

Annex D

Updated Traffic Impact Assessment

Proposed Conversion of part of the Pulse
into Hotel in “Other Specified Uses
(Beach Related Leisure Use)” and
“Government, Institution or Community” Zones
at No. 28 Beach Road, Repulse Bay

Traffic Impact Assessment
Updated Final Report
(2nd Revision)
7th August, 2025

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Prepared for: Goldshine Investment Limited

**Proposed Conversion of part of the Pulse
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1.0 INTRODUCTION

Background

- 1.1 The Subject Site is located at 28 Beach Road, Repulse Bay, Hong Kong. It is now occupied by a retail building, which is known as The Pulse (hereinafter "the Existing Development"). **Figure 1.1** shows the location of the Subject Site.
- 1.2 The Owner, i.e. Goldshine Investment Limited, intends to convert the upper 2 floors (1/F and UG/F) of the Existing Development into a hotel with 96 rooms. In addition, the existing changing room at B1/F will also be converted into an ancillary gym and spa for the hotel. With this conversion, the retail GFA will be reduced from existing 13,728m² to 5,841m² (hereinafter "the Proposed Conversion").
- 1.3 CKM Asia Limited, a traffic and transportation planning consultancy firm, has been commissioned by the Owner to prepare this Traffic Impact Assessment ("TIA") in support of the planning application for the Proposed Conversion. This TIA report has been updated in responses to the comments provided by Transport Department in March and **July 2025**.

Scope of Study

- 1.4 The main objectives of this study are as follows:
- To assess the existing traffic and pedestrian issues in the vicinity of the Subject Site;
 - To justify the provision of internal transport facilities;
 - To quantify the amount of traffic and pedestrian generated by the Proposed Conversion;
 - To examine the traffic and pedestrian impact on the local road network;
 - To identify any deficiencies in the road and pedestrian network in accommodating the expected traffic and pedestrian generation associated with the Proposed Conversion; and
 - To recommend traffic and pedestrian improvement measures, if necessary.

Contents of the Report

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

Chapter Two	- Describes the existing condition and surveys,
Chapter Three	- Outlines the Proposed Conversion,
Chapter Four	- Presents the traffic and pedestrian impact analyses, and
Chapter Five	- Summarises the overall conclusion.

2.0 THE EXISTING SITUATION

The Subject Site

- 2.1 The Subject Site is elongated with a length of some 260m, but has a narrow depth averaging at only 15m. It is bounded by Beach Road to the east, and the Repulse Bay Beach to the west.

The Existing Development

- 2.2 The Existing Development is a 6-storey retail-only building with some 13,728 m² GFA. For easy understanding, the existing building disposition is illustrated below:

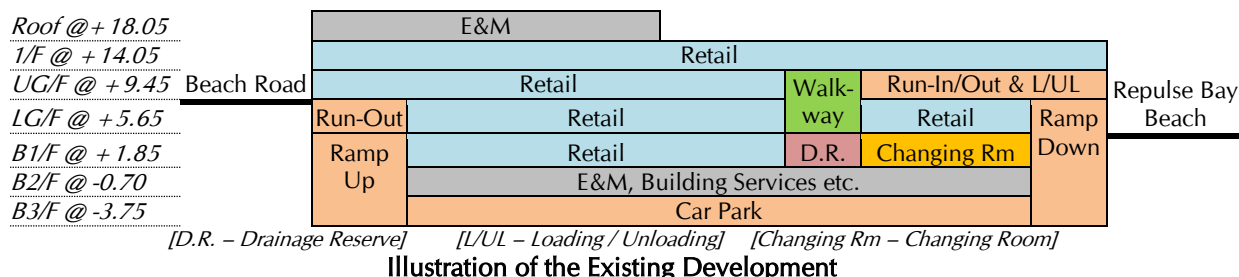


Illustration of the Existing Development

- 2.3 Internal transport facilities are provided on UG/F, and B3/F at present. Table 2.1 presents details of the existing internal transport provision.

TABLE 2.1 EXISTING INTERNAL TRANSPORT PROVISION

Facility	Number of Spaces / Bays	Location
Private Car Parking Spaces	Conventional: 26 nos. @ 5.0m (L) x 2.5m (W) x Min. 2.4m (H) Mechanical: 70 nos. on 35 sets of double deck car parking racks @ 5.0m (L) x 2.5m (W) Accessible: 1 no. @ 5.0m (L) x 3.5m (W) x Min. 2.4m (H) Total: 97 nos.	B3/F
Van-Type Goods Vehicle Loading / Unloading Bays	4 nos. @ 5.0m (L) x 2.5m (W)	UG/F (Indoor)
LGV Layby	1 no. @ 7.0m (L) x 3.5m (W)	UG/F (Semi-Open)

- 2.4 The headroom required for loading / unloading bays and layby are not stated in the Lease or the approved GBP. Hence, the headroom available at the loading / unloading area are measured on-site and summarised in Table 2.2.

TABLE 2.2 EXISTING HEADROOM OF LOADING / UNLOADING BAYS AND LAYBY

Facility	Location	Minimum Clear Headroom
Van-type Loading / Unloading Bays	UG/F (Indoor)	2.9m ^(Note 1)
LGV Layby	UG/F (Semi-Open)	3.8m ^(Note 1)

Note 1: Lowest headroom measured along the driveway, and at the loading / unloading bay or layby.

- 2.5 In addition, the Existing Development has 3 vehicular access points, including:
- (i) Run-out from the car park at the northern end of the building,
 - (ii) Run-in/out of the UG/F indoor loading / unloading area and run-in of the car park at the southern end of the building, and
 - (iii) Run-in/out of the UG/F semi-open LGV loading / unloading bay at the southernmost end.

- 2.6 Figures 2.1 - 2.5 show the existing internal transport layout, and locations of the 3 vehicular access points.

Existing Goods Delivery Operation

- 2.7 In view the Existing Development provides limited number and type of goods vehicle loading / unloading bays, a survey was conducted to understand the existing goods delivery operation. The Existing Development has 44 shops and a tenancy rate of 80% with 30 tenants when the questionnaire survey was conducted for a 2-week period from Sunday, 22nd June to Saturday, 5th July 2025. The questionnaire survey had a response rate of 83%, i.e. 25 out of 30 tenants responded [*Calculation: $25 / 30 \times 100\% = 83\%$*].
- 2.8 During the 2-week survey period, the maximum daily delivery was on Monday, 30th June 2025 with a total of 17 deliveries, of which 73% or 11 nos. used private car and goods van, and the remaining 27% or 6 nos. used LGV. The peak 2-hour period was from 1100 to 1300 hours with 6 deliveries, i.e. an average of 3 deliveries per hour. No M/HGV was reported during the 2-week survey period.
- 2.9 Some 80% of the deliveries were completed within 15 minutes, and the remaining 20% between 15 – 30 minutes.
- 2.10 If the Existing Development were fully occupied, i.e. a tenancy rate 100%, the estimated maximum delivery would be 4 per hour [*Calculation: $3 \times (1 + 20\%) = 3.6$, says 4*], including 3 private car / goods van and 1 LGV. This demand could be fulfilled by the 4 van-type loading / unloading bays and 1 LGV loading / unloading bay provided at the Existing Development as present.

The Road Network

- 2.11 Beach Road is a single carriageway 1-way local road connecting Repulse Bay Road to the north and South Bay Road to the south. On-street parking spaces, laybys for passenger pick-off / drop-off, and red minibus and taxi stands are provided along Beach Road. Vehicles exceeding the height of 4.1m are warned to enter Beach Road due to restricted headroom under Repulse Bay Road. Goods vehicles are prohibited to enter Beach Road between 12noon and 7pm on Saturday, and all day on Sundays and General Holidays.
- 2.12 South Bay Path is a single carriageway 2-way local road connecting Beach Road and South Bay Road. Goods vehicles are prohibited to enter South Bay Path between 12noon and 7pm on Saturday, and all day on Sundays and General Holidays.
- 2.13 South Bay Road is a single carriageway 2-way local road connecting Repulse Bay Road to the north and ends at the South Bay Beach.
- 2.14 Repulse Bay Road is a single carriageway 2-way Primary Distributor connecting Wong Nai Chung Gap Road to the north and continues as Stanley Gap Road to the south. It provides regional access to the Subject Site.

Pedestrian Facilities

- 2.15 In general, footpaths are provided along both sides of Beach Road fronting the Subject Site. Further north of the Subject Site, footpath is only provided along one side of Beach Road, i.e. the western side along Repulse Bay Beach. Pedestrian can reach the public transport service provided at Repulse Bay Road via a stairway which connects Beach Road and Repulse Bay Road.

Public Transport Services

- 2.16 The Subject Site is located close to public transport services, including franchised bus and green mini-bus (the "GMB") routes operate along Repulse Bay Road. **Figure 2.6** shows the stop locations of these public transport services in the vicinity, and Table 2.3 presents the details.

TABLE 2.3 PUBLIC TRANSPORT SERVICES OPERATING NEAR THE SUBJECT SITE

Route	Origin - Destination	Frequency (minutes)
CTB 6	Central (Exchange Square) ⇌ Stanley Prison	10 – 30
CTB 6A	Central (Exchange Square) → Stanley Fort Gate	20 ⁽¹⁾
CTB 6X	Central (Exchange Square) ⇌ Stanley Prison	10 – 25
CTB 63	North Point Ferry ⇌ Stanley Prison	30 ⁽¹⁾
CTB 65	North Point Ferry ⇌ Stanley Market	12 - 20 ⁽²⁾
CTB 66	Central (Exchange Square) ⇌ Ma Hang Estate	20 - 30 ⁽³⁾
CTB 73	Cyberport / Wah Fu (North) ⇌ Stanley Prison	12 – 30
CTB 260	Central (Exchange Square) ⇌ Stanley Prison	15 – 20
CTB 973	Tsim Sha Tsui (Mody Road) ⇌ Stanley	30 – 60
GMB 40	Causeway Bay ⇌ Stanley Village	10 – 20
GMB 40X	Causeway Bay ⇌ Stanley (Stanley Prison)	4 – 9
GMB 52	Aberdeen (Shek Pai Wan) ⇌ Stanley Prison	5 – 12
GMB N40	Causeway Bay ⇌ Stanley Village	20 ⁽⁴⁾
RMB	Mong Kok → Repulse Bay Beach	AM Service Only ⁽⁵⁾
	Repulse Bay Beach → Mong Kok	PM Service Only ⁽⁵⁾

Note: CTB – Citybus

GMB – Green Minibus

RMB – Red Minibus

⁽¹⁾ No service on Sundays and Public Holidays.

⁽²⁾ Service on Sundays and Public Holidays only.

⁽³⁾ AM and PM peak hours service. No service on Saturdays, Sundays and Public Holidays.

⁽⁴⁾ Overnight Services.

⁽⁵⁾ Limited services on Saturdays, Sundays, and Public Holidays during swimming season from April to September.

Existing Traffic Flows

- 2.19 To quantify the existing traffic flows during the swimming peak season in summer, manual classified counts were conducted during the AM and PM peak periods, i.e. from 0800 to 1000 hours and 1700 to 1900 hours, at selected junctions within the Area of Influence ("AOI") on Friday, 4th July, 2025 (weekday), and on Sunday, 6th July 2025 (weekend). The weather on both survey days were sunny and hot, and Table 2.4 presents the surveyed junctions.

TABLE 2.4 LIST OF SURVEYED JUNCTIONS

Ref.	Surveyed Junctions
J01	Junction of Repulse Bay Road / Beach Road
J02	Junction of Beach Road / South Bay Path
J03	Junction of South Bay Road / Beach Road
J04	Junction of South Bay Road / South Bay Path
J05	Junction of Repulse Bay Road / South Bay Road
J06	Junction of South Bay Road / South Bay Close

- 2.20 The AOI and locations of the above listed junctions are shown in **Figure 2.7**, and the existing junction layouts are shown in **Figures 2.8 - 2.12**.
- 2.21 The traffic counts were classified by vehicle type to enable traffic flows in passenger car units ("pcu") to be calculated. The AM peak hour are found to be 0800 to 0900 hours on a weekday, and 0900 to 1000 on a weekend; whereas the PM peak hour is found to be 1700 to 1800 for both weekday and weekend respectively. **Figures 2.13 and 2.14** present the existing AM and PM peak hour traffic flows established, in pcu/hour, for a weekday and a weekend respectively.

Performance of the Surveyed Junctions

- 2.22 Performance of surveyed junctions were calculated based on the existing traffic flows and the analysis was undertaken using the methods outlined in Volume 2 of the TPDM, which is published by the Transport Department. Table 2.5 presents the results and detailed calculations are found in **Appendix A**.

TABLE 2.5 EXISTING PEAK HOUR JUNCTION PERFORMANCE

Ref.	Junction	Type	Parameter	AM Peak Hour	PM Peak Hour
Weekday					
J01	J/O Repulse Bay Road / Beach Road	Priority	RFC	0.060	0.083
J02	J/O Beach Road / South Bay Path	Priority	RFC	0.035	0.043
J03	J/O South Bay Road / Beach Road	Priority	RFC	0.087	0.093
J04	J/O South Bay Road / South Bay Path	Priority	RFC	0.282	0.403
J05	J/O Repulse Bay Road / South Bay Road	Roundabout	RFC	0.453	0.425
J06	J/O South Bay Road / South Bay Close	Roundabout	RFC	0.226	0.255
Weekend					
J01	J/O Repulse Bay Road / Beach Road	Priority	RFC	0.085	0.135
J02	J/O Beach Road / South Bay Path	Priority	RFC	0.057	0.075
J03	J/O South Bay Road / Beach Road	Priority	RFC	0.155	0.166
J04	J/O South Bay Road / South Bay Path	Priority	RFC	0.430	0.545
J05	J/O Repulse Bay Road / South Bay Road	Roundabout	RFC	0.314	0.427
J06	J/O South Bay Road / South Bay Close	Roundabout	RFC	0.267	0.341

Note: RFC – Ratio of Flow to Capacity

- 2.23 The results in Table 2.5 indicate that the junctions analyzed operate with capacity during the weekday and weekend peak hours.

Existing Pedestrian Flow

- 2.24 To quantify the existing pedestrian flows, pedestrian counts were conducted during the AM and PM peak periods on a weekday, i.e. Friday, 4th July, 2025, and on a weekend day, i.e. Sunday, 6th July 2025, at the selected footpaths within the Area of Influence ("AOI"). The surveyed footpaths are found in Table 2.6, and their locations are illustrated in **Figure 2.15**.

TABLE 2.6 LIST OF SURVEYED FOOTPATHS

Ref.	Surveyed Footpaths
FP01	Stairway between Repulse Bay Road and Beach Road
FP02	Southern Footpath of Beach Road (outside Seaview Building)
FP03	Southern Footpath of Beach Road (outside Car Park / Repulse Bay Beach Building)
FP04	Northern Footpath of Beach Road (outside Beach Centre)
FP05	Southern Footpath of Beach Road (opposite South Bay Path)
FP06	Southern Footpath of Beach Road (opposite 49/53/55 Beach Road))
FP07	Northern Footpath of Beach Road (south of South Bay Road)
FP08	Footpath along Repulse Bay Beach (near Repulse Bay Beach Building)
FP09	Footpath along Repulse Bay Beach (outside the Subject Site)

Performance of the Surveyed Footpaths

- 2.25 Level-of-Service ("LOS") analysis was conducted, and the LOS grading follows TPDM Volume 6, Section 10.4. Table 2.7 summarize the pedestrian flows, and analysis results.

TABLE 2.7 EXISTING FOOTPATH OPERATIONAL PERFORMANCE

Footpath Section	Measured Width (m)	Effective Width (m)	AM Peak Hour		PM Peak Hour	
			2-way Pedestrian Flow (ped/hour)	Flow Rates [LOS] (ped/m/min)	2-way Pedestrian Flow (ped/hour)	Flow Rates [LOS] (ped/m/min)
Weekday						
FP01	3.5m	2.5m	149	1.0 [A]	432	2.9 [A]
FP02	2.5m	1.5m	64	0.7 [A]	85	0.9 [A]
FP03	3.0m	2.0m	56	0.5 [A]	199	1.7 [A]
FP04	1.8m	0.8m	68	1.4 [A]	30	0.6 [A]
FP05	2.8m	1.8m	59	0.5 [A]	231	2.1 [A]
FP06	1.8m	0.8m	47	1.0 [A]	90	1.9 [A]
FP07	1.5m	1.0m	11	0.2 [A]	13	0.2 [A]
FP08	4.0m	3.0m	200	1.1 [A]	284	1.6 [A]
FP09	3.5m	3.0m	163	0.9 [A]	273	1.5 [A]
Weekend						
FP01	3.5m	2.5m	272	1.8 [A]	736	4.9 [A]
FP02	2.5m	1.5m	317	3.5 [A]	176	2.0 [A]
FP03	3.0m	2.0m	120	1.0 [A]	207	1.7 [A]
FP04	1.8m	0.8m	82	1.7 [A]	42	0.9 [A]
FP05	2.8m	1.8m	113	1.0 [A]	221	2.0 [A]
FP06	1.8m	0.8m	74	1.5 [A]	78	1.6 [A]
FP07	1.5m	1.0m	11	0.2 [A]	7	0.1 [A]
FP08	4.0m	3.0m	317	1.8 [A]	701	3.9 [A]
FP09	3.5m	3.0m	288	1.6 [A]	568	3.2 [A]

- 2.26 Table 2.8 shows the footpaths analyzed operate with capacity during the weekday and weekend peak hours.

Existing Car Park Utilisation

- 2.27 The Existing Development provides ancillary car parking, and the maximum occupancy on the survey days are 32 cars on Friday, 4th July 2025 and 58 cars on Sunday, 6th July 2025.

Existing Layby Utilisation

2.28 A general layby is found along the northern kerbside of Beach Road opposite the Existing Development, and to the immediate east of South Bay Lane, where "*No Stopping Restriction*" is imposed between 0700 and 1900 hours, except for buses and taxi coach pick-up / drop-off. Utilisation survey was conducted at this general layby during the AM and PM peak periods on Friday, 4th July, 2025, and on Sunday, 6th July 2025. Table 2.8 presents the results.

TABLE 2.8 UTILISATION OF EXISTING GENERAL LAYBY ON BEACH ROAD

Date	Total Capacity (m-minute) [a]	Observed Occupancy (m-minute) [b]		Utilisation [b] / [a]	
		AM Peak Period (0800 - 1000)	PM Peak Period (1700 - 1900)	AM Peak Period (0800 - 1000)	PM Peak Period (1700 - 1900)
Weekday	5,760	1,249	2,583	22%	45%
Weekend	5,760	1,797	3,484	31%	60%

Note: Total Capacity = Length of Layby, i.e. 48m, x 120 minutes = 5,760 m-minute
Observed Occupancy = \sum Stopped Vehicle Length x Stopping Duration

2.29 Table 2.8 shows the surveyed layby operates at some 22% and 31% of its capacity during the weekday and weekend AM peak period, and some 31% and 60% during the weekday and weekend PM peak period.

3.0 THE PROPOSED CONVERSION

The Proposed Conversion

- 3.1 The Proposed Conversion involves changing some existing 7,887m² retail GFA to become a hotel with 96 rooms at 1/F and UG/F. In addition, the existing changing rooms at B1/F will also be converted into an ancillary gym and spa for the hotel. Whereas, the existing retail use on LG/F and B1/F will remain.
- 3.2 Table 3.1 compares the development parameters for the Existing Development and the Proposed Conversion

TABLE 3.1 COMPARISON ON DEVELOPMENT PARAMETERS

Use	Existing Development	Proposed Conversion	Difference
Retail	13,728m ² GFA (1/F, UG/F, LG/F, B1/F, and B2/F)	About 5,841m ² GFA (LG/F, B1/F [Part] and B2/F) ^(Note 1)	-7,887m ² GFA
Hotel	-	96 rooms with GFA of about 6,590m ² , including some 300m ² GFA of restaurant (1/F, UG/F and B1/F [Part])	+ 96 rooms (+ about 6,590m ² GFA)
Others	-	Car parking spaces and facilities etc.	+ 1,297 m ² GFA
TOTAL	13,728m² GFA	13,728m² GFA	No change

Note 1: According to the Approved GBP, some existing E&M facilities on B2/F is GFA accountable, and these GFA is included as Retail GFA under the Proposed Conversion for the purpose of technical assessment.

- 3.3 For easy understanding, the disposition of the Proposed Conversion is illustrated below:

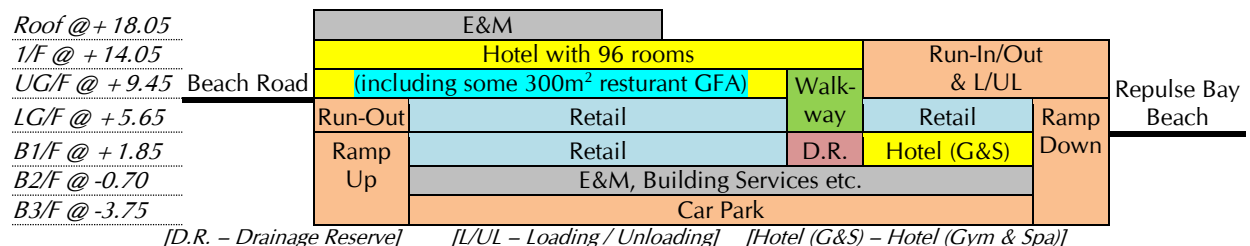


Illustration of the Proposed Conversion

Internal Transport Facilities

- 3.4 The internal transport facilities provided for the Proposed Conversion agree with the recommendation of the Hong Kong Planning Standards and Guidelines ("HKPSG"), and is compared in Table 3.2.

TABLE 3.2 COMPARISON OF THE PROVISION OF INTERNAL TRANSPORT FACILITIES

Use	HKPSG Recommendation (Retail GFA = 5,841m ² GFA, and Hotel with 96 rooms, including some 300m ² GFA of restaurant)	Proposed Provision
Car Parking Spaces		
Retail	1 car parking space per 150 – 300 m ² GFA Minimum: 5,841 ÷ 300 = 19.5, say 20 nos. Maximum: 5,841 ÷ 150 = 38.9, say 39 nos.	50 nos., including: - 49 nos. regular @ 5.0m (L) x 2.5m (W) x min. 2.4m (H) - 1 no. accessible @ 5.0m (L) x 3.5m (W) x min. 2.4m (H) > HKPSG Maximum, OK
Hotel	1 car parking space per 100 rooms 96 ÷ 100 = 1.0, say 1 nos. 0.5 – 1 car parking space per 200m ² GFA of conference and banquet facilities Minimum: 300 x 0.5 ÷ 200 = 0.8, say 1 no. Maximum: 300 x 1.0 ÷ 250 = 1.5, say 2 nos	
TOTAL	Minimum: 20 + 1 + 1 = 22 nos. Maximum: 39 + 1 + 2 = 42 nos.	
Motorcycle Parking Spaces		
Overall	5% - 10% of car parking space provided Minimum: 50 x 5% = 2.5, say 3 nos. Maximum: 50 x 10% = 5, say 5 nos.	5 nos. @ 2.4m (L) x 1.0m (W) x min. 2.4m (H) = HKPSG Maximum, OK
Goods Vehicle Loading / Unloading Bays		
Retail	1 loading / unloading bay per 800 – 1,200 m ² GFA, with 35% HGV and 65% LGV Minimum: 5,841 ÷ 1,200 = 4.8, say 5 nos. Maximum: 5,841 ÷ 800 = 7.3, say 8 nos.	9 nos., including - 2 nos. HGV @ 11.0m (L) x 3.5m (W) x min. 4.7m (H), - 2 nos. LGV @ 7.0m (L) x 3.5m (W) x min. 3.6m (H), and - 5 nos. Van-type @ 5.0m (L) x 2.5m (W) x min. 2.4m (H) = HKPSG Maximum with deviation on type of bays provided, OK [Remarks: Only van-type goods vehicle loading / unloading bays are provided in the Existing Development.]
Hotel	0.5 – 1 loading / unloading bay per 100 rooms Minimum: 96 x 0.5 ÷ 100 = 0.5, say 1 no. Maximum: 96 x 1.0 ÷ 100 = 1.0, say 1 no.	
TOTAL	Minimum: 6 + 1 = 7 nos. HGV: 7 x 35% = 2.5, say 3 nos. LGV: 7 – 3 = 4 nos. Maximum: 8 + 1 = 9 nos. HGV: 9 x 35% = 3.2, say 4 nos. LGV: 9 – 4 = 5 nos.	
Layby for Taxi and Private Cars		
Retail	No Recommendation	2 nos. @ 5.0m (L) x 2.5m (W) x min. 2.4m (H) = HKPSG, OK
Hotel	For Taxi and Private Cars: Minimum 2 nos. for ≤299 rooms	
Layby for Single-Deck Tour Bus		
Retail	No Recommendation	1 no. @ 12.0m (L) x 3.5m (W) x min. 3.8m (H) = HKPSG, OK
Hotel	For Single-Deck Tour Bus: Minimum 1 nos. for ≤299 rooms	

Car Parking Spaces

- 3.5 Table 3.2 shows that the number of private car parking spaces provided satisfies the HKPSG maximum recommendation for both retail and hotel uses.

Motorcycle Parking Spaces

- 3.6 Table 3.2 also shows that the number of motorcycle parking spaces satisfies the HKPSG maximum recommendation. Considering the Existing Development does not provide motorcycle parking space, the introduction of motorcycle parking spaces for the Proposed Conversion is a merit.

Goods Vehicle Loading / Unloading Bays

- 3.7 Table 3.2 shows that the number of goods vehicle loading / unloading bays provided satisfies the HKPSG maximum recommendation. The Proposed Conversion offers a merit which is the introduction of HGV loading / unloadings bays, currently not provided within the Existing Development, as well as an additional LGV loading / unloading bay.

- 3.8 To enable LGV and HGV to access the existing loading / unloading area at the Existing Development, portion of the 1/F above the loading / unloading area will be demolished as part of the Proposed Conversion in order to increase the clear headroom available.

Layby for Taxi and Private Cars

- 3.9 Table 3.2 shows that the number of layby for private car and taxi provided satisfies the HKPSG recommendation. Provision of 2 laybys for 96 rooms is equivalent to 1 layby per 48 rooms, which is 3 times more than the HKPSG recommendation of 2 laybys per 299 rooms, i.e. 1 layby per 149.5 rooms [Calculation $149.5 \div 48 = 3.1$].

Layby for Single-deck Tour Bus Parking Space

- 3.10 Table 3.2 shows that the number of layby for single-deck tour bus provided satisfies the HKPSG recommendation. Provision of 1 layby for 96 rooms is 3 times more than the HKPSG recommendation of 1 layby per 299 rooms [Calculation $299 \div 96 = 3.1$].

Internal Transport Layout

- 3.11 Figures 3.1 and 3.2 present the internal transport layout at UG/F and B3/F for the Proposed Conversion. The 3 existing vehicular access points at Beach Road remain unchanged, but the existing entry drop bar at UG/F will be relocated to B3/F to enable vehicle queue space to increase from some 25m, or equivalent to 4 vehicles, to some 170m, or equivalent to 28 vehicles, i.e. 7 times increase.

- 3.12 Swept path analyses using CAD-based program were conducted to ensure ease of vehicle manoeuvring with the Proposed Conversion. No manoeuvring issue is found. The swept path analysis drawings are found in the **Appendix B**.

- 3.13 Visibility assessments meeting the requirement as stipulated in the TPDM at the 3 existing vehicular access points are performed and illustrated in **Figure 3.3**.

Traffic Generation

- 3.14 Traffic generation for the Existing Development and the Proposed Conversion are estimated based on the retail and hotel trip rates found in the TPDM, and are presented in below paragraphs.

Weekday Trip Rates

3.15 Table 3.3 presents the trip rates for retail and hotel obtained from the TPDM for weekday AM and PM peak hour.

TABLE 3.3 ADOPTED WEEKDAY TRIP RATES

Use	Unit	Adopted Trip Rates (TPDM Upper Limit)			
		AM Peak Hour		PM Peak Hour	
		Generation	Attraction	Generation	Attraction
Retail	pcu/100m ² /hr	0.3307	0.3342	0.3839	0.4504
Hotel	pcu/room/hr	0.1814	0.2082	0.1697	0.2183

Weekend Trip Rates

3.16 Since the TPDM has no weekend trip rates, these are produced with (i) reference to the weekday trip rates presented in Table 3.3, and (ii) the weekend / weekday factor derived from surveys conducted at the Existing Development, and at a similar hotel, i.e the WM Hotel, which is located at 28 Wai Man Road, Sai Kung. The surveys were conducted on Friday, 4th July, 2025, and Sunday, 6th July 2025.

3.17 Similar to the Subject Site, the WM Hotel is also located in a "remote" leisure area with good access by both private and public transport. It is noted that the WM Hotel with 260 rooms provides only 6 free shuttle bus trips a day with 75 minute headway using vehicles with no more than 30 seats.

3.18 Other "remote" leisure hotels were considered, but found to be not suitable, and these include:

- i) The Pier Hotel at 9 Pak Sha Wan Street in Sai Kung with 40 guestrooms is found to have very low trip rates. If these trip rates are adopted, the traffic generation would be under-estimated;
- ii) Gold Coast Hotel in Tuen Mun, and the hotels in the Hong Kong Disneyland Resort, have more guestrooms, i.e. over 400 with frequent shuttle service. These hotels do not have similar operational characteristic; and
- iii) The Auberge Discovery Bay Hong Kong and the Silvermine Resort Hotel are located on Lantau Island, with restricted access by both private and public transport. These hotels have different transport characteristics, and are not considered.

3.19 With reference to the latest "Hotel Room Occupancy Report" published by Hong Kong Tourism Board in June 2025, the monthly occupancy of hotel rooms in the New Territories was 83% to 93% between January and June 2025; and 90% for July 2024. The occupancy in July 2025 is assumed to be similar to July 2024, hence, the hotels are assumed to be near full occupancy when the surveys were conducted.

3.20 Results of the trip generation surveys and the derived weekend / weekday ratios for the Existing Development and the WM Hotel are summarised in Tables 3.4 and 3.5 respectively.

TABLE 3.4 RESULTS OF TRIP GENERATION SURVEYS AND THE DERIVED WEEKEND / WEEKDAY RATIO AT THE EXISTING DEVELOPMENT

Item	AM Peak Hour				PM Peak Hour			
	Generation (pcu/hour)		Attraction (pcu/hour)		Generation (pcu/hour)		Attraction (pcu/hour)	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Observed Number of Trips	9	15	13	19	15	23	12	21
Weekend / Weekday Ratio	1.667		1.462		1.533		1.750	

TABLE 3.5 RESULTS OF TRIP GENERATION SURVEYS AND THE DERIVED WEEKEND / WEEKDAY RATIO AT THE WM HOTEL

Item	AM Peak hour				PM Peak Hour			
	Generation (pcu/hour)		Attraction (pcu/hour)		Generation (pcu/hour)		Attraction (pcu/hour)	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Observed Number of Trips	17	25	28	41	31	53	35	57
Weekend / Weekday Ratio	1.471		1.464		1.710		1.629	

3.21 Based on Tables 3.4 and 3.5, the derived weekend trip rates are presented in Table 3.6.

TABLE 3.6 WEEKEND TRIP RATES ADOPTED FOR THE PROPOSED CONVERSION

Use	Parameter	Weekend Trip Rates			
		AM Peak Hour		PM Peak Hour	
		Generation	Attraction	Generation	Attraction
Retail (Table 3.3 x Table 3.4)	pcu/100m ² /hr	0.5513	0.4886	0.5885	0.7882
Hotel (Table 3.3 x Table 3.5)	pcu/room/hr	0.2668	0.3048	0.2902	0.3556

Net Change in Traffic Generation

3.22 Tables 3.7 and 3.8 show the net change in calculated weekday and weekend traffic generation between the Existing Development and Proposed Conversion.

TABLE 3.7 NET CHANGE IN WEEKDAY TRAFFIC GENERATION

Use	Trip Generation (pcu/hour)					
	AM Peak Hour			PM Peak Hour		
	Generation	Attraction	2-Way	Generation	Attraction	2-Way
Existing Development (13,728m² Retail GFA)						
Retail	45	46	91	53	62	115
Total [a]	45	46	91	53	62	115
Proposed Conversion (5,841m² Retail GFA and 96-room Hotel)						
Retail	19	20	39	22	26	48
Hotel	17	20	37	16	21	37
Total [b]	36	40	76	38	47	85
Net Change in Traffic Generation						
Net Change [b] – [a]	-9	-6	-15	-15	-15	-30

TABLE 3.8 NET CHANGE IN WEEKEND TRAFFIC GENERATION

Use	Trip Generation (pcu/hour)					
	AM Peak Hour			PM Peak Hour		
	Generation	Attraction	2-Way	Generation	Attraction	2-Way
Existing Development (13,728m² Retail GFA)						
Retail	76	67	143	81	108	189
Total [a]	76	67	143	81	108	189
Proposed Conversion (5,841m² Retail GFA and 96-room Hotel)						
Retail	32	29	61	34	46	80
Hotel	26	29	55	28	34	62
Total [b]	58	58	116	62	80	142
Net Change in Traffic Generation						
Net Change [b] – [a]	-18	-9	-27	-19	-28	-47

Pedestrian Generation

- 3.23 To derive the pedestrian generation rates for the hotel use within the Proposed Conversion, pedestrian generation surveys was conducted in July 2025 at the WM Hotel, and additional survey results obtained from the CKM in-house database are referenced. Table 3.9 presents details of the surveyed hotels.

TABLE 3.9 DETAILS OF THE SURVEYED HOTELS

Hotel Address	No. of Rooms	Survey Date
28 Wai Man Road, Sai Kung	260	July 2025
3 Kau U Fong, Central	162	March 2018
263 Hollywood Road, Central	142	March 2018

- 3.24 Although 2 of the above surveyed hotels are located in Central and Western ("C&W") District where there is convenient access to public transport services, the pedestrian generations of these 2 hotels are expected to be generally higher; and in view that the pedestrian generation rates are relatively higher, the analysis conducted would give more conservative results. Based on the "Hotel Room Occupancy Report", the hotel is Sai Kung is assumed to have occupancy of 90% when the survey was conducted, at for the hotels in C&W, the occupancy for March 2018 is 91%.
- 3.25 Tables 3.10 and 3.11 summarise the results of weekday and weekend pedestrian surveys, and the derived generation rates respectively.

TABLE 3.10 RESULTS OF WEEKDAY PEDESTRIAN GENERATION SURVEYS
AND DERIVED PEDESTRIAN GENERATION RATES

Period	AM Peak Hour		PM Peak Hour	
	Generation	Attraction	Generation	Attraction
Observed Pedestrian Generation (ped / hour)				
28 Wai Man Road, Sai Kung	17	32	62	85
3 Kau U Fong, Central	18	51	28	54
263 Hollywood Road, Central	13	36	39	15
Pedestrian Generation Rates (ped / hour / room)				
28 Wai Man Road, Sai Kung (260 rooms)	0.0654	0.1231	0.2385	0.3269
3 Kau U Fong, Central (162 rooms)	0.1111	0.3148	0.1728	0.3333
263 Hollywood Road, Central (142 rooms)	0.0915	0.2535	0.2746	0.1056

TABLE 3.11 RESULTS OF WEEKEND PEDESTRIAN GENERATION SURVEYS
AND DERIVED PEDESTRIAN GENERATION RATES

Period	AM Peak Hour		PM Peak Hour	
	Generation	Attraction	Generation	Attraction
Observed Pedestrian Generation (ped / hour)				
28 Wai Man Road, Sai Kung	26	42	102	135
3 Kau U Fong, Central	20	58	33	48
263 Hollywood Road, Central	15	42	45	38
Pedestrian Generation Rates (ped / hour / room)				
28 Wai Man Road, Sai Kung (260 rooms)	0.1000	0.1615	0.3923	0.5192
3 Kau U Fong, Central (162 rooms)	0.1235	0.3580	0.2037	0.2963
263 Hollywood Road, Central (142 rooms)	0.1056	0.2958	0.3169	0.2676

- 3.26 To err on the high side, the highest pedestrian generation rates presented in Tables 3.10 and 3.11 are adopted, and the calculated pedestrian generation of the Proposed Conversion is presented in Table 3.12.

TABLE 3.12 PEDESTRIAN GENERATION OF PROPOSED CONVERSION

Period	AM Peak Hour		PM Peak Hour	
	Generation	Attraction	Generation	Attraction
Adopted Pedestrian Generation Rates (ped / hour / room)				
Weekday	0.1111	0.3148	0.2746	0.3333
Weekend	0.1235	0.3580	0.3923	0.5192
Pedestrian Generation (ped / hour)				
Weekday	11	30	26	32
Weekend	12	34	38	50

Note: Proposed Conversion has 96 rooms, i.e. Pedestrian Generation = Pedestrian Generation Rates x 96 rooms.

Proposed Traffic Management

- 3.27 To further reduce the potential traffic impact on Beach Road associated with the Proposed Conversion, the Applicant undertakes to implement the following traffic management measures:

(i) Recommended Access Route

- 3.28 The Applicant will publicise the recommended access route to the Proposed Conversion on the official website, i.e. to use South Bay Road and South Bay Path, which is shown in Figure 3.4. This measure aims to discourage vehicles from entering Beach Road from Repulse Bay Road, hence, reducing traffic flow along Beach Road.

(ii) Use of Single-deck Tour Bus Layby

- 3.29 The Proposed Conversion has only 96 rooms and is a high tariff luxury accommodation; hence, the number of tour groups is expected to be negligible. Therefore, the use of single-deck tour bus by hotel guests is expected to be rare. Nevertheless, should there be tour groups, advanced arrangement will be made to ensure that only 1 single-deck tour bus or private light bus would use the layby.

- 3.30 Hotel staff will be deployed to monitor the maneuvering of tour bus and ensure the pedestrian passage between Beach Road and the Repulse Bay Public Toilet is not blocked. The staff will also direct guests to the hotel lobby and not wait at the layby or the adjoining public footpath. All departing guests must wait within the hotel lobby, and only proceed to the layby after the vehicle has arrived. Figure 3.5 shows the pedestrian access route between the single-deck tour bus layby and the hotel lobby.

(iii) Use of Goods Vehicles Loading / Unloading Bays

- 3.31 As in the existing condition, there is no barrier gate to restrict vehicles from entering the loading / unloading area at UG/F from Beach Road, and this operational condition shall be maintained. In addition, vehicles manoeuvring within the loading / unloading area shall be closely monitored by the management office; hence, incoming vehicles queue back onto Beach Road is not anticipated.
- 3.32 The management office will request all shop tenants and the hotel operator to carry out loading / unloading during the off-peak period on weekdays and only during the early morning on weekend and public holidays.
- 3.33 With the Proposed Conversion, retail GFA is reduced and the demand for goods loading / unloading is expected to reduce accordingly. Therefore, the operation of the loading / unloading bays is expected to improve compared to the existing condition.

(iv) Use of Taxi / Private Car Layby

- 3.34 The taxi / private car layby at UG/F is for use by taxis only and all private car pick-up / drop-off will be directed to use the laybys at B3/F. Hence, the conflict between vehicles using the taxi / private car layby with goods vehicles using the loading / unloading bays is minimised.

4.0 TRAFFIC IMPACT

Design Year

- 4.1 The Proposed Conversion is anticipated to complete in 2027 and the design year adopted for this traffic study is 2030, i.e. 3 years after completion.

Historic Traffic Growth

- 4.2 Table 4.1 presents the historic annual average daily traffic ("AADT") from the Annual Traffic Census ("ATC") published by the Transport Department for roads located nearby.

TABLE 4.1 AADT OF ATC STATIONS LOCATED NEAR THE SUBJECT SITE

Station No.	1011	1245	1835	2603	1618	1223	OVERALL
Road	Repulse Bay Road & Stanley Gap Road	Repulse Bay Road	Repulse Bay Road	Beach Road	Island Road	Wong Chuk Hang Road	
From	South Bay Road	Wong Nai Chung Gap Road	Island Road	Repulse Bay Road	Deep Water Bay Road	Nam Fung Road	
To	Tai Tam Road	Island Road	South Bay Road	South Bay Road	Repulse Bay Road	Shouson Hill Road E. Junction	
Year	Annual Average Daily Traffic (vehicles / day)						
2016	15,800	7,980	21,700	2,120	20,190	19,080	86,870
2017	15,500	7,910	21,760	2,530	19,960	18,860	86,520
2018	15,650	6,910	21,650	2,550	19,860	18,210	84,830
2019	15,490	9,020	21,890	2,890	20,070	16,040	85,400
2020	14,340	8,480	21,150	2,560	21,750	15,500	83,780
2021	15,680	8,810	22,730	2,910	24,620	16,750	91,500
2022	14,930	8,080	21,390	3,000	23,420	15,930	86,750
2023	15,230	8,030	21,870	3,020	23,940	20,140	92,230
Average Annual Growth (2016 – 2023) =							+0.9%

- 4.3 Table 4.1 shows that the traffic growth in vicinity is +0.9% per annum. It should be noted that the AADT for years 2020, 2021 and 2022 are disregarded due to the impact of the COVID-19 pandemic, but shown for reference only.

Population Projection

- 4.4 Reference is made to the "Projections of Population Distribution 2023 - 2031" for Southern District, published by the Planning Department and is presented in Table 4.2.

TABLE 4.2 PROJECTED POPULATION FOR SOUTHERN DISTRICT

Year	Population in Southern District
2025	259,600
2030	266,900
Average Annual Growth (2025 to 2030)	+0.6%

- 4.5 Table 4.2 shows that population in the Southern District is projected to increase by 0.6% per annum between 2025 and 2030.

Traffic Forecast

- 4.6 The design year traffic flows are estimated with reference to:
- (i) Expected traffic growth from 2025 to 2030 with reference to the historic traffic growth from the ATC;
 - (ii) Traffic generated by other known planned / committed developments located in the vicinity, and
 - (iii) Net change in traffic generation between the Existing Development and the Proposed Conversion.
- 4.7 Details of the above are presented in below paragraphs.
- (i) Traffic Growth Rate
- 4.8 With reference to Table 4.1, a growth rate of 1.5% per annum is adopted to produce the 2030 traffic flows from 2025.
- (ii) Other Known Planned / Committed Developments
- 4.9 Information on other known major planned / committed developments are summarized in Table 4.1. These are obtained from the available public domains including "Monthly Digest" published by Buildings Department, and the Town Planning Board's Statutory Planning Portal 3 by Planning Department, etc.

TABLE 4.3 DETAILS OF OTHER KNOWN MAJOR PLANNED / COMMITTED DEVELOPMENTS IDENTIFIED

Ref.	Address	Use	GFA(m ²) (Approx.)	No. of Flat / Unit
Approved General Building Plan				
A.	18A, 18B, 18C & 18D Cape Road	Residential	2,000	4
B.	22 Tung Tau Wan Road	School	11,000	-
C.	72 Repulse Bay Road	Residential	1,800	-
D.	18 Carmel Road	Residential	500	1
E.	R.B.L. 1201, Wong Ma Kok Road	Residential	20,600	86
F.	2 Headland Road	Residential	1,600	-
G.	7 Stanley Market Road / 78 & 79 Stanley Main Street	Hotel	1,000	-
H.	125 Repulse Bay Road	Residential	2,900	-
I.	3 South Bay Close	Residential	2,500	9
J.	14 Stanley Beach Road	Residential	1,100	3
Approved Planning Application				
K.	39 South Bay Road	Residential	1,300	4
L.	86 & 88 Stanley Main Street	Residential	1,400	10
M.	30 Stanley Link Road	Residential	300	3

- 4.10 Traffic generated by the above other known major planned / committed developments is included in the design year.
- (iii) Net change in traffic generation between the Existing Development and the Proposed Conversion
- 4.11 The net change in peak hour traffic generation on weekday and weekend between the Existing Development and the Proposed Conversion are added to the 2030 traffic flow.

Year 2030 Traffic Flows

4.12 The future traffic flows are derived as follow:

$$2030 \text{ Traffic Flows without the Proposed Conversion [A]} = 2025 \text{ Existing Traffic Flows} + \text{Total Traffic Growth from 2025 to 2030} + \text{Traffic Generated by Other Developments}$$

$$2030 \text{ Traffic Flows with the Proposed Conversion} = [A] + \text{Net change in Traffic Generation between the Existing Development and the Proposed Conversion}$$

4.13 **Figures 4.1 and 4.2** shows the year 2030 weekday and weekend peak hour traffic flows without the Proposed Conversion; and **Figures 4.3 and 4.4** shows the year 2030 weekday and weekend peak hour traffic flows with the Proposed Conversion.

Year 2030 Junction Capacity Analyses

4.14 Year 2030 junction capacity analyses for the cases without and with the Proposed Conversion are summarised in Table 4.4 and detailed calculations are found in the **Appendix A**.

TABLE 4.4 YEAR 2030 PEAK HOUR JUNCTION PERFORMANCE

Ref.	Junction	Type	Parameter	Without the Proposed Conversion		With the Proposed Conversion	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Weekday							
J01	J/O Repulse Bay Road / Beach Road	Priority	RFC	0.065	0.090	0.065	0.090
J02	J/O Beach Road / South Bay Path	Priority	RFC	0.038	0.046	0.052	0.067
J03	J/O South Bay Road / Beach Road	Priority	RFC	0.095	0.099	0.114	0.122
J04	J/O South Bay Road / South Bay Path	Priority	RFC	0.306	0.437	0.273	0.405
J05	J/O Repulse Bay Road / South Bay Road	Roundabout	RFC	0.489	0.458	0.498	0.470
J06	J/O South Bay Road / South Bay Path	Roundabout	RFC	0.245	0.275	0.238	0.271
Weekend							
J01	J/O Repulse Bay Road / Beach Road	Priority	RFC	0.092	0.149	0.092	0.148
J02	J/O Beach Road / South Bay Path	Priority	RFC	0.062	0.082	0.092	0.114
J03	J/O South Bay Road / Beach Road	Priority	RFC	0.168	0.179	0.194	0.210
J04	J/O South Bay Road / South Bay Path	Priority	RFC	0.465	0.591	0.410	0.545
J05	J/O Repulse Bay Road / South Bay Road	Roundabout	RFC	0.341	0.467	0.328	0.459
J06	J/O South Bay Road / South Bay Path	Roundabout	RFC	0.288	0.367	0.275	0.361

Note: RFC – Ratio of Flow to Capacity

4.15 Table 4.4 shows that the analyzed junctions will have capacity to accommodate the expected traffic growth to Year 2030 and the expected change in traffic generation between the Existing Development and the Proposed Conversion.

Pedestrian Forecast

4.16 The design year pedestrian flows are estimated with reference to:

- Expected population growth from 2025 to 2030 with reference to the project population change in Southern District;
- Pedestrian generation of the Proposed Conversion.

4.17 Details of the above are presented in below paragraphs.

(i) Pedestrian Growth Rate

4.18 With reference to Table 4.2, a conservative growth rate of 1.0% per annum is adopted to produce the 2030 pedestrian flows.

(ii) Pedestrian Generation of the Proposed Conversion

4.19 Peak hour pedestrian generation on weekday and weekend for the Proposed Conversion presented in Table 3.13 are added to the 2030 pedestrian flow. To be conservative, pedestrian generations of the Existing Development are not subtracted from the future pedestrian forecast.

Year 2030 Pedestrian Flows

4.20 The future pedestrian flows are derived as follow:

$$2030 \text{ Pedestrian Flows without the Proposed Conversion [A]} = 2025 \text{ Existing Pedestrian Flows} + \text{Total Pedestrian Growth from 2025 to 2030}$$

$$2030 \text{ Pedestrian Flows with the Proposed Conversion} = [A] + \text{Pedestrian Generation of the Proposed Conversion}$$

Year 2030 Footpath Operational Performance

4.21 Year 2030 peak hour footpath operational performance are calculated and summarised in Table 4.5

TABLE 4.5 YEAR 2030 PEAK HOUR FOOTPATH PERFORMANCE

Pedestrian Facilities	Actual Width (m)	Effective Width (m)	Without the Proposed Conversion				With the Proposed Conversion			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Ped. Flow (p/hr)	Flow Rate (p/hr/m) [LOS]	Ped. Flow (p/hr)	Flow Rate (p/hr/m) [LOS]	Ped. Flow (p/hr)	Flow Rate (p/hr/m) [LOS]	Ped. Flow (p/hr)	Flow Rate (p/hr/m) [LOS]
Weekday										
FP01	3.5m	2.5m	156	1.0 [A]	454	3.0 [A]	197	1.3 [A]	512	3.4 [A]
FP02	2.5m	1.5m	67	0.7 [A]	88	1.0 [A]	72	0.8 [A]	101	1.1 [A]
FP03	3.0m	2.0m	59	0.5 [A]	209	1.7 [A]	80	0.7 [A]	238	2.0 [A]
FP04	1.8m	0.8m	72	1.5 [A]	32	0.7 [A]	72	1.5 [A]	32	0.7 [A]
FP05	2.8m	1.8m	62	0.6 [A]	243	2.3 [A]	103	1.0 [A]	301	2.8 [A]
FP06	1.8m	0.8m	50	1.0 [A]	94	2.0 [A]	50	1.0 [A]	94	2.0 [A]
FP07	1.5m	1.0m	11	0.2 [A]	13	0.2 [A]	11	0.2 [A]	13	0.2 [A]
FP08	4.0m	3.0m	210	1.2 [A]	299	1.7 [A]	210	1.2 [A]	299	1.7 [A]
FP09	3.5m	3.0m	171	1.0 [A]	287	1.6 [A]	191	1.1 [A]	316	1.8 [A]

- FP01 - Stairway between Repulse Bay Road and Beach Road
 FP02 - Southern Footpath of Beach Road (outside Seaview Building)
 FP03 - Southern Footpath of Beach Road (outside Car Park / Repulse Bay Beach Building)
 FP04 - Northern Footpath of Beach Road (outside Beach Centre)
 FP05 - Southern Footpath of Beach Road (opposite South Bay Path)
 FP06 - Southern Footpath of Beach Road (opposite 49/53/55 Beach Road)
 FP07 - Northern Footpath of Beach Road (south of South Bay Road)
 FP08 - Footpath along Repulse Bay Beach (near Repulse Bay Beach Building)
 FP09 - Footpath along Repulse Bay Beach (outside the Subject Site)

TABLE 4.5 YEAR 2030 PEAK HOUR FOOTPATH PERFORMANCE

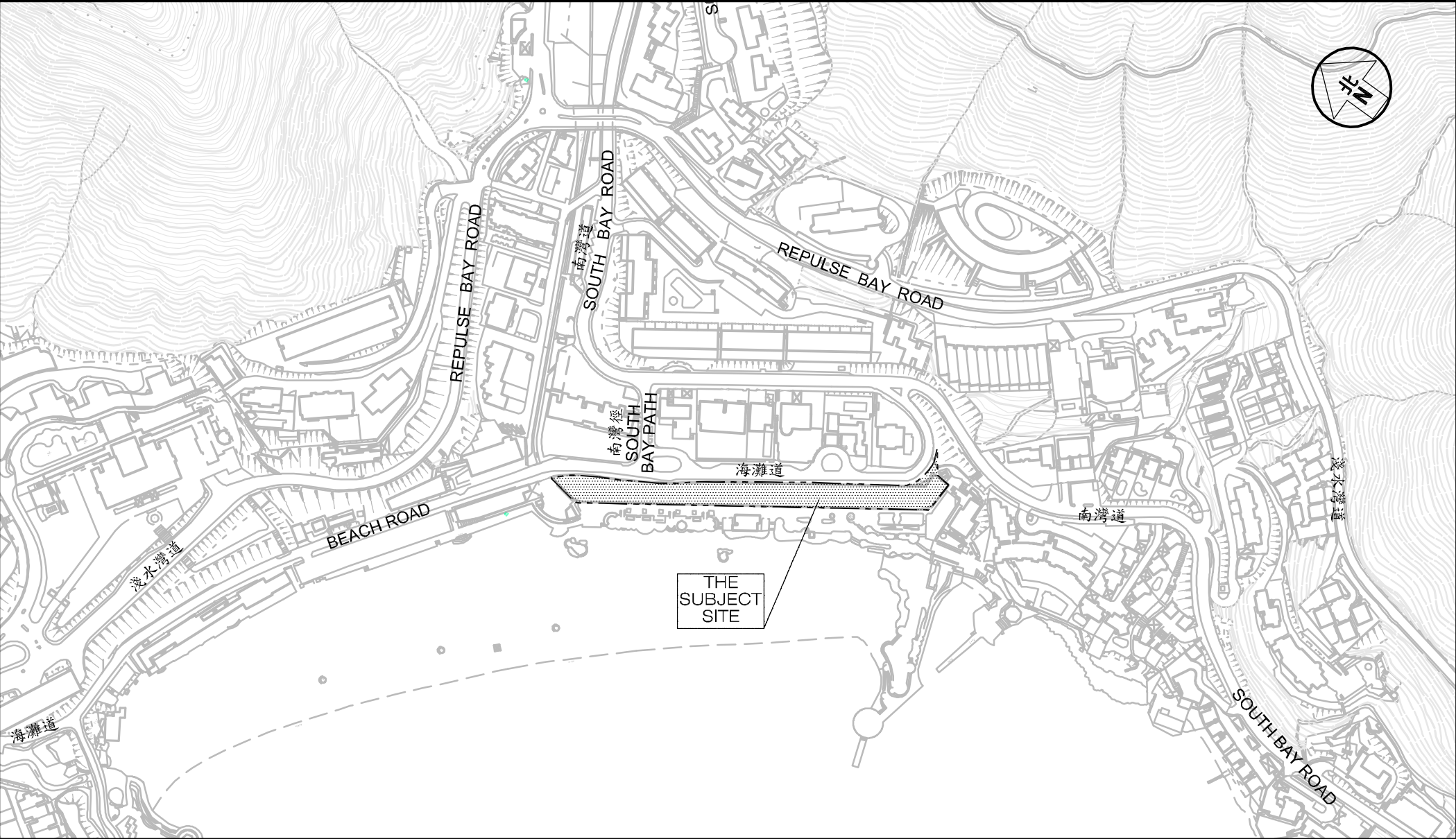
Pedestrian Facilities	Actual Width (m)	Effective Width (m)	Without the Proposed Conversion				With the Proposed Conversion			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Ped. Flow (p/hr)	Flow Rate (p/hr/m) [LOS]	Ped. Flow (p/hr)	Flow Rate (p/hr/m) [LOS]	Ped. Flow (p/hr)	Flow Rate (p/hr/m) [LOS]	Ped. Flow (p/hr)	Flow Rate (p/hr/m) [LOS]
Weekend										
FP01	3.5m	2.5m	286	1.9 [A]	773	5.2 [A]	332	2.2 [A]	861	5.7 [A]
FP02	2.5m	1.5m	334	3.7 [A]	185	2.1 [A]	340	3.8 [A]	204	2.3 [A]
FP03	3.0m	2.0m	126	1.1 [A]	217	1.8 [A]	149	1.2 [A]	261	2.2 [A]
FP04	1.8m	0.8m	86	1.8 [A]	44	0.9 [A]	86	1.8 [A]	44	0.9 [A]
FP05	2.8m	1.8m	118	1.1 [A]	232	2.1 [A]	164	1.5 [A]	320	3.0 [A]
FP06	1.8m	0.8m	78	1.6 [A]	82	1.7 [A]	198	4.1 [A]	202	4.2 [A]
FP07	1.5m	1.0m	11	0.2 [A]	7	0.1 [A]	11	0.2 [A]	7	0.1 [A]
FP08	4.0m	3.0m	334	1.9 [A]	736	4.1 [A]	334	1.9 [A]	736	4.1 [A]
FP09	3.5m	3.0m	303	1.7 [A]	597	3.3 [A]	326	1.8 [A]	641	3.6 [A]

- FP01 - Stairway between Repulse Bay Road and Beach Road
 FP02 - Southern Footpath of Beach Road (outside Seaview Building)
 FP03 - Southern Footpath of Beach Road (outside Car Park / Repulse Bay Beach Building)
 FP04 - Northern Footpath of Beach Road (outside Beach Centre)
 FP05 - Southern Footpath of Beach Road (opposite South Bay Path)
 FP06 - Southern Footpath of Beach Road (opposite 49/53/55 Beach Road)
 FP07 - Northern Footpath of Beach Road (south of South Bay Road)
 FP08 - Footpath along Repulse Bay Beach (near Repulse Bay Beach Building)
 FP09 - Footpath along Repulse Bay Beach (outside the Subject Site)

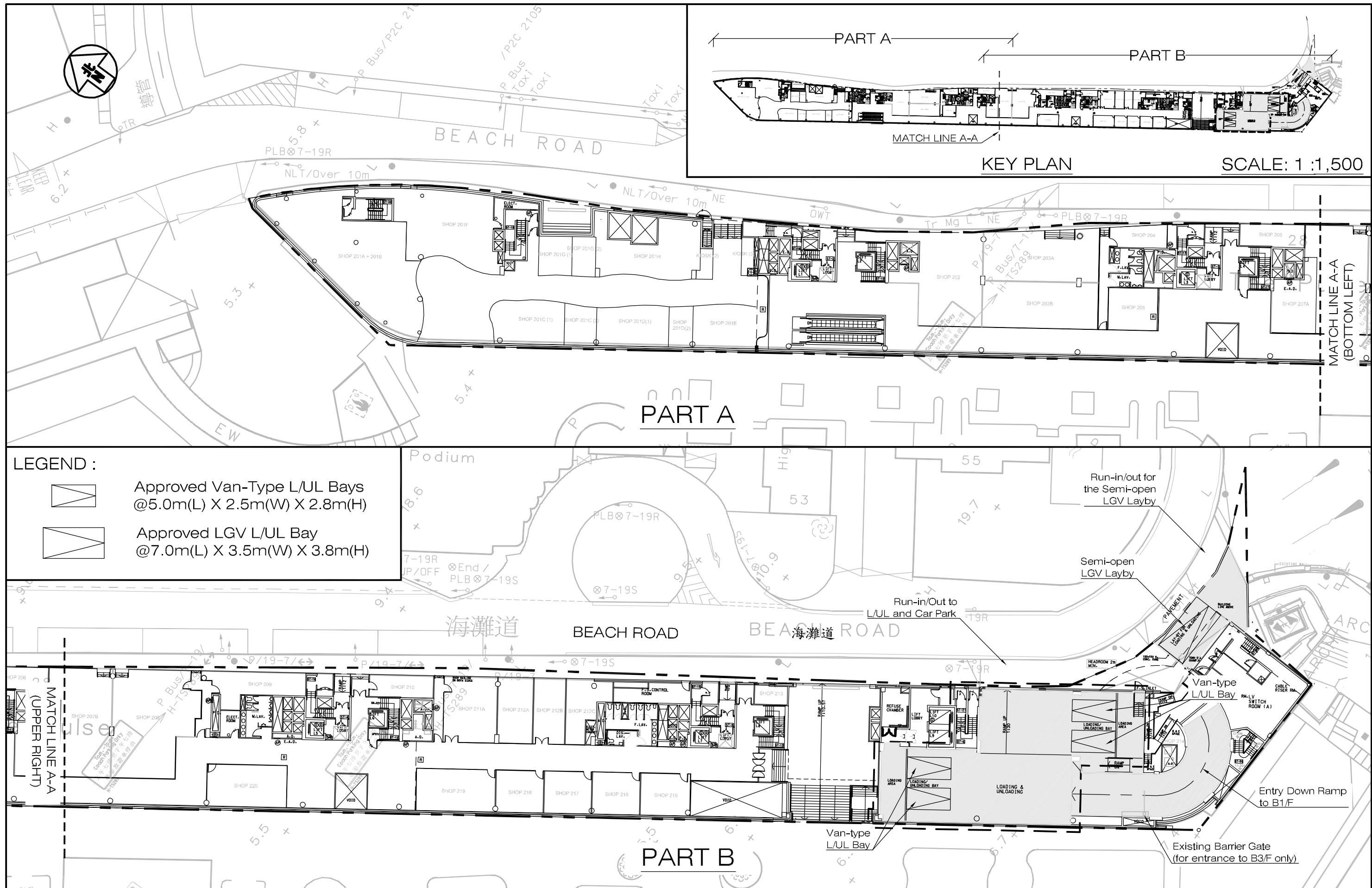
4.22 Table 4.5 shows that the analyzed footpaths will have capacity to accommodate the expected pedestrian growth to Year 2030 and the expected pedestrian generation of the Proposed Conversion.

5.0 SUMMARY

- 5.1 The Owner intends to convert the 1/F, UG/F and B1/F [part] of the Existing Development into a hotel with 96-room, and hence, retail GFA will be reduced substantially from existing 13,728 m² to become 5,841m².
- 5.2 The Proposed Conversion provides internal transport facilities which satisfy the maximum HKPSG recommendation, including:
- 50 nos. car parking spaces,
 - 5 nos. motorcycle parking spaces,
 - 9 nos. goods vehicle loading / unloading bays,
 - 2 nos. laybys for taxi and private cars, and
 - 1 no. layby for single deck tour bus.
- 5.3 The Existing Development provides limited number and type of goods vehicle loading / unloading bays, i.e. van-type goods vehicles and LGV. With the Proposed Conversion, modification will be undertaken to provide sufficient headroom for LGV and HGV loading / unloading bays, and layby for single deck tour bus.
- 5.4 Manual classified counts were conducted at junctions located in the vicinity of the Subject Site during the peak swimming period in summer on weekday and weekend AM and PM peak periods. Capacity analyses found that these junctions operate with capacity.
- 5.5 Pedestrian counts were conducted at footpaths located in the vicinity during the peak swimming period in summer on weekday and weekend AM and PM peak hours. Capacity analyses found that these footpaths operate with capacity.
- 5.6 Weekday and weekend peak hour traffic generation for the Existing Development and the Proposed Conversion are estimated, and found that the Proposed Conversion will have no increase in traffic generation compared with the Existing Development. The future year junction capacity analyses found that the Proposed Conversion will not have adverse effect on the local road network .
- 5.7 Weekday and weekend peak hour pedestrian generation the Proposed Conversion are estimated. The future year footpath capacity analyses found that the Proposed Conversion will not have adverse effect on the local pedestrian network
- 5.8 In view the internal transport facilities provided for the Proposed Conversion satisfies the HKPSG recommendation, and is believed to be sufficient to serve the Proposed Conversion. Based on the above, from traffic engineering grounds, the Proposed Conversion is acceptable.

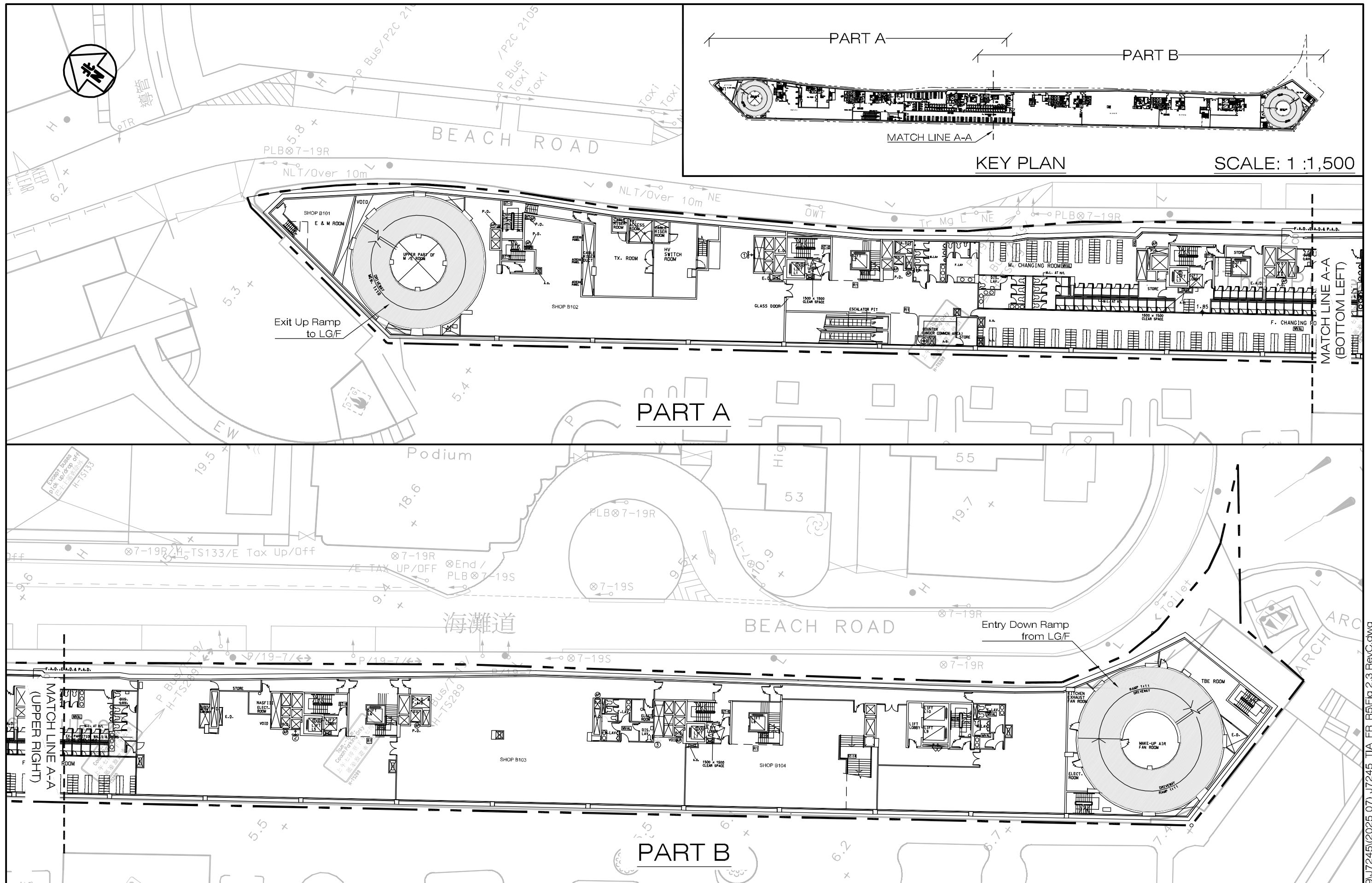


Project Title		PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY				J7245	Figure No. 1.1		Revision C		<div>CKM Asia Limited</div> <div>Traffic and Transportation Planning Consultants</div> <div>21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong</div> <div>Tel : (852) 2520 5990 Fax : (852) 2528 6343</div> <div>Email : mail@ckmasia.com.hk</div>
Figure Title LOCATION OF THE SUBJECT SITE							Designed by W C H	Drawn by S C Y	Checked by K C		
							Scale in A4 1 : 3,500		Date 07 AUG 2025		



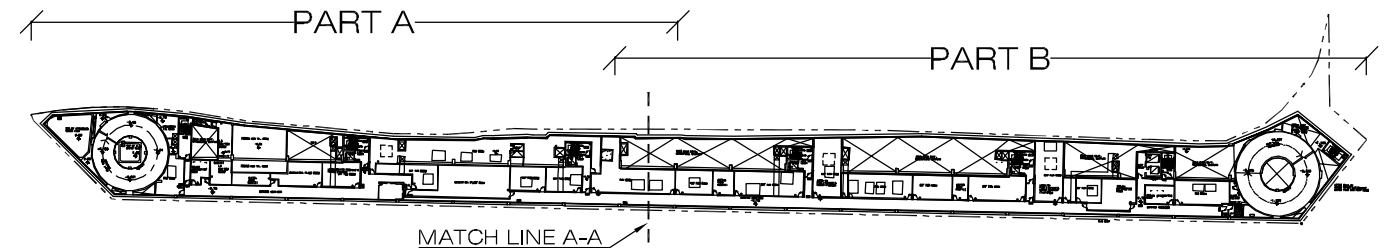
Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY										J7245	Figure No. 2.1	Revision C	CKM Asia Limited Traffic and Transportation Planning Consultants 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	APPROVED UG/F LAYOUT OF THE EXISTING DEVELOPMENT										Designed by W C H	Drawn by S C Y	Checked by K C		
											Scale in A3 1 : 400		Date 07 AUG 2025		

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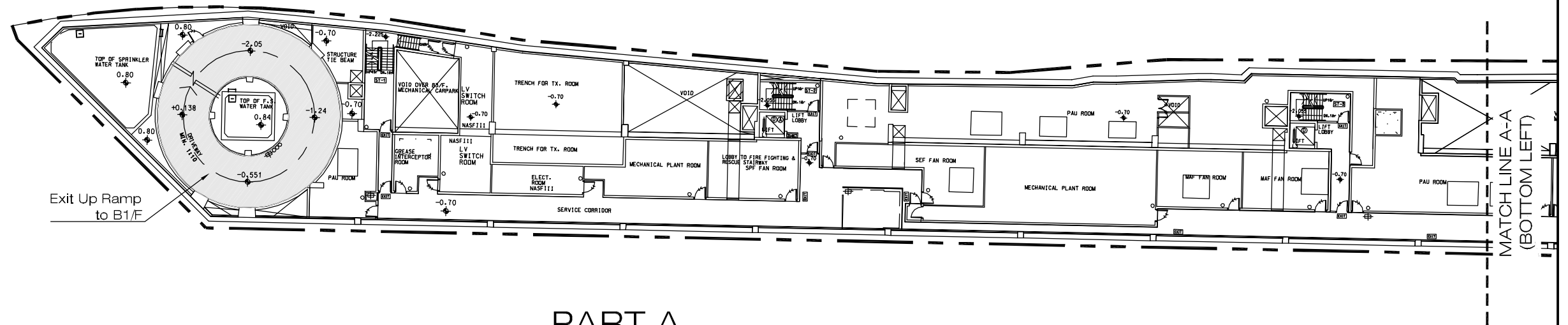
Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY				Figure No. J7245 2.3	Revision C	CKM Asia Limited Traffic and Transportation Planning Consultants 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	APPROVED B1/F LAYOUT OF THE EXISTING DEVELOPMENT				Designed by W C H	Drawn by S C Y	
					Scale in A3 1 : 400	Date 07 AUG 2025	

T:\JOB\J7200-J7249\J7245(2025 07) J7245_TIA_FR_R5\Fig 2.3 RevC.dwg

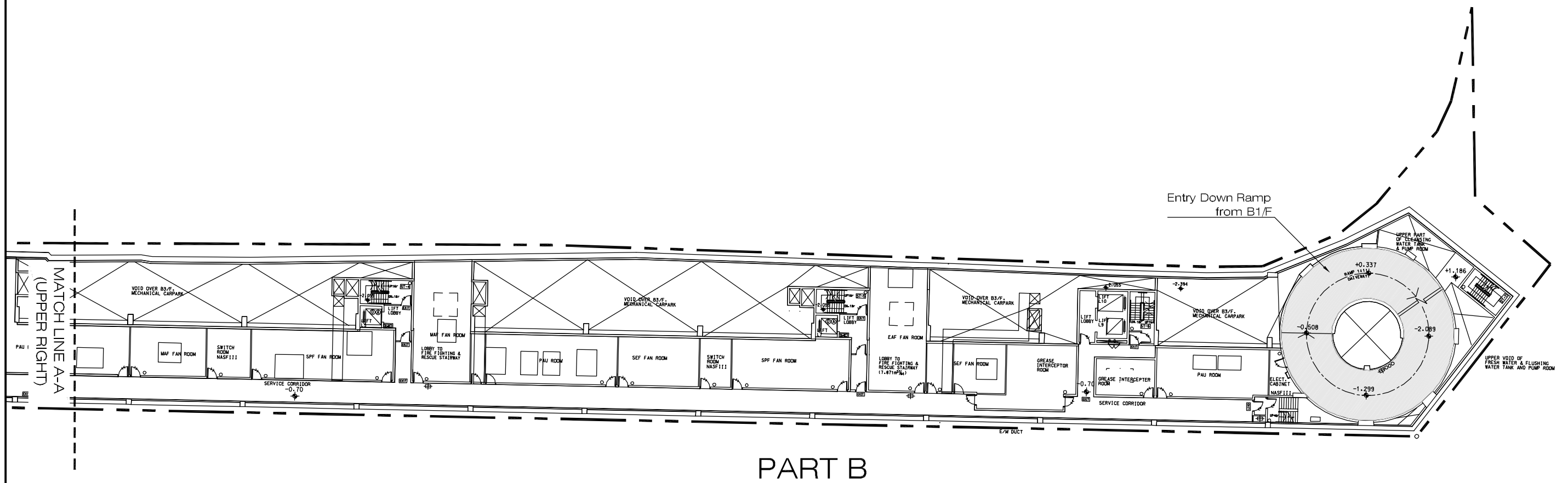


KEY PLAN

SCALE: 1 : 1,500



PART A



PART B

Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY

Figure Title APPROVED B2/F LAYOUT OF THE EXISTING DEVELOPMENT

Figure No. J7245

2.4

Revision C

Designed by W C H

Drawn by S C Y

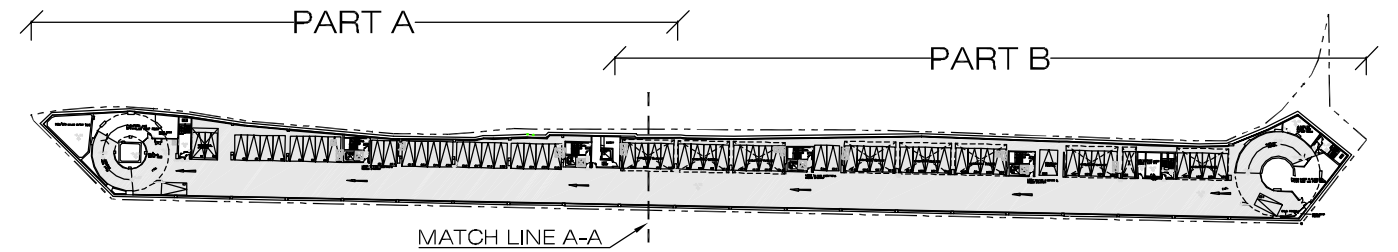
Checked by K C

Scale in A3 1 : 400

Date 07 AUG 2025

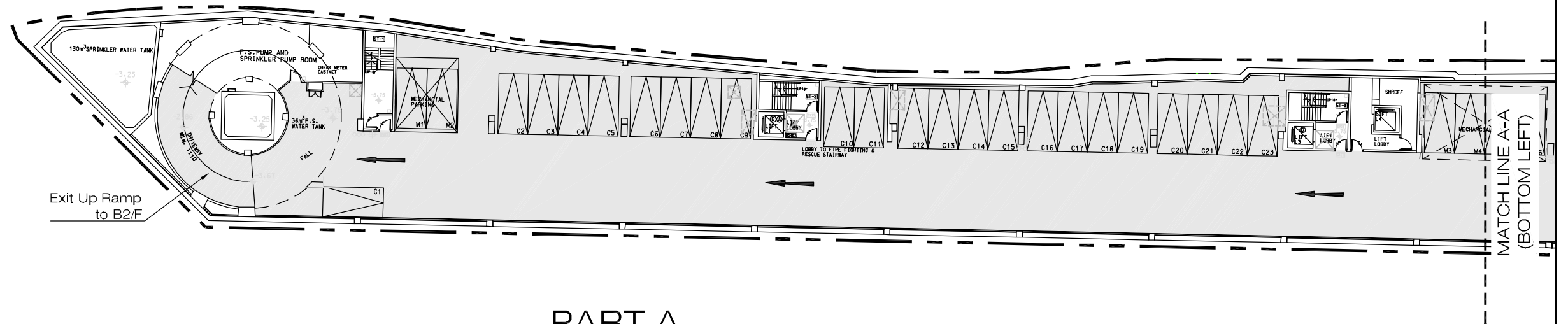
CKM Asia Limited
Traffic and Transportation Planning Consultants
21st Floor, Methodist House, 36 Hennessy Road
Wan Chai, Hong Kong
Tel : (852) 2520 5990 Fax : (852) 2528 6343
Email : mail@ckmasia.com.hk

T:\JOB\J7200-J7249\J7245(2025 07) J7245_TIA_FR_R5\Fig 2.4 RevC.dwg



KEY PLAN

SCALE: 1 : 1,500



PART A

LEGEND :



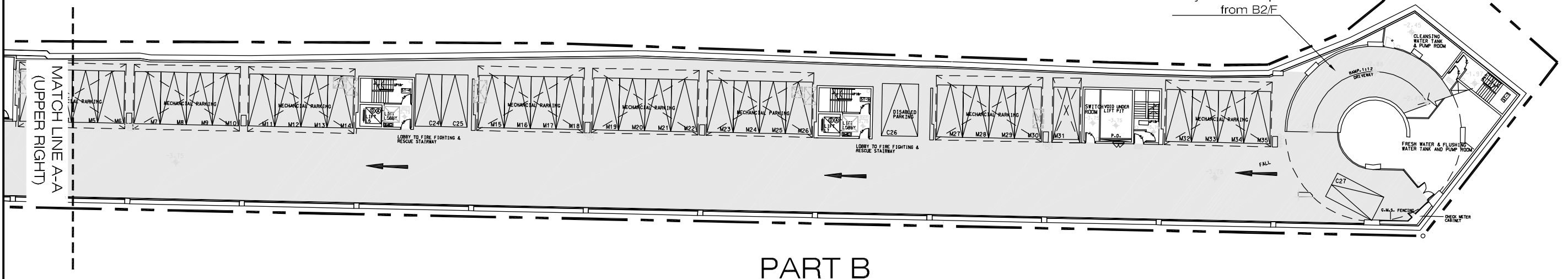
Approved Conventional car parking space
@5.0m(L) X 2.5m(W) X Min. 2.4m(H) [26 nos.]



Approved Double deck car parking rack
@5.0m(L) X 2.5m(W) [35 sets with 70 nos.]



Approved Accessible car parking space
@5.0m(L) X 3.5m(W) X Min. 2.4m(H) [1 no.]



PART B

Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)"
AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY

Figure Title APPROVED B3/F LAYOUT OF THE EXISTING DEVELOPMENT

J7245

Figure No.

2.5

Revision

C

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Traffic and Transportation Planning Consultants

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Wan Chai, Hong Kong

Tel : (852) 2520 5990 Fax : (852) 2528 6343

Email : mail@ckmasia.com.hk

Designed by
W C H

Drawn by
S C Y

Checked by
K C

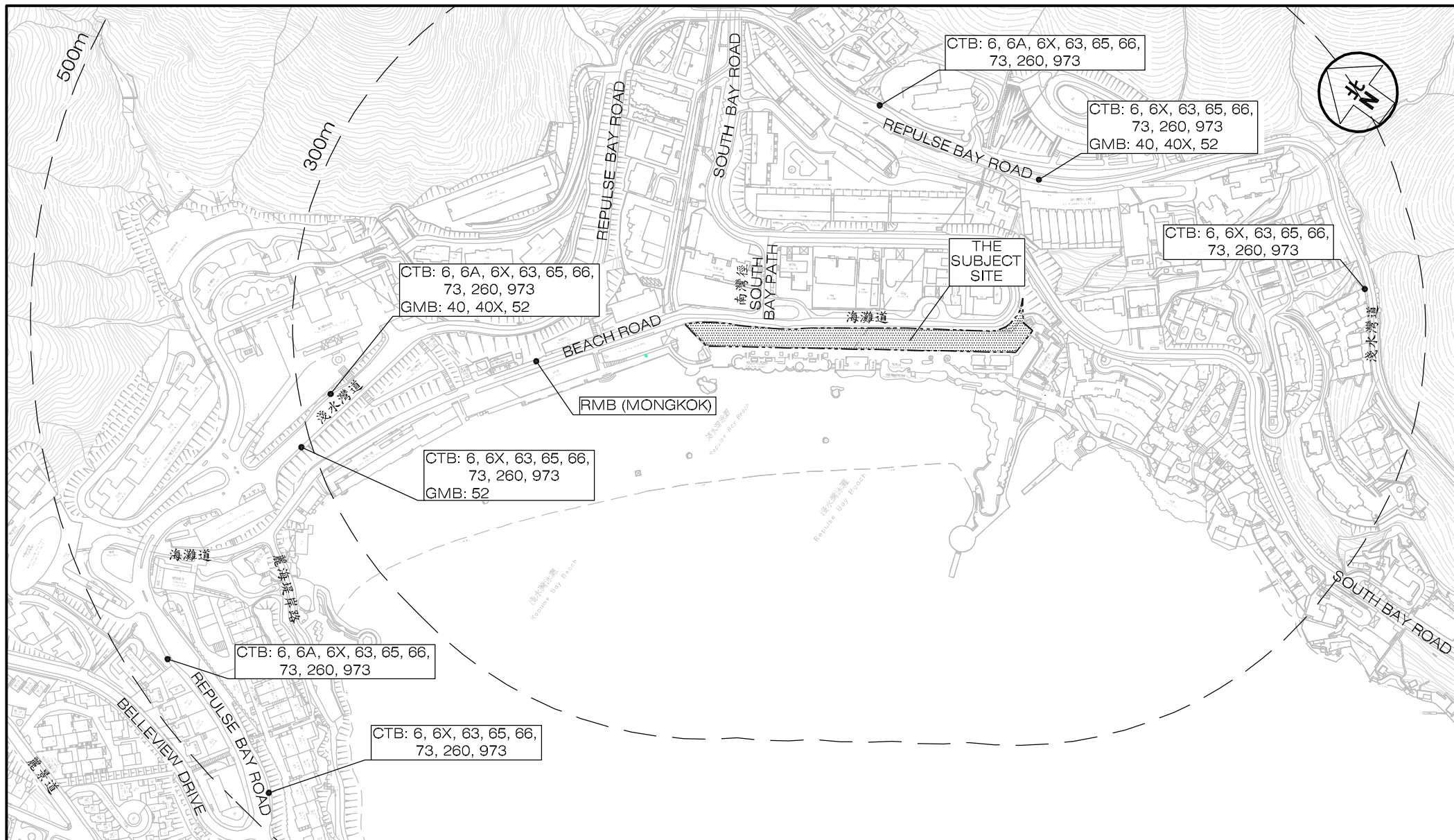
Scale in A3

1 : 400

Date

07 AUG 2025

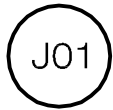
T:\JOB\J7200-J7249\J7245(2025 07) J7245_TIA_FR_R5\Fig 2.5 RevC.dwg



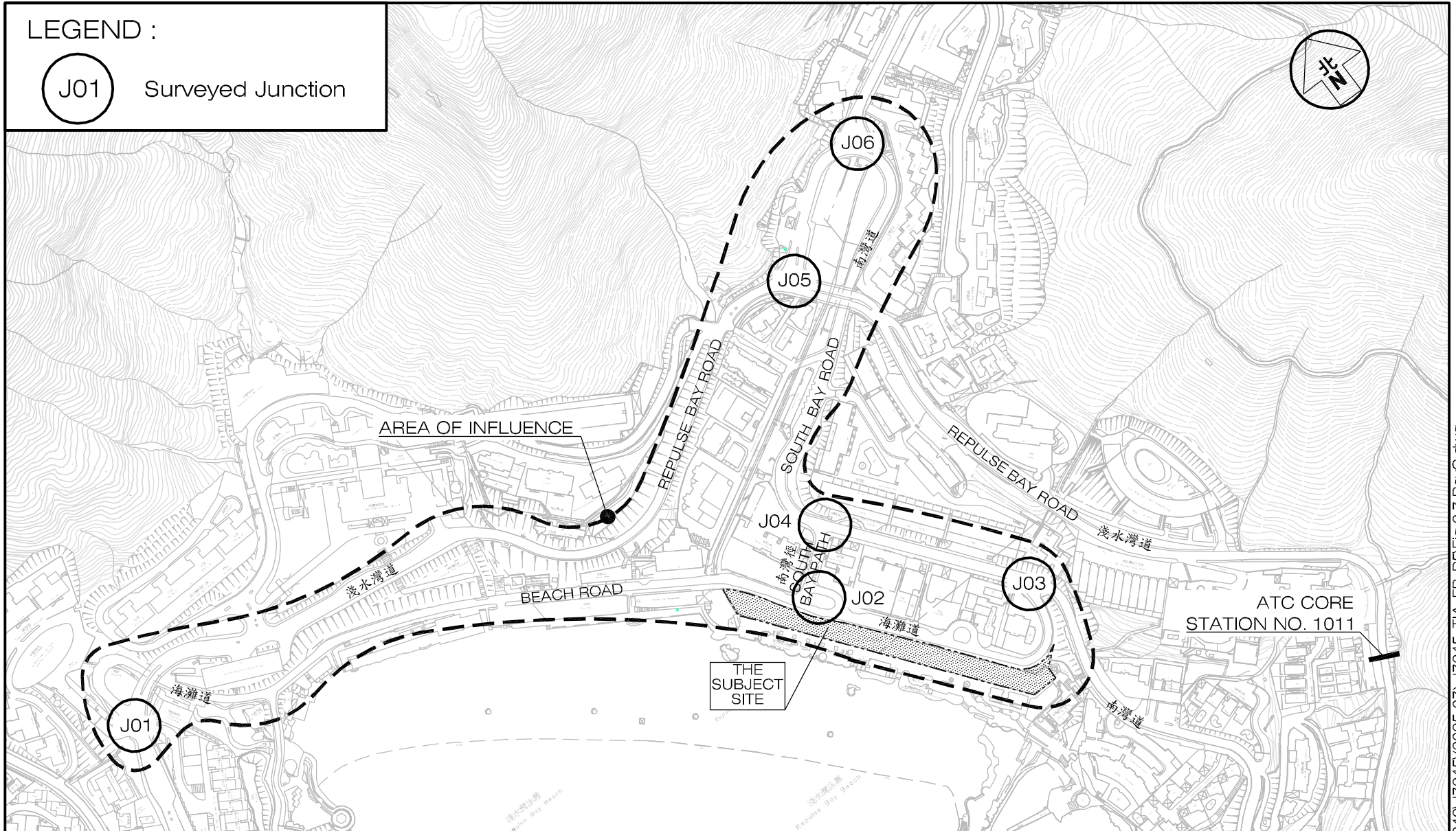
Project Title			PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY			Figure No.		Revision		CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk	
			J7245			2.6		C			
Figure Title			PUBLIC TRANSPORT SERVICES OPERATING NEAR THE SUBJECT SITE			Designed by		Drawn by			Checked by
						M C Y		S C Y			K C
						Scale in A4		Date			
						1 : 4,000		07 AUG 2025			

T:\JOB\J7200-J7249\J7245(2025 07) J7245_TIA_FR_R5Fig 2.6 RevC.dwg

LEGEND :



Surveyed Junction



Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY J7342

Figure Title

AREA OF INFLUENCE AND
LOCATION OF THE SURVEYED JUNCTIONS

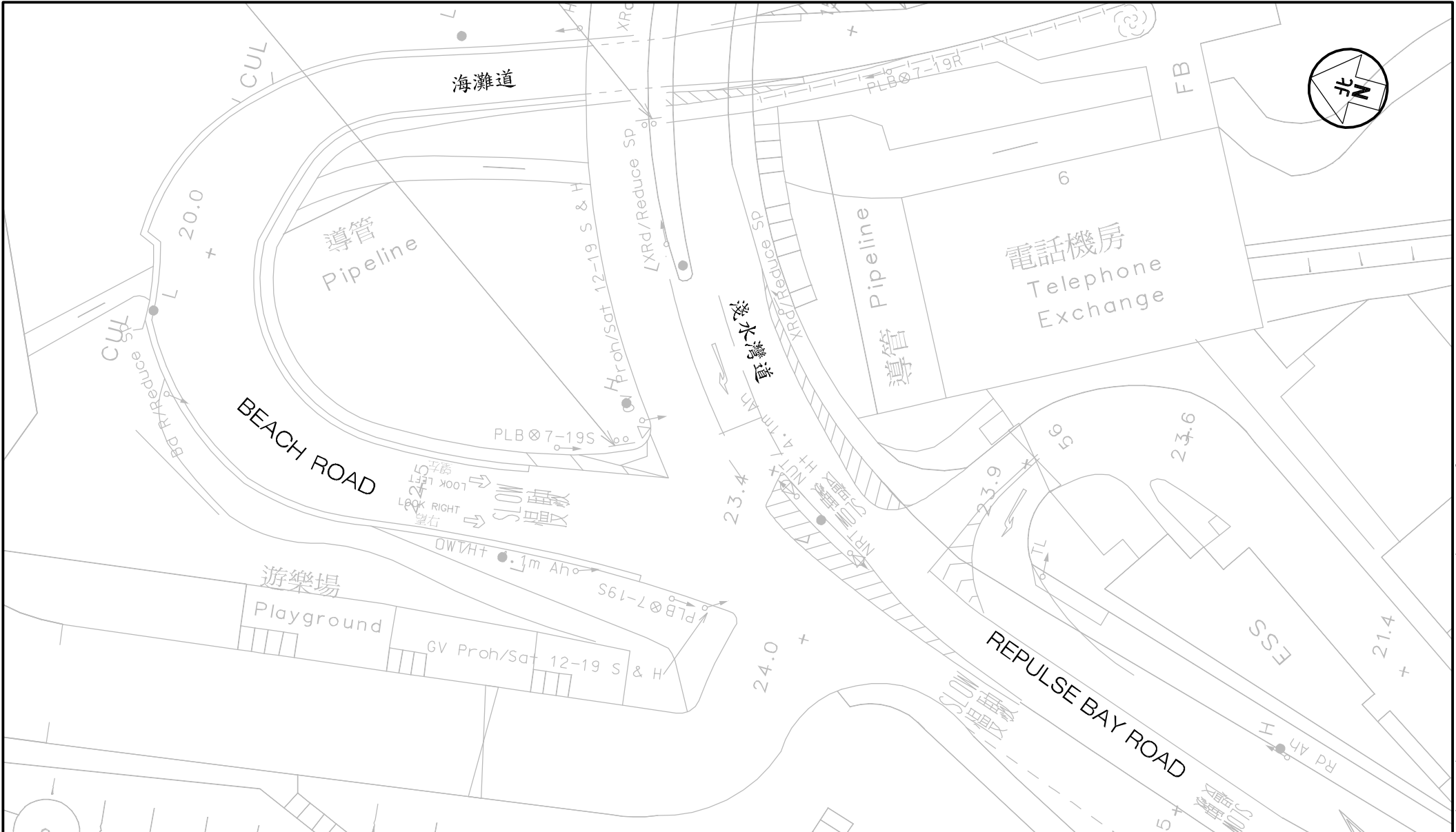
Figure No. 2.7 Revision C

Designed by M C Y Drawn by S C Y Checked by K C

Scale in A4 1 : 3,000 Date 07 AUG 2025

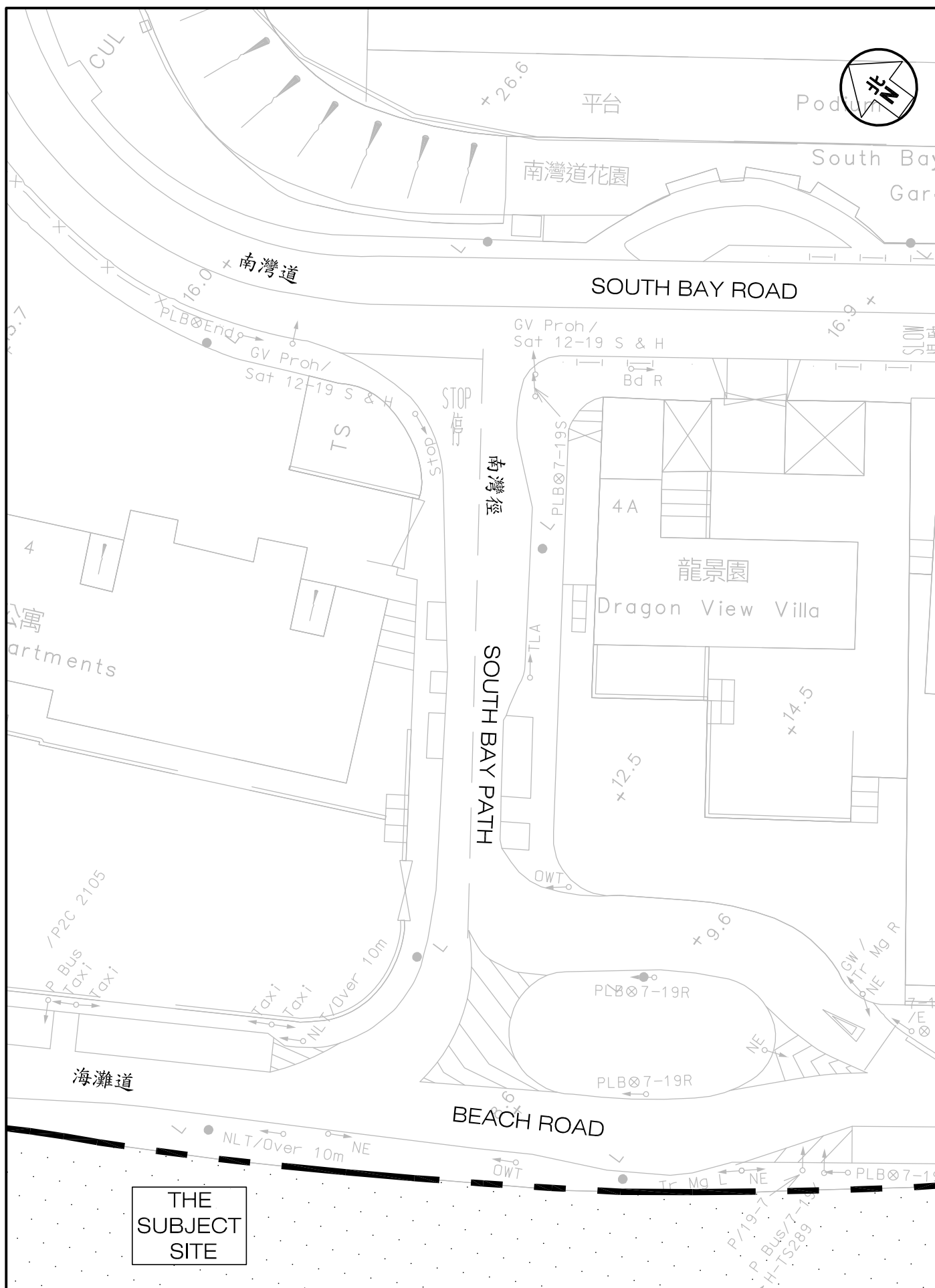
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21st Floor, Methodist House, 36 Hennessy Road,
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Email : mail@ckmasia.com.hk



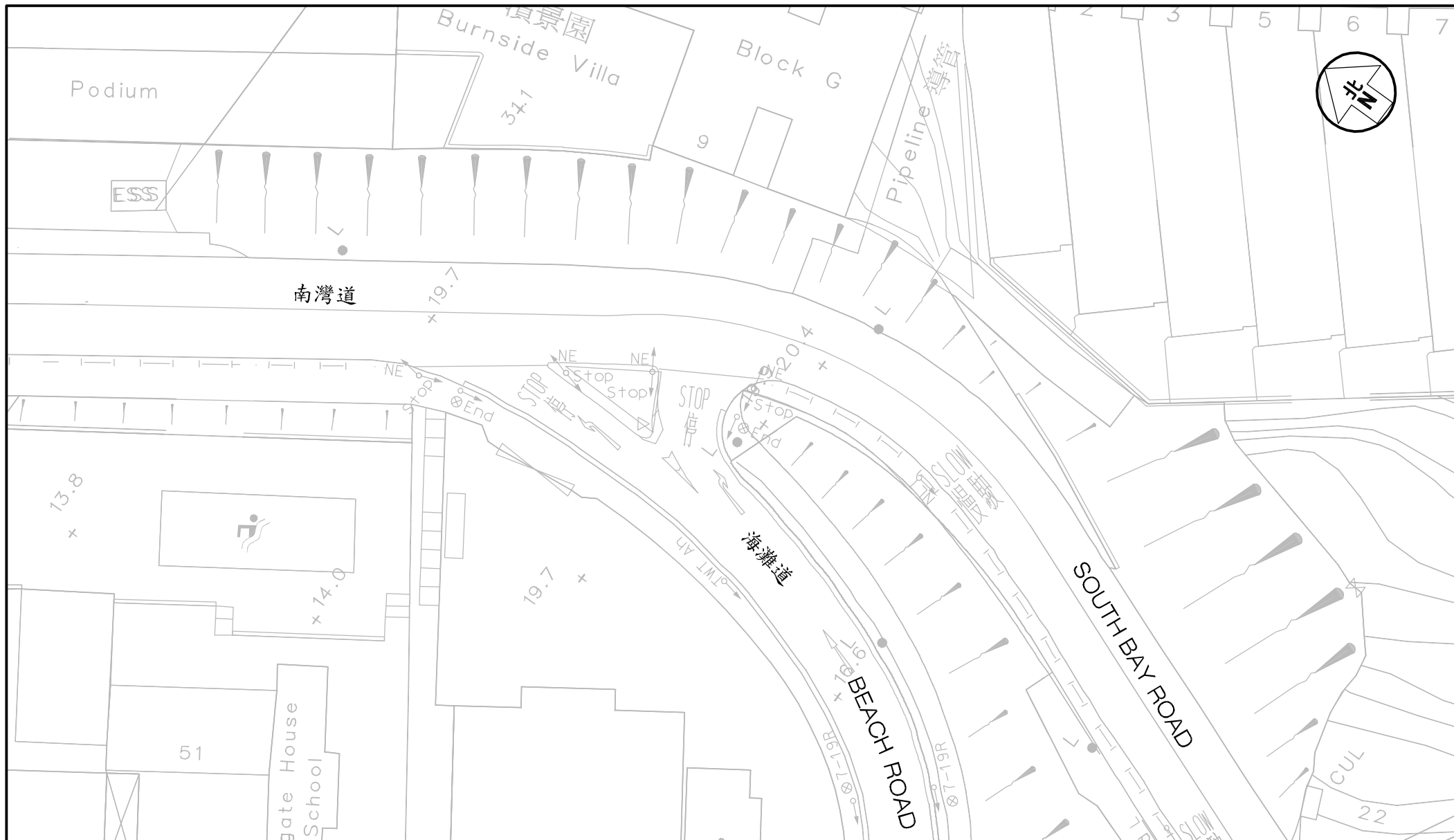
Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY				Figure No.	2.8		Revision	C		CKM Asia Limited Traffic and Transportation Planning Consultants 21st 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	JUNCTION OF REPULSE BAY ROAD / BEACH ROAD (J01)				J7245	Designed by	M C Y		Drawn by	S C Y		Checked by	K C		
					Scale in A4		1 : 400		Date			07 AUG 2025			

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Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	Job No. J7245	Figure No. 2.9	Scale in A4 1 : 400
Figure Title JUNCTION OF BEACH ROAD / SOUTH BAY PATH (J02) AND JUNCTION OF SOUTH BAY ROAD / SOUTH BAY PATH (J04)	Designed by M C Y	Drawn by S C Y	Checked by K C
		Revision C	Date 07 AUG 2025
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\J7200-J7249\J7245(2025 07) J7245_TIA_FR_R5\Fig 2.9 RevC.dwg



Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY

J7245

Figure No. 2.10

Revision C

Figure Title
JUNCTION OF BEACH ROAD / SOUTH BAY ROAD (J03)

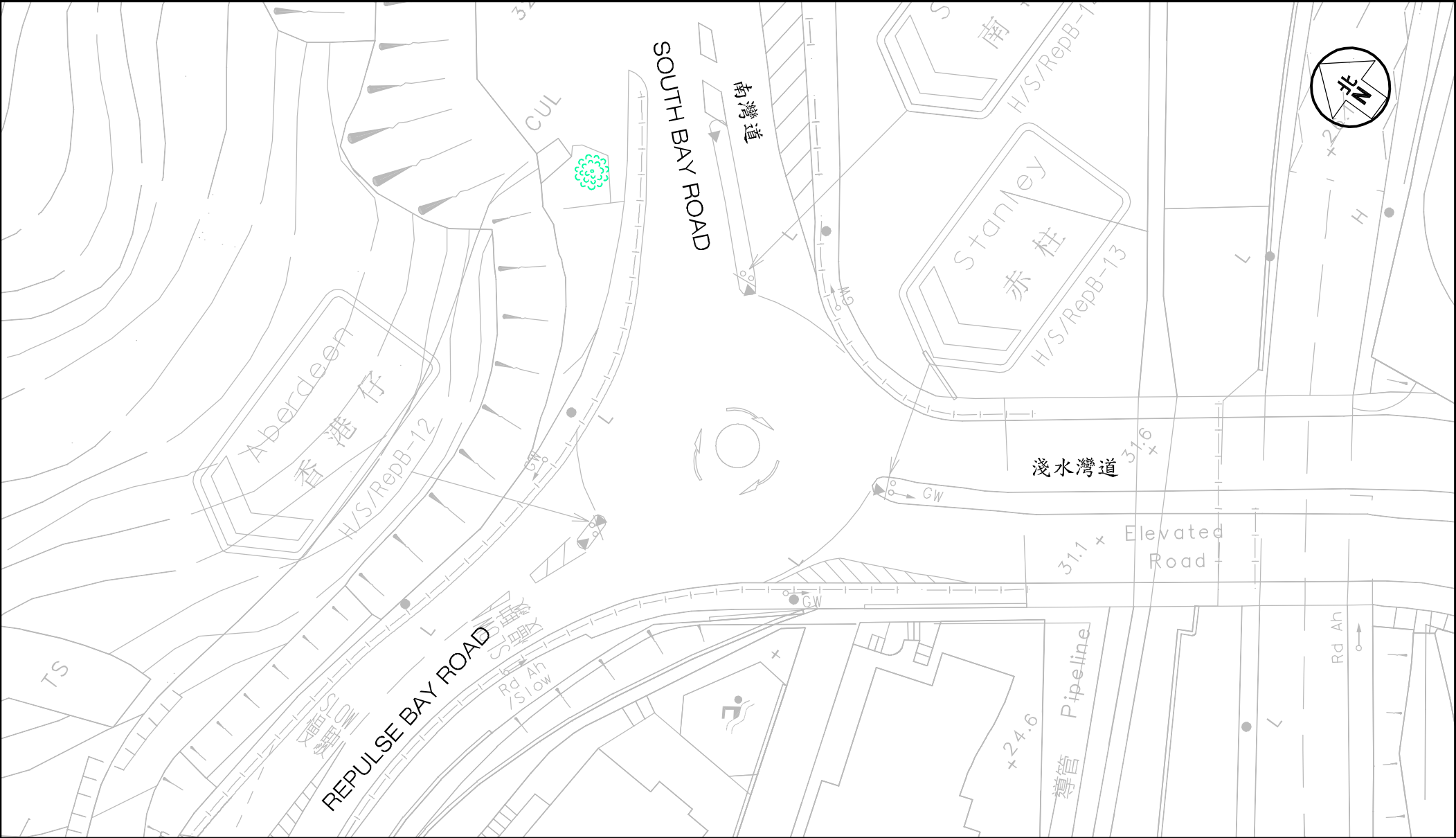
Designed by M C Y
Drawn by S C Y
Checked by K C

Scale in A4
1 : 400
Date
07 AUG 2025

CKM Asia Limited

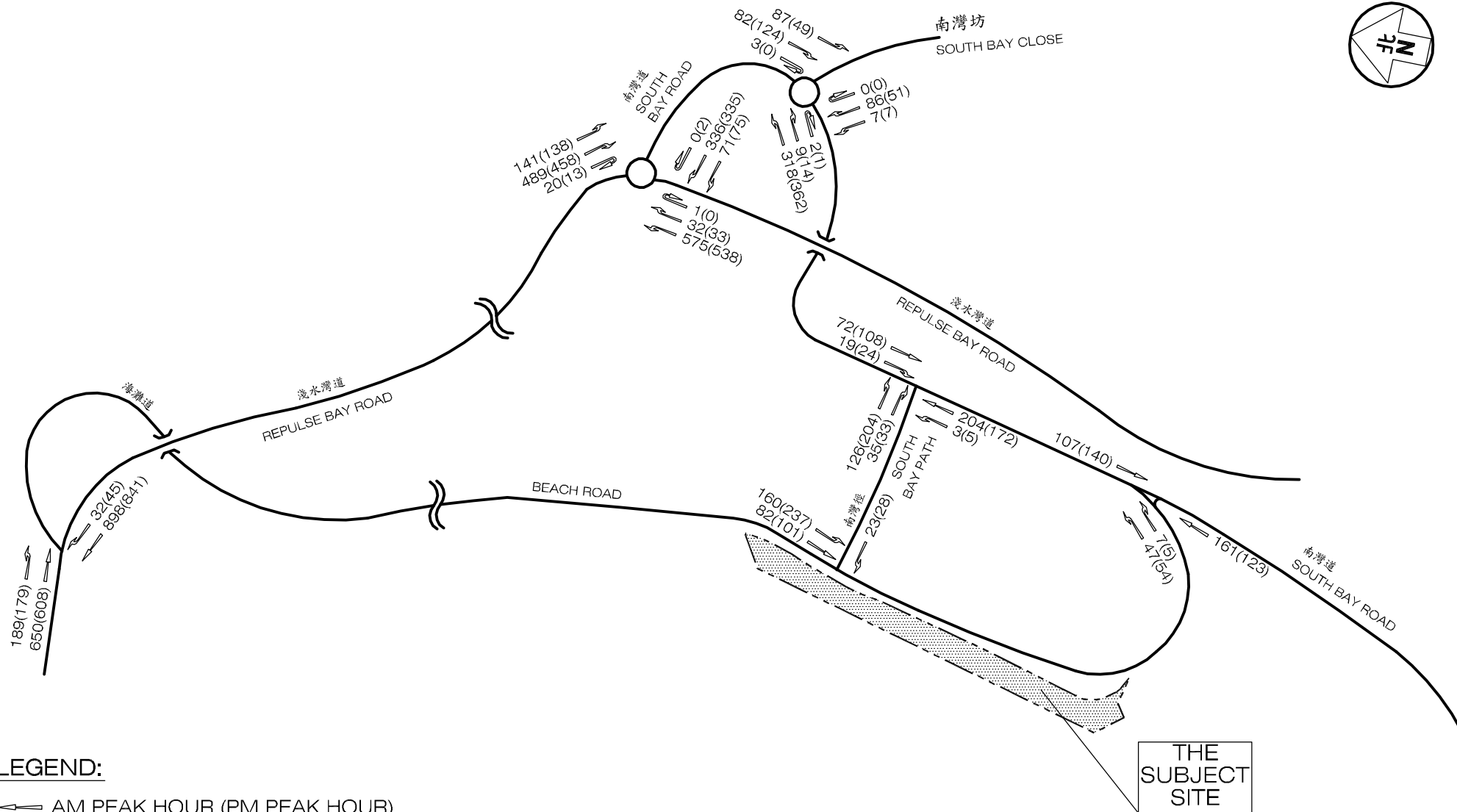
Traffic and Transportation Planning Consultants

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Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY					J7245	Figure No.	2.11		Revision	C		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	JUNCTION OF REPULSE BAY ROAD / SOUTH BAY ROAD (J05)						Designed by	Drawn by		Checked by			
							M C Y		S C Y		K C		
							Scale in A4		Date				
							1 : 400		07 AUG 2025				

T:\JOB\J7200-J7249\J7245(2025 07) J7245_TIA_FR_R5Fig 2.11 RevC.dwg



Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY J7245

Figure No. 2.13 Revision C

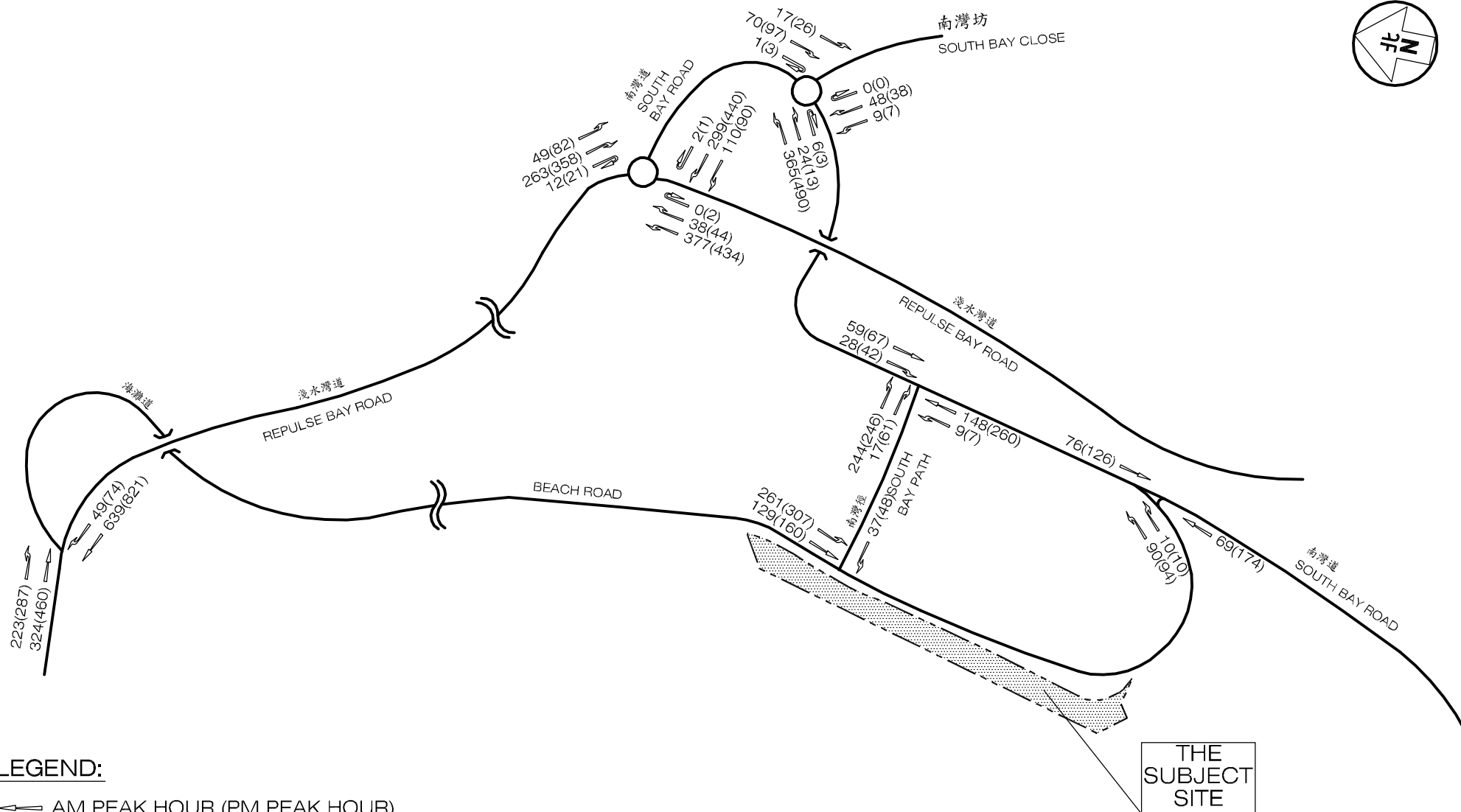
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 Traffic and Transportation Planning Consultants

Figure Title
EXISTING WEEKDAY PEAK HOUR TRAFFIC FLOWS

Designed by M C Y
 Drawn by S C Y
 Checked by K C
 Scale in A4 N.T.S.
 Date 07 AUG 2025

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 Wan Chai, Hong Kong
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T:\JOB\J7200-J7249\J7245(2025 07) J7245_TIA_FR_R5\Fig 2.13 RevC.dwg



Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY

J7245

Figure No. 2.14

Revision C

Figure Title

EXISTING WEEKEND PEAK HOUR TRAFFIC FLOWS

Designed by M C Y

Drawn by S C Y

Checked by K C

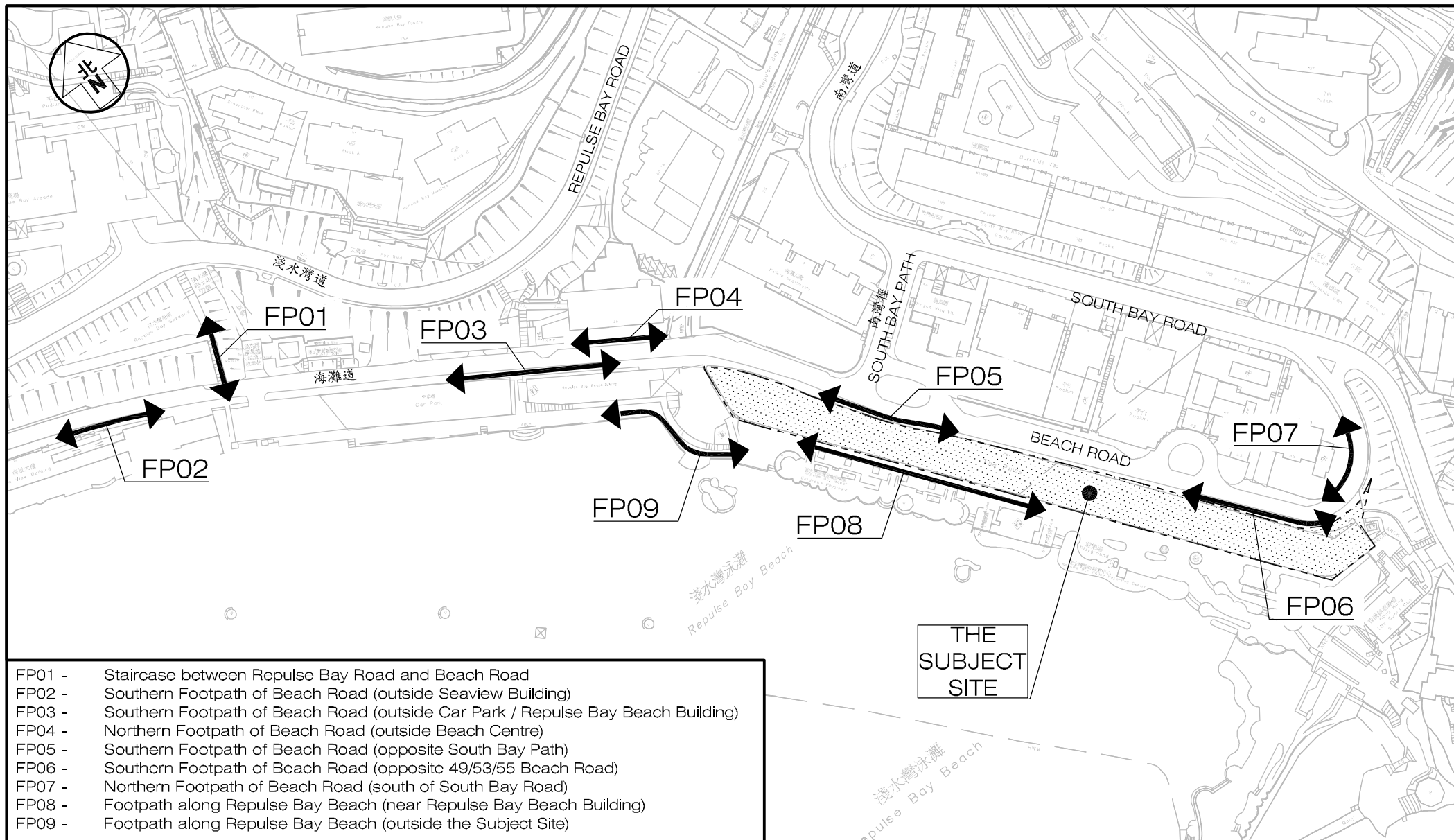
Scale in A4 N.T.S.

Date 07 AUG 2025

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- FP01 - Staircase between Repulse Bay Road and Beach Road
- FP02 - Southern Footpath of Beach Road (outside Seaview Building)
- FP03 - Southern Footpath of Beach Road (outside Car Park / Repulse Bay Beach Building)
- FP04 - Northern Footpath of Beach Road (outside Beach Centre)
- FP05 - Southern Footpath of Beach Road (opposite South Bay Path)
- FP06 - Southern Footpath of Beach Road (opposite 49/53/55 Beach Road)
- FP07 - Northern Footpath of Beach Road (south of South Bay Road)
- FP08 - Footpath along Repulse Bay Beach (near Repulse Bay Beach Building)
- FP09 - Footpath along Repulse Bay Beach (outside the Subject Site)

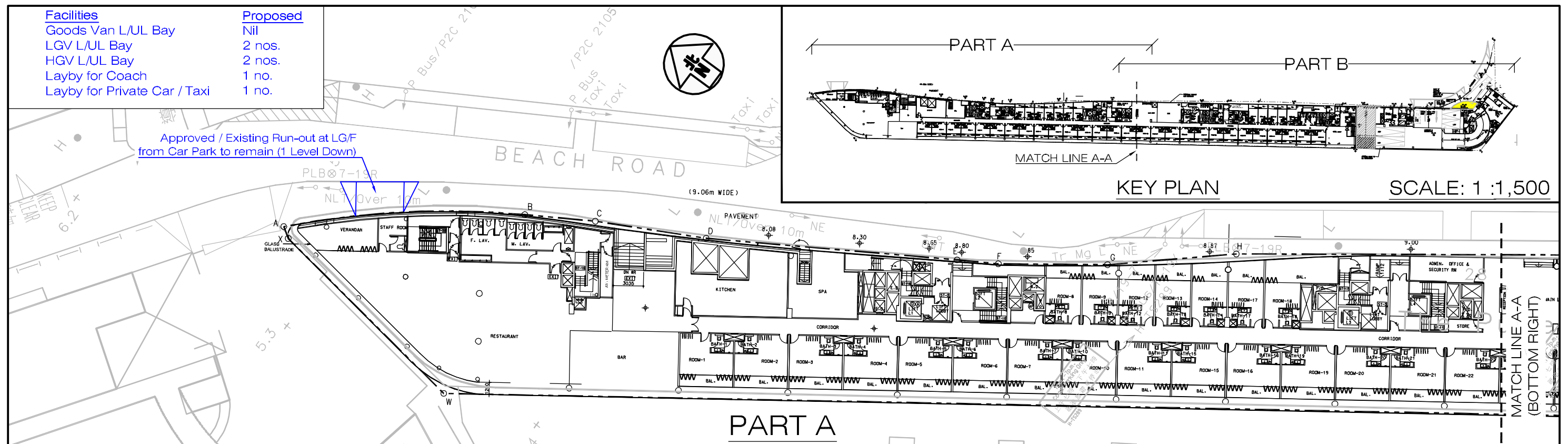
Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY J7245

Figure Title LOCATION OF THE SURVEYED FOOTPATHS







Figure No.	2.15	Revision	C
Designed by	MCY	Drawn by	SCY
Checked by	KC		
Scale in A4	1 : 2,000	Date	07 AUG 2025

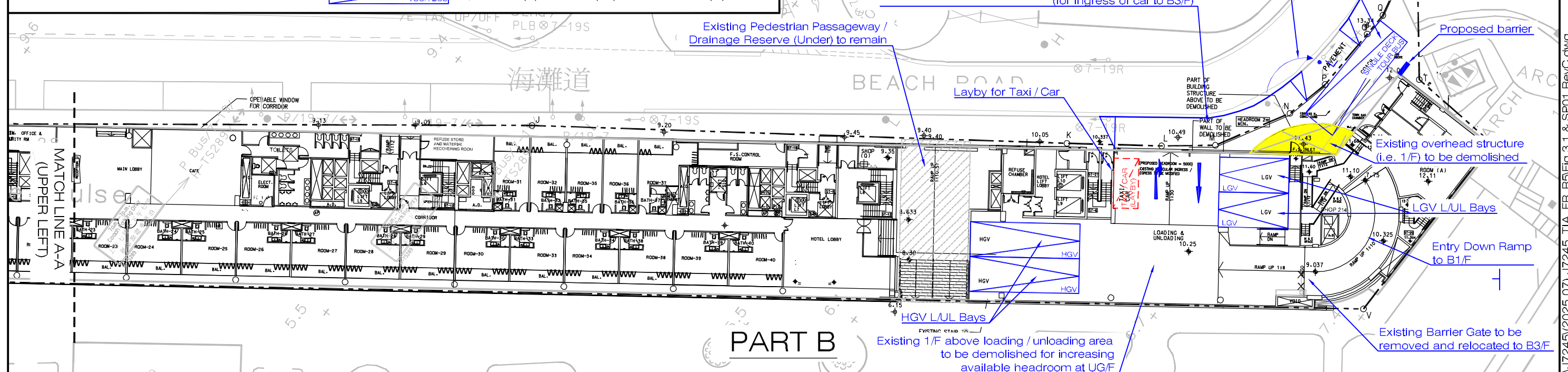
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 Wan Chai, Hong Kong
 Tel : (852) 2520 5990 Fax : (852) 2528 6343
 Email : mail@ckmasia.com.hk

<u>Facilities</u>	<u>Proposed</u>
Goods Van L/UL Bay	Nil
LGV L/UL Bay	2 nos.
HGV L/UL Bay	2 nos.
Layby for Coach	1 no.
Layby for Private Car / Taxi	1 no.



LEGEND :

- | | | | |
|---|---|---|--|
|  | Existing Goods Van L/UL Bay
@5.0m(L) X 2.5m(W) |  | @5.0m(L) X 2.5m(W) X Min. 2.4m(H) |
|  | Existing LGV L/UL Bay
@7.0m(L) X 3.5m(W) |  | Proposed LGV L/UL Bay
@7.0m(L) X 3.5m(W) X Min. 3.6m (H) |
| | |  | Proposed HGV L/UL Bay
@11.0m(L) X 3.5m(W) X Min. 4.7m (H) |
| | |  | Proposed Layby for Single Deck Tour Bus
@12.0m(L) X 3.5m(W) X Min. 3.8m (H) |



Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY
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Figure Title

PROPOSED INTERNAL TRANSPORT LAYOUT AT UG/F WITH THE PROPOSED CONVERSION

J7245

45	Figure No.
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Revision
C

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Traffic and Transportation Planning Consultants

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Wan Chai, Hong Kong

Tel : (852) 2520 5990 Fax : (852) 2528 6343

Designed by	
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Drawn by	
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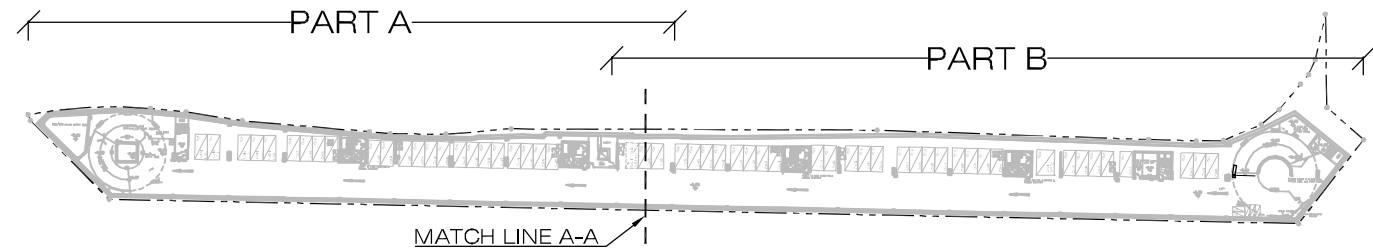
Checked by	
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Scale in A3

	Date
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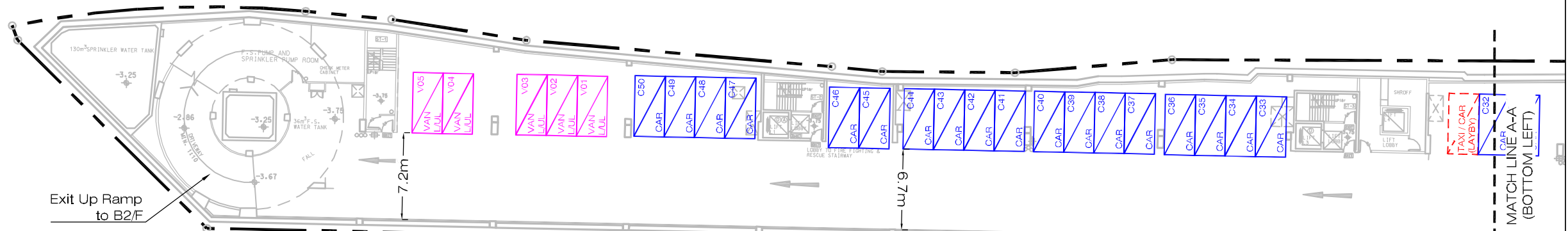
9

Facilities	
Car Parking Spaces	Proposed
- Conventional	Total 50 nos., including:
- Accessible	49 nos.
	1 no.
Motorcycle	5 nos.
Layby for Taxi / Private Car	1 no.
Goods Van Loading / Unloading Bays	5 nos.



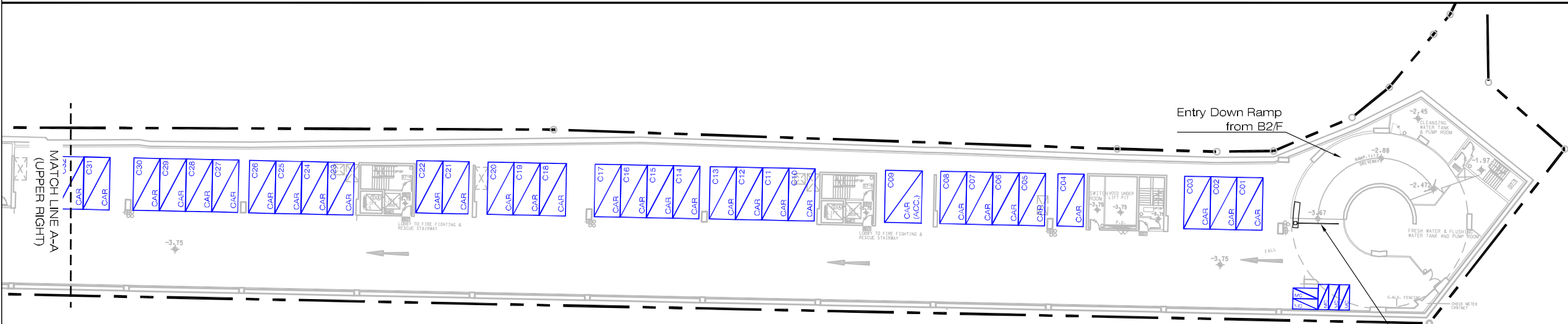
KEY PLAN

SCALE: 1 :1,500



PART A

NOTE:
ALL existing mechanical parking racks are to be removed.



PART B

NOTE:
ALL existing mechanical parking racks are to be removed.

LEGEND :

Proposed car parking spaces
@5.0m(L) X 2.5m(W) X Min. 2.4m(H)

Proposed accessible car parking space
@5.0m(L) X 3.5m(W) X Min. 2.4m(H)

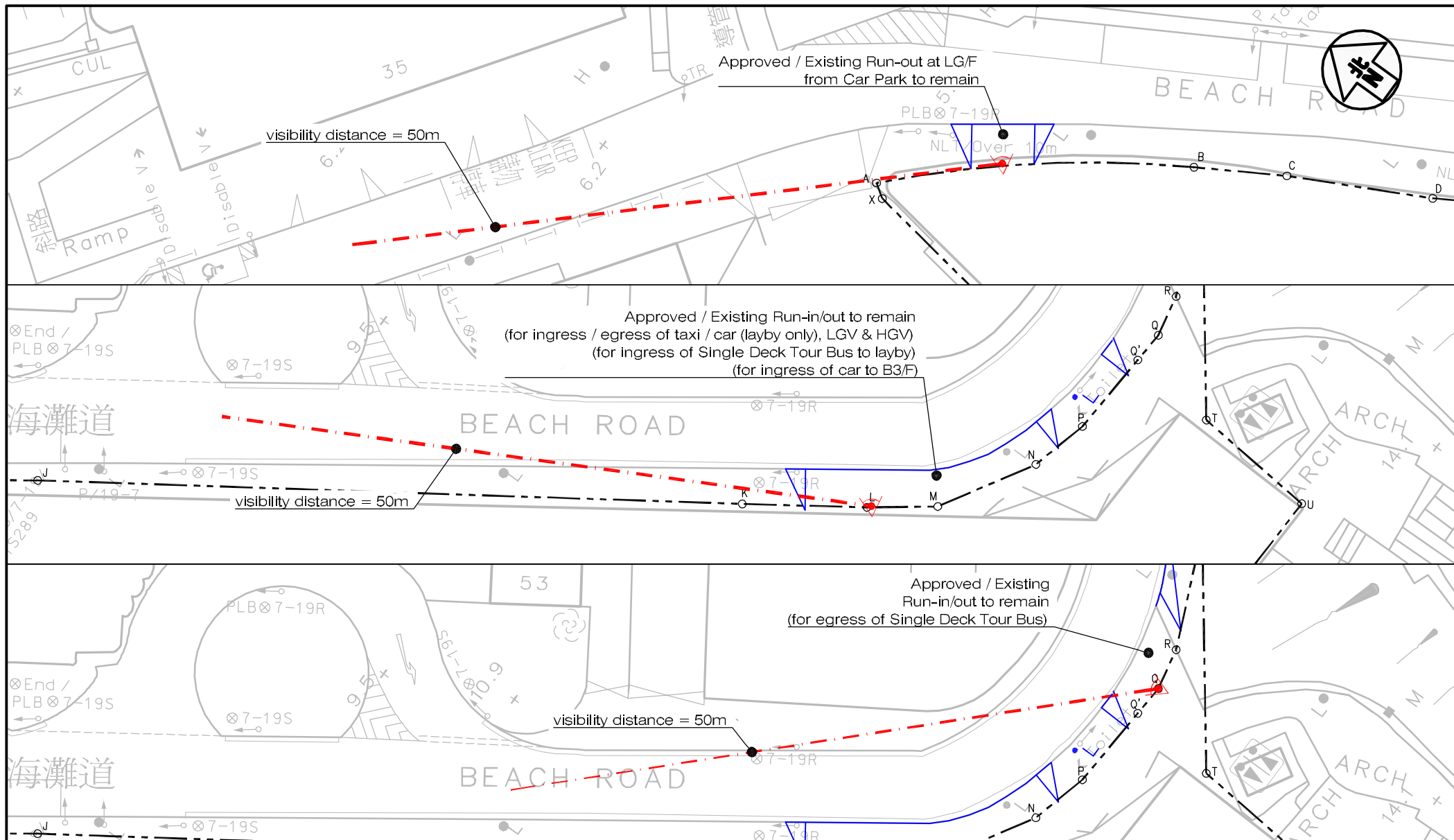
Proposed layby for taxi / private car
@5.0m(L) X 2.5m(W) X Min. 2.4m(H)

Proposed motorcycle parking spaces
@2.4m(L) X 1.0m(W) X Min. 2.4m(H)

Proposed Goods Van loading / unloading bay
@ 5.0m(L) X 2.5m(W) X Min. 2.4m(H)

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	Figure No. 3.2	Revision C	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	PROPOSED INTERNAL TRANSPORT LAYOUT AT B3/F WITH THE PROPOSED CONVERSION		Designed by W C H	Drawn by S C Y		Checked by K C
			Scale in A3 1 : 400	Date 07 AUG 2025		

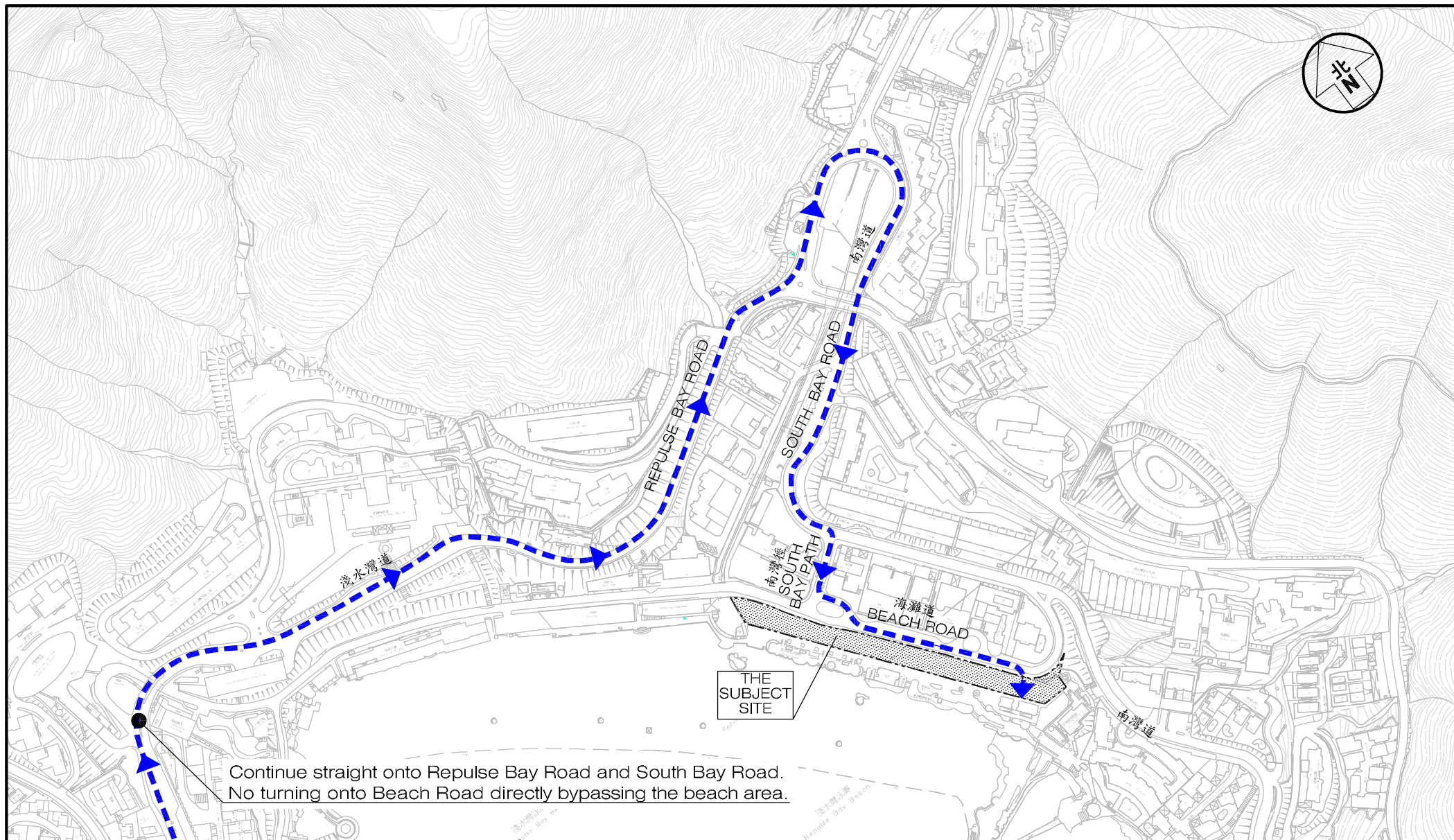
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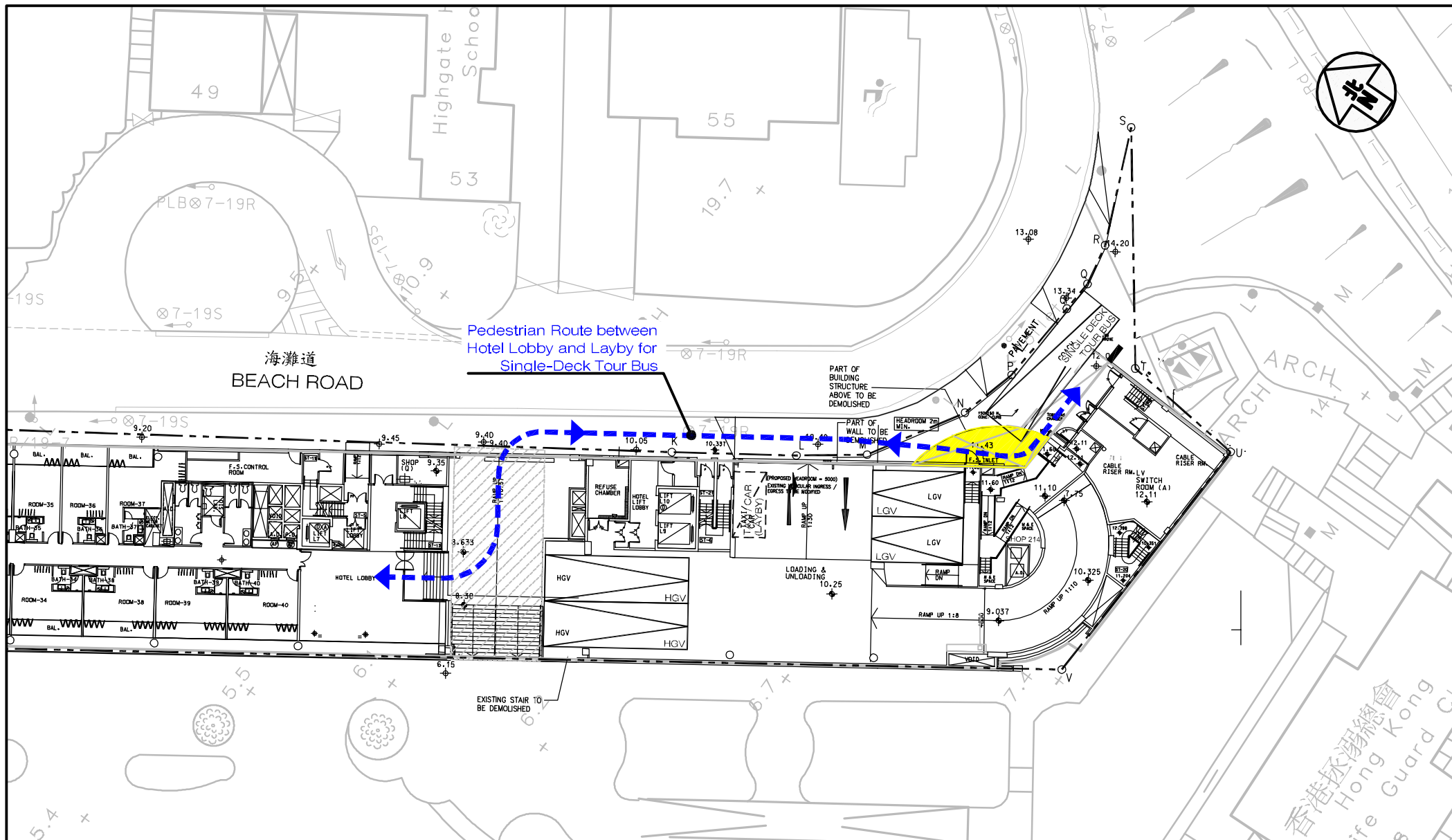
Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	Figure No. 3.3	Revision C
Figure Title VISIBILITY ASSESSMENTS AT APPROVED / EXISTING VEHICULAR ACCESSES ALONG BEACH ROAD	Designed by W C H Scale in A4 1 : 400	Checked by K C Date 07 AUG 2025

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T:\JOB\J7200-J7249\J7245(2025 07) J7245_TIA_FR_R5\Fig 3.3 RevC.dwg



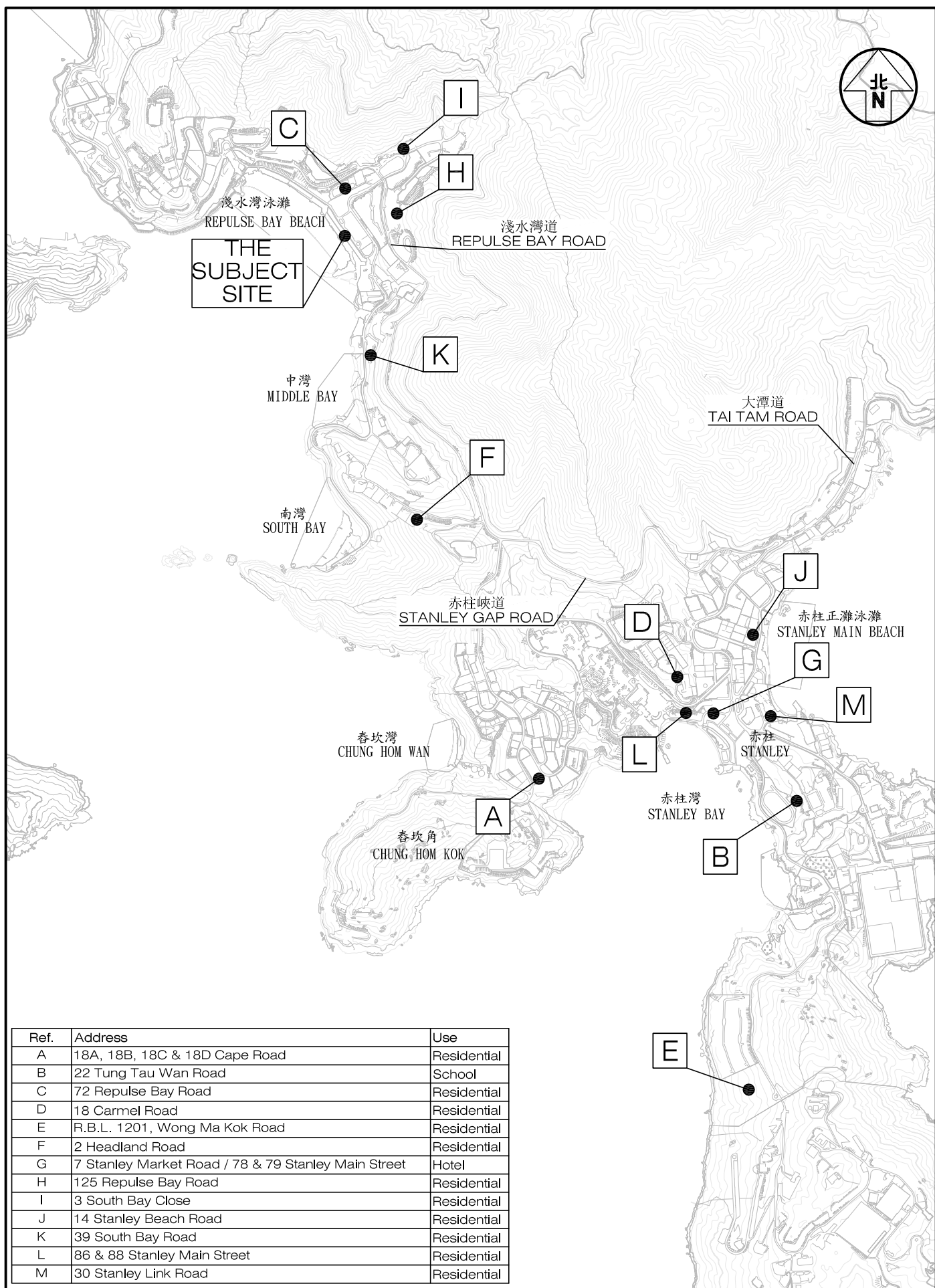
Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	Figure No. 3.4	Revision C
Figure Title RECOMMENDED INGRESS ROUTE TO THE SUBJECT SITE (VIA REPULSE BAY ROAD AND SOUTH BAY ROAD)	Designed by M C Y Drawn by S C Y Checked by K C Scale in A4 1 : 3,000	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



Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	Figure No. 3.5	Revision C
Figure Title PEDESTRIAN ACCESS ROUTE BETWEEN HOTEL LOBBY AND LAYBY FOR SINGLE-DECK TOUR BUS	Designed by W C H Scale in A4 1 : 400	Checked by K C Date 07 AUG 2025

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T:\JOB\J7200-J7249\J7245(2025 07) J7245_TIA_FR_R5Fig 3.5 RevC.dwg



Ref.	Address	Use
A	18A, 18B, 18C & 18D Cape Road	Residential
B	22 Tung Tau Wan Road	School
C	72 Repulse Bay Road	Residential
D	18 Carmel Road	Residential
E	R.B.L. 1201, Wong Ma Kok Road	Residential
F	2 Headland Road	Residential
G	7 Stanley Market Road / 78 & 79 Stanley Main Street	Hotel
H	125 Repulse Bay Road	Residential
I	3 South Bay Close	Residential
J	14 Stanley Beach Road	Residential
K	39 South Bay Road	Residential
L	86 & 88 Stanley Main Street	Residential
M	30 Stanley Link Road	Residential

Project Title
PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY

Figure Title

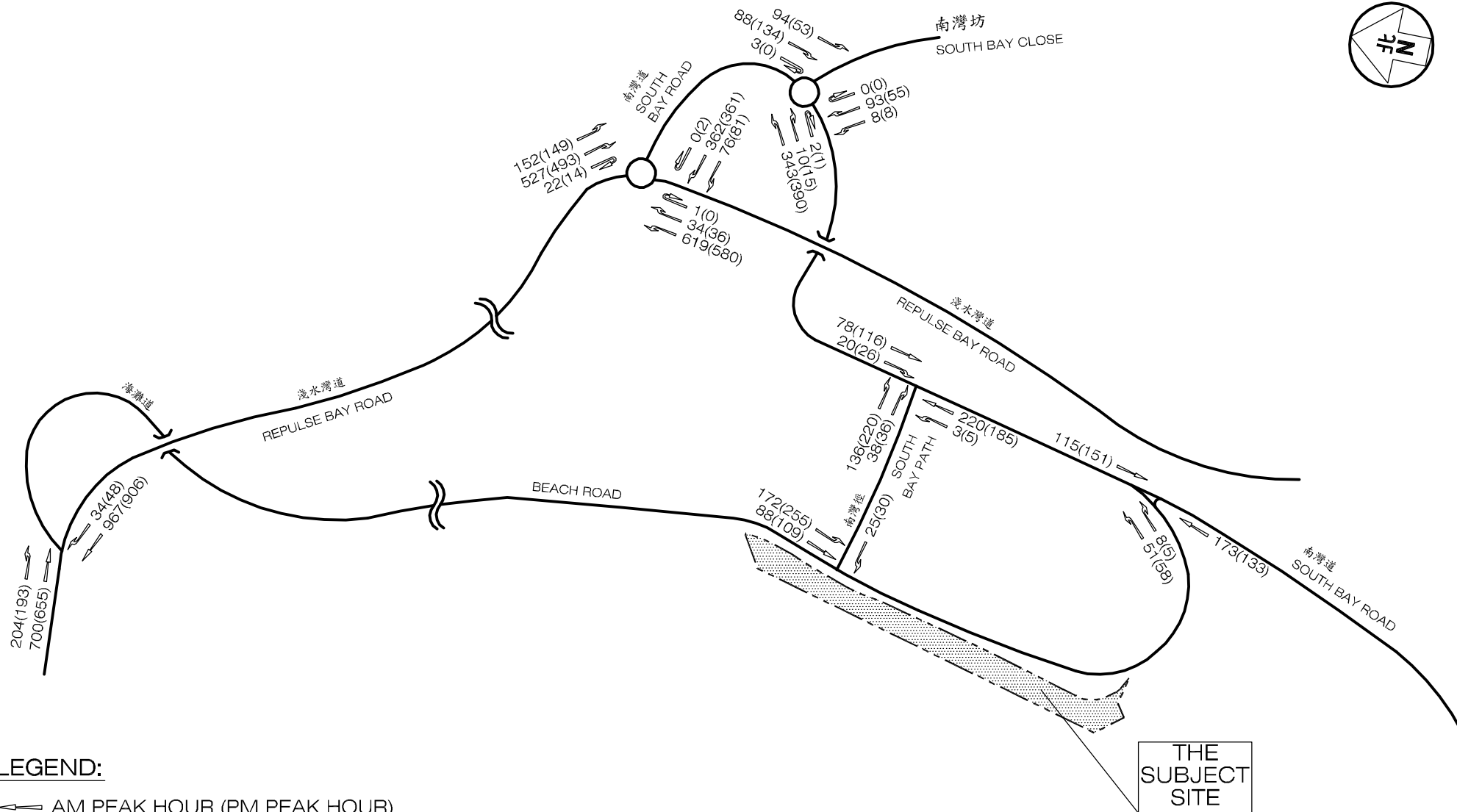
LOCATIONS OF OTHER PLANNED / COMMITTED DEVELOPMENTS IN THE VICINITY

Job No. J7245	Figure No. 4.1	Scale in A4 1 : 20,000
Designed by M C Y	Drawn by S C Y	Checked by K C
	Revision C	Date 07 AUG 2025

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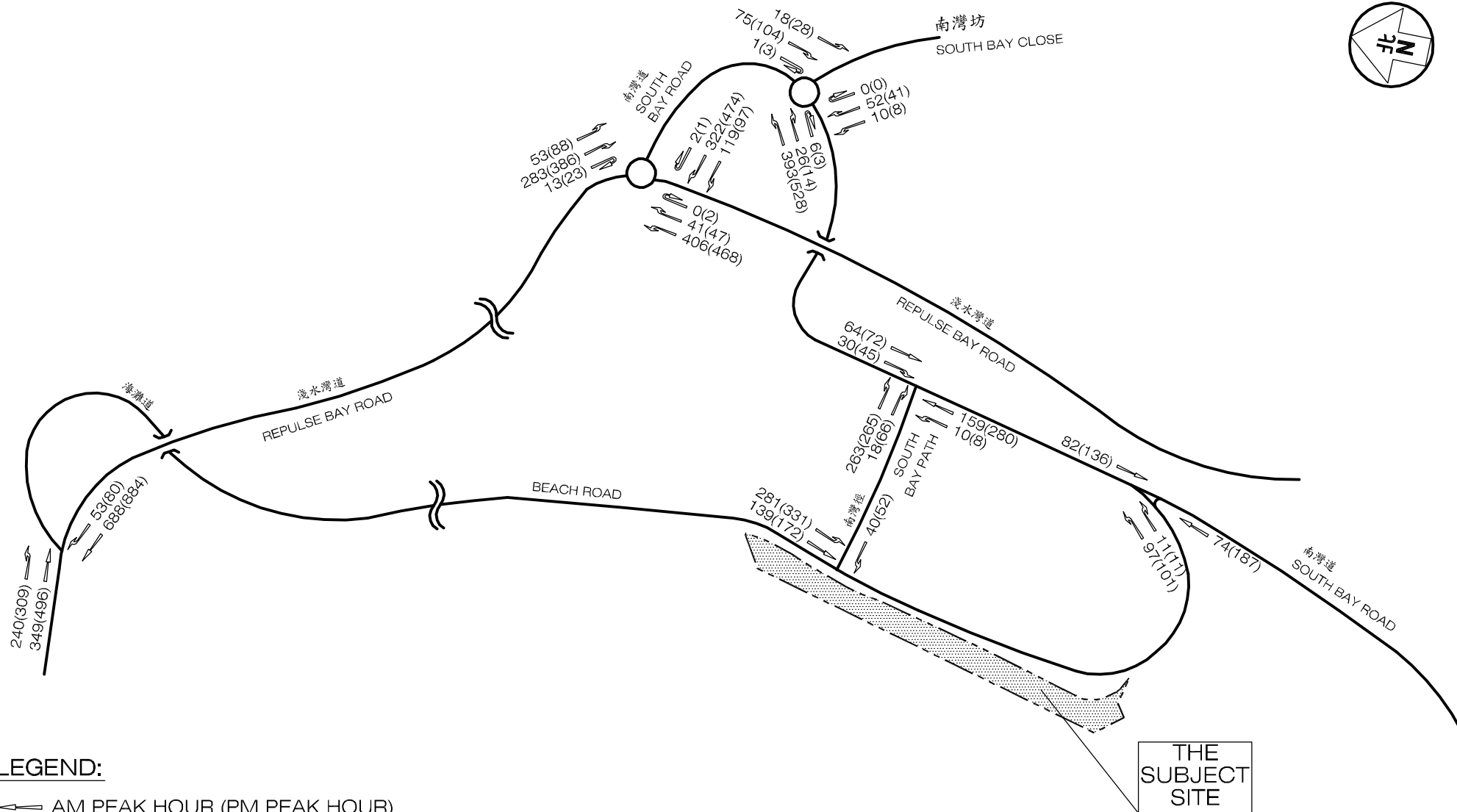
Traffic and Transportation Planning Consultants
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T:\JOB\J7200-J7249\J7245(2025 07) J7245_TIA_FR_R5\Fig 4.1 RevC.dwg



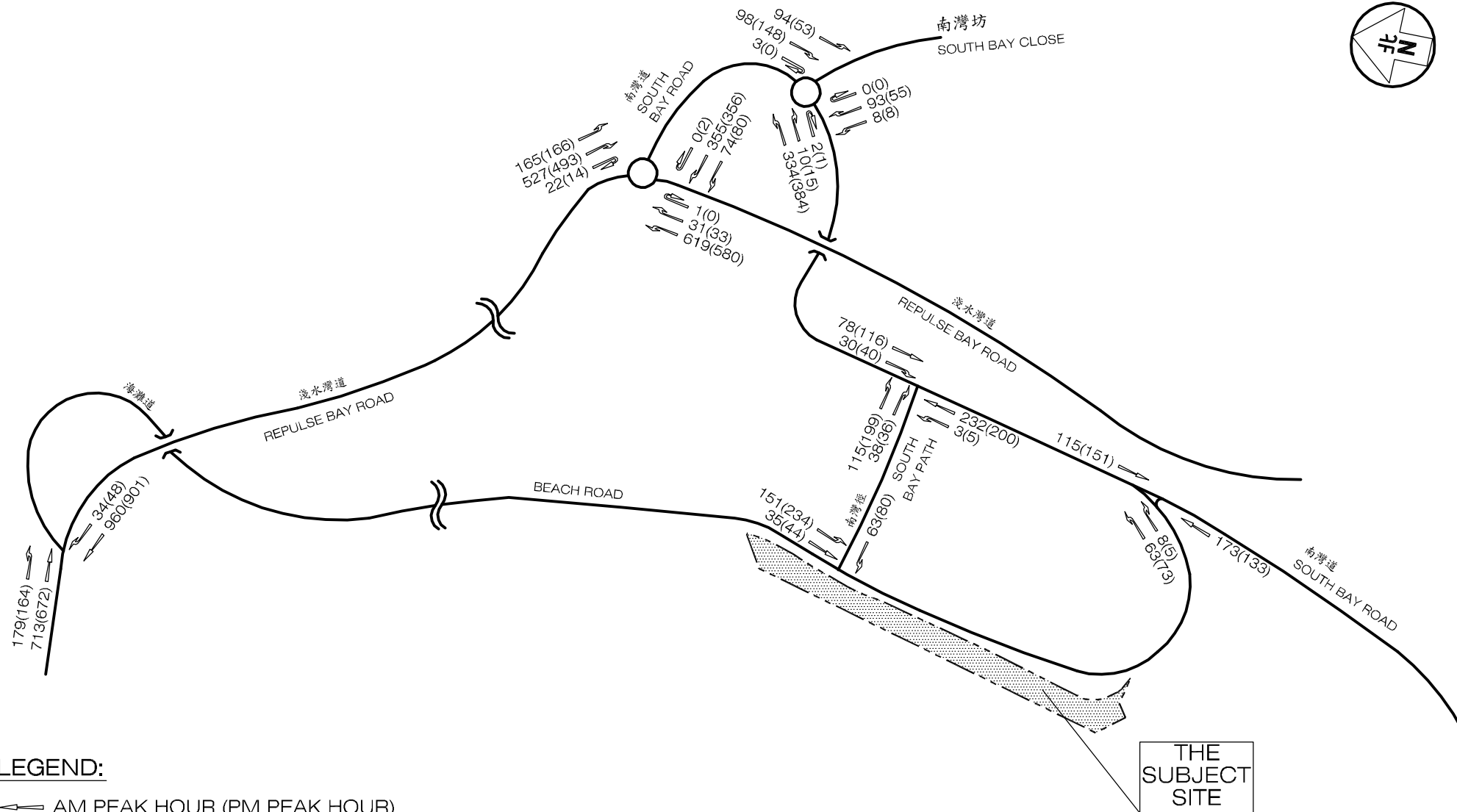
Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	Figure No. 4.2	Revision C
Figure Title YEAR 2030 WEEKDAY PEAK HOUR TRAFFIC FLOW WITHOUT THE PROPOSED DEVELOPMENT	Designed by M C Y Scale in A4 N.T.S.	Checked by K C Date 07 AUG 2025

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Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	Figure No. 4.3	Revision C
Figure Title YEAR 2030 WEEKEND PEAK HOUR TRAFFIC FLOW WITHOUT THE PROPOSED CONVERSION	Designed by M C Y Scale in A4 N.T.S.	Drawn by S C Y Date 07 AUG 2025

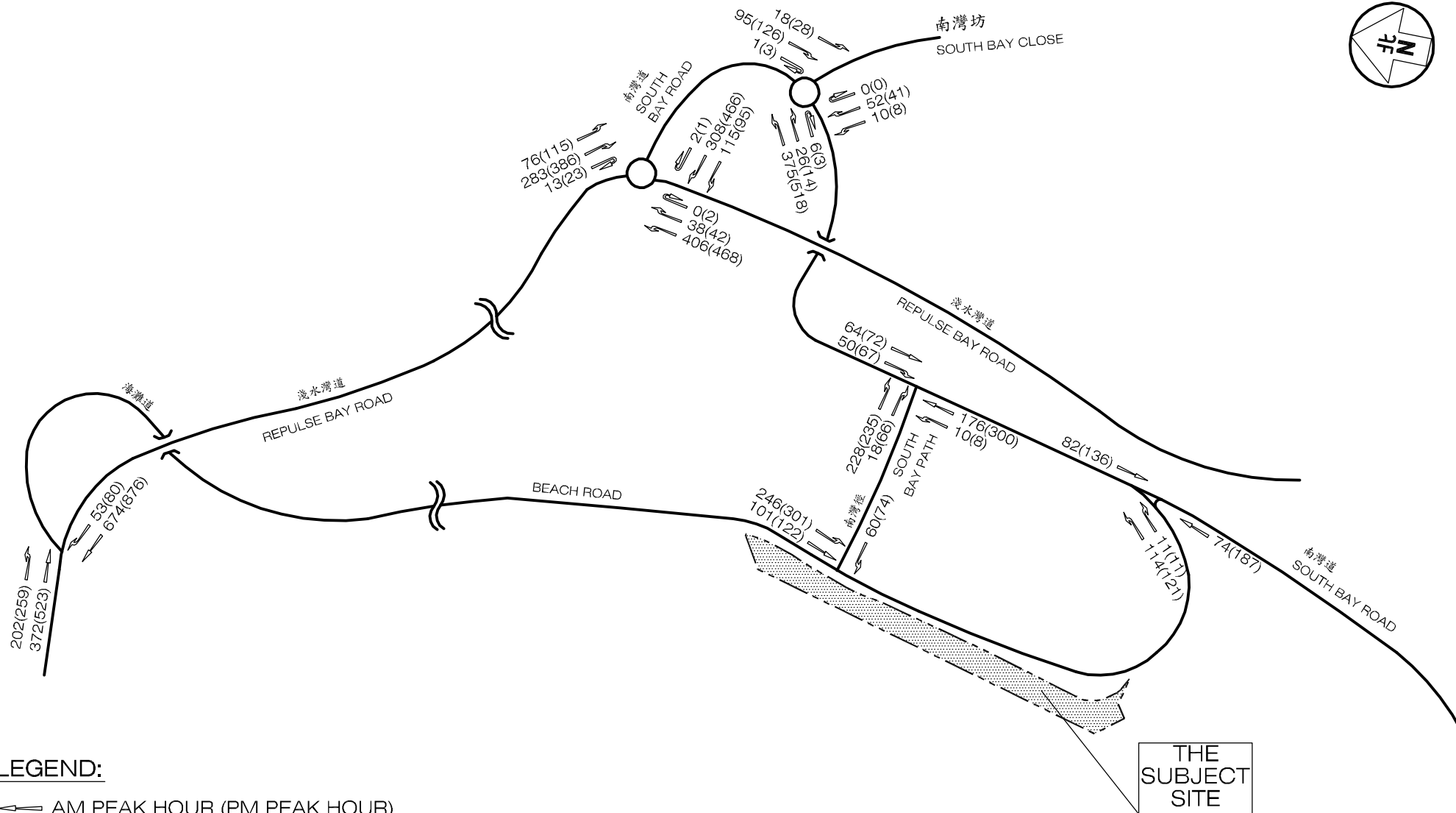
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Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	Figure No. 4.4	Revision C
Figure Title YEAR 2030 WEEKDAY PEAK HOUR TRAFFIC FLOW WITH THE PROPOSED CONVERSION	Designed by M C Y Scale in A4 N.T.S.	Checked by K C Date 07 AUG 2025

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Project Title PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY J7245

Figure No. 4.5 Revision C

Figure Title YEAR 2030 WEEKEND PEAK HOUR TRAFFIC FLOW WITH THE PROPOSED CONVERSION

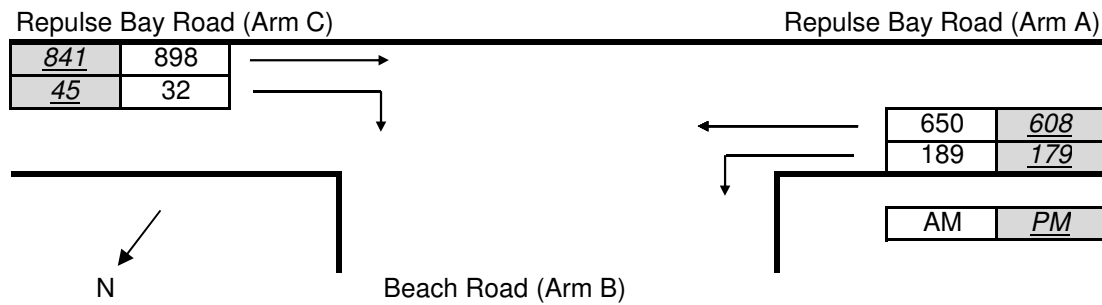
Designed by M C Y Drawn by S C Y Checked by K C Scale in A4 N.T.S. Date 07 AUG 2025

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Appendix A – Junction Capacity Analyses

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road	Job Number:	J7245
Scenario:	Existing Condition (Weekday)	J01 - P. 1	
Design Year:	2025	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	9.50	V-rBA	50
W-CR	0.00	V-IBA	50
		V-rBC	50
		V-rCB	50
		w-BA	0.00
		w-BC	0.00
		w-CB	3.20
		D	0.5786
		E	0.6155
		F	0.8974
		Y	0.4963

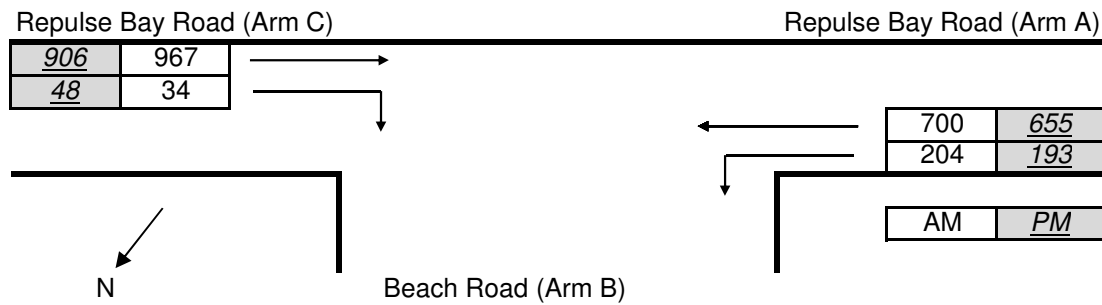
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	898	841	Q-BA	223	230
q-CB	32	45	Q-BC	378	383
q-AB	189	179	Q-CB	533	541
q-AC	650	608	Q-BAC	223	230
q-BA	0	0			
q-BC	0	0			
f	0.000	0.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.000	0.000
C-B	0.060	0.083
B-AC	0.000	0.000

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road	Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekday)	J01 - P. 2	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	9.50	V-rBA	50
W-CR	0.00	V-IBA	50
		V-rBC	50
		V-rCB	50
		w-BA	0.00
		w-BC	0.00
		w-CB	3.20
		D	0.5786
		E	0.6155
		F	0.8974
		Y	0.4963

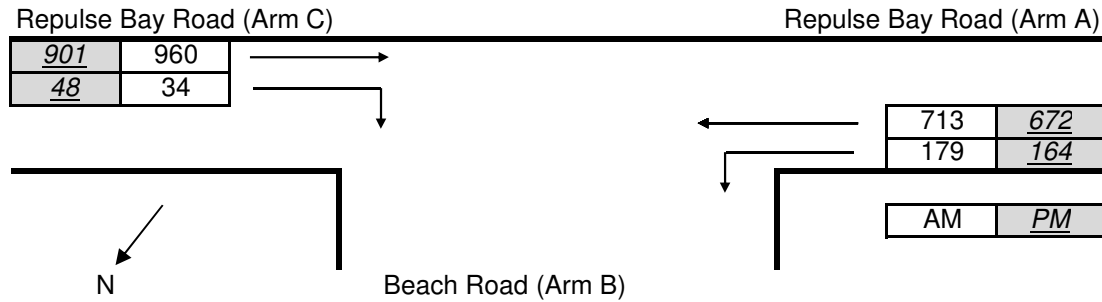
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	967	906	Q-BA	213	220
q-CB	34	48	Q-BC	372	377
q-AB	204	193	Q-CB	522	531
q-AC	700	655	Q-BAC	213	220
q-BA	0	0			
q-BC	0	0			
f	0.000	0.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.000	0.000
C-B	0.065	0.090
B-AC	0.000	0.000

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road	Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday)	J01 - P. 3	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	9.50	V-rBA	50
W-CR	0.00	V-IBA	50
		V-rBC	50
		V-rCB	50
		w-BA	0.00
		w-BC	0.00
		w-CB	3.20
		D	0.5786
		E	0.6155
		F	0.8974
		Y	0.4963

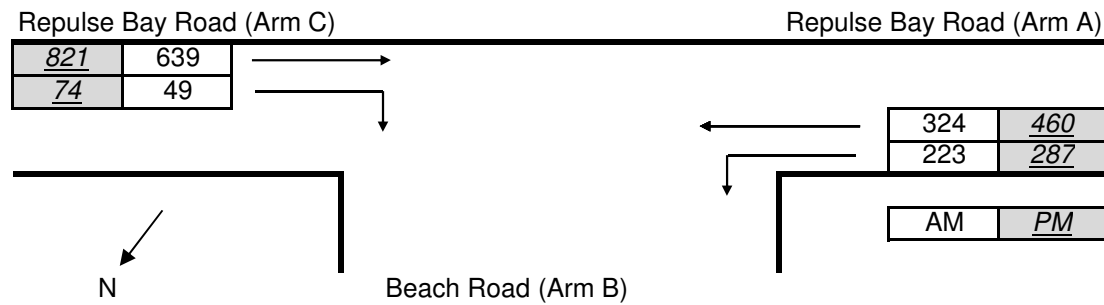
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	960	901	Q-BA	213	219
q-CB	34	48	Q-BC	371	377
q-AB	179	164	Q-CB	524	533
q-AC	713	672	Q-BAC	213	219
q-BA	0	0			
q-BC	0	0			
f	0.000	0.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.000	0.000
C-B	0.065	0.090
B-AC	0.000	0.000

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road	Job Number:	J7245
Scenario:	Existing Condition (Weekend)	J01 - P. 4	
Design Year:	2025	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	9.50	V-rBA	50
W-CR	0.00	V-IBA	50
		V-rBC	50
		V-rCB	50
		w-BA	0.00
		w-BC	0.00
		w-CB	3.20
		D	0.5786
		E	0.6155
		F	0.8974
		Y	0.4963

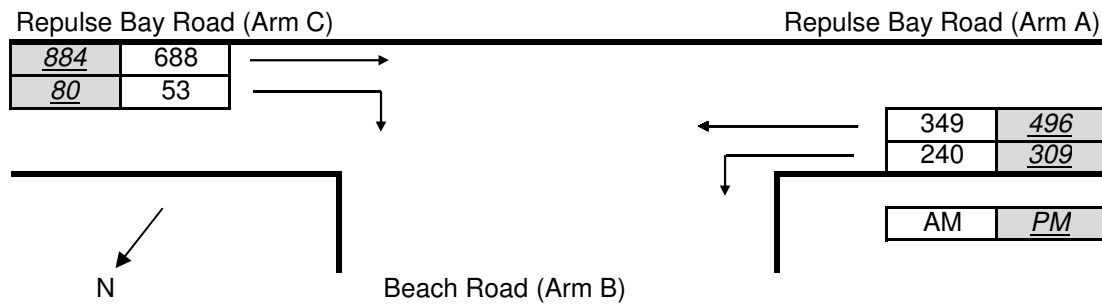
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	639	821	Q-BA	270	238
q-CB	49	74	Q-BC	413	395
q-AB	223	287	Q-CB	580	547
q-AC	324	460	Q-BAC	270	238
q-BA	0	0			
q-BC	0	0			
f	0.000	0.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.000	0.000
C-B	0.085	0.135
B-AC	0.000	0.000

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road	Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekend)	J01 - P. 5	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	9.50	V-rBA	50
W-CR	0.00	V-IBA	50
		V-rBC	50
		V-rCB	50
		w-BA	0.00
		w-BC	0.00
		w-CB	3.20
		D	0.5786
		E	0.6155
		F	0.8974
		Y	0.4963

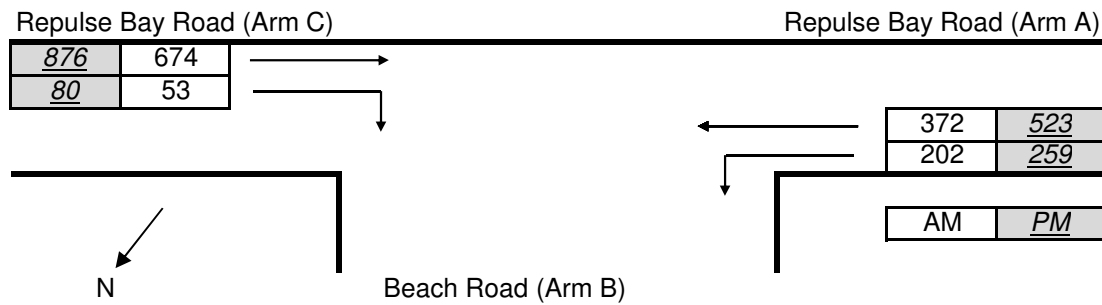
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	688	884	Q-BA	263	228
q-CB	53	80	Q-BC	409	390
q-AB	240	309	Q-CB	573	538
q-AC	349	496	Q-BAC	263	228
q-BA	0	0			
q-BC	0	0			
f	0.000	0.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.000	0.000
C-B	0.092	0.149
B-AC	0.000	0.000

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road	Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend)	J01 - P. 6	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input		Input		Input		Calculated	
W	9.50	V-rBA	50	w-BA	0.00	D	0.5786
W-CR	0.00	V-lBA	50	w-BC	0.00	E	0.6155
		V-rBC	50	w-CB	3.20	F	0.8974
		V-rCB	50			Y	0.4963

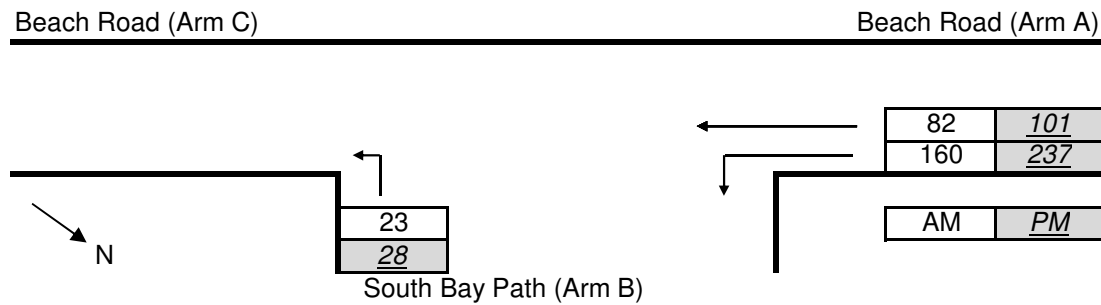
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	674	876	Q-BA	263	228
q-CB	53	80	Q-BC	408	389
q-AB	202	259	Q-CB	575	542
q-AC	372	523	Q-BAC	263	228
q-BA	0	0			
q-BC	0	0			
f	0.000	0.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.000	0.000
C-B	0.092	0.148
B-AC	0.000	0.000

Priority Junction Analysis

Junction:	South Bay Path / Beach Road	Job Number:	J7245
Scenario:	Existing Condition (Weekday)		J02 - P. 1
Design Year:	2025	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input	Input	Input	Calculated
	W	9.60	V-rBA	50
	W-CR	0.00	V-IBA	50
			V-rBC	50
			V-rCB	50
			w-BA	0.00
			w-BC	3.50
			w-CB	0.00
			D	0.5786
			E	0.9238
			F	0.6155
			Y	0.4963

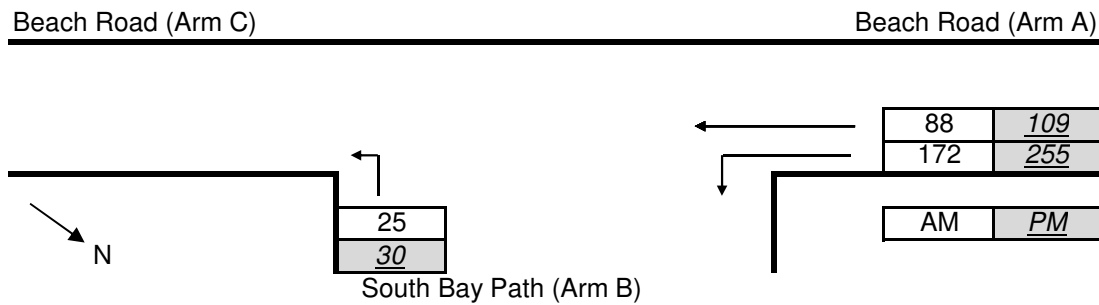
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	348	342
q-CB	0	0	Q-BC	664	656
q-AB	160	237	Q-CB	432	421
q-AC	82	101	Q-BAC	664	656
q-BA	0	0			
q-BC	23	28			
f	1.000	1.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.035	0.043
C-B	0.000	0.000
B-AC	0.035	0.043

Priority Junction Analysis

Junction:	South Bay Path / Beach Road	Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekday)	J02 - P. 2	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	8.60	V-rBA	50
W-CR	0.00	V-IBA	50
		V-rBC	50
		V-rCB	50
		w-BA	0.00
		w-BC	3.50
		w-CB	0.00
		D	0.5786
		E	0.9238
		F	0.6155
		Y	0.4963

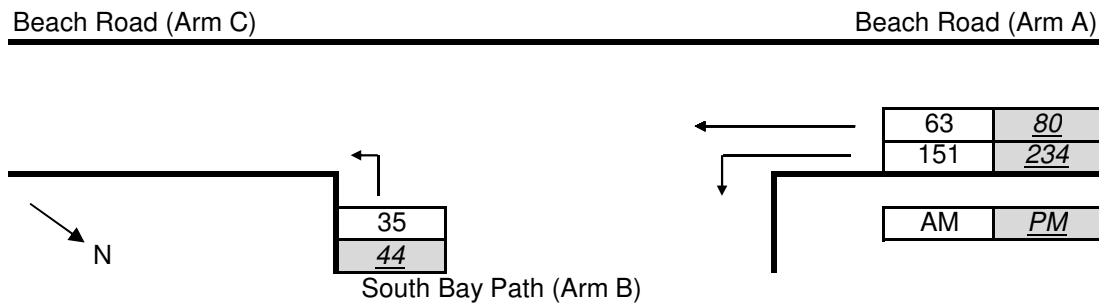
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	346	341
q-CB	0	0	Q-BC	662	653
q-AB	172	255	Q-CB	430	418
q-AC	88	109	Q-BAC	662	653
q-BA	0	0			
q-BC	25	30			
f	1.000	1.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.038	0.046
C-B	0.000	0.000
B-AC	0.038	0.046

Priority Junction Analysis

Junction:	South Bay Path / Beach Road	Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday)	J02 - P. 3	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	8.60	V-rBA	50
W-CR	0.00	V-IBA	50
		V-rBC	50
		V-rCB	50
		w-BA	0.00
		w-BC	3.50
		w-CB	0.00
		D	0.5786
		E	0.9238
		F	0.6155
		Y	0.4963

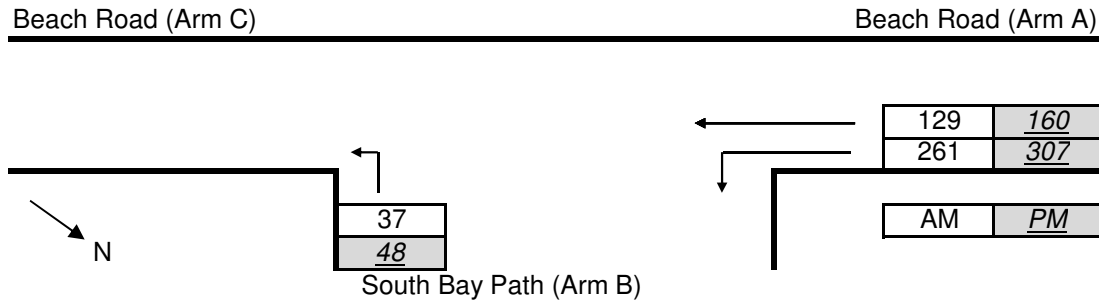
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	350	345
q-CB	0	0	Q-BC	668	659
q-AB	151	234	Q-CB	435	424
q-AC	63	80	Q-BAC	668	659
q-BA	0	0			
q-BC	35	44			
f	1.000	1.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.052	0.067
C-B	0.000	0.000
B-AC	0.052	0.067

Priority Junction Analysis

Junction:	South Bay Path / Beach Road	Job Number:	J7245
Scenario:	Existing Condition (Weekend)		J02 - P. 4
Design Year:	2025	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input		Input		Input		Calculated	
W	9.60	V-rBA	50	w-BA	0.00	D	0.5786
W-CR	0.00	V-lBA	50	w-BC	3.50	E	0.9238
		V-rBC	50	w-CB	0.00	F	0.6155
		V-rCB	50			Y	0.4963

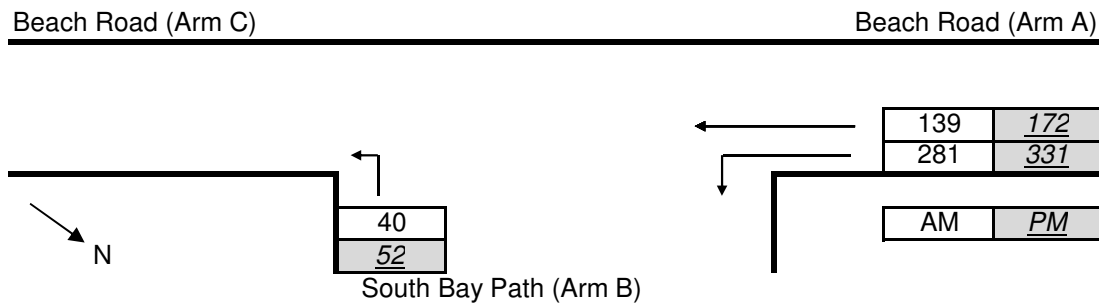
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	338	333
q-CB	0	0	Q-BC	649	641
q-AB	261	307	Q-CB	415	407
q-AC	129	160	Q-BAC	649	641
q-BA	0	0			
q-BC	37	48			
f	1.000	1.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.057	0.075
C-B	0.000	0.000
B-AC	0.057	0.075

Priority Junction Analysis

Junction:	South Bay Path / Beach Road	Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekend)		J02 - P. 5
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input		Input		Input		Calculated	
W	8.60	V-rBA	50	w-BA	0.00	D	0.5786
W-CR	0.00	V-IBA	50	w-BC	3.50	E	0.9238
		V-rBC	50	w-CB	0.00	F	0.6155
		V-rCB	50			Y	0.4963

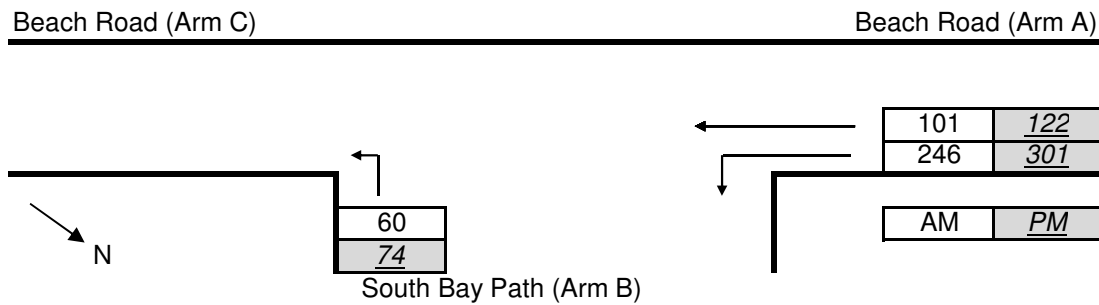
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	337	331
q-CB	0	0	Q-BC	646	638
q-AB	281	331	Q-CB	412	403
q-AC	139	172	Q-BAC	646	638
q-BA	0	0			
q-BC	40	52			
f	1.000	1.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.062	0.082
C-B	0.000	0.000
B-AC	0.062	0.082

Priority Junction Analysis

Junction:	South Bay Path / Beach Road	Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend)	J02 - P. 6	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input		Input		Input		Calculated	
W	8.60	V-rBA	50	w-BA	0.00	D	0.5786
W-CR	0.00	V-IBA	50	w-BC	3.50	E	0.9238
		V-rBC	50	w-CB	0.00	F	0.6155
		V-rCB	50			Y	0.4963

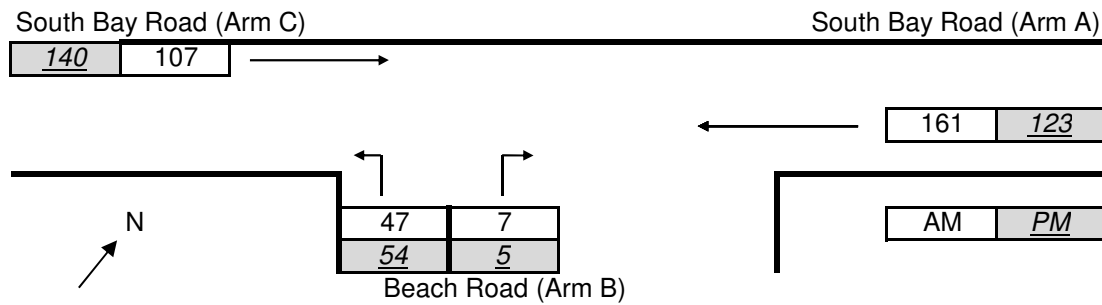
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	342	338
q-CB	0	0	Q-BC	655	648
q-AB	246	301	Q-CB	420	412
q-AC	101	122	Q-BAC	655	648
q-BA	0	0			
q-BC	60	74			
f	1.000	1.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.092	0.114
C-B	0.000	0.000
B-AC	0.092	0.114

Priority Junction Analysis

Junction:	South Bay Road / Beach Road	Job Number:	J7245
Scenario:	Existing Condition (Weekday)	J03 - P. 1	
Design Year:	2025	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

	Input	Input	Input	Calculated
W	7.00	V-rBA	30	D 0.8408
W-CR	0.00	V-IBA	30	E 0.9060
		V-rBC	30	F 0.6037
		V-rCB	30	Y 0.4963

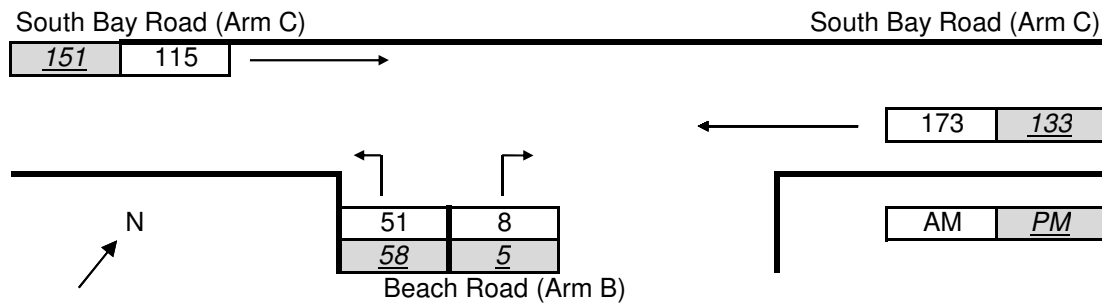
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	107	140	Q-BA	493	495
q-CB	0	0	Q-BC	649	655
q-AB	0	0	Q-CB	432	436
q-AC	161	123	Q-BAC	623	637
q-BA	7	5			
q-BC	47	54			
f	0.870	0.915			

Ratio-of-flow to Capacity	AM	PM
B-A	0.014	0.010
B-C	0.072	0.082
C-B	0.000	0.000
B-AC	0.087	0.093

Priority Junction Analysis

Junction:	South Bay Road / Beach Road	Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekday)		J03 - P. 2
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

	Input	Input	Input	Calculated
W	7.00	V-rBA	30	D 0.8408
W-CR	0.00	V-IBA	30	E 0.9060
		V-rBC	30	F 0.6037
		V-rCB	30	Y 0.4963

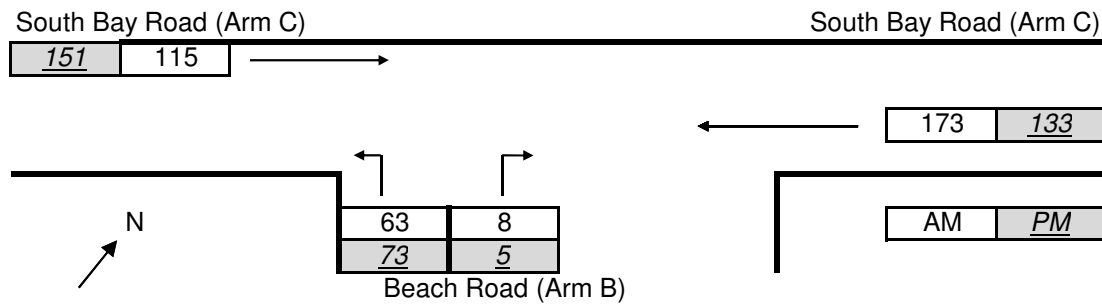
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	115	151	Q-BA	490	493
q-CB	0	0	Q-BC	647	653
q-AB	0	0	Q-CB	431	435
q-AC	173	133	Q-BAC	620	637
q-BA	8	5			
q-BC	51	58			
f	0.864	0.921			

Ratio-of-flow to Capacity	AM	PM
B-A	0.016	0.010
B-C	0.079	0.089
C-B	0.000	0.000
B-AC	0.095	0.099

Priority Junction Analysis

Junction:	South Bay Road / Beach Road	Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday)		J03 - P. 3
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

	Input	Input	Input	Calculated
W	7.00	V-rBA	30	D 0.8408
W-CR	0.00	V-IBA	30	E 0.9060
		V-rBC	30	F 0.6037
		V-rCB	30	Y 0.4963

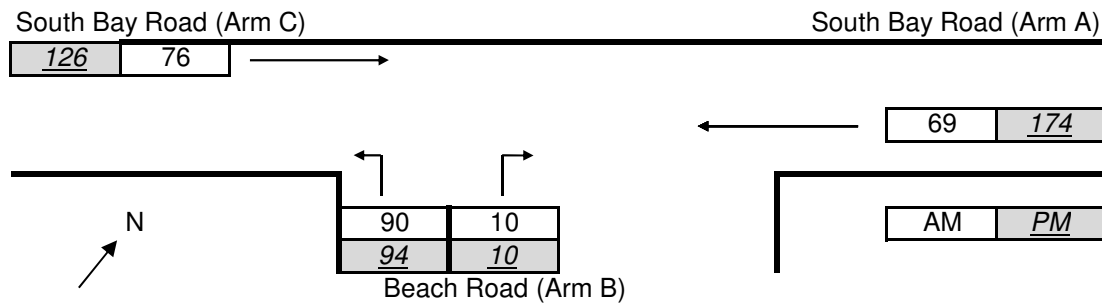
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	115	151	Q-BA	490	493
q-CB	0	0	Q-BC	647	653
q-AB	0	0	Q-CB	431	435
q-AC	173	133	Q-BAC	624	640
q-BA	8	5			
q-BC	63	73			
f	0.887	0.936			

Ratio-of-flow to Capacity	AM	PM
B-A	0.016	0.010
B-C	0.097	0.112
C-B	0.000	0.000
B-AC	0.114	0.122

Priority Junction Analysis

Junction:	South Bay Road / Beach Road	Job Number:	J7245
Scenario:	Existing Condition (Weekend)		J03 - P. 4
Design Year:	2025	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

	Input	Input	Input	Calculated
W	7.00	V-rBA	30	D 0.8408
W-CR	0.00	V-IBA	30	E 0.9060
		V-rBC	30	F 0.6037
		V-rCB	30	Y 0.4963

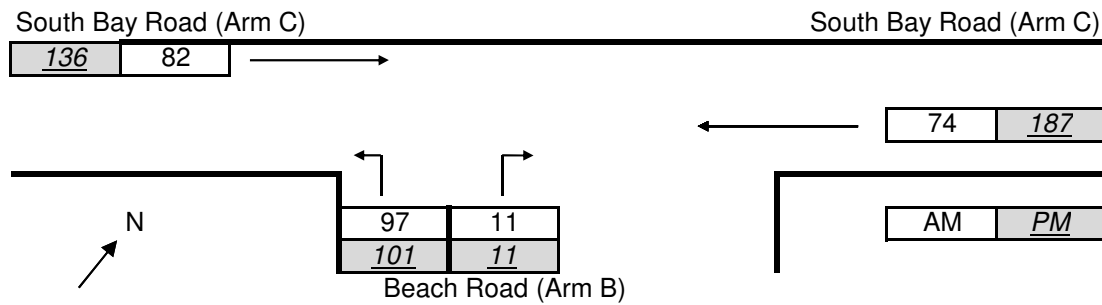
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	76	126	Q-BA	509	489
q-CB	0	0	Q-BC	664	647
q-AB	0	0	Q-CB	442	431
q-AC	69	174	Q-BAC	644	627
q-BA	10	10			
q-BC	90	94			
f	0.900	0.904			

Ratio-of-flow to Capacity	AM	PM
B-A	0.020	0.020
B-C	0.136	0.145
C-B	0.000	0.000
B-AC	0.155	0.166

Priority Junction Analysis

Junction:	South Bay Road / Beach Road	Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekend)		J03 - P. 5
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

	Input	Input	Input	Calculated
W	7.00	V-rBA	30	D 0.8408
W-CR	0.00	V-IBA	30	E 0.9060
		V-rBC	30	F 0.6037
		V-rCB	30	Y 0.4963

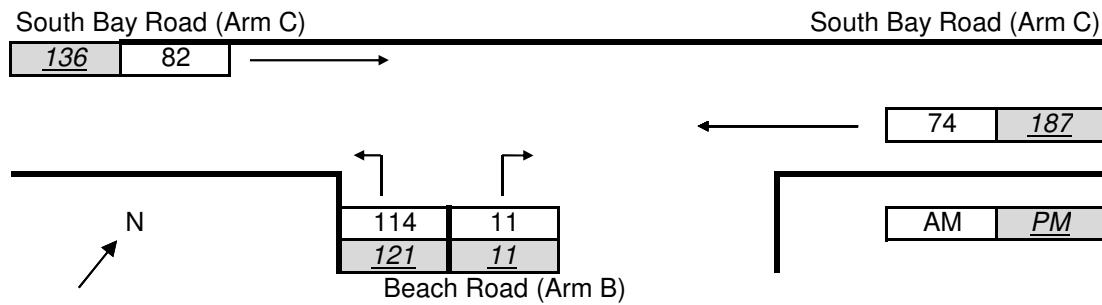
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	82	136	Q-BA	508	486
q-CB	0	0	Q-BC	663	644
q-AB	0	0	Q-CB	442	429
q-AC	74	187	Q-BAC	643	624
q-BA	11	11			
q-BC	97	101			
f	0.898	0.902			

Ratio-of-flow to Capacity	AM	PM
B-A	0.022	0.023
B-C	0.146	0.157
C-B	0.000	0.000
B-AC	0.168	0.179

Priority Junction Analysis

Junction:	South Bay Road / Beach Road	Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend)	J03 - P. 6	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	7.00	V-rBA	30
W-CR	0.00	V-IBA	30
		V-rBC	30
		V-rCB	30
		w-BA	3.50
		w-BC	3.50
		w-CB	0.00
		D	0.8408
		E	0.9060
		F	0.6037
		Y	0.4963

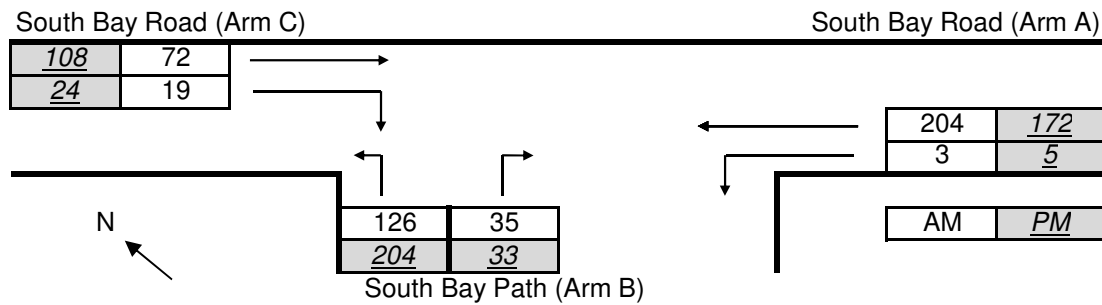
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	82	136	Q-BA	508	486
q-CB	0	0	Q-BC	663	644
q-AB	0	0	Q-CB	442	429
q-AC	74	187	Q-BAC	646	627
q-BA	11	11			
q-BC	114	121			
f	0.912	0.917			

Ratio-of-flow to Capacity	AM	PM
B-A	0.022	0.023
B-C	0.172	0.188
C-B	0.000	0.000
B-AC	0.194	0.210

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road	Job Number:	J7245
Scenario:	Existing Condition (Weekday)		J04 - P. 1
Design Year:	2025	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

	Input	Input	Input	Calculated
W	7.30	V-rBA	30	D 0.8007
W-CR	0.00	V-IBA	30	E 0.8628
		V-rBC	30	F 0.6037
		V-rCB	30	Y 0.4963

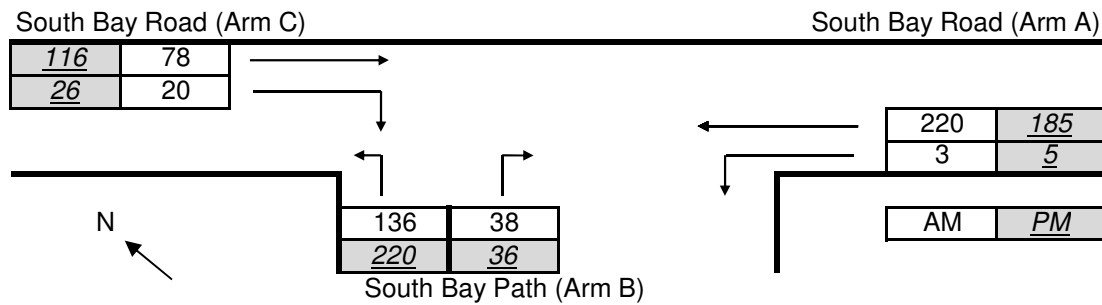
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	72	108	Q-BA	462	462
q-CB	19	24	Q-BC	611	616
q-AB	3	5	Q-CB	427	430
q-AC	204	172	Q-BAC	571	588
q-BA	35	33			
q-BC	126	204			
f	0.783	0.861			

Ratio-of-flow to Capacity	AM	PM
B-A	0.076	0.071
B-C	0.206	0.331
C-B	0.044	0.056
B-AC	0.282	0.403

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road	Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekday)		J04 - P. 2
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

	Input	Input	Input	Calculated
W	7.30	V-rBA	30	D 0.8007
W-CR	0.00	V-IBA	30	E 0.8628
		V-rBC	30	F 0.6037
		V-rCB	30	Y 0.4963

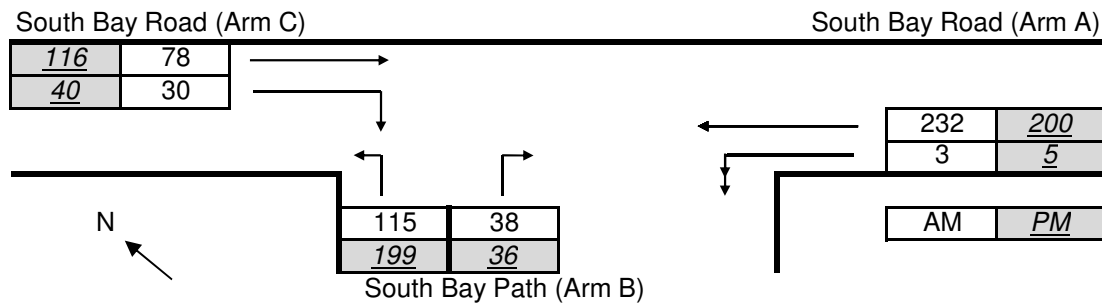
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	78	116	Q-BA	459	459
q-CB	20	26	Q-BC	608	614
q-AB	3	5	Q-CB	425	429
q-AC	220	185	Q-BAC	568	586
q-BA	38	36			
q-BC	136	220			
f	0.782	0.859			

Ratio-of-flow to Capacity	AM	PM
B-A	0.083	0.078
B-C	0.224	0.358
C-B	0.047	0.061
B-AC	0.306	0.437

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road	Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday)	J04 - P. 3	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

	Input	Input	Input	Calculated
W	7.30	V-rBA	30	D 0.8007
W-CR	0.00	V-IBA	30	E 0.8628
		V-rBC	30	F 0.6037
		V-rCB	30	Y 0.4963

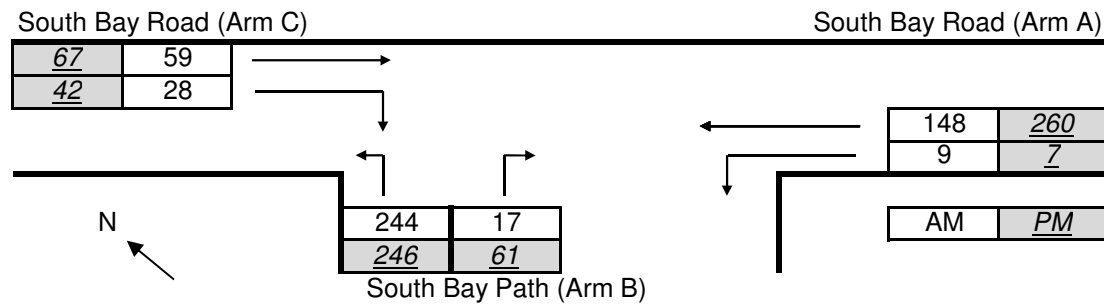
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	78	116	Q-BA	455	454
q-CB	30	40	Q-BC	606	611
q-AB	3	5	Q-CB	424	427
q-AC	232	200	Q-BAC	560	581
q-BA	38	36			
q-BC	115	199			
f	0.752	0.847			

Ratio-of-flow to Capacity	AM	PM
B-A	0.084	0.079
B-C	0.190	0.326
C-B	0.071	0.094
B-AC	0.273	0.405

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road	Job Number:	J7245
Scenario:	Existing Condition (Weekend)	J04 - P. 4	
Design Year:	2025	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	7.30	V-rBA	30
W-CR	0.00	V-IBA	30
		V-rBC	30
		V-rCB	30
		w-BA	3.00
		w-BC	3.00
		w-CB	0.00
		D	0.8007
		E	0.8628
		F	0.6037
		Y	0.4963

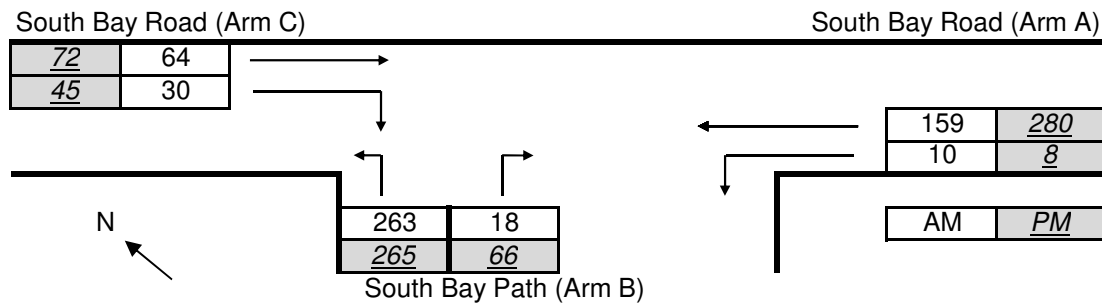
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	59	67	Q-BA	469	449
q-CB	28	42	Q-BC	619	602
q-AB	9	7	Q-CB	433	421
q-AC	148	260	Q-BAC	607	564
q-BA	17	61			
q-BC	244	246			
f	0.935	0.801			

Ratio-of-flow to Capacity	AM	PM
B-A	0.036	0.136
B-C	0.394	0.409
C-B	0.065	0.100
B-AC	0.430	0.545

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road	Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekend)	J04 - P. 5	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-IBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-IBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	7.30	V-rBA	30
W-CR	0.00	V-IBA	30
		V-rBC	30
		V-rCB	30
		w-BA	3.00
		w-BC	3.00
		w-CB	0.00
		D	0.8007
		E	0.8628
		F	0.6037
		Y	0.4963

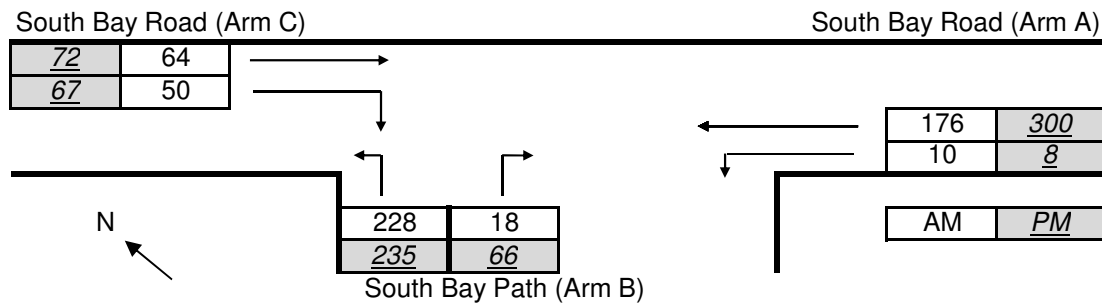
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	64	72	Q-BA	466	445
q-CB	30	45	Q-BC	617	599
q-AB	10	8	Q-CB	431	418
q-AC	159	280	Q-BAC	605	560
q-BA	18	66			
q-BC	263	265			
f	0.936	0.801			

Ratio-of-flow to Capacity	AM	PM
B-A	0.039	0.148
B-C	0.426	0.443
C-B	0.070	0.108
B-AC	0.465	0.591

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road	Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend)	J04 - P. 6	
Design Year:	2030	Designed By:	MCY
		Checked By:	WCH
		Date:	22 July 2025



The predictive equations of capacity of movement are:

$$Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]$$

$$Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]$$

$$Q-CB = F[745 - 0.364Y(q-AC + q-AB)]$$

The geometric parameters represented by D, E, F are:

$$D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]$$

$$E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]$$

$$F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]$$

where $Y = 1 - 0.0345W$

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :

Input	Input	Input	Calculated
W	7.30	V-rBA	30
W-CR	0.00	V-lBA	30
		V-rBC	30
		V-lCB	30
		w-BA	3.00
		w-BC	3.00
		w-CB	0.00
		Y	0.4963

Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	64	72	Q-BA	460	438
q-CB	50	67	Q-BC	615	596
q-AB	10	8	Q-CB	429	416
q-AC	176	300	Q-BAC	600	552
q-BA	18	66			
q-BC	228	235			
f	0.927	0.781			

Ratio-of-flow to Capacity	AM	PM
B-A	0.039	0.151
B-C	0.371	0.395
C-B	0.116	0.161
B-AC	0.410	0.545

Priority Junction Analysis

Junction: Repulse Bay Road / South Bay Road Roundabout Job Number: J7245
 Scenario: Existing Condition (Weekday) J05 - P. 1
 Design Year: 2024 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	1	575	32						608	356
From B	489	20	141						650	33
From C	71	336	0						407	510
From D										
From E										
From F										
From G										
From H										
Total	561	931	173						1665	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	0	538	33						571	350
From B	458	13	138						609	35
From C	75	335	2						412	471
From D										
From E										
From F										
From G										
From H										
Total	533	886	173						1592	

Legend

Arm	Road (in clockwise order)
A	Repulse Bay Rd (WB)
B	Repulse Bay Rd (EB)
C	South Bay Road
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	5.0	100.0	100.0	20	15	0.0
From B	5.0	3.5	50.0	10.0	20	20	0.2
From C	5.0	4.0	50.0	10.0	20	30	0.2
From D							
From E							
From F							
From G							
From H							

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)

Arm	x ₂	M	t _D	K	F	f _c	Q _E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	5.000	0.018	1.491	1.091	1515	0.626	1410	1414	608	571	0.431	0.404
From B	4.514	0.018	1.491	1.064	1368	0.596	1434	1433	650	609	0.453	0.425
From C	4.758	0.018	1.491	1.029	1442	0.611	1163	1188	407	412	0.350	0.347
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: Repulse Bay Road / South Bay Road Roundabout Job Number: J7245
 Scenario: Without Proposed Development (Weekday) J05 - P. 2
 Design Year: 2029 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	1	619	34						654	384
From B	527	22	152						701	35
From C	76	362	0						438	550
From D										
From E										
From F										
From G										
From H										
Total	604	1003	186						1793	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	0	580	36						616	377
From B	493	14	149						656	38
From C	81	361	2						444	507
From D										
From E										
From F										
From G										
From H										
Total	574	955	187						1716	

Legend

Arm	Road (in clockwise order)
A	Repulse Bay Rd (WB)
B	Repulse Bay Rd (EB)
C	South Bay Road
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	Ø (°)	S
From A	5.0	5.0	100.0	100.0	20	15	0.0
From B	5.0	3.5	50.0	10.0	20	20	0.2
From C	5.0	4.0	50.0	10.0	20	30	0.2
From D							
From E							
From F							
From G							
From H							

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(Ø-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
Ø	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

Arm	x ₂	M	t _D	K	F	f _c	Q _E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	5.000	0.018	1.491	1.091	1515	0.626	1391	1396	654	616	0.470	0.441
From B	4.514	0.018	1.491	1.064	1368	0.596	1433	1431	701	656	0.489	0.458
From C	4.758	0.018	1.491	1.029	1442	0.611	1138	1165	438	444	0.385	0.381
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: Repulse Bay Road / South Bay Road Roundabout Job Number: J7245
 Scenario: With Proposed Development (Weekday) J05 - P. 3
 Design Year: 2029 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	1	619	31						651	377
From B	527	22	165						714	32
From C	74	355	0						429	550
From D										
From E										
From F										
From G										
From H										
Total	602	996	196						1794	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	0	580	33						613	372
From B	493	14	166						673	35
From C	80	356	2						438	507
From D										
From E										
From F										
From G										
From H										
Total	573	950	201						1724	

Legend

Arm	Road (in clockwise order)
A	Repulse Bay Rd (WB)
B	Repulse Bay Rd (EB)
C	South Bay Road
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	5.0	100.0	100.0	20	15	0.0
From B	5.0	3.5	50.0	10.0	20	20	0.2
From C	5.0	4.0	50.0	10.0	20	30	0.2
From D							
From E							
From F							
From G							
From H							

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)

Arm	x ₂	M	t _D	K	F	f _c	Q _E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	5.000	0.018	1.491	1.091	1515	0.626	1396	1399	651	613	0.466	0.438
From B	4.514	0.018	1.491	1.064	1368	0.596	1435	1433	714	673	0.498	0.470
From C	4.758	0.018	1.491	1.029	1442	0.611	1138	1165	429	438	0.377	0.376
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: Repulse Bay Road / South Bay Road Roundabout Job Number: J7245
 Scenario: Existing Condition (Weekend) J05 - P. 4
 Design Year: 2024 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	0	377	38						415	313
From B	263	12	49						324	40
From C	110	299	2						411	275
From D										
From E										
From F										
From G										
From H										
Total	373	688	89						1150	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	2	434	44						480	462
From B	358	21	82						461	47
From C	90	440	1						531	381
From D										
From E										
From F										
From G										
From H										
Total	450	895	127						1472	

Legend

Arm	Road (in clockwise order)
A	Repulse Bay Rd (WB)
B	Repulse Bay Rd (EB)
C	South Bay Road
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	5.0	100.0	100.0	20	15	0.0
From B	5.0	3.5	50.0	10.0	20	20	0.2
From C	5.0	4.0	50.0	10.0	20	30	0.2
From D							
From E							
From F							
From G							
From H							

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)

Arm	x ₂	M	t _D	K	F	f _c	Q _E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	5.000	0.018	1.491	1.091	1515	0.626	1439	1337	415	480	0.288	0.359
From B	4.514	0.018	1.491	1.064	1368	0.596	1430	1425	324	461	0.227	0.323
From C	4.758	0.018	1.491	1.029	1442	0.611	1311	1244	411	531	0.314	0.427
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: Repulse Bay Road / South Bay Road Roundabout Job Number: J7245
 Scenario: Without Proposed Development (Weekend) J05 - P. 5
 Design Year: 2029 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	0	406	41						447	337
From B	283	13	53						349	43
From C	119	322	2						443	296
From D										
From E										
From F										
From G										
From H										
Total	402	741	96						1239	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	2	468	47						517	498
From B	386	23	88						497	50
From C	97	474	1						572	411
From D										
From E										
From F										
From G										
From H										
Total	485	965	136						1586	

Legend

Arm	Road (in clockwise order)
A	Repulse Bay Rd (WB)
B	Repulse Bay Rd (EB)
C	South Bay Road
D	0
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	5.0	100.0	100.0	20	15	0.0
From B	5.0	3.5	50.0	10.0	20	20	0.2
From C	5.0	4.0	50.0	10.0	20	30	0.2
From D							
From E							
From F							
From G							
From H							

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

Q _E	Entry Capacity
q _c	Circulating Flow across the Entry
K	$= 1 - 0.00347(\emptyset - 30) - 0.978[(1/r) - 0.05]$
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)

Arm	x ₂	M	t _D	K	F	f _c	Q _E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	5.000	0.018	1.491	1.091	1515	0.626	1423	1313	447	517	0.314	0.394
From B	4.514	0.018	1.491	1.064	1368	0.596	1428	1423	349	497	0.244	0.349
From C	4.758	0.018	1.491	1.029	1442	0.611	1298	1225	443	572	0.341	0.467
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: Repulse Bay Road / South Bay Road Roundabout Job Number: J7245
 Scenario: With Proposed Development (Weekend) J05 - P. 6
 Design Year: 2029 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	0	406	38						444	323
From B	283	13	76						372	40
From C	115	308	2						425	296
From D										
From E										
From F										
From G										
From H										
Total	398	727	116						1241	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	2	468	42						512	490
From B	386	23	115						524	45
From C	95	466	1						562	411
From D										
From E										
From F										
From G										
From H										
Total	483	957	158						1598	

Legend

Arm	Road (in clockwise order)
A	Repulse Bay Rd (WB)
B	Repulse Bay Rd (EB)
C	South Bay Road
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	5.0	100.0	100.0	20	15	0.0
From B	5.0	3.5	50.0	10.0	20	20	0.2
From C	5.0	4.0	50.0	10.0	20	30	0.2
From D							
From E							
From F							
From G							
From H							

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

Q _E	Entry Capacity
q _c	Circulating Flow across the Entry
K	$= 1 - 0.00347(\emptyset - 30) - 0.978[(1/r) - 0.05]$
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)

Arm	x ₂	M	t _D	K	F	f _c	Q _E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	5.000	0.018	1.491	1.091	1515	0.626	1432	1318	444	512	0.310	0.388
From B	4.514	0.018	1.491	1.064	1368	0.596	1430	1427	372	524	0.260	0.367
From C	4.758	0.018	1.491	1.029	1442	0.611	1298	1225	425	562	0.328	0.459
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: South Bay Road / South Bay Close Roundabout Job Number: J7245
 Scenario: Existing Condition (Weekday) J06 - P. 1
 Design Year: 2024 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	3	87	82						172	11
From B	86	0	7						93	87
From C	318	9	2						329	89
From D										
From E										
From F										
From G										
From H										
Total	407	96	91						594	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	0	49	124						173	15
From B	51	0	7						58	125
From C	362	14	1						377	51
From D										
From E										
From F										
From G										
From H										
Total	413	63	132						608	

Legend

Arm	Road (in clockwise order)
A	South Bay Rd (EB)
B	South Bay Close (WB)
C	South Bay Rd (NB)
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	3.5	25.0	15.0	25	25	0.2
From B	5.0	4.0	25.0	50.0	25	15	0.0
From C	5.0	4.0	25.0	50.0	25	30	0.0
From D							
From E							
From F							
From G							
From H							

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

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	$= 1 - 0.00347(\emptyset - 30) - 0.978[(1/r) - 0.05]$
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)

Arm	x_2	M	t_D	K	F	f_c	Q_E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	4.636	0.030	1.485	1.027	1405	0.601	1436	1434	172	173	0.120	0.121
From B	4.940	0.030	1.485	1.062	1497	0.620	1532	1507	93	58	0.061	0.038
From C	4.940	0.030	1.485	1.010	1497	0.620	1456	1479	329	377	0.226	0.255
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: South Bay Road / South Bay Close Roundabout Job Number: J7245
 Scenario: Without Proposed Development (Weekday) J06 - P. 2
 Design Year: 2029 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	3	94	88						185	12
From B	93	0	8						101	93
From C	343	10	2						355	96
From D										
From E										
From F										
From G										
From H										
Total	439	104	98						641	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	0	53	134						187	16
From B	55	0	8						63	135
From C	390	15	1						406	55
From D										
From E										
From F										
From G										
From H										
Total	445	68	143						656	

Legend

Arm	Road (in clockwise order)
A	South Bay Rd (EB)
B	South Bay Close (WB)
C	South Bay Rd (NB)
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	3.5	25.0	15.0	25	25	0.2
From B	5.0	4.0	25.0	50.0	25	15	0.0
From C	5.0	4.0	25.0	50.0	25	30	0.0
From D							
From E							
From F							
From G							
From H							

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

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	$= 1 - 0.00347(\emptyset - 30) - 0.978[(1/r) - 0.05]$
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)

Arm	x_2	M	t_D	K	F	f_c	Q_E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	4.636	0.030	1.485	1.027	1405	0.601	1436	1433	185	187	0.129	0.130
From B	4.940	0.030	1.485	1.062	1497	0.620	1528	1500	101	63	0.066	0.042
From C	4.940	0.030	1.485	1.010	1497	0.620	1451	1477	355	406	0.245	0.275
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: South Bay Road / South Bay Close Roundabout Job Number: J7245
 Scenario: With Proposed Development (Weekday) J06 - P. 3
 Design Year: 2029 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	3	94	98						195	12
From B	93	0	8						101	103
From C	334	10	2						346	96
From D										
From E										
From F										
From G										
From H										
Total	430	104	108						642	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	0	53	148						201	16
From B	55	0	8						63	149
From C	384	15	1						400	55
From D										
From E										
From F										
From G										
From H										
Total	439	68	157						664	

Legend

Arm	Road (in clockwise order)
A	South Bay Rd (EB)
B	South Bay Close (WB)
C	South Bay Rd (NB)
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	3.5	25.0	15.0	25	25	0.2
From B	5.0	4.0	25.0	50.0	25	15	0.0
From C	5.0	4.0	25.0	50.0	25	30	0.0
From D							
From E							
From F							
From G							
From H							

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)

Arm	x ₂	M	t _D	K	F	f _c	Q _E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	4.636	0.030	1.485	1.027	1405	0.601	1436	1433	195	201	0.136	0.140
From B	4.940	0.030	1.485	1.062	1497	0.620	1522	1491	101	63	0.066	0.042
From C	4.940	0.030	1.485	1.010	1497	0.620	1451	1477	346	400	0.238	0.271
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: South Bay Road / South Bay Close Roundabout Job Number: J7245
 Scenario: Existing Condition (Weekend) J06 - P. 4
 Design Year: 2024 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A		17	70						87	30
From B	48	0	9						57	76
From C	365	24	6						395	48
From D										
From E										
From F										
From G										
From H										
Total	413	41	85						539	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	3	26	97						126	16
From B	38	0	7						45	103
From C	490	13	3						506	41
From D										
From E										
From F										
From G										
From H										
Total	531	39	107						677	

Legend

Arm	Road (in clockwise order)
A	South Bay Rd (EB)
B	South Bay Close (WB)
C	South Bay Rd (NB)
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	3.5	25.0	15.0	25	25	0.2
From B	5.0	4.0	25.0	50.0	25	15	0.0
From C	5.0	4.0	25.0	50.0	25	30	0.0
From D							
From E							
From F							
From G							
From H							

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

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	$= 1 - 0.00347(\emptyset - 30) - 0.978[(1/r) - 0.05]$
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)

Arm	x_2	M	t_D	K	F	f_c	Q_E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	4.636	0.030	1.485	1.027	1405	0.601	1424	1433	87	126	0.061	0.088
From B	4.940	0.030	1.485	1.062	1497	0.620	1539	1522	57	45	0.037	0.030
From C	4.940	0.030	1.485	1.010	1497	0.620	1481	1486	395	506	0.267	0.341
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: South Bay Road / South Bay Close Roundabout Job Number: J7245
 Scenario: Without Proposed Development (Weekend) J06 - P. 5
 Design Year: 2029 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	1	18	75						94	32
From B	52	0	10						62	82
From C	393	26	6						425	53
From D										
From E										
From F										
From G										
From H										
Total	446	44	91						581	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	3	28	104						135	17
From B	41	0	8						49	110
From C	528	14	3						545	44
From D										
From E										
From F										
From G										
From H										
Total	572	42	115						729	

Legend

Arm	Road (in clockwise order)
A	South Bay Rd (EB)
B	South Bay Close (WB)
C	South Bay Rd (NB)
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	3.5	25.0	15.0	25	25	0.2
From B	5.0	4.0	25.0	50.0	25	15	0.0
From C	5.0	4.0	25.0	50.0	25	30	0.0
From D							
From E							
From F							
From G							
From H							

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

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	$= 1 - 0.00347(\emptyset - 30) - 0.978[(1/r) - 0.05]$
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)

Arm	x_2	M	t_D	K	F	f_c	Q_E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	4.636	0.030	1.485	1.027	1405	0.601	1423	1432	94	135	0.066	0.094
From B	4.940	0.030	1.485	1.062	1497	0.620	1535	1517	62	49	0.040	0.032
From C	4.940	0.030	1.485	1.010	1497	0.620	1478	1484	425	545	0.288	0.367
From D												
From E												
From F												
From G												
From H												

Priority Junction Analysis

Junction: South Bay Road / South Bay Close Roundabout Job Number: J7245
 Scenario: With Proposed Development (Weekend) J06 - P. 6
 Design Year: 2029 Designed By: MCY Checked By: WCH Date: 22 July 2025

AM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	1	18	95						114	32
From B	52	0	10						62	102
From C	375	26	6						407	53
From D										
From E										
From F										
From G										
From H										
Total	428	44	111						583	

PM Peak

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q _c
From A	3	28	126						157	17
From B	41	0	8						49	132
From C	518	14	3						535	44
From D										
From E										
From F										
From G										
From H										
Total	562	42	137						741	

Legend

Arm	Road (in clockwise order)
A	South Bay Rd (EB)
B	South Bay Close (WB)
C	South Bay Rd (NB)
D	
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	5.0	3.5	25.0	15.0	25	25	0.2
From B	5.0	4.0	25.0	50.0	25	15	0.0
From C	5.0	4.0	25.0	50.0	25	30	0.0
From D							
From E							
From F							
From G							
From H							

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

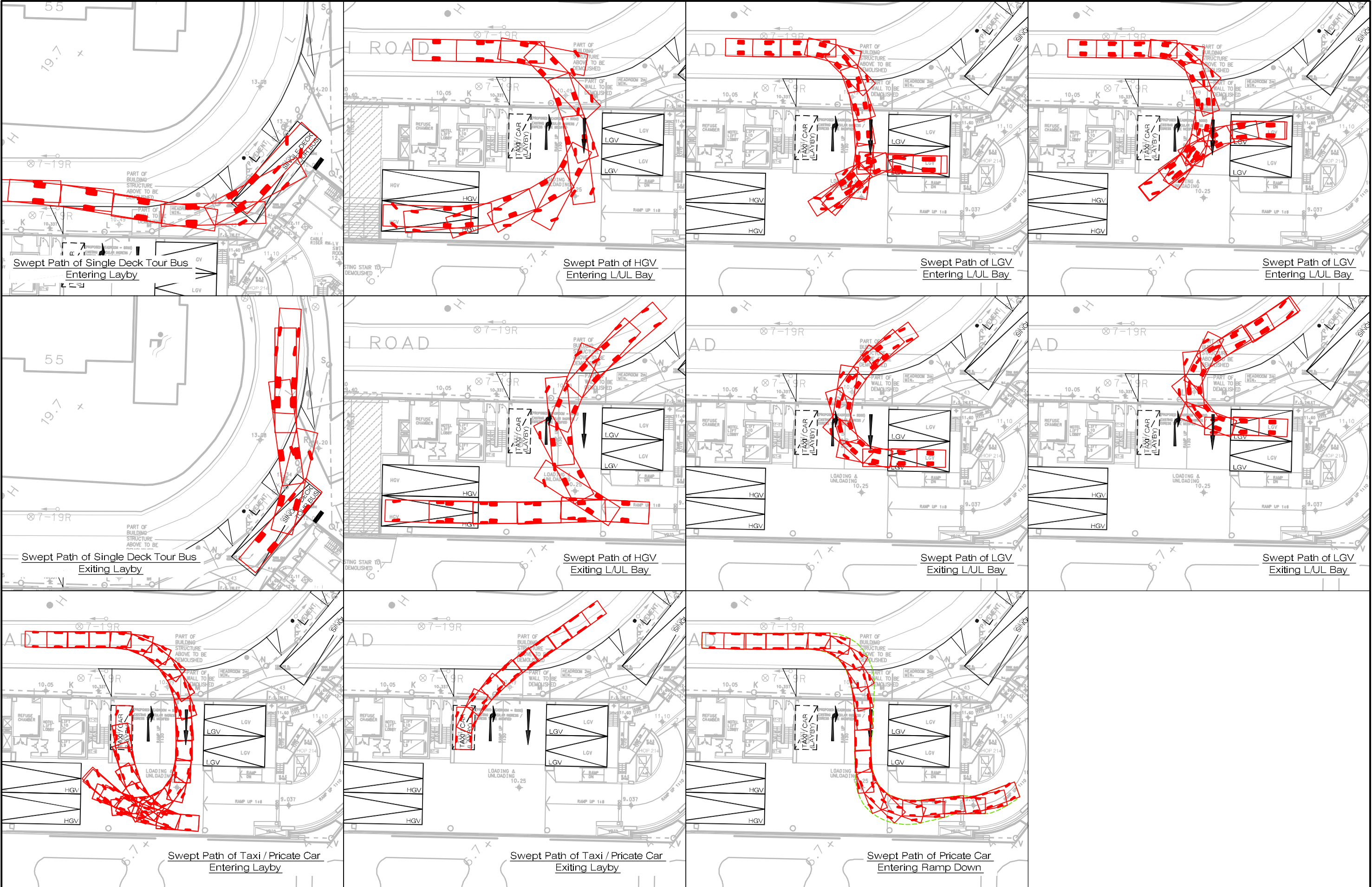
Limitation

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)

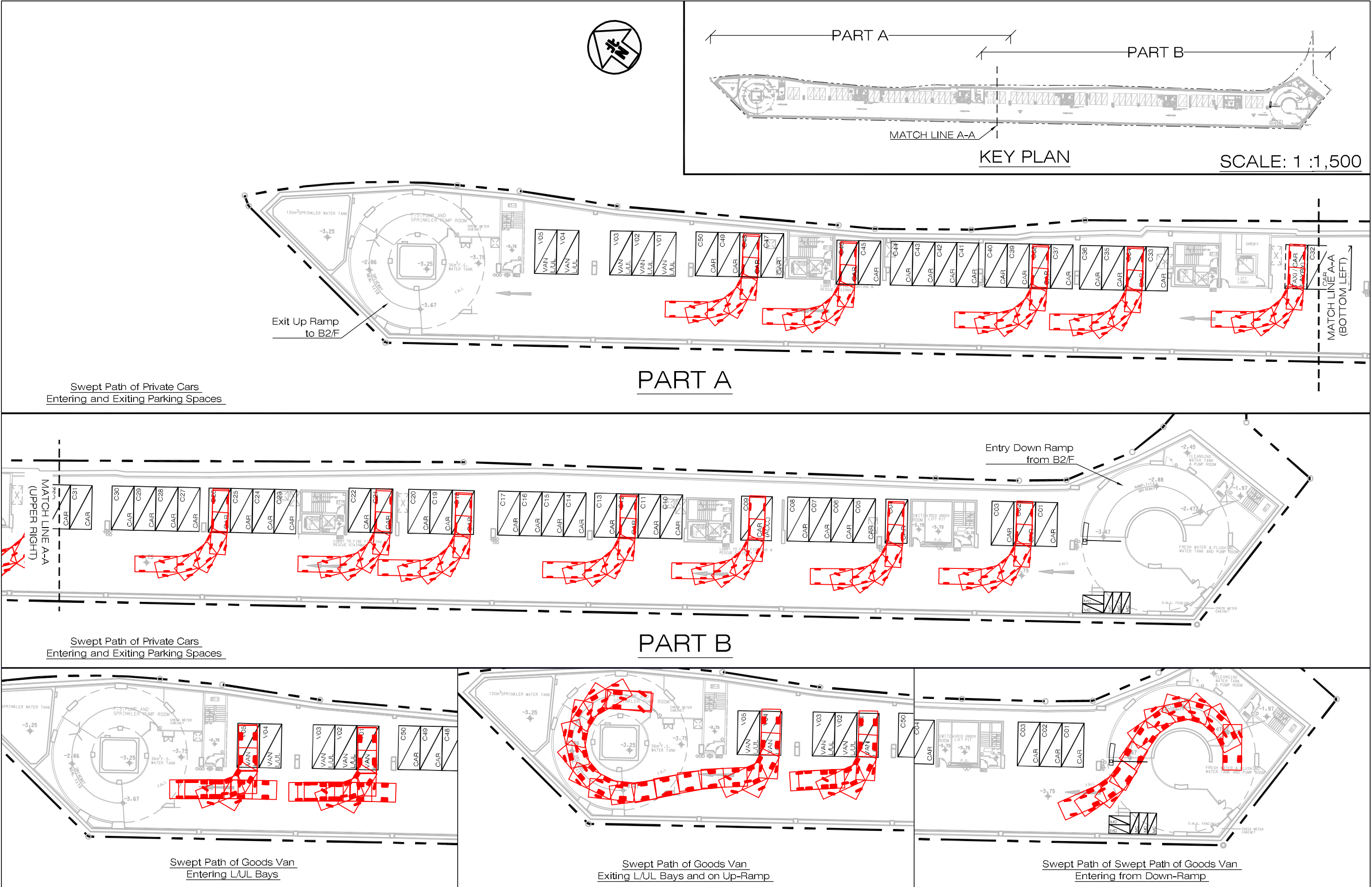
Arm	x ₂	M	t _D	K	F	f _c	Q _E		Entry Flow		RFC	
							AM	PM	AM	PM	AM	PM
From A	4.636	0.030	1.485	1.027	1405	0.601	1423	1432	114	157	0.080	0.110
From B	4.940	0.030	1.485	1.062	1497	0.620	1522	1502	62	49	0.041	0.033
From C	4.940	0.030	1.485	1.010	1497	0.620	1478	1484	407	535	0.275	0.361
From D												
From E												
From F												
From G												
From H												

Appendix B – Swept Path Analyses



Project Title		PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY					Figure No. SP01		Revision C	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Henncssy Road Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				
Figure Title		SWEPT PATH ANALYSES FOR L/UL AREAS AT UG/F					J7245		Designed by W C H				Drawn by S C Y	Checked by K C
							Scale in A3 1 : 400		Date 07 AUG 2025					

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Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY		Figure No. J7245	SP02		Revision C	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
				Designed by W C H	Drawn by S C Y		
Figure Title	SWEPT PATH OF PRIVATE CARS AND GOOD VAN AT B3/F WITH THE PROPOSED CONVERSION		Scale in A3 1 : 400	Date 07 AUG 2025			

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