Section 12A Application for Proposed Rezoning from "Commercial", "Open Space" and an area shown as "Road" to "Residential (Group A) 13" and Amend the Notes of the Zone Applicable to the Site for Proposed Flat, Shop and Services, Eating Place and Social Welfare Facility (Child Care Centre) Uses at 16 Po Tai Street, Ma On Shan

Traffic Impact Assessment

Final Report
November 2026

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Prepared for: Real Charm Investment Limited

Section 12A Application for Proposed Rezoning from "Commercial", "Open Space" and an area shown as "Road" to "Residential (Group A) 13" and Amend the Notes of the Zone Applicable to the Site for Proposed Flat, Shop and Services, Eating Place and Social Welfare Facility (Child Care Centre) Uses at 16 Po Tai Street, Ma On Shan

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1.0 INTRODUCTION

Background

1.1 The subject site is located at 16 Po Tai Street, and the location is shown in Figure 1.1. The subject site is zoned "Commercial" ("C"), "Open Space" ("O") and an area shown as 'Road' under the Approved Ma On Shan Outline Zoning Plan No. S/MOS/28.

1.2 At present, the subject site is occupied by a shopping complex which is known as the We Go Mall (the "Existing Building"). The Applicant has the intention to rezone the subject site from "C" to "Residential (Group A) 13" ["R(A)13"] in order to redevelop the Existing Building and construct a residential development with a shopping complex (the "Proposed Development").

1.3 CKM Asia Limited, a traffic and transportation planning consultancy firm, was commissioned to carry out a Traffic Impact Assessment (TIA) in support of the Proposed Development. This report describes the TIA undertaken.

Scope of Study

1.4 The main objectives of this Study are as follows:

- To assess the existing traffic issues in the vicinity of the subject site;
- To provide adequate internal transport facilities for the Proposed Development;
- To quantify the amount of traffic generated by the Proposed Development; and
- To examine the traffic impact of the Proposed Development on the local road network.

Contents of the Report

1.5 After this introduction, the remaining chapters contain the following:

chapter two – describes the existing situation;
chapter three – presents the Proposed Development;
chapter four – describes the traffic and pedestrian impact analysis; and
chapter five – presents the overall conclusion.

2.0 THE EXISTING SITUATION

The Existing Building

2.1 The subject site fronts onto Po Tai Street to the west, Sai Sha Road to the east, Po Yip Street in the east. To the north and west of the subject site are residential developments known as Oceanaire（天宇海） and Ocean View（海典灣） respectively, and to the south is a temporary open public car park.

The Road Network

2.2 Po Tai Street is one-way 2 lane road and it forms a gyratory with Ning Tai Road. Footpaths are found along both side of this road, and the southbound bus stop is provided fronting the subject site.

2.3 Ning Tai Road is a single carriageway north-south road connecting Hang Fai Street to the north and Hang Shun Street to the south. The Ma On Shan Promenade is located on the western side of Ning Tai Road, and the northbound bus stop is located at Ning Tai Road opposite to Ocean View.

2.4 Sai Sha Road runs east-west direction connecting Sha Tin and Sai Kung. The section of Sai Sha Road fronting the Existing Development is a dual carriageway district distributor with 3 – 4 traffic lanes, and a cycle track is provided along the western side.

Manual Classified Counts

2.5 Manual classified counts were conducted from 0700 – 1000 hours and 1700 – 2000 hours on Thursday 9th October 2025, at the junctions located in the vicinity of the subject site in order to establish the peak hour traffic flows. The surveyed junctions include the following:

J1 – Sai Sha Road / Hang Fai Street
J2 – Ning Tai Road / Hang Fai Street / Hang Ming Street
J3 – Ning Tai Road / Po Tai Street (north)
J4 – Ning Tai Road / Po Tai Street (south)
J5 – Ning Tai Road / Sui Tai Road

2.6 The traffic counts were classified by vehicle type to enable traffic flows in passenger car units ("pcu") to be calculated. The locations and layouts of the surveyed junctions are shown in Figure 2.1 and Figures 2.2 – 2.6 respectively.

2.7 The AM and the PM peak hour traffic flows were found to occur at 0800 – 0900 and 1800 – 1900 hours respectively, and the peak hour traffic flows are illustrated in Figure 2.7.

Existing Junction and Link Operational Performance

2.8 The existing operational performance of the surveyed junctions was calculated based on the observed traffic counts and the analysis method found in Volumes 2 and 4 of Transport Planning and Design Manual (TPDM). The analysis results are summarised in Table 2.1 and detailed calculations are found in Appendix A.

TABLE 2.1 EXISTING JUNCTION OPERATIONAL PERFORMANCE

Ref.	Junction	Type of Junction	Performance Indicator	AM Peak	PM Peak
J1	Sai Sha Road / Hang Fai Street	Roundabout	DFC	0.503	0.279
J2	Ning Tai Road / Hang Fai Street / Hang Ming Street	Roundabout	DFC	0.330	0.197
J3	Ning Tai Road / Po Tai Street (north)	Signal	RC	74%	80%
J4	Ning Tai Road / Po Tai Street (south)	Signal	RC	>100%	>100%
J5	Ning Tai Road / Sui Tai Road	Signal	RC	>100%	>100%

Note: RC – Reserve Capacity DFC – Design Flow / Capacity Ratio

2.9 The above results indicate that the surveyed junctions currently operate with capacities during the AM and PM peak hours.

2.10 The existing link capacity for the local road network is assessed, and the link capacity analysis results are shown in Table 2.2.

TABLE 2.2 EXISTING LINK CAPACITY ASSESSMENT

Ref.	Road Section	Bound	Capacity (pcu/hr) [1]	Traffic Flows (pcu/hr)		Volume to Capacity Ratio	
				AM Peak	PM Peak	AM Peak	PM Peak
L1	Sai Sha Road [2]	northbound	6,720	1,258	1,384	0.19	0.21
L2		southbound	5,040	2,106	1,240	0.42	0.25
L3	Ning Tai Road	northbound	2,120 [4]	454	221	0.21	0.10
L4		southbound	2,120 [4]	321	287	0.15	0.14
L5	Po Tai Street	one-way	960	416	255	0.43	0.27
L6	Ma On Shan Road [3]	northbound	5,640	3,035	3,447	0.54	0.61
L7		southbound	7,560	4,340	2,690	0.57	0.36

Note: [1] A pcu factor of 1.2 is adopted to convert the capacity from veh/hr to pcu/hr:

Ref.	Road Section	Type	Carriageway	No. of Lane	Capacity	
					veh/hr	pcu/hr
L1	Sai Sha Road	DD	Dual	4	5,600	6,720
L2				3	4,200	5,040
L3	Ning Tai Road	DD	Single	2	1,900	2,120 [4]
L4				2	1,900	2,120 [4]
L5	Po Tai Street	LD	Single	2	800	960
L6	Ma On Shan Road	RT	Dual	3	4,700	5,640
L7				4	6,300	7,560

[2] section between Ma On Shan Road and Hang Fai Street

[3] section between Sai Sha Road and slip road of T6 bridge

[4] with reduction factor of 7% for heavy vehicle percentage between 15 – 20%

2.11 Table 2.2 shows that the analysed road links currently operate with capacities during the AM and PM peak hours.

Traffic and Pedestrian Generation of Existing Building

2.12 The observed peak hour traffic and pedestrian generation of the Existing Building are presented in Table 2.3.

TABLE 2.3 OBSERVED GENERATION OF EXISTING BUILDING

Item	Unit	AM Peak		PM Peak	
		IN	OUT	IN	OUT
Traffic Generation	pcu/hour	23	16	33	21
Pedestrian Generation	ped/15-min	55	70	106	87

Survey Period: 0700 – 1000 and 1700 – 2000 hours on Thursday 9th October 2025

Level-of-Service of Surveyed Footpath

2.13 There are good pedestrian facilities provided in the vicinity of the subject site, including footpaths alongside the roads, and pedestrian crossings are provided at road junctions.

2.14 To quantify the existing pedestrian flows, pedestrian counts were conducted at footpaths connecting the subject site to (i) MTR Heng On Station; (ii) northbound bus stop at Ning Tai Road; and (iii) southbound bus stop at Po Tai Street. Based on the above destinations, the survey locations include the following:

F1 – Western footpath of Sai Sha Road (north of Hang Fai Street);
F2 – Western footpath of Sai Sha Road (south of Hang Fai Street);
F3a – Eastern footpath of Po Tai Street (outside Oceanaire);
F3b – Eastern footpath of Po Tai Street (outside We Go Mall);
F3c – Eastern footpath of Po Tai Street (outside La Costa);
F4 – Western footpath of Ning Tai Road;
F5 – Footway in the non-building area (NBA) between Sai Sha Road and Po Tai Street; and
F6 – Subway to / from Sai Sha Road Pet Garden.

2.15 The level-of-service ("LOS") of a pedestrian walkway is dependent on its width and number of pedestrians using the facility. Description of the LOS at walkway is obtained from Volume 6 of the TPDM, and is presented in Table 2.4.

TABLE 2.4 PEDESTRIAN WALKWAY LEVEL-OF-SERVICE

LOS	Flow Rate (ped/min/m)	Description
A	≤ 16	Pedestrians basically move in desired paths without altering their movements in response to other pedestrians. Walking speeds are freely selected, and conflicts between pedestrians are unlikely.
B	16 – 23	Sufficient space is provided for pedestrians to freely select their walking speeds, to bypass other pedestrians and to avoid crossing conflicts with others. At this level, pedestrians begin to be aware of other pedestrians and to respond to their presence in the selection of walking paths.
C	23 – 33	Sufficient space is available to select normal walking speeds and to bypass other pedestrians primarily in unidirectional stream. Where reverse direction or crossing movement exist, minor conflicts will occur, and speed and volume will be somewhat lower.
D	33 – 49	Freedom to select individual walking speeds and bypass other pedestrians is restricted. Where crossing or reverse-flow movements exist, the probability of conflicts is high and its avoidance requires changes of speeds and position. The LOS provides reasonable fluid flow; however considerable friction and interactions between pedestrians are likely to occur.

TABLE 2.4 PEDESTRIAN WALKWAY LEVEL-OF-SERVICE (CONT'D)

LOS	Flow Rate (ped/min/m)	Description
E	49 – 75	Virtually, all pedestrians would have their normal walking speeds restricted. At the lower range of this LOS, forward movement is possible only by shuffling. Space is insufficient to pass over slower pedestrians. Cross- and reverse-movement are possible only with extreme difficulties. Design volumes approach the limit of walking capacity with resulting stoppages and interruptions to flow.
F	> 75	Walking speeds are severely restricted. Forward progress is made only by shuffling. There are frequent and unavoidable conflicts with other pedestrians. Cross- and reverse-movements are virtually impossible. Flow is sporadic and unstable. Space is more characteristics of queued pedestrians than of moving pedestrian streams.

Source: Volume 6 Chapter 10, TPDM published by Transport Department

2.16 The peak 15-minute pedestrian flows are illustrated in Figure 2.8, and the corresponding LOS assessment is presented in Table 2.5.

TABLE 2.5 EXISTING LEVEL-OF-SERVICE ASSESSMENT

Ref.	Footpath	Measured Width	Effective Width	Peak Period	2-way Peak Pedestrian Flows		LOS
					Flow (ped/ 15-min)	Rate (ped/ min/m)	
F1	Western footpath of Sai Sha Road (north of Hang Fai Street)	2.5m	1.5m	AM	354	15.73	A
				PM	205	9.11	A
F2	Western footpath of Sai Sha Road (south of Hang Fai Street)	3m	2m	AM	53	1.77	A
				PM	99	3.30	A
F3a	Eastern footpath of Po Tai Street (outside Oceanaire)	3.4m	2.4m	AM	48	1.33	A
				PM	31	0.86	A
F3b	Eastern footpath of Po Tai Street (outside We Go Mall)	1.8m [(1)]	0.8m	AM	169	14.08	A
				PM	137	11.42	A
F3c	Eastern footpath of Po Tai Street (outside La Costa)	3.4m	2.4m	AM	72	2.00	A
				PM	53	1.47	A
F4	Western footpath of Ning Tai Road	1.5m	0.5m	AM	43	5.73	A
				PM	94	12.53	A
F5	Footway in the NBA between Sai Sha Road and Po Tai Street	3m	2m	AM	105	3.50	A
				PM	92	3.07	A
F6	Subway to / from Sai Sha Road Pet Garden	3m	2m	AM	161	5.37	A
				PM	132	4.40	A

Note: [(1)] clear width of footpath excluding existing bus stops / shelters at Po Tai Street

2.17 The above results indicate that the surveyed footpaths currently operate with LOS A during the AM and PM peak hours. As stated in the TPDM, LOS A to C is considered as an acceptable level of service: *"In general, LOS C is desirable for most design at streets with dominant 'living' pedestrian activities"*.

Public Transport Services and Surveys

2.18 Access to road-based and rail-based public transport services from the subject site is convenient. The MTR Heng On Station is located within 450m, or equivalent to around 8 minutes' walk from the subject site.

2.19 In addition, numerous franchised bus routes and green minibus ("GMB") routes operate close to the subject site along Ning Tai Road and Po Tai Street. Details of these franchised bus and GMB routes are presented in Table 2.6.

TABLE 2.6 BUS ROUTES OPERATING CLOSE TO THE SUBJECT SITE

Route	Routing	Frequency (minutes)
KMB 43X	Yiu On – MTR Tsuen Wan West Station	9 – 20
KMB 81C	Yiu On – Tsim Sha Tsui East (Mody Road)	10 – 60
KMB 85K	Heng On – MTR Sha Tin Station	7 – 30
KMB 85S	Yiu On > Hung Hom (Hung Luen Road)	AM peak
KMB 89C	Heng On – Kwun Tong (Tsui Ping Road)	12 – 30
KMB 281X	Yiu On > Tsim Sha Tsui East (Mody Road)	AM peak
KMB 286D	Ma On Shan Town Centre – Sham Shui Po	AM & PM peak
KMB 289K	MTR University Station – Chevalier Garden (Circular)	13 – 30
KMB N287	Tsim Sha Tsui East (Mody Road) > MTR Wu Kai Sha Station	overnight
KMB / CTB 681P	Yiu On – Sheung Wan	AM & PM peak
KMB / CTB 981P	Yiu On > Wan Chai (Fleming Road)	AM peak
	MTR Admiralty Station (East) > Yiu On	PM peak
KMB / CTB 680B	Chevalier Garden > MTR Admiralty Station (East)	AM peak
CTB 682A	Ma On Shan Town Centre > Chai Wan (East)	AM peak
	Chai Wan (East) > Nai Chung	PM peak
LWB A41P	MTR Wu Kai Sha Station – Airport (Ground Transportation Centre)	20 – 40
LWB NA40	MTR Wu Kai Sha Station – HZMB Hong Kong Port	overnight
GMB 810	Sha Tin Central – Ma On Shan (Villa Athena)	6 – 15
GMB 810A	Sha Tin Central – White Head	AM & PM peak
GMB 806B	Shek Mun – Wan Tau Tong	12 – 25

Note: KMB – Kowloon Motor Bus LWB – Long Win Bus
CTB – Citybus GMB – Green Minibus

2.20 The occupancy of franchised bus / GMB routes operating along Ning Tai Road and Po Tai Street was surveyed at their respective maximum loading points, i.e. at the last bus / GMB stop in Sha Tin District for outbound routes (i.e. departing from Ma On Shan) and at the first bus / GMB stop in Sha Tin District for inbound routes (i.e. towards Ma On Shan).

2.21 During the AM peak hour, the outbound bus / GMB routes have higher occupancy rate compared to the inbound bus / GMB routes, and vice versa, during the PM peak hour. To conduct a conservative assessment, outbound bus / GMB routes were surveyed during the AM peak hour while inbound bus / GMB routes were surveyed during the PM peak hour. The survey results are summarised in Table 2.7 and survey data is found in Appendix B.

TABLE 2.7 PUBLIC TRANSPORT OCCUPANCY SURVEY RESULTS

Peak Hour	Maximum Loading Point	Route	Level of Public Transport Service (persons/hr)		
			Carrying Capacity [a] (1)	No. of Passenger on Board [b]	Surplus Capacity [a] – [b]
AM (Outbound Bus Route)	Shing Mun Tunnel	KMB 43X	720	474	246
	Lion Rock Tunnel	KMB 281X	360	150	210
	Tate's Cairn Tunnel	KMB 85S	120	90	30
		KMB 89C	840	537	303
		KMB / CTB 681P	240	120	120
		KMB / CTB 680B	240	131	109
		CTB 682A	360	180	180
	Tsing Sha Highway	KMB 286D	120	60	60
		KMB / CTB 981P	480	240	240
		LWB A41P	360	195	165
	A Kung Kok Street	KMB 85K	480	255	225
		GMB 810	152	131	21
	MTR University Station	KMB 289K	600	507	93
	Kam On Court	GMB 810A	38	30	8
	Yan On Estate	GMB 806B	114	101	13
	Total		**5,224**	**3,201**	**2,023**
PM (Inbound Bus Route)	Shing Mun Tunnel	KMB 43X	720	450	270
	Lion Rock Tunnel	KMB 81C	360	195	165
	Tate's Cairn Tunnel	KMB 89C	720	438	282
		KMB / CTB 681P	120	60	60
		CTB 682A	120	90	30
	Tsing Sha Highway	KMB 286D	120	60	60
		KMB / CTB 981P	600	333	267
		LWB A41P	360	180	180
	A Kung Kok Street	KMB 85K	360	120	240
		GMB 810	171	151	20
	MTR University Station	KMB 289K	360	297	63
	We Go Mall	GMB 810A	38	33	5
		GMB 806B	76	44	32
	Total		**4,125**	**2,451**	**1,674**

Note: Inbound – towards Ma On Shan Outbound – departing from Ma On Shan

(1) The assumed carrying capacity of a single-deck bus and double-deck bus is 60 and 120 passengers respectively. The capacity of GMB is identified from survey.

2.22 Table 2.7 shows that the existing franchised bus / GMB services have surplus capacity of over 2,000 and 1,600 passengers during the AM and PM peak hours respectively.

3.0 THE PROPOSED DEVELOPMENT

Development Schedule

3.1 The development schedule of the Proposed Development is presented in Table 3.1.

TABLE 3.1 DEVELOPMENT SCHEDULE

Item	Development Parameters (approx.)
Site Area	around 5,090m^2
No. of Housing Block	1 block
No. of Flat	540 nos., including: **Size of Flat (in GFA)** — **No. of Flat** ≤ 40m^2 — 282 40 – 70m^2 — 258 **Total =** — **540**
Domestic Plot Ratio	5
Average Flat Size	around 47m^2
GFA for Retail	around 9,121.28m^2
GFA for Social Welfare Facility	around 1,007.82m^2 for a 100-place Child Care Centre

Internal Transport Facilities

3.2 The internal transport facilities provided for the Proposed Development is calculated based on the Hong Kong Planning Standards and Guidelines (HKPSG). Since the HKPSG has no recommendations for *"child care centre"*, reference is made to *"kindergarten"* which has similar nature.

TABLE 3.2 PROVISION OF INTERNAL TRANSPORT FACILITIES

Item	Type	HKPSG Recommendations	Proposed Provision
Private Car	**Residential**	Requirement = GPS × R1 × R2 × R3 GPS = 1 car space per 4 – 7 flats R1 = 0.5 for flat size ≤ 40m^2 (282 flats) = 1.2 for flat size 40 – 70m^2 (258 flats) R2 = 0.75 for development within 500m of rail station R3 = 1 for domestic plot ratio > 2 and ≤ 5 Minimum = (282 × 0.5 + 258 × 1.2) ÷ 7 × 0.75 × 1 = 49 nos. Maximum = (282 × 0.5 + 258 × 1.2) ÷ 4 × 0.75 × 1 = 85 nos.	85 nos.
	Visitor	5 visitor car parking spaces for developments with more than 75 units per block Provision = 2 × 5 = 10 nos.	10 nos.
	Retail	1 space per 150 – 300m^2 GFA Minimum = 9121.28 ÷ 300 = 31 nos. Maximum = 9121.28 ÷ 150 = 61 nos.	61 nos.
	Total	**Minimum = 49 + 10 + 31 = 90 nos.** **Maximum = 85 + 10 + 61 = 156 nos.**	**156 nos.** (1)

TABLE 3.2 PROVISION OF INTERNAL TRANSPORT FACILITIES (CONT'D)

Item	Type	HKPSG Recommendations	Proposed Provision
Loading / Unloading Bay	**Residential**	Minimum 1 bay for every 800 flats or part thereof, subject to minimum 1 bay for each housing block	2 nos. (2 HGV)
	Retail	1 space per 800 – 1,200m^2, or part thereof, of GFA Minimum = 9121.28 ÷ 1200 = 8 nos. Maximum = 9121.28 ÷ 800 = 12 nos.	12 nos. (5 HGV + 7 LGV)
	Total	**Minimum = 2 + 8 = 10 nos.** **Maximum = 2 + 12 = 14 nos.**	**14 nos. (7 HGV + 7 LGV)**
Motorcycle	**Residential**	1 space per 80 – 120 flats, i.e. equivalent to 25% more on top of the HKPSG provision [(2)] Minimum = 540 ÷ 120 = 5 nos. Maximum = 540 ÷ 80 = 7 nos.	7 nos.
	Retail	5 – 10% of total provision of car parking space Minimum = 61 × 5% = 4 nos. Maximum = 61 × 10% = 7 nos.	7 nos.
	Total	**Minimum = 5 + 4 = 9 nos.** **Maximum = 7 + 7 = 14 nos.**	**14 nos.**
Bicycle	**Residential**	1 bicycle parking space for every 15 flats with flat size smaller than 70m^2 Minimum = (282 + 258) ÷ 15 = 36 nos.	**36 nos.**
Social Welfare Facility (100-place Child Care Centre)	**Coach**	A minimum of 2 lay-bys for coaches	**2 nos.**
	Private Car	0 – 1 car parking space per 4 to 6 classrooms, or equivalent to 80 to 120 persons [(3)] Minimum = 100 ÷ 120 + 2 [(4)] = 3 nos. Maximum = 100 ÷ 80 + 2 [(4)] = 4 nos.	**4 nos. [(1)]**
	Taxi / Private Car	1 lay-by for taxi / private car for every 5 to 8 classrooms, or equivalent to 100 to 160 persons [(3)]	**1 no.**

Note: LGV – light goods vehicle HGV – heavy goods vehicle

(1) Based on Chapter 8 of HKPSG, 3 car parking spaces for persons with disabilities shall be provided for the Proposed Development with 160 car parking spaces.

(2) Reference is made to *"Checklist of Traffic Impact Assessment (TIA) for Development Projects"*, *"25% more on top of the HKPSG required provision of motorcycle parking spaces for residential developments may be required …"*. To address the local parking demand, the number of residential motorcycle parking spaces will be increased by 25%.

(3) Reference is made to the Education Regulations, *"in any school providing full-day kindergarten education, not more than 20 pupils shall be taught at one time by one teacher"*. Hence, each classroom is assumed to be equivalent to 20 persons.

(4) Additional visitor car parking spaces (2 nos.) are provided to meet the operational needs of the child care centre

3.3 Table 3.2 shows that the internal transport facilities for the Proposed Development comply with the **maximum recommendations of HKPSG**.

Internal Transport Layout

3.4 The ground, basement and 1st – 3rd floor plans showing the internal transport facilities are found in Figures 3.1 – 3.4.

3.5 At present, the run-in for the Existing Building is located at the north-west, near Oceanaire and the run-out is to the south-west, i.e. adjacent to the temporary public car park. As shown in Figure 3.1, the existing run-in and run-out located at Po Tai Street will be maintained for the Proposed Development.

3.6 After the rezoning application has been approved, the Applicant will carry out detailed design of the internal transport layout.

Improvement to Connectivity and Walkability

3.7 At present, a 3m footway connects Sai Sha Road and Po Tai Street via the NBA to the north of the Existing Building. Likewise, as part of the Proposed Development, a 3m footway will be provided within the NBA as shown in Figure 3.1.

3.8 As recommended in the TPDM and HKPSG, the minimum clear width of pedestrian through zone in a footpath is 3m.

3.9 At present, the clear width of public footpath, excluding the bus stops / shelters, outside We Go Mall at Po Tai Street is around 1.8m. As shown in Figure 3.1, the Applicant is willing to provide a 1.2m setback along the site frontage adjacent to the existing bus / GMB lay-by at Po Tai Street to provide a widened footpath with clear width of 3m.

3.10 With the proposed setback at Po Tai Street and the 3m footway within the NBA, the walkability and pedestrian connectivity between Sai Sha Road, Po Tai Street and the Proposed Development is improved.

Traffic Arrangement during Construction Stage

3.11 To restrict unauthorised entry and illegal parking on the access road leading to the run-in of the subject site, temporary traffic arrangement ("TTA") will be submitted to close the access road during the construction stage, except for access of construction vehicles.

3.12 According to the *"Checklist of Traffic Impact Assessment (TIA) for Development Projects"*, *"Construction Traffic Impact Assessment (CTIA), which involves the traffic impact assessment during the construction stage of a development project, could be separated from a TIA in the planning application. The application will be approved with conditions which requires the CTIA submission at a later stage, e.g. during construction stage, for approval"*. Hence, the conduct of CTIA will be carried out at a later stage.

Swept Path Analysis

3.13 The CAD-based swept path analysis programme, *Autodesk Vehicle Tracking*, was used to check the ease of manoeuvring of vehicles, and are found to have no problems. The swept path analysis drawings are found in the Appendix C.

4.0 TRAFFIC IMPACT

Design Year

4.1 The Proposed Development is expected to be completed in 2035. Thus, the design year adopted for the capacity analysis is 2038, i.e. 3 years after its planned completion.

4.2 In order to produce the traffic and pedestrian forecasts up to year 2038, reference is made to the latest *"Territorial Population and Employment Data Matrix"* ("TPEDM") published by Planning Department, and the projected population and employment data is summarised in Table 4.1.

TABLE 4.1 TPEDM DATA FOR SHA TIN DISTRICT

Year	Population	Employment	Total
2021	692,800	222,150	**914,950**
2026	687,450	230,600	**918,050**
2031	667,750	220,400	**888,150**
Annual Growth Rate			**−0.30%**

4.3 Table 4.1 shows that the annual growth rate obtained from TPEDM is declining, i.e. −0.30%. To err on the high side, the traffic and pedestrian growth rate of **1%** per annum is adopted to produce the traffic forecast for year 2038.

Traffic Generation

4.4 To estimate traffic generation of the Proposed Development, the following are adopted:

- trip generation rates for residential and retail – from TPDM Volume 1; and
- trip generation rates for welfare facilities – these rates are not found in the TPDM, hence, independent survey was conducted at similar development with comparable use, class and accessibility to public transport services.

4.5 The average size of the residential flats is around 47m^2, but the smallest private housing category in the TPDM is 60m^2, i.e. *"Private Housing: High-density / R(A) with average flat size of 60m^2"*, and these are used. The adopted trip generation rates are presented in Table 4.2.

TABLE 4.2 TRIP GENERATION RATES

Use	Unit	Trip Generation Rates			
		AM Peak		PM Peak	
		IN	OUT	IN	OUT
Residential (average flat size of 60m^2) [(1)]	pcu/hour/flat	0.0425	0.0718	0.0370	0.0286
Retail [(1)]	pcu/hour/100m^2	0.2434	0.2296	0.3563	0.3100
Welfare Facilities [(2)]	pcu/hour/place	0.0286	0.0286	0.0190	0.0190

Note: [(1)] extract from Volume 1 of TPDM

[(2)] Survey at Tsung Tsin Mission of Hong Kong Joyful Place (with 105 places) at Shek Mun Estate in Sha Tin (Survey Period: 0700 – 1000 and 1700 – 2000 hours on Thursday 9th October 2025)

4.6 The trip generation rates in Table 4.2 are used to calculate the traffic generated associated with the Proposed Development, and the calculated traffic generation is presented in Table 4.3.

TABLE 4.3 PROPOSED DEVELOPMENT TRAFFIC GENERATION

Use	Quantity	Traffic Generation (pcu/hour)			
		AM Peak		PM Peak	
		IN	OUT	IN	OUT
Residential	540 flats	23	39	20	16
Retail	9,121.28m^2 GFA	23	21	33	29
Welfare Facilities	100 places	3	3	2	2
Total		**49**	**63**	**55**	**47**

Major Planned Developments

4.7 The major planned developments in the vicinity of the subject site have been identified. Comments from Planning Department on the planned developments are found in Appendix D, and have been incorporated in Table 4.4.

TABLE 4.4 DETAILS OF MAJOR PLANNED DEVELOPMENTS

Ref.	Location	Use	Development Parameters (Approx.)
1	Temporary Public Vehicle Park (PVP) at Po Tai Street (Planning Application No. A/MOS/129)	PVP	247 – 295 parking spaces
2	Kam Pak Court	Subsidised Housing	1,900 flats
3	Public Housing Development at Ma On Shan Tsuen Road	Public Housing	2,700 flats
4	Light Public Housing Project at Hang Kwong Street	Light Public Housing	860 units
5	Amenity Complex in Area 103, Ma On Shan	G/IC	amenity complex and PVP with around 354 parking spaces
6	Private Housing Development at 29 On Chun Street (Planning Application No. Y/MOS/6)	Private Housing	*"Full Residential Scheme"*: 758 flats and commercial GFA of 5,543m^2
7	City University of Hong Kong Whitehead Student Hostel	Student Hostel	around 2,200 places
8	Public Housing Development at Cheung Muk Tau Site 1	Public Housing	1,660 flats, retail GFA of around 1,550m^2 and various G/IC facilities
9	Public Housing Development at Cheung Muk Tau Site 2	Public Housing	1,820 flats, retail GFA of around 1,700m^2 and various G/IC facilities
10	Expansion of Cheung Muk Tau Holiday Centre for the Elderly by Helping Hand	G/IC	Care and Attention Home providing Continuum of Care (CoC Home) (200 places)
11	School Development at Various Lots and Adjoining Government Land in DD167 (Planning Application No. A/MOS/125)	G/IC	29 classrooms

TABLE 4.4 DETAILS OF MAJOR PLANNED DEVELOPMENTS (CONT'D)

Ref.	Location	Use	Development Parameters (Approx.)
12	Shap Sz Heung Development (Planning Application No. A/NE-SSH/120-1 & 142)	Mixed Use	9,700 private residential flats, commercial GFA of no more than 12,077m^2 and various G/IC facilities
13	Residential Care Home and Day Care Centre for the Elderly and Healthcare Centres at On Chun Street	G/IC	Residential Care Home for the Elderly (270 places)

4.8 The major planned developments listed in Table 4.4 are included in the production of the 2038 traffic forecast. For ease of reference, estimation of traffic generated by each planned development is presented in Appendix E.

Base Year LATM Development

4.9 The 2038 peak hour traffic flows are produced with reference to the: (i) 2036 NTE1 Base District Traffic Model (BDTM); (ii) traffic generated by the major planned developments in the vicinity; and (iii) traffic generated by the Proposed Development.

4.10 The BDTM from *"Quotation No. TD 507/2023 Base District Traffic Models for The New Territories Area – 2024 Update"* (the *"BDTM Study"*) produced by Transport Department was adopted to form the Local Area Traffic Model (LATM) for this Study using *"SATURN"* software.

4.11 Although the BDTM was well validated, the traffic network and zone within and in the vicinity of the Study Area were reviewed to ensure that the level of details of the LATM could produce the traffic flows required for this Study. The validation methodology includes the following:

- The road links and junctions were checked and updated to ensure that recent change in the existing road network is considered and missing road links or junction do not exist;
- The schedule of public transport services such as franchised bus and green / red minibus were also checked to ensure that the updated routings and headway information are adopted;
- The zone and centroid connectors were reviewed such that the traffic zones generate / attract traffic at appropriate locations; and
- The traffic flows produced by LATM at the surveyed road links were reviewed with reference to the observed traffic flows.

4.12 The validation criteria are the same as those adopted in the BDTM. All count locations were reviewed and checked by GEH statistic (a modified chi squared test to provide a statistic for both the magnitude of the difference and the percentage difference between modelled and observed flows). The GEH statistic is defined by:

$$\sqrt{\frac{(V_2 - V_1)^2}{\frac{1}{2}(V_2 + V_1)}}$$

where V_1 and V_2 are the observed and modelled flows.

4.13 The validation criteria adopted are found in Table 4.5, which is the same as that given in the BDTM. The validation results are presented in Table 4.6.

TABLE 4.5 VALIDATION CRITERIA

Locations	Target
All Count Locations	85% return a GEH error of 5 or less 100% return a GEH error of 10 or less

TABLE 4.6 BASE YEAR LATM VALIDATION RESULTS

Criteria	Target	Results	
		AM Peak	PM Peak
Total No. of Movements	–	39	39
No. of Movements within GEH ≤ 5	–	35	34
No. of Movements within GEH ≤ 10	–	39	39
No. of Movements GEH > 10	–	0	0
% of Movements within GEH ≤ 5	85%	90%	87%
% of Movements within GEH ≤ 10	100%	100%	100%

4.14 Table 4.6 shows that the results meet the validation criteria listed in Table 4.5. Therefore, the traffic flows produced by LATM are applicable for this Study.

Design Year LATM Development

4.15 The 2038 LATM was developed by the following steps:

Step 1 – The 2036 LATM was adopted to produce the 2038 LATM. The total traffic growth is calculated using the following equation with x_1 being the adopted traffic growth rate:

2036 to 2038 Total Traffic Growth $= (1 + x_1)^2$ where $x_1 = 1\%$.

Step 2 – Traffic generation associated to the Proposed Development and planned developments are added to the traffic zone of the 2038 LATM obtained in Step 1.

Step 3 – The 2038 LATM traffic assignment were carried out to produce the design year traffic flows.

4.16 The 2038 peak hour traffic flows without and with the Proposed Development are shown in Figures 4.1 and 4.2 respectively.

2038 Junction and Link Capacity Analysis

4.17 The 2038 junction capacity analysis for the cases without and with the Proposed Development are summarised in Table 4.7, and detailed calculations are found in Appendix A.

TABLE 4.7 2038 JUNCTION OPERATIONAL PERFORMANCE

Ref.	Junction	Performance Indicator	Without Proposed Development		With Proposed Development	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Sai Sha Road / Hang Fai Street	DFC	0.582	0.331	0.611	0.332
J2	Ning Tai Road / Hang Fai Street / Hang Ming Street	DFC	0.356	0.214	0.363	0.235
J3	Ning Tai Road / Po Tai Street (north)	RC	62%	65%	43%	47%
J4	Ning Tai Road / Po Tai Street (south)	RC	>100%	>100%	82%	>100%
J5	Ning Tai Road / Sui Tai Road	RC	>100%	>100%	>100%	>100%

Note: RC – Reserve Capacity DFC – Design Flow / Capacity Ratio

4.18 The 2038 link capacity for the local road network is also assessed and the results are shown in Table 4.8.

TABLE 4.8 2038 LINK CAPACITY ASSESSMENT

Ref.	Road Section	Direction	Without Proposed Development				With Proposed Development			
			Traffic Flows (pcu/hr)		V/C Ratio (1)(2)		Traffic Flows (pcu/hr)		V/C Ratio (1)(2)	
			AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
L1	Sai Sha Road (3)	northbound	1,473	1,590	0.22	0.24	1,515	1,639	0.23	0.24
L2		southbound	2,376	1,366	0.47	0.27	2,429	1,396	0.48	0.28
L3	Ning Tai Road	northbound	493	236	0.23	0.11	493	236	0.23	0.11
L4		southbound	345	315	0.16	0.15	345	315	0.16	0.15
L5	Po Tai Street	one-way	438	284	0.46	0.30	501	331	0.52	0.34
L6	Ma On Shan Road (4)	northbound	4,081	4,474	0.72	0.79	4,121	4,521	0.73	0.80
L7		southbound	5,749	3,468	0.76	0.46	5,802	3,498	0.77	0.46

Note: (1) V/C Ratio – Volume to Capacity Ratio

(2) road type and capacity as extracted from Table 2.2:

Ref.	Road Section	Type	Carriageway	No. of Lane	Capacity	
					veh/hr	pcu/hr
L1	Sai Sha Road	DD	Dual	4	5,600	6,720
L2				3	4,200	5,040
L3	Ning Tai Road	DD	Single	2	1,900	2,120 (5)
L4				2	1,900	2,120 (5)
L5	Po Tai Street	LD	Single	2	800	960
L6	Ma On Shan Road	RT	Dual	3	4,700	5,640
L7				4	6,300	7,560

(3) section between Ma On Shan Road and Hang Fai Street

(4) section between Sai Sha Road and slip road of T6 bridge

(5) with reduction factor of 7% for heavy vehicle percentage between 15 – 20%

4.19 The above results indicate that the analysed junctions and road links are expected to operate with sufficient capacity during the peak hours in 2038. The junctions and road links analysed have sufficient capacity to accommodate the (i) expected traffic growth; and (ii) additional traffic generated by the Proposed Development.

Pedestrian Generation

4.20 Pedestrians generated by the Proposed Development are estimated based on the pedestrian generation surveys conducted at similar type buildings. The surveyed developments are comparable in terms of use, class and are located with good accessibility to public transport services. The adopted pedestrian generation rates are presented in Table 4.9.

TABLE 4.9 PEDESTRIAN GENERATION RATES

Use	Unit	Pedestrian Generation Rates			
		AM Peak		PM Peak	
		IN	OUT	IN	OUT
Residential [(1)]	ped/15-min/flat	0.0384	0.1559	0.0714	0.0395
Retail [(2)]	ped/15-min/100m^2 GFA	0.3602	0.4584	0.6942	0.5698
Welfare Facilities [(3)]	pcu/15-min/place	0.0476	0.0190	0.0286	0.0571

Survey Period: 0700 – 1000 and 1700 – 2000 hours on Thursday 9th October 2025

Source: [(1)] Survey at Ocean View (with 911 flats and average flat size of around 60m^2) at 1 Po Tai Street in Ma On Shan
[(2)] Survey at We Go Mall (with around 15,270m^2 retail GFA), i.e. the Existing Building
[(3)] Survey at Tsung Tsin Mission of Hong Kong Joyful Place (with 105 places) at Shek Mun Estate in Sha Tin

4.21 The pedestrian generated by the Proposed Development are calculated based on the generation rates in Table 4.9 and is presented in Table 4.10.

TABLE 4.10 PROPOSED DEVELOPMENT PEDESTRIAN GENERATION

Use	Quantity	Pedestrian Generation (ped/15-min)			
		AM Peak		PM Peak	
		IN	OUT	IN	OUT
Residential	540 flats	21	85	39	22
Retail	9,121.28m^2 GFA	33	42	64	52
Welfare Facilities	100 places	5	2	3	6
Total		**59**	**129**	**106**	**80**

2038 Level-of-Service Assessment

4.22 The 2038 peak 15-minute pedestrian flows without and with the Proposed Development are shown in Figures 4.3 and 4.4 respectively, and the corresponding LOS assessment is presented in Table 4.11.

TABLE 4.11 2038 LEVEL-OF-SERVICE ASSESSMENT

Ref.	Footpath	Measured Width (Effective Width)	Peak Period	2-way Peak Pedestrian Flows					
				Without Proposed Development			With Proposed Development		
				Flow (ped/ 15-min)	Rate (ped/ min/m)	LOS	Flow (ped/ 15-min)	Rate (ped/ min/m)	LOS
F1	Western footpath of Sai Sha Road (north of Hang Fai Street)	2.5m (1.5m)	AM	404	17.96	B	513	22.80	B
			PM	234	10.40	A	341	15.16	A
F2	Western footpath of Sai Sha Road (south of Hang Fai Street)	3m (2m)	AM	64	2.13	A	173	5.77	A
			PM	115	3.83	A	222	7.40	A
F3a	Eastern footpath of Po Tai Street (outside Oceanaire)	3.4m (2.4m)	AM	56	1.56	A	89	2.47	A
			PM	39	1.08	A	90	2.50	A
F3b	Eastern footpath of Po Tai Street (outside We Go Mall)	3m [(1)] (2m) [(1)]	AM	270	9.00	A	357	11.90	A
			PM	151	5.03	A	239	7.97	A
F3c	Eastern footpath of Po Tai Street (outside La Costa)	3.4m (2.4m)	AM	85	2.36	A	89	2.47	A
			PM	62	1.72	A	67	1.86	A
F4	Western footpath of Ning Tai Road	1.5m (0.5m)	AM	50	6.67	A	83	11.07	A
			PM	108	14.40	A	159	21.20	B
F5	Footway in the NBA between Sai Sha Road and Po Tai Street	3m (2m)	AM	123	4.10	A	232	7.73	A
			PM	108	3.60	A	215	7.17	A
F6	Subway to / from Sai Sha Road Pet Garden	3m (2m)	AM	270	9.00	A	379	12.63	A
			PM	151	5.03	A	258	8.60	A

Note: [(1)] include 1.2m setback along site frontage adjacent to the existing bus / GMB lay-by

4.23 The above results indicate that the analysed footpaths are expected to operate with LOS A to B during the peak hours in 2038. The results show that the footpaths analysed has sufficient capacity to accommodate the (i) expected pedestrian growth; and (ii) additional pedestrians generated by the Proposed Development.

Modal Split of Transport Demand

4.24 The modal split of public transport demand for the Proposed Development is estimated with reference to the *"2021 Population Census",* published by Census and Statistics Department (C&SD). The estimated modal split is presented in Table 4.12.

TABLE 4.12 MODAL SPLIT OF PUBLIC TRANSPORT DEMAND FOR SHA TIN DISTRICT

Transport Mode		**Working Population** [(1)]	**Student** [(2)]	**Total**	**Percentage**
Railway	MTR (Local Line)	106,720	33,518	140,238	43%
Road-based Public Transport	Bus	75,614	17,166	92,780	28%
	Public Light Bus	11,989	5,755	17,744	6%
	Residential Coach Service	2,054	781	2,835	1%
	Company Bus or Van / School Bus	6,758	14,361	21,119	7%
					42%
Taxi		2,021	439	2,460	1%
On Foot Only		18,460	25,218	43,678	14%
Sub-total		**223,616**	**97,238**	**320,854**	**100%**
Private Transport / Not Applicable to the Proposed Development [(3)]	Private Car / Passenger Van	20,746	6,363		
	MTR (Light Rail)				
	Ferry / Vessel	154	47		
	Others	3,262	266		
Overall		**247,778**	**103,914**		

Note: (1) extracted from Table C204 of 2021 Population Census: *Working Population with Fixed Place of Work in Hong Kong by District Council District, Place of Work, Year and Main Mode of Transport to Place of Work* (Link: www.census2021.gov.hk/en/main_tables.html)

(2) extracted from Table B203 of 2021 Population Census: *Persons Attending Full-time Courses in Educational Institutions in Hong Kong by District Council District, Place of Study, Year and Main Mode of Transport to Place of Study* (Link: www.census2021.gov.hk/en/main_tables.html)

(3) for the purpose to conduct the assessment on public transport services, private transport or other transport modes not applicable to the Proposed Development are excluded

4.25 Table 4.12 shows that around 43% of daily travellers use railway, 42% use the road-based public transport service, e.g. franchised bus, minibus, etc. and 1% use taxi. The remaining 14% of population travel to their destinations *"on foot only"*.

Impact to Public Transport Services

4.26 Based on the findings in Table 4.10, the maximum number of pedestrians generated by the Proposed Development is found to be 752 ped/hr (two-way) [Calculation: (59 + 129) × 4] during the AM peak hour. With the modal split estimated in Table 4.12, the public transport demand of the Proposed Development is projected in Table 4.13.

TABLE 4.13 PUBLIC TRANSPORT DEMAND OF THE PROPOSED DEVELOPMENT

Public Transport Mode	Percentage	No. of 2-way Pedestrian Trips (ped/hr)
Railway	43%	323
Road-based Public Transport	42%	316
Taxi	1%	8
On Foot Only	14%	105
Total	**100%**	**752**

4.27 Table 4.13 shows that the maximum road-based passenger demand is found to be 316 ped/hr. As mentioned in Paragraph 2.22, the existing franchised bus / GMB services have surplus capacity of over 2,000 and 1,600 passengers during the AM and PM peak hours respectively. Hence, the surplus capacity would be **capable to absorb the additional road-based passenger demand** associated to the Proposed Development.

4.28 With reference to Serial No. TLB187 of *"Examination of Estimates of Expenditure 2025 – 26"* for Legislative Council Finance Committee Meetings, the maximum carrying capacity of MTR Tuen Ma Line per direction is 70,000 persons per hour (pph) respectively.

4.29 From the findings in Table 4.13, the maximum rail-based passenger demand is found to be 323 ped/hr. This is equivalent to only **0.46%** of the maximum carrying capacity of the MTR Tuen Ma Line [= 323 ÷ 70,000], which is **insignificant**.

5.0 SUMMARY

5.1 The subject site is located at 16 Po Tai Street in Ma On Shan, and it is currently occupied by a shopping complex which is known as the We Go Mall. The Applicant intends to rezone the subject site from "C" to "R(A)13" in order to construct a residential development with 540 residential flats, 9,121.28m^2 shopping complex and a 100-place child care centre

5.2 The internal transport facilities provided for the Proposed Development agree with the **maximum recommendations of HKPSG**.

5.3 Manual classified counts were conducted at junctions and road links, which are located in the vicinity, in order to establish the existing traffic flows during the AM and PM peak hours. The 2038 peak hour traffic flows are produced with reference to the: (i) 2036 NTE1 BDTM; (ii) traffic generated by the major planned developments in the vicinity; and (iii) traffic generated by the Proposed Development.

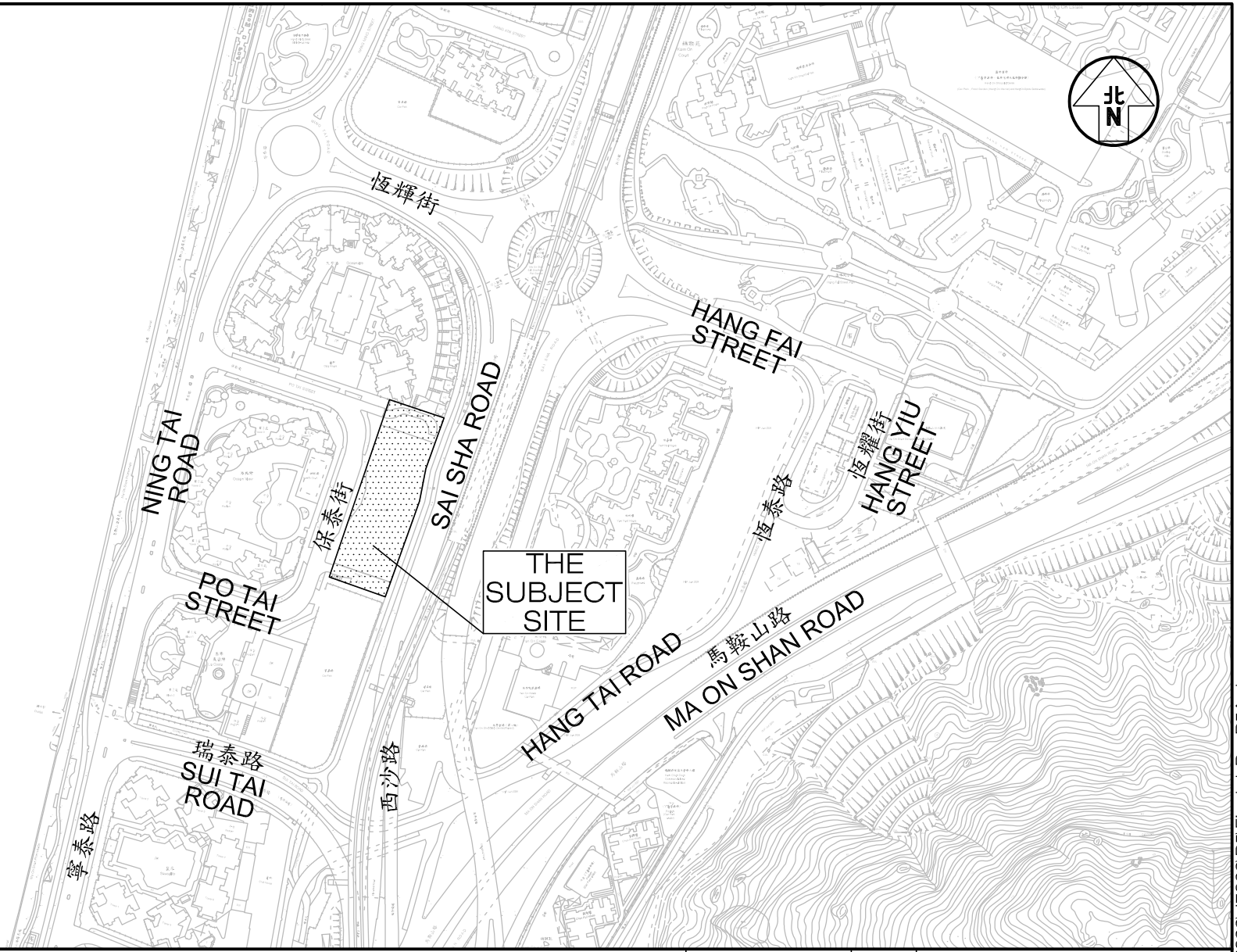
5.4 The 2038 junction and link capacity analysis was undertaken for the cases with and without the Proposed Development. The junctions and links analysed have sufficient capacity to accommodate the expected 2038 traffic flows and the additional traffic generated by the Proposed Development.

5.5 Pedestrian counts were conducted at the footpaths connecting the subject site with the MTR Heng On Station and the nearest bus stops in order to estimate the future pedestrian flows during the AM and PM peak hours. The LOS assessment demonstrates that the analysed footpaths have sufficient capacity to accommodate the estimated pedestrian flows in 2038.

5.6 The surplus capacity of the existing franchised bus / GMB routes would be capable to absorb the additional road-based passenger demand from the Proposed Development during the AM and PM peak hours. In addition, the Proposed Development would generate insignificant rail-based passenger demand to the MTR Tuen Ma Line.

5.7 The TIA concluded that the Proposed Development will result in **no** adverse traffic and pedestrian impact to the surrounding road network. From traffic engineering grounds, the Proposed Development is acceptable.

Figures

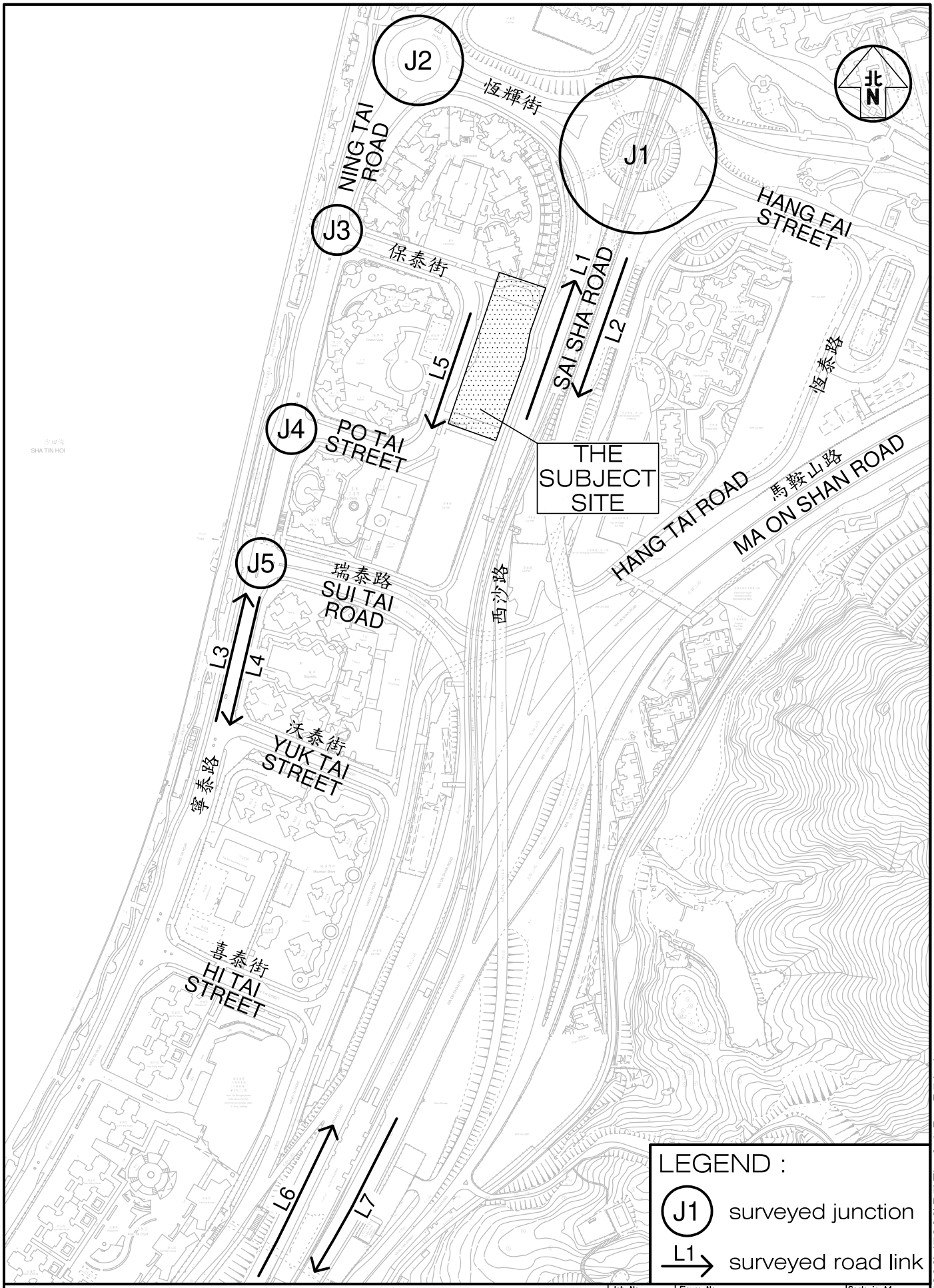


Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	
Figure Title	LOCATION OF THE SUBJECT SITE		

Figure No.	1.1	Revision	R5A
Designed by	T H C	Drawn by	C C L
Checked by	K C		
Scale in A4	1 : 4,000	Date	2 NOV 2026

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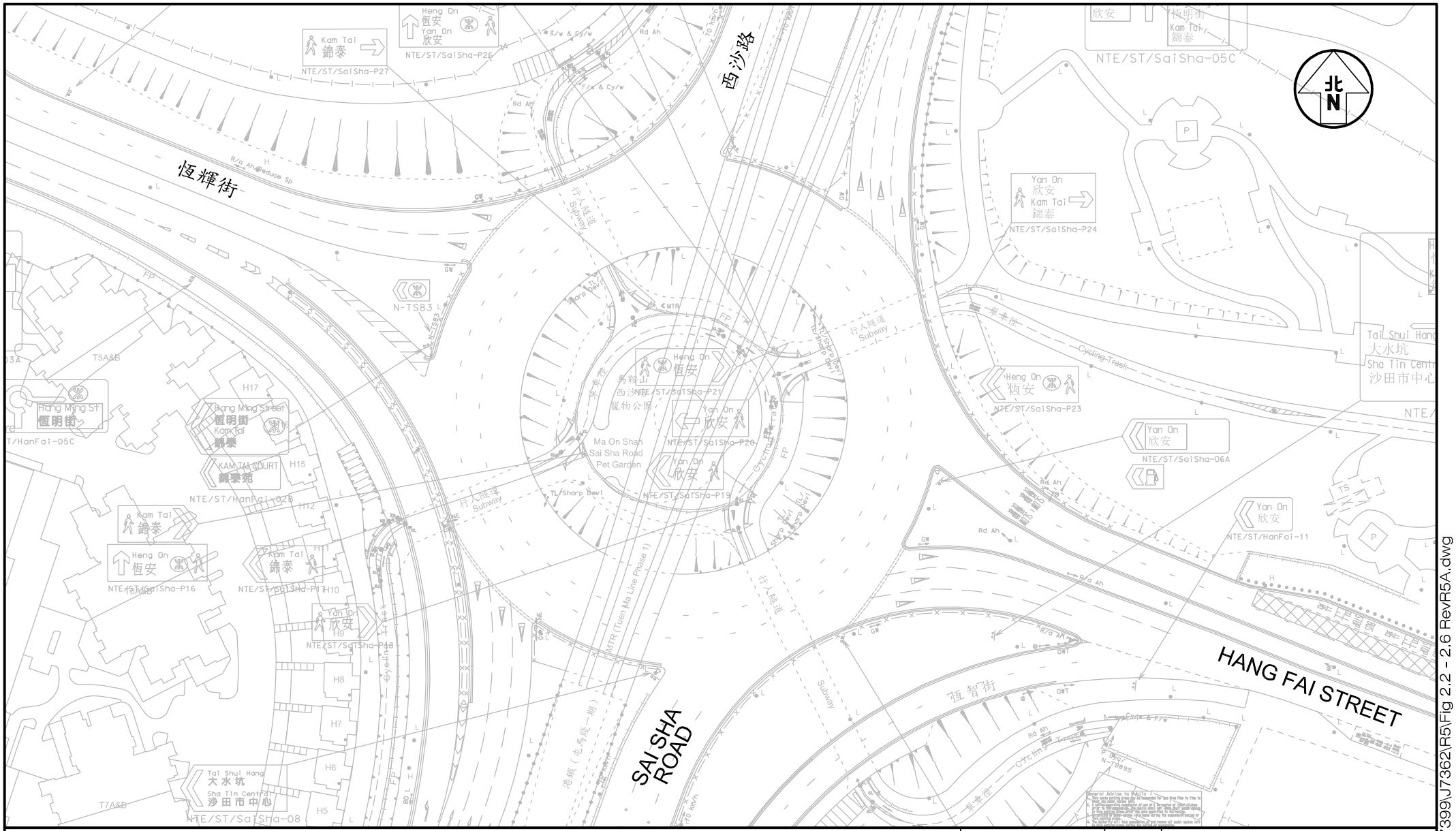
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Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	Job No. J7362	Figure No. 2.1			Scale in A4 N.T.S.
	Designed by T H C	Drawn by C C L	Checked by K C	Revision R5A	Date 2 NOV 2026
Figure Title: SURVEYED JUNCTIONS					

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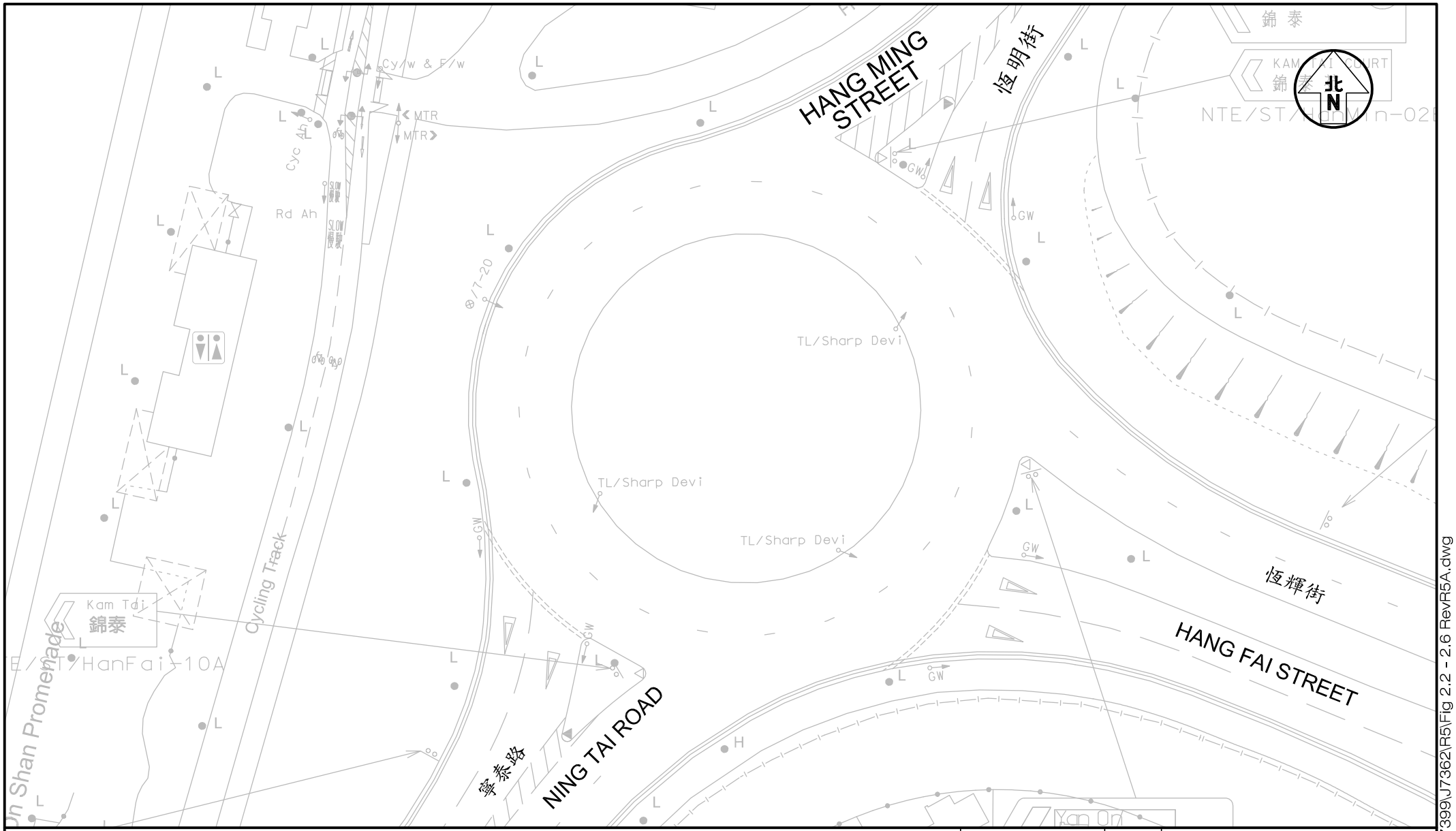
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Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No. 2.2	Revision R5A
Figure Title: (J1) ROUNDABOUT OF SAI SHA ROAD / HANG FAI STREET		Designed by T H C / Drawn by C C L / Checked by K C	
		Scale in A4: 1 : 1,000	Date: 2 NOV 2026

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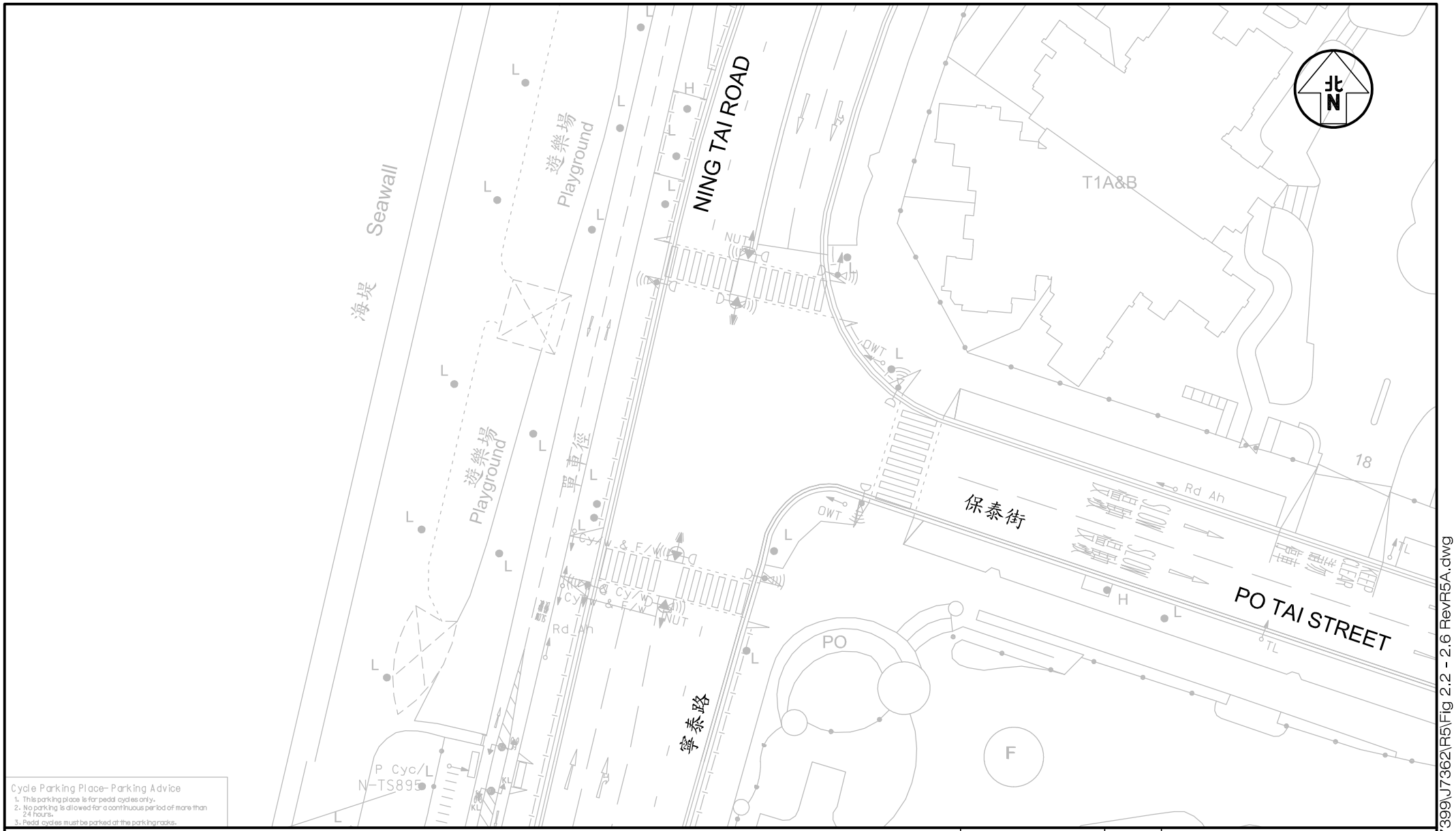
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Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No. 2.3	Revision R5A
Figure Title	(J2) ROUNDABOUT OF NING TAI ROAD / HANG FAI STREET / HANG MING STREET		Designed by T H C / Drawn by C C L / Checked by K C	
			Scale in A4 1 : 500 / Date 2 NOV 2026	

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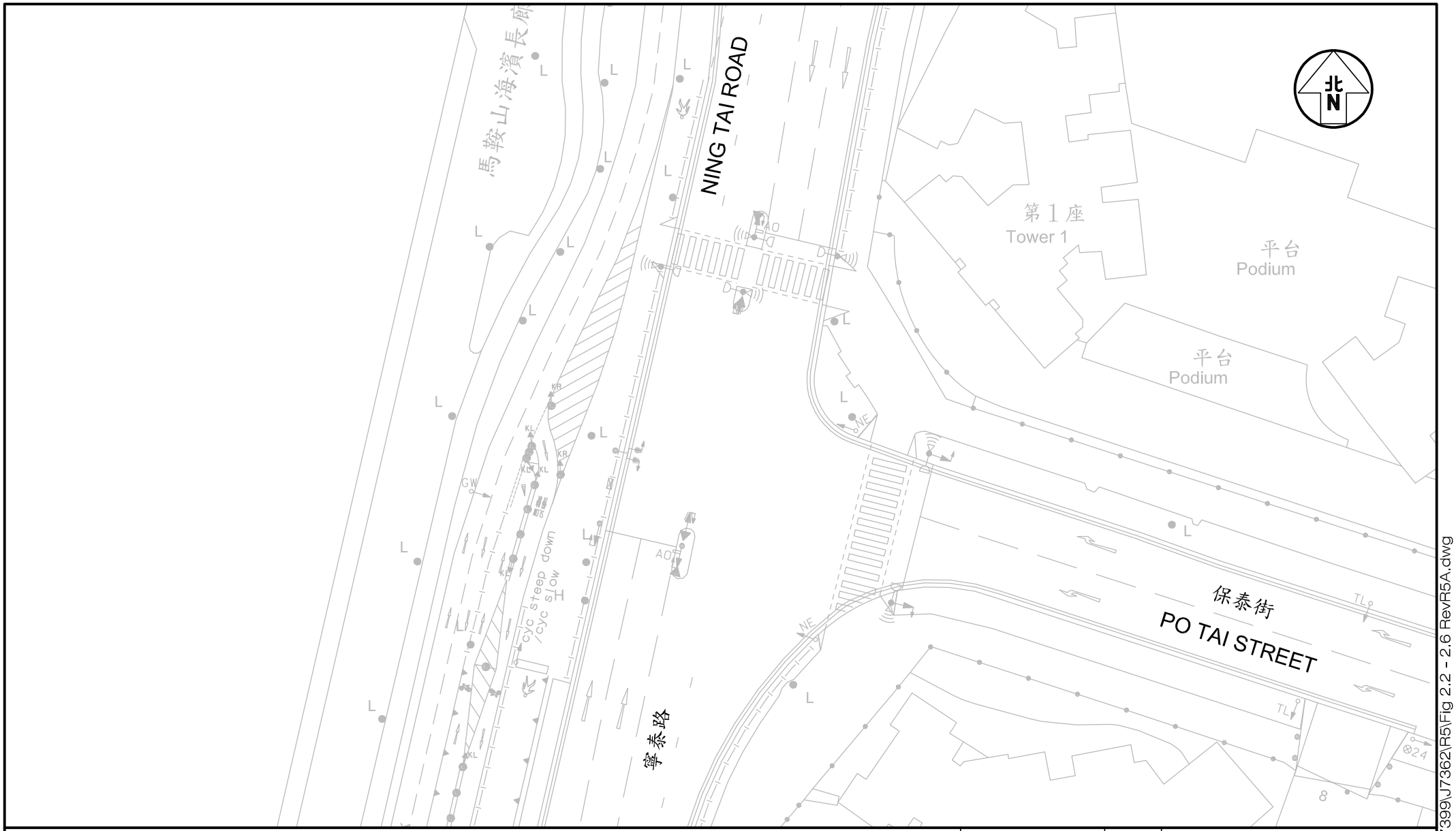
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Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No. 2.4	Revision R5A
Figure Title: (J3) JUNCTION OF NING TAI ROAD / PO TAI STREET (NORTH)		Designed by T H C / Drawn by C C L / Checked by K C	
		Scale in A4: 1 : 500	Date: 2 NOV 2026

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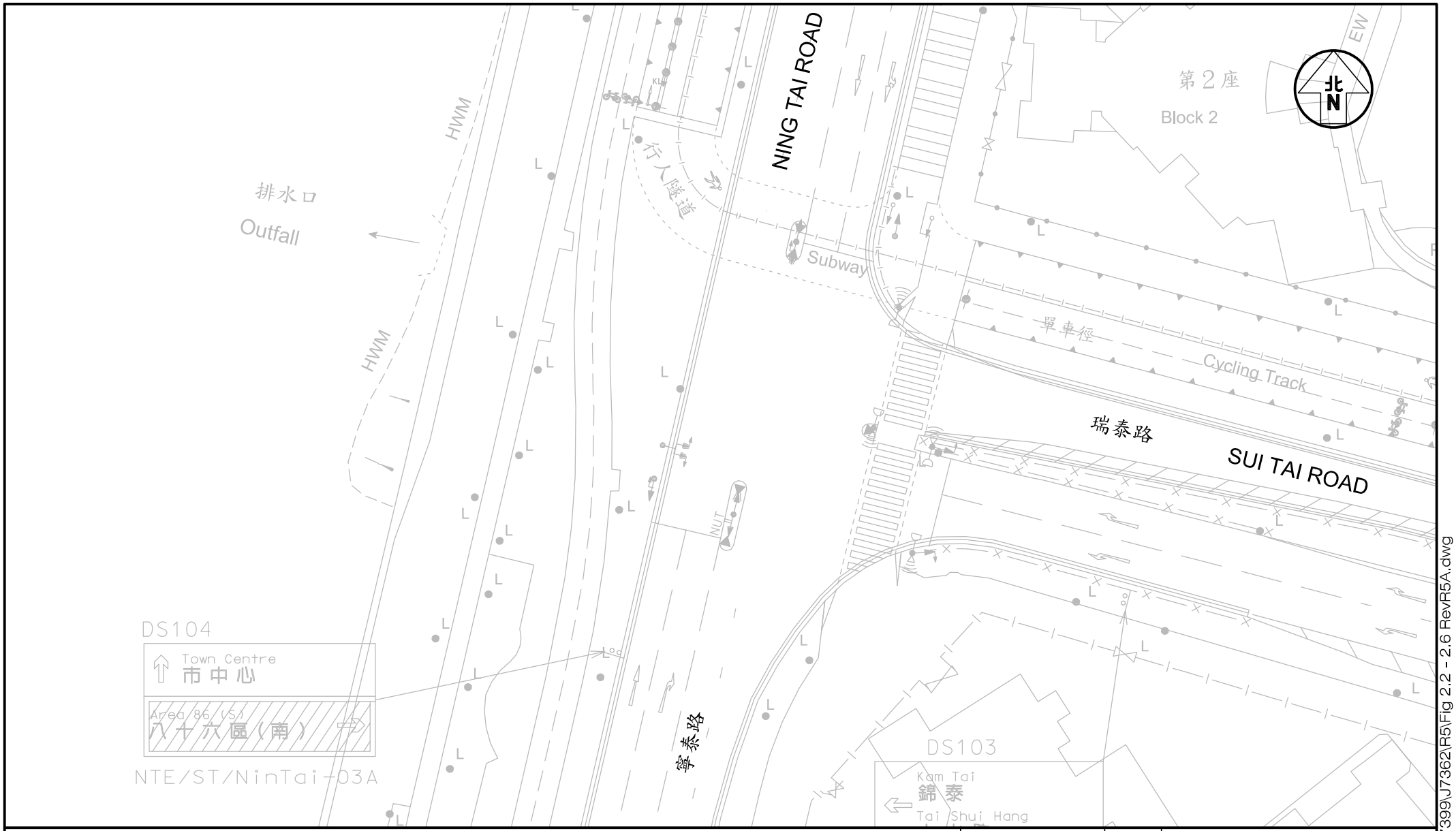


Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	
Figure Title	(J4) JUNCTION OF NING TAI ROAD / PO TAI STREET (SOUTH)		

Figure No.	2.5	Revision	R5A
Designed by	T H C	Drawn by	C C L
Checked by	K C		
Scale in A4	1 : 500	Date	2 NOV 2026

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T:\JOBJ7350-J7399\J7362\R5\Fig 2.2 - 2.6 RevR5A.dwg

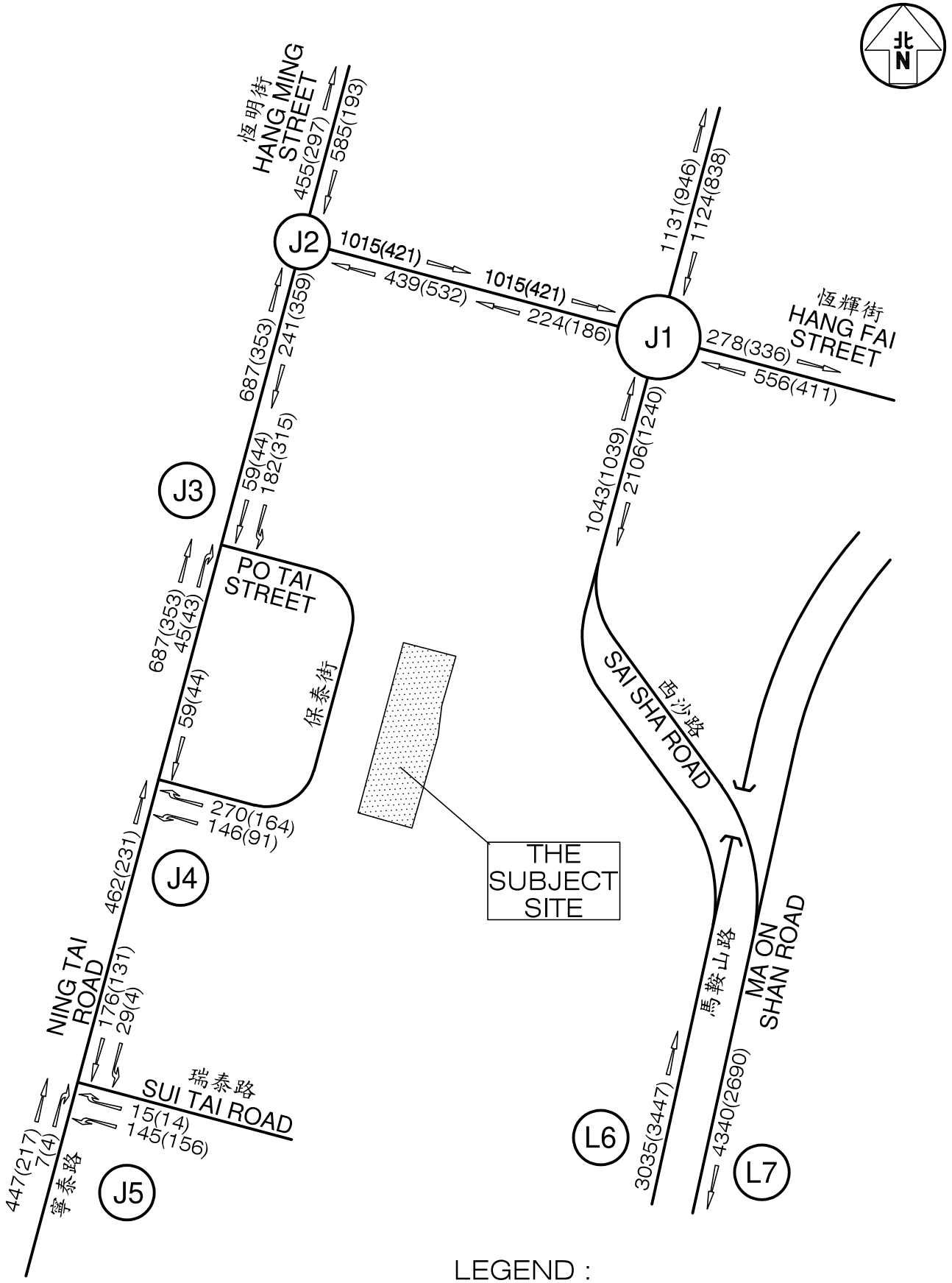


Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	
Figure Title	(J5) JUNCTION OF NING TAI ROAD / SUI TAI ROAD		

Figure No.	2.6	Revision R5A
Designed by	Drawn by	Checked by
T H C	C C L	K C
Scale in A4	Date	
1 : 500	2 NOV 2026	

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T:\JOBJ7350-J7399\J7362\R5\Fig 2.2 - 2.6 RevR5A.dwg



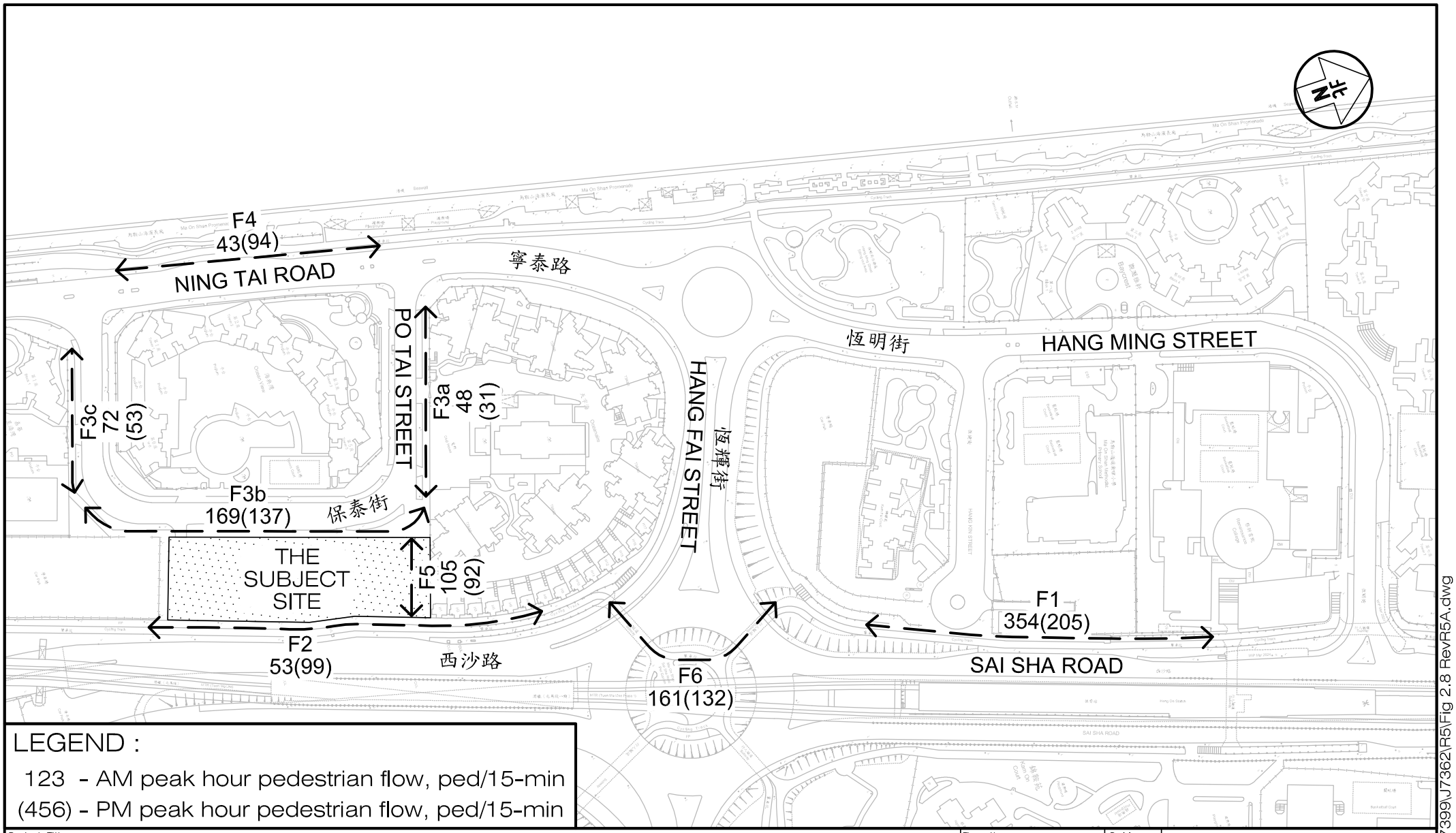
LEGEND :

123 - AM peak hour traffic flow, pcu / hr

(456) - PM peak hour traffic flow, pcu / hr

Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	Job No. J7362	Figure No. 2.7			Scale in A4 N.T.S.
	Designed by T H C	Drawn by C C L	Checked by K C	Revision R5A	Date 2 NOV 2026
Figure Title: EXISTING PEAK HOUR TRAFFIC FLOWS	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				

T:\JOB\J7350-J7399\J7362\R5\Fig 2.7 RevR5A.dwg

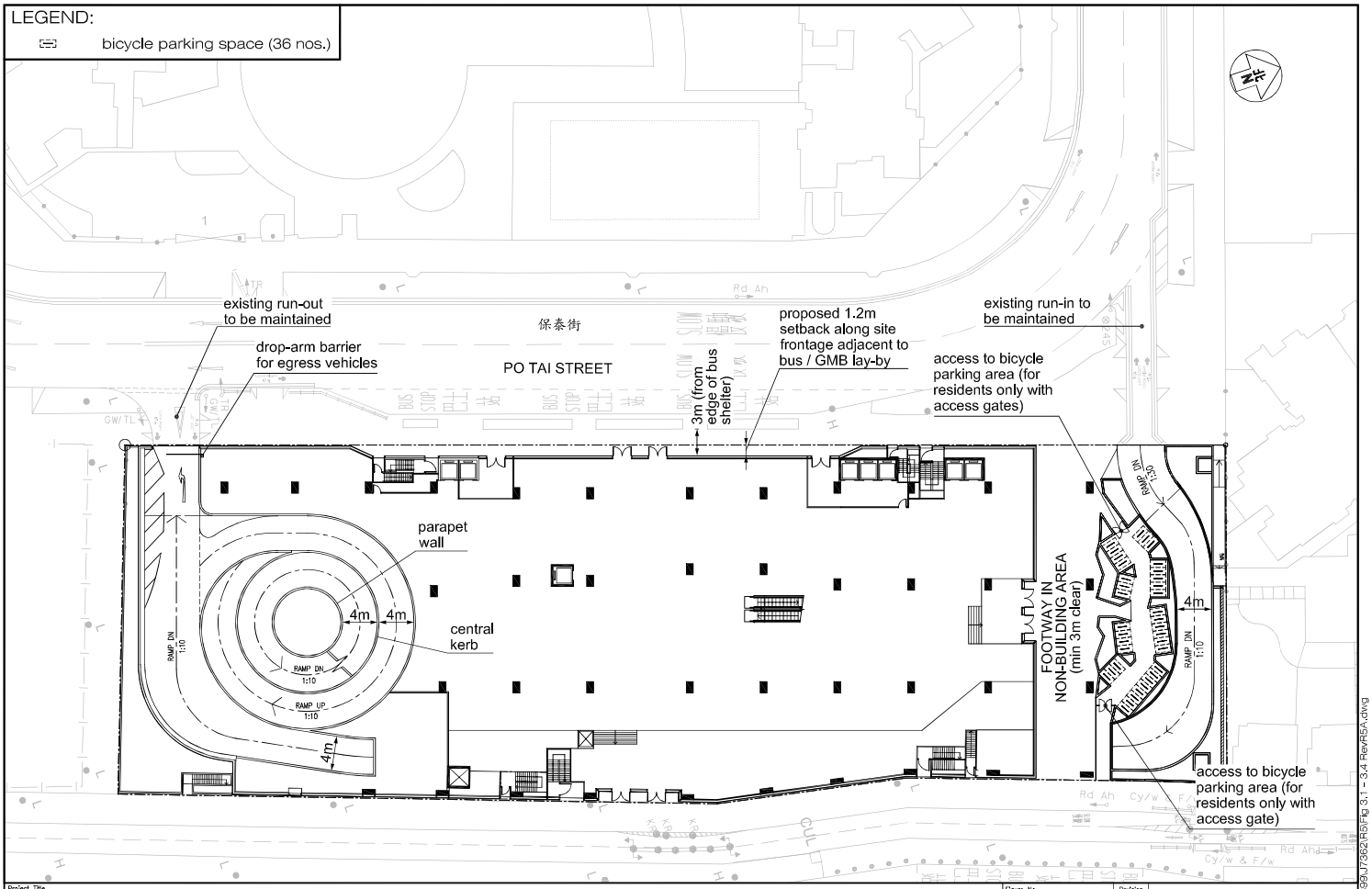


Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	
Figure Title	EXISTING PEAK 15-MINUTE PEDESTRIAN FLOWS		

Figure No.	2.8	Revision	R5A
Designed by	T H C	Drawn by	C C L
Checked by	K C		
Scale in A4	1 : 2,500	Date	2 NOV 2026

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Project Title

WE GO MALL AT 16 PO TAI STREET, MA ON SHAN

J7362

Figure Title

GROUND FLOOR PLAN

Figure No.	Revision
3.1	R5A

Designed by	Drawn by	Checked by
T H C	C C L	K C

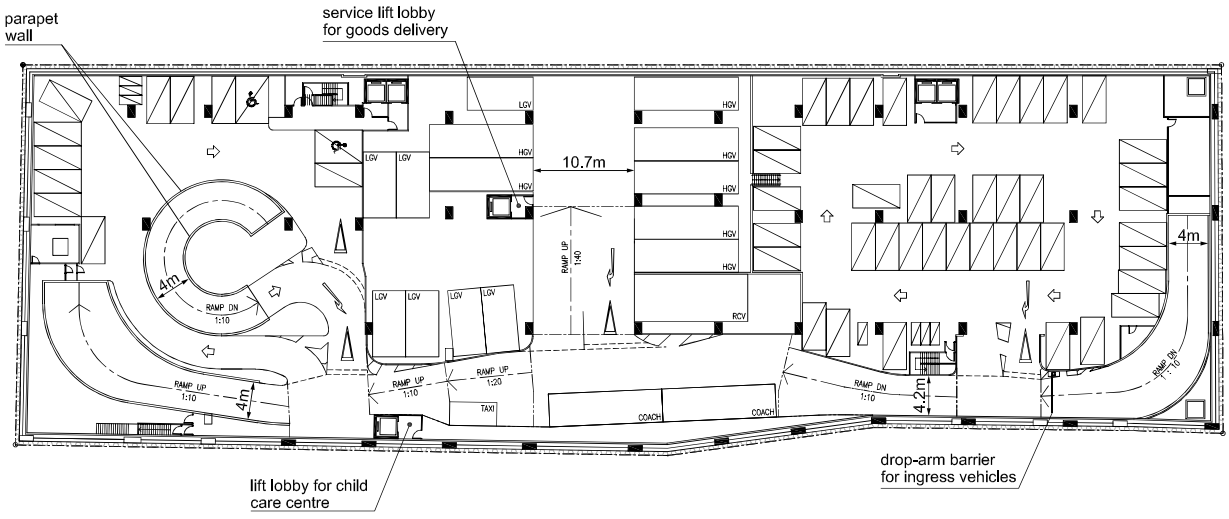
Scale in A3	Date
1 : 400	2 NOV 2026

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T:\JOBS\7350-7399\7362\R5\Fig 3.1 - 3.4 RevR5A.dwg

LEGEND:

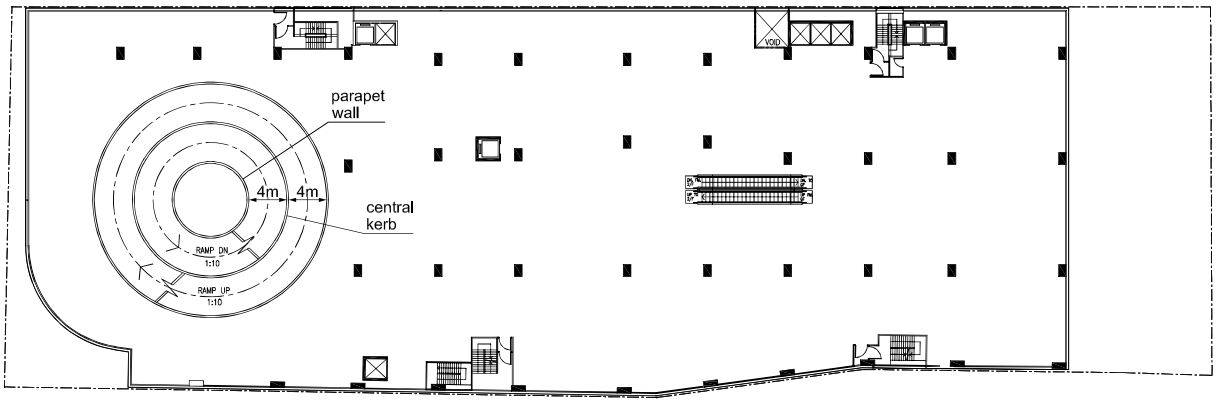
- traffic direction
- motorcycle parking space @2.4m(L) x 1m(W) x 2.4m(H)
- private car parking space @5m(L) x 2.5m(W) x 2.4m(H)
- taxi / private car lay-by @5m(L) x 2.5m(W) x 2.4m(H)
- car parking space for persons with disabilities @5m(L) x 3.5m(W) x 2.4m(H)
- LGV loading / unloading bay @7m(L) x 3.5m(W) x 3.6m(H)
- HGV loading / unloading bay @11m(L) x 3.5m(W) x 4.7m(H)
- coach lay-by @12m(L) x 3.5m(W) x 4.3m(H)
- RCV loading / unloading bay @12m(L) x 5m(W) x 4.5m(H)



Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	
Figure Title	BASEMENT FIRST FLOOR PLAN	Figure No. 3.2	Revision R5A
		Designed by THC / Drawn by CCL / Checked by KC	
		Scale in A3: 1 : 400	Date: 2 NOV 2026

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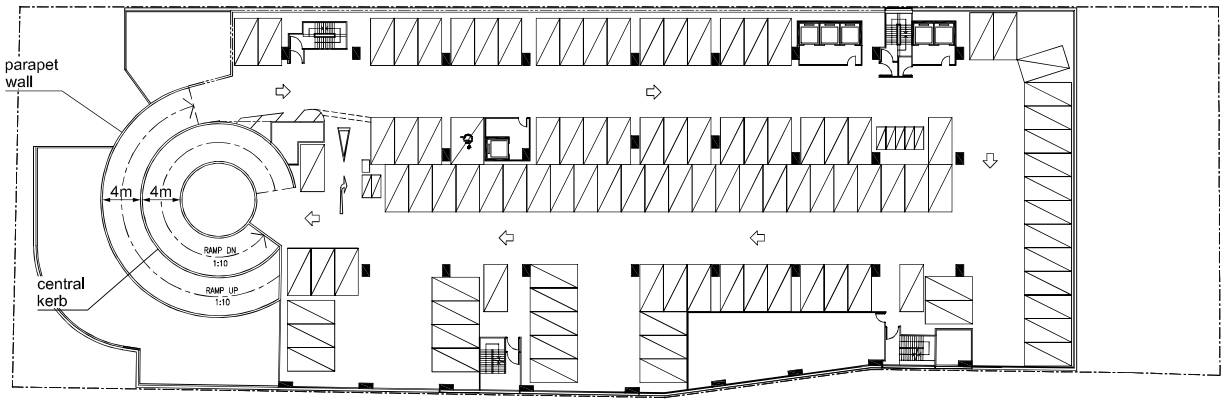


Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN J7362	Figure No. 3.3	Revision R5A	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk	
Figure Title: FIRST AND SECOND FLOOR PLAN	Designed by T H C / Drawn by C C L / Checked by K C			
	Scale In A3: 1 : 400	Date: 2 NOV 2026		

T:\JOBS\J7350-J7399\J7362\R5\Fig 3.1 - 3.4 RevR5A.dwg

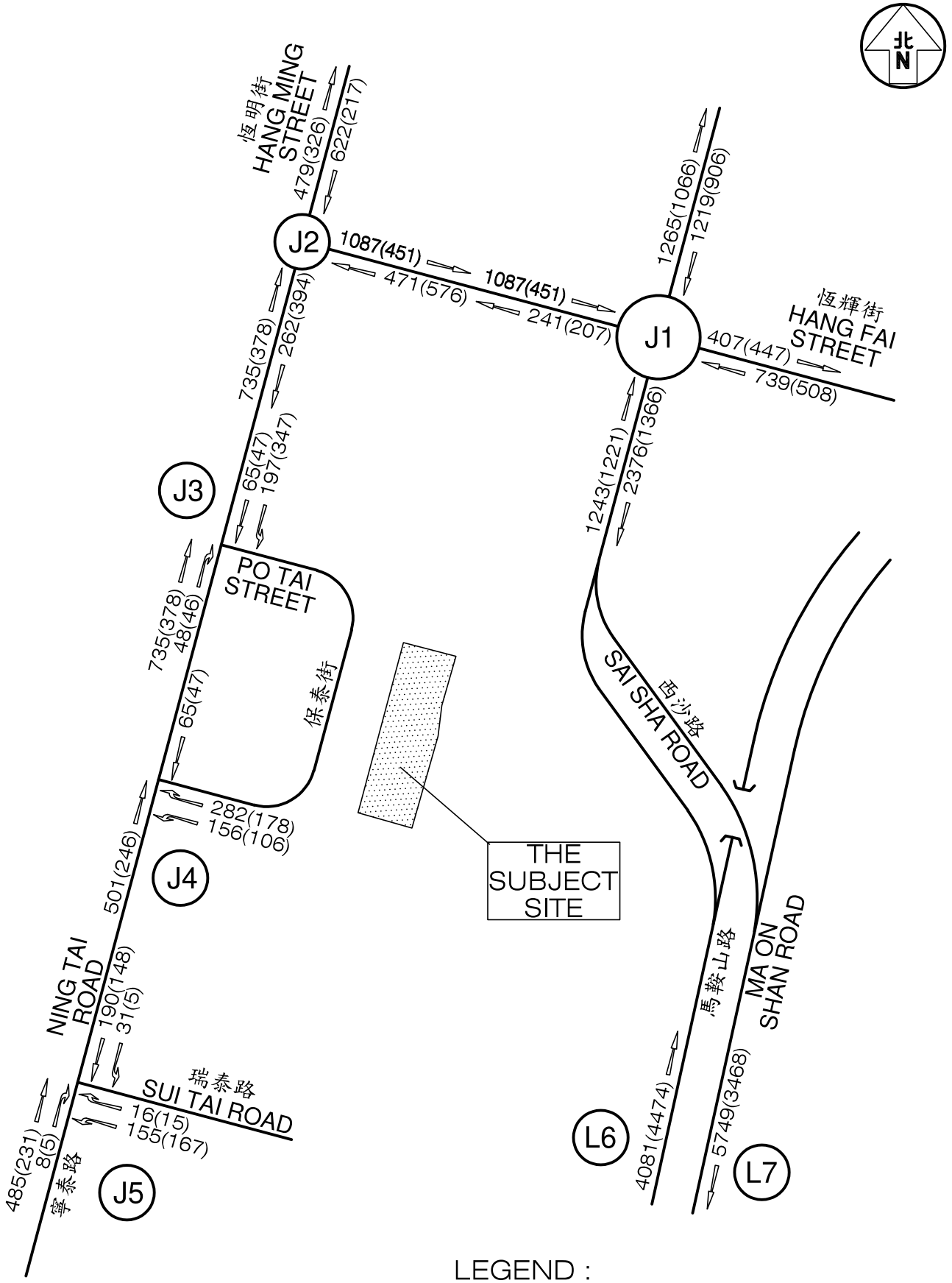
LEGEND:

- traffic direction
- private car parking space @5m(L) x 2.5m(W) x 2.4m(H)
- motorcycle parking space @2.4m(L) x 1m(W) x 2.4m(H)
- car parking space for persons with disabilities @5m(L) x 3.5m(W) x 2.4m(H)



Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN J7362	Figure No. 3.4	Revision R5A	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk	
Figure Title: THIRD FLOOR PLAN	Designed by T H C / Drawn by C C L / Checked by K C			
	Scale In A3: 1 : 400	Date: 2 NOV 2026		

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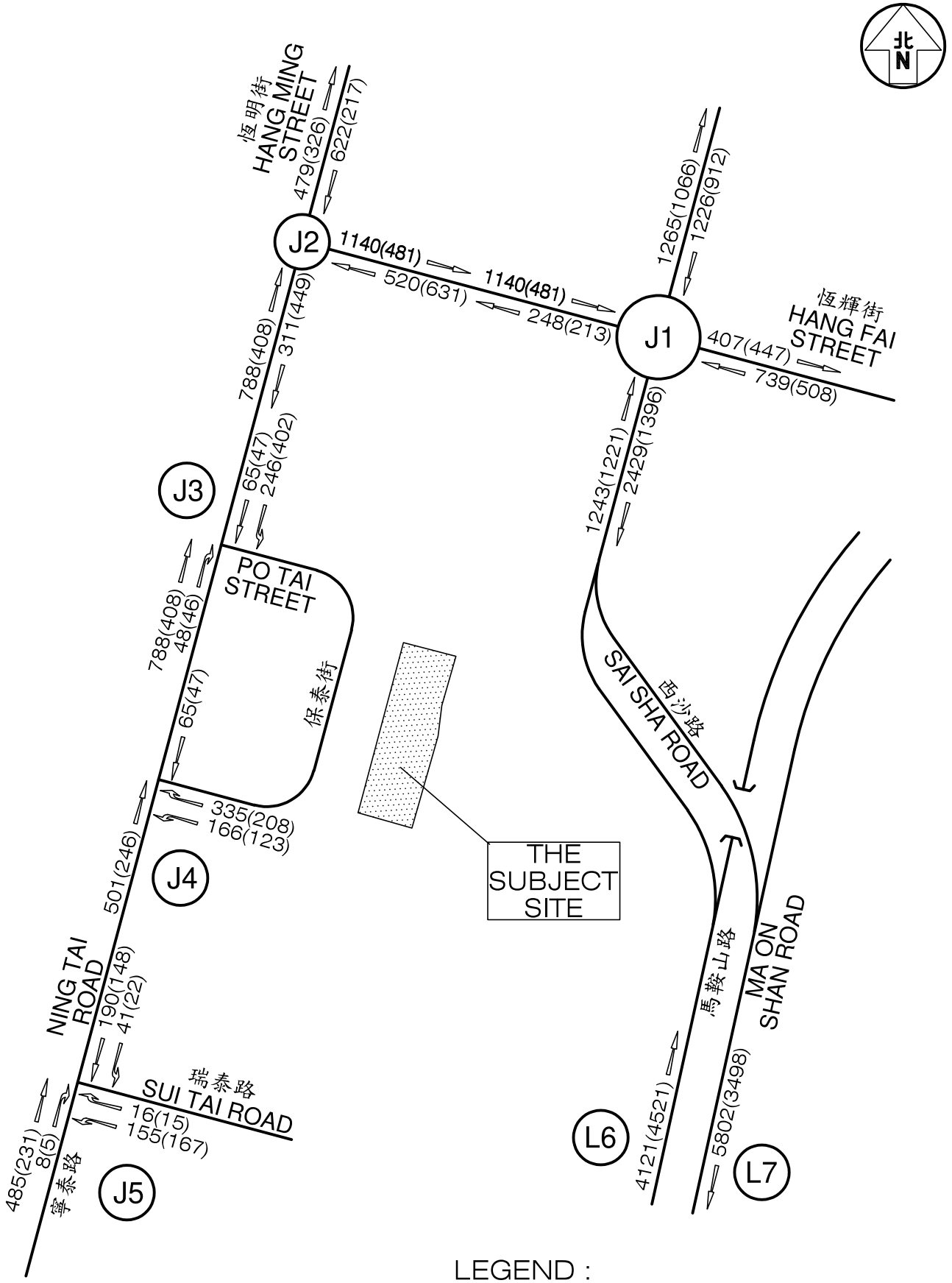
LEGEND :

123 - AM peak hour traffic flow, pcu / hr

(456) - PM peak hour traffic flow, pcu / hr

Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	Job No. J7362	Figure No. 4.1			Scale in A4 N.T.S.
	Designed by T H C	Drawn by C C L	Checked by K C	Revision R5A	Date 2 NOV 2026
Figure Title: 2038 PEAK HOUR TRAFFIC FLOWS WITHOUT THE PROPOSED DEVELOPMENT	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				

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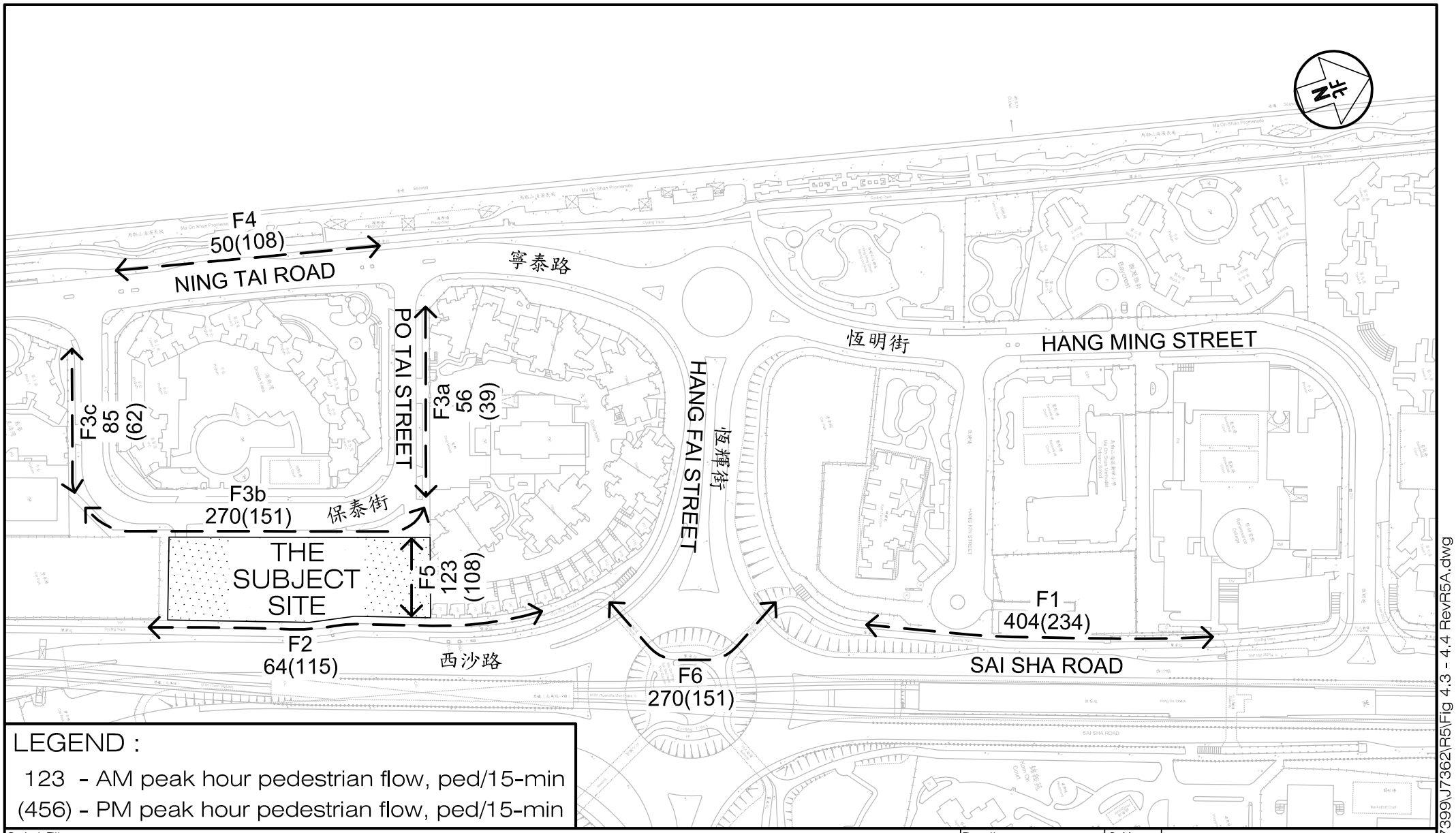
LEGEND :

123 - AM peak hour traffic flow, pcu / hr

(456) - PM peak hour traffic flow, pcu / hr

Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	Job No. J7362	Figure No. 4.2			Scale in A4 N.T.S.
	Designed by T H C	Drawn by C C L	Checked by K C	Revision R5A	Date 2 NOV 2026
Figure Title: 2038 PEAK HOUR TRAFFIC FLOWS WITH THE PROPOSED DEVELOPMENT	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				

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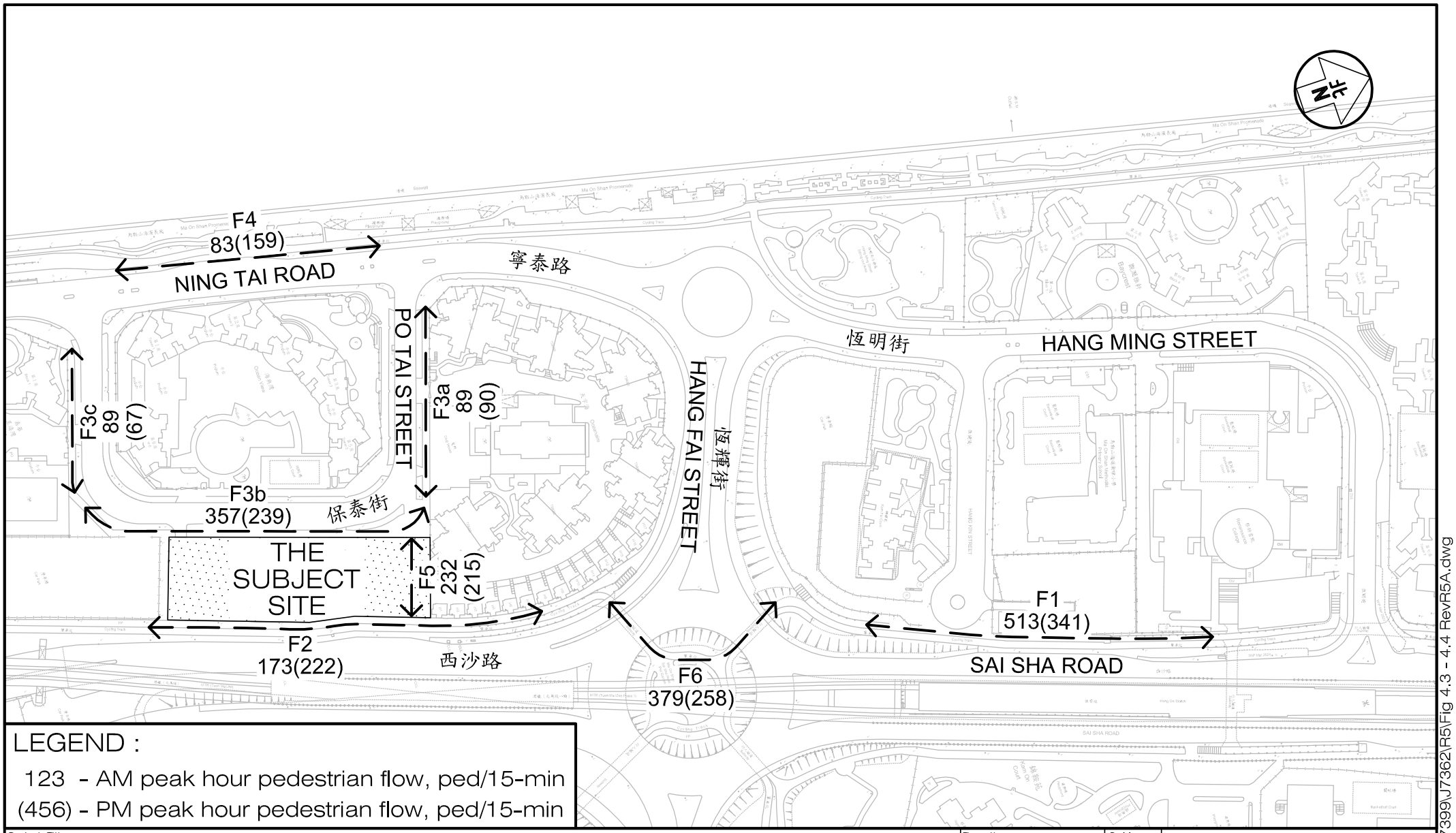
LEGEND :

123 - AM peak hour pedestrian flow, ped/15-min

(456) - PM peak hour pedestrian flow, ped/15-min

Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No. 4.3	Revision R5A	CKM Asia Limited
Figure Title: 2038 PEAK 15-MINUTE PEDESTRIAN FLOWS WITHOUT PROPOSED DEVELOPMENT		Designed by T H C / Drawn by C C L / Checked by K C		Traffic and Transportation Planning Consultants
		Scale in A4: 1 : 2,500	Date: 2 NOV 2026	21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk

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LEGEND :

123 - AM peak hour pedestrian flow, ped/15-min

(456) - PM peak hour pedestrian flow, ped/15-min

Project Title

WE GO MALL AT 16 PO TAI STREET, MA ON SHAN

J7362

Figure Title

2038 PEAK 15-MINUTE PEDESTRIAN FLOWS WITH PROPOSED DEVELOPMENT

Figure No.	Revision
4.4	R5A

Designed by	Drawn by	Checked by
T H C	C C L	K C

Scale in A4	Date
1 : 2,500	2 NOV 2026

CKM Asia Limited

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Appendix A – Junction Capacity Analysis (with Queue Length Analysis for J4)

Roundabout Analysis

Location	Sai Sha Road / Hang Fei Street		R5A / P.1-1
Scenario	existing condition		
Design Year	2025	Job Number	J7362	Date	2 November 2026

AM Peak

Arm	To A	To B	To C	To D	Total	q_c
From A	5	249	70	231	556	2055
From B	72	233	38	700	1043	505
From C	98	800	0	117	1015	1324
From D	103	823	116	82	1124	1208
Total	278	2106	224	1131	3738	

PM Peak

Arm	To A	To B	To C	To D	Total	q_c
From A	0	202	59	150	411	1160
From B	86	194	31	728	1039	331
From C	118	261	0	42	421	1184
From D	133	583	96	25	838	659
Total	336	1240	186	946	2709	

Legend

Arm	Road (in clockwise order)
A	Hang Fei Street (Westbound)
B	Sai Sha Road (Northbound)
C	Hang Fei Street (Eastbound)
D	Sai Sha Road (Southbound)

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	13.0	6.6	42.0	20.0	100	20	0.5
From B	13.0	12.0	100.0	5.0	100	29	0.3
From C	11.0	7.4	66.0	8.0	100	24	0.7
From D	13.0	12.0	63.0	1.0	100	29	1.6

Predictive Equation $Q_E = K(F - f_c q_c)$

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(∅-30)-0.978[(1/r)-0.05]
F	= $303x_2$
f_c	= $0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

e	Entry Width	4.0 - 15.0 m
v	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
∅	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	PM	AM	PM	AM	PM
From A	9.762	54.598	1.009	1.060	2957.903	0.626	1773	2367	556	411	0.313	0.174
From B	12.610	54.598	1.009	1.043	3820.756	0.746	3591	3726	1043	1039	0.291	0.279
From C	8.875	54.598	1.009	1.055	2689.249	0.588	2016	2103	1015	421	0.503	0.200
From D	12.238	54.598	1.009	1.037	3708.143	0.731	2930	3346	1124	838	0.384	0.250

Roundabout Analysis

Location: Sai Sha Road / Hang Fei Street — R5A / P.1-2
Scenario: without proposed development
Design Year: 2038 — Job Number: J7362 — Date: 2 November 2026

AM Peak

Arm	To A	To B	To C	To D	Total	q_c
From A	5	389	75	270	739	2199
From B	171	249	41	782	1243	562
From C	106	857	0	125	1087	1564
From D	126	881	125	88	1219	1387
Total	407	2376	241	1265	4287	

PM Peak

Arm	To A	To B	To C	To D	Total	q_c
From A	0	254	71	184	508	1242
From B	170	208	33	811	1221	385
From C	127	279	0	45	451	1399
From D	151	625	104	27	906	783
Total	447	1366	207	1066	3086	

Legend

Arm	Road (in clockwise order)
A	Hang Fei Street (Westbound)
B	Sai Sha Road (Northbound)
C	Hang Fei Street (Eastbound)
D	Sai Sha Road (Southbound)

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	13.0	6.6	42.0	20.0	100	20	0.5
From B	13.0	12.0	100.0	5.0	100	29	0.3
From C	11.0	7.4	66.0	8.0	100	24	0.7
From D	13.0	12.0	63.0	1.0	100	29	1.6

Predictive Equation $Q_E = K(F - f_c q_c)$

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(∅-30)-0.978[(1/r)-0.05]
F	= $303x_2$
f_c	= $0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

e	Entry Width	4.0 - 15.0 m
v	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
∅	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	PM	AM	PM	AM	PM
From A	9.762	54.598	1.009	1.060	2957.903	0.626	1678	2312	739	508	0.440	0.220
From B	12.610	54.598	1.009	1.043	3820.756	0.746	3546	3684	1243	1221	0.350	0.331
From C	8.875	54.598	1.009	1.055	2689.249	0.588	1867	1969	1087	451	0.582	0.229
From D	12.238	54.598	1.009	1.037	3708.143	0.731	2795	3252	1219	906	0.436	0.279

Roundabout Analysis

Location	Sai Sha Road / Hang Fei Street		R5A / P.1-3
Scenario	with proposed development		
Design Year	2038	Job Number	J7362	Date	2 November 2026

AM Peak

Arm	To A	To B	To C	To D	Total	q_c
From A	5	389	75	270	739	2259
From B	171	249	41	782	1243	569
From C	106	910	0	125	1140	1564
From D	126	881	132	88	1226	1440
Total	407	2429	248	1265	4347	

PM Peak

Arm	To A	To B	To C	To D	Total	q_c
From A	0	254	71	184	508	1278
From B	170	208	33	811	1221	391
From C	127	309	0	45	481	1399
From D	151	625	110	27	912	813
Total	447	1396	213	1066	3122	

Legend

Arm	Road (in clockwise order)
A	Hang Fei Street (Westbound)
B	Sai Sha Road (Northbound)
C	Hang Fei Street (Eastbound)
D	Sai Sha Road (Southbound)

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	13.0	6.6	42.0	20.0	100	20	0.5
From B	13.0	12.0	100.0	5.0	100	29	0.3
From C	11.0	7.4	66.0	8.0	100	24	0.7
From D	13.0	12.0	63.0	1.0	100	29	1.6

Predictive Equation $Q_E = K(F - f_c q_c)$

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(∅-30)-0.978[(1/r)-0.05]
F	= $303x_2$
f_c	= $0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

e	Entry Width	4.0 - 15.0 m
v	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
∅	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	PM	AM	PM	AM	PM
From A	9.762	54.598	1.009	1.060	2957.903	0.626	1638	2289	739	508	0.451	0.222
From B	12.610	54.598	1.009	1.043	3820.756	0.746	3541	3680	1243	1221	0.351	0.332
From C	8.875	54.598	1.009	1.055	2689.249	0.588	1867	1969	1140	481	0.611	0.244
From D	12.238	54.598	1.009	1.037	3708.143	0.731	2754	3229	1226	912	0.445	0.282

Roundabout Analysis

Location	Ning Tai Road / Hang Fai Street / Hang Ming Street		R5A / P.2-1
Scenario	existing condition		
Design Year	2025	Job Number	J7362	Date	2 November 2026

AM Peak

Arm	To A	To B	To C	Total	q_c
From A	0	179	260	439	67
From B	496	0	191	687	264
From C	519	62	5	585	496
Total	1015	241	455	1711	

PM Peak

Arm	To A	To B	To C	Total	q_c
From A	0	320	212	532	40
From B	268	0	84	353	213
From C	153	39	1	193	268
Total	421	359	297	1077	

Legend

Arm	Road (in clockwise order)
A	Hang Fei Street
B	Ning Tai Road
C	Hang Ming Street

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	10.0	7.0	50.0	11.0	54	25	0.4
From B	10.0	7.0	40.0	8.0	54	30	0.6
From C	8.0	5.5	25.0	7.0	54	20	0.6

Predictive Equation $Q_E = K(F - f_c q_c)$

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(∅-30)-0.978[(1/r)-0.05]
F	= $303x_2$
f_c	= $0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

e	Entry Width	4.0 - 15.0 m
v	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
∅	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	PM	AM	PM	AM	PM
From A	8.602	0.549	1.323	1.047	2606.388	0.756	2675	2696	439	532	0.164	0.197
From B	8.364	0.549	1.323	1.024	2534.182	0.742	2395	2434	687	353	0.287	0.145
From C	6.667	0.549	1.323	1.044	2020.000	0.648	1774	1928	585	193	0.330	0.100

Roundabout Analysis

Location	Ning Tai Road / Hang Fai Street / Hang Ming Street		R5A / P.2-2
Scenario	without proposed development		
Design Year	2038	Job Number	J7362	Date	2 November 2026

AM Peak

Arm	To A	To B	To C	Total	q_c
From A	0	200	272	471	69
From B	534	0	201	735	278
From C	554	63	6	622	534
Total	1087	262	479	1828	

PM Peak

Arm	To A	To B	To C	Total	q_c
From A	0	342	234	576	53
From B	287	0	91	378	235
From C	164	52	1	217	287
Total	451	394	326	1170	

Legend

Arm	Road (in clockwise order)
A	Hang Fei Street
B	Ning Tai Road
C	Hang Ming Street

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	10.0	7.0	50.0	11.0	54	25	0.4
From B	10.0	7.0	40.0	8.0	54	30	0.6
From C	8.0	5.5	25.0	7.0	54	20	0.6

Predictive Equation $Q_E = K(F - f_c q_c)$

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	$= 1-0.00347(\varnothing-30)-0.978[(1/r)-0.05]$
F	$= 303x_2$
f_c	$= 0.210t_D(1+0.2x_2)$
t_D	$= 1+0.5/(1+M)$
M	$= \exp[(D-60)/10]$
x_2	$= v+(e-v)/(1+2S)$
S	$= 1.6(e-v)/L$

Limitation

e	Entry Width	4.0 - 15.0 m
v	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
∅	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	PM	AM	PM	AM	PM
From A	8.602	0.549	1.323	1.047	2606.388	0.756	2674	2686	471	576	0.176	0.214
From B	8.364	0.549	1.323	1.024	2534.182	0.742	2385	2417	735	378	0.308	0.156
From C	6.667	0.549	1.323	1.044	2020.000	0.648	1749	1916	622	217	0.356	0.113

Roundabout Analysis

Location	Ning Tai Road / Hang Fai Street / Hang Ming Street		R5A / P.2-3
Scenario	with proposed development		
Design Year	2038	Job Number	J7362	Date	2 November 2026

AM Peak

Arm	To A	To B	To C	Total	q_c
From A	0	249	272	520	69
From B	587	0	201	788	278
From C	554	63	6	622	587
Total	1140	311	479	1930	

PM Peak

Arm	To A	To B	To C	Total	q_c
From A	0	397	234	631	53
From B	317	0	91	408	235
From C	164	52	1	217	317
Total	481	449	326	1255	

Legend

Arm	Road (in clockwise order)
A	Hang Fei Street
B	Ning Tai Road
C	Hang Ming Street

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	10.0	7.0	50.0	11.0	54	25	0.4
From B	10.0	7.0	40.0	8.0	54	30	0.6
From C	8.0	5.5	25.0	7.0	54	20	0.6

Predictive Equation $Q_E = K(F - f_c q_c)$

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(∅-30)-0.978[(1/r)-0.05]
F	= $303x_2$
f_c	= $0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

e	Entry Width	4.0 - 15.0 m
v	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
∅	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	PM	AM	PM	AM	PM
From A	8.602	0.549	1.323	1.047	2606.388	0.756	2674	2686	520	631	0.194	0.235
From B	8.364	0.549	1.323	1.024	2534.182	0.742	2385	2417	788	408	0.330	0.169
From C	6.667	0.549	1.323	1.044	2020.000	0.648	1713	1895	622	217	0.363	0.114

Signal Junction Analysis

Junction: Ning Tai Road / Po Tai Street (north) Job Number: J7362

Scenario: existing condition R5A / P.3-1

Design Year: 2025 Designed By: _____ Checked By: _____ Date: 2 November 2026

Approach	Phase	Stage	Width (m)	Radius (m)	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak Degree of Saturation	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak Degree of Saturation	PM Peak y value	PM Peak Critical y
Ning Tai Road SB LT+SA	A1	2	3.40	20.0	100	1819	182	0.320	0.100	0.100	100	1819	315	0.660	0.173	0.173
SA	A2	2	3.40			2095	59	0.090	0.028			2095	44	0.080	0.021	
Ning Tai Road NB SA	B1	1	3.40			1955	356	0.784	0.182			1955	194	0.351	0.099	
SA+RT	B2	1	3.40	10.0	12	2058	376	0.786	0.183	0.183	21	2031	201	0.350	0.099	0.099

Signal Junction Analysis

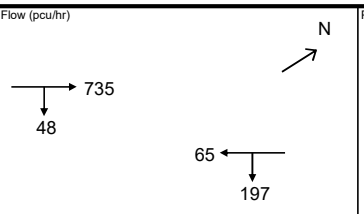
Junction: Ning Tai Road / Po Tai Street (north) Job Number: J7362

Scenario: without proposed development R5A / P.3-2

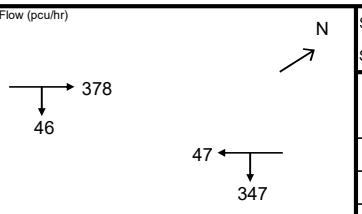
Design Year: 2038 Designed By: _____ Checked By: _____ Date: 2 November 2026

Approach		Phase	Stage	Width (m)	Radius (m)	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak Degree of Saturation	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak Degree of Saturation	PM Peak y value	PM Peak Critical y
Ning Tai Road SB	LT+SA	A1	2	3.40	20.0	100	1819	197	0.346	0.108	0.108	100	1819	347	0.727	0.191	0.191
	SA	A2	2	3.40			2095	65	0.099	0.031			2095	47	0.085	0.022	
Ning Tai Road NB	SA	B1	1	3.40			1955	381	0.839	0.195			1955	208	0.376	0.106	
	SA+RT	B2	1	3.40	10.0	12	2058	402	0.840	0.195	0.195	21	2030	216	0.375	0.106	0.106
pedestrian phase		P1	3		min crossing time =			9	sec GM +		8	sec FGM =		17	sec		
		P2	3		min crossing time =			6	sec GM +		11	sec FGM =		17	sec		
		P3	3		min crossing time =			12	sec GM +		9	sec FGM =		21	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

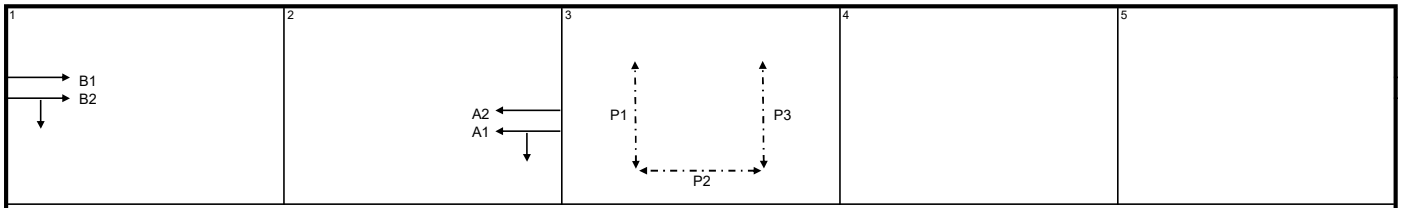


$S=1940+100(W-3.25)$ $S=2080+100(W-3.25)$

$S_M=S\div(1+1.5f/r)$ $S_M=(S-230)\div(1+1.5f/r)$

	AM Peak	Check Pedestrian Phase	PM Peak	Check Pedestrian Phase
Sum y	0.303		0.297	
L (s)	45		45	
C (s)	99		99	
practical y	0.491		0.491	
R.C. (%)	62%		65%	

Note:



AM	G =	22	I/G =	7	G =	30	I/G =	5	G =	33	I/G =	2	G =		I/G =		G =		I/G =	
	G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =	
PM	G =	27	I/G =	7	G =	25	I/G =	5	G =	33	I/G =	2	G =		I/G =		G =		I/G =	
	G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =	

Signal Junction Analysis

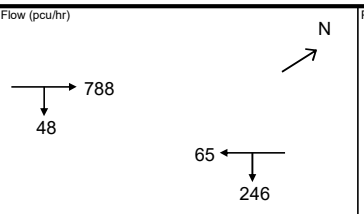
Junction: Ning Tai Road / Po Tai Street (north) Job Number: J7362

Scenario: with proposed development R5A / P.3-3

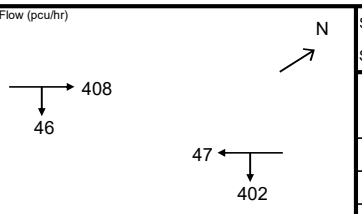
Design Year: 2038 Designed By: _____ Checked By: _____ Date: 2 November 2026

Approach		Phase	Stage	Width (m)	Radius (m)	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak Degree of Saturation	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak Degree of Saturation	PM Peak y value	PM Peak Critical y
Ning Tai Road SB	LT+SA	A1	2	3.40	20.0	100	1819	246	0.432	0.135	0.135	100	1819	402	0.842	0.221	0.221
	SA	A2	2	3.40			2095	65	0.099	0.031			2095	47	0.085	0.022	
Ning Tai Road NB	SA	B1	1	3.40			1955	407	0.896	0.208			1955	222	0.401	0.114	
	SA+RT	B2	1	3.40	10.0	11	2060	429	0.895	0.208	0.208	20	2034	232	0.402	0.114	0.114
pedestrian phase		P1	3		min crossing time =			9	sec GM +		8	sec FGM =		17	sec		
		P2	3		min crossing time =			6	sec GM +		11	sec FGM =		17	sec		
		P3	3		min crossing time =			12	sec GM +		9	sec FGM =		21	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

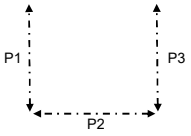


$S=1940+100(W-3.25)$ $S=2080+100(W-3.25)$

$S_M=S\div(1+1.5f/r)$ $S_M=(S-230)\div(1+1.5f/r)$

	AM Peak	Check Pedestrian Phase	PM Peak	Check Pedestrian Phase
Sum y	0.343		0.335	
L (s)	45		45	
C (s)	99		99	
practical y	0.491		0.491	
R.C. (%)	43%		47%	

Note:

1	2	3	4	5
				
AM G = 22 I/G = 7	G = 30 I/G = 5	G = 33 I/G = 2	G = I/G =	G = I/G =
G = I/G =	G = I/G =	G = I/G =	G = I/G =	G = I/G =
PM G = 27 I/G = 7	G = 25 I/G = 5	G = 33 I/G = 2	G = I/G =	G = I/G =
G = I/G =	G = I/G =	G = I/G =	G = I/G =	G = I/G =

Signal Junction Analysis

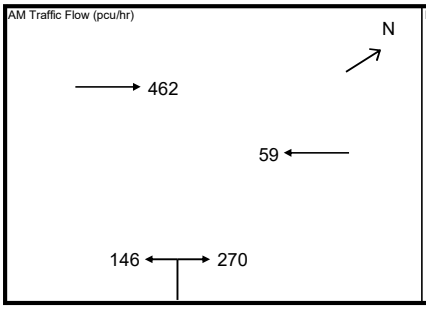
Junction: Ning Tai Road / Po Tai Street (south) Job Number: J7362

Scenario: existing condition R5A / P.4-1

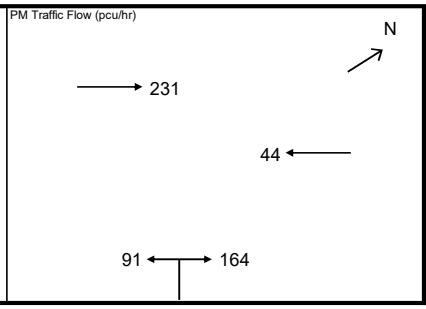
Design Year: 2025 Designed By: _____ Checked By: _____ Date: 2 November 2026

Approach		Phase	Stage	Width (m)	Radius (m)	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak Degree of Saturation	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak Degree of Saturation	PM Peak y value	PM Peak Critical y
Ning Tai Road SB	SA	A1	1	3.40			1955	29	0.042	0.015			1955	21	0.030	0.011	
	SA	A2	1	3.40			2095	30	0.041	0.014			2095	23	0.031	0.011	
Ning Tai Road NB	SA	B1	1	3.40			1955	223	0.323	0.114			1955	112	0.162	0.057	
	SA	B2	1	3.40			2095	239	0.323	0.114	0.114		2095	119	0.161	0.057	0.057
Po Tai Street WB	LT	C1	2	5.00	20.0	100	1967	146	0.305	0.074		100	1967	91	0.191	0.046	
	RT	C2	2	5.00	10.0	100	1961	270	0.567	0.137	0.137	100	1961	164	0.345	0.084	0.084
pedestrian phase		P1	1, 3		min crossing time =			8	sec GM +		16	sec FGM =		24	sec		
		P2	3		min crossing time =			7	sec GM +		7	sec FGM =		14	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

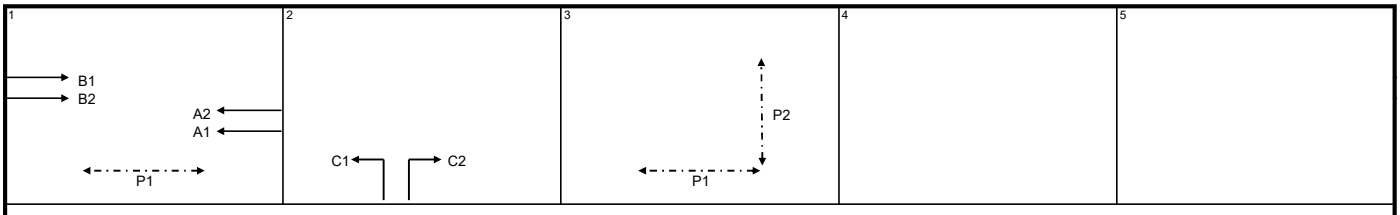


$S=1940+100(W-3.25)$ $S=2080+100(W-3.25)$

$S_M=S\div(1+1.5f/r)$ $S_M=(S-230)\div(1+1.5f/r)$

	AM Peak	Check Pedestrian Phase	PM Peak	Check Pedestrian Phase
Sum y	0.252		0.141	
L (s)	40		40	
C (s)	99		99	
practical y	0.536		0.536	
R.C. (%)	113%		282%	

Note:



AM	G =	34	I/G =	7	G =	23	I/G =	10	G =	22	I/G =	3	G =		I/G =		G =		I/G =
	G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =
PM	G =	34	I/G =	7	G =	23	I/G =	10	G =	22	I/G =	3	G =		I/G =		G =		I/G =
	G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =

Signal Junction Analysis

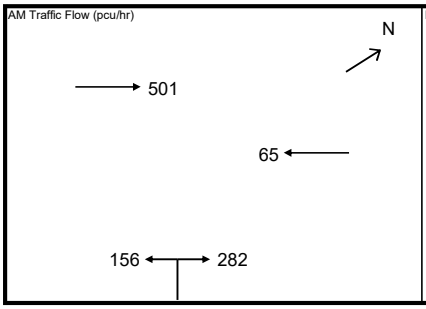
Junction: Ning Tai Road / Po Tai Street (south) Job Number: J7362

Scenario: without proposed development R5A / P.4-2

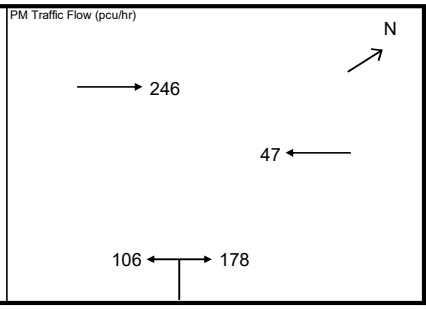
Design Year: 2038 Designed By: _____ Checked By: _____ Date: 2 November 2026

Approach		Phase	Stage	Width (m)	Radius (m)	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak Degree of Saturation	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak Degree of Saturation	PM Peak y value	PM Peak Critical y
Ning Tai Road SB	SA	A1	1	3.40			1955	31	0.045	0.016			1955	23	0.033	0.012	
	SA	A2	1	3.40			2095	34	0.046	0.016			2095	24	0.032	0.011	
Ning Tai Road NB	SA	B1	1	3.40			1955	242	0.350	0.124	0.124		1955	119	0.172	0.061	0.061
	SA	B2	1	3.40			2095	259	0.349	0.123			2095	127	0.171	0.060	
Po Tai Street WB	LT	C1	2	5.00	20.0	100	1967	156	0.327	0.079		100	1967	106	0.222	0.054	
	RT	C2	2	5.00	10.0	100	1961	282	0.593	0.144	0.144	100	1961	178	0.374	0.091	0.091
pedestrian phase		P1	1, 3		min crossing time =			8	sec GM +		16	sec FGM =		24	sec		
		P2	3		min crossing time =			7	sec GM +		7	sec FGM =		14	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

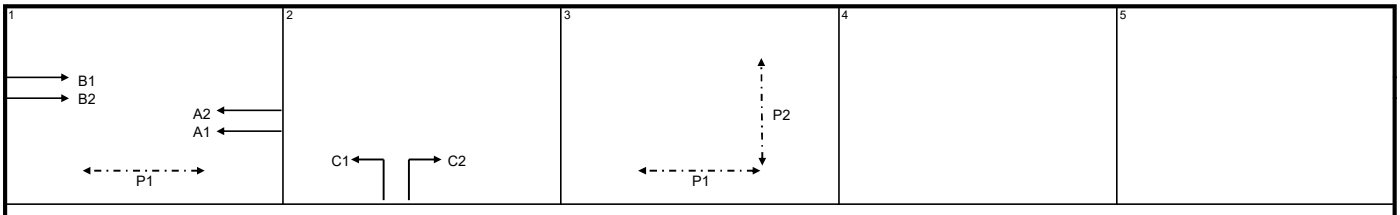


$S=1940+100(W-3.25)$ $S=2080+100(W-3.25)$

$S_M=S\div(1+1.5f/r)$ $S_M=(S-230)\div(1+1.5f/r)$

	AM Peak	Check Pedestrian Phase	PM Peak	Check Pedestrian Phase
Sum y	0.268		0.152	
L (s)	40		40	
C (s)	99		99	
practical y	0.536		0.536	
R.C. (%)	100%		254%	

Note:



AM	G =	34	I/G =	7	G =	23	I/G =	10	G =	22	I/G =	3	G =		I/G =		G =		I/G =
	G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =
PM	G =	34	I/G =	7	G =	23	I/G =	10	G =	22	I/G =	3	G =		I/G =		G =		I/G =
	G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =

Signal Junction Analysis

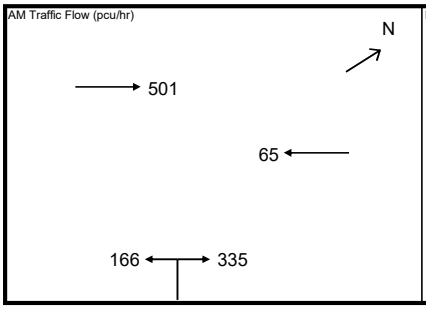
Junction: Ning Tai Road / Po Tai Street (south) Job Number: J7362

Scenario: with proposed development R5A / P.4-3

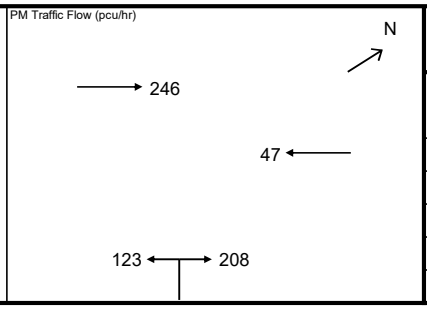
Design Year: 2038 Designed By: _____ Checked By: _____ Date: 2 November 2026

Approach		Phase	Stage	Width (m)	Radius (m)	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak Degree of Saturation	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak Degree of Saturation	PM Peak y value	PM Peak Critical y
Ning Tai Road SB	SA	A1	1	3.40			1955	31	0.045	0.016			1955	23	0.033	0.012	
	SA	A2	1	3.40			2095	34	0.046	0.016			2095	24	0.032	0.011	
Ning Tai Road NB	SA	B1	1	3.40			1955	242	0.350	0.124	0.124		1955	119	0.172	0.061	0.061
	SA	B2	1	3.40			2095	259	0.349	0.123			2095	127	0.171	0.060	
Po Tai Street WB	LT	C1	2	5.00	20.0	100	1967	166	0.348	0.084		100	1967	123	0.258	0.063	
	RT	C2	2	5.00	10.0	100	1961	335	0.705	0.171	0.171	100	1961	208	0.438	0.106	0.106
pedestrian phase		P1	1, 3		min crossing time =			8	sec GM +		16	sec FGM =		24	sec		
		P2	3		min crossing time =			7	sec GM +		7	sec FGM =		14	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

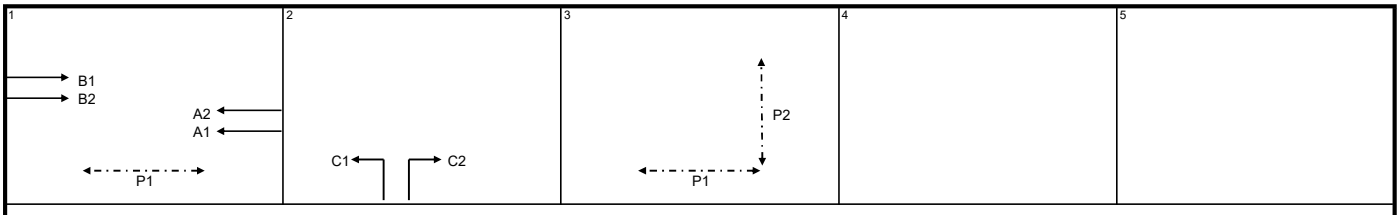


$S=1940+100(W-3.25)$ $S=2080+100(W-3.25)$

$S_M=S\div(1+1.5f/r)$ $S_M=(S-230)\div(1+1.5f/r)$

	AM Peak	Check Pedestrian Phase	PM Peak	Check Pedestrian Phase
Sum y	0.295		0.167	
L (s)	40		40	
C (s)	99		99	
practical y	0.536		0.536	
R.C. (%)	82%		221%	

Note:



AM	G =	34	I/G =	7	G =	23	I/G =	10	G =	22	I/G =	3	G =		I/G =		G =		I/G =
	G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =
PM	G =	34	I/G =	7	G =	23	I/G =	10	G =	22	I/G =	3	G =		I/G =		G =		I/G =
	G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =		G =		I/G =

Average Queue Length for Signal Junction

Junction :	Ning Tai Road / Po Tai Street (south)	**Job No.:**	J7362
		Date:	2/11/2026
Scenario :	existing condition	**Design Year:**	2025

R5A / P.4-4

Lane Approach	Stage	Period	Cycle Time (sec)	Direction	Traffic Flow (pcu/hr)	Saturation Flow (pcu/hr)	Effective Green (sec)	Queue Length (m/lane)
Ning Tai Road (SB)	1	AM	99	SA	29	1955	35	3
		PM	99		21	1955	35	2
	1	AM	99	SA	30	2095	35	3
		PM	99		23	2095	35	2
Ning Tai Road (NB)	1	AM	99	SA	223	1955	35	24
		PM	99		112	1955	35	12
	1	AM	99	SA	239	2095	35	25
		PM	99		119	2095	35	13
Po Tai Street (WB)	2	AM	99	LT	146	1967	24	18
		PM	99		91	1967	24	11
	2	AM	99	RT	270	1961	24	34
		PM	99		164	1961	24	20

Note:
1. Queue Length = Average Queue x 6m

Average Queue Length for Signal Junction

Junction :	Ning Tai Road / Po Tai Street (south)	**Job No.:**	J7362
		Date:	2/11/2026
Scenario :	without proposed develpoment	**Design Year:**	2038

R5A / P.4-5

Lane Approach	Stage	Period	Cycle Time (sec)	Direction	Traffic Flow (pcu/hr)	Saturation Flow (pcu/hr)	Effective Green (sec)	Queue Length (m/lane)
Ning Tai Road (SB)	1	AM	99	SA	31	1955	35	3
		PM	99		23	1955	35	2
	1	AM	99	SA	34	2095	35	4
		PM	99		24	2095	35	3
Ning Tai Road (NB)	1	AM	99	SA	242	1955	35	26
		PM	99		119	1955	35	13
	1	AM	99	SA	259	2095	35	28
		PM	99		127	2095	35	13
Po Tai Street (WB)	2	AM	99	LT	156	1967	24	20
		PM	99		106	1967	24	13
	2	AM	99	RT	282	1961	24	35
		PM	99		178	1961	24	22

Note:
1. Queue Length = Average Queue x 6m

Average Queue Length for Signal Junction

Junction :	Ning Tai Road / Po Tai Street (south)	**Job No.:**	J7362
		Date:	2/11/2026
Scenario :	with proposed develpoment	**Design Year:**	2038

R5A / P.4-6

Lane Approach	Stage	Period	Cycle Time (sec)	Direction	Traffic Flow (pcu/hr)	Saturation Flow (pcu/hr)	Effective Green (sec)	Queue Length (m/lane)
Ning Tai Road (SB)	1	AM	99	SA	31	1955	35	3
		PM	99		23	1955	35	2
	1	AM	99	SA	34	2095	35	4
		PM	99		24	2095	35	3
Ning Tai Road (NB)	1	AM	99	SA	242	1955	35	26
		PM	99		119	1955	35	13
	1	AM	99	SA	259	2095	35	28
		PM	99		127	2095	35	13
Po Tai Street (WB)	2	AM	99	LT	166	1967	24	21
		PM	99		123	1967	24	15
	2	AM	99	RT	335	1961	24	42
		PM	99		208	1961	24	26

Note:
1. Queue Length = Average Queue x 6m

Signal Junction Analysis

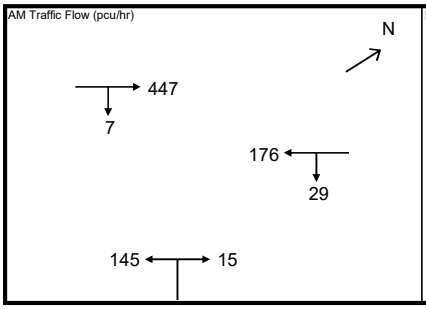
Junction: Ning Tai Road / Sui Tai Road Job Number: J7362

Scenario: existing condition R5A / P.5-1

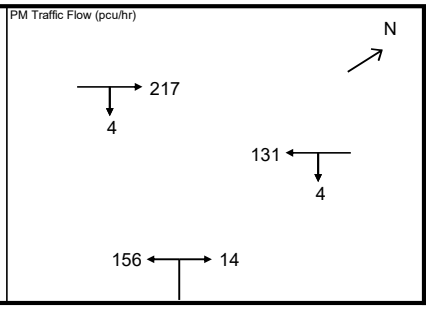
Design Year: 2025 Designed By: Checked By: Date: 2 November 2026

Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak y value	PM Peak Critical y
Nai Tai Road SB	LT+SA	A1	1	3.40	15.0			1955	99	0.051			1955	65	0.033	
	SA	A2	1	3.40				2095	106	0.050			2095	70	0.034	
Ning Tai Road NB	SA	B1	1,2,4	3.40				1955	447	0.229	0.229		1955	217	0.111	0.111
	RT	B2	2	3.40	20.0		100	1949	7	0.004		100	1949	4	0.002	
Sui Tai Road WB	LT	C1	3	3.60	20.0		100	1837	145	0.079	0.079	100	1837	156	0.085	0.085
	RT	C2	3	3.60	20.0		100	1967	15	0.008		100	1967	14	0.007	
pedestrian phase		P1	4		min crossing time =			14	sec GM +		13	sec FGM =		27	sec	

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

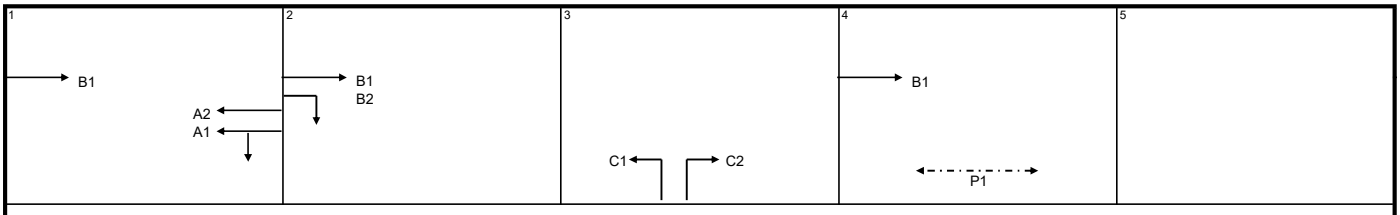


$S=1940+100(W-3.25)$ $S=2080+100(W-3.25)$

$S_M=S\div(1+1.5f/r)$ $S_M=(S-230)\div(1+1.5f/r)$

	AM Peak	Check Pedestrian Phase	PM Peak	Check Pedestrian Phase
Sum y	0.307		0.196	
L (s)	9		9	
C (s)	99		99	
practical y	0.818		0.818	
R.C. (%)	166%		317%	

Note:



AM	G =	I/G =	G =	I/G =	5	G =	I/G =	6	G =	I/G =		G =	I/G =			
	G =	I/G =	G =	I/G =		G =	I/G =		G =	I/G =		G =	I/G =			
PM	G =	I/G =	G =	I/G =	5	G =	I/G =	6	G =	I/G =		G =	I/G =			
	G =	I/G =	G =	I/G =		G =	I/G =		G =	I/G =		G =	I/G =			

Signal Junction Analysis

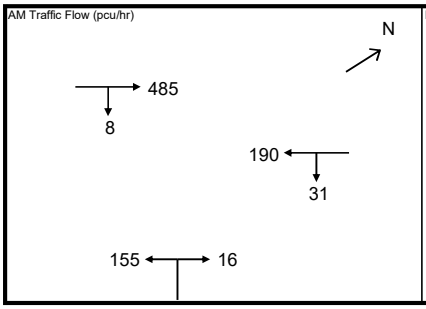
Junction: Ning Tai Road / Sui Tai Road Job Number: J7362

Scenario: without proposed development R5A / P.5-2

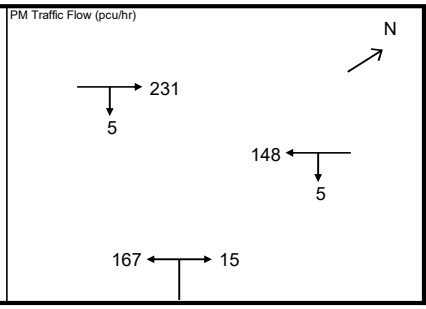
Design Year: 2038 Designed By: Checked By: Date: 2 November 2026

Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak y value	PM Peak Critical y
Nai Tai Road SB	LT+SA	A1	1	3.40	15.0			1955	107	0.055			1955	74	0.038	
	SA	A2	1	3.40				2095	114	0.054			2095	79	0.038	
Ning Tai Road NB	SA	B1	1,2,4	3.40				1955	485	0.248	0.248		1955	231	0.118	0.118
	RT	B2	2	3.40	20.0		100	1949	8	0.004		100	1949	5	0.003	
Sui Tai Road WB	LT	C1	3	3.60	20.0		100	1837	155	0.084	0.084	100	1837	167	0.091	0.091
	RT	C2	3	3.60	20.0		100	1967	16	0.008		100	1967	15	0.008	
pedestrian phase		P1	4		min crossing time =			14	sec GM +		13	sec FGM =		27	sec	

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

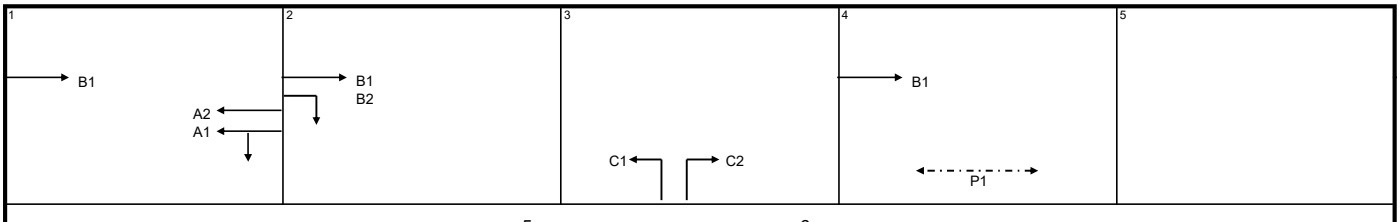


$S=1940+100(W-3.25)$ $S=2080+100(W-3.25)$

$S_M=S\div(1+1.5f/r)$ $S_M=(S-230)\div(1+1.5f/r)$

	AM Peak	Check Pedestrian Phase	PM Peak	Check Pedestrian Phase
Sum y	0.332		0.209	
L (s)	9		9	
C (s)	99		99	
practical y	0.818		0.818	
R.C. (%)	146%		292%	

Note:



		1		2		3		4		5	
AM	G =	I/G =	G =	I/G =	5	G =	I/G =	6	G =	I/G =	G =	I/G =
	G =	I/G =	G =	I/G =		G =	I/G =		G =	I/G =	G =	I/G =
PM	G =	I/G =	G =	I/G =	5	G =	I/G =	6	G =	I/G =	G =	I/G =
	G =	I/G =	G =	I/G =		G =	I/G =		G =	I/G =	G =	I/G =

Signal Junction Analysis

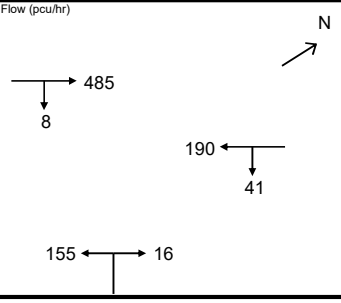
Junction: Ning Tai Road / Sui Tai Road Job Number: J7362

Scenario: with proposed development R5A / P.5-3

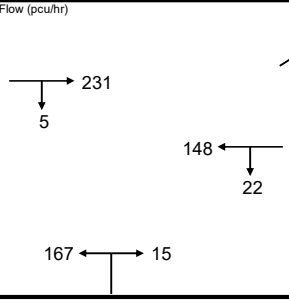
Design Year: 2038 Designed By: Checked By: Date: 2 November 2026

Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak y value	PM Peak Critical y
Nai Tai Road SB	LT+SA	A1	1	3.40	15.0			1955	112	0.057			1955	82	0.042	
	SA	A2	1	3.40				2095	119	0.057			2095	88	0.042	
Ning Tai Road NB	SA	B1	1,2,4	3.40				1955	485	0.248	0.248		1955	231	0.118	0.118
	RT	B2	2	3.40	20.0		100	1949	8	0.004		100	1949	5	0.003	
Sui Tai Road WB	LT	C1	3	3.60	20.0		100	1837	155	0.084	0.084	100	1837	167	0.091	0.091
	RT	C2	3	3.60	20.0		100	1967	16	0.008		100	1967	15	0.008	
pedestrian phase		P1	4		min crossing time =		14	sec GM +		13		sec FGM =	27	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

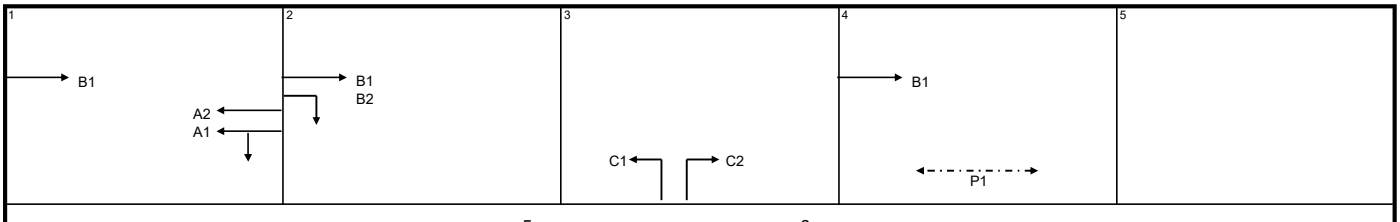


$S=1940+100(W-3.25)$ $S=2080+100(W-3.25)$

$S_M=S\div(1+1.5f/r)$ $S_M=(S-230)\div(1+1.5f/r)$

	AM Peak	Check Pedestrian Phase	PM Peak	Check Pedestrian Phase
Sum y	0.332		0.209	
L (s)	9		9	
C (s)	99		99	
practical y	0.818		0.818	
R.C. (%)	146%		292%	

Note:



AM	G =	I/G =	G =	I/G =	5	G =	I/G =	6	G =	I/G =	G =	I/G =				
	G =	I/G =	G =	I/G =		G =	I/G =		G =	I/G =	G =	I/G =				
PM	G =	I/G =	G =	I/G =	5	G =	I/G =	6	G =	I/G =	G =	I/G =				
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Appendix B – Public Transport Survey Results

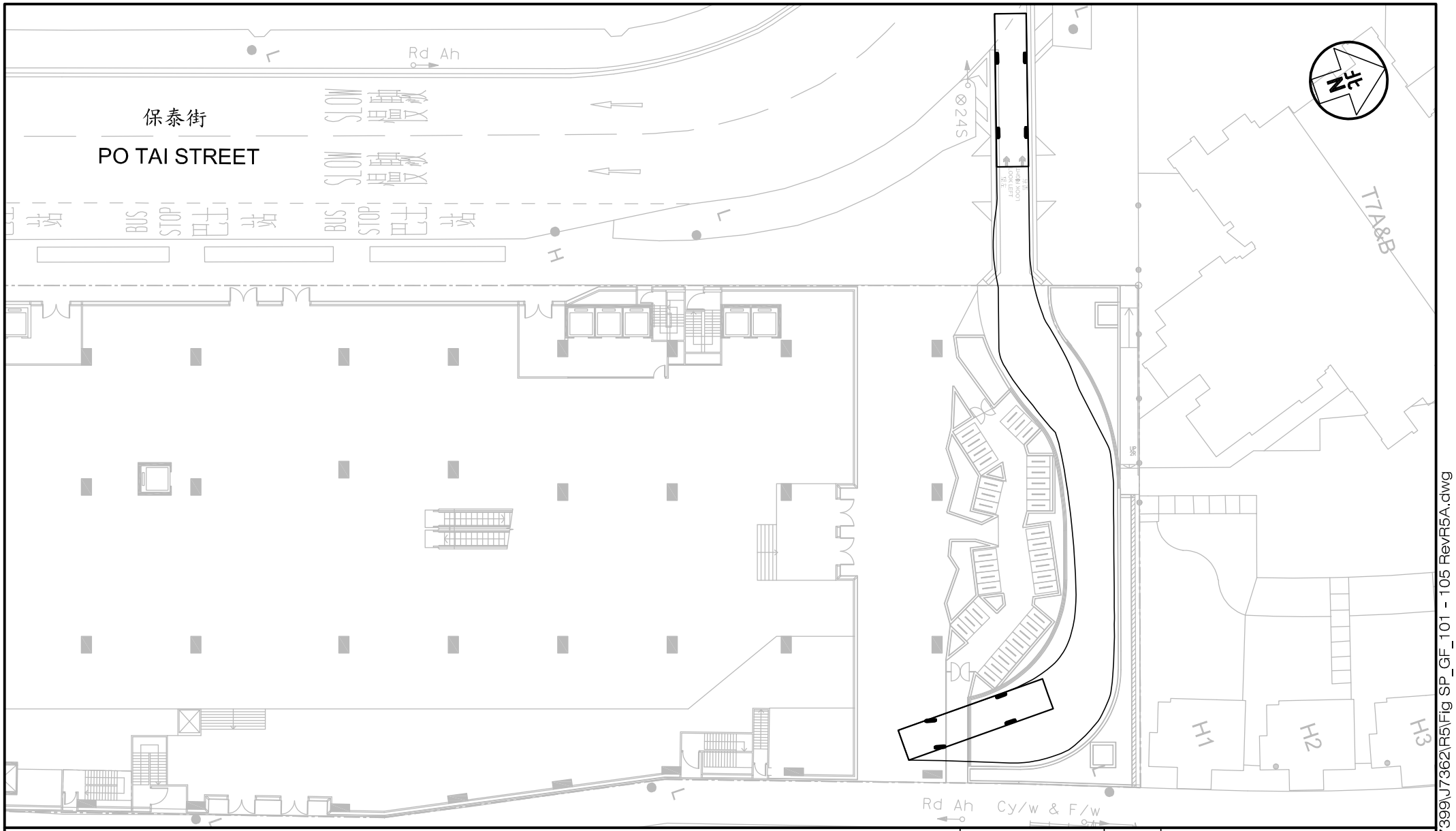
AM PEAK HOUR (Outbound Bus / GMB Route)										
Maximum Loading Point	**Time (hours)**	**Type**	**Route No.**	**Upper Deck**		**Lower Deck / Minibus**		**Overall**		
				Capacity [a]	**Occupancy [b]**	**Capacity [c]**	**Occupancy [d]**	**Capacity [e] = [a] + [c]**	**Occupancy [f] = [a][b] + [c][d]**	**Surplus Capacity [e] – [f]**
Shing Mun Tunnel	0736	Double-Deck Bus	43X	60	50%	60	25%	120	45	75
	0750	Double-Deck Bus	43X	60	50%	60	75%	120	75	45
	0805	Double-Deck Bus	43X	60	75%	60	75%	120	90	30
	0815	Double-Deck Bus	43X	60	90%	60	75%	120	99	21
	0819	Double-Deck Bus	43X	60	75%	60	75%	120	90	30
	0827	Double-Deck Bus	43X	60	75%	60	50%	120	75	45
Lion Rock Tunnel	0746	Double-Deck Bus	281X	60	25%	60	25%	120	30	90
	0804	Double-Deck Bus	281X	60	75%	60	50%	120	75	45
	0833	Double-Deck Bus	281X	60	50%	60	25%	120	45	75
Tate's Cairn Tunnel	0738	Double-Deck Bus	682A	60	25%	60	25%	120	30	90
	0741	Double-Deck Bus	89C	60	25%	60	25%	120	30	90
	0748	Double-Deck Bus	680B	60	75%	60	50%	120	90	30
	0749	Double-Deck Bus	89C	60	50%	60	50%	120	60	60
	0750	Double-Deck Bus	682A	60	75%	60	50%	120	75	45
	0759	Double-Deck Bus	89C	60	90%	60	75%	120	99	21
	0800	Double-Deck Bus	89C	60	90%	60	75%	120	99	21
	0801	Double-Deck Bus	681P	60	50%	60	25%	120	45	75
	0808	Double-Deck Bus	89C	60	90%	60	75%	120	99	21
	0808	Double-Deck Bus	682A	60	75%	60	50%	120	75	45
	0810	Double-Deck Bus	680B	60	25%	60	10%	120	41	79
	0815	Double-Deck Bus	85S	60	75%	60	75%	120	90	30
	0817	Double-Deck Bus	89C	60	75%	60	75%	120	90	30
	0821	Double-Deck Bus	89C	60	50%	60	50%	120	60	60
	0826	Double-Deck Bus	681P	60	75%	60	50%	120	75	45
Tsing Sha Highway	0731	Double-Deck Bus	A41P	60	50%	60	25%	120	45	75
	0740	Double-Deck Bus	981P	60	75%	60	50%	120	75	45
	0753	Double-Deck Bus	A41P	60	75%	60	50%	120	75	45
	0754	Double-Deck Bus	981P	60	75%	60	25%	120	60	60
	0810	Double-Deck Bus	981P	60	75%	60	50%	120	75	45
	0817	Double-Deck Bus	A41P	60	75%	60	50%	120	75	45

AM PEAK HOUR (Outbound Bus / GMB Route)										
Maximum Loading Point	**Time (hours)**	**Type**	**Route No.**	**Upper Deck**		**Lower Deck / Minibus**		**Overall**		
				Capacity [a]	**Occupancy [b]**	**Capacity [c]**	**Occupancy [d]**	**Capacity [e] = [a] + [c]**	**Occupancy [f] = [a][b] + [c][d]**	**Surplus Capacity [e] – [f]**
Tsing Sha Highway	0822	Double-Deck Bus	286D	60	50%	60	50%	120	60	60
	0824	Double-Deck Bus	981P	60	25%	60	25%	120	30	90
A Kung Kok Street	0736	19-seater Minibus	810	0	0%	19	75%	19	15	4
	0738	Double-Deck Bus	85K	60	75%	60	50%	120	75	45
	0741	Double-Deck Bus	85K	60	75%	60	50%	120	75	45
	0745	19-seater Minibus	810			19	75%	19	15	4
	0748	19-seater Minibus	810			19	90%	19	18	1
	0754	19-seater Minibus	810			19	75%	19	15	4
	0755	Double-Deck Bus	85K	60	75%	60	50%	120	75	45
	0801	19-seater Minibus	810			19	75%	19	15	4
	0806	19-seater Minibus	810			19	100%	19	19	0
	0808	Double-Deck Bus	85K	60	25%	60	25%	120	30	90
	0819	19-seater Minibus	810			19	100%	19	19	0
	0827	19-seater Minibus	810			19	75%	19	15	4
MTR University Station	0730	Double-Deck Bus	289K	60	90%	60	75%	120	99	21
	0744	Double-Deck Bus	289K	60	90%	60	100%	120	114	6
	0759	Double-Deck Bus	289K	60	100%	60	100%	120	120	0
	0812	Double-Deck Bus	289K	60	90%	60	75%	120	99	21
	0824	Double-Deck Bus	289K	60	50%	60	75%	120	75	45
Kam On Court	0731	19-seater Minibus	810A			19	75%	19	15	4
	0742	19-seater Minibus	810A			19	75%	19	15	4
Yan On Estate	0731	19-seater Minibus	806B			19	100%	19	19	0
	0742	19-seater Minibus	806B			19	75%	19	15	4
	0752	19-seater Minibus	806B			19	90%	19	18	1
	0801	19-seater Minibus	806B			19	75%	19	15	4
	0814	19-seater Minibus	806B			19	100%	19	19	0
	0825	19-seater Minibus	806B			19	75%	19	15	4
Total								**5,224**	**3,201**	**2,023**

PM PEAK HOUR (Inbound Bus / GMB Route)										
Maximum Loading Point	Time (hours)	Type	Route No.	Upper Deck		Lower Deck / Minibus		Overall		
				Capacity [a]	Occupancy [b]	Capacity [c]	Occupancy [d]	Capacity [e] = [a] + [c]	Occupancy [f] = [a][b] + [c][d]	Surplus Capacity [e] – [f]
Shing Mun Tunnel	1835	Double-Deck Bus	43X	60	25%	60	25%	120	30	90
	1848	Double-Deck Bus	43X	60	50%	60	50%	120	60	60
	1902	Double-Deck Bus	43X	60	50%	60	75%	120	75	45
	1919	Double-Deck Bus	43X	60	100%	60	75%	120	105	15
	1923	Double-Deck Bus	43X	60	100%	60	75%	120	105	15
	1930	Double-Deck Bus	43X	60	75%	60	50%	120	75	45
Lion Rock Tunnel	1847	Double-Deck Bus	81C	60	50%	60	50%	120	60	60
	1906	Double-Deck Bus	81C	60	75%	60	75%	120	90	30
	1917	Double-Deck Bus	81C	60	50%	60	25%	120	45	75
Tate's Cairn Tunnel	1830	Double-Deck Bus	89C	60	25%	60	50%	120	45	75
	1836	Double-Deck Bus	89C	60	50%	60	75%	120	75	45
	1854	Double-Deck Bus	89C	60	90%	60	75%	120	99	21
	1906	Double-Deck Bus	89C	60	90%	60	75%	120	99	21
	1910	Double-Deck Bus	681P	60	50%	60	50%	120	60	60
	1915	Double-Deck Bus	682A	60	75%	60	75%	120	90	30
	1926	Double-Deck Bus	89C	60	50%	60	50%	120	60	60
	1928	Double-Deck Bus	89C	60	50%	60	50%	120	60	60
Tsing Sha Highway	1830	Double-Deck Bus	286D	60	50%	60	50%	120	60	60
	1836	Double-Deck Bus	A41P	60	50%	60	50%	120	60	60
	1851	Double-Deck Bus	981P	60	90%	60	75%	120	99	21
	1902	Double-Deck Bus	A41P	60	50%	60	50%	120	60	60
	1903	Double-Deck Bus	981P	60	90%	60	75%	120	99	21
	1917	Double-Deck Bus	981P	60	50%	60	50%	120	60	60
	1923	Double-Deck Bus	981P	60	25%	60	50%	120	45	75
	1929	Double-Deck Bus	A41P	60	50%	60	50%	120	60	60
	1930	Double-Deck Bus	981P	60	25%	60	25%	120	30	90
A Kung Kok Street	1835	19-seater Minibus	810			19	100%	19	19	0
	1837	Double-Deck Bus	85K	60	50%	60	50%	120	60	60
	1838	19-seater Minibus	810			19	75%	19	15	4
	1845	19-seater Minibus	810			19	75%	19	15	4

PM PEAK HOUR (Inbound Bus / GMB Route)										
Maximum Loading Point	**Time (hours)**	**Type**	**Route No.**	**Upper Deck**		**Lower Deck / Minibus**		**Overall**		
				Capacity [a]	**Occupancy [b]**	**Capacity [c]**	**Occupancy [d]**	**Capacity [e] = [a] + [c]**	**Occupancy [f] = [a][b] + [c][d]**	**Surplus Capacity [e] – [f]**
A Kung Kok Street	1851	19-seater Minibus	810			19	90%	19	18	1
	1900	19-seater Minibus	810			19	90%	19	18	1
	1900	Double-Deck Bus	85K	60	25%	60	25%	120	30	90
	1902	19-seater Minibus	810			19	75%	19	15	4
	1914	19-seater Minibus	810			19	90%	19	18	1
	1916	Double-Deck Bus	85K	60	25%	60	25%	120	30	90
	1923	19-seater Minibus	810			19	90%	19	18	1
	1927	19-seater Minibus	810			19	75%	19	15	4
MTR University Station	1839	Double-Deck Bus	289K	60	90%	60	75%	120	99	21
	1853	Double-Deck Bus	289K	60	90%	60	75%	120	99	21
	1916	Double-Deck Bus	289K	60	90%	60	75%	120	99	21
We Go Mall	1808	19-seater Minibus	806B			19	25%	19	5	14
	1808	19-seater Minibus	810A			19	90%	19	18	1
	1822	19-seater Minibus	806B			19	100%	19	19	0
	1822	19-seater Minibus	810A			19	75%	19	15	4
	1836	19-seater Minibus	806B			19	50%	19	10	9
	1852	19-seater Minibus	806B			19	50%	19	10	9
Total								**4,125**	**2,451**	**1,674**

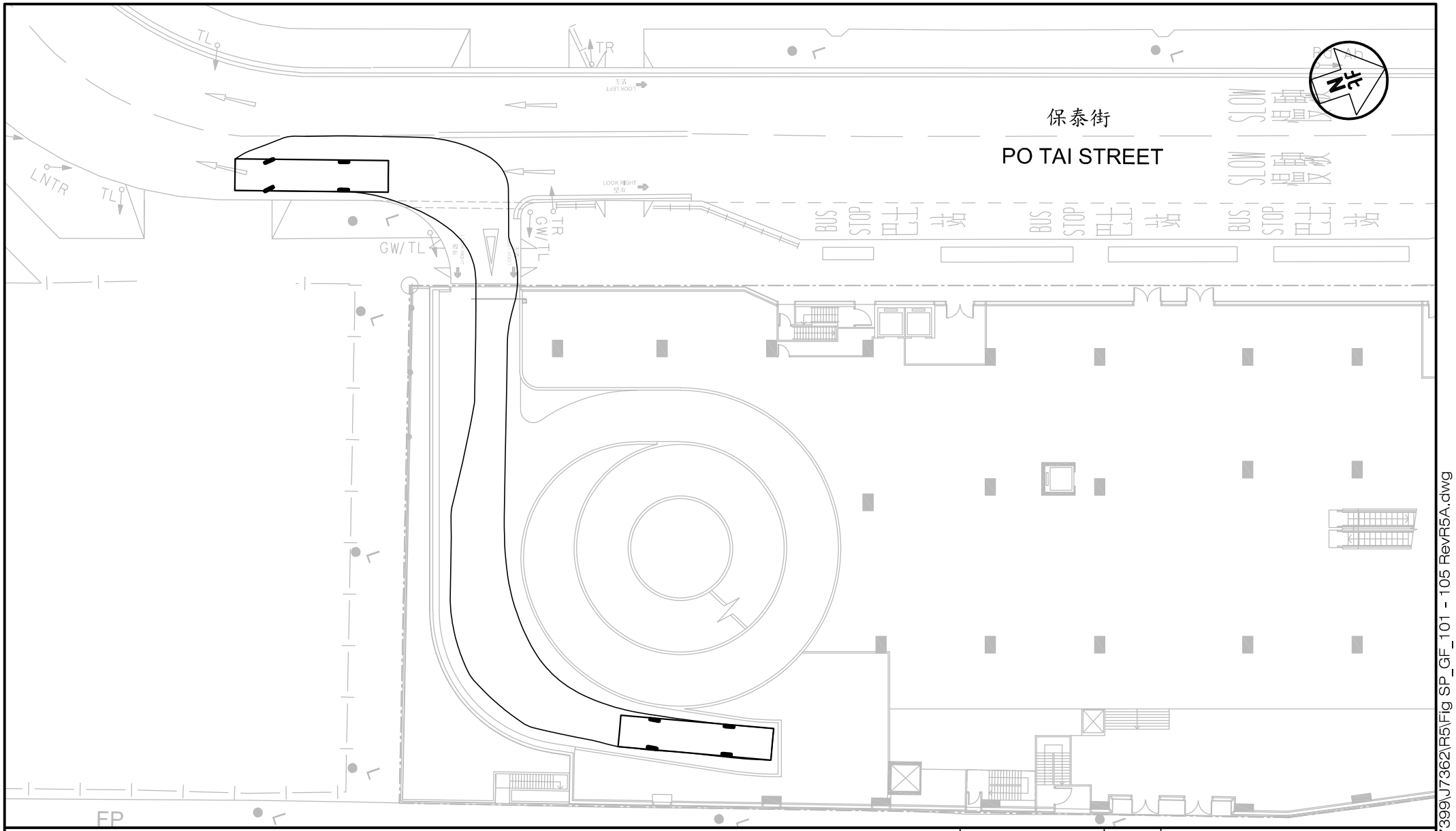
Appendix C – Swept Path Analysis



Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No.: SP/GF/101	Revision: R5A
Figure Title: SWEPT PATH OF COACH ENTERING THE SUBJECT SITE		Designed by: T H C / Drawn by: C C L / Checked by: K C	
		Scale in A4: 1 : 400	Date: 2 NOV 2026

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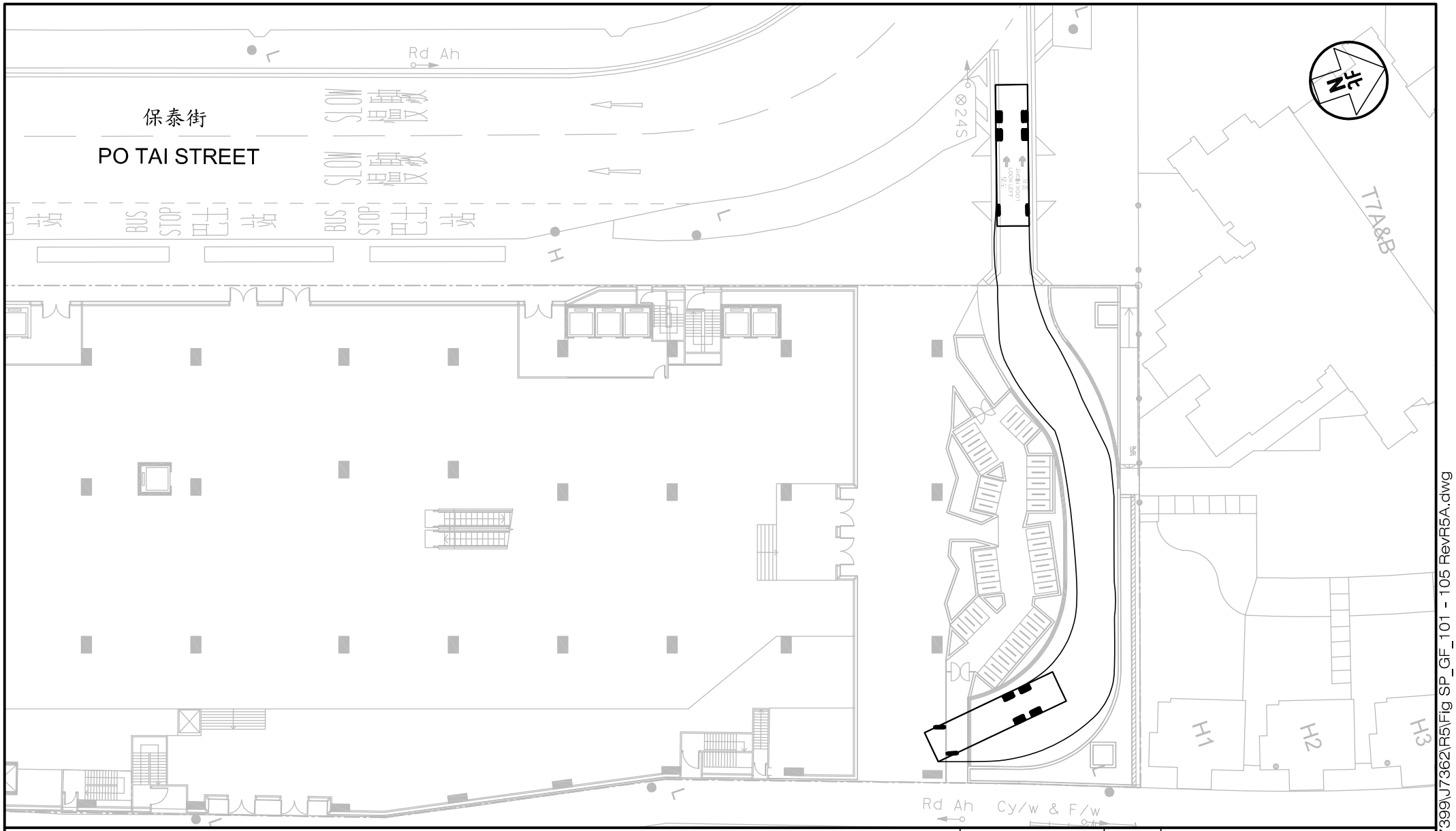
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Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No. SP/GF/102	Revision R5A
Figure Title: SWEPT PATH OF COACH LEAVING THE SUBJECT SITE		Designed by T H C / Drawn by C C L / Checked by K C	
		Scale in A4: 1 : 400	Date: 2 NOV 2026

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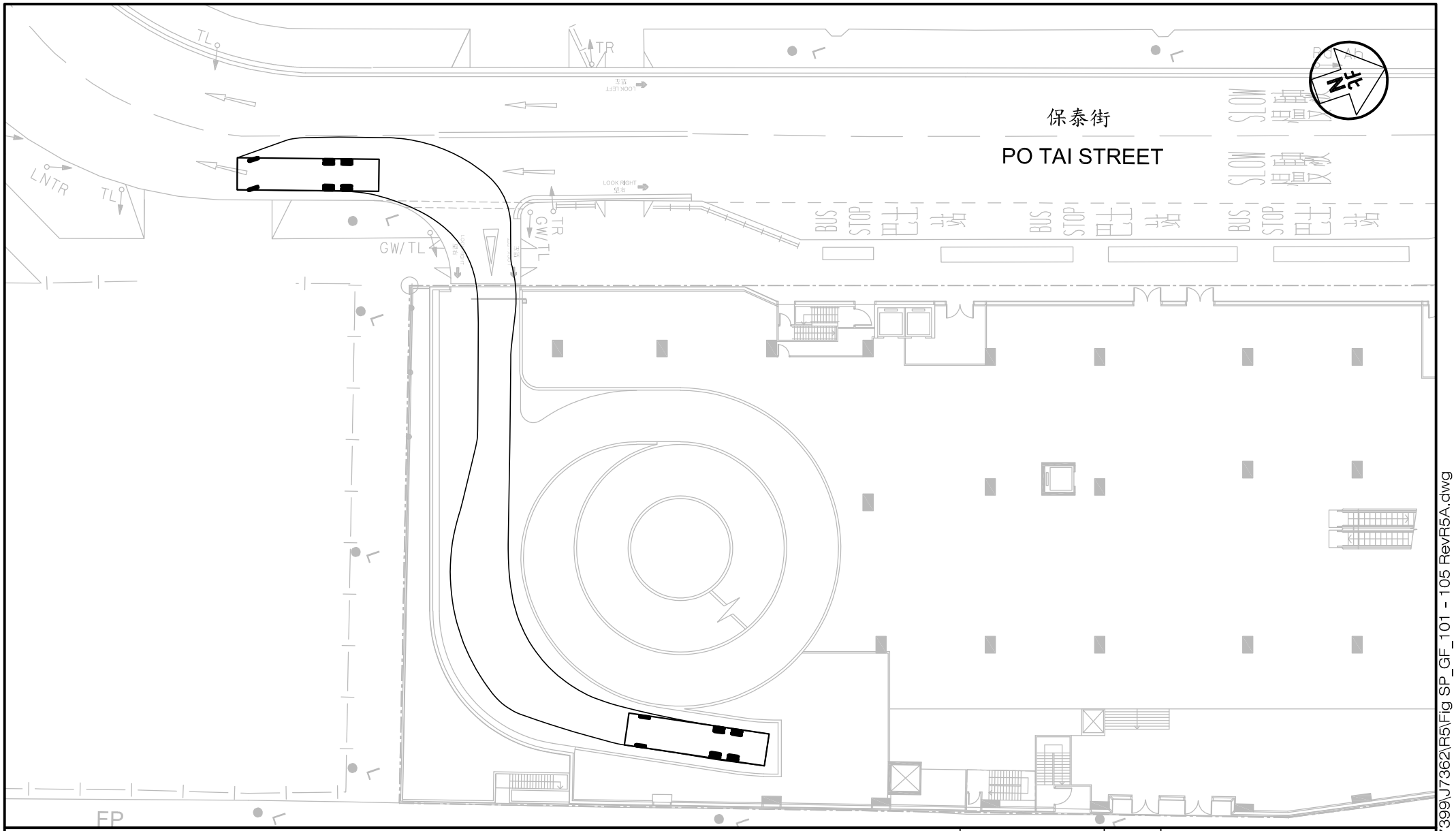
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Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No. SP/GF/103 Revision R5A
Figure Title	SWEPT PATH OF HGV ENTERING THE SUBJECT SITE	Designed by T H C / Drawn by C C L / Checked by K C	Scale in A4 1 : 400 / Date 2 NOV 2026

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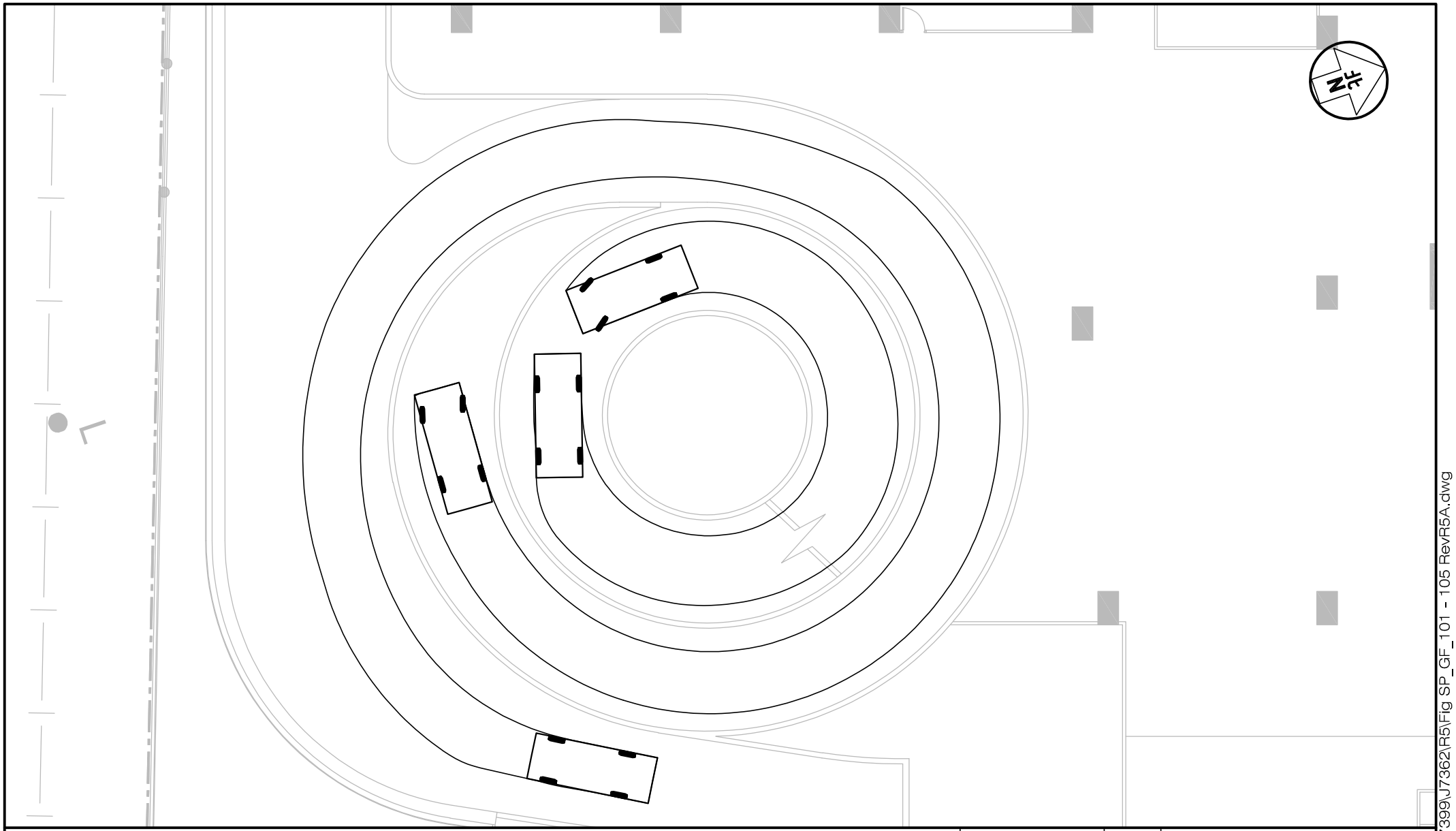
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Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No.: SP/GF/104	Revision: R5A
Figure Title: SWEPT PATH OF HGV LEAVING THE SUBJECT SITE		Designed by: T H C / Drawn by: C C L / Checked by: K C	
		Scale in A4: 1 : 400 / Date: 2 NOV 2026	

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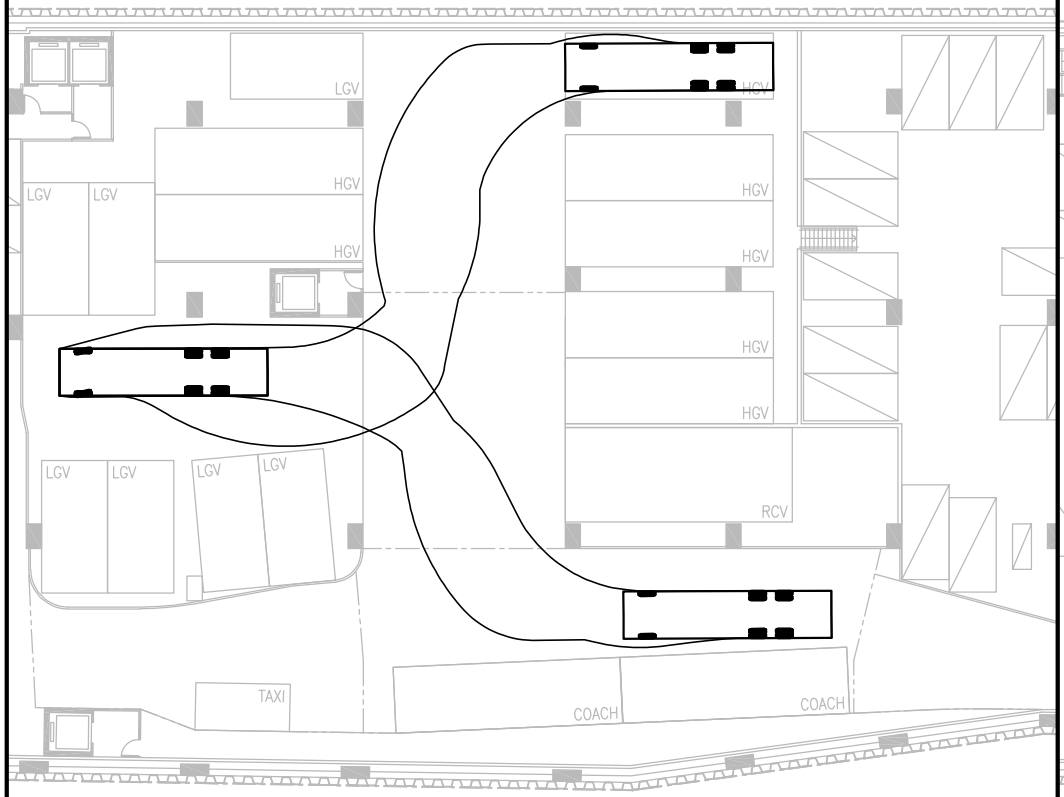
Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	
Figure Title	SWEPT PATHS OF PRIVATE CAR TRAVELLING BETWEEN G/F AND 1/F		

Figure No.	SP/GF/105	Revision	R5A
Designed by	T H C	Drawn by	C C L
Checked by	K C		
Scale in A4	1 : 200	Date	2 NOV 2026

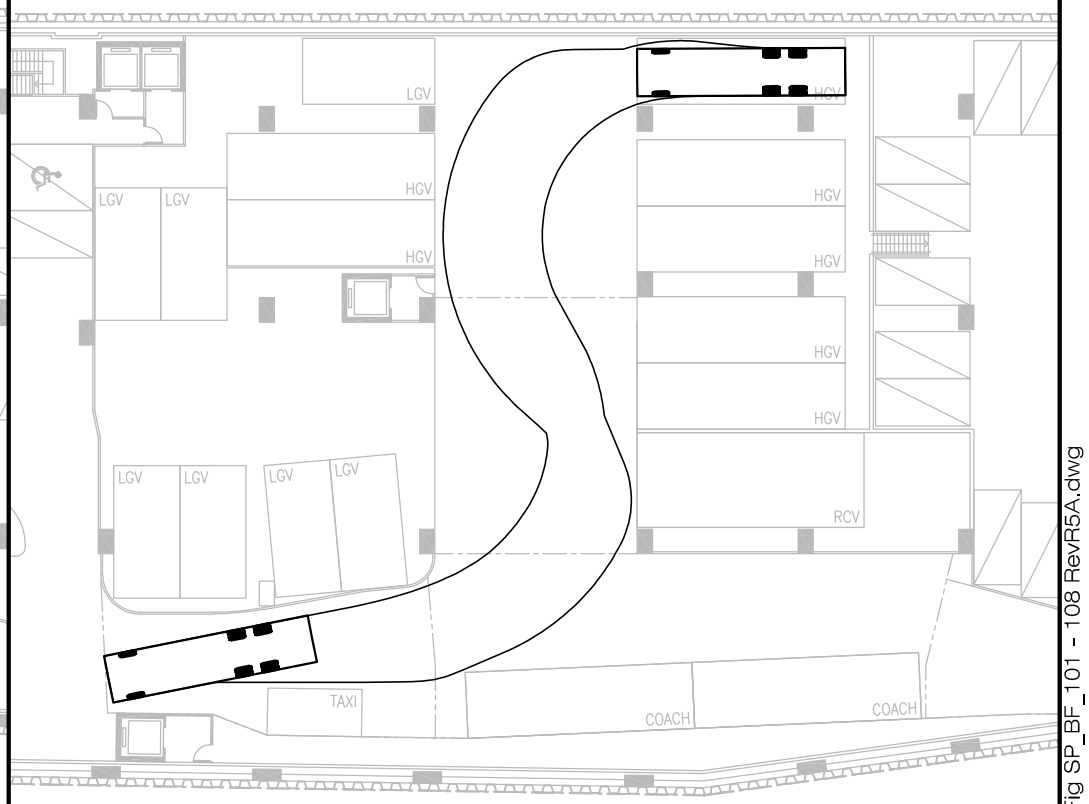
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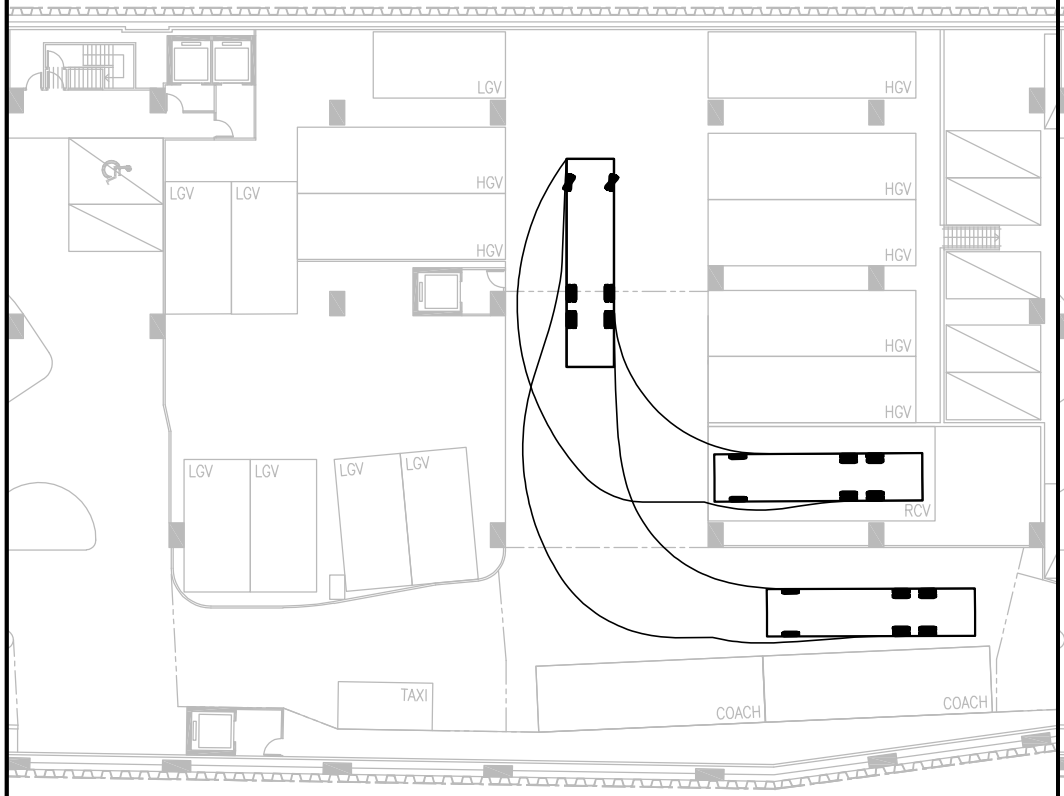


Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No. SP/BF/101 Revision R5A
Figure Title	SWEPT PATH OF HGV ENTERING AND LEAVING THE HGV LOADING / UNLOADING BAY		Designed by THC Drawn by CCL Checked by KC Scale in A4 1 : 400 Date 2 NOV 2026

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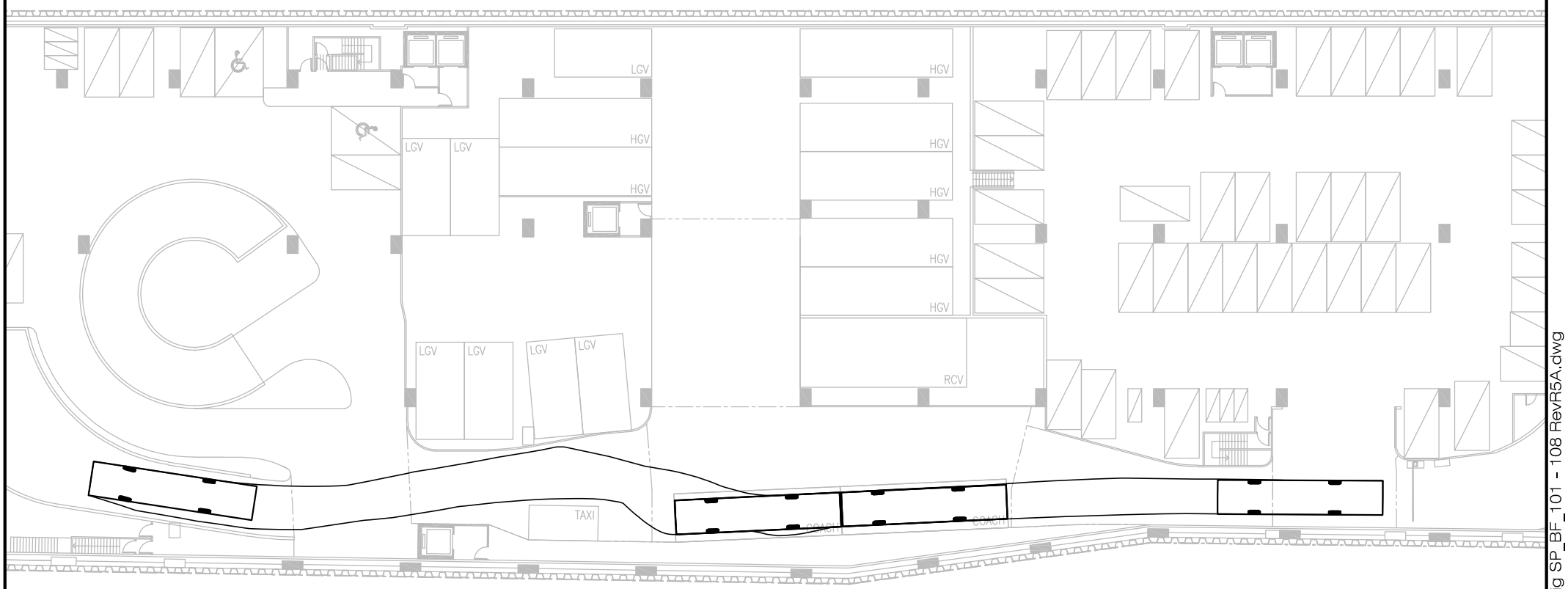


Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No. SP/BF/102 Revision R5A
Figure Title	SWEPT PATH OF RCV ENTERING AND LEAVING THE RCV LOADING / UNLOADING BAY		Designed by THC Drawn by CCL Checked by KC Scale in A4 1 : 400 Date 2 NOV 2026

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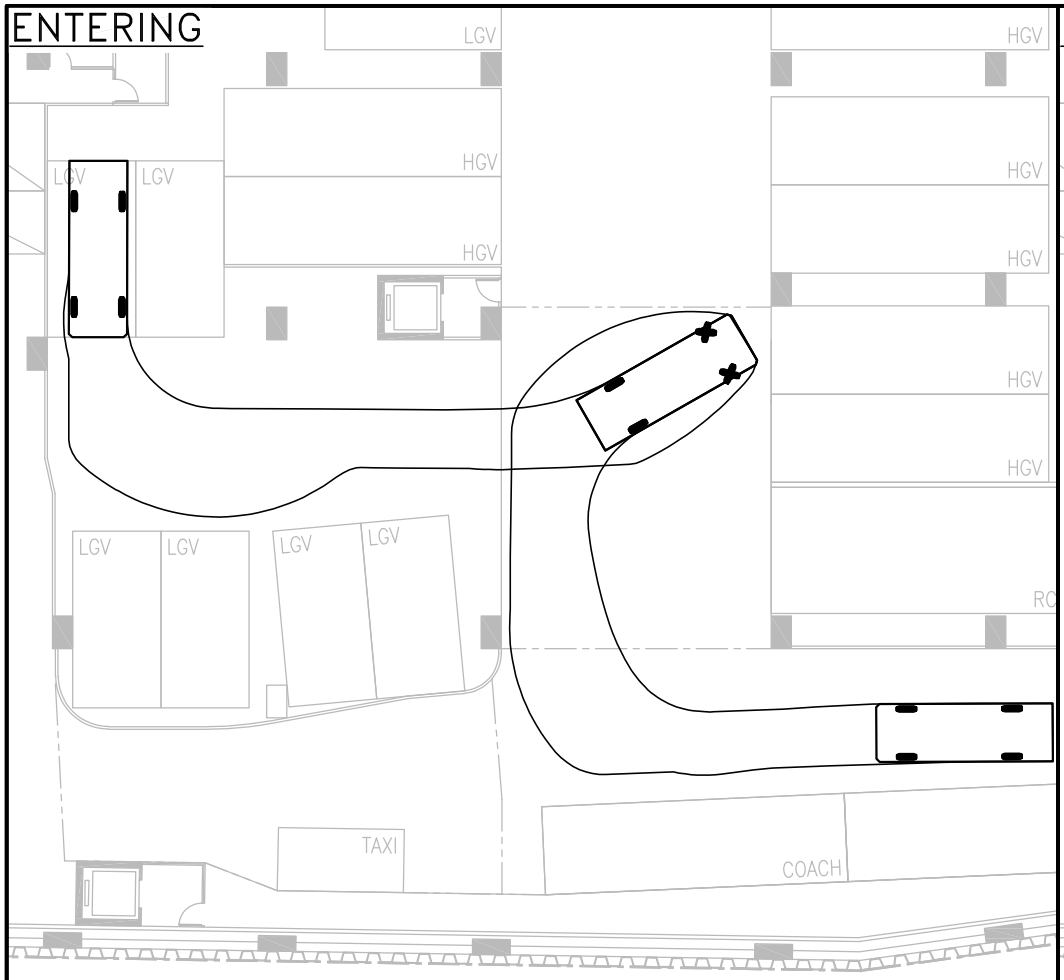
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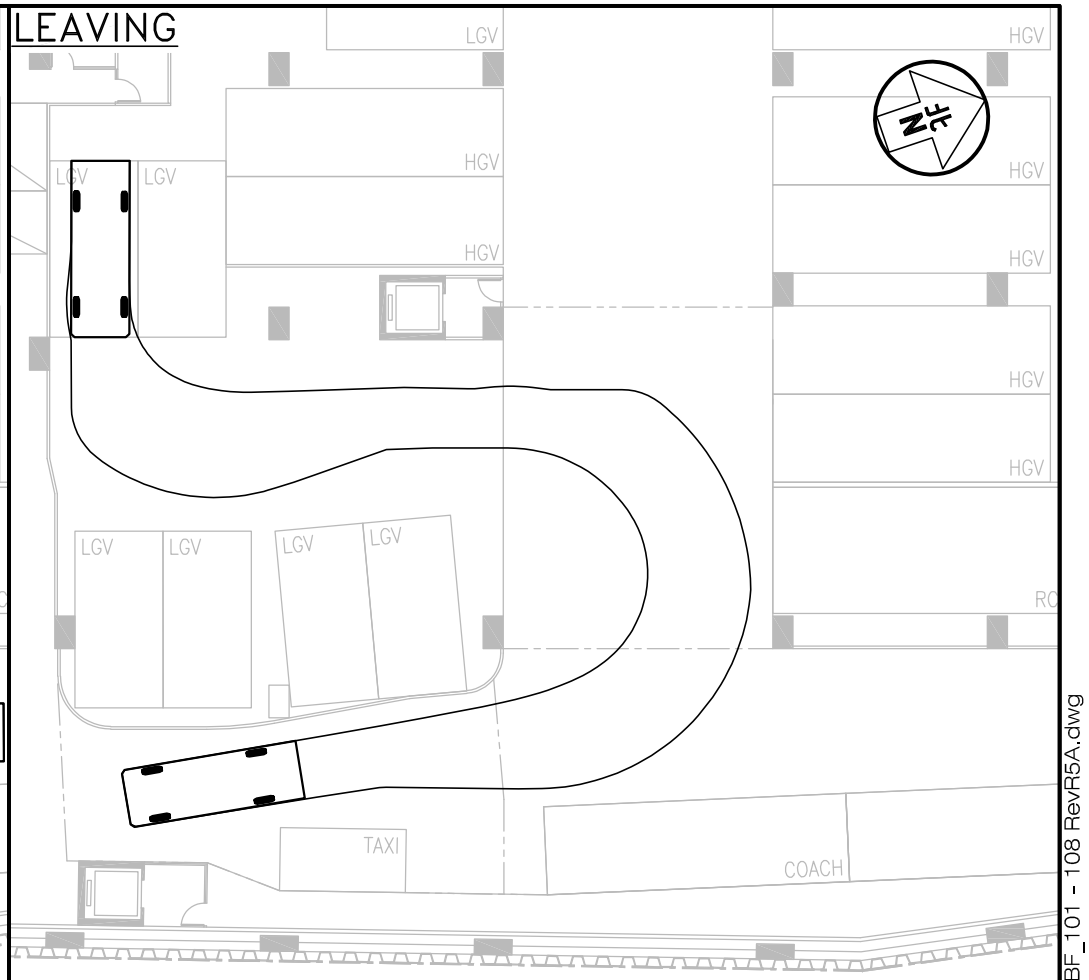
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Project Title: WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No. SP/BF/103	Revision R5A	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk
Figure Title: SWEPT PATH OF COACH ENTERING AND LEAVING THE COACH LAY-BY		Designed by: T H C / Drawn by: C C L / Checked by: K C Scale in A4: 1 : 400 Date: 2 NOV 2026		

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Project Title

WE GO MALL AT 16 PO TAI STREET, MA ON SHAN

J7362

Figure No. SP/BF/104

Revision R5A

Figure Title

SWEPT PATH OF LGV ENTERING AND LEAVING THE LGV LOADING / UNLOADING BAY

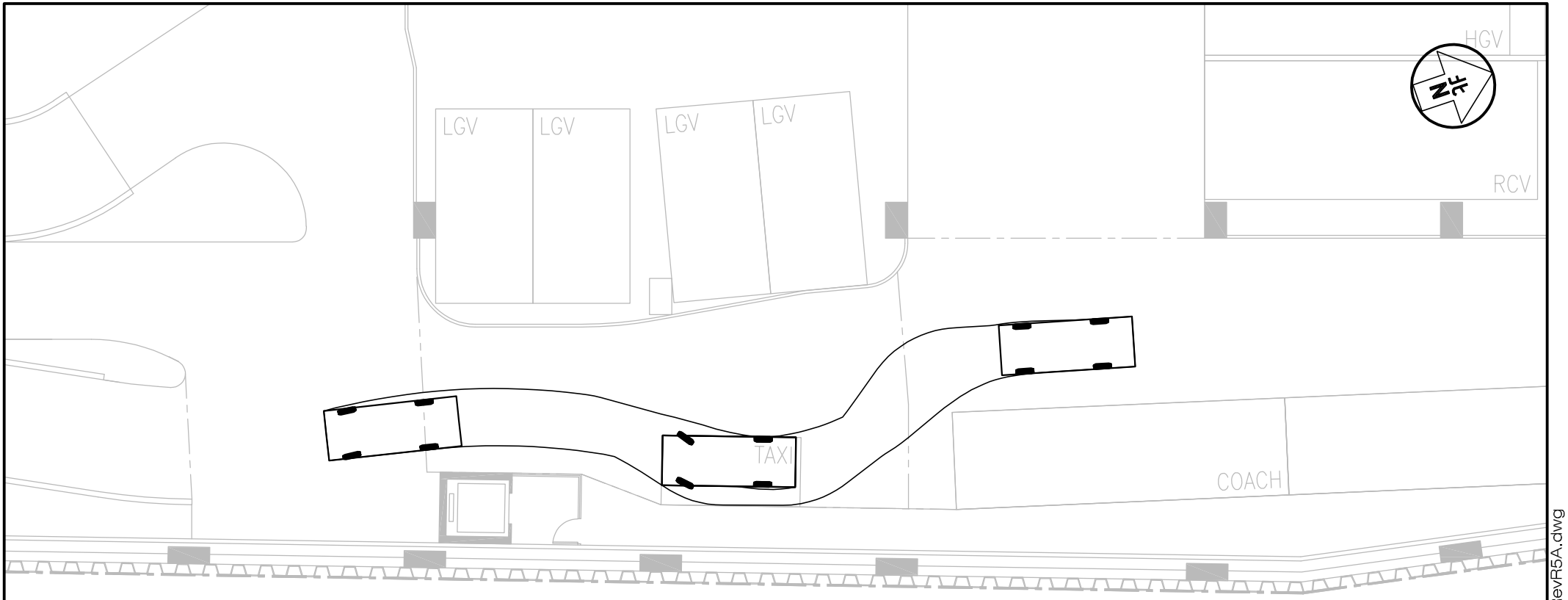
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T H C	C C L	K C

Scale in A4: 1 : 400

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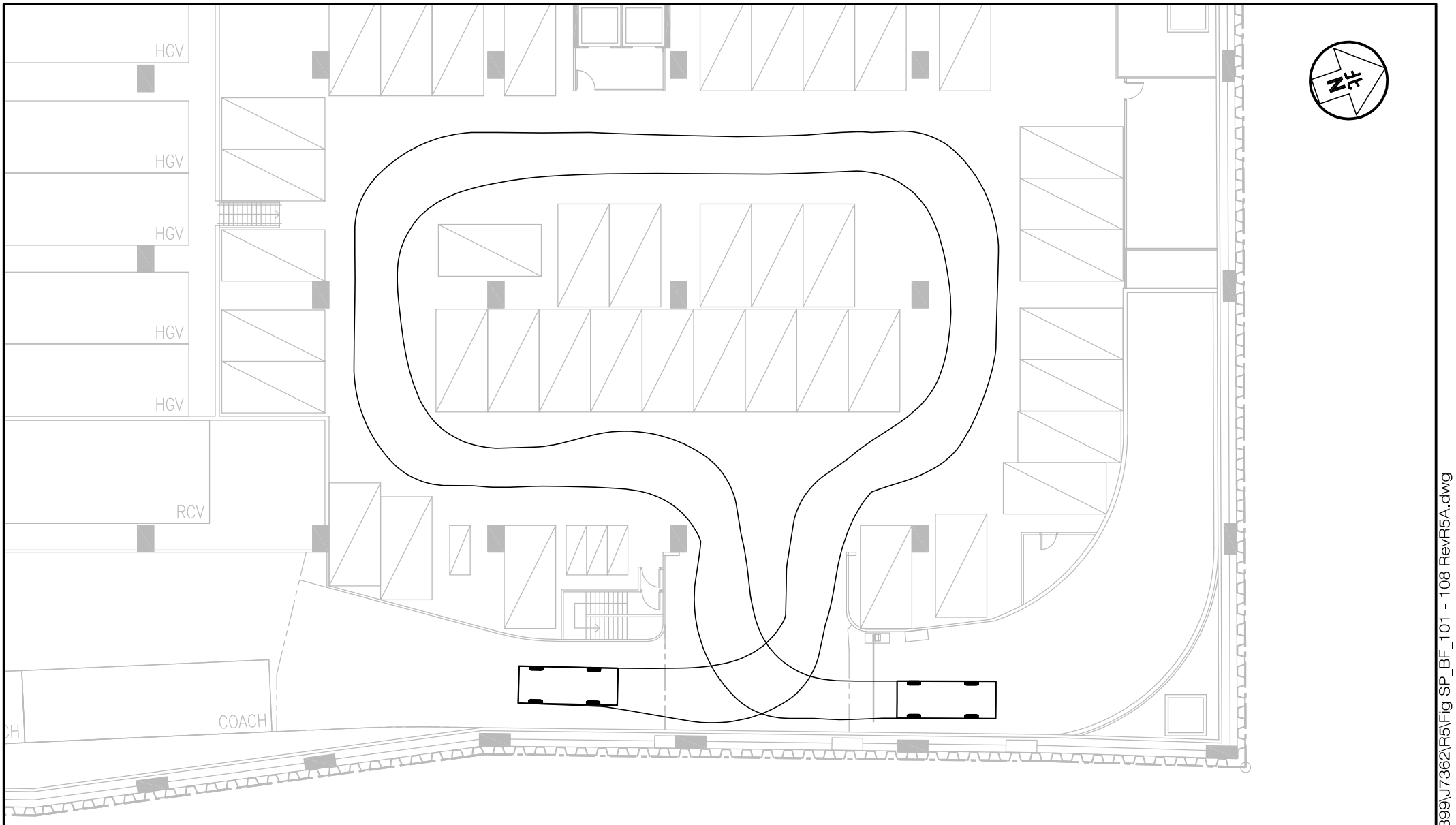
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Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	Figure No. SP/BF/105	Revision R5A
Figure Title	SWEPT PATH OF TAXI / PRIVATE CAR ENTERING AND LEAVING THE TAXI / PRIVATE CAR LAY-BY		Designed by T H C / Drawn by C C L / Checked by K C	
			Scale in A4 1 : 200 / Date 2 NOV 2026	

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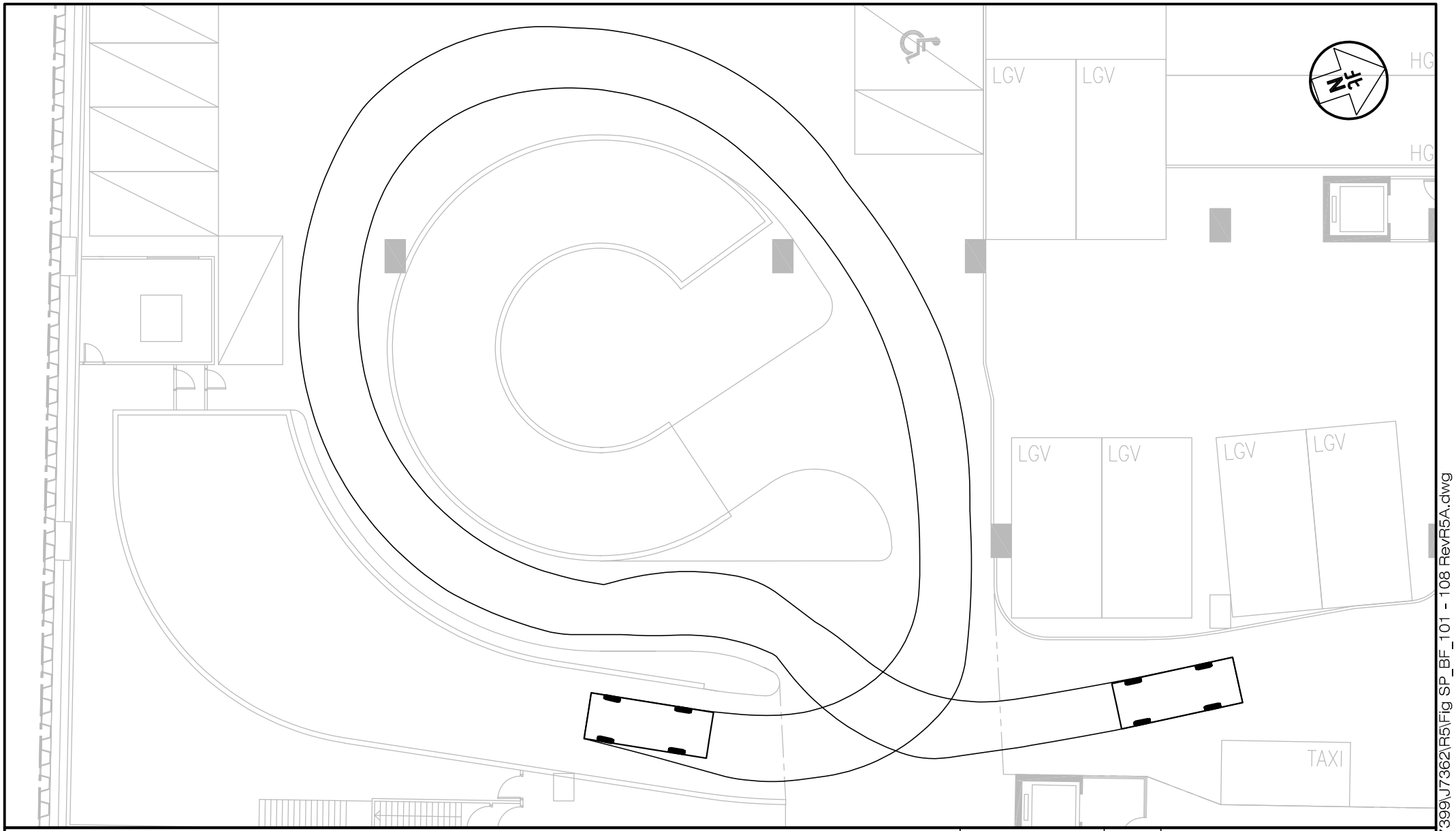


Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	
Figure Title	SWEPT PATH OF PRIVATE CAR TRAVELLING ON B/F		

Figure No.	SP/BF/106	Revision	R5A
Designed by	T H C	Drawn by	C C L
Checked by	K C		
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Project Title

WE GO MALL AT 16 PO TAI STREET, MA ON SHAN

J7362

Figure Title

SWEPT PATH OF PRIVATE CAR TRAVELLING ON B/F

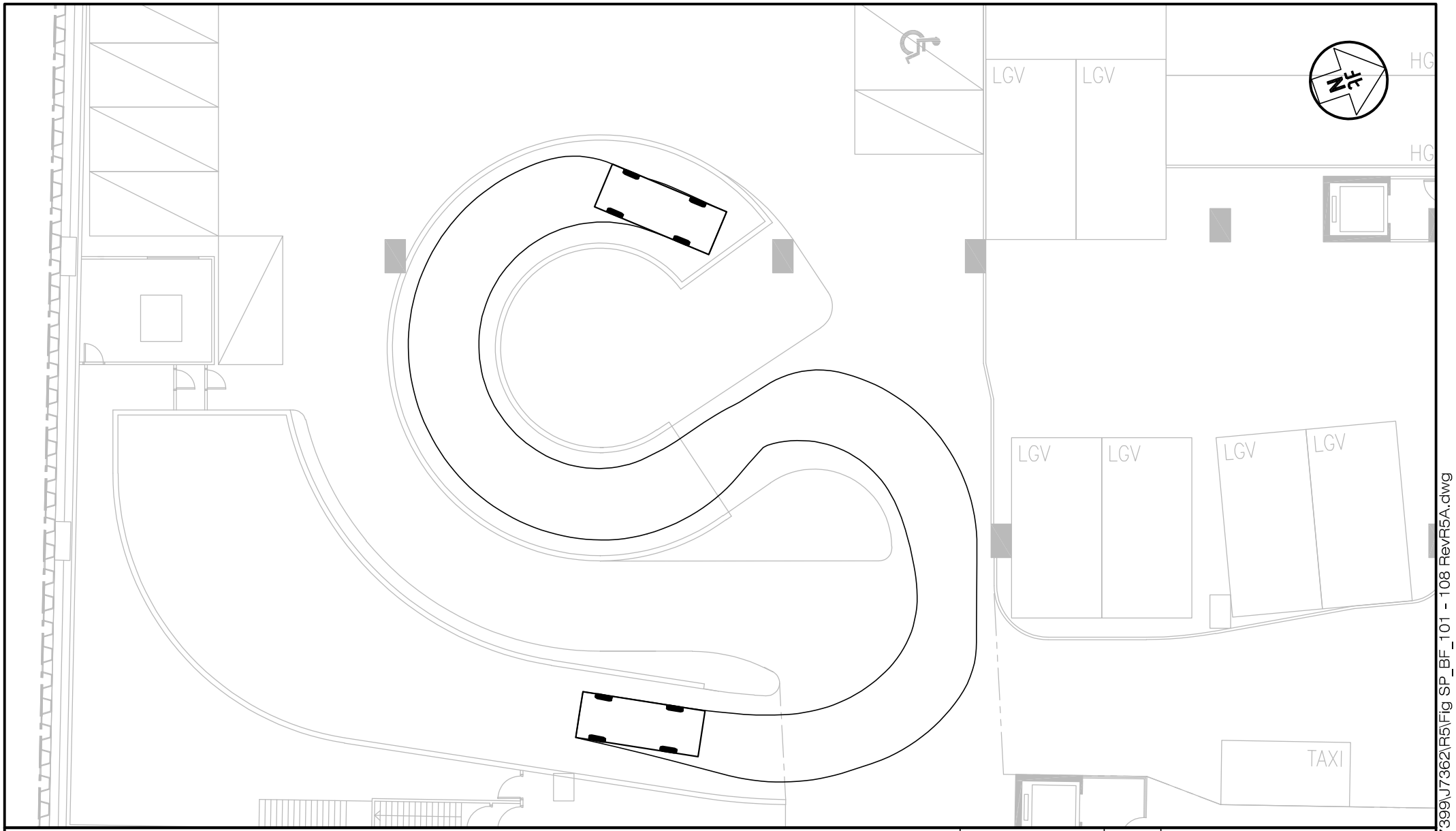
Figure No.	Revision
SP/BF/107	R5A

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Project Title

WE GO MALL AT 16 PO TAI STREET, MA ON SHAN

J7362

Figure Title

SWEPT PATH OF PRIVATE CAR TRAVELLING FROM 3/F TO B/F

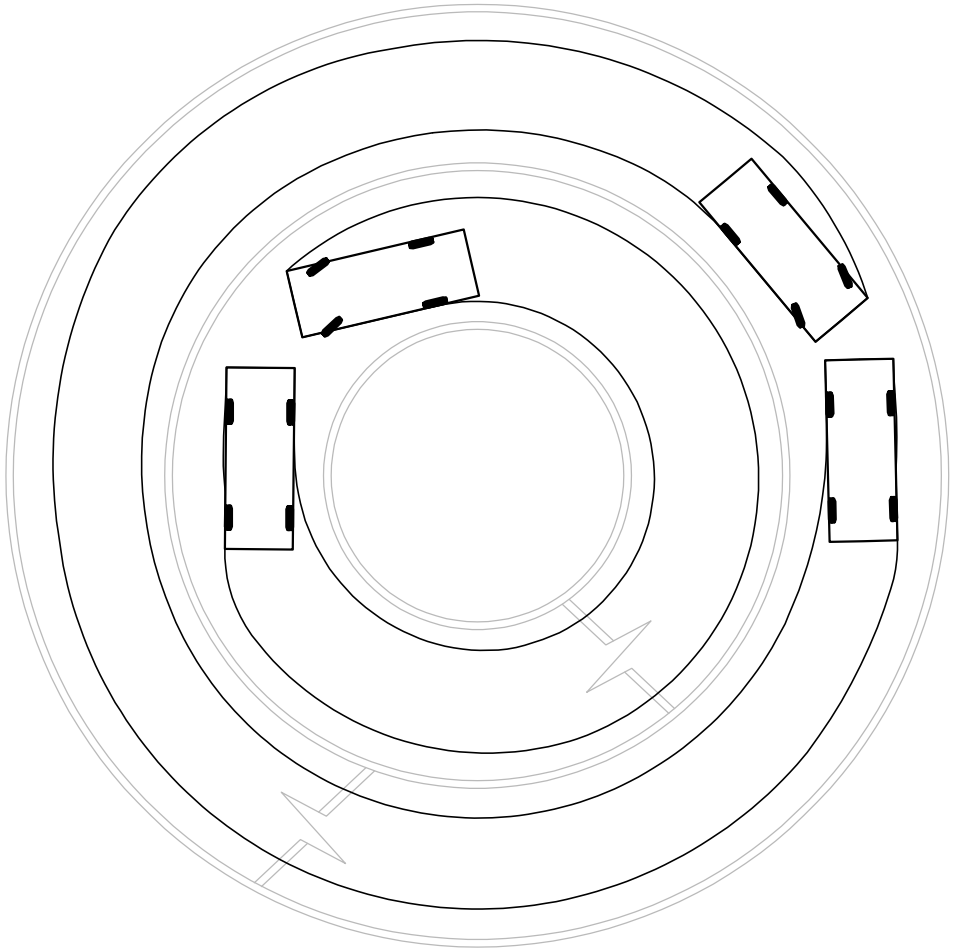
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SP/BF/108	R5A

Designed by	Drawn by	Checked by
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Scale in A4	Date
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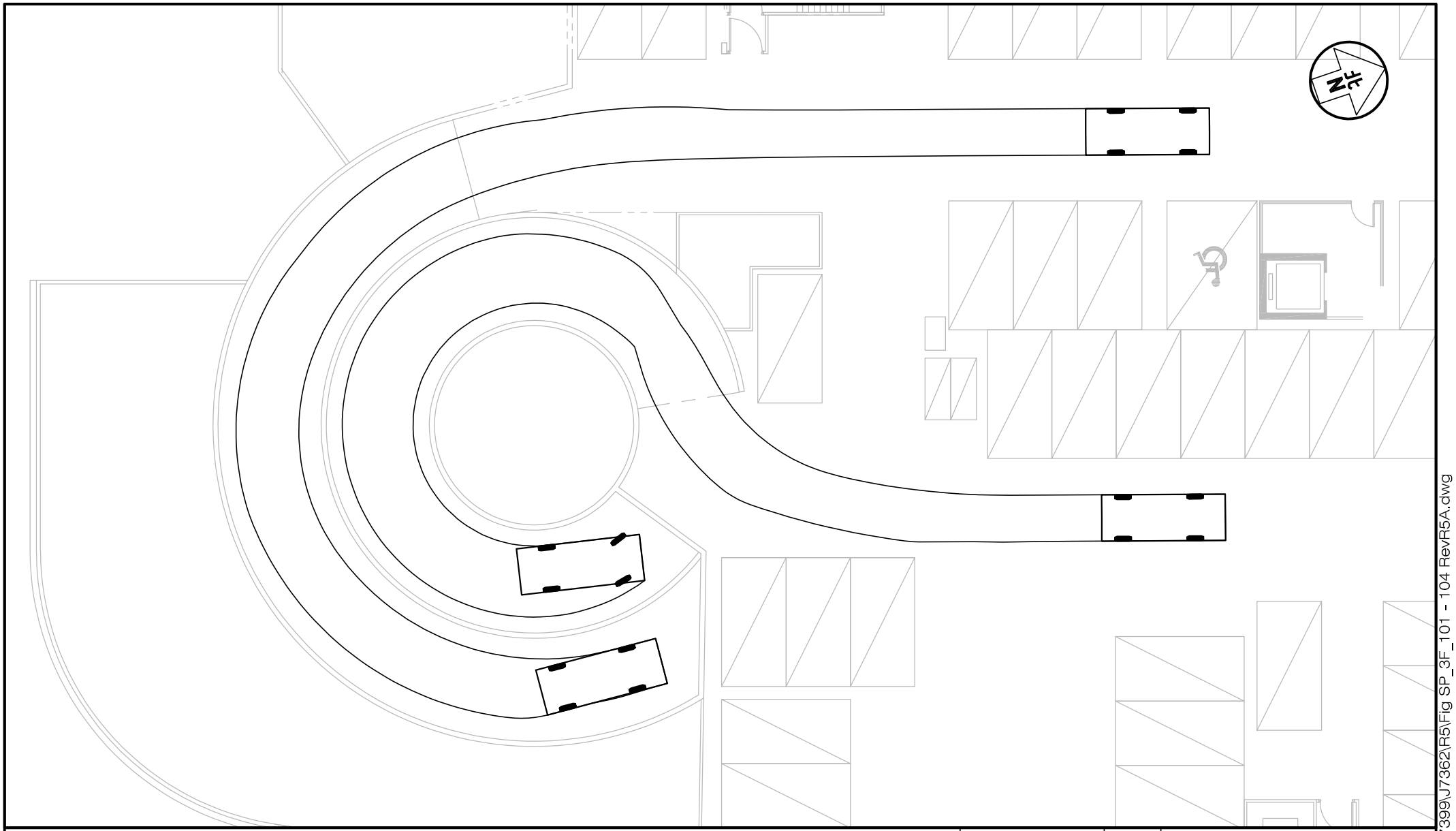


Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	
Figure Title	SWEPT PATH OF PRIVATE CAR TRAVELLING BETWEEN 1/F AND 3/F		

Figure No.	SP/1F/101	Revision	R5A
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Checked by	K C		
Scale in A4	1 : 200	Date	2 NOV 2026

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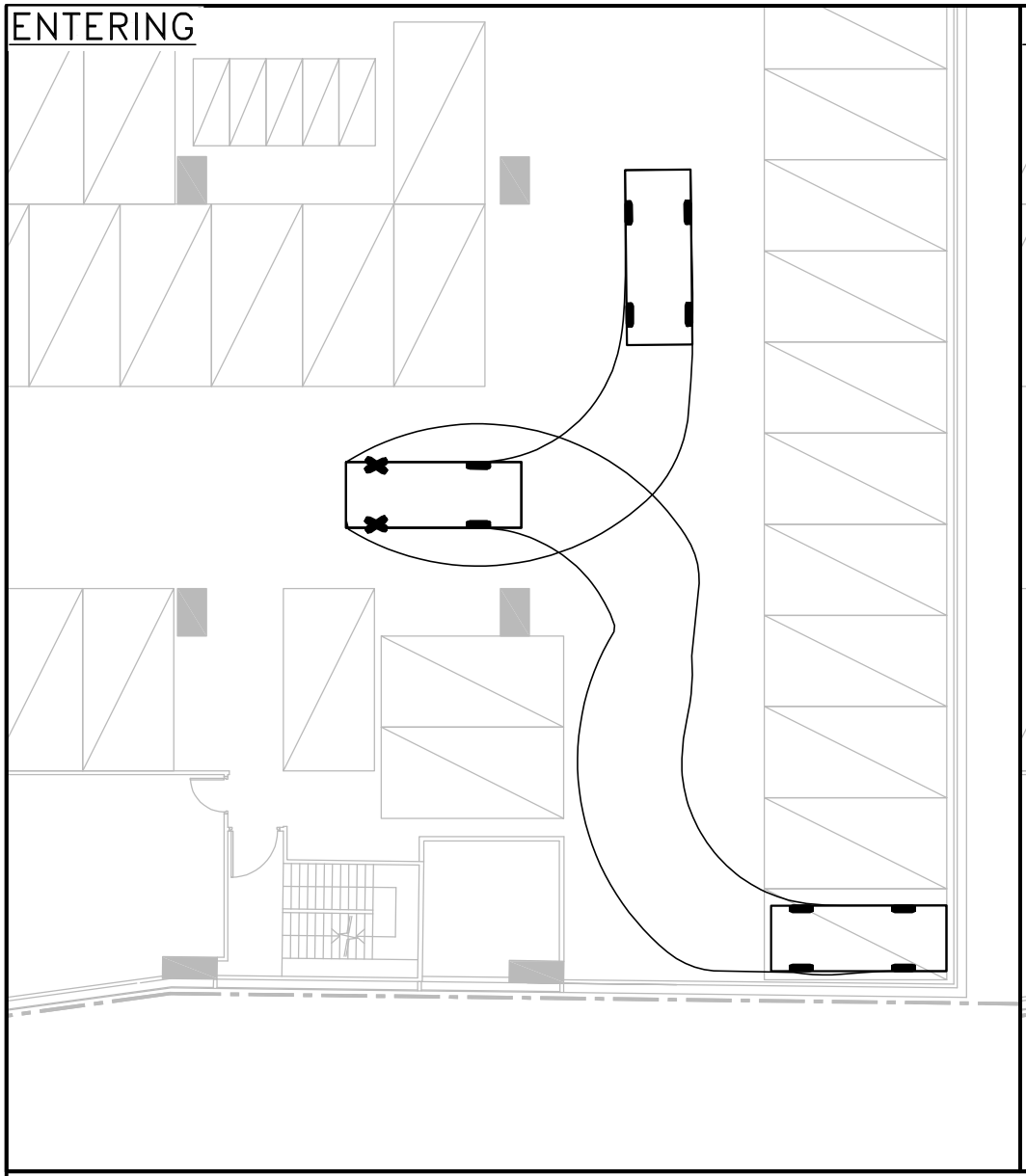


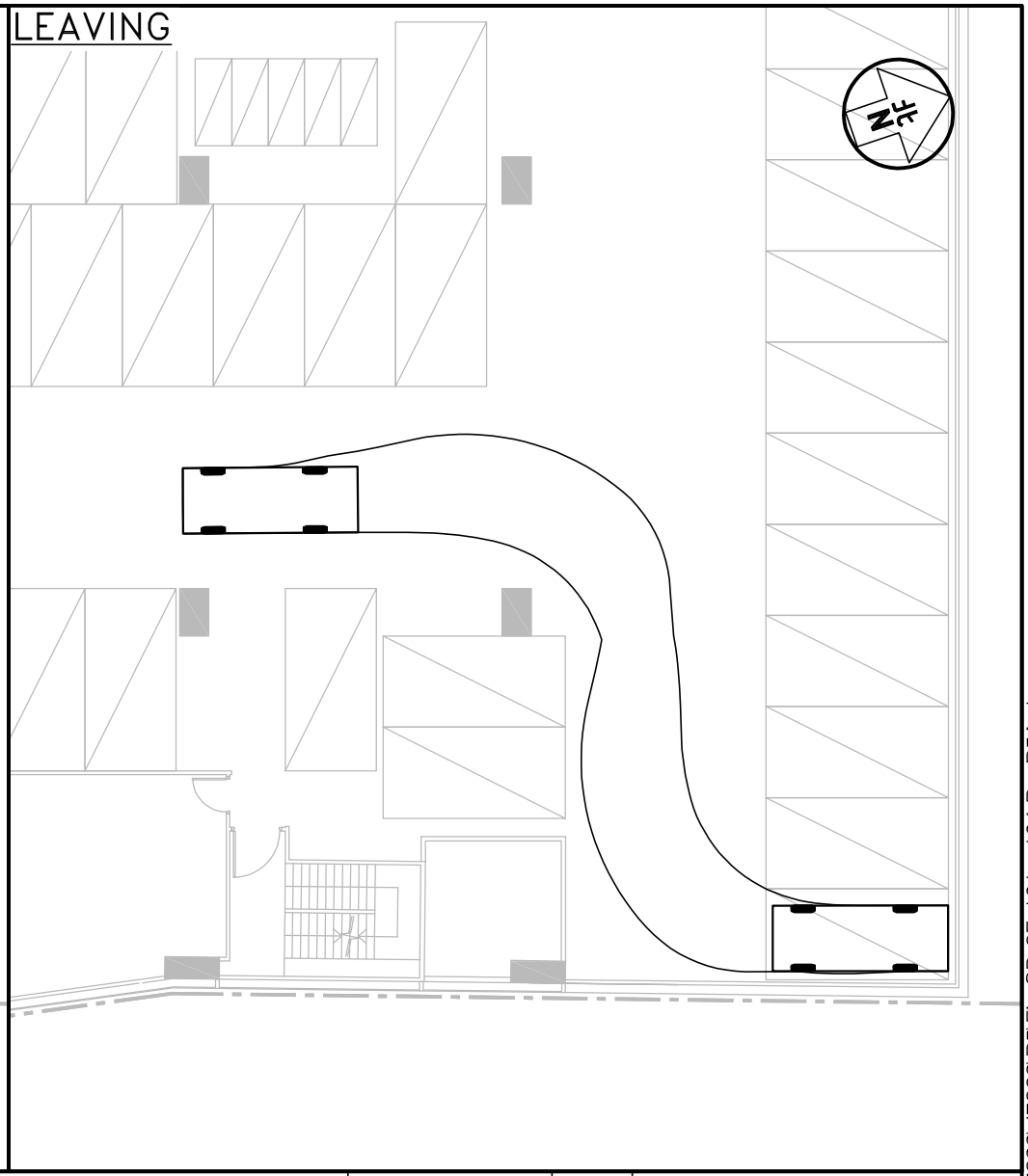
Project Title	WE GO MALL AT 16 PO TAI STREET, MA ON SHAN	J7362	
Figure Title	SWEPT PATH OF PRIVATE CAR TRAVELLING TO AND FROM 3/F		

Figure No.	SP/3F/101	Revision	R5A
Designed by	T H C	Drawn by	C C L
Checked by	K C		
Scale in A4	1 : 200	Date	2 NOV 2026

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Project Title

WE GO MALL AT 16 PO TAI STREET, MA ON SHAN

J7362

Figure No. SP/3F/102

Revision R5A

Figure Title

SWEPT PATH OF PRIVATE CAR ENTERING AND LEAVING THE CAR PARKING SPACE

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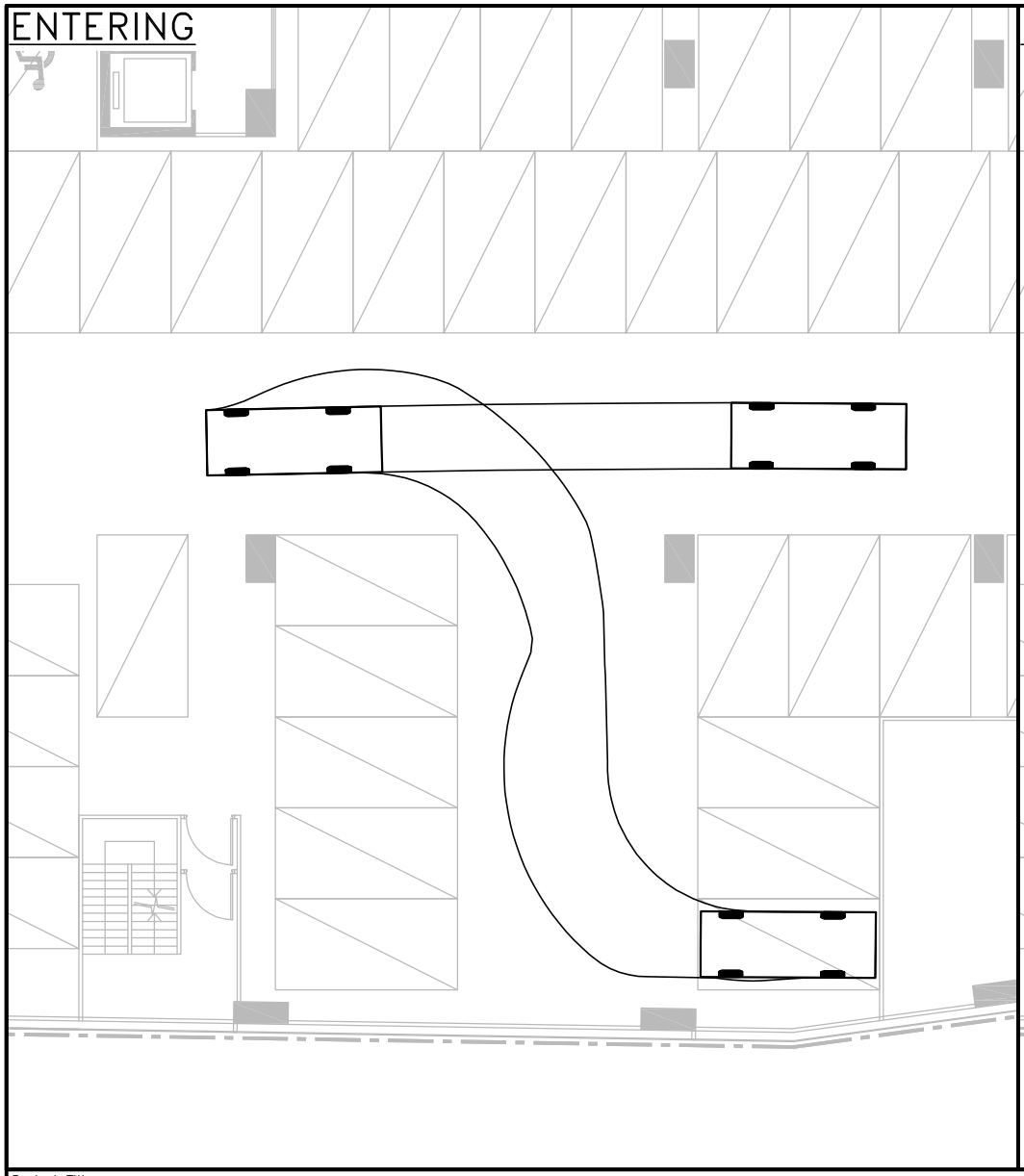
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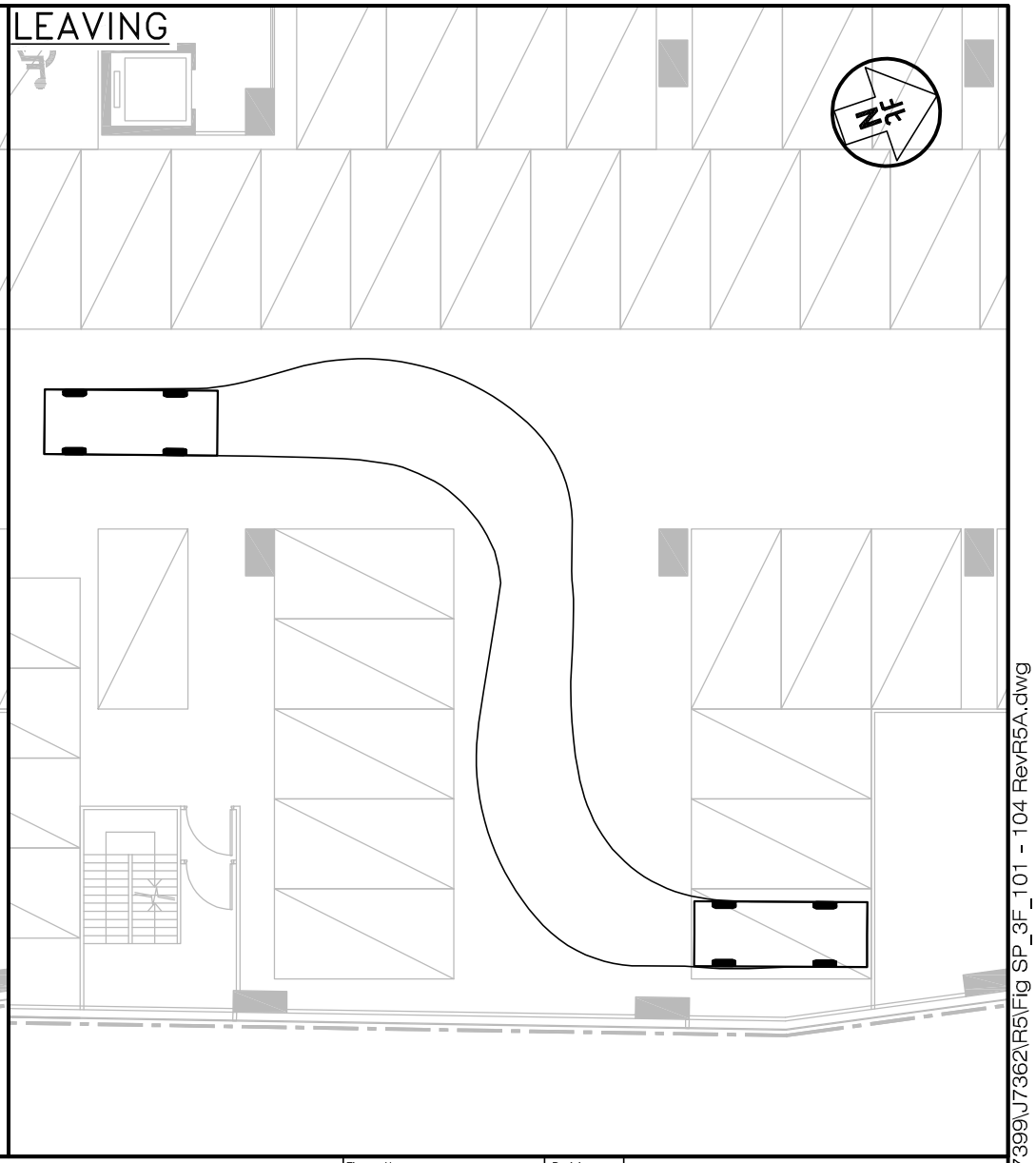
CKM Asia Limited
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Project Title

WE GO MALL AT 16 PO TAI STREET, MA ON SHAN

J7362

Figure No. SP/3F/103

Revision R5A

Figure Title

SWEPT PATH OF PRIVATE CAR ENTERING AND LEAVING THE CAR PARKING SPACE

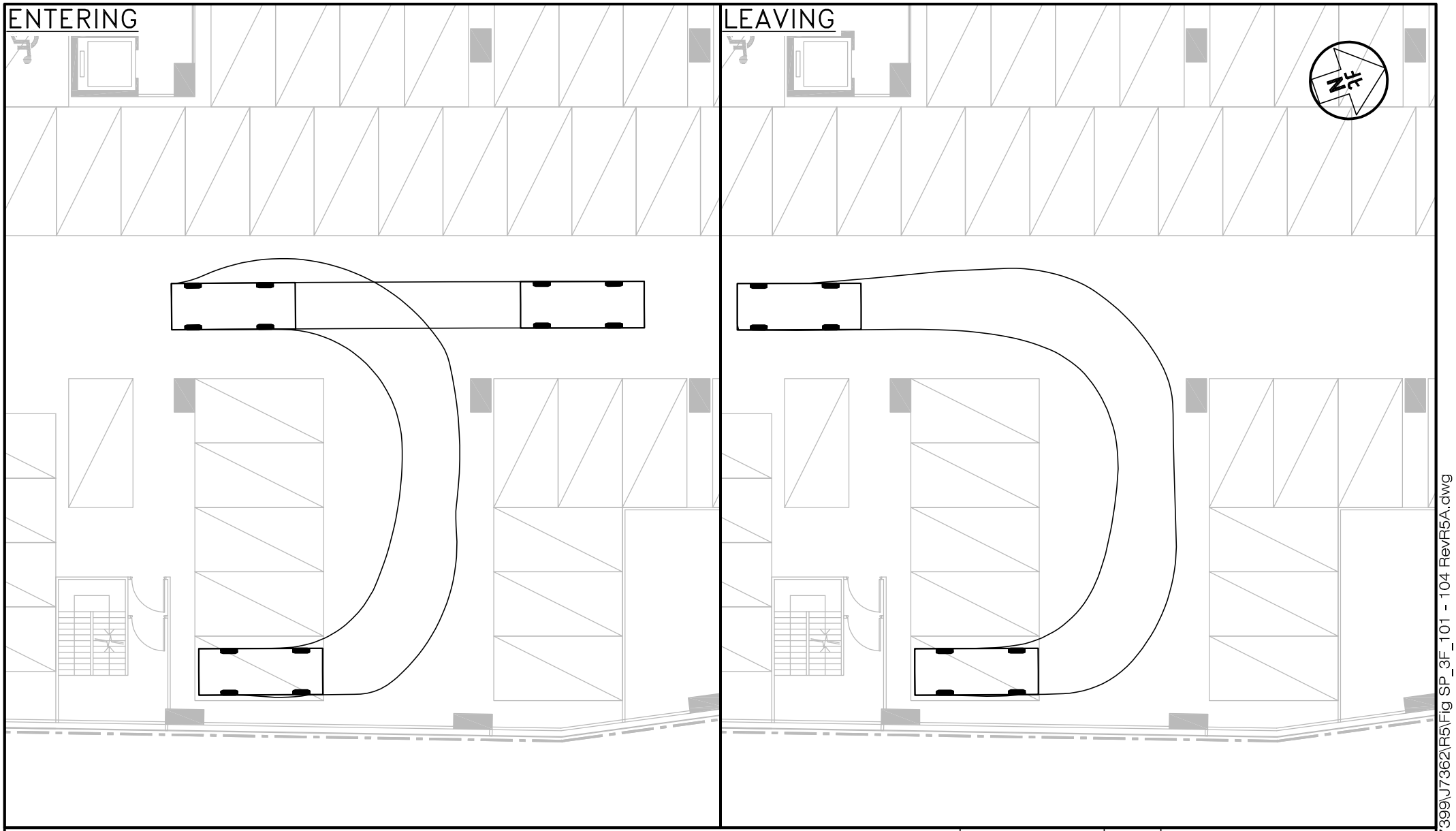
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T H C	C C L	K C

Scale in A4: 1 : 200

Date: 2 NOV 2026

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Project Title

WE GO MALL AT 16 PO TAI STREET, MA ON SHAN

J7362

Figure Title

SWEPT PATH OF PRIVATE CAR ENTERING AND LEAVING THE CAR PARKING SPACE

Figure No.	Revision
SP/3F/104	R5A

Designed by	Drawn by	Checked by
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Appendix D – Comments from Planning Department

CKM Asia Limited

From: Brandon Chi Wai HUNG/PLAND <bcwhung@pland.gov.hk>
Sent: Friday, 3 July 2026 6:02 PM
To: CKM Asia
Cc: Louis Ho Wing CHEUNG/PLAND; Jacky Koon Yin CHAN/PLAND; YF TSUI/PLAND
Subject: Re: Redevelopment of We Go Mall at 16 Po Tai Street, Ma On Shan - Traffic Forecast: Planned Developments
Attachments: Site Location.pdf; Table 4.4 of TIA.pdf; TD comment_250611.pdf; Previous Advice from PlanD_2025 02 13.pdf

Dear Mr. TANG,

Please find my comments as follows:

For Item No. 3 (Public Housing Development at Ma On Shan Tsuen Road), the development parameters is updated as 1,900 flats (Source).

Also, please add the following planned development where public consultation has been undertaken in 2023.

Planned Residential Care Home for the Elderly, Day Care Centre for the Elderly and Healthcare Centres at On Chun Street	G/IC	Residential Care Home for the Elderly (270 places)

Regards,
Brandon HUNG
TP/ST3, PlanD
Tel: 2158 6232

規劃署 Planning Department
透過規劃工作，使香港成為一個宜居、具競爭力和可持續發展的亞洲國際都會
We plan to make Hong Kong a Liveable • Competitive • Sustainable ASIA'S WORLD CITY

(GR, please file)

From: CKM Asia <mail@ckmasia.com.hk>
Sent: Monday, June 29, 2026 5:48 PM
To: Brandon Chi Wai HUNG/PLAND <bcwhung@pland.gov.hk>
Subject: RE: Redevelopment of We Go Mall at 16 Po Tai Street, Ma On Shan - Traffic Forecast: Planned Developments

Attn: Planning Department – Mr Brandon Hung (Town Plnr / Sha Tin 3)

Dear Mr Hung,

CKM Asia Limited

We refer to your email of 13th February 2025 with your advice on the planned developments to be included in the traffic forecast for the Traffic Impact Assessment (TIA) and Traffic Noise Impact Assessment (TNIA) for the captioned project in Ma On Shan. The location of subject site is shown in Figure 1.1.

With regards to the 3rd pre-submission of rezoning application in late-May 2026, Transport Department commented that *"the planned / committed development for the TIA shall be confirmed and agreed by PlanD"*.

As discussed this afternoon, we would like to confirm with your department that the planned developments presented in Table 4.4 of the TIA report, is up-to-date.

Should you have any queries, please do not hesitate to contact our Mr Raymond Yip at 2520 5990.

We look forward to your reply at the earliest convenience. Thank you for your attention.

Regards,

H.C. Tang

CKM Asia Limited
Traffic and Transportation Planning Consultants
Phone: (852) 2520 5990
Fax: (852) 2528 6343
Email: mail@ckmasia.com.hk
Website: www.ckmasia.com.hk
Address: 21/F, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong

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From: Jessie Sin Yee LAU/PLAND <jsylau@pland.gov.hk>
Sent: Thursday, 13 February 2025 10:31 AM
To: CKM Asia <mail@ckmasia.com.hk>
Cc: Elizabeth NG/PLAND <eng@pland.gov.hk>
Subject: Re: Redevelopment of We Go Mall at 16 Po Tai Street, Ma On Shan - Traffic Forecast: Planned Developments

Dear Mr. Tang,

Enclosed please find our mark-up on Table 2 for revision.

[See attachment "Comments on Planned Developments_20250213.pdf"]

Regards,
Jessie SY LAU
TP/ST3, STN DPO
Planning Department

Tel: 2158 6232

From: CKM Asia <mail@ckmasia.com.hk>
Sent: Wednesday, February 12, 2025 5:25 PM
To: Jessie Sin Yee LAU/PLAND <jsylau@pland.gov.hk>

Appendix E – Estimation of Traffic Generated by Planned Development

TABLE E1 ADOPTED TRIP GENERATION RATES

Use	Unit	Trip Generation Rates			
		AM Peak		PM Peak	
		IN	OUT	IN	OUT
Public / Subsidised Housing [1] [2]	pcu/hour/flat	0.0426	0.0622	0.0401	0.0297
Retail [1]	pcu/hour/100m^2	0.2434	0.2296	0.3563	0.3100
G/IC [3]	pcu/hour/100m^2	0.2267	0.1432	0.0358	0.1432

Source: [1] Volume 1 of TPDM

[2] To err on high side, trip generation rates for *"Subsidised Housing: HOS / PSPS with average flat size of 50m^2"* are adopted

[3] Survey at Caritas Community Centre – Tsuen Wan (with GFA of around 8,300m^2) at 9 Shing Mun Road, Tsuen Wan

TABLE E2 TRAFFIC GENERATION OF MAJOR PLANNED DEVELOPMENT

Ref.	Use	Quantity	Traffic Generation (pcu/hour)			
			AM Peak		PM Peak	
			IN	OUT	IN	OUT
1	PVP		15 [1]	35 [1]	35 [1]	12 [1]
2	Subsidised Housing	1,900 flats	81	119	77	57
3	Public Housing	1,900 flats	81	119	77	57
4	Light Public Housing		20 [2]	21 [2]	18 [2]	16 [2]
5	G/IC		20 [3]	28 [3]	18 [3]	6 [3]
6	Private Housing		47 [4]	68 [4]	49 [4]	40 [4]
7	Student Hostel		34 [5]	40 [5]	31 [5]	34 [5]
8	Public Housing	1,660 flats	71	104	67	50
		1,550m^2 retail	4	4	6	5
		2,140m^2 G/IC	5	4	1	4
9	Public Housing	1,820 flats	78	114	73	55
		1,700m^2 retail	5	4	7	6
		2,200m^2 G/IC	5	4	1	4
10	G/IC		8 [6]	7 [6]	7 [6]	7 [6]
11	G/IC		131 [7]	116 [7]	81 [7]	87 [7]
12	Mixed Use		707 [8]	981 [8]	846 [8]	738 [8]
13	G/IC		11	10	10	10
Total			**1,323**	**1,778**	**1,404**	**1,188**

Note: [1] extracted from TPB Application No. A/MOS/129

[2] extracted from TIA report for Light Public Housing at Hang Kwong Street

[3] extracted from TIA report for Amenity Complex in Area 103

[4] extracted from TPB Application No. Y/MOS/6

[5] extracted from TPB Application No. A/MOS/96

[6] extracted from TIA report for Cheung Muk Tau Holiday Centre Expansion

[7] extracted from TPB Application No. A/MOS/125

[8] extracted from TPB Application No. A/NE-SSH/142