Document Status Control Record

Application under Section 16
for Proposed Columbarium Redevelopment
at Lot 613 RP(Part), 614 & 1229 in D.D. 453
and Adjoining Government Land, Lo Wai,
Tsuen Wan

Traffic Impact Assessment Report

Originating Organisation : LLA Consultancy Limited Unit 610, 6/F, Island Place Tower, 510 King's Road, North Point, Hong Kong	Prepared by: SKL	SKL	Date: 24 October 2024
	Approved by: SLN		Date: 24 October 2024
	Revision No.: -		Date of Issue: 24 October 2024

Table of Contents

1 INTRODUCTION

1.1 Background

1.1.1 With the promulgation of the Private Columbarium Ordinance, the Applicant of Lots No. 613 RP (Part), 614 and 1229 and their adjoining Government Land in DD 453 at Lo Wai Road, Tsuen Wan (hereinafter referred to “the Site”) intends to regularize its existing “columbarium” use.

1.1.2 Lo Wai is an area with a number of existing columbaria, traffic management measures have been formulated and implemented continuously in the past and present by the Transport Department (TD) during the festival days and its shadow periods. In order not to generate additional traffic volume in Lo Wai area during the festival days and its shadow periods, the Applicant proposed to close the columbarium on these special days in the rezoning application. All visitors must make their visits only on other normal weekdays and normal weekends. The arrangement will form part of the Management Plan to be submitted to the Private Columbarium Licensing Board) (”PCLB”) for long-term monitoring and enforcement purposes.

1.1.3 Recently, the Applicant requested the study team to design the columbarium in an innovative building form for the S16 planning application. In the new design, 4,250 niches will be provided.

1.1.4 LLA Consultancy Limited has been commissioned to conduct an updated traffic impact assessment (TIA) study for the S16 planning application. This TIA report presents the latest study findings.

1.2 Objectives

1.2.1 The objectives of this study can be summarised as follows:

- to discuss the development content and recommend the transport facilities for the proposed development;
- to review the latest existing traffic conditions on normal weekdays and weekends in the vicinity of the Site;
- to assess the future traffic situation in the surrounding road network;
- to examine the possible increase in pedestrian and vehicular traffic generation/ attraction on normal weekdays and weekends when the proposed columbarium development is fully occupied; and
- to appraise the potential traffic impact on normal weekdays and weekends when the proposed columbarium development is fully occupied.

2 THE PROPOSED COLUMBARIUM DEVELOPMENT

2.1 Development Site

2.1.1 As shown in **Figure 2.1**, the Site is located on the western side of Lo Wai Road and is about 180m away from the main entrance of Yuen Yuen Institute.

2.2 Development Schedule

2.2.1 The proposed columbarium development comprises 4,250 niches and **Table 2.1** summarizes the latest key development parameters.

Table 2.1 Key Development Parameters

Development Parameters	Total
Proposed No. of Columbarium Niches	Maximum 4,250
Proposed No. of Urns	Maximum 6,375 (2,125 niches with 1 urn/niche and 2,125 niches with 2 urns/niche)
Proposed Internal Transport Facilities	
- Private Cars Parking Space (2.5m x 5.0m)	3
- Disabled Private Cars Parking Space (3.5m x 5.0m)	1
- Pick-up/Drop-off Lay-by (10m in length)	1
- Motorcycle Parking Space (1.0m x 2.4m)	3
- Light Goods Vehicle Loading/Unloading Bay (3.5m x 7.0m)	1

2.2.2 The operating hours of the proposed columbarium development are from 09:00 to 17:30 daily (i.e. Monday to Sunday). The proposed columbarium development will not open to the public on the following days:

- Ching Ming and Chung Yeung Festival Days
- Two weekends, i.e. Saturday and Sunday, before and after Ching Ming Festival Days, including public holidays in between
- Two weekends, i.e. Saturday and Sunday, before and after Chung Yeung Festival Days, including public holidays in between.

2.2.3 The proposed columbarium development will not open to the public on the following days, subjected to the prevailing traffic conditions:

- Chinese New Year Holidays
- Yu Lan Festival Day

*Note: All the closure days will be included in the Columbarium Management Plan for FEHD's consideration and approval. The actual closure days in each year will be notified to all buyers (or his/her descendants) of niches in accordance with the procedures as set out in the Columbarium Management Plan (see **Appendix A**).*

2.3 Access Arrangement

2.3.1 The Site can be reached via an access road which connects directly to Lo Wai Road. In order to cope with the future possible traffic demand on normal weekdays and weekends, it is proposed to widen the section of the access road between the Site and Lo Wai Road to a minimum of 7.3m single 2-lane carriageway with a pedestrian footpath on the southern kerbside.

2.4 Car Parking and Loading/Unloading Provisions

2.4.1 There is no car parking and loading/unloading provisions standard requirements with respect to the columbarium development under the present Hong Kong Planning Standards and Guidelines (HKPSG). The proposed internal transport facilities are hence provided solely to meet the operational needs.

2.4.2 It is proposed to provide 4 private car parking spaces. Out of the 4 private car parking spaces, 3 are 2.5m (W) x 5.0m (L) and 1 is 3.5m (W) x 5.0m (L) for people with disabilities. Additionally, 3 motorcycle parking spaces of 1.0m (W) x 2.4m (L) and 1 no. of light goods vehicle loading/unloading bay of 3.5m (W) x 7.0m (L) are also proposed to cater for the loading/unloading purposes. **Table 2.1** listed out the details of the provision.

2.4.3 The proposed columbarium will generate and attract around 110 visitors on a daily basis (details will be discussed in **Section 4.2**). For visitors arriving by private car, they must make advance booking and 1 hour free parking space will be reserved for each party. The worst case scenario will be that the 110 visitors on a daily basis are all arriving by private cars. The occupancy of each vehicle is assumed to be 3.5 persons, which implies that there will be 32 (110 / 3.5 = 31.4, say 32) private cars arriving on a daily basis and each private car will have one hour parking timeslot assigned by the management office. As a result, the provision of four parking spaces can have 32 one-hour timeslots (4 spaces x 8 one-hour timeslot between from 09:00 to 17:00 per space) available and will be adequate to serve the parking demand under the worst case scenario.

2.4.4 A pick-up/drop-off lay-by (10m in length) is provided to serve the visitors arriving by taxis and the lay-by can serve up to 40 taxis per hour (3 minutes pick-up/drop-off time required per taxi).

2.4.5 The proposed internal traffic layout is shown in **Figure 2.2**. and the swept path analysis is provided in **Figure 2.3** to **2.5**.

3 EXISTING TRAFFIC CONDITIONS

3.1 Existing Road Network

3.1.1 The major road in the vicinity of the Site is Lo Wai Road, which is a single 2-lane carriageway. Lo Wai Road connects with Yi Pei Chun Road and Sam Tung Uk Road to form a roundabout. In 2022, Lo Wai Road carried an AADT of 3,790 vehicles.

3.1.2 The access road to the Site is a short access road connecting the Site to Lo Wai Road and the traffic volume is minimal.

3.2 Existing Public Transport Facilities

3.2.1 **Table 3.1** shows the operation details of the public transport services on normal days.

Table 3.1 Existing Public Transport Services on Normal Days

Mode	Route No.	Origin-Destination	Frequency (min)
Terminus at Lo Wai Road			
Minibus	81	Tsuen Wan (Shiu Wo Street) – Lo Wai	6 – 25
En-route Stop at Sam Tung Uk Road			
Bus	32	Tsuen Wan (Shek Wai Kok) – Olympic Station	20 – 30
	36(3)	Tsuen Wan West Station – Lei Muk Shue	12 – 25
	32M(3)	Kwai Fong Station – Cheung Shan	15 – 25
	43X	Tsuen Wan West Station – Yiu On	9 – 20
Minibus	82	Tsuen Wan (Shiu Wo Street) – Shing Mun Reservoir	8 – 25
	82M	Tsuen Wan (Shiu Wo Street) – Cheung Shan Estate	10 – 30
	94	Shek Wai Kok – Kwai Shing Circuit	7 – 30
	312	Lei Muk Shue Estate Public Transport Interchange –Tsing Yi Station	5 – 9

Note: (1) Circular Route

3.3 Traffic Count Surveys

3.3.1 In order to appraise the existing traffic conditions on normal weekdays and weekends, classified turning movement count surveys were conducted on Sunday, 22 September 2024 and Wednesday, 25 September 2024 from 08:30 to 18:30. It has been observed that the peak hours were 08:30 – 09:30 (AM), 10:45 – 11:45 (Noon) and 17:30 – 18:30 (PM) on weekday. The corresponding peak hours on weekend were 08:30 – 09:30 (AM), 10:15 – 11:15 (Noon) and 17:30 – 18:30 (PM). The traffic flows are shown diagrammatically in **Figures 3.1 – 3.2**.

3.4 Existing Junction Capacity Assessment

3.4.1.1 Based on the observed peak hour traffic flows, the performances of the concerned junctions were assessed. The assessment results are summarized and presented in **Table 3.3** and the detailed calculation sheets are presented in **Appendix A**.

Table 3.3 Junction Capacity Assessments

No.	Junction Location	Junction Type	DFC(1)					
			Weekday Peak Hour			Weekend Peak Hour		
			AM	Noon	PM	AM	Noon	PM
J1	Lo Wai Road/Access Road to the Site	Priority	0.01	0.00	0.00	0.00	0.00	0.00
J2	Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road	Roundabout	0.39	0.29	0.34	0.31	0.31	0.34

Notes: (1) DFC = design flow to capacity ratio for priority junction and roundabout.

3.4.2 It can be seen from **Table 3.3** that both concerned junctions are operating satisfactorily during the peak hours on normal weekday and weekend.

3.5 Existing Link Capacity Assessment

3.5.1 The Volume to Capacity (V/C) Ratios of Lo Wai Road, Yi Pei Chun Road and Sam Tung Uk Road were assessed and the results are presented in **Table 3.4**.

Table 3.4 Link Capacity Assessments

No.	Road	Capacity	Traffic Flow in veh/hr [V/C Ratio]					
			Weekday Peak Hour			Weekend Peak Hour		
			AM	Noon	PM	AM	Noon	PM
L1	**Upper Section –** Lo Wai Road between Hilltop Road and Lo Wai Lane	1,400 veh/hr(1)	197 [0.14]	149 [0.11]	171 [0.12]	657 [0.47]	653 [0.47]	707 [0.51]
L2	**Lower Section –** Lo Wai Road between Hilltop Road and Yi Pei Chun Road	1,700 veh/hr(2)	362 [0.21]	271 [0.16]	314 [0.18]	975 [0.57]	969 [0.57]	1,050 [0.62]
L3	Yi Pei Chun Road eastbound	1,900 veh/hr(3)	439 [0.23]	329 [0.17]	380 [0.20]	568 [0.30]	564 [0.30]	611 [0.32]
L4	Yi Pei Chun Road westbound	950 veh/hr(3)	461 [0.49]	346 [0.36]	400 [0.42]	478 [0.50]	475 [0.50]	516 [0.54]
L5	Sam Tung Uk Road eastbound	1,900 veh/hr(3)	295 [0.16]	221 [0.12]	256 [0.13]	435 [0.23]	432 [0.23]	467 [0.25]
L6	Sam Tung Uk Road westbound	950 veh/hr(3)	342 [0.36]	256 [0.27]	297 [0.31]	408 [0.43]	406 [0.43]	440 [0.46]

Notes: (1) The design two-way flow for district distributor (6.75m) as stipulated in Volume 2 of TPDM is adopted.
(2) The design two-way flow for district distributor (7.3m) as stipulated in Volume 2 of TPDM is adopted.
(3) The design one-way flow for undivided carriageway as stipulated in Volume 2 of TPDM is adopted.

3.5.2 As shown in **Table 3.4**, all road links are operating satisfactorily with V/C ratios under 0.85. As a result, the overall traffic condition, as indicated by the junction and link capacity assessments result, is satisfactory.

4 TRAFFIC IMPACT ASSESSMENT

4.1 Future Traffic Growth

Design Year

4.1.1 The tentative year for the proposed columbarium development to be in operation is 2026. So, 2029, i.e. 3 years after the commencement in operation, will be taken as the design year in this study.

Historical Growth from the Annual Traffic Census (ATC) Data

4.1.2 In order to establish the traffic growth rate in the vicinity of the study area, reference was made to the ATC Reports published by TD, reporting on the annual average daily traffic (AADT) flows at counting stations in the territory. The details of the counting stations and the recorded counts in vicinity are shown in **Table 4.1**.

Table 4.1 Annual Traffic Census Data

Stn. No.	Road	AADT(1)						Average Growth 2017 – 2022
		2017	2018	2019	2020	2021	2022	
5851	Lo Wai Road	4,050	4,120 (1.7%)	4,100 (-0.5%)	4,060 (-1%)	4,620 (13.8%)	3,790 (-18%)	-1.3%

Note: (1) Figures in bracket indicate the percentage change between successive years.

4.1.3 From the record data, it was found that the traffic volume at the vicinity area has been fluctuating since 2017 with an average negative growth rate of 1.3%.

Future Territorial Population and Employment Data Matrix (TPEDM)

4.1.4 Reference was also made to the 2019–based TPEDM published by Planning Department. The population and employment data of year 2019 and 2031 in Tsuen Wan District are summarized in **Table 4.2**.

Table 4.2 Population and Employment Data in Tsuen Wan District

Year	2019	2026	2031
Population	293,700	279,450	249,400
Employment	165,000	166,100	160,650
Total	458,700	445,550	410,050
Average Growth %		-0.4% (2019 to 2026)	-1.6% (2026 to 2031)

4.1.5 As shown in **Table 4.2**, the average annual growth rates for the total of population and employment are -0.4% and -1.6% during 2019 to 2026 and 2026 to 2031, respectively.

4.1.6 Although both the annual growth rates in the historical ATC data and the TPEDM projections are negative, a nominal annual growth rate of +2.0% is still adopted for the projecting the 2019 observed traffic flows to the 2029 reference traffic flows in the assessment with a conservative approach.

Future Columbarium Developments in Lo Wai Area

4.1.7 It is noted that the major developments in Lo Wai will be the extension of Yuen Yuen Institute with an additional of 20,000 niches and regularization of Western Monastery (Planning Application no. A/TW/530) with an additional 7,500 niches to be occupied. There is no exact information on when the proposed Yuen Yuen Institute Extension will be fully completed. It is anticipated that most of the vehicular and pedestrian traffic generated and attracted by these niches (when occupied) will be on the festival days and their shadow periods which will not overlap with the traffic generated and attracted by the proposed columbarium development.

4.1.8 It is also noted that there are various existing columbarium developments in Lo Wai, which they have submitted applications to regularize the columbarium use. In these developments, there are certain amount of niches were being sold but not occupied. In the following assessment, an assumption of a total of 20,000 niches (sold but not occupied) will be considered. Similar to the new niches in the extension of Yuen Yuen Institute, the vehicular and pedestrian traffic generated and attracted by these niches (when occupied) will be on the festival days and their shadow periods only.

4.1.9 Besides the traffic generated on the festival days and their shadow periods, the buyers and his/her relatives will attend a simple ceremony to place their ancestor's ashes in the above niches on a selected date throughout the year and therefore will generate additional trips on normal weekdays and normal weekends. It is assumed that a ten-years time is required to fully occupied the 47,500 unoccupied/new niches, i.e. 4,750 niches per year. With approximately 80 suitable days for holding such ceremony, there will be 60 niches to be occupied on each day. On average, 6 to 7 niches will be occupied per hour and this will generate a two-way traffic of 24 to 28 vehicles/hour (4 vehicle trips per niche). To be conservative, a nominal value of 60 vehicle trips (two-way) are assumed to cater for the traffic generated for attending the ceremony to place the ancestor's ashes for the new 47,500 niches in the Lo Wai area.

Approved Development in Lo Wai Area

4.1.10 A new rezoning application with 458 residential units in the vicinity of the proposed columbarium development, Y/TW/13, was approved by the Town Planning Board in 2020. To estimate the future traffic flows generated and attracted of the newly approved development, updated information has been obtained from the statutory planning portal of Town Planning Board.

4.1.11 Based on the latest set of traffic generation and attraction rates documented in Chapter 3 "Transport Considerations of Town Plans" of the Transport Planning and Design Manual (TPDM), the traffic generated by the approved application were estimated as shown in **Table 4.3** and are taken into account in the following assessment.

Table 4.3 Traffic Generations by the Planned and Approved Development

Development	Use / Content	AM Peak Hour		Noon Peak Hour		PM Peak Hour	
		Gen.	Att.	Gen. (2)	Att. (2)	Gen.	Att.
TPDM Mean Trip Rate Private Housing: Medium-Density / R(B) – 120m^2 (1)	pcu/hr/flat	0.2246	0.1157	0.2246	0.1468	0.1068	0.1468
Traffic Generation of Y/TW/13	458 units	103	53	103	68	49	68

Note: (1) Mean trip rate of Private Housing: Medium-Density / R(B) with average flat size of 120 m^2 is adopted.
(2) Reference was made to the AM and PM trip rates, to be conservative, the larger rates were adopted.

4.2 Pedestrian Traffic Generation of the Proposed Columbarium Development

4.2.1 Visitors of the proposed columbarium development are expected to arrive throughout the year, except on the festival days and their shadow periods as mentioned in **Section 2.2.2.** So, no traffic will be generated or attracted by the proposed columbarium development on the festival days and their shadow periods.

4.2.2 According to the 2019 data, a total of 790 visitors were recorded to visit the 103 occupied niches, equivalent to not more than 8 persons per niche. Normally, for a niche that can placed two urns or more, the number of visitors will be mainly comprised of the same family group members, except with minimal additional visitors from other relatives/friends for few individuals. To cater for this effect, a 10% increase of the trip rate, 9 persons per niche (8 x (1+10%) = 8.8, say 9) , will be adopted for the niches with two urns.

4.2.3 So, the proposed columbarium development, when fully occupied, will generate 36,125 person trips (8 x 2,125 + 9 x 2,125) each year. Excluding the Ching Ming and Chung Yeung Festival Days and their shadow periods (the shadow period will be subjected to the prevailing traffic condition every year) that the proposed columbarium development will be closed as well as other days that will not attract visitors (e.g. new year, lunar new year, days with extreme bad weather), 330 days each year is assumed to have visitors. It is estimated that on average, 110 visitors, i.e. 36,125/330 = 110 will be generated and attracted by proposed columbarium development on a daily basis.

4.3 Vehicular Traffic Generation of the Proposed Columbarium Development

4.3.1 In the following assessment, it is assumed that half of the visitors, i.e. 55 visitors, will visit the proposed columbarium development before noon at 11:00, which is the peak of the day. Although these visitors can take the green public minibus route no. 81 to travel from Tsuen Wan (Shiu Wo Street) to Lo Wai for the proposed columbarium development, all the visitors is assigned to take taxis (2 persons per taxi) on a conservative approach. Therefore, a total of 28 pcu/hour (one-way) will be attracted to the proposed columbarium development during the noon peak hour and it is also included in the AM and PM peak for conservative assessment purpose. The traffic generation/attraction pattern is shown in **Figure 4.1**.

4.4 2029 Reference and Design Flows

4.4.1 The 2029 Reference Flows (**Figures 4.2 and 4.3**), i.e. the traffic flows in the local road network, are estimated based on the following equation.

2029 Reference Flows = 2024 surveyed peak hour traffic flows on normal weekday/weekend x $(1 + 2\%)^5$ + traffic for attending ceremony for the new 47,500 niches in the area + traffic generated by the approved development

4.4.2 The 2029 Design Flows (**Figures 4.4 and 4.5**), i.e. the traffic flows in the local road network plus the proposed development traffic are estimated based on the following equation:

2029 Design Flows = 2029 Reference Flows + traffic generated by the proposed columbarium development

4.5 Future Junction Capacity Assessment

4.5.1 Junction capacity assessments were carried out for the design year 2029 and the results are shown in **Table 4.4** and the detailed calculation sheets are presented in **Appendix B**.

Table 4.4 Junction Capacity Assessments – Year 2029

No.	Junction Location	Junction Type	2029 Reference			2029 Design		
			AM	Noon	PM	AM	Noon	PM
Weekday Peak Hour								
J1	Lo Wai Road/Access Road to the Site	Priority	0.01	0.01	0.01	0.07	0.06	0.06
J2	Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road	Roundabout	0.44	0.33	0.38	0.44	0.33	0.38
Weekend Peak Hour								
J1	Lo Wai Road/Access Road to the Site (2)	Priority	0.01	0.01	0.01	0.08	0.08	0.08
J2	Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road	Roundabout	0.44	0.43	0.43	0.45	0.45	0.45

Notes: (1) All numbers are in DFC = design flow to capacity ratio for priority junction and roundabout.
(2) Access road to the Site is widened to 7.3m.

4.5.2 As shown in **Table 4.4**, the assessment results indicated that both concerned junctions will perform satisfactorily on year 2029, with DFC values under 0.85.

4.6 Future Link Capacity Assessment

4.6.1 Link capacity assessments were carried out for the design year 2029 and the results are shown in **Table 4.5**.

Table 4.5 Link Capacity Assessments – Year 2029

No.	Road	Capacity	Reference Flows (veh/hr) [V/C Ratio]			Design Flows (veh/hr) [V/C Ratio]		
			AM	Noon	PM	AM	Noon	PM
Weekday Peak Hour								
L1	**Upper Section –** Lo Wai Road between Hilltop Road and Lo Wai Lane	1,400 veh/hr(1)	280 [0.20]	227 [0.16]	251 [0.18]	280 [0.20]	227 [0.16]	251 [0.18]
L2	**Lower Section –** Lo Wai Road between Hilltop Road and Yi Pei Chun Road	1,700 veh/hr(2)	619 [0.36]	518 [0.30]	527 [0.31]	619 [0.36]	518 [0.30]	527 [0.31]
L3	Yi Pei Chun Road eastbound	1,900 veh/hr(3)	548 [0.29]	427 [0.22]	492 [0.26]	548 [0.29]	427 [0.22]	492 [0.26]
L4	Yi Pei Chun Road westbound	950 veh/hr(3)	598 [0.63]	471 [0.50]	495 [0.52]	598 [0.63]	471 [0.50]	495 [0.52]
L5	Sam Tung Uk Road eastbound	1,900 veh/hr(3)	374 [0.20]	292 [0.15]	312 [0.16]	374 [0.20]	292 [0.15]	312 [0.16]
L6	Sam Tung Uk Road westbound	950 veh/hr(3)	401 [0.42]	306 [0.32]	358 [0.38]	401 [0.42]	306 [0.32]	358 [0.38]

No.	Road	Capacity	Reference Flows (veh/hr) [V/C Ratio]			Design Flows (veh/hr) [V/C Ratio]		
			AM	Noon	PM	AM	Noon	PM
Weekend Peak Hour								
L1	**Upper Section –** Lo Wai Road between Hilltop Road and Lo Wai Lane	1,400 veh/hr(1)	788 [0.56]	782 [0.56]	842 [0.60]	788 [0.56]	782 [0.56]	842 [0.60]
L2	**Lower Section –** Lo Wai Road between Hilltop Road and Yi Pei Chun Road	1,700 veh/hr(2)	1,295 [0.76]	1,288 [0.76]	1,338 [0.79]	1,295 [0.76]	1,288 [0.76]	1,338 [0.79]
L3	Yi Pei Chun Road eastbound	1,900 veh/hr(3)	691 [0.36]	687 [0.36]	748 [0.39]	691 [0.36]	687 [0.36]	748 [0.39]
L4	Yi Pei Chun Road westbound	950 veh/hr(3)	608 [0.64]	604 [0.64]	619 [0.65]	608 [0.64]	604 [0.64]	619 [0.65]
L5	Sam Tung Uk Road eastbound	1,900 veh/hr(3)	536 [0.28]	533 [0.28]	548 [0.29]	536 [0.28]	533 [0.28]	548 [0.29]
L6	Sam Tung Uk Road westbound	950 veh/hr(3)	472 [0.50]	470 [0.49]	513 [0.54]	472 [0.50]	470 [0.49]	513 [0.54]

Notes: (1) The design two-way flow for district distributor (6.75m) as stipulated in Volume 2 of TPDM is adopted.
(2) The design two-way flow for district distributor (7.3m) as stipulated in Volume 2 of TPDM is adopted.
(3) The design one-way flow for undivided carriageway as stipulated in Volume 2 of TPDM is adopted.

4.6.2 **Table 4.5** shows that all road links will operate with V/C ratios under 1.0, for both "With" and "Without" the proposed columbarium development, which is indicated as satisfactory as stated in Transport Planning and Design Manual ("TPDM") (see **Note 1**[1]). So, the future traffic condition is considered to be acceptable.

4.7 Sensitivity Test

4.7.1 In Chinese traditions, once the niche is occupied, the family members will visit the ancestor more frequent in the first few years and in the long run, less family members will visit. However, to be conservative, a sensitivity test should be conducted assuming the number of family members visiting each niche remain unchanged throughout years.

4.7.2 The proposed columbarium will resume the sale of 500 niches from 2026 and anticipated to be sold completely by 2035 (2026 + 4,147 unsold niches / 500 niches per year = 2026 + 9 = 2035). Having considered that ATC is historical data and TPEDM is only available up to 2031 , for long terms traffic forecast to 2035, the growth rates should be also referred to other sources.

4.7.3 Hence, reference is also made to the Hong Kong Population Projections 2022 – 2046, published by Census & Statistic Department (C&SD) in August 2023. The projected overall population of Hong Kong over the period between Year 2022 and Year 2035 are shown in **Table 4.6**.

[1] Note 1: Chapter 1.4, Volume 1 of TPDM states that "In general, a peak hour v/c ratio of 1.0 or less indicates a satisfactory level of traffic on the proposed road."

Table 4.6 Projected Population Growth in Hong Kong (2022 – 2035)

Year	HK Resident Population
2022	7,346,100
2035	7,988,900
Average Growth Rate per Annum (2022 – 2035)	**+0.65%**

4.7.4 As shown in **Table 4.6**, the average annual population growth rate from 2022 to 2035 is +0.65% per annum. The derived growth rate of +0.65% will be adopted for projecting the increase in traffic between 2031 and 2035.

4.8 2035 Reference and Design Flows

4.8.1 The 2035 Reference Flows (**Figures 4.6 and 4.7**), i.e. the traffic flows in the local road network, are estimated based on the following equation.

2035 Reference Flows = 2024 surveyed peak hour traffic flows on normal weekday/weekend x $(1 + 2\%)^7$ x $(1+0.65\%)^4$ + traffic for attending ceremony for the new 47,500 niches in the area + traffic generated by the approved development

4.8.2 The 2035 Design Flows (**Figures 4.8 and 4.9**), i.e. the traffic flows in the local road network plus the proposed development traffic are estimated based on the following equation:

2035 Design Flows = 2035 Reference Flows + Additional Traffic Generated by the Proposed Columbarium Development

4.9 2035 Junction Capacity Assessment

4.9.1 Junction capacity assessments were carried out for the 2035 reference and design scenarios and the results are shown in **Table 4.7** and the detailed calculation sheets are presented in **Appendix C**.

Table 4.7 Junction Capacity Assessments – Year 2035

No.	Junction Location	Junction Type	2035 Reference			2035 Design		
			AM	Noon	PM	AM	Noon	PM
Weekday Peak Hour								
J1	Lo Wai Road/Access Road to the Site	Priority	0.01	0.01	0.01	0.07	0.06	0.06
J2	Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road	Roundabout	0.48	0.35	0.41	0.48	0.35	0.41
Weekend Peak Hour								
J1	Lo Wai Road/Access Road to the Site (2)	Priority	0.01	0.01	0.01	0.08	0.08	0.09
J2	Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road	Roundabout	0.46	0.46	0.46	0.48	0.48	0.48

Notes: (1) All numbers are in DFC = design flow to capacity ratio for priority junction and roundabout.
(2) Access road to the Site is widened to 7.3m.

4.9.2 As shown in **Table 4.7**, the assessment results indicated that both concerned junctions will operate with capacity, with DFC values less than 0.85.

4.10 2035 Link Capacity Assessment

4.10.1 Link capacity assessments were carried out for the design year 2035 and the results are shown in **Table 4.8**.

Table 4.8 Link Capacity Assessments – Year 2035

No.	Road	Capacity	Reference Flows (veh/hr) [V/C Ratio]			Design Flows (veh/hr) [V/C Ratio]		
			AM	Noon	PM	AM	Noon	PM
Weekday Peak Hour								
L1	**Upper Section –** Lo Wai Road between Hilltop Road and Lo Wai Lane	1,400 veh/hr(1)	294 [0.21]	238 [0.17]	264 [0.19]	294 [0.21]	238 [0.17]	264 [0.19]
L2	**Lower Section –** Lo Wai Road between Hilltop Road and Yi Pei Chun Road	1,700 veh/hr(2)	645 [0.38]	538 [0.32]	550 [0.32]	645 [0.38]	538 [0.32]	550 [0.32]
L3	Yi Pei Chun Road eastbound	1,900 veh/hr(3)	581 [0.31]	452 [0.24]	519 [0.27]	581 [0.31]	452 [0.24]	519 [0.27]
L4	Yi Pei Chun Road westbound	950 veh/hr(3)	632 [0.67]	497 [0.52]	524 [0.55]	632 [0.67]	497 [0.52]	524 [0.55]
L5	Sam Tung Uk Road eastbound	1,900 veh/hr(3)	395 [0.21]	308 [0.16]	331 [0.17]	395 [0.21]	308 [0.16]	331 [0.17]
L6	Sam Tung Uk Road westbound	950 veh/hr(3)	425 [0.45]	325 [0.34]	380 [0.40]	425 [0.45]	325 [0.34]	380 [0.40]
Weekend Peak Hour								
L1	**Upper Section –** Lo Wai Road between Hilltop Road and Lo Wai Lane	1,400 veh/hr(1)	837 [0.60]	831 [0.59]	895 [0.64]	837 [0.60]	831 [0.59]	895 [0.64]
L2	**Lower Section –** Lo Wai Road between Hilltop Road and Yi Pei Chun Road	1,700 veh/hr(2)	1,366 [0.80]	1,360 [0.80]	1,417 [0.83]	1,366 [0.80]	1,360 [0.80]	1,417 [0.83]
L3	Yi Pei Chun Road eastbound	1,900 veh/hr(3)	734 [0.39]	730 [0.38]	794 [0.42]	734 [0.39]	730 [0.38]	794 [0.42]
L4	Yi Pei Chun Road westbound	950 veh/hr(3)	644 [0.68]	641 [0.67]	658 [0.69]	644 [0.68]	641 [0.67]	658 [0.69]
L5	Sam Tung Uk Road eastbound	1,900 veh/hr(3)	568 [0.30]	565 [0.30]	583 [0.31]	568 [0.30]	565 [0.30]	583 [0.31]
L6	Sam Tung Uk Road westbound	950 veh/hr(3)	502 [0.53]	500 [0.53]	546 [0.57]	502 [0.53]	500 [0.53]	546 [0.57]

Notes: (1) The design two-way flow for district distributor (6.75m) as stipulated in Volume 2 of TPDM is adopted.
(2) The design two-way flow for district distributor (7.3m) as stipulated in Volume 2 of TPDM is adopted.
(3) The design one-way flow for undivided carriageway as stipulated in Volume 2 of TPDM is adopted.

4.10.2 **Table 4.8** shows that all road links will operate with V/C ratios under 0.85, which is indicated as satisfactory as stated in Transport Planning and Design Manual ("TPDM") (see **Note 1**[2]). So, the future traffic condition is considered to be acceptable.

[2] Note 1: Chapter 1.4, Volume 1 of TPDM states that "In general, a peak hour v/c ratio of 1.0 or less indicates a satisfactory level of traffic on the proposed road."

5 OTHER MANAGEMENT MEASURES

5.1 Visit-by-Appointment Scheme

5.1.1 Visit-by-Appointment scheme will be implemented at the proposed columbarium development to control the number of visitors each day and to reserve car parking space for visitors. The relevant details provided in the Columbarium Management Plan is abstracted in **Appendix A**.

5.2 Data Collection and Review of Management Plan

5.2.1 A traffic report shall be prepared for every subsequent year, summarizing all traffic-related information, such as the number of visitors, number of niches occupied, etc. All information can be used to evaluate the operation efficiency of the traffic arrangement and assist to enhance the management of the proposed columbarium. At the same time, if necessary, the information can be provided to Hong Kong Police Force, Transport Department, and other relevant government departments for consideration. Necessary actions can be taken to improve the overall traffic arrangement.

6 SUMMARY AND CONCLUSION

6.1 Summary

6.1.1 The Applicant intends to regularize its existing "columbarium" use at the Site to provide 4,250 niches. The Site is located on the western side of Lo Wai Road and is about 180m away from the main entrance of Yuen Yuen Institute. The Site can be reached via an access road which is connected to Lo Wai Road.

6.1.2 In order not to generate additional traffic volume in Lo Wai area during festival days and its shadow periods, the Applicant proposes to close the columbarium on these special days. All visitors must make their visits only on other normal weekdays and weekends. This arrangement will form part of the Columbarium Management Plan to be submitted to the Private Columbarium Licensing Board for long-term monitoring and enforcement purposes.

6.1.3 The proposed columbarium development will provide 4 private car parking spaces including 1 for people with disabilities, 3 motorcycle parking spaces and 1 LGV loading/unloading bay. A pick-up/drop-off lay-by (10m in length) is also provided to serve the visitors arriving by taxis.

6.1.4 To appraise the existing traffic conditions on normal weekdays and weekends, classified turning movement counts were conducted on a weekday and a Sunday from 08:30 to 18:30 in September 2024. Based on the peak hour traffic flows, junction and link capacity assessments were conducted. The overall traffic conditions was found to be satisfactory.

6.1.5 Taking into consideration of the historical growth from the ATC data, the future TPEDM data and the future developments in the Lo Wai area, a nominal growth rate of 2% is adopted to project the 2029 Reference Traffic Flows ("Without" the proposed columbarium). Also, a nominal traffic of 50 vehicle trips (2-way) per hour are assumed to cater for the demand for attending ceremony for the new 47,500 niches in the Lo Wai area.

6.1.6 Visitors of the proposed columbarium development are expected to arrive throughout the year, except on the festival days and their shadow periods. It is estimated that a total of 28 pcu/hour (one-way) will be attracted to the proposed columbarium development. The 2029 Design Traffic Flows ("With" the proposed columbarium) are derived by sum up the 2029 Reference Traffic Flows and the development traffic flows.

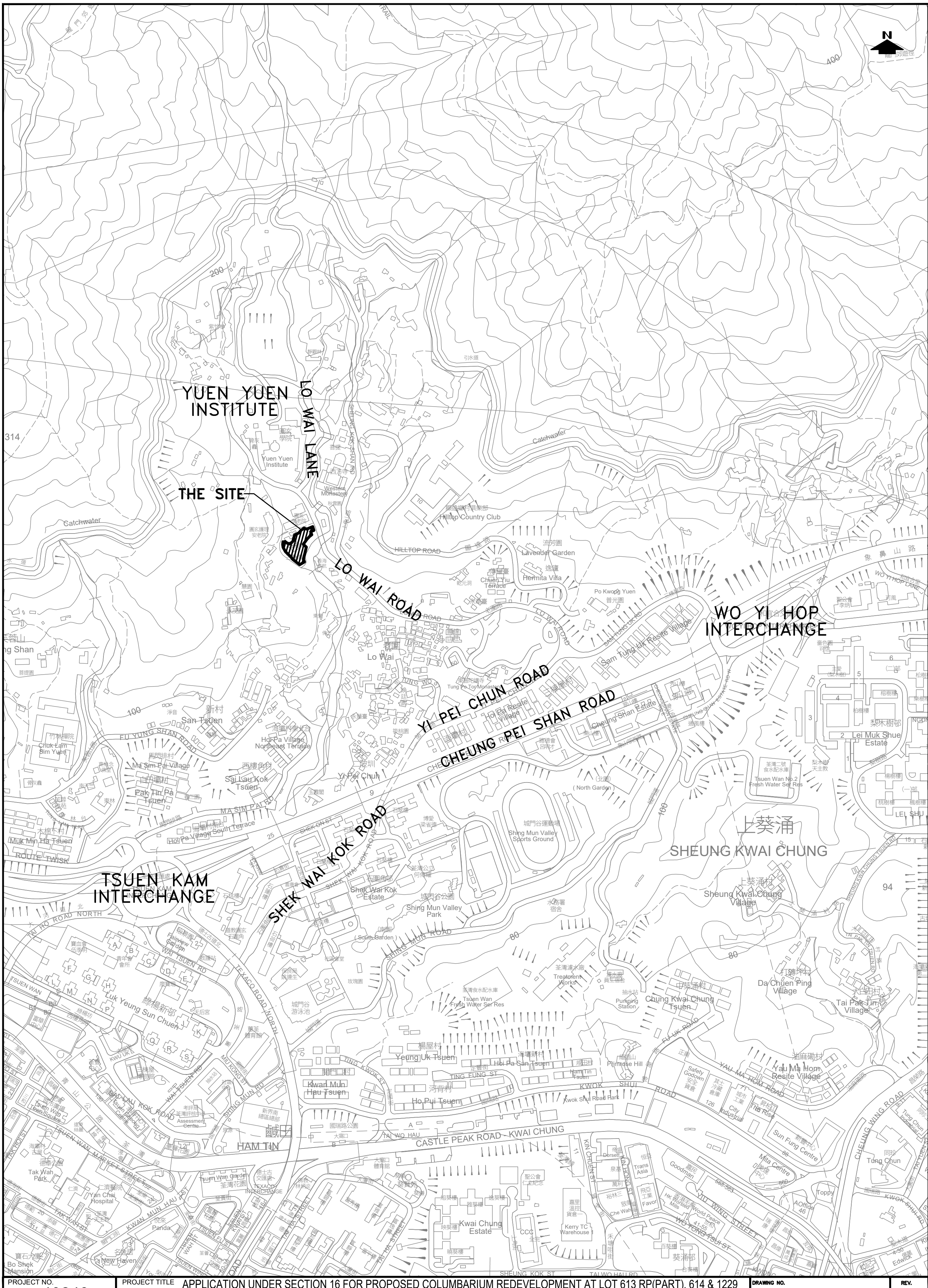
6.1.7 Based on the future traffic flows, junction and link capacity assessments were conducted for both "With" and "Without" the proposed columbarium development and the results was satisfactory. A sensitivity test is also conducted in 2035, the year which all niches are sold assuming the number of family members visiting each niche remain unchanged throughout years. The result shows that the concerned junctions and link would operate with capacity during the peak hour. Nevertheless, a traffic review should be conducted on a regular basis to enhance the special traffic arrangement for maintaining the smooth traffic condition.

6.1.8 Other management measures, i.e. visit-by-appointment scheme and regular review of management plan, would be implemented.

6.2 Conclusion

6.2.1 The findings of this traffic impact assessment indicated that the proposed columbarium development will not cause additional adverse impact on the operation of Lo Wai Road on normal weekdays and weekends, provided that the proposed columbarium development is closed for the visitors during the festival days and its shadow period. The Applicant will incorporate the same proposed traffic arrangements into the Columbarium Management Plan to PCLB for future monitoring and enforcement purposes.

6.2.2 In view of the above, the proposed columbarium development is considered acceptable in traffic viewpoint.



PROJECT NO.	PROJECT TITLE	DRAWING NO.	REV.
40243	APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	FIGURE 2.1	.

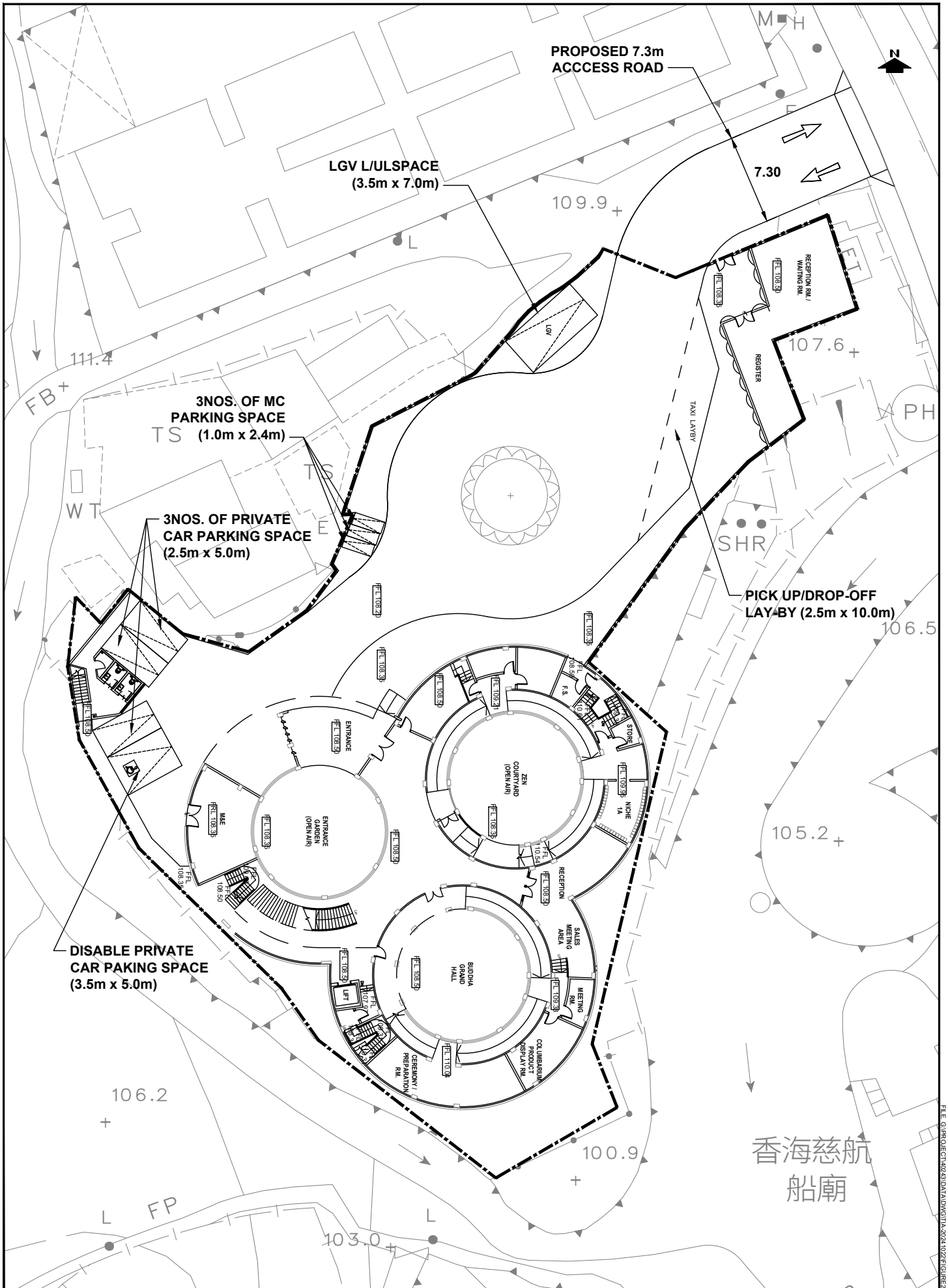
DESIGNED SKL	DATE JUL 2024
DRAWN CLL	SCALE 1:10000
CHECKED SLN	

DRAWING TITLE

LOCATION PLAN

LLA 顧問有限公司 Consultancy Limited

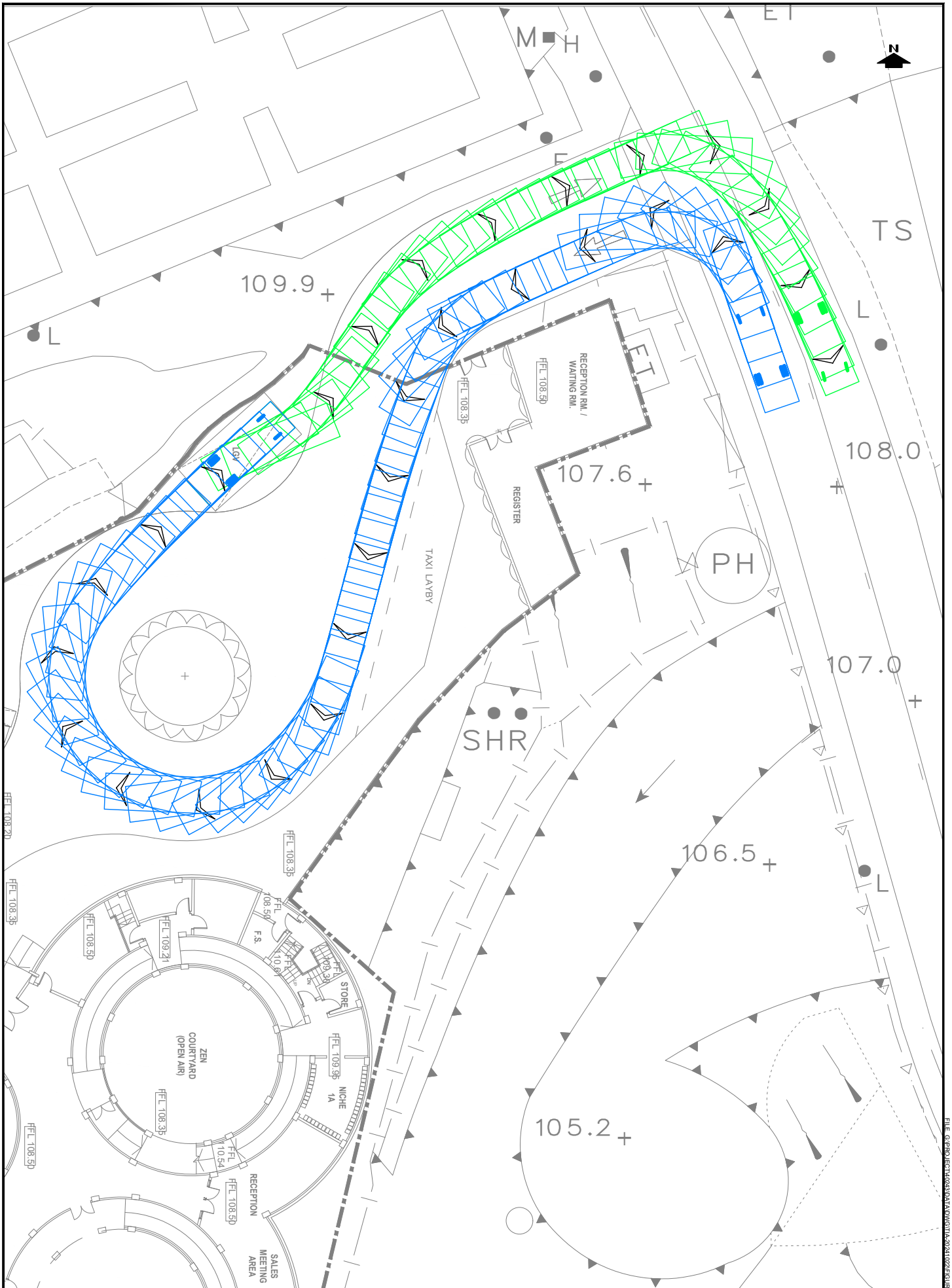
FILE. G:\PROJECT\40243\DATA\DWG\TIA-20240730\FIGURE2.1.DWG PLOT SCALE : 1 = 1



PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 2.2	REV. A
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: PROPOSED TRAFFIC LAYOUT	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE 1:400			
CHECKED SLN			

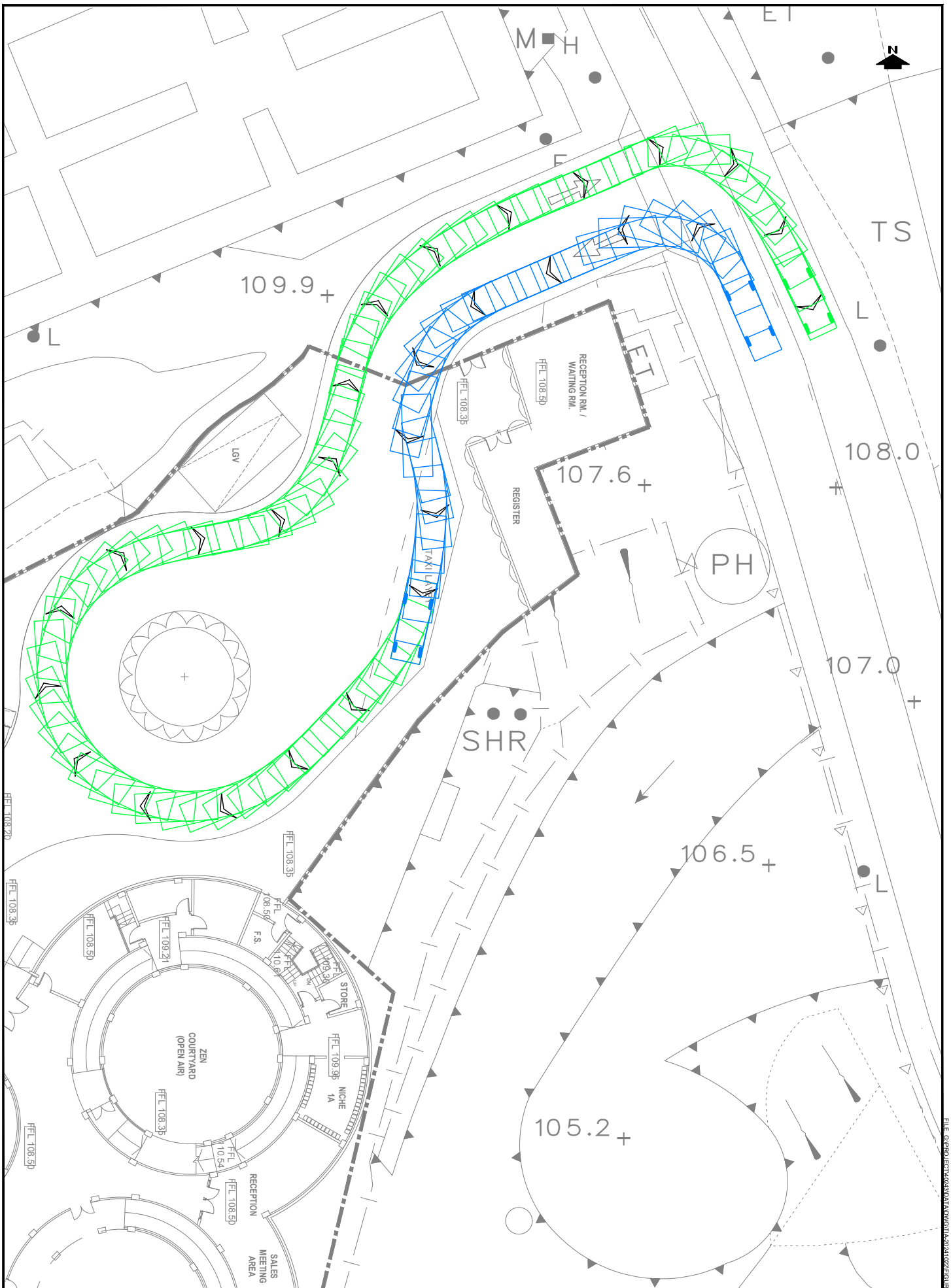
FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE2.2A.DWG PLOT SCALE : 1 = 1

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE2.2A.DWG PLOT SCALE : 1 = 1



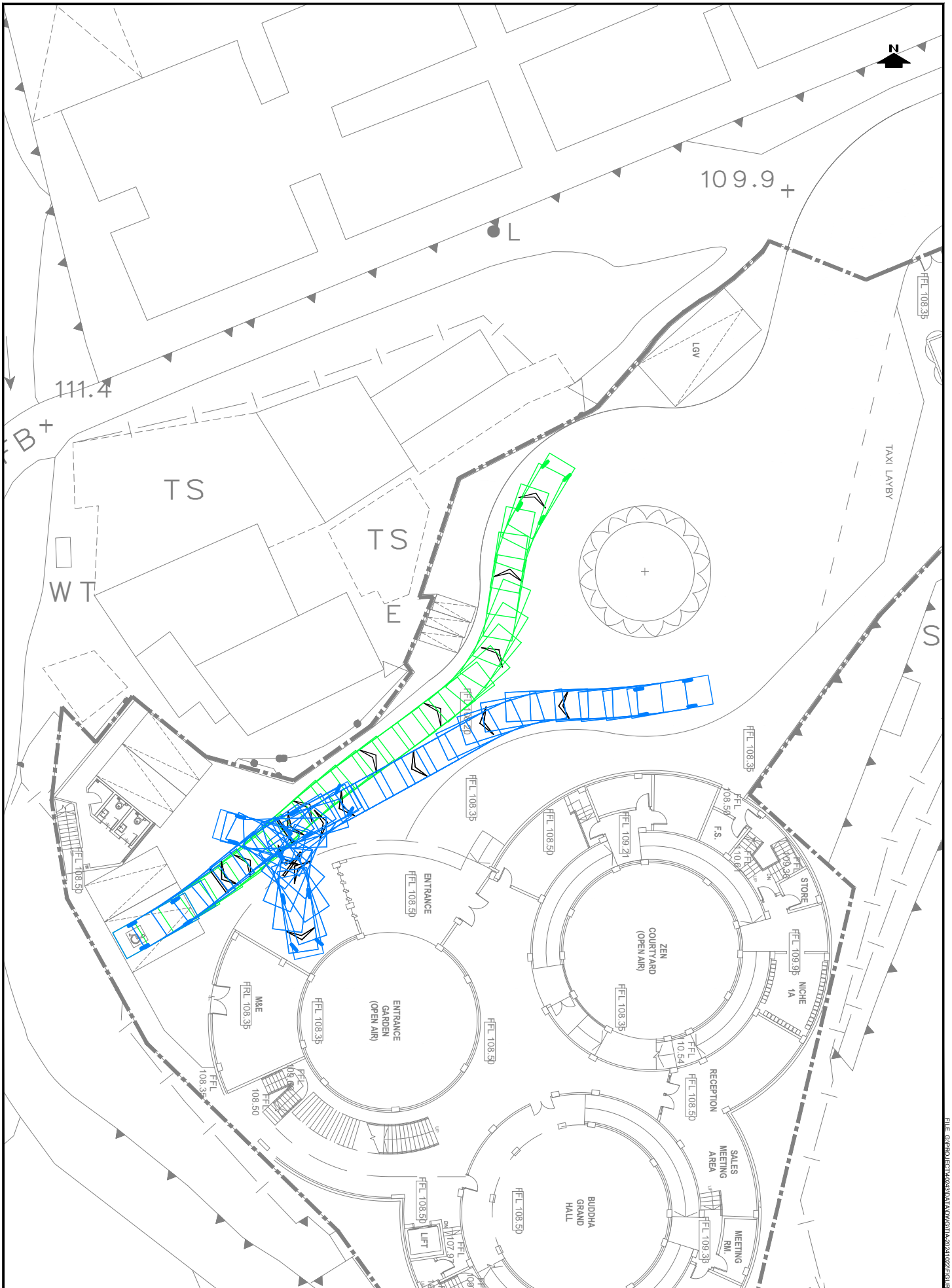
PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 2.3	REV. A
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: **SWEPT PATH ANALYSIS - LGV L/UL SPACE**		
DRAWN CLL / SCALE 1:300		LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE2.3A.DWG PLOT SCALE : 1 = 1



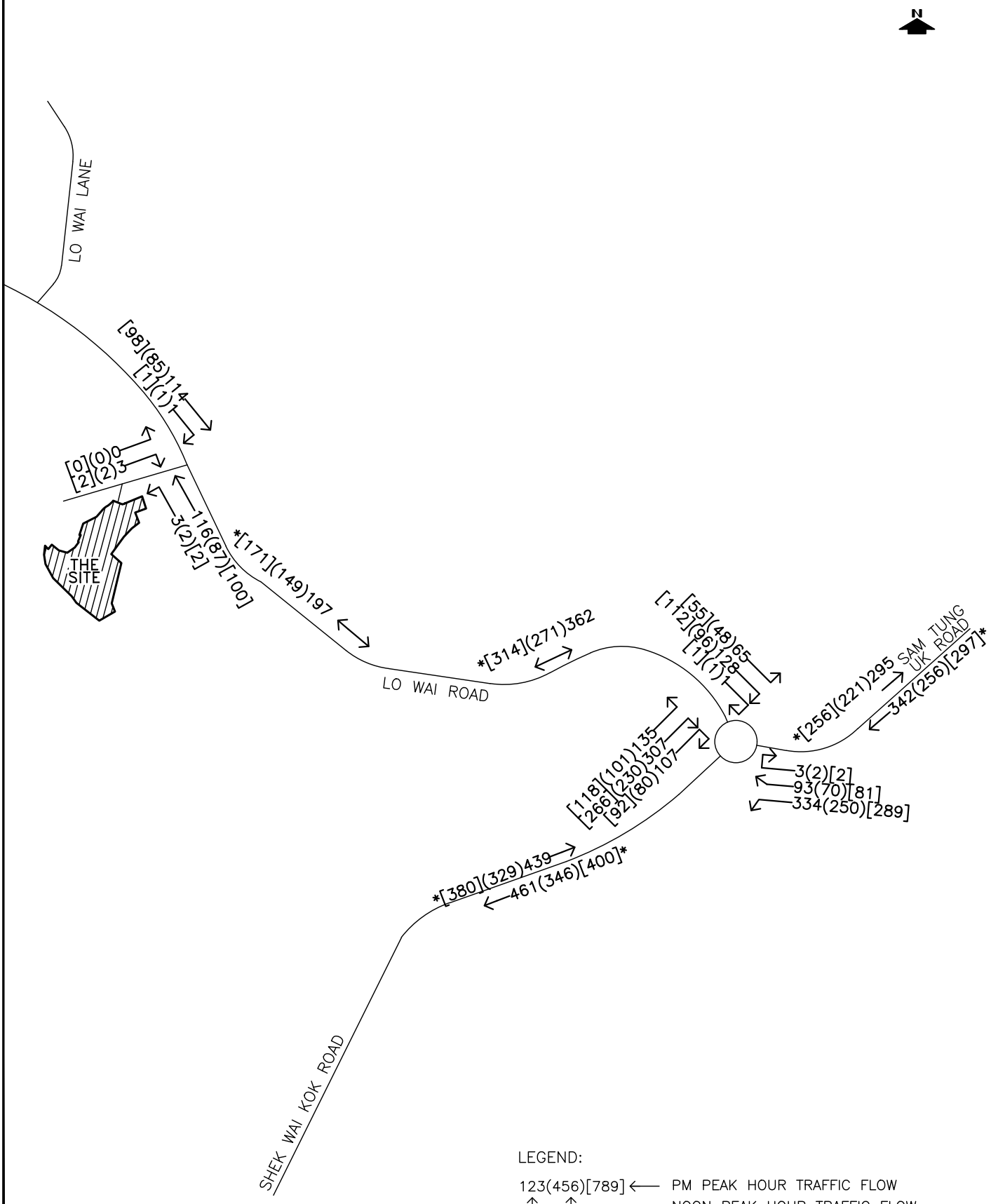
PROJECT NO. 40243	PROJECT TITLE APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 2.4	REV. A
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE **SWEPT PATH ANALYSIS - PICK-UP/DROP-OFF LAYBY**	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE 1:300			
CHECKED SLN			

FILE. G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE2.4A.DWG PLOT SCALE : 1 = 1



PROJECT NO. 40243	PROJECT TITLE APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 2.5	REV. A
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE SWEPT PATH ANALYSIS - DISABLE PRIVATE CAR PARKING SPACE	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE 1:300			
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE2.5A.DWG PLOT SCALE : 1 = 1



LEGEND:

123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW

NOON PEAK HOUR TRAFFIC FLOW

AM PEAK HOUR TRAFFIC FLOW

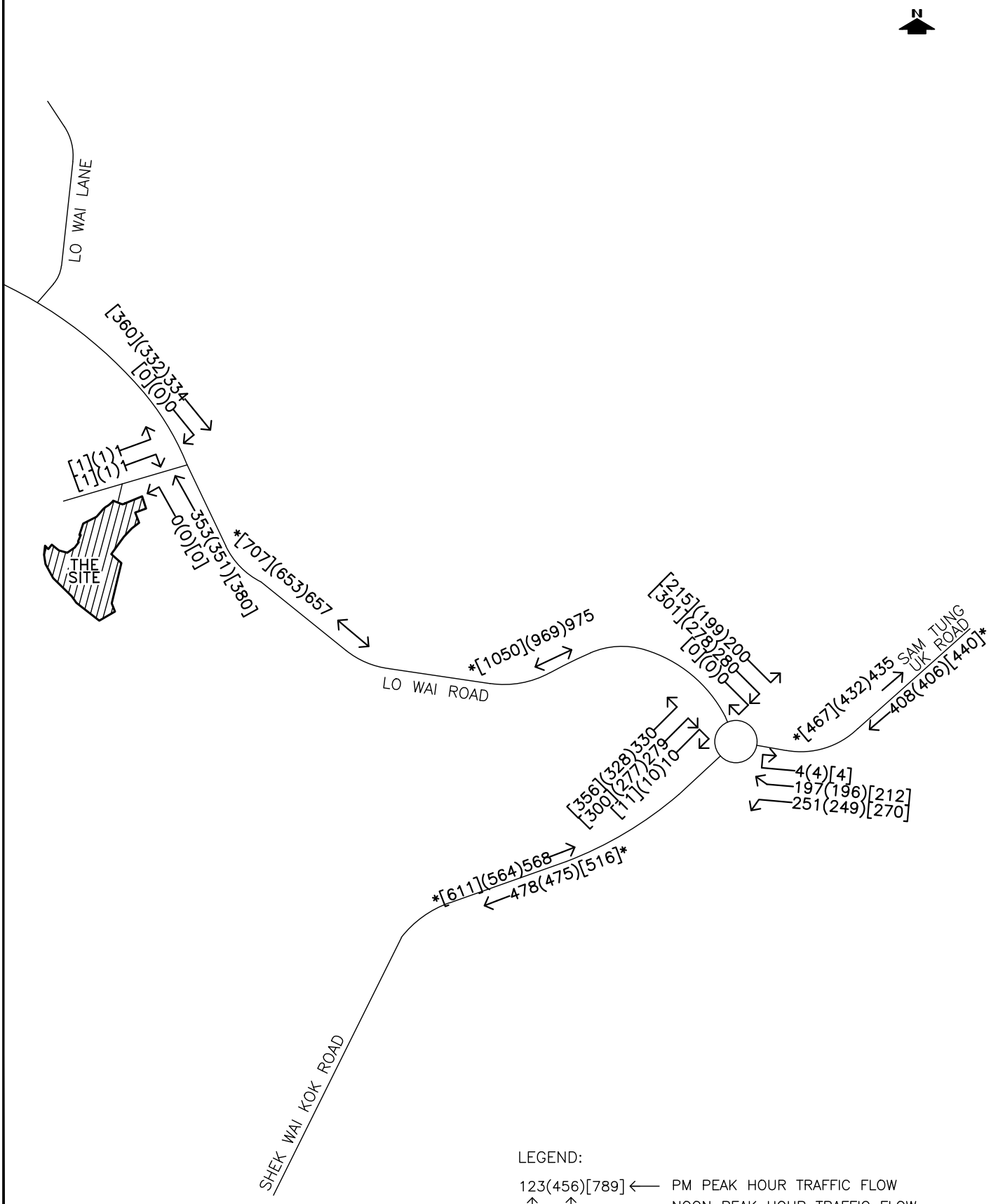
*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 3.1	REV. A
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: EXISTING TRAFFIC FLOWS ON WEDNESDAY, 25 SEPTEMBER 2024		
DRAWN CLL / SCALE N.T.S.		LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE3.1A.DWG PLOT SCALE : 1 = 1



LEGEND:

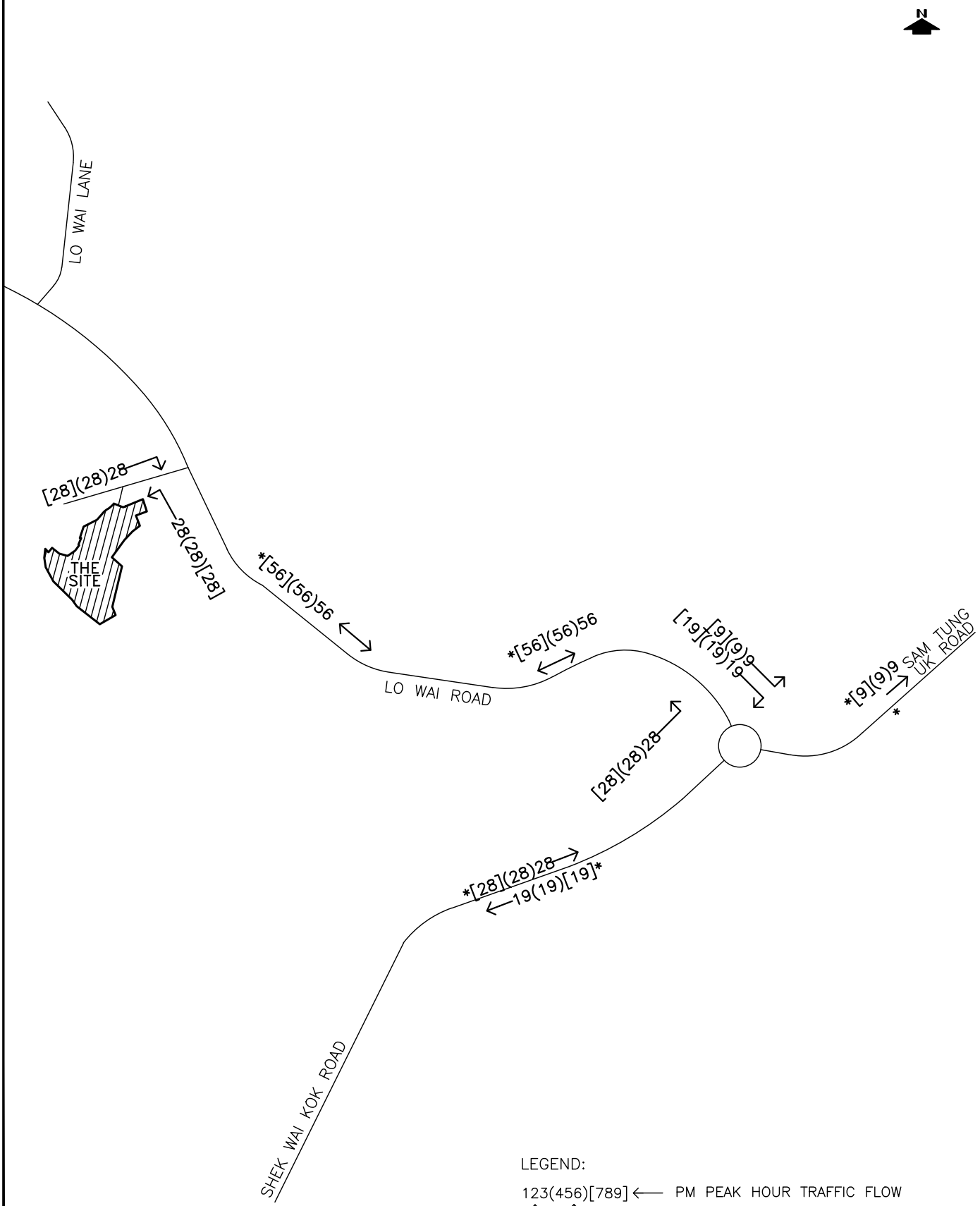
123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW
NOON PEAK HOUR TRAFFIC FLOW
AM PEAK HOUR TRAFFIC FLOW
*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 3.2	REV. A
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: EXISTING TRAFFIC FLOWS ON SUNDAY, 22 SEPTEMBER 2024	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE N.T.S.			
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE3.2A.DWG PLOT SCALE : 1 = 1



LEGEND:

123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW

NOON PEAK HOUR TRAFFIC FLOW

AM PEAK HOUR TRAFFIC FLOW

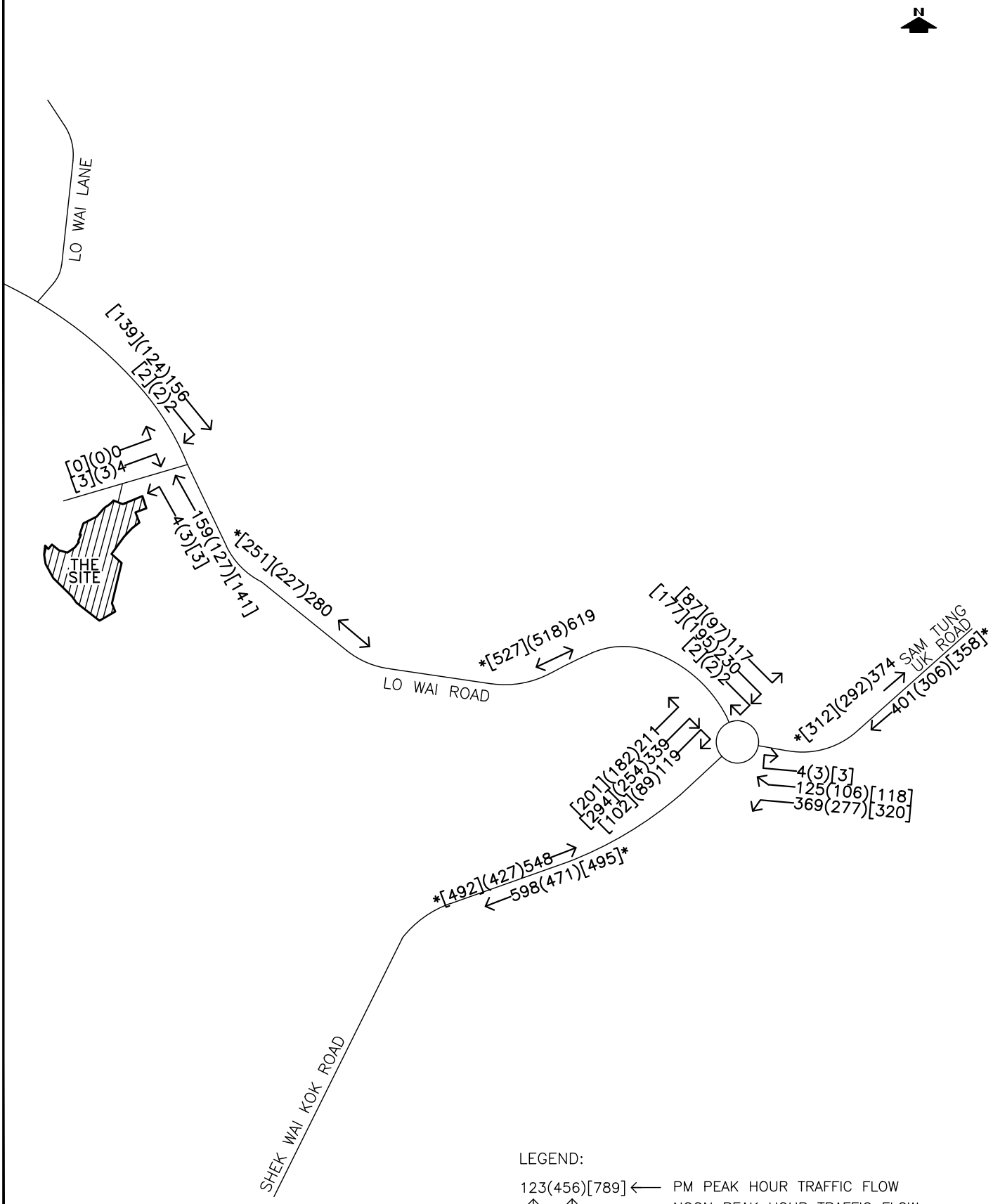
*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 4.1	REV. –
DESIGNED SKL / DATE JUL 2024	DRAWING TITLE: DEVELOPMENT TRAFFIC FLOWS	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE N.T.S.			
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20240730\FIGURE4.1.DWG PLOT SCALE : 1 = 1



LEGEND:

123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW

↑ NOON PEAK HOUR TRAFFIC FLOW

↑ AM PEAK HOUR TRAFFIC FLOW

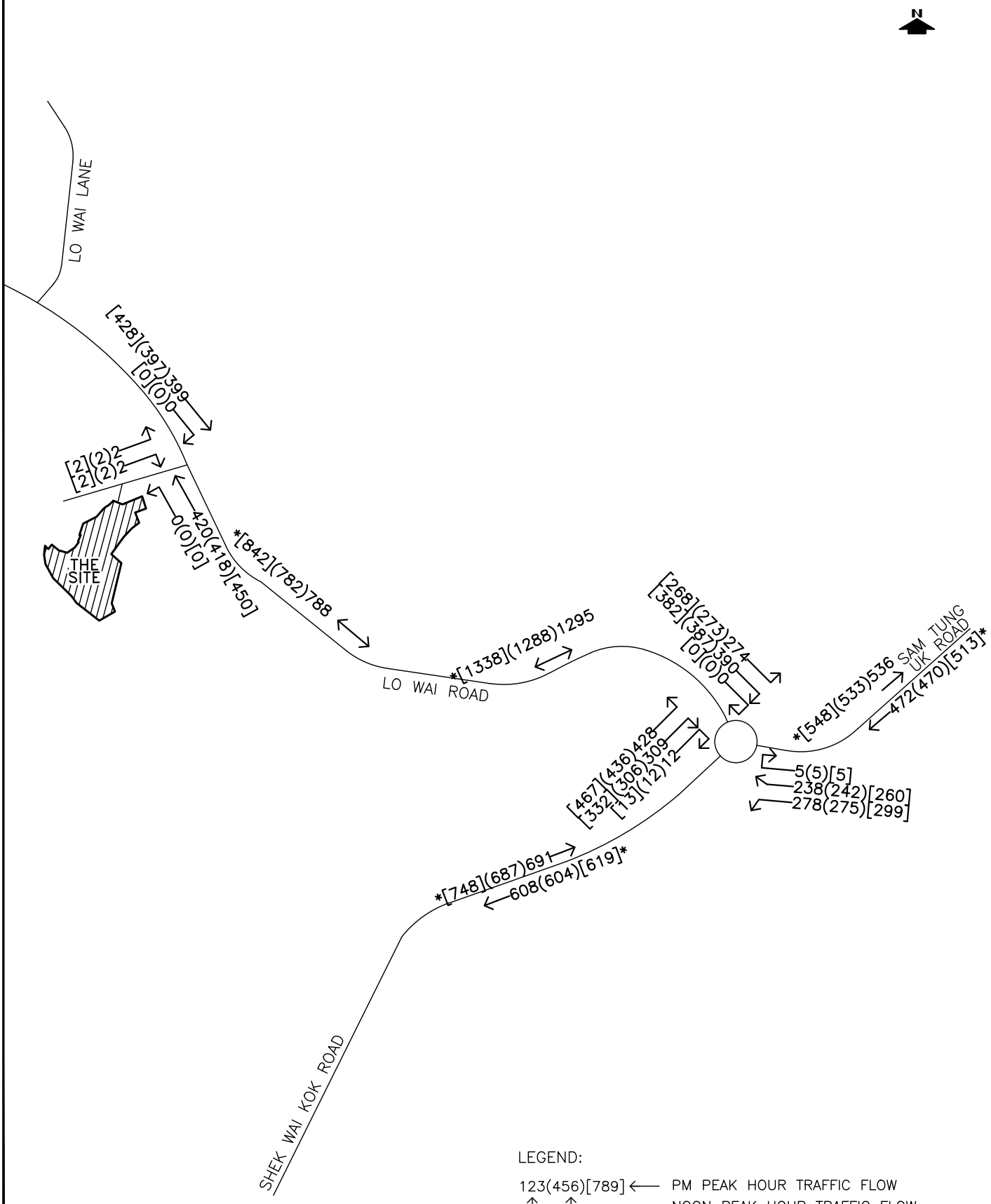
*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 4.2	REV. A
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: 2029 REFERENCE TRAFFIC FLOWS ON WEEKDAY	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE N.T.S.			
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE4.2A.DWG PLOT SCALE : 1 = 1



LEGEND:

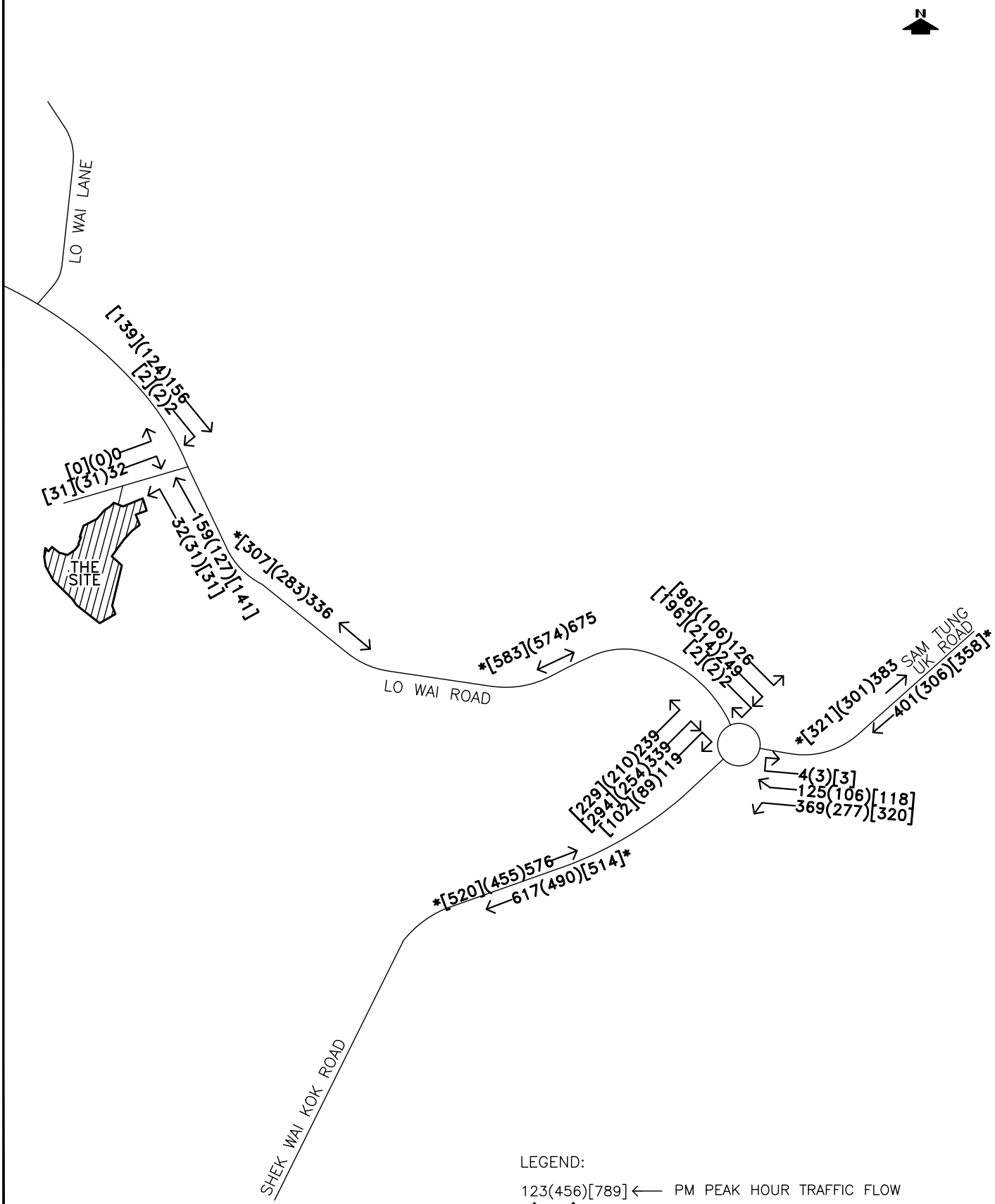
123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW
NOON PEAK HOUR TRAFFIC FLOW
AM PEAK HOUR TRAFFIC FLOW
*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 4.3	REV. A
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: 2029 REFERENCE TRAFFIC FLOWS ON WEEKEND	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE N.T.S.			
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE4.3A.DWG PLOT SCALE : 1 = 1



LEGEND:

123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW

NOON PEAK HOUR TRAFFIC FLOW

AM PEAK HOUR TRAFFIC FLOW

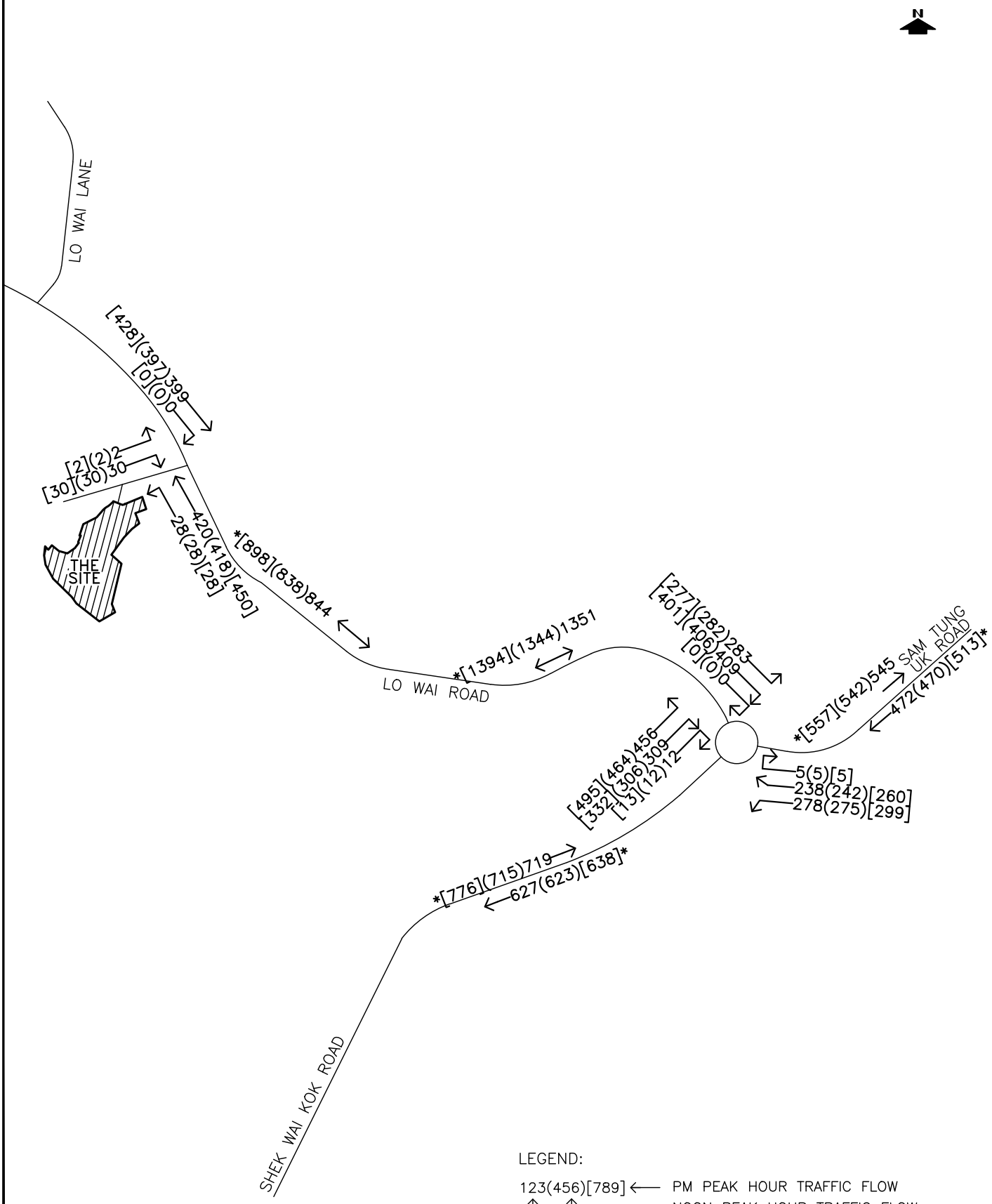
*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT		DRAWING NO. FIGURE 4.4	REV. A
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: 2029 DESIGN TRAFFIC FLOWS ON WEEKDAY		LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE N.T.S.				
CHECKED SLN				

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE4.4A.DWG PLOT SCALE : 1 = 1



LEGEND:

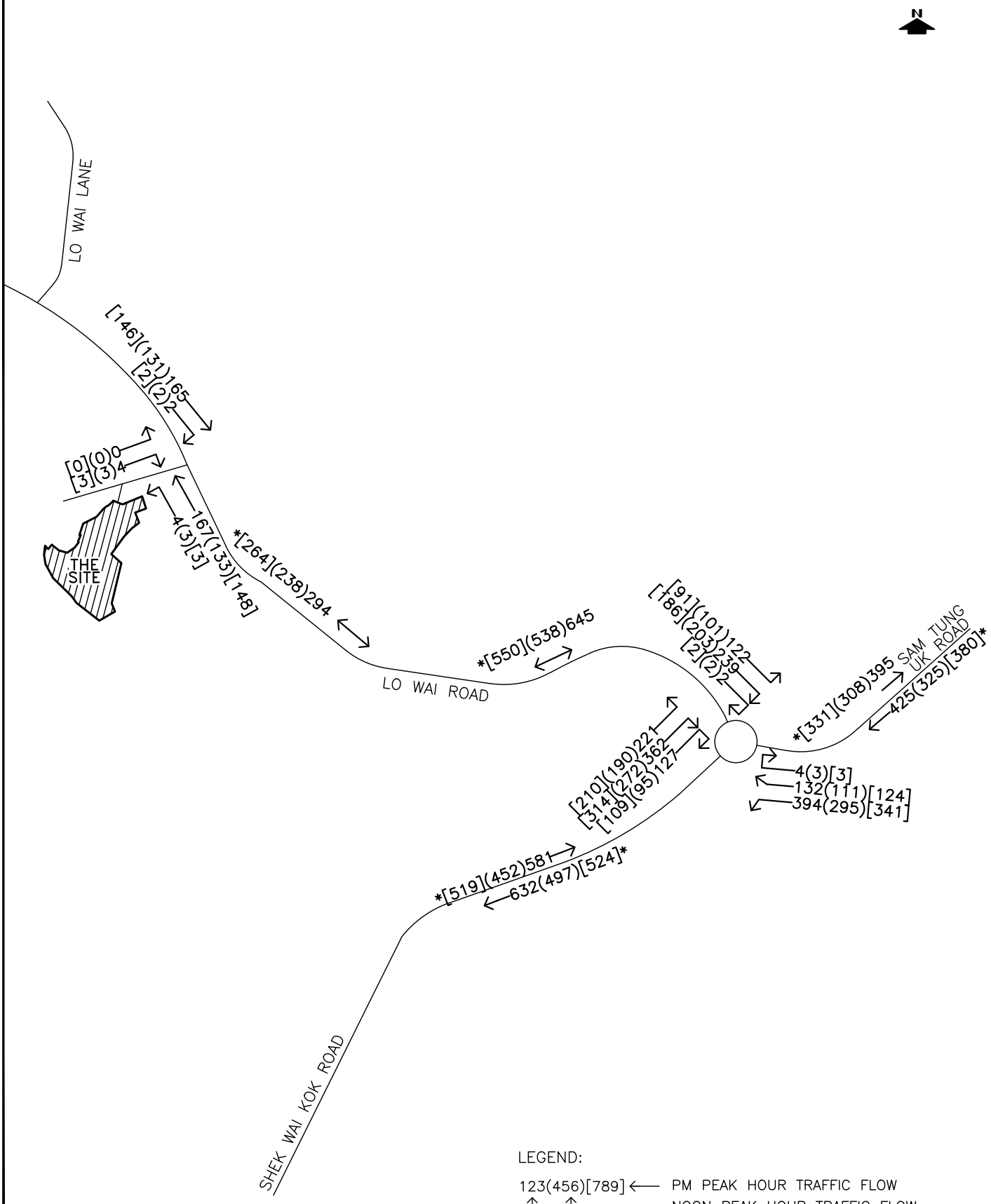
123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW
NOON PEAK HOUR TRAFFIC FLOW
AM PEAK HOUR TRAFFIC FLOW
*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT		DRAWING NO. FIGURE 4.5	REV. A
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: 2029 DESIGN TRAFFIC FLOWS ON WEEKEND			
DRAWN CLL / SCALE N.T.S.			LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN				

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE4.5A.DWG PLOT SCALE : 1 = 1



LEGEND:

123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW

NOON PEAK HOUR TRAFFIC FLOW

AM PEAK HOUR TRAFFIC FLOW

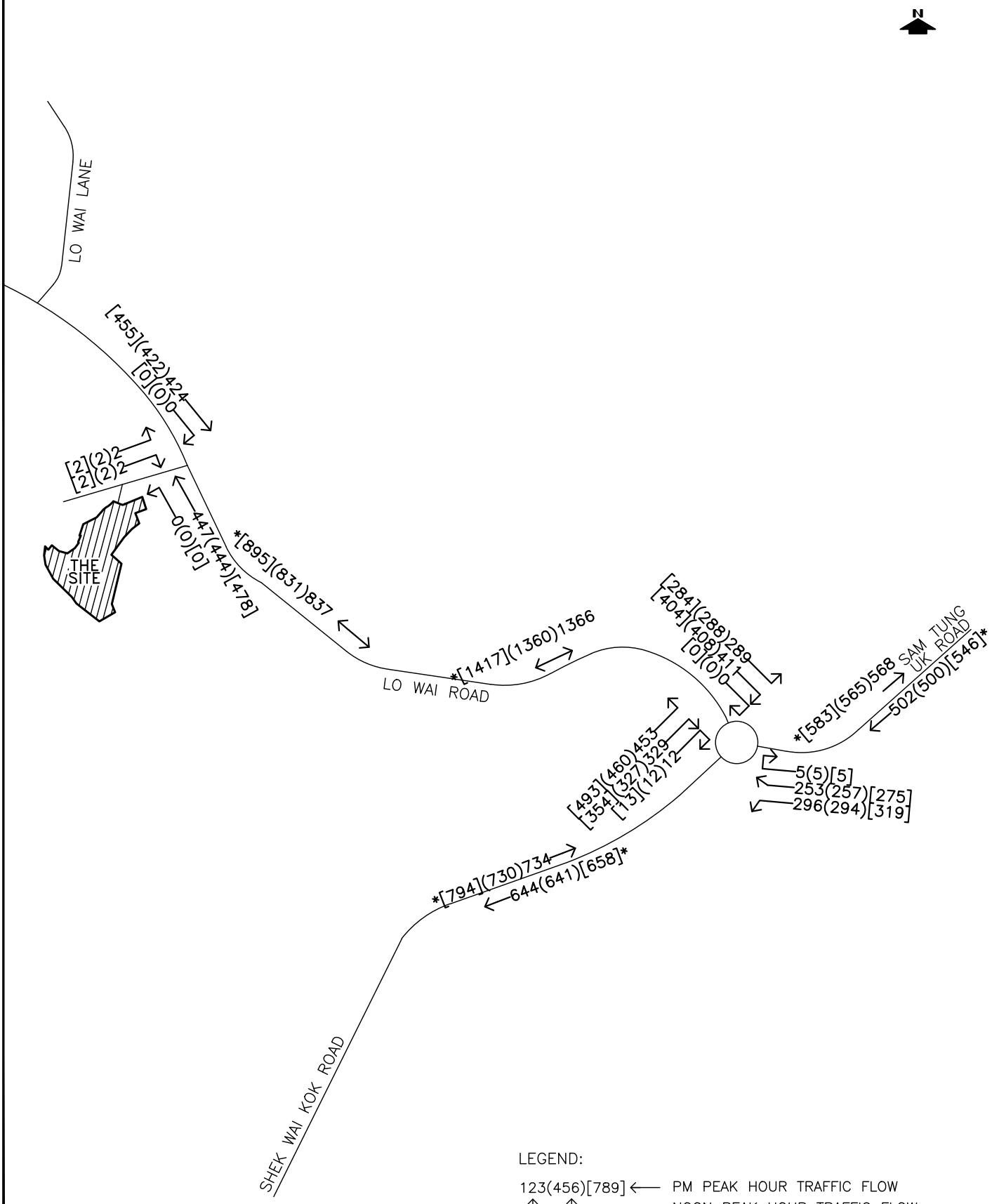
*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 4.6	REV. –
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: 2035 REFERENCE TRAFFIC FLOWS ON WEEKDAY	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE N.T.S.			
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE4.6.DWG PLOT SCALE : 1 = 1



LEGEND:

123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW

NOON PEAK HOUR TRAFFIC FLOW

AM PEAK HOUR TRAFFIC FLOW

*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

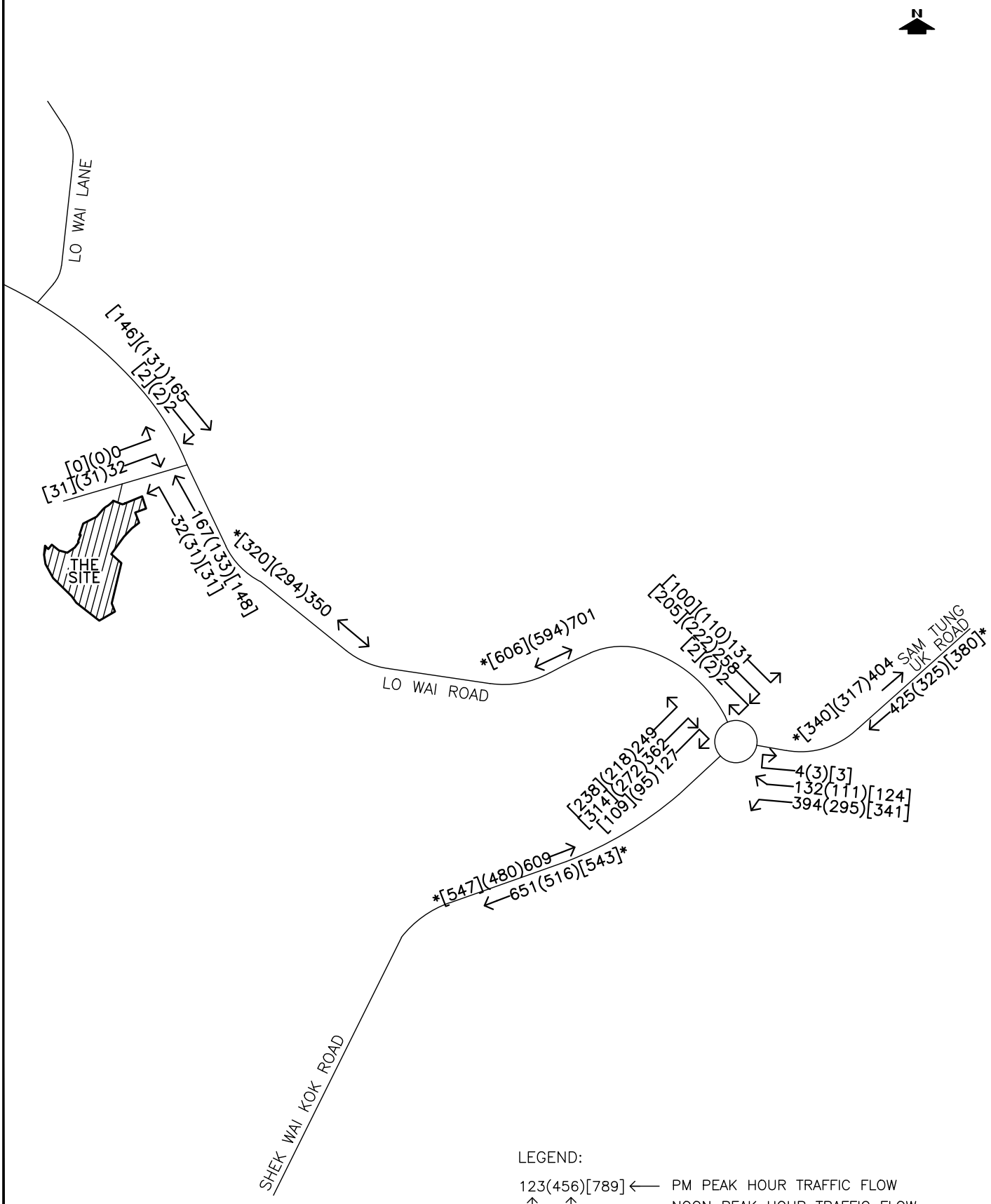
NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 4.7	REV. –
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: 2035 REFERENCE TRAFFIC FLOWS ON WEEKEND	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE N.T.S.			
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE4.7.DWG PLOT SCALE : 1 = 1

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE4.7.DWG PLOT SCALE : 1 = 1



LEGEND:

123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW

NOON PEAK HOUR TRAFFIC FLOW

AM PEAK HOUR TRAFFIC FLOW

*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

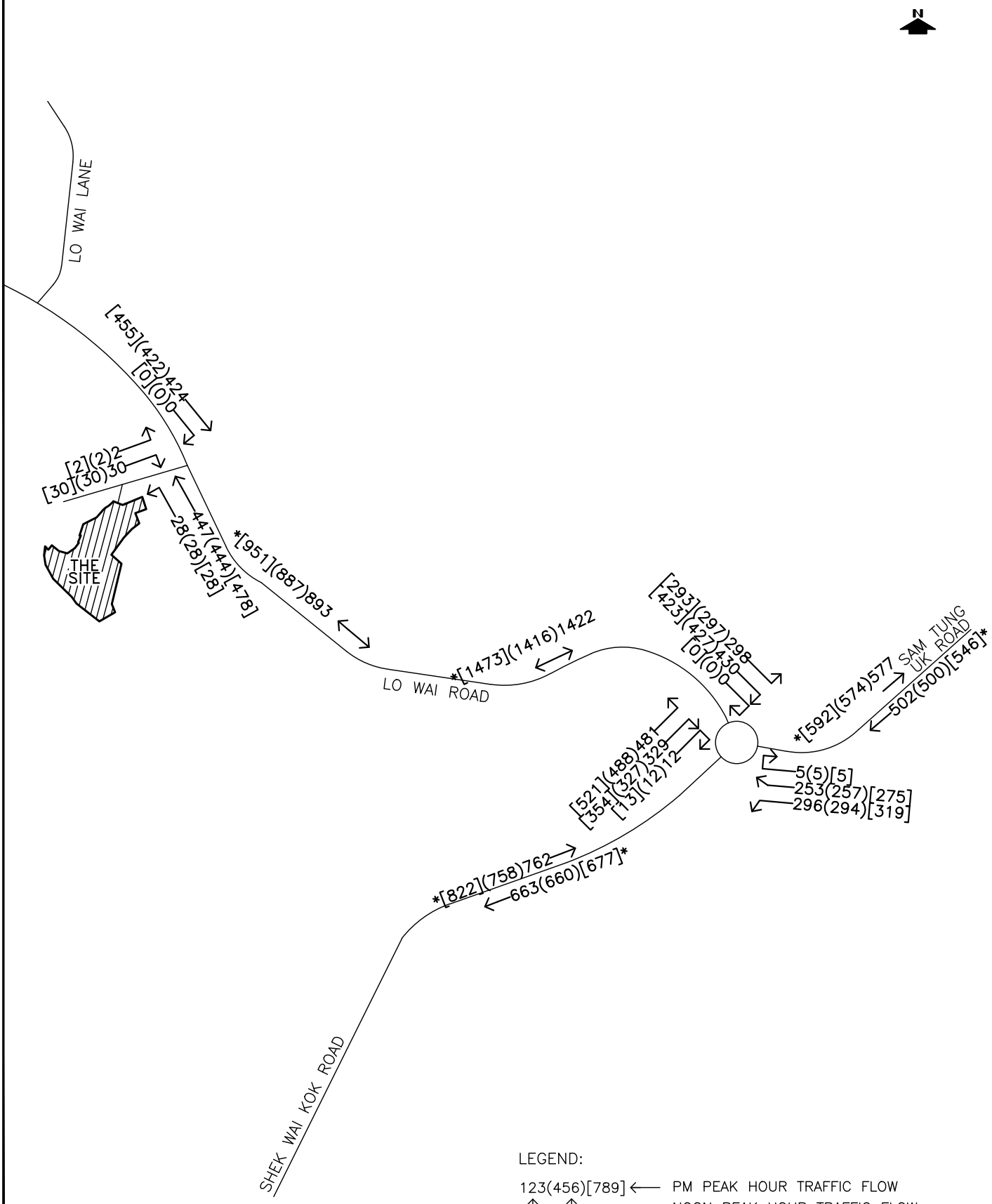
NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 4.8	REV. –
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: 2035 DESIGN TRAFFIC FLOWS ON WEEKDAY	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE N.T.S.			
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE4.8.DWG PLOT SCALE : 1 = 1

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE4.8.DWG PLOT SCALE : 1 = 1



LEGEND:

123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW

↑ NOON PEAK HOUR TRAFFIC FLOW

↑ AM PEAK HOUR TRAFFIC FLOW

*123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

NOTES:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR.
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. 40243	PROJECT TITLE: APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 4.9	REV. –
DESIGNED SKL / DATE OCT 2024	DRAWING TITLE: 2035 DESIGN TRAFFIC FLOWS ON WEEKEND	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE N.T.S.			
CHECKED SLN			

FILE: G:\PROJECT\40243\DATA\DWG\TIA-20241022\FIGURE4.9.DWG PLOT SCALE : 1 = 1

APPENDIX A

Abstract of the Management Plan

3. 場地資料及樓宇排列

3.1. 永盛園私營骨灰安置所 (以下稱為『本骨灰安置所』) 佔地約 2,250 平方米，總樓宇建築面積不超過 1,880 平方米，共有：

(a) 1 座 2 層高的骨灰安置所大樓；
(b) 1 座 1 層高的附屬樓內含接待/登記/等候室；
(c) 1 座 2 層高的附屬樓內含停車位/洗手間/儲物室。

4. 可容納的訪客量及入場管制

4.1 「本骨灰安置所」重建後的開放時間為週一至週日由上午九時至下午五時(**不包括**清明節及重陽節，及其前後兩週內的週六、週日和在該期內的公眾假期〔以下統稱為『規定時段』〕)。農曆新年和盂蘭節期間的開放時間也會作出彈性處理安排，並會另行正式通知。在此「規定時段」內，本骨灰安置所將會全日關閉，並會將大閘用鐵鏈上鎖，以及在門外當眼位置掛上不開放的通告牌。該通告內容包括如下資料：

不開放的日期、時間、依據或理由、
查詢電話和聯絡人姓名。

4.2 「本骨灰安置所」在每年春、秋二祭「規定時段」的一個月前，會以信件、電郵及電話短訊形式通知所有客人，有關「本骨灰安置所」在「規定時段」的特別安排。不開放通告內容同上(請參考第 4.1 段)。

4.3 只有在「本骨灰安置所」已註冊購買龕位的客人及其親友，並按照第 4.4 段的安排，方可進入「本骨灰安置所」拜祭先人，「本骨灰安置所」設施是不開放予其他與「本骨灰安置所」無關的公眾人士。

4.4 「本骨灰安置所」將嚴格實施「預約到訪」的人流管制安排。所有到訪者必須在不少於 2 個工作天與「本骨灰安置所」職員預約確定到訪的日期、時間、人數和到訪使用的交通工具。預約可以透過電郵[電郵地址稍後補上]或通過電話[2490 2128；2490 2866]完成。在成功預約後，每位訪客/訪客團將會獲取一個進場編號。所有訪客需於預約時段內到達「本骨灰安置所」，「本骨灰安置所」會調派兩位職員於大門駐守及為訪客登記。登記時訪客需要向職員提供登記確認號碼、姓名及聯絡電話以作核對。成功核對登記和核實訪客人數後，駐守於等候區的骨灰龕堂職員會按預約時段，安排訪客進入骨灰龕堂進行拜祭。未能確認預約或逾時的訪客將不容許進入「本骨灰安置所」，並必須再次進行預約。堂內及大閘兩旁將會設有攝錄儀器，在堂內亦有「本骨灰安置所」職員提供協助。

4.5 每一節拜祭時段為 60 分鐘 (即 09:00–10:00，10:00–11:00，如此類推，訪客每次最多可連續預約兩節的拜祭時段)。在每時段的 25 分鐘後，「本骨灰安置所」職員及堂內通訊系統，會溫馨提示訪客有關拜祭時段將快結束，客人需開始收拾東西離開龕堂。

4.6 如訪客搭的士到場，訪客需於大門向職員提供拜訪者登記確認號碼、姓名及聯絡電話以作核對(第 4.4 段應用)。成功核對登記和核實訪客人數後，的士才可駛進入「本骨灰安置所」的的士停靠處，的士落客後必須立即離開「本骨灰安置所」。

4.7 訪客必須服從「本骨灰安置所」的入場管理安排。由於「本骨灰安置所」的停車場車位有限，我們會鼓勵拜祭人士盡量乘搭公共交通工具往返「本骨灰安置所」。如訪客自身是，或同行者有，殘障人士，需要臨時使用「本骨灰安置所」的車位，訪客必須在一星期前與「本骨灰安置所」職員進行預約，預約可以透過電郵[電郵地址稍後補上]或通過電話[2490 2128；2490 2866]進行。訪客在預約時需清楚聲明預約日期、時段、人數、車牌號碼和需求特別安排。在成功完成預約後，每位訪客/訪問團會獲提供一個車輛進場編號，成功預約的訪客需向「本骨灰安置所」辦公室的職員出示該車輛進場編號。只有成功預約的訪客，在職員核實所有相關資料(第 4.4 段也應用)後，才可駕車進入「本骨灰安置所」的停車場，停車時限不得超過 1 小時。

4.8 所有早到的訪客會被職員帶領到地面層指定的等候區等候， 並必須依照職員的指示，按預約時段先後進入骨灰龕堂進行拜祭。

5. 交通及公共運輸安排

公共交通服務

5.1 訪客可選擇乘搭下列各交通工具往來「本骨灰安置所」:

(a) 乘搭專線小巴 81 線，在「老圍路」站下車，步行約 5 分鐘就可到達「本骨灰安置所」; 或

(b) 乘搭九巴 32、36、32M 及 43X 線，或專線小巴 82、82M、94 及 312 線在「三棟屋村」站下車，步行約 15 分鐘可到達「本骨灰安置所」。

上落客貨設施

5.2 「本骨灰安置所」有 1 個上落客貨設施，僅供「本骨灰安置所」的日常運作使用。同時，鼓勵訪客乘坐公共交通工具，並手提輕便祭品進行拜祭。

的士停靠處

5.3 「本骨灰安置所」有 1 個 10 米長的的士停靠處，僅供「本骨灰安置所」有預約的訪客使用(第 4.4 及 4.6 段也應用)，的士落客後必須立即離開「本骨灰安置所」。

停車設施

5.4 「本骨灰安置所」合共有 4 個私家車車位(包括 1 殘障人士泊車位)及 3 個電單車車位，並積極鼓勵訪客乘坐公共交通工具往返「本骨灰安置所」。如訪客自身是，或同行者，有殘障人士，需要臨時使用「本骨灰安置所」的車位，訪客必須在一星期前與「本骨灰安置所」職員進行預約(第 4.4 及 4.7 段也應用)。

「本骨灰安置所」對附近道路產生的影響及建議的紓緩措施

5.5 為舒緩前往「本骨灰安置所」對附近道路產生的影響，同時也顧及大堂內可接受最高人流量的限制和保持一個合理舒適的環境，「本骨灰安置所」是會嚴格實施「預約到訪」機制，管控各時段內的訪客量。而在「規定時段」內，「本骨灰安置所」將會全日關閉。

6. 訪客注意事項

6.1 凡購買龕位時客戶需簽妥出售協議書內的「用家協議」。「用家協議」中會清楚列明「本骨灰安置所」的訪客注意事項，其中包括場地開放、「預約到訪」安排、進場管制措施及停車位安排規定。本骨灰安置亦會把有關的安排及規定，以提示形式張貼在「本骨灰安置所」內當眼位置。所有協議簽署客戶及其到訪的家屬和朋友，必須遵守。若出現客戶或其家屬不遵從有關協議，「本骨灰安置所」將會先行給予提醒，並保留單方面撤銷出售協議之權利。

6.2 在拜祭先人時，「本骨灰安置所」有以下的安排及規定，而此等安排及規定亦會在「用家協議」內和「本骨灰安置所」當眼位置張貼，作為重要提示：

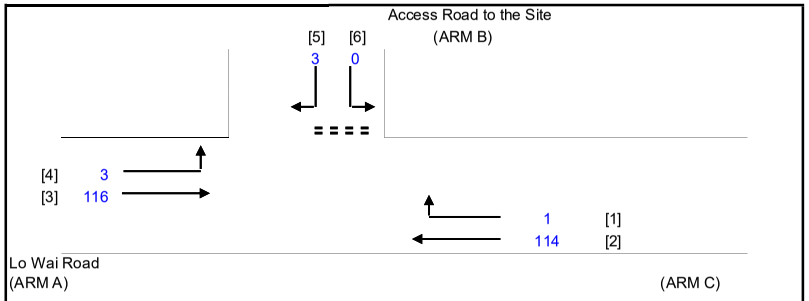
關於入場管制安排

(i) 除「特定節日時間」外，「本骨灰安置所」的開放時間為週一至週日上午九時至下午五時；
(ii) 農曆新年期間開放時間會作彈性處理，並另行通知所有客戶；
(iii) 特定節日期間，即清明節及重陽節當天，以及該節日之前後兩週內的週六、週日和該兩週內的公眾假日；
(iv) 在此「規定時段」內，「本骨灰安置所」將會全日關閉，並會將大閘上鎖；
(v) 所有有特別需要臨時使用「本骨灰安置所」內的車位的訪客，必須在一星期前與「本骨灰安置所」職員進行預約。未有確認預約者不得駕車進入「本骨灰安置所」；及
(vi) 到訪者必須遵循「本骨灰安置所」職員的人流指示和安排。

APPENDIX B

Junction Capacity Assessment – Existing Scenario

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing AM (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	116	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	114	(pcu/hr)
q c-b	=	1	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	3	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

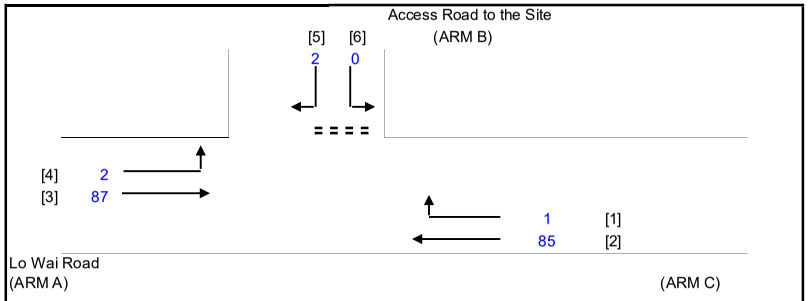
Q b-a	=	473	
Q b-c	=	615	
Q c-b	=	888	
Q b-ac	=	473	
TOTAL FLOW	=	237	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0063
DFC b-c	=	0.0000
DFC c-b	=	0.0011
DFC b-ac (share lane)	=	0.0063

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing Noon (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	2	(pcu/hr)
q a-c	=	87	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	85	(pcu/hr)
q c-b	=	1	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	2	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

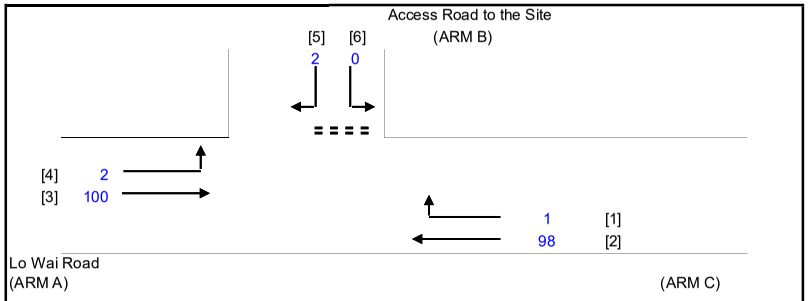
Q b-a	=	483	
Q b-c	=	622	
Q c-b	=	898	
Q b-ac	=	483	
TOTAL FLOW	=	177	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0041
DFC b-c	=	0.0000
DFC c-b	=	0.0011
DFC b-ac (share lane)	=	0.0041

CRITICAL DFC = 0.00

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing PM (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	2	(pcu/hr)
q a-c	=	100	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	98	(pcu/hr)
q c-b	=	1	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	2	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

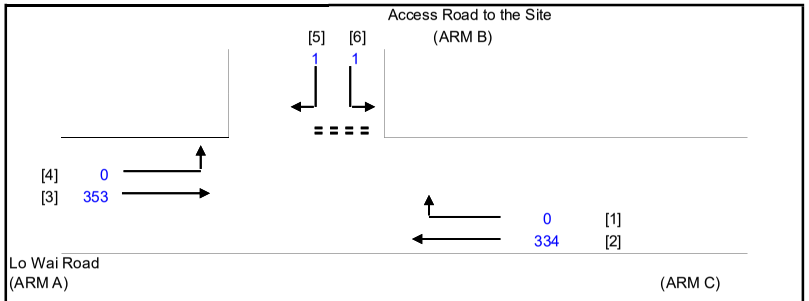
Q b-a	=	479	
Q b-c	=	619	
Q c-b	=	894	
Q b-ac	=	479	
TOTAL FLOW	=	203	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0042
DFC b-c	=	0.0000
DFC c-b	=	0.0011
DFC b-ac (share lane)	=	0.0042

CRITICAL DFC = 0.00

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing AM (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	353	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	334	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	1	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.5000

THE CAPACITY OF MOVEMENT :

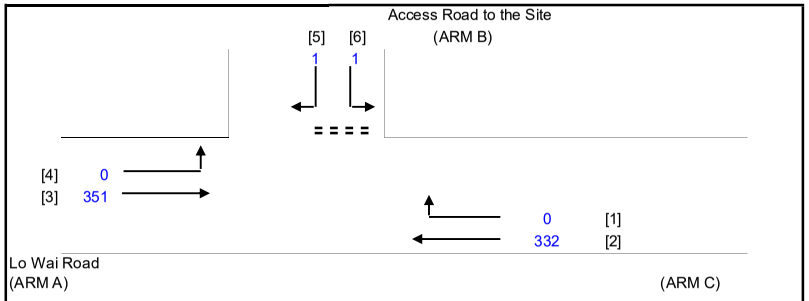
Q b-a	=	389	
Q b-c	=	560	
Q c-b	=	809	
Q b-ac	=	459	
TOTAL FLOW	=	689	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0026
DFC b-c	=	0.0018
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0044

CRITICAL DFC = 0.00

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing Noon (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	351	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	332	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	1	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.5000

THE CAPACITY OF MOVEMENT :

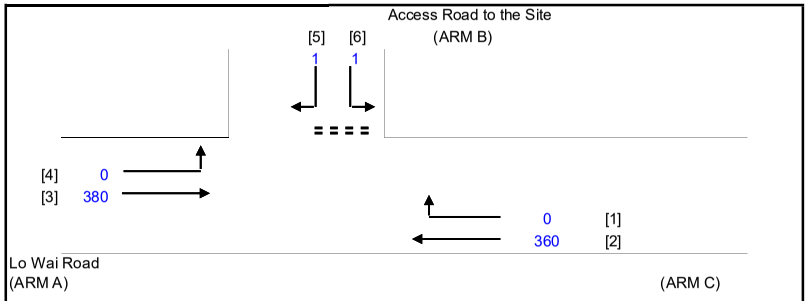
Q b-a	=	390	
Q b-c	=	560	
Q c-b	=	809	
Q b-ac	=	460	
TOTAL FLOW	=	685	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0026
DFC b-c	=	0.0018
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0043

CRITICAL DFC = 0.00

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing PM (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	380	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	360	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	1	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.5000

THE CAPACITY OF MOVEMENT :

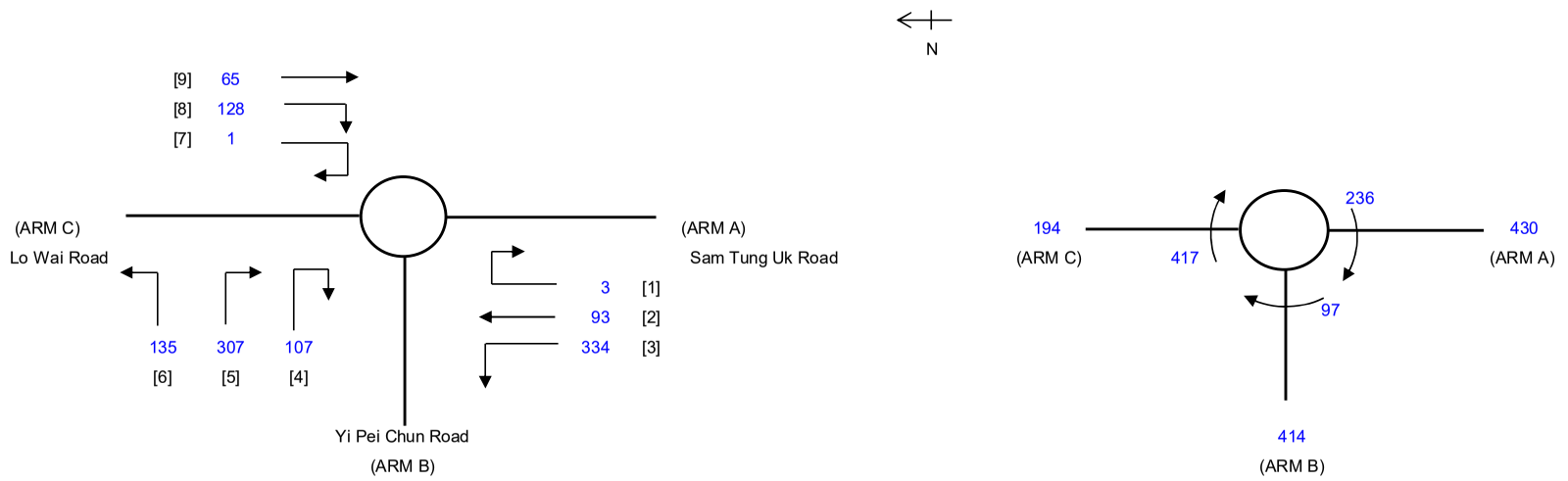
Q b-a	=	379	
Q b-c	=	554	
Q c-b	=	800	
Q b-ac	=	450	
TOTAL FLOW	=	742	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0026
DFC b-c	=	0.0018
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0044

CRITICAL DFC = 0.00

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing AM (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

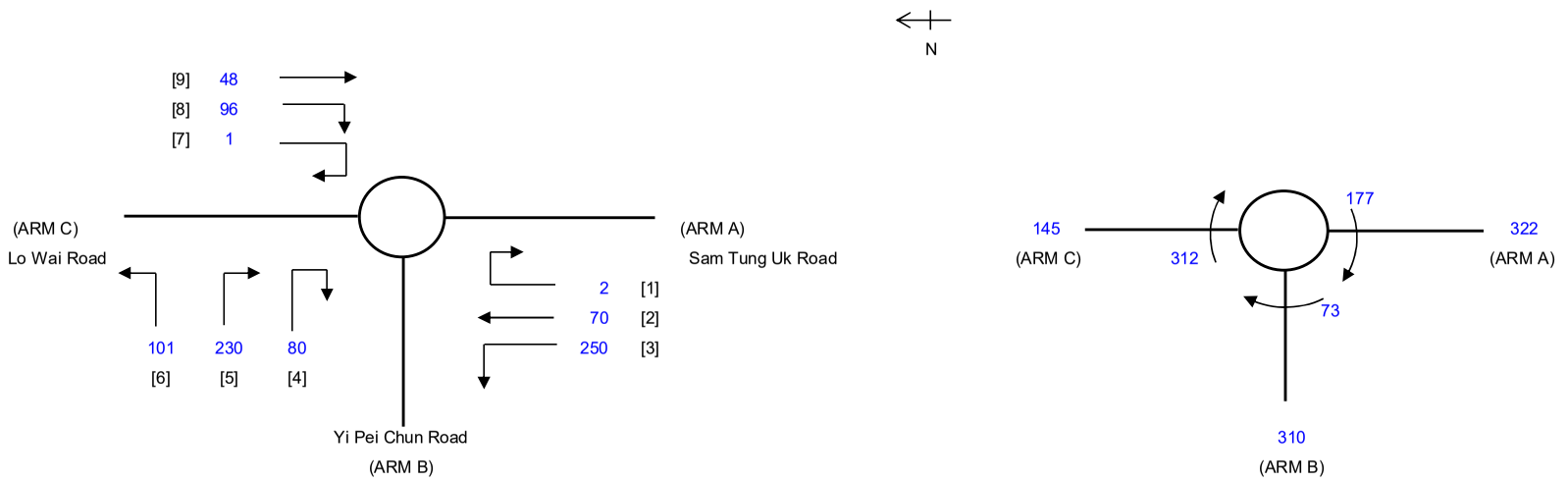


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	430	414	194
Qc	=	Circulating flow across entry (pcu/h)	236	97	417
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1543	1048	1458
DFC	=	Design flow/Capacity = Q/Qe	0.28	0.39	0.13

Total In Sum = 1367 PCU

DFC of Critical Approach = 0.39

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing Noon (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

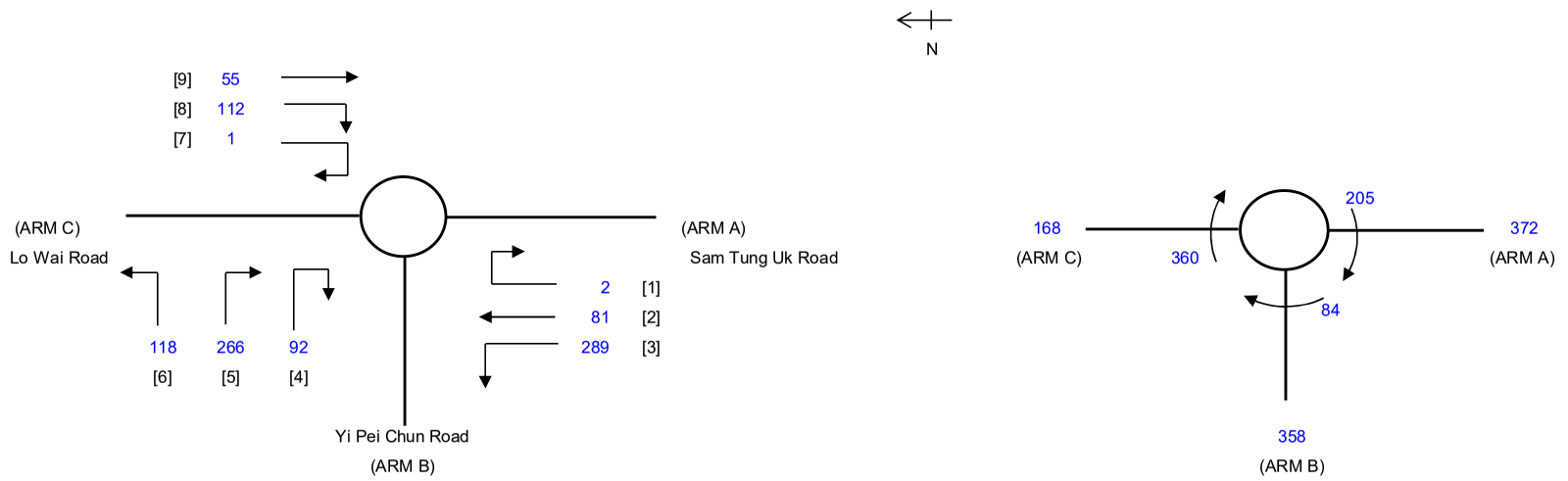


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	322	310	145
Qc	=	Circulating flow across entry (pcu/h)	177	73	312
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1583	1061	1531
DFC	=	Design flow/Capacity = Q/Qe	0.20	0.29	0.09

Total In Sum = 1023 PCU

DFC of Critical Approach = 0.29

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing PM (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

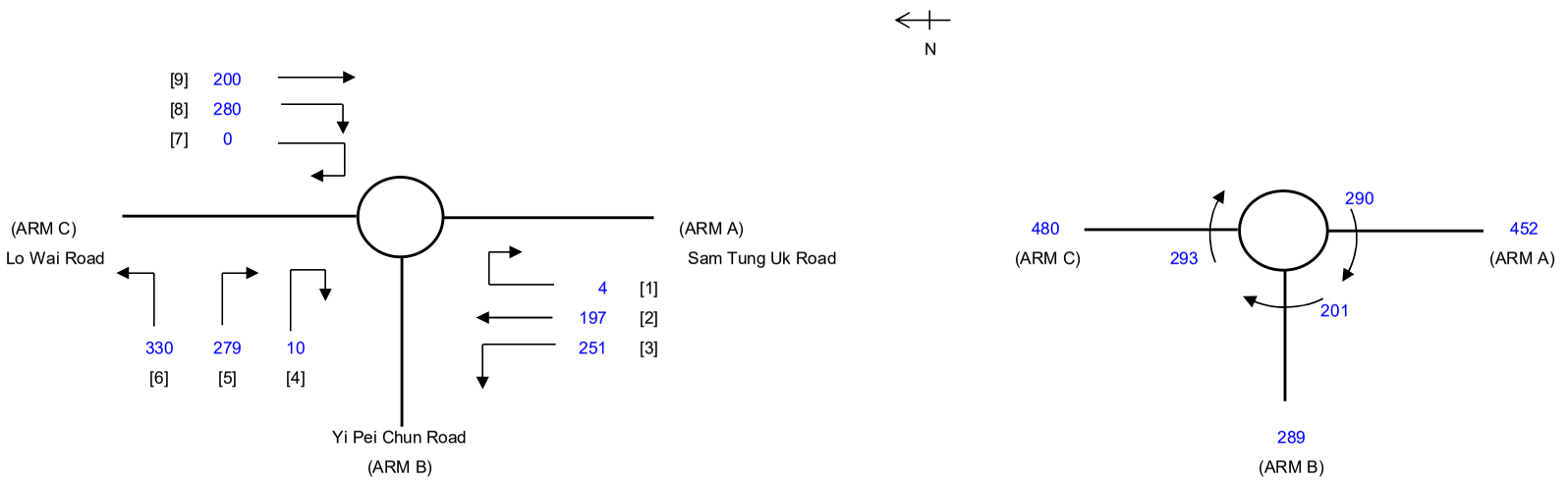


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	372	358	168
Qc	=	Circulating flow across entry (pcu/h)	205	84	360
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1564	1055	1497
DFC	=	Design flow/Capacity = Q/Qe	0.24	0.34	0.11

Total In Sum = 1184 PCU

DFC of Critical Approach = 0.34

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing AM (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

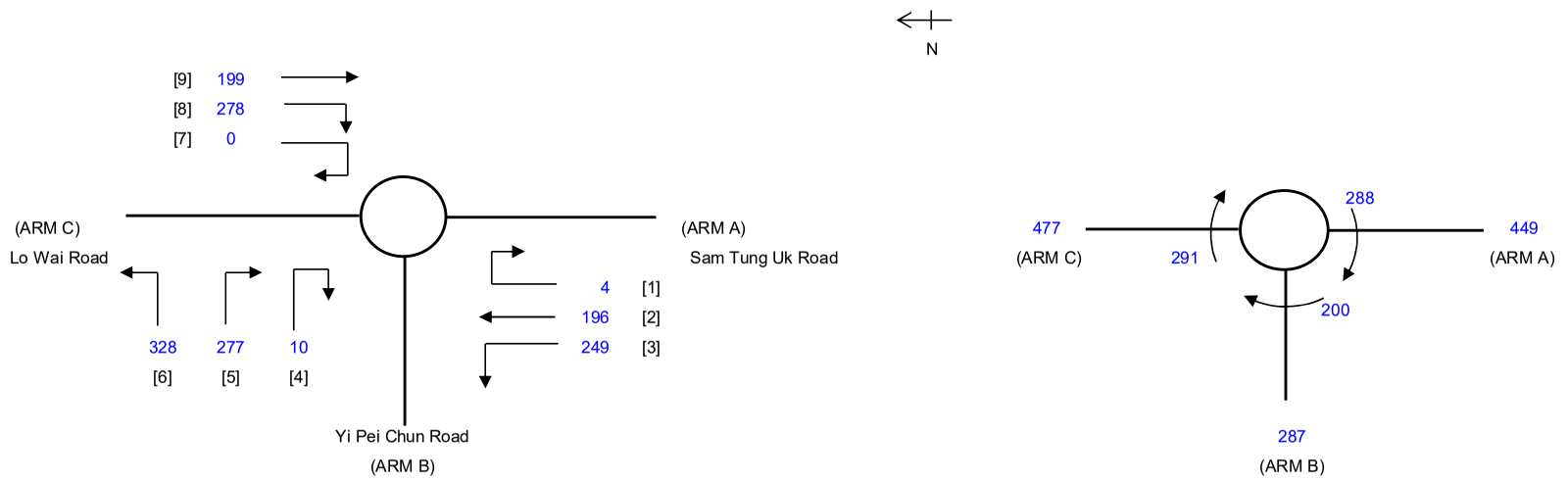


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	452	289	480
Qc	=	Circulating flow across entry (pcu/h)	290	201	293
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1506	992	1544
DFC	=	Design flow/Capacity = Q/Qe	0.30	0.29	0.31

Total In Sum = 2031 PCU

DFC of Critical Approach = 0.31

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing Noon (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

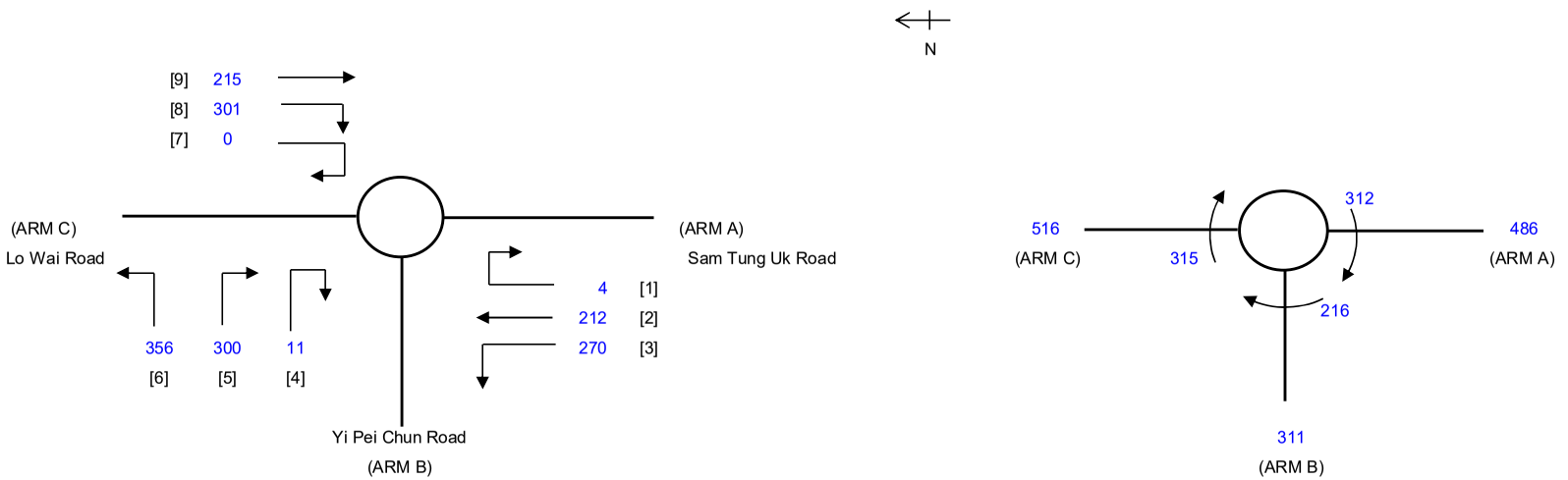


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	449	287	477
Qc	=	Circulating flow across entry (pcu/h)	288	200	291
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1507	993	1545
DFC	=	Design flow/Capacity = Q/Qe	0.30	0.29	0.31

Total In Sum = 2018 PCU

DFC of Critical Approach = 0.31

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2024 Existing PM (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	486	311	516
Qc	=	Circulating flow across entry (pcu/h)	312	216	315
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1491	984	1529
DFC	=	Design flow/Capacity = Q/Qe	0.33	0.32	0.34

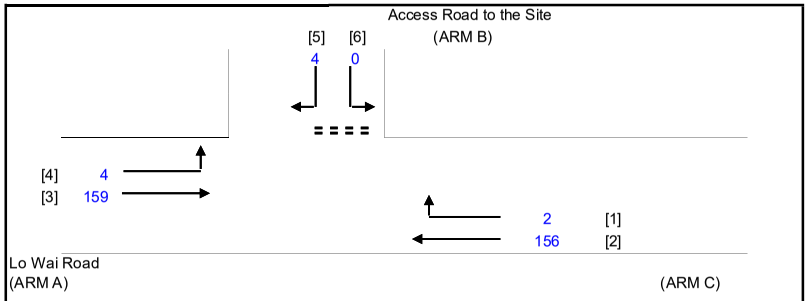
Total In Sum = 2185 PCU

DFC of Critical Approach = 0.34

APPENDIX C

Junction Capacity Assessment
– 2029 Reference & Design Scenarios

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference AM (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	4	(pcu/hr)
q a-c	=	159	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	156	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

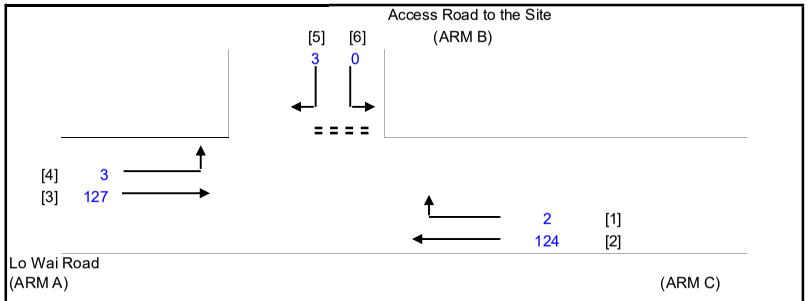
Q b-a	=	457	
Q b-c	=	605	
Q c-b	=	873	
Q b-ac	=	457	
TOTAL FLOW	=	325	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0088
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0088

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference Noon (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	127	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	124	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	3	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

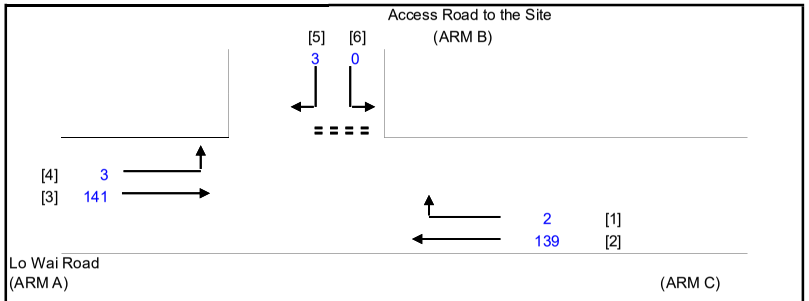
Q b-a	=	468	
Q b-c	=	613	
Q c-b	=	884	
Q b-ac	=	468	
TOTAL FLOW	=	259	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0064
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0064

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference PM (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	141	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	139	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	3	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

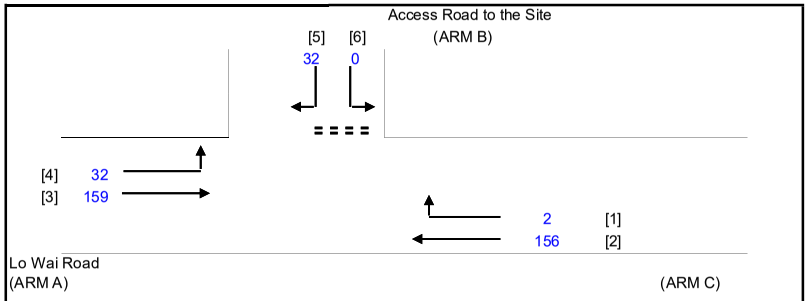
Q b-a	=	463	
Q b-c	=	609	
Q c-b	=	880	
Q b-ac	=	463	
TOTAL FLOW	=	288	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0065
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0065

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design AM (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	32	(pcu/hr)
q a-c	=	159	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	156	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	32	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

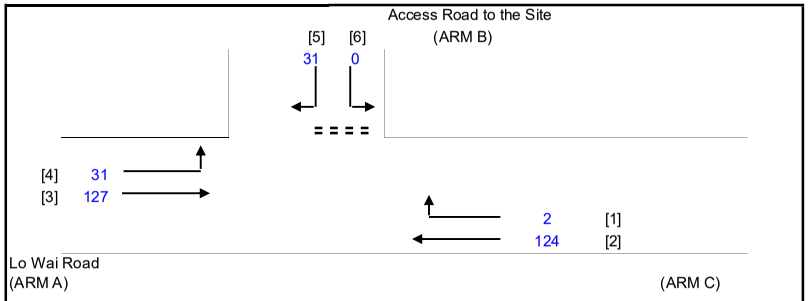
Q b-a	=	484	
Q b-c	=	642	
Q c-b	=	864	
Q b-ac	=	484	
TOTAL FLOW	=	381	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0661
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0661

CRITICAL DFC = 0.07

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design Noon (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	31	(pcu/hr)
q a-c	=	127	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	124	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	31	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

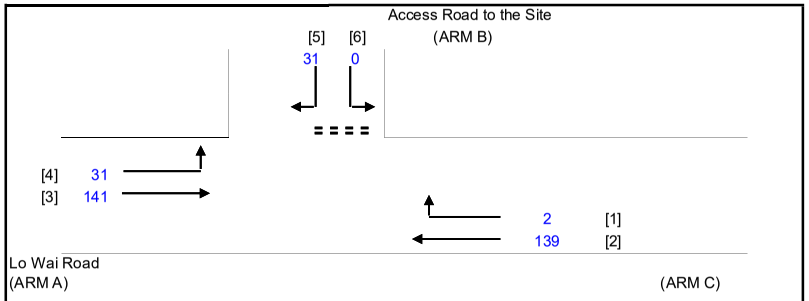
Q b-a	=	496	
Q b-c	=	650	
Q c-b	=	875	
Q b-ac	=	496	
TOTAL FLOW	=	315	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0625
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0625

CRITICAL DFC = 0.06

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design PM (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	31	(pcu/hr)
q a-c	=	141	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	139	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	31	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

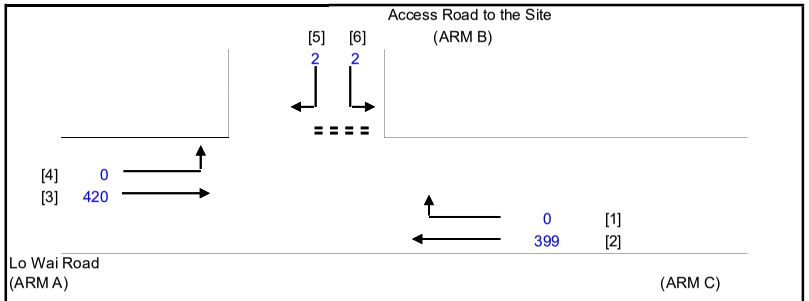
Q b-a	=	491	
Q b-c	=	646	
Q c-b	=	870	
Q b-ac	=	491	
TOTAL FLOW	=	344	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0631
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0631

CRITICAL DFC = 0.06

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference AM (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	420	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	399	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	2	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.5000

THE CAPACITY OF MOVEMENT :

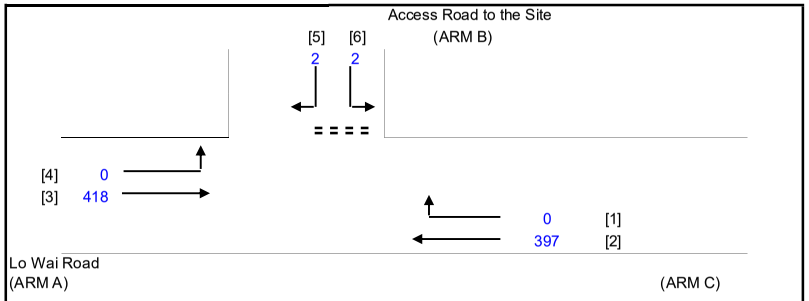
Q b-a	=	365	
Q b-c	=	544	
Q c-b	=	786	
Q b-ac	=	437	
TOTAL FLOW	=	823	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0055
DFC b-c	=	0.0037
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0092

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference Noon (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	418	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	397	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	2	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.5000

THE CAPACITY OF MOVEMENT :

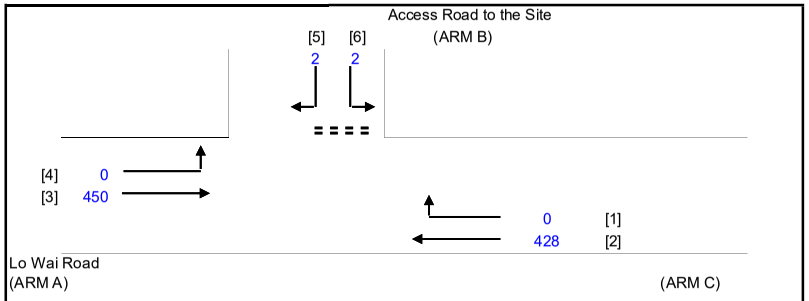
Q b-a	=	366	
Q b-c	=	545	
Q c-b	=	787	
Q b-ac	=	438	
TOTAL FLOW	=	819	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0055
DFC b-c	=	0.0037
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0091

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference PM (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	450	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	428	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	2	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.5000

THE CAPACITY OF MOVEMENT :

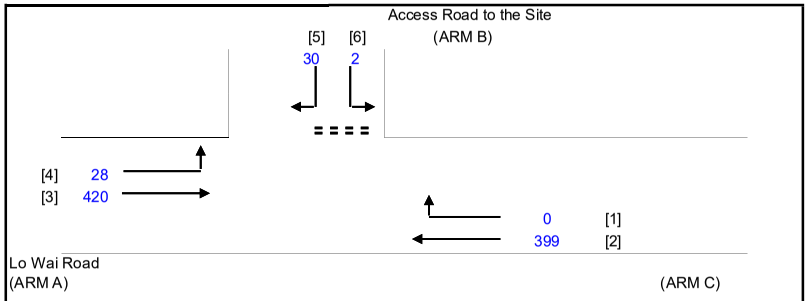
Q b-a	=	354	
Q b-c	=	537	
Q c-b	=	776	
Q b-ac	=	427	
TOTAL FLOW	=	882	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0056
DFC b-c	=	0.0037
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0094

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design AM (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	28	(pcu/hr)
q a-c	=	420	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	399	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	30	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0625

THE CAPACITY OF MOVEMENT :

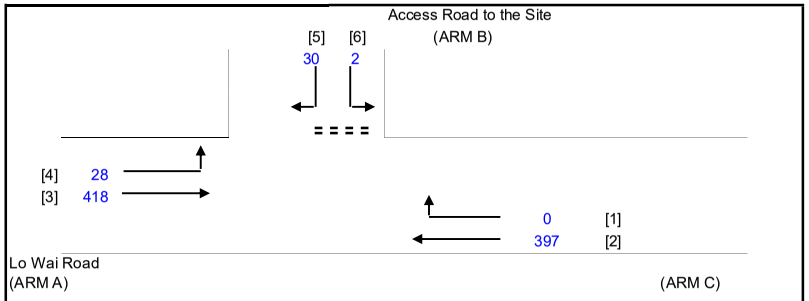
Q b-a	=	386	
Q b-c	=	577	
Q c-b	=	777	
Q b-ac	=	394	
TOTAL FLOW	=	879	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0777
DFC b-c	=	0.0035
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0812

CRITICAL DFC = 0.08

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design Noon (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	28	(pcu/hr)
q a-c	=	418	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	397	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	30	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0625

THE CAPACITY OF MOVEMENT :

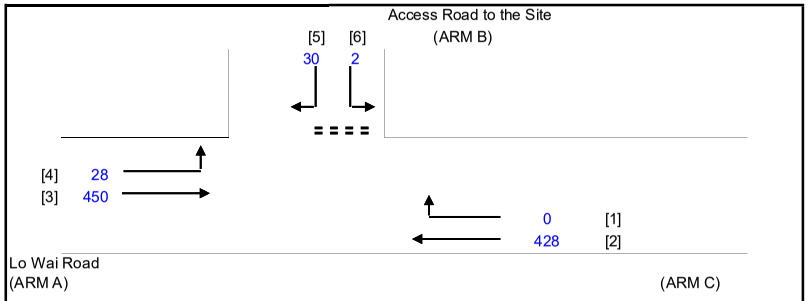
Q b-a	=	387	
Q b-c	=	577	
Q c-b	=	777	
Q b-ac	=	395	
TOTAL FLOW	=	875	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0775
DFC b-c	=	0.0035
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0810

CRITICAL DFC = 0.08

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design PM (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	28	(pcu/hr)
q a-c	=	450	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	428	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	30	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0625

THE CAPACITY OF MOVEMENT :

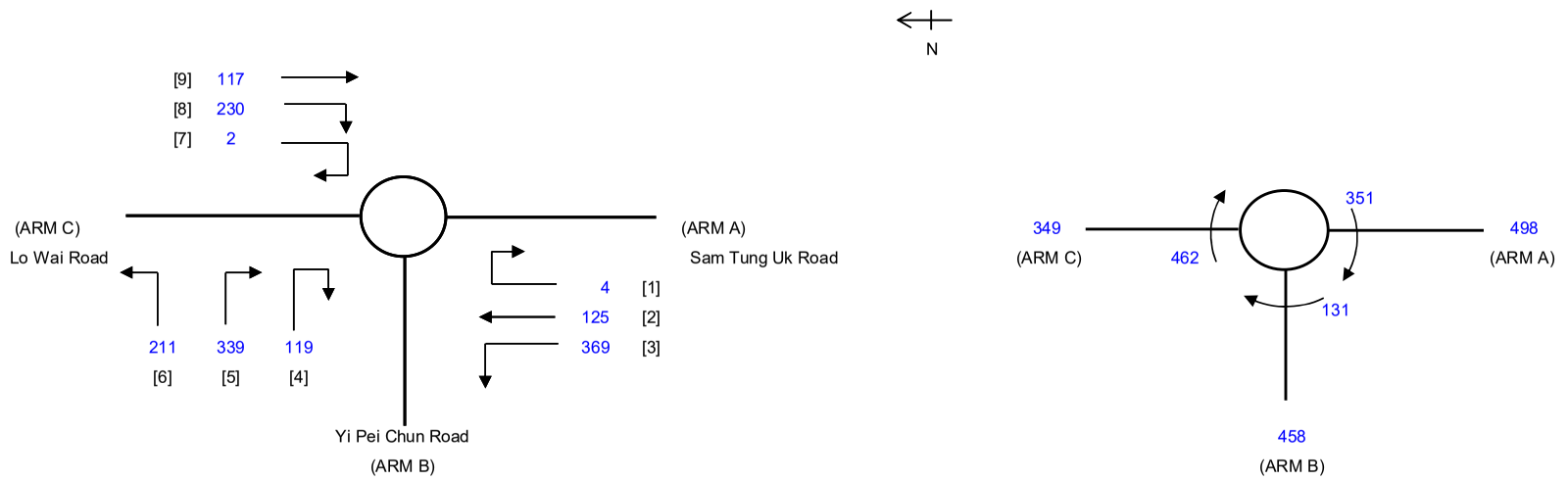
Q b-a	=	375	
Q b-c	=	569	
Q c-b	=	766	
Q b-ac	=	383	
TOTAL FLOW	=	938	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0800
DFC b-c	=	0.0035
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0835

CRITICAL DFC = 0.08

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference AM (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

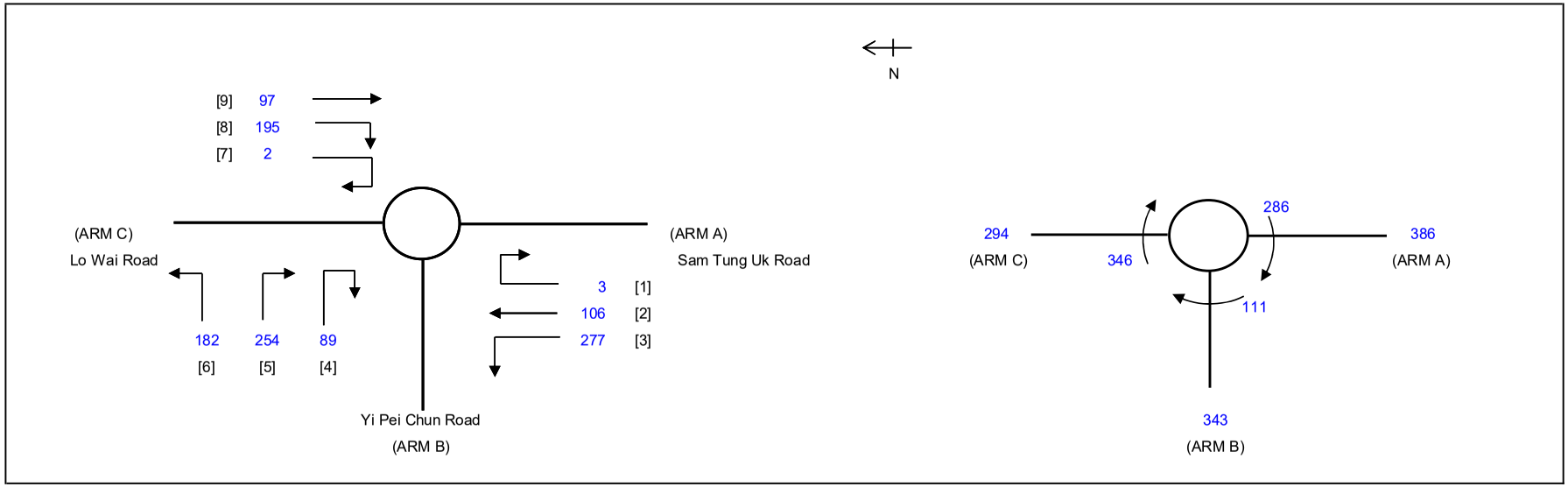


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	498	458	349
Qc	=	Circulating flow across entry (pcu/h)	351	131	462
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1464	1030	1427
DFC	=	Design flow/Capacity = Q/Qe	0.34	0.44	0.24

Total In Sum = 1865 PCU

DFC of Critical Approach = 0.44

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference Noon (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

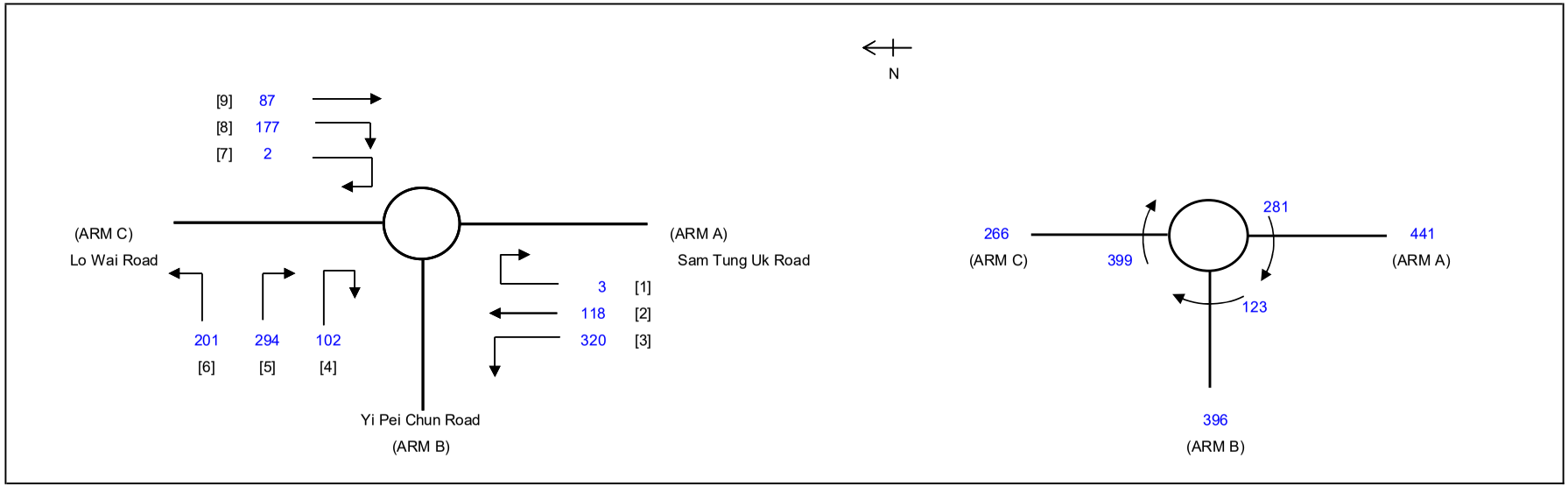


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	386	343	294
Qc	=	Circulating flow across entry (pcu/h)	286	111	346
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1509	1041	1507
DFC	=	Design flow/Capacity = Q/Qe	0.26	0.33	0.20

Total In Sum = 1499 PCU

DFC of Critical Approach = 0.33

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference PM (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

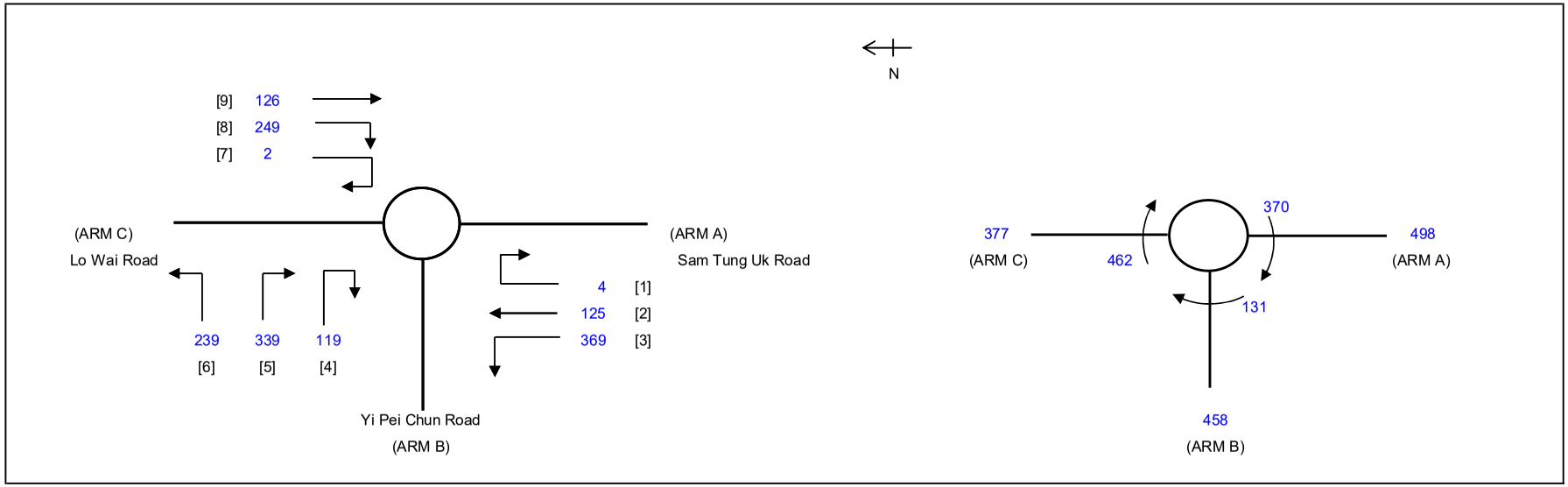


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	441	396	266
Qc	=	Circulating flow across entry (pcu/h)	281	123	399
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1512	1034	1470
DFC	=	Design flow/Capacity = Q/Qe	0.29	0.38	0.18

Total In Sum = 1570 PCU

DFC of Critical Approach = 0.38

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design AM (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

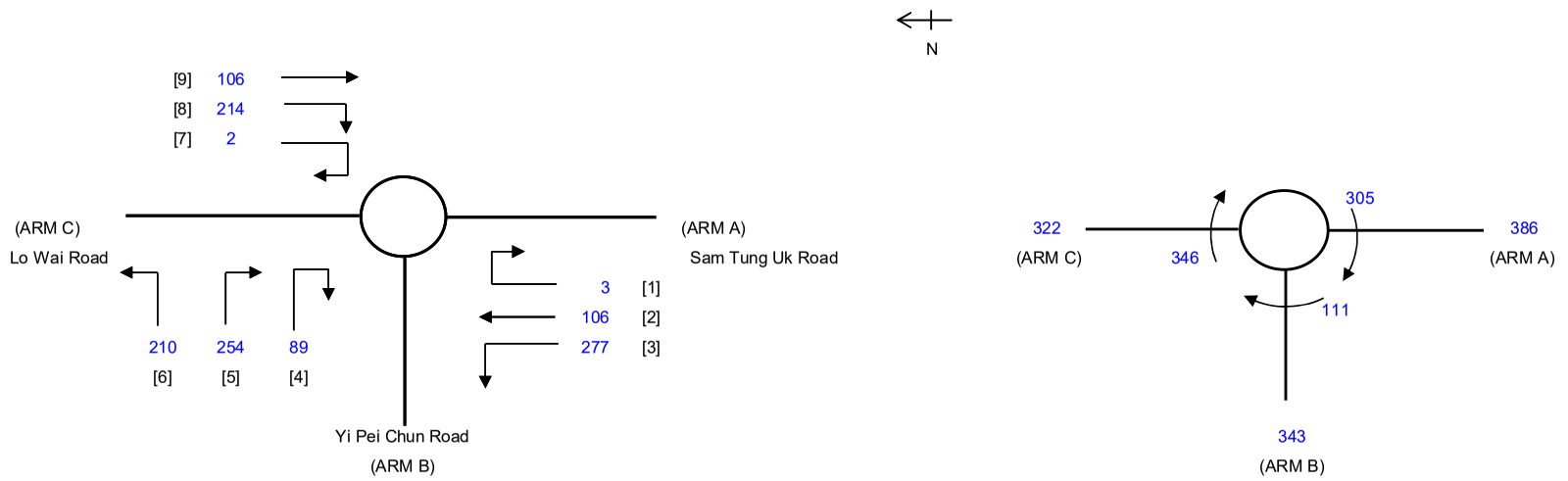


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	498	458	377
Qc	=	Circulating flow across entry (pcu/h)	370	131	462
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1451	1030	1427
DFC	=	Design flow/Capacity = Q/Qe	0.34	0.44	0.26

Total In Sum = 1949 PCU

DFC of Critical Approach = 0.44

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design Noon (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

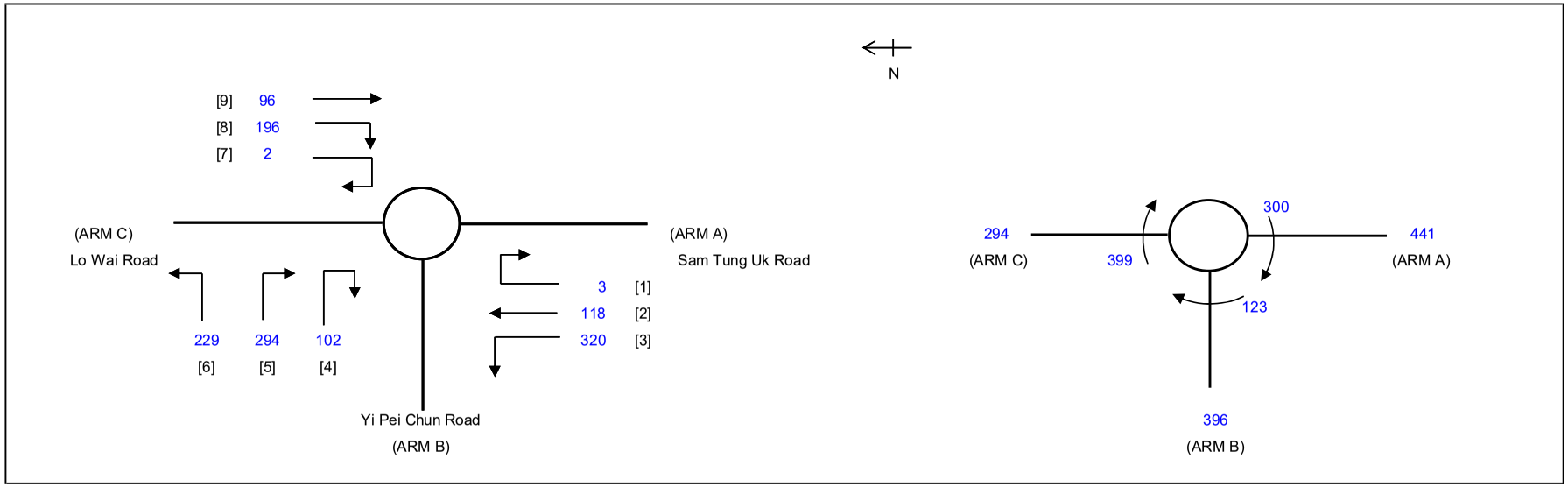


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	386	343	322
Qc	=	Circulating flow across entry (pcu/h)	305	111	346
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1496	1041	1507
DFC	=	Design flow/Capacity = Q/Qe	0.26	0.33	0.21

Total In Sum = 1583 PCU

DFC of Critical Approach = 0.33

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design PM (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

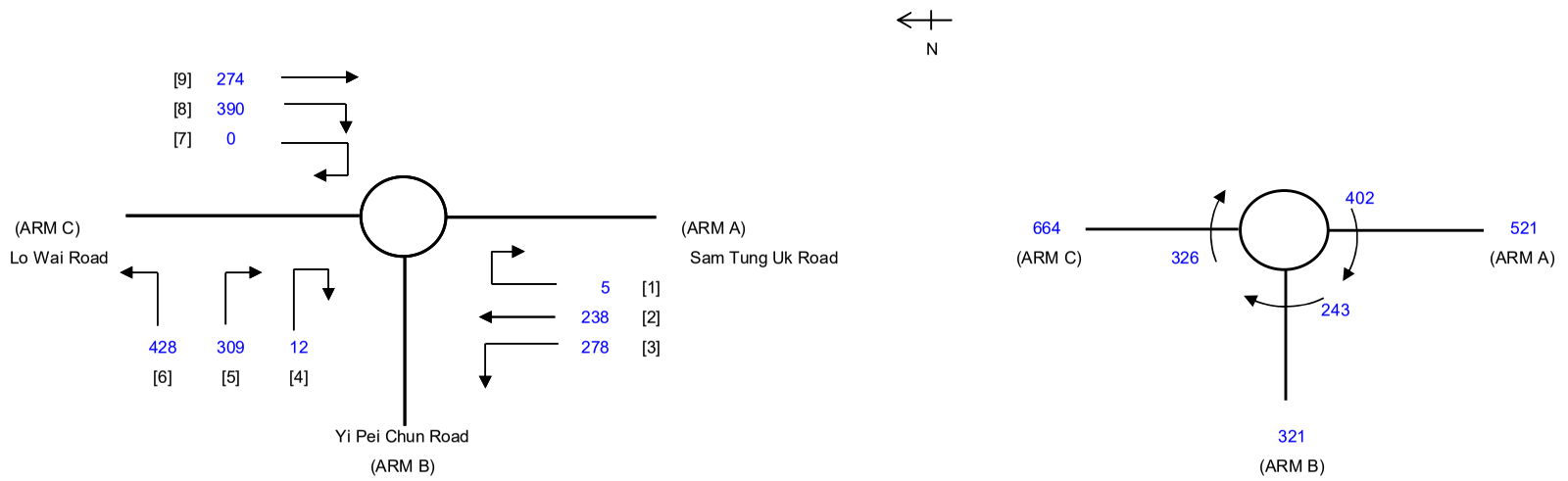


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	441	396	294
Qc	=	Circulating flow across entry (pcu/h)	300	123	399
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1499	1034	1470
DFC	=	Design flow/Capacity = Q/Qe	0.29	0.38	0.20

Total In Sum = 1654 PCU

DFC of Critical Approach = 0.38

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference AM (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

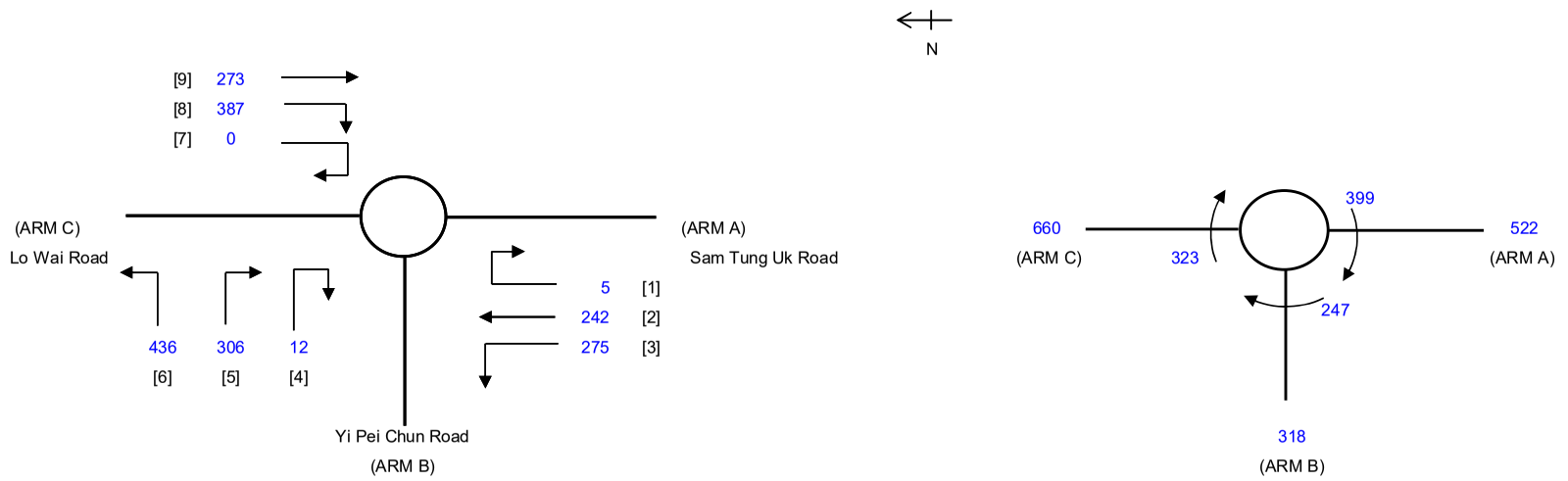


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	521	321	664
Qc	=	Circulating flow across entry (pcu/h)	402	243	326
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1429	970	1521
DFC	=	Design flow/Capacity = Q/Qe	0.36	0.33	0.44

Total In Sum = 2598 PCU

DFC of Critical Approach = 0.44

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference Noon (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

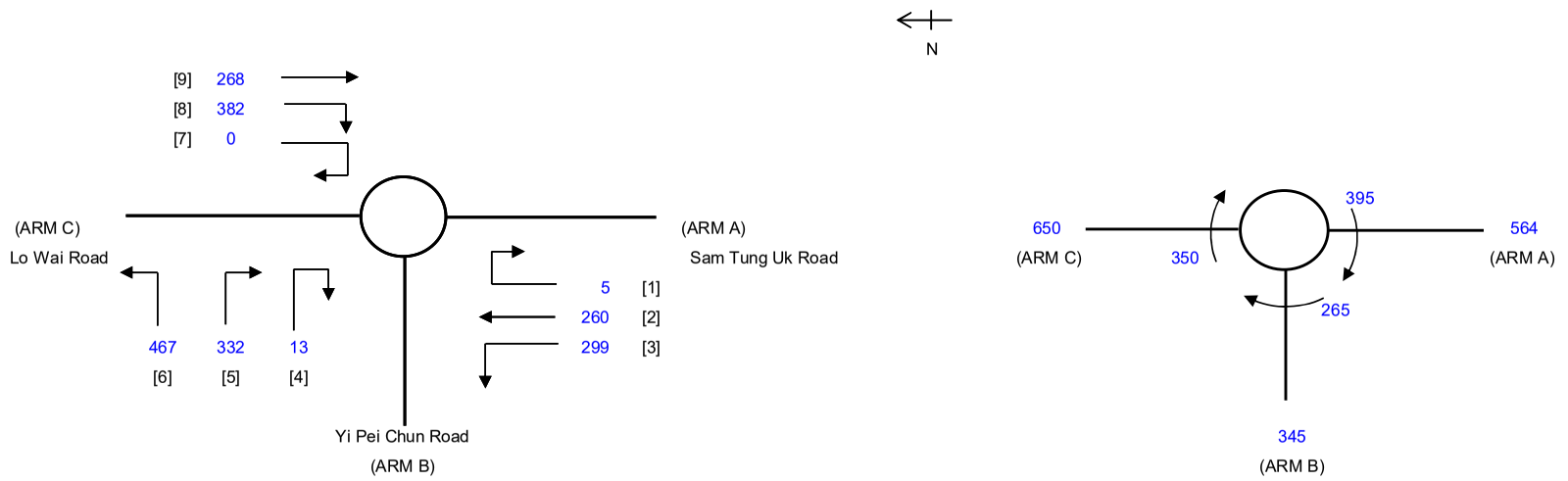


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	522	318	660
Qc	=	Circulating flow across entry (pcu/h)	399	247	323
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1431	968	1523
DFC	=	Design flow/Capacity = Q/Qe	0.36	0.33	0.43

Total In Sum = 2596 PCU

DFC of Critical Approach = 0.43

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Reference PM (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

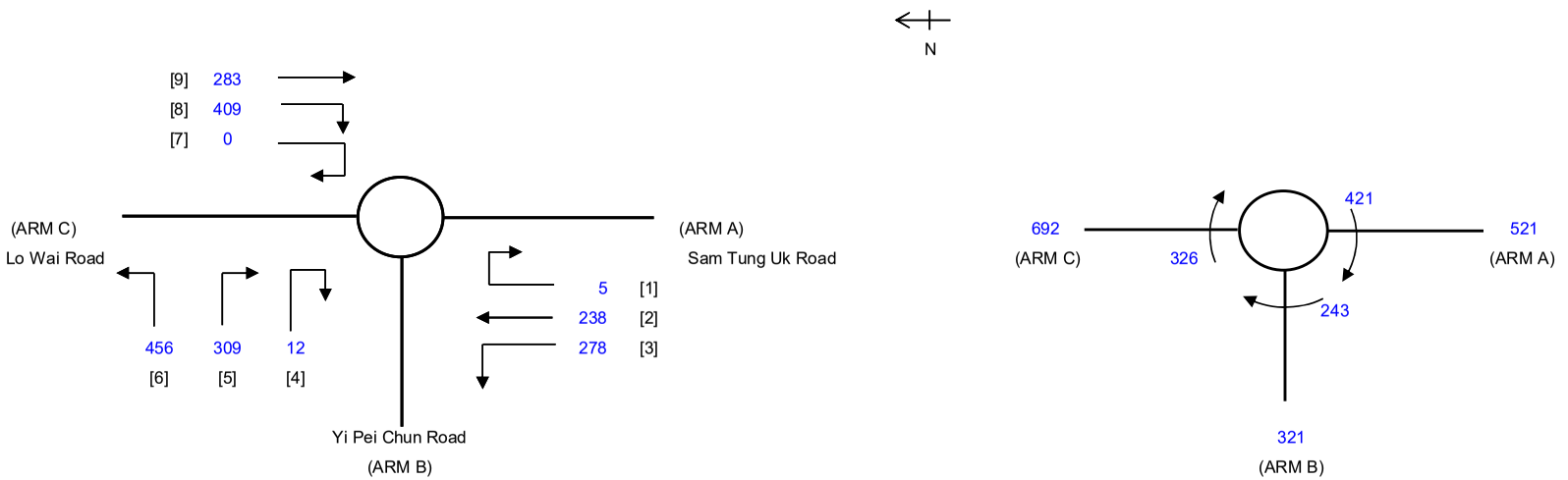


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	564	345	650
Qc	=	Circulating flow across entry (pcu/h)	395	265	350
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1434	958	1504
DFC	=	Design flow/Capacity = Q/Qe	0.39	0.36	0.43

Total In Sum = 2676 PCU

DFC of Critical Approach = 0.43

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design AM (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

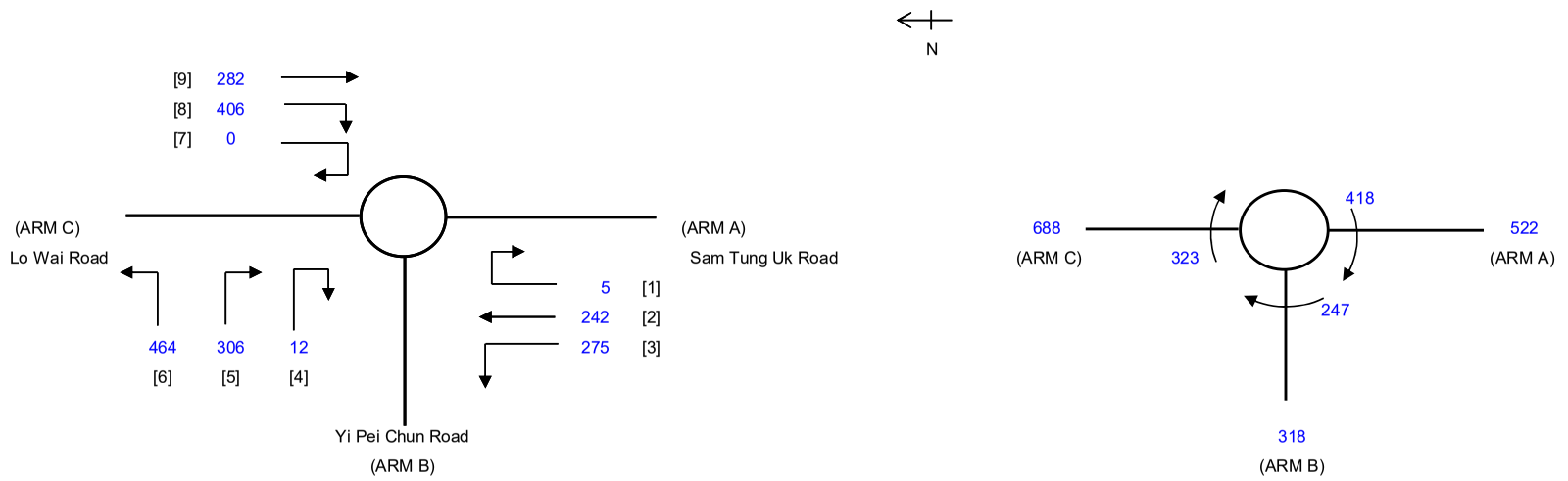


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	521	321	692
Qc	=	Circulating flow across entry (pcu/h)	421	243	326
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1416	970	1521
DFC	=	Design flow/Capacity = Q/Qe	0.37	0.33	0.45

Total In Sum = 2682 PCU

DFC of Critical Approach = 0.45

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design Noon (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

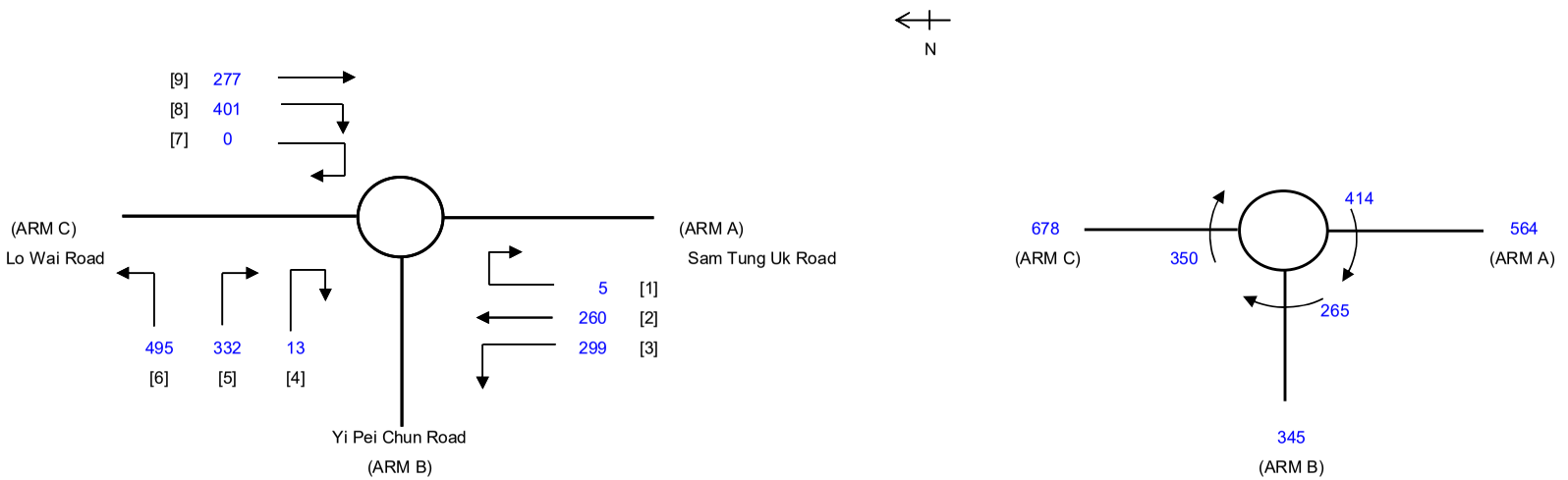


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	522	318	688
Qc	=	Circulating flow across entry (pcu/h)	418	247	323
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1418	968	1523
DFC	=	Design flow/Capacity = Q/Qe	0.37	0.33	0.45

Total In Sum = 2680 PCU

DFC of Critical Approach = 0.45

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2029 Design PM (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	564	345	678
Qc	=	Circulating flow across entry (pcu/h)	414	265	350
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1421	958	1504
DFC	=	Design flow/Capacity = Q/Qe	0.40	0.36	0.45

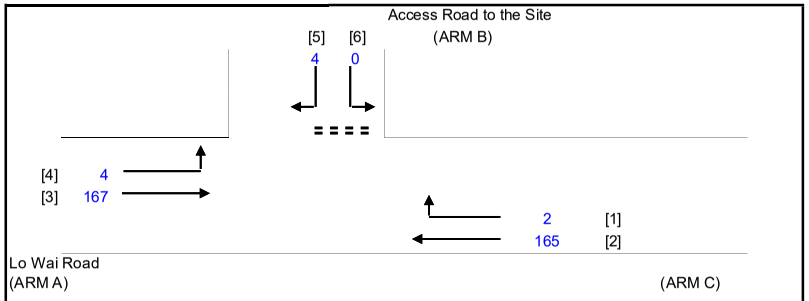
Total In Sum = 2760 PCU

DFC of Critical Approach = 0.45

APPENDIX D

Junction Capacity Assessment
– 2035 Reference & Design Scenarios

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference AM (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	4	(pcu/hr)
q a-c	=	167	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	165	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

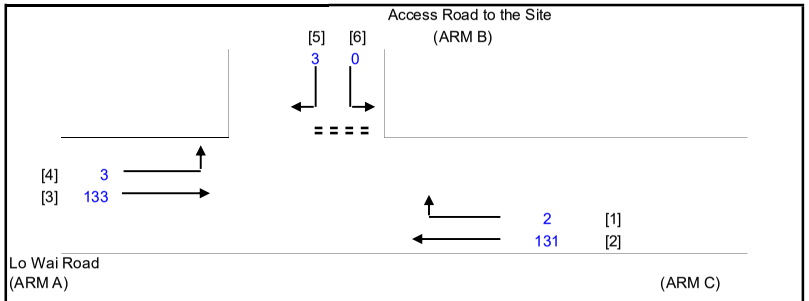
Q b-a	=	454	
Q b-c	=	603	
Q c-b	=	871	
Q b-ac	=	454	
TOTAL FLOW	=	342	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0088
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0088

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference Noon (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	133	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	131	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	3	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

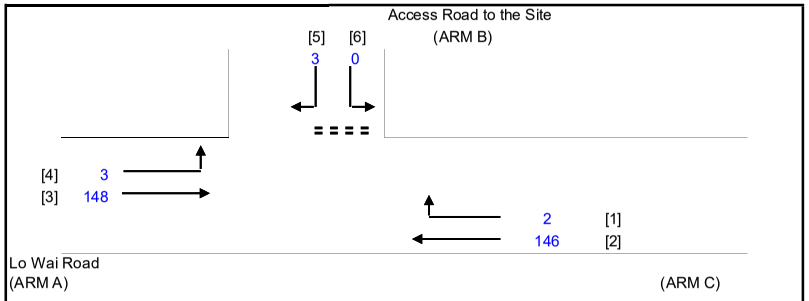
Q b-a	=	466	
Q b-c	=	611	
Q c-b	=	882	
Q b-ac	=	466	
TOTAL FLOW	=	272	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0064
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0064

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference PM (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	148	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	146	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	3	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

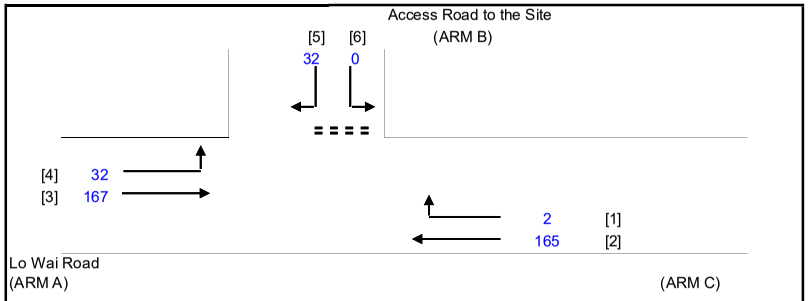
Q b-a	=	461	
Q b-c	=	608	
Q c-b	=	877	
Q b-ac	=	461	
TOTAL FLOW	=	302	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0065
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0065

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design AM (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	32	(pcu/hr)
q a-c	=	167	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	165	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	32	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

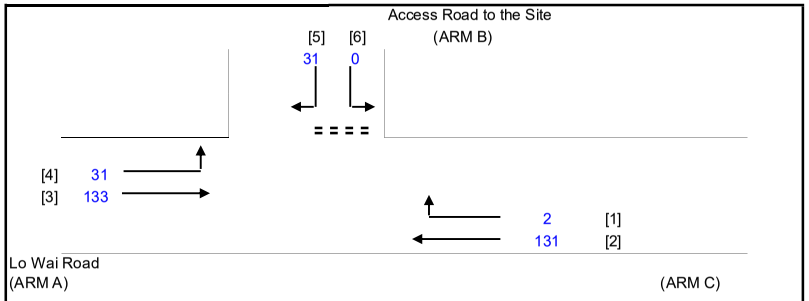
Q b-a	=	480	
Q b-c	=	640	
Q c-b	=	861	
Q b-ac	=	480	
TOTAL FLOW	=	398	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0667
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0667

CRITICAL DFC = 0.07

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design Noon (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	31	(pcu/hr)
q a-c	=	133	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	131	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	31	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

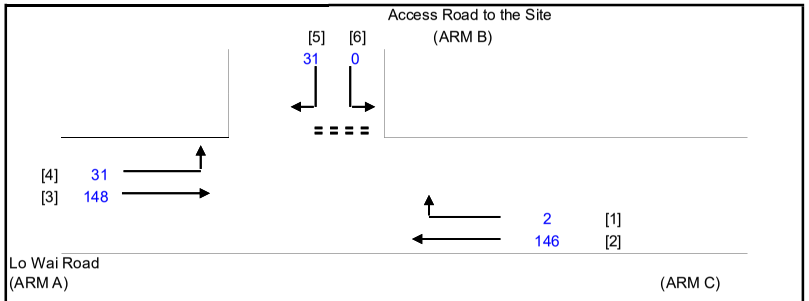
Q b-a	=	494	
Q b-c	=	648	
Q c-b	=	873	
Q b-ac	=	494	
TOTAL FLOW	=	328	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0628
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0628

CRITICAL DFC = 0.06

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design PM (Weekday)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	31	(pcu/hr)
q a-c	=	148	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	146	(pcu/hr)
q c-b	=	2	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	31	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0000

THE CAPACITY OF MOVEMENT :

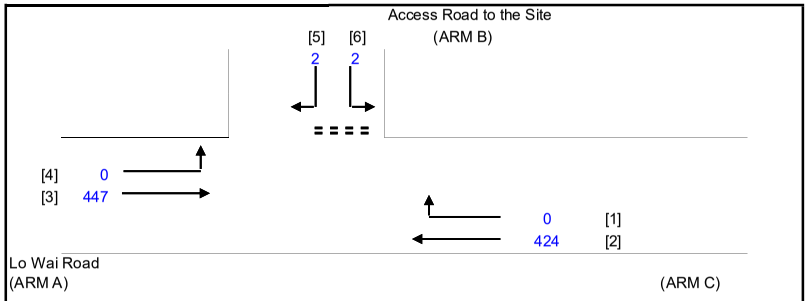
Q b-a	=	488	
Q b-c	=	645	
Q c-b	=	868	
Q b-ac	=	488	
TOTAL FLOW	=	358	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0635
DFC b-c	=	0.0000
DFC c-b	=	0.0023
DFC b-ac (share lane)	=	0.0635

CRITICAL DFC = 0.06

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference AM (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	447	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	424	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	2	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.5000

THE CAPACITY OF MOVEMENT :

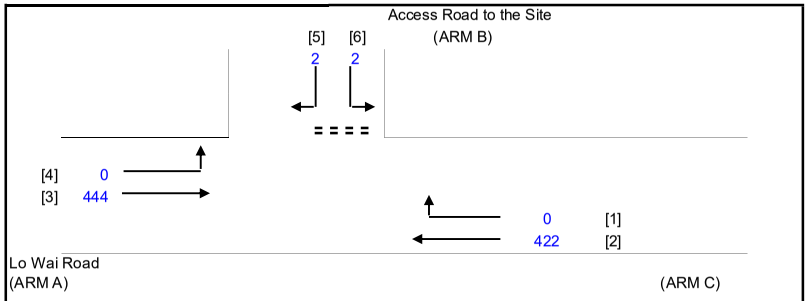
Q b-a	=	355	
Q b-c	=	538	
Q c-b	=	777	
Q b-ac	=	428	
TOTAL FLOW	=	875	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0056
DFC b-c	=	0.0037
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0094

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference Noon (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	444	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	422	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	2	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.5000

THE CAPACITY OF MOVEMENT :

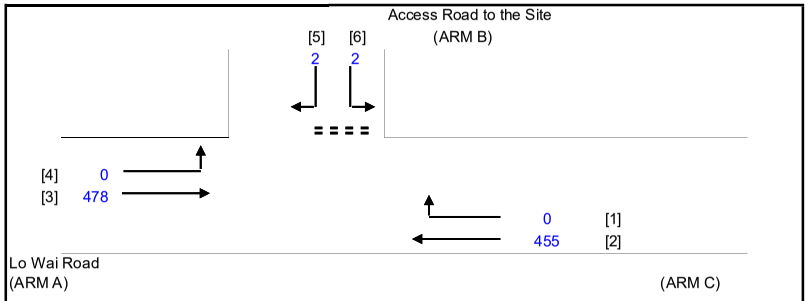
Q b-a	=	356	
Q b-c	=	538	
Q c-b	=	778	
Q b-ac	=	428	
TOTAL FLOW	=	870	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0056
DFC b-c	=	0.0037
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0093

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference PM (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	478	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	455	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	2	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8217
E	=	0.8628
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.5000

THE CAPACITY OF MOVEMENT :

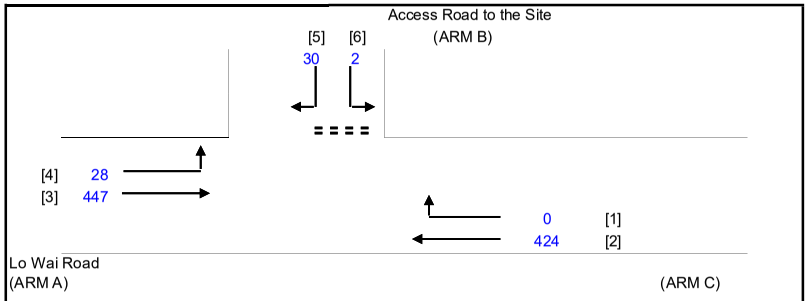
Q b-a	=	344	
Q b-c	=	531	
Q c-b	=	766	
Q b-ac	=	418	
TOTAL FLOW	=	937	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0058
DFC b-c	=	0.0038
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0096

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design AM (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	28	(pcu/hr)
q a-c	=	447	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	424	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	30	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0625

THE CAPACITY OF MOVEMENT :

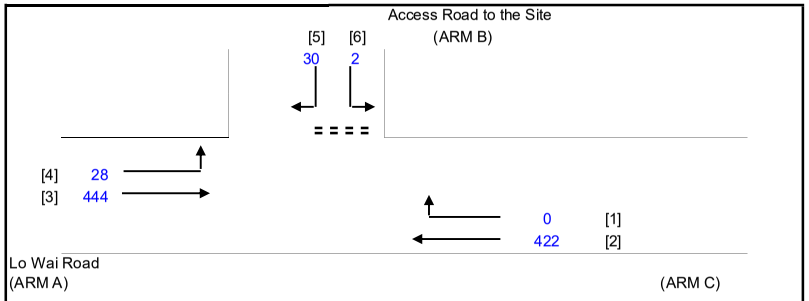
Q b-a	=	376	
Q b-c	=	570	
Q c-b	=	767	
Q b-ac	=	384	
TOTAL FLOW	=	931	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0798
DFC b-c	=	0.0035
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0833

CRITICAL DFC = 0.08

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design Noon (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	28	(pcu/hr)
q a-c	=	444	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	422	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	30	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0625

THE CAPACITY OF MOVEMENT :

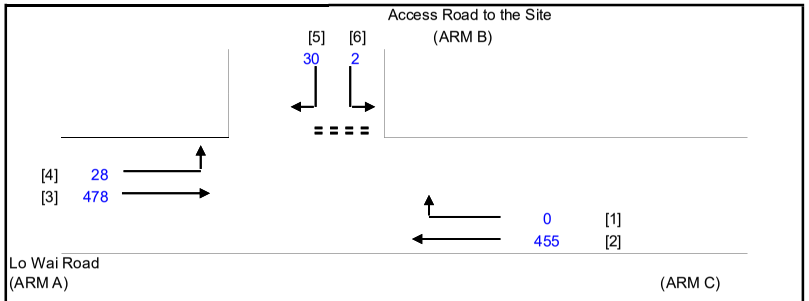
Q b-a	=	377	
Q b-c	=	571	
Q c-b	=	768	
Q b-ac	=	385	
TOTAL FLOW	=	926	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0796
DFC b-c	=	0.0035
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0831

CRITICAL DFC = 0.08

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			**INITIALS**	**DATE**
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design PM (Weekend)**	**PROJECT NO.:** 40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME : J1_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J1 Lo Wai Road/Access Road to the Site		**REFERENCE NO.:**	**REVIEWED BY:**	SLN	Oct-24



NOTES : (GEOMETRIC INPUT DATA)

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 STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.30	(metres)
W cr	=	0	(metres)
q a-b	=	28	(pcu/hr)
q a-c	=	478	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	7.30	(metres)
Vr c-b	=	40	(metres)
q c-a	=	455	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.65	(metres)
W b-c	=	3.65	(metres)
Vl b-a	=	40	(metres)
Vr b-a	=	50	(metres)
Vr b-c	=	30	(metres)
q b-a	=	30	(pcu/hr)
q b-c	=	2	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8752
E	=	0.9190
F	=	1.2464
Y	=	0.7482
F for (Qb-ac)	=	0.0625

THE CAPACITY OF MOVEMENT :

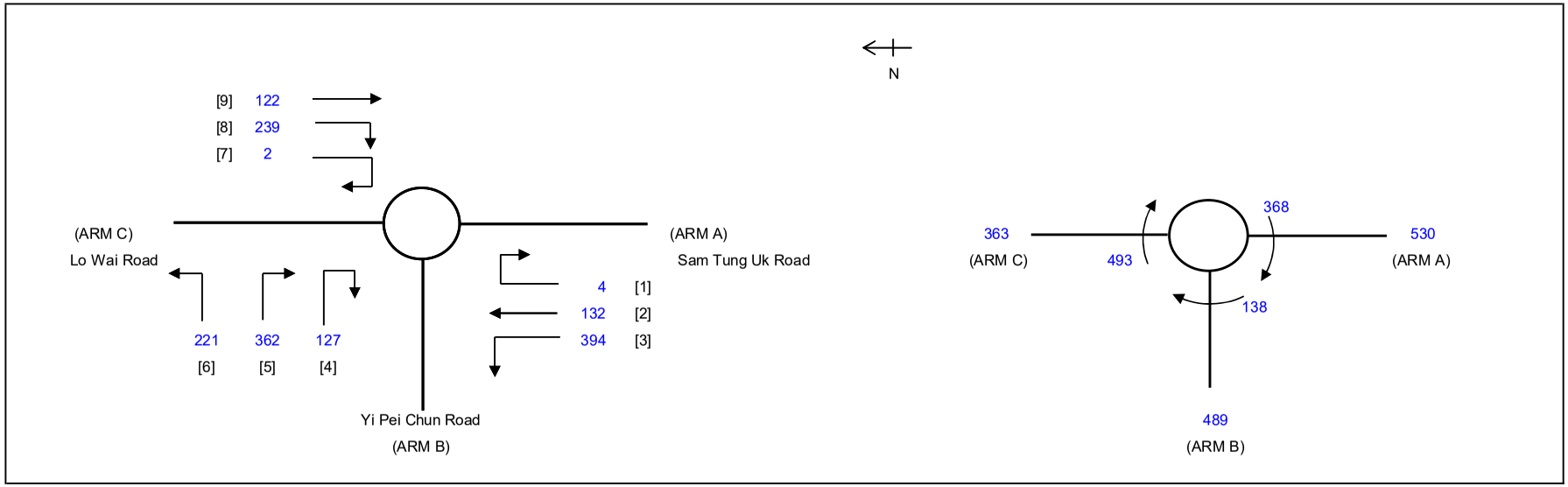
Q b-a	=	364	
Q b-c	=	562	
Q c-b	=	757	
Q b-ac	=	372	
TOTAL FLOW	=	993	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0824
DFC b-c	=	0.0036
DFC c-b	=	0.0000
DFC b-ac (share lane)	=	0.0860

CRITICAL DFC = 0.09

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference AM (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

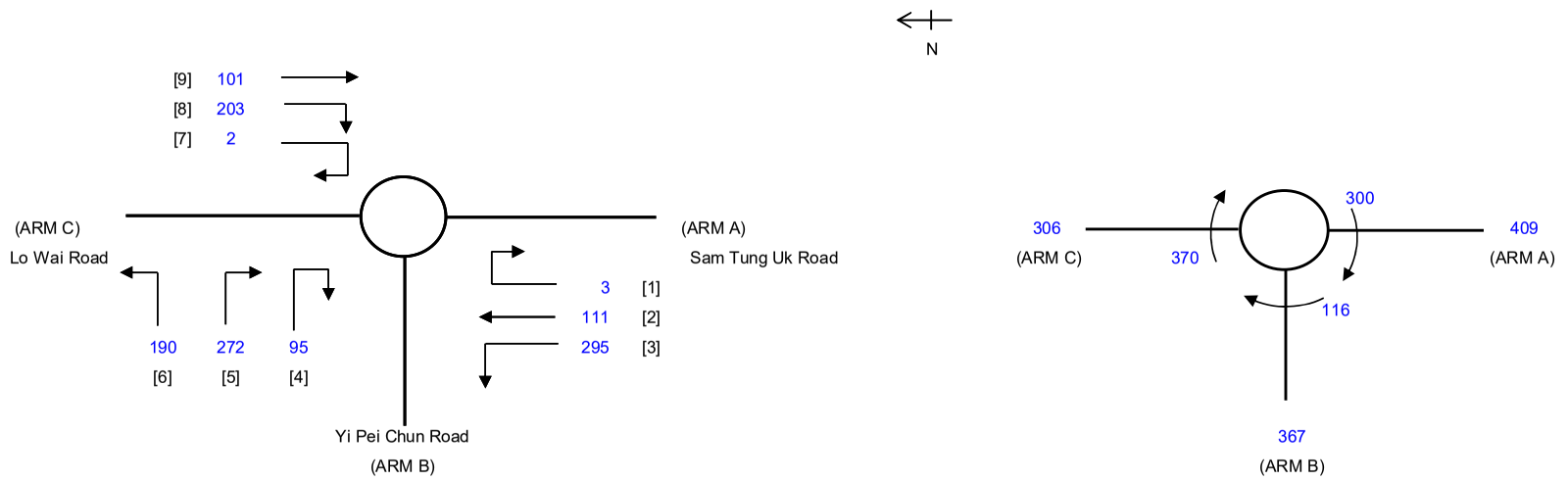


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	530	489	363
Qc	=	Circulating flow across entry (pcu/h)	368	138	493
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1453	1026	1405
DFC	=	Design flow/Capacity = Q/Qe	0.36	0.48	0.26

Total In Sum = 1966 PCU

DFC of Critical Approach = 0.48

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference Noon (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

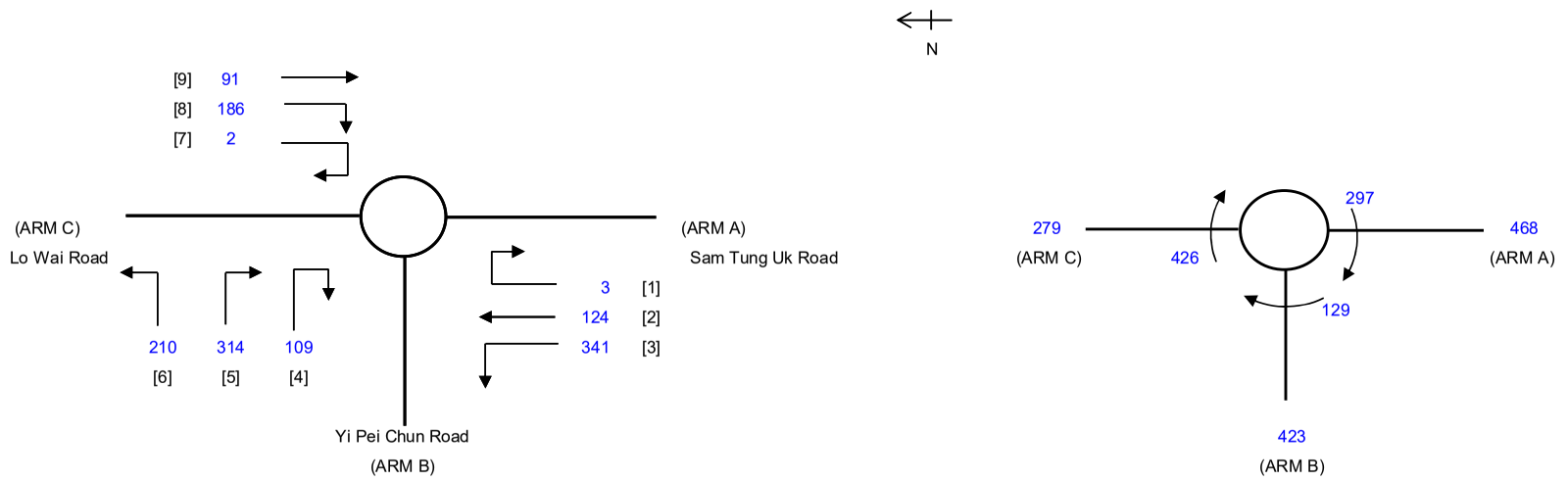


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	409	367	306
Qc	=	Circulating flow across entry (pcu/h)	300	116	370
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1499	1038	1491
DFC	=	Design flow/Capacity = Q/Qe	0.27	0.35	0.21

Total In Sum = 1578 PCU

DFC of Critical Approach = 0.35

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference PM (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

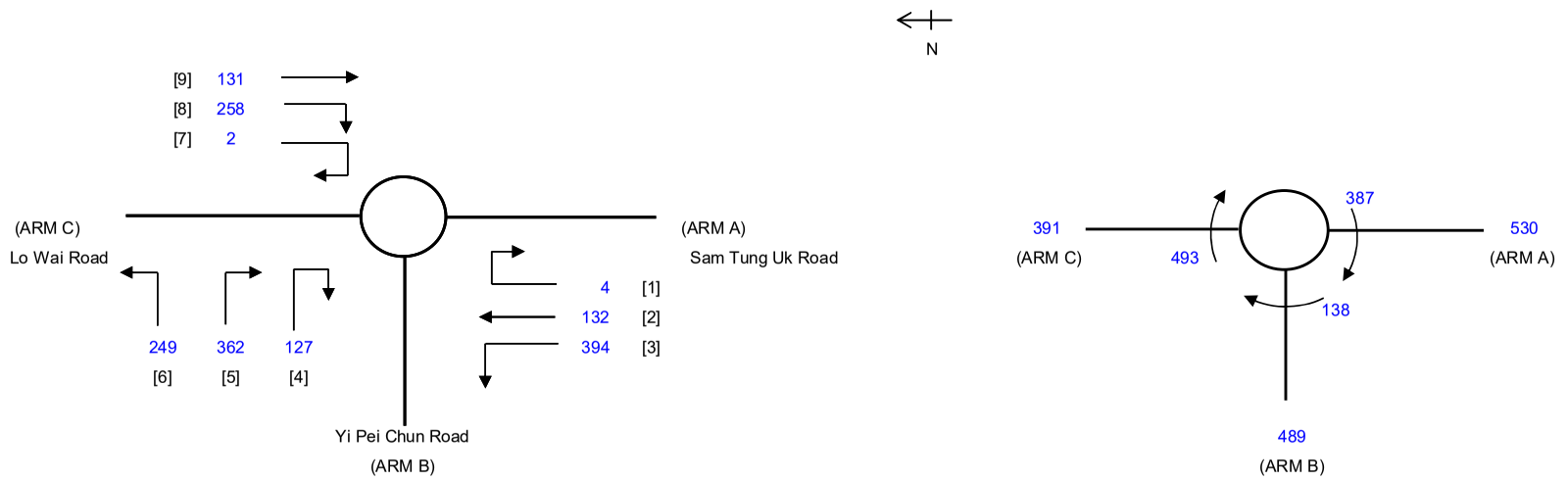


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	468	423	279
Qc	=	Circulating flow across entry (pcu/h)	297	129	426
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1501	1031	1452
DFC	=	Design flow/Capacity = Q/Qe	0.31	0.41	0.19

Total In Sum = 1659 PCU

DFC of Critical Approach = 0.41

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design AM (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

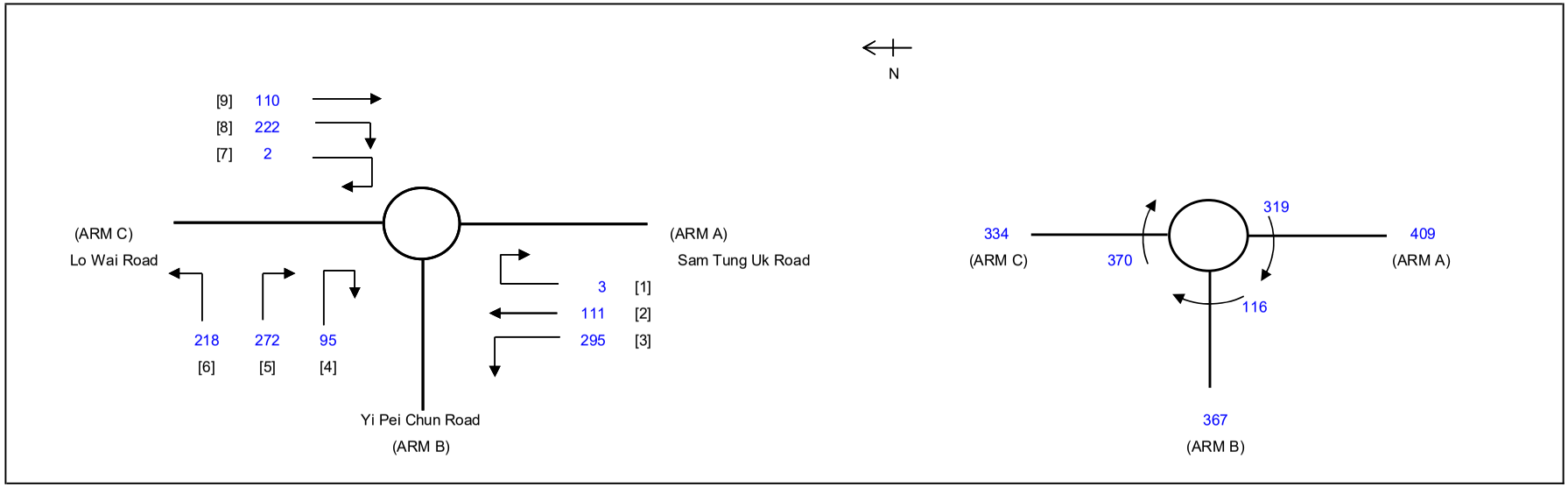


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	530	489	391
Qc	=	Circulating flow across entry (pcu/h)	387	138	493
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1440	1026	1405
DFC	=	Design flow/Capacity = Q/Qe	0.37	0.48	0.28

Total In Sum = 2050 PCU

DFC of Critical Approach = 0.48

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design Noon (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

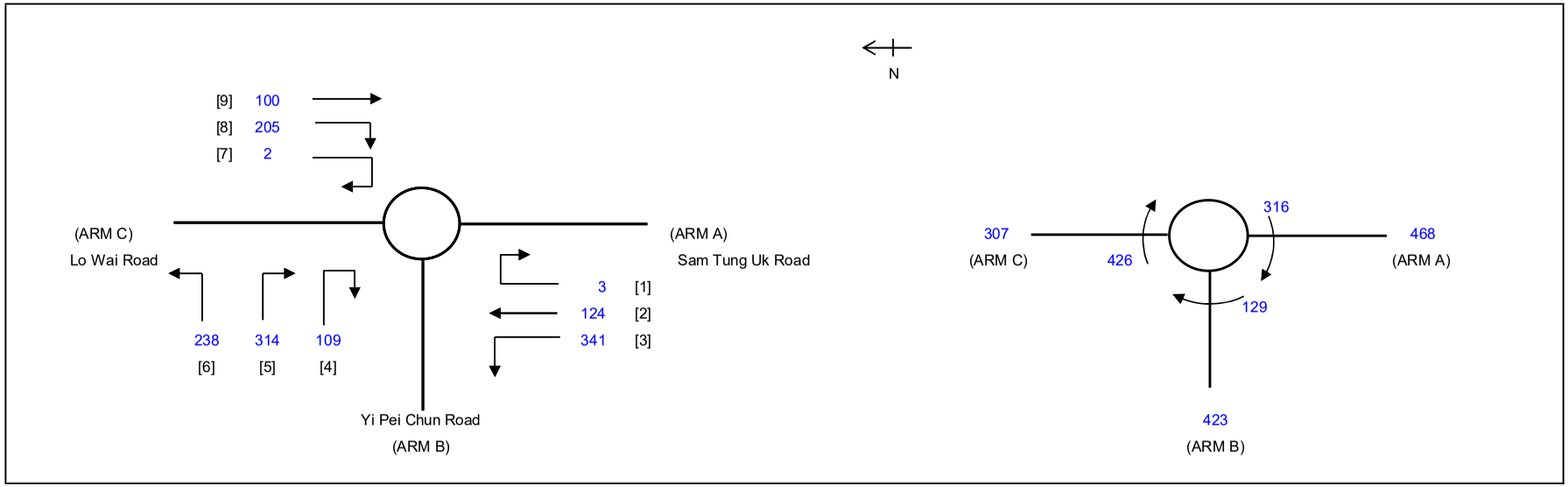


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	409	367	334
Qc	=	Circulating flow across entry (pcu/h)	319	116	370
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1486	1038	1491
DFC	=	Design flow/Capacity = Q/Qe	0.28	0.35	0.22

Total In Sum = 1662 PCU

DFC of Critical Approach = 0.35

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design PM (Weekday)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekday.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

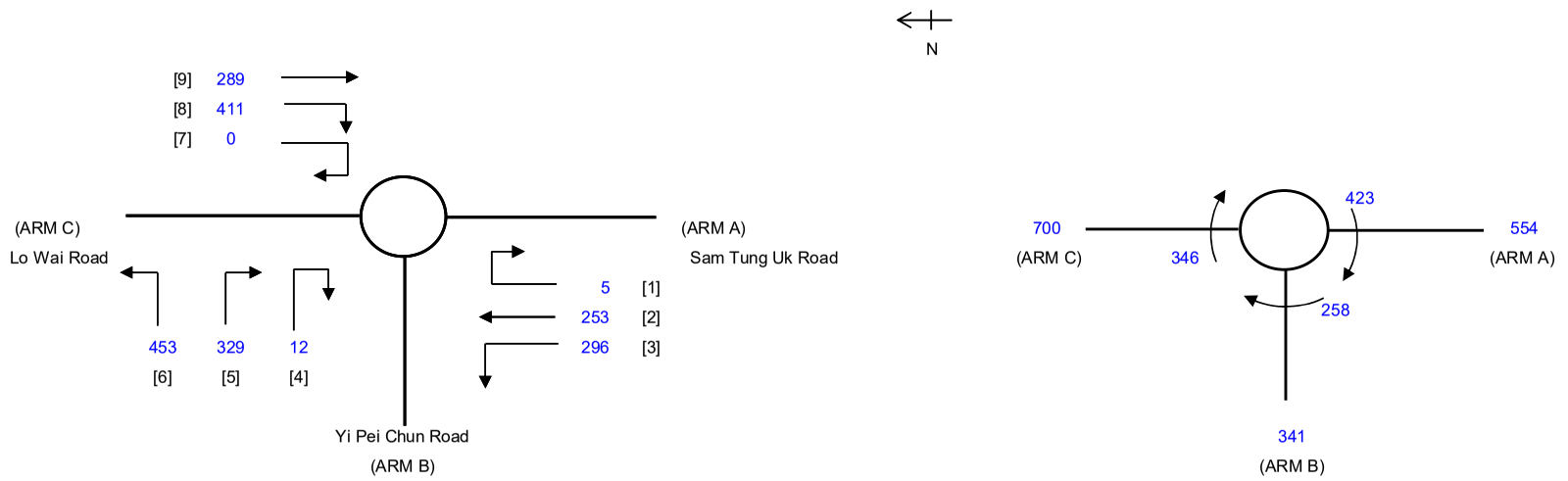


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	468	423	307
Qc	=	Circulating flow across entry (pcu/h)	316	129	426
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1488	1031	1452
DFC	=	Design flow/Capacity = Q/Qe	0.31	0.41	0.21

Total In Sum = 1743 PCU

DFC of Critical Approach = 0.41

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference AM (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

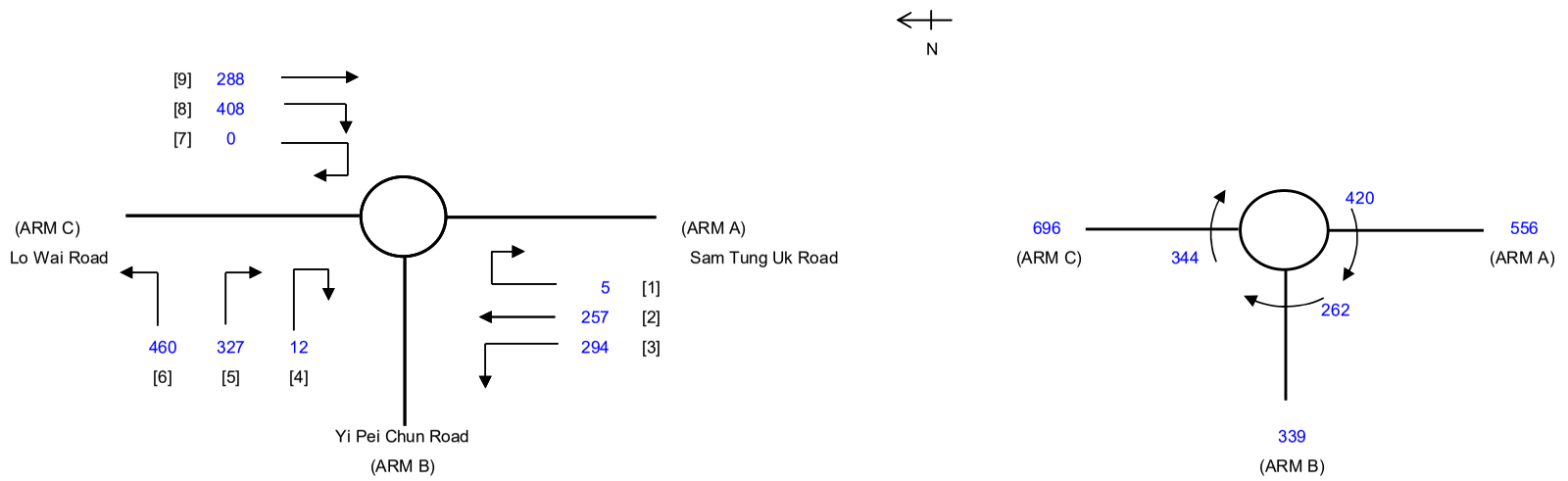


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	554	341	700
Qc	=	Circulating flow across entry (pcu/h)	423	258	346
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1415	962	1507
DFC	=	Design flow/Capacity = Q/Qe	0.39	0.35	0.46

Total In Sum = 2748 PCU

DFC of Critical Approach = 0.46

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference Noon (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

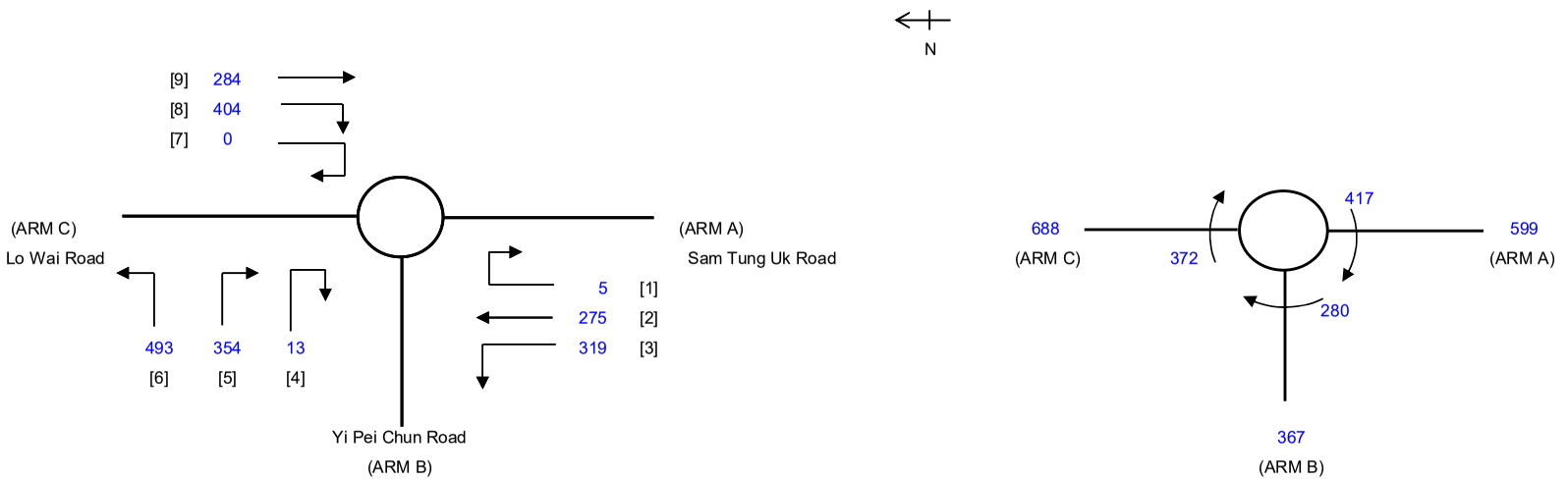


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	556	339	696
Qc	=	Circulating flow across entry (pcu/h)	420	262	344
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1417	960	1509
DFC	=	Design flow/Capacity = Q/Qe	0.39	0.35	0.46

Total In Sum = 2747 PCU

DFC of Critical Approach = 0.46

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Reference PM (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

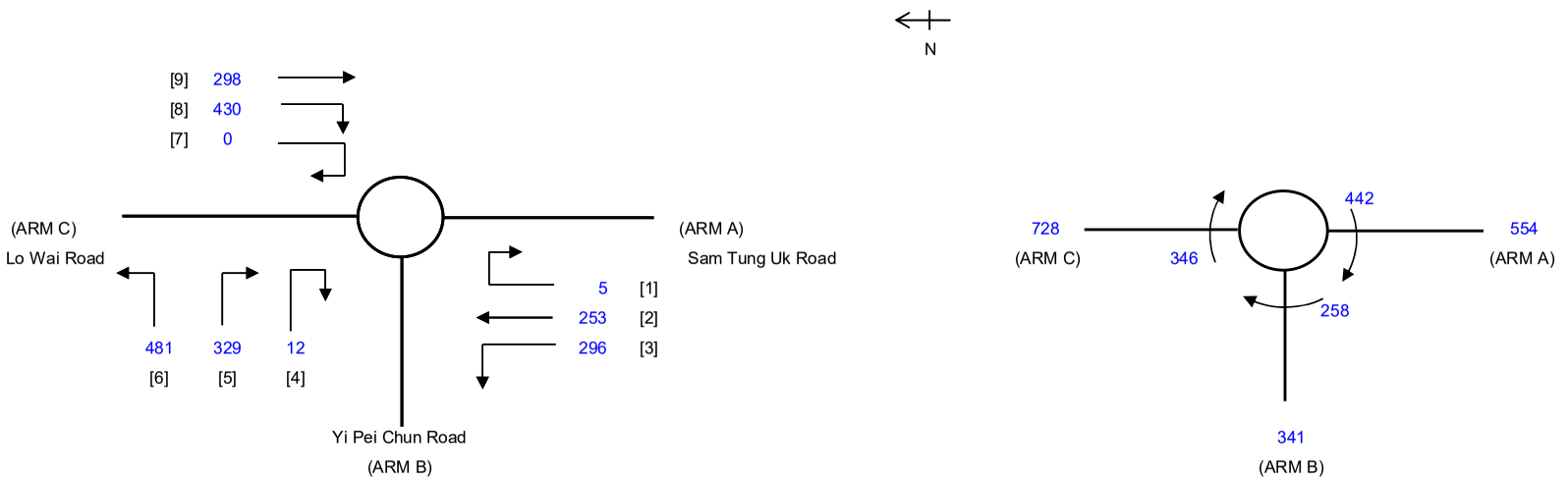


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	599	367	688
Qc	=	Circulating flow across entry (pcu/h)	417	280	372
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1419	950	1489
DFC	=	Design flow/Capacity = Q/Qe	0.42	0.39	0.46

Total In Sum = 2835 PCU

DFC of Critical Approach = 0.46

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design AM (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

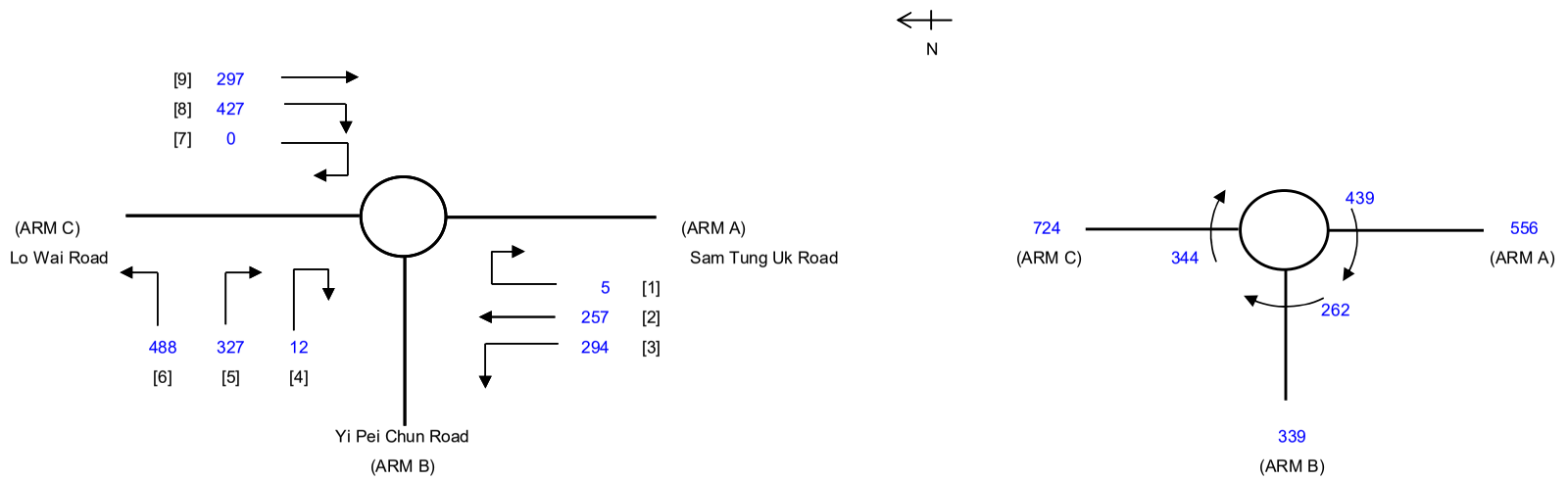


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	554	341	728
Qc	=	Circulating flow across entry (pcu/h)	442	258	346
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1402	962	1507
DFC	=	Design flow/Capacity = Q/Qe	0.40	0.35	0.48

Total In Sum = 2832 PCU

DFC of Critical Approach = 0.48

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design Noon (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24

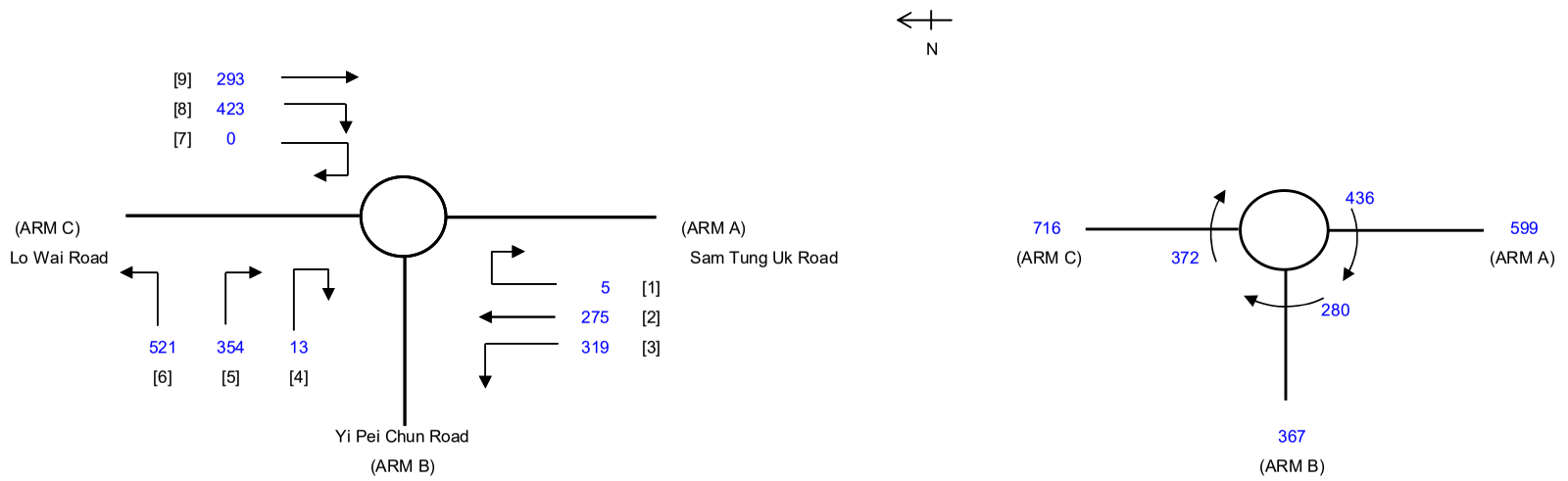


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	556	339	724
Qc	=	Circulating flow across entry (pcu/h)	439	262	344
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1404	960	1509
DFC	=	Design flow/Capacity = Q/Qe	0.40	0.35	0.48

Total In Sum = 2831 PCU

DFC of Critical Approach = 0.48

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION				INITIALS	DATE
Proposed Columbarium at Lot Nos. 613 RP(Part), 614 & 1229 in D.D. 453 and Their Adjoining Government Land, Lo Wai, Tsuen Wan, New Territories	**2035 Design PM (Weekend)**	**PROJECT NO.:**	40243	**PREPARED BY:**	SKL	Oct-24
		FILENAME :	J2_Weekend.xlsx	**CHECKED BY:**	SLN	Oct-24
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road		**REFERENCE NO.:**	J2	**REVIEWED BY:**	SLN	Oct-24



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.50	3.65	3.50
E	=	Entry width (m)	6.50	3.65	6.20
L	=	Effective length of flare (m)	13.00	1.00	19.00
R	=	Entry radius (m)	40.00	50.00	40.00
D	=	Inscribed circle diameter (m)	28.00	28.00	28.00
A	=	Entry angle (degree)	15.00	40.00	15.00
Q	=	Entry flow (pcu/h)	599	367	716
Qc	=	Circulating flow across entry (pcu/h)	436	280	372
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.37	0.00	0.23
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.99	1.08
X2	=	V + ((E-V)/(1+2S))	5.23	3.65	5.36
M	=	EXP((D-60)/10)	0.04	0.04	0.04
F	=	303*X2	1583	1106	1623
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48
Fc	=	0.21*Td(1+0.2*X2)	0.64	0.54	0.64
Qe	=	K(F-Fc*Qc)	1406	950	1489
DFC	=	Design flow/Capacity = Q/Qe	0.43	0.39	0.48

Total In Sum = 2919 PCU

DFC of Critical Approach = 0.48