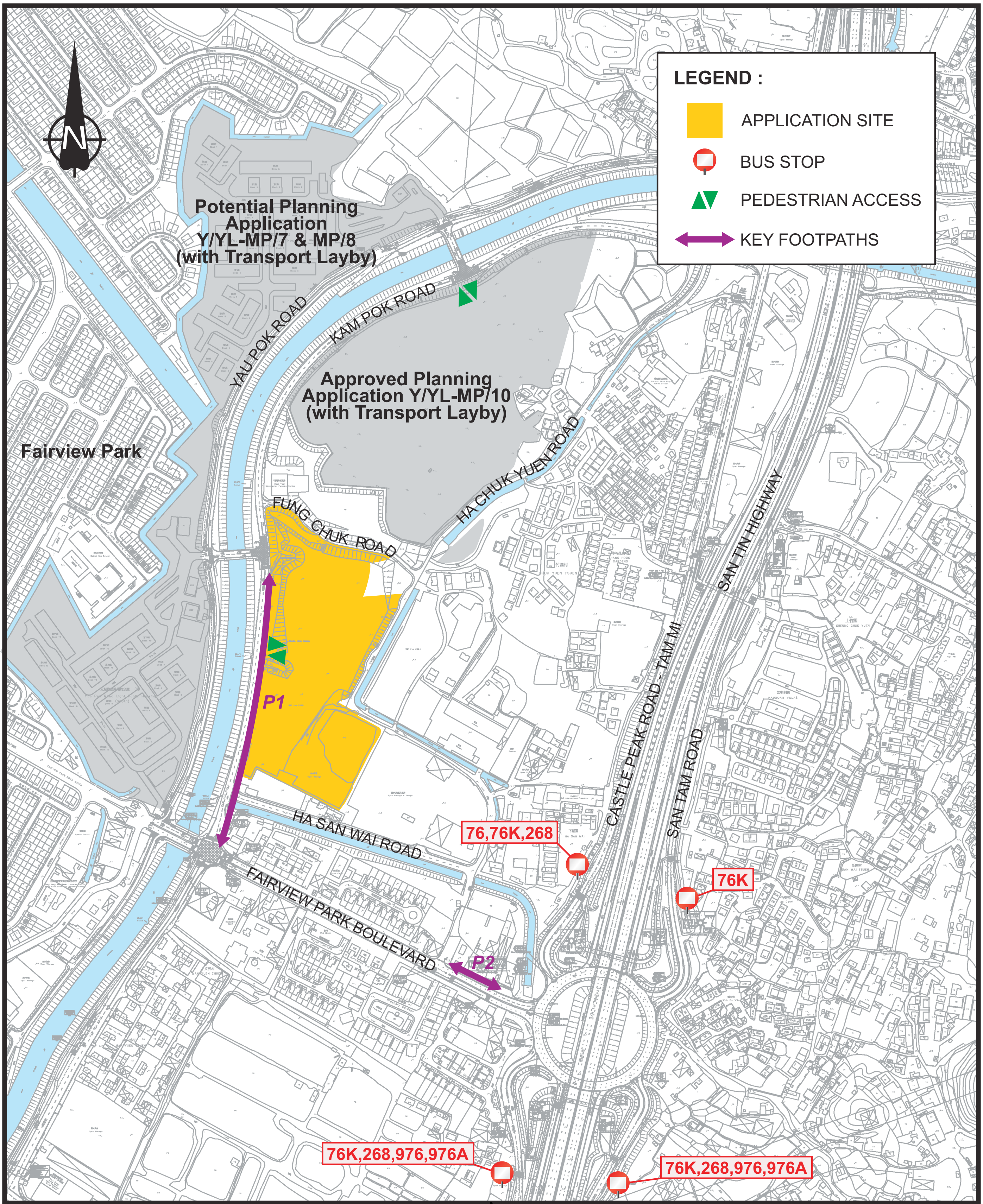
Drawing Title

SUGGESTED JUNCTION IMPROVEMENT LAYOUT OF FAIRVIEW PARK INTERCHANGE (J1)

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	1:1000(A3)	JUN 2025	5.8	-

SYSTRA MVA

Original Size : A3


N
LEGEND :
APPLICATION SITE
BUS STOP
PEDESTRIAN ACCESS
KEY FOOTPATHS
Potential Planning Application Y/YL-MP/7 & MP/8 (with Transport Layby)
Approved Planning Application Y/YL-MP/10 (with Transport Layby)
Fairview Park
YAU POK ROAD
KAM POK ROAD
FUNG CHUK ROAD
HA CHUK YUEN ROAD
SAN TIN HIGHWAY
CASTLE PEAK ROAD - TAM MI
SAN TAM ROAD
HA SAN WAI ROAD
FAIRVIEW PARK BOULEVARD
P1
P2
76,76K,268
76K
76K,268,976,976A
76K,268,976,976A

Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Project Title

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT NO. 4822 IN D.D.104 AND ADJOINING GOVERNMENT LAND, EAST OF KAM POK ROAD, MAI PO, YUEN LONG

Drawing Title

IDENTIFIED FOOTPATHS

SYSTRA MVA

Designed	Checked	Scale	Date	Drawing No.	Rev.
HZF	PTC	NTS	DEC 2025	5.9	-

CHK50868310/TIA/F59.CDR/LLH/11DEC25

Original Size : A4

6. SUMMARY & CONCLUSION

6.1 Summary

6.1.1 The application site comprises lot No. 4822 in D.D. 104 and adjoining government Land, east Kam Pok Road, Mai Po, Yuen Long, as indicated in **Drawing 1.1**. The Applicant proposes to increase its domestic plot ratio from 0.2 to 1.5. Under the current scheme, the proposed development will provide 5 medium-rise residential blocks of total 1,303 units, one 6-classroom kindergarten and one Neighbourhood Elderly Centre.

6.1.2 The main development vehicular access will be located at Kam Pok Road. The internal transport facilities provisions will be provided in accordance with the relevant guidelines stipulated in the latest HKPSG and the comments from TD.

6.1.3 Traffic surveys have been conducted to establish the current traffic condition in the vicinity of the site. The results of the junction and link capacity assessments have revealed that all the identified local junctions and road links are currently operating within capacities during peak hours.

6.1.4 The tentative operation year of proposed development is 2031. Thus, the design year of 2034 is adopted for traffic forecast and assessment purposes.

6.1.5 Operational performance of all identified local junctions and road links have been assessed based on the anticipated year 2034 traffic flows and the existing/planned layouts. The results of the assessment as shown in **Table 5.1** and **Table 5.2** revealed that all identified key junctions and road links will operate within capacities except the planned junctions Fairview Park Interchange (J1) and Castle Peak Road / Kam Pok Road (J6).

6.1.6 To resolve the foreseeable traffic problem, local junction improvement measures have been proposed for Fairview Park Interchange (J1) and Castle Peak Road/Kam Pok Road (J6). According to the results of the junction assessment as shown in **Table 5.3**, the junctions J1 and J6 can operate within capacity under the proposed improvement schemes at the design year 2034.

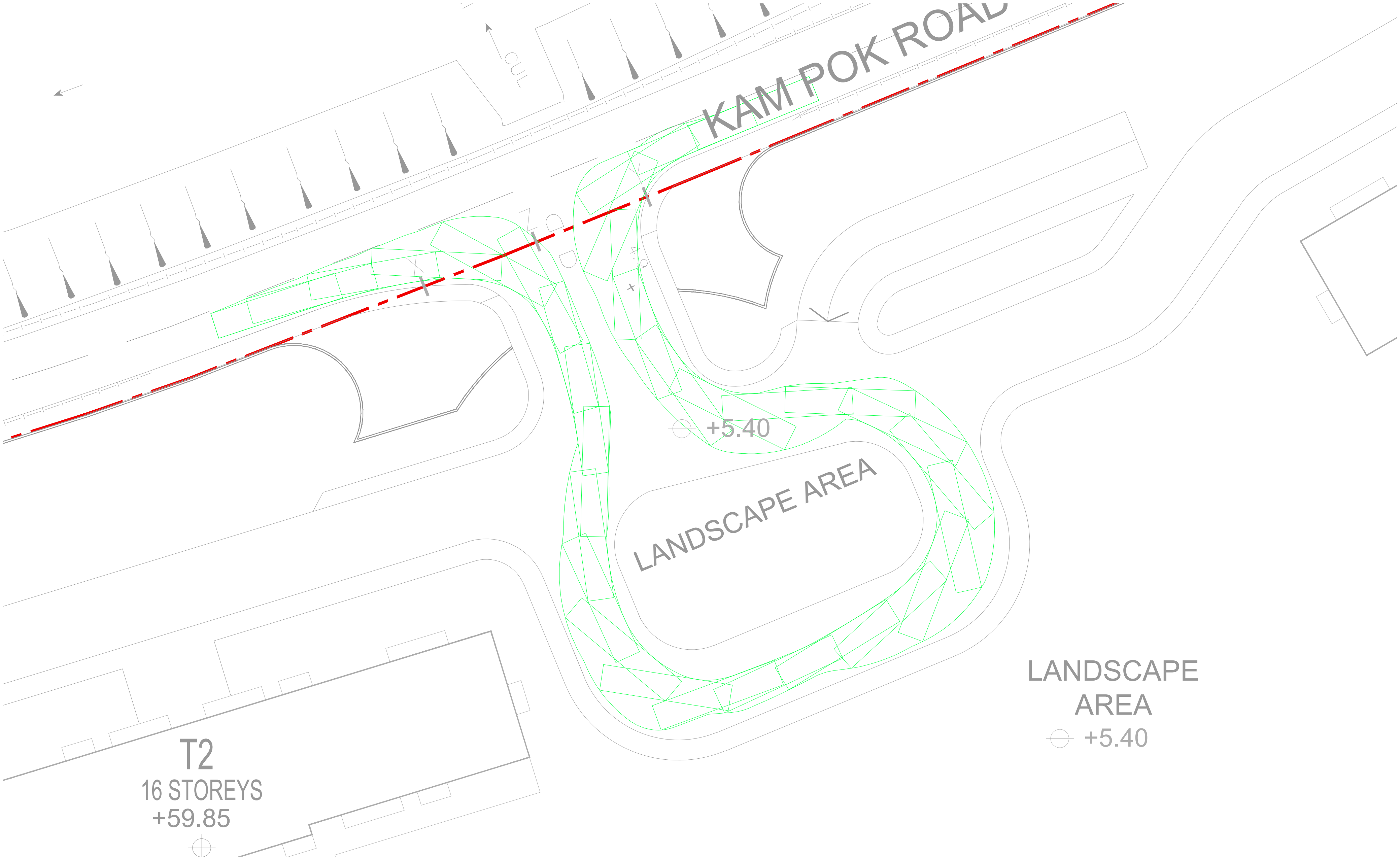
6.1.7 It is noted that two rezoning applications in the vicinity of the application site have been submitted for increasing their development densities. A sensitivity test (i.e. Sensitivity Test 1) has conducted to assess the traffic impact by assuming that these potential residential developments will be completed before the design year 2034. The results of the junction and link assessment under Sensitivity Test 1 revealed that all identified key junctions and road links will operate within capacities except Fairview Park Interchange (J1). A junction improvement scheme has been suggested for Fairview Park Interchange (J1).

6.2 Conclusion

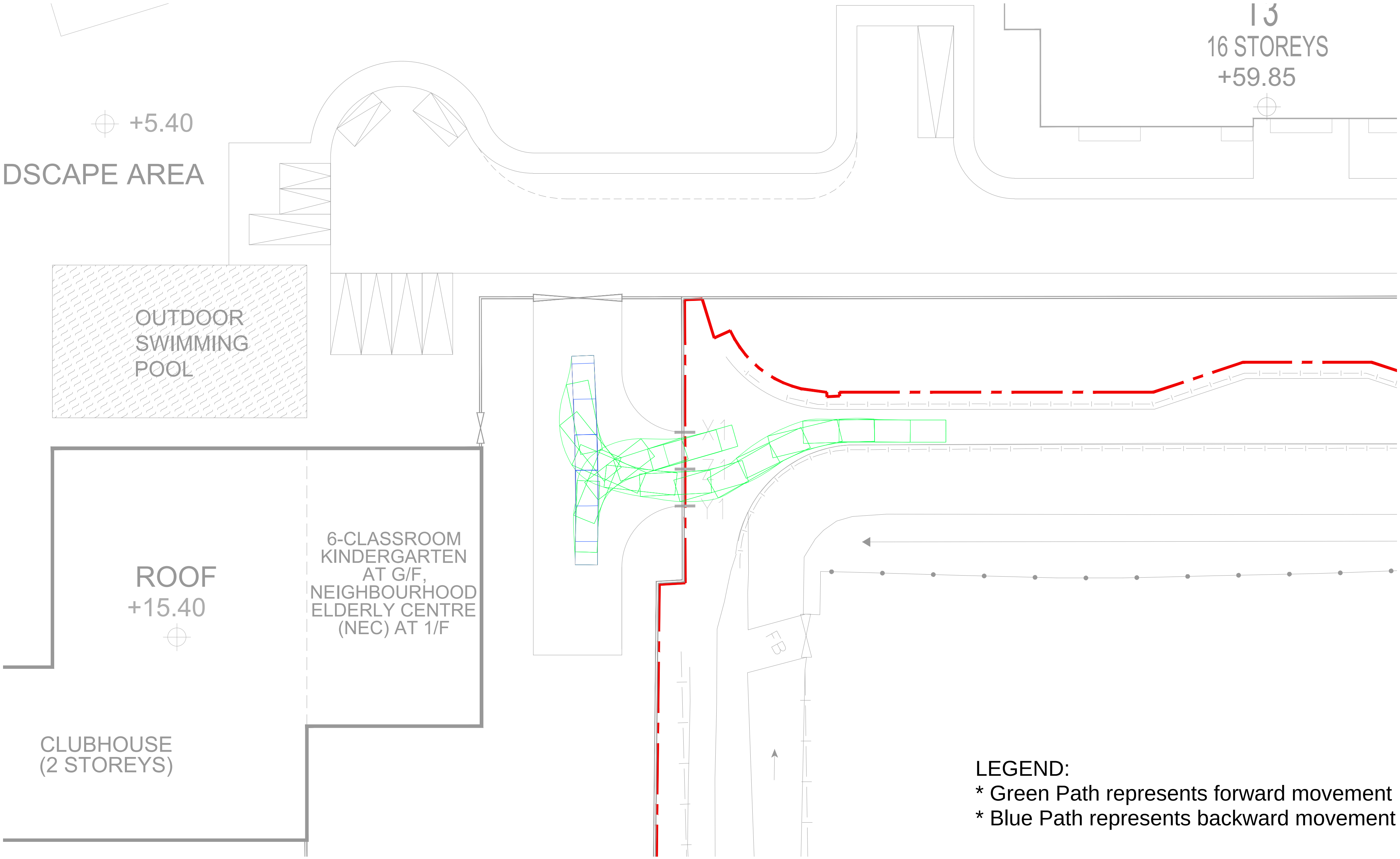
6.2.1 In conclusion, the results of the traffic impact assessment have demonstrated that the development traffic generation by the subject site can be absorbed by the nearby road network (with implementation of junction improvement works at Fairview Park Interchange J1 and Castle Peak Road/Kam Pok Road J6) and would not cause any adverse traffic impact. Hence it can be concluded that the proposed development is considered acceptable in traffic engineering perspective.

Appendix A

Swept Path Analysis at the Proposed Vehicular Accesses


KAM POK ROAD
CUL
LANDSCAPE AREA
+5.40
LANDSCAPE
AREA
+5.40
T2
16 STOREYS
+59.85

Swept Path Analysis for 12.8m Bus at the Main Entrance
1:500 in A4 Size

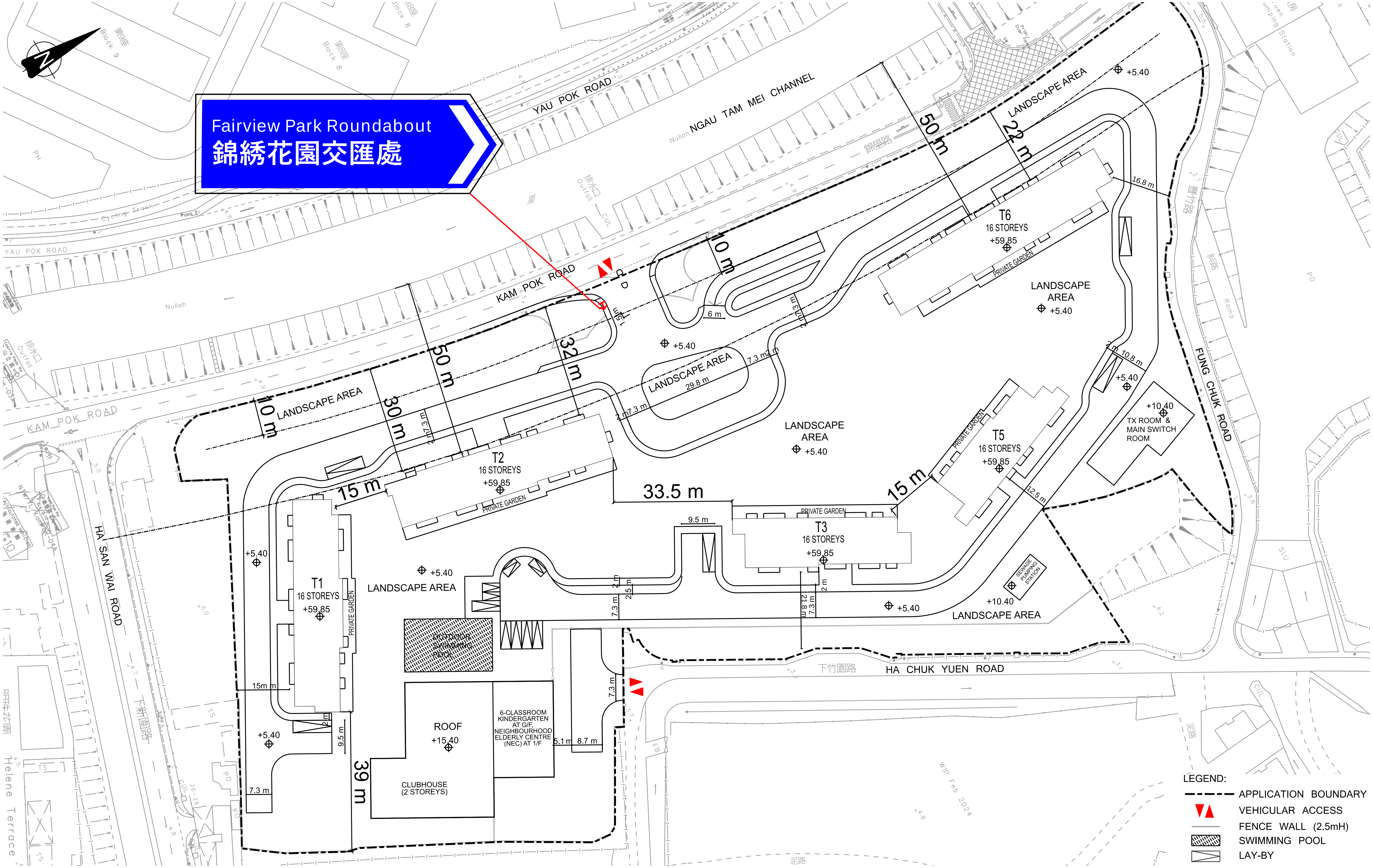

13
16 STOREYS
+59.85
+5.40
DSCAPE AREA
OUTDOOR SWIMMING POOL
ROOF
+15.40
6-CLASSROOM KINDERGARTEN AT G/F, NEIGHBOURHOOD ELDERLY CENTRE (NEC) AT 1/F
CLUBHOUSE (2 STOREYS)
X1
Z1
Y1
FB

LEGEND:
* Green Path represents forward movement
* Blue Path represents backward movement

Swept Path Analysis for 7m Vehicle at the Second Entrance
1:500 in A4 Size

Appendix B

Preliminary Directional Sign at Egress of the Development

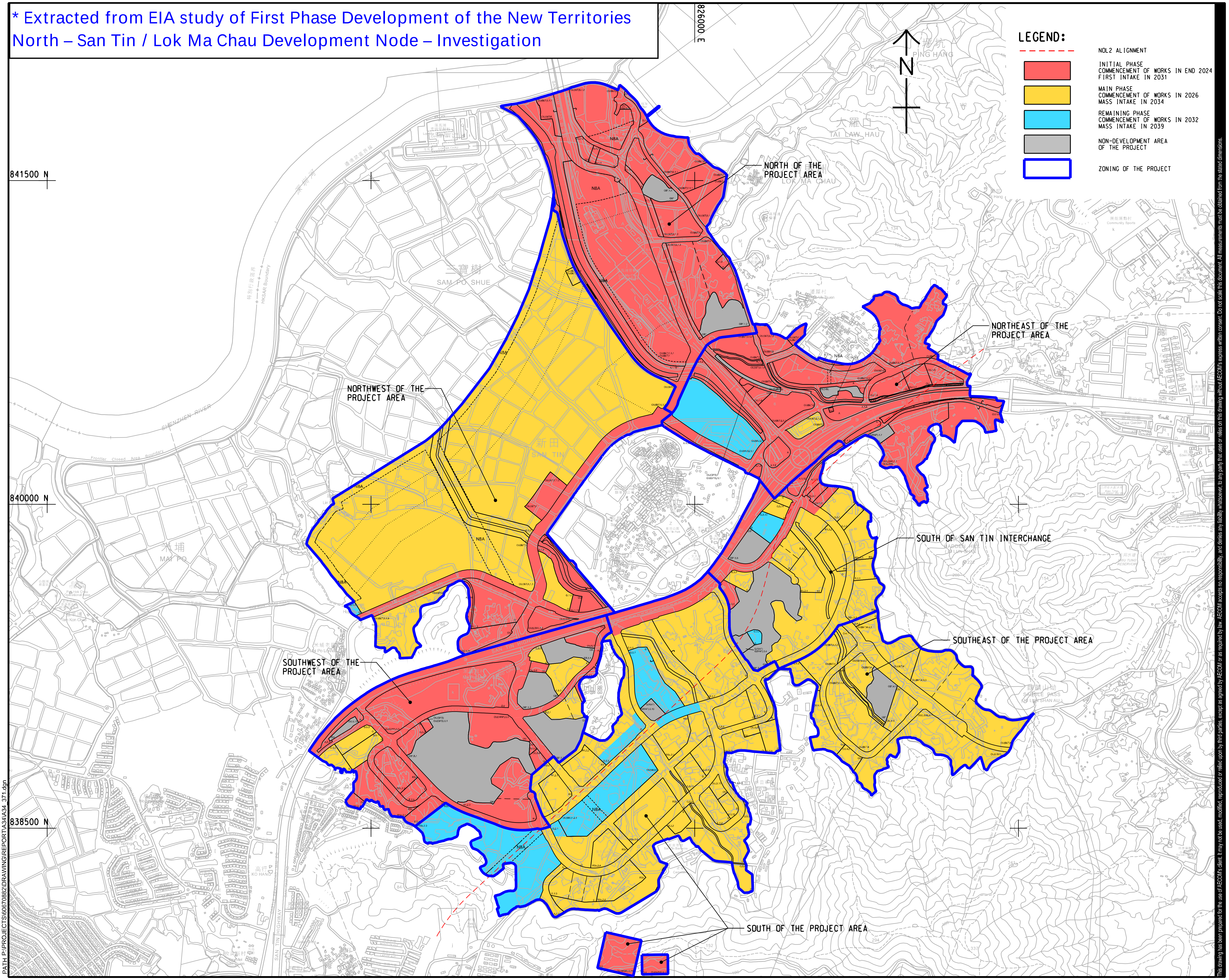

Fairview Park Roundabout
錦綉花園交匯處
YAU POK ROAD
NGAU TAM MEI CHANNEL
KAM POK ROAD
HA SAN WAI ROAD
FUNG CHUK ROAD
HA CHUK YUEN ROAD
下竹園路
LANDSCAPE AREA
T1
16 STOREYS
+59.85
T2
16 STOREYS
+59.85
T3
16 STOREYS
+59.85
T5
16 STOREYS
+59.85
T6
16 STOREYS
+59.85
PRIVATE GARDEN
+5.40
+10.40
+15.40
ROOF
CLUBHOUSE (2 STOREYS)
6-CLASSROOM KINDERGARTEN AT G/F, NEIGHBOURHOOD ELDERLY CENTRE (NEC) AT 1/F
OUTDOOR SWIMMING POOL
TX ROOM & MAIN SWITCH ROOM
SEWAGE PUMPING STATION
50 m
22 m
10 m
32 m
30 m
15 m
33.5 m
39 m
29.8 m
16.8 m
10.8 m
12.5 m
9.5 m
7.3 m
21.8 m
8.7 m
5.1 m
6 m
2 m
2.5 m
LEGEND:
APPLICATION BOUNDARY
VEHICULAR ACCESS
FENCE WALL (2.5mH)
SWIMMING POOL
LAY-BY

Appendix C

Preliminary Phasing Plan of San Tin Technopole

(Extracted from EIA study of First Phase Development of the New Territories North – San Tin / Lok Ma Chau Development Node – Investigation)

* Extracted from EIA study of First Phase Development of the New Territories North – San Tin / Lok Ma Chau Development Node – Investigation


826000 E
841500 N
840000 N
838500 N
N
NORTH OF THE PROJECT AREA
NORTHEAST OF THE PROJECT AREA
NORTHWEST OF THE PROJECT AREA
SOUTH OF SAN TIN INTERCHANGE
SOUTHEAST OF THE PROJECT AREA
SOUTHWEST OF THE PROJECT AREA
SOUTH OF THE PROJECT AREA
三寶樹 SAM PO SHUE
新田 SAN TIN
米埔 MAI PO
LOK MA CHAU
PING HANG
TAI LAW HAU
SHENZHEN RIVER
NBA

LEGEND:

- - - -	NOL2 ALIGNMENT
🟥	INITIAL PHASE COMMENCEMENT OF WORKS IN END 2024 FIRST INTAKE IN 2031
🟨	MAIN PHASE COMMENCEMENT OF WORKS IN 2026 MASS INTAKE IN 2034
🟦	REMAINING PHASE COMMENCEMENT OF WORKS IN 2032 MASS INTAKE IN 2039
⬜	NON-DEVELOPMENT AREA OF THE PROJECT
☐	ZONING OF THE PROJECT

PROJECT
項目

FIRST PHASE DEVELOPMENT OF THE NEW TERRITORIES NORTH – SAN TIN / LOK MA CHAU DEVELOPMENT NODE – INVESTIGATION

CLIENT
業主

土木工程拓展署
Civil Engineering and Development Department

規劃署
Planning Department

CONSULTANT
工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION
修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核

STATUS
階段

SCALE 比例	**DIMENSION UNIT** 尺寸單位
A3 1 : 16000	METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號	**AGREEMENT NO.** 協議編號
60670882	CE 20/2021

SHEET TITLE
圖紙名稱

PRELIMINIARY CONSTRUCTION AND POPULATION INTAKE SCHEDULE

SHEET NUMBER
圖紙編號

60670882/A34/APPENDIX 2.1

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ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:

Plot File by: RenS 2023/11/14
PATH P:\PROJECTS\60670882\DRAWING\REPORT\A34\A34_371.dgn

Appendix D

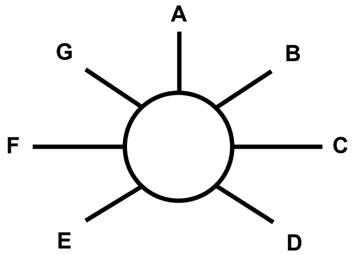
Junction Calculation Sheets

Roundabout Capacity Calculation

Job Title: Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long
Junction: Fairview Park Interchange (J1) Ref. No.:
Scheme: Observed Case
2025 Job No.: CHK50868310 -

AM PM

ARM A: Fairview Park Boulevard
ARM B: Castle Peak Road - Tam Mi (N)
ARM C: San Tin Highway Slip Road (N)
ARM D: San Tam Road (N)
ARM E: San Tam Road (S)
ARM F: San Tin Highway Slip Road (S)
ARM G: Castle Peak Road - Tam Mi (S)



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	7.00	11.00	14	22	142	35	0.46
B	5.50	10.50	15	20	142	35	0.53
C	5.50	8.50	7.5	23	142	30	0.64
D	6.75	8.50	10	20	142	25	0.28
E	6.00	8.00	9.5	20	142	35	0.34
F	6.50	9.00	15	25	142	40	0.27
G	5.50	6.00	7	22	142	30	0.11

AM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	55	5	215	35	145	395	15	1265	865	580
B	15	25	60	5	125	270	5	1735	505	395
C	150	60	10	105	230	20	125	1660	700	580
D	40	10	45	10	225	210	10	1985	550	375
E	50	65	130	50	5	35	5	1650	340	885
F	240	135	15	130	95	25	110	895	750	1095
G	30	95	105	40	60	140	15	1360	485	285

PM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	55	20	145	40	145	250	20	1275	675	800
B	15	25	45	15	115	100	10	1555	325	395
C	175	45	20	100	265	5	100	1305	710	575
D	20	20	70	20	140	165	10	1590	445	425
E	50	35	155	35	10	35	5	1255	325	780
F	450	150	25	160	90	20	175	905	1070	675
G	35	100	115	55	15	100	10	1645	430	330

CALCULATIONS

							Q_E		RFC	
ARM	K	X_2	M	F	t_D	f_c	AM	PM	AM	PM
A	0.99	9.09	3640.95	2754	1.00	0.59	1980	1974	0.44	0.34
B	0.98	7.92	3640.95	2400	1.00	0.54	1433	1529	0.35	0.21
C	1.01	6.82	3640.95	2065	1.00	0.50	1249	1427	0.56	0.50
D	1.02	7.87	3640.95	2385	1.00	0.54	1335	1552	0.41	0.29
E	0.98	7.19	3640.95	2180	1.00	0.51	1312	1511	0.26	0.22
F	0.98	8.13	3640.95	2464	1.00	0.55	1921	1915	0.39	0.56
G	1.00	5.91	3640.95	1790	1.00	0.46	1172	1041	0.41	0.41

Crtical Arm:	**C**	**F**
RFC:	**0.56**	**0.56**
	AM	**PM**

- In accordance with TPDM V2.4

Calculated by: HZF Date: Dec-25 Checked by: PTC

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310

MVA HONG KONG LIMITED

Junction: Kam Pok Road / Fairview Park Boulevard (J2)

Design Year: 2034

Description: Year 2025 Observed Traffic Flows

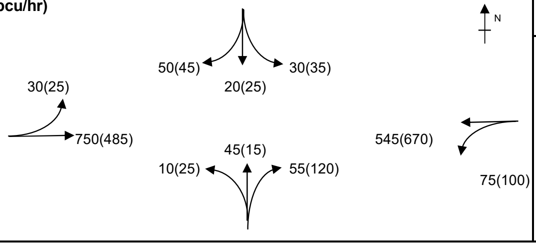
Designed By: HZF

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Fairview Park	↰→	A	1	3.4	15			8%	10%	1940	1935	389	0.201	0.201	254	0.131	
Boulevard EB	→	A	1	3.4						1955	1955	391	0.200		256	0.131	
Fairview Park	←↓	A	1	3.5	17			24%	26%	1925	1920	307	0.159		381	0.198	0.198
Boulevard WB	←	A	1	3.5						1965	1965	313	0.159		389	0.198	
Kam Pok Road SB	←↓→	B	2	5.5	18	18		30% / 50%	33% / 43%	2030	2035	100	0.049	0.049	105	0.052	0.052
Kam Pok Road NB	←↑→	C	3	3.8	13	20		9% / 50%	16% / 75%	1905	1855	110	0.058	0.058	160	0.086	0.086
Pedestrian Crossing		Dp	4	MIN GREEN + FLASH =			10	+	9	=	19			*			*

Notes:

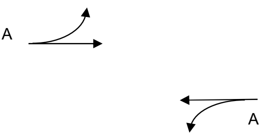
Flow: (pcu/hr)



Group		A,B,C,Dp	Group		A,B,C,Dp
y		0.308	y		0.336
L (sec)		44	L (sec)		44
C (sec)		120	C (sec)		120
y pract.		0.570	y pract.		0.570
R.C. (%)		85%	R.C. (%)		69%

Stage / Phase Diagrams

1.



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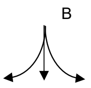
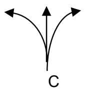


3.



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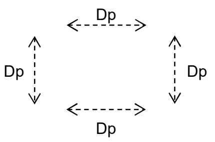


5.

I/G= 3		I/G= 7		I/G= 7		I/G= 11	19	I/G=	
I/G= 3		I/G= 7		I/G= 7		I/G= 11	19	I/G=	

Date: Dec, 2025

Junction: 2

J2

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310

MVA HONG KONG LIMITED

Junction: Kam Pok Road / Vehicular Bridge – South (J3)

Design Year: 2034

Description: Year 2025 Observed Traffic Flows

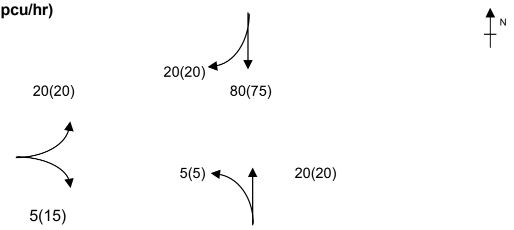
Designed By: HZF

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Vehicular Bridge (EB)	←→	A	1	3.600	10	10		80% / 20%	57% / 43%	1715	1715	25	0.015	0.015	35	0.020	0.020
Kam Pok Rd (SB)	↑→	B	2	3.600		10		20%	21%	1915	1915	100	0.052	0.052	95	0.050	0.050
Kam Pok Rd (NB)	←↑	C	3	3.600	10			20%	20%	1915	1915	25	0.013		25	0.013	
Pedestrian Crossing		Dp	4	MIN GREEN + FLASH =			7	+	7	=	14			*			*

Notes:

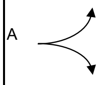
Flow: (pcu/hr)



Group		A,B,C,Dp	Group		A,B,C,Dp
y		0.067	y		0.070
L (sec)		32	L (sec)		32
C (sec)		60	C (sec)		60
y pract.		0.420	y pract.		0.420
R.C. (%)		529%	R.C. (%)		500%

Stage / Phase Diagrams

1.



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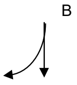

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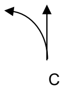

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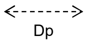


5.

I/G= 2		I/G= 5		I/G= 5	5	I/G= 3	14	I/G=	
I/G= 2		I/G= 5		I/G= 5	5	I/G= 3	14	I/G=	

Date: Dec, 2025

Junction: 3

J3

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310

MVA HONG KONG LIMITED

Junction: Kam Pok Road / Vehicular Bridge – North (J4)

Design Year: 2034

Description: Year 2025 Observed Traffic Flows

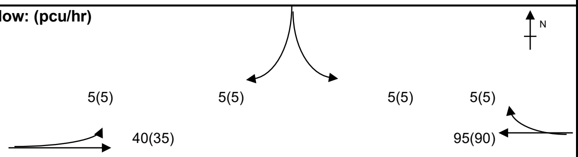
Designed By: HZF

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Kam Pok Road WB	↑→	C	1	3.650		12		5%	5%	1970	1965	100	0.051	0.051	95	0.048	0.048
Kam Pok Road EB	←↑	B	3	3.650	10			11%	13%	1950	1945	45	0.023	0.023	40	0.021	0.021
Vehicular Bridge SB	←→	A	2	3.650	10	12		50% / 50%	50% / 50%	1740	1740	10	0.006		10	0.006	
Pedestrian Crossing		Dp	4	MIN GREEN + FLASH =			7	+	7	=	14			*			*

Notes:

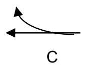
Flow: (pcu/hr)



Group		A,B,C,Dp	Group		A,B,C,Dp
y		0.074	y		0.069
L (sec)		34	L (sec)		34
C (sec)		60	C (sec)		60
y pract.		0.390	y pract.		0.390
R.C. (%)		428%	R.C. (%)		466%

Stage / Phase Diagrams

1.



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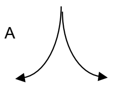

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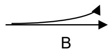
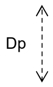


4.



5.

I/G= 2		I/G= 5	5	I/G= 5		I/G= 5	14	I/G=	
I/G= 2		I/G= 5	5	I/G= 5		I/G= 5	14	I/G=	

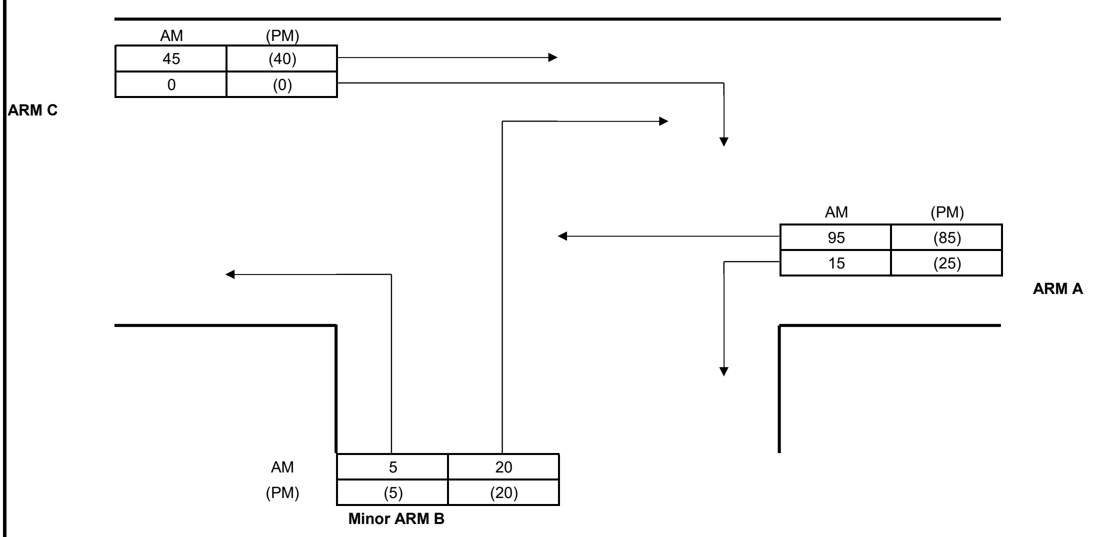
Date: Dec, 2025

Junction: 4

J4

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Ha Chuk Yuen Road (J5)			Ref. No.:	
Scheme:	Observed Case				
Year:	2025	Job No.:	CHK50868310	Rev.:	
ARM A:	Kam Pok Road WB				
ARM B:	Ha Chuk Yuen Road				
ARM C:	Kam Pok Road EB				



GEOMETRY

Major road width	W	9.30	Lane widths	w(b-a)	2.05
Central Reserve width	Wcr	0.00		w(b-c)	2.05
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.50
Visibilities	Vr(b-a)	50	Calculated	D	0.75
	Vl(b-a)	50		E	0.80
	Vr(b-c)	50		F	0.92
	Vr(c-b)	50		Y	0.68

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		45	40
	q(c-b)		0	0
	q(a-b)		15	25
	q(a-c)		95	85
	q(b-a)		20	20
	q(b-c)		5	5
	f		0.20	0.20
CAPACITIES	Q(b-a)	1	445	447
	Q(b-c)	1	573	574
	Q(c-b)	1	663	663
	Q(b-ac)	1	466	468
RFC's	b-a		0.045	0.045
	b-c		0.009	0.009
	c-b		0.000	0.000
	b-ac		0.054	0.053
Worst RFC			**0.054**	**0.053**

Where Vl and Vr are visibility distances to the left or right of the respective streams
D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))
E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))
F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))
Y = 1-0.0345W
f = proportion of minor traffic turning left
Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

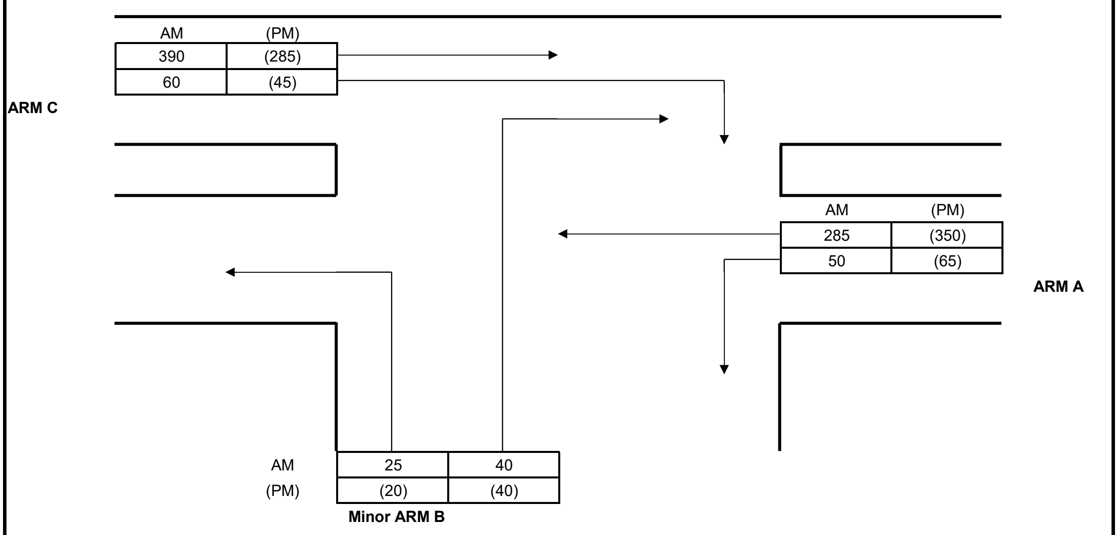
T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long			
Junction:	Kam Pok Road / Castle Peak Road – Tam Mi (J6)			Ref. No.:
Scheme:	Observed Case			
Year:	2025	Job No.:	CHK50868310	Rev.:
ARM A:	Castle Peak Road - Tam Mi NB			
ARM B:	Kam Pok Road EB			
ARM C:	Castle Peak Road - Tam Mi SB			



GEOMETRY

Major road width	W	6.90	Lane widths	w(b-a)	4.50
Central Reserve width	Wcr	0.00		w(b-c)	4.50
2 Lane Minor Arm (Y/N)		N		w(c-b)	2.05
Visibilities	Vr(b-a)	53	Calculated	D	0.97
	Vl(b-a)	70		E	1.03
	Vr(b-c)	70		F	0.78
	Vr(c-b)	30		Y	0.76

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		390	285
	q(c-b)		60	45
	q(a-b)		50	65
	q(a-c)		285	350
	q(b-a)		40	40
	q(b-c)		25	20
	f		0.38	0.33
CAPACITIES	Q(b-a)	1	435	440
	Q(b-c)	1	681	661
	Q(c-b)	1	509	492
	Q(b-ac)	1	505	495
RFC's	b-a		0.092	0.091
	b-c		0.037	0.030
	c-b		0.118	0.091
	b-ac		0.129	0.121
Worst RFC			**0.129**	**0.121**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

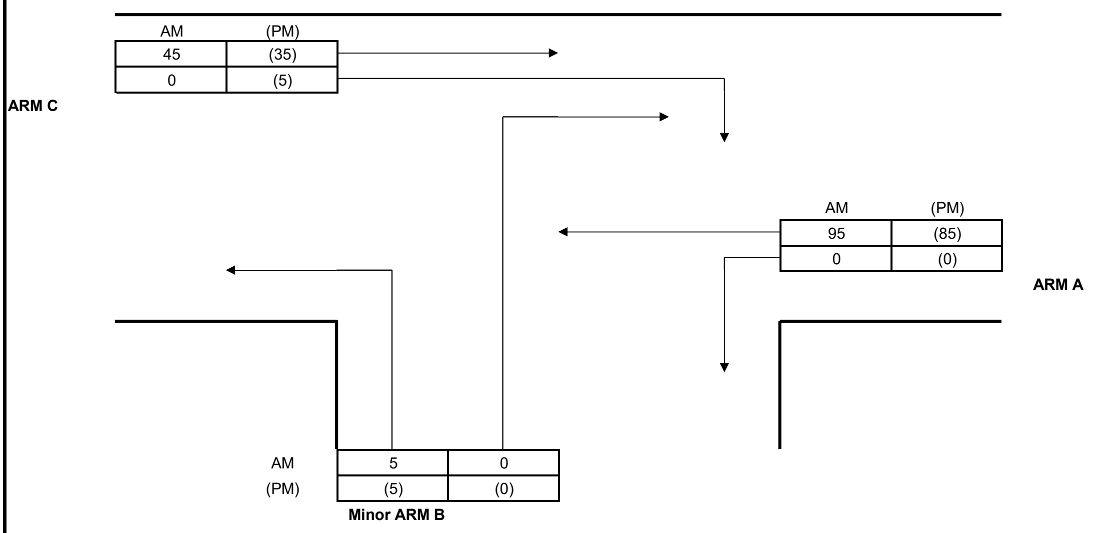
Capacity of combined streams
- in accordance with TPDM V2.4

T.P.D.M.V.2.4
Appendix 1

Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Fung Chuk Road (J7)			Ref. No.:	
Scheme:	Observed Case				
Year:	2025	Job No.:	CHK50868310	Rev.:	
ARM A:	Kam Pok Road SB				
ARM B:	Fung Chuk Road				
ARM C:	Kam Pok Road NB				



GEOMETRY					
Major road width	W	7.30	Lane widths	w(b-a)	2.00
Central Reserve width	Wcr	0.00		w(b-c)	2.00
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.50
Visibilities	Vr(b-a)	12	Calculated	D	0.70
	Vl(b-a)	8.5		E	0.76
	Vr(b-c)	12		F	0.90
	Vr(c-b)	21		Y	0.75

ANALYSIS				
			AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		45	35
	q(c-b)		0	5
	q(a-b)		0	0
	q(a-c)		95	85
	q(b-a)		0	0
	q(b-c)		5	5
	f		1.00	1.00
		Factor		
CAPACITIES	Q(b-a)	1	414	416
	Q(b-c)	1	549	551
	Q(c-b)	1	646	648
	Q(b-ac)	1	549	551
RFC's	b-a		0.000	0.000
	b-c		0.009	0.009
	c-b		0.000	0.008
	b-ac		0.009	0.009
Worst RFC			**0.009**	**0.009**

Where Vl and Vr are visibility distances to the left or right of the respective streams
D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))
E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))
F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))
Y = 1-0.0345W
f = proportion of minor traffic turning left
Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

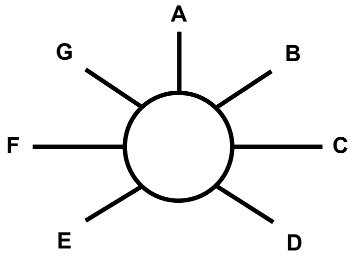
Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Roundabout Capacity Calculation

Job Title: Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long
Junction: Fairview Park Interchange (J1) Ref. No.:
Scheme: Reference Case (with Planned Junction Layout)
2034 Job No.: CHK50868310 -

AM PM

ARM A: Fairview Park Boulevard
ARM B: Castle Peak Road - Tam Mi (N)
ARM C: San Tin Highway Slip Road (N)
ARM D: San Tam Road (N)
ARM E: San Tam Road (S)
ARM F: San Tin Highway Slip Road (S)
ARM G: Castle Peak Road - Tam Mi (S)



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	7.00	11.80	20	25	140	35	0.38
B	7.30	12.00	36	30	140	25	0.21
C	7.30	13.00	13	45	140	30	0.70
D	7.30	11.00	23	25	140	35	0.26
E	7.30	12.00	27	25	140	45	0.28
F	6.00	12.50	20	25	140	40	0.52
G	6.50	11.20	22	25	140	35	0.34

AM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	10	20	210	40	230	480	30	2835	1020	670
B	10	10	145	10	250	390	30	3205	845	650
C	95	75	10	100	485	10	225	2795	1000	1255
D	65	20	45	10	270	270	95	3325	775	470
E	40	35	465	70	10	535	20	2215	1175	1885
F	335	330	10	155	630	10	Free Flow	1370	1470	2020
G	115	160	370	85	10	325	0	2440	1065	400

PM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	10	10	170	55	210	345	30	2535	830	955
B	35	10	95	10	170	190	30	2735	540	630
C	190	125	20	85	425	20	210	2385	1075	890
D	80	20	90	20	215	150	75	2950	650	510
E	100	30	305	75	10	295	20	1900	835	1700
F	445	310	10	210	660	20	Free Flow	1495	1655	1240
G	95	125	200	55	10	220	10	2775	715	375

CALCULATIONS

							Q_E		RFC	
ARM	K	X_2	M	F	t_D	f_c	AM	PM	AM	PM
A	0.99	9.71	2980.96	2944	1.00	0.62	1182	1366	0.86	0.61
B	1.03	10.62	2980.96	3216	1.00	0.66	1152	1470	0.73	0.37
C	1.03	9.67	2980.96	2931	1.00	0.62	1241	1500	0.81	0.72
D	0.99	9.74	2980.96	2952	1.00	0.62	886	1117	0.87	0.58
E	0.96	10.32	2980.96	3127	1.00	0.64	1629	1823	0.72	0.46
F	0.98	9.19	2980.96	2783	1.00	0.60	1918	1845	0.77	0.90
G	0.99	9.29	2980.96	2815	1.00	0.60	1340	1141	0.79	0.63
								Crtical Arm:	**D**	**F**
								RFC:	**0.87**	**0.90**
									AM	**PM**

- In accordance with TPDM V2.4

Calculated by: HZF Date: Dec-25 Checked by: PTC

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310

MVA HONG KONG LIMITED

Junction: Kam Pok Road / Fairview Park Boulevard (J2)

Design Year: 2034

Description: Year 2034 Reference Traffic Flows

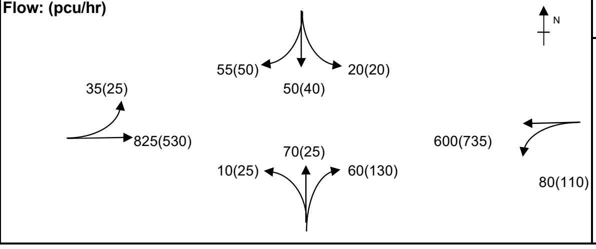
Designed By: HZF

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Fairview Park Boulevard EB	↑→	A	1	3.4	15			8%	9%	1940	1935	428	0.221		276	0.143	
	→	A	1	3.4						1955	1955	432	0.221	0.221	279	0.143	
Fairview Park Boulevard WB	←↓	A	1	3.5	17			24%	26%	1925	1920	336	0.175		418	0.218	0.218
	←	A	1	3.5						1965	1965	344	0.175		427	0.217	
Kam Pok Road SB	←↓→	B	2	5.5	18	18		16% / 44%	18% / 45%	2060	2055	125	0.061	0.061	110	0.054	0.054
Kam Pok Road NB	←↑→	C	3	3.8	13	20		7% / 43%	14% / 72%	1920	1865	140	0.073	0.073	180	0.097	0.097
Pedestrian Crossing		Dp	4	MIN GREEN + FLASH =			10	+	9	=	19			*			*

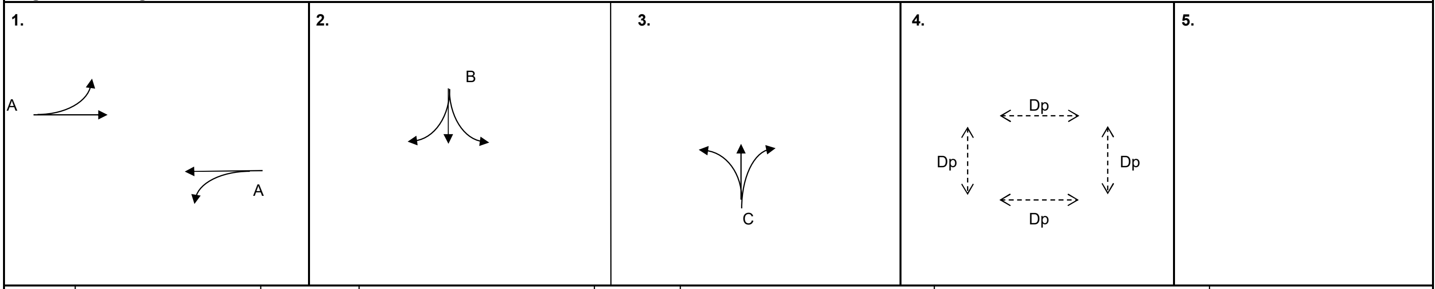
Notes:

Flow: (pcu/hr)



Group		A,B,C,Dp	Group		A,B,C,Dp
y		0.355	y		0.368
L (sec)		44	L (sec)		44
C (sec)		120	C (sec)		120
y pract.		0.570	y pract.		0.570
R.C. (%)		61%	R.C. (%)		55%

Stage / Phase Diagrams



I/G= 3		I/G= 7		I/G= 7		I/G= 11	19	I/G=	
I/G= 3		I/G= 7		I/G= 7		I/G= 11	19	I/G=	

Date: Dec, 2025

Junction: 2

J2

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310

MVA HONG KONG LIMITED

Junction: Kam Pok Road / Vehicular Bridge – South (J3)

Design Year: 2034

Description: Year 2034 Reference Traffic Flows

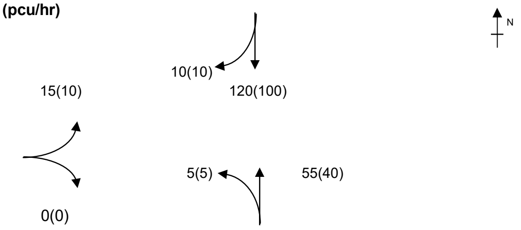
Designed By: HZF

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Vehicular Bridge (EB)	↰↱	A	1	3.600	10	10		100% / 0%	100% / 0%	1715	1715	15	0.009		10	0.006	
Kam Pok Rd (SB)	↱	B	2	3.600		10		8%	9%	1950	1950	130	0.067	0.067	110	0.056	0.056
Kam Pok Rd (NB)	↰	C	3	3.600	10			8%	11%	1950	1945	60	0.031	0.031	45	0.023	0.023
Pedestrian Crossing		Dp	4	MIN GREEN + FLASH =			7	+	7	=	14			*			*

Notes:

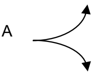
Flow: (pcu/hr)



Group		A,B,C,Dp	Group		A,B,C,Dp
y		0.097	y		0.080
L (sec)		32	L (sec)		32
C (sec)		60	C (sec)		60
y pract.		0.420	y pract.		0.420
R.C. (%)		331%	R.C. (%)		428%

Stage / Phase Diagrams

1.



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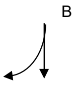

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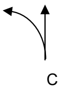

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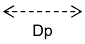


5.

I/G= 2	5	I/G= 5		I/G= 5		I/G= 3	14	I/G=	
I/G= 2	5	I/G= 5		I/G= 5		I/G= 3	14	I/G=	

Date: Dec, 2025

Junction: 3

J3

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310

MVA HONG KONG LIMITED

Junction: Kam Pok Road / Vehicular Bridge – North / Vehicular Access (J4)

Design Year: 2034

Description: Year 2034 Reference Traffic Flows (with Planned Junction Layout)

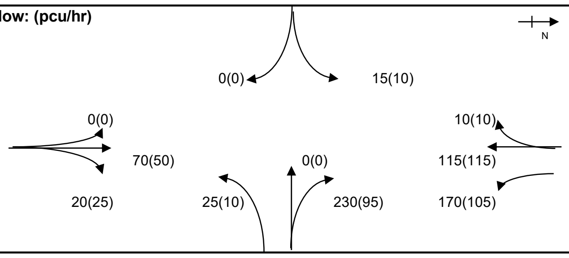
Designed By: HZF

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Vehicular Bridge SB	↰↱	A	1	3.500	10	12		100% / 0%	100% / 0%	1710	1710	15	0.009		10	0.006	
Kam Pok Road EB	↰→↱	D	2	3.650	10	12		0% / 22%	0% / 33%	1925	1900	90	0.047	0.047	75	0.039	0.039
R(D) Site Access	↰	C	3	5.500	20					2015	2015	25	0.012		10	0.005	
	↱	C	3	4.000		12		100%	100%	1790	1790	230	0.128	0.128	95	0.053	0.053
	↰	B	4	3.650	15					1800	1800	170	0.094	0.094	105	0.058	
	↱	B	4	3.650		12		8%	8%	1960	1960	125	0.064		125	0.064	0.064
Pedestrian Crossing		Ep	3	MIN GREEN + FLASH =			10	+	10	=	20						
		Fp	1	MIN GREEN + FLASH =			11	+	10	=	21						
		Gp	1,2,4	MIN GREEN + FLASH =			5	+	5	=	10						

Notes:

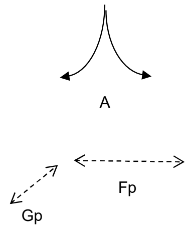
Flow: (pcu/hr)



Group	Fp,D,C,B	A,D,C,B	Group	Fp,D,C,B	A,D,C,B
y	0.270	0.270	y	0.156	0.156
L (sec)	18	31	L (sec)	18	31
C (sec)	90	90	C (sec)	90	90
y pract.	0.720	0.590	y pract.	0.720	0.590
R.C. (%)	167%	119%	R.C. (%)	361%	277%

Stage / Phase Diagrams

1.



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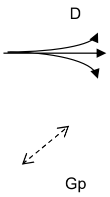

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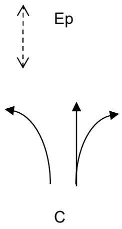

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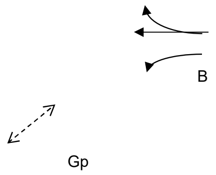


5.

I/G= 7	5	I/G= 12		I/G= 5		I/G= 5		I/G=	
I/G= 7	5	I/G= 12		I/G= 5		I/G= 5		I/G=	

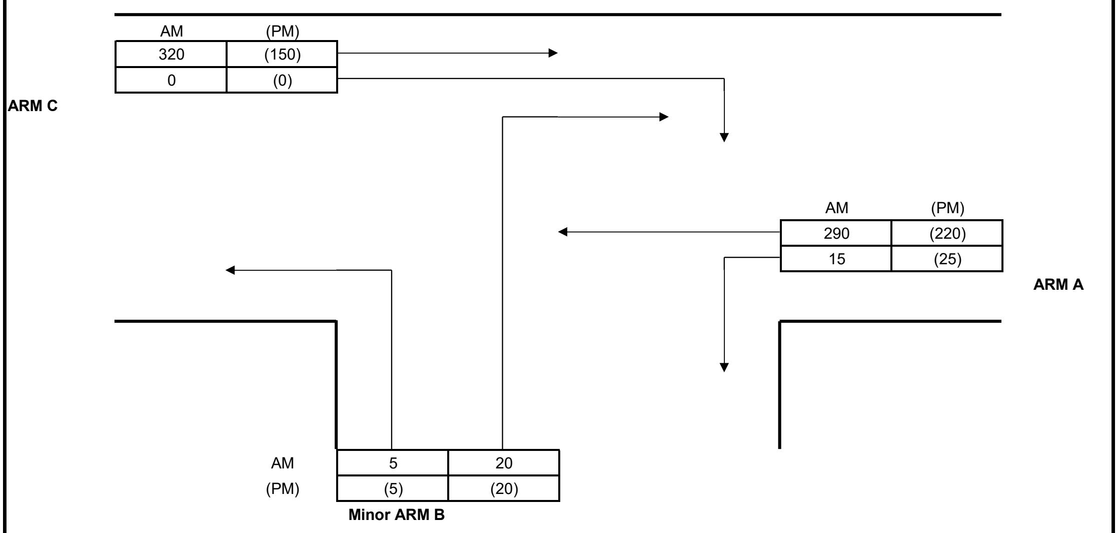
Date: Dec, 2025

Junction: 4

J4

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Ha Chuk Yuen Road (J5)			Ref. No.:	
Scheme:	Reference Case				
Year:	2034	Job No.:	CHK50868310	Rev.:	
ARM A:	Kam Pok Road WB				
ARM B:	Ha Chuk Yuen Road				
ARM C:	Kam Pok Road EB				



GEOMETRY					
Major road width	W	9.30	Lane widths	w(b-a)	2.05
Central Reserve width	Wcr	0.00		w(b-c)	2.05
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.50
Visibilities	Vr(b-a)	50	Calculated	D	0.75
	Vl(b-a)	50		E	0.80
	Vr(b-c)	50		F	0.92
	Vr(c-b)	50		Y	0.68

ANALYSIS				
			AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		320	150
	q(c-b)		0	0
	q(a-b)		15	25
	q(a-c)		290	220
	q(b-a)		20	20
	q(b-c)		5	5
	f		0.20	0.20
		Factor		
CAPACITIES	Q(b-a)	1	377	409
	Q(b-c)	1	535	548
	Q(c-b)	1	619	632
	Q(b-ac)	1	401	431
RFC's	b-a		0.053	0.049
	b-c		0.009	0.009
	c-b		0.000	0.000
	b-ac		0.062	0.058
Worst RFC			**0.062**	**0.058**

Where Vl and Vr are visibility distances to the left or right of the respective streams
D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))
E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))
F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))
Y = 1-0.0345W
f = proportion of minor traffic turning left
Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

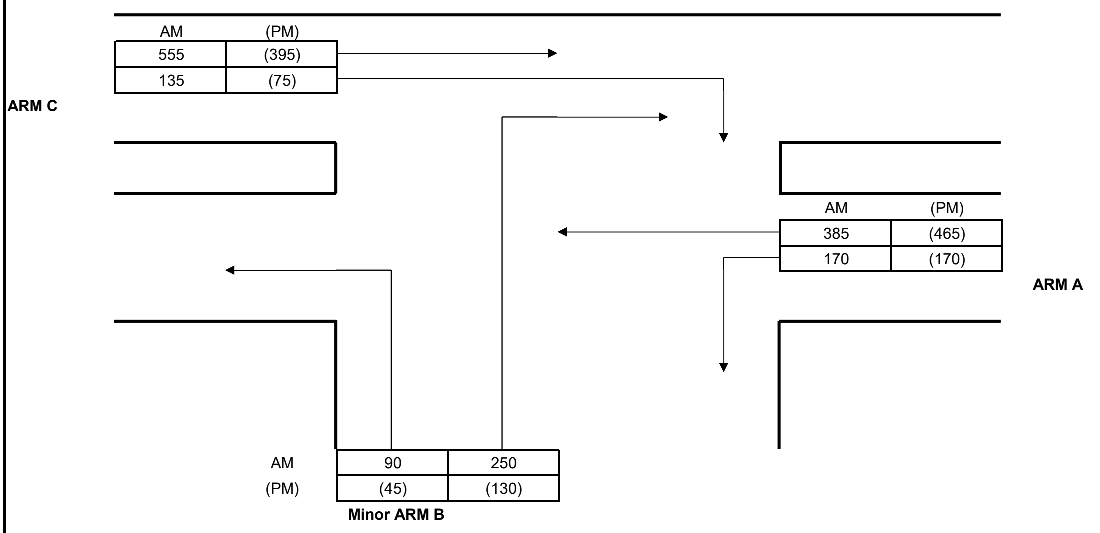
T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Castle Peak Road – Tam Mi (J6)			Ref. No.:	
Scheme:	Reference Case (with Planned Junction Layout)				
Year:	2034	Job No.:	CHK50868310	Rev.:	
ARM A:	Castle Peak Road - Tam Mi NB				
ARM B:	Kam Pok Road EB				
ARM C:	Castle Peak Road - Tam Mi SB				



GEOMETRY					
Major road width	W	6.90	Lane widths	w(b-a)	4.30
Central Reserve width	Wcr	1.50		w(b-c)	4.30
2 Lane Minor Arm (Y/N)		Y		w(c-b)	2.05
Visibilities	Vr(b-a)	53	Calculated	D	0.95
	Vl(b-a)	70		E	1.01
	Vr(b-c)	70		F	0.78
	Vr(c-b)	30		Y	0.76

ANALYSIS		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		555	395
	q(c-b)		135	75
	q(a-b)		170	170
	q(a-c)		385	465
	q(b-a)		250	130
	q(b-c)		90	45
	f		0.26	0.26
CAPACITIES	Q(b-a)	1	353	381
	Q(b-c)	1	628	605
	Q(c-b)	1	461	444
	Q(b-ac)	1	399	421
RFC's	b-a		0.708	0.341
	b-c		0.143	0.074
	c-b		0.293	0.169
	b-ac		0.000	0.000
Worst RFC			**0.708**	**0.341**

Where Vl and Vr are visibility distances to the left or right of the respective streams
D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))
E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))
F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))
Y = 1-0.0345W
f = proportion of minor traffic turning left
Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

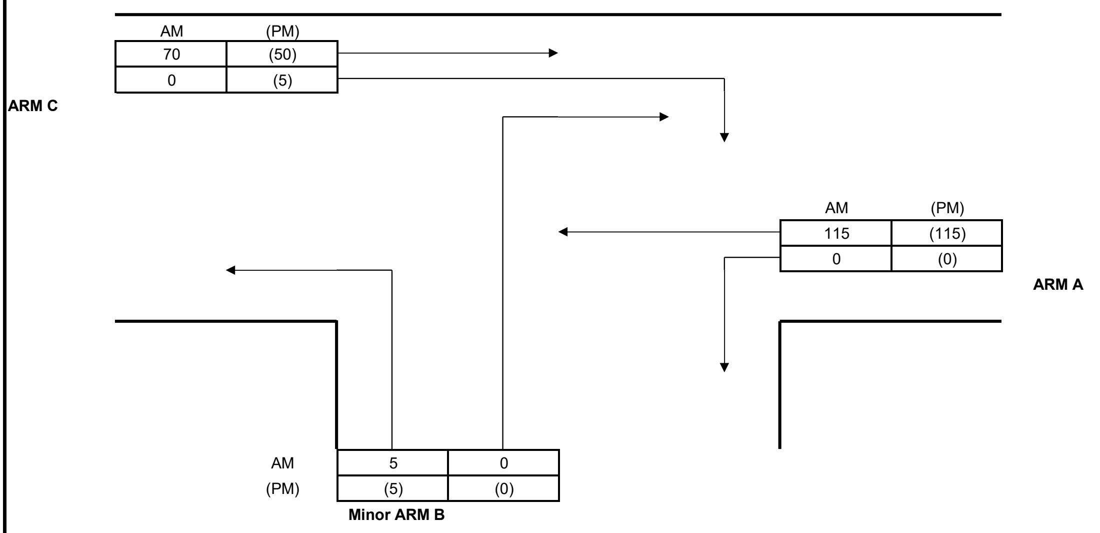
T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Fung Chuk Road (J7)			Ref. No.:	
Scheme:	Reference Case				
Year:	2025	Job No.:	CHK50868310	Rev.:	
ARM A:	Kam Pok Road SB				
ARM B:	Fung Chuk Road				
ARM C:	Kam Pok Road NB				



GEOMETRY

Major road width	W	7.30	Lane widths	w(b-a)	2.00
Central Reserve width	Wcr	0.00		w(b-c)	2.00
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.50
Visibilities	Vr(b-a)	12	Calculated	D	0.70
	Vl(b-a)	8.5		E	0.76
	Vr(b-c)	12		F	0.90
	Vr(c-b)	21		Y	0.75

ANALYSIS

			AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		70	50
	q(c-b)		0	5
	q(a-b)		0	0
	q(a-c)		115	115
	q(b-a)		0	0
	q(b-c)		5	5
	f		1.00	1.00
		Factor		
CAPACITIES	Q(b-a)	1	407	408
	Q(b-c)	1	544	544
	Q(c-b)	1	641	641
	Q(b-ac)	1	544	544
RFC's	b-a		0.000	0.000
	b-c		0.009	0.009
	c-b		0.000	0.008
	b-ac		0.009	0.009
Worst RFC			**0.009**	**0.009**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

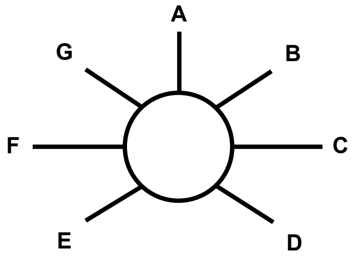
Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Roundabout Capacity Calculation

Job Title: Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long
Junction: Fairview Park Interchange (J1) Ref. No.:
Scheme: Design Case (with Planned Junction Layout)
2034 Job No.: CHK50868310 -

AM PM

ARM A: Fairview Park Boulevard
ARM B: Castle Peak Road - Tam Mi (N)
ARM C: San Tin Highway Slip Road (N)
ARM D: San Tam Road (N)
ARM E: San Tam Road (S)
ARM F: San Tin Highway Slip Road (S)
ARM G: Castle Peak Road - Tam Mi (S)



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	7.00	11.80	20	25	140	35	0.38
B	7.30	12.00	36	30	140	25	0.21
C	7.30	13.00	13	45	140	30	0.70
D	7.30	11.00	23	25	140	35	0.26
E	7.30	12.00	27	25	140	45	0.28
F	6.00	12.50	20	25	140	40	0.52
G	6.50	11.20	22	25	140	35	0.34

AM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	10	20	210	40	230	480	30	2920	1020	670
B	10	10	170	35	250	465	30	3205	970	735
C	95	80	10	100	485	10	225	2895	1005	1280
D	65	45	45	10	270	270	95	3405	800	495
E	40	35	465	70	10	535	20	2320	1175	1885
F	335	385	10	155	630	10	Free Flow	1400	1525	2095
G	115	160	370	85	10	325	0	2525	1065	400

PM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	10	10	170	55	210	345	30	2600	830	955
B	35	10	105	35	170	215	30	2735	600	695
C	190	135	20	85	425	20	210	2435	1085	900
D	80	45	90	20	215	150	75	2985	675	535
E	100	30	305	75	10	295	20	1960	835	1700
F	445	340	10	210	660	20	Free Flow	1530	1685	1265
G	95	125	200	55	10	220	10	2840	715	375

CALCULATIONS

						Q_E		RFC	
ARM	K	X_2	M	F	t_D	f_c	AM	PM	AM	PM
A	0.99	9.71	2980.96	2944	1.00	0.62	1130	1326	0.90	0.63
B	1.03	10.62	2980.96	3216	1.00	0.66	1152	1470	0.84	0.41
C	1.03	9.67	2980.96	2931	1.00	0.62	1177	1469	0.85	0.74
D	0.99	9.74	2980.96	2952	1.00	0.62	837	1095	0.96	0.62
E	0.96	10.32	2980.96	3127	1.00	0.64	1565	1786	0.75	0.47
F	0.98	9.19	2980.96	2783	1.00	0.60	1901	1825	0.80	0.92
G	0.99	9.29	2980.96	2815	1.00	0.60	1290	1102	0.83	0.65

Crtical Arm:	**D**	**F**
RFC:	**0.96**	**0.92**
	AM	**PM**

- In accordance with TPDM V2.4

Calculated by: HZF Date: Dec-25 Checked by: PTC

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310

MVA HONG KONG LIMITED

Junction: Kam Pok Road / Fairview Park Boulevard (J2)

Design Year: 2034

Description: Year 2034 Design Traffic Flows

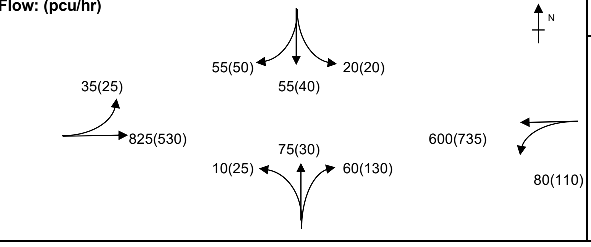
Designed By: HZF

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Fairview Park Boulevard EB	↑→	A	1	3.4	15			8%	9%	1940	1935	428	0.221		276	0.143	
	→	A	1	3.4						1955	1955	432	0.221	0.221	279	0.143	
Fairview Park Boulevard WB	←↓	A	1	3.5	17			24%	26%	1925	1920	336	0.175		418	0.218	0.218
	←	A	1	3.5						1965	1965	344	0.175		427	0.217	
Kam Pok Road SB	←↓→	B	2	5.5	18	18		15% / 42%	18% / 45%	2065	2055	130	0.063	0.063	110	0.054	0.054
Kam Pok Road NB	←↑→	C	3	3.8	13	20		7% / 41%	14% / 70%	1920	1865	145	0.076	0.076	185	0.099	0.099
Pedestrian Crossing		Dp	4	MIN GREEN + FLASH =			10	+	9	=	19			*			*

Notes:

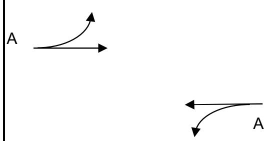
Flow: (pcu/hr)



Group		A,B,C,Dp	Group		A,B,C,Dp
y		0.359	y		0.370
L (sec)		44	L (sec)		44
C (sec)		120	C (sec)		120
y pract.		0.570	y pract.		0.570
R.C. (%)		59%	R.C. (%)		54%

Stage / Phase Diagrams

1.



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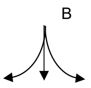

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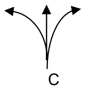

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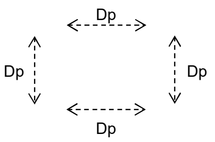


5.

I/G= 3		I/G= 7		I/G= 7		I/G= 11	19	I/G=	
I/G= 3		I/G= 7		I/G= 7		I/G= 11	19	I/G=	

Date: Dec, 2025

Junction: 2

J2

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310

MVA HONG KONG LIMITED

Junction: Kam Pok Road / Vehicular Bridge – South (J3)

Design Year: 2034

Description: Year 2034 Design Traffic Flows

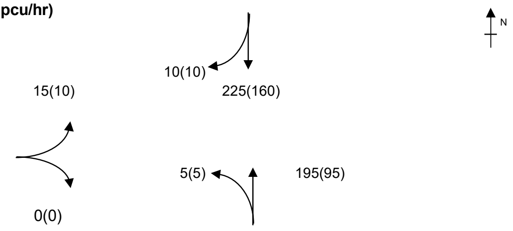
Designed By: HZF

Checked By: PTC

Approach	**Movements**	**Phase**	**Stage**	**Width (m)**	**Radius (m)**		**Gradient (%)**	**Pro. Turning (%)**		**Revised Saturation Flow (pcu/hr)**		**AM Peak**			**PM Peak**		
					Left	**Right**		**AM**	**PM**	**AM**	**PM**	**Flow (pcu/hr)**	**y Value**	**Critical y**	**Flow (pcu/hr)**	**y Value**	**Critical y**
Vehicular Bridge (EB)	↰↱	A	1	3.600	10	10		100% / 0%	100% / 0%	1715	1715	15	0.009		10	0.006	
Kam Pok Rd (SB)	↑↱	B	2	3.600		10		4%	6%	1960	1960	235	0.120	0.120	170	0.087	0.087
Kam Pok Rd (NB)	↰↑	C	3	3.600	10			3%	5%	1970	1960	200	0.102	0.102	100	0.051	0.051
Pedestrian Crossing		Dp	4	MIN GREEN + FLASH =			7	+	7	=	14			*			*

Notes:

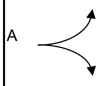
Flow: (pcu/hr)



Group		A,B,C,Dp	**Group**		A,B,C,Dp
y		0.221	**y**		0.138
L (sec)		32	**L (sec)**		32
C (sec)		60	**C (sec)**		60
y pract.		0.420	**y pract.**		0.420
R.C. (%)		90%	**R.C. (%)**		205%

Stage / Phase Diagrams

1.



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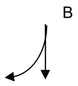

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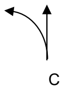

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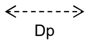


5.

I/G= 2	5	I/G= 5		I/G= 5		I/G= 3	14	I/G=	
I/G= 2	5	I/G= 5		I/G= 5		I/G= 3	14	I/G=	

Date: Dec, 2025

Junction: 3

J3

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310

MVA HONG KONG LIMITED

Junction: Kam Pok Road / Vehicular Bridge – North / Vehicular Access (J4)

Design Year: 2034

Description: Year 2034 Design Traffic Flows (with Planned Junction Layout)

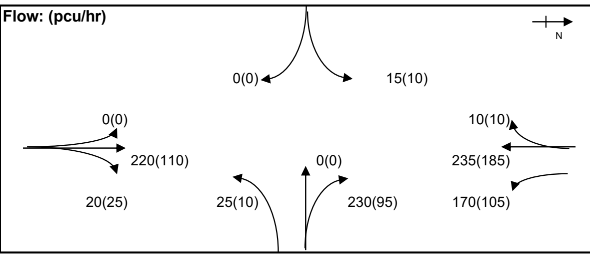
Designed By: HZF

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	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
Vehicular Bridge SB	↔	A	1	3.500	10	12		100% / 0%	100% / 0%	1710	1710	15	0.009		10	0.006	
Kam Pok Road EB	✥	D	2	3.650	10	12		0% / 8%	0% / 19%	1960	1935	240	0.122	0.122	135	0.070	0.070
R(D) Site Access	↰	C	3	5.500	20					2015	2015	25	0.012		10	0.005	
	↳	C	3	4.000		12		100%	100%	1790	1790	230	0.128	0.128	95	0.053	0.053
	↰	B	4	3.650	15					1800	1800	170	0.094		105	0.058	
	↳	B	4	3.650		12		4%	5%	1970	1965	245	0.124	0.124	195	0.099	0.099
Pedestrian Crossing		Ep	3	MIN GREEN + FLASH =			10	+	10	=	20						
		Fp	1	MIN GREEN + FLASH =			11	+	10	=	21						
		Gp	1,2,4	MIN GREEN + FLASH =			5	+	5	=	10						

Notes:

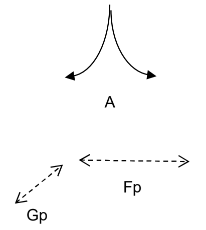
Flow: (pcu/hr)



Group	Fp,D,C,B	A,D,C,B	Group	Fp,D,C,B	A,D,C,B
y	0.375	0.375	y	0.222	0.222
L (sec)	18	31	L (sec)	18	31
C (sec)	90	90	C (sec)	90	90
y pract.	0.720	0.590	y pract.	0.720	0.590
R.C. (%)	92%	57%	R.C. (%)	224%	166%

Stage / Phase Diagrams

1.



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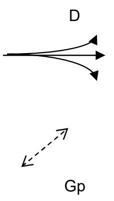

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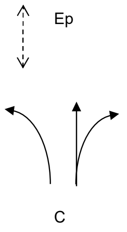

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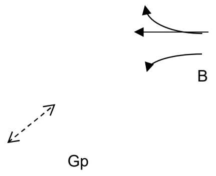


5.

I/G= 7	5	I/G= 12		I/G= 5		I/G= 5		I/G=	
I/G= 7	5	I/G= 12		I/G= 5		I/G= 5		I/G=	

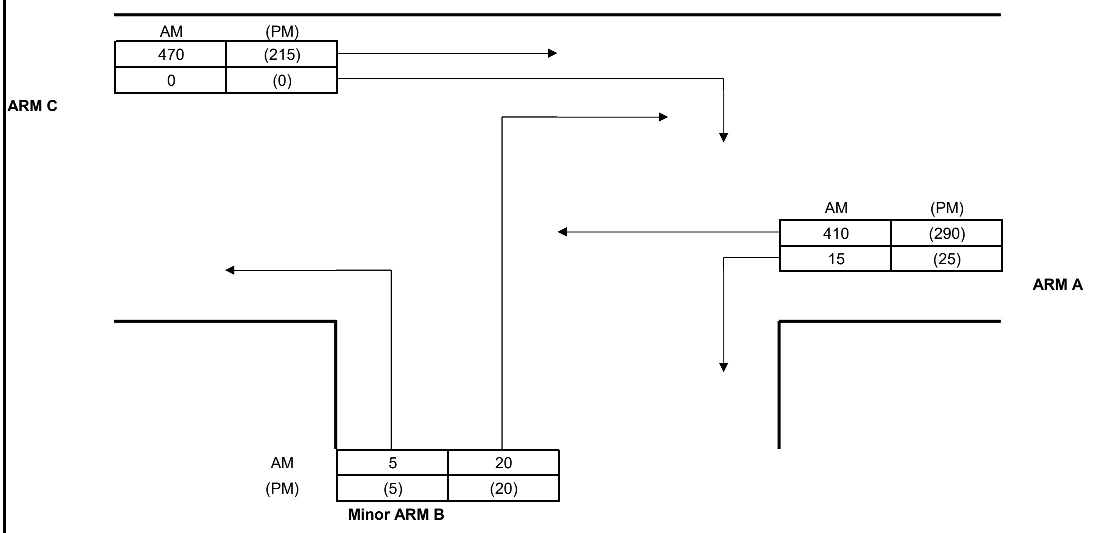
Date: Dec, 2025

Junction: 4

J4

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Ha Chuk Yuen Road (J5)			Ref. No.:	
Scheme:	Design Case				
Year:	2034	Job No.:	CHK50868310	Rev.:	
ARM A:	Kam Pok Road WB				
ARM B:	Ha Chuk Yuen Road				
ARM C:	Kam Pok Road EB				



GEOMETRY					
Major road width	W	9.30	Lane widths	w(b-a)	2.05
Central Reserve width	Wcr	0.00		w(b-c)	2.05
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.50
Visibilities	Vr(b-a)	50	Calculated	D	0.75
	Vl(b-a)	50		E	0.80
	Vr(b-c)	50		F	0.92
	Vr(c-b)	50		Y	0.68

ANALYSIS				
			AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		470	215
	q(c-b)		0	0
	q(a-b)		15	25
	q(a-c)		410	290
	q(b-a)		20	20
	q(b-c)		5	5
	f		0.20	0.20
		Factor		
CAPACITIES	Q(b-a)	1	338	389
	Q(b-c)	1	511	534
	Q(c-b)	1	591	616
	Q(b-ac)	1	363	411
RFC's	b-a		0.059	0.051
	b-c		0.010	0.009
	c-b		0.000	0.000
	b-ac		0.069	0.061
Worst RFC			**0.069**	**0.061**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

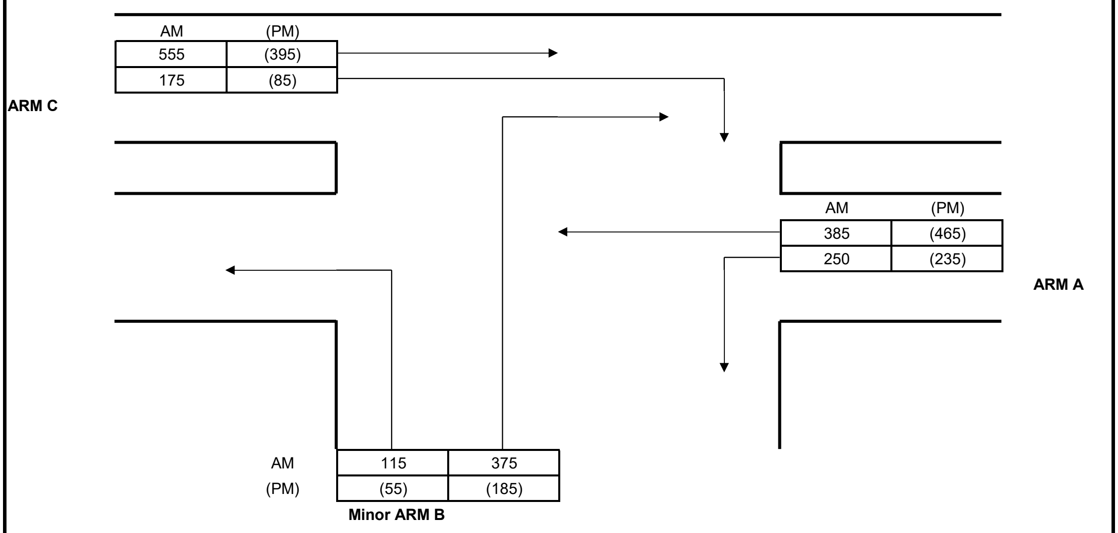
Capacity of combined streams
- in accordance with TPDM V2.4

T.P.D.M.V.2.4
Appendix 1

Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Castle Peak Road – Tam Mi (J6)			Ref. No.:	
Scheme:	Design Case (with Planned Junction Layout)				
Year:	2034	Job No.:	CHK50868310	Rev.:	
ARM A:	Castle Peak Road - Tam Mi NB				
ARM B:	Kam Pok Road EB				
ARM C:	Castle Peak Road - Tam Mi SB				



GEOMETRY

Major road width	W	6.90	Lane widths	w(b-a)	4.30
Central Reserve width	Wcr	1.50		w(b-c)	4.30
2 Lane Minor Arm (Y/N)		Y		w(c-b)	2.05
Visibilities	Vr(b-a)	53	Calculated	D	0.95
	Vl(b-a)	70		E	1.01
	Vr(b-c)	70		F	0.78
	Vr(c-b)	30		Y	0.76

ANALYSIS

			AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		555	395
	q(c-b)		175	85
	q(a-b)		250	235
	q(a-c)		385	465
	q(b-a)		375	185
	q(b-c)		115	55
	f		0.23	0.23
		Factor		
CAPACITIES	Q(b-a)	1	330	371
	Q(b-c)	1	619	598
	Q(c-b)	1	444	430
	Q(b-ac)	1	371	406
RFC's	b-a		1.136	0.499
	b-c		0.186	0.092
	c-b		0.394	0.198
	b-ac		0.000	0.000
Worst RFC			**1.136**	**0.499**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

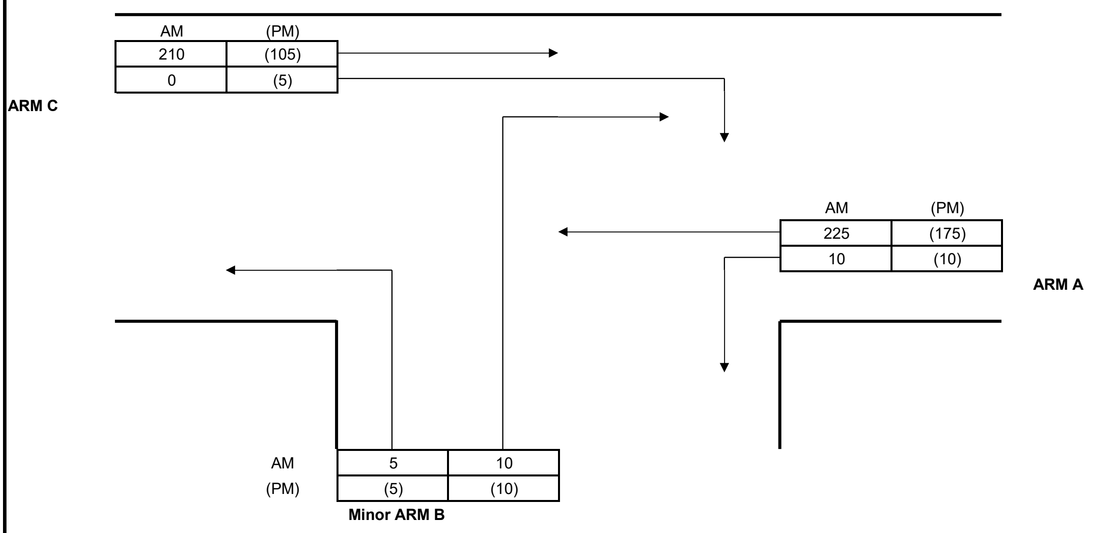
T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Fung Chuk Road (J7)			Ref. No.:	
Scheme:	Design Case				
Year:	2025	Job No.:	CHK50868310	Rev.:	
ARM A:	Kam Pok Road SB				
ARM B:	Fung Chuk Road				
ARM C:	Kam Pok Road NB				



GEOMETRY					
Major road width	W	7.30	Lane widths	w(b-a)	2.00
Central Reserve width	Wcr	0.00		w(b-c)	2.00
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.50
Visibilities	Vr(b-a)	12	Calculated	D	0.70
	Vl(b-a)	8.5		E	0.76
	Vr(b-c)	12		F	0.90
	Vr(c-b)	21		Y	0.75

ANALYSIS				
			AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		210	105
	q(c-b)		0	5
	q(a-b)		10	10
	q(a-c)		225	175
	q(b-a)		10	10
	q(b-c)		5	5
	f		0.33	0.33
		Factor		
CAPACITIES	Q(b-a)	1	369	390
	Q(b-c)	1	521	531
	Q(c-b)	1	612	624
	Q(b-ac)	1	409	428
RFC's	b-a		0.027	0.026
	b-c		0.010	0.009
	c-b		0.000	0.008
	b-ac		0.037	0.035
Worst RFC			**0.037**	**0.035**

Where Vl and Vr are visibility distances to the left or right of the respective streams
D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))
E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))
F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))
Y = 1-0.0345W
f = proportion of minor traffic turning left
Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

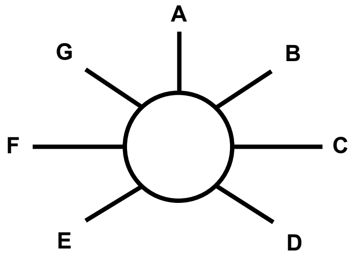
Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Roundabout Capacity Calculation

Job Title: Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long
Junction: Fairview Park Interchange (J1) Ref. No.:
Scheme: Design Case (with Proposed Junction Layout)
2034 Job No.: CHK50868310 -

AM PM

ARM A: Fairview Park Boulevard
ARM B: Castle Peak Road - Tam Mi (N)
ARM C: San Tin Highway Slip Road (N)
ARM D: San Tam Road (N)
ARM E: San Tam Road (S)
ARM F: San Tin Highway Slip Road (S)
ARM G: Castle Peak Road - Tam Mi (S)



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	7.00	12.20	34	25	140	35	0.24
B	7.30	12.00	36	30	140	25	0.21
C	7.30	13.00	13	45	140	30	0.70
D	7.30	13.00	34	25	140	35	0.27
E	7.30	12.00	27	25	140	45	0.28
F	6.00	13.00	36	25	140	40	0.31
G	6.50	11.20	22	25	140	35	0.34

AM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	10	20	210	40	230	480	30	2920	1020	670
B	10	10	170	35	250	465	30	3205	970	735
C	95	80	10	Free Flow	485	10	225	2895	905	1280
D	65	45	45	10	270	270	95	3405	800	395
E	40	35	465	70	10	535	20	2320	1175	1885
F	335	385	10	155	630	10	Free Flow	1400	1525	2095
G	115	160	370	85	10	325	0	2525	1065	400

PM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	10	10	170	55	210	345	30	2600	830	955
B	35	10	105	35	170	215	30	2735	600	695
C	190	135	20	Free Flow	425	20	210	2435	1000	900
D	80	45	90	20	215	150	75	2985	675	450
E	100	30	305	75	10	295	20	1960	835	1700
F	445	340	10	210	660	20	Free Flow	1530	1685	1265
G	95	125	200	55	10	220	10	2840	715	375

CALCULATIONS

							Q_E		RFC	
ARM	K	X_2	M	F	t_D	f_c	AM	PM	AM	PM
A	0.99	10.49	2980.96	3179	1.00	0.65	1269	1476	0.80	0.56
B	1.03	10.62	2980.96	3216	1.00	0.66	1152	1470	0.84	0.41
C	1.03	9.67	2980.96	2931	1.00	0.62	1177	1469	0.77	0.68
D	0.99	11.01	2980.96	3336	1.00	0.67	1038	1318	0.77	0.51
E	0.96	10.32	2980.96	3127	1.00	0.64	1565	1786	0.75	0.47
F	0.98	10.32	2980.96	3125	1.00	0.64	2169	2088	0.70	0.81
G	0.99	9.29	2980.96	2815	1.00	0.60	1290	1102	0.83	0.65
								Crtical Arm:	**B**	**F**
								RFC:	**0.84**	**0.81**
									AM	**PM**

- In accordance with TPDM V2.4

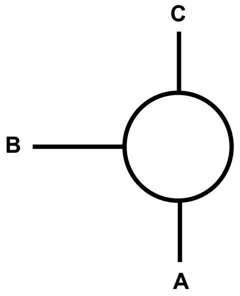
Calculated by: HZF Date: Dec-25 Checked by: PTC

Roundabout Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long
Junction:	Kam Pok Road / Castle Peak Road – Tam Mi (J6) Ref. No.:
Scheme:	Design Case (with Junction Improvement Layout)
	2034 Job No.: CHK50868310 -

AM PM

ARM A: Castle Peak Road - Tam Mi NB
ARM B: Kam Pok Road EB
ARM C: Castle Peak Road - Tam Mi SB



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	3.50	4.50	12	50	26	30	0.13
B	7.30	5.00	5	17.5	26	45	-0.74
C	3.30	3.10	7	80	26	5	-0.05

AM FLOWS

from \ to	A	B	C	Circ	Entry	Exit
A	0	250	385	175	635	375
B	375	0	115	385	490	425
C	FF	175	0	375	175	500

PM FLOWS

from \ to	A	B	C	Circ	Entry	Exit
A	0	235	465	85	700	185
B	185	0	55	465	240	320
C	FF	85	0	185	85	520

CALCULATIONS

							Q_E		RFC	
ARM	K	X_2	M	F	t_D	f_c	AM	PM	AM	PM
A	1.03	4.29	0.03	1300	1.48	0.58	1234	1287	0.51	0.54
B	0.94	12.17	0.03	3688	1.48	1.07	3083	3002	0.16	0.08
C	1.12	3.08	0.03	933	1.48	0.50	836	944	0.21	0.09

Crtical Arm:	**A**	**A**
RFC:	**0.51**	**0.54**
	AM	**PM**

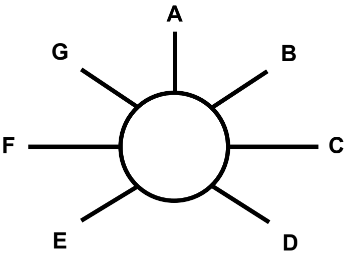
- In accordance with TPDM V2.4

Calculated by: HZF Date: Dec-25 Checked by: PTC

Roundabout Capacity Calculation

Job Title: Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long
Junction: Fairview Park Interchange (J1) Ref. No.:
Scheme: Design Case under Sensitivity Test 1 (with Proposed Junction Layout)
2034 Job No.: CHK50868310 -
AM PM

ARM A: Fairview Park Boulevard
ARM B: Castle Peak Road - Tam Mi (N)
ARM C: San Tin Highway Slip Road (N)
ARM D: San Tam Road (N)
ARM E: San Tam Road (S)
ARM F: San Tin Highway Slip Road (S)
ARM G: Castle Peak Road - Tam Mi (S)



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	7.00	12.20	34	25	140	35	0.24
B	7.30	12.00	36	30	140	25	0.21
C	7.30	13.00	13	45	140	30	0.70
D	7.30	13.00	34	25	140	35	0.27
E	7.30	12.00	27	25	140	45	0.28
F	6.00	13.00	36	25	140	40	0.31
G	6.50	11.20	22	25	140	35	0.34

AM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	10	20	210	40	230	480	30	3005	1020	670
B	10	10	205	35	250	590	30	3205	1130	820
C	95	90	10	Free Flow	485	10	225	3020	915	1315
D	65	45	45	10	270	270	95	3540	800	395
E	40	35	465	70	10	535	20	2455	1175	1885
F	335	460	10	155	630	10	Free Flow	1410	1600	2220
G	115	160	370	85	10	325	0	2610	1065	400

PM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	10	10	170	55	210	345	30	2680	830	955
B	35	10	120	35	170	270	30	2735	670	775
C	190	155	20	Free Flow	425	20	210	2490	1020	915
D	80	45	90	20	215	150	75	3060	675	450
E	100	30	305	75	10	295	20	2035	835	1700
F	445	400	10	210	660	20	Free Flow	1550	1745	1320
G	95	125	200	55	10	220	10	2920	715	375

CALCULATIONS

							Q_E		RFC	
ARM	K	X_2	M	F	t_D	f_c	AM	PM	AM	PM
A	0.99	10.49	2980.96	3179	1.00	0.65	1214	1424	0.84	0.58
B	1.03	10.62	2980.96	3216	1.00	0.66	1152	1470	0.98	0.46
C	1.03	9.67	2980.96	2931	1.00	0.62	1098	1434	0.83	0.71
D	0.99	11.01	2980.96	3336	1.00	0.67	948	1268	0.84	0.53
E	0.96	10.32	2980.96	3127	1.00	0.64	1481	1740	0.79	0.48
F	0.98	10.32	2980.96	3125	1.00	0.64	2163	2075	0.74	0.84
G	0.99	9.29	2980.96	2815	1.00	0.60	1239	1054	0.86	0.68
								Crtical Arm:	**B**	**F**
								RFC:	**0.98**	**0.84**
									AM	**PM**

- In accordance with TPDM V2.4

Calculated by: HZF Date: Dec-25 Checked by: PTC

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310 **MVA HONG KONG LIMITED**

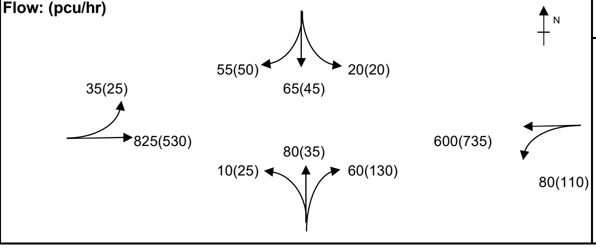
Junction: Kam Pok Road / Fairview Park Boulevard (J2) Design Year: 2034

Description: Year 2034 Design Traffic Flows (Sensitivity Test 1) Designed By: HZF Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Fairview Park Boulevard EB	↑→	A	1	3.4	15			8%	9%	1940	1935	428	0.221		276	0.143	
	→	A	1	3.4						1955	1955	432	0.221	0.221	279	0.143	
Fairview Park Boulevard WB	←↓	A	1	3.5	17			24%	26%	1925	1920	336	0.175		418	0.218	0.218
	←	A	1	3.5						1965	1965	344	0.175		427	0.217	
Kam Pok Road SB	←↓→	B	2	5.5	18	18		14% / 39%	17% / 43%	2070	2060	140	0.068	0.068	115	0.056	0.056
Kam Pok Road NB	←↑→	C	3	3.8	13	20		7% / 40%	13% / 68%	1925	1870	150	0.078	0.078	190	0.102	0.102
Pedestrian Crossing		Dp	4	MIN GREEN + FLASH =			10	+	9	=	19			*			*

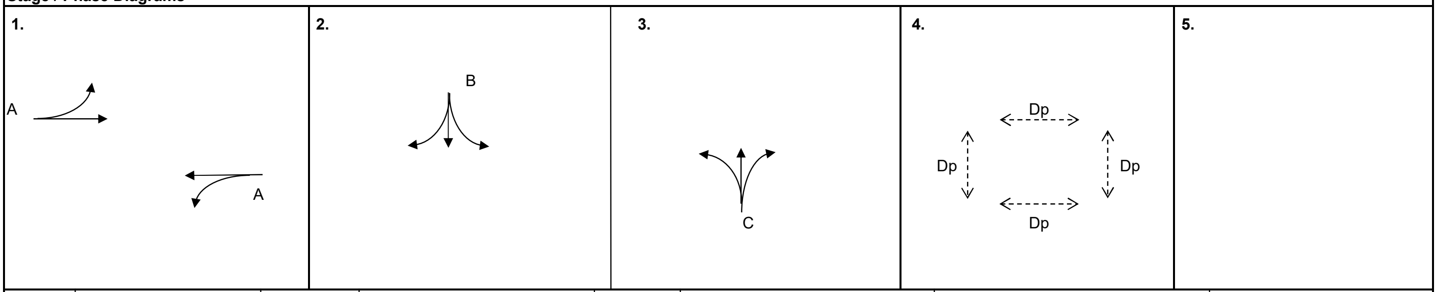
Notes:

Flow: (pcu/hr)



Group		A,B,C,Dp	Group		A,B,C,Dp
y		0.367	y		0.375
L (sec)		44	L (sec)		44
C (sec)		120	C (sec)		120
y pract.		0.570	y pract.		0.570
R.C. (%)		56%	R.C. (%)		52%

Stage / Phase Diagrams



I/G= 3		I/G= 7		I/G= 7		I/G= 11	19	I/G=
I/G= 3		I/G= 7		I/G= 7		I/G= 11	19	I/G=

Date: Dec, 2025

Junction: 2 J2

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310 **MVA HONG KONG LIMITED**

Junction: Kam Pok Road / Vehicular Bridge – South (J3)

Design Year: 2034

Description: Year 2034 Design Traffic Flows (Sensitivity Test 1)

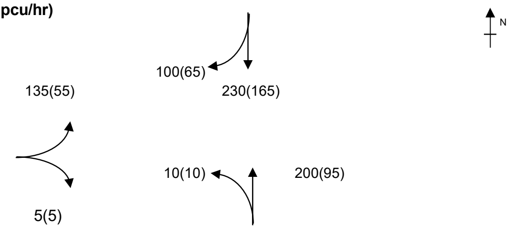
Designed By: HZF

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	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
Vehicular Bridge (EB)	←→	A	1	3.600	10	10		96% / 4%	92% / 8%	1715	1715	140	0.082	0.082	60	0.035	
Kam Pok Rd (SB)	↑→	B	2	3.600		10		30%	28%	1890	1895	330	0.175	0.175	230	0.121	0.121
Kam Pok Rd (NB)	←↑	C	3	3.600	10			5%	10%	1960	1945	210	0.107	0.107	105	0.054	0.054
Pedestrian Crossing		Dp	4	MIN GREEN + FLASH =			7	+	7	=	14			*			*

Notes:

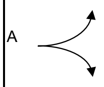
Flow: (pcu/hr)



Group		A,B,C,Dp	Group		A,B,C,Dp
y		0.363	y		0.175
L (sec)		26	L (sec)		32
C (sec)		60	C (sec)		60
y pract.		0.510	y pract.		0.420
R.C. (%)		40%	R.C. (%)		140%

Stage / Phase Diagrams

1.



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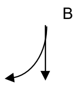

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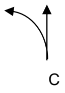

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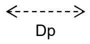


5.

I/G= 2		I/G= 5		I/G= 5		I/G= 3	14	I/G=	
I/G= 2	5	I/G= 5		I/G= 5		I/G= 3	14	I/G=	

Date: Dec, 2025

Junction: 3

J3

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50868310

MVA HONG KONG LIMITED

Junction: Kam Pok Road / Vehicular Bridge – North / Vehicular Access (J4)

Design Year: 2034

Description: Year 2034 Design Traffic Flows (Sensitivity Test 1) (with Planned Junction Layout)

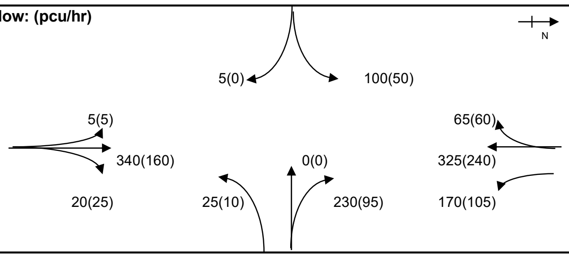
Designed By: HZF

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	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
Vehicular Bridge SB	↰↱	A	1	3.500	10	12		95% / 5%	100% / 0%	1710	1710	105	0.061	0.061	50	0.029	
Kam Pok Road EB	↰↑↱	D	2	3.650	10	12		1% / 5%	3% / 13%	1965	1940	365	0.186	0.186	190	0.098	0.098
R(D) Site Access	↰	C	3	5.500	20					2015	2015	25	0.012		10	0.005	
	↑↱	C	3	4.000		12		100%	100%	1790	1790	230	0.128	0.128	95	0.053	0.053
	↰	B	4	3.650	15					1800	1800	170	0.094		105	0.058	
	↑↱	B	4	3.650		12		17%	20%	1940	1930	390	0.201	0.201	300	0.155	0.155
Pedestrian Crossing		Ep	3	MIN GREEN + FLASH =			10	+	10	=	20						
		Fp	1	MIN GREEN + FLASH =			11	+	10	=	21						
		Gp	1,2,4	MIN GREEN + FLASH =			5	+	5	=	10						

Notes:

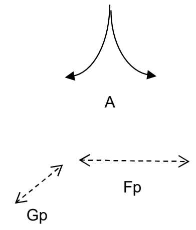
Flow: (pcu/hr)



Group	Fp,D,C,B	A,D,C,B	Group	Fp,D,C,B	A,D,C,B
y	0.515	0.577	y	0.306	0.306
L (sec)	18	25	L (sec)	18	31
C (sec)	90	90	C (sec)	90	90
y pract.	0.720	0.650	y pract.	0.720	0.590
R.C. (%)	40%	13%	R.C. (%)	135%	93%

Stage / Phase Diagrams

1.



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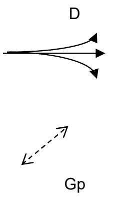

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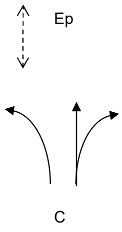

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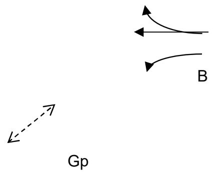


5.

I/G= 7		I/G= 12		I/G= 5		I/G= 5		I/G=
I/G= 7	5	I/G= 12		I/G= 5		I/G= 5		I/G=

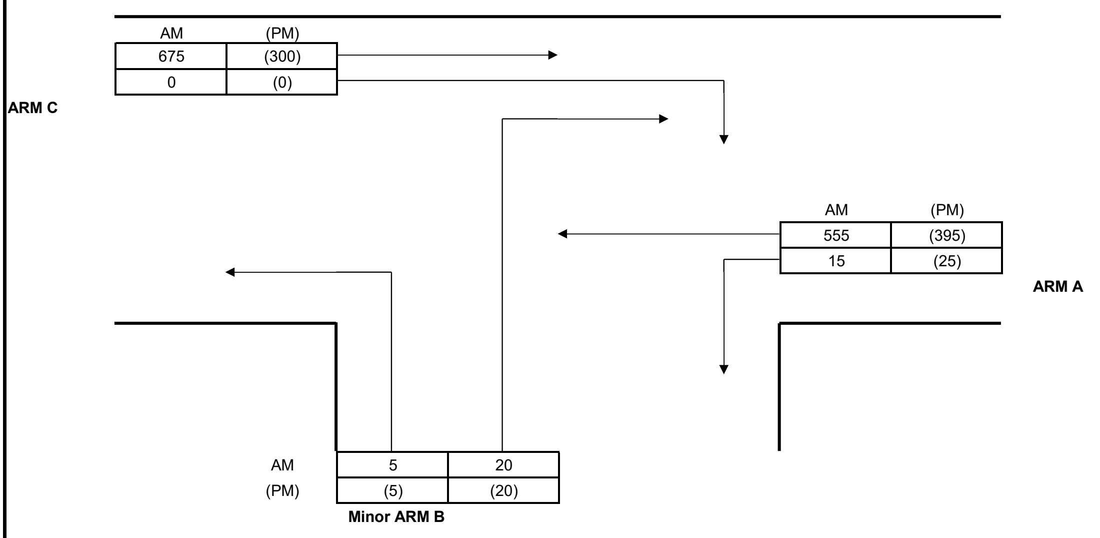
Date: Dec, 2025

Junction: 4

J4

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Ha Chuk Yuen Road (J5)			Ref. No.:	
Scheme:	Design Case under Sensitivity Test 1				
Year:	2034	Job No.:	CHK50868310	Rev.:	
ARM A:	Kam Pok Road WB				
ARM B:	Ha Chuk Yuen Road				
ARM C:	Kam Pok Road EB				



GEOMETRY

			Lane widths		
Major road width	W	9.30	Lane widths	w(b-a)	2.05
Central Reserve width	Wcr	0.00		w(b-c)	2.05
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.50
Visibilities	Vr(b-a)	50	Calculated	D	0.75
	Vl(b-a)	50		E	0.80
	Vr(b-c)	50		F	0.92
	Vr(c-b)	50		Y	0.68

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		675	300
	q(c-b)		0	0
	q(a-b)		15	25
	q(a-c)		555	395
	q(b-a)		20	20
	q(b-c)		5	5
	f		0.20	0.20
CAPACITIES	Q(b-a)	1	287	359
	Q(b-c)	1	483	513
	Q(c-b)	1	558	592
	Q(b-ac)	1	312	382
RFC's	b-a		0.070	0.056
	b-c		0.010	0.010
	c-b		0.000	0.000
	b-ac		0.080	0.065
Worst RFC			**0.080**	**0.065**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

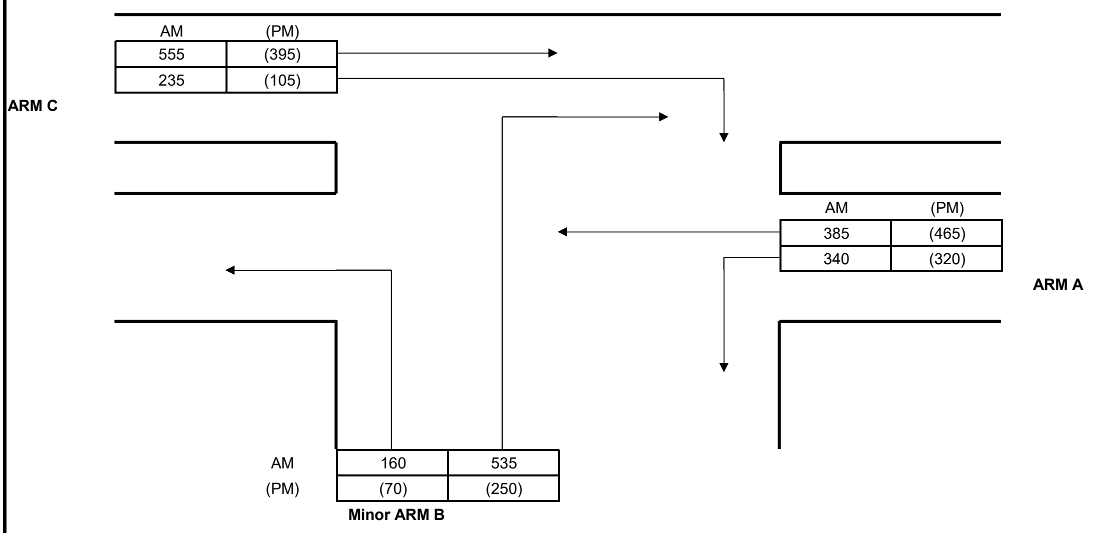
T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Castle Peak Road – Tam Mi (J6)			Ref. No.:	
Scheme:	Design Case under Sensitivity Test 1 (with Planned Junction Layout)				
Year:	2034	Job No.:	CHK50868310	Rev.:	
ARM A:	Castle Peak Road - Tam Mi NB				
ARM B:	Kam Pok Road EB				
ARM C:	Castle Peak Road - Tam Mi SB				



GEOMETRY					
Major road width	W	6.90	Lane widths	w(b-a)	4.30
Central Reserve width	Wcr	1.50		w(b-c)	4.30
2 Lane Minor Arm (Y/N)		Y		w(c-b)	2.05
Visibilities	Vr(b-a)	53	Calculated	D	0.95
	Vl(b-a)	70		E	1.01
	Vr(b-c)	70		F	0.78
	Vr(c-b)	30		Y	0.76

ANALYSIS				
			AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		555	395
	q(c-b)		235	105
	q(a-b)		340	320
	q(a-c)		385	465
	q(b-a)		535	250
	q(b-c)		160	70
	f		0.23	0.22
		Factor		
CAPACITIES	Q(b-a)	1	298	354
	Q(b-c)	1	609	589
	Q(c-b)	1	425	412
	Q(b-ac)	1	338	388
RFC's	b-a		1.795	0.706
	b-c		0.263	0.119
	c-b		0.553	0.255
	b-ac		0.000	0.000
Worst RFC			**1.795**	**0.706**

Where Vl and Vr are visibility distances to the left or right of the respective streams
D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))
E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))
F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))
Y = 1-0.0345W
f = proportion of minor traffic turning left
Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

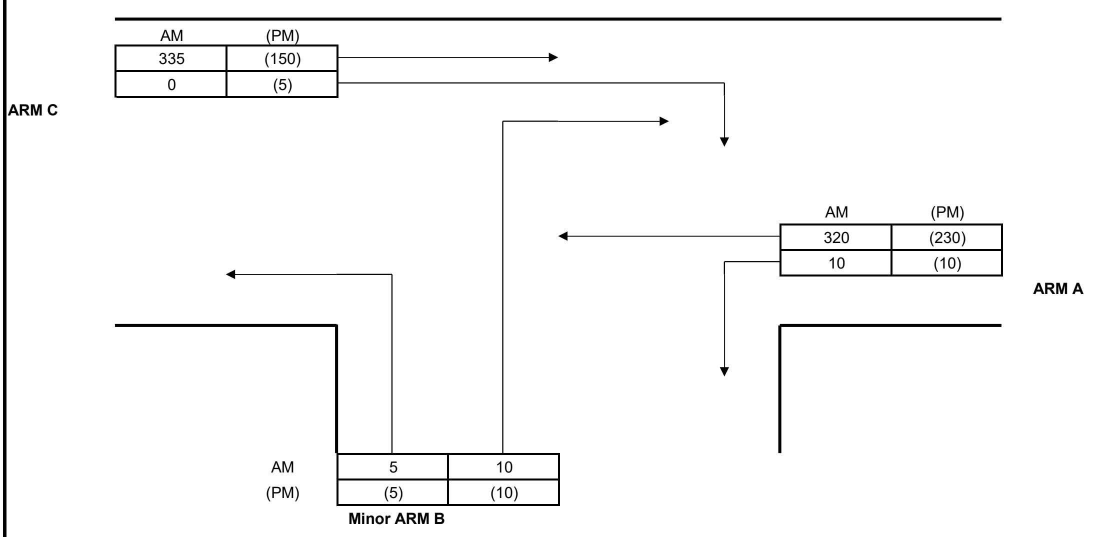
T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Simplified Priority Junction Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long				
Junction:	Kam Pok Road / Fung Chuk Road (J7)			Ref. No.:	
Scheme:	Design Case under Sensitivity Test 1				
Year:	2025	Job No.:	CHK50868310	Rev.:	
ARM A:	Kam Pok Road SB				
ARM B:	Fung Chuk Road				
ARM C:	Kam Pok Road NB				



GEOMETRY

Major road width	W	7.30	Lane widths	w(b-a)	2.00
Central Reserve width	Wcr	0.00		w(b-c)	2.00
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.50
Visibilities	Vr(b-a)	12	Calculated	D	0.70
	Vl(b-a)	8.5		E	0.76
	Vr(b-c)	12		F	0.90
	Vr(c-b)	21		Y	0.75

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		335	150
	q(c-b)		0	5
	q(a-b)		10	10
	q(a-c)		320	230
	q(b-a)		10	10
	q(b-c)		5	5
	f		0.33	0.33
CAPACITIES	Q(b-a)	1	336	374
	Q(b-c)	1	501	520
	Q(c-b)	1	588	610
	Q(b-ac)	1	377	412
RFC's	b-a		0.030	0.027
	b-c		0.010	0.010
	c-b		0.000	0.008
	b-ac		0.040	0.036
Worst RFC			**0.040**	**0.036**

Where Vl and Vr are visibility distances to the left or right of the respective streams
D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))
E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))
F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))
Y = 1-0.0345W
f = proportion of minor traffic turning left
Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

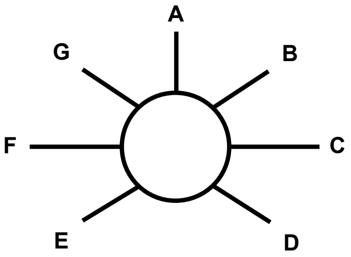
Calculated by:	HZF	Date:	Dec, 2025	Checked by:	PTC

Roundabout Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long		
Junction:	Fairview Park Interchange (J1)	Ref. No.:	
Scheme:	Design Case under Sensitivity Test 1 (with Suggested Junction Improvement Layout)		
	2034	Job No.:	CHK50868310 -

AM PM

ARM A:	Fairview Park Boulevard
ARM B:	Castle Peak Road - Tam Mi (N)
ARM C:	San Tin Highway Slip Road (N)
ARM D:	San Tam Road (N)
ARM E:	San Tam Road (S)
ARM F:	San Tin Highway Slip Road (S)
ARM G:	Castle Peak Road - Tam Mi (S)



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	7.00	12.20	34	25	140	35	0.24
B	7.30	12.00	36	30	140	25	0.21
C	7.30	13.00	13	45	140	30	0.70
D	7.30	13.00	34	25	140	35	0.27
E	7.30	12.00	27	25	140	45	0.28
F	6.00	13.00	36	25	140	40	0.31
G	6.50	12.00	25	25	140	35	0.35

AM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	10	20	210	40	230	480	30	3005	1020	670
B	10	10	Free Flow	35	250	590	30	3205	925	820
C	95	90	10	Free Flow	485	10	225	3020	915	1110
D	65	45	45	10	270	270	95	3540	800	395
E	40	35	465	70	10	535	20	2455	1175	1885
F	335	460	10	155	630	10	Free Flow	1410	1600	2220
G	115	160	370	85	10	325	0	2610	1065	400

PM FLOWS

from \ to	A	B	C	D	E	F	G	Circ	Entry	Exit
A	10	10	170	55	210	345	30	2680	830	955
B	35	10	Free Flow	35	170	270	30	2735	550	775
C	190	155	20	Free Flow	425	20	210	2490	1020	795
D	80	45	90	20	215	150	75	3060	675	450
E	100	30	305	75	10	295	20	2035	835	1700
F	445	400	10	210	660	20	Free Flow	1550	1745	1320
G	95	125	200	55	10	220	10	2920	715	375

CALCULATIONS

							Q_E		RFC	
ARM	K	X_2	M	F	t_D	f_c	AM	PM	AM	PM
A	0.99	10.49	2980.96	3179	1.00	0.65	1214	1424	0.84	0.58
B	1.03	10.62	2980.96	3216	1.00	0.66	1152	1470	0.80	0.37
C	1.03	9.67	2980.96	2931	1.00	0.62	1098	1434	0.83	0.71
D	0.99	11.01	2980.96	3336	1.00	0.67	948	1268	0.84	0.53
E	0.96	10.32	2980.96	3127	1.00	0.64	1481	1740	0.79	0.48
F	0.98	10.32	2980.96	3125	1.00	0.64	2163	2075	0.74	0.84
G	0.99	9.73	2980.96	2947	1.00	0.62	1323	1132	0.81	0.63

Crtical Arm:	**A**	**F**
RFC:	**0.84**	**0.84**
	AM	**PM**

- In accordance with TPDM V2.4

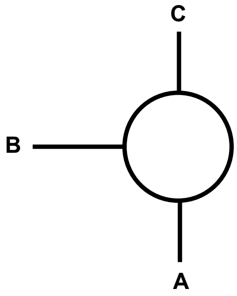
Calculated by:	HZF	Date:	Dec-25	Checked by:	PTC

Roundabout Capacity Calculation

Job Title:	Proposed Residential Development at Lot No. 4822 in D.D. 104 and Adjoining Government Land, East of Kam Pok Road, Mai Po, Yuen Long		
Junction:	Kam Pok Road / Castle Peak Road – Tam Mi (J6)	Ref. No.:	
Scheme:	Design Case under Sensitivity Test 1 (with Junction Improvement Layout)		
	2034	Job No.:	CHK50868310 -

AM PM

ARM A: Castle Peak Road - Tam Mi NB
ARM B: Kam Pok Road EB
ARM C: Castle Peak Road - Tam Mi SB



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	3.50	4.50	12	50	26	30	0.13
B	7.30	5.00	5	17.5	26	45	-0.74
C	3.30	3.10	7	80	26	5	-0.05

AM FLOWS

from \ to	A	B	C	Circ	Entry	Exit
A	0	340	385	235	725	535
B	535	0	160	385	695	575
C	FF	235	0	535	235	545

PM FLOWS

from \ to	A	B	C	Circ	Entry	Exit
A	0	320	465	105	785	250
B	250	0	70	465	320	425
C	FF	105	0	250	105	535

CALCULATIONS

							Q_E		RFC	
ARM	K	X_2	M	F	t_D	f_c	AM	PM	AM	PM
A	1.03	4.29	0.03	1300	1.48	0.58	1198	1275	0.61	0.62
B	0.94	12.17	0.03	3688	1.48	1.07	3083	3002	0.23	0.11
C	1.12	3.08	0.03	933	1.48	0.50	746	907	0.32	0.12

Crtical Arm:	**A**	**A**
RFC:	**0.61**	**0.62**
	AM	**PM**

- In accordance with TPDM V2.4

Calculated by:	HZF	Date:	Dec-25	Checked by:	PTC

Appendix T1

Email to PlanD regarding Planned/Committed Developments

From: norawong@visionplanning.com.hk
Sent: Wednesday, December 3, 2025 5:30 PM
To: jsylau@pland.gov.hk
Cc: akytong@pland.gov.hk; PUN Alan; CHAN Karen Pt; CHAN Karen Pt; kimchan@visionplanning.com.hk; ottolung@visionplanning.com.hk
Subject: RE: s.12A Application No. Y/YL-MP/11 - Planned Developments in the Surrounding
Attachments: MP11 - List of Planned Developments.pdf; 20251103 - Dept. Comments on Original (Batch 4).pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Jessie,

I am writing in reference to Comment Item No. 10 from the Transport Department, as enclosed in your email dated 3.11.2025. Please refer to the attached list of Planned/Committed Developments for PlanD's endorsement. Thank you.

Regards,
Nora WONG
Vision Planning Consultants Limited
Tel: 2566 9988 | Email: norawong@visionplanning.com.hk | Fax: 2566 9978

From: Jessie Sin Yee LAU/PLAND <jsylau@pland.gov.hk>
Sent: Monday, November 3, 2025 5:55 PM
To: norawong@visionplanning.com.hk
Cc: Anna Ka Yan TONG/PLAND <akytong@pland.gov.hk>; ottolung@visionplanning.com.hk; Yen PY LEUNG/PLAND <pyleung@pland.gov.hk>
Subject: Re: s.12A Application No. Y/YL-MP/11 - Departmental Comments (Batch 3)

Dear Nora,

Further to my preceding email, enclosed please find the comments from Transport Department (batch 4) for consideration.
[See attachment "20251103 - Dept. Comments on Original (Batch 4).pdf"]

Regards,
Jessie SY LAU
TP/FS2, FS&YLE DPO
Planning Department

Tel: 3168 4037

File
Y/YL-MP/11

List of the planned developments located in the vicinity of the site that are expected to be completed by year 2034 according to the latest available information from public domain

Ref.	Planned/Committed Developments	Key Development Parameters
1	Tung Shing Lei Development (A/YL-NSW/274)	• 1,518 residential units (average flat size = about 46 m^2)
2	Sha Po North Phase 2 Residential Development (A/YL-KTN/663)	• 1,154 residential units (average flat size = about 42.57m^2)
3	Residential Development at west of Castle Peak Road - Tam Mi, Yuen Long (Y/YL-NSW/9)	• 3,115 residential units • 2900m^2 retail GFA • 1 primary school, 1 kindergarten • Soy Factory
4	Kam Tin South Priority Sites Development	• 9,060 units of public housing (average flat size = about 50 m^2) • 2,200 units of private housing (average flat size = about 70 m^2)
5	Residential Development at west of Castle Peak Road - Tam Mi, Yuen Long (Y/YL-NSW/8)	• 6,825 residential units • 3950m^2 retail GFA • 2 GIC facilities and 1 kindergarten
6	Tung Shing Lei Land Sharing Pilot Scheme Application No. LSPS/002	• 1,261 units of private housing (average flat size = about 40 m^2) • 1,868 units of public housing (average flat size = about 50 m^2)
7	Sha Po North Comprehensive Residential Development (A/YL-KTN/604)	• 3,891 residential units (average flat size = about 49 m^2) • 5,500 m^2 retail GFA
8	Sha Po Public Housing Development	• 16,300 Flats • 20,668 m^2 retail GFA • 5 Kindergarten and 1 Primary School • 38,384 m^2 Welfare Facilities • 19,267 m^2 GIC
9	Kam Tin North Residential Development (A/YL-KTN/791)	• 330 flats and 87 houses (average flat/house size = about 38.73 m^2)
10	Residential Development at Sha Po South (A/YL-KTN/964)	• 615 residential units (average flat size = about 38 m^2)
11	Development at Wing Kei Tsuen, Nam Sang Wai, Yuen Long (Y/YL-NSW/7)	• 1,997 residential units (average flat size = 48.9 m^2)
12	Residential Development at Tung Shing Lei, Nam Sang Wai, Yuen Long (A/YL-NSW/293)	• 3,566 Flats • 9 Houses • 5,358 Non Domestic GFA
13	Comprehensive Development Scheme at north of Kam Pok Road East, Pok Wai, Yuen Long (A/YL-NSW/314)	• 90 residential units
14	Ngau Tam Mei Area New Development Area(1)	• Population: 9,600 – 10,800 • No. of Flats: 3,600 – 3,900
14	Social Welfare Facilities at Siu Sheung Road, Nam Sang Wai, Yuen Long (A/YL-NSW/303)	• 127 beds for Residential Care Home for the Elderly • 100 beds for senior hostel
15	Social Welfare Facilities at Siu Sheung Road, Nam Sang Wai, Yuen Long (A/YL-NSW/292)	• 9,180 m^2 GFA

Ref.	Planned/Committed Developments	Key Development Parameters
16	Residential Care Homes for the Elderly at 81 San Tam Road, Ngau Tam Mei, Yuen Long (Y/YL-NTM/9)	• 142 beds (5,400 m^2 GFA)
17	Residential Development at Yau Pok Road, Yuen Long (Y/YL-MP/3)(2)	• 106 houses
18	Proposed Residential Development at Kam Pok Road, Yuen Long (Y/YL-MP/10)	• 2,322 residential units (average flat size = about 42.4 m^2) • 2,363m^2 retail GFA • 1 kindergarten and 1 NEC
19	Proposed Comprehensive Development at Wo Shang Wai, Yuen Long (Y/YL-MP/9)	• 3,562 residential units (average flat size = about 75 m^2) • a 100-place Residential Care Home for the elderly
20	San Tin Technopole(3)	• 120,000 employment • ~760,000m^2 Logistics & Storage and Workshop • Public housing of ~25,800 units • Private housing of ~12,200 units

Remarks:

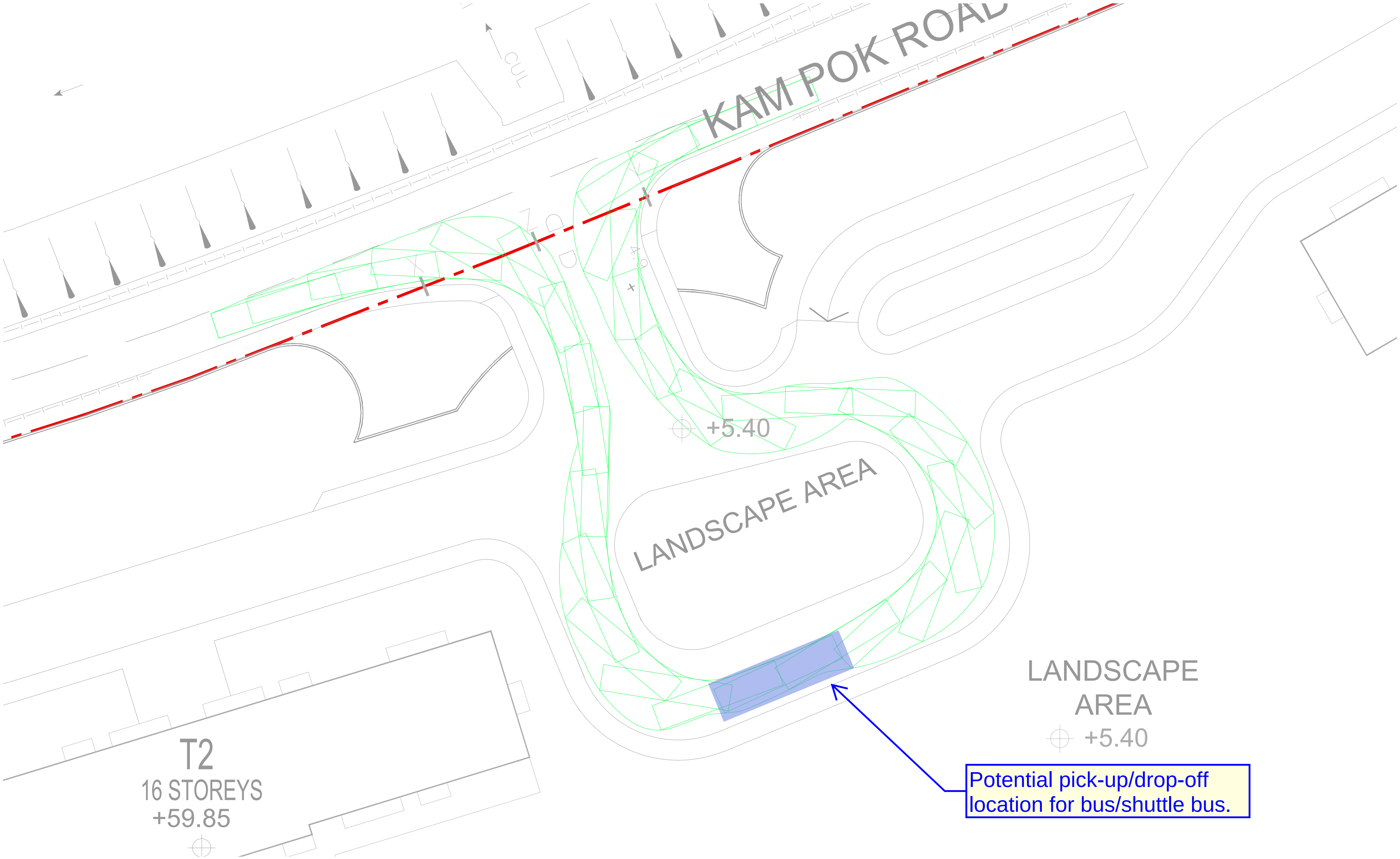
(1) The Ngau Tam Mei New Development Area anticipates a new population of about 32,000 to 36,000, accommodated within about 12,000 to 13,000 new residential units. According to LegCo paper No. CB(1) 1487/2024(04), it is noted that the first population intake will take place gradually from 2034 to tie in with the commissioning of the NOL Main Line. Therefore, it is assumed that 30% of the Comprehensive Residential Neighbourhood in close vicinity of the planned Ngau Tam Mei Station, will be in place in year 2034.

(2) The site is currently occupied by the existing temporary Light Public Housing at Yau Pok Road. The surveyed trip generations of Light Public Housing were separately excluded from the traffic forecast.

(3) According to the “EIA study of First Phase Development of the New Territories North – San Tin / Lok Ma Chau Development Node – Investigation”, the population intakes for Initial Phase and Main Phase are anticipated on or before 2034. The development schedules under Initial and Main Phases are assumed based on the planning assumptions in the revised RODP.

Appendix T2

Potential Pick-Up/Drop-Off Location For Bus/Shuttle Bus


KAM POK ROAD
CUL
LANDSCAPE AREA
+5.40
LANDSCAPE AREA
+5.40
T2
16 STOREYS
+59.85

Potential pick-up/drop-off location for bus/shuttle bus.

Swept Path Analysis for 12.8m Bus
1:500 in A4 Size