Annex B of FI (5)

Replacement Page of 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
(3rd Revision)
11th September, 2025

Prepared by: CKM Asia Limited

Prepared for: Goldshine Investment Limited

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

CONTENTS

CHAPTER		PAGE
1.	INTRODUCTION Background Scope of Study Contents of the Report	1
2.	THE EXISTING SITUATION The Subject Site The Existing Development The Road Network Pedestrian Facilities Public Transport Services Existing Traffic Flows Performance of the Surveyed Junctions and Road Links Existing Pedestrian Flows Performance of the Surveyed Footpaths Existing Car Park Utilisation Existing Layby Utilisation	2
3.	THE PROPOSED CONVERSION The Proposed Conversion Internal Transport Facilities Internal Transport Layout Traffic Generation Pedestrian Generation Proposed Traffic Management	10
4.	TRAFFIC IMPACT Design Year Historic Traffic Growth Population Projection Traffic Forecast Year 2030 Traffic Flows Year 2030 Junction and Road Link Capacity Analyses Pedestrian Forecast Year 2030 Pedestrian Flows Year 2030 Footpath Operational Performance	18
5.	Summary	24

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

CONTENTS

CHAPTER PAGE

Figures

Appendix A – Junction Capacity Analyses
Appendix B – Swept Path Analyses

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

TABLES

NUMBER

2.1 Approved Internal Transport Provision

2.2 Existing Headroom of Loading / Unloading Bays and Layby

2.3 Public Transport Services Operating near the Subject Site

2.4 List of Surveyed Junctions and Road Links

2.5 Comparsion of Peak Hour Traffic Flows at Beach Road

2.6 Existing Peak Hour Junction Performance

2.7 Existing Peak Hour Road Links Performance

2.8 List of Surveyed Footpaths

2.9 Existing Footpath Operational Performance

2.10 Utilisation of Existing General Layby on Beach Road

3.1 Comparison on Development Parameters

3.2 Comparisons of the Provision of Internal Transport Facilities

3.3 Results of Trip Generation Surveys at the Existing Development

3.4 Adopted Weekday Hotel Trip Rates

3.5 Results of Trip Generation Surveys and the Derived Weekend / Weekday Ratio at the WM Hotel

3.6 Weekend Trip Rates Adopted for the Proposed Conversion

3.7 Net Change in Weekday Traffic Generation

3.8 Net Change in Weekend Traffic Generation

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

TABLES

NUMBER

3.9 Details of the Surveyed Hotels

3.10 Results of Weekday Pedestrian Generation Surveys and Derived Pedestrian Generation Rates

3.11 Results of Weekend Pedestrian Generation Surveys and Derived Pedestrian Generation Rates

3.12 Pedestrian Generation of Proposed Conversion

4.1 AADT of ATC Stations Located near the Subject Site

4.2 Project Population for Southern District

4.3 Details of Other Known Major Planned / Committed Developments Identified

4.4 Year 2030 Peak Hour Junction Performance

4.5 Year 2030 Peak Hour Road Link Performance ((P/Df)

4.6 Year 2030 Peak Hour Footpath Performance

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

FIGURES

NUMBER

1.1 Location of the Subject Site

2.1 Approved UG/F Layout of the Existing Development

2.2 Approved LG/F Layout of the Existing Development

2.3 Approved B1/F Layout of the Existing Development

2.4 Approved B2/F Layout of the Existing Development

2.5 Approved B3/F Layout of the Existing Development

2.6 Public Transport Services operating near the Subject Site

2.7 Area of Influence and Location of the Surveyed Junctions

2.8 Junction of Repulse Bay Road / Beach Road (J01)

2.9 Junction of Beach Road / South Bay Path (J02) and Junction of South Bay Road / South Bay Path (J02)

2.10 Junction of South Bay Road / Beach Road (J03)

2.11 Junction of Repulse Bay Road / South Bay Road (J05)

2.12 Junction of South Bay Road / South Bay Close (J06)

2.13 Existing Weekday Peak Hour Traffic Flows (Swimming Season July 2025)

2.14 Existing Weekend Peak Hour Traffic Flows (Swimming Season July 2025)

2.15 Existing Weekend Peak Hour Traffic Flows (Swimming Season June 2024)

2.16 Existing Weekend Peak Hour Traffic Flows (Swimming Season June 2024)

2.17 Location of the Surveyed Footpaths

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

FIGURES

NUMBER

3.1 Proposed Internal Transport Layout at UG/F with the Proposed Conversion

3.2 Proposed Internal Transport Layout at B3/F with the Proposed Conversion

3.3 Visibility Assessment at Approved / Existing Vehicular Accesses along Beach Road

3.4 Recommended Ingress Route to the Subject Site (via Repulse Bay Road and South Bay Road)

3.5 Pedestrian Access Route between Hotel Lobby and Layby for Single-Deck Tour Bus

4.1 Locations of Other Planned / Committed Developments in the vicinity

4.2 Year 2030 Weekday Peak Hour Traffic Flow without the Proposed Conversion (Swimming Season in July)

4.3 Year 2030 Weekend Peak Hour Traffic Flow without the Proposed Conversion (Swimming Season in July)

4.4 Year 2030 Weekday Peak Hour Traffic Flow with the Proposed Conversion (Swimming Season in July)

4.5 Year 2030 Weekend Peak Hour Traffic Flow with the Proposed Conversion (Swimming Season in July)

4.6 Year 2030 Weekday Peak Hour Traffic Flow without the Proposed Conversion (Swimming Season in June)

4.7 Year 2030 Weekend Peak Hour Traffic Flow without the Proposed Conversion (Swimming Season in June)

4.8 Year 2030 Weekday Peak Hour Traffic Flow with the Proposed Conversion (Swimming Season in June)

4.9 Year 2030 Weekend Peak Hour Traffic Flow with the Proposed Conversion (Swimming Season in June)

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, part of the existing 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 the existing 13,728m^2 to 5,841m^2 (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 and Planning Department in March, July and September 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 m^2 GFA. For easy understanding, the existing approved building disposition is illustrated below:

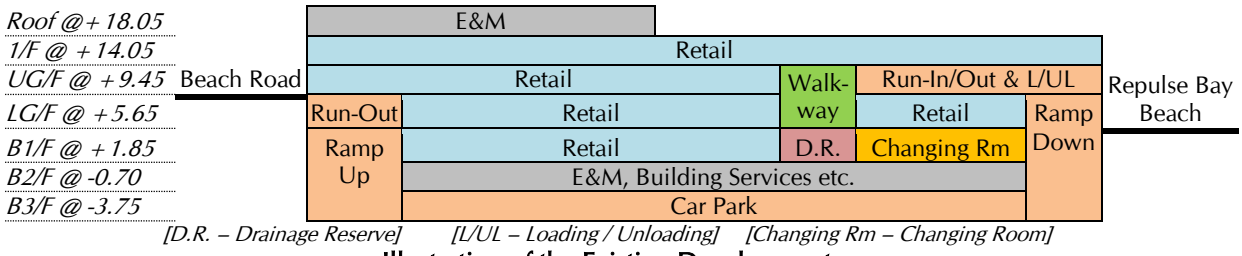


Illustration of the Existing Development

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

TABLE 2.1 APPROVED 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 approved internal transport layout, and locations of the 3 vehicular access points.

Existing Goods Delivery Operation

2.7 In view that 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. Questionnaire was distributed to all shop tenants of the Existing Development, which had a tenancy rate of 80%, i.e. to 30 tenants (out of 44 shops). The questionnaire survey covered a 2-week period which was from Sunday, 22nd June to Saturday, 5th July 2025, and had a response rate of 83%, i.e. 25 out of 30 tenants responded *[Calculation: 25 / 30 x 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 x (1 + 20%) = 3.6, say 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

Swimming Season in July 2025

2.17 To quantify the existing traffic flows during the swimming 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).

2.18 Details of the survey locations are found in Table 2.4. The AOI and survey locations are shown in **Figure 2.7**, and the surveyed junction layouts are presented in **Figures 2.8 - 2.12**.

TABLE 2.4 LIST OF SURVEYED JUNCTIONS AND ROAD LINKS

Ref.	Surveyed Junctions and Road Links
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
L01	Beach Road between Repulse Bay Road and South Bay Path
L02	Repulse Bay Road between Beach Road and South Bay Road

2.19 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.

2.20 Although Typhoon Signal No. 1 was hoisted from 1220 hours on Friday, 4th July 2025 to 1420 hours on Sunday, 6th July 2025, there were no other special weather warning, except for "*Very Hot Weather Warning*." The weather on both survey days was sunny and hot with high temperature of 33° to 35°C. In addition, no rainfall was recorded on both survey days, and the Repulse Bay Beach remained opened, i.e. red flag was not hoisted by the Leisure and Cultural Services Department ("LCSD").

2.21 To ascertain if the observed traffic flows in early July 2025 are representative, additional traffic counts at Beach Road to the north of South Bay Path were conducted on Friday, 8th August 2025 and Sunday, 10th August 2025. The weather on these 2 days in August 2025 was sunny and hot with no special weather warning, except for "*Very Hot Weather Warning*." Table 2.5 compares the peak hour traffic at Beach Road for the 4 survey days.

TABLE 2.5 COMPARISON OF PEAK HOUR TRAFFIC FLOWS AT BEACH ROAD

Peak Hour	Observed Peak Hour Traffic Flow (pcu/hr)					
	Weekday (Friday)			Weekend (Sunday)		
	4 Jul 2025	8 Aug 2025	Difference	6 Jul 2025	10 Aug 2025	Difference
AM Peak Hour	242	229	-5%	338	323	-4%
PM Peak Hour	390	372	-5%	467	463	-1%

2.22 Table 2.5 shows the peak hour traffic flows observed on Friday 4th and Sunday 6th July, 2025 are similar to those of Friday 8th and Sunday 10th August 2025, i.e. no more than 5% difference. Though Typhoon Signal No. 1 was hoisted from 1220 hours on Friday, 4th July 2025 to 1420 hours on Sunday, 6th July 2025, traffic flows appear to be marginally higher than the 2 corresponding days, i.e. Friday, 8th and Sunday, 10th August 2025. Hence, based on the traffic flows, it can be concluded that Typhoon Signal No. 1, had no significant effect to the traffic condition on Beach Road, and the observed peak hour traffic flows (of Friday 4th July and Sunday 6th July 2025) adopted are considered acceptable. **Figures 2.13 and 2.14** present the existing AM and PM peak hour traffic flows for the swimming season in July 2025, in pcu/hour, for a weekday and a weekend respectively.

Swimming Season in June 2024

2.23 In view that the latest available Annual Traffic Census ("ATC") is for 2023, reference is made to the 2023 ATC Core Station 1011 - Repulse Bay Road. It shows that traffic flow along Repulse Bay Road in the month of June is the highest month, and Friday is the busiest weekday and Saturday is the busiest weekend.

2.24 To provide a more comprehensive assessment, traffic surveys previously conducted on Friday, 7th June 2024 and Saturday, 8th June 2024 are also assessed. **Figures 2.15 and 2.16** present the AM and PM peak hour traffic flows for the swimming season in June 2024 for weekday and weekend respectively.

Performance of the Surveyed Junctions and Road Links

2.25 Performance of surveyed junctions and road links were calculated using the methods outlined in Volume 2 of the TPDM, which is published by the Transport Department. Tables 2.6 and 2.7 present the results and detailed calculations are found in **Appendix A**.

TABLE 2.6 EXISTING PEAK HOUR JUNCTION PERFORMANCE

Ref.	Junction	Type	Parameter	Swimming Season in July 2025		Swimming Season in June 2024	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
			Weekday				
J01	J/O Repulse Bay Road / Beach Road	Priority	RFC	0.060	0.083	0.087	0.049
J02	J/O Beach Road / South Bay Path	Priority	RFC	0.035	0.043	0.021	0.030
J03	J/O South Bay Road / Beach Road	Priority	RFC	0.087	0.093	0.062	0.080
J04	J/O South Bay Road / South Bay Path	Priority	RFC	0.282	0.403	0.178	0.193
J05	J/O Repulse Bay Road / South Bay Road	Roundabout	RFC	0.453	0.425	0.471	0.427
J06	J/O South Bay Road / South Bay Close	Roundabout	RFC	0.226	0.255	0.162	0.217
			Weekend				
J01	J/O Repulse Bay Road / Beach Road	Priority	RFC	0.085	0.135	0.073	0.085
J02	J/O Beach Road / South Bay Path	Priority	RFC	0.057	0.075	0.024	0.037
J03	J/O South Bay Road / Beach Road	Priority	RFC	0.155	0.166	0.070	0.157
J04	J/O South Bay Road / South Bay Path	Priority	RFC	0.430	0.545	0.202	0.322
J05	J/O Repulse Bay Road / South Bay Road	Roundabout	RFC	0.314	0.427	0.351	0.440
J06	J/O South Bay Road / South Bay Close	Roundabout	RFC	0.267	0.341	0.198	0.249

Note: RFC – Ratio of Flow to Capacity

TABLE 2.7 EXISTING PEAK HOUR ROAD LINK PERFORMANCE

Ref.	Road Link	Config.	Direction	Design Flow (pcu/hr)	Peak Hourly Flows / Design Flow Ratio (P/Df)			
					Swimming Season in July 2025		Swimming Season in June 2024	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Weekday								
L01	Beach Road	Single-1	Southbound	900	0.269	0.376	0.146	0.170
L02	Repulse Bay Road	Single-2	Southbound	1,200	0.542	0.507	0.493	0.507
			Northbound	1,200	0.748	0.701	0.732	0.632
Weekend								
L01	Beach Road	Single-1	Southbound	900	0.433	0.519	0.207	0.244
L02	Repulse Bay Road	Single-2	Southbound	1,200	0.270	0.383	0.419	0.524
			Northbound	1,200	0.533	0.684	0.615	0.718

2.26 The results in Tables 2.6 and 2.7 indicate that the junctions and road links analyzed operate with capacity during the weekday and weekend peak hours.

Existing Pedestrian Flow

2.27 To quantify the existing pedestrian flows, pedestrian counts were conducted during the AM and PM peak periods on Friday, 4th July, 2025 (weekday) and on Sunday, 6th July 2025 (weekend), at the selected footpaths within the AOI. The surveyed footpaths are found in Table 2.8, and their locations are illustrated in **Figure 2.15**.

TABLE 2.8 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

2.28 Level-of-Service ("LOS") analysis was conducted, and the LOS grading follows TPDM Volume 6, Section 10.4. Table 2.9 summarize the pedestrian flows, and analysis results.

TABLE 2.9 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]

2.29 Table 2.9 shows the footpaths analyzed operate with capacity during the weekday and weekend peak hours.

Existing Car Park Utilisation

2.30 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. Based on 58 car parking spaces in use on the survey days, the weekday and weekend utilisation rates are 55% and 100% respectively. According to the Applicant, for a number of years, the ancillary car park has operated with 58 car parking spaces.

Existing Layby Utilisation

2.31 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 2.10 presents the results.

TABLE 2.10 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 = ∑Stopped Vehicle Length x Stopping Duration

2.32 Table 2.10 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 7,887m^2 retail GFA to become a hotel with 96 rooms at 1/F and UG/F. In addition, part of the existing 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	**13,728m^2 GFA**	**13,728m^2 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:

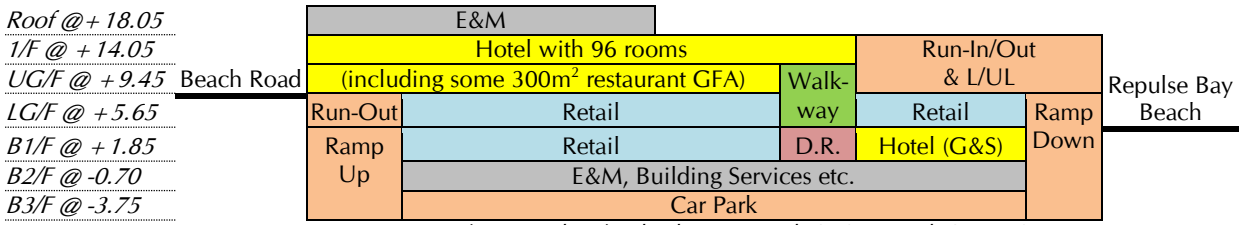


Illustration of the Proposed Conversion

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. In view that Hong Kong Island, , is defined as "*Main Urban Area and New Towns*" by the HKPSG, including Repulse Bay, the internal transport facilities for the Proposed Conversion is calculated based on the recommendation for a hotel in "*Main Urban Area and New Towns*".

TABLE 3.2 COMPARISON OF THE PROVISION OF INTERNAL TRANSPORT FACILITIES

Use	HKPSG Recommendation (Retail GFA = 5,841m² GFA, and Hotel with 96 rooms, including some 300m² GFA of restaurant)	Proposed Provision
Car Parking Spaces		
Retail	1 car parking space per 150 – 300 m² GFA Minimum: 5,841 ÷ 300 = 19.5, say 20 nos. Maximum: 5,841 ÷ 150 = 38.9, say 39 nos.	**58 nos., including:** - 56 nos. regular @ 5.0m (L) x 2.5m (W) x min. 2.4m (H) - 2 nos. 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 200m² 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: 58 x 5% = 2.9, say **3 nos.** Maximum: 58 x 10% = 5.8, say **6 nos.**	6 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 m² 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	
Hotel	For Single-Deck Tour Bus: **Minimum 1 nos.** for ≤299 rooms	1 no. @ 12.0m (L) x 3.5m (W) x min. 3.8m (H) **=HKPSG, OK**

Car Parking Spaces

3.5 Table 3.2 shows that the number of car parking spaces provided satisfies the HKPSG maximum recommendation for both retail and hotel uses. The Applicant is aware of the demand for car parking in Repulse Bay and is willing to provide 16 additional car parking spaces beyond the HKPSG recommendation. Hence, the Proposed Conversion would maintain the existing 58 car parking spaces in use.

Motorcycle Parking Spaces

3.6 Table 3.2 also shows that the number of motorcycle parking spaces satisfies the HKPSG maximum recommendation. Considering that the Existing Development does not provide motorcycle parking space, the introduction of motorcycle parking spaces to 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 / unloading 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, the 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 for the loading / unloading area.

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 ÷ 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 ÷ 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 queuing 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 analysis was conducting using CAD-based program 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 trip generation surveys, and the hotel trip rates found in the TPDM, and are presented in below paragraphs.

Trip Generation of the Existing Development

3.15 Trip generation surveys were conducted at the Existing Development on Friday, 4th July, 2025, and Sunday, 6th July 2025, and the results are presented in Table 3.3.

TABLE 3.3 RESULTS OF TRIP GENERATION SURVEYS AT THE EXISTING DEVELOPMENT

Item	AM Peak Hour		PM Peak Hour	
	Generation (pcu/hour)	Attraction (pcu/hour)	Generation (pcu/hour)	Attraction (pcu/hour)
Weekday	9	13	15	12
Weekend	15	19	23	21

Hotel Trip Rates

3.16 Table 3.4 presents weekday hotel trip rates obtained from the TPDM.

TABLE 3.4 ADOPTED WEEKDAY HOTEL TRIP RATES

Use	Unit	Adopted Trip Rates (TPDM Upper Limit)			
		AM Peak Hour		PM Peak Hour	
		Generation	Attraction	Generation	Attraction
Hotel	pcu/room/hr	0.1814	0.2082	0.1697	0.2183

3.17 Since the TPDM has no weekend trip rates, these are produced with (i) reference to the weekday trip rates presented in Table 3.4, and (ii) the weekend / weekday factor derived from surveys conducted 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.

3.18 Similar to the Subject Site, the WM Hotel is also located in a leisure area with good access by both private and public transport. It is noted that the WM Hotel with 260 rooms provides limited shuttle services, with no noticeable effect on trip generation. Although WM Hotel provides substantial number of car parking spaces, the results obtained could be considered as more conservative if it has a high trip generation / attraction. Nevertheless, the trip characteristics obtained is only used to derive the weekday / weekend relationship, and is not used to estimate the traffic generation associated with the Proposed Conversion.

3.19 Other 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.

3.20 With reference to the latest "*Hotel Room Occupancy Report*" published by Hong Kong Tourism Board in August 2025, the monthly occupancy of hotel rooms in the New Territories was 92% in July 2025, hence, the surveyed hotel is assumed to have full occupancy when the surveys were conducted.

3.21 Results of the trip generation surveys and the derived weekend / weekday ratios are summarised in Table 3.5.

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**	

3.22 Based on Table 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
Hotel(Table 3.4 x Table 3.5)	pcu/room/hr	0.2668	0.3048	0.2902	0.3556

Net Change in Traffic Generation

3.23 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	9	13	22	15	12	27
Total [a]	**9**	**13**	**22**	**15**	**12**	**27**
Proposed Conversion (5,841m² Retail GFA and 96-room Hotel)						
Retail (Note 1)	4	6	10	6	5	11
Hotel	17	20	37	16	21	37
Total [b]	**21**	**26**	**47**	**22**	**26**	**48**
Net Change in Traffic Generation						
Net Change [b] – [a]	**12**	**13**	**25**	**7**	**14**	**21**

Note 1: Retail trip generation / attraction of 5,841m² GFA for Proposed Conversion are estimated on a pro rata basis with the trip generation / attraction of the Existing Development with 13,728m² GFA.

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	15	19	34	23	21	44
Total [a]	**15**	**19**	**34**	**23**	**21**	**44**
Proposed Conversion (5,841m² Retail GFA and 96-room Hotel)						
Retail (Note 1)	6	8	14	10	9	19
Hotel	26	29	55	28	34	62
Total [b]	**32**	**37**	**69**	**38**	**43**	**81**
Net Change in Traffic Generation						
Net Change [b] – [a]	**17**	**18**	**35**	**15**	**22**	**37**

Note 1: Retail trip generation / attraction of 5,841m² GFA for Proposed Conversion are estimated on a pro rata basis with the trip generation / attraction of the Existing Development with 13,728m² GFA.

Pedestrian Generation

3.24 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

3.25 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 surveyed hotel in Sai Kung was assumed to have occupancy of 92% when the survey was conducted, and for the hotels in C&W, the occupancy for March 2018 is 91%.

3.26 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

3.27 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

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

(i) Recommended Access Route

3.29 The Applicant will publicise on the official website the recommended access route to the Proposed Conversion, which is to use South Bay Road and South Bay Path, as shown in **Figure 3.4,** when arriving from the west. This measure aims to discourage vehicles from entering Beach Road from Repulse Bay Road (opposite 56 Repulse Bay Road), hence, reducing traffic flow along Beach Road (between its junctions with Repulse Bay Road and South Bay Path). All hotel patrons will be reminded to use the recommended access route.

(ii) Use of Single-deck Tour Bus Layby

3.30 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.

3.31 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 at the adjoining public footpath. All departing guests must wait within the hotel lobby, and only proceed to the layby after the tour bus 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

3.32 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 condition shall be maintained. In addition, vehicle 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.

3.33 The management office will request all shop tenants and the hotel operator to: (i) carry out loading / unloading during the off-peak period on weekdays and only during the early morning on Saturday, and (ii) goods vehicles are prohibited from entering Beach Road and South Bay Path between 12noon and 7pm on Saturday, and all day on Sundays and General Holidays.

3.34 With the Proposed Conversion, retail GFA is reduced and the demand for goods loading / unloading is expected to decrease 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

3.35 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. In addition, similar to existing condition, car park attendants will operate the ancillary car park during peak period to ensure traffic and pedestrian safety, and smooth traffic flow.

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 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	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-
2023	15,230	8,030	21,870	3,020	23,940	20,140	**92,230**
Average Annual Growth (2016 – 2023) =							**+0.9%**

4.3 Disregarding the AADT for 2020 to 2022, due to the COVID-19 pandemic, Table 4.1 shows that the traffic growth in vicinity is +0.9% per annum..

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 conservative growth rate of +2.0% per annum (*Note: 222% higher than the rate of +0.9% per annum presented in Table 4.1*) 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 4.3. 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	Hotel	1,320	13
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 Traffic Flows without the Proposed Conversion [A] = *2025 Existing Traffic Flows + Total Traffic Growth from 2025 to 2030 + Traffic Generated by Other Developments*

2030 Traffic Flows with the Proposed Conversion = *[A] + Net change in Traffic Generation between the Existing Development and the Proposed Conversion*

4.13 To be conservative, the recommended access route described in Paragraph 3.29 is not assumed to be implemented for assessment purpose, i.e. all traffic associated with the Proposed Conversion are assumed to access Beach Road from Repulse Bay Road (opposite 56 Repulse Bay Road).

4.14 **Figures 4.2 and 4.3** show the year 2030 weekday and weekend peak hour traffic flows without the Proposed Conversion; and **Figures 4.4 and 4.5** show the year 2030 weekday and weekend peak hour traffic flows with the Proposed Conversion. These traffic flows ("Swimming Season in July") are derived based on the traffic flows obtained from the swimming season in July 2025.

4.15 **Figures 4.6 and 4.7** show the year 2030 weekday and weekend peak hour traffic flows without the Proposed Conversion; and **Figures 4.8 and 4.9** show the year 2030 weekday and weekend peak hour traffic flows with the Proposed Conversion. These traffic flows ("Swimming Season in June") are derived based on the traffic flows obtained from the swimming season in June 2024.

Year 2030 Junction Capacity and Road Link Analyses

4.16 Year 2030 junction and road link capacity analyses for the cases without and with the Proposed Conversion are summarised in Tables 4.4 and 4.5, and detailed calculations are found in the **Appendix A**.

TABLE 4.4 YEAR 2030 PEAK HOUR JUNCTION PERFORMANCE

Ref.	Junction	Type	Para-meter	Swimming Season in July				Swimming Season in June			
				Without the Proposed Conversion		With the Proposed Conversion		Without the Proposed Conversion		With the Proposed Conversion	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Weekday											
J01	Repulse Bay Road / Beach Road	Priority	RFC	0.068	0.095	0.068	0.095	0.100	0.056	0.100	0.056
J02	Beach Road / South Bay Path	Priority	RFC	0.038	0.048	0.039	0.052	0.024	0.034	0.025	0.039
J03	South Bay Road / Beach Road	Priority	RFC	0.097	0.104	0.100	0.109	0.071	0.091	0.074	0.096
J04	South Bay Road / South Bay Path	Priority	RFC	0.314	0.446	0.331	0.463	0.202	0.219	0.218	0.235
J05	Repulse Bay Road / South Bay Road	Round-about	RFC	0.501	0.470	0.501	0.470	0.537	0.483	0.540	0.483
J06	South Bay Road / South Bay Path	Round-about	RFC	0.250	0.282	0.259	0.291	0.183	0.245	0.191	0.254

Note: RFC – Ratio of Flow to Capacity

TABLE 4.4 YEAR 2030 PEAK HOUR JUNCTION PERFORMANCE (CONT'D)

Ref.	Junction	Type	Para-meter	Swimming Season in July				Swimming Season in June			
				Without the Proposed Conversion		With the Proposed Conversion		Without the Proposed Conversion		With the Proposed Conversion	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Weekend											
J01	Repulse Bay Road / Beach Road	Priority	RFC	0.095	0.153	0.095	0.154	0.081	0.096	0.082	0.097
J02	Beach Road / South Bay Path	Priority	RFC	0.064	0.083	0.068	0.092	0.027	0.042	0.032	0.050
J03	South Bay Road / Beach Road	Priority	RFC	0.171	0.184	0.176	0.191	0.078	0.173	0.083	0.179
J04	South Bay Road / South Bay Path	Priority	RFC	0.477	0.606	0.500	0.629	0.226	0.356	0.249	0.378
J05	Repulse Bay Road / South Bay Road	Round-about	RFC	0.350	0.480	0.363	0.494	0.388	0.487	0.388	0.488
J06	South Bay Road / South Bay Path	Round-about	RFC	0.295	0.376	0.307	0.388	0.219	0.274	0.230	0.286

Note: RFC – Ratio of Flow to Capacity

TABLE 4.5 YEAR 2030 PEAK HOUR ROAD LINK PERFORMANCE (P/Df)

Ref.	Road Link	Con-fig.	Dir.	Design Flow (pcu/hr)	Swimming Season in July				Swimming Season in June			
					Without the Proposed Conversion		With the Proposed Conversion		Without the Proposed Conversion		With the Proposed Conversion	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Weekday												
L01	Beach Road	S1	SB	900	0.298	0.416	0.316	0.439	0.164	0.191	0.182	0.214
L02	Repulse Bay Road	S2	SB	1,200	0.598	0.559	0.598	0.559	0.555	0.571	0.555	0.571
			NB	1,200	0.826	0.774	0.834	0.783	0.824	0.712	0.833	0.720
Weekend												
L01	Beach Road	S1	SB	900	0.478	0.573	0.508	0.607	0.228	0.270	0.258	0.303
L02	Repulse Bay Road	S2	SB	1,200	0.298	0.423	0.298	0.423	0.463	0.578	0.463	0.578
			NB	1,200	0.588	0.755	0.600	0.766	0.679	0.793	0.691	0.803

Note: P/Df - Peak Hourly Flows / Design Flow Ratio Config. – Configureation Dir. - Direction
S1 – Single-1 S2 – Single-2 SB – Southbounod NB - Northbound

4.17 Tables 4.4 and 4.5 show that the analyzed junctions and road links 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

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

(i) Expected population growth from 2025 to 2030 with reference to the project population change in Southern District;

(ii) Pedestrian generation of the Proposed Conversion.

4.19 Details of the above are presented in below paragraphs.

(i) Pedestrian Growth Rate

4.20 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

4.21 Peak hour pedestrian generation on weekday and weekend for the Proposed Conversion presented in Table 3.12 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 Pedestrian Flows without the Proposed Conversion [A] = *2025 Existing Pedestrian Flows + Total Pedestrian Growth from 2025 to 2030*

2030 Pedestrian Flows with the Proposed Conversion = *[A] + 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 4.6.

TABLE 4.6 YEAR 2030 PEAK HOUR FOOTPATH PERFORMANCE

Footpath Section	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]

TABLE 4.6 YEAR 2030 PEAK HOUR FOOTPATH PERFORMANCE (CONT'D)

Pedestrian Facility	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 4.6 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 m^2 to become 5,841m^2.

5.2 The Proposed Conversion provides internal transport facilities which satisfy the maximum HKPSG recommendation, including:

- 58 nos. car parking spaces,
- 6 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 The Proposed Conversion provides a total of 58 car parking spaces, which is 16 more than the HKPSG recommendation. which is the same as the existing condition.

5.5 Manual classified counts were conducted at junctions and road links located in the vicinity of the Subject Site in summer on weekday and weekend AM and PM peak periods. Capacity analyses found that these junctions and road links operate with capacity.

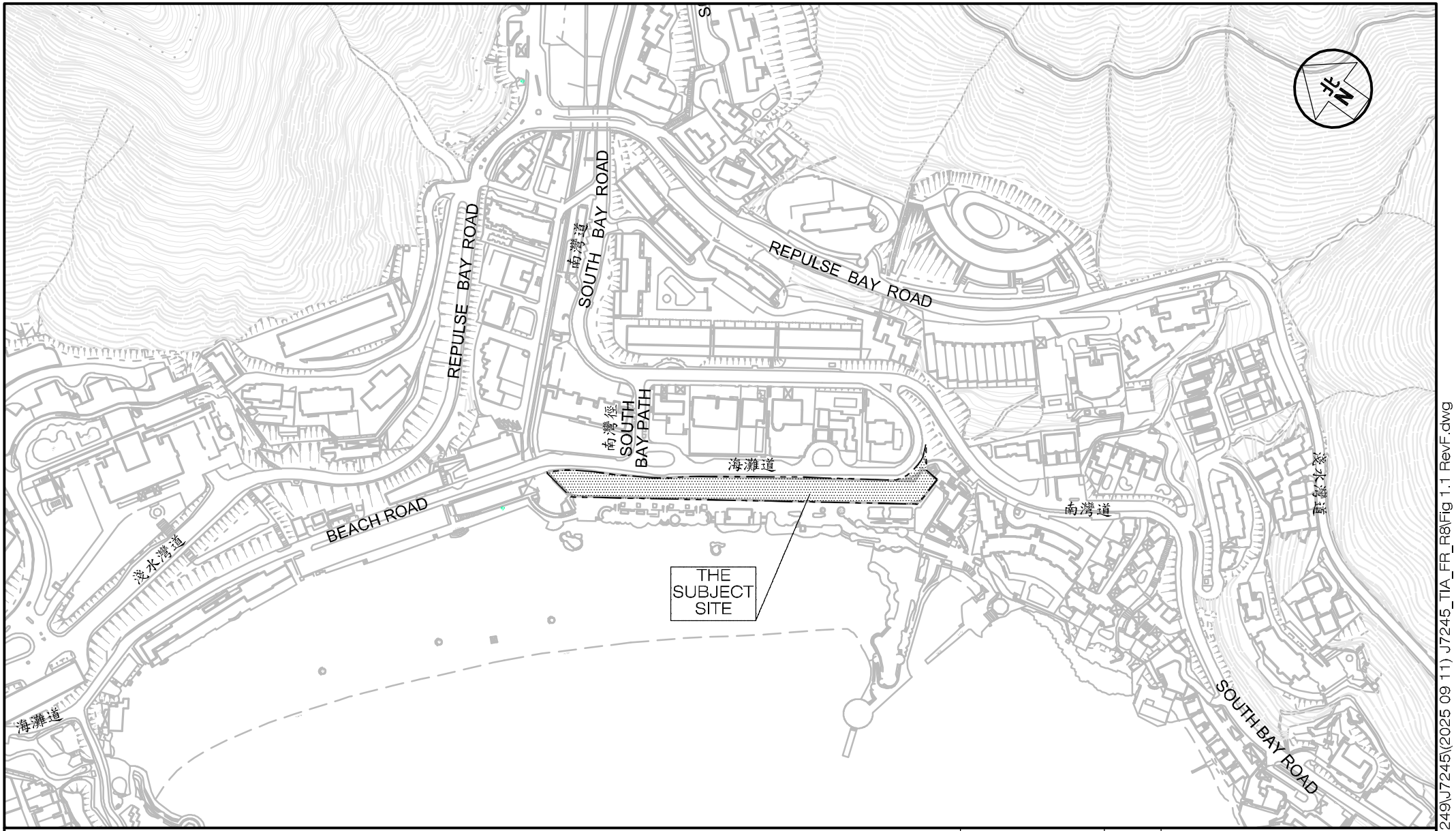
5.6 Pedestrian counts were conducted at footpaths located the vicinity of the Subject Site in summer on weekday and weekend AM and PM peak hours. Capacity analyses found that these footpaths operate with capacity.

5.7 Weekday and weekend peak hour traffic generation for the Proposed Conversion are estimated. The future year junction capacity analyses found that the Proposed Conversion will not have adverse effect on the local road network .

5.8 Weekday and weekend peak hour pedestrian generation for 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

5.9 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.

Figures



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 F
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 11 SEP 2025

CKM Asia Limited
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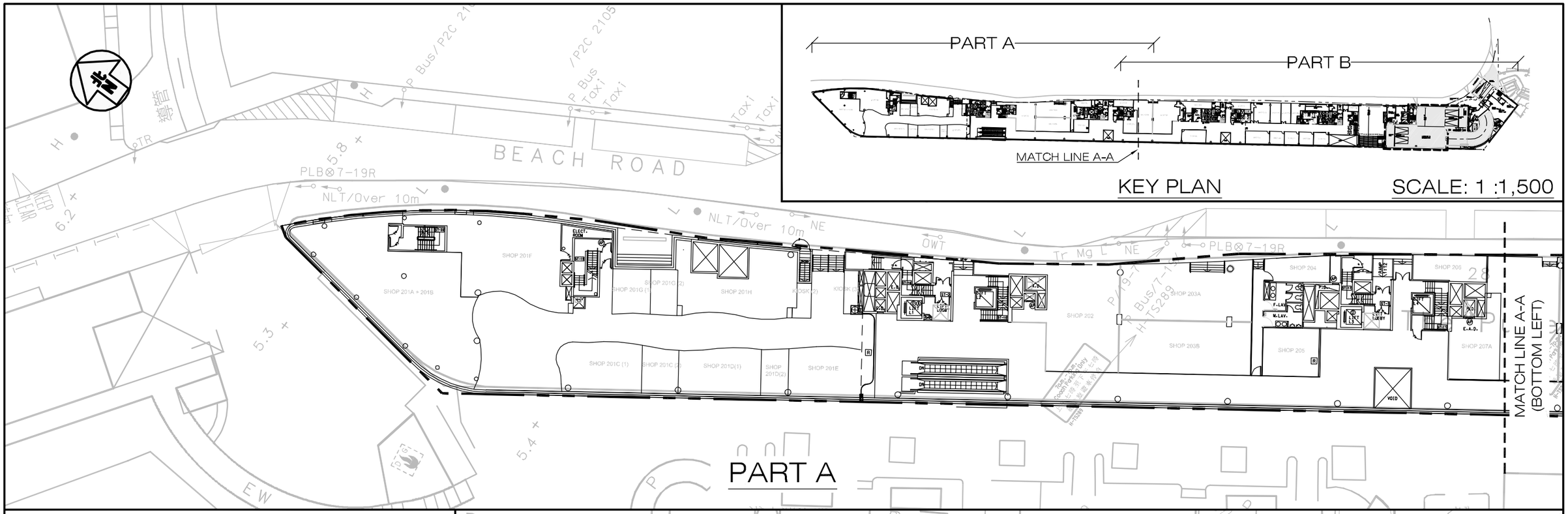

LEGEND :

- Approved Van-Type L/UL Bays @5.0m(L) X 2.5m(W) X 2.8m(H)
- Approved LGV L/UL Bay @7.0m(L) X 3.5m(W) X 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	J7245	Figure No. 2.1 / Revision F
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 11 SEP 2025

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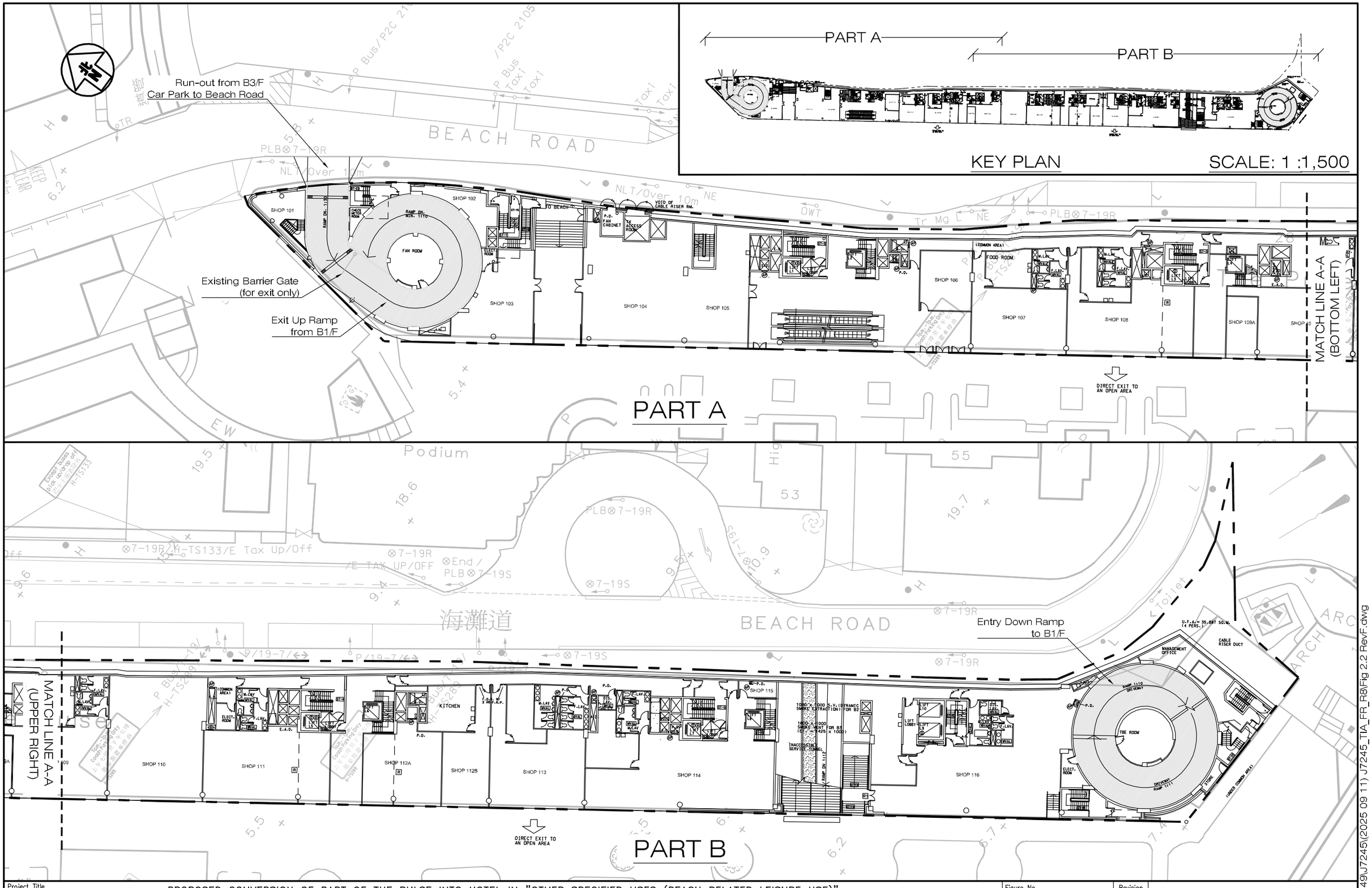

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	Figure No. 2.2 / Revision D
Figure Title	APPROVED LG/F LAYOUT OF THE EXISTING DEVELOPMENT		Designed by W C H / Drawn by S C Y / Checked by K C / Scale in A3 1 : 400 / Date 11 SEP 2025

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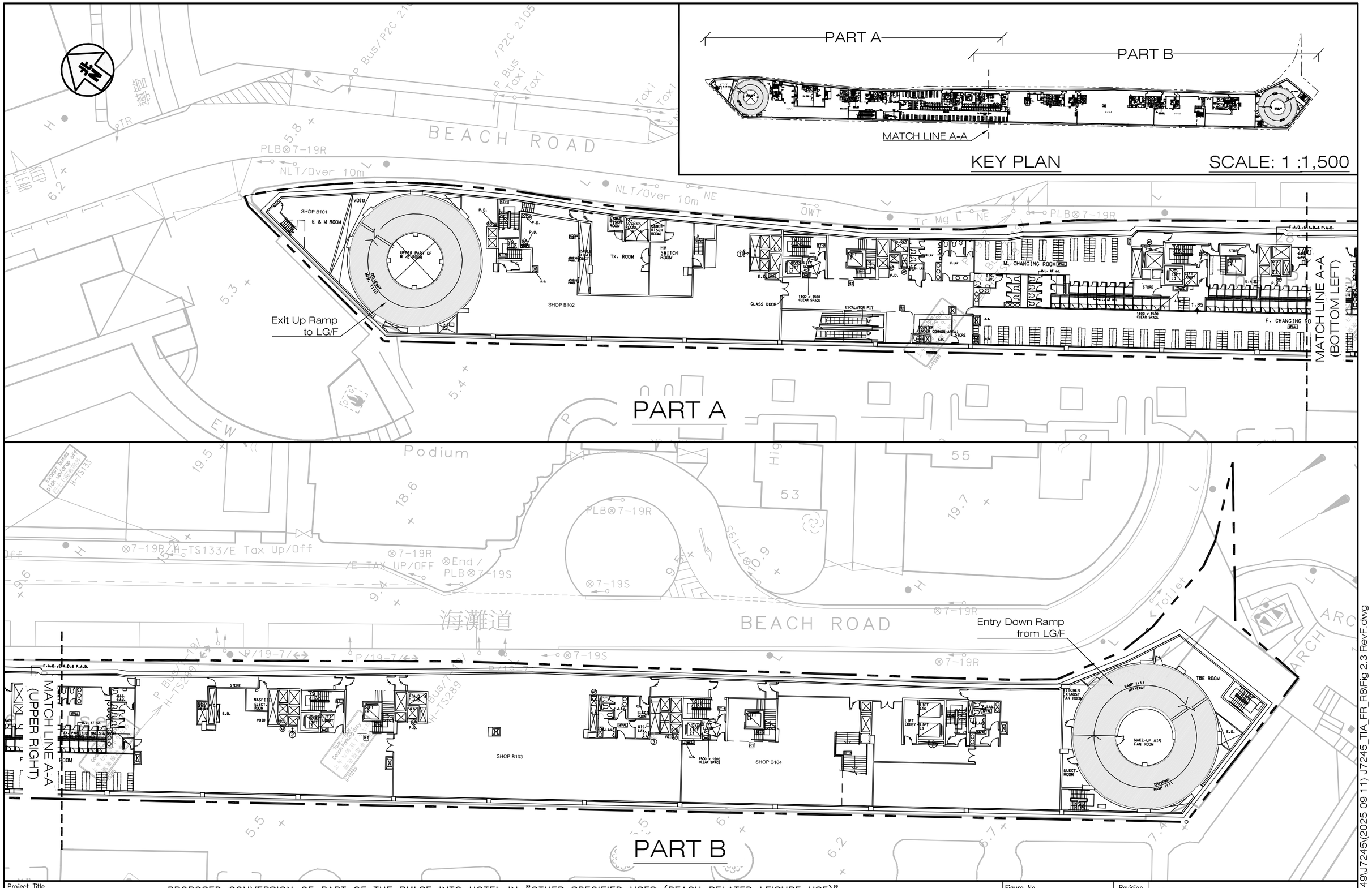

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	Figure No. 2.3 / Revision F
Figure Title	APPROVED B1/F LAYOUT OF THE EXISTING DEVELOPMENT		Designed by W C H / Drawn by S C Y / Checked by K C / Scale in A3 1 : 400 / Date 11 SEP 2025

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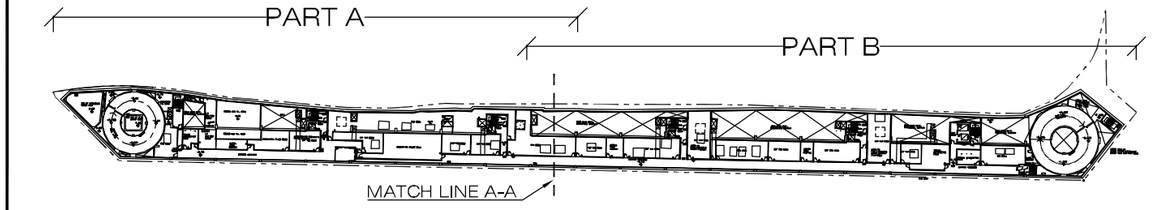

KEY PLAN

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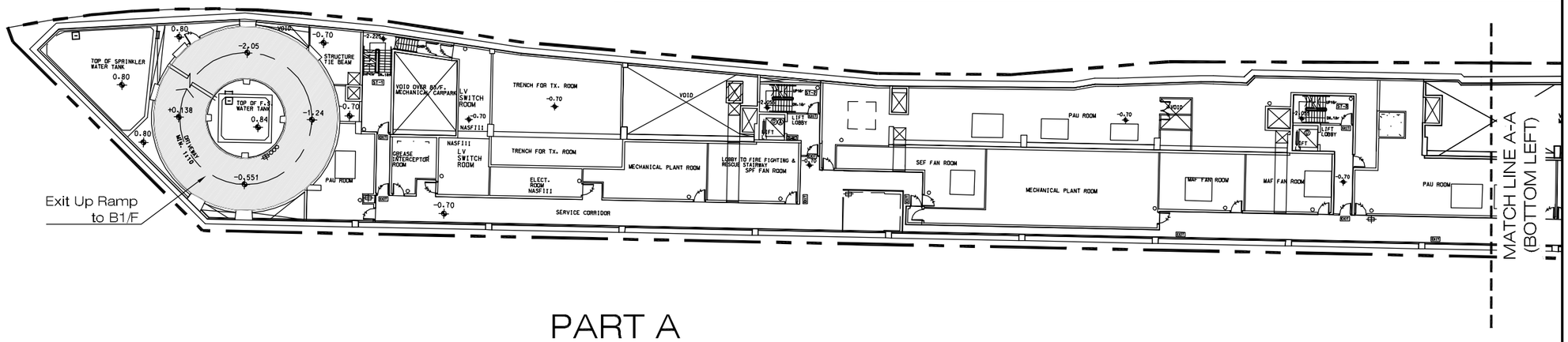
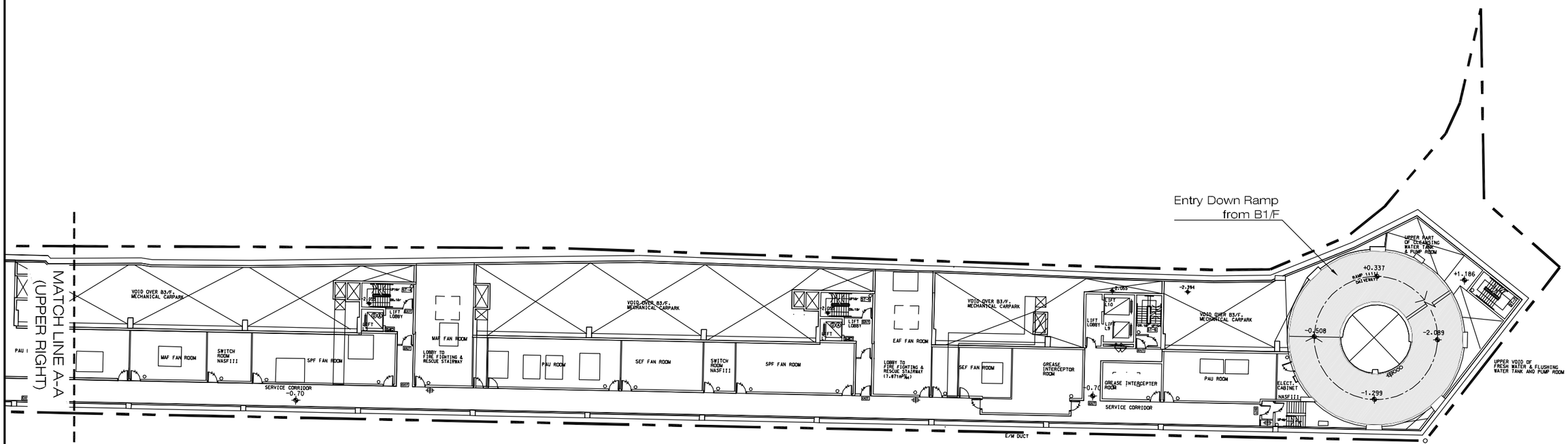


PART A



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	J7245	Figure No. 2.4 / Revision F
Figure Title	APPROVED B2/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 11 SEP 2025

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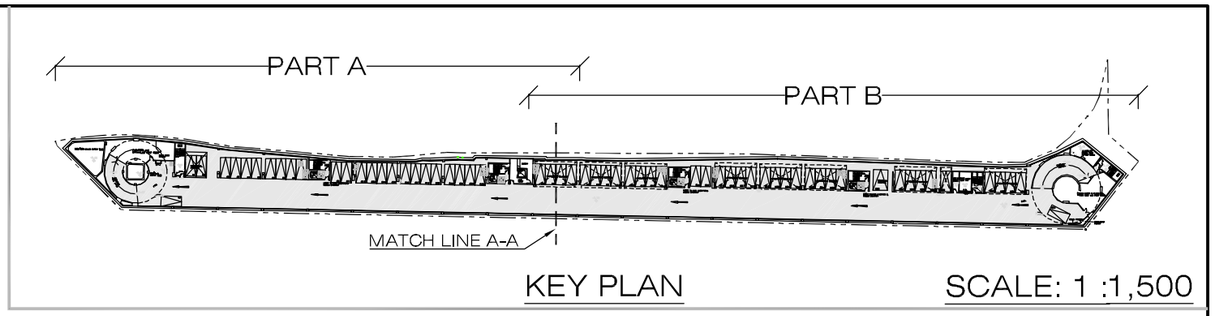
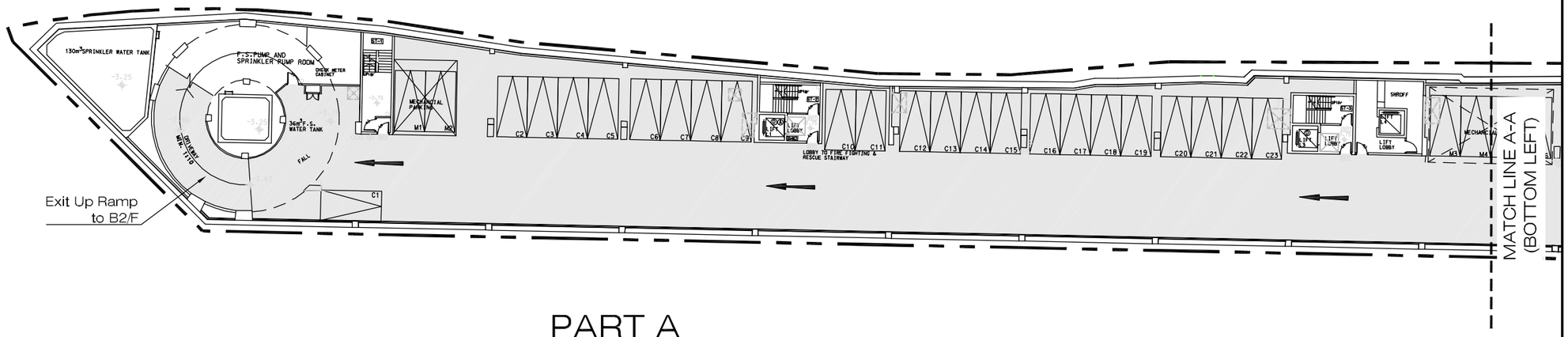


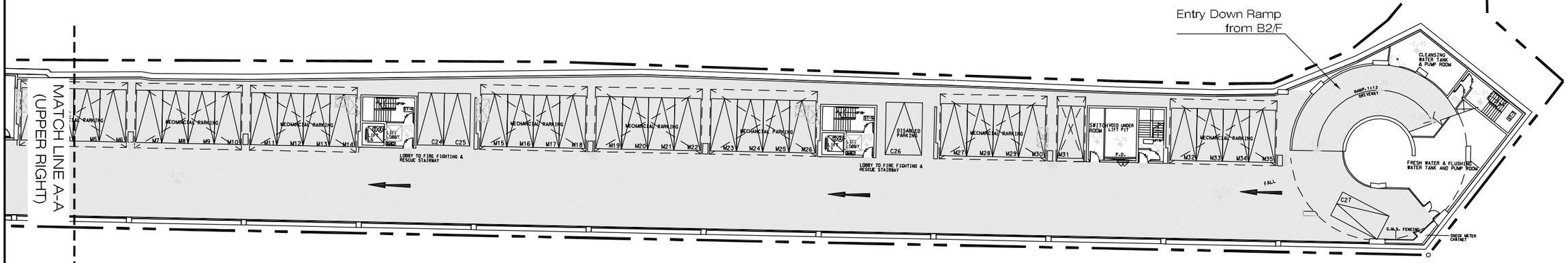
KEY PLAN SCALE: 1 :1,500



PART A

LEGEND :

- C1 — Approved Conventional car parking space @5.0m(L) X 2.5m(W) X Min. 2.4m(H) [26 nos.]
- M1 — Approved Double deck car parking rack @5.0m(L) X 2.5m(W) [35 sets with 70 nos.]
- C26 — 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	J7245	Figure No. 2.5 / Revision F
Figure Title	APPROVED B3/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 11 SEP 2025

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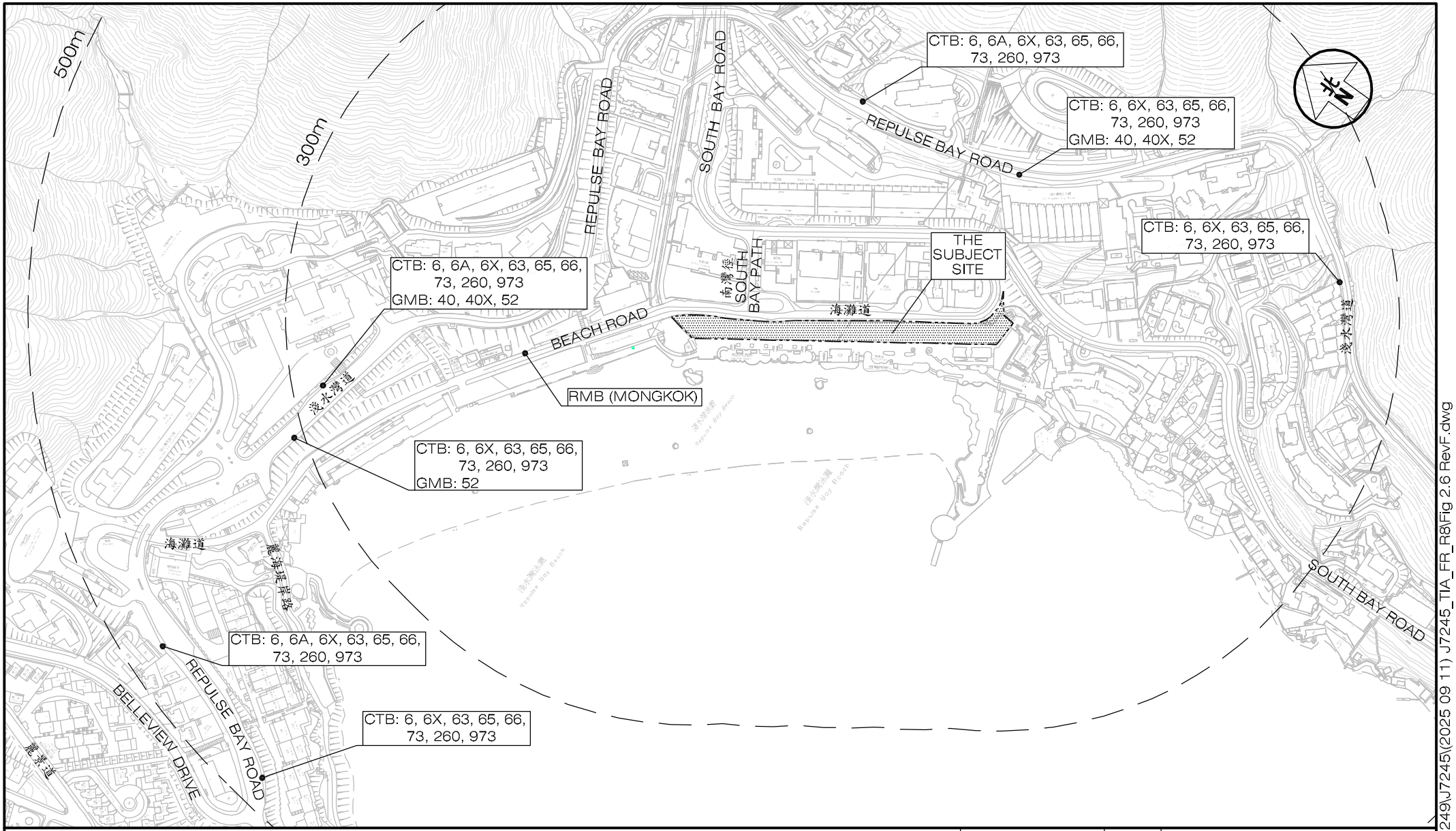

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	Figure No. 2.6 / Revision F
Figure Title	PUBLIC TRANSPORT SERVICES OPERATING NEAR THE SUBJECT SITE		Designed by M C Y / Drawn by S C Y / Checked by K C
			Scale in A4 1 : 4,000 / Date 11 SEP 2025

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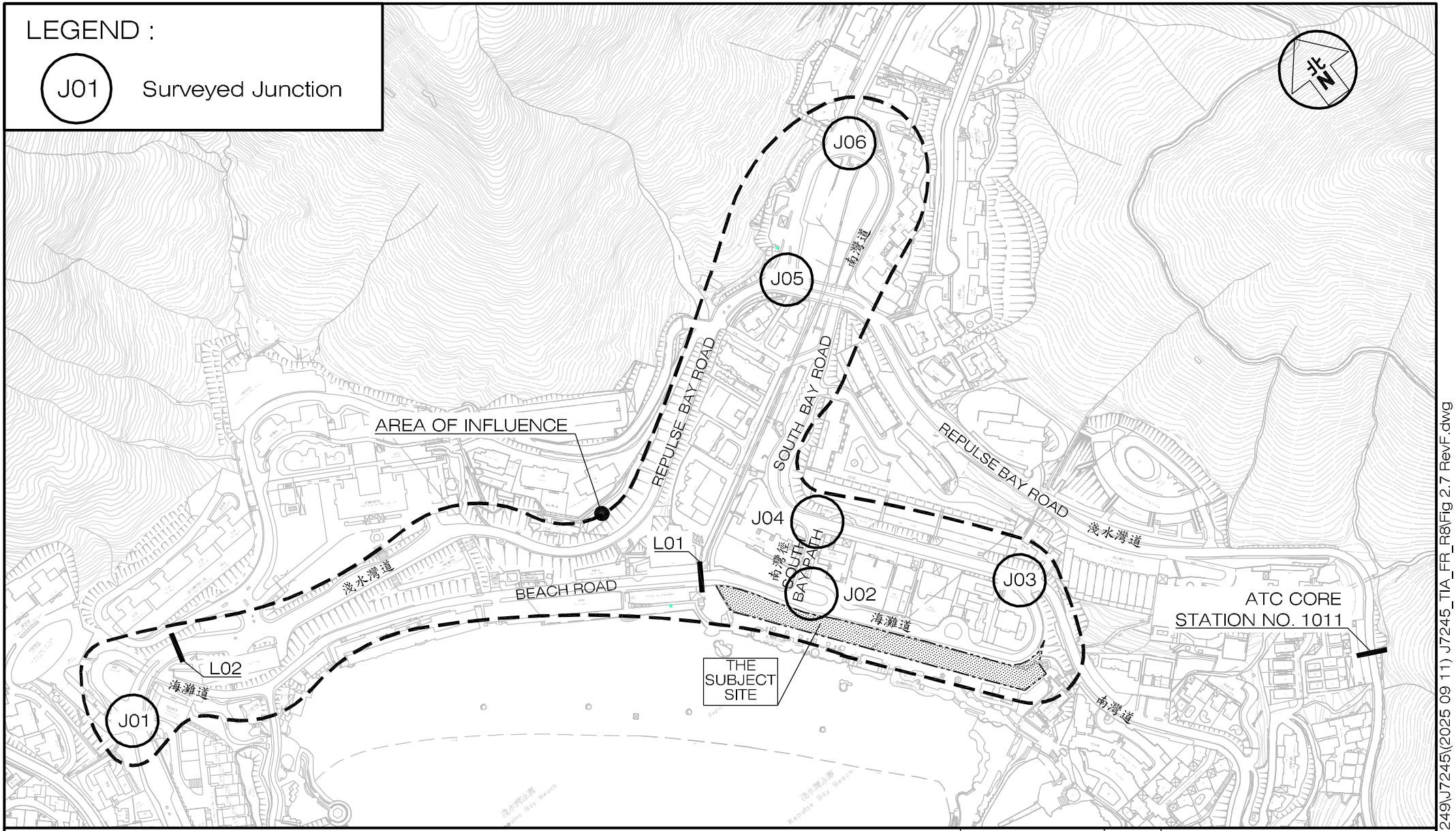

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7342	Figure No. 2.7 / Revision F
Figure Title	AREA OF INFLUENCE AND LOCATION OF THE SURVEYED JUNCTIONS	Designed by M C Y / Drawn by S C Y / Checked by K C	Scale in A4 1 : 3,000 / Date 11 SEP 2025

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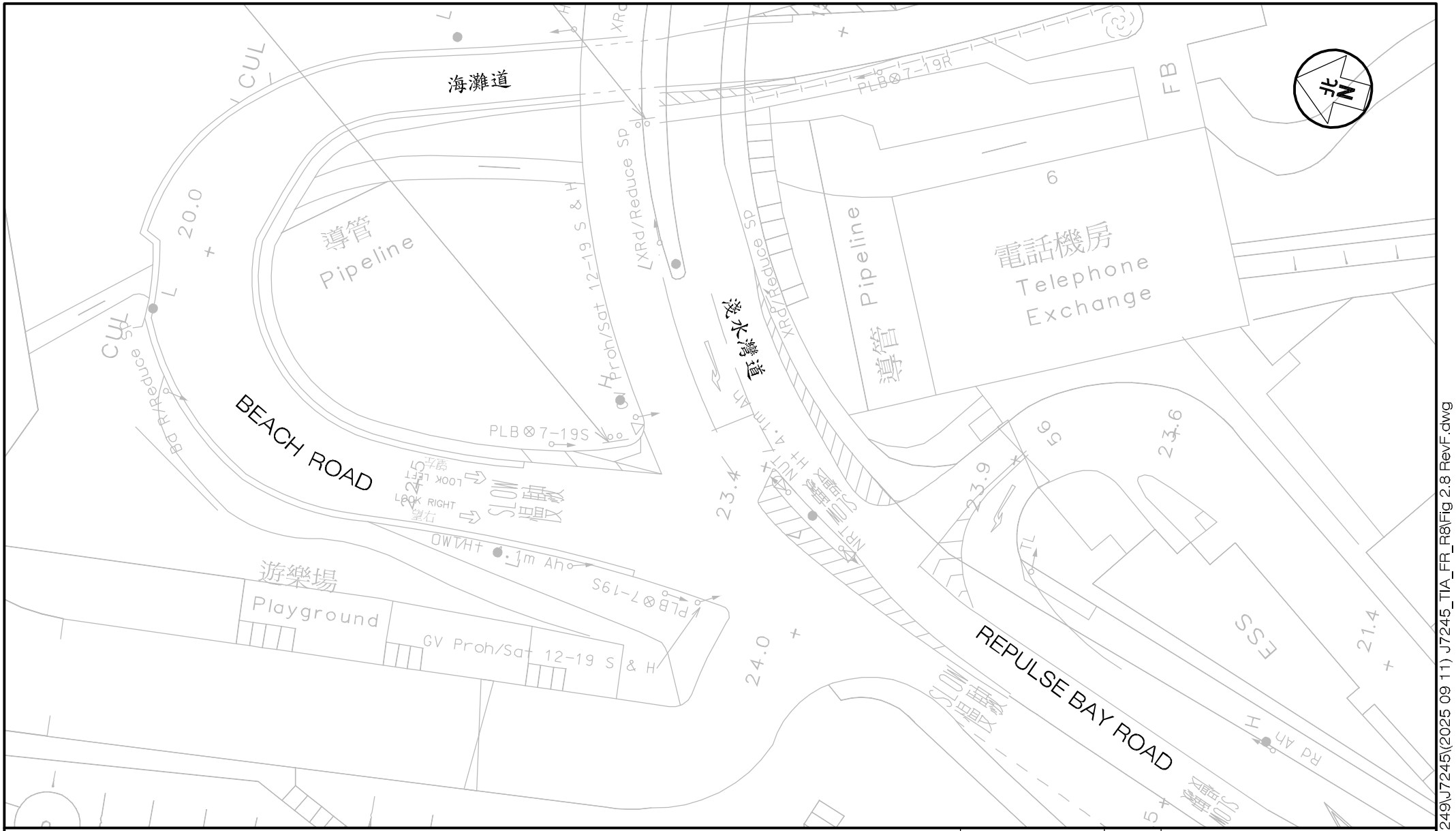

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	Figure No. 2.8 / Revision F
Figure Title	JUNCTION OF REPULSE BAY ROAD / BEACH ROAD (J01)	Designed by M C Y / Drawn by S C Y / Checked by K C	Scale in A4 1 : 400 / Date 11 SEP 2025

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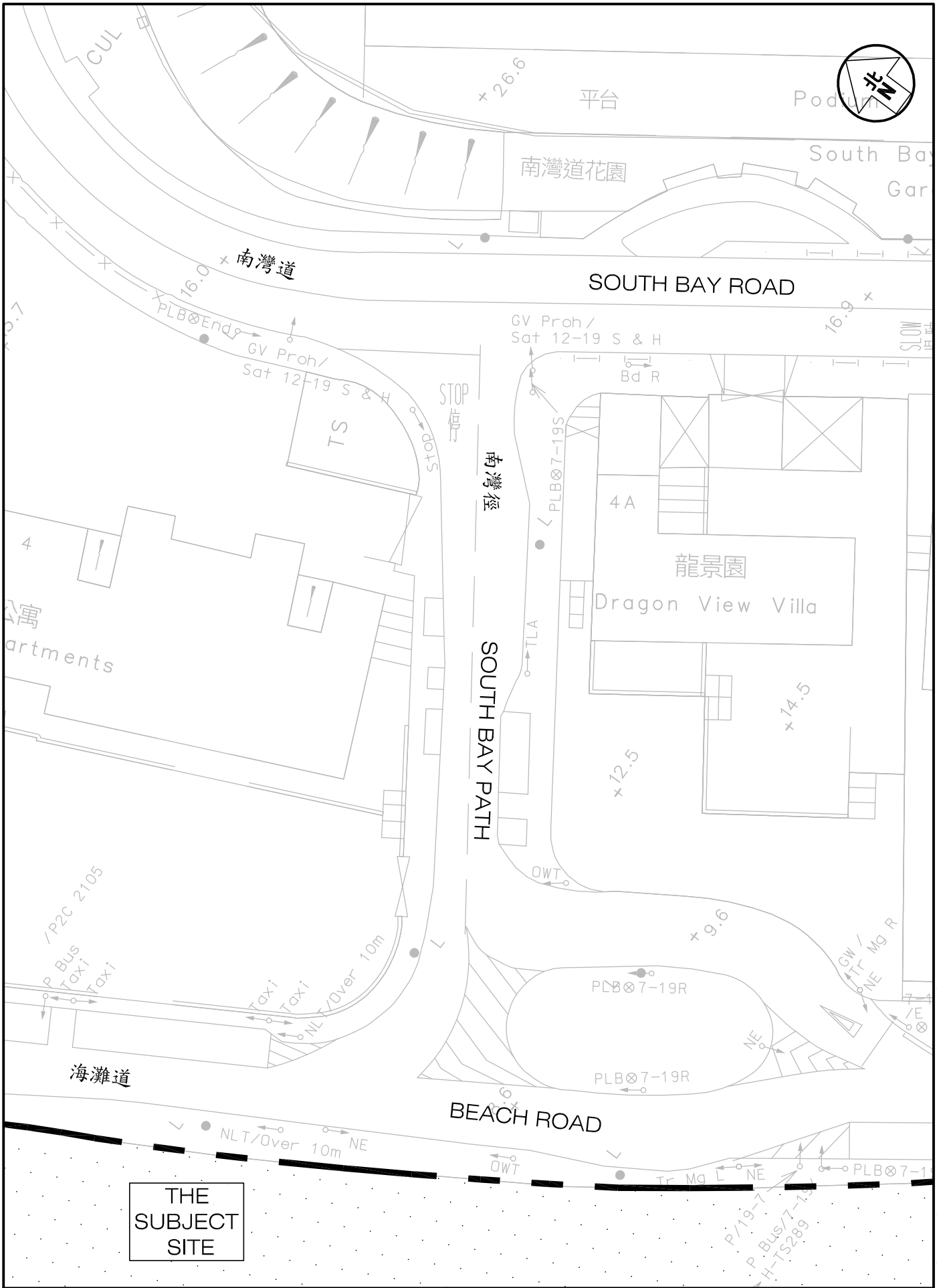

Project Title: PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	Job No. J7245	Figure No. 2.9			Scale in A4 1 : 400
	Designed by M C Y	Drawn by S C Y	Checked by K C	Revision F	Date 11 SEP 2025
Figure Title: JUNCTION OF BEACH ROAD / SOUTH BAY PATH (J02) AND JUNCTION OF SOUTH BAY ROAD / SOUTH BAY PATH (J04)					

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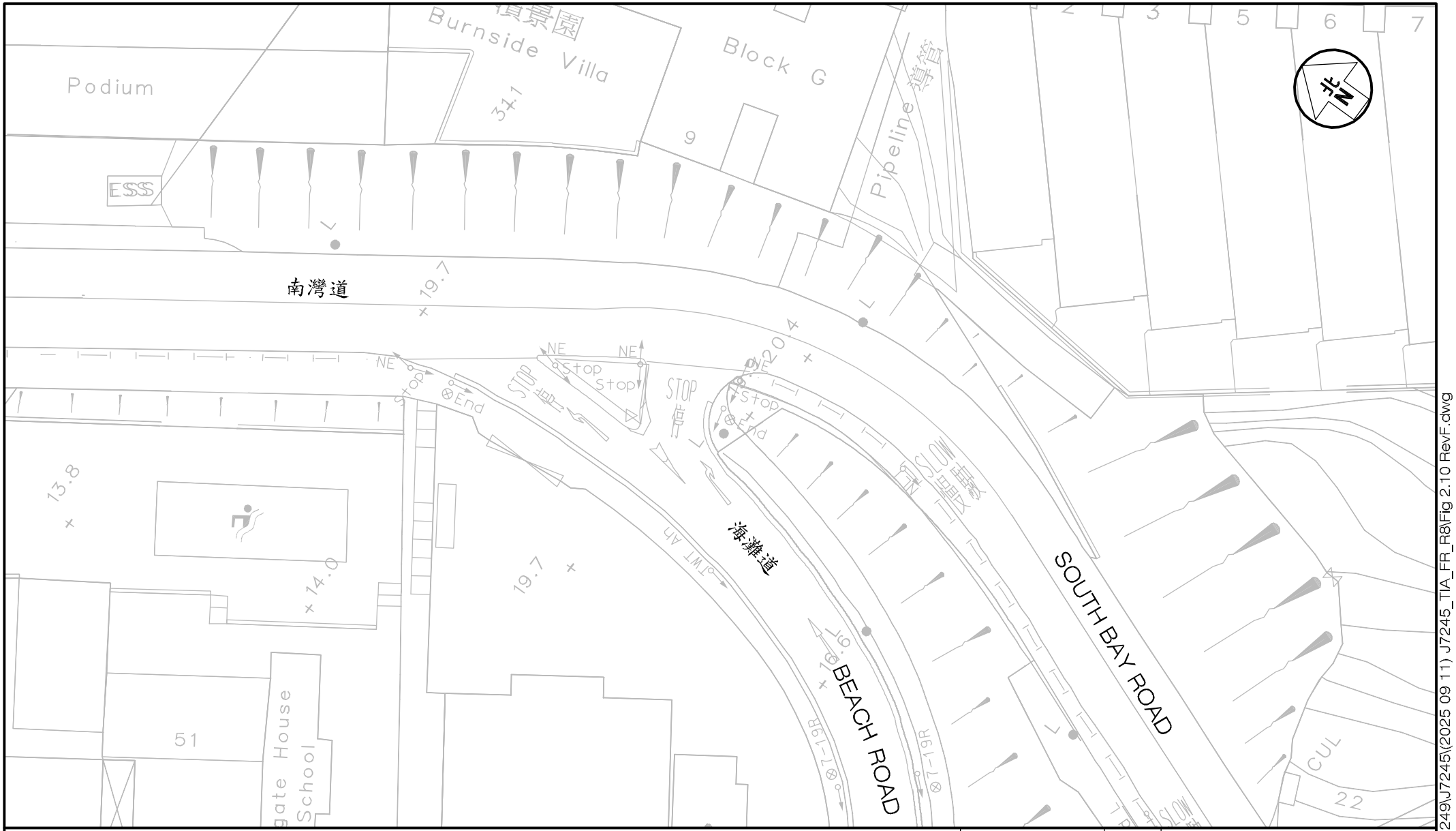

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	
Figure Title	JUNCTION OF BEACH ROAD / SOUTH BAY ROAD (J03)		

Figure No.	2.10	Revision F
Designed by	M C Y	
Drawn by	S C Y	
Checked by	K C	
Scale in A4	1 : 400	
Date	11 SEP 2025	

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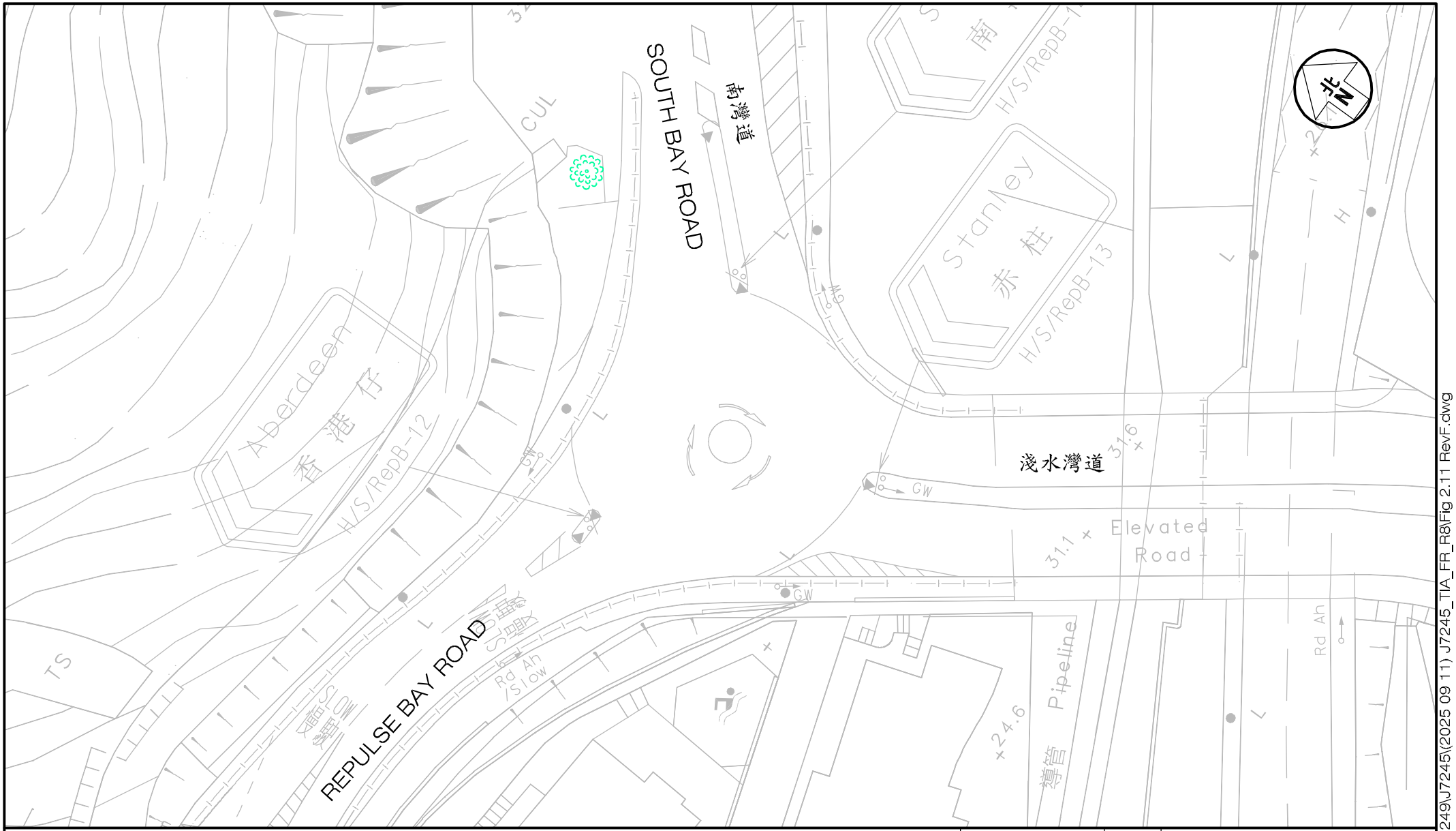
T:\JOBJ\J7200-J7249\J7245\(2025 09 11) J7245_TIA_FR_R8\Fig 2.10 RevF.dwg



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 Title	JUNCTION OF REPULSE BAY ROAD / SOUTH BAY ROAD (J05)		

Figure No.	2.11	Revision F
Designed by	M C Y	
Drawn by	S C Y	
Checked by	K C	
Scale in A4	1 : 400	
Date	11 SEP 2025	

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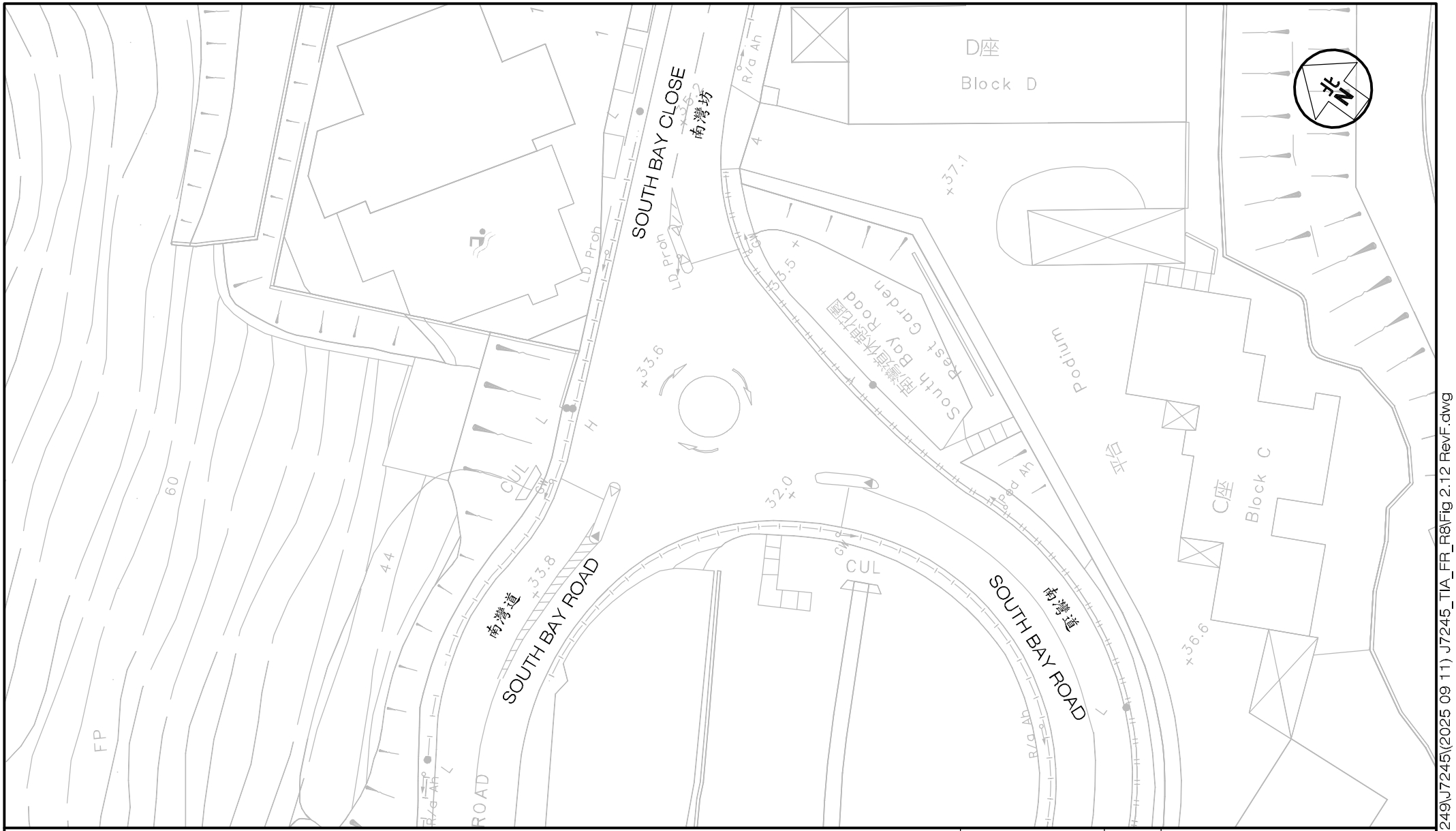

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	Figure No. 2.12 / Revision F
Figure Title	JUNCTION OF SOUTH BAY ROAD / SOUTH BAY CLOSE (J06)	Designed by M C Y / Drawn by S C Y / Checked by K C	Scale in A4 1 : 500 / Date 11 SEP 2025

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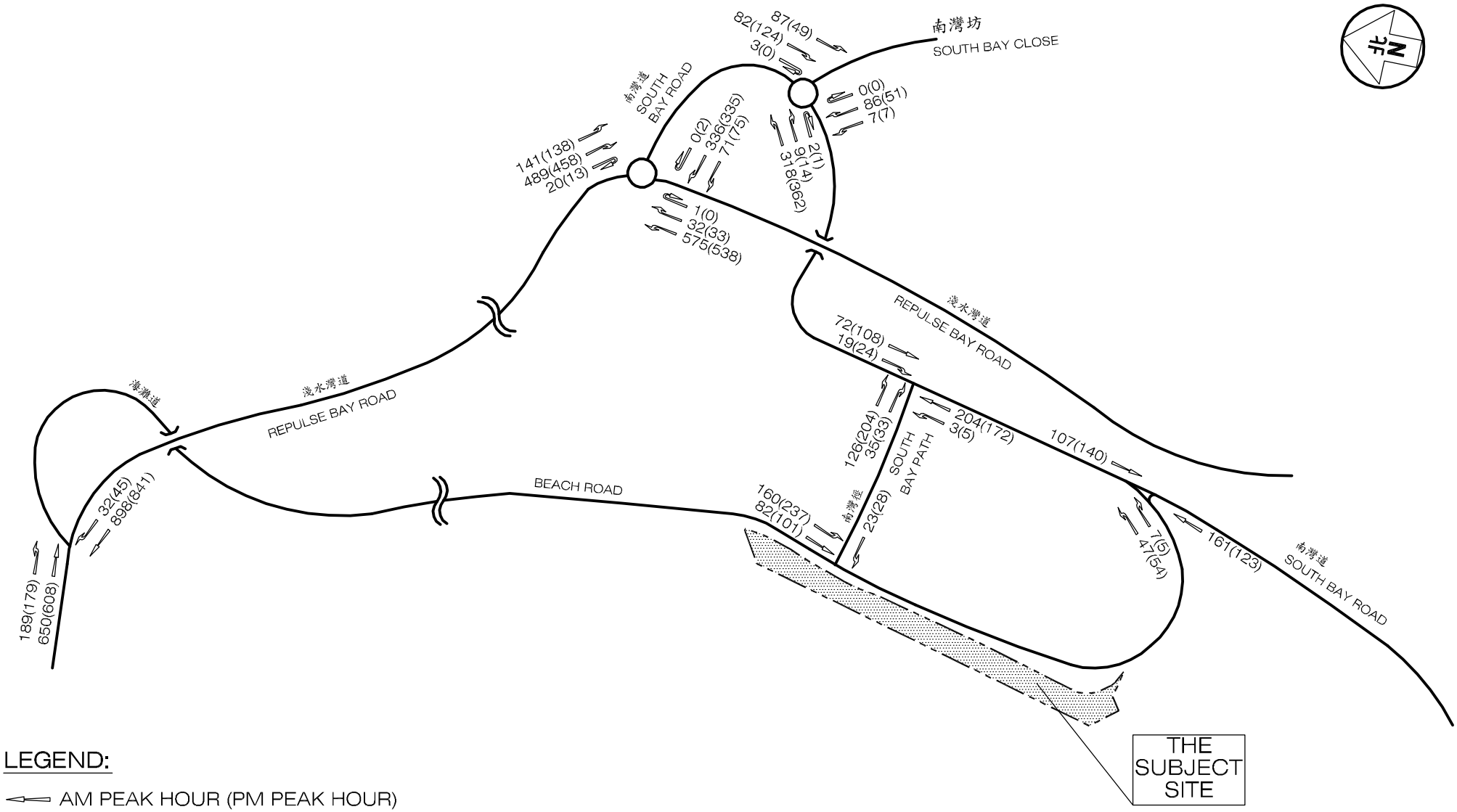

LEGEND:

AM PEAK HOUR (PM PEAK HOUR)

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 F
Figure Title: EXISTING WEEKDAY PEAK HOUR TRAFFIC FLOWS (SWIMMING SEASON IN JULY 2025)		Designed by M C Y / Drawn by S C Y / Checked by K C	
		Scale in A4: N.T.S.	Date: 11 SEP 2025

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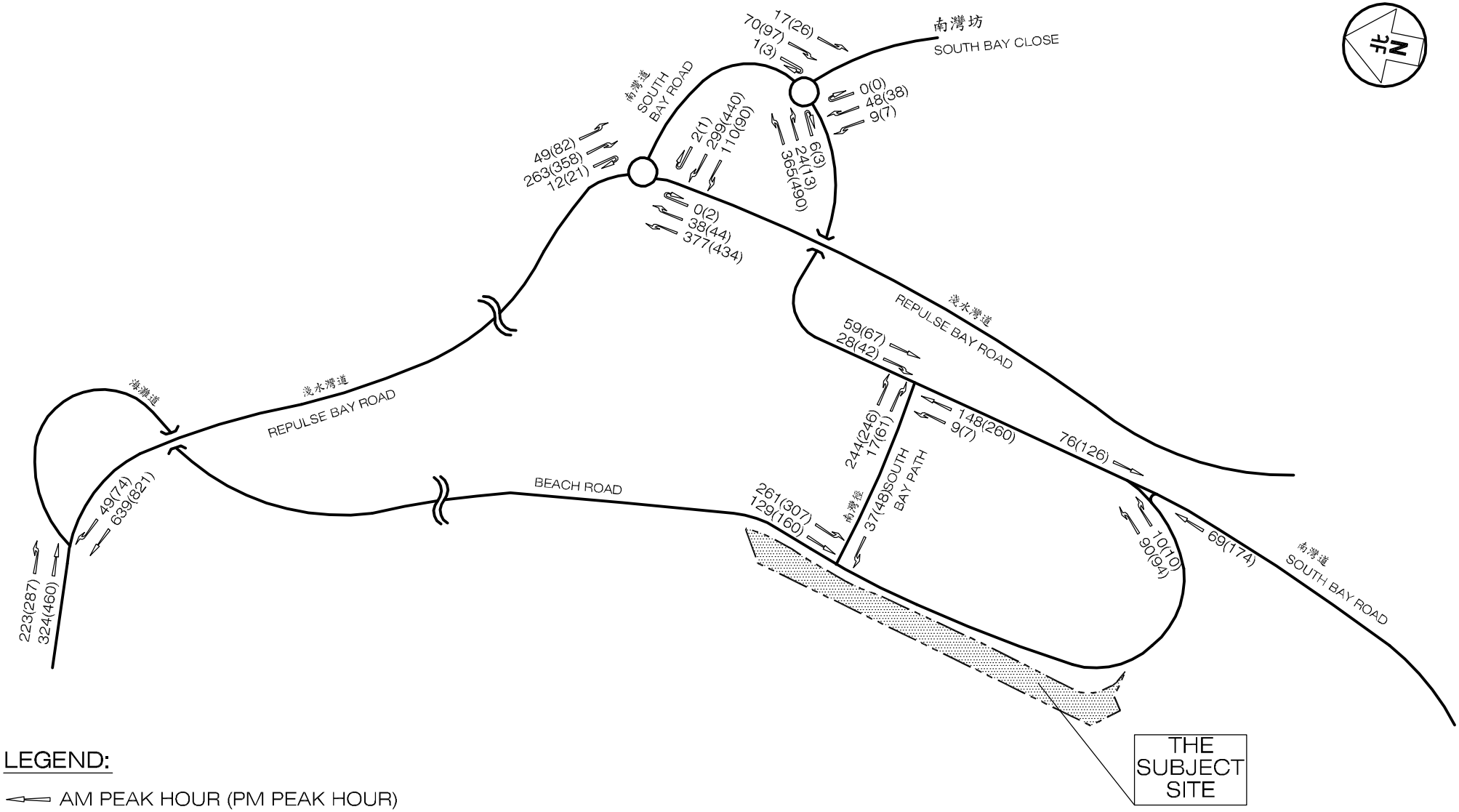

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	
Figure Title	EXISTING WEEKEND PEAK HOUR TRAFFIC FLOWS (SWIMMING SEASON IN JULY 2025)	Figure No. 2.14	Revision F
		Designed by M C Y / Drawn by S C Y / Checked by K C	
		Scale in A4 N.T.S. / Date 11 SEP 2025	

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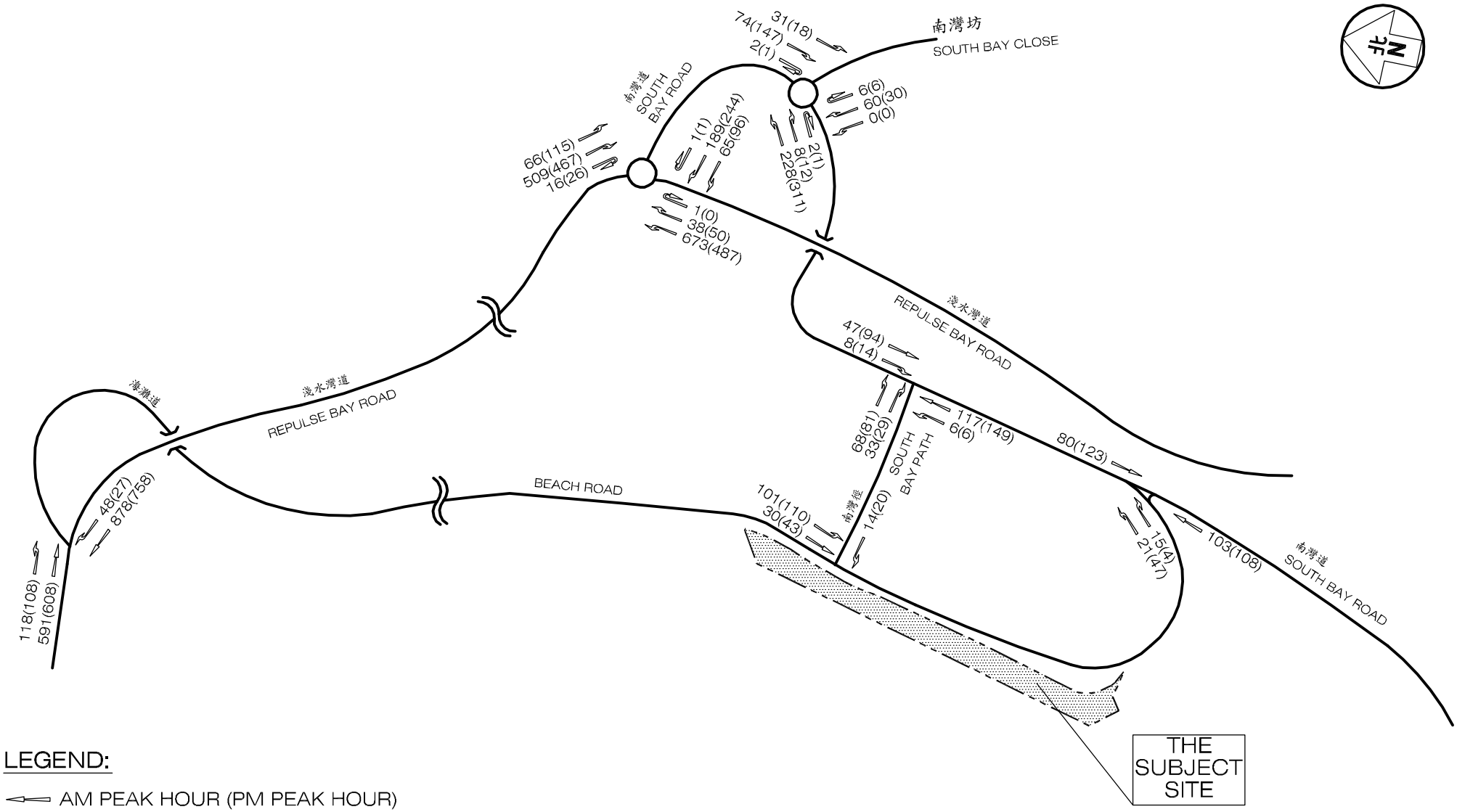

LEGEND:

AM PEAK HOUR (PM PEAK HOUR)

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. 2.15	Revision F
Figure Title: EXISTING WEEKDAY PEAK HOUR TRAFFIC FLOWS (SWIMMING SEASON IN JUNE 2024)		Designed by M C Y / Drawn by S C Y / Checked by K C	
		Scale in A4: N.T.S.	Date: 11 SEP 2025

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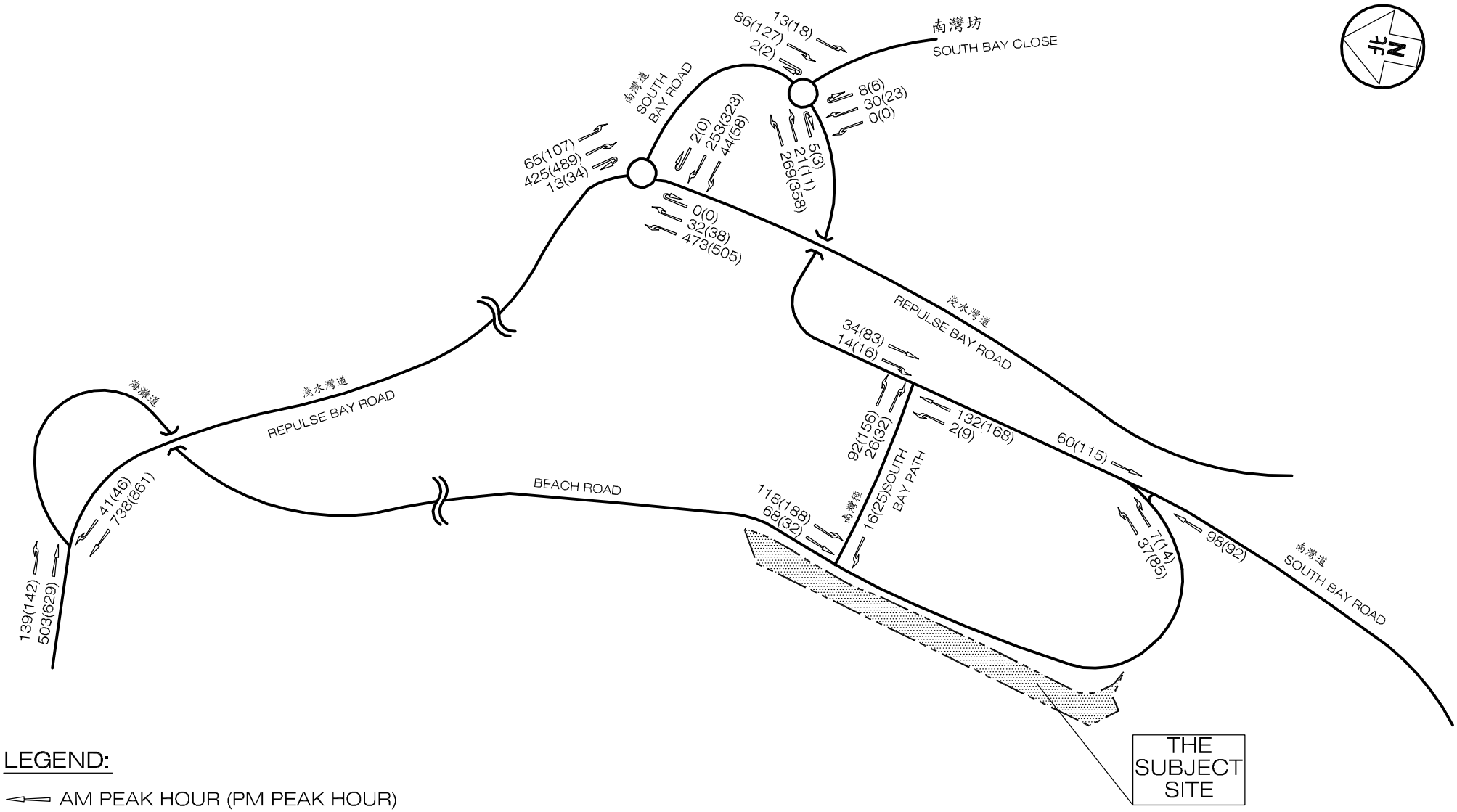

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AM PEAK HOUR (PM PEAK HOUR)

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. 2.16	Revision F
Figure Title: EXISTING WEEKEND PEAK HOUR TRAFFIC FLOWS (SWIMMING SEASON IN JUNE 2024)		Designed by M C Y / Drawn by S C Y / Checked by K C	
		Scale in A4: N.T.S. / Date: 11 SEP 2025	

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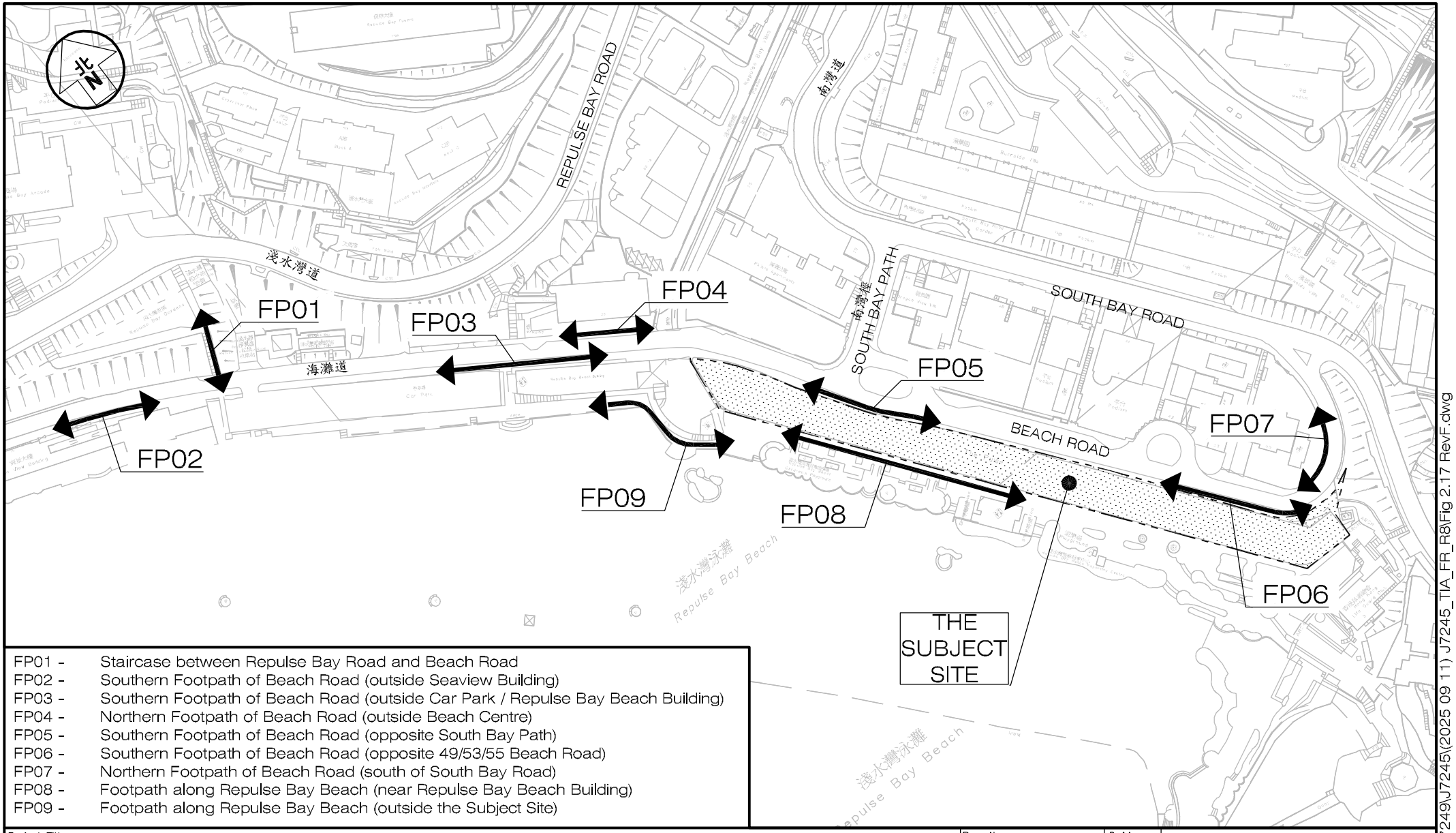

FP01 -	Staircase between Repulse Bay Road and Beach Road
FP02 -	Southern Footpath of Beach Road (outside Seaview Building)
FP03 -	Southern Footpath of Beach Road (outside Car Park / Repulse Bay Beach Building)
FP04 -	Northern Footpath of Beach Road (outside Beach Centre)
FP05 -	Southern Footpath of Beach 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.: 2.17 | Revision: F

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

Scale in A4: 1 : 2,000 | Date: 11 SEP 2025

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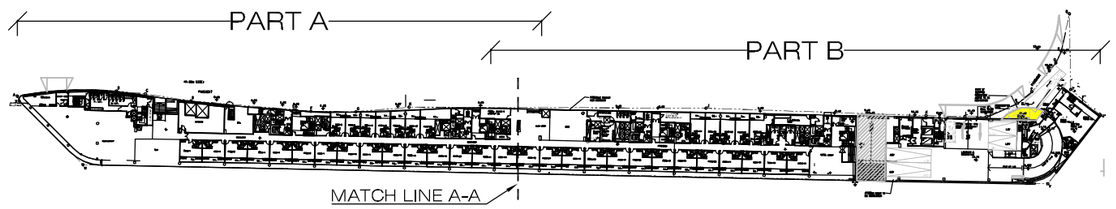
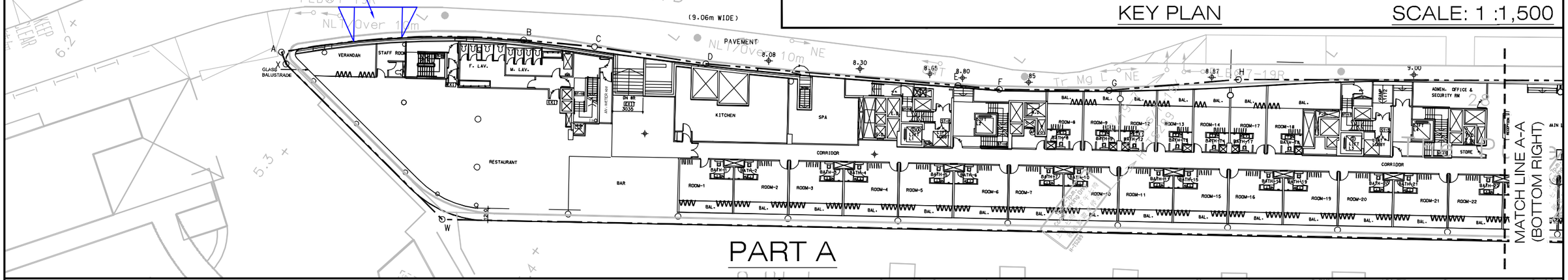
Facilities	Proposed
Goods Van L/UL Bay	Nil
LGV L/UL Bays	2 nos.
HGV L/UL Bays	2 nos.
Layby for Coach	1 no.
Laybys for Private Car / Taxi	2 nos.



KEY PLAN

SCALE: 1 :1,500

Approved / Existing Run-out at LG/F
from Car Park to remain (1 Level Down)



PART A

LEGEND :

Existing Goods Van L/UL Bay
@5.0m(L) X 2.5m(W)

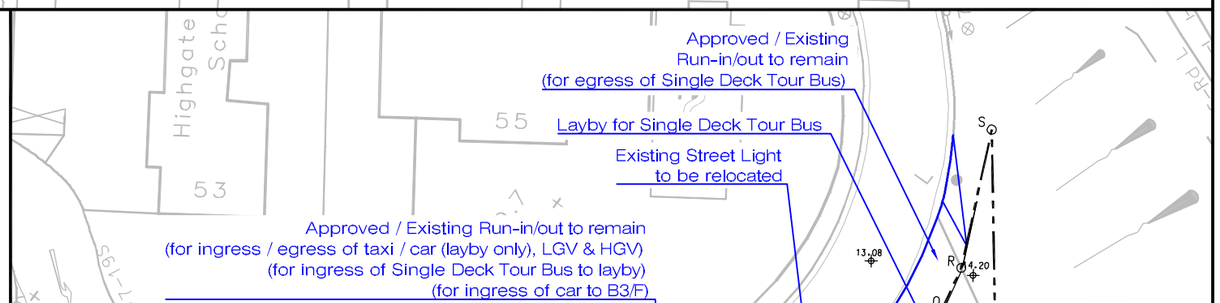
Existing LGV L/UL Bay
@7.0m(L) X 3.5m(W)

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

LGV
Proposed LGV L/UL Bay
@7.0m(L) X 3.5m(W) X Min. 3.6m (H)

HGV
Proposed HGV L/UL Bay
@11.0m(L) X 3.5m(W) X Min. 4.7m (H)

SINGLE DECK TOUR BUS
Proposed Layby for Single Deck Tour Bus
@12.0m(L) X 3.5m(W) X Min. 3.8m (H)



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	J7245	Figure No. 3.1 / Revision F
Figure Title	PROPOSED INTERNAL TRANSPORT LAYOUT AT UG/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 11 SEP 2025

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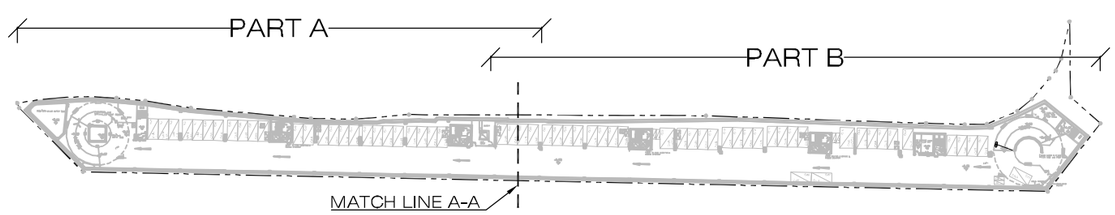
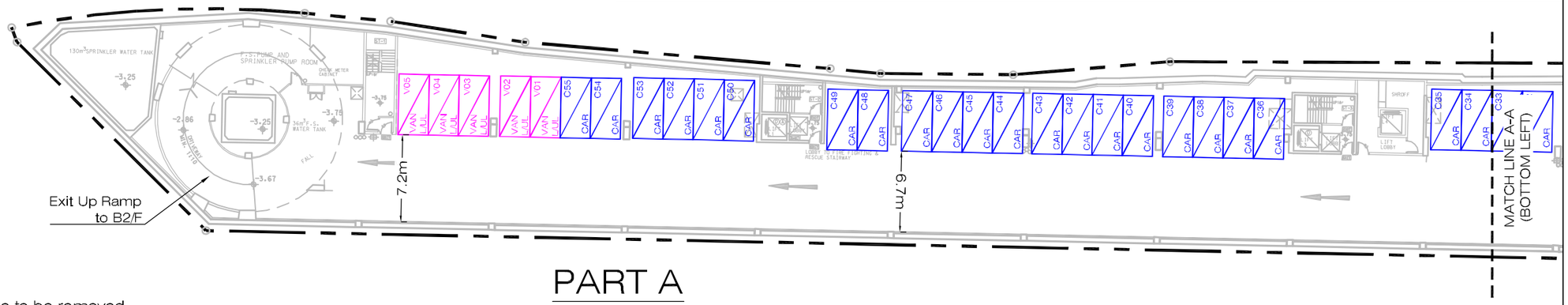
Facilities	Proposed
Car Parking Spaces	Total 58 nos., including:
- Conventional	56 nos.
- Accessible	2 nos.
Motorcycle	6 nos.
Goods Van Loading / Unloading Bays	5 nos.



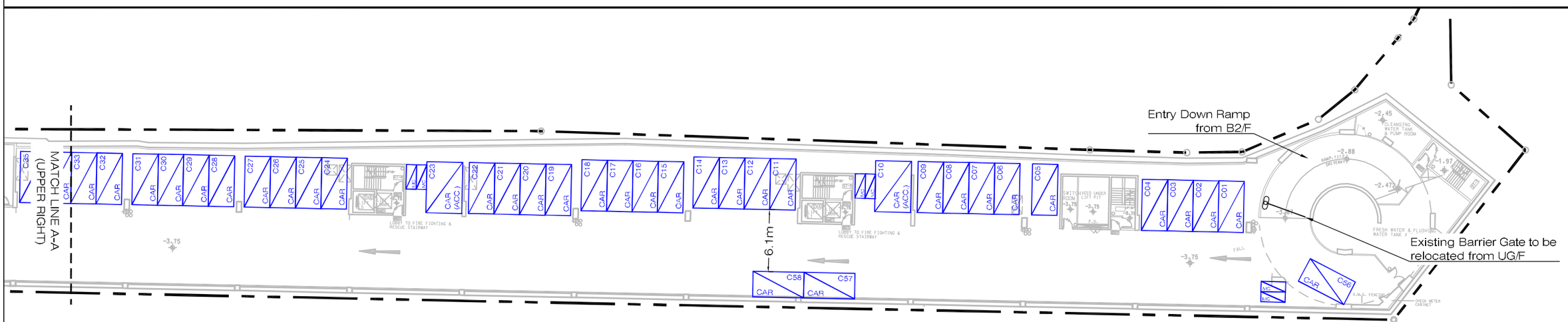
KEY PLAN

SCALE: 1 :1,500



PART A

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



PART B

NOTE:
ALL existing mechnical 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 F
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 11 SEP 2025

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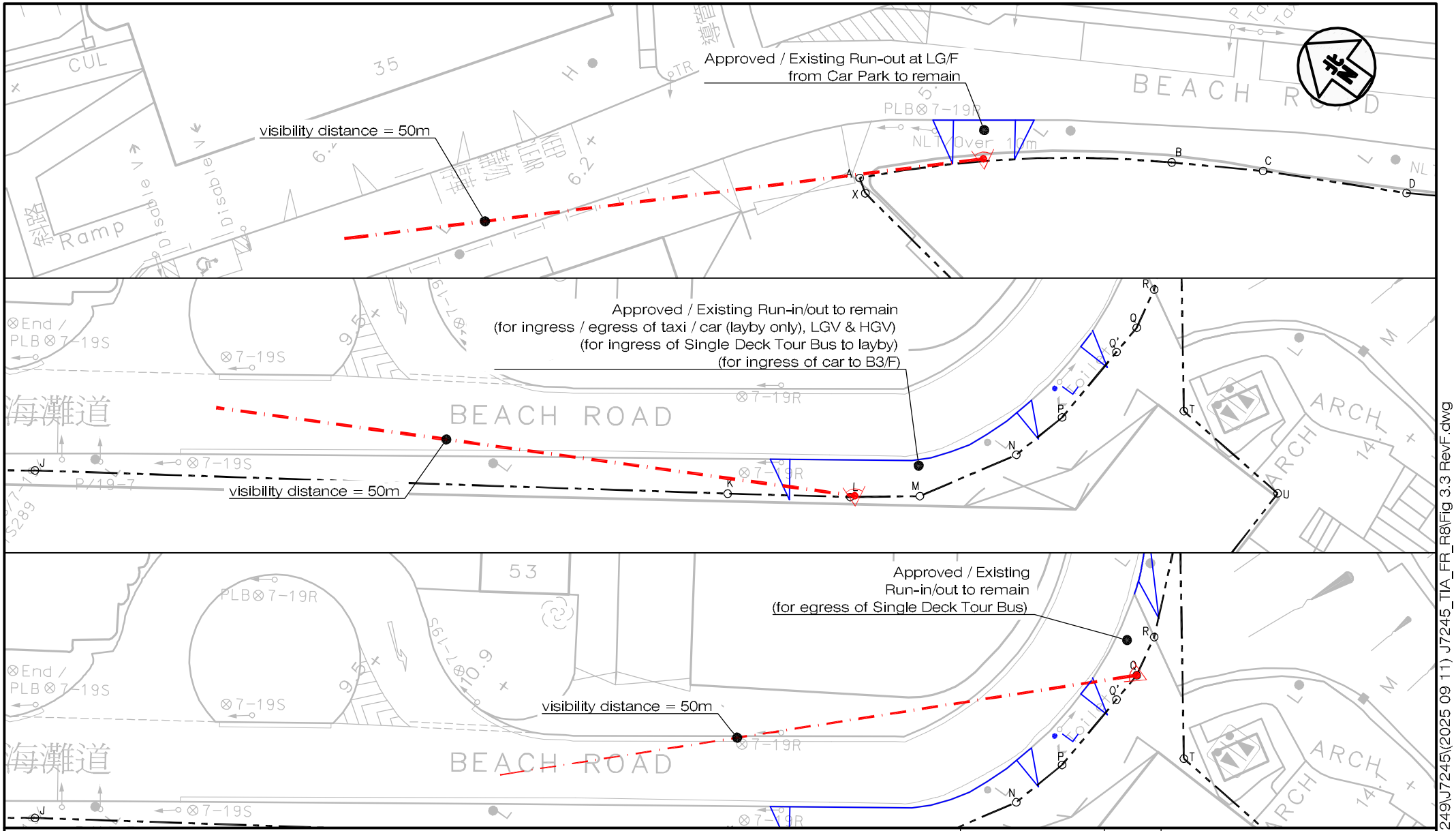

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J6733	
Figure Title	VISIBILITY ASSESSMENTS AT APPROVED / EXISTING VEHICULAR ACCESSES ALONG BEACH ROAD	Figure No. 3.3	Revision F
		Designed by W C H / Drawn by S C Y / Checked by K C	
		Scale in A4 1 : 400	Date 11 SEP 2025

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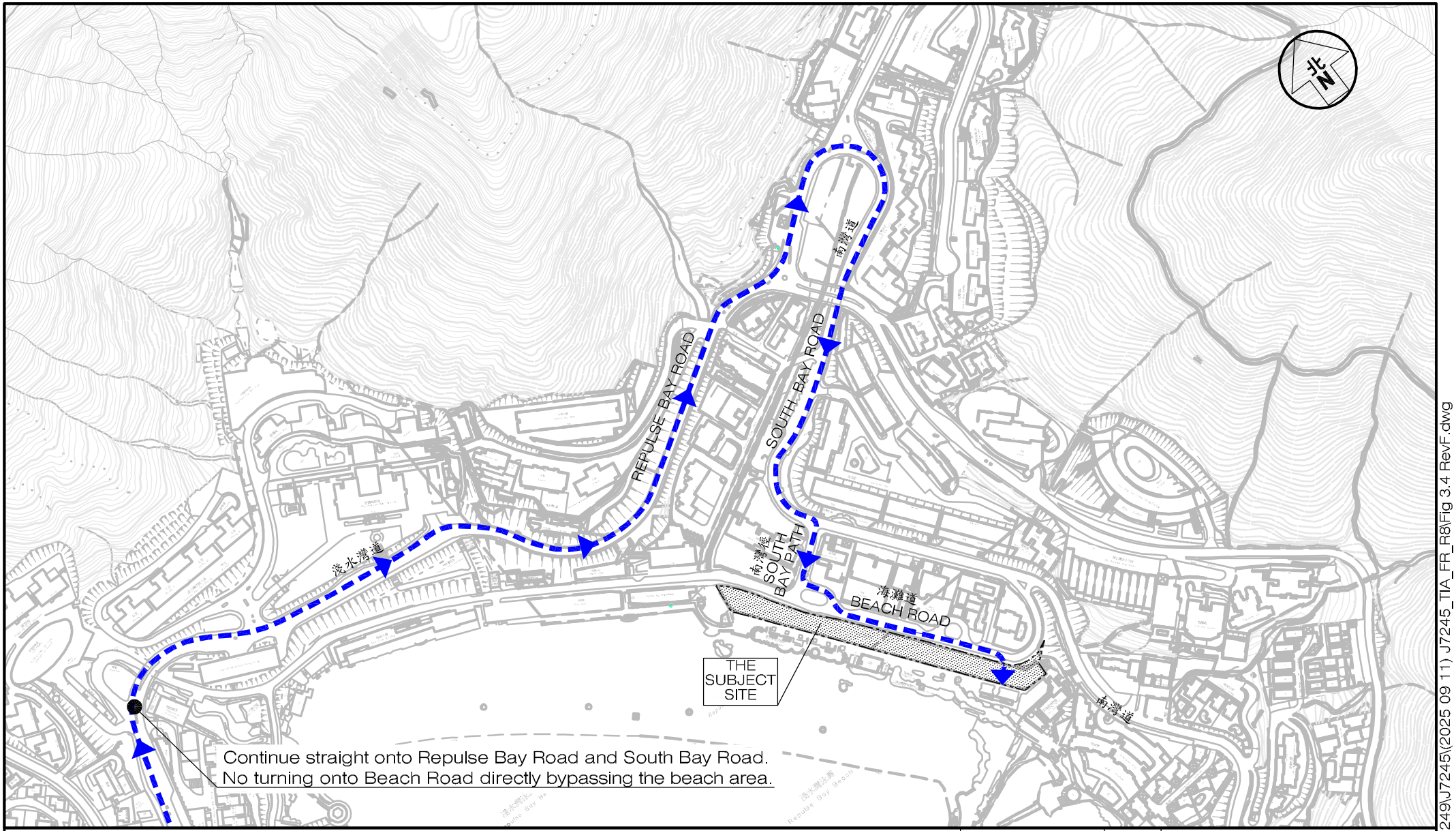

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7342	Figure No. 3.4	Revision F
Figure Title	RECOMMENDED INGRESS ROUTE TO THE SUBJECT SITE (VIA REPULSE 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 / Date 11 SEP 2025	

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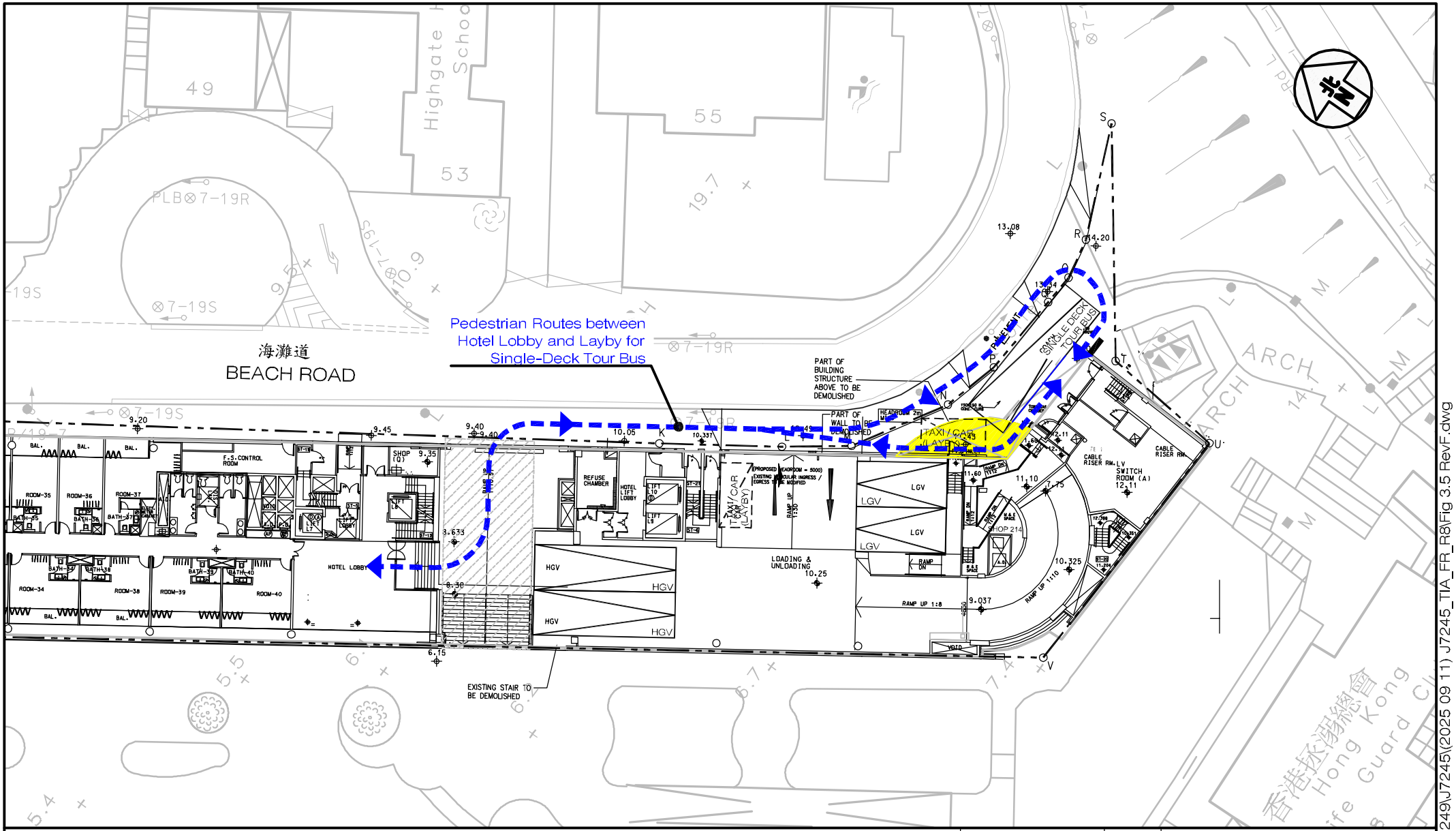

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	
Figure Title	PEDESTRIAN ACCESS ROUTE BETWEEN HOTEL LOBBY AND LAYBY FOR SINGLE-DECK TOUR BUS	Figure No. 3.5	Revision F
		Designed by W C H / Drawn by S C Y / Checked by K C	
		Scale in A4 1 : 400	Date 11 SEP 2025

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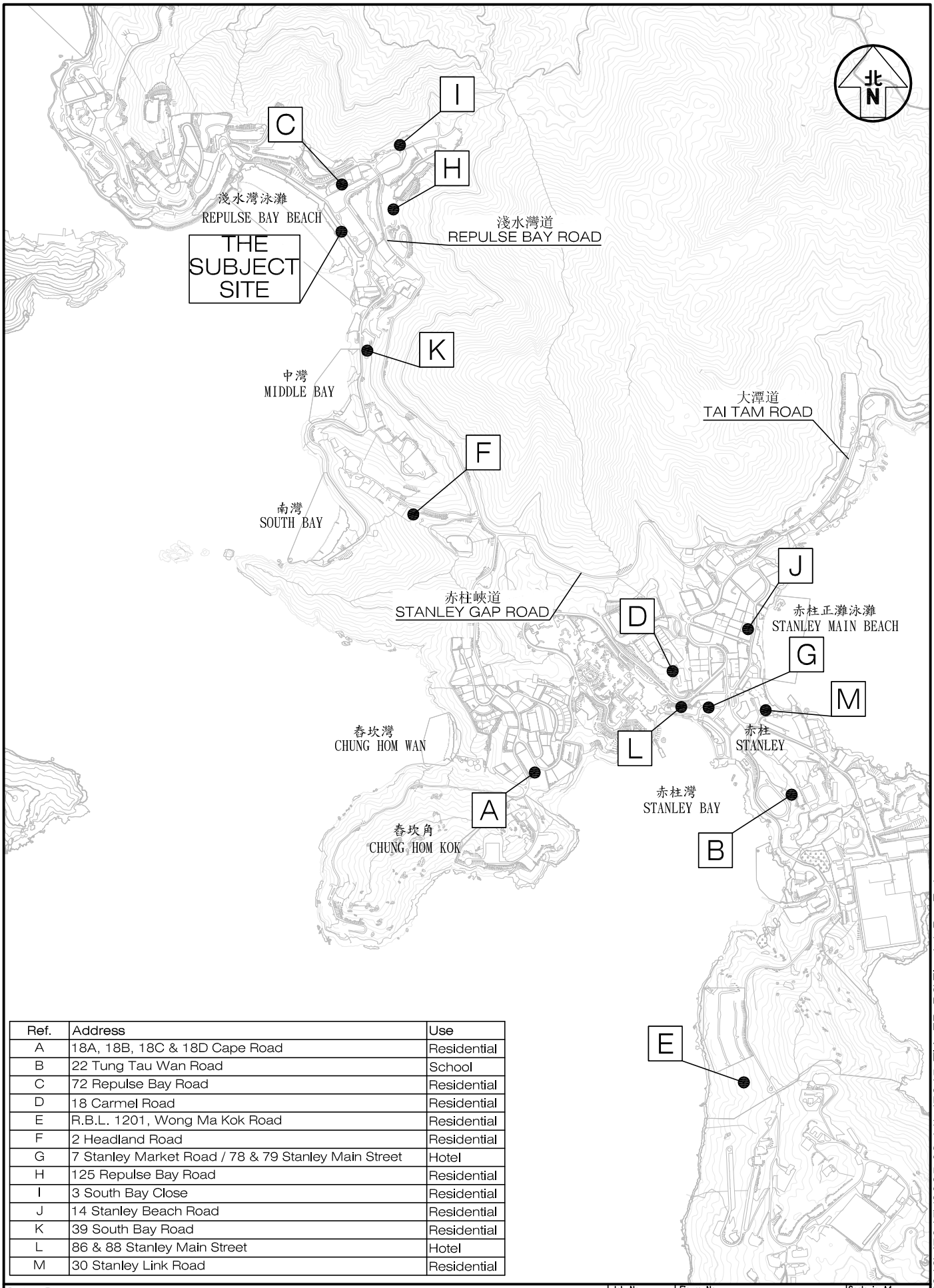

Ref.	Address	Use
A	18A, 18B, 18C & 18D Cape Road	Residential
B	22 Tung Tau Wan Road	School
C	72 Repulse Bay Road	Residential
D	18 Carmel Road	Residential
E	R.B.L. 1201, Wong Ma Kok Road	Residential
F	2 Headland Road	Residential
G	7 Stanley Market Road / 78 & 79 Stanley Main Street	Hotel
H	125 Repulse 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	Hotel
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.	Figure No.			Scale in A4
J7245	4.1			1 : 20,000
Designed by	Drawn by	Checked by	Revision	Date
M C Y	S C Y	K C	F	11 SEP 2025

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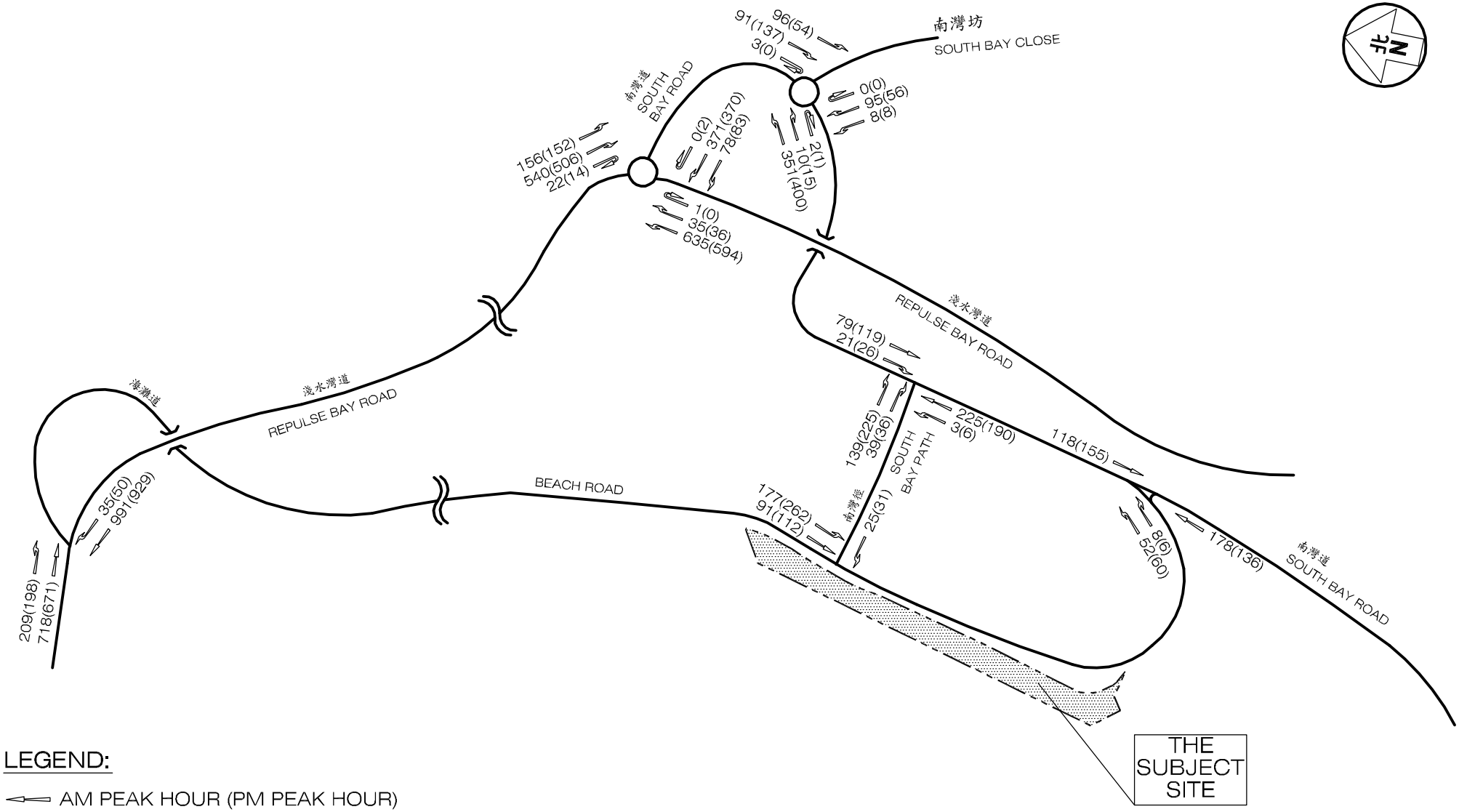

LEGEND:

AM PEAK HOUR (PM PEAK HOUR)

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. 4.2 / Revision F
Figure Title	YEAR 2030 WEEKDAY PEAK HOUR TRAFFIC FLOW WITHOUT THE PROPOSED CONVERSION (SWIMMING SEASON IN JULY)		Designed by M C Y / Drawn by S C Y / Checked by K C; Scale in A4 N.T.S. / Date 11 SEP 2025

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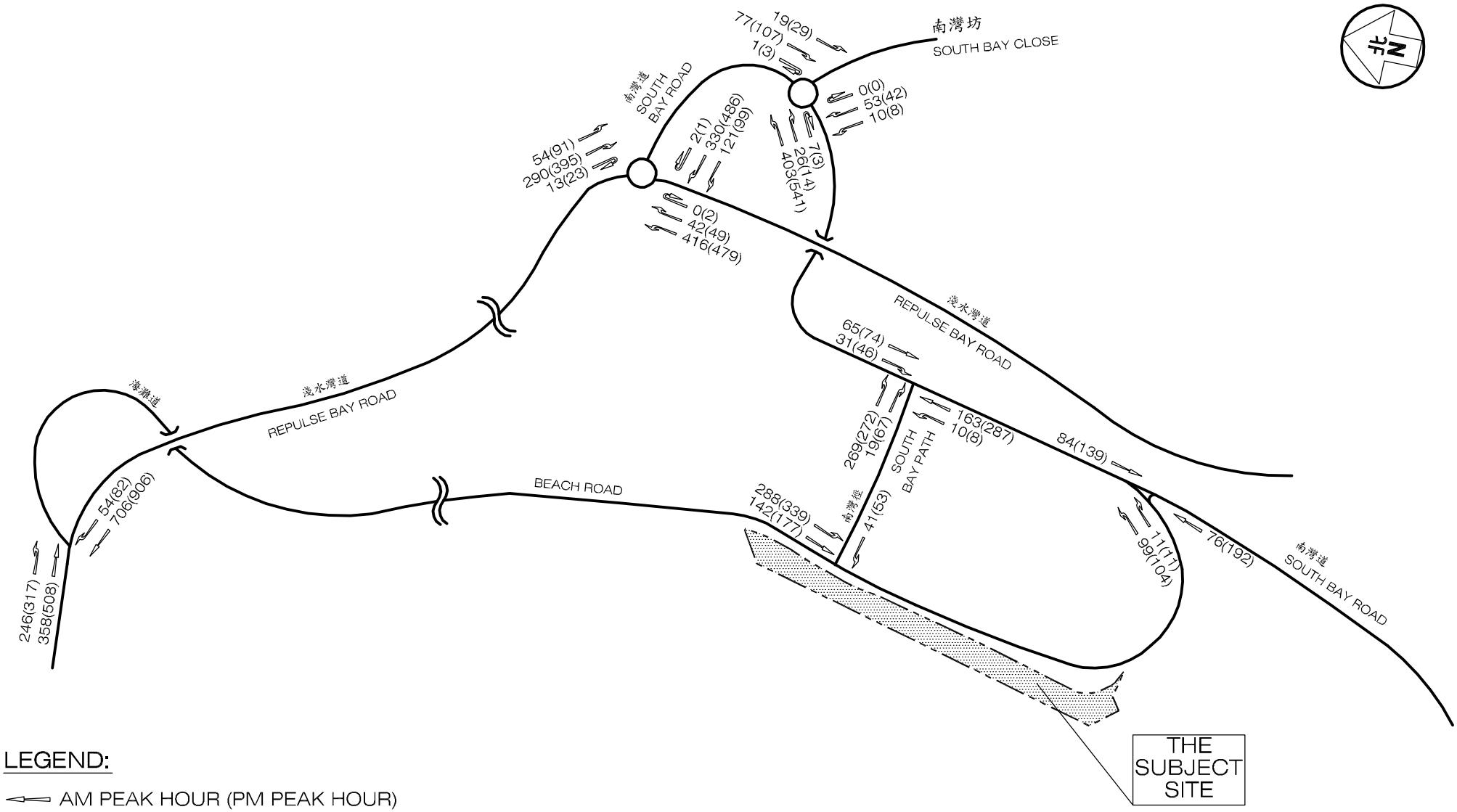

LEGEND:

AM PEAK HOUR (PM PEAK HOUR)

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. 4.3	Revision F
Figure Title	YEAR 2030 WEEKEND PEAK HOUR TRAFFIC FLOW WITHOUT THE PROPOSED CONVERSION (SWIMMING SEASON IN JULY)		Designed by M C Y / Drawn by S C Y / Checked by K C	
			Scale in A4 N.T.S. / Date 11 SEP 2025	

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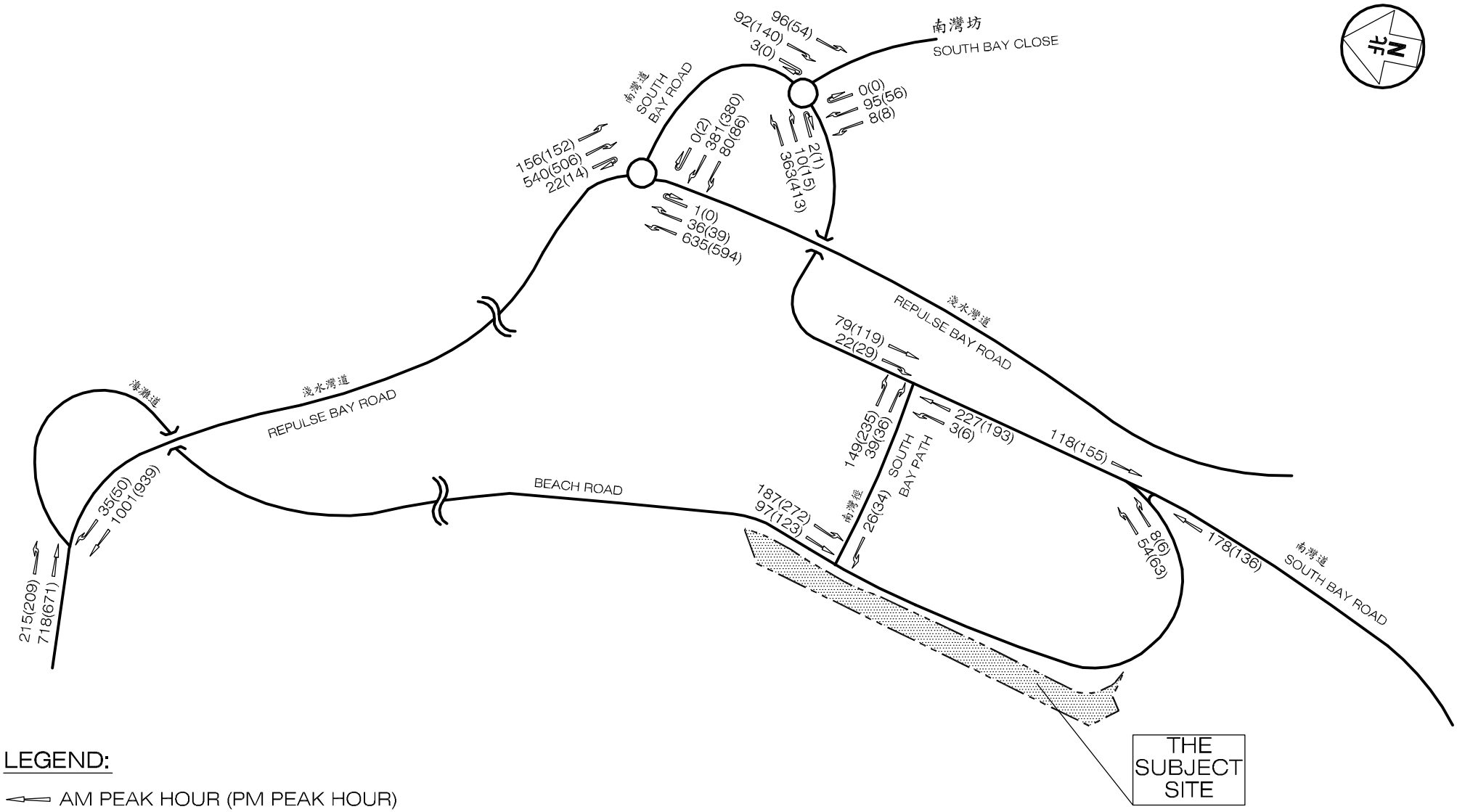

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	
Figure Title	YEAR 2030 WEEKDAY PEAK HOUR TRAFFIC FLOW WITH THE PROPOSED CONVERSION (SWIMMING SEASON IN JULY)	Figure No. 4.4	Revision F
		Designed by M C Y / Drawn by S C Y / Checked by K C	
		Scale in A4 N.T.S. / Date 11 SEP 2025	

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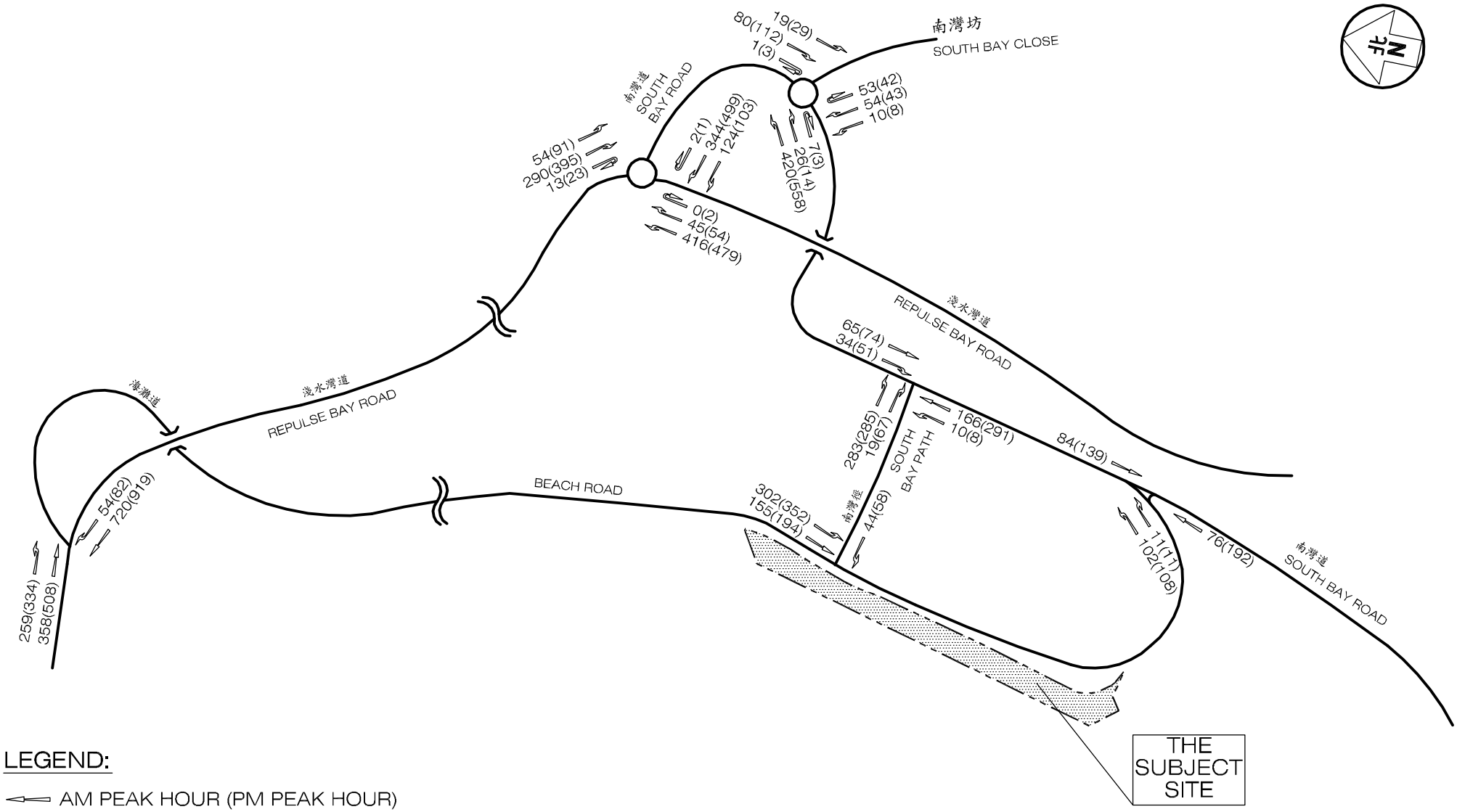

LEGEND:

AM PEAK HOUR (PM PEAK HOUR)

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 F
Figure Title: YEAR 2030 WEEKEND PEAK HOUR TRAFFIC FLOW WITH THE PROPOSED CONVERSION (SWIMMING SEASON IN JULY)		Designed by M C Y / Drawn by S C Y / Checked by K C	
		Scale in A4: N.T.S.	Date: 11 SEP 2025

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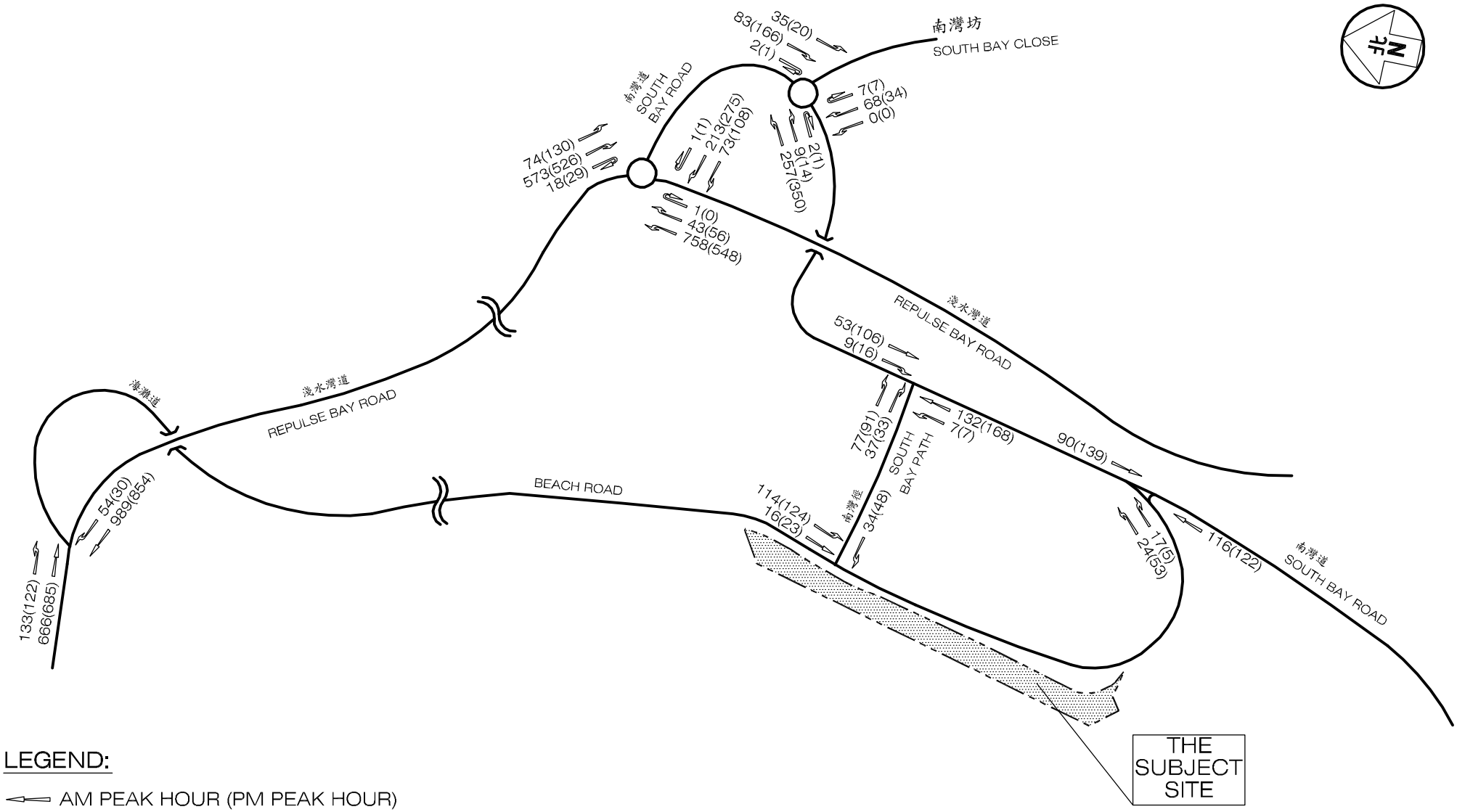

Project Title	PROPOSED CONVERSION OF PART OF THE PULSE INTO HOTEL IN "OTHER SPECIFIED USES (BEACH RELATED LEISURE USE)" AND "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONES AT NO. 28 BEACH ROAD, REPULSE BAY	J7245	
Figure Title	YEAR 2030 WEEKDAY PEAK HOUR TRAFFIC FLOW WITHOUT THE PROPOSED CONVERSION (SWIMMING SEASON IN JUNE)	Figure No. 4.6	Revision F
		Designed by M C Y / Drawn by S C Y / Checked by K C	
		Scale in A4 N.T.S. / Date 11 SEP 2025	

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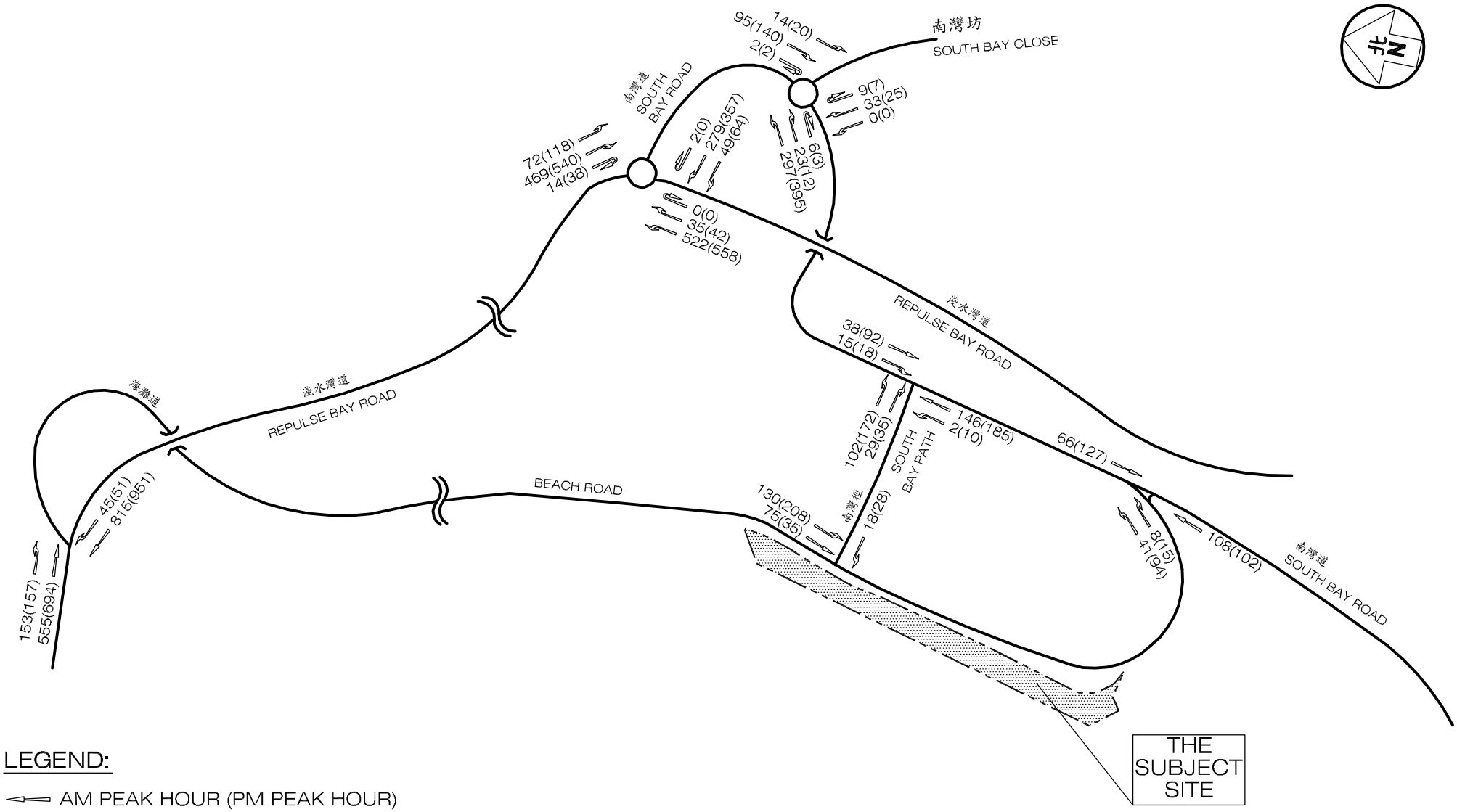

LEGEND:

AM PEAK HOUR (PM PEAK HOUR)

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. 4.7	Revision F
Figure Title	YEAR 2030 WEEKEND PEAK HOUR TRAFFIC FLOW WITHOUT THE PROPOSED CONVERSION (SWIMMING SEASON IN JUNE)		Designed by M C Y / Drawn by S C Y / Checked by K C	
			Scale in A4 N.T.S. / Date 11 SEP 2025	

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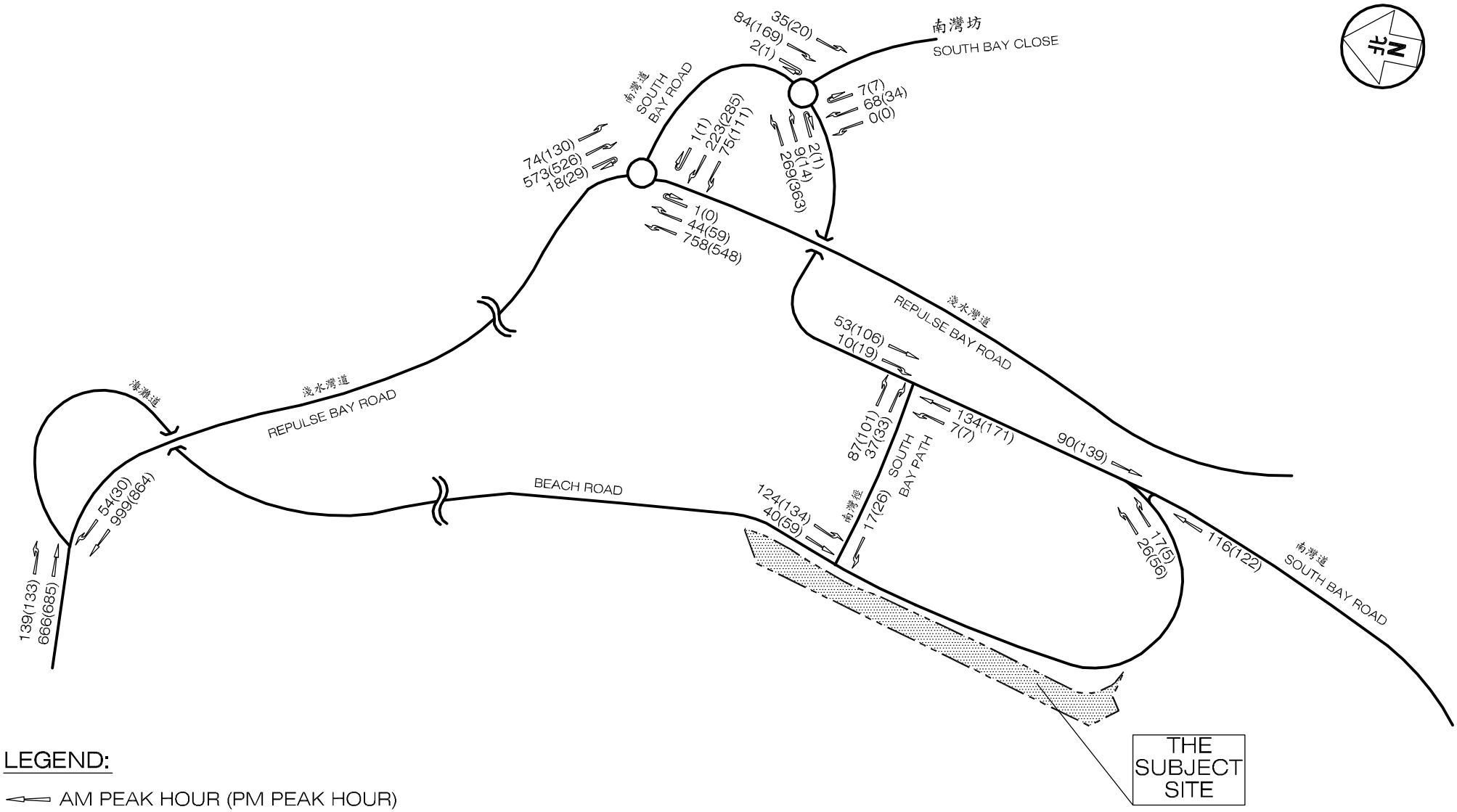

LEGEND:

AM PEAK HOUR (PM PEAK HOUR)

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. 4.8	Revision F
Figure Title	YEAR 2030 WEEKDAY PEAK HOUR TRAFFIC FLOW WITH THE PROPOSED CONVERSION (SWIMMING SEASON IN JUNE)		Designed by M C Y / Drawn by S C Y / Checked by K C	
			Scale in A4 N.T.S. / Date 11 SEP 2025	

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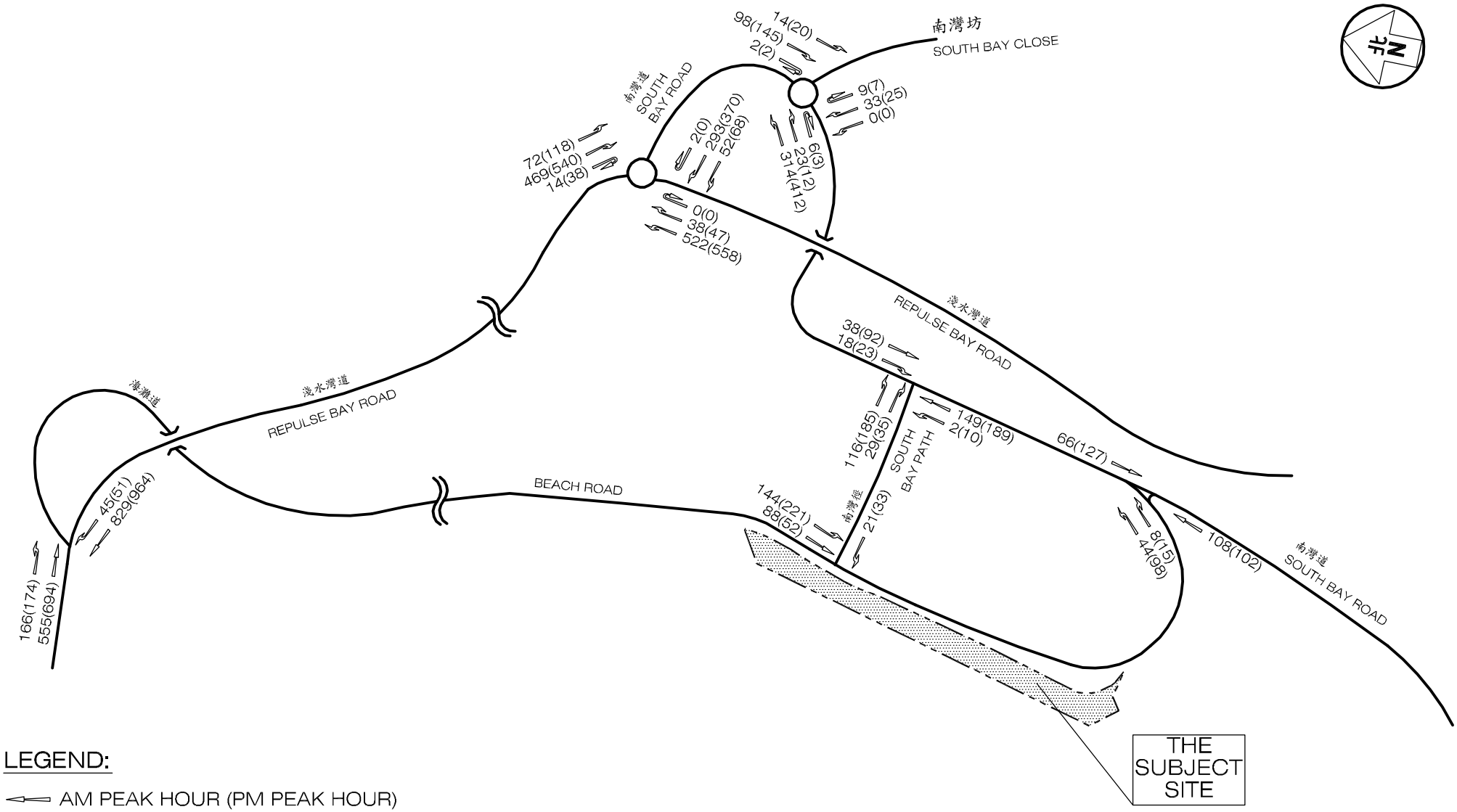

LEGEND:

AM PEAK HOUR (PM PEAK HOUR)

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. 4.9	Revision F
Figure Title	YEAR 2030 WEEKEND PEAK HOUR TRAFFIC FLOW WITH THE PROPOSED CONVERSION (SWIMMING SEASON IN JUNE)		Designed by M C Y / Drawn by S C Y / Checked by K C	
			Scale in A4 N.T.S. / Date 11 SEP 2025	

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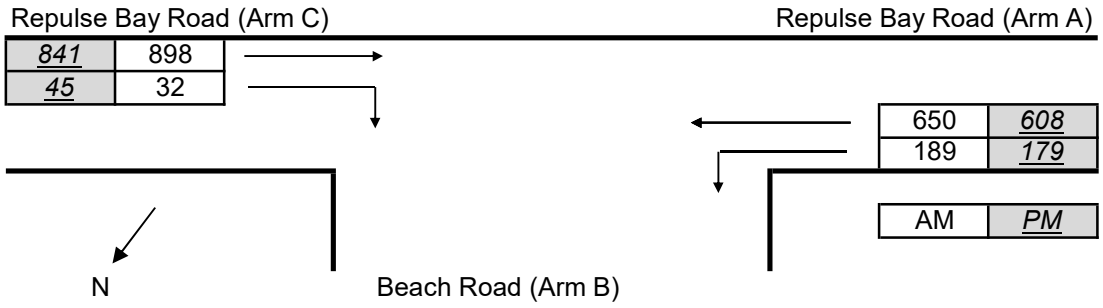
Appendix A – Junction Capacity Analyses

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road			Job Number:	J7245
Scenario:	Existing Condition (Weekday - July 2025)				J01 - P. 1
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

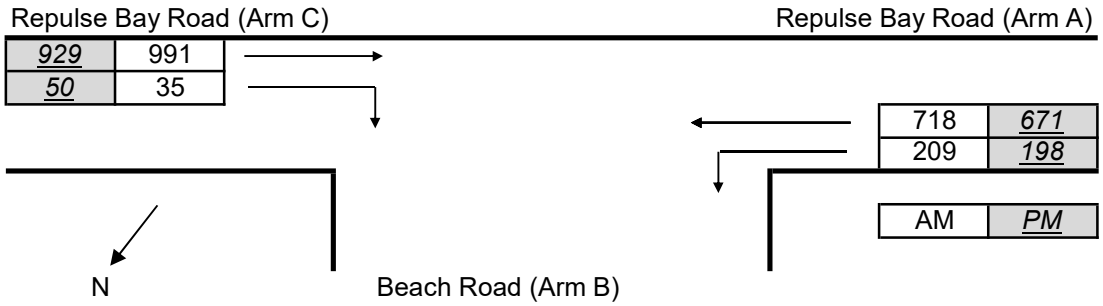
Traffic Flows, pcu/hr	AM	*PM*
q-CA	898	*841*
q-CB	32	*45*
q-AB	189	*179*
q-AC	650	*608*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	223	*230*
Q-BC	378	*383*
Q-CB	533	*541*
Q-BAC	223	*230*

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 - July)				J01 - P. 2
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

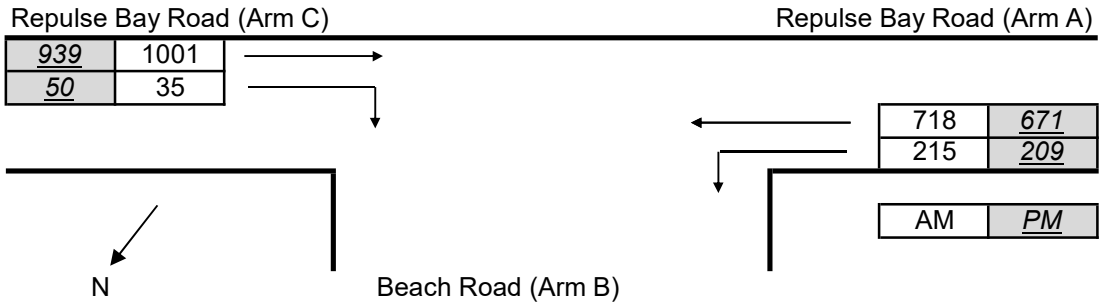
Traffic Flows, pcu/hr	AM	*PM*
q-CA	991	*929*
q-CB	35	*50*
q-AB	209	*198*
q-AC	718	*671*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	209	*216*
Q-BC	370	*375*
Q-CB	518	*528*
Q-BAC	209	*216*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.000	*0.000*
C-B	0.068	*0.095*
B-AC	0.000	*0.000*

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday - July)				J01 - P. 3
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

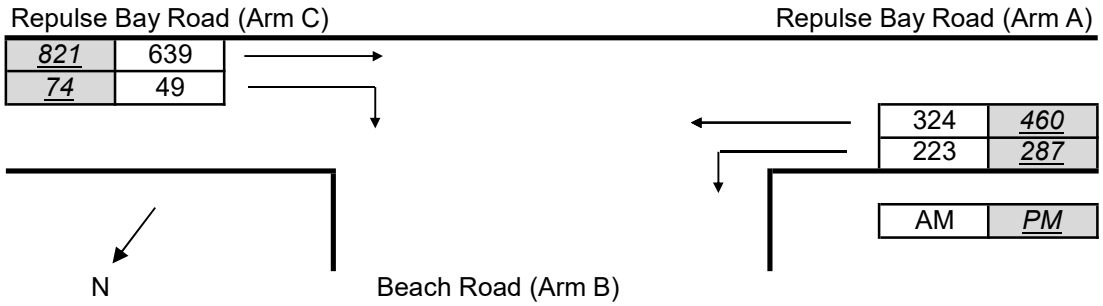
Traffic Flows, pcu/hr	AM	*PM*
q-CA	1001	*939*
q-CB	35	*50*
q-AB	215	*209*
q-AC	718	*671*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	208	*215*
Q-BC	369	*375*
Q-CB	517	*526*
Q-BAC	208	*215*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.000	*0.000*
C-B	0.068	*0.095*
B-AC	0.000	*0.000*

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road			Job Number:	J7245
Scenario:	Existing Condition (Weekend - July 2025)				J01 - P. 4
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

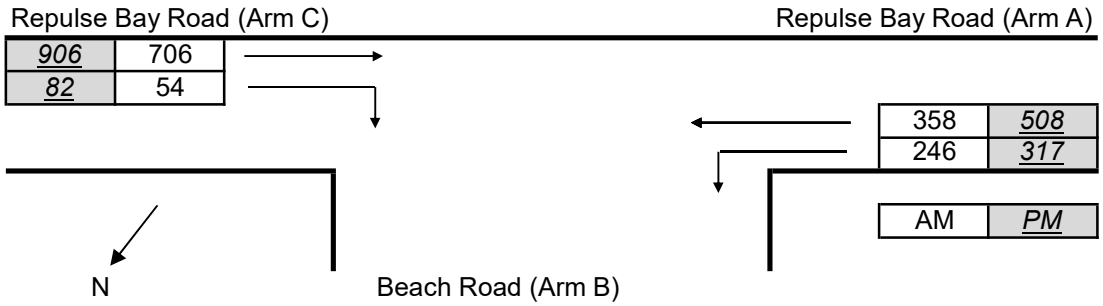
Traffic Flows, pcu/hr	AM	*PM*
q-CA	639	*821*
q-CB	49	*74*
q-AB	223	*287*
q-AC	324	*460*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	270	*238*
Q-BC	413	*395*
Q-CB	580	*547*
Q-BAC	270	*238*

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 - July)				J01 - P. 5
Design Year:	2030	Designed By:	MCY	Checked By:	WCH	Date:	10 September 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	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 :

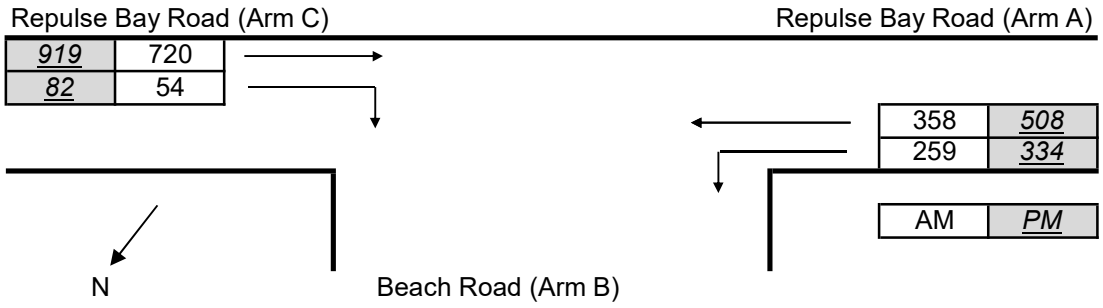
Traffic Flows, pcu/hr	AM	*PM*
q-CA	706	*906*
q-CB	54	*82*
q-AB	246	*317*
q-AC	358	*508*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	261	*225*
Q-BC	408	*388*
Q-CB	571	*535*
Q-BAC	261	*225*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.000	*0.000*
C-B	0.095	*0.153*
B-AC	0.000	*0.000*

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend - July)				J01 - P. 6
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

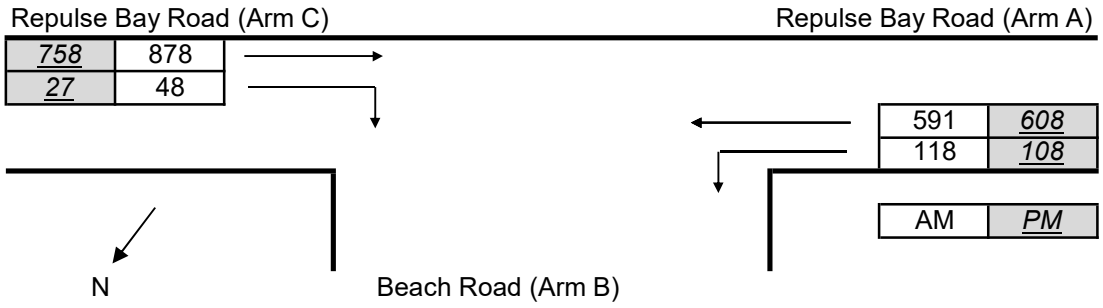
Traffic Flows, pcu/hr	AM	*PM*
q-CA	720	*919*
q-CB	54	*82*
q-AB	259	*334*
q-AC	358	*508*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	259	*223*
Q-BC	407	*387*
Q-CB	569	*532*
Q-BAC	259	*223*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.000	*0.000*
C-B	0.095	*0.154*
B-AC	0.000	*0.000*

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road			Job Number:	J7245
Scenario:	Existing Condition (Weekday - June 2024)				J01 - P. 7
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

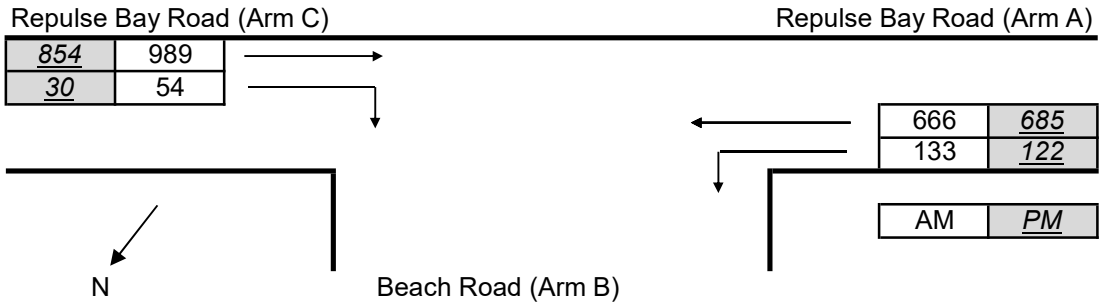
Traffic Flows, pcu/hr	AM	*PM*
q-CA	878	*758*
q-CB	48	*27*
q-AB	118	*108*
q-AC	591	*608*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	231	*241*
Q-BC	388	*386*
Q-CB	554	*552*
Q-BAC	231	*241*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.000	*0.000*
C-B	0.087	*0.049*
B-AC	0.000	*0.000*

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road			Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekday - June)				J01 - P. 8
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

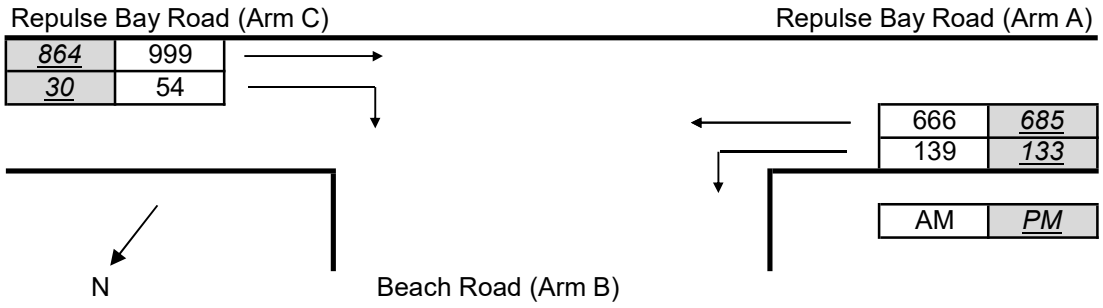
Traffic Flows, pcu/hr	AM	*PM*
q-CA	989	*854*
q-CB	54	*30*
q-AB	133	*122*
q-AC	666	*685*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	215	*225*
Q-BC	379	*377*
Q-CB	539	*538*
Q-BAC	215	*225*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.000	*0.000*
C-B	0.100	*0.056*
B-AC	0.000	*0.000*

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday - June)				J01 - P. 9
Design Year:	2030	Designed By:	MCY	Checked By: WCH	Date: 10 September 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	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 :

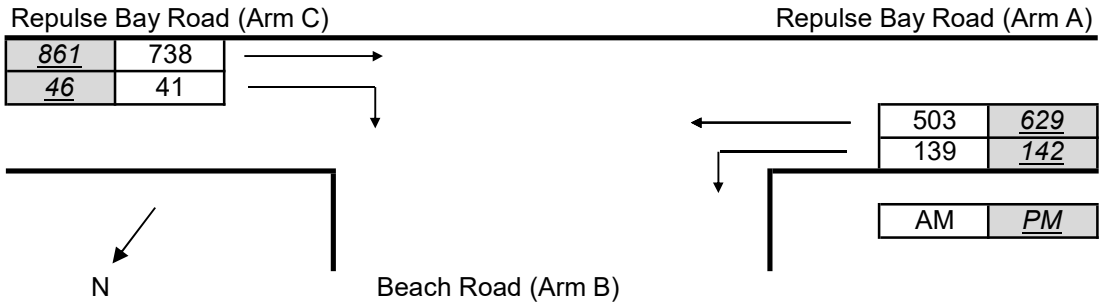
Traffic Flows, pcu/hr	AM	*PM*
q-CA	999	*864*
q-CB	54	*30*
q-AB	139	*133*
q-AC	666	*685*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	214	*224*
Q-BC	378	*377*
Q-CB	538	*536*
Q-BAC	214	*224*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.000	*0.000*
C-B	0.100	*0.056*
B-AC	0.000	*0.000*

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road			Job Number:	J7245
Scenario:	Existing Condition (Weekend - June 2024)				J01 - P. 10
Design Year:	2024	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

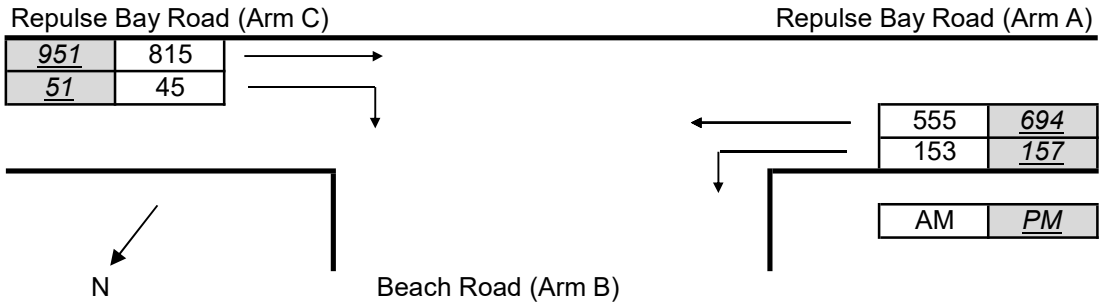
Traffic Flows, pcu/hr	AM	*PM*
q-CA	738	*861*
q-CB	41	*46*
q-AB	139	*142*
q-AC	503	*629*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	250	*228*
Q-BC	397	*382*
Q-CB	564	*544*
Q-BAC	250	*228*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.000	*0.000*
C-B	0.073	*0.085*
B-AC	0.000	*0.000*

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road			Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekend - June)				J01 - P. 11
Design Year:	2030	Designed By:	MCY	Checked By: WCH	Date: 10 September 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	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 :

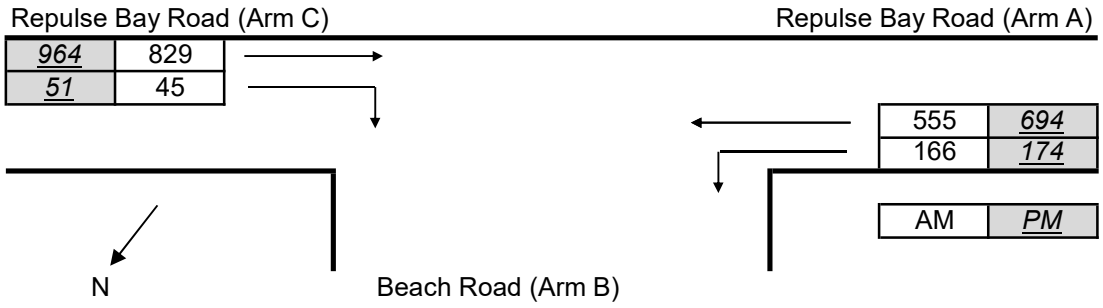
Traffic Flows, pcu/hr	AM	*PM*
q-CA	815	*951*
q-CB	45	*51*
q-AB	153	*157*
q-AC	555	*694*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	238	*214*
Q-BC	390	*374*
Q-CB	554	*531*
Q-BAC	238	*214*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.000	*0.000*
C-B	0.081	*0.096*
B-AC	0.000	*0.000*

Priority Junction Analysis

Junction:	Beach Road / Repulse Bay Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend - June)				J01 - P. 12
Design Year:	2030	Designed By:	MCY	Checked By: WCH	Date: 10 September 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	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 :

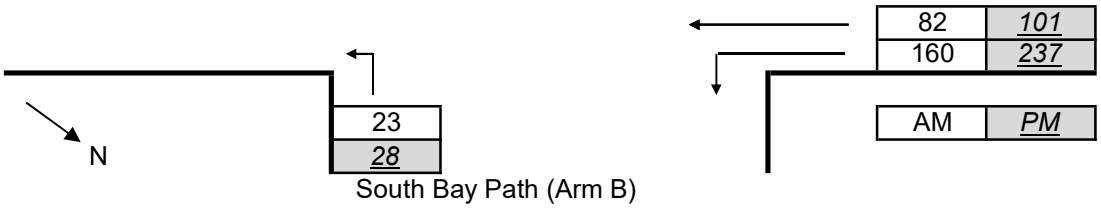
Traffic Flows, pcu/hr	AM	*PM*
q-CA	829	*964*
q-CB	45	*51*
q-AB	166	*174*
q-AC	555	*694*
q-BA	0	*0*
q-BC	0	*0*
f	0.000	*0.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	237	*212*
Q-BC	390	*374*
Q-CB	552	*528*
Q-BAC	237	*212*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.000	*0.000*
C-B	0.082	*0.097*
B-AC	0.000	*0.000*

Priority Junction Analysis

Junction:	South Bay Path / Beach Road			Job Number:	J7245
Scenario:	Existing Condition (Weekday - July 2025)				J02 - P. 1
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

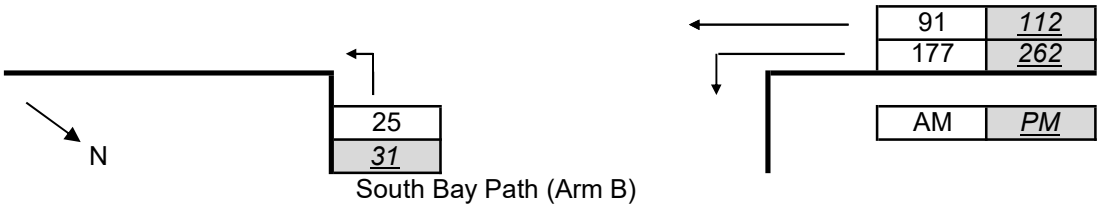
Traffic Flows, pcu/hr	AM	*PM*
q-CA	0	*0*
q-CB	0	*0*
q-AB	160	*237*
q-AC	82	*101*
q-BA	0	*0*
q-BC	23	*28*
f	1.000	*1.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	348	*342*
Q-BC	664	*656*
Q-CB	432	*421*
Q-BAC	664	*656*

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 - July)				J02 - P. 2
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	8.60	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 :

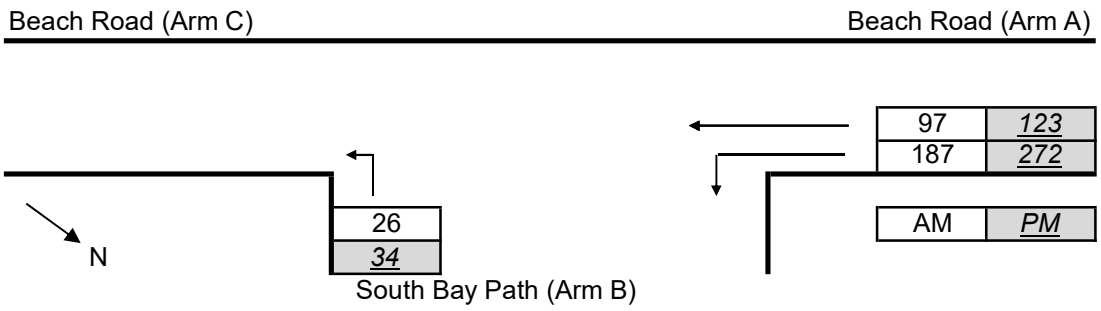
Traffic Flows, pcu/hr	AM	*PM*
q-CA	0	*0*
q-CB	0	*0*
q-AB	177	*262*
q-AC	91	*112*
q-BA	0	*0*
q-BC	25	*31*
f	1.000	*1.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	346	*340*
Q-BC	661	*652*
Q-CB	429	*417*
Q-BAC	661	*652*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.038	*0.048*
C-B	0.000	*0.000*
B-AC	0.038	*0.048*

Priority Junction Analysis

Junction:	South Bay Path / Beach Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday - July)				J02 - P. 3
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	8.60	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 :

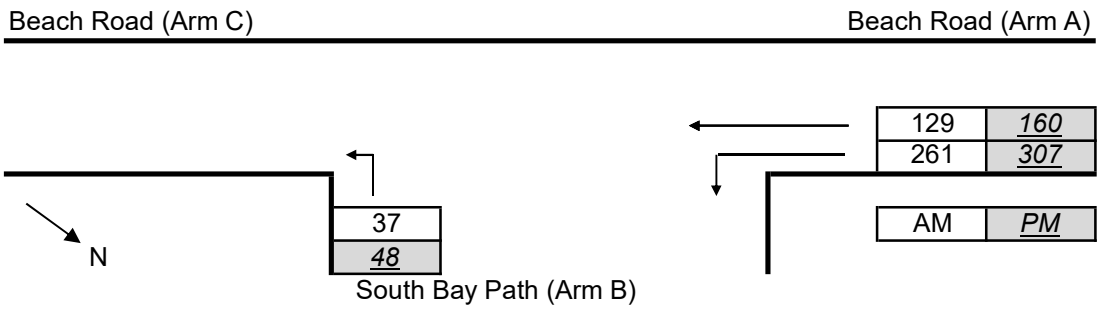
Traffic Flows, pcu/hr	AM	*PM*
q-CA	0	*0*
q-CB	0	*0*
q-AB	187	*272*
q-AC	97	*123*
q-BA	0	*0*
q-BC	26	*34*
f	1.000	*1.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	345	*339*
Q-BC	660	*650*
Q-CB	427	*415*
Q-BAC	660	*650*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.039	*0.052*
C-B	0.000	*0.000*
B-AC	0.039	*0.052*

Priority Junction Analysis

Junction:	South Bay Path / Beach Road			Job Number:	J7245
Scenario:	Existing Condition (Weekend - July 2025)				J02 - P. 4
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

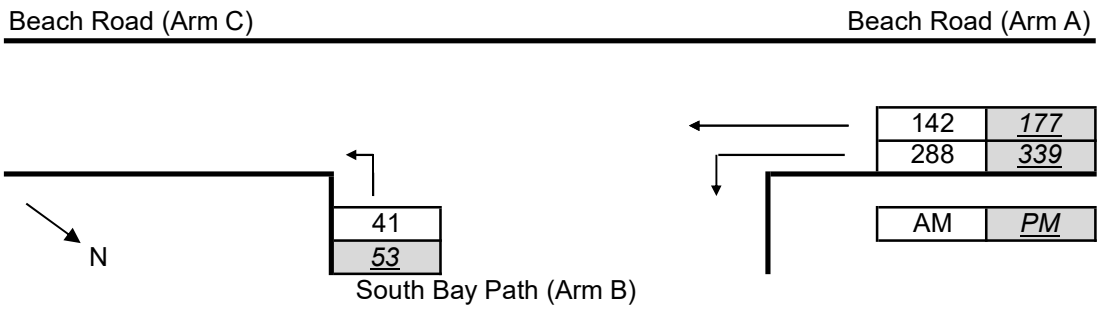
Traffic Flows, pcu/hr	AM	*PM*
q-CA	0	*0*
q-CB	0	*0*
q-AB	261	*307*
q-AC	129	*160*
q-BA	0	*0*
q-BC	37	*48*
f	1.000	*1.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	338	*333*
Q-BC	649	*641*
Q-CB	415	*407*
Q-BAC	649	*641*

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 - July)				J02 - P. 5
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	8.60	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 :

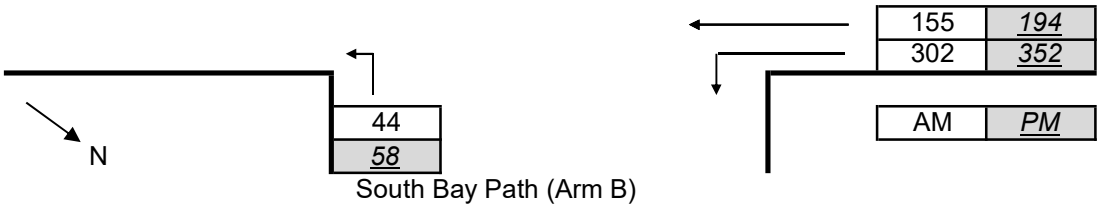
Traffic Flows, pcu/hr	AM	*PM*
q-CA	0	*0*
q-CB	0	*0*
q-AB	288	*339*
q-AC	142	*177*
q-BA	0	*0*
q-BC	41	*53*
f	1.000	*1.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	336	*330*
Q-BC	646	*636*
Q-CB	411	*401*
Q-BAC	646	*636*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.064	*0.083*
C-B	0.000	*0.000*
B-AC	0.064	*0.083*

Priority Junction Analysis

Junction:	South Bay Path / Beach Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend - July)				J02 - P. 6
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	8.60	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

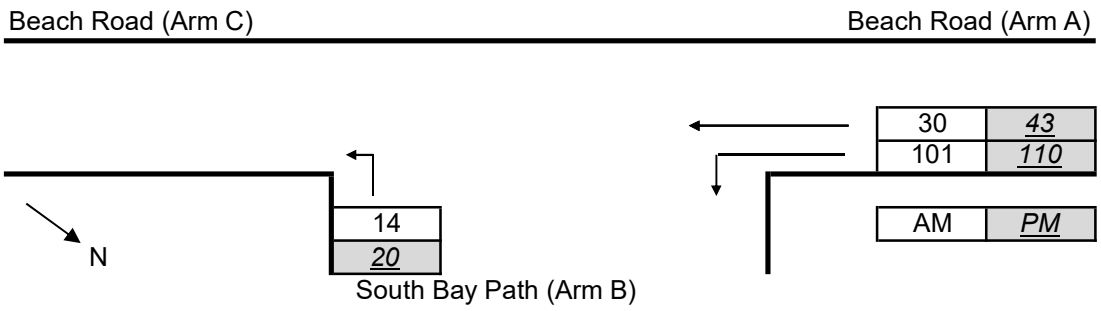
Analysis :

Traffic Flows, pcu/hr	AM	*PM*	Capacity, pcu/hr	AM	*PM*
q-CA	0	*0*	Q-BA	334	*328*
q-CB	0	*0*	Q-BC	642	*633*
q-AB	302	*352*	Q-CB	408	*398*
q-AC	155	*194*	Q-BAC	642	*633*
q-BA	0	*0*			
q-BC	44	*58*			
f	1.000	*1.000*			

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.068	*0.092*
C-B	0.000	*0.000*
B-AC	0.068	*0.092*

Priority Junction Analysis

Junction:	South Bay Path / Beach Road			Job Number:	J7245
Scenario:	Existing Condition (Weekday - June 2024)				J02 - P. 7
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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

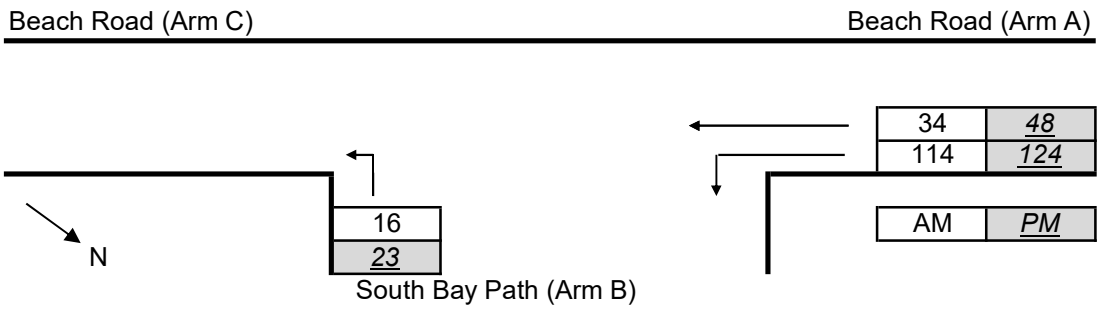
Analysis :

Traffic Flows, pcu/hr	AM	*PM*	Capacity, pcu/hr	AM	*PM*
q-CA	0	*0*	Q-BA	355	*354*
q-CB	0	*0*	Q-BC	677	*674*
q-AB	101	*110*	Q-CB	444	*442*
q-AC	30	*43*	Q-BAC	677	*674*
q-BA	0	*0*			
q-BC	14	*20*			
f	1.000	*1.000*			

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.021	*0.030*
C-B	0.000	*0.000*
B-AC	0.021	*0.030*

Priority Junction Analysis

Junction:	South Bay Path / Beach Road			Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekday - June)				J02 - P. 8
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	8.60	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 :

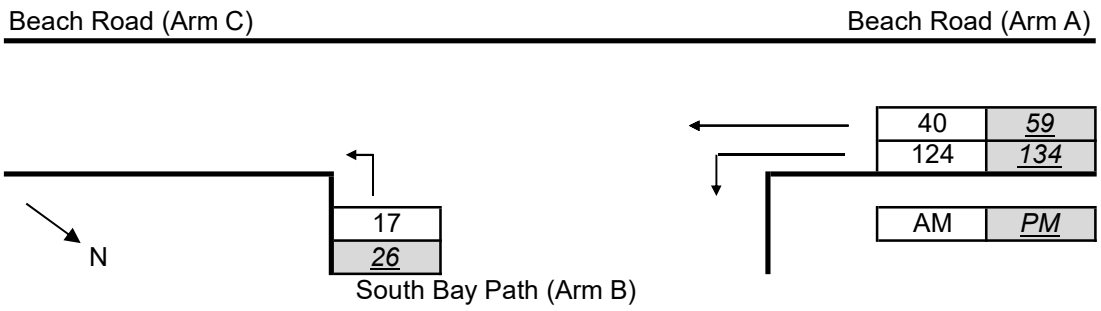
Traffic Flows, pcu/hr	AM	*PM*
q-CA	0	*0*
q-CB	0	*0*
q-AB	114	*124*
q-AC	34	*48*
q-BA	0	*0*
q-BC	16	*23*
f	1.000	*1.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	355	*353*
Q-BC	675	*672*
Q-CB	442	*439*
Q-BAC	675	*672*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.024	*0.034*
C-B	0.000	*0.000*
B-AC	0.024	*0.034*

Priority Junction Analysis

Junction:	South Bay Path / Beach Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday - June)				J02 - P. 9
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	8.60	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 :

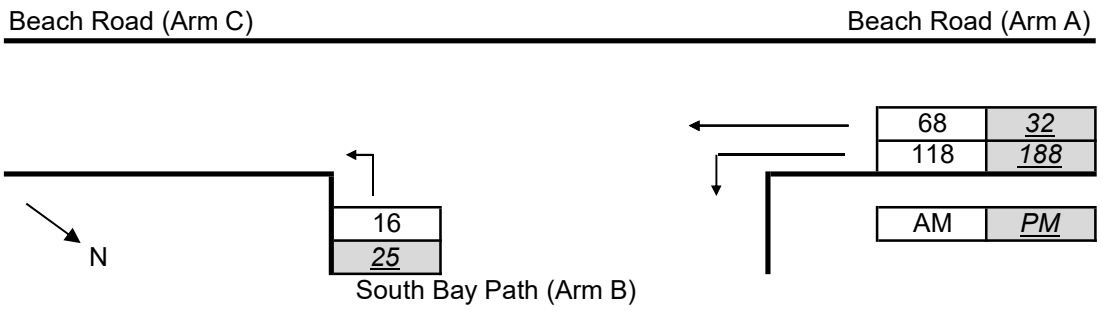
Traffic Flows, pcu/hr	AM	*PM*
q-CA	0	*0*
q-CB	0	*0*
q-AB	124	*134*
q-AC	40	*59*
q-BA	0	*0*
q-BC	17	*26*
f	1.000	*1.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	353	*351*
Q-BC	673	*670*
Q-CB	440	*437*
Q-BAC	673	*670*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.025	*0.039*
C-B	0.000	*0.000*
B-AC	0.025	*0.039*

Priority Junction Analysis

Junction:	South Bay Path / Beach Road			Job Number:	J7245
Scenario:	Existing Condition (Weekend - June 2024)				J02 - P. 10
Design Year:	2024	Designed By: MCY	Checked By: WCH	Date:	10 September 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	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 :

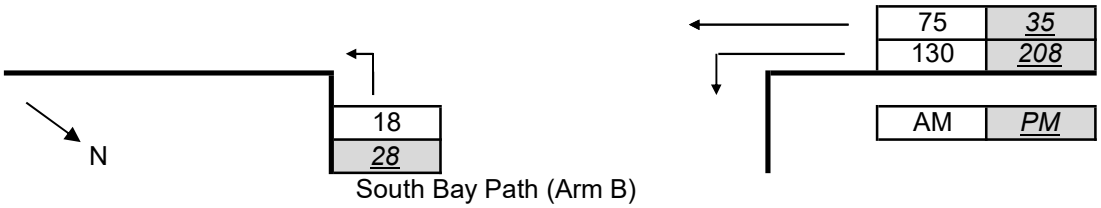
Traffic Flows, pcu/hr	AM	*PM*
q-CA	0	*0*
q-CB	0	*0*
q-AB	118	*188*
q-AC	68	*32*
q-BA	0	*0*
q-BC	16	*25*
f	1.000	*1.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	351	*352*
Q-BC	669	*670*
Q-CB	438	*434*
Q-BAC	669	*670*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.024	*0.037*
C-B	0.000	*0.000*
B-AC	0.024	*0.037*

Priority Junction Analysis

Junction:	South Bay Path / Beach Road			Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekend - June)				J02 - P. 11
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	8.60	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 :

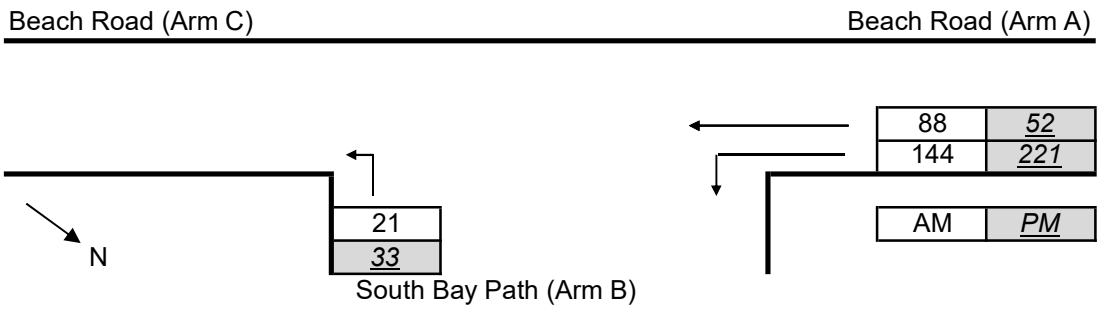
Traffic Flows, pcu/hr	AM	*PM*
q-CA	0	*0*
q-CB	0	*0*
q-AB	130	*208*
q-AC	75	*35*
q-BA	0	*0*
q-BC	18	*28*
f	1.000	*1.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	350	*351*
Q-BC	667	*669*
Q-CB	436	*432*
Q-BAC	667	*669*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.027	*0.042*
C-B	0.000	*0.000*
B-AC	0.027	*0.042*

Priority Junction Analysis

Junction:	South Bay Path / Beach Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend - June)				J02 - P. 12
Design Year:	2030	Designed By:	MCY	Checked By: WCH	Date: 10 September 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	8.60	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 :

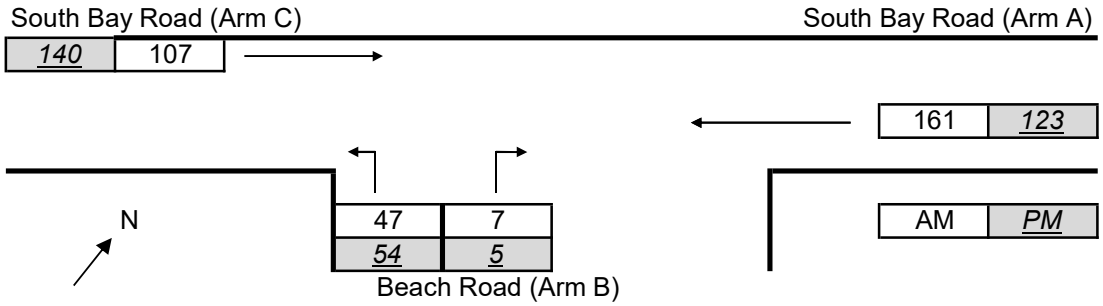
Traffic Flows, pcu/hr	AM	*PM*
q-CA	0	*0*
q-CB	0	*0*
q-AB	144	*221*
q-AC	88	*52*
q-BA	0	*0*
q-BC	21	*33*
f	1.000	*1.000*

Capacity, pcu/hr	AM	*PM*
Q-BA	348	*348*
Q-BC	664	*665*
Q-CB	433	*428*
Q-BAC	664	*665*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.000	*0.000*
B-C	0.032	*0.050*
C-B	0.000	*0.000*
B-AC	0.032	*0.050*

Priority Junction Analysis

Junction:	South Bay Road / Beach Road			Job Number:	J7245
Scenario:	Existing Condition (Weekday - July 2025)				J03 - P. 1
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

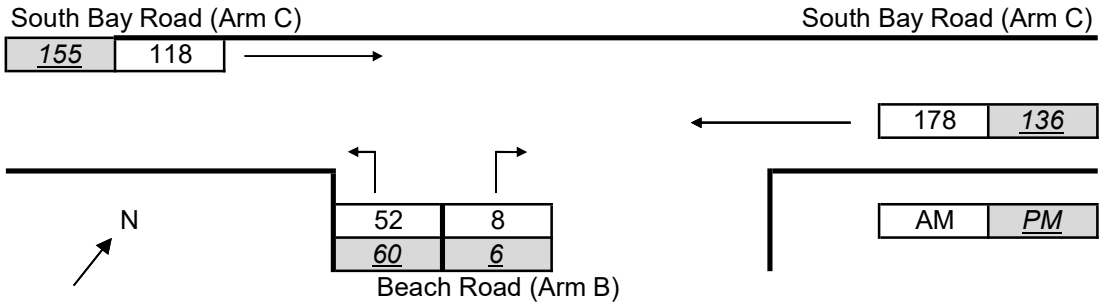
Traffic Flows, pcu/hr	AM	*PM*
q-CA	107	*140*
q-CB	0	*0*
q-AB	0	*0*
q-AC	161	*123*
q-BA	7	*5*
q-BC	47	*54*
f	0.870	*0.915*

Capacity, pcu/hr	AM	*PM*
Q-BA	493	*495*
Q-BC	649	*655*
Q-CB	432	*436*
Q-BAC	623	*637*

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 - July)				J03 - P. 2
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

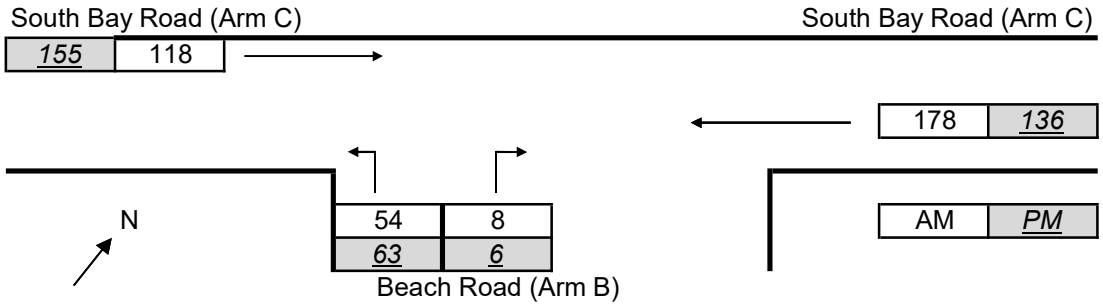
Traffic Flows, pcu/hr	AM	*PM*
q-CA	118	*155*
q-CB	0	*0*
q-AB	0	*0*
q-AC	178	*136*
q-BA	8	*6*
q-BC	52	*60*
f	0.867	*0.909*

Capacity, pcu/hr	AM	*PM*
Q-BA	489	*492*
Q-BC	646	*653*
Q-CB	430	*435*
Q-BAC	619	*634*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.016	*0.012*
B-C	0.081	*0.092*
C-B	0.000	*0.000*
B-AC	0.097	*0.104*

Priority Junction Analysis

Junction:	South Bay Road / Beach Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday - July)				J03 - P. 3
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

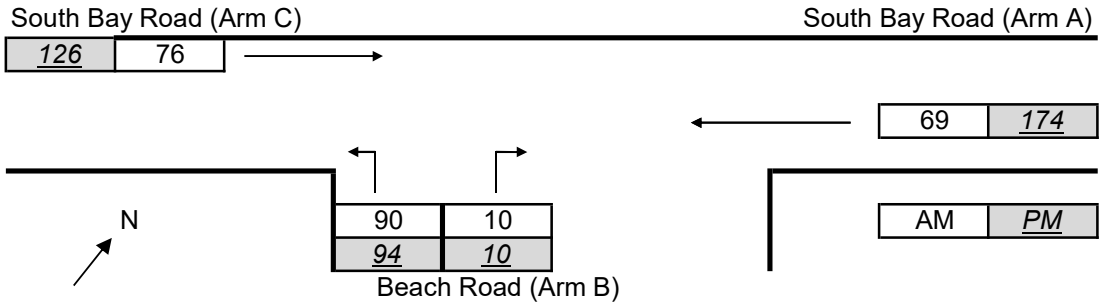
Traffic Flows, pcu/hr	AM	*PM*
q-CA	118	*155*
q-CB	0	*0*
q-AB	0	*0*
q-AC	178	*136*
q-BA	8	*6*
q-BC	54	*63*
f	0.871	*0.913*

Capacity, pcu/hr	AM	*PM*
Q-BA	489	*492*
Q-BC	646	*653*
Q-CB	430	*435*
Q-BAC	620	*635*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.016	*0.012*
B-C	0.084	*0.097*
C-B	0.000	*0.000*
B-AC	0.100	*0.109*

Priority Junction Analysis

Junction:	South Bay Road / Beach Road			Job Number:	J7245
Scenario:	Existing Condition (Weekend - July 2025)				J03 - P. 4
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

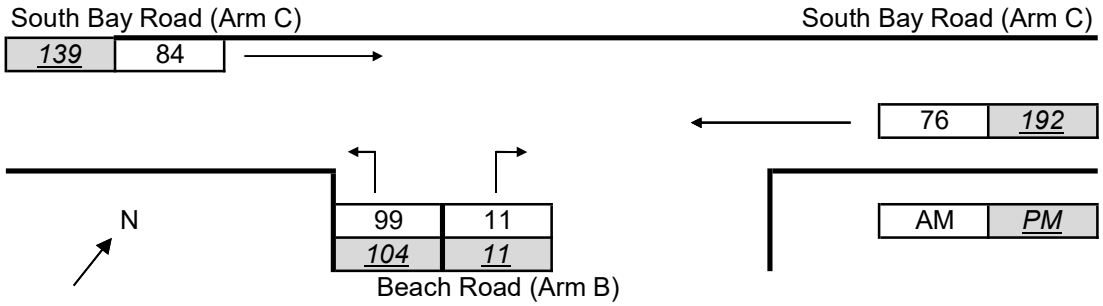
Traffic Flows, pcu/hr	AM	*PM*
q-CA	76	*126*
q-CB	0	*0*
q-AB	0	*0*
q-AC	69	*174*
q-BA	10	*10*
q-BC	90	*94*
f	0.900	*0.904*

Capacity, pcu/hr	AM	*PM*
Q-BA	509	*489*
Q-BC	664	*647*
Q-CB	442	*431*
Q-BAC	644	*627*

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 - July)				J03 - P. 5
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

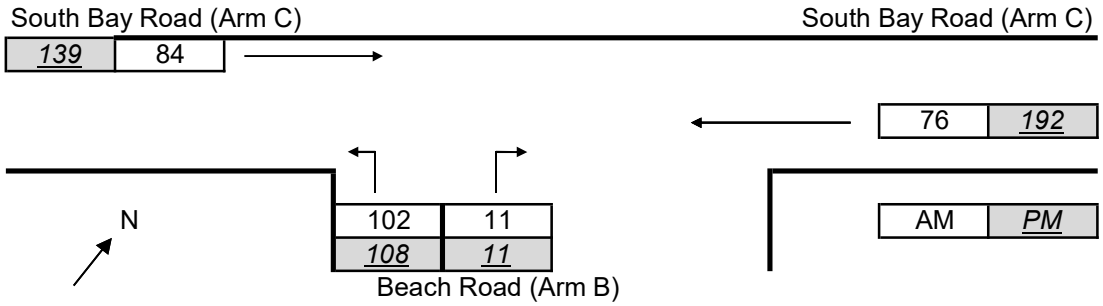
Traffic Flows, pcu/hr	AM	*PM*
q-CA	84	*139*
q-CB	0	*0*
q-AB	0	*0*
q-AC	76	*192*
q-BA	11	*11*
q-BC	99	*104*
f	0.900	*0.904*

Capacity, pcu/hr	AM	*PM*
Q-BA	508	*485*
Q-BC	663	*644*
Q-CB	441	*429*
Q-BAC	643	*624*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.022	*0.023*
B-C	0.149	*0.162*
C-B	0.000	*0.000*
B-AC	0.171	*0.184*

Priority Junction Analysis

Junction:	South Bay Road / Beach Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend - July)				J03 - P. 6
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

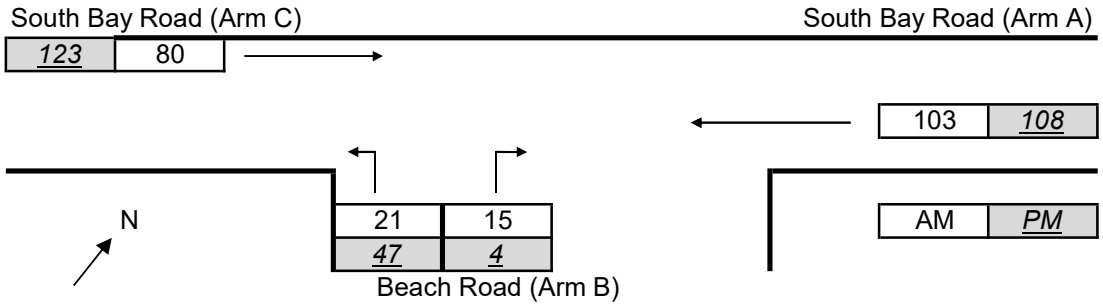
Traffic Flows, pcu/hr	AM	*PM*
q-CA	84	*139*
q-CB	0	*0*
q-AB	0	*0*
q-AC	76	*192*
q-BA	11	*11*
q-BC	102	*108*
f	0.903	*0.908*

Capacity, pcu/hr	AM	*PM*
Q-BA	508	*485*
Q-BC	663	*644*
Q-CB	441	*429*
Q-BAC	643	*625*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.022	*0.023*
B-C	0.154	*0.168*
C-B	0.000	*0.000*
B-AC	0.176	*0.191*

Priority Junction Analysis

Junction:	South Bay Road / Beach Road			Job Number:	J7245
Scenario:	Existing Condition (Weekday - June 2024)				J03 - P. 7
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

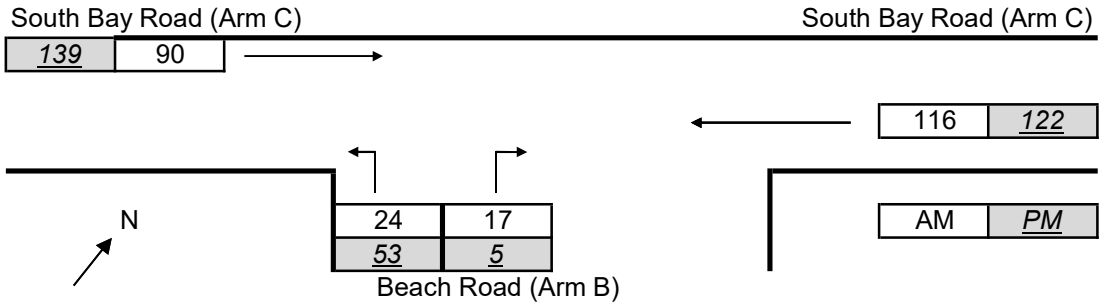
Traffic Flows, pcu/hr	AM	*PM*
q-CA	80	*123*
q-CB	0	*0*
q-AB	0	*0*
q-AC	103	*108*
q-BA	15	*4*
q-BC	21	*47*
f	0.583	*0.922*

Capacity, pcu/hr	AM	*PM*
Q-BA	504	*499*
Q-BC	658	*657*
Q-CB	439	*438*
Q-BAC	584	*641*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.030	*0.008*
B-C	0.032	*0.072*
C-B	0.000	*0.000*
B-AC	0.062	*0.080*

Priority Junction Analysis

Junction:	South Bay Road / Beach Road			Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekday - June)				J03 - P. 8
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

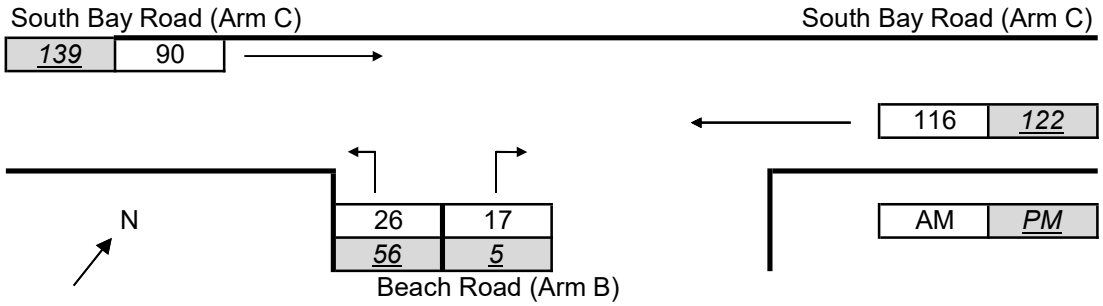
Traffic Flows, pcu/hr	AM	*PM*
q-CA	90	*139*
q-CB	0	*0*
q-AB	0	*0*
q-AC	116	*122*
q-BA	17	*5*
q-BC	24	*53*
f	0.585	*0.914*

Capacity, pcu/hr	AM	*PM*
Q-BA	501	*495*
Q-BC	656	*655*
Q-CB	437	*436*
Q-BAC	581	*637*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.034	*0.010*
B-C	0.037	*0.081*
C-B	0.000	*0.000*
B-AC	0.071	*0.091*

Priority Junction Analysis

Junction:	South Bay Road / Beach Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday - June)				J03 - P. 9
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

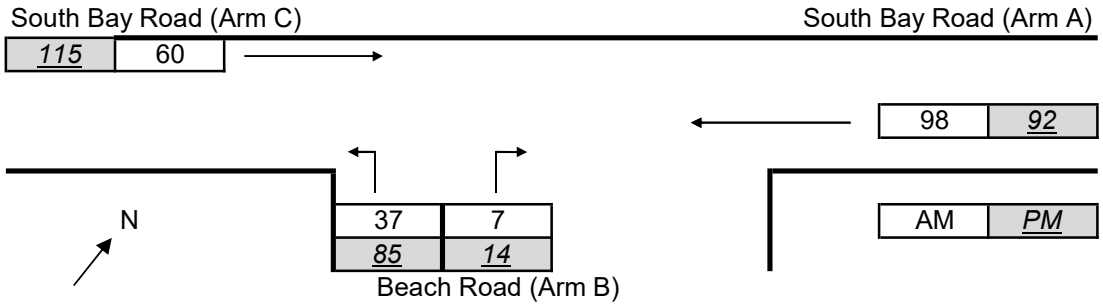
Traffic Flows, pcu/hr	AM	*PM*
q-CA	90	*139*
q-CB	0	*0*
q-AB	0	*0*
q-AC	116	*122*
q-BA	17	*5*
q-BC	26	*56*
f	0.605	*0.918*

Capacity, pcu/hr	AM	*PM*
Q-BA	501	*495*
Q-BC	656	*655*
Q-CB	437	*436*
Q-BAC	584	*638*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.034	*0.010*
B-C	0.040	*0.085*
C-B	0.000	*0.000*
B-AC	0.074	*0.096*

Priority Junction Analysis

Junction:	South Bay Road / Beach Road			Job Number:	J7245
Scenario:	Existing Condition (Weekend - June 2024)				J03 - P. 10
Design Year:	2024	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

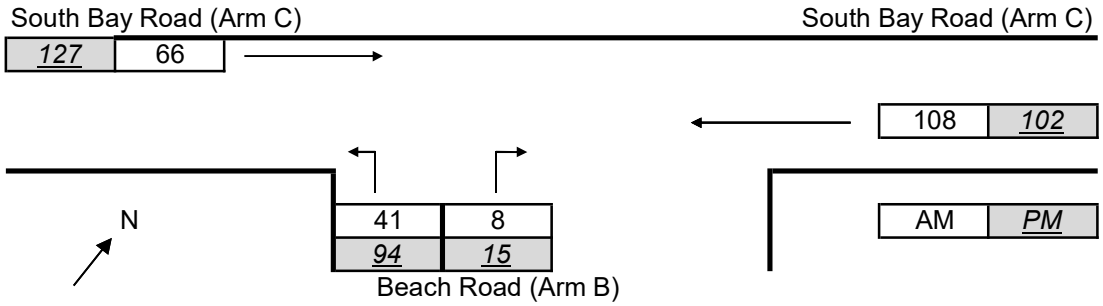
Traffic Flows, pcu/hr	AM	*PM*
q-CA	60	*115*
q-CB	0	*0*
q-AB	0	*0*
q-AC	98	*92*
q-BA	7	*14*
q-BC	37	*85*
f	0.841	*0.859*

Capacity, pcu/hr	AM	*PM*
Q-BA	507	*502*
Q-BC	659	*660*
Q-CB	439	*440*
Q-BAC	629	*632*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.014	*0.028*
B-C	0.056	*0.129*
C-B	0.000	*0.000*
B-AC	0.070	*0.157*

Priority Junction Analysis

Junction:	South Bay Road / Beach Road			Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekend - June)				J03 - P. 11
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

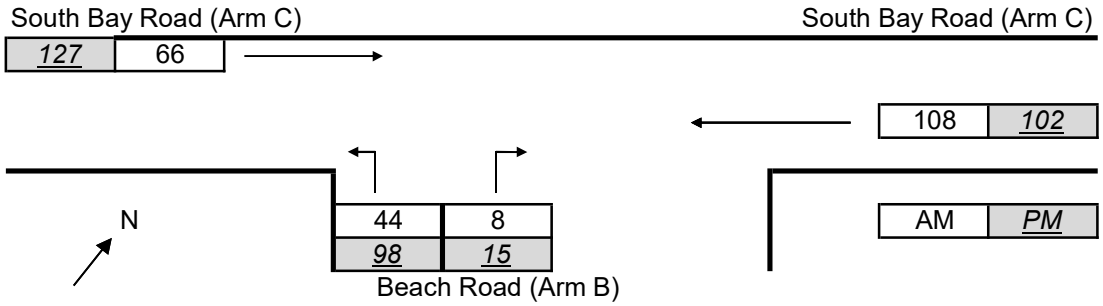
Traffic Flows, pcu/hr	AM	*PM*
q-CA	66	*127*
q-CB	0	*0*
q-AB	0	*0*
q-AC	108	*102*
q-BA	8	*15*
q-BC	41	*94*
f	0.837	*0.862*

Capacity, pcu/hr	AM	*PM*
Q-BA	504	*500*
Q-BC	657	*658*
Q-CB	438	*439*
Q-BAC	626	*631*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.016	*0.030*
B-C	0.062	*0.143*
C-B	0.000	*0.000*
B-AC	0.078	*0.173*

Priority Junction Analysis

Junction:	South Bay Road / Beach Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend - June)				J03 - P. 12
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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	7.00	V-rBA	30	w-BA	3.50	D	0.8408
	W-CR	0.00	V-lBA	30	w-BC	3.50	E	0.9060
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

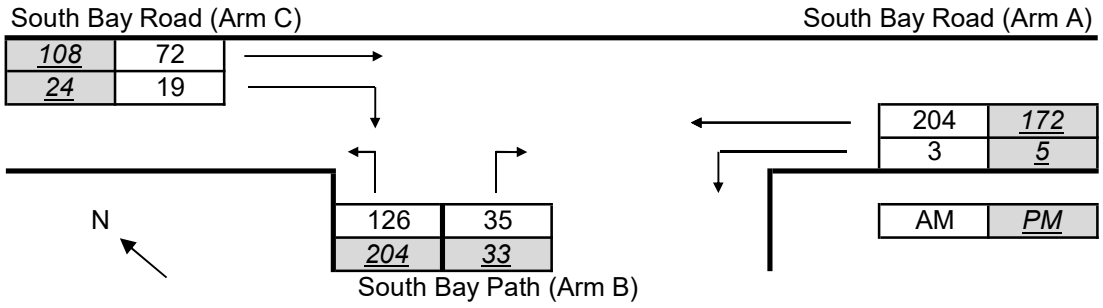
Traffic Flows, pcu/hr	AM	*PM*
q-CA	66	*127*
q-CB	0	*0*
q-AB	0	*0*
q-AC	108	*102*
q-BA	8	*15*
q-BC	44	*98*
f	0.846	*0.867*

Capacity, pcu/hr	AM	*PM*
Q-BA	504	*500*
Q-BC	657	*658*
Q-CB	438	*439*
Q-BAC	628	*632*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.016	*0.030*
B-C	0.067	*0.149*
C-B	0.000	*0.000*
B-AC	0.083	*0.179*

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road			Job Number:	J7245
Scenario:	Existing Condition (Weekday - July 2025)				J04 - P. 1
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

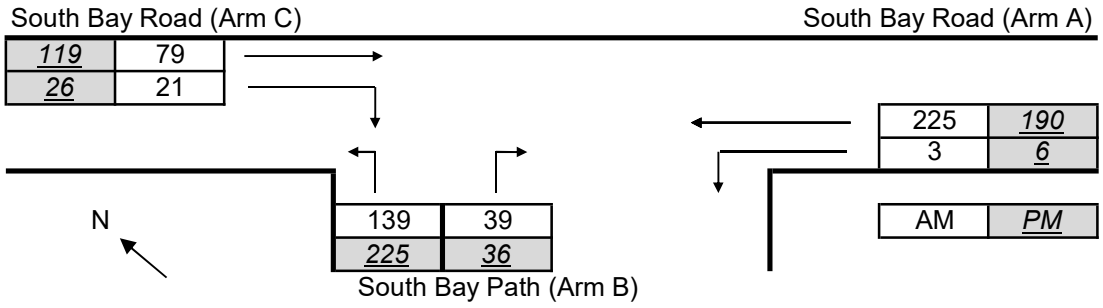
Traffic Flows, pcu/hr	AM	*PM*
q-CA	72	*108*
q-CB	19	*24*
q-AB	3	*5*
q-AC	204	*172*
q-BA	35	*33*
q-BC	126	*204*
f	0.783	*0.861*

Capacity, pcu/hr	AM	*PM*
Q-BA	462	*462*
Q-BC	611	*616*
Q-CB	427	*430*
Q-BAC	571	*588*

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 - July)				J04 - P. 2
Design Year:	2030	Designed By:	MCY	Checked By: WCH	Date: 10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

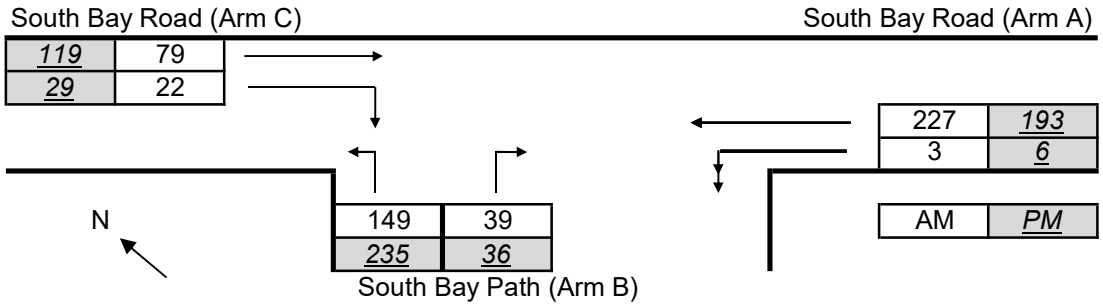
Traffic Flows, pcu/hr	AM	*PM*
q-CA	79	*119*
q-CB	21	*26*
q-AB	3	*6*
q-AC	225	*190*
q-BA	39	*36*
q-BC	139	*225*
f	0.781	*0.862*

Capacity, pcu/hr	AM	*PM*
Q-BA	458	*458*
Q-BC	608	*613*
Q-CB	425	*428*
Q-BAC	567	*586*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.085	*0.079*
B-C	0.229	*0.367*
C-B	0.049	*0.061*
B-AC	0.314	*0.446*

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday - July)				J04 - P. 3
Design Year:	2030	Designed By:	MCY	Checked By:	WCH	Date:	10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

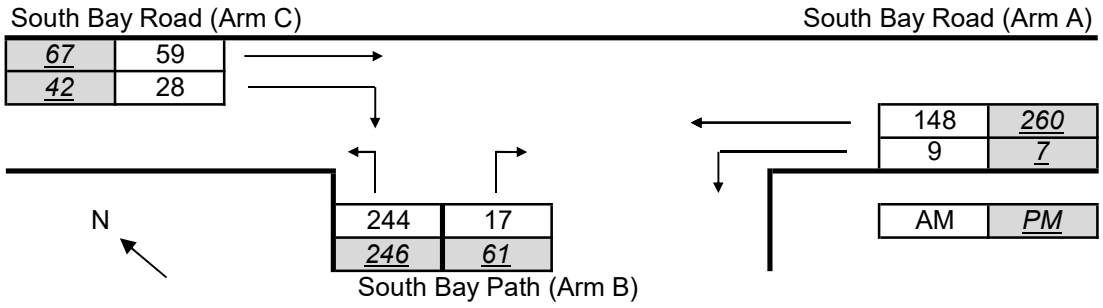
Traffic Flows, pcu/hr	AM	*PM*
q-CA	79	*119*
q-CB	22	*29*
q-AB	3	*6*
q-AC	227	*193*
q-BA	39	*36*
q-BC	149	*235*
f	0.793	*0.867*

Capacity, pcu/hr	AM	*PM*
Q-BA	457	*457*
Q-BC	607	*612*
Q-CB	425	*428*
Q-BAC	569	*586*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.085	*0.079*
B-C	0.245	*0.384*
C-B	0.052	*0.068*
B-AC	0.331	*0.463*

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road			Job Number:	J7245
Scenario:	Existing Condition (Weekend - July 2025)				J04 - P. 4
Design Year:	2025	Designed By: MCY	Checked By: WCH	Date:	10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

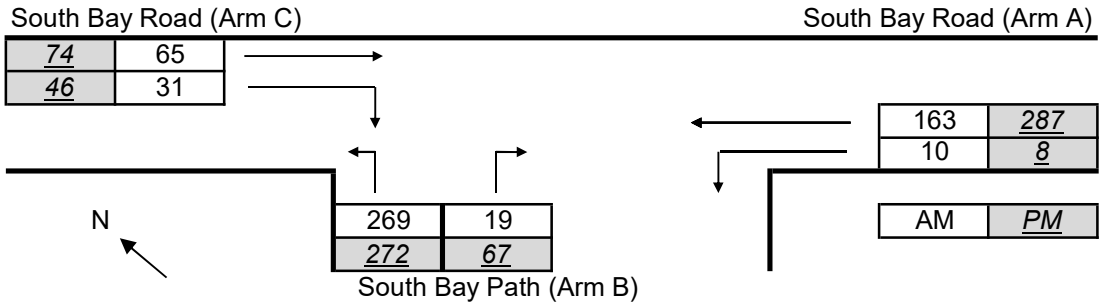
Traffic Flows, pcu/hr	AM	*PM*
q-CA	59	*67*
q-CB	28	*42*
q-AB	9	*7*
q-AC	148	*260*
q-BA	17	*61*
q-BC	244	*246*
f	0.935	*0.801*

Capacity, pcu/hr	AM	*PM*
Q-BA	469	*449*
Q-BC	619	*602*
Q-CB	433	*421*
Q-BAC	607	*564*

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 - July)				J04 - P. 5
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

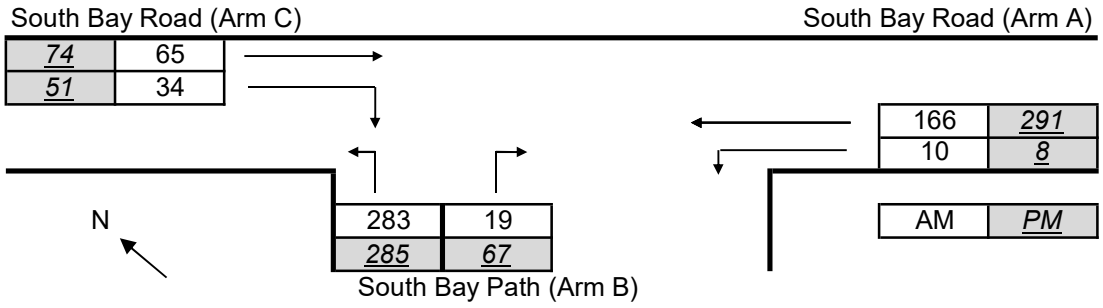
Traffic Flows, pcu/hr	AM	*PM*
q-CA	65	*74*
q-CB	31	*46*
q-AB	10	*8*
q-AC	163	*287*
q-BA	19	*67*
q-BC	269	*272*
f	0.934	*0.802*

Capacity, pcu/hr	AM	*PM*
Q-BA	466	*444*
Q-BC	617	*598*
Q-CB	431	*418*
Q-BAC	604	*559*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.041	*0.151*
B-C	0.436	*0.455*
C-B	0.072	*0.110*
B-AC	0.477	*0.606*

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend - July)				J04 - P. 6
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

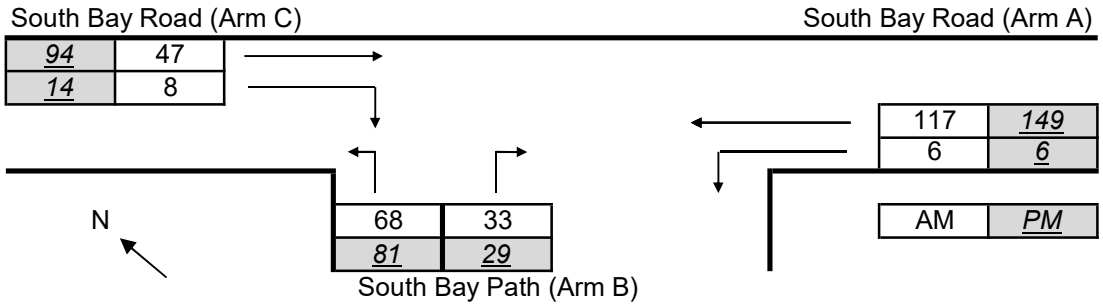
Traffic Flows, pcu/hr	AM	*PM*
q-CA	65	*74*
q-CB	34	*51*
q-AB	10	*8*
q-AC	166	*291*
q-BA	19	*67*
q-BC	283	*285*
f	0.937	*0.810*

Capacity, pcu/hr	AM	*PM*
Q-BA	465	*442*
Q-BC	616	*597*
Q-CB	431	*417*
Q-BAC	604	*560*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.041	*0.152*
B-C	0.459	*0.477*
C-B	0.079	*0.122*
B-AC	0.500	*0.629*

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road			Job Number:	J7245
Scenario:	Existing Condition (Weekday - June 2024)				J04 - P. 7
Design Year:	2025	Designed By:	MCY	Checked By: WCH	Date: 10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

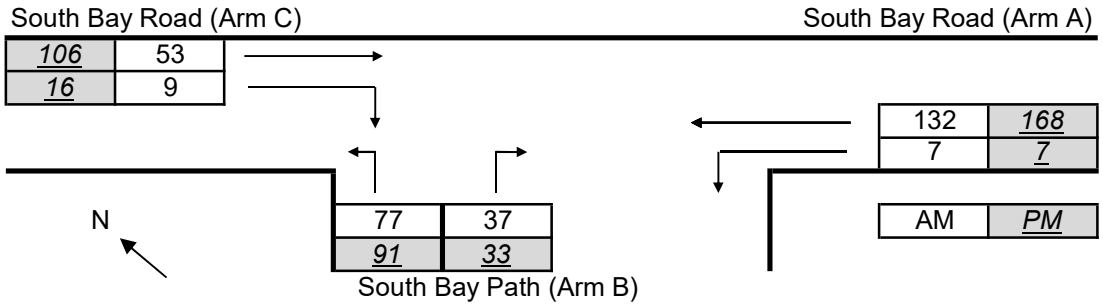
Traffic Flows, pcu/hr	AM	*PM*
q-CA	47	*94*
q-CB	8	*14*
q-AB	6	*6*
q-AC	117	*149*
q-BA	33	*29*
q-BC	68	*81*
f	0.673	*0.736*

Capacity, pcu/hr	AM	*PM*
Q-BA	479	*469*
Q-BC	624	*619*
Q-CB	436	*433*
Q-BAC	568	*571*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.069	*0.062*
B-C	0.109	*0.131*
C-B	0.018	*0.032*
B-AC	0.178	*0.193*

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road			Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekday - June)				J04 - P. 8
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

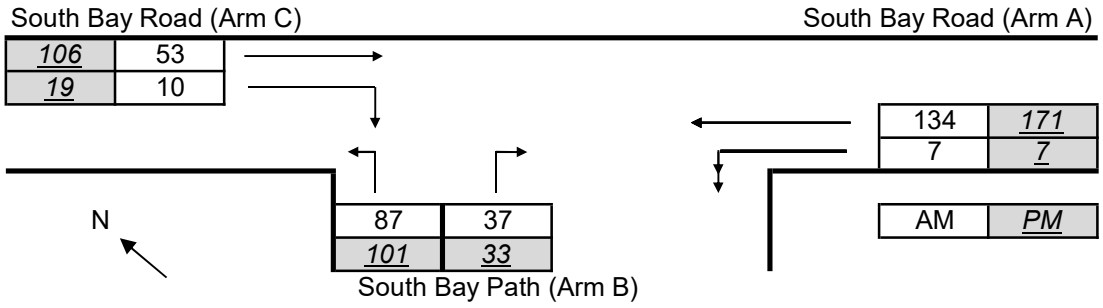
Traffic Flows, pcu/hr	AM	*PM*
q-CA	53	*106*
q-CB	9	*16*
q-AB	7	*7*
q-AC	132	*168*
q-BA	37	*33*
q-BC	77	*91*
f	0.675	*0.734*

Capacity, pcu/hr	AM	*PM*
Q-BA	476	*464*
Q-BC	622	*616*
Q-CB	435	*431*
Q-BAC	566	*567*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.078	*0.071*
B-C	0.124	*0.148*
C-B	0.021	*0.037*
B-AC	0.202	*0.219*

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekday - June)				J04 - P. 9
Design Year:	2030	Designed By: MCY	Checked By: WCH	Date:	10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

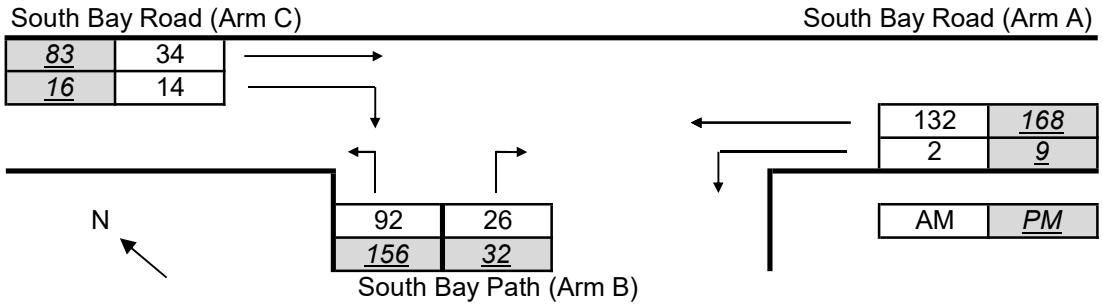
Analysis :

Traffic Flows, pcu/hr	AM	*PM*	Capacity, pcu/hr	AM	*PM*
q-CA	53	*106*	Q-BA	475	*463*
q-CB	10	*19*	Q-BC	622	*616*
q-AB	7	*7*	Q-CB	434	*430*
q-AC	134	*171*	Q-BAC	569	*570*
q-BA	37	*33*			
q-BC	87	*101*			
f	0.702	*0.754*			

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.078	*0.071*
B-C	0.140	*0.164*
C-B	0.023	*0.044*
B-AC	0.218	*0.235*

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road			Job Number:	J7245
Scenario:	Existing Condition (Weekend - June 2024)				J04 - P. 10
Design Year:	2024	Designed By: MCY	Checked By: WCH	Date:	10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

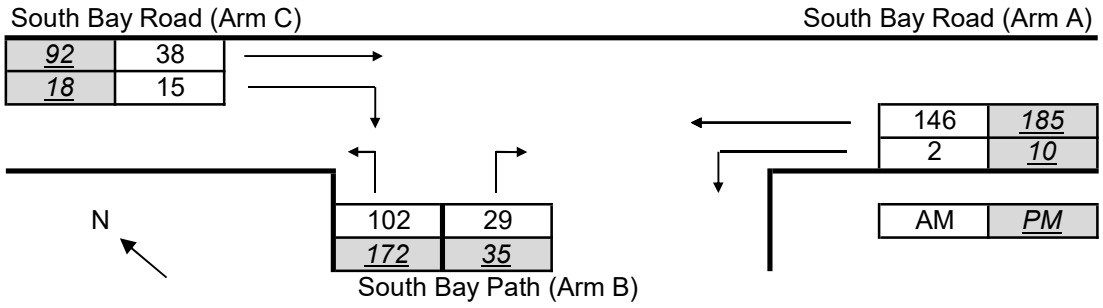
Traffic Flows, pcu/hr	AM	*PM*
q-CA	34	*83*
q-CB	14	*16*
q-AB	2	*9*
q-AC	132	*168*
q-BA	26	*32*
q-BC	92	*156*
f	0.780	*0.830*

Capacity, pcu/hr	AM	*PM*
Q-BA	477	*466*
Q-BC	622	*616*
Q-CB	435	*430*
Q-BAC	583	*584*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.055	*0.069*
B-C	0.148	*0.253*
C-B	0.032	*0.037*
B-AC	0.202	*0.322*

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road			Job Number:	J7245
Scenario:	Without Proposed Conversion (Weekend - June)				J04 - P. 11
Design Year:	2030	Designed By:	MCY	Checked By: WCH	Date: 10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

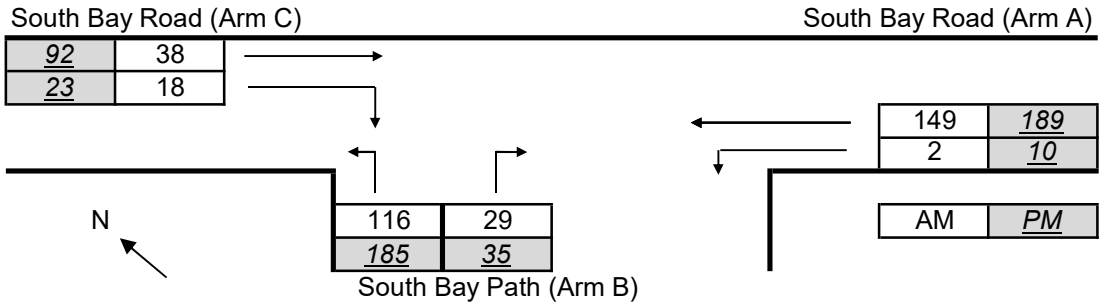
Traffic Flows, pcu/hr	AM	*PM*
q-CA	38	*92*
q-CB	15	*18*
q-AB	2	*10*
q-AC	146	*185*
q-BA	29	*35*
q-BC	102	*172*
f	0.779	*0.831*

Capacity, pcu/hr	AM	*PM*
Q-BA	474	*463*
Q-BC	620	*613*
Q-CB	434	*428*
Q-BAC	580	*581*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.061	*0.076*
B-C	0.165	*0.280*
C-B	0.035	*0.042*
B-AC	0.226	*0.356*

Priority Junction Analysis

Junction:	South Bay Path / South Bay Road			Job Number:	J7245
Scenario:	With Proposed Conversion (Weekend - June)				J04 - P. 12
Design Year:	2030	Designed By:	MCY	Checked By: WCH	Date: 10 September 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-BA	3.00	D	0.8007
	W-CR	0.00	V-lBA	30	w-BC	3.00	E	0.8628
			V-rBC	30	w-CB	0.00	F	0.6037
			V-rCB	30			Y	0.4963

Analysis :

Traffic Flows, pcu/hr	AM	*PM*
q-CA	38	*92*
q-CB	18	*23*
q-AB	2	*10*
q-AC	149	*189*
q-BA	29	*35*
q-BC	116	*185*
f	0.800	*0.841*

Capacity, pcu/hr	AM	*PM*
Q-BA	473	*461*
Q-BC	619	*613*
Q-CB	433	*428*
Q-BAC	583	*582*

Ratio-of-flow to Capacity	AM	*PM*
B-A	0.061	*0.076*
B-C	0.187	*0.302*
C-B	0.042	*0.054*
B-AC	0.249	*0.378*

Priority Junction Analysis

Junction:	Repulse Bay Road / South Bay Road Roundabout			Job Number:	J7245
Scenario:	Existing Condition (Weekday - July 2025)				J05 - P. 1
Design Year:	2024	Designed By:	MCY	Checked By:	WCH	Date:	10 September 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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	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 Concersion (Weekday)				J05 - P. 2
Design Year:	2029	Designed By: MCY	Checked By: WCH	Date:	10 September 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	635	35						671	393
From B	540	22	156						718	36
From C	78	371	0						449	563
From D										
From E										
From F										
From G										
From H										
Total	619	1028	191						1838	

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*	*594*	*36*						*630*	*386*
From B	*506*	*14*	*152*						*672*	*38*
From C	*83*	*370*	*2*						*455*	*520*
From D										
From E										
From F										
From G										
From H										
Total	*589*	*978*	*190*						*1757*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	5.000	0.018	1.491	1.091	1515	0.626	1385	*1389*	671	*630*	0.485	*0.453*
From B	4.514	0.018	1.491	1.064	1368	0.596	1432	*1431*	718	*672*	0.501	*0.470*
From C	4.758	0.018	1.491	1.029	1442	0.611	1130	*1157*	449	*455*	0.397	*0.393*
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 Concersion (Weekday) — J05 - P. 3
Design Year: 2029 — Designed By: MCY — Checked By: WCH — Date: 10 September 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	635	36						672	403
From B	540	22	156						718	37
From C	80	381	0						461	563
From D										
From E										
From F										
From G										
From H										
Total	621	1038	192						1851	

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*	*594*	*39*						*633*	*396*
From B	*506*	*14*	*152*						*672*	*41*
From C	*86*	*380*	*2*						*468*	*520*
From D										
From E										
From F										
From G										
From H										
Total	*592*	*988*	*193*						*1773*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	5.000	0.018	1.491	1.091	1515	0.626	1378	*1383*	672	*633*	0.488	*0.458*
From B	4.514	0.018	1.491	1.064	1368	0.596	1432	*1429*	718	*672*	0.501	*0.470*
From C	4.758	0.018	1.491	1.029	1442	0.611	1130	*1157*	461	*468*	0.408	*0.405*
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 - July 2025 — J05 - P. 4
Design Year: 2024 — Designed By: MCY — Checked By: WCH — Date: 10 September 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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	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: 10 September 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	416	42						458	345
From B	290	13	54						357	44
From C	121	330	2						453	303
From D										
From E										
From F										
From G										
From H										
Total	411	759	98						1268	

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*	*479*	*49*						*530*	*510*
From B	*395*	*23*	*91*						*509*	*52*
From C	*99*	*486*	*1*						*586*	*420*
From D										
From E										
From F										
From G										
From H										
Total	*496*	*988*	*141*						*1625*	

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(∅-30)-0.978[(1/r)-0.05]
F	= $303x_2$
f_c	= $0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

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

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	5.000	0.018	1.491	1.091	1515	0.626	1417	*1305*	458	*530*	0.323	*0.406*
From B	4.514	0.018	1.491	1.064	1368	0.596	1427	*1422*	357	*509*	0.250	*0.358*
From C	4.758	0.018	1.491	1.029	1442	0.611	1293	*1220*	453	*586*	0.350	*0.480*
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: 10 September 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	416	45						461	359
From B	290	13	54						357	47
From C	124	344	2						470	303
From D										
From E										
From F										
From G										
From H										
Total	414	773	101						1288	

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*	*479*	*54*						*535*	*523*
From B	*395*	*23*	*91*						*509*	*57*
From C	*103*	*499*	*1*						*603*	*420*
From D										
From E										
From F										
From G										
From H										
Total	*500*	*1001*	*146*						*1647*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	5.000	0.018	1.491	1.091	1515	0.626	1408	*1296*	461	*535*	0.327	*0.413*
From B	4.514	0.018	1.491	1.064	1368	0.596	1425	*1419*	357	*509*	0.250	*0.359*
From C	4.758	0.018	1.491	1.029	1442	0.611	1293	*1220*	470	*603*	0.363	*0.494*
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 (Weekday - June 2024)			J05 - P. 7	
Design Year:	2024	Designed By: MCY	Checked By: WCH	Date:	10 September 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	673	38						712	206
From B	509	16	66						591	40
From C	65	189	1						255	526
From D										
From E										
From F										
From G										
From H										
Total	575	878	105						1558	

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*	*487*	*50*						*537*	*271*
From B	*467*	*26*	*115*						*608*	*51*
From C	*96*	*244*	*1*						*341*	*493*
From D										
From E										
From F										
From G										
From H										
Total	*563*	*757*	*166*						*1486*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	5.000	0.018	1.491	1.091	1515	0.626	1512	*1468*	712	*537*	0.471	*0.366*
From B	4.514	0.018	1.491	1.064	1368	0.596	1430	*1423*	591	*608*	0.413	*0.427*
From C	4.758	0.018	1.491	1.029	1442	0.611	1153	*1174*	255	*341*	0.221	*0.291*
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 Concersion (Weekday)				J05 - P. 8
Design Year:	2029	Designed By:	MCY	Checked By:	WCH	Date:	10 September 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	758	43						802	232
From B	573	18	74						665	45
From C	73	213	1						287	592
From D										
From E										
From F										
From G										
From H										
Total	647	989	118						1754	

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*	*548*	*56*						*604*	*305*
From B	*526*	*29*	*130*						*685*	*57*
From C	*108*	*275*	*1*						*384*	*555*
From D										
From E										
From F										
From G										
From H										
Total	*634*	*852*	*187*						*1673*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	5.000	0.018	1.491	1.091	1515	0.626	1495	*1445*	802	*604*	0.537	*0.418*
From B	4.514	0.018	1.491	1.064	1368	0.596	1427	*1419*	665	*685*	0.466	*0.483*
From C	4.758	0.018	1.491	1.029	1442	0.611	1111	*1135*	287	*384*	0.258	*0.338*
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 Concersion (Weekday) — J05 - P. 9
Design Year: 2029 — Designed By: MCY — Checked By: WCH — Date: 10 September 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	758	44						803	242
From B	573	18	74						665	46
From C	75	223	1						299	592
From D										
From E										
From F										
From G										
From H										
Total	649	999	119						1767	

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*	*548*	*59*						*607*	*315*
From B	*526*	*29*	*130*						*685*	*60*
From C	*111*	*285*	*1*						*397*	*555*
From D										
From E										
From F										
From G										
From H										
Total	*637*	*862*	*190*						*1689*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	5.000	0.018	1.491	1.091	1515	0.626	1488	*1438*	803	*607*	0.540	*0.422*
From B	4.514	0.018	1.491	1.064	1368	0.596	1426	*1417*	665	*685*	0.466	*0.483*
From C	4.758	0.018	1.491	1.029	1442	0.611	1111	*1135*	299	*397*	0.269	*0.350*
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 - June 2024 — J05 - P. 10

Design Year: 2024 — Designed By: MCY — Checked By: WCH — Date: 10 September 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	473	32						505	268
From B	425	13	65						503	34
From C	44	253	2						299	438
From D										
From E										
From F										
From G										
From H										
Total	469	739	99						1307	

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*	*505*	*38*						*543*	*357*
From B	*489*	*34*	*107*						*630*	*38*
From C	*58*	*323*	*0*						*381*	*523*
From D										
From E										
From F										
From G										
From H										
Total	*547*	*862*	*145*						*1554*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	5.000	0.018	1.491	1.091	1515	0.626	1470	*1409*	505	*543*	0.344	*0.385*
From B	4.514	0.018	1.491	1.064	1368	0.596	1434	*1431*	503	*630*	0.351	*0.440*
From C	4.758	0.018	1.491	1.029	1442	0.611	1208	*1155*	299	*381*	0.247	*0.330*
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. 11
Design Year:	2029	Designed By: MCY	Checked By: WCH	Date:	10 September 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	522	35						557	295
From B	469	14	72						555	37
From C	49	279	2						330	483
From D										
From E										
From F										
From G										
From H										
Total	518	815	109						1442	

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*	*558*	*42*						*600*	*395*
From B	*540*	*38*	*118*						*696*	*42*
From C	*64*	*357*	*0*						*421*	*578*
From D										
From E										
From F										
From G										
From H										
Total	*604*	*953*	*160*						*1717*	

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(∅-30)-0.978[(1/r)-0.05]
F	= $303x_2$
f_c	= $0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

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

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	5.000	0.018	1.491	1.091	1515	0.626	1452	*1383*	557	*600*	0.384	*0.434*
From B	4.514	0.018	1.491	1.064	1368	0.596	1432	*1429*	555	*696*	0.388	*0.487*
From C	4.758	0.018	1.491	1.029	1442	0.611	1180	*1120*	330	*421*	0.280	*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: With Proposed Development (Weekend) — J05 - P. 12
Design Year: 2029 — Designed By: MCY — Checked By: WCH — Date: 10 September 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	522	38						560	309
From B	469	14	72						555	40
From C	52	293	2						347	483
From D										
From E										
From F										
From G										
From H										
Total	521	829	112						1462	

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*	*558*	*47*						*605*	*408*
From B	*540*	*38*	*118*						*696*	*47*
From C	*68*	*370*	*0*						*438*	*578*
From D										
From E										
From F										
From G										
From H										
Total	*608*	*966*	*165*						*1739*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	5.000	0.018	1.491	1.091	1515	0.626	1442	*1374*	560	*605*	0.388	*0.440*
From B	4.514	0.018	1.491	1.064	1368	0.596	1430	*1425*	555	*696*	0.388	*0.488*
From C	4.758	0.018	1.491	1.029	1442	0.611	1180	*1120*	347	*438*	0.294	*0.391*
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 - July 2025) — J06 - P. 1
Design Year: 2024 — Designed By: MCY — Checked By: WCH — Date: 10 September 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(∅-30)-0.978[(1/r)-0.05]
F	= $303x_2$
f_c	= $0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

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

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	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 Concersion (Weekday)				J06 - P. 2
Design Year:	2029	Designed By: MCY	Checked By: WCH	Date:	10 September 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	96	91						190	12
From B	95	0	8						103	96
From C	351	10	2						363	98
From D										
From E										
From F										
From G										
From H										
Total	449	106	101						656	

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*	*54*	*137*						*191*	*16*
From B	*56*	*0*	*8*						*64*	*138*
From C	*400*	*15*	*1*						*416*	*56*
From D										
From E										
From F										
From G										
From H										
Total	*456*	*69*	*146*						*671*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	4.636	0.030	1.485	1.027	1405	0.601	1436	*1433*	190	*191*	0.132	*0.133*
From B	4.940	0.030	1.485	1.062	1497	0.620	1526	*1498*	103	*64*	0.067	*0.043*
From C	4.940	0.030	1.485	1.010	1497	0.620	1450	*1476*	363	*416*	0.250	*0.282*
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 Concersion (Weekday) — J06 - P. 3
Design Year: 2029 — Designed By: MCY — Checked By: WCH — Date: 10 September 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	96	92						191	12
From B	95	0	8						103	97
From C	363	10	2						375	98
From D										
From E										
From F										
From G										
From H										
Total	461	106	102						669	

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*	*54*	*140*						*194*	*16*
From B	*56*	*0*	*8*						*64*	*141*
From C	*413*	*15*	*1*						*429*	*56*
From D										
From E										
From F										
From G										
From H										
Total	*469*	*69*	*149*						*687*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	4.636	0.030	1.485	1.027	1405	0.601	1436	*1433*	191	*194*	0.133	*0.135*
From B	4.940	0.030	1.485	1.062	1497	0.620	1525	*1496*	103	*64*	0.068	*0.043*
From C	4.940	0.030	1.485	1.010	1497	0.620	1450	*1476*	375	*429*	0.259	*0.291*
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 - July 2025				J06 - P. 4
Design Year:	2024	Designed By: MCY	Checked By: WCH	Date:	10 September 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(∅-30)-0.978[(1/r)-0.05]
F	= $303x_2$
f_c	= $0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

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

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	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: 10 September 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	19	77						97	33
From B	53	0	10						63	85
From C	403	26	7						436	54
From D										
From E										
From F										
From G										
From H										
Total	457	45	94						596	

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*	*29*	*107*						*139*	*17*
From B	*42*	*0*	*8*						*50*	*113*
From C	*541*	*14*	*3*						*558*	*45*
From D										
From E										
From F										
From G										
From H										
Total	*586*	*43*	*118*						*747*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	4.636	0.030	1.485	1.027	1405	0.601	1423	*1432*	97	*139*	0.068	*0.097*
From B	4.940	0.030	1.485	1.062	1497	0.620	1533	*1515*	63	*50*	0.041	*0.033*
From C	4.940	0.030	1.485	1.010	1497	0.620	1478	*1483*	436	*558*	0.295	*0.376*
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: 10 September 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	19	80						100	33
From B	53	0	10						63	88
From C	420	26	7						453	54
From D										
From E										
From F										
From G										
From H										
Total	474	45	97						616	

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*	*29*	*112*						*144*	*17*
From B	*42*	*0*	*8*						*50*	*118*
From C	*558*	*14*	*3*						*575*	*45*
From D										
From E										
From F										
From G										
From H										
Total	*603*	*43*	*123*						*769*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	4.636	0.030	1.485	1.027	1405	0.601	1423	*1432*	100	*144*	0.070	*0.101*
From B	4.940	0.030	1.485	1.062	1497	0.620	1531	*1512*	63	*50*	0.041	*0.033*
From C	4.940	0.030	1.485	1.010	1497	0.620	1478	*1483*	453	*575*	0.307	*0.388*
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 - June 2024) — J06 - P. 7
Design Year: 2024 — Designed By: MCY — Checked By: WCH — Date: 10 September 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	2	31	74						107	10
From B	60	0	6						66	78
From C	228	8	2						238	62
From D										
From E										
From F										
From G										
From H										
Total	290	39	82						411	

PM 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*	*147*						*166*	*13*
From B	*30*	*0*	*6*						*36*	*149*
From C	*311*	*12*	*1*						*324*	*31*
From D										
From E										
From F										
From G										
From H										
Total	*342*	*30*	*154*						*526*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	4.636	0.030	1.485	1.027	1405	0.601	1437	*1435*	107	*166*	0.074	*0.116*
From B	4.940	0.030	1.485	1.062	1497	0.620	1538	*1491*	66	*36*	0.043	*0.024*
From C	4.940	0.030	1.485	1.010	1497	0.620	1473	*1492*	238	*324*	0.162	*0.217*
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 Concersion (Weekday) — J06 - P. 8
Design Year: 2029 — Designed By: MCY — Checked By: WCH — Date: 10 September 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	2	35	83						120	11
From B	68	0	7						75	87
From C	257	9	2						268	70
From D										
From E										
From F										
From G										
From H										
Total	327	44	92						463	

PM Peak

Arm	*To A*	*To B*	*To C*	*To D*	*To E*	*To F*	*To G*	*To H*	*Total*	*q_c*
From A	*1*	*20*	*166*						*187*	*15*
From B	*34*	*0*	*7*						*41*	*168*
From C	*350*	*14*	*1*						*365*	*35*
From D										
From E										
From F										
From G										
From H										
Total	*385*	*34*	*174*						*593*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	4.636	0.030	1.485	1.027	1405	0.601	1436	*1434*	120	*187*	0.084	*0.130*
From B	4.940	0.030	1.485	1.062	1497	0.620	1532	*1479*	75	*41*	0.049	*0.028*
From C	4.940	0.030	1.485	1.010	1497	0.620	1468	*1489*	268	*365*	0.183	*0.245*
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 Concersion (Weekday) — J06 - P. 9
Design Year: 2029 — Designed By: MCY — Checked By: WCH — Date: 10 September 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	2	35	84						121	11
From B	68	0	7						75	88
From C	269	9	2						280	70
From D										
From E										
From F										
From G										
From H										
Total	339	44	93						476	

PM Peak

Arm	*To A*	*To B*	*To C*	*To D*	*To E*	*To F*	*To G*	*To H*	*Total*	*q_c*
From A	*1*	*20*	*169*						*190*	*15*
From B	*34*	*0*	*7*						*41*	*171*
From C	*363*	*14*	*1*						*378*	*35*
From D										
From E										
From F										
From G										
From H										
Total	*398*	*34*	*177*						*609*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	4.636	0.030	1.485	1.027	1405	0.601	1436	*1434*	121	*190*	0.084	*0.133*
From B	4.940	0.030	1.485	1.062	1497	0.620	1531	*1477*	75	*41*	0.049	*0.028*
From C	4.940	0.030	1.485	1.010	1497	0.620	1468	*1489*	280	*378*	0.191	*0.254*
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 - June 2024)				J06 - P. 10
Design Year:	2024	Designed By:	MCY	Checked By:	WCH	Date:	10 September 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		13	86						99	26
From B	30	0	8						38	91
From C	269	21	5						295	30
From D										
From E										
From F										
From G										
From H										
Total	299	34	99						432	

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*	*18*	*127*						*147*	*14*
From B	*23*	*0*	*6*						*29*	*132*
From C	*358*	*11*	*3*						*372*	*25*
From D										
From E										
From F										
From G										
From H										
Total	*383*	*29*	*136*						*548*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	4.636	0.030	1.485	1.027	1405	0.601	1427	*1434*	99	*147*	0.069	*0.102*
From B	4.940	0.030	1.485	1.062	1497	0.620	1529	*1502*	38	*29*	0.025	*0.019*
From C	4.940	0.030	1.485	1.010	1497	0.620	1493	*1496*	295	*372*	0.198	*0.249*
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. 11
Design Year: 2029 — Designed By: MCY — Checked By: WCH — Date: 10 September 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	2	14	95						111	29
From B	33	0	9						42	103
From C	297	23	6						326	35
From D										
From E										
From F										
From G										
From H										
Total	332	37	110						479	

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*	*20*	*140*						*162*	*15*
From B	*25*	*0*	*7*						*32*	*145*
From C	*395*	*12*	*3*						*410*	*27*
From D										
From E										
From F										
From G										
From H										
Total	*422*	*32*	*150*						*604*	

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)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	4.636	0.030	1.485	1.027	1405	0.601	1425	*1434*	111	*162*	0.078	*0.113*
From B	4.940	0.030	1.485	1.062	1497	0.620	1522	*1494*	42	*32*	0.028	*0.021*
From C	4.940	0.030	1.485	1.010	1497	0.620	1489	*1495*	326	*410*	0.219	*0.274*
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. 12
Design Year: 2029 — Designed By: MCY — Checked By: WCH — Date: 10 September 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	2	14	98						114	29
From B	33	0	9						42	106
From C	314	23	6						343	35
From D										
From E										
From F										
From G										
From H										
Total	349	37	113						499	

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*	*20*	*145*						*167*	*15*
From B	*25*	*0*	*7*						*32*	*150*
From C	*412*	*12*	*3*						*427*	*27*
From D										
From E										
From F										
From G										
From H										
Total	*439*	*32*	*155*						*626*	

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

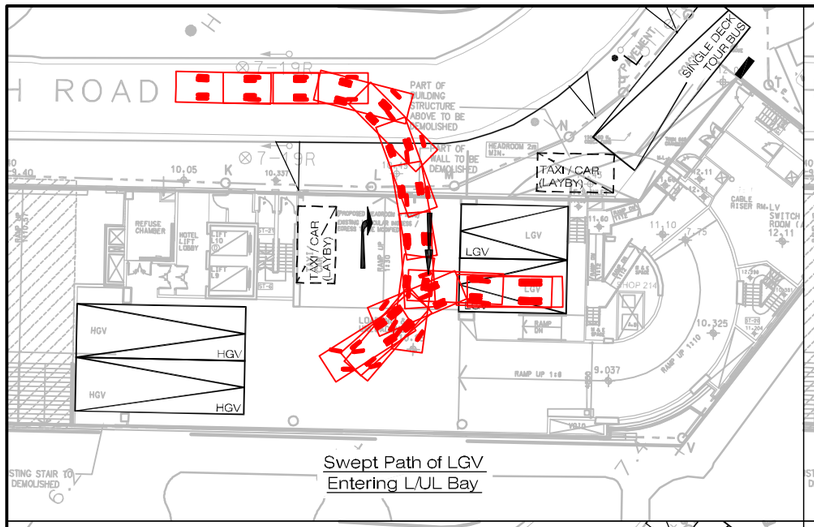
Limitation

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

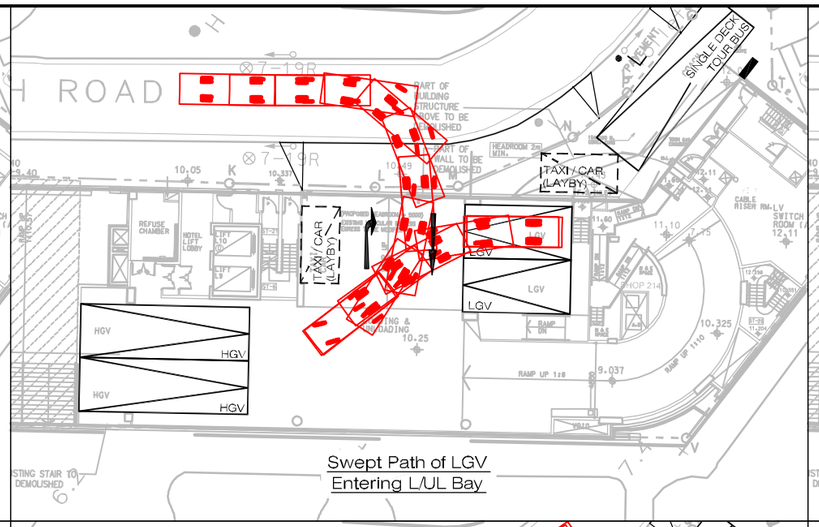
Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f_c	AM	*PM*	AM	*PM*	AM	*PM*
From A	4.636	0.030	1.485	1.027	1405	0.601	1425	*1434*	114	*167*	0.080	*0.116*
From B	4.940	0.030	1.485	1.062	1497	0.620	1520	*1491*	42	*32*	0.028	*0.021*
From C	4.940	0.030	1.485	1.010	1497	0.620	1489	*1495*	343	*427*	0.230	*0.286*
From D												
From E												
From F												
From G												
From H												

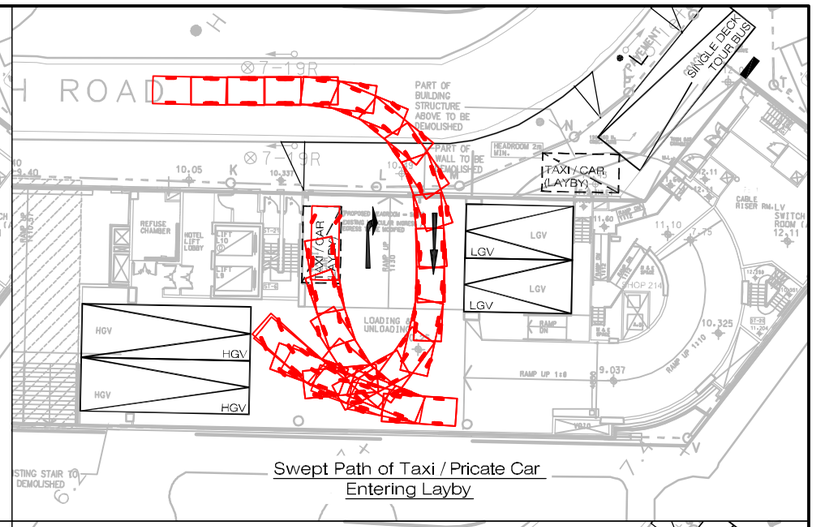
Appendix B –
Swept Path Analyses



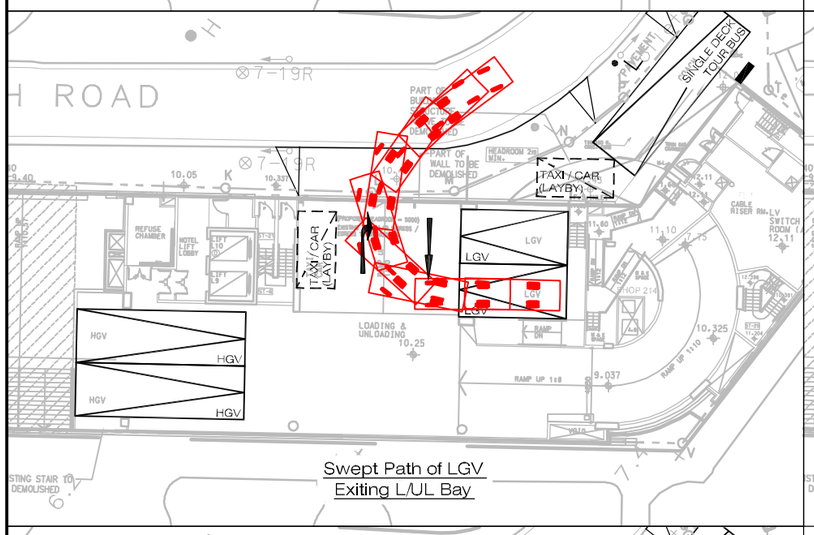
Swept Path of LGV
Entering L/UL Bay



Swept Path of LGV
Entering L/UL Bay



Swept Path of Taxi / Pricate Car
Entering Layby



Swept Path of LGV
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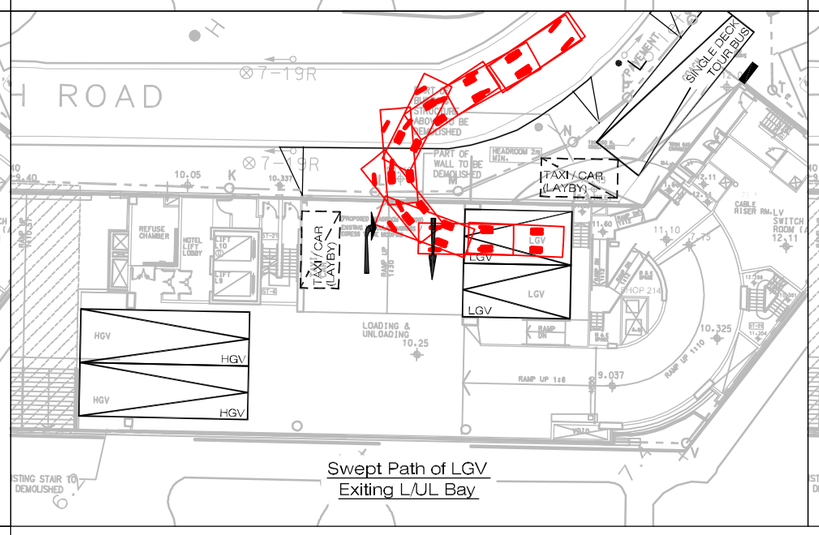
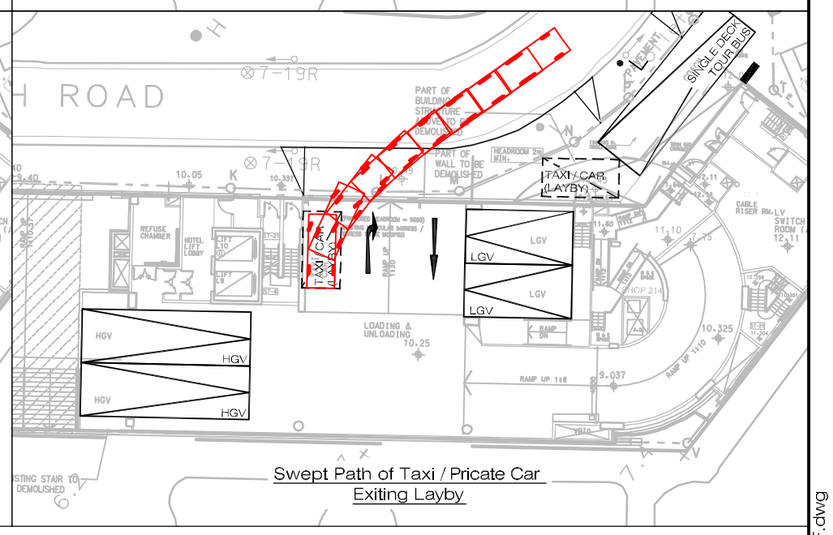
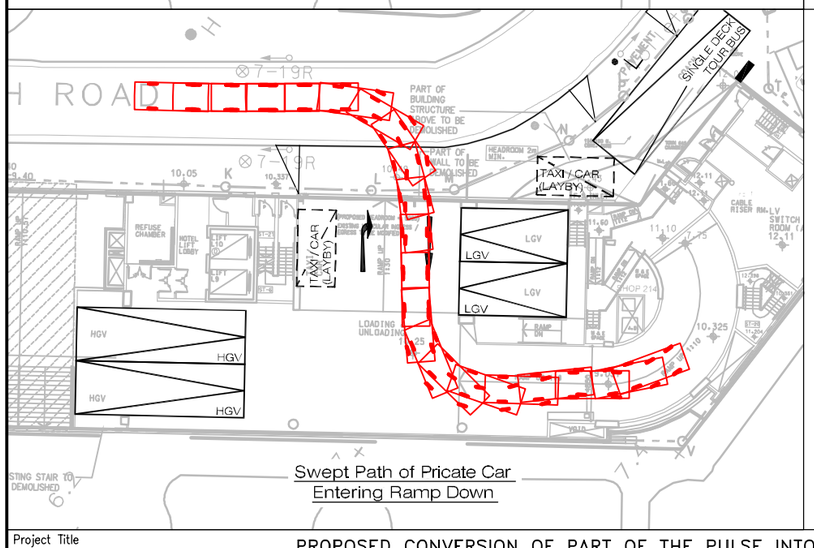


Swept Path of LGV
Exiting L/UL Bay



Swept Path of Taxi / Pricate Car
Exiting Layby



Swept Path of Pricate Car
Entering Ramp Down

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

SWEPT PATH ANALYSES
FOR L/UL AREAS AT UG/F

Figure No.	Revision
SP01-1	F

Designed by	Drawn by	Checked by
W C H	S C Y	K C

Scale in A3	Date
1 : 400	11 SEP 2025

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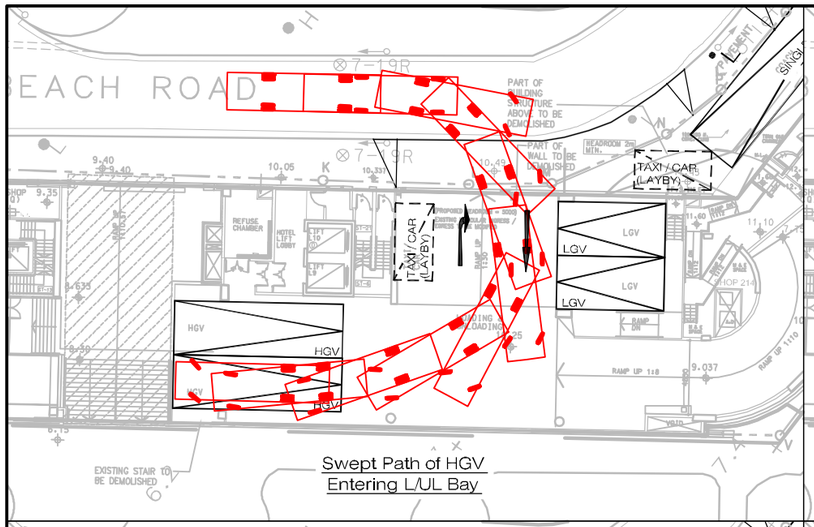
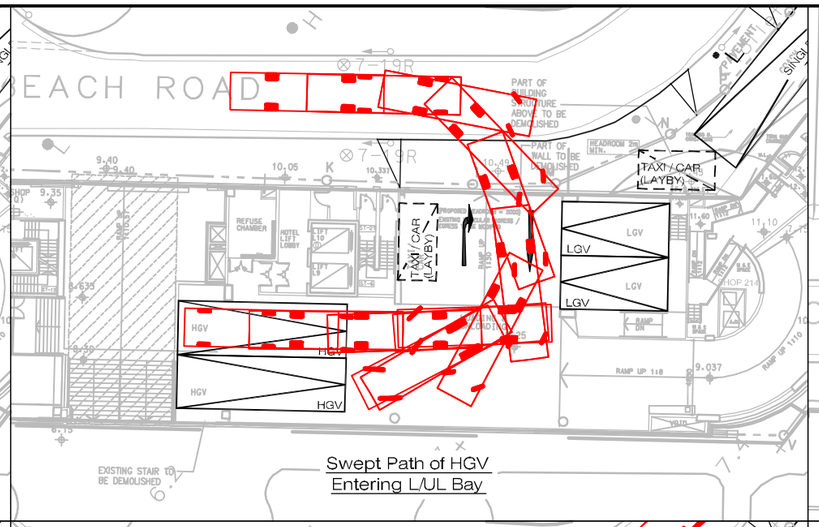
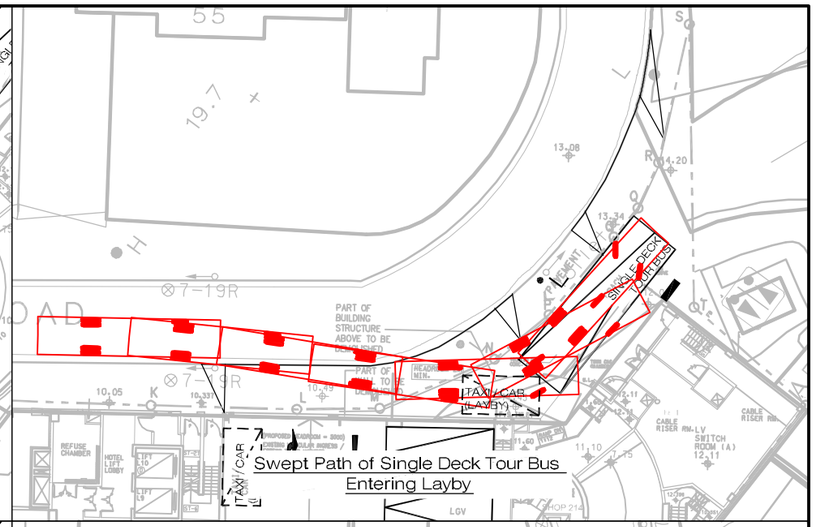
T:\JOB\J7200-J7249\J7245\(2025 09 11) J7245_TIA_FR_R8\Fig 3.1 & SP01 RevF.dwg



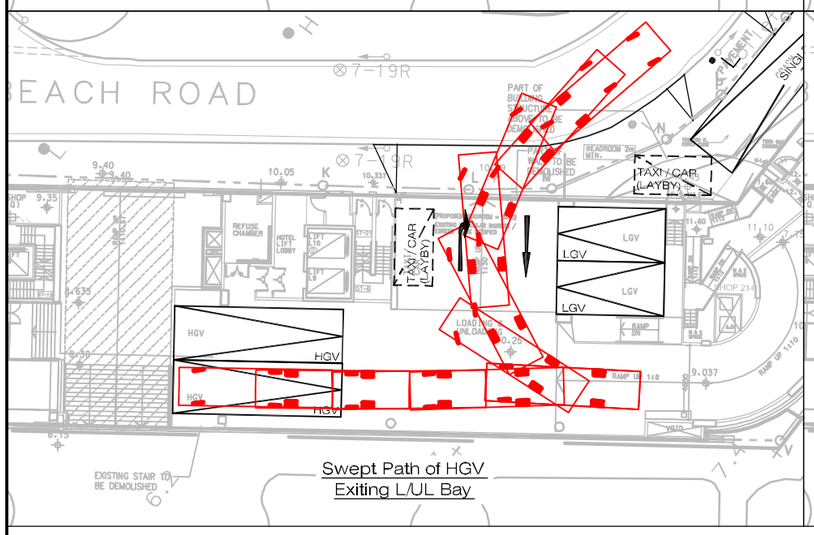
Swept Path of HGV
Entering L/UL Bay



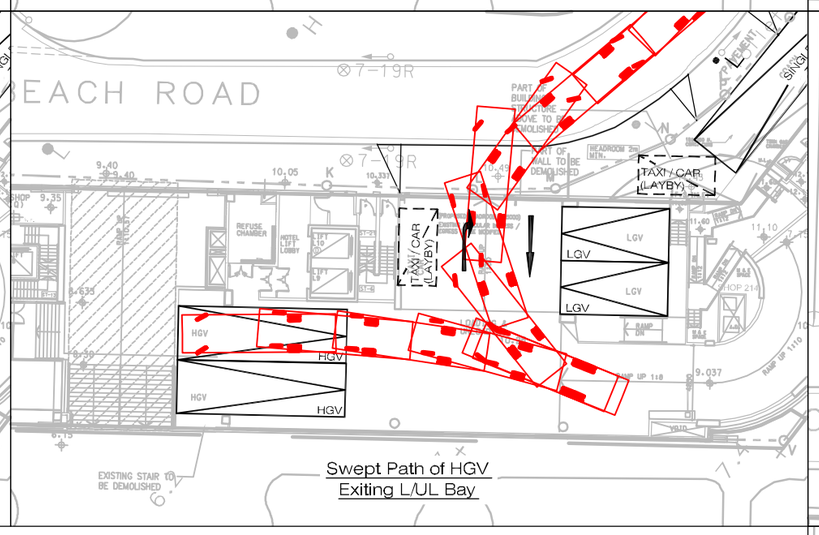
Swept Path of HGV
Entering L/UL Bay



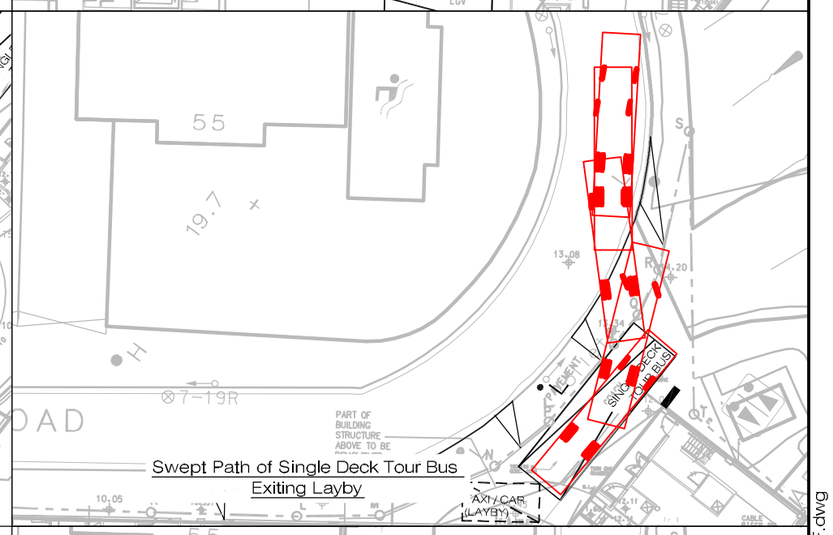
Swept Path of Single Deck Tour Bus
Entering Layby



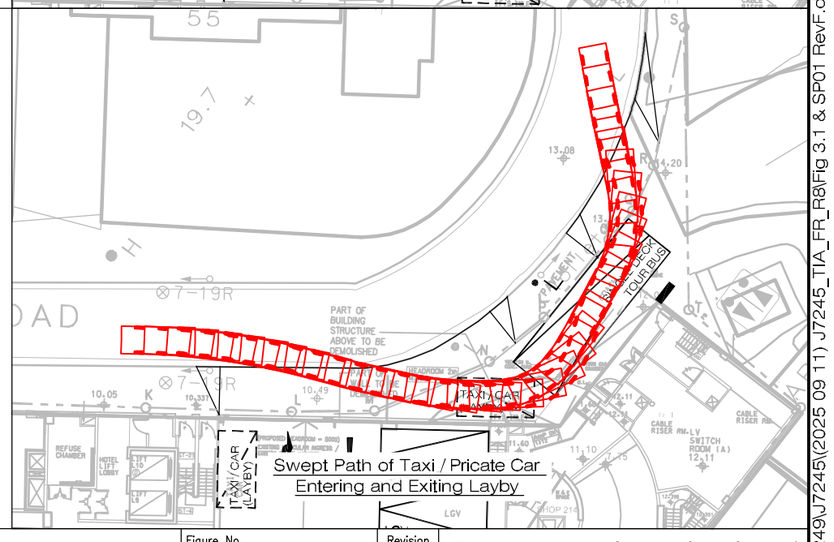
Swept Path of HGV
Exiting L/UL Bay



Swept Path of HGV
Exiting L/UL Bay



Swept Path of Single Deck Tour Bus
Exiting Layby



Swept Path of Taxi / Pricate Car
Entering and Exiting Layby

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. SP01-2 / Revision F
Figure Title	SWEPT PATH ANALYSES FOR L/UL AREAS AT UG/F		Designed by W C H / Drawn by S C Y / Checked by K C / Scale in A3 1 : 400 / Date 11 SEP 2025

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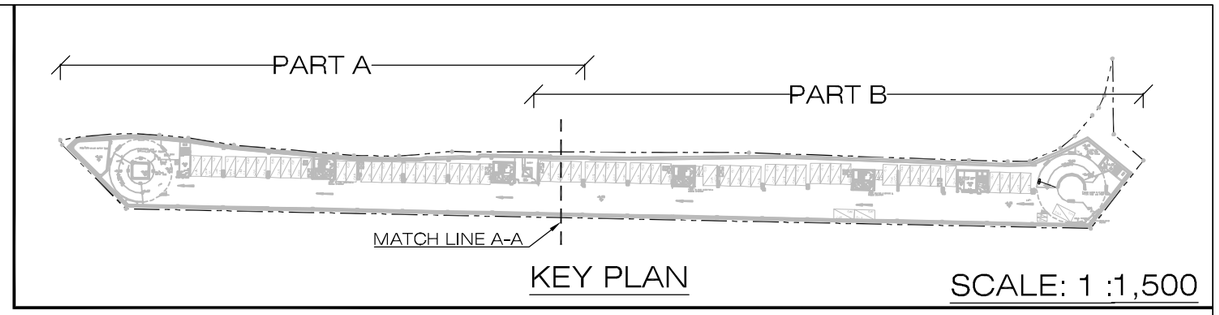
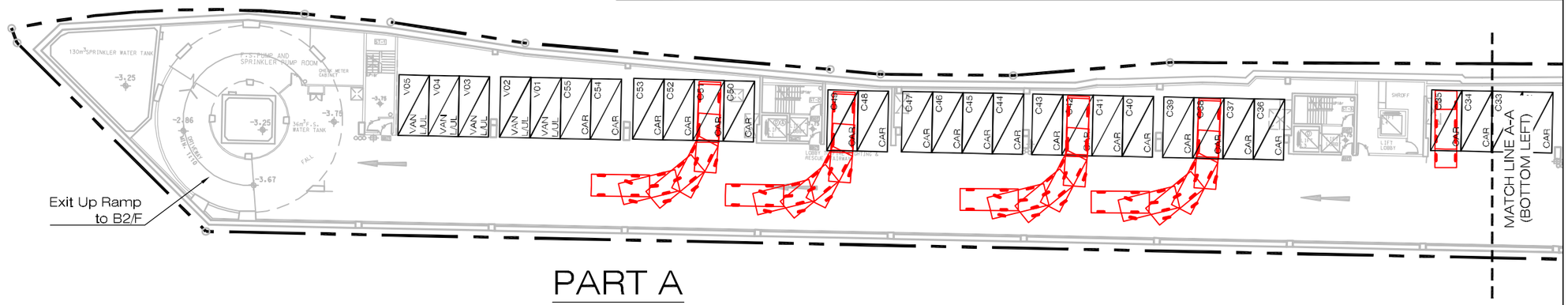
T:\JOB\J7200-J7249\J7245\(2025 09 11) J7245_TIA_FR_R6\Fig 3.1 & SP01 RevF.dwg



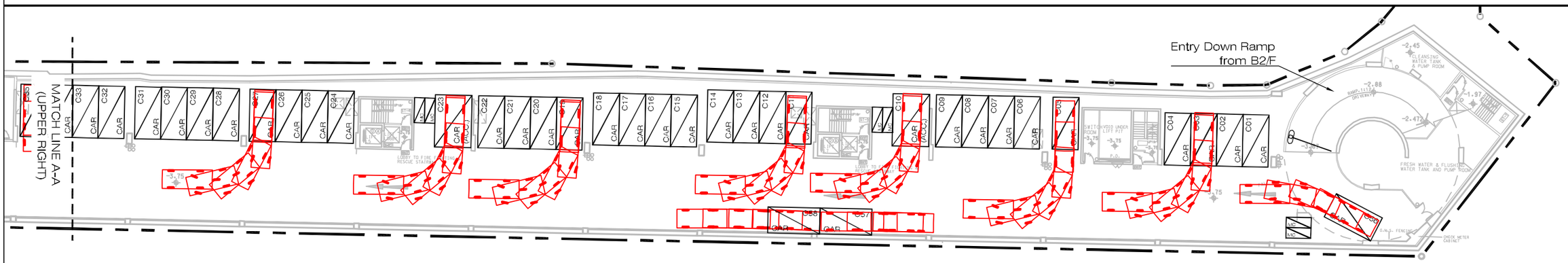
KEY PLAN

SCALE: 1 :1,500



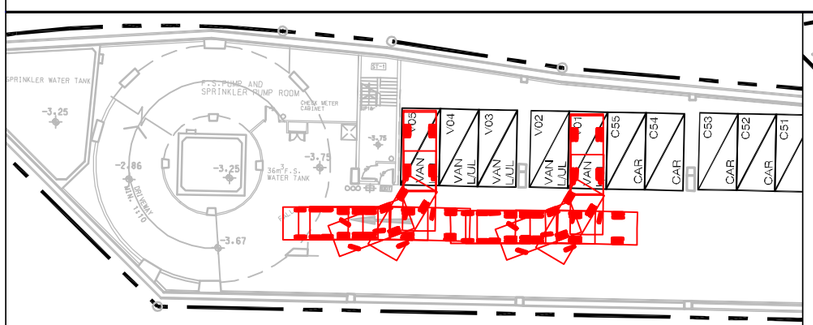
PART A

Swept Path of Private Cars
Entering and Exiting Parking Spaces



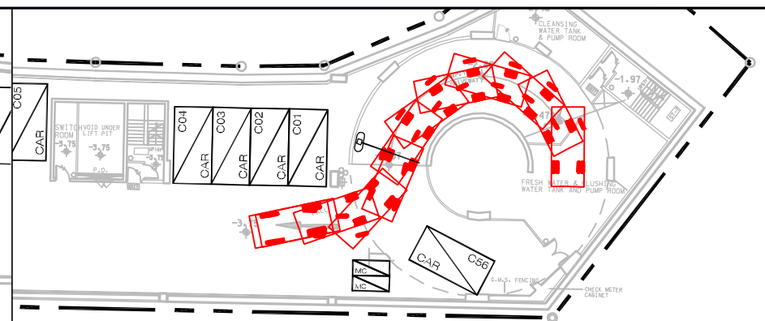
PART B

Swept Path of Private Cars
Entering and Exiting Parking Spaces



Swept Path of Goods Van
Entering L/UL Bays

Swept Path of Goods Van
Exiting L/UL Bays and on Up-Ramp



Swept Path of Swept Path of Goods Van
Entering from Down-Ramp

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. SP02 / Revision F
Figure Title	SWEPT PATH OF PRIVATE CARS AND GOOD VAN 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 11 SEP 2025

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T:\JOB\J7200-J7249\J7245\(2025 09 11) J7245_TIA_FR_R8\Fig 3.2 & SP02 RevF.dwg