Annex III – Result of The Traffic Count Survey

1) Existing Nearby Road Network

1.1 The application site (the Site) is accessible from Ping Che Road via the aforesaid local access.

1.2 The existing local access that connects the Site to Ping Che Road is a village track. Ping Che Road is district distributor which provides major access for traffic commuting to/from Ta Kwu Ling and other areas of North East New Territories.

2) Existing Traffic Flows with the Proposed Development

2.1 In order to gain understanding of the existing traffic condition of the vicinity of the Site, traffic count surveys were conducted at the key locations on 29/5/2024 (Wednesday) PM and 30/5/2024 (Thursday) AM with survey period of 07:00 – 10:00 and 16:00 – 19:00. The AM and PM peak hours are identified to occur at 08:00 – 09:00 and 17:00 – 18:00 respectively. The survey results are shown at **Tables 1** and **2** below and **Figures 1 and 2**:

Table 1: 2024 Peak Hour Junction Capacity Performance (w/o the proposed development)

Junction No.	Location	DFC for AM Peak	DFC for PM Peak
J1	Ping Che Road / Local Access	0.04[#]	0.03[#]

[#]Please refer to the junction capacity performance calculation at **Annex IV**.

Table 2: 2024 Peak Hour Road Link Performance (w/o the proposed development)

Link No.	Location	Direction	Design Capacity	AM Peak		PM Peak	
				Flows[#] (veh/hr)	P/Df	Flows (veh/hr)	P/Df
L1	Ping Che Road	NB	400*	193	0.48	183	0.46
		SB	400*	184	0.46	175	0.44
L2	Ping Che Road	NB	400*	195	0.49	185	0.46
		SB	400*	185	0.46	176	0.44
L3	Local Access	2-way	100	37	0.37	31	0.31

*According to TPDM 2.4.1.1, the design flow of a 2-lane single carriageway may be taken as 800 veh/h

[#]According to TPDM 2.3.1.1, flow (vehicle/hr) has been converted to passenger car units

2.2 The traffic count results indicate that the key link flows in the vicinity of the proposed development are currently operating within capacity during the AM and PM peak hour.

3) Trip Generation and Attraction of the Proposed Development

3.1 The current application is intended to facilitate the relocation of an existing 'Medium Goods Vehicle and Container Tractor/Trailer Park' (approved under S.16 planning application No. A/KTN/82), which is affected by land resumption to facilitate the development of Kwu North North New Development Area.

3.2 Based on the approved scheme of A/KTN/82, a total of 49 parking spaces are provided at the original premises. While a total of 48 parking spaces are proposed at the Site, hence, the trip generation and attraction of the original premises and the current application should be very similar. According to the applicant, the below **Table 3** is the actual trip generation and attraction of the original premises in Kwu Tung at 08:00 – 09:00 and 17:00 – 18:00, which could be adopted as the estimated trip generation and attraction of the proposed development.

Table 3: Trip Generation and Attraction of the Proposed Development

Time Period	Trip Generation and Attraction						
	PC		MGV		CV/T		2-Way Total
	In	Out	In	Out	In	Out	
Trips at 08:00 – 09:00	4	0	0	2	0	3	9
Trips at 17:00 – 18:00	0	4	2	0	3	0	9

#According to TPDM 2.3.1.1, flow of vehicle has been converted to passenger car units

4) Future Traffic Situation with the Proposed Development

4.1 Based on the results of the traffic count survey on the existing peak hours traffic flows with the accumulation of the estimated peak hour traffic generation and attraction by the proposed development, the peak hour traffic flows with the proposed development are shown at **Tables 4 and 5** below and **Figure 2**:

Table 4: 2024 Peak Hour Junction Capacity Performance (with the proposed development)

Junction No.	Location	DFC for AM Peak	DFC for PM Peak
J1	Ping Che Road / Local Access	*0.05*#	*0.04*#

#Please refer to the junction capacity performance calculation at **Annex II**.

Table 5: 2024 Peak Hour Road Link Performance (with the proposed development)

Link No.	Location	Direction	Design Capacity	AM Peak		PM Peak	
				Flows (veh/hr)	P/Df	Flows (veh/hr)	P/Df
L1	Ping Che Road	NB	400*	*193 (+5)*	*0.48*	183	0.41
		SB	400*	184	0.41	*180 (+5)*	*0.45*
L2	Ping Che Road	NB	400*	*199 (+4)*	*0.50*	185	0.42
		SB	400*	185	0.41	*180 (+4)*	*0.45*
L3	Local Access	2-way	100	*46 (+9)*	*0.46*	*40 (+9)*	*0.40*

*According to TPDM 2.4.1.1, the design flow of a 2-lane single carriageway may be taken as 800 veh/h

4.2 As advised by the applicant, goods vehicle would likely enter/leave the Site from/towards Heung Yuen Wai Highway, while private car would likely enter/leave the Site from/towards Sha Tau Kok Road (Ma Mei Ha). Therefore, vehicular trips are added to respective road links at AM and PM peak.

4.3 The results shown at **Tables 4, 5** and **Annex II** indicate that all the link flows in the vicinity of the proposed development would be operating within capacity during the AM and PM peak hour even with the estimated peak hours trips from the proposed development.

4.4 Furthermore, passing areas are also provided along the local access connecting the Site to Ping Che Road, hence, adverse traffic impact arisen from the proposed development to the surrounding road network should not be anticipated (**Annex III**).

Figure 1 – Observed 2024 Peak Hour Traffic Flows (without the Proposed Development)

1) The AM and PM peak hours are identified to occur at 08:00 – 09:00 and 17:00 – 18:00 respectively.

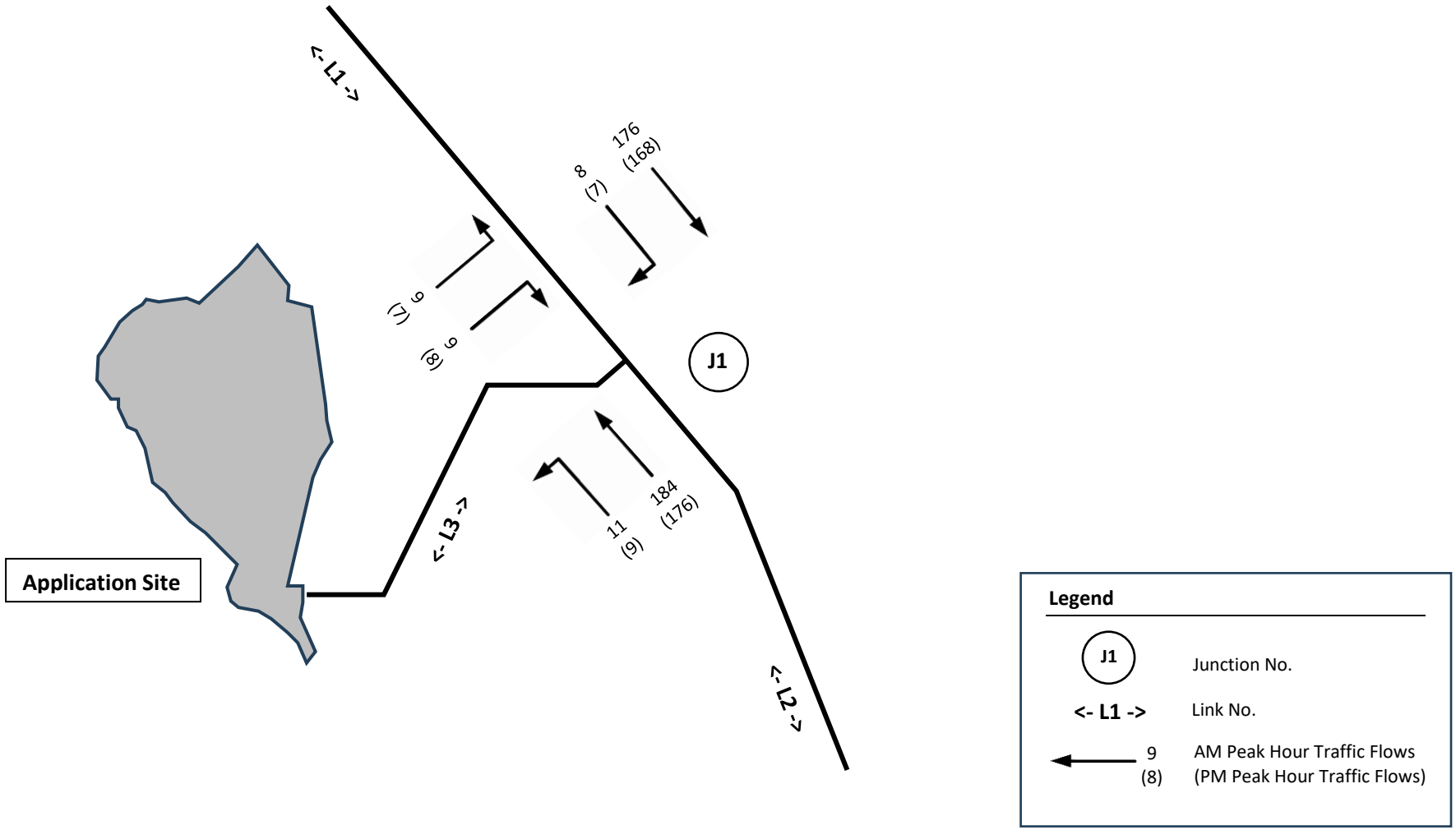
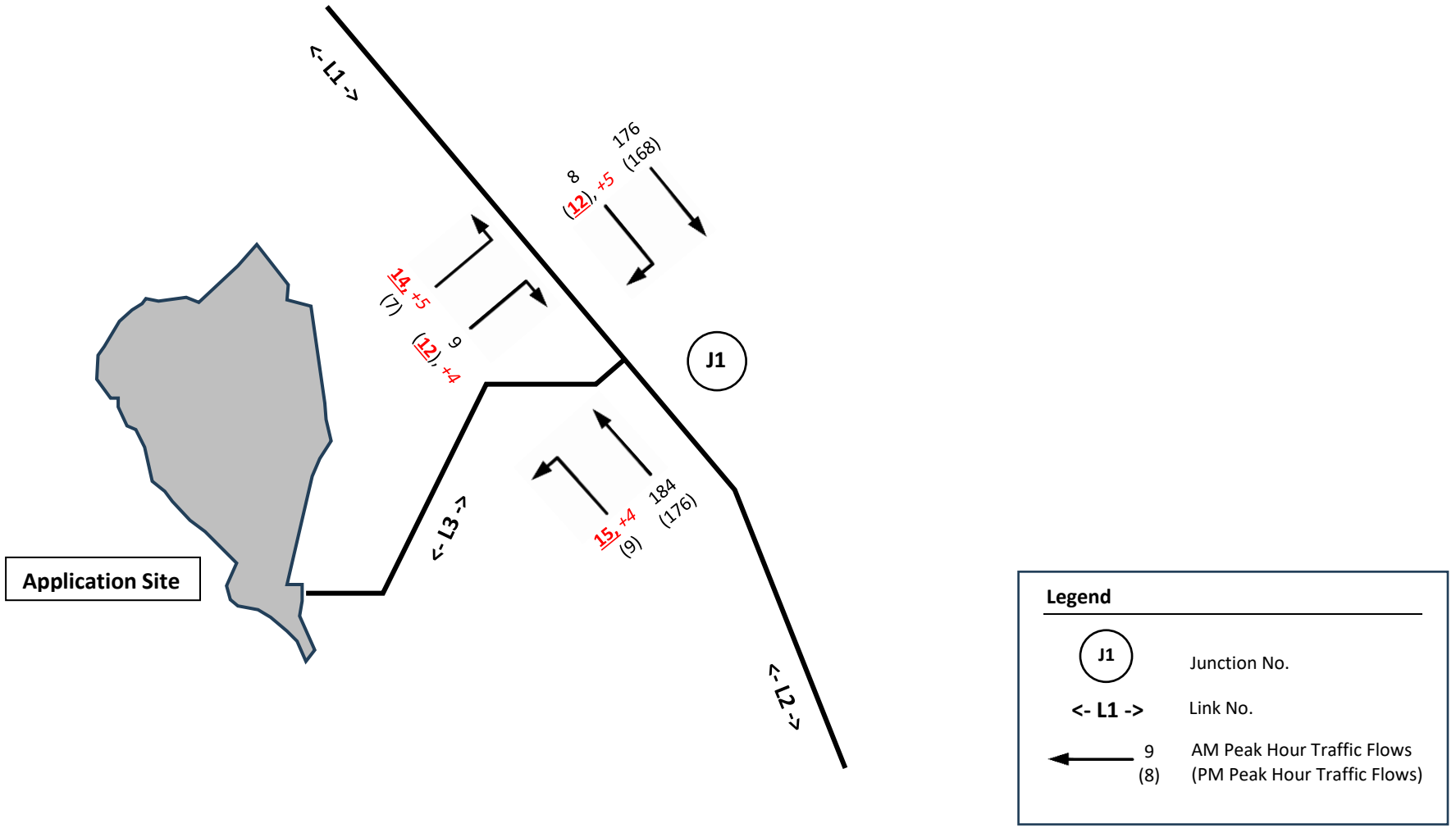


Figure 2 – Future 2024 Peak Hour Traffic Flows (with the Proposed Development)

1) The AM and PM peak hours are identified to occur at 08:00 – 09:00 and 17:00 – 18:00 respectively.



Proposed Temporary Medium Goods Vehicle and Container Tractor/Trailer Park with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lots 9 S.A (Part), 9 S.B (Part), 10 S.A, 10 S.B (Part) and 11 (Part) in D.D. 84, Ta Kwu Ling, New Territories
S.16 Planning Application No. A/NE-TKL/755

Priority Junction Calculation
2024 AM Peak (w/o the proposed development)

Geomatric details:

Major Road (Arm A)

W	=	6.3	metres
W cr	=	0	metres
q a-b	=	11	pcu/hr
q a-c	=	184	pcu/hr

Major Road (Arm C)

W c-b	=	3.1	metres
Vr c-b	=	22	metres
q c-a	=	176	pcu/hr
q c-b	=	8	pcu/hr

Minor Road (Arm B)

W b-a	=	3	metres
W b-c	=	3	metres
Vl b-a	=	105	metres
Vr b-a	=	62	metres
Vr b-c	=	62	metres
q b-a	=	9	pcu/hr
q b-c	=	9	pcu/hr

Geometric factors:

D	=	0.8659
E	=	0.8899
F	=	0.8647
Y	=	0.7827

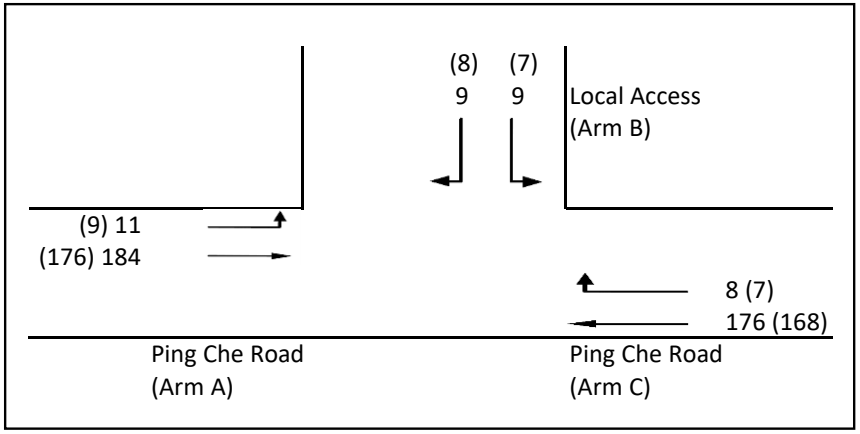
The capacity of movement:

Q b-a	=	466.3031
Q b-c	=	615.2175
Q c-b	=	596.1376
Q b-ac	=	466.3031
Total flow	=	397 pcu/hr

Comparison of design flow to capacity:

DFC b-a	=	0.0193
DFC b-c	=	0.0146
DFC c-b	=	0.0134
DFC b-ac (share lane)	=	0.0386

Critical DFC = 0.04



W	=	Major Road Width
W cr	=	Central Reserve Width
W b-a	=	Lane width available to vehicle waiting in stream b-a
W b-c	=	Lane width available to vehicle waiting in stream b-c
W c-b	=	Lane width available to vehicle waiting in stream c-b
Vl b-a	=	Visibility to the left for vehicles waiting in steam b-a
Vr b-a	=	Visibility to the right for vehicles waiting in steam b-a
Vr b-c	=	Visibility to the right for vehicles waiting in steam b-c
Vr c-b	=	Visibility to the right for vehicles waiting in steam c-b

D	=	Stream-specific B-A
E	=	Stream-specific B-C
F	=	Stream-specific C-B
Y	=	(1-0.0345W)

Proposed Temporary Medium Goods Vehicle and Container Tractor/Trailer Park with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lots 9 S.A (Part), 9 S.B (Part), 10 S.A, 10 S.B (Part) and 11 (Part) in D.D. 84, Ta Kwu Ling, New Territories
S.16 Planning Application No. A/NE-TKL/755

Priority Junction Calculation
2024 PM Peak (w/o the proposed development)

Geomatric details:

Major Road (Arm A)

W	=	6.3	metres
W cr	=	0	metres
q a-b	=	9	pcu/hr
q a-c	=	176	pcu/hr

Major Road (Arm C)

W c-b	=	3.1	metres
Vr c-b	=	22	metres
q c-a	=	168	pcu/hr
q c-b	=	7	pcu/hr

Minor Road (Arm B)

W b-a	=	3	metres
W b-c	=	3	metres
Vl b-a	=	105	metres
Vr b-a	=	62	metres
Vr b-c	=	62	metres
q b-a	=	8	pcu/hr
q b-c	=	7	pcu/hr

Geometric factors:

D	=	0.8659
E	=	0.8899
F	=	0.8647
Y	=	0.7827

The capacity of movement:

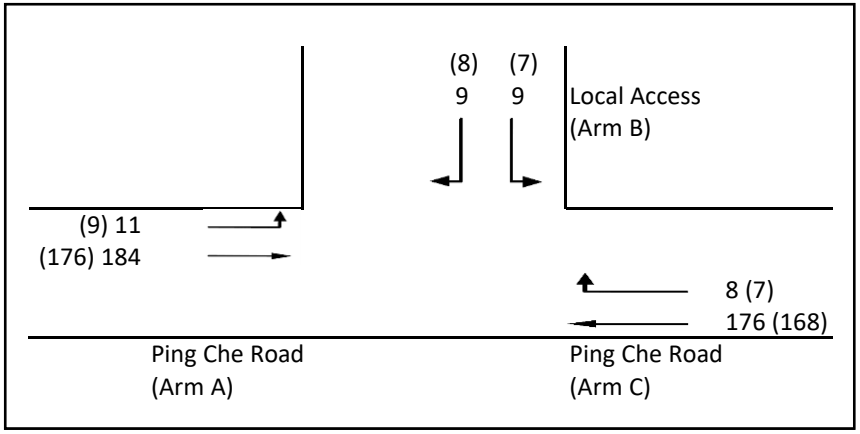
Q b-a	=	470.0655
Q b-c	=	617.4462
Q c-b	=	598.6009
Q b-ac	=	470.0655

Total flow = 375 pcu/hr

Comparison of design flow to capacity:

DFC b-a	=	0.0170
DFC b-c	=	0.0113
DFC c-b	=	0.0117
DFC b-ac (share lane)	=	0.0319

Critical DFC = 0.03



W	=	Major Road Width
W cr	=	Central Reserve Width
W b-a	=	Lane width available to vehicle waiting in stream b-a
W b-c	=	Lane width available to vehicle waiting in stream b-c
W c-b	=	Lane width available to vehicle waiting in stream c-b
Vl b-a	=	Visibility to the left for vehicles waiting in steam b-a
Vr b-a	=	Visibility to the right for vehicles waiting in steam b-a
Vr b-c	=	Visibility to the right for vehicles waiting in steam b-c
Vr c-b	=	Visibility to the right for vehicles waiting in steam c-b

D	=	Stream-specific B-A
E	=	Stream-specific B-C
F	=	Stream-specific C-B
Y	=	(1-0.0345W)

Proposed Temporary Medium Goods Vehicle and Container Tractor/Trailer Park with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lots 9 S.A (Part), 9 S.B (Part), 10 S.A, 10 S.B (Part) and 11 (Part) in D.D. 84, Ta Kwu Ling, New Territories
S.16 Planning Application No. A/NE-TKL/755

Priority Junction Calculation
2024 AM Peak (with the proposed development)

Geomatric details:

Major Road (Arm A)

W	=	6.3	metres
W cr	=	0	metres
q a-b	=	**15**	pcu/hr
q a-c	=	184	pcu/hr

Major Road (Arm C)

W c-b	=	3.1	metres
Vr c-b	=	22	metres
q c-a	=	176	pcu/hr
q c-b	=	8	pcu/hr

Minor Road (Arm B)

W b-a	=	3	metres
W b-c	=	3	metres
Vl b-a	=	105	metres
Vr b-a	=	62	metres
Vr b-c	=	62	metres
q b-a	=	9	pcu/hr
q b-c	=	**14**	pcu/hr

Geometric factors:

D	=	0.8659
E	=	0.8899
F	=	0.8647
Y	=	0.7827

The capacity of movement:

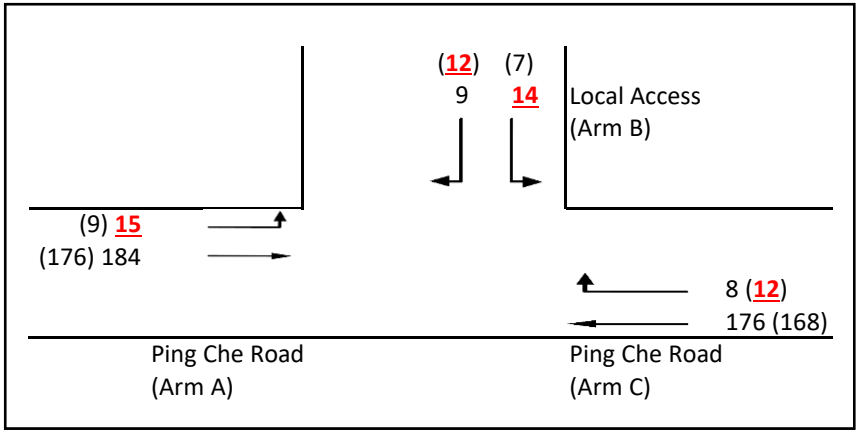
Q b-a	=	465.9127
Q b-c	=	614.8163
Q c-b	=	595.1523
Q b-ac	=	465.9127

Total flow = 406 pcu/hr

Comparison of design flow to capacity:

DFC b-a	=	0.0193
DFC b-c	=	0.0228
DFC c-b	=	0.0134
DFC b-ac (share lane)	=	0.0494

Critical DFC = 0.05



W	=	Major Road Width
W cr	=	Central Reserve Width
W b-a	=	Lane width available to vehicle waiting in stream b-a
W b-c	=	Lane width available to vehicle waiting in stream b-c
W c-b	=	Lane width available to vehicle waiting in stream c-b
Vl b-a	=	Visibility to the left for vehicles waiting in steam b-a
Vr b-a	=	Visibility to the right for vehicles waiting in steam b-a
Vr b-c	=	Visibility to the right for vehicles waiting in steam b-c
Vr c-b	=	Visibility to the right for vehicles waiting in steam c-b

D	=	Stream-specific B-A
E	=	Stream-specific B-C
F	=	Stream-specific C-B
Y	=	(1-0.0345W)

Proposed Temporary Medium Goods Vehicle and Container Tractor/Trailer Park with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lots 9 S.A (Part), 9 S.B (Part), 10 S.A, 10 S.B (Part) and 11 (Part) in D.D. 84, Ta Kwu Ling, New Territories
S.16 Planning Application No. A/NE-TKL/755

Priority Junction Calculation
2024 PM Peak (with the proposed development)

Geomatric details:

Major Road (Arm A)

W	=	6.3	metres
W cr	=	0	metres
q a-b	=	9	pcu/hr
q a-c	=	176	pcu/hr

Major Road (Arm C)

W c-b	=	3.1	metres
Vr c-b	=	22	metres
q c-a	=	168	pcu/hr
q c-b	=	**12**	pcu/hr

Minor Road (Arm B)

W b-a	=	3	metres
W b-c	=	3	metres
Vl b-a	=	105	metres
Vr b-a	=	62	metres
Vr b-c	=	62	metres
q b-a	=	**12**	pcu/hr
q b-c	=	7	pcu/hr

Geometric factors:

D	=	0.8659
E	=	0.8899
F	=	0.8647
Y	=	0.7827

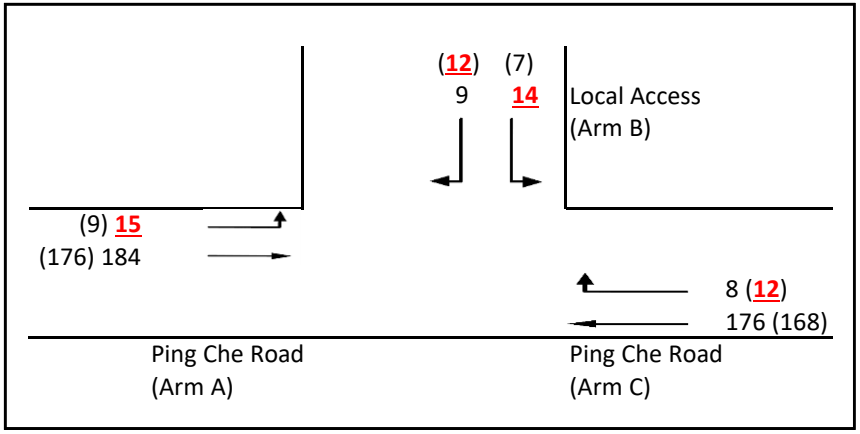
The capacity of movement:

Q b-a	=	468.3035	
Q b-c	=	617.4462	
Q c-b	=	598.6009	
Q b-ac	=	468.3035	
Total flow	=	384	pcu/hr

Comparison of design flow to capacity:

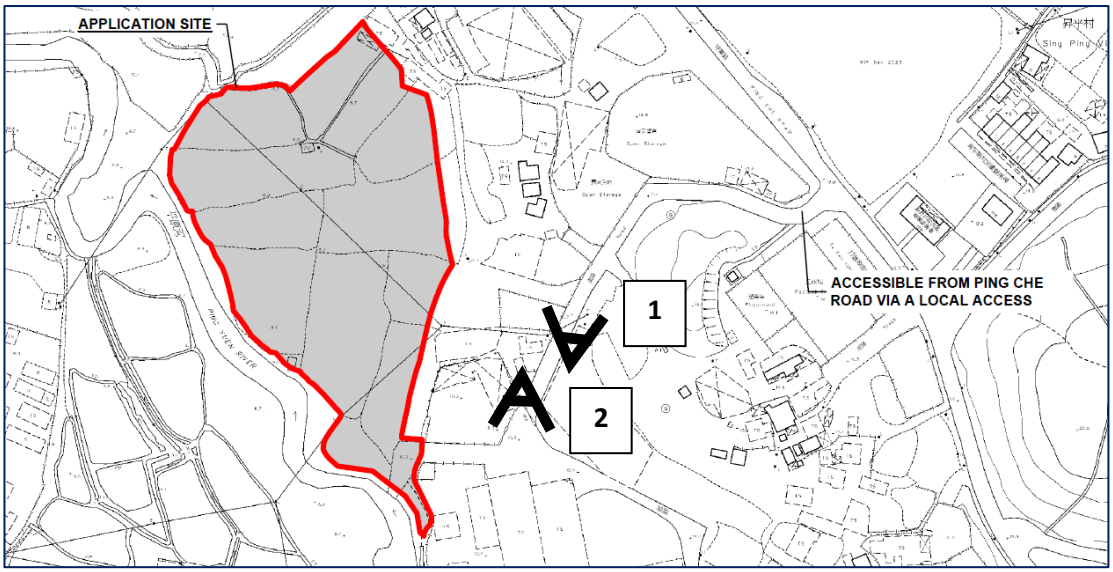
DFC b-a	=	0.0256
DFC b-c	=	0.0113
DFC c-b	=	0.0200
DFC b-ac (share lane)	=	0.0406

Critical DFC = 0.04



W	=	Major Road Width
W cr	=	Central Reserve Width
W b-a	=	Lane width available to vehicle waiting in stream b-a
W b-c	=	Lane width available to vehicle waiting in stream b-c
W c-b	=	Lane width available to vehicle waiting in stream c-b
Vl b-a	=	Visibility to the left for vehicles waiting in steam b-a
Vr b-a	=	Visibility to the right for vehicles waiting in steam b-a
Vr b-c	=	Visibility to the right for vehicles waiting in steam b-c
Vr c-b	=	Visibility to the right for vehicles waiting in steam c-b

D	=	Stream-specific B-A
E	=	Stream-specific B-C
F	=	Stream-specific C-B
Y	=	(1-0.0345W)

Annex V – Passing Areas at the Local Access

(i) Adequate passing areas are also provided along the local access connecting the Site to Ping Che Road, details are as follows: