

# **Appendix 3**

## **Traffic Impact Assessment**

**Proposed Flat with Shop and  
Services / Eating Place in “Commercial” zone  
on draft Wan Chai Outline zoning plan no. S/H5/32  
at 42-44 Yiu Wa Street and 28-29 Canal Road East,  
Causeway Bay, Hong Kong**

**Traffic Impact Assessment  
Final Report  
April 2026**

**Prepared by: CKM Asia Limited**

Proposed Flat with Shop and Services / Eating Place in “Commercial”  
zone on draft Wan Chai Outline zoning plan no. S/H5/32 at 42-44 Yiu Wa  
Street and 28-29 Canal Road East, Causeway Bay, Hong Kong

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**Proposed Flat with Shop and Services / Eating Place in “Commercial”  
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Street and 28-29 Canal Road East, Causeway Bay, Hong Kong**

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**Proposed Flat with Shop and Services / Eating Place in “Commercial”  
zone on draft Wan Chai Outline zoning plan no. S/H5/32 at 42-44 Yiu Wa  
Street and 28-29 Canal Road East, Causeway Bay, Hong Kong**

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## 1.0 INTRODUCTION

### Background

- 1.1 The subject site is located at 42 – 44 Yiu Wa Street and 28 – 29 Canal Road East in Causeway Bay (the “Subject Site”), and the location of Subject Site is shown in **Figure 1.1**.
- 1.2 On 20 October 2023, Buildings Department approved the General Building Plan (BD ref.: BD 2/3010/17) (the “**Approved GBP**”) for a commercial building at the Subject Site providing retail use with gross floor area (“GFA”) of 4,111.538m<sup>2</sup>. The **Approved GBP** does not provide internal transport facilities. The GBP approval letter is found in **Appendix 1**.
- 1.3 The Owner would now like to develop the Subject Site into a 26-storey residential building (the “**Proposed Development**”) providing: (i) 66 residential units with an average GFA of about 40m<sup>2</sup>, and (ii) retail use with GFA of 162.483m<sup>2</sup>.
- 1.4 Against this background, CKM Asia Limited, a traffic and transportation planning consultancy firm, was commissioned to conduct a Traffic Impact Assessment (“TIA”) in support of the **Proposed Development**. The report presents the findings of the traffic impact assessment for the **Proposed Development**.

### Scope of the Assessment

- 1.5 The main objectives of this TIA are as follows:
- To assess the existing traffic conditions in the vicinity of the Subject Site;
  - To quantify the traffic generated by the **Proposed Development**; and
  - To examine the traffic impact on the local road network in the vicinity of the Subject Site.

### Contents of the Report

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

Chapter Two	- describes the existing situation;
Chapter Three	- outlines the development proposal;
Chapter Four	- presents the traffic impact analysis; and
Chapter Five	- summarises the overall conclusion

## 2.0 THE EXISTING SITUATION

### The Subject Site

- 2.1 The Subject Site is located at 42 – 44 Yiu Wa Street and 28 – 29 Canal Road East in Causeway Bay, i.e., at the junction of Canal Road East / Yiu Wa Street. Along Yiu Wa Street, the Subject Site has a length of only 14m, and along Canal Road East 13.2m. The **Approved GBP** does not provide internal transport facilities. The foundation work for the **Approved GBP** was completed in late-2023, however, construction work has stopped since early-2024.

### Existing Road Network

- 2.2 Yiu Wa Street is a local distributor, and it is of single carriageway with 1-lane for eastbound traffic. It connects Canal Road East to the east with Matheson Street to the west.
- 2.3 Canal Road East is a district distributor, and is of single carriageway 3 lane southbound. The portion of Canal Road East fronting the Subject Site connects the slip road of Canal Road Flyover to the north and Leighton Road to the south.
- 2.4 Matheson Street is a local distributor, and is of single carriageway 1 - 2 lanes northbound. It connects Russell Street to the north and Leighton Road to the south.

### Traffic Survey

- 2.5 To quantify the traffic flows at the junctions chosen for the capacity analysis, manual classified count was conducted on Friday, 6 March 2026 during the AM and PM peak periods. The locations of the surveyed junctions are presented in **Figure 2.1** and their layouts are shown in **Figures 2.2 to 2.4**.
- 2.6 The surveyed junctions include the following:
- J1: Signalised Junction of Sharp Street East / Canal Road East / Southbound Slip Road of Canal Road Flyover;
  - J2: Signalised Junction of Leighton Road / Canal Road East; and
  - J3: Signalised Junction of Matheson Street / Sharp Street East
- 2.7 The traffic counts were classified by vehicle type to enable traffic flows in passenger car units (“pcu”) to be calculated. From the survey, the AM and PM peak hours were found to be between 0730 – 0830 and 1730 – 1830 hours respectively, and these traffic flows are presented in **Figure 2.5**.

### Operational Performance of the Surveyed Junctions

- 2.8 The existing operational performance of the surveyed junctions is calculated based on the observed traffic counts and the analysis is undertaken using the methods outlined in Volume 2 of Transport Planning and Design Manual (“TPDM”). The existing operational performance of the junctions are summarised in **Table 2.1** and the detailed calculations are found in **Appendix 2**.

TABLE 2.1 EXISTING JUNCTION OPERATIONAL PERFORMANCE

Ref.	Junction	Type of Junction	Parameter <sup>(1)</sup>	AM Peak Hour	PM Peak Hour
J1	Sharp Street East / Canal Road East / Southbound Slip Road of Canal Road Flyover	Signalised	RC	> 100%	> 100%
J2	Leighton Road / Canal Road East	Signalised	RC	> 100%	> 100%
J3	Matheson Street / Sharp Street East	Signalised	RC	72%	51%

Notes: <sup>(1)</sup> RC – reserve capacity

### Public Transport Facilities

- 2.9 The Subject Site is located close to public transport services and the stops are located some 100 metres or less than 1 minutes’ walk away. The closest entrance to the Causeway Bay MTR Station is in Times Square, which is about 200 metres or less than 3 minutes’ walk away.
- 2.10 Details of the public transport services operating in the vicinity of the Subject Site are presented in **Figure 2.6** and **Table 2.2**.

TABLE 2.2 FRANCHISED BUS AND PUBLIC LIGHT BUS SERVICES OPERATING CLOSE TO THE SUBJECT SITE

Route	Routing	Frequency (minutes)
KMB 108	Kai Yip – Braemar Hill	10 – 30
KMB 600	Anderson – Central (Rumsey Street)	15 – 30
KMB 603	Ping Tin – Central Ferry Piers	6 – 30
KMB 603A	Ping Tin – Central Market	AM, PM Peak
KMB 673	Sheung Shui – Central (Hong Kong Station)	20 – 30
KMB 673A	Central (Hong Kong Station) – Sheung Shui	AM, PM Peak
KMB 673P	Sheung Shui – Central (Rumsey Street)	AM Peak
KMB 936	Tsuen Wan (Shek Wai Kok) – Causeway Bay (Cotton Path)	15 – 30
KMB 936A	Tsuen Wan (Shek Wai Kok) – Causeway Bay (Cotton Path)	AM, PM Peak
KMB 960	Tuen Mun (Kin Sang Estate) – Exhibition Centre Station	5 – 25
KMB 960C	Tuen Mun (Fu Tai Estate) – Causeway Bay (Victoria Park)	AM, PM Peak
KMB 960P	Causeway Bay – Hung Shui Kiu	AM, PM Peak
KMB 960S	Causeway Bay – Tuen Mun (Fu Tai Estate)	AM, PM Peak
KMB 961	Tuen Mun (Shan King Estate) – Wan Chai (HKCECE)	7 – 25
KMB 961P	Tuen Mun (Leung King Estate) – Causeway Bay	AM Peak
KMB 961S	Tuen Mun (Leung King Estate) – Causeway Bay	AM Peak
KMB 968	Yuen Long (West) – Causeway Bay (Tin Hau)	5 – 25
KMB 968A	Yuen Long (West) – Causeway Bay (Tin Hau)	AM Peak
KMB N368	Yuen Long (West) – Central (Macao Ferry)	Overnight
KMB N373	Fanling (Luen Wo Hui) – Central (Macao Ferry)	Overnight
KMB P968	Yuen Long (West) – Causeway Bay (Tin Hau)	AM, PM Peak
KMB P960	Siu Hong Station (North) – Exhibition Centre Station	AM, PM Peak
KMB/CTB 101	Kwun Tong (Yue Man Square) – Kennedy Town	4 – 27
KMB/CTB 101X	Kennedy Town – Kwun Tong (Yue Man Square)	AM, PM Peak
KMB/CTB 103	Chuk Yuen Estate – Pokfield Rd	14 – 30
KMB/CTB 104	Kennedy Town – Sham Shui Po (Pak Tin Estate)	10 – 30
KMB/CTB 107	Kowloon Bay – Wah Kwai	5 – 25
KMB/CTB 107P	Hung Hom (Laguna Verde) – Cyberport	PM Peak
KMB/CTB 109	Ho Man Tin – Central (Macao Ferry)	8 – 30
KMB/CTB 111	Ping Shek / Choi Hung Station – Central (Macao Ferry)	5 – 30
KMB/CTB 111P	Choi Fook – Central (Macao Ferry)	AM, PM Peak
KMB/CTB 112	North Point – So Uk	5 – 30

KMB/CTB 113	Choi Hung – Kennedy Town (Belcher Bay)	15 – 30
KMB/CTB 116	Tsz Wan Shan (Central) – Quarry Bay	4 – 20
KMB/CTB 115	Kowloon City Ferry – Central (Macao Ferry)	9 – 30
KMB/CTB 115P	Laguna Verde – Central (Macao Ferry)	AM Peak
KMB/CTB 117	Sham Shui Po (Yen Chow St) – Happy Valley (Lower)	16 – 30
KMB/CTB 170	Shatin Station – Wah Fu (Central)	15 – 30
KMB/CTB 171	Lai Chi Kok – South Horizons	12 – 30
KMB/CTB 171A	Lei Tung Estate – Lai Chi Kok	AM Peak
KMB/CTB 182	Yu Chui Court – Central (Macao Ferry)	15 – 30
KMB/CTB 182X	Central (Macao Ferry) – Yu Chui Court	PM Peak
KMB/CTB 307	Tai Po Central – Central (Central Ferry Piers)	12 – 30
KMB/CTB 601	Po Tat – Admiralty Station (East)	6 – 25
KMB/CTB 601P	Po Tat – Sheung Wan	AM, PM Peak
KMB/CTB 619	Shun Lee – Central (Macao Ferry)	7 – 27
KMB/CTB 619X	Shun Lee – Central (Macao Ferry)	AM, PM Peak
KMB/CTB 621	Laguna City – Central (Hong Kong Station)	AM, PM Peak
KMB/CTB 671	Diamond Hill Station – Ap Lei Chau Lee Lok St	15 – 45
KMB/CTB 678	Sheung Shui – Causeway Bay	AM, PM Peak
KMB/CTB 680	Lee On – Admiralty Station (East)	10 – 30
KMB/CTB 680B	Chevalier Garden Bus Terminus – Admiralty Station (East)	AM Peak
KMB/CTB 680P	Wu Kai Sha Station – Admiralty Station (East)	AM Peak
KMB/CTB 680X	Wu Kai Sha Station – Central (Macao Ferry)	AM, PM Peak
KMB/CTB 681	Central (Hong Kong Station) – Ma On Shan Town Centre	9 – 30
KMB/CTB 681P	Yiu On – Sheung Wan	AM, PM Peak
KMB/CTB 690	Tseung Kwan O (Hong Sing Garden) – Central	20 – 30
KMB/CTB 690S	Hang Hau – Central (Exchange Square) (via Lohas Park)	AM, PM Peak
KMB/CTB 914	Hoi Lai Estate – Causeway Bay (Tin Hau)	13 – 30
KMB/CTB 948	Tsing Yi (Cheung On Estate) – Causeway Bay (Tin Hau)	8 – 30
KMB/CTB 948A	Cheung On Estate – Causeway Bay (Tin Hau)	AM Peak
KMB/CTB 948B	Greenfield Garden – Causeway Bay (Tin Hau)	AM Peak
KMB/CTB 948P	Cheung On Estate – Causeway Bay (Tin Hau)	AM Peak
KMB/CTB 948X	Cheung Wang – Causeway Bay (Tin Hau)	AM Peak
KMB/CTB 985	Admiralty Station (East) – Mei Tin	AM, PM Peak
KMB/CTB 985A	Mei Tin Estate (Mei Chi House) – Wan Chai (Hennessy Road)	AM Peak
KMB/CTB 985B	Tin Sam Village – Wan Chai (Hennessy Road)	AM Peak
KMB/CTB N121	Central (Macao Ferry) – Ngau Tau Kok	Overnight
KMB/CTB N122	Mei Foo – Shau Kei Wan	Overnight
KMB/CTB N170	Shatin Central – Wah Fu (Central)	Overnight
KMB/CTB N171	Lai Chi Kok – Ap Lei Chau Estate	Overnight
KMB/CTB N182	Kwong Yuen – Central (Macao Ferry)	Overnight
KMB/CTB N307	Tai Wo – Sheung Wan	Overnight
KMB/CTB N619	Shun Lee – Central (Macao Ferry)	Overnight
KMB/CTB N680	Kam Ying Court – Central (Macao Ferry)	Overnight
KMB/CTB N691	Tiu Keng Leng – Central (Macao Ferry)	Overnight
CTB 1	Central (Macao Ferry) – Happy Valley (Upper)	12 – 25
CTB 1M	Exhibition Centre Station – Wong Nai Chung Gap (Circular)	15 – 30
CTB 1P	Wong Nai Chung Road (Broadwood Road) – Central	AM Peak
CTB 2	Grand Promenade – Central (Macao Ferry)	20 – 30
CTB 2A	Yiu Tung Estate – Exhibition Centre Station	5 – 27
CTB 2X	Grand Promenade – Exhibition Centre Station	6 – 20
CTB 5B	Felix Villas – Hong Kong Stadium	7 – 30
CTB 5X	Kennedy Town – Causeway Bay (Whitfield Road)	20 – 30
CTB 6X	Central (Exchange Square) – Stanley Market	10 – 29
CTB 8	Heng Fa Chuen – Exhibition Centre Station	12 – 25
CTB 8H	Siu Sai Wan (Island Resort) – Tung Wah Eastern Hospital	30
CTB 8P	Siu Sai Wan (Island Resort) – Exhibition Centre Station	5 – 22
CTB 8X	Siu Sai Wan (Island Resort) – Happy Valley (Upper)	6 – 20
CTB 10	North Point Ferry Pier – Kennedy Town	8 – 30

CTB 11	Central (Ferry Piers) – Jardine's Lookout (Circular)	12 – 30
CTB 15B	The Peak – Wan Chai (Convention Centre)	PM Peak
CTB 19P	Shau Kei Wan – Tai Hang Road	AM Peak
CTB 23	North Point Ferry – Pokfield Road	7 – 20
CTB 23B	Braemar Hill – Park Road / Robinson Road	AM, PM Peak
CTB 25	Central (Pier 3) – Braemar Hill (Circular)	10 – 20
CTB 25A	Exhibition Centre Station – Braemar Hill (Circular)	12 – 30
CTB 26	Lai Tak Tsuen – Hollywood Road (Circular)	10 – 25
CTB 37A	Chi Fu Fa Yuen – Admiralty (Circular)	6 – 30
CTB 37B	Chi Fu Fa Yuen – Central (Circular)	9 – 30
CTB 37X	Chi Fu Fa Yuen – Central (Circular)	AM Peak
CTB 38	Chi Fu Fa Yuen – North Point Ferry	6 – 20
CTB 42	Wah Fu (South) – North Point Ferry	AM Peak
CTB 42C	Cyberport – North Point Ferry	PM Peak
CTB 63	North Point Ferry – Stanley Market	30
CTB 65	North Point Ferry – Stanley Market	12 – 30
CTB 72	Wah Kwai – Causeway Bay (Moreton Terrace)	4 – 20
CTB 72A	Shum Wan Public Transport Terminus – Causeway Bay (Moreton Terrace)	20 – 35
CTB 75	Shum Wan – Central (Exchange Square)	AM, PM Peak
CTB 76	Wong Chuk Hang Station – Causeway Bay (Pennington Street) (Circular)	AM, PM Peak
CTB 77	Tin Wan Estate – Shau Kei Wan	11 – 30
CTB 90	Ap Lei Chau Estate – Central (Exchange Square)	10 – 30
CTB 90C	Ap Lei Chau (Main Street, Ap Lei Chau) – Central (Jardine House)	AM Peak
CTB 97	Lei Tung Estate – Central (Exchange Square)	AM Peak
CTB 99	South Horizons – Shau Kei Wan	12 – 25
CTB 592	South Horizons – Causeway Bay (Moreton Terrace)	8 – 30
CTB 679	Queen's Hill Fanling – Central (Hong Kong Station)	AM Peak
CTB 780P	Chai Wan (Hing Wah Estate) – Central (Central Ferry Piers)	AM Peak
CTB 789	Siu Sai Wan (Island Resort) – Admiralty (Rodney Street)	8 – 25
CTB 930B	Kwai Shing Circuit – Causeway Bay (Moreton Terrace) (omit Kwai Fong)	AM Peak
CTB 930X	Causeway Bay (Moreton Terrace) – Tsuen Wan (Discovery Park) (via Nina Tower on journey to Causeway Bay)	12 – 25
CTB 952	Tuen Mun (Chi Lok Fa Yuen) – Causeway Bay (Moreton Terrace)	10 – 30
CTB 952P	Tuen Mun (Chi Lok Fa Yuen) – Causeway Bay (Moreton Terrace)	AM Peak
CTB 962	Tuen Mun (Lung Mun Oasis) – Causeway Bay (Moreton Terrace)	AM, PM Peak
CTB 962G	Causeway Bay (Moreton Terrace) – Tuen Mun (Yuet Wu Villa)	PM Peak
CTB 962P	Tuen Mun (Lung Mun Oasis) – Causeway Bay (Moreton Terrace)	AM Peak
CTB 962P	Yip Wong Estate – Causeway Bay (Moreton Terrace)	AM Peak
CTB 962X	Tuen Mun (Lung Mun Oasis) – Causeway Bay (Moreton Terrace)	9 – 30
CTB 967X	Tin Shui Wai (Tin Yan Estate) – Causeway Bay (via Tin Shui Wai North)	AM, PM Peak
CTB 969	Tin Shui Wai Town Center – Causeway Bay (Moreton Terrace)	7 – 30
CTB 969N	Tin Shui Wai Town Center – Causeway Bay (Moreton Terrace)	AM Peak
CTB 969P	Tin Shui Wai Town Centre – Causeway Bay (Moreton Terrace)	AM Peak
CTB 969X	Tin Shui Wai Town Centre – Causeway Bay (Leighton Centre)	AM Peak
CTB 979	Queen's Hill Fanling – Central (Hong Kong Station)	AM, PM Peak
CTB A11	North Point Ferry Pier – Airport (Ground Transportation Centre)	15 – 60

CTB A17	Sham Wan – Airport	AM, PM Peak
CTB E11	Tin Hau Station – Skycity	AM, PM Peak
CTB E11A	Tin Hau Station – Skycity	35 – 44
CTB E11B	Tin Hau Station – Tung Chung (Mun Tung Estate)	10 – 40
CTB E11S	Tung Chung (Mun Tung Estate) – Tin Hau Station	AM Peak
CTB H1	Central (Star Ferry) – Tsim Sha Tsui	60
CTB H1S	Central (Star Ferry) – West Kowloon Cultural District (Circular)	30
CTB H2	Tsim Sha Tsui – Central (Star Ferry)	60
CTB H2K	Central (Star Ferry) – West Kowloon Cultural (Circular)	PM Peak
CTB N8X	Siu Sai Wan (Island Resort) – Kennedy Town	Overnight
CTB N8P	Siu Sai Wan (Island Resort) – Wan Chai (Harbour Road) (Circular)	Overnight
CTB N11	Central (Macao Ferry) – Airport (Ground Transportation Centre)	Overnight
CTB N72	Wah Kwai – Quarry Bay (Hoi Chak Street)	Overnight
CTB N90	South Horizons – Central (Macao Ferry)	Overnight
CTB N930	Tsuen Wan (Discovery Park) – Causeway Bay (Moreton Terrace)	AM Peak
CTB N969	Tin Shui Wai Town Centre – Causeway Bay (Moreton Terrace)	Overnight
CTB NA11	North Point Ferry Pier – HZMB Hong Kong Port	Overnight
CTB N952	Tuen Mun (Chi Lok Fa Yuen) – Causeway Bay (Moreton Terrace)	AM Peak
CTB N962	Tuen Mun (Lung Mun Oasis) – Causeway Bay (Moreton Terrace)	Overnight
CTB X8	Happy Valley (Upper) – Siu Sai Wan (Island Resort)	AM Peak
CTB X15	Central (Central Ferry Pier No. 6) – The Peak	PM Peak
GMB 4A	Aberdeen (Shek Pai Wan) – Causeway Bay (Cannon Street)	8 – 30
GMB 4B	Aberdeen (Shek Pai Wan) – Wan Chai (Circular)	5 – 10
GMB 4C	Aberdeen (Shek Pai Wan) – Causeway Bay (Cannon Street)	5
GMB 5	Aberdeen (Nam Ning Street) – Causeway Bay (Jaffe Road)	15 – 30
GMB 10	Causeway Bay (Jaffe Road) – Cyberport Public Transport Interchange	10 – 30
GMB 10P	Jaffe Road, near Siu On Plaza – Cyberport Bus Terminus	AM, PM Peak
GMB 14M	Lan Fong Road – Moorsom Road (Circular)	5 – 12
GMB 21A	Causeway Bay (Lan Fong Road) – Lai Tak Tsuen (Circular)	6 – 12
GMB 21M	Causeway Bay (Lan Fong Road) – Tai Hang Drive (Circular)	6 – 12
GMB 26	To Kwa Wan (Chi Kiang Street) – Kowloon Station	10 – 12
GMB 28	Baguio Villa (Upper) – Causeway Bay (Sun Wui Road)	15 – 20
GMB 28S	Baguio Villa (Upper) – Causeway Bay (Sun Wui Road) (Short Working Service)	15 – 20
GMB 30	Causeway Bay (Lan Fong Road) – Happy Valley (Holly Road)	7 – 10
GMB 31	Yuen Long (Hong King Street) – Tong Yan San Tsuen (Circular)	8 – 10
GMB 31X	Tin Wan Estate – Causeway Bay (Jaffe Road) (Express Service Departure)	AM Peak
GMB 35M	Aberdeen (Shek Pai Wan) – Wan Chai (Johnston Road)	AM Peak
GMB 36X	Ap Lei Chau (Ping Lan Street) – Causeway Bay (Jardine's Bazaar)	15 – 20
GMB 39M	Lok Fu – Tung Tau (Circular)	6 – 8
GMB 40	Stanley Village – Jardine's Bazaar	12 – 15
GMB 40X	Stanley Prison – Jardine's Bazaar (Short Working Service)	4 – 9
GMB 49S	Tuen Mun Siu Hong Court – Wan Chai (Overnight Service)	Overnight
GMB 56	Richland Gardens – Shung Yan Street	10 – 20
GMB 56A	Mid-Levels (Robinson Road) – Tin Hau Station	8 – 15
GMB 56B	Mid-Levels Robinson Road – Tin Hau Station	12 – 30
GMB 69X	Cyberport – Causeway Bay (Lockhart Road)	6 – 20

GMB N4A	Aberdeen (Shek Pai Wan) – Causeway Bay (Cannon Street) (Overnight Service)	Overnight
GMB N4C	Aberdeen (Shek Pai Wan) – Causeway Bay (Cannon Street) (Overnight Service)	Overnight
GMB N4X	Causeway Bay (Cannon Street) – Shum Wan Road Public Transport Terminus (Circular) (Overnight Service)	Overnight
GMB N40	Stanley Village – Jardine's Bazaar (Overnight Service)	Overnight
GMB N31	Tin Wan Estate – Causeway Bay (Jaffe Road) (Overnight Service Departure)	Overnight

Note: KMB – Kowloon Motor Bus                      GMB – Green Minibus  
CTB - Citybus

### 3.0 THE PROPOSED DEVELOPMENT

#### Proposed Development

- 3.1 The **Proposed Development** is a 26-storey residential building providing: (i) 66 residential units with an average GFA of about 40m<sup>2</sup>, and (ii) retail use with GFA of 162.483m<sup>2</sup>.

#### Hong Kong Planning Standards and Guidelines Recommendation on internal transport facilities

- 3.2 The internal transport facilities of the 66 residential units located with the **Proposed Development**, is calculated based on Hong Kong Planning Standards and Guidelines (“HKPSG”) and is presented in **Table 3.1**.

TABLE 3.1 THE HKPSG RECOMMENDATIONS ON INTERNAL TRANSPORT FACILITIES FOR THE 66 RESIDENTIAL UNITS

Use	<u>HKPSG Recommendation</u> flat size ≤ 40 m <sup>2</sup> = 66 units
<b><u>Car Parking Space</u></b>	
Residential (I)	Number of space = GPS x R1 x R2 x R3, where: Global Parking Standard (GPS) = 1 space per 4 – 7 flats R1 = 0.5 for flat size ≤ 40 m <sup>2</sup> R2 = 0.75 for development within 500m of rail station R3 = 0.75 for domestic plot ratio (PR) > 8.00  Minimum = 66 ÷ 7 x 0.5 x 0.75 x 0.75 = 2.65 = say <u>3 nos.</u> Maximum = 66 ÷ 4 x 0.5 x 0.75 x 0.75 = 4.64 = say <u>5 nos.</u>
Visitor (II)	For private residential developments with 75 units or less per block, the visitor car parking provision will be determined by Transport Department on a case-by-case basis.
Total (I) + (II)	Minimum = <u>3 nos.</u> Maximum = <u>5 nos.</u>
<b><u>Loading / Unloading Bay</u></b>	
Residential	Minimum of 1 loading / unloading bay for goods vehicles within the site for every 800 flats or part thereof, subject to a minimum of 1 bay for each housing block or as determined by the Authority.  Recommendation = 1 no.

- 3.3 The retail use with 162.483m<sup>2</sup>, is a road-side retail shop, and according to the HKPSG, generally nil car park provision is permitted for this type of road-side retail shop. Hence, the total recommended number of car parking spaces range from 3 – 5, and the recommended number of loading / unloading bay is 1.

#### Justification for not providing internal transport facilities

- 3.4 Due to a number of reasons, no internal transport facilities could be provided within the **Proposed Development**. The reasons are presented in the **paragraphs 3.5 – 3.13**.

##### i. Small site

- 3.5 The Subject Site is small and it located at the corner of Yiu Wa Street and Canal Road East. Along Yiu Wa Street, the Subject Site has a length of only 14m, and along Canal Road East 13.2m.

3.6 As shown in **Figure 3.1**, in order to provide the basic facilities within the **Proposed Development** including the lift core, column structures, staircase, lobby, there is insufficient space to provide internal transport facilities.

*ii. Not suitable to provide run-in/out at junction*

3.7 Reference is made to the Clause 3.6.2.5 in Chapter 3.6 of Volume 2 in TPDM: “Run-ins should be located as far as possible away from an uncontrolled junction and preferably not closer than 30m. ”

3.8 In view that the frontage along Yiu Wa Street is only 14m and along Canal Road East is only 13.2m, i.e., both frontages are less than 30m from the junction of Canal Road East / Yiu Wa Street, the provision of run-in/out is **not desirable or feasible**.

*iii. Sufficient public car park in the vicinity of the Proposed Development*

3.9 A parking supply survey was undertaken on Friday, 6 March 2026 during the busy PM period at 2 car parks which are located within 300m from the **Proposed Development**. The locations of the surveyed car parks are shown in **Figure 3.2** and the details are presented in **Table 3.2**.

TABLE 3.2 CAR PARKS LOCATED WITHIN 300M FROM THE PROPOSED DEVELOPMENT

Ref.	Location	Car Parking Space		
		No. of Spaces	Occupied	Surplus
1	Time Square (1 Matheson Street, Causeway Bay, Hong Kong Island)	700	432	268
2	Leighton Centre (77 Leighton Road, Causeway Bay, Hong Kong Island)	321	210	111
<b>Total</b>		<b>1,021</b>	<b>642</b>	<b>379</b>

3.10 As shown in **Table 3.2**, there are 379 nos. of surplus public car parking spaces, which is sufficient to cater the potential parking demand of the **Proposed Development**.

*iv. Good accessibility to public transport services*

3.11 As shown in **Figure 2.6** and **Table 2.2**, the **Proposed Development** is located close to public transport services and the stops are located some 100 metres or less than 1 minutes’ walk away. The closest entrance to the Causeway Bay MTR Station is in Times Square, which is about 200 metres or less than 3 minutes’ walk away.

3.12 Due to good accessibility to public transport services, the residents are expected to use these services.

*v. Availability of kerbside for on-street activities*

3.13 Based on site observations, loading / unloading and pick-up / drop-off activities are permitted in the vicinity of the Subject Site, i.e., Yiu Wa Street, as shown in **Figure 3.3**.

## 4.0 TRAFFIC IMPACT

### Design Year

- 4.1 The **Proposed Development** is expected to be completed by 2030, and the design year adopted for the capacity analysis is 2033, i.e. 3 years after the completion of the **Proposed Development**.

### Traffic Forecasting

- 4.2 The 2033 traffic flows used for the junction analysis are produced with reference to the following:
- (i) estimated traffic growth from 2026 to 2033 based on the higher of:
    - (a) 2021 – based Territorial Population and Employment Data Matrix (“TPEDM”) data produced by Planning Department (“PlanD”) for Wan Chai District;
    - (b) Hong Kong Population Projections from 2026 to 2033, published by Census and Statistics Department (“C&SD”);
    - (c) historic Annual Average Daily Traffic (“AADT”) from the Annual Traffic Census (“ATC”), published by Transport Department;
  - (ii) Other developments in the vicinity of the **Proposed Development**; and
  - (iii) Traffic generated by the **Proposed Development**.
- 4.3 The (i) estimated traffic growth from 2026 to 2033, (ii) the other developments in the vicinity of the **Proposed Development**, and (iii) traffic generated by the **Proposed Development** are presented in the paragraphs below.

#### (i) Estimated Traffic Growth Rate from 2026 to 2033

- 4.4 The 2021 – based TPEDM data for Wan Chai District, Hong Kong Population Projections from 2026 to 2033 and historic AADT are summarised in **Tables 4.1 – 4.3** respectively.

TABLE 4.1 2021-BASED TPEDM DATA FOR WAN CHAI DISTRICT

Item	TPEDM Estimation / Projection			Annual Growth Rate		
	2021	2026	2031	2021 to 2026	2026 to 2031	2019 to 2031
Population	166,700	156,000	145,700	-1.32%	-1.36%	-1.34%
Employment	299,700	301,700	287,250	0.13%	-0.98%	-0.42%

TABLE 4.2 HONG KONG POPULATION PROJECTIONS FROM 2026 TO 2033

Whole Territory Population		Annual Growth Rate
Year 2026	Year 2033	2025 to 2032
7,596,800	7,903,600	0.57%

TABLE 4.3 AADT OF THE ATC STATIONS LOCATED IN THE VICINITY OF THE SUBJECT SITE

Station	2024	2649	1847	1631	2035	Overall
Road	Canal Road Flyover <H73> down-ramp S-B	Yiu Wa Street	Leighton Road	Leighton Road	Leighton Road	
From	Canal Road Flyover <H110> S-B	Canal Road East	Canal Road East	Morrison Hill Road	Wong Nai Chung Road	
To	Canal Road East	Matheson Street	Wong Nai Chung Road	Canal Road East	Percival Street	
2015	18,040	4,680	28,550	44,490	28,000	123,760
2016	18,060	4,850	22,620	40,440	27,960	113,930
2017	17,670	4,200	23,460	39,850	27,110	112,290
2018	16,920	4,900	23,530	39,960	28,080	113,390
2019	15,060	4,590	23,320	39,620	27,830	110,420
2020	13,560	3,880	22,180	42,940	26,470	109,030
2021	14,000	4,590	23,160	43,550	27,000	112,300
2022	13,620	3,930	22,700	41,030	21,860	103,140
2023	15,060	4,890	23,200	41,930	23,770	108,850
2024	14,920	5,200	22,980	41,540	23,550	108,190
<b>Average Annual Growth</b>						<b>-1.48%</b>

4.5 **Table 4.1** shows that the highest annual growth rate for population is -1.32% and for employment is 0.13%. **Table 4.2** shows that the annual growth rate from 2026 to 2033 is +0.57%. **Table 4.3** shows that in the historic AADT of the stations between 2015 and 2024 in the vicinity has average annual growth rate of -1.48% per annum. To be conservative, the growth rate of +0.57% per annum is adopted to produce 2033 traffic flows from 2026.

*(ii) Other developments in the vicinity of the **Proposed Development***

4.6 The developments included in the 2033 reference traffic flows are presented in **Table 4.4**.

TABLE 4.4 OTHER DEVELOPMENTS IN THE VICINITY OF THE PROPOSED DEVELOPMENT

Site	Address	Use	Development Parameter (Approx.)
A	Po Leung Kuk Headquarters at 66 Leighton Road, Causeway Bay	Social Services	Additional 322 Service Quotas
B	8 Leighton Road	Commercial	14,945m <sup>2</sup> GFA
C	Inland Lot 8945, Caroline Hill Road	Commercial & G/IC	102,000m <sup>2</sup> GFA
D	District Court Building at Caroline Hill Road	District Court	70,000m <sup>2</sup> GFA
E	88 Caroline Hill Road	Social Services	31,330m <sup>2</sup> GFA
F	25-27 Morrison Hill Road	Hotel	122 rooms

*(iii) Traffic Generated by the **Proposed Development***

4.7 Traffic generated associated with the **Approved GBP** and **Proposed Development** is calculated based on trip generation rate found in TPDM, and these are presented in **Table 4.5**, the calculated of traffic generation is found in **Table 4.6**.

TABLE 4.5 TRIP RATES FROM TPDM

Trip Rate	AM Peak Hour		PM Peak Hour	
	In	Out	In	Out
Residential Use <sup>(1)</sup> (pcu/hour/flat)	0.0425	0.0718	0.0370	0.0286
Retail (pcu/hour/100m <sup>2</sup> GFA)	0.2434	0.2296	0.3563	0.3100

Note: <sup>(1)</sup> Mean rate of average flat size of 60m<sup>2</sup> from Transport Planning and Design Manual (TPDM)

TABLE 4.6 COMPARISON OF TRAFFIC GENERATION

Use	Traffic Generation (pcu/hour)					
	AM Peak			PM Peak		
	IN	OUT	2-way	IN	OUT	2-way
<b>Approved GBP [a]</b>						
Retail: 4,111.538m <sup>2</sup> GFA	10.0	9.4	19.4	14.6	12.7	27.3
<b>Proposed Development [b]</b>						
Residential Use: 66 flats	2.8	4.7	7.5	2.4	1.9	4.3
Retail: 162.483 m <sup>2</sup> GFA	0.4	0.4	0.8	0.6	0.5	1.1
<b>Total</b>	<b>3.2</b>	<b>5.1</b>	<b>8.3</b>	<b>3.0</b>	<b>2.4</b>	<b>5.4</b>
<b>Difference [b] – [a]</b>	<b>-6.8</b>	<b>-4.3</b>	<b>-11.1</b>	<b>-11.6</b>	<b>-10.3</b>	<b>-21.9</b>
$\frac{[b] - [a]}{[a]}$	<u>-68.0%</u>	<u>-38.5%</u>	<u>-57.2%</u>	<u>-79.5%</u>	<u>-81.8%</u>	<u>-80.2%</u>

4.8 Table 4.6 shows that the compared with the **Approved GBP**, the **Proposed Development** generates 57.2% **less** traffic during AM peak hour and 80.2% **less** traffic during PM peak hour, i.e., 11.1 pcu and 21.9 pcu (2-way) **less** respectively. Hence, if the **Proposed Development** is implemented, **less** traffic will be generated to the surrounding road network, compared to the **Approved GBP**.

### 2033 Traffic Flows

4.9 Year 2033 traffic flows for the following cases are derived:

2033 with the **Approved GBP [A]** = 2026 existing traffic flows + (i) estimated total growth from 2026 to 2033 + (ii) Other developments in the vicinity of the **Proposed Development** + (iii) Traffic generated by the **Approved GBP (Table 4.6)**

2033 with the **Proposed Development [B]** = [A] + (iii) Difference of Traffic generated by the **Proposed Development (Table 4.6)**

4.10 The 2033 peak hour traffic flows for the cases without and with the **Proposed Development**, are shown in **Figures 4.1** and **4.2**.

### 2033 Junction Operational Performance

4.11 2032 capacity analysis for the cases with the **Approved GBP** and with the **Proposed Development** are summarised in **Table 4.7** and detailed calculations are found in the **Appendix 2**.

TABLE 4.7 2033 JUNCTION OPERATIONAL PERFORMANCE

Ref.	Junction	Type of Junction / Parameter <sup>(1)</sup>	With Approved GBP		With Proposed Development	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Sharp Street East / Canal Road East / Southbound Slip Road of Canal Road Flyover	Signal / RC	> 100%	> 100%	> 100%	> 100%
J2	Leighton Road / Canal Road East	Signal / RC	> 100%	> 100%	> 100%	> 100%
J3	Matheson Street / Sharp Street East	Signal / RC	64%	44%	65%	45%

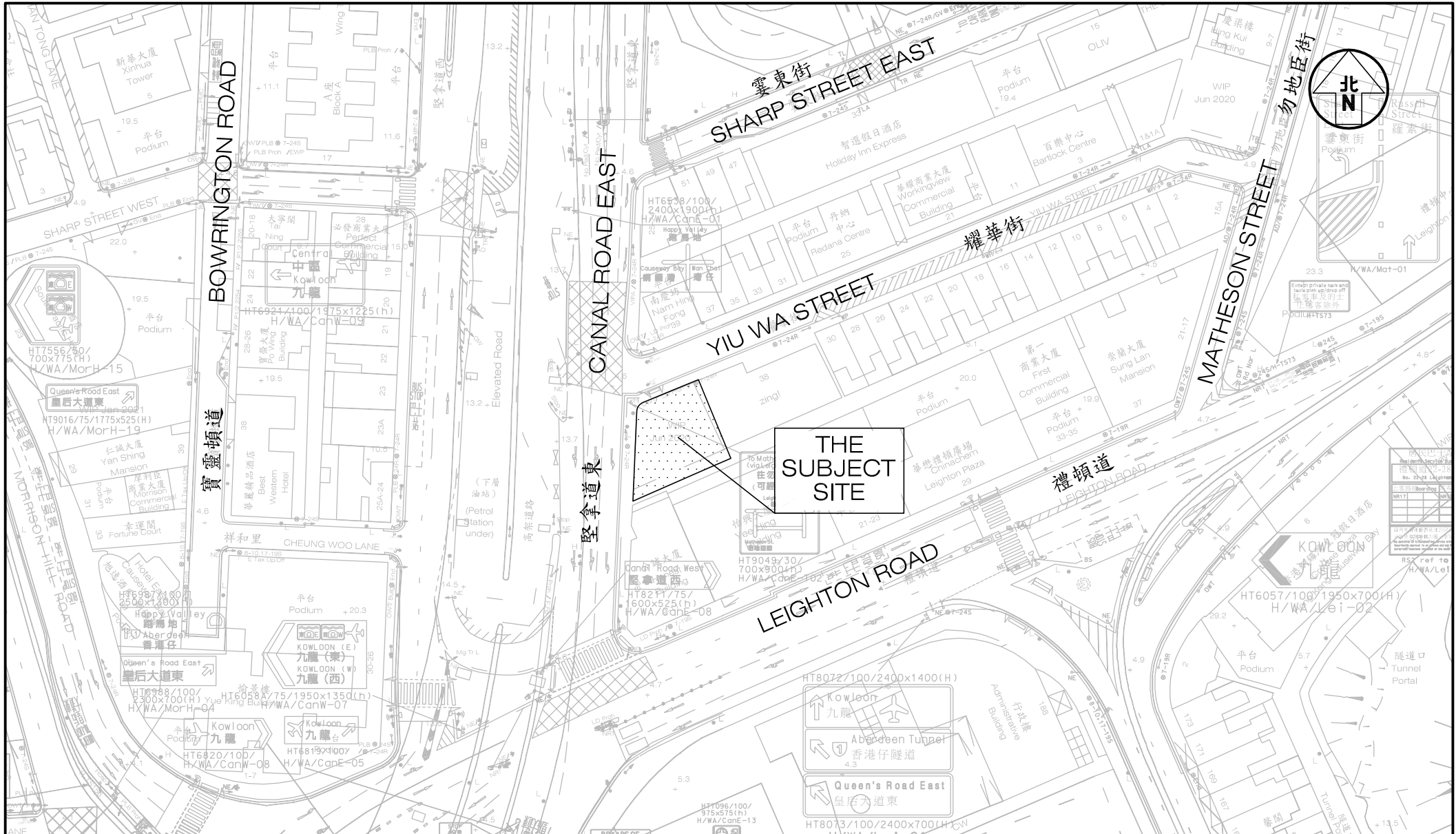
Notes: <sup>(1)</sup> RC – reserve capacity

4.12 **Table 4.7** shows that the junctions operate with capacities during the AM and PM peak hours for the cases with the **Approved GBP** and with the **Proposed Development**.

## 5.0 CONCLUSION

- 5.1 The Subject Site is located at 42 – 44 Yiu Wa Street and 28 – 29 Canal Road East in Causeway Bay. The Owner would now like to develop the Subject Site into a 26-storey residential building providing: (i) 66 residential units with an average GFA of about 40m<sup>2</sup>, and (ii) retail use with GFA of 162.483m<sup>2</sup>.
- 5.2 Manual classified counts were conducted at surveyed junctions located in the vicinity of the **Proposed Development** in order to establish the peak hour traffic flows. Currently, these junctions operate with capacities during the AM and PM peak hours.
- 5.3 Justification for not providing internal transport facilities is as follows:
- i. Small site
  - ii. Not suitable to provide run-in/out at junction
  - iii. Sufficient public car park in the vicinity of the **Proposed Development**
  - iv. Good accessibility to public transport services
  - v. Availability of kerbside for on-street activities
- 5.4 The **Proposed Development** is expected to be completed by 2030, and the junction capacity analysis is undertaken for year 2033. Compared with the **Approved GBP**, the **Proposed Development** generates 57.2% less traffic during AM peak hour and 80.2% less traffic during PM peak hour, i.e., 11.1 pcu and 21.9 pcu (2-way) less respectively. For the design year 2033, the junctions analysed are expected to operate with capacities during the peak hours for the case with the **Proposed Development**.
- 5.5 It is concluded that the **Proposed Development** will result in no adverse traffic impact to the surrounding road network. From traffic engineering grounds, the **Proposed Development** is acceptable.





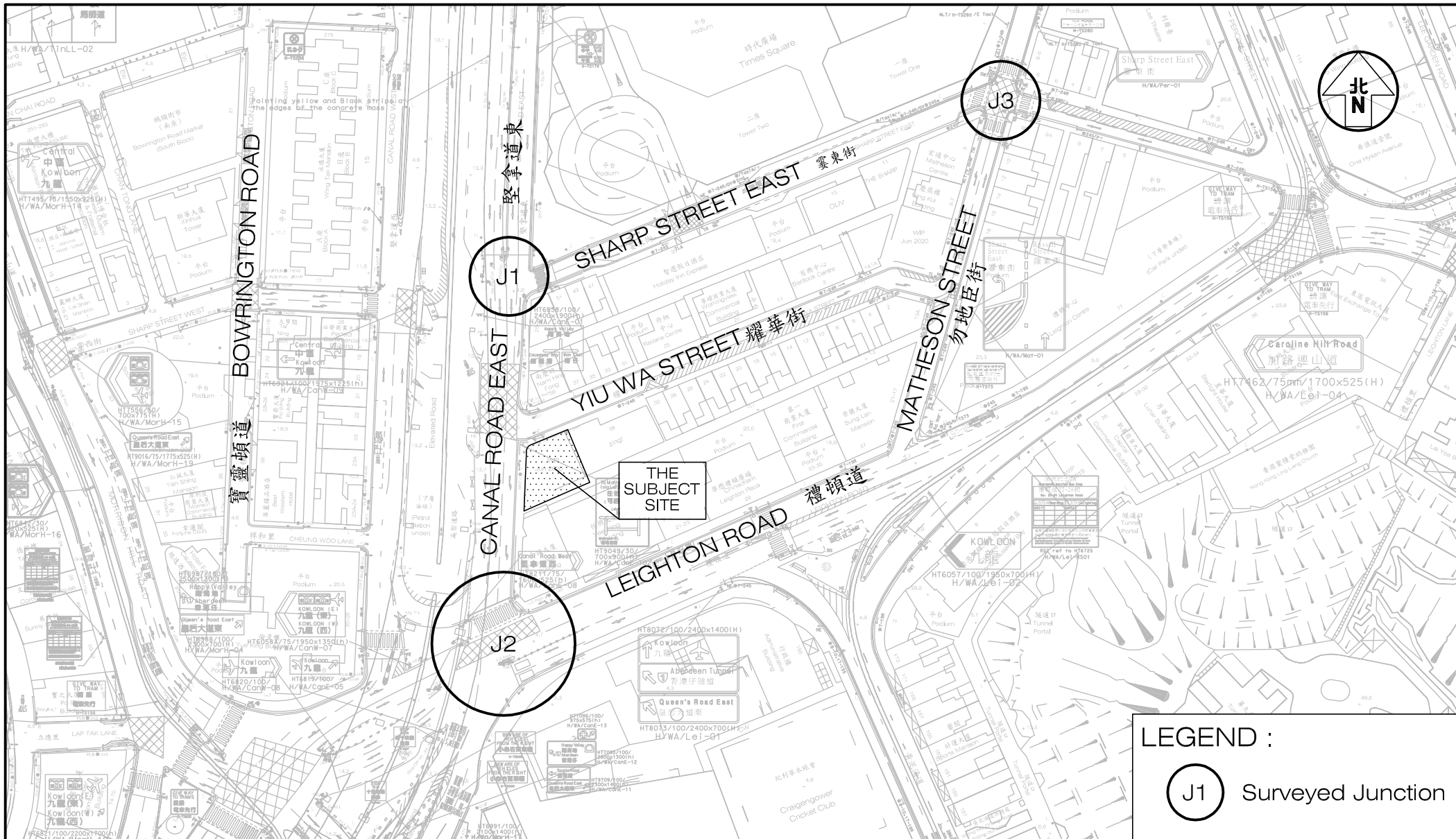
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Figure Title **LOCATION OF SUBJECT SITE**

Figure No. **1.1** Revision **A**

Designed by <b>T T O</b>	Drawn by <b>N C M</b>	Checked by <b>K C</b>
Scale in A4 <b>1 : 1000</b>		Date <b>02 MAR 2026</b>

**CKM Asia Limited**  
Traffic and Transportation Planning Consultants



**LEGEND :**

**J1** Surveyed Junction

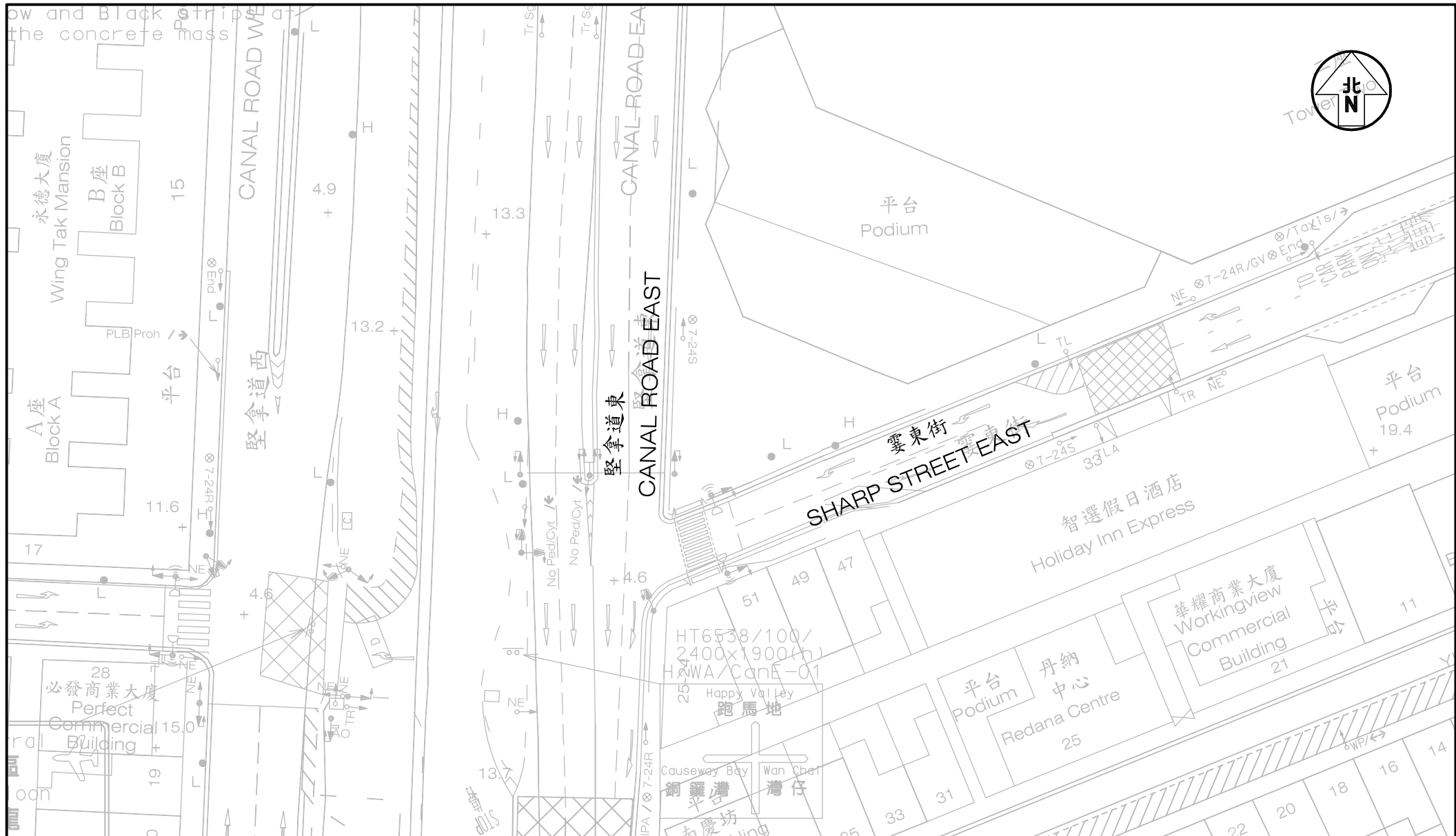
Project Title **PROPOSED FLAT WITH SHOP AND SERVICES / EATING PLACE IN "COMMERCIAL" ZONE ON DRAFT WAN CHAI OUTLINE ZONING PLAN NO. S/H5/32 AT 42-44 YIU WA STREET AND 28-29 CANAL ROAD EAST, HONG KONG** J7471

Figure No. **2.1**  
Revision **A**

**CKM Asia Limited**  
Traffic and Transportation Planning Consultants

Figure Title **LOCATION OF SURVEYED JUNCTIONS**

Designed by **LCH** Drawn by **NCM** Checked by **KC**  
Scale in A4 **1 : 1500** Date **15 APR 2026**



Project Title PROPOSED FLAT WITH SHOP AND SERVICES / EATING PLACE IN "COMMERCIAL" ZONE ON DRAFT WAN CHAI OUTLINE ZONING PLAN NO. S/H5/32 AT 42-44 YIU WA STREET AND 28-29 CANAL ROAD EAST, HONG KONG J7471

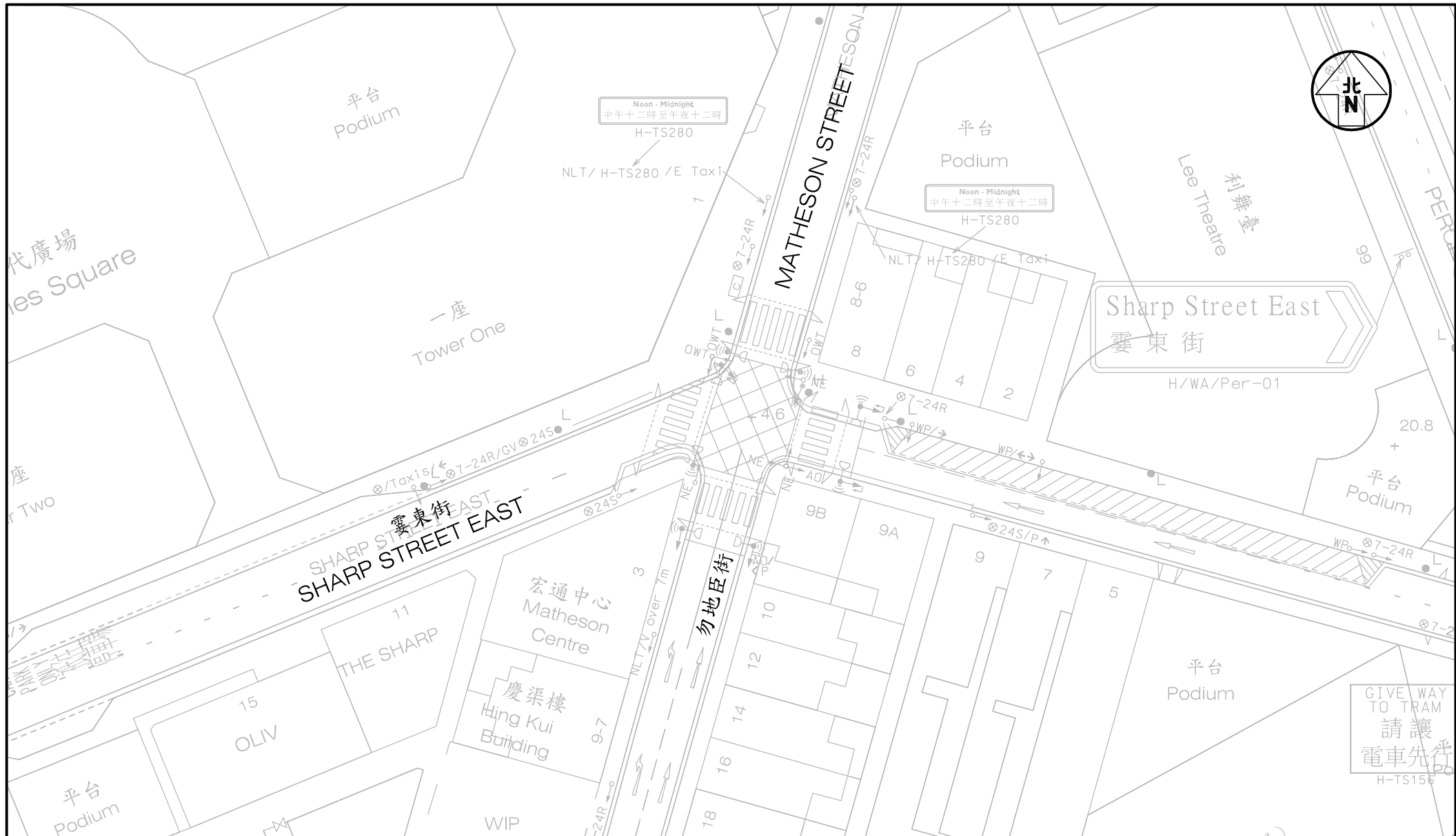
Figure No. 2.2 Revision A

**CKM Asia Limited**  
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Figure Title LAYOUT OF JUNCTION OF SHARP STREET EAST / CANAL ROAD EAST / SOUTHOUND SLIP ROAD OF CANAL ROAD FLYOVER

Designed by L C H	Drawn by N C M	Checked by K C
Scale in A4 1 : 500		Date 15 APR 2026





Project Title PROPOSED FLAT WITH SHOP AND SERVICES / EATING PLACE IN "COMMERCIAL" ZONE ON DRAFT WAN CHAI OUTLINE ZONING PLAN NO. S/H5/32 AT 42-44 YIU WA STREET AND 28-29 CANAL ROAD EAST, HONG KONG J7471

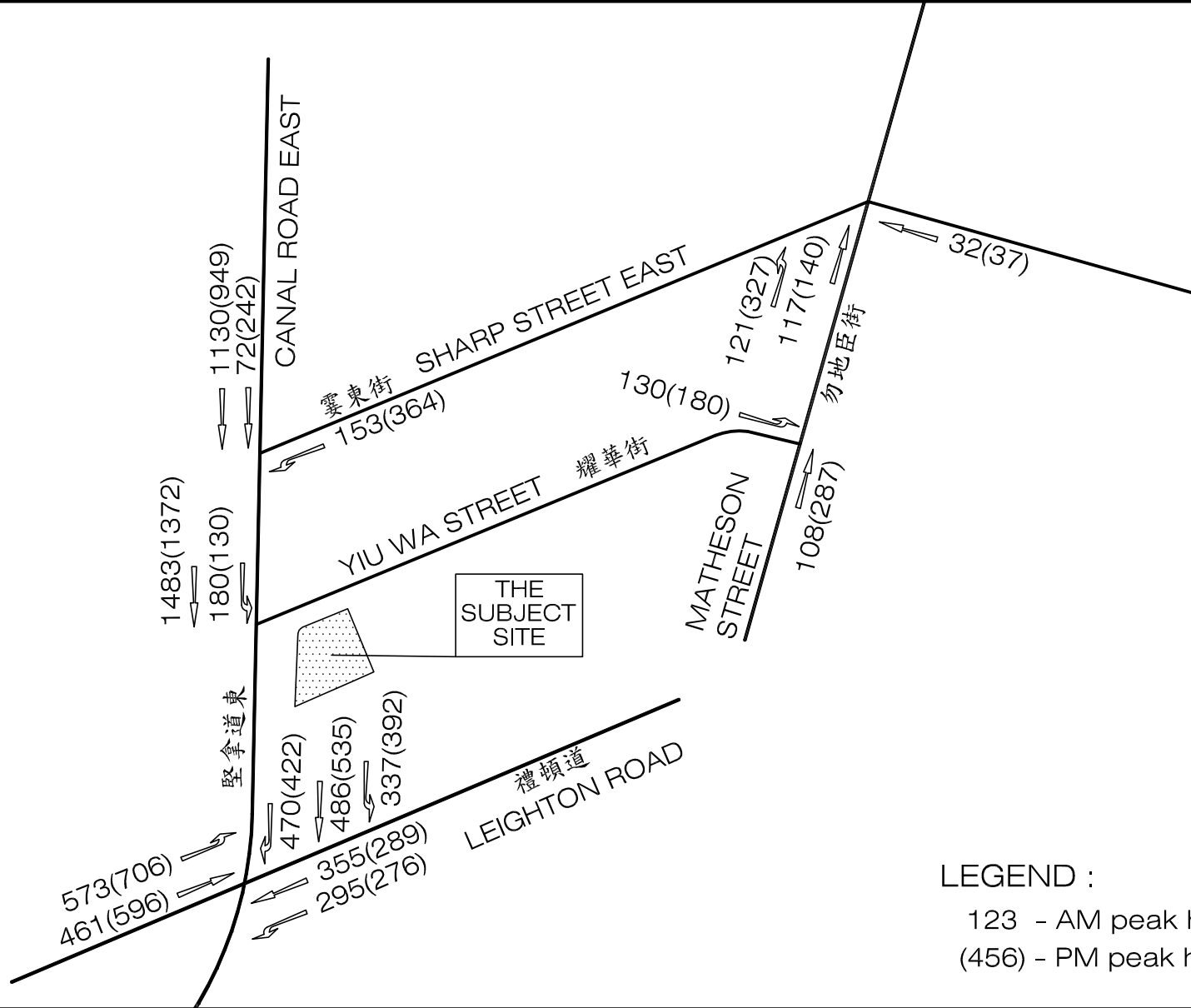
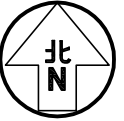
Figure No. 2.4 Revision A

**CKM Asia Limited**  
Traffic and Transportation Planning Consultants

Figure Title  
**LAYOUT OF JUNCTION OF MATHESON STREET / SHARP STREET EAST**

Designed by L C H	Drawn by N C M	Checked by K C
Scale in A4 1 : 500	Date 15 APR 2026	

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**LEGEND :**

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

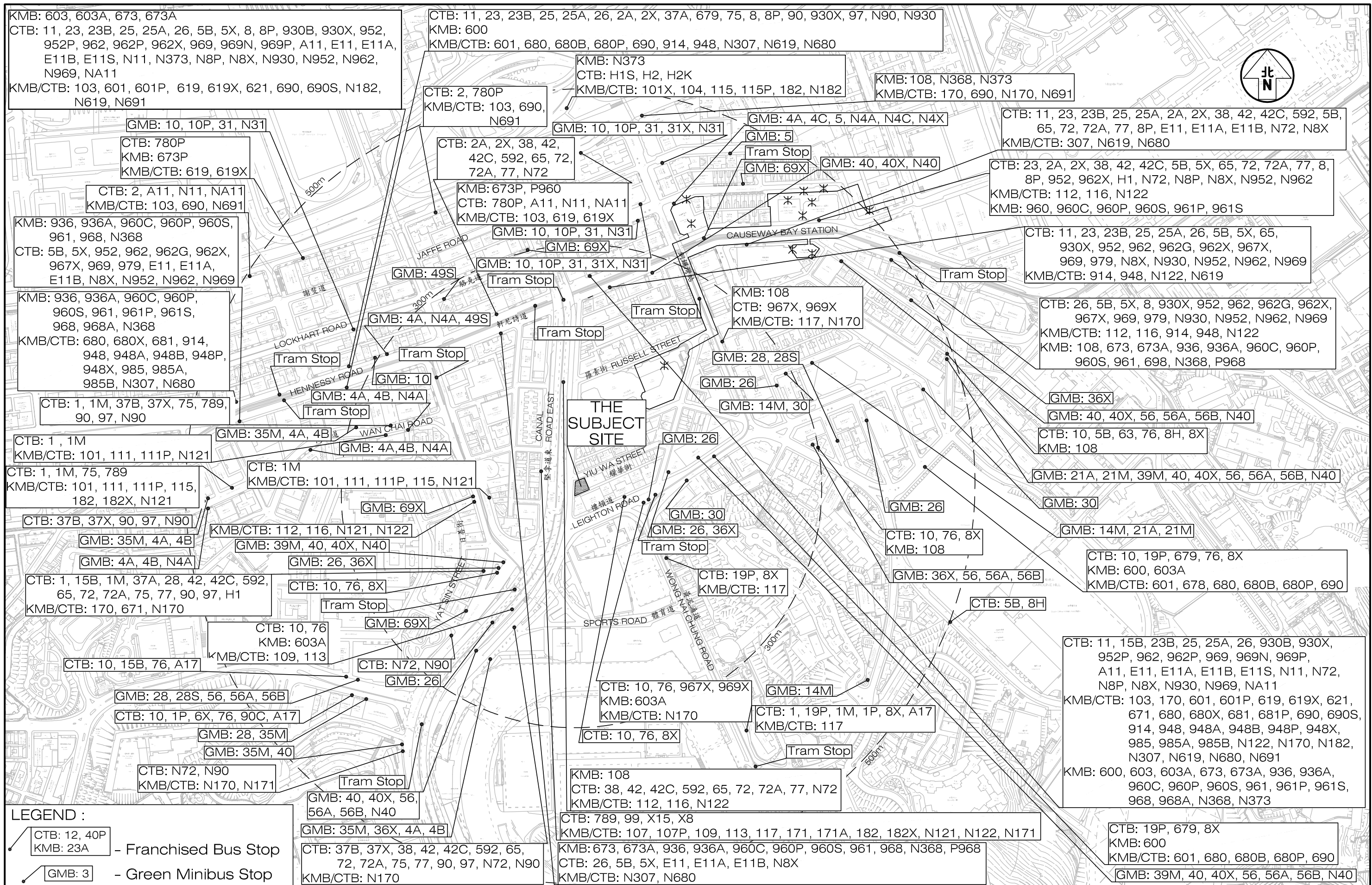
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Figure No. 2.5  
 Revision A

**CKM Asia Limited**  
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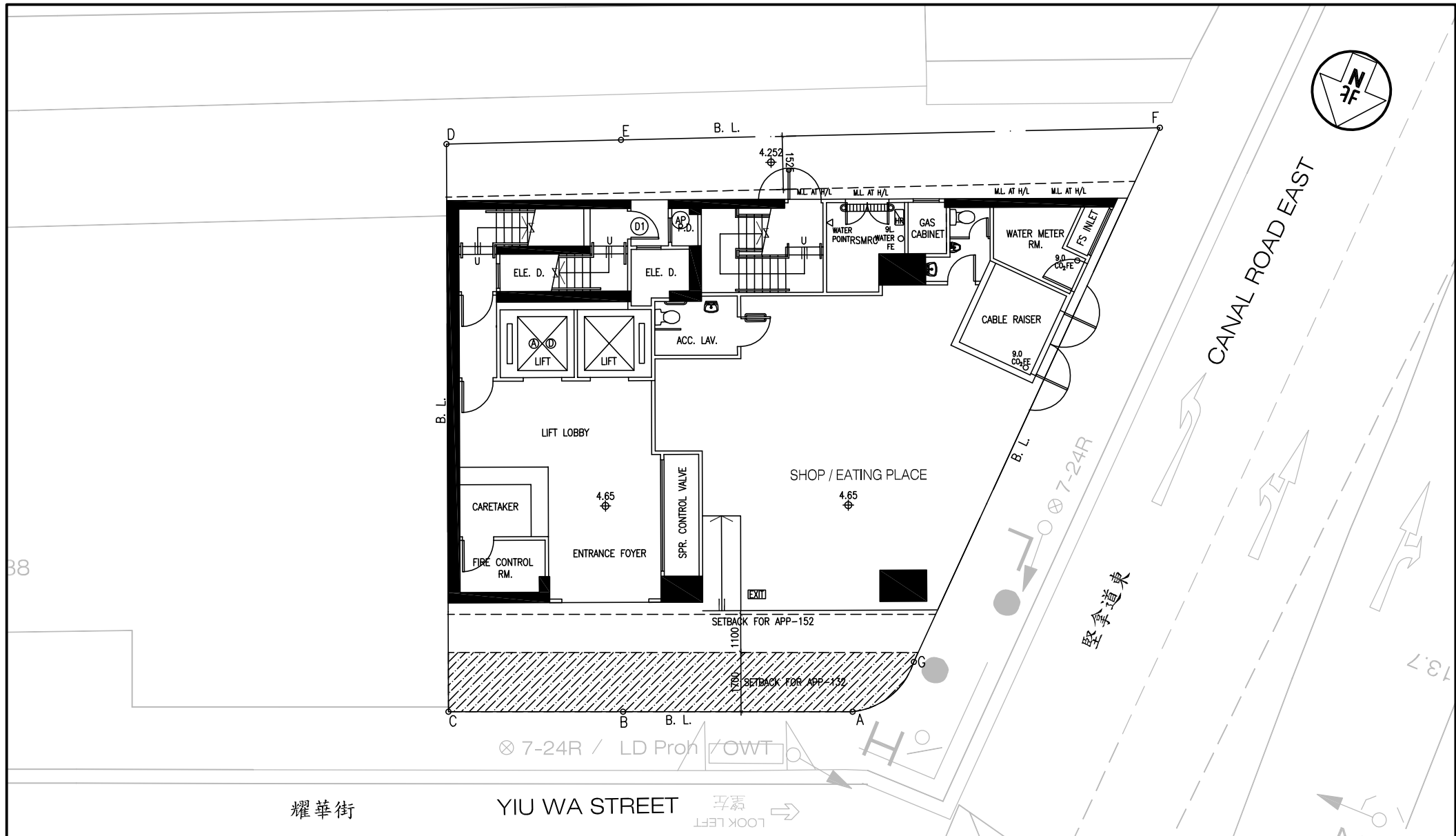
Figure Title  
**EXISTING PEAK HOUR TRAFFIC FLOWS**

Designed by L C H	Drawn by N C M	Checked by K C
Scale in A4 N.T.S.	Date 15 APR 2026	



Project Title	PROPOSED FLAT WITH SHOP AND SERVICES / EATING PLACE IN "COMMERCIAL" ZONE ON DRAFT WAN CHAI OUTLINE ZONING PLAN NO. S/H5/32 AT 42-44 YIU WA STREET AND 28-29 CANAL ROAD EAST, HONG KONG			Figure No.	2.6	Revision	A	<b>CKM Asia Limited</b> Traffic and Transportation Planning Consultants
Figure Title	THE PUBLIC TRANSPORT SERVICES PROVIDED IN THE VICINITY OF THE SUBJECT SITE			Designed by	L C H	Drawn by	N C M	
				Checked by	K C	Scale in A3	Date	
						1 : 4500	15 APR 2026	

T:\JOB\J7450-J7499\J7412026 04\Fig 2.6 RevA.dwg



Project Title PROPOSED FLAT WITH SHOP AND SERVICES / EATING PLACE IN "COMMERCIAL" ZONE ON DRAFT WAN CHAI OUTLINE ZONING PLAN NO. S/H5/32 AT 42-44 YIU WA STREET AND 28-29 CANAL ROAD EAST, HONG KONG J7471

Figure No. 3.1 Revision A

CKM Asia Limited  
Traffic and Transportation Planning Consultants

Figure Title  
**G/F LAYOUT PLAN**

Designed by L C H	Drawn by N C M	Checked by K C
Scale in A4 1 : 150	Date 15 APR 2026	



**THE  
SUBJECT  
SITE**

- LEGEND :**
- 1 Time Square  
(1 Matheson Street, Causeway Bay)
  - 2 Leighton Centre  
(77 Leighton Road, Causeway Bay)

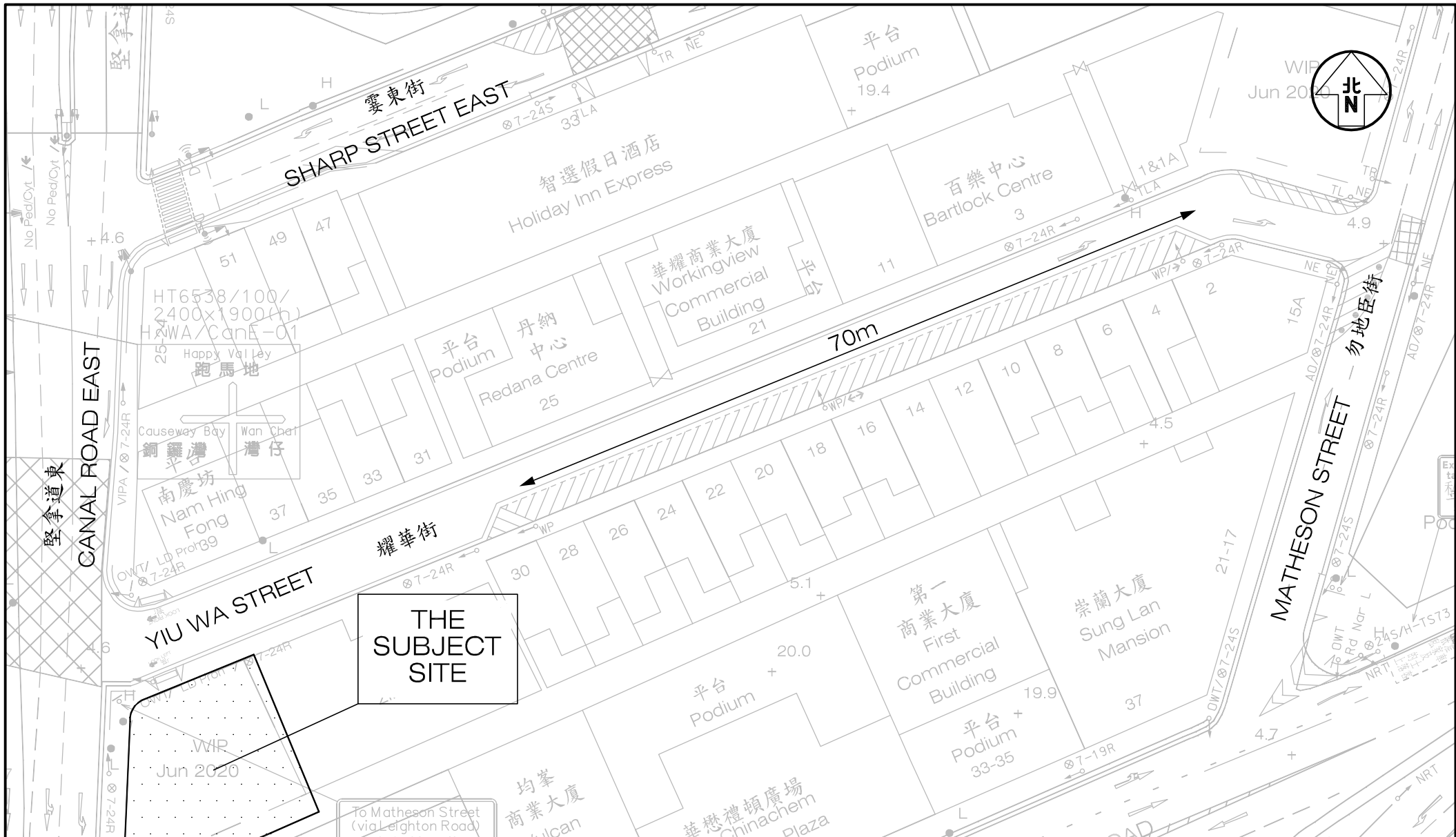
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Figure No. **3.2** Revision **A**

**CKM Asia Limited**  
Traffic and Transportation Planning Consultants

Figure Title **LOCATION OF THE SURVEYED CAR PARKS**

Designed by <b>L C H</b>	Drawn by <b>N C M</b>	Checked by <b>K C</b>
Scale in A4 <b>1 : 1500</b>		Date <b>15 APR 2026</b>



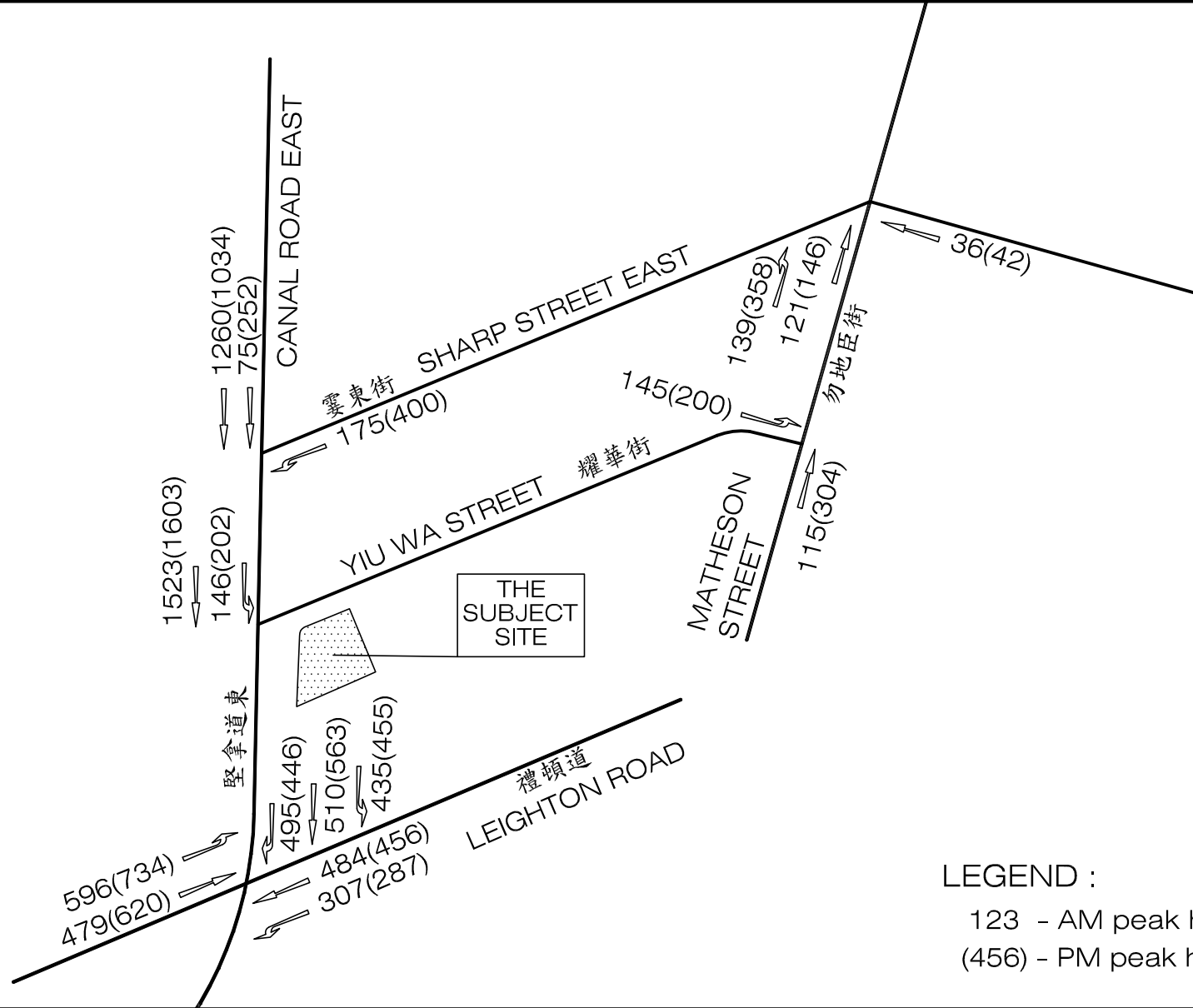
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Figure No. 3.3 Revision A

CKM Asia Limited  
Traffic and Transportation Planning Consultants

Figure Title  
LOCATION OF THE LOADING / UNLOADING AND PICK-UP / DROP-OFF POINT

Designed by L C H	Drawn by N C M	Checked by K C
Scale in A4 1 : 500	Date 15 APR 2026	



LEGEND :

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

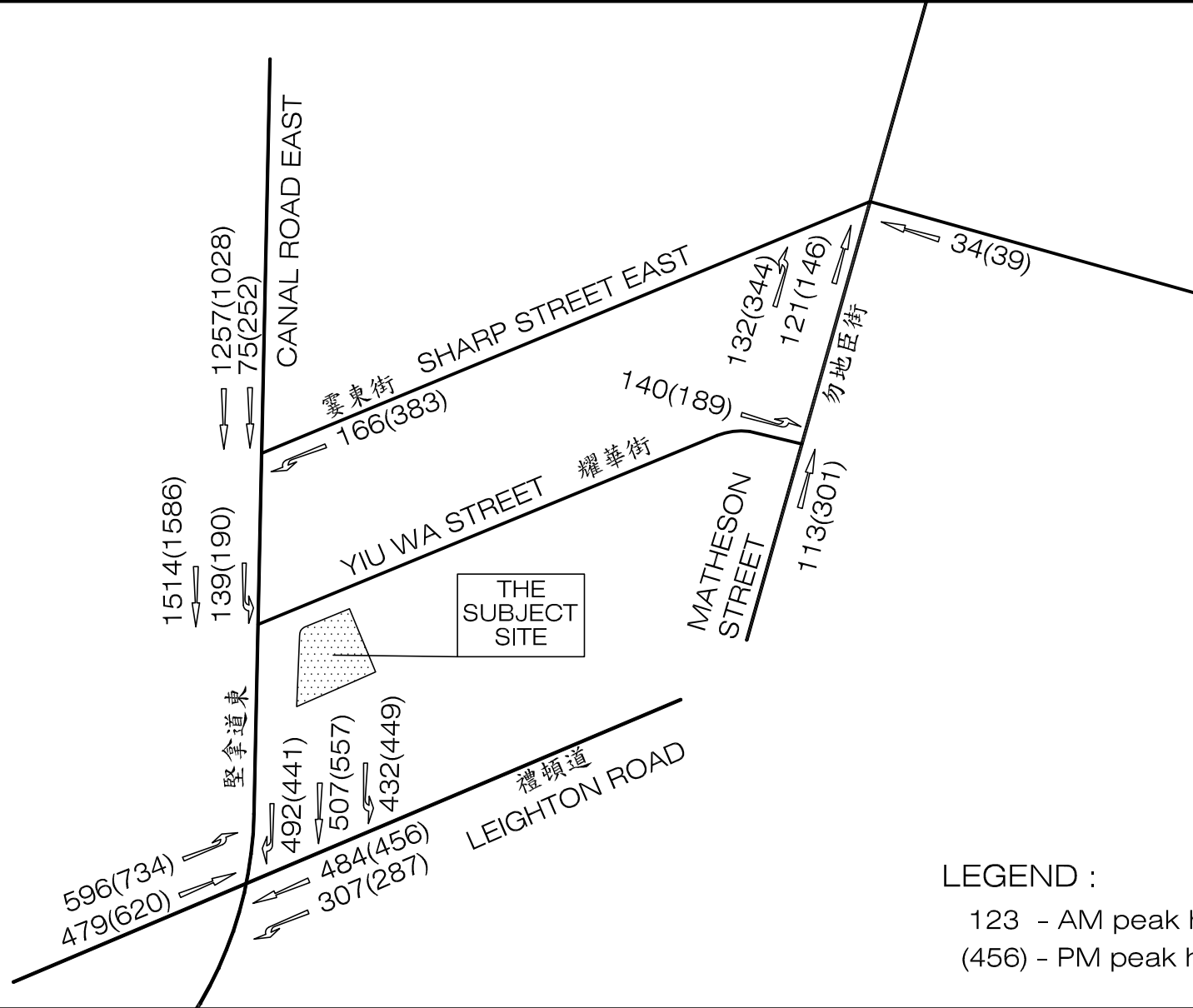
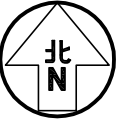
Project Title PROPOSED FLAT WITH SHOP AND SERVICES / EATING PLACE IN "COMMERCIAL" ZONE ON DRAFT WAN CHAI OUTLINE ZONING PLAN NO. S/H5/32 AT 42-44 YIU WA STREET AND 28-29 CANAL ROAD EAST, HONG KONG J7471

Figure No. 4.1  
 Revision A

**CKM Asia Limited**  
 Traffic and Transportation Planning Consultants

Figure Title  
**YEAR 2033 PEAK HOUR TRAFFIC FLOWS  
 WITHOUT THE PROPOSED DEVELOPMENT**

Designed by L C H	Drawn by N C M	Checked by K C
Scale in A4 N.T.S.	Date 15 APR 2026	



**LEGEND :**

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

Project Title PROPOSED FLAT WITH SHOP AND SERVICES / EATING PLACE IN "COMMERCIAL" ZONE ON DRAFT WAN CHAI OUTLINE ZONING PLAN NO. S/H5/32 AT 42-44 YIU WA STREET AND 28-29 CANAL ROAD EAST, HONG KONG J7471

Figure No. 4.2  
 Revision A

**CKM Asia Limited**  
 Traffic and Transportation Planning Consultants

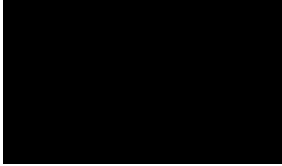
Figure Title **YEAR 2033 PEAK HOUR TRAFFIC FLOWS WITH THE PROPOSED DEVELOPMENT**

Designed by L C H	Drawn by N C M	Checked by K C
Scale in A4 N.T.S.		Date 15 APR 2026

**Appendix 1 –  
The GBP Approved Letter**

---

20 October 2023



56 249

Dear KO,

**42-44 Yiu Wa Street and 28-29 Canal Road East, Hong Kong**  
**I.L. 5444 and I.L. 5445**

I refer to your application received on 29 August 2023 and withdrawn and resubmitted on 25 September 2023 for approval of proposals in respect of Building Amendment and the application for consent to the commencement and carrying out of the above building works.

2. Your submission of plans has been checked under the curtailed check system announced in Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers ADM-19. On this basis, I am satisfied that your submission is fundamentally acceptable and may be approved.

3. You are reminded that the curtailed check system covers only the fundamental issues of a building proposal. Although non-fundamental issues will not be raised as reasons for disapproving a submission, I expect that all contraventions of the Buildings Ordinance and its subsidiary legislation are rectified as and when they are discovered and in any event, before completion of the works is certified. In this connection, I ask you to note that the Building Authority attaches great importance to the proper assumption of duties and responsibilities by authorized persons and registered structural engineers.

4. In accordance with the provisions of regulation 30(1) of the Building (Administration) Regulations, this is to notify that the above - mentioned plan submitted with your application received on 29 August 2023 and withdrawn and resubmitted on 25 September 2023 are hereby approved. One set of the said plans, on which I have signified my approval, is enclosed. Your client has been sent a copy of this letter but I would request that you ensure that the contents are understood by him.

5. This approval should not be deemed to confer any title to land or to act as a waiver of any term in any lease or licence. Section 14(2) of the Buildings Ordinance refers.

6. Consent to the commencement and carrying out of the above Building Amendment is given in the Form BD103 enclosed. You are reminded to ensure that the plans now approved are compatible with all previously approved plans, any conditions imposed are fulfilled and no works are carried out before all required plans have been approved and consent given. Your attention is drawn to paragraph 10 of Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers APP-97.

/7. ....

Original BD 103 retained for convenience  
of future consent applications

S.L. 9A (10/2009)

Our Ref. BD 2/3010/17

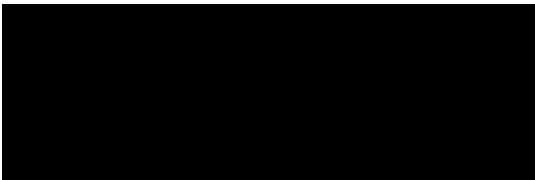
7. This approval only covers the building works as coloured on the submitted plans on the basis that the uncoloured parts of the plans are exactly the same as the corresponding parts in the previous approved plans, and should not be construed as implying the approval of the uncoloured portions of the plan.
8. Your plan has been referred to the Director of Fire Services for comments. Since a fire certificate is not available, your attention is drawn to sections 4(3) of the Buildings Ordinance in case any amendments are required.
9. Comments from the Commissioner for Transport, Transport Department (contact officer: Mr CHAN Quan-wai at tel. no.: 2829 5424) are given in Appendix I enclosed.
10. Comments from the Chief Landscape Architect, Landscape Division, Highways Department (contact officer: Mr Michael CHEUNG at tel. no.: 3155 5720) are given in Appendix II enclosed.
10. District Planning Officer/Hong Kong, Planning Department (contact officer: Ms. Floria TSANG at tel. 2231 4917) has no statutory planning objection to approval of plan. Her detailed comments have been conveyed to you via fax dated 26 September 2023.
11. Chief Engineer/Lighting, Highways Department (HyD) has no comment from public lighting point of view and Chief Highway Engineer/Bridges & Structure, Highways Department has no comment from highway structure design point of view.
13. Chief Engineer/ General Engineering Services, Electrical and Mechanical Services Department advised that the arrangement of AHU room and A/C platforms of this submission is acceptable.
12. Your plan has been referred to Chief Highway Engineer/HK, Highways Department and District Lands Officer/Hong Kong East, Lands Department for comments which will be conveyed to you direct.
13. To minimise light pollution and reduce energy consumption arising from the lighting of the signboards, the AP and the applicant are advised to make reference to the Guidelines on Industry Best Practices for External Lighting Installations jointly issued by the Environment Bureau (ENB) , Environmental Protection Department and the Electrical and Mechanical Services Department, which can be downloaded from ENB website.
14. This serves to record that you withdraw and resubmit the plans on 25 September 2023 for extension of time to resolve the department comments.
15. This serves to record that you have taken away the said plans from this office on 18 October 2023 for amendment and subsequently returned the same on 19 October 2023.

Yours sincerely,



(YEUNG Pak-shing )  
Senior Building Surveyor  
for Building Authority

c.c.



DFS  
DLO/HKE  
DPO/HK  
EMSD  
CHE/HK, HyD  
C for T  
CLA, LD, HyD  
CE/Lighting, HyD  
CE/Bridge and Structure, HyD

CO/SM

S.L. 9A (10/2009)

**Appendix 2 –  
Calculation**

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# Signal Junction Analysis

Junction: Canal Road East / Sharp Street East Job Number: J7471  
 Scenario: Existing Condition P. 1  
 Design Year: 2026 Designed By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: 15 Apr 2026

Approach	Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak					PM Peak				
						Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y
Canal Road Flyover SB	SA	A1	1,2	3.00			2055	565	0.275	0.275		2055	475	0.231	0.231
	SA	A2	1,2	3.00			2055	565	0.275			2055	475	0.231	
Canal Road East SB	SA	B1	1	3.60			1975	36	0.018			1975	121	0.061	
	SA	B2	1	3.60			2115	36	0.017			2115	121	0.057	
Sharp Street East WB	LT	C1	3	3.00	15.0	100	1741	77	0.044	0.044	100	1741	182	0.105	0.105
	LT	C2	3	3.00	15.0	100	1741	77	0.044		100	1741	182	0.105	
pedestrian phase			D(p)	1,2		min crossing time =	5	sec GM +	7	sec FGM =	12	sec			

<p>AM Traffic Flow (pcu/hr)</p> <div style="text-align: center;"> </div>	<p>PM Traffic Flow (pcu/hr)</p> <div style="text-align: center;"> </div>	<p><b>S=1940+100(W-3.25)</b>      <b>S=2080+100(W-3.25)</b>      Note:</p> <p><b>S<sub>m</sub>=S÷(1+1.5f/r)</b>      <b>S<sub>m</sub>=(S-230)÷(1+1.5f/r)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>AM Peak</th> <th>PM Peak</th> </tr> </thead> <tbody> <tr> <td>Group</td> <td>1,2+3</td> <td>1,2+3</td> </tr> <tr> <td>Sum y</td> <td>0.319</td> <td>0.335</td> </tr> <tr> <td>L (s)</td> <td>11</td> <td>11</td> </tr> <tr> <td>C (s)</td> <td>100</td> <td>100</td> </tr> <tr> <td>practical y</td> <td>0.801</td> <td>0.801</td> </tr> <tr> <td>R.C. (%)</td> <td>151%</td> <td>139%</td> </tr> </tbody> </table>		AM Peak	PM Peak	Group	1,2+3	1,2+3	Sum y	0.319	0.335	L (s)	11	11	C (s)	100	100	practical y	0.801	0.801	R.C. (%)	151%	139%
	AM Peak	PM Peak																					
Group	1,2+3	1,2+3																					
Sum y	0.319	0.335																					
L (s)	11	11																					
C (s)	100	100																					
practical y	0.801	0.801																					
R.C. (%)	151%	139%																					

1 	2 	3 	4 	5 
AM G =            I/G =	G =            I/G =	G =            I/G = 7	G =            I/G = 6	G =            I/G =
G =            I/G =	G =            I/G =	G =            I/G =	G =            I/G =	G =            I/G =
PM G =            I/G =	G =            I/G =	G =            I/G = 7	G =            I/G = 6	G =            I/G =
G =            I/G =	G =            I/G =	G =            I/G =	G =            I/G =	G =            I/G =

# Signal Junction Analysis

Junction: Canal Road East / Sharp Street East Job Number: J7471  
 Scenario: Future Condition (With Approved GBP) P. 2  
 Design Year: 2033 Designed By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: 15 Apr 2026

Approach	Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak					PM Peak				
						Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y
Canal Road Flyover SB	SA	A1	1,2	3.00			2055	630	0.307	0.307		2055	517	0.252	0.252
	SA	A2	1,2	3.00			2055	630	0.307			2055	517	0.252	
Canal Road East SB	SA	B1	1	3.60			1975	38	0.019			1975	126	0.064	
	SA	B2	1	3.60			2115	38	0.018			2115	126	0.060	
Sharp Street East WB	LT	C1	3	3.00	15.0	100	1741	88	0.050	0.050	100	1741	200	0.115	0.115
	LT	C2	3	3.00	15.0	100	1741	88	0.050		100	1741	200	0.115	
pedestrian phase			D(p)	3		min crossing time =	5	sec GM +	7		sec FGM =	12	sec		

<p>AM Traffic Flow (pcu/hr)</p> <p style="text-align: center;">↓   ↓</p> <p style="text-align: center;">1260   75</p> <p style="text-align: right; margin-right: 50px;">↓</p> <p style="text-align: right;">175</p>	<p>PM Traffic Flow (pcu/hr)</p> <p style="text-align: center;">↓   ↓</p> <p style="text-align: center;">1034   252</p> <p style="text-align: right; margin-right: 50px;">↓</p> <p style="text-align: right;">400</p>	<p><b>S=1940+100(W-3.25)</b>      <b>S=2080+100(W-3.25)</b>      Note:</p> <p><b>S<sub>m</sub>=S÷(1+1.5f/r)</b>      <b>S<sub>m</sub>=(S-230)÷(1+1.5f/r)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>AM Peak</th> <th>PM Peak</th> </tr> </thead> <tbody> <tr> <td>Group</td> <td>1,2+3</td> <td>1,2+3</td> </tr> <tr> <td>Sum y</td> <td>0.357</td> <td>0.366</td> </tr> <tr> <td>L (s)</td> <td>11</td> <td>11</td> </tr> <tr> <td>C (s)</td> <td>100</td> <td>100</td> </tr> <tr> <td>practical y</td> <td>0.801</td> <td>0.801</td> </tr> <tr> <td>R.C. (%)</td> <td>124%</td> <td>119%</td> </tr> </tbody> </table>		AM Peak	PM Peak	Group	1,2+3	1,2+3	Sum y	0.357	0.366	L (s)	11	11	C (s)	100	100	practical y	0.801	0.801	R.C. (%)	124%	119%
	AM Peak	PM Peak																					
Group	1,2+3	1,2+3																					
Sum y	0.357	0.366																					
L (s)	11	11																					
C (s)	100	100																					
practical y	0.801	0.801																					
R.C. (%)	124%	119%																					

1 	2 	3 	4 	5 
AM G =      I/G =      G =      I/G =      7      G =      I/G =      6      G =      I/G =      G =      I/G =	G =      I/G =      G =      I/G =      G =      I/G =      G =      I/G =      G =      I/G =	PM G =      I/G =      G =      I/G =      7      G =      I/G =      6      G =      I/G =      G =      I/G =	G =      I/G =      G =      I/G =      G =      I/G =      G =      I/G =      G =      I/G =	G =      I/G =      G =      I/G =      G =      I/G =      G =      I/G =      G =      I/G =

# Signal Junction Analysis

Junction: Canal Road East / Sharp Street East Job Number: J7471  
 Scenario: Future Condition (With Proposed Development) P. 3  
 Design Year: 2033 Designed By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: 15 Apr 2026

Approach	Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak					PM Peak				
						Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y
Canal Road Flyover SB	SA	A1	1,2	3.00			2055	629	0.306	0.306		2055	514	0.250	0.250
	SA	A2	1,2	3.00			2055	629	0.306			2055	514	0.250	
Canal Road East SB	SA	B1	1	3.60			1975	38	0.019			1975	126	0.064	
	SA	B2	1	3.60			2115	38	0.018			2115	126	0.060	
Sharp Street East WB	LT	C1	3	3.00	15.0	100	1741	83	0.048	0.048	100	1741	192	0.110	0.110
	LT	C2	3	3.00	15.0	100	1741	83	0.048		100	1741	192	0.110	
pedestrian phase			D(p)	3		min crossing time =	5	sec GM +	7	sec FGM =	12	sec			

<p>AM Traffic Flow (pcu/hr)</p> <div style="text-align: center;"> </div>	<p>PM Traffic Flow (pcu/hr)</p> <div style="text-align: center;"> </div>	<p><b>S=1940+100(W-3.25)</b>      <b>S=2080+100(W-3.25)</b>      Note:</p> <p><b>S<sub>m</sub>=S÷(1+1.5f/r)</b>      <b>S<sub>m</sub>=(S-230)÷(1+1.5f/r)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>AM Peak</th> <th>PM Peak</th> </tr> </thead> <tbody> <tr> <td>Group</td> <td>1,2+3</td> <td>1,2+3</td> </tr> <tr> <td>Sum y</td> <td>0.354</td> <td>0.360</td> </tr> <tr> <td>L (s)</td> <td>11</td> <td>11</td> </tr> <tr> <td>C (s)</td> <td>100</td> <td>100</td> </tr> <tr> <td>practical y</td> <td>0.801</td> <td>0.801</td> </tr> <tr> <td>R.C. (%)</td> <td>127%</td> <td>122%</td> </tr> </tbody> </table>		AM Peak	PM Peak	Group	1,2+3	1,2+3	Sum y	0.354	0.360	L (s)	11	11	C (s)	100	100	practical y	0.801	0.801	R.C. (%)	127%	122%
	AM Peak	PM Peak																					
Group	1,2+3	1,2+3																					
Sum y	0.354	0.360																					
L (s)	11	11																					
C (s)	100	100																					
practical y	0.801	0.801																					
R.C. (%)	127%	122%																					

1 	2 	3 	4 	5 
AM G =            I/G =            G =            I/G =            7            G =            I/G =            6            G =            I/G =            G =            I/G =	G =            I/G =            G =            I/G =            G =            I/G =            G =            I/G =            G =            I/G =	PM G =            I/G =            G =            I/G =            7            G =            I/G =            6            G =            I/G =            G =            I/G =	G =            I/G =            G =            I/G =            G =            I/G =            G =            I/G =            G =            I/G =	G =            I/G =            G =            I/G =            G =            I/G =            G =            I/G =            G =            I/G =



# Signal Junction Analysis

Junction: Matheson Street / Sharp Street East Job Number: J7471  
 Scenario: Future Condition (With Approved GBP) P. 5  
 Design Year: 2033 Designed By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: 15 Apr 2026

Approach	Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak					PM Peak				
						Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y
Matheson Street NB	LT	A1	1	3.00	20.0	100	1781	139	0.078	0.078	100	1781	358	0.201	0.201
	SA	A2	1	3.00			1915	121	0.063			1915	146	0.076	
Sharp Street East WB	SA	B1	2	3.00			1915	36	0.019	0.019		1915	42	0.022	0.022
pedestrian phase						C(p)	2,3		min crossing time =	10	sec GM +	6	sec FGM =	16	sec
						D(p)	1,3		min crossing time =	6	sec GM +	6	sec FGM =	12	sec
						E(p)	3		min crossing time =	5	sec GM +	7	sec FGM =	12	sec
						F(p)	2,3		min crossing time =	8	sec GM +	6	sec FGM =	14	sec

<p>AM Traffic Flow (pcu/hr)</p>	<p>PM Traffic Flow (pcu/hr)</p>	<p><b>S=1940+100(W-3.25)</b>      <b>S=2080+100(W-3.25)</b> <span style="float: right;">Note:</span></p> <p><b>S<sub>m</sub>=S÷(1+1.5f/r)</b>      <b>S<sub>m</sub>=(S-230)÷(1+1.5f/r)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>AM Peak</th> <th>PM Peak</th> </tr> </thead> <tbody> <tr> <td>Group</td> <td>1+2+3</td> <td>1+2+3</td> </tr> <tr> <td>Sum y</td> <td>0.097</td> <td>0.223</td> </tr> <tr> <td>L (s)</td> <td>35</td> <td>35</td> </tr> <tr> <td>C (s)</td> <td>100</td> <td>100</td> </tr> <tr> <td>practical y</td> <td>0.585</td> <td>0.585</td> </tr> <tr> <td>R.C. (%)</td> <td>504%</td> <td>162%</td> </tr> </tbody> </table>		AM Peak	PM Peak	Group	1+2+3	1+2+3	Sum y	0.097	0.223	L (s)	35	35	C (s)	100	100	practical y	0.585	0.585	R.C. (%)	504%	162%
	AM Peak	PM Peak																					
Group	1+2+3	1+2+3																					
Sum y	0.097	0.223																					
L (s)	35	35																					
C (s)	100	100																					
practical y	0.585	0.585																					
R.C. (%)	504%	162%																					

1	2	3	4	5
AM	G = I/G = 5	G = I/G = 7	G = 16 I/G = 9	G = I/G =
PM	G = I/G = 5	G = I/G = 7	G = 16 I/G = 9	G = I/G =

# Signal Junction Analysis

Junction: Matheson Street / Sharp Street East Job Number: J7471  
 Scenario: Future Condition (With Proposed Development) P. 6  
 Design Year: 2033 Designed By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: 15 Apr 2026

Approach	Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak					PM Peak				
						Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y
Matheson Street NB	LT	A1	1	3.00	20.0										
	SA	A2	1	3.00											
Sharp Street East WB	SA	B1	2	3.00											
pedestrian phase						C(p)	2,3		min crossing time =	10	sec GM +	6	sec FGM =	16	sec
						D(p)	1,3		min crossing time =	6	sec GM +	6	sec FGM =	12	sec
						E(p)	3		min crossing time =	5	sec GM +	7	sec FGM =	12	sec
						F(p)	2,3		min crossing time =	8	sec GM +	6	sec FGM =	14	sec

<p>AM Traffic Flow (pcu/hr)</p>	<p>PM Traffic Flow (pcu/hr)</p>	<p><b>S=1940+100(W-3.25)      S=2080+100(W-3.25)</b>  <b>S<sub>m</sub>=S÷(1+1.5f/r)      S<sub>m</sub>=(S-230)÷(1+1.5f/r)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>AM Peak</th> <th>PM Peak</th> </tr> </thead> <tbody> <tr> <td>Group</td> <td>1+2+3</td> <td>1+2+3</td> </tr> <tr> <td>Sum y</td> <td>0.092</td> <td>0.214</td> </tr> <tr> <td>L (s)</td> <td>35</td> <td>35</td> </tr> <tr> <td>C (s)</td> <td>100</td> <td>100</td> </tr> <tr> <td>practical y</td> <td>0.585</td> <td>0.585</td> </tr> <tr> <td>R.C. (%)</td> <td>537%</td> <td>174%</td> </tr> </tbody> </table> <p>Note:</p>		AM Peak	PM Peak	Group	1+2+3	1+2+3	Sum y	0.092	0.214	L (s)	35	35	C (s)	100	100	practical y	0.585	0.585	R.C. (%)	537%	174%
	AM Peak	PM Peak																					
Group	1+2+3	1+2+3																					
Sum y	0.092	0.214																					
L (s)	35	35																					
C (s)	100	100																					
practical y	0.585	0.585																					
R.C. (%)	537%	174%																					

1	2	3	4	5
AM G = I/G = 5 G = I/G =	G = I/G = 7 G = I/G =	G = 16 I/G = 9 G = I/G =	G = I/G = G = I/G =	G = I/G = G = I/G =
PM G = I/G = 5 G = I/G =	G = I/G = 7 G = I/G =	G = 16 I/G = 9 G = I/G =	G = I/G = G = I/G =	G = I/G = G = I/G =

# Signal Junction Analysis

Junction: Canal Road East / Canal Road West / Morrison Hill Road / Leighton Road Job Number: J7471  
 Scenario: Existing Condition P. 13  
 Design Year: 2026 Designed By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: 15 Apr 2026

Approach	Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak					PM Peak					
						Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	
Canal Road East SB	LT	A1	2,3	3.50	15.0		100	1786	337	0.189		100	1786	392	0.219	
	LT+SA	A2	2,3	3.50	20.0		0	2105	459	0.218		0	2105	457	0.217	
	SA+RT	A3	2,3	3.50	35.0		95	2023	497	0.246	0.246	85	2031	500	0.246	0.246
Leighton Road EB	LT	B1	1,2	3.30	15.0		100	1768	277	0.157		100	1768	341	0.193	
	LT+SA	B2	1,2	3.30	15.0		100	1895	296	0.156		100	1895	365	0.193	
	SA	B3	1	3.30				2085	461	0.221	0.221		2085	596	0.286	0.286
Leighton Road WB	LT+SA	C1	1	3.50	25.0		97	1857	305	0.164		100	1854	276	0.149	
	SA	C2	1	3.50				2105	345	0.164			2105	289	0.137	
pedestrian phase	D(p)	4				min crossing time =	6	sec GM +	10		sec FGM =	16	sec			
	E(p)	4				min crossing time =	7	sec GM +	13		sec FGM =	20	sec			

<p>AM Traffic Flow (pcu/hr)</p>	<p>PM Traffic Flow (pcu/hr)</p>	<p>Note:</p> $S=1940+100(W-3.25) \quad S=2080+100(W-3.25)$ $S_m=S+(1+1.5f/r) \quad S_m=(S-230)/(1+1.5f/r)$ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>AM Peak</th> <th>PM Peak</th> </tr> </thead> <tbody> <tr> <td>Group</td> <td>1+2,3</td> <td>1+2+3</td> </tr> <tr> <td>Sum y</td> <td>0.467</td> <td>0.532</td> </tr> <tr> <td>L (s)</td> <td>14</td> <td>14</td> </tr> <tr> <td>C (s)</td> <td>130</td> <td>130</td> </tr> <tr> <td>practical y</td> <td>0.803</td> <td>0.803</td> </tr> <tr> <td>R.C. (%)</td> <td>72%</td> <td>51%</td> </tr> </tbody> </table>		AM Peak	PM Peak	Group	1+2,3	1+2+3	Sum y	0.467	0.532	L (s)	14	14	C (s)	130	130	practical y	0.803	0.803	R.C. (%)	72%	51%
	AM Peak	PM Peak																					
Group	1+2,3	1+2+3																					
Sum y	0.467	0.532																					
L (s)	14	14																					
C (s)	130	130																					
practical y	0.803	0.803																					
R.C. (%)	72%	51%																					

1	2	3	4	5
AM	G = I/G = 8	G = I/G =	G = I/G = 8	G = I/G =
PM	G = I/G = 8	G = I/G =	G = I/G = 8	G = I/G =

# Signal Junction Analysis

Junction: Canal Road East / Canal Road West / Morrison Hill Road / Leighton Road Job Number: J7471  
 Scenario: Future Condition (With Approved GBP) P. 14  
 Design Year: 2033 Designed By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: 15 Apr 2026

Approach	Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak					PM Peak					
						Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	
Canal Road East SB	LT	A1	2,3	3.50	15.0		100	1786	435	0.244		100	1786	455	0.255	
	LT+SA	A2	2,3	3.50	20.0		0	2105	482	0.229		0	2105	482	0.229	
	SA+RT	A3	2,3	3.50	35.0		95	2023	523	0.259	0.259	85	2031	527	0.259	0.259
Leighton Road EB	LT	B1	1,2	3.30	15.0		100	1768	288	0.163		100	1768	354	0.200	
	LT+SA	B2	1,2	3.30	15.0		100	1895	308	0.163		100	1895	380	0.201	
	SA	B3	1	3.30				2085	479	0.230	0.230		2085	620	0.297	0.297
Leighton Road WB	LT+SA	C1	1	3.50	25.0		83	1872	372	0.199		100	1854	287	0.155	
	SA	C2	1	3.50				2105	419	0.199			2105	456	0.217	
pedestrian phase		D(p)	4			min crossing time =	6	sec GM +	10		sec FGM =	16	sec			
		E(p)	4			min crossing time =	7	sec GM +	13		sec FGM =	20	sec			

<p>AM Traffic Flow (pcu/hr)</p>	<p>PM Traffic Flow (pcu/hr)</p>	<p>Note:</p> $S=1940+100(W-3.25) \quad S=2080+100(W-3.25)$ $S_M=S+(1+1.5f/r) \quad S_M=(S-230)/(1+1.5f/r)$ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>AM Peak</th> <th>PM Peak</th> </tr> </thead> <tbody> <tr> <td>Group</td> <td>1+2+3</td> <td>1+2+3</td> </tr> <tr> <td>Sum y</td> <td>0.488</td> <td>0.557</td> </tr> <tr> <td>L (s)</td> <td>14</td> <td>14</td> </tr> <tr> <td>C (s)</td> <td>130</td> <td>130</td> </tr> <tr> <td>practical y</td> <td>0.803</td> <td>0.803</td> </tr> <tr> <td>R.C. (%)</td> <td>64%</td> <td>44%</td> </tr> </tbody> </table>		AM Peak	PM Peak	Group	1+2+3	1+2+3	Sum y	0.488	0.557	L (s)	14	14	C (s)	130	130	practical y	0.803	0.803	R.C. (%)	64%	44%
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# Signal Junction Analysis

Junction: Canal Road East / Canal Road West / Morrison Hill Road / Leighton Road Job Number: J7471  
 Scenario: Future Condition (With Proposed Development) P. 15  
 Design Year: 2033 Designed By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: 15 Apr 2026

Approach	Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak					PM Peak					
						Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	Flow (pcu/hr)	y value	Critical y	
Canal Road East SB	LT	A1	2,3	3.50	15.0		100	1786	432	0.242		100	1786	449	0.251	
	LT+SA	A2	2,3	3.50	20.0		0	2105	480	0.228		0	2105	477	0.227	
	SA+RT	A3	2,3	3.50	35.0		95	2023	519	0.257	0.257	85	2031	521	0.257	0.257
Leighton Road EB	LT	B1	1,2	3.30	15.0		100	1768	288	0.163		100	1768	354	0.200	
	LT+SA	B2	1,2	3.30	15.0		100	1895	308	0.163		100	1895	380	0.201	
	SA	B3	1	3.30				2085	479	0.230	0.230		2085	620	0.297	0.297
Leighton Road WB	LT+SA	C1	1	3.50	25.0		83	1872	372	0.199		100	1854	287	0.155	
	SA	C2	1	3.50				2105	419	0.199			2105	456	0.217	
pedestrian phase	D(p)	4				min crossing time =	6	sec GM +	10		sec FGM =	16	sec			
	E(p)	4				min crossing time =	7	sec GM +	13		sec FGM =	20	sec			

<b>AM Traffic Flow (pcu/hr)</b> 	<b>PM Traffic Flow (pcu/hr)</b> 	<p><b>S=1940+100(W-3.25)      S=2080+100(W-3.25)</b>  <b>S<sub>m</sub>=S÷(1+1.5f/r)      S<sub>m</sub>=(S-230)÷(1+1.5f/r)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>AM Peak</th> <th>PM Peak</th> </tr> </thead> <tbody> <tr> <td>Group</td> <td>1+2+3</td> <td>1+2+3</td> </tr> <tr> <td>Sum y</td> <td>0.486</td> <td>0.554</td> </tr> <tr> <td>L (s)</td> <td>14</td> <td>14</td> </tr> <tr> <td>C (s)</td> <td>130</td> <td>130</td> </tr> <tr> <td>practical y</td> <td>0.803</td> <td>0.803</td> </tr> <tr> <td>R.C. (%)</td> <td>65%</td> <td>45%</td> </tr> </tbody> </table> <p style="font-size: small;">Note:</p>		AM Peak	PM Peak	Group	1+2+3	1+2+3	Sum y	0.486	0.554	L (s)	14	14	C (s)	130	130	practical y	0.803	0.803	R.C. (%)	65%	45%
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