Attachment 5: Replacement Pages of Traffic Impact Assessment

19/05/2026

Reference number: CHK50793710

PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"

INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

TRAFFIC IMPACT ASSESSMENT REPORT

SYSTRA MVA

PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

TRAFFIC IMPACT ASSESSMENT REPORT

IDENTIFICATION TABLE	
Client/Project owner	Marine Riches III
Project	Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the "Other Specified Uses" zone annotated "Cultural and/or Commercial Leisure and Tourism Related Uses" Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay
Study	Traffic Impact Assessment Report
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MVA Hong Kong Limited
22/F Genesis • 33-35 Wong Chuk Hang Road • Hong Kong
T. +852 2529 7037 • F. +852 2527 8490 • E. info@mvaasia.com • www.mvaasia.com

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1. INTRODUCTION

1.1 Background

1.1.1 The application site is situated at the land on north of Hoi Yu Street and the Island East Corridor ("IEC") along the Quarry Bay Waterfront Promenade. It consists of the part of land lot IL8590 R.P. and IL 8723 R.P., and the adjoining government land (which currently used as a temporary open space car parking) ("the Land" or "the Application Site").

1.1.2 In 2001, General Building Plans ("GBPs") were approved in compliance with the "Industrial" zone in effect at the time for an Industrial Building ("the approved industrial building") for the lot IL8590 R.P. and IL8723 R.P.. Construction of the industrial building commenced with work on foundations in 2017 and were suspended when the Development Bureau approached to owner to see if they would consider a scheme which was more appropriate to the up-to-date planning intention and public aspirations for a more vibrant waterfront. The incomplete foundation works remain on the private lots are currently largely vacant.

1.1.3 Following the Hong Kong Island East Harbour-front Study ("HKIEHS") commenced by the Planning Department, which aims to improve the connectivity and pedestrian accessibility of the harbour-front, it was proposed to construct an about 2km long pedestrian Boardwalk underneath the Island Eastern Corridor from Oil Street to Hoi Yu Street ("the Boardwalk") to enhance the connectivity along the North Point promenade in 2012. An investigation study for the Boardwalk was then commenced in March 2015 by the Civil Engineering and Development Department ("CEDD") to review the feasibility. Subsequently, the contract for design and construction of the Boardwalk was awarded in December 2021 and the works has been completed in end 2025.

1.1.4 Under the latest Approved Quarry Bay Outline Zoning Plan (No. S/H21/28, September 2010), main portion of the Application site is currently zoned as "Other Specified Uses ("OU(1)") annotated "Cultural and/ or Commercial, Leisure and Tourism Related Uses" with the uses of "Eating Place, Exhibition or Convention Hall, Place of Entertainment, Place of Recreation, Sports or Culture, Hotel, Office and Shop and Services" and etc. all under Column 2.

1.1.5 In order to provide a better waterfront to the public and to tally with the above-mentioned enhancement proposal/ the Boardwalk, the previous owner of the Land ("the previous owner") was invited by the Government to revisit the land use of the approved industrial building.

1.1.6 The previous owner was willing to partly surrender the original site (i.e. the approved industrial building) in exchange for the land (including part IL 8590 R.P., part IL 8723 R.P. and adjoining Government land) zoned OU(1) to form a new site for a combined waterfront development comprising of 4 hotel blocks, an office building, some retails and food & beverage facilities, which would have a more compatible land use to the waterfront than the approved industrial building, and the adjoining area zoned as "Other Specified Uses (OU)" annotated "Elevated Walkway" ("the elevated walkway").

1.1.7 Therefore, a section 16 planning application for the aforesaid waterfront development had been submitted to the Town Planning Board (TPB) for consideration in 2018 and it was approved with conditions in 2019. Hereafters refer to as the "previously approved scheme".

1.1.8 However, with reference to the Planning Statement, the implementation of the Approved Scheme was not possible, nor was the sale of the Approved Scheme. A stalemate has therefore been reached with the Approved Scheme. As the economic outlook has significantly changed since the scheme was approved in 2019 and both office and hotels are facing a difficult time with oversupply in the areas, the new owner, Marine Riches III ("the Applicant"), would like to revisit the use of the Land.

1.1.9 With the use of "Flat" under Column 2 of the latest OZP, the applicant intends to provide a space for specific cultural and tourism features with residential units. A Section 12A planning application is therefore required to be submitted for TPB's consideration.

1.1.10 MVA Hong Kong Limited (MVA) was commissioned as the Traffic Consultant to provide traffic engineering input and prepare a Traffic Impact Assessment (TIA) Study in support of the Section 12A planning application for the proposed development.

1.1.11 This version of the TIA has been amended in response to Transport Departments comments received in March 2026 on the previous version.

1.2 Objectives

1.2.1 The main objectives of this study are as follows:

- to review the existing traffic conditions in the vicinity of the application site;
- to review the traffic arrangement and internal transport facilities provision of the proposed development;
- to estimate the additional traffic generations and attractions due to the proposed development;
- to forecast the pedestrian and vehicular traffic demands on the adjacent road network in the design year 2033 (i.e. 3 years after completion, i.e. 2030 + 3 years);
- to assess the possible traffic impacts due to the proposed development on the adjacent road network; and
- to recommend any traffic improvement measures to mitigate the potential traffic problems on the road network, if required.

1.3 Structure of Report

1.3.1 Following this introductory chapter, there are **FIVE** further chapters:

- **Chapter 2 – PROPOSED DEVELOPMENT**, which presents the site location, development schedules, traffic arrangements and provisions of internal transport facilities for the proposed development;
- **Chapter 3 – EXISTING TRAFFIC CONDITION**, which describes the existing local road network in the vicinity of the proposed development; presents details of the traffic count survey and assess the existing traffic conditions;
- **Chapter 4 – FUTURE TRAFFIC CONDITION**, which assesses the annual growth rate to be adopted, estimates the potential traffic generations and attractions from the proposed development and future traffic flows on the surrounding road network;
- **Chapter 5 – TRAFFIC IMPACT ASSESSMENT**, which presents the findings of the traffic impact assessment for the reference and design scenarios, and recommends improvement measures, if necessary;
- **Chapter 6 – SUMMARY AND CONCLUSION**, which summarizes the findings of this study and presents the conclusions regarding the traffic issues associated with the proposed development.

2. PROPOSED DEVELOPMENT

2.1 Overview

2.1.1 The application site is situated at the land on north of Hoi Yu Street and the Island East Corridor ("IEC") along the Quarry Bay Waterfront Promenade. It consists of the part of land lot IL8590 R.P. and IL 8723, and the adjoining government land (which currently used as a temporary open space car parking). Location of the application site is shown in **Figure 2.1**.

2.1.2 The "OU(1)" portion of the site has a total area of about 8,532m^2. A combined waterfront development comprising of 3 domestic blocks with maximum 225 residential units, 1 non-domestic block for cultural, leisure and entertainment uses, and some retails and Food & Beverage facilities will be provided. The development parameters of the previously approved scheme versus the current scheme are summarised in **Table 2.1** below.

Table 2.1 Key Development Parameters

	Previously Approved Scheme	**Current Scheme**
Site Area	About 8,532 m^2	About 8,532 m^2
Uses	Hotel & Office & Shop and Services, Eating Place, and Place of Recreation, Sport, or Culture	Cultural, Leisure and Entertainment uses, Easting Place, Shops and Services, and Flat
Plot Ratio (PR)	Approx. 4.4	Approx. 4.63
Building Height	About +34.0 mPD, +39.0 mPD and +41.0 mPD	About +26.3mPD, +40.7mPD and +44mPD
No. of Storeys	10 to 13 storeys including 1-storey of podium and 2 basement levels for car park	8, 13, 14 Including 1 storey of podium (i.e. eating place and shop and services at ground floor level) and 3 basement levels
Gross Floor Area (GFA)	**Total – 37,155m^2** Incl. Retail – 11,537m^2 Office – 8,070m^2 Hotel – 17,548m^2 (with 400 guest rooms)	**Total – about 39,480m^2** Domestic – about 26,545m^2 (maximum 225 units) Non-domestic – about 12,935m^2 (Including about 7,703m^2 for cultural facilities & about 4,617m^2 for retail/ F&B & about 615 m^2 for covered public open space)

2.1.3 A new waterfront cultural venue for exhibitions or multi-function events will be provided. Although no specify events is planned for the time being, such events would be some cultural digital museum or art related exhibitions, etc. with target visitor trips of about 5,000 guests per day.

2.1.4 Besides, approximately over 30% area on the ground plane of the proposed development will be given over to the public with aim to provide a potential spaces and environments for leisure or opportunity to engage with some special events like concerts, performances, etc.

2.1.5 The proposed development is planned to be completed by 2030 tentatively.

2.2 Proposed Development Access and Internal Transport Facilities Provision

2.2.1 The existing vehicular access of the approved industrial building is located at the local street connects perpendicularly to Hoi Yu Street. A separated vehicular access is provided at Hoi Yu Street for the existing temporary parking area. With the proposed development, a combined vehicular access at Hoi Yu Street will be provided on the east side of the site for access to its basement car park.

2.2.2 The required car parking and servicing provisions as stipulated under the latest Hong Kong Planning Standards and Guidelines (HKPSG) and the proposed provision are summarised in **Table 2.2** below.

Table 2.2 Required and Proposed Internal Transport Facilities Provision under the Latest HKPSG Requirement

	Parameters	HKPSG Requirements	Required Provision (nos.)	Proposed Provision (nos.)
• **Residential**				
Car Parking	3 Blocks, 225 flats (GFA – about 26,545 sqm)	Global Parking Standard (GPS) x R1 x R2 x R3 (1)	99 to 173	173
Visitor parking		Additional 5 spaces per block	15	15
Motorcycle		1 space per 100-150 flats	2 to 3	3
Loading/ Unloading (L/UL)		Min 1 bay for every 800 flats or Min 1 bay for each block	Min. 3	3
• **Retail and F&B Facilities**				
Car Parking	GFA – about 4,617m^2	1 space per 150 - 300m^2	16 to 31	31
Motorcycle		5% to 10% of total car parking	1 to 4	4
Loading/ Unloading		1 bay per 800-1,200m^2	4 to 6	6
• **Cultural Facilities**				
Car Parking	GFA – about 7,703m^2	(No requirement)	N/A	50
Loading/ Unloading		(No requirement)	N/A	3
Coach Parking		No requirement)	N/A	5
• **Total**				
Car Parking		-	115 to 204	204
Car parking for cultural		-	-	50
Visitor parking		-	15	15
Total Car Parking		-	-	**269** (2)
Motorcycle		-	3 to 7	**7**
L/UL		-	7 to 9	9 (6 in LGV, 3 in HGV)
L/UL for cultural		-	-	3 (in HGV)
Total L/UL		-	-	**12**
Coach Parking		-	-	**5**

Remarks: (1) GPS = 1 space per 4-7 flats; Demand Adjustment Ratio (R1) = 4.1 (average flat size between 100m^2 and 130m^2); Accessibility Adjustment Ratio (R2) = 0.75 (within 500m-radius of rail station); Development Intensity Adjustment Ratio (R3) = 1.0 (Domestic Plot Ratio between 2 and 5).

(2) Including 4 nos. accessible parking spaces.

2.2.3 A total of about 50m to 55m long laybys will be provided at ground floor on Hoi Yu Street. Car parking spaces and loading/ unloading bays will be provided at the basement levels. The traffic arrangement on G/F, B1, B2 and B3 under the Master Layout Plan (MLP) is shown in **Figure 2.2** to **2.5**.

2.2.4 The car parking and servicing provision for residential and retail (with F&B facilities) portions will be provided in accordance with the upper-end of the HKPSG requirement.

2.2.5 Owing that there is no specific requirement on transport facilities provision for "cultural" use under the latest HKPSG, additional 50 private car parking spaces and 5 bays for coaches will be provided for the cultural venue based on the estimated traffic trips by the cultural venue (with a design capacity of about 5,000 guests per day) and making reference to the "Public Transport Strategy Study, June 2017" as published by the Transport and Housing Bureau. Detail please refer to the later **Section 4.5**.

2.2.6 In addition, it is understood that the loading/ unloading demand for the cultural venue is generally low, hence 3 nos. loading/ unloading bays is expecting sufficient to cope with the operational needs of the cultural venue based on the past experiences of the potential operator (i.e. the digital museum). Besides, loading/ unloading activities for the cultural venue are usually carried out during the off-peak hours. The loading/ unloading bays could be share used with the residential and retail portions to increase the efficiency.

2.2.7 In summary, the car parking and servicing provision will be provided in accordance with the upper-end of the HKPSG requirement, even more for car parking, as listed in the following to provide a sustainable parking supply for the proposed development as well as its neighbourhood area.

Table 2.3 Summary Table of Proposed Internal Transport Provision

Internal Transport Provision		Dimension (L) x (W) x (H)	Residential	Retail and F&B Facilities	Cultural Facilities	Total
Car parking		5m x 2.5m x 2.4m	173	31	50	269
Visitor parking			15	-	-	
Motorcycle parking		2.4m x 1m x 2.4m	3	4		7
Loading/ Unloading	LGV	7m x 3.5m x 3.6m	2	4	-	6
	MGV/HGV	11m x 3.5m x 4.7m	1	2	3	6
Coach Parking		12m x 3.5m x 3.8m	-	-	5	5

Remarks: (1) Including 4 nos. accessible parking spaces in size of 5m x 3.5m x 2.4m.

2.3 Pedestrian Connection

2.3.1 Since Hoi Yu Street is ended with a cul-de-sac at its east-end, pedestrians access the Application Site from the nearest MTR Station (i.e. Quarry Bay Exit C) or the nearby public transport services mainly via King's Road, Java Road and Hoi Yu Street at present. Previously, there was no crossing point or footpath provided on the southern part of Hoi Yu Street. Hence, all pedestrians accessing the area relied on the northern footpath of Hoi Yu Street, which the width is about 3.6m at the west-end (i.e. outside the North Point Police Station) but eventually reduced to about 1.6m near the Quarry Bay Salt Water Pumping Station and in front of the Application Site at present.

2.3.2 The pedestrian network in the area has undergone a major change with the Boardwalk project completed in end 2025 (the main section, and the remaining supporting facilities is expecting to be completed in 2026). An integrated walkway system, accommodating a walkway and cycle track, running along the waterfront from the new reclamation area north (or Oil Street at the western end) to Hoi Yu Street at the eastern end has been constructed. The area adjacent to the Quarry Bay Salt Water Pumping Station will be reformed as open space and walkway to provide a continuous pedestrian connection along the waterfront promenade. In particular, the existing footpath near the Quarry Bay Salt Water Pumping Station and in front of the Application Site has been widen to minimum 3.5m by realigning the carriageway of Hoi Yu Street under the Boardwalk project.

2.3.3 Meanwhile, the piece of land underneath the IEC and adjoining the North Point Offtake Station will be converted into some Boardwalk facilities such as management office, public toilet, bike racks, open space and etc.. A new pedestrian crossing will also be provided near the Quarry Bay Salt Water Pumping Station. It is anticipated that a new route will be created for pedestrian accessing Hoi Yu Street and the pedestrians no longer rely on the northern footpath of Hoi Yu Street only upon opening of the Boardwalk in end 2025.

2.3.4 Besides, the access road from Hoi Chak Street to the Food and Environmental Hygiene Department (FEHD) Quarry Bay Depot GLA-THK-1038 (''the FEHD Depot'') runs parallel to the IEC could be retained as a pedestrian access for those pedestrians coming from the south direction or Quarry Bay MTR Exit A & B.

2.3.5 In view of the above-mentioned, it revealed that the pedestrian connectivity and accessibility in the area will be improved significantly in the future with the Boardwalk. The existing (assuming as the condition before opening of Boardwalk since it is yet fully completed) and future pedestrian routes to/ from the Application Site are showed in **Figure 2.6**.

2.4 The Planned Elevated Walkway

2.4.1 The elevated walkway across the IEC as has been planned as an indicative alignment under the latest Approved Quarry Bay Outline Zoning Plan (No. S/H21/28, September 2010), shown in **Figure 2.7**, and was agreed to be implemented under the S16 Approved Scheme by the previous owner at the time the aforesaid pedestrian improvement works was yet proposed by the Boardwalk project.

2.4.2 However, given the enhanced at-grade pedestrian facilities in the future, in particular the creation of new pedestrian routes by the Boardwalk and connections to Quarry Bay Park, a more direct and shorter pedestrian route will be provided which reduces the need for the elevated walkway from the application site to the hinterland. There is no justification for an elevated walkway above Quarry Bay Park to be implemented as part of this application.

2.4.3 A shorter footbridge over the IEC from the access road/ pedestrian entrance near the Quarry Bay Park Office, crossing Hoi Yu Street to the proposed development is therefore proposed and the proposed elevated walkway will be maintained and managed by the relevant Government department.

2.4.4 The elevated walkway over the IEC will be constructed by the developer and will connect directly into the development at the landscape deck level (Level 2). It will be available for public use at the time the development is to be occupied.

3. EXISTING TRAFFIC CONDITION

3.1 Existing Road Network

3.1.1 The proposed development is situated at the land on north of Hoi Yu Street and the Island East Corridor ("IEC") along the Quarry Bay Waterfront Promenade. It is mainly served by King's Road, Java Road, Hoi Chak Street and Hoi Yu Street.

3.1.2 King's Road is an east-west primary distributor connecting to Causeway Road to the west, and Shau Kei Wan Road to the east. It is the key distributor providing access for traffic between Quarry Bay and other area such as Causeway Bay, Chai Wan and the rest of Hong Kong Island and beyond.

3.1.3 Java Road is a one-way eastbound district distributor connecting Electric Road to the west and King's Road to the east. It is essentially parallel to King's Road. It connects with Hoi Yu Street adjacent to its junction with King's Road and provides the main ingress and egress traffic route to the proposed development.

3.1.4 Hoi Chak Street is currently one of the key local access routes serving the Quarry Bay area. It is a two-way single four-lane carriageway connecting Hoi Yu Street to the north and Hoi Tai Street to the south.

3.1.5 Hoi Yu Street is a single 2 lanes local distributor which operates in two-way direction and ended with a cul-de-sac at its east-end. It connects with Java Road to the West and ended at the temporary open space car park near the entrance of the Eastern Harbour Crossing to the East. It is the only vehicular access serving the Quarry Bay Waterfront area and the application site.

3.2 Existing Public Transport Services

3.2.1 The Quarry Bay MTR Station is located at the south-west of the proposed development with about 8 minutes walking journey from the Exit C and about 12 minutes walking journey from the Exit A/B. The alternative access from rail transport is from the Taikoo MTR Station which can be accessed from the Tai Koo Shing area via the existing footbridge network with about 20 minutes walking journey.

3.2.2 Currently, numerous road-based public transport services are operating within 500m catchment area of the proposed development. These include up to 54 routes for Franchised Buses, 5 routes for Green Mini-Buses (GMB) and numerous routes for Public Light Buses (PLB). Tram services are also provided on King's Road. **Figure 3.1** showed the existing public transport facilities in the vicinity of the proposed development.

3.2.3 The proposed development is considered well served by the comprehensive public transport services within its 500m catchment area.

3.3 Existing Vehicular Traffic Condition

3.3.1 The key vehicular ingress and egress routes to/ from the proposed development are shown in **Figure 3.2**.

3.3.2 Eleven nearby road junctions, as listed in **Table 3.1**, were identified to be critical in this traffic impact assessment. Locations of these critical junctions are also indicated in **Figure 3.2**, whilst their existing junction arrangements and Method of Control (MOC) are shown in **Figures 3.3** to **3.13** respectively.

3.3.3 Manual classified traffic count survey was carried out at the identified critical junctions during the morning peak (07:30 to 09:30), noon (12:00-14:00) peak and evening (17:00 to 19:00) peak hours on a typical weekday in June 2025 (i.e. 26 June 2025) to obtain the up-to-date vehicular traffic pattern in the vicinity of the proposed development. Based on the observed traffic flows, it revealed that the AM peak, Noon peak and PM peak hours occurred from 08:30AM to 09:30AM, 12:00PM to 13:00 PM and 17:30PM to 18:30PM respectively.

3.3.4 The 2025 observed peak hour traffic flows are presented in **Figure 3.14**. Detailed calculation of the assessed existing operational performance of the identified junctions are attached in **Appendix A** and the results are summarized in **Table 3.1** below.

Table 3.1 Identified Critical Junctions

Ref. No.	Fig No.	Junctions	Type of Junction	Year 2025 RC/ RFC (1)(2)		
				AM Peak	Noon Peak	PM Peak
J1	**3.3**	Hoi Yu Street/ Hoi Chak Street	Priority	0.026	0.035	0.026
J2	**3.4**	Java Road/ Hoi Yu Street	Signalised	23%	82%	88%
J3	**3.5**	King's Road/ Java Road	Signalised	>100%	>100%	>100%
J4	**3.6**	Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street	Signalised	68%	>100%	82%
J5	**3.7**	King's Road/ Finnie Street	Signalised	>100%	>100%	93%
J6	**3.8**	King's Road/ Model Lane	Signalised	>100%	>100%	>100%
J7	**3.9**	Java Road/ Man Hong Street	Signalised	>100%	>100%	>100%
J8	**3.10**	King's Road/ Healthy Street West/ Man Hong Street	Signalised	>100%	>100%	>100%
J9	**3.11**	Tsat Tsz Mui Road/ Healthy Street West	Signalised	>100%	>100%	>100%
J10	**3.12**	Tsat Tsz Mui Road/ Tin Chiu West	Signalised	>100%	>100%	>100%
J11	**3.13**	King's Road/ Tin Chiu Street	Signalised	>100%	>100%	>100%

Notes: (1) Zero Reserve Capacity (RC) represents signalised junction operating at capacity. Positive RC represents signalised junction operating with spare capacity. Negative RC means signalised junction is overloaded.

(2) Ratio of Flow to Capacity (RFC) = 1.0 represents priority junction/roundabout operating at capacity. RFC < 1.0 represents priority junction/roundabout operating with spare capacity. RFC>1.0 means priority junction/roundabout is overloaded.

3.3.5 As indicated in above **Table 3.1**, all the identified critical junctions are currently operating within their capacities during the peak hours.

3.4 Existing Pedestrian Traffic Condition

3.4.1 Pedestrian count survey was also carried out at the identified critical footpaths/crossing along Hoi Yu Street, Java Road, Model Lane and Hoi Chak Street/ Finnie Street/ Hoi Tai Street (based on the pedestrian route to/from the proposed development as shown in **Figure 2.6**) to obtain the up-to-date pedestrian traffic pattern in the vicinity of the proposed development in June 2025 (i.e. 25 June 2025 and 28 Jun 2025) during the time periods below:

- During the morning peak (07:30AM to 09:30AM), noon peak (12:00-14:00) and evening peak (17:30PM to 19:30PM) periods on a typical weekday; and
- During the morning peak (07:30AM to 09:30AM), noon peak (12:00-14:00) and evening peak (17:30PM to 19:30PM) periods on a typical weekend.

3.4.2 It was observed that the AM, noon and PM peak 15-min pedestrian flows occurred from 08:45AM to 09:00AM, 12:25PM to 12:40PM and 18:00PM to 18:15PM respectively on weekday; and 09:00AM to 09:15AM, 12:40PM to 12:55PM and 17:05PM to 17:20PM respectively on weekend. The 2025 observed peak pedestrian flows are presented in **Figure 3.16**.

3.4.3 Currently, pedestrians accessing Quarry Bay waterfront promenade and the application site are mainly via Hoi Yu Street and some via Hoi Chak Street/ Finnie Street/ Hoi Tai Street. A Level-Of-Service (LOS) assessment was therefore carried out to access the existing performance of the identified critical sections of footpaths and crossings based on the observed peak 15-min pedestrian flows. Locations of these footpaths and crossing are shown in **Figure 3.15** and the summarised in **Table 3.2** and **Table 3.3** below:

Table 3.2 Existing Performances of Identified Critical Sections of Footpaths/Cautionary Crossing

Critical Footpath/ Cautionary Crossing [1]	Clear Width (m)	Eff. Width (m)[2]	Period		2-way Pedestrian Peak Flow (ped/15-min)[4]	Flow Rate (ped/min/ m)[4]	LOS[5]
Location A Hoi Yu St.	1.05	0.8[3]	Weekday	AM Peak	30	2.5	A
				Noon Peak	25	2.1	A
				PM Peak	60	5.0	A
			Weekend	AM Peak	60	5.0	A
				Noon Peak	35	2.9	A
				PM Peak	70	5.8	A
Location B Hoi Yu St.	3.5	2.5	Weekday	AM Peak	30	0.8	A
				Noon Peak	25	0.7	A
				PM Peak	60	1.6	A
			Weekend	AM Peak	60	1.6	A
				Noon Peak	35	0.9	A
				PM Peak	70	1.9	A
Location C	2.8	1.8	Weekday	AM Peak	165	6.1	A

Critical Footpath/ Cautionary Crossing [1]	Clear Width (m)	Eff. Width (m)[2]	Period		2-way Pedestrian Peak Flow (ped/15-min)[4]	Flow Rate (ped/min/ m)[4]	LOS[5]
Java Road				Noon Peak	315	11.7	A
				PM Peak	125	4.6	A
			Weekend	AM Peak	95	3.5	A
				Noon Peak	45	1.7	A
				PM Peak	60	2.2	A
Location D Java Road	3	2	Weekday	AM Peak	55	1.8	A
				Noon Peak	35	1.2	A
				PM Peak	85	2.8	A
			Weekend	AM Peak	15	0.5	A
				Noon Peak	25	0.8	A
				PM Peak	35	1.2	A
Location E Java Road	2.8	1.8	Weekday	AM Peak	30	1.1	A
				Noon Peak	85	3.1	A
				PM Peak	45	1.7	A
			Weekend	AM Peak	10	0.4	A
				Noon Peak	10	0.4	A
				PM Peak	15	0.6	A
Location F Hoi Yu St.	2.8	1.8	Weekday	AM Peak	120	4.4	A
				Noon Peak	305	11.3	A
				PM Peak	115	4.3	A
			Weekend	AM Peak	15	0.6	A
				Noon Peak	20	0.7	A
				PM Peak	25	0.9	A
Location H Hoi Chak St.	4	3	Weekday	AM Peak	10	0.2	A
				Noon Peak	20	0.4	A
				PM Peak	20	0.4	A
			Weekend	AM Peak	10	0.2	A
				Noon Peak	10	0.2	A
				PM Peak	15	0.3	A
Location I Model Lane	2	1	Weekday	AM Peak	635	42.3	D
				Noon Peak	145	9.7	A
				PM Peak	435	29.0	C
			Weekend	AM Peak	65	4.3	A
				Noon Peak	50	3.3	A
				PM Peak	145	9.7	A
Location J Model Lane	2.6	1.6	Weekday	AM Peak	190	7.9	A
				Noon Peak	50	2.1	A
				PM Peak	535	22.3	B
			Weekend	AM Peak	20	0.8	A
				Noon Peak	30	1.3	A
				PM Peak	50	2.1	A

Notes: (1) Refer to **Figure 3.15**.
(2) Effective width is clear width deducting the horizontal clearance, generally 0.5m (i.e. Dead Width) on each side.
(3) Min. 0.8m clear width shall be adopted according to HCM 2000.

(4) Observed 2-way Ped. Peak Flow rounded to the nearest 5; Flow Rate rounded to the nearest 0.1.
(5) According to the Highway Capacity Manual 2000 (HCM 2000), the criteria range from LOS "A" (best) to LOS "F" (worst). In general, LOS C is considered as an optimal level of service and is preferable for all new walkways.

3.4.4 The result in the above **Table 3.2** indicated that all the identified critical sections of footpaths/cautionary crossing are currently operating with a LOS level of "A" or above except the Model Lane.

Table 3.3 Existing Performances of Identified Critical Sections of Crossing

Critical Crossing (1)	Period		Eff. Crosswalk Width (m)	2-way Pedestrian Peak Flow (ped/15-min)(2)	LOS of Cross walk (3)	Area of Waiting Space (m)	LOS of Waiting Space(3)
Location G Java Road	Weekday	AM Peak	4	25	A	North:18 South:16.8	A
		Noon Peak		30	A		A
		PM Peak		85	A		A
	Weekend	AM Peak		15	A		A
		Noon Peak		10	A		A
		PM Peak		15	A		A
Location K Hoi Tai Street	Weekday	AM Peak	3.1	20	A	North:11 South:15.6	A
		Noon Peak		70	A		B
		PM Peak		20	A		A
	Weekend	AM Peak		25	A		A
		Noon Peak		25	A		A
		PM Peak		10	A		A
Location L Hoi Kwong Street	Weekday	AM Peak	4.2	280	B	North:12.8 South:31.5	A
		Noon Peak		425	C		B
		PM Peak		280	B		A
	Weekend	AM Peak		45	A		A
		Noon Peak		150	A		A
		PM Peak		120	A		A
Location M Finnie Street	Weekday	AM Peak	2.5	80	B	North:14.3 South:16.2	A
		Noon Peak		525	F		C
		PM Peak		185	E		A
	Weekend	AM Peak		60	A		A
		Noon Peak		160	D		A
		PM Peak		135	C		A
Location N Finnie Street	Weekday	AM Peak	2.5	70	A	North:16.2 South:9.5	A
		Noon Peak		505	D		C
		PM Peak		180	A		A
	Weekend	AM Peak		30	A		A
		Noon Peak		100	A		A
		PM Peak		85	A		A
Location O Hoi Tai Street	Weekday	AM Peak	2	15	A	North:16.2 South:11.6	A
		Noon Peak		30	A		A
		PM Peak		25	A		A
	Weekend	AM Peak		55	A		A
		Noon Peak		85	B		A
		PM Peak		75	B		A

Notes: (1) Refer to **Figure 3.15**.
(2) Observed 2-way Ped. Peak Flow rounded to the nearest 5; Flow Rate rounded to the nearest 0.1.
(3) According to the Highway Capacity Manual 2000 (HCM 2000), the criteria range from LOS "A" (best) to LOS "F" (worst). In general, LOS C is considered as an optimal level of service and is preferable for all new walkways.
(4) Detailed calculations of the identified critical sections of crossing are attached in **Appendix A2**.

3.4.5 The result in the above **Table 3.3** indicated that the identified critical crossings at Java Road and Hoi Tai Street are currently operating with a LOS level of "B" or above. However, the identified critical crossings at Hoi Kwong Street and Finnie Street are currently operating at their capacities.

4. FUTURE TRAFFIC CONDITION

4.1 Design Year

4.1.1 The proposed development is planned to be completed with full intended operation by 2030 tentatively. In order to assess the possible traffic impacts to the local road network due to the proposed development, Year 2033 (3 years after completion, i.e. 2030 + 3 years) was adopted as the design year for this study.

4.2 Future Local Road Network and Pedestrian Linkage

4.2.1 It is anticipated no major road works and infrastructure to be constructed within the study area. Hence, it is considered that the traffic pattern in the local area is expecting to be similar as existing. The existing junction layouts were therefore adopted for the traffic impact assessment in the reference and design scenarios.

4.2.2 According to the project webpage of "Boardwalk underneath Island Eastern Corridor", the Boardwalk has been fully completed by end 2025. Hence, the future pedestrian connection with the Boardwalk and its associated pedestrian trips were considered in the traffic impact assessment.

4.2.3 Meanwhile, an elevated walkway connects between the waterfront area at Hoi Yu Street and Quarry Bay Park was planned to be constructed under the latest Approved Quarry Bay OZP as mentioned in **Section 2**. Subject to future agreement between the applicant and government as to cover the cost of the bridge, it is assumed that the elevated walkway will be in placed in the reference and design scenarios.

4.3 Adopted Traffic Growth

4.3.1 In order to conduct the traffic forecast of Year 2033, a traffic growth factor was determined for the study area based on the following approaches.

Historical Traffic Growth and Planning Data

4.3.2 There are Annual Traffic Census (ATC) traffic count stations available in the vicinity of the proposed development. The annual traffic counts at these stations over the period between Year 2019 to Year 2024 reported in the latest ATC report are summarized in the following **Table 4.1**.

Table 4.1 Annual Traffic Census (ATC) Traffic Counts Between Year 2019 to 2024

Road Name	Stn. No.	Annual Average Daily Traffic (AADT)						Average Annual Growth Rate
		2019	2020	2021	2022	2023	2024	
Man Hong Street (Java Road - King's Road)	1613	21,340	23,780	25,860	24,680	25,390	25,450	3.59%
Java Road (Island Eastern Corridor - King's Road)	1635	20,820	18,770	20,600	19,410	19,830	19,650	-1.15%
King's Road (Healthy St W - Java Road)	2020	19,500	18,600	19,440	19,120	18,640	18,680	-0.86%
Java Road (Tong Shui Road - Tin Chiu Street)	2040	16,830	16,000	16,320	15,920	15,520	15,380	-1.79%
Total		**78,490**	**77,150**	**82,220**	**79,130**	**79,380**	**79,160**	**-0.05%**

4.3.3 As indicated in **Table 4.1** above, the average annual traffic growth pattern in the vicinity of the proposed development is in a declining trend of -0.05% per annum over the past 6 years.

Traffic Growth Rate by Population Data

4.3.4 The 2019-based Territorial Population and Employment Data Matrix (TPEDM) planning data for the Eastern District published by the Planning Department has also been considered. The population and employment planning data in Year 2019, Year 2026 and Year 2031 in Eastern District is summarized in **Table 4.2**.

Table 4.2 2019-based Territorial Population and Employment Data Matrix

	Population	Employment	Total
• Eastern District			
Year 2019	568,150	331,300	899,450
Year 2026	533,100	324,900	858,000
Year 2031	506,050	317,250	823,300
Average Annual	**-0.96%**	**+0.36%**	**-0.73%**

Note: (1) Source from webpage of Planning Department (https://www.pland.gov.hk/pland_en/info_serv/statistic/tpedm19/2019_based_Open_TPEDM_(Data).pdf)

4.3.5 As indicated in the above **Table 4.2**, Eastern District has a negative average annual growth rate of -0.73% on the population and employment for the next few years.

4.3.6 As a conservative approach, a +0.50% annual growth rate is adopted to develop the 2033 reference traffic flows for the assessment. It is deemed sufficient to allow for any unexpected future growth as a result of some changes in land use or new developments in the study area.

4.4 Traffic Generations of Nearby Planned and Committed Developments

4.4.1 In addition to the annual traffic growth rate, the major planned and committed developments in the vicinity of the proposed redevelopment as listed in **Tables 4.3** below have also been considered in the reference traffic forecast. Locations of the aforesaid developments are shown in **Figure 4.1**.

Table 4.3 Major Planned and Committed Developments Nearby

Major Planned and Committed Development	Anticipated Completion Year
The Boardwalk underneath Island Eastern Corridor	End 2025
Proposed Redevelopment of AIA Tower at No. 734 King's Road	Uncertain
Proposed Residential Development at 16-94 Pan Hoi Street and 983-987A King's Road, Quarry Bay, Hong Kong [A/H21/151]	Uncertain
Proposed Residential Development at No. 10-12 & 14-16 Mount Parker Road [A/H21/157]	Uncertain
Proposed Residential Development at 56-76 Kai Yuen Street [A/H8/435]	Uncertain

4.4.2 It is noted that the existing AIA Tower at No. 734 King's Road is planned to be redeveloped as a comprehensive building with office and retails uses. Based on the information obtained from Bravo, i.e. the online building records by Buildings Department (BD), a General Building Plan (GBP) has been submitted to BD and approved in 2022. It is assumed that the proposed redevelopment will be in place in Year 2033 and its traffic generations were considered in the traffic impact assessment although the existing building is yet demolished today.

4.4.3 A planning application proposing a commercial development in the existing "Residential (Group A)" Zone and an area shown as "Road" at 16-94 Pan Hoi Street and 983-987A King's Road, Quarry Bay [A/H21/151A] was submitted to Town Planning Board (TPB)in 2020. Although the aforesaid application has been rejected by TPB, the site is always permitted to be redeveloped as residential use under the current OZP. Therefore, traffic generations for residential development have been adopted into the assessment.

4.4.4 Another planning application proposing a minor relaxation of building height from +120mPD to +139.75mPD for the proposed residential development at 992-998 King's Road and 2-16 Mount Parker Road, Quarry Bay was submitted to TPB and approved with conditions in December 2022. It is observed that construction works have been commenced on-site. Hence, the development is anticipated will be in place in Year 2033 and its traffic generations were considered in the assessment.

4.4.5 Also, a Section 16 application proposing a minor relaxation of Plot Ratio and Building Height Restrictions at Land falling within "Comprehensive Development Area (2)" zone and an area

shown as 'Road' at Kai Yuen Street, North Point was submitted to TPB and approved with conditions in February 2023. It is observed that construction works have been commenced on-site. Hence, the development is anticipated will be in place in Year 2033 and its traffic generations were considered in the assessment also.

4.4.6 Traffic generations and attractions of the nearby planned/ committed developments are listed in **Table 4.4** to **Table 4.8** below.

Table 4.4 Adopted Traffic Trips of the Boardwalk underneath Island Eastern Corridor

	AM Peak		PM Peak	
	Generation	**Attraction**	**Generation**	**Attraction**
Expected Two-way Volumes at Hoi Yu Street	309		134	

Remarks: (1) Source from Agreement No. CE 41/2014(HY) Boardwalk underneath Island Eastern Corridor – Investigation Assessment on Pedestrian and Cyclist Demand for Proposed Boardwalk

Table 4.5 Adopted Traffic Trips of the Proposed Redevelopment of AIA Tower at No. 734 King's Road

	AM Peak		PM Peak	
	Generation	**Attraction**	**Generation**	**Attraction**
Land Use	Office with portion of retail			
Key Parameters	About 27,870m^2			
Office Trip Rates (pcu/hr/100m2 GFA, mean) (1)	0.1703	0.2452	0.1573	0.1175
Total Traffic Trips (pcu/hr)	48	69	44	33

Remarks: (1) Refer to TPDM Volume 1 Chapter 3 Appendix 1 Table 1.
(2) Source from Bravo – online building records.

Table 4.6 Adopted Traffic Trips of the Proposed Residential Development at 16-94 Pan Hoi Street and 983-987A King's Road, Quarry Bay

	AM Peak		PM Peak	
	Generation	**Attraction**	**Generation**	**Attraction**
Land Use	Residential			
Key Parameters	900 flats, average flat size about 60m^2			
Residential Trip Rates (pcu/hr/flat, Private Housing: High Density/R(A) & Avg. flat size 60m^2, mean) (1)	0.0718	0.0425	0.0286	0.037
Total Traffic Trips (pcu/hr)	65	39	26	34

Remarks: (1) Refer to TPDM Volume 1 Chapter 3 Appendix 1 Table 1.
(2) Source from Town Planning Board Statutory Planning Portal. Planning Application No. A/H21/151A refers.

Table 4.7 Adopted Traffic Trips of the Proposed Residential Development at No. 10-12 & 14-16 Mount Parker Road

	AM Peak		PM Peak	
	Generation	**Attraction**	**Generation**	**Attraction**
Land Use	Residential			
Key Parameters	592 flats, average flat size about 67m^2			
Residential Trip Rates (pcu/hr/flat, Private Housing: High Density/R(A) & Avg. flat size 67m^2, mean) (1)	0.0888	0.0515	0.0356	0.048
Total Traffic Trips (pcu/hr)	53	31	22	29

Remarks: (1) Refer to TPDM Volume 1 Chapter 3 Appendix 1 Table 1.
(2) Source extracted from Monthly Digest, Building Department.

Table 4.8 Adopted Traffic Trips of the Proposed Residential Development at 56-76 Kai Yuen Street

	AM Peak		PM Peak	
	Generation	**Attraction**	**Generation**	**Attraction**
Land Use	Residential			
Key Parameters	1461 flats, average flat size about 85m^2			
Residential Trip Rates (pcu/hr/flat, Private Housing: High Density/R(A) & Avg. flat size 85m^2, mean) (1)	0.1887	0.0942	0.0862	0.1214
Total Traffic Trips (pcu/hr)	276	138	126	178

Remarks: (1) Refer to TPDM Volume 1 Chapter 3 Appendix 1 Table 1.
(2) Source from Town Planning Board Statutory Planning Portal. Planning Application No. A/H8/432 refers

4.4.7 The 2033 reference traffic flows were therefore developed based on the 2025 observed traffic flow with the aforesaid growth rate and traffic generations of the nearby planned and committed developments adopted as shown in **Figure 4.2**.

4.5 Traffic Generations of Proposed Development

4.5.1 As mentioned in **Section 1**, the lot IL8590 R.P. and IL8723 R.P. could either be developed as an industrial building or the previously approved scheme (i.e. hotel + office + retails) together with the government lot (which is currently used as a temporary open space car parking). The traffic trips by the temporary open space car parking were therefore deducted in the calculation of the traffic forecast.

4.5.2 The cultural venue/ digital museum is planned to have a servicing capacity of about 5,000 guests per day. Visitors would flow through the space with an expected stay of about 45-60 mins, subject to future operation, for each immersive experience (i.e. "show"). Hence, visitors would come and go constantly within the opening hours between 10:00AM to 19:00PM. Therefore, it was assumed that about 11.1% of the visitors would come during the PM peak hours (i.e. average of the 9 hours and nil during the AM peak as it is anticipated yet opened) and the estimated traffic generations by the cultural venue/ digital museum were superimposed onto the reference traffic flows to assess the potential traffic impact due to the proposed development.

4.5.3 The traffic trips to be generated by the cultural venue/ digital museum were estimated by making reference to the traffic modal split mentioned in Chapter 3 of the "Public Transport Strategy Study, June 2017" as published by Transport and Housing Bureau. The result is summarized in **Table 4.9** below.

Table 4.9 Anticipated Traffic Generation by the Cultural Venue/ Digital Museum

Transport Mode	Distribution[1] (%)	No. of Guest (people)		Additional Vehicular Traffic Trips (pcu) [4]
Rail	38.7%	0 (215)	0 (450)	-
Ferry	0.9%	0 (5)		-
Franchised Bus	27%	0(150)		-
PLB	13.5%	0 (75)		-
Tram	0.9%	0 (5)		-
Private Vehicle	10%	0 (56)[2]		0 (28)
SPB	1.8%	0 (10)[3]		0 (1)
Taxi	7.2%	0 (40)[2]		0 (20)
Total	**100%**	**0 (556)**		**0 (49)**

Remarks: (1) According to Paragraph 3.12 in Chapter 3 of the "Public Transport Strategy Study, June 2017";
(2) Assuming 2 passengers per private vehicle and 2 passengers per taxi;
(3) Assuming 24 passengers per SPB;
(4) Adopted pcu factor: 1 for private vehicle and 1.5 for SPB.

Vehicular Traffic

4.5.4 The estimated vehicular traffic trips to be generated by the proposed development during the peak hours are summarized in **Table 4.10** below.

Table 4.10 Anticipated Traffic Generation of the Proposed Development

Traffic Trips	AM Peak		Noon Peak		PM Peak	
	Gen.	Att.	Gen.	Att.	Gen.	Att.
Proposed Development ……. (A)						
Residential Units & Size	Not more than 225 flats					
Residential Trip Rates (pcu/hr/flat, Private Housing/ Medium-Density R(B), mean)(1)	0.2246	0.1157	0.1068	0.1468	0.1068	0.1468
Traffic Trips (pcu/hr)	51	27	25	34	25	34
Retail and F&B Facilities GFA (m^2)	4,617m^2					
Retail Trip Rates (pcu/hr/100m^2 GFA, mean)(1)	0.2296	0.2434	0.3100	0.3563	0.3100	0.3563
Traffic Trips (pcu/hr)	11	12	15	17	15	17
Total Traffic Trips (pcu/hr)	62	39	40	51	40	51
Traffic Generation by the Cultural Venue/ Digital Museum ……. (B)						
Traffic Trips (pcu/hr)	0	0	49	49	49	49
Existing temporary open space car park at the Adjoining Government Land ……. (C)						
Observed Trips (pcu/hr)	20	0	0	15	0	15
Different in Traffic Trips ……. (A + B – C)						
Net Traffic Trips (pcu/hr)	42	39	89	85	89	85
2-way Vehicular Trips (pcu/hr)	**81**		**174**		**174**	

Remarks: (1) Refer to TPDM Volume 1 Chapter 3 Appendix 1 Table 1.
(2) As no information is provide in TPDM for noon peak, trip rate of PM peak was therefore adopted for Noon peak as a conservative approach.

4.5.5 As indicated in **Table 4.10** above, it is anticipated that the proposed development would generate an additional two-way traffic trips of some 68 pcu/hr in the AM peak, some 163 pcu/hr in Noon peak, and some 163 pcu/hr during the PM peak.

4.5.6 Based on the anticipated traffic generations and key vehicular ingress and egress routes to/ from the proposed development as showed in **Figure 3.2**, the estimated traffic generations were then superimposed onto the year 2033 reference traffic flows to derive the year 2033 design traffic flows as shown in **Figure 4.3**. The distribution of development traffic trips is shown in **Figure 4.4**.

Pedestrian Traffic

4.5.7 Pedestrian traffic generations of the proposed development were also estimated. In-house data, as summarized in **Table 4.11**, was adopted to estimate the traffic trips by the residential and retail portions and the anticipated traffic generations by the cultural venue/ digital museum were also considered.

Table 4.11 Adopted Pedestrian Generation Rates

	AM Peak		Noon Peak		PM Peak	
	Generation	Attraction	Generation	Attraction	Generation	Attraction
Residential Trip Rates (Private Housing) (ped/hr/flat)(1)	0.7230	0.4400	0.3660	0.2640	0.3660	0.2640
Retail Trip Rates (ped/15 mins/100m^2 GFA)	0.1005	0.1417	0.2936	0.273	0.2936	0.273

Remarks: (1) Based on in-house data.
(2) Trip rate of PM peak was adopted for Noon peak as a conservative approach.

4.5.8 The estimated pedestrian traffic trips to be generated by the proposed development during the peak hours are summarized in **Table 4.12** below.

Table 4.12 Anticipated Pedestrian Generation of Proposed Development

Traffic Trips	AM Peak		Noon Peak		PM Peak	
	Gen.	Att.	Gen.	Att.	Gen.	Att.
Proposed Development ……. (A)						
Residential Units & Size	Not more than 225 flats					
Residential Trip Rates (ped/15 mins/flat)	0.7230	0.4400	0.3660	0.2640	0.3660	0.2640
Pedestrian Peak Flows (ped/ 15 mins)	41	25	21	15	21	15
Retail and F&B Facilities GFA (m^2)	4,617m^2					
Retail Trip Rates (ped/15 mins/100m^2 GFA)	0.1005	0.1417	0.2936	0.273	0.2936	0.273
Pedestrian Peak Flows (ped/ 15 mins)	1	2	4	3	4	3
Total Pedestrian Trips (ped/ 15 mins)	42	27	25	18	25	18
Total 2-way Pedestrian Trips (ped/15 mins)	69		43		43	
Traffic Generation by the Cultural Venue/ Digital Museum ……. (B)						
Pedestrian Trips (ped/15 mins)(2)	0		113		113	
Total Pedestrian Trips ……. (A + B)						
Total 2-way Pedestrian Trips (ped/15 mins)	**69**		**156**		**156**	

Remarks: (1) Trip rate of PM peak was adopted for Noon peak as a conservative approach.

(2) As mentioned in Section 4.5.2, the serving capacity of the Cultural Venue/ Digital Museum is about 5000 guests per day with 0%,11.1% &11.1% visitor distribution during AM, Noon & PM peak hour respectively. Therefore, the peak 15-min pedestrian trips are 0, 113 & 113 during AM, Noon & PM peak hour respectively.

4.5.9 It is anticipated that the proposed development would generate a 2-way pedestrian trips of 69 pedestrians per peak 15 minutes during the AM peak, 156 pedestrians per peak 15 minutes during the Noon peak, and 156 pedestrians per peak 15 minutes during the PM peak.

4.5.10 With the cultural venue/ digital museum, the proposed development is expecting to become one of the attractions of the Quarry Bay Waterfront Promenade. Although majority of the trips by the cultural venue/ digital museum are anticipated coming from/ travelling to the Boardwalk, it was assumed that half of the pedestrian trips would access from Hoi Yu Street/ Java Road and the other half would access via the elevated walkway as a conservative approach.

4.5.11 Similar to the vehicular traffic forecast, the estimated pedestrian traffic generations were then superimposed onto the year 2033 reference traffic flows to derive the year 2033 design traffic flows based on the anticipated pedestrian traffic generations as showed in **Figure 3.16**.

5. TRAFFIC IMPACT ASSESSMENT

5.1 Junction Performance Assessment

5.1.1 In order to investigate the potential traffic impacts to the local road network upon completion of the proposed development, operational performances assessment for the identified critical junctions were conducted, for both the reference and design scenarios in Year 2033. The assessment results are summarised in **Table 5.1** below.

Table 5.1 Junction Performance of Critical Junctions in Year 2033

Ref. No.	Junctions	Type of Junction	RC/ RFC (1)(2)					
			Reference Year 2033			Design Year 2033		
			AM Peak	Noon Peak	PM Peak	AM Peak	Noon Peak	PM Peak
J1	Hoi Yu Street/ Hoi Chak Street	Priority	0.052	0.059	0.039	0.207	0.317	0.288
J2	Java Road/ Hoi Yu Street	Signalised	18%	74%	80%	13%	56%	72%
J3	King's Road/ Java Road	Signalised	>100%	>100%	>100%	>100%	>100%	>100%
J4	Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street	Signalised	61%	>100%	72%	60%	>100%	72%
J5	King's Road/ Finnie Street	Signalised	92%	96%	40%	92%	96%	40%
J6	King's Road/ Model Lane	Signalised	>100%	>100%	93%	>100%	>100%	84%
J7	Java Road/ Man Hong Street	Signalised	76%	85%	82%	73%	81%	77%
J8	King's Road/ Healthy Street West/ Man Hong Street	Signalised	95%	87%	97%	92%	84%	93%
J9	Tsat Tsz Mui Road/ Healthy Street West	Signalised	>100%	>100%	>100%	>100%	>100%	>100%
J10	Tsat Tsz Mui Road/ Tin Chiu West	Signalised	58%	75%	83%	57%	73%	81%
J11	King's Road/ Tin Chiu Street	Signalised	>100%	>100%	>100%	>100%	>100%	>100%

Notes: (1) Zero Reserve Capacity (RC) represents signalised junction operating at capacity. Positive RC represents signalised junction operating with spare capacity. Negative RC means signalised junction is overloaded.

(2) Ratio of Flow to Capacity (RFC) = 1.0 represents priority junction/roundabout operating at capacity. RFC < 1.0 represents priority junction/roundabout operating with spare capacity. RFC>1.0 means priority junction/roundabout is overloaded.

5.1.2 As indicated in **Table 5.1** above, all the identified critical junctions would still be operating within their capacities in both the reference and design scenarios in Year 2033. However, the junction performance of J2 would drop from 18% to 14% (i.e. less than 15% which is the preferable benchmark). In addition to the traffic flows to be generated by the new developments in Taikoo Place area (the newly opened Taikoo Place 2 building which is expected not yet fully occupied and the potential Pan Hoi Street redevelopment), it is anticipated that the left turn traffic of Java Road (eastbound) at the junction of Java Road/ Hoi Yu Street would become busier. In this regard, junction improvement to the Java Road/ Hoi Yu Street, in particular the left turn movement, is suggested. Details of the proposed junction improvement works are shown in **Figure 5.1**.

5.2 Proposed Junction Improvement Measure

5.2.1 Under the proposed junction improvement scheme, additional traffic lane (i.e. two lanes in total) would be provided for the left turn traffic of Java Road (eastbound). Alignment of the existing kerbline outside the police station is proposed to be modified slightly to provide more manoeuvring space for the traffic turning to Hoi Yu Street. With due consideration the site constraint of the existing high mast lighting at J2, it is proposed to convert the section of Hoi Yu Street (westbound) from existing 2-lane to a 1-lane carriageway. Hence the disturbance and nuisance during the construction could also be minimised.

5.2.2 Besides, the footpath at Hoi Yu Street outside the police station and the existing cautionary pedestrian crossing at Hoi Chak Street would also be widened under the proposed junction improvement scheme.

5.2.3 On the other hand, improvement to the junction of Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street, i.e. J4, is also proposed to cope with the pedestrian walking environment. Details please refer to **Section 5.4**.

5.2.4 Operational performances of J1 (i.e. Junction Hoi Yu Street/ Hoi Chak Street), J2 (i.e. Java Road/ Hoi Yu Street) and J4 (i.e. Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street) under the proposed improvement scheme were assessed and the result is summarized in **Table 5.2** below.

Table 5.2 Junction Performance of J1, J2 and J4 Under Proposed Improvement Schemes

Ref. No.	Junctions	Type of Junction	Year 2033 RC/ RFC [1][2]					
			Existing Layout			With Improvement		
			AM Peak	Noon Peak	PM Peak	AM Peak	Noon Peak	PM Peak
J1	Hoi Yu Street/ Hoi Chak Street	Priority	0.175	0.303	0.275	0.207	0.317	0.288
J2	Java Road/ Hoi Yu Street[4]	Signalised	14%	57%	72%	40%	25%	57%
J4[3]	Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street	Signalised	60%	>100%	72%	27%	50%	43%

Notes: (1) Zero Reserve Capacity (RC) represents signalised junction operating at capacity. Positive RC represents signalised junction operating with spare capacity. Negative RC means signalised junction is overloaded.

(2) Ratio of Flow to Capacity (RFC) = 1.0 represents priority junction/roundabout operating at capacity. RFC < 1.0 represents priority junction/roundabout operating with spare capacity. RFC>1.0 means priority junction/roundabout is overloaded.
(3) The junction of J4 will be modified to improve the pedestrian situation as shown in **Figure 5.2**.
(4) It is understood that TD has planned to convert the existing cautionary crossing at Java Road/ Hoi Yu Street to a signalised crossing . It has been adopted into our proposed improvement scheme.

5.2.5 Swept path analysis of long vehicles accessing the junctions under the proposed arrangement have also been conducted and the drawings are attached in **Appendix B** for reference.

5.3 Pedestrian Assessment

5.3.1 Based on the estimated pedestrian generations by the proposed development as summarised in **Table 4.12** and the key pedestrian routes accessing the proposed development as showed in **Figure 2.6**., performance of the identified critical sections of footpath in Year 2033 were assessed and the result is shown in **Figure 3.16** summarized in **Table 5.3** below.

Table 5.3 Year 2033 Performances of Identified Critical Sections of Footpaths/Cautionary Crossing

Critical Footpath/ Cautionary Crossing[1]	Clear Width (m)	Eff. Width (m)[2]	Peak Period		Reference Year 2033			Design Year 2033		
					2-way Pedestrian Peak Flow (ped/15-min)[4]	Flow Rate (ped/min/m)[4]	LOS[5]	2-way Pedestrian Peak Flow (ped/15-min)[4]	Flow Rate (ped/min/m)[4]	LOS[5]
Location A Hoi Yu St.	3.5	2.5	Weekday	AM	70	1.9	A	105	2.8	A
				Noon	65	1.7	A	145	3.9	A
				PM	105	2.8	A	180	4.8	A
			Weekend	AM	95	2.5	A	130	3.5	A
				Noon	70	1.9	A	150	4.0	A
				PM	105	2.8	A	185	4.9	A
Location B Hoi Yu St.	3.5	2.5	Weekday	AM	70	1.9	A	100	2.7	A
				Noon	65	1.7	A	130	3.5	A
				PM	105	2.8	A	170	4.5	A
			Weekend	AM	95	2.5	A	125	3.3	A
				Noon	70	1.9	A	135	3.6	A
				PM	105	2.8	A	170	4.5	A
Location C Java Road	2.8	1.8	Weekday	AM	205	7.6	A	230	8.5	A
				Noon	365	13.5	A	410	15.2	A
				PM	160	5.9	A	205	7.6	A
			Weekend	AM	130	4.8	A	155	5.7	A
				Noon	75	2.8	A	125	4.6	A
				PM	90	3.3	A	135	5.0	A
Location D	3	2	Weekday	AM	65	2.2	A	70	2.3	A

Java Road				Noon	50	1.7	A	70	2.3	A
				PM	100	3.3	A	120	4.0	A
			Weekend	AM	25	0.8	A	25	0.8	A
				Noon	35	1.2	A	55	1.8	A
				PM	50	1.7	A	65	2.2	A
Location E Java Road	2.8	1.8	Weekday	AM	35	1.3	A	35	1.3	A
				Noon	90	3.3	A	95	3.5	A
				PM	50	1.9	A	55	2.0	A
			Weekend	AM	15	0.6	A	15	0.6	A
				Noon	15	0.6	A	20	0.7	A
				PM	20	0.7	A	25	0.9	A
Location F Hoi Yu St.	2.8	1.8	Weekday	AM	125	4.6	A	125	4.6	A
				Noon	320	11.9	A	320	11.9	A
				PM	120	4.4	A	120	4.4	A
			Weekend	AM	20	0.7	A	20	0.7	A
				Noon	25	0.9	A	25	0.9	A
				PM	30	1.1	A	30	1.1	A
Location H Hoi Chak St.	4	3	Weekday	AM	15	0.3	A	20	0.4	A
				Noon	25	0.6	A	35	0.8	A
				PM	25	0.6	A	35	0.8	A
			Weekend	AM	15	0.3	A	20	0.4	A
				Noon	15	0.3	A	25	0.6	A
				PM	20	0.4	A	30	0.7	A
Location I Model Lane	2	1	Weekday	AM	700	46.7	D	730	48.7	D
				Noon	190	12.7	A	265	17.7	B
				PM	495	33.0	D	565	37.7	D
			Weekend	AM	100	6.7	A	135	9.0	A
				Noon	85	5.7	A	155	10.3	A
				PM	185	12.3	A	255	17.0	B
Location J Model Lane	2.6	1.6	Weekday	AM	200	8.3	A	200	8.3	A
				Noon	55	2.3	A	55	2.3	A
				PM	560	23.3	C	560	23.3	C
			Weekend	AM	25	1.0	A	25	1.0	A
				Noon	35	1.5	A	35	1.5	A
				PM	55	2.3	A	55	2.3	A

Notes: (1) Refer to **Figure 3.15**.
(2) Effective width is clear width deducting the horizontal clearance, generally 0.5m (i.e. Dead Width) on each side.
(3) Min. 0.8m clear width shall be adopted according to HCM 2000.
(4) Observed 2-way Ped. Peak Flow rounded to the nearest 5; Flow Rate rounded to the nearest 0.1.
(5) According to the Highway Capacity Manual 2000 (HCM 2000), the criteria range from LOS "A" (best) to LOS "F" (worst). In general, LOS C is considered as an optimal level of service and is preferable for all new walkways.

5.3.2 The result in the above **Table 5.3** indicated that all the identified critical sections of footpaths/cautionary crossing would be operating with a LOS level of "A" or above except the Model Lane.

5.3.3 As indicated in **Table 5.3** above, it is revealed that the footpaths of Model Lane (Location I and J) are currently operating at their capacity even without the proposed development. Meanwhile, the assessment result showed that insignificant traffic impact to the footpaths of Model Lane would be induced by the proposed development. Also, it is anticipated that the proposed elevated footbridge over IEC would diverge some pedestrians from Model Lane to Finnie Street hence the performance of footpaths of Model Lane would be improved in the

future. In this regard, no improvement scheme for the footpaths of Model Lane would be proposed under this study.

Table 5.4 Year 2033 Performances of Identified Critical Sections of Crossing

Critical Crossing (1)	Peak Period		Eff. Crosswalk Width (m)	LOS of Crosswalk (3)	Reference Year 2033			Design Year 2033		
					2-way Pedestrian Peak Flow (ped/15-min)(2)	LOS of Crosswalk (3)	LOS of Waiting Space(3)	2-way Pedestrian Peak Flow (ped/15-min)(2)	LOS of Crosswalk (3)	LOS of Waiting Space(3)
Location G Java Road	Weekday	AM	4	North:18 South:16.8	35	A	A	40	A	A
		Noon			45	A	A	65	A	A
		PM			100	A	A	120	A	A
	Weekend	AM			25	A	A	30	A	A
		Noon			25	A	A	40	A	A
		PM			30	A	A	45	A	A
Location K Hoi Tai Street	Weekday	AM	3.1	North:11 South:15.6	25	A	A	25	A	A
		Noon			75	A	B	75	A	B
		PM			25	A	A	25	A	A
	Weekend	AM			30	A	A	30	A	A
		Noon			30	A	A	30	A	A
		PM			15	A	A	15	A	A
Location L Hoi Kwong Street	Weekday	AM	4.2	North:12.8 South:31.5	295	B	A	295	B	A
		Noon			445	C	B	445	C	C
		PM			295	B	A	295	B	A
	Weekend	AM			50	A	A	50	A	A
		Noon			160	A	A	160	A	A
		PM			130	A	A	130	A	A
Location M Finnie Street	Weekday	AM	2.5	North:14.3 South:16.2	85	B	A	85	B	A
		Noon			550	F	C	550	F	C
		PM			195	E	A	195	E	A
	Weekend	AM			65	A	A	65	A	A
		Noon			170	D	A	170	D	A
		PM			145	C	A	145	C	A
Location N Finnie Street	Weekday	AM	2.5	North:16.2 South:9.5	115	A	A	150	A	A
		Noon			570	D	C	645	D	C
		PM			230	B	A	305	C	A
	Weekend	AM			65	A	A	100	A	A
		Noon			140	A	A	215	B	A
		PM			125	A	A	200	B	A
Location O Hoi Tai Street	Weekday	AM	2	North:16.2 South:11.6	55	A	A	90	B	A
		Noon			75	B	A	150	C	B
		PM			65	B	A	145	C	A
	Weekend	AM			90	B	A	125	C	A
		Noon			125	C	A	200	D	A
		PM			115	C	A	190	D	A

Notes: (1) Refer to **Figure 3.15**.
(2) Observed 2-way Ped. Peak Flow rounded to the nearest 5; Flow Rate rounded to the nearest 0.1.
(3) According to the Highway Capacity Manual 2000 (HCM 2000), the criteria range from LOS "A" (best) to LOS "F" (worst). In general, LOS C is considered as an optimal level of service and is preferable for all new walkways.
(4) Detailed calculations of the identified critical sections of crossing are attached in **Appendix A2**.

5.3.4 The result in the above **Table 5.4** indicated that the identified critical crossings at Java Road would be operating with a LOS level of "B" or above. However, the identified critical crossings at Hoi Kwong Street, Finnie Street and Hoi Tai Street would be operating at their capacities.

5.4 Proposed Pedestrian Improvement Measure

5.4.1 It is proposed to realign and re-arrange the pedestrian crossings at the junction of Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street as shown in **Figure 5.2** to improve the pedestrian walking environment. It is understood that TD has planned to convert the existing cautionary crossing at Java Road/ Hoi Yu Street to a signalised crossing. It has been adopted into our proposed improvement scheme as shown in **Figure 5.1**.

5.4.2 Operational performances of the crossings at the junction of Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street under the proposed improvement scheme were assessed and the result is summarized in **Table.5** below.

Table 5.5 Performances of Identified Crossing Under Proposed Improvement Scheme

Critical Crossing (1)	Peak Period		Existing Layout					With Improvement				
			Eff. Crosswalk Width (m)	Reference Year 2033		Design Year 2033		Eff. Crosswalk Width (m)	Reference Year 2033		Design Year 2033	
				LOS of Crosswalk (2)	LOS of Waiting Space (2)	LOS of Crosswalk (2)	LOS of Waiting Space (2)		LOS of Crosswalk (2)	LOS of Waiting Space (2)	LOS of Crosswalk (2)	LOS of Waiting Space (2)
Location G' Java Road	Weekday	AM	4	A	A	A	A	5	A	A	A	A
		Noon		A	A	A	A		A	A	A	A
		PM		A	A	A	A		A	A	A	A
	Weekend	AM		A	A	A	A		A	A	A	A
		Noon		A	A	A	A		A	A	A	A
		PM		A	A	A	A		A	A	A	A
Location F1'(3) Hoi Yu Street	Weekday	AM	/	/	/	/	/	5	A	A	A	A
		Noon		/	/	/	/		C	A	C	A
		PM		/	/	/	/		A	A	A	A
	Weekend	AM		/	/	/	/		A	A	A	A
		Noon		/	/	/	/		A	A	A	A
		PM		/	/	/	/		A	A	A	A
Location F2'(3) Hoi Yu Street	Weekday	AM	/	/	/	/	/	5	B	A	B	A
		Noon		/	/	/	/		C	A	C	A
		PM		/	/	/	/		A	A	A	A
	Weekend	AM		/	/	/	/		A	A	A	A
		Noon		/	/	/	/		A	A	A	A
		PM		/	/	/	/		A	A	A	A
Location M' Hoi Tai Street	Weekday	AM	2.5	B	A	B	A	6	A	A	A	A
		Noon		F	C	F	C		C	B	C	B
		PM		E	A	E	A		B	A	B	A
	Weekend	AM		A	A	A	A		A	A	A	A
		Noon		D	A	D	A		B	A	B	A
		PM		C	A	C	A		A	A	A	A
Location N' Hoi Tai Street	Weekday	AM	2.5	A	A	A	A	5.5	A	A	A	A
		Noon		D	C	D	C		C	B	C	B
		PM		B	A	C	A		A	A	A	A
	Weekend	AM		A	A	A	A		A	A	A	A
		Noon		A	A	B	A		A	A	A	A
		PM		A	A	B	A		A	A	A	A
Location O' Hoi Tai Street	Weekday	AM	2	A	A	B	A	5	A	A	A	A
		Noon		B	A	C	B		A	A	A	A
		PM		B	A	C	A		A	A	A	A
	Weekend	AM		B	A	C	A		A	A	A	A
		Noon		C	A	D	A		B	A	B	A
		PM		C	A	D	A		B	A	B	A

Notes: (1) Refer to **Figure 5.2**.

(2) According to the Highway Capacity Manual 2000 (HCM 2000), the criteria range from LOS “A” (best) to LOS “F” (worst). In general, LOS C is considered as an optimal level of service and is preferable for all new walkways.

(3) It is understood that TD has planned to convert the existing cautionary crossing at Java Road/ Hoi Yu Street to a signalised crossing . It has been adopted into our proposed improvement scheme.

5.4.3 As shown in **Table 5.5** above, the performance of the critical crossings would be improved under the proposed improvement schemes although some of their performance still could not reach a level of "C" of above (i.e. Location F1’ & F2’ on Hoi Yu Street and Location M' on Hoi Tai Street) owing to the constraints of limited space at the well-developed urban area.

6. SUMMARY AND CONCLUSION

6.1 Summary

6.1.1 The application site is situated at the land on north of Hoi Yu Street and the Island East Corridor ("IEC") along the Quarry Bay Waterfront Promenade. It consists of the part of land lot IL8590 R.P. and IL 8723 R.P., and the adjoining government land (which currently used as a temporary open space car parking) ("the Land" or "the Application Site"). Location of the application site is shown in **Figure 2.1**.

6.1.2 In 2001, General Building Plans ("GBPs") were approved in compliance with the "Industrial" zone in effect at the time for an Industrial Building ("the approved industrial building") for the lot IL8590 R.P. and IL8723 R.P.. However, construction works of the approved industrial building was not commenced over a decade. In order to provide a better waterfront to the public and to tally with the harbourfront enhancement proposal/ the Boardwalk by the Development Bureau and relevant parties, the previous owner of the Land ("the previous owner") thus willing to partly surrender the Original Site in exchange for the government land zoned OU(1) to form a new Site with an area of 8,532m^2 for a proposed waterfront development comprising of 4 hotel blocks, an office building, and some retail and Food & Beverage facilities and OU for elevated walkway. A section 16 planning application for the aforesaid waterfront development had been submitted to the Town Planning Board (TPB) for consideration in 2018 and it was approved with conditions in 2019 ("the S16 Approved Scheme").

6.1.3 However, with reference to the Planning Statement, the implementation of the Approved Scheme was not possible, nor was the sale of the Approved Scheme. A stalemate has therefore been reached with the Approved Scheme. As the economic outlook has significantly changed since the scheme was approved in 2019 and both office and hotels are facing a difficult time with oversupply in the areas, the new owner, Marine Riches III ("the Applicant"), would like to revisit the use of the Land.

6.1.4 With the use of "Flat" under Column 2 of the latest OZP, the applicant intends to provide a space for specific cultural and tourism features with residential units. A Section 12A planning application is therefore required to be submitted for TPB's consideration.

6.1.5 It is proposed to provide a combined waterfront development comprising of 3 domestic blocks with maximum 225 residential units, 1 non-domestic block for cultural, leisure and entertainment uses, and some retails and Food & Beverage facilities. A new waterfront cultural venue for exhibitions or multi-function events will be provided. Although no specify events is planned for the time being, such events would be some cultural digital museum or art related exhibitions, etc. with target visitor trips of about 5,000 guests per day.

6.1.6 The proposed development is planned to be completed by 2030 tentatively.

Development Access and Internal Transport Facilities Provision

6.1.7 The existing vehicular access of the approved industrial building is located at the local street connects perpendicularly to Hoi Yu Street. A separated vehicular access is provided at Hoi Yu Street for the existing temporary parking area. With the proposed development, a combined vehicular access at Hoi Yu Street will be provided on the east side of the site for access to its basement car park.

6.1.8 All the car parking and servicing provision will be provided in accordance with the upper-end of the HKPSG requirement in order to provide more parking supply to the neighbourhood area. Additional 50 private car parking spaces, 5 bays for coaches and 3 nos. loading/ unloading bays will be provided for the cultural venue based on the estimated traffic trips by the cultural venue.

6.1.9 In summary, the proposed car parking and servicing provision are summarised below:

Internal Transport Provision		Dimension (L) x (W) x (H)	Residential	Retail and F&B Facilities	Cultural Facilities	Total
Car parking		5m x 2.5m x 2.4m	173	31	50	269
Visitor parking			15	-	-	
Motorcycle parking		2.4m x 1m x 2.4m	3	4		7
Loading/ Unloading	LGV	7m x 3.5m x 3.6m	2	4	-	6
	MGV/HGV	11m x 3.5m x 4.7m	1	2	3	6
Coach Parking		12m x 3.5m x 3.8m	-	-	5	5

Remarks: (1) Including 4 nos. accessible parking spaces in size of 5m x 3.5m x 2.4m.

Future Pedestrian Connection & The Planned Elevated Walkway

6.1.10 Hoi Yu Street is ended with a cul-de-sac at its east-end. At present, pedestrians accessing the Application Site from the nearest MTR Station (i.e. Quarry Bay Exit C) or the nearby public transport services mainly travel from King's Road, Java Road to Hoi Yu Street. There is no crossing point or footpath provided on the southern part of Hoi Yu Street. Hence, all pedestrians accessing the area rely on the northern footpath of Hoi Yu Street, which the width is about 3.6m at the west-end (i.e. outside the North Point Police Station) but eventually reduced to about 1.6m near the Quarry Bay Salt Water Pumping Station and in front of the Application Site.

6.1.11 The pedestrian network in the area has undergone a major change with the Boardwalk project to be completed in end 2025. The existing footpath near the Quarry Bay Salt Water Pumping Station and in front of the Application Site has been widen to minimum 3.5m. A new pedestrian crossing will also be provided upon full completion of the Boardwalk project, including the supporting facilities. As such, a new route is expected to be created for pedestrian accessing Hoi Yu Street. There is also an alternative pedestrian access for pedestrians coming from the south direction or Quarry Bay MTR Exit A & B via the access road from Hoi Chak Street to the FEHD Depot which runs parallel to the IEC.

6.1.12 Given the enhanced at-grade pedestrian facilities in the future, in particular the creation of new pedestrian routes by the Boardwalk, there is no justification for an elevated walkway

above Quarry Bay Park to be implemented as part of this application. Instead, a short elevated footbridge walkway over IEC is proposed subject to future agreement between the Applicant and the Government. The proposed elevated walkway will be constructed by the developer and it is proposed to be maintained and managed by the relevant Government department.

Vehicular Traffic Impact Assessment

6.1.13 To appraise the existing traffic conditions in the study area, classified traffic counting surveys were conducted to cover the surrounding road network affected by the proposed development. The operational performances of the identified critical junctions were assessed with the observed traffic flows collected in 2025. The result of the assessment indicated that all critical junctions identified in the study are operating within their capacities.

6.1.14 The year 2033 reference traffic flows were derived from the observed 2025 traffic flows adopting a conservative growth rate +0.5% per annum. The reference traffic forecast has also taken into account the major planned and committed developments in the vicinity of the proposed development.

6.1.15 The traffic generations and attractions of the proposed development were estimated according to the trip generation rates given from the latest TPDM. Also, the traffic trips to be generated by the cultural venue/ digital museum were estimated by making reference to the traffic modal split mentioned in Chapter 3 of the "Public Transport Strategy Study, June 2017" as published by Transport and Housing Bureau. It is anticipated that the proposed development would generate an additional two-way traffic trips of some 68 pcu/hr in the AM peak, some 163 pcu/hr in Noon peak, and some 163 pcu/hr during the PM peak.

6.1.16 With the proposed development, the estimated traffic flows in design year 2033 were estimated by superimposing the traffic generations from the proposed development over the year 2033 reference traffic flows on the road network covered within the study area.

6.1.17 The performance of those critical junctions identified in the study area would all be operating within their capacities in both the reference and design scenarios in year 2033. It revealed that the proposed development would not induce significant traffic impacts on the adjacent road network.

6.1.18 Hoi Yu Street is the only carriageway connects to the application site. Together with the traffic flows to be generated by the new developments in Taikoo Place area (the newly opened Taikoo Place 2 building which is expected yet fully occupied and the potential Pan Hoi Street redevelopment), it is anticipated that the left turn traffic of Java Road (eastbound) at the junction of Java Road/ Hoi Yu Street would become busier. Junction improvement measure to the Java Road/ Hoi Yu Street, in particular the left turn movement, is suggested.

6.1.19 Under the proposed junction improvement scheme, additional traffic lane (i.e. two lanes in total) would be provided for the left turn traffic of Java Road (eastbound). Alignment of the existing kerbline outside the police station would be modified slightly to provide more manoeuvring space for the traffic turning to Hoi Yu Street. Section of Hoi Yu Street

(westbound) would also be converted from existing 2-lane to a 1-lane carriageway to maximize the overall junction capacity.

Pedestrian Traffic Impact Assessment

6.1.20 Capacities of the identified critical sections of footpaths and crossing at Hoi Yu Street, Java Road, Model Lane and Hoi Chak Street/ Finnie Street/ Hoi Tai Street were assessed. The performance assessment indicated that all the identified critical sections of footpaths/cautionary crossing and the identified critical crossings at Java Road would be operating with a LOS of not less than C during peak hours with the proposed development. However, the identified critical crossings at Hoi Kwong Street, Finnie Street and Hoi Tai Street would be operating at their capacities.

6.1.21 It is understood that TD has planned to convert the existing cautionary crossing at Java Road/ Hoi Yu Street to a signalised crossing. It has been adopted into our proposed improvement scheme. Besides, improvement measure to the crossings at Hoi Chak Street/ Finnie Street/ Hoi Tai Street was therefore proposed. By converting the staggered crossings to straight crossing at the junction of Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street, the performance of the crossings at Hoi Tai Street could be improved but still could not reach a level of C or above.

6.2 Conclusion

6.2.1 Based on the above-mentioned, it is concluded that the proposed development would not induce significant traffic impacts on the adjacent road network and is therefore supported from traffic engineering point of view.