

Appendix 10

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

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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.

Note: the actual closure days in each year will be notified to all buyers of niches in accordance with the procedure set out in the Management Plan.

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. With an occupancy rate of 4 persons per private car, there will be 28 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, 26 June 2022 and Wednesday, 29 June 2022 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).

3.3.2 Due to the recent COVID-19 coronavirus, it is understood that the traffic flows may be lower. As similar traffic surveys were carried out on Sunday, 17 March 2019 and Wednesday, 20 March 2019 during the rezoning application stage. The two sets of traffic flow data are compared and a summary table at the concerned road sections are provided in **Table 3.2**.

Table 3.2 Comparison of 2019 and 2022 Traffic Survey Results

No.	Roads	Peak Hour Traffic Flows in veh/hr					
		2019			2022		
		AM	Noon	PM	AM	Noon	PM
Weekday Peak Hour							
L1	Upper Section – Lo Wai Road between Hilltop Road and Lo Wai Lane	193	145	167	168	126	145
L2	Lower Section – Lo Wai Road between Hilltop Road and Yi Pei Chun Road	353	265	307	307	231	267
L3	Yi Pei Chun Road eastbound	428	321	371	355	266	308
L4	Yi Pei Chun Road westbound	450	337	390	374	280	324
TOTAL		1,424	1,068	1,235	1,204	903	1,044
Weekend Peak Hour							
L1	Upper Section – Lo Wai Road between Hilltop Road and Lo Wai Lane	641	637	690	609	605	656
L2	Lower Section – Lo Wai Road between Hilltop Road and Yi Pei Chun Road	951	945	1,024	903	898	973
L3	Yi Pei Chun Road eastbound	554	550	596	499	495	536
L4	Yi Pei Chun Road westbound	467	464	503	420	418	453
TOTAL		2,613	2,596	2,813	2,431	2,416	2,618

3.3.3 **Table 3.2** shows that the traffic flows in 2019 are higher than those in 2022. As a result, the traffic flows in 2019 are adopted as the conservative data for the subsequent assessment and the traffic flows are shown diagrammatically in **Figures 3.1 – 3.2**.

3.4 Existing Junction Capacity Assessment

3.4.1 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	0.30	0.22	0.26	0.28	0.28	0.31

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⁾	193 [0.14]	145 [0.10]	167 [0.12]	641 [0.46]	637 [0.46]	690 [0.49]
L2	Lower Section – Lo Wai Road between Hilltop Road and Yi Pei Chun Road	1,700 veh/hr ⁽²⁾	353 [0.21]	265 [0.16]	307 [0.18]	951 [0.56]	945 [0.56]	1,024 [0.60]
L3	Yi Pei Chun Road eastbound	1,900 veh/hr ⁽³⁾	428 [0.23]	321 [0.17]	371 [0.20]	554 [0.29]	550 [0.29]	596 [0.31]
L4	Yi Pei Chun Road westbound	950 veh/hr ⁽³⁾	450 [0.47]	337 [0.35]	390 [0.41]	467 [0.49]	464 [0.49]	503 [0.53]
L5	Sam Tung Uk Road eastbound	1,900 veh/hr ⁽³⁾	288 [0.15]	216 [0.11]	250 [0.13]	424 [0.22]	421 [0.22]	456 [0.24]
L6	Sam Tung Uk Road westbound	950 veh/hr ⁽³⁾	334 [0.35]	250 [0.26]	289 [0.30]	398 [0.42]	396 [0.42]	429 [0.45]

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 2025. So, 2028, 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 2028 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 development in Lo Wai will be the extension of Yuen Yuen Institute with an additional of 20,000 niches. 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 40,000 unoccupied/new niches, i.e. 4,000 niches per year. With approximately 80 suitable days for holding such ceremony, there will be 50 niches to be occupied on each day. On average, 5 to 6 niches will be occupied per hour and this will generate a two-way traffic of 20 to 24 vehicles/hour (4 vehicle trips per niche). To be conservative, a nominal value of 50 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 40,000 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 m² 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 At present, there are a total of 103 occupied niches at the Site. According to the 2019 data, a total of 790 visitors were recorded to visit the 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 ($8 \times (1+10\%) = 8.8$, 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 ($8 \times 2,125 + 9 \times 2,125$) 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 2028 Reference and Design Flows

- 4.4.1 The 2028 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.

$$\text{2028 Reference Flows} = \text{2019 surveyed peak hour traffic flows on normal weekday/weekend} \times (1 + 2\%)^9 + \text{traffic for attending ceremony for the new 40,000 niches in the area between 2019 and 2028} + \text{traffic generated by the approved development}$$

- 4.4.2 The 2028 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:

$$\text{2028 Design Flows} = \text{2028 Reference Flows} + \text{traffic generated by the proposed columbarium development}$$

4.5 Future Junction Capacity Assessment

4.5.1 Junction capacity assessments were carried out for the design year 2028 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 2028

No.	Junction Location	Junction Type	2028 Reference			2028 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	0.07	0.07
J2	Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road	Roundabout	0.47	0.35	0.41	0.47	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	0.45	0.45	0.48	0.47	0.47

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 2028, 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 2028 and the results are shown in **Table 4.5**.

Table 4.5 Link Capacity Assessments – Year 2028

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⁾	282 [0.20]	226 [0.16]	252 [0.18]	338 [0.24]	282 [0.20]	308 [0.22]
L2	Lower Section – Lo Wai Road between Hilltop Road and Yi Pei Chun Road	1,700 veh/hr ⁽²⁾	630 [0.37]	526 [0.31]	536 [0.32]	686 [0.40]	582 [0.34]	592 [0.35]
L3	Yi Pei Chun Road eastbound	1,900 veh/hr ⁽³⁾	570 [0.30]	442 [0.23]	509 [0.27]	598 [0.31]	470 [0.25]	537 [0.28]
L4	Yi Pei Chun Road westbound	950 veh/hr ⁽³⁾	622 [0.65]	487 [0.51]	516 [0.54]	642 [0.68]	507 [0.53]	536 [0.56]
L5	Sam Tung Uk Road eastbound	1,900 veh/hr ⁽³⁾	391 [0.21]	305 [0.16]	326 [0.17]	399 [0.21]	313 [0.16]	334 [0.18]
L6	Sam Tung Uk Road westbound	950 veh/hr ⁽³⁾	421 [0.44]	322 [0.34]	375 [0.39]	421 [0.44]	322 [0.34]	375 [0.39]
Weekend Peak Hour								
L1	Upper Section – Lo Wai Road between Hilltop Road and Lo Wai Lane	1,400 veh/hr ⁽¹⁾	818 [0.58]	813 [0.58]	877 [0.63]	874 [0.62]	869 [0.62]	933 [0.67]
L2	Lower Section – Lo Wai Road between Hilltop Road and Yi Pei Chun Road	1,700 veh/hr ⁽²⁾	1,345 [0.79]	1,337 [0.79]	1,392 [0.82]	1,401 [0.82]	1,393 [0.82]	1,448 [0.85]
L3	Yi Pei Chun Road eastbound	1,900 veh/hr ⁽³⁾	722 [0.38]	717 [0.38]	781 [0.41]	750 [0.39]	745 [0.39]	809 [0.43]
L4	Yi Pei Chun Road westbound	950 veh/hr ⁽³⁾	634 [0.67]	631 [0.66]	647 [0.68]	654 [0.69]	651 [0.69]	667 [0.70]
L5	Sam Tung Uk Road eastbound	1,900 veh/hr ⁽³⁾	562 [0.30]	557 [0.29]	576 [0.30]	570 [0.30]	565 [0.30]	584 [0.31]
L6	Sam Tung Uk Road westbound	950 veh/hr ⁽³⁾	497 [0.52]	494 [0.52]	540 [0.57]	497 [0.52]	494 [0.52]	540 [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.

4.6.2 **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 1¹**). So, the future traffic condition is considered to be acceptable.

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.”

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.

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.

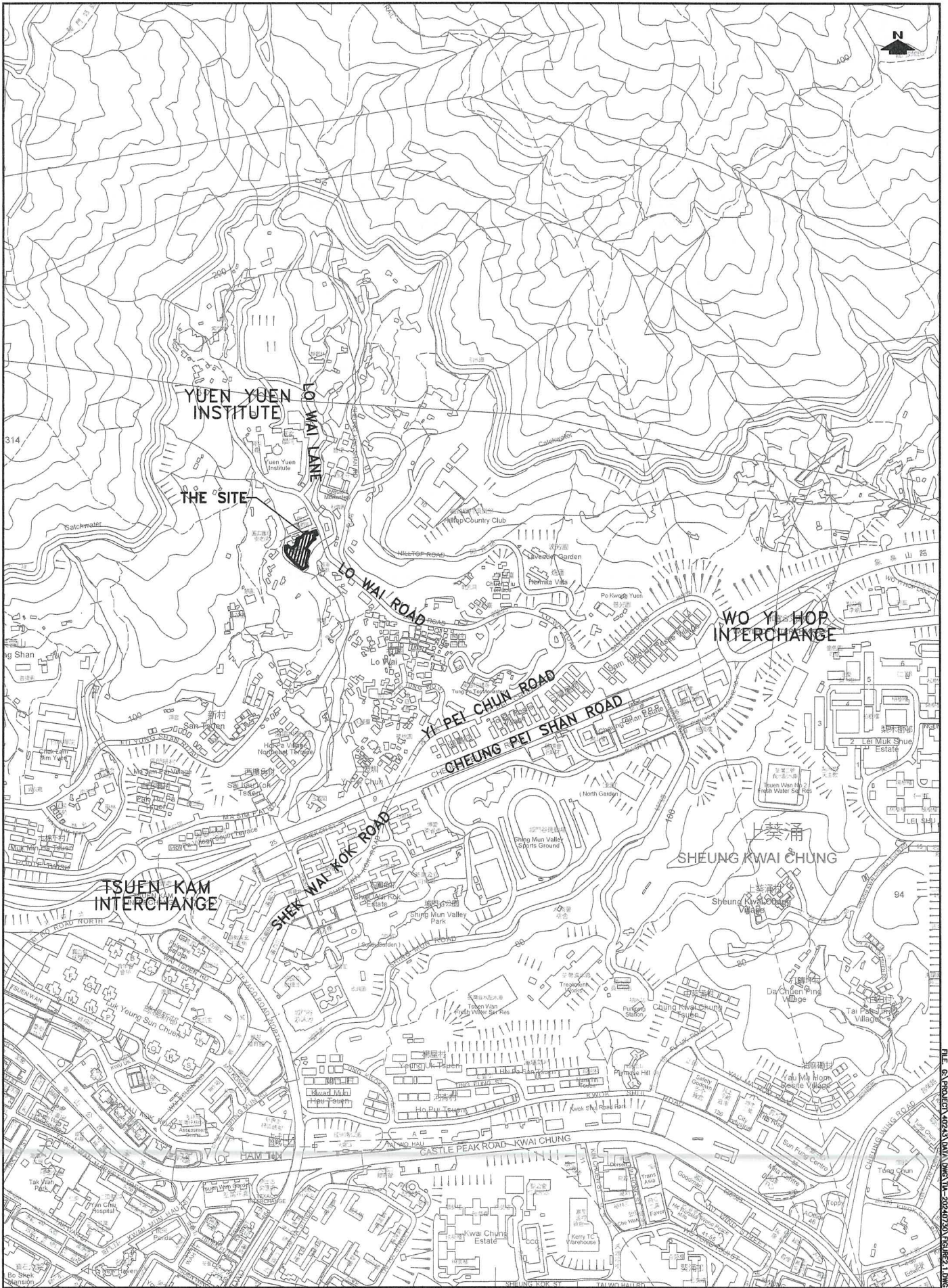
6 SUMMARY AND CONCLUSION

6.1 Summary

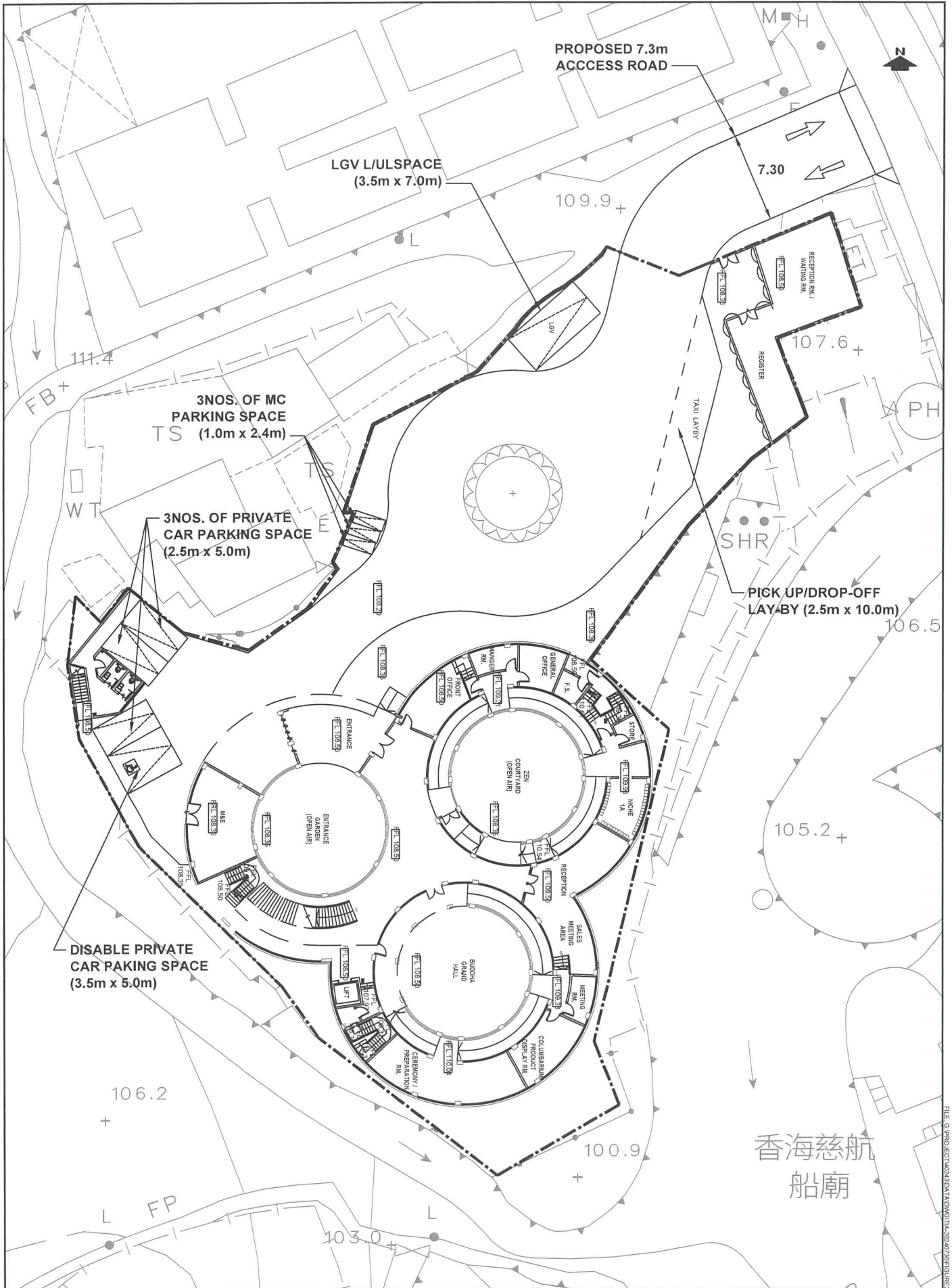
- 6.1.1 The Applicant intends to regularize its existing “columbarium” use at the Site to provide 4,250 niches. The Site is located on the western side of Lo Wai Road and is about 180m away from the main entrance of Yuen Yuen Institute. The Site can be reached via an access road which is connected to 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 Management Plan to be submitted to the Private Columbarium Licensing Board (“PCLB”) 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 count surveys were conducted on a weekday and a Sunday from 08:30 to 18:30 in June 2022. Due to the recent COVID-19 coronavirus, the set of 2022 traffic flows were compared with the 2019 traffic flows (collected during the rezoning application) and was found to be smaller. Therefore, the 2019 traffic flows were adopted and based on the peak hour traffic flows, junction and link capacity assessments were conducted. The overall traffic conditions, as indicated by the DFCs and V/Cs, was satisfactory.
- 6.1.5 Taking into consideration of the historical growth from the ATC data, future TPEDM data and future developments in the Lo Wai area, a nominal growth rate of 2% is adopted to project the 2028 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 40,000 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 2028 Design Traffic Flows (“With” the proposed columbarium) are derived by sum up the 2028 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.
- 6.1.8 Other management measures, i.e. visit-by-appointment scheme and regular review of management plan, would be implemented.

6.2 Conclusion

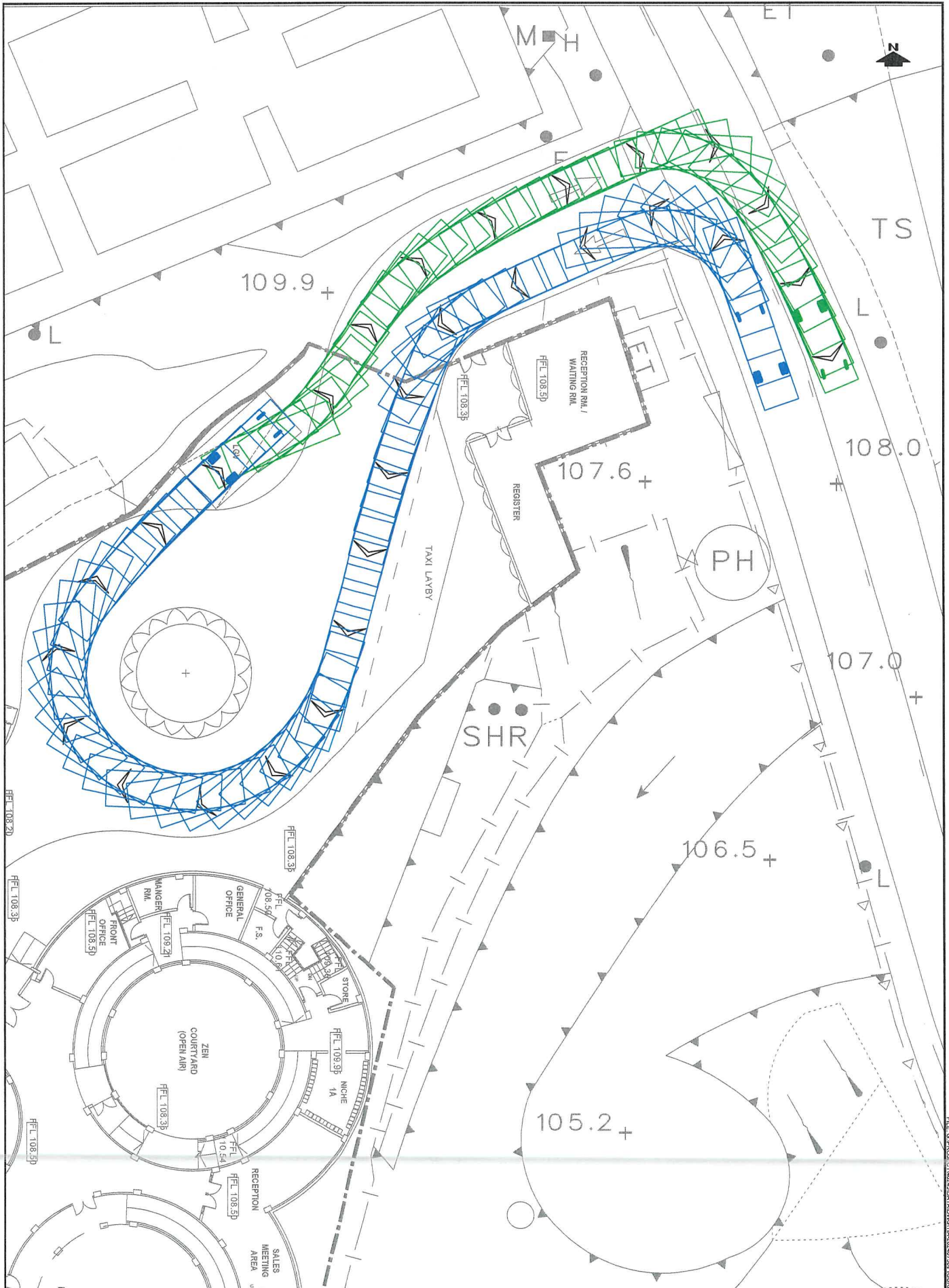
- 6.2.1 The findings of this traffic impact assessment indicated that the proposed columbarium development will not cause additional adverse impact on the operation of Lo Wai Road on normal weekdays and weekends, provided that the proposed columbarium development is closed for the visitors during the festival days and its shadow period. The Applicant will incorporate the same proposed traffic arrangements into the submission documents 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.



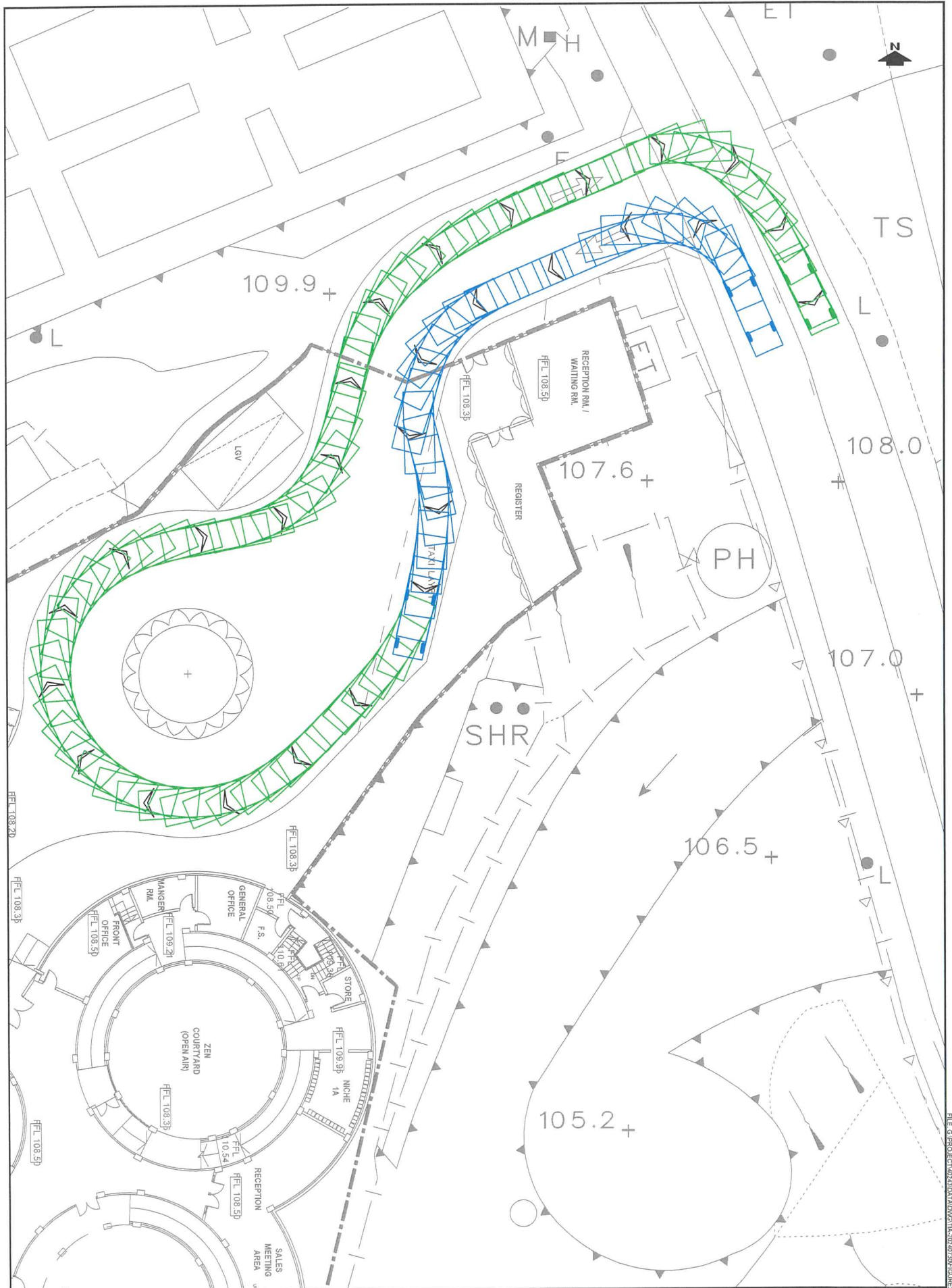
PROJECT NO. 40243	PROJECT TITLE APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 2.1	REV. .
DESIGNED SKL	DATE JUL 2024	DRAWING TITLE LOCATION PLAN	
DRAWN CLL	SCALE 1:10000	LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			



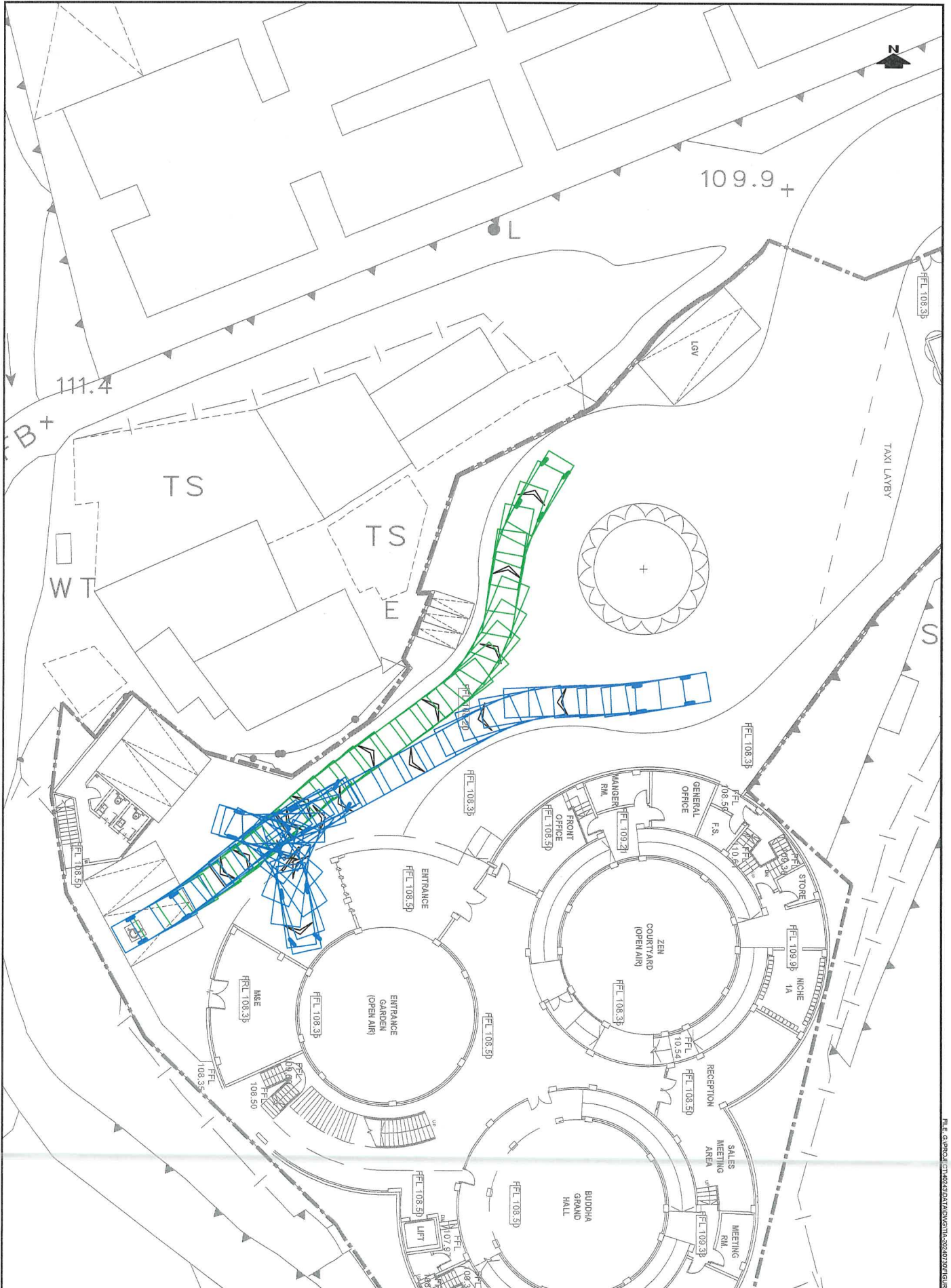
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DESIGNED SKL	DATE JUL 2024	DRAWING TITLE PROPOSED TRAFFIC LAYOUT	
DRAWN CLL	SCALE 1:400	LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			



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. -
DESIGNED SKL DATE JUL 2024	DRAWING TITLE SWEPT PATH ANALYSIS - LGV L/UL SPACE	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL SCALE 1:300			
CHECKED SLN			



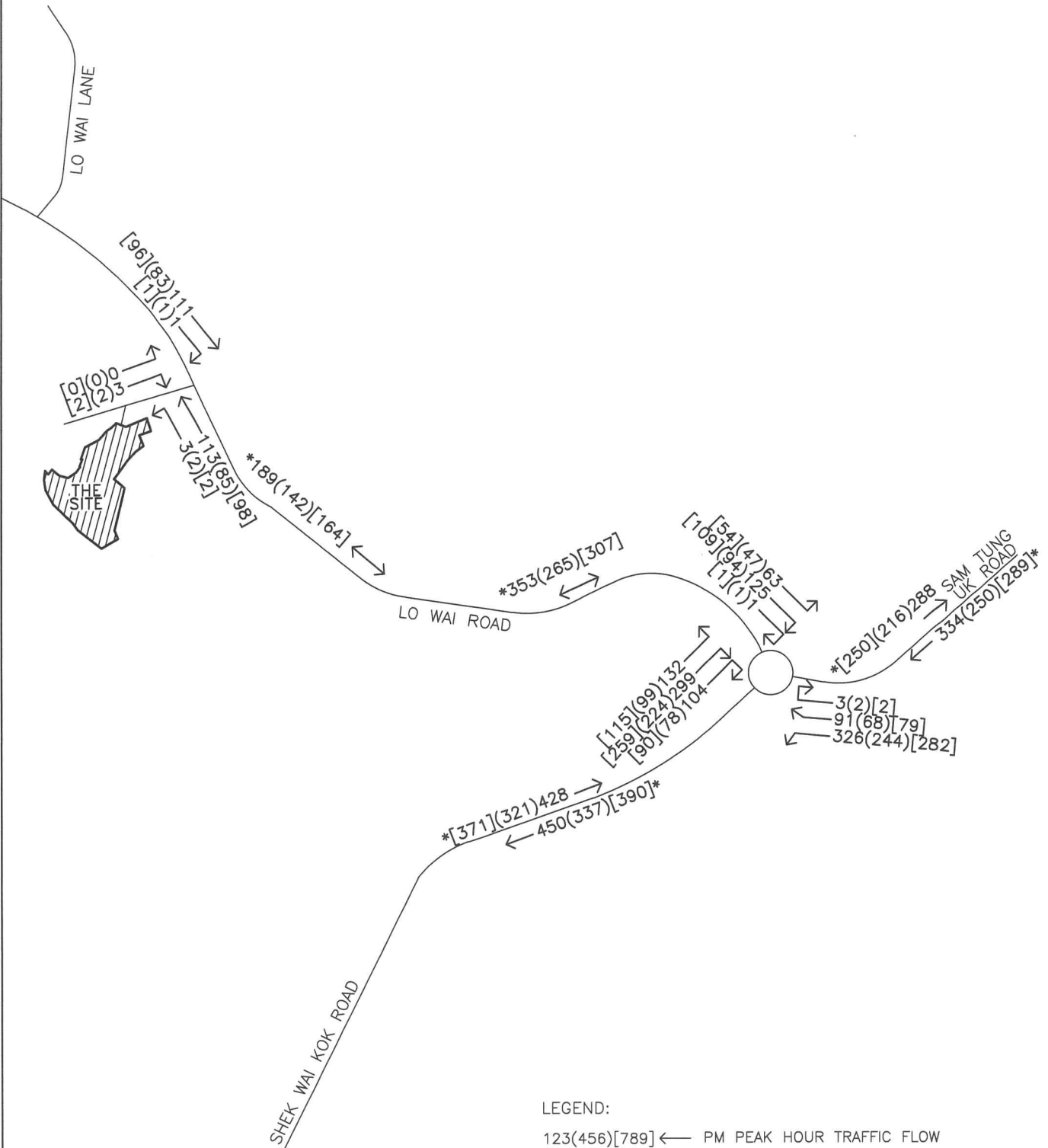
PROJECT NO. 40243	PROJECT TITLE APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 2.4	REV. -
DESIGNED SKL	DATE JUL 2024	DRAWING TITLE SWEPT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



PROJECT NO.	40243
DESIGNED	SKL
DATE	JUL 2024
DRAWN	CLL
CHECKED	SLN
SCALE	1:300

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 TITLE	SWEPT PATH ANALYSIS - DISABLE PRIVATE CAR PARKING SPACE

DRAWING NO.	FIGURE 2.5
REV.	-
LLA 顧問有限公司 Consultancy Limited	



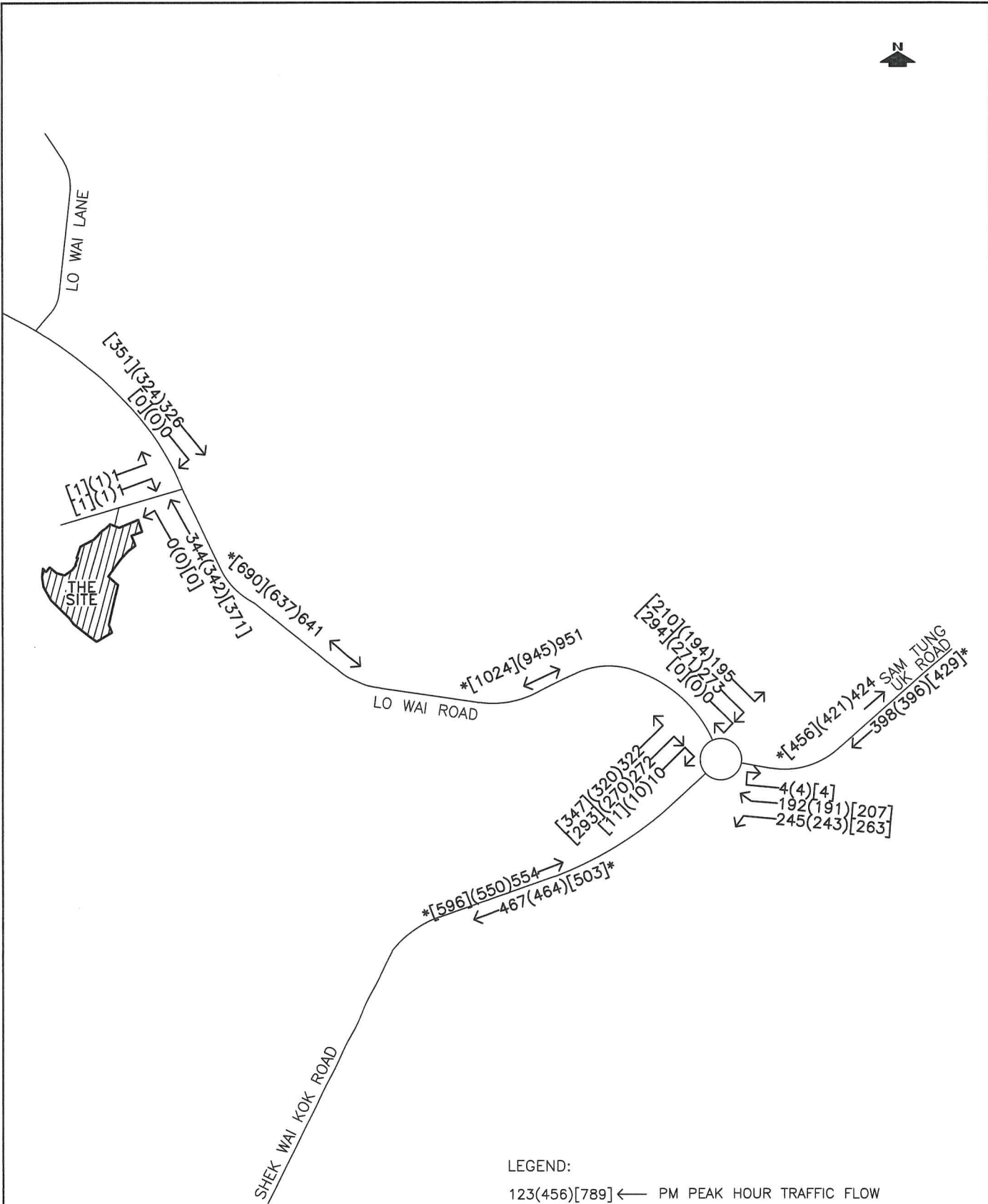
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- 123(456)[789] ← PM PEAK HOUR TRAFFIC FLOW
- ↑ NOON PEAK HOUR TRAFFIC FLOW
- AM PEAK HOUR TRAFFIC FLOW
- *123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

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. —
DESIGNED SKL DATE JUL 2024	DRAWING TITLE EXISTING TRAFFIC FLOWS ON WEDNESDAY, 20 MARCH 2019	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL SCALE			
CHECKED SLN N.T.S.			




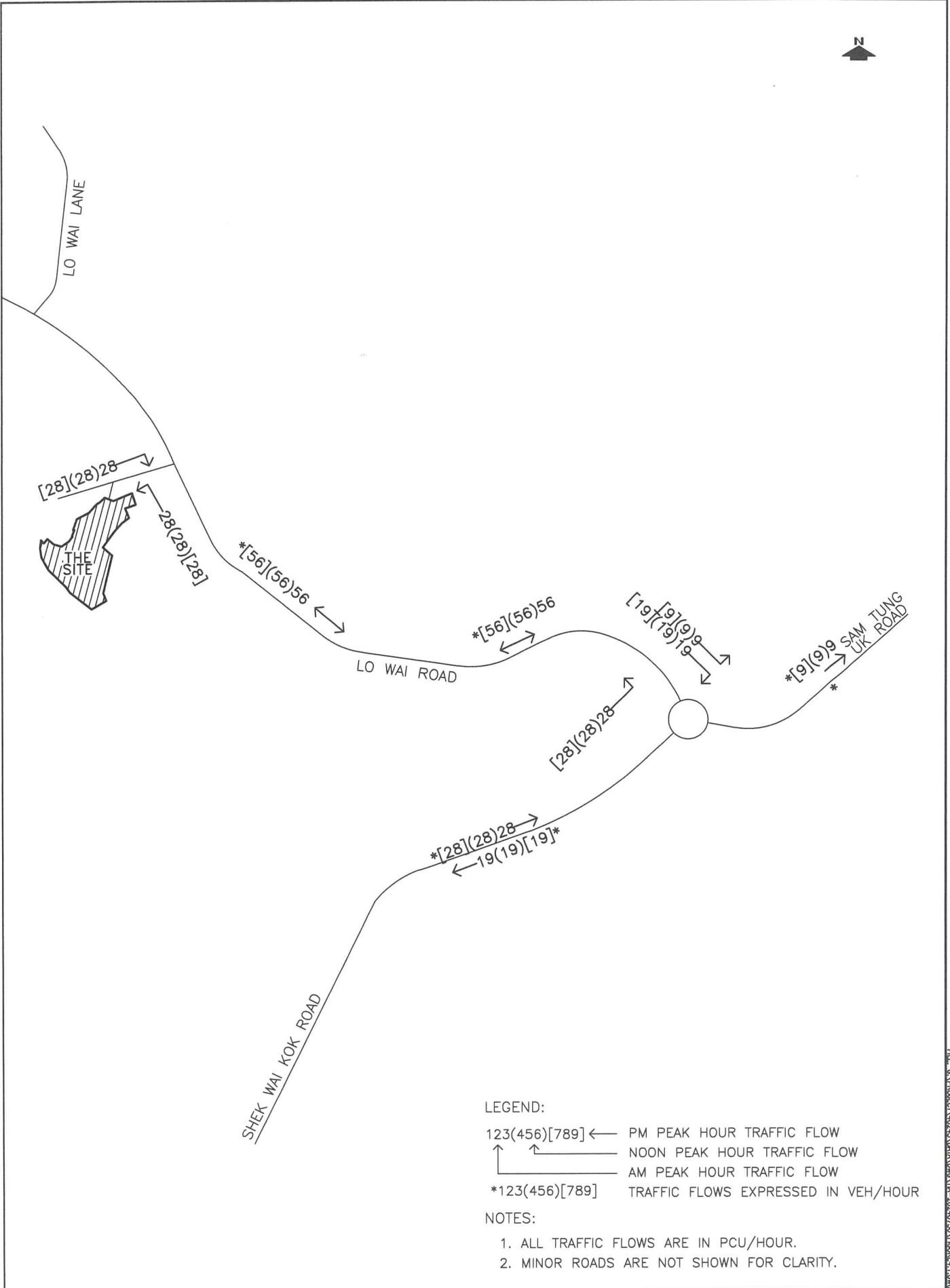
LEGEND:

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

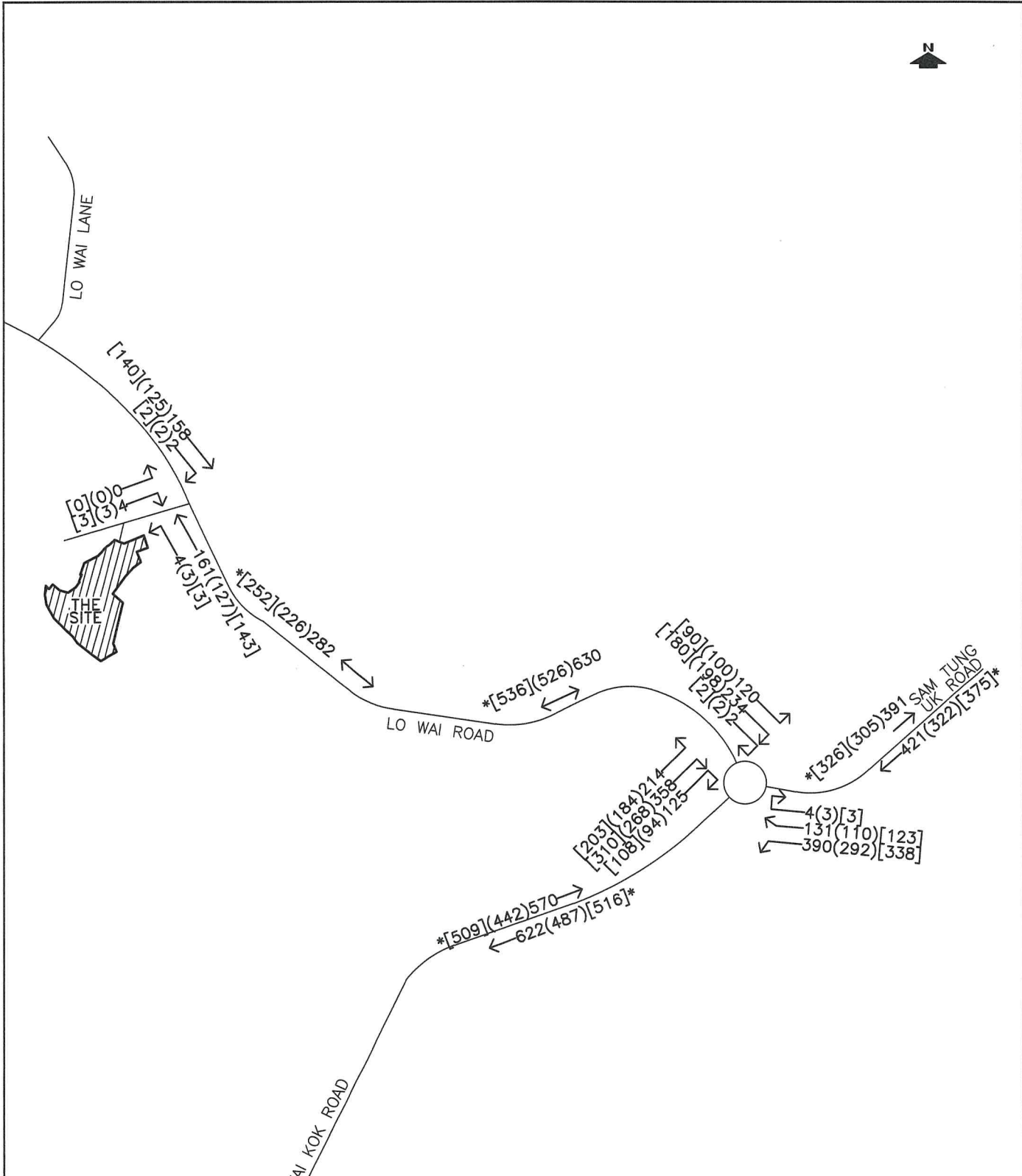
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DESIGNED SKL	DATE JUL 2024	DRAWING TITLE EXISTING TRAFFIC FLOWS ON SUNDAY, 17 MARCH 2019	
DRAWN CLL	SCALE N.T.S.	 LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			



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	
DRAWN CLL	SCALE N.T.S.		
CHECKED SLN			



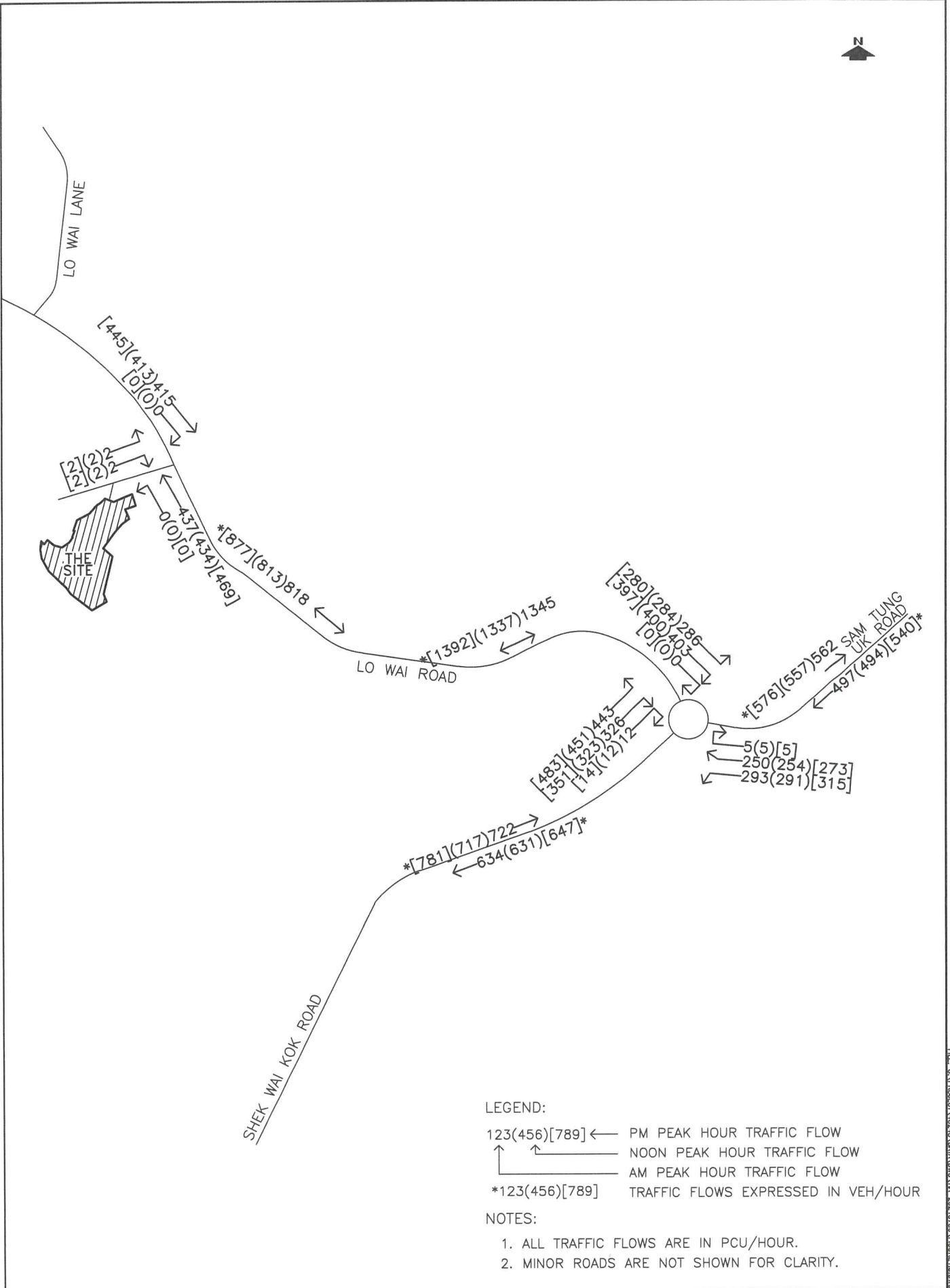
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- ← AM PEAK HOUR TRAFFIC FLOW
- *123(456)[789] TRAFFIC FLOWS EXPRESSED IN VEH/HOUR

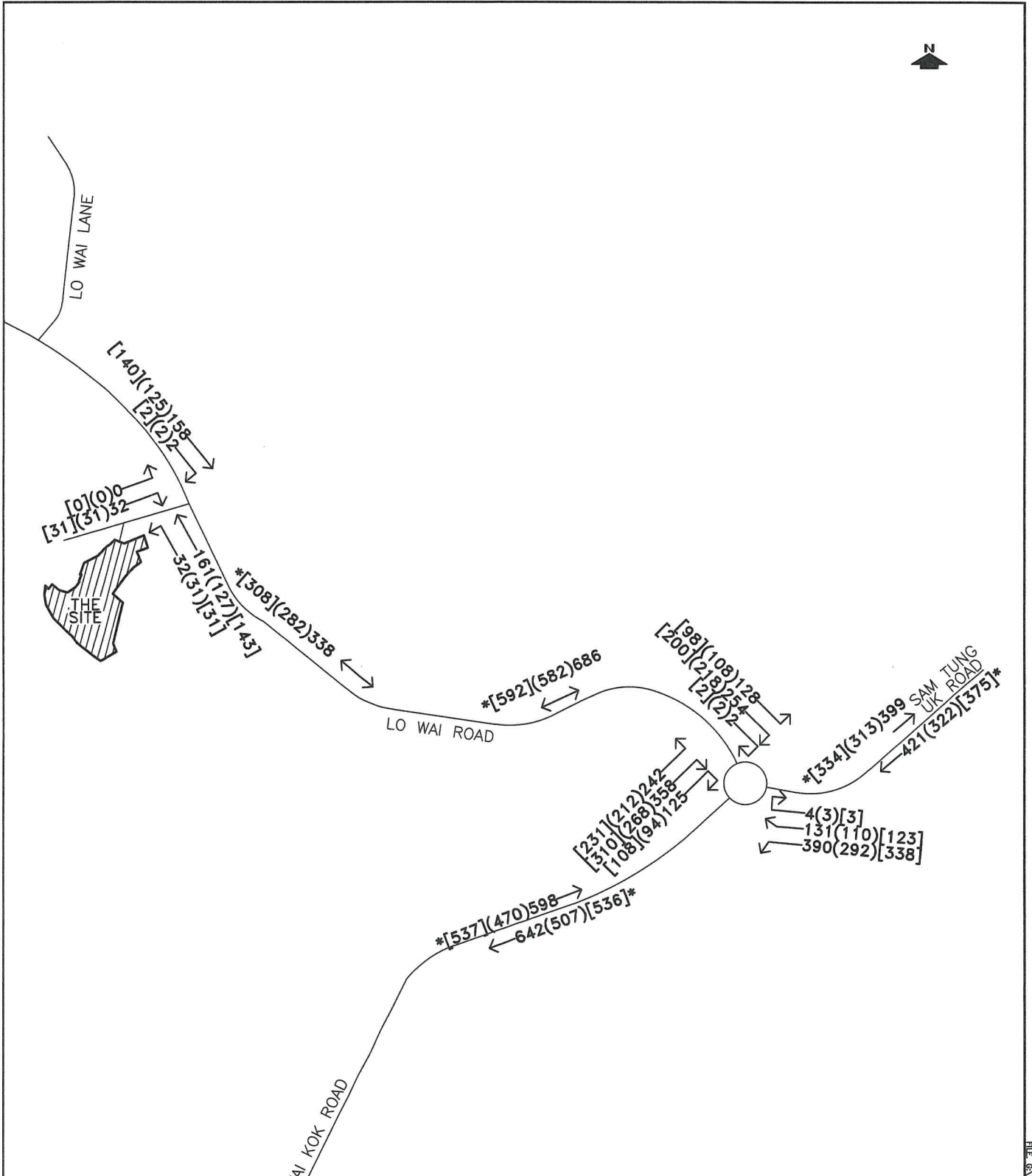
NOTES:

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. —
DESIGNED SKL	DATE JUL 2024	DRAWING TITLE 2028 REFERENCE TRAFFIC FLOWS ON WEEKDAY	
DRAWN CLL	SCALE N.T.S.		
CHECKED SLN			



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. —
DESIGNED SKL	DATE JUL 2024	DRAWING TITLE 2028 REFERENCE TRAFFIC FLOWS ON WEEKEND	
DRAWN CLL	SCALE N.T.S.		
CHECKED SLN			



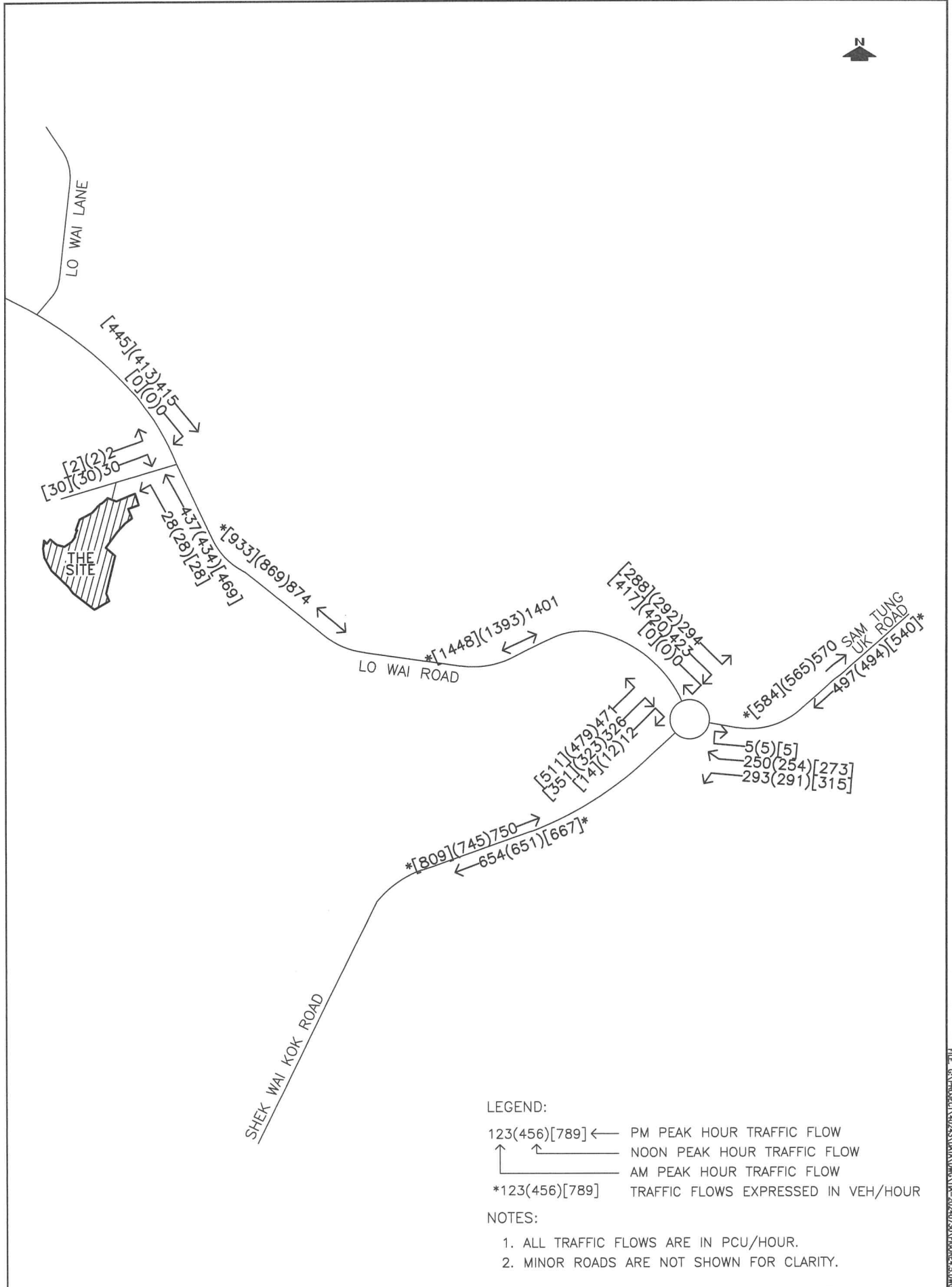
LEGEND:

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

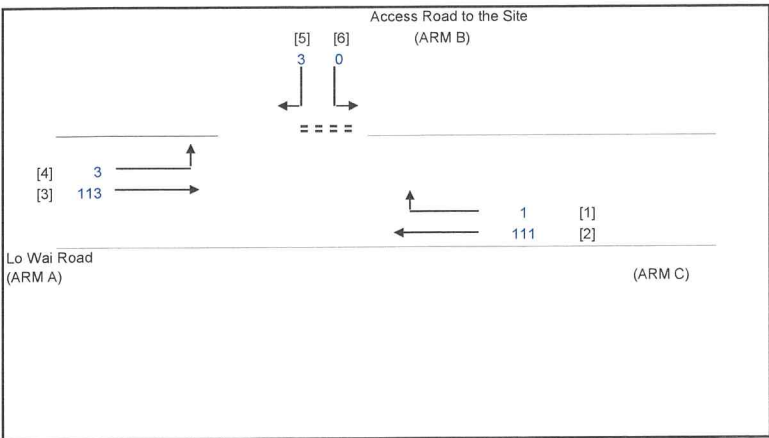
PROJECT NO. 40243	PROJECT TITLE APPLICATION UNDER SECTION 16 FOR PROPOSED COLUMBARIUM REDEVELOPMENT AT LOT 613 RP(PART), 614 & 1229 IN D.D. 453 AND ADJOINING GOVERNMENT LAND, LO WAI, TSUEN WAN - TRAFFIC IMPACT ASSESSMENT REPORT	DRAWING NO. FIGURE 4.4	REV. —
DESIGNED SKL	DATE JUL 2024	DRAWING TITLE 2028 DESIGN TRAFFIC FLOWS ON WEEKDAY	
DRAWN CLL	SCALE N.T.S.		
CHECKED SLN			



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. —
DESIGNED SKL DATE JUL 2024	DRAWING TITLE 2028 DESIGN TRAFFIC FLOWS ON WEEKEND	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL SCALE N.T.S.			
CHECKED SLN			

APPENDIX A
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	2019 Existing AM (Weekday)	PROJECT NO.: 40243	PREPARED BY: SKL
J1 Lo Wai Road/Access Road to the Site	FILENAME : J1_Weekday.xlsx		CHECKED BY: SLN	Jul-24
		REFERENCE NO.:	REVIEWED BY: SLN	Jul-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
- Vi 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:	GEOMETRIC FACTORS :	THE CAPACITY OF MOVEMENT :	COMPARISON OF DESIGN FLOW TO CAPACITY:
MAJOR ROAD (ARM A) W = 7.30 (metres) W cr = 0 (metres) q a-b = 3 (pcu/hr) q a-c = 113 (pcu/hr)	D = 0.8217 E = 0.8628 F = 1.2464 Y = 0.7482	Q b-a = 474 Q b-c = 616 Q c-b = 889 Q b-ac = 474	DFC b-a = 0.0063 DFC b-c = 0.0000 DFC c-b = 0.0011 DFC b-ac (share lane) = 0.0063
MAJOR ROAD (ARM C) W c-b = 7.30 (metres) Vr c-b = 40 (metres) q c-a = 111 (pcu/hr) q c-b = 1 (pcu/hr)	F for (Qb-ac) = 0.0000	TOTAL FLOW = 231 (PCU/HR)	
MINOR ROAD (ARM B) W b-a = 3.00 (metres) W b-c = 3.00 (metres) Vi 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)			
			CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED

PRIORITY JUNCTION CALCULATION

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

**2019 Existing Noon
(Weekday)**

PROJECT NO.: 40243

PREPARED BY:

INITIALS

DATE

J1 Lo Wai Road/Access Road to the Site

FILENAME : J1_Weekday.xlsx

CHECKED BY:

SKL

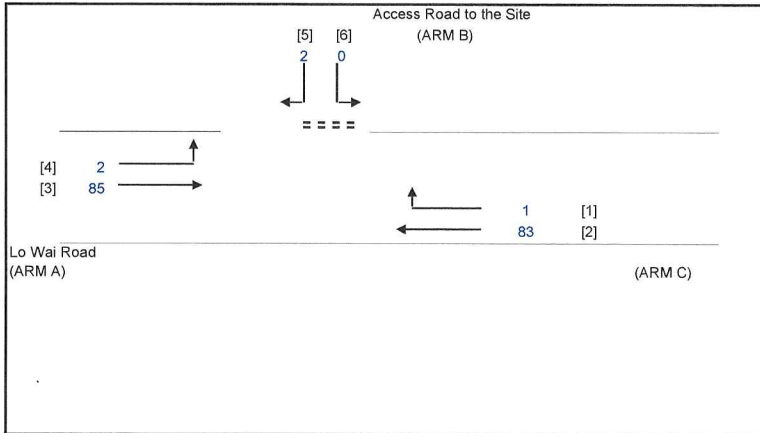
Jul-24

REFERENCE NO.:

REVIEWED BY:

SLN

Jul-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
- VI 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 = 85 (pcu/hr)

MAJOR ROAD (ARM C)

W c-b = 7.30 (metres)
 Vr c-b = 40 (metres)
 q c-a = 83 (pcu/hr)
 q c-b = 1 (pcu/hr)

MINOR ROAD (ARM B)

W b-a = 3.00 (metres)
 W b-c = 3.00 (metres)
 VI 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 = 484
 Q b-c = 623
 Q c-b = 899
 Q b-ac = 484

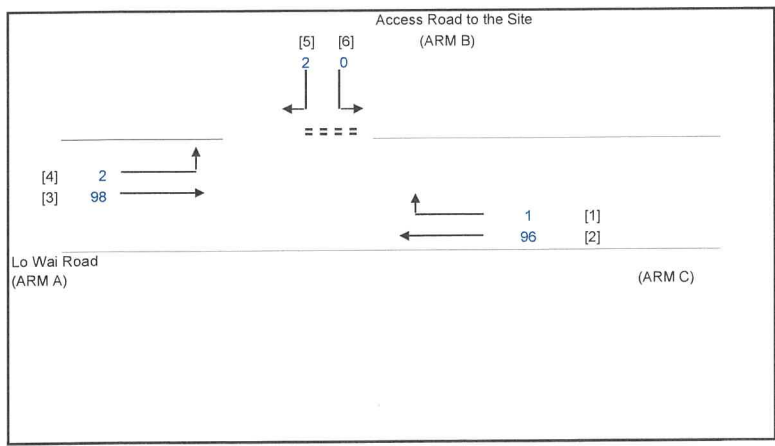
TOTAL FLOW = 173 (PCU/HR)

COMPARISON 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		2019 Existing PM (Weekday)	PROJECT NO.: 40243	PREPARED BY:	SKL	Jul-24
J1 Lo Wai Road/Access Road to the Site			FILENAME : J1_Weekday.xlsx	CHECKED BY:	SLN	Jul-24
			REFERENCE NO.:	REVIEWED BY:	SLN	Jul-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
- Vi 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:	GEOMETRIC FACTORS :	THE CAPACITY OF MOVEMENT :	COMPARISON OF DESIGN FLOW TO CAPACITY:
MAJOR ROAD (ARM A) W = 7.30 (metres) W cr = 0 (metres) q a-b = 2 (pcu/hr) q a-c = 98 (pcu/hr)	D = 0.8217 E = 0.8628 F = 1.2464 Y = 0.7482	Q b-a = 479 Q b-c = 620 Q c-b = 895 Q b-ac = 479	DFC b-a = 0.0042 DFC b-c = 0.0000 DFC c-b = 0.0011 DFC b-ac (share lane) = 0.0042
MAJOR ROAD (ARM C) W c-b = 7.30 (metres) Vr c-b = 40 (metres) q c-a = 96 (pcu/hr) q c-b = 1 (pcu/hr)	F for (Qb-ac) = 0.0000	TOTAL FLOW = 199 (PCU/HR)	
MINOR ROAD (ARM B) W b-a = 3.00 (metres) W b-c = 3.00 (metres) Vi 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)			
			CRITICAL DFC = 0.00

LLA CONSULTANCY LIMITED

PRIORITY JUNCTION CALCULATION

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

**2019 Existing AM
(Weekend)**

PROJECT NO.: 40243

PREPARED BY:

INITIALS

DATE

SKL Jul-24

FILENAME : J1_Weekend.xlsx

CHECKED BY:

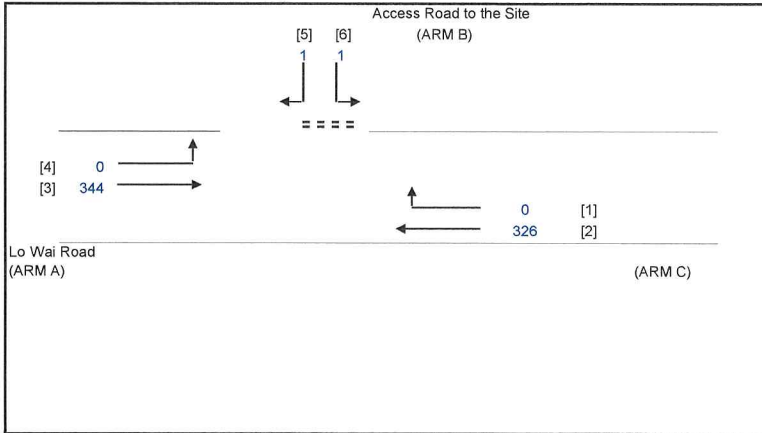
SLN Jul-24

J1 Lo Wai Road/Access Road to the Site

REFERENCE NO.:

REVIEWED BY:

SLN Jul-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
- VI 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:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)

W = 7.30 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 344 (pcu/hr)

D = 0.8217
 E = 0.8628
 F = 1.2464
 Y = 0.7482

Q b-a = 392
 Q b-c = 562
 Q c-b = 812
 Q b-ac = 462

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

MAJOR ROAD (ARM C)

W c-b = 7.30 (metres)
 Vr c-b = 40 (metres)
 q c-a = 326 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0.5000

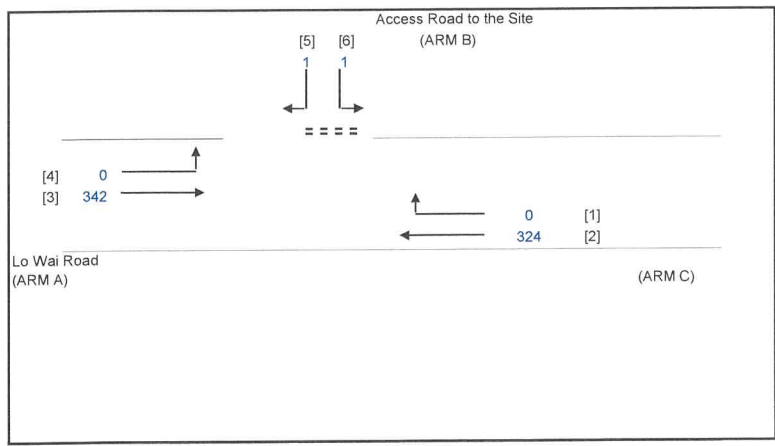
TOTAL FLOW = 672 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)

W b-a = 3.00 (metres)
 W b-c = 3.00 (metres)
 VI 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)

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		2019 Existing Noon (Weekend)	PROJECT NO.: 40243	PREPARED BY:	SKL	Jul-24
J1 Lo Wai Road/Access Road to the Site			FILENAME : J1_Weekend.xlsx	CHECKED BY:	SLN	Jul-24
			REFERENCE NO.:	REVIEWED BY:	SLN	Jul-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
- Vi 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:	GEOMETRIC FACTORS :	THE CAPACITY OF MOVEMENT :	COMPARISON OF DESIGN FLOW TO CAPACITY:
MAJOR ROAD (ARM A) W = 7.30 (metres) W cr = 0 (metres) q a-b = 0 (pcu/hr) q a-c = 342 (pcu/hr)	D = 0.8217 E = 0.8628 F = 1.2464 Y = 0.7482	Q b-a = 393 Q b-c = 562 Q c-b = 812 Q b-ac = 463	DFC b-a = 0.0025 DFC b-c = 0.0018 DFC c-b = 0.0000 DFC b-ac (share lane) = 0.0043
MAJOR ROAD (ARM C) W c-b = 7.30 (metres) Vr c-b = 40 (metres) q c-a = 324 (pcu/hr) q c-b = 0 (pcu/hr)	F for (Qb-ac) = 0.5000	TOTAL FLOW = 668 (PCU/HR)	
MINOR ROAD (ARM B) W b-a = 3.00 (metres) W b-c = 3.00 (metres) Vi 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)			
			CRITICAL DFC = 0.00

LLA CONSULTANCY LIMITED

PRIORITY JUNCTION CALCULATION

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

**2019 Existing PM
(Weekend)**

PROJECT NO.: 40243

PREPARED BY:

INITIALS

DATE

SKL

Jul-24

FILENAME : J1_Weekend.xlsx

CHECKED BY:

SLN

Jul-24

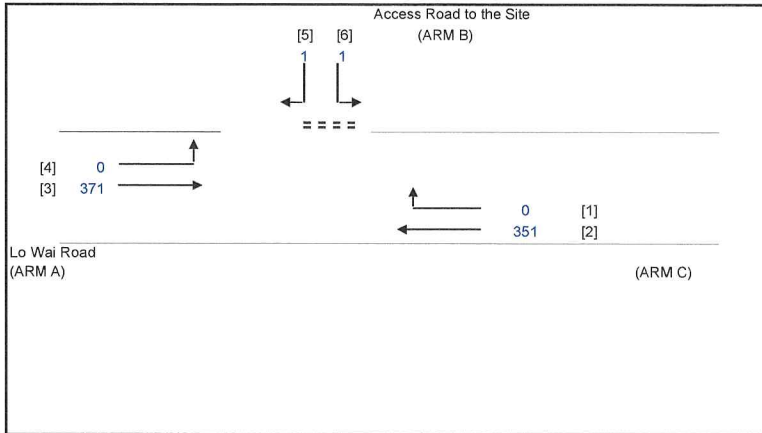
J1 Lo Wai Road/Access Road to the Site

REFERENCE NO.:

REVIEWED BY:

SLN

Jul-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
- VI 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:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
W = 7.30 (metres)
W cr = 0 (metres)
q a-b = 0 (pcu/hr)
q a-c = 371 (pcu/hr)

D = 0.8217
E = 0.8628
F = 1.2464
Y = 0.7482

Q b-a = 383
Q b-c = 556
Q c-b = 803
Q b-ac = 454

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

MAJOR ROAD (ARM C)
W c-b = 7.30 (metres)
Vr c-b = 40 (metres)
q c-a = 351 (pcu/hr)
q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0.5000

TOTAL FLOW = 724 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
W b-a = 3.00 (metres)
W b-c = 3.00 (metres)
VI 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)

LLA CONSULTANCY LIMITED

ROUNDBABOUT 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

2019 Existing AM
(Weekday)

PROJECT NO.: 40243

PREPARED BY:

SKL

Jul-24

FILENAME : J2_Weekday.xlsx

CHECKED BY:

SLN

Jul-24

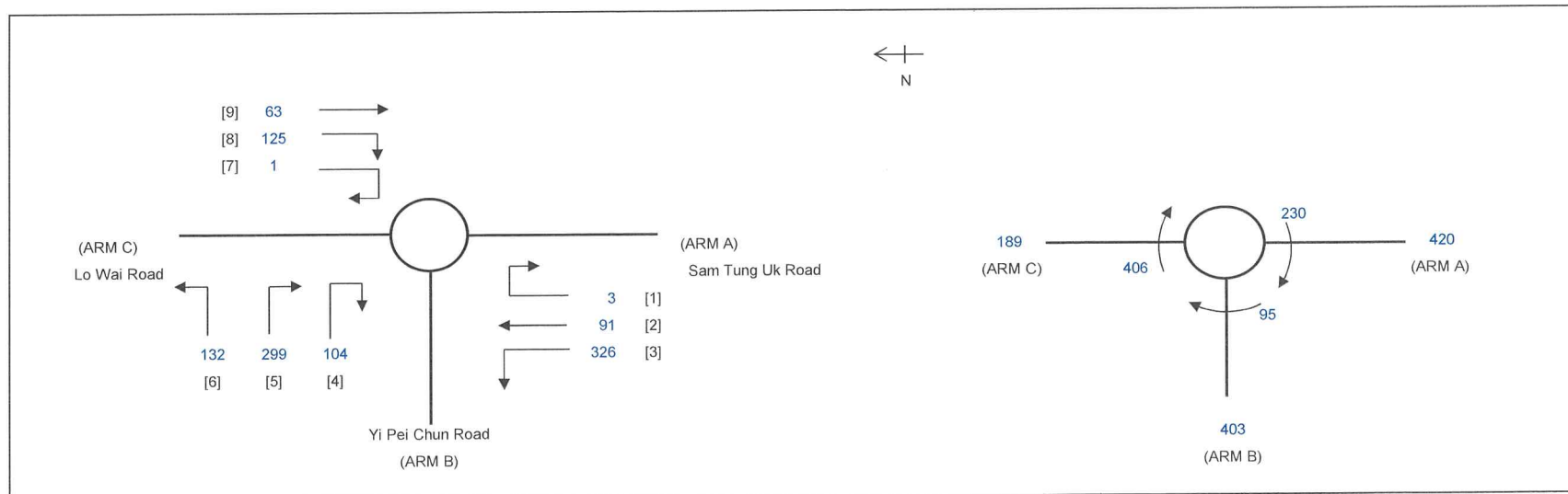
REFERENCE NO.: J2

REVIEWED BY:

SLN

Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	420	403	189
Qc = Circulating flow across entry (pcu/h)	230	95	406
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)	1547	1049	1466
DFC = Design flow/Capacity = Q/Qe	0.27	0.38	0.13
Total In Sum =			1333 PCU
DFC of Critical Approach =			0.38

LLA CONSULTANCY LIMITED

ROUNDBABOUT 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

2019 Existing Noon
(Weekday)

PROJECT NO.: 40243

PREPARED BY: SKL

Jul-24

FILENAME : J2_Weekday.xlsx

CHECKED BY: SLN

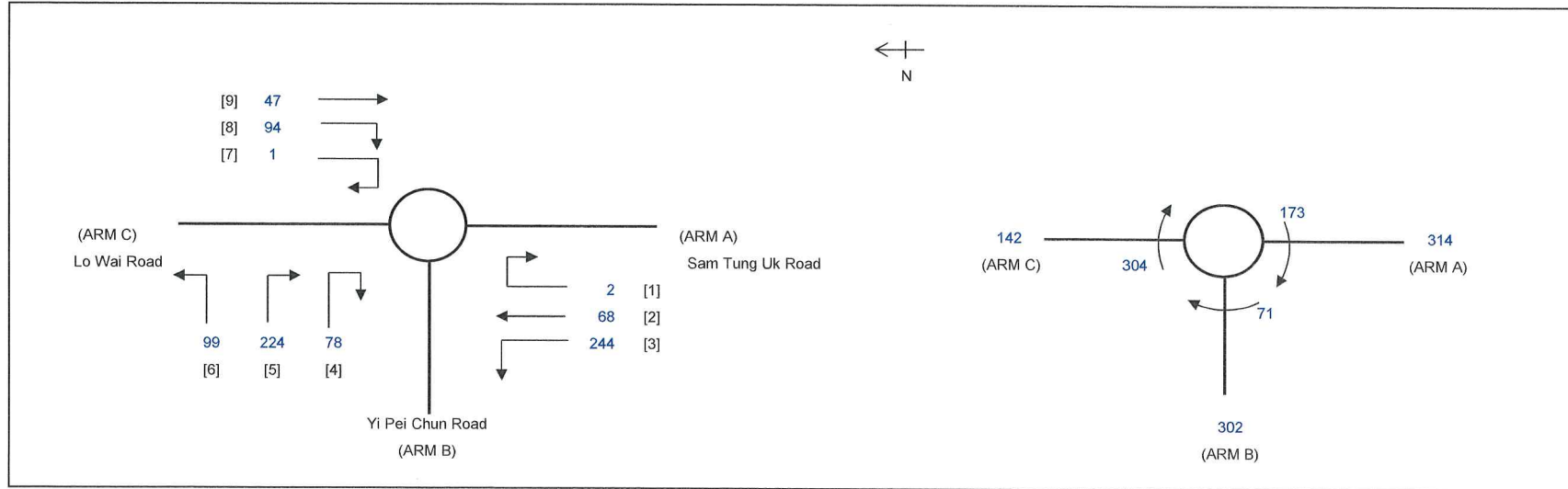
Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road

REFERENCE NO.: J2

REVIEWED BY: SLN

Jul-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)	314	302	142	
Qc	= Circulating flow across entry (pcu/h)	173	71	304	
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)	1586	1062	1536	
DFC	= Design flow/Capacity = Q/Qe	0.20	0.28	0.09	
Total In Sum =					999 PCU
DFC of Critical Approach =					0.28

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ROUNDBABOUT CALCULATION

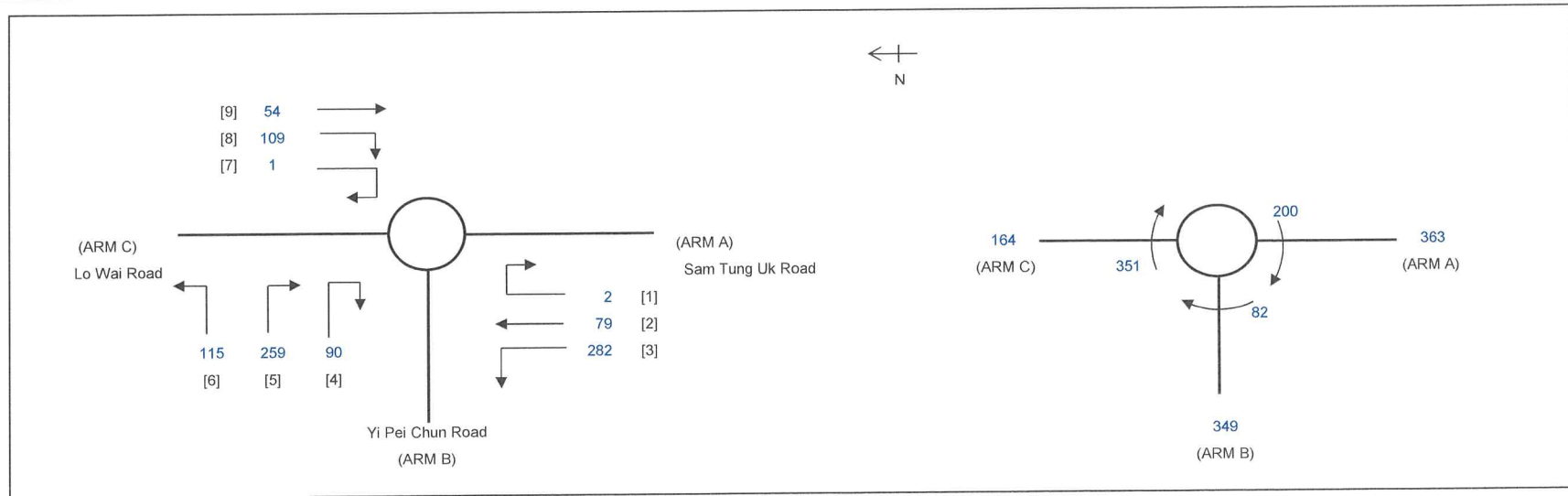
INITIALS DATE

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

**2019 Existing PM
(Weekday)**

PROJECT NO.:	40243	PREPARED BY:	SKL	Jul-24
FILENAME :	J2_Weekday.xlsx	CHECKED BY:	SLN	Jul-24
REFERENCE NO.:	J2	REVIEWED BY:	SLN	Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	363	349	164
Qc	= Circulating flow across entry (pcu/h)	200	82	351
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)	1568	1056	1504
DFC	= Design flow/Capacity = Q/Qe	0.23	0.33	0.11
Total In Sum =				1155 PCU
DFC of Critical Approach =				0.33

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ROUNDBABOUT 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

2019 Existing AM
(Weekend)

PROJECT NO.: 40243

PREPARED BY: SKL

Jul-24

FILENAME : J2_Weekend.xlsx

CHECKED BY: SLN

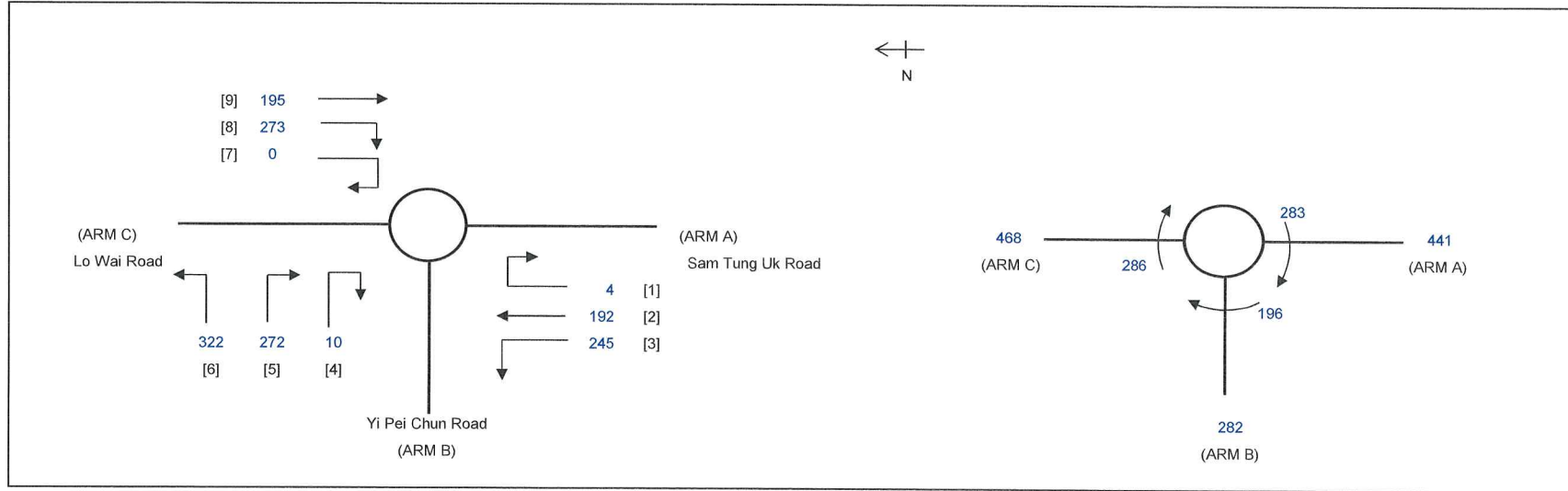
Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road

REFERENCE NO.: J2

REVIEWED BY: SLN

Jul-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	282	468
Qc	=	Circulating flow across entry (pcu/h)	283	196	286
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)	1511	995	1549
Total In Sum = 1981 PCU					
DFC	=	Design flow/Capacity = Q/Qe	0.29	0.28	0.30
DFC of Critical Approach = 0.30					

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ROUNDBABOUT CALCULATION

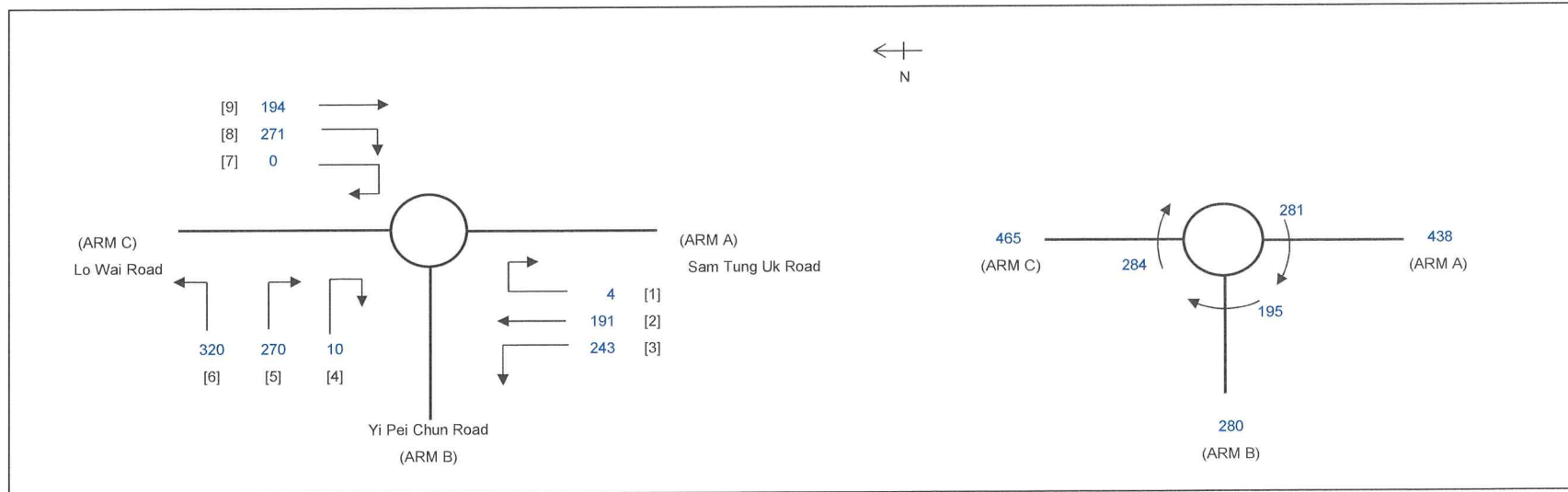
INITIALS DATE

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

2019 Existing Noon
(Weekend)

PROJECT NO.:	40243	PREPARED BY:	SKL	Jul-24
FILENAME :	J2_Weekend.xlsx	CHECKED BY:	SLN	Jul-24
REFERENCE NO.:	J2	REVIEWED BY:	SLN	Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	438	280	465	
Qc	= Circulating flow across entry (pcu/h)	281	195	284	
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	996	1550	
				Total In Sum =	1968 PCU
				DFC of Critical Approach =	0.30
DFC	= Design flow/Capacity = Q/Qe	0.29	0.28	0.30	

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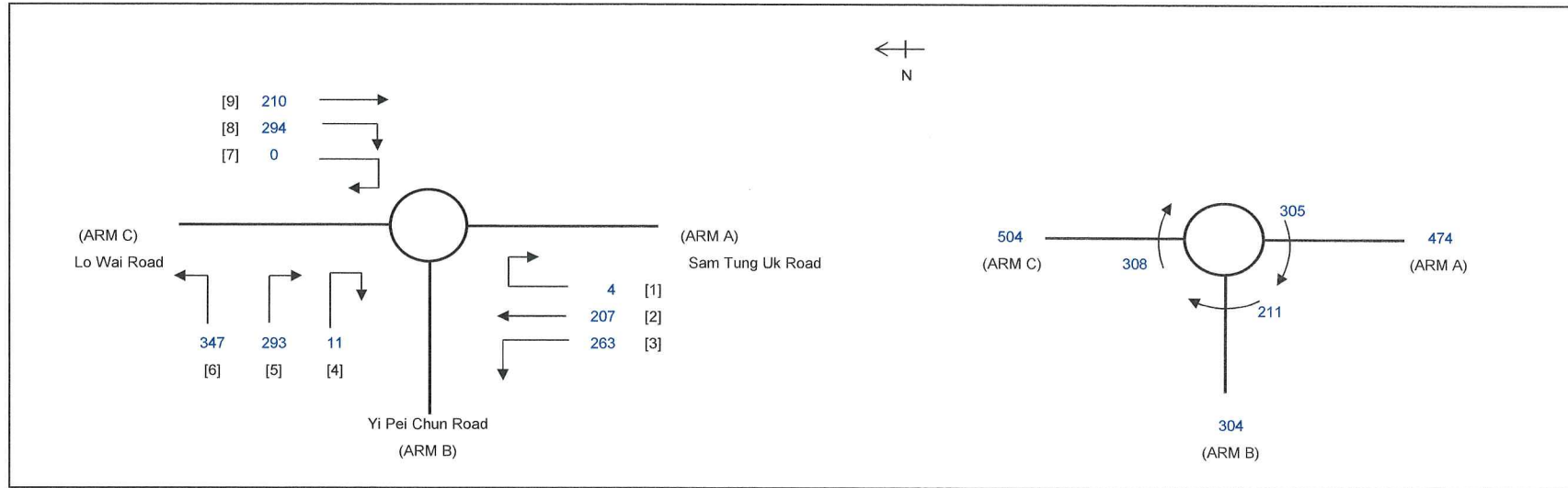
ROUNABOUT CALCULATION

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

2019 Existing PM
(Weekend)

PROJECT NO.:	40243	PREPARED BY:	SKL	DATE	Jul-24
FILENAME :	J2_Weekend.xlsx	CHECKED BY:	SLN		Jul-24
REFERENCE NO.:	J2	REVIEWED BY:	SLN		Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	474	304	504	
Qc	= Circulating flow across entry (pcu/h)	305	211	308	
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	987	1534	
DFC	= Design flow/Capacity = Q/Qe	0.32	0.31	0.33	
				Total In Sum =	2133 PCU
				DFC of Critical Approach =	0.33

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

**2028 Reference AM
(Weekday)**

PROJECT NO.: 40243

PREPARED BY:

SKL

Jul-24

FILENAME : J1_Weekday.xlsx

CHECKED BY:

SLN

Jul-24

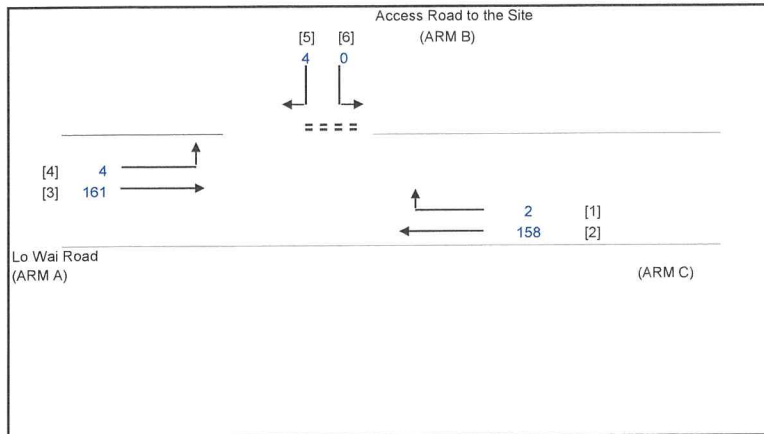
J1 Lo Wai Road/Access Road to the Site

REFERENCE NO.:

REVIEWED BY:

SLN

Jul-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
- Vi 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 = 161 (pcu/hr)

MAJOR ROAD (ARM C)

W c-b = 7.30 (metres)
 Vr c-b = 40 (metres)
 q c-a = 158 (pcu/hr)
 q c-b = 2 (pcu/hr)

MINOR ROAD (ARM B)

W b-a = 3.00 (metres)
 W b-c = 3.00 (metres)
 Vi 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 = 456
 Q b-c = 605
 Q c-b = 873
 Q b-ac = 456

TOTAL FLOW = 329 (PCU/HR)

COMPARISON 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

APPENDIX B
Junction Capacity Assessment
– 2028 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

**2028 Reference
Noon
(Weekday)**

PROJECT NO.: 40243

PREPARED BY:

SKL

Jul-24

FILENAME : J1_Weekday.xlsx

CHECKED BY:

SLN

Jul-24

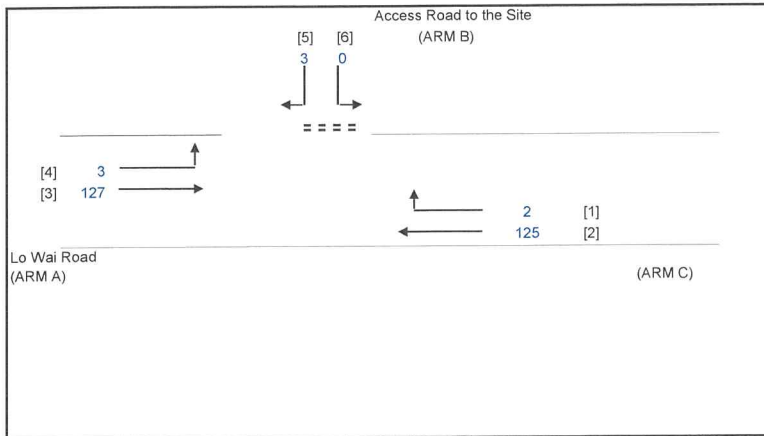
J1 Lo Wai Road/Access Road to the Site

REFERENCE NO.:

REVIEWED BY:

SLN

Jul-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:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)

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

D = 0.8217
E = 0.8628
F = 1.2464
Y = 0.7482

Q b-a = 468
Q b-c = 613
Q c-b = 884
Q b-ac = 468

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

MAJOR ROAD (ARM C)

W c-b = 7.30 (metres)
Vr c-b = 40 (metres)
q c-a = 125 (pcu/hr)
q c-b = 2 (pcu/hr)

F for (Qb-ac) = 0.0000

TOTAL FLOW = 260 (PCU/HR)

CRITICAL DFC = 0.01

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)

LLA CONSULTANCY LIMITED

PRIORITY JUNCTION CALCULATION

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

2028 Reference PM (Weekday)

PROJECT NO.: 40243

PREPARED BY:

INITIALS

DATE

J1 Lo Wai Road/Access Road to the Site

FILENAME : J1_Weekday.xlsx

CHECKED BY:

SKL

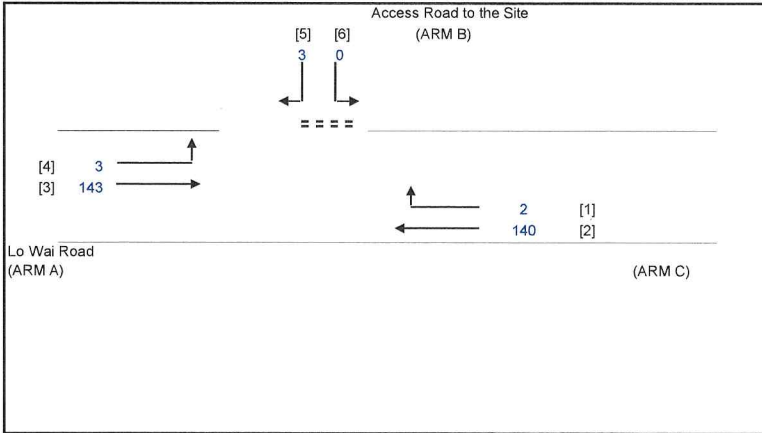
Jul-24

REFERENCE NO.:

REVIEWED BY:

SLN

Jul-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
- VI 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:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
W = 7.30 (metres)
W cr = 0 (metres)
q a-b = 3 (pcu/hr)
q a-c = 143 (pcu/hr)

D = 0.8217
E = 0.8628
F = 1.2464
Y = 0.7482

Q b-a = 463
Q b-c = 609
Q c-b = 879
Q b-ac = 463

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

MAJOR ROAD (ARM C)
W c-b = 7.30 (metres)
Vr c-b = 40 (metres)
q c-a = 140 (pcu/hr)
q c-b = 2 (pcu/hr)

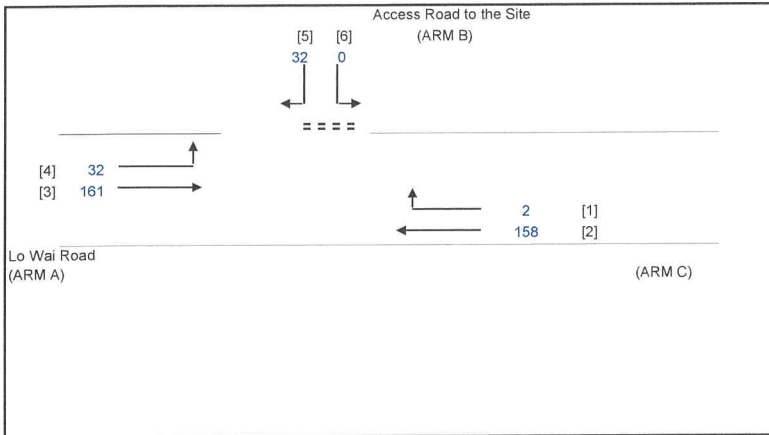
F for (Qb-ac) = 0.0000

TOTAL FLOW = 291 (PCU/HR)

CRITICAL DFC = 0.01

MINOR ROAD (ARM B)
W b-a = 3.00 (metres)
W b-c = 3.00 (metres)
VI 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)

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	2028 Design AM (Weekday)	PROJECT NO.: 40243	PREPARED BY:	SKL	Jul-24
J1 Lo Wai Road/Access Road to the Site		FILENAME : J1_Weekday.xlsx	CHECKED BY:	SLN	Jul-24
		REFERENCE NO.:	REVIEWED BY:	SLN	Jul-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
- Vi 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:	GEOMETRIC FACTORS :	THE CAPACITY OF MOVEMENT :	COMPARISON OF DESIGN FLOW TO CAPACITY:
MAJOR ROAD (ARM A) W = 7.30 (metres) W cr = 0 (metres) q a-b = 32 (pcu/hr) q a-c = 161 (pcu/hr)	D = 0.8752 E = 0.9190 F = 1.2464 Y = 0.7482	Q b-a = 483 Q b-c = 641 Q c-b = 863 Q b-ac = 483	DFC b-a = 0.0663 DFC b-c = 0.0000 DFC c-b = 0.0023 DFC b-ac (share lane) = 0.0663
MAJOR ROAD (ARM C) W c-b = 7.30 (metres) Vr c-b = 40 (metres) q c-a = 158 (pcu/hr) q c-b = 2 (pcu/hr)	F for (Qb-ac) = 0.0000	TOTAL FLOW = 385 (PCU/HR)	
MINOR ROAD (ARM B) W b-a = 3.65 (metres) W b-c = 3.65 (metres) Vi 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)			
			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

**2028 Design Noon
(Weekday)**

PROJECT NO.: 40243

PREPARED BY:

SKL

Jul-24

FILENAME : J1_Weekday.xlsx

CHECKED BY:

SLN

Jul-24

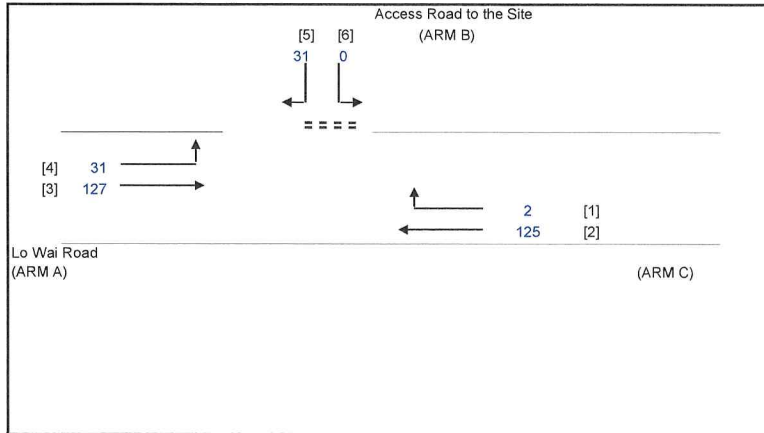
J1 Lo Wai Road/Access Road to the Site

REFERENCE NO.:

REVIEWED BY:

SLN

Jul-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
- VI 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:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

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

D = 0.8752
E = 0.9190
F = 1.2464
Y = 0.7482

Q b-a = 496
Q b-c = 650
Q c-b = 875
Q b-ac = 496

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

MAJOR ROAD (ARM C)
W c-b = 7.30 (metres)
Vr c-b = 40 (metres)
q c-a = 125 (pcu/hr)
q c-b = 2 (pcu/hr)

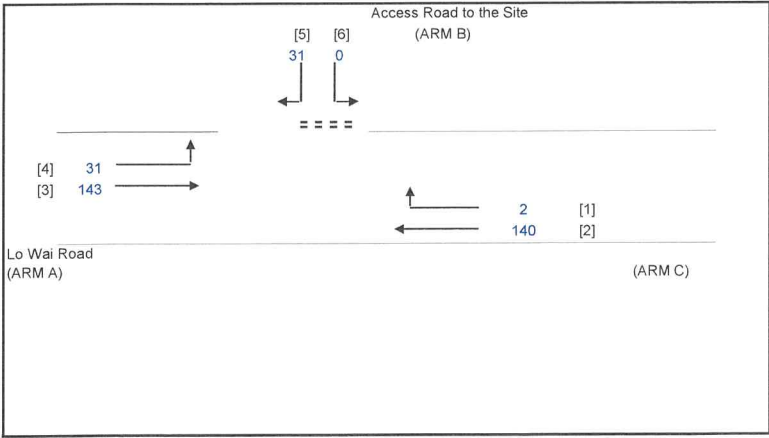
F for (Qb-ac) = 0.0000

TOTAL FLOW = 316 (PCU/HR)

CRITICAL DFC = 0.06

MINOR ROAD (ARM B)
W b-a = 3.65 (metres)
W b-c = 3.65 (metres)
VI 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)

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	2028 Design PM (Weekday)	PROJECT NO.: 40243	PREPARED BY:	SKL	Jul-24
		FILENAME : J1_Weekday.xlsx	CHECKED BY:	SLN	Jul-24
J1 Lo Wai Road/Access Road to the Site		REFERENCE NO.:	REVIEWED BY:	SLN	Jul-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
- Vi 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:	GEOMETRIC FACTORS :	THE CAPACITY OF MOVEMENT :	COMPARISON OF DESIGN FLOW TO CAPACITY:
MAJOR ROAD (ARM A) W = 7.30 (metres) W cr = 0 (metres) q a-b = 31 (pcu/hr) q a-c = 143 (pcu/hr)	D = 0.8752 E = 0.9190 F = 1.2464 Y = 0.7482	Q b-a = 490 Q b-c = 646 Q c-b = 870 Q b-ac = 490 TOTAL FLOW = 347 (PCU/HR)	DFC b-a = 0.0633 DFC b-c = 0.0000 DFC c-b = 0.0023 DFC b-ac (share lane) = 0.0633
MAJOR ROAD (ARM C) W c-b = 7.30 (metres) Vr c-b = 40 (metres) q c-a = 140 (pcu/hr) q c-b = 2 (pcu/hr)	F for (Qb-ac) = 0.0000		
MINOR ROAD (ARM B) W b-a = 3.65 (metres) W b-c = 3.65 (metres) Vi 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)			
			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

**2028 Reference AM
(Weekend)**

PROJECT NO.: 40243

PREPARED BY:

SKL

Jul-24

FILENAME : J1_Weekend.xlsx

CHECKED BY:

SLN

Jul-24

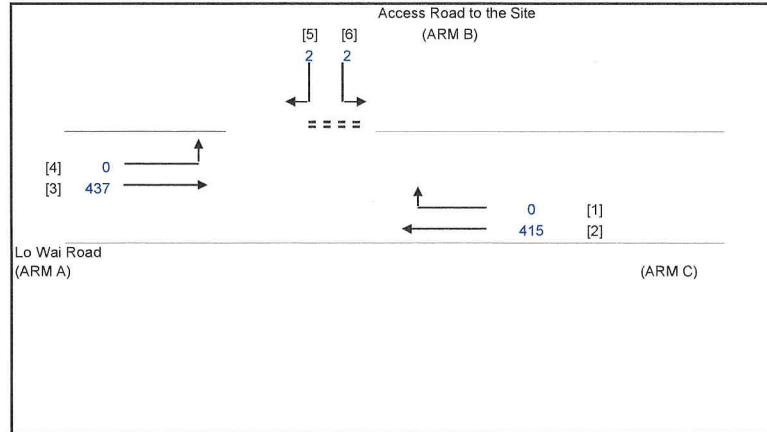
J1 Lo Wai Road/Access Road to the Site

REFERENCE NO.:

REVIEWED BY:

SLN

Jul-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
- VI 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:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)

W = 7.30 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 437 (pcu/hr)

D = 0.8217
 E = 0.8628
 F = 1.2464
 Y = 0.7482

Q b-a = 359
 Q b-c = 540
 Q c-b = 780
 Q b-ac = 431

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

MAJOR ROAD (ARM C)

W c-b = 7.30 (metres)
 Vr c-b = 40 (metres)
 q c-a = 415 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0.5000

TOTAL FLOW = 856 (PCU/HR)

CRITICAL DFC = 0.01

MINOR ROAD (ARM B)

W b-a = 3.00 (metres)
 W b-c = 3.00 (metres)
 VI 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)

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

**2028 Reference
Noon
(Weekend)**

PROJECT NO.: 40243

PREPARED BY:

SKL

Jul-24

FILENAME : J1_Weekend.xlsx

CHECKED BY:

SLN

Jul-24

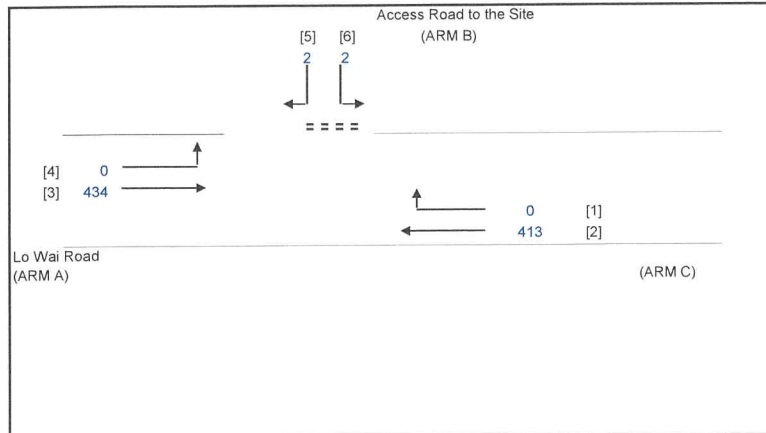
J1 Lo Wai Road/Access Road to the Site

REFERENCE NO.:

REVIEWED BY:

SLN

Jul-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
- V_{l b-a} = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- V_{r b-a} = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- V_{r b-c} = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- V_{r 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:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)

W = 7.30 (metres)
W_{cr} = 0 (metres)
q_{a-b} = 0 (pcu/hr)
q_{a-c} = 434 (pcu/hr)

D = 0.8217
E = 0.8628
F = 1.2464
Y = 0.7482

Q_{b-a} = 360
Q_{b-c} = 541
Q_{c-b} = 781
Q_{b-ac} = 432

DFC_{b-a} = 0.0056
DFC_{b-c} = 0.0037
DFC_{c-b} = 0.0000
DFC_{b-ac (share lane)} = 0.0093

MAJOR ROAD (ARM C)

W_{c-b} = 7.30 (metres)
V_{r c-b} = 40 (metres)
q_{c-a} = 413 (pcu/hr)
q_{c-b} = 0 (pcu/hr)

F for (Q_{b-ac}) = 0.5000

TOTAL FLOW = 851 (PCU/HR)

CRITICAL DFC = 0.01

MINOR ROAD (ARM B)

W_{b-a} = 3.00 (metres)
W_{b-c} = 3.00 (metres)
V_{l b-a} = 40 (metres)
V_{r b-a} = 50 (metres)
V_{r b-c} = 30 (metres)
q_{b-a} = 2 (pcu/hr)
q_{b-c} = 2 (pcu/hr)

LLA CONSULTANCY LIMITED

PRIORITY JUNCTION CALCULATION

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

2028 Reference PM (Weekend)

PROJECT NO.: 40243

PREPARED BY:

INITIALS

DATE

SKL

Jul-24

FILENAME : J1_Weekend.xlsx

CHECKED BY:

SLN

Jul-24

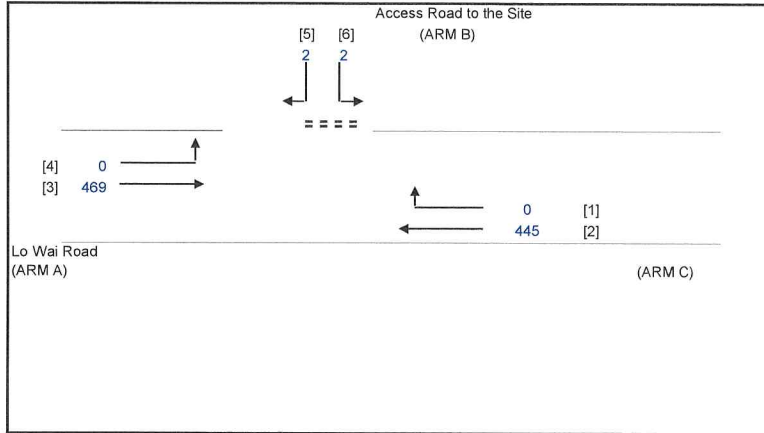
REFERENCE NO.:

REVIEWED BY:

SLN

Jul-24

J1 Lo Wai Road/Access Road to the Site



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
- Vi 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:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)

W = 7.30 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 469 (pcu/hr)

D = 0.8217
 E = 0.8628
 F = 1.2464
 Y = 0.7482

Q b-a = 348
 Q b-c = 533
 Q c-b = 769
 Q b-ac = 421

DFC b-a = 0.0057
 DFC b-c = 0.0038
 DFC c-b = 0.0000
 DFC b-ac (share lane) = 0.0095

MAJOR ROAD (ARM C)

W c-b = 7.30 (metres)
 Vr c-b = 40 (metres)
 q c-a = 445 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0.5000

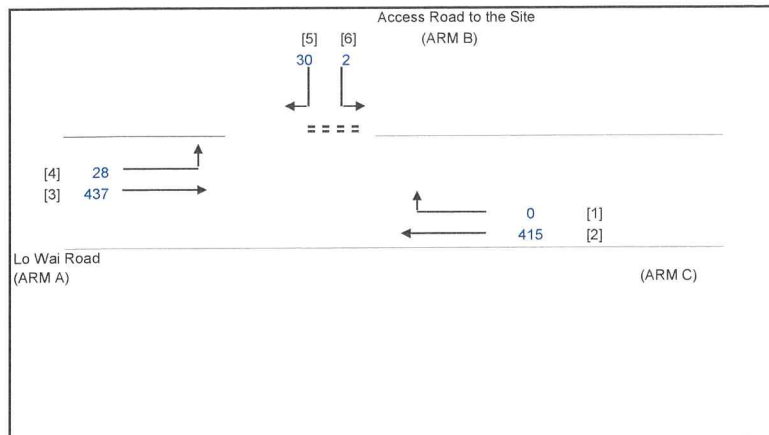
TOTAL FLOW = 918 (PCU/HR)

CRITICAL DFC = 0.01

MINOR ROAD (ARM B)

W b-a = 3.00 (metres)
 W b-c = 3.00 (metres)
 Vi 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)

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	2028 Design AM (Weekend)	PROJECT NO.: 40243	PREPARED BY:	SKL	Jul-24
		FILENAME : J1_Weekend.xlsx	CHECKED BY:	SLN	Jul-24
J1 Lo Wai Road/Access Road to the Site		REFERENCE NO.:	REVIEWED BY:	SLN	Jul-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:	GEOMETRIC FACTORS :	THE CAPACITY OF MOVEMENT :	COMPARISON OF DESIGN FLOW TO CAPACITY:
MAJOR ROAD (ARM A) W = 7.30 (metres) W cr = 0 (metres) q a-b = 28 (pcu/hr) q a-c = 437 (pcu/hr)	D = 0.8752 E = 0.9190 F = 1.2464 Y = 0.7482 F for (Qb-ac) = 0.0625	Q b-a = 380 Q b-c = 573 Q c-b = 771 Q b-ac = 388 TOTAL FLOW = 912 (PCU/HR)	DFC b-a = 0.0789 DFC b-c = 0.0035 DFC c-b = 0.0000 DFC b-ac (share lane) = 0.0824
MAJOR ROAD (ARM C) W c-b = 7.30 (metres) Vr c-b = 40 (metres) q c-a = 415 (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)			
			CRITICAL DFC = 0.08

LLA CONSULTANCY LIMITED

PRIORITY JUNCTION CALCULATION

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

**2028 Design Noon
(Weekend)**

PROJECT NO.: 40243

PREPARED BY:

INITIALS

DATE

SKL

Jul-24

FILENAME : J1_Weekend.xlsx

CHECKED BY:

SLN

Jul-24

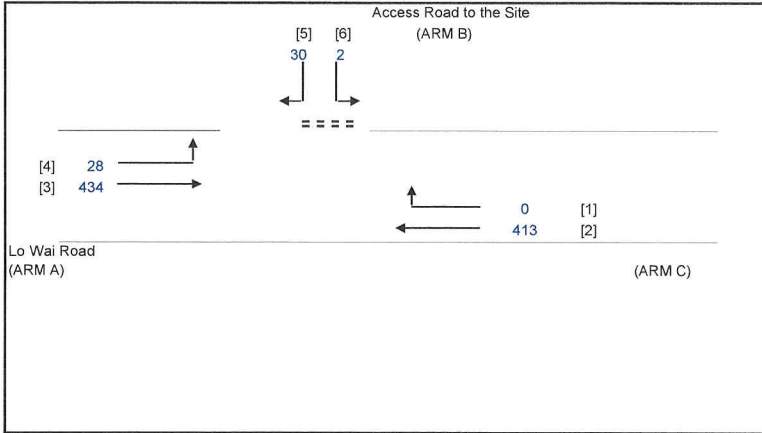
J1 Lo Wai Road/Access Road to the Site

REFERENCE NO.:

REVIEWED BY:

SLN

Jul-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
- VI 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:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
W = 7.30 (metres)
W cr = 0 (metres)
q a-b = 28 (pcu/hr)
q a-c = 434 (pcu/hr)

D = 0.8752
E = 0.9190
F = 1.2464
Y = 0.7482

Q b-a = 381
Q b-c = 573
Q c-b = 772
Q b-ac = 389

DFC b-a = 0.0787
DFC b-c = 0.0035
DFC c-b = 0.0000
DFC b-ac (share lane) = 0.0822

MAJOR ROAD (ARM C)
W c-b = 7.30 (metres)
Vr c-b = 40 (metres)
q c-a = 413 (pcu/hr)
q c-b = 0 (pcu/hr)

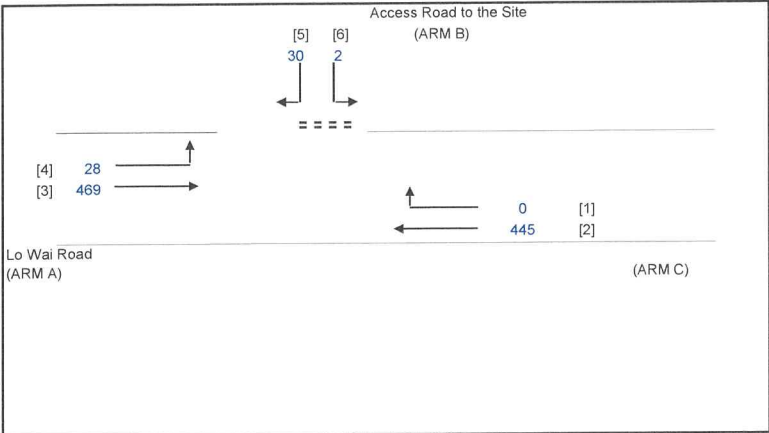
F for (Qb-ac) = 0.0625

TOTAL FLOW = 907 (PCU/HR)

CRITICAL DFC = 0.08

MINOR ROAD (ARM B)
W b-a = 3.65 (metres)
W b-c = 3.65 (metres)
VI 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)

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		2028 Design PM (Weekend)	PROJECT NO.: 40243	PREPARED BY:	SKL	Jul-24
J1 Lo Wai Road/Access Road to the Site			FILENAME : J1_Weekend.xlsx	CHECKED BY:	SLN	Jul-24
			REFERENCE NO.:	REVIEWED BY:	SLN	Jul-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
- Vi 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:	GEOMETRIC FACTORS :	THE CAPACITY OF MOVEMENT :	COMPARISON OF DESIGN FLOW TO CAPACITY:
<p>MAJOR ROAD (ARM A)</p> <p>W = 7.30 (metres)</p> <p>W cr = 0 (metres)</p> <p>q a-b = 28 (pcu/hr)</p> <p>q a-c = 469 (pcu/hr)</p> <p>MAJOR ROAD (ARM C)</p> <p>W c-b = 7.30 (metres)</p> <p>Vr c-b = 40 (metres)</p> <p>q c-a = 445 (pcu/hr)</p> <p>q c-b = 0 (pcu/hr)</p> <p>MINOR ROAD (ARM B)</p> <p>W b-a = 3.65 (metres)</p> <p>W b-c = 3.65 (metres)</p> <p>Vi b-a = 40 (metres)</p> <p>Vr b-a = 50 (metres)</p> <p>Vr b-c = 30 (metres)</p> <p>q b-a = 30 (pcu/hr)</p> <p>q b-c = 2 (pcu/hr)</p>	<p>D = 0.8752</p> <p>E = 0.9190</p> <p>F = 1.2464</p> <p>Y = 0.7482</p> <p>F for (Qb-ac) = 0.0625</p>	<p>Q b-a = 368</p> <p>Q b-c = 565</p> <p>Q c-b = 760</p> <p>Q b-ac = 376</p> <p>TOTAL FLOW = 974 (PCU/HR)</p>	<p>DFC b-a = 0.0815</p> <p>DFC b-c = 0.0035</p> <p>DFC c-b = 0.0000</p> <p>DFC b-ac (share lane) = 0.0851</p> <p>CRITICAL DFC = 0.09</p>

LLA CONSULTANCY LIMITED

ROUNDBABOUT CALCULATION

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

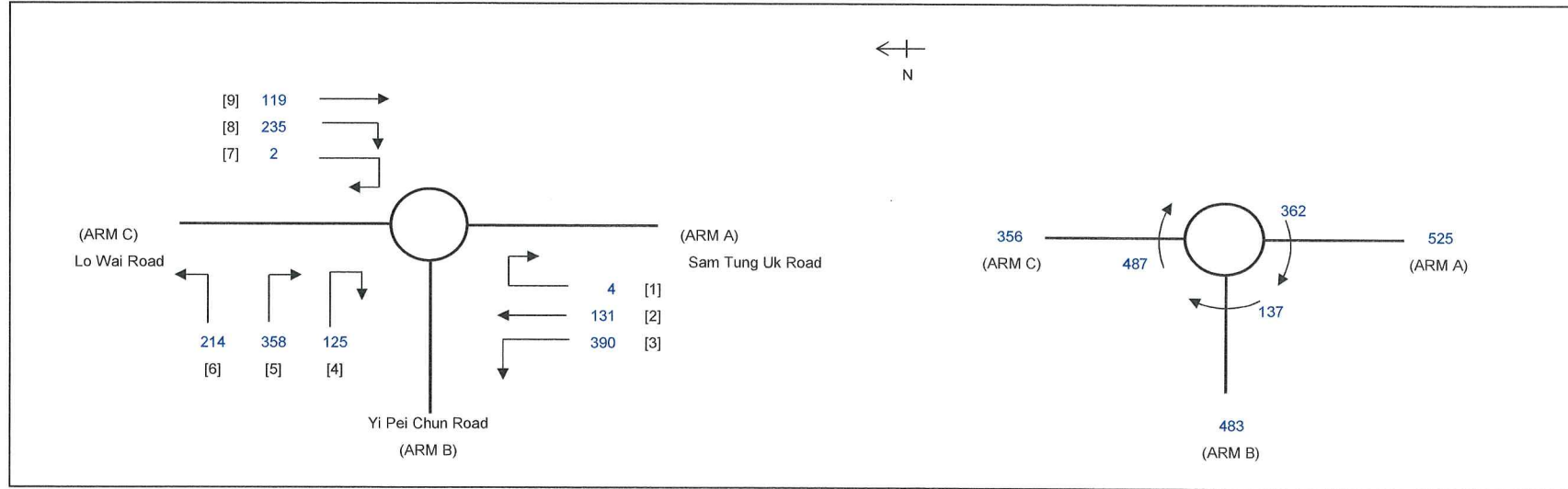
2028 Reference AM
(Weekday)

PROJECT NO.: 40243
FILENAME : J2_Weekday.xlsx
REFERENCE NO.: J2

PREPARED BY:
CHECKED BY:
REVIEWED BY:

INITIALS	DATE
SKL	Jul-24
SLN	Jul-24
SLN	Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	525	483	356
Qc	= Circulating flow across entry (pcu/h)	362	137	487
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)	1457	1027	1409
DFC	= Design flow/Capacity = Q/Qe	0.36	0.47	0.25
Total In Sum =				1934 PCU
DFC of Critical Approach =				0.47

LLA CONSULTANCY LIMITED

ROUNDBABOUT CALCULATION

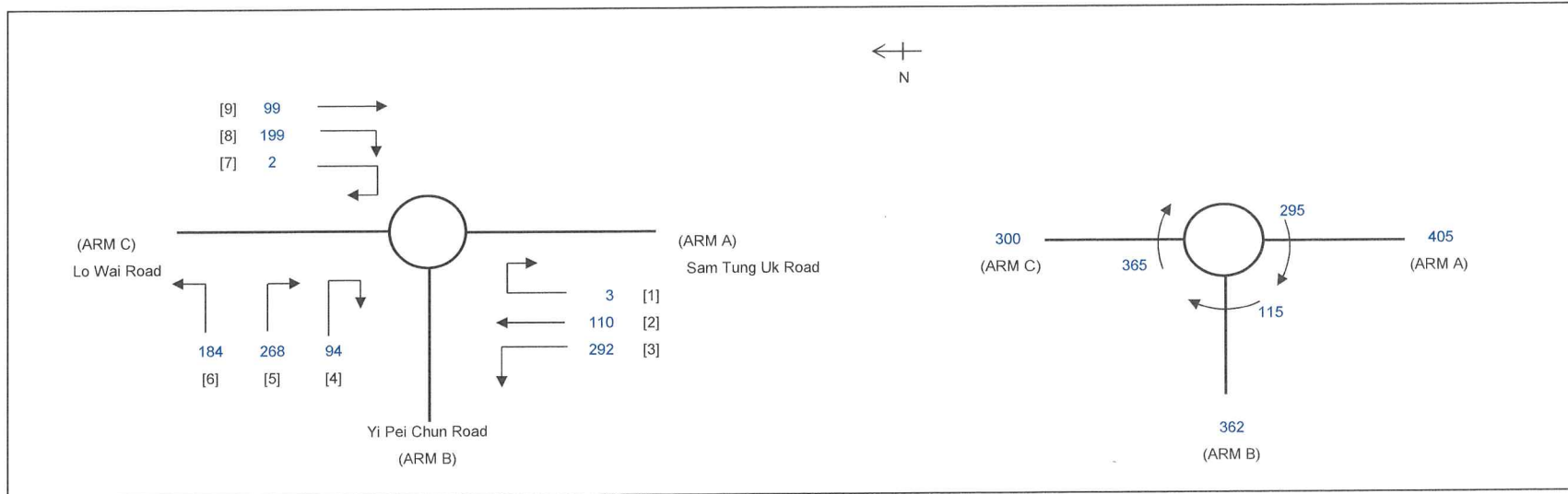
INITIALS DATE

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

**2028 Reference Noon
(Weekday)**

PROJECT NO.:	40243	PREPARED BY:	SKL	Jul-24
FILENAME :	J2_Weekday.xlsx	CHECKED BY:	SLN	Jul-24
REFERENCE NO.:	J2	REVIEWED BY:	SLN	Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	405	362	300
Qc = Circulating flow across entry (pcu/h)	295	115	365
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 = $K(F-Fc*Qc)$	1503	1039	1494
DFC = Design flow/Capacity = Q/Qe	0.27	0.35	0.20
Total In Sum =			1551 PCU
DFC of Critical Approach =			0.35

LLA CONSULTANCY LIMITED

ROUNDOABOUT CALCULATION

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

2028 Reference PM (Weekday)

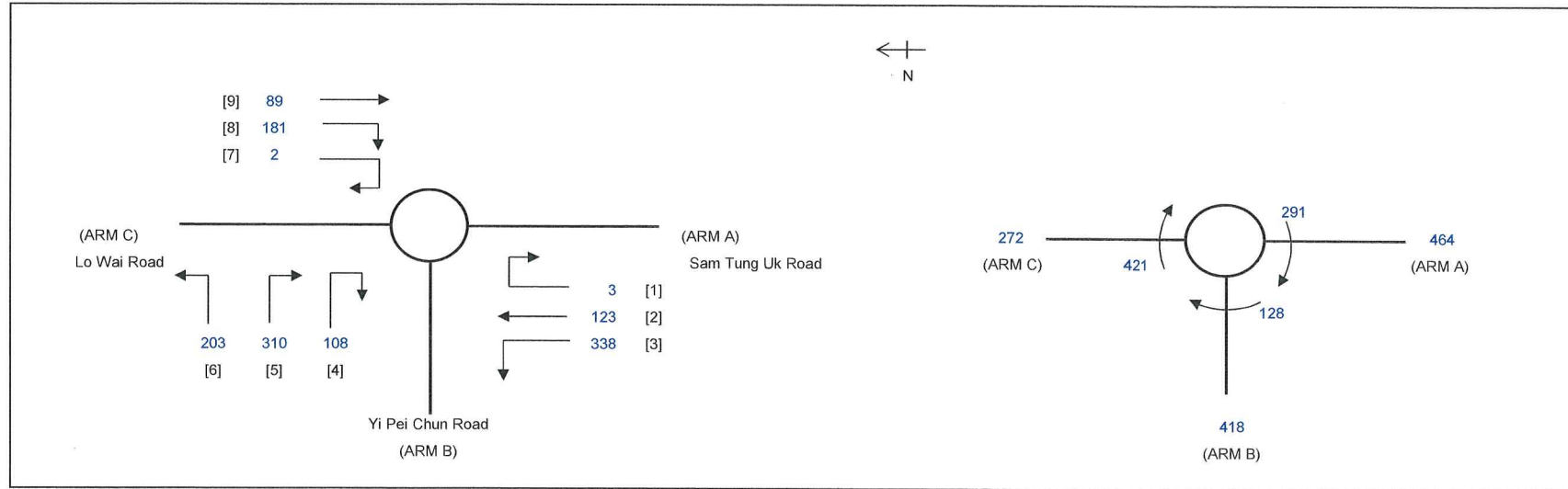
PROJECT NO.: 40243
 FILENAME : J2_Weekday.xlsx
 REFERENCE NO.: J2

PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS

DATE

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	464	418	272	
Qc	= Circulating flow across entry (pcu/h)	291	128	421	
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	= $303 \times X2$	1583	1106	1623	
Td	= $1+(0.5/(1+M))$	1.48	1.48	1.48	
Fc	= $0.21 \times Td(1+0.2 \times X2)$	0.64	0.54	0.64	
Qe	= $K(F-Fc \times Qc)$	1505	1032	1455	
DFC	= Design flow/Capacity = Q/Qe	0.31	0.41	0.19	
				Total In Sum =	1629 PCU
				DFC of Critical Approach =	0.41

LLA CONSULTANCY LIMITED

ROUNDBABOUT 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

2028 Design AM
(Weekday)

PROJECT NO.: 40243

PREPARED BY: SKL

Jul-24

FILENAME : J2_Weekday.xlsx

CHECKED BY: SLN

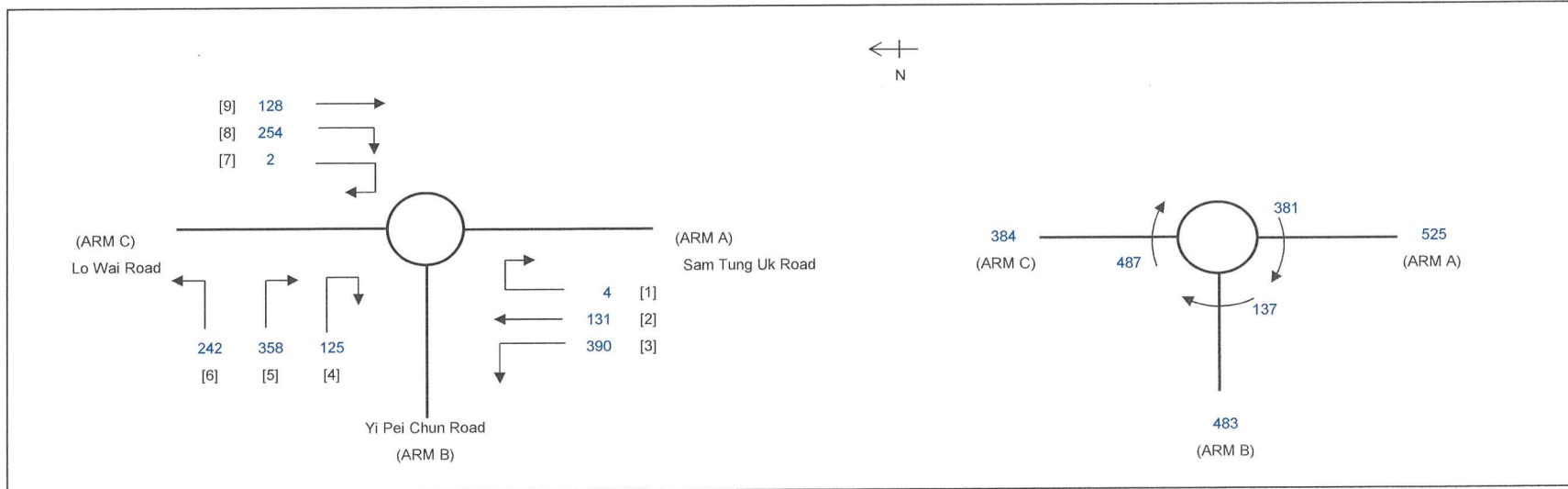
Jul-24

REFERENCE NO.: J2

REVIEWED BY: SLN

Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	525	483	384
Qc = Circulating flow across entry (pcu/h)	381	137	487
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)	1444	1027	1409
DFC = Design flow/Capacity = Q/Qe	0.36	0.47	0.27
Total In Sum =			2018 PCU
DFC of Critical Approach =			0.47

LLA CONSULTANCY LIMITED

ROUNDOABOUT CALCULATION

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

2028 Design Noon
(Weekday)

PROJECT NO.: 40243
FILENAME : J2_Weekday.xlsx
REFERENCE NO.: J2

PREPARED BY:
CHECKED BY:
REVIEWED BY:

INITIALS

DATE

SKL

Jul-24

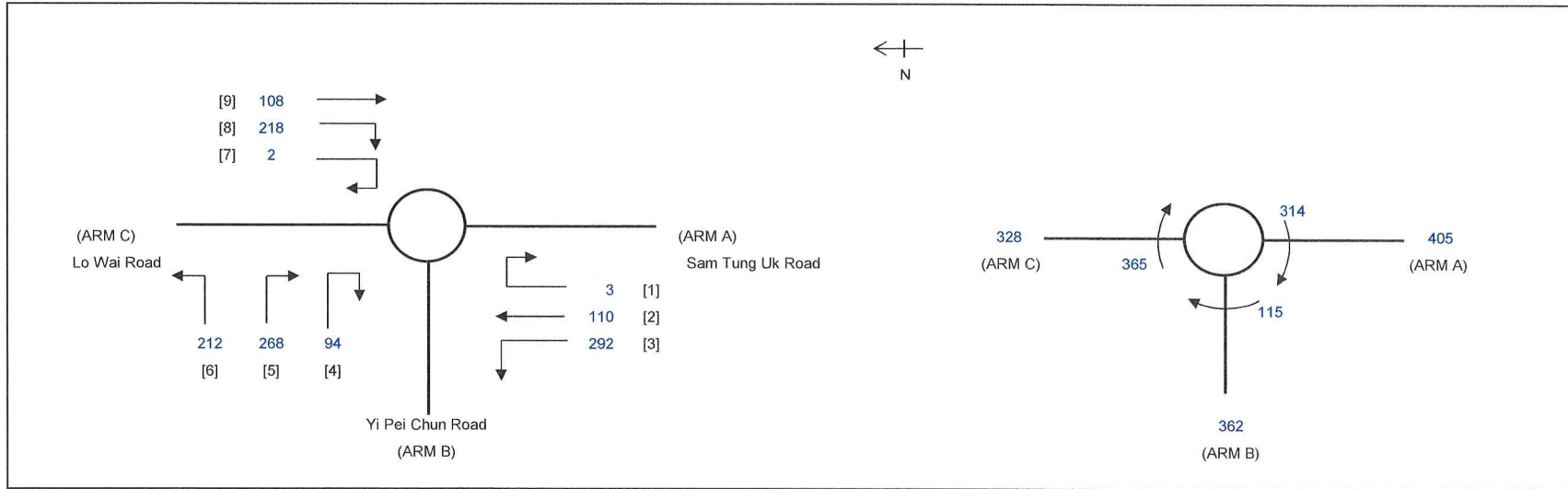
SLN

Jul-24

SLN

Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	405	362	328	
Qc = Circulating flow across entry (pcu/h)	314	115	365	
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 = $303 \times X2$	1583	1106	1623	
Td = $1+(0.5/(1+M))$	1.48	1.48	1.48	
Fc = $0.21 \times Td(1+0.2 \times X2)$	0.64	0.54	0.64	
Qe = $K(F-Fc \times Qc)$	1490	1039	1494	
DFC = Design flow/Capacity = Q/Qe	0.27	0.35	0.22	
				Total In Sum = 1635 PCU
				DFC of Critical Approach = 0.35

LLA CONSULTANCY LIMITED

ROUNDBABOUT 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

2028 Design PM
(Weekday)

PROJECT NO.: 40243

PREPARED BY:

SKL

Jul-24

FILENAME : J2_Weekday.xlsx

CHECKED BY:

SLN

Jul-24

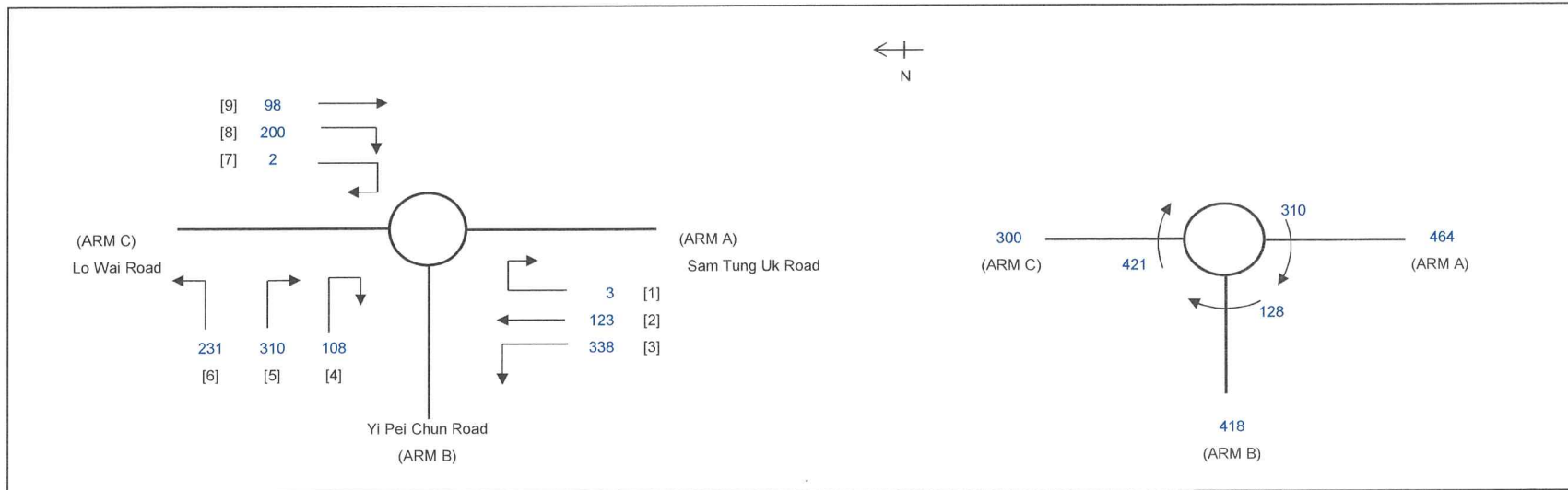
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road

REFERENCE NO.: J2

REVIEWED BY:

SLN

Jul-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)	464	418	300
Qc = Circulating flow across entry (pcu/h)	310	128	421
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 = $K(F-Fc*Qc)$	1492	1032	1455
DFC = Design flow/Capacity = Q/Qe	0.31	0.41	0.21
Total In Sum =			1713 PCU
DFC of Critical Approach =			0.41

LLA CONSULTANCY LIMITED

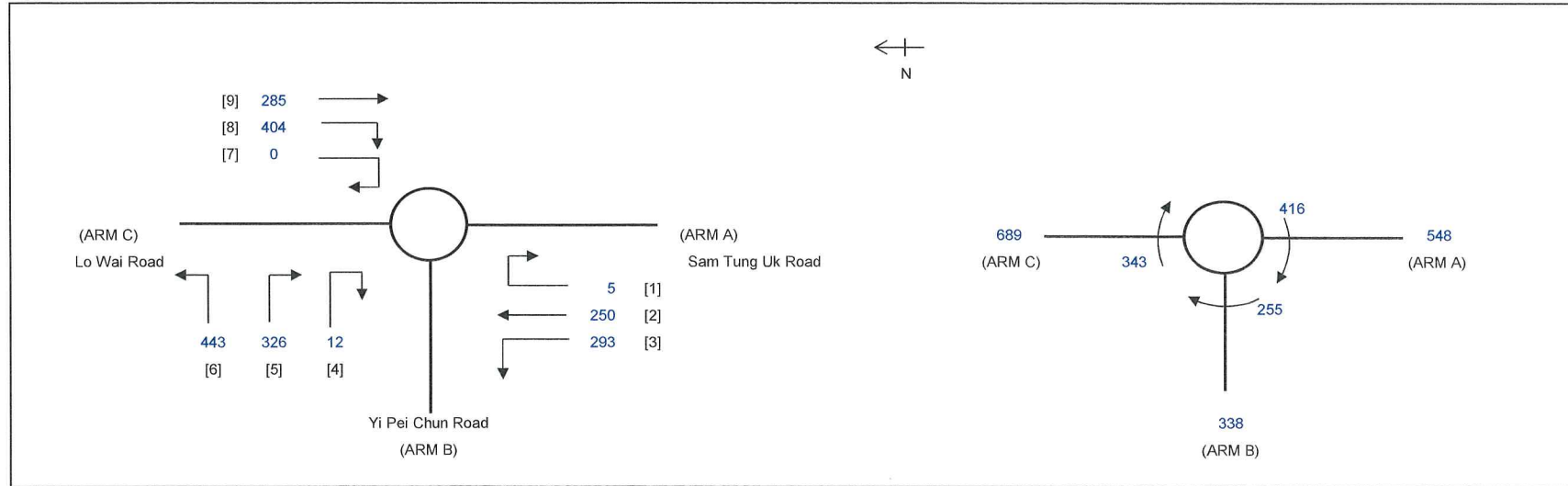
ROUNABOUT CALCULATION

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

2028 Reference AM (Weekend)

PROJECT NO.:	40243	PREPARED BY:	SKL	DATE	Jul-24
FILENAME :	J2_Weekend.xlsx	CHECKED BY:	SLN		Jul-24
REFERENCE NO.:	J2	REVIEWED BY:	SLN		Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	548	338	689	
Qc	= Circulating flow across entry (pcu/h)	416	255	343	
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	= $303 \times X2$	1583	1106	1623	
Td	= $1+(0.5/(1+M))$	1.48	1.48	1.48	
Fc	= $0.21 \times Td(1+0.2 \times X2)$	0.64	0.54	0.64	
Qe	= $K(F-Fc \times Qc)$	1420	964	1509	
				Total In Sum =	2707 PCU
DFC	= Design flow/Capacity = Q/Qe	0.39	0.35	0.46	DFC of Critical Approach = 0.46

LLA CONSULTANCY LIMITED

ROUNDBABOUT 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

2028 Reference Noon
(Weekend)

PROJECT NO.: 40243

PREPARED BY:

SKL

Jul-24

FILENAME : J2_Weekend.xlsx

CHECKED BY:

SLN

Jul-24

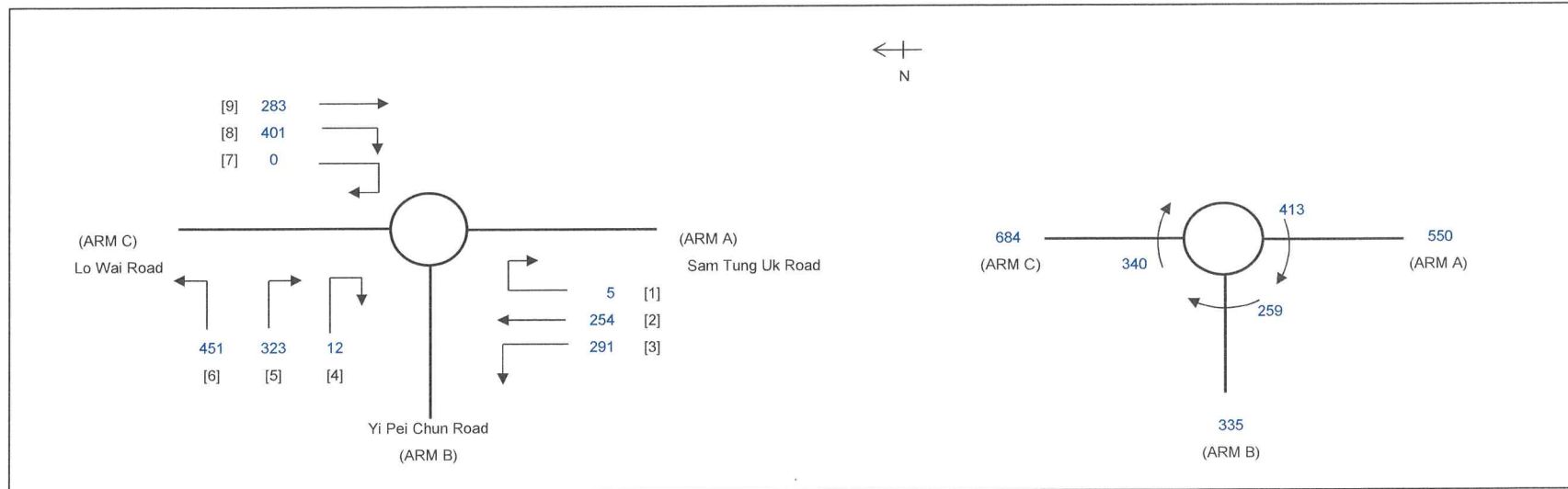
J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road

REFERENCE NO.: J2

REVIEWED BY:

SLN

Jul-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)	550	335	684
Qc = Circulating flow across entry (pcu/h)	413	259	340
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 = $303 \times X2$	1583	1106	1623
Td = $1+(0.5/(1+M))$	1.48	1.48	1.48
Fc = $0.21 \times Td(1+0.2 \times X2)$	0.64	0.54	0.64
Qe = $K(F-Fc \times Qc)$	1422	961	1511
DFC = Design flow/Capacity = Q/Qe	0.39	0.35	0.45
Total In Sum =			2704 PCU
DFC of Critical Approach =			0.45

LLA CONSULTANCY LIMITED

ROUNABOUT CALCULATION

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

2028 Reference PM (Weekend)

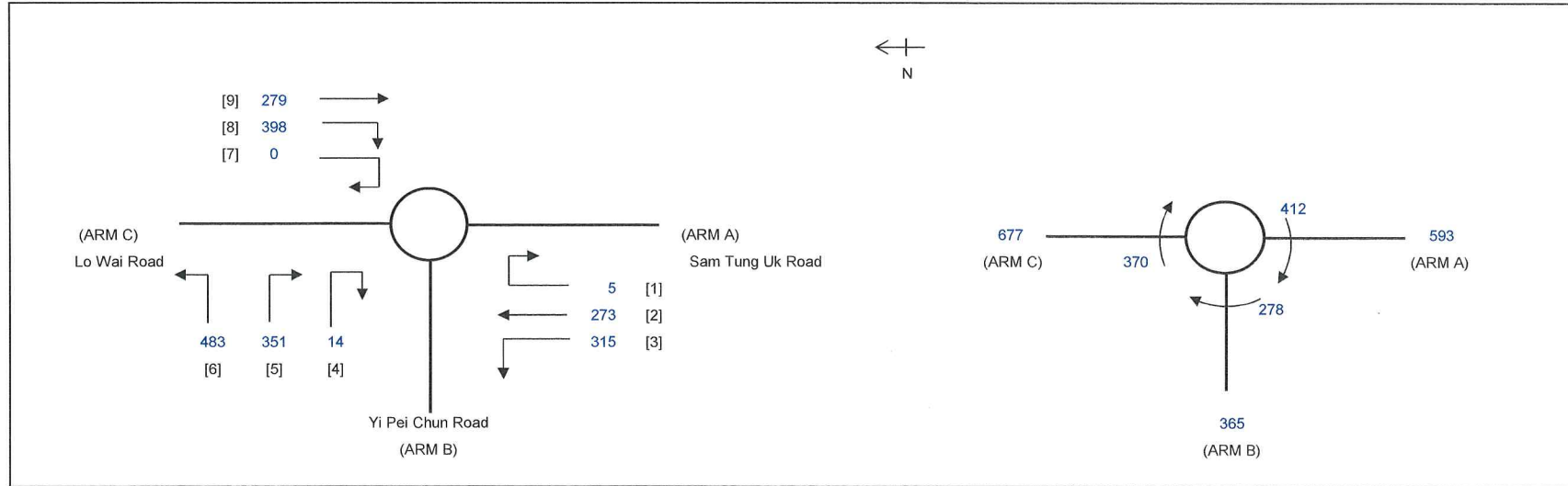
PROJECT NO.: 40243
 FILENAME : J2_Weekend.xlsx
 REFERENCE NO.: J2

PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS

DATE

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	593	365	677
Qc	= Circulating flow across entry (pcu/h)	412	278	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	= $303 \times X2$	1583	1106	1623
Td	= $1+(0.5/(1+M))$	1.48	1.48	1.48
Fc	= $0.21 \times Td(1+0.2 \times X2)$	0.64	0.54	0.64
Qe	= $K(F-Fc \times Qc)$	1423	951	1491
				Total In Sum = 2795 PCU
DFC	= Design flow/Capacity = Q/Qe	0.42	0.38	0.45
				DFC of Critical Approach = 0.45

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ROUNDBABOUT CALCULATION

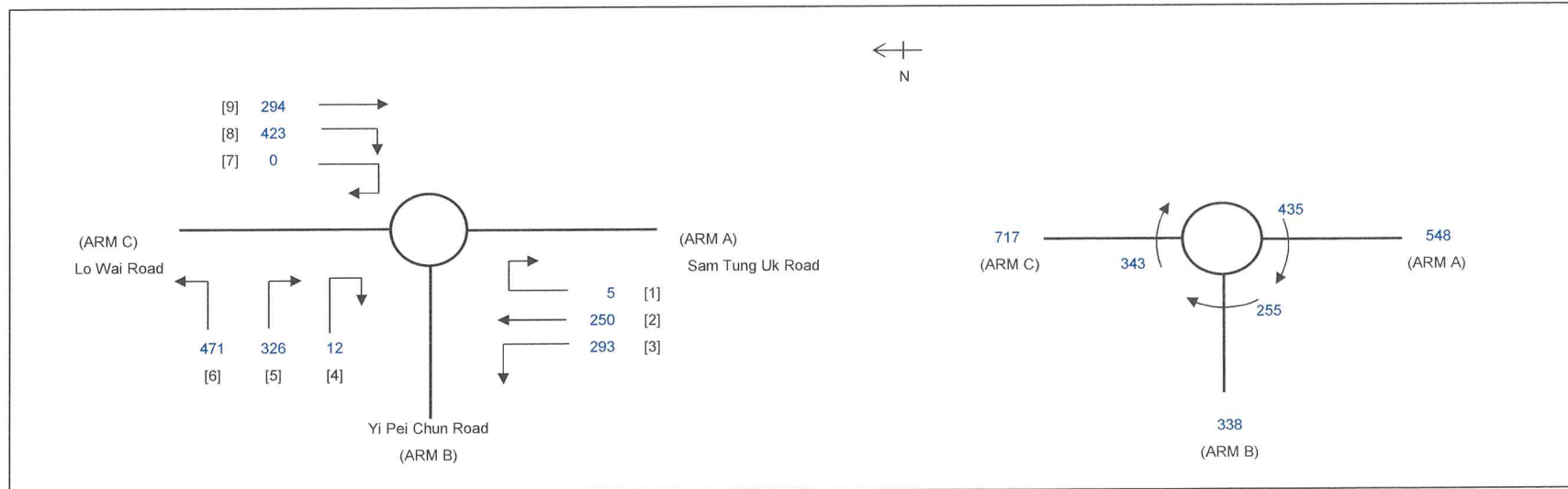
INITIALS DATE

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

2028 Design AM
(Weekend)

PROJECT NO.:	40243	PREPARED BY:	SKL	Jul-24
FILENAME :	J2_Weekend.xlsx	CHECKED BY:	SLN	Jul-24
REFERENCE NO.:	J2	REVIEWED BY:	SLN	Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	548	338	717
Qc = Circulating flow across entry (pcu/h)	435	255	343
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)	1407	964	1509
DFC = Design flow/Capacity = Q/Qe	0.39	0.35	0.48
Total In Sum =			2791 PCU
DFC of Critical Approach =			0.48

LLA CONSULTANCY LIMITED

ROUNDBABOUT CALCULATION

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

2028 Design Noon
(Weekend)

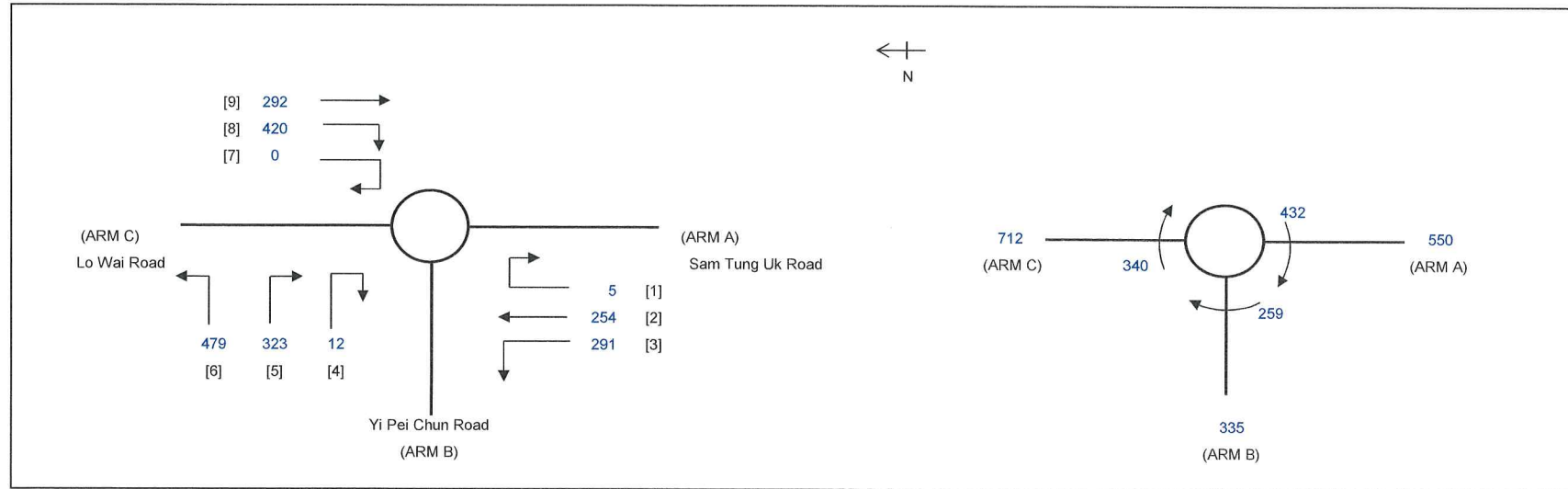
PROJECT NO.: 40243
FILENAME : J2_Weekend.xlsx
REFERENCE NO.: J2

PREPARED BY: SKL
CHECKED BY: SLN
REVIEWED BY: SLN

INITIALS

DATE

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	550	335	712	
Qc	= Circulating flow across entry (pcu/h)	432	259	340	
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	= $K(F-Fc*Qc)$	1409	961	1511	
DFC	= Design flow/Capacity = Q/Qe	0.39	0.35	0.47	
				Total In Sum =	2788 PCU
				DFC of Critical Approach =	0.47

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ROUNDOABOUT CALCULATION

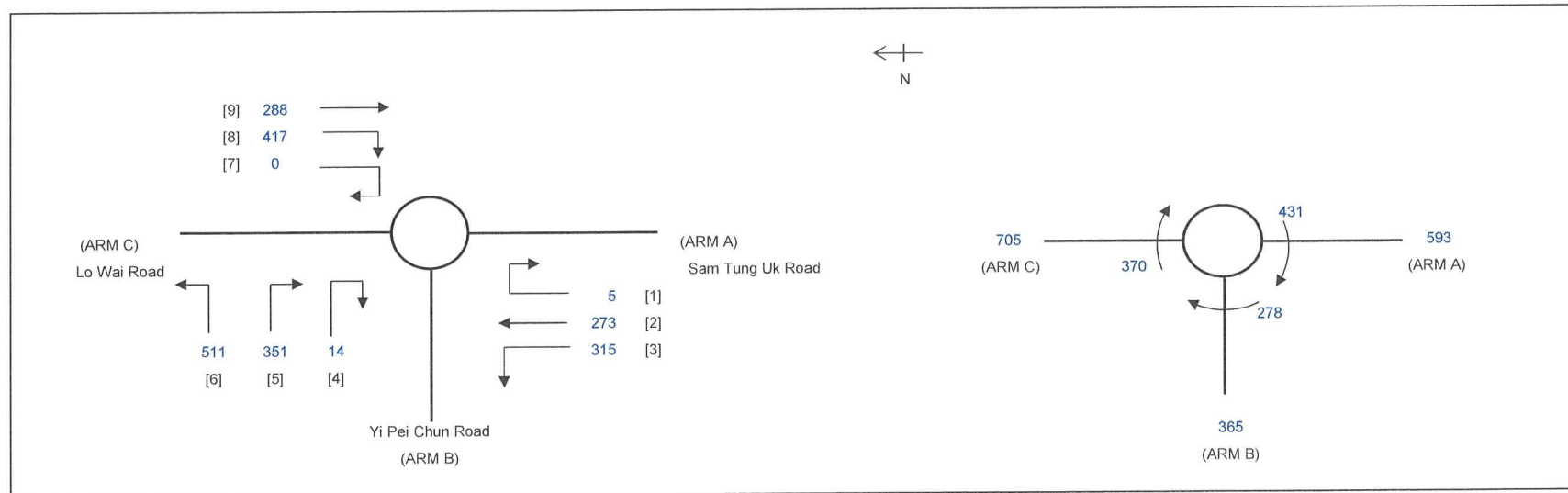
INITIALS DATE

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

2028 Design PM
(Weekend)

PROJECT NO.:	40243	PREPARED BY:	SKL	Jul-24
FILENAME :	J2_Weekend.xlsx	CHECKED BY:	SLN	Jul-24
REFERENCE NO.:	J2	REVIEWED BY:	SLN	Jul-24

J2 Lo Wai Road/Yi Pei Chun Road/Sam Tung Uk Road



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)	593	365	705
Qc	= Circulating flow across entry (pcu/h)	431	278	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)	1410	951	1491
DFC	= Design flow/Capacity = Q/Qe	0.42	0.38	0.47
Total In Sum =				2879 PCU
DFC of Critical Approach =				0.47