

## ***Appendix 2***

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### **Traffic Impact Assessment**

**Proposed Temporary Public Vehicle Park  
with Electric Vehicle Charging Facilities and  
Filling of Land for a Period of 3 Years,  
Various Lots in DD7, Kau Lung Hang,  
Tai Po, New Territories**

**Traffic Impact Assessment  
Final Report  
September 2025**

**Prepared by: CKM Asia Limited**

**Prepared for: Wing Lee (Kong Shum) Transportation Limited**

# **Proposed Temporary Public Vehicle Park with Electric Vehicle Charging Facilities and Filling of Land for a Period of 3 Years, Various Lots in DD7, Kau Lung Hang, Tai Po, New Territories**

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**Proposed Temporary Public Vehicle Park with Electric Vehicle Charging  
Facilities and Filling of Land for a Period of 3 Years,  
Various Lots in DD7, Kau Lung Hang, Tai Po, New Territories**

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**Proposed Temporary Public Vehicle Park with Electric Vehicle Charging  
Facilities and Filling of Land for a Period of 3 Years,  
Various Lots in DD7, Kau Lung Hang, Tai Po, New Territories**

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## 1.0 INTRODUCTION

### Background

- 1.1 The application site is located at various lots in D.D. 7 at Kau Lung Hang, in Tai Po. The location of the application site is shown in **Figure 1.1**.
- 1.2 CKM Asia Limited, a traffic and transportation planning consultancy firm, was commissioned by the Applicant to prepare a traffic assessment in connection with the S16 application for a temporary public vehicle park with 201 car parking spaces and 10 parking spaces shared-use for HGV and coach for a period of 3 years (the "Proposed Temporary Public Vehicle Park"). Access to the Proposed Temporary Public Vehicle Park is via its existing vehicular access, which is provided at Tai Wo Service Road West, some 600m north of its junction with Hong Lok Yuen Road.
- 1.3 This report describes the traffic assessment undertaken for the Proposed Temporary Public Vehicle Park.

### Structure of the Report

- 1.4 The report is structured as follows:

- |               |  |
|---------------|--|
| Chapter One   | - Gives the background of the project;                 |
| Chapter Two   | - Describes the existing situation;                    |
| Chapter Three | - Presents the Proposed Temporary Public Vehicle Park; |
| Chapter Four  | - Describes the traffic impact analysis; and           |
| Chapter Five  | - Gives the overall conclusion.                        |

## 2.0 THE EXISTING SITUATION

### The Application Site

- 2.1 The application site is currently used as a plant nursery with some temporary shelters and ancillary storage area. It fronts onto Tai Wo Service Road West to the east, some 600m north of its junction with Hong Lok Yuen Road.

### The Road Network

- 2.2 Tai Wo Service Road West is classified as rural road, and is of single carriageway 2-lane standard. It connects with Wo Hing Road to the north, and with Hong Lok Yuen Road, Fanling Highway and Lam Kam Road Interchange to the south.
- 2.3 Lam Kam Road is classified as a rural road, and is of single carriageway 2-lane standard. It connects with the Lam Kam Road Interchange and Tolo Highway to the north and with Route Twisk, Kam Sheung Road and Kam Tin Road to the south.

### Manual Classified Traffic Counts

- 2.4 To quantify the traffic flows in the vicinity of the application site, manual classified counts were conducted on Wednesday, 19<sup>th</sup> June 2024 during the AM and PM peak periods at the following junctions:
- J1: Tai Wo Service Road West / Hong Lok Yuen Road;
  - J2: Lam Kam Road Interchange / Tai Po Road – Tai Wo; and
  - J3: Lam Kam Road Interchange.
- 2.5 The locations of these junctions are shown in **Figure 2.1** and the layouts are shown in **Figures 2.2 – 2.4** respectively.
- 2.6 From the traffic survey conducted, the AM and PM peak hours are found between 0730 – 0830 hours and 1715 – 1815 hours respectively. The existing AM and PM peak hour flows are presented in **Figures 2.5**.

### Existing Junction Performance

- 2.7 The existing operating performance of the surveyed junctions is calculated based on the existing traffic flows, and the analysis was undertaken using the method found in the Transport Planning and Design Manual (“TPDM”). The results are summarised in **Table 2.1**, and detailed calculations are presented in the **Appendix A**.

TABLE 2.1 EXISTING JUNCTION PERFORMANCE

| Ref | Junction  | Type of Junction<br>(Parameter) | AM<br>Peak | PM<br>Peak |
|-----|---|---------------------------------|------------|------------|
| J1  | Tai Wo Service Road West / Hong Lok Yuen Road   | Signal (RC)                     | 65%        | 58%        |
| J2  | Lam Kam Road Interchange / Tai Po Road – Tai Wo | Priority (DFC)                  | 0.581      | 0.484      |
| J3  | Lam Kam Road Interchange                        | RA (DFC)                        | 0.484      | 0.631      |

Note: RA – roundabout RC – reserve capacity DFC - design flow/capacity ratio

- 2.8 **Table 2.1** shows that the junctions operate with capacities.

### Public Transport Services

- 2.9 At present, 10 franchised bus and 3 green minibus ("GMB") routes operate in the vicinity of the Proposed Temporary Public Vehicle Park. Details of public transport services are presented in **Table 2.2**.

TABLE 2.2 EXISTING PUBLIC TRANSPORT SERVICES OPERATING IN THE VICINITY OF THE PROPOSED TEMPORARY PUBLIC VEHICLE PARK

| Route    | Routing  | Headway (minutes) |
|----------|--|-------------------|
| KMB 73   | Fanling (Wah Ming) – Tai Po Industrial Estate                | 20 – 30           |
| KMB 73A  | Fanling (Wah Ming) – Yu Chui Court                           | 20 – 35           |
| KMB 73B  | Chuen On Road (Nethersole Hospital) – Sheung Shui (Circular) | 25 – 60           |
| KMB 74C  | Kau Lung Hang – Kwun Tong Ferry                              | AM Peak           |
| KMB 74D  | Kau Lung Hang – Kwun Tong Ferry                              | 25 – 60           |
| KMB 271P | Kau Lung Hang – Tsim Sha Tsui (Canton Road)                  | AM Peak           |
| KMB 273C | Kau Lung Hang – Tsuen Wan West Station                       | AM Peak           |
| KMB 373  | Sheung Shui – Central (Hong Kong Station)                    | AM, PM Peak       |
| KMB N373 | Fanling (Luen Wo Hui) – Central (Macau Ferry)                | Overnight         |
| KMB N73  | Shatin Central – Lok Ma Chau                                 | Overnight         |
| GMB 502  | Ching Ho Estate – Nethersole Hospital                        | 8 – 15            |
| GMB 25A  | Tai Po Market – Nam Wa Po                                    | 5 - 10            |
| GMB 25B  | Tai Po Market – Kau Lung Hang / Yuen Leng                    | 4 – 8             |

Note: KMB – Kowloon Motor Bus GMB – Green Minibus



### 3.0 THE PROPOSED TEMPORARY PUBLIC VEHICLE PARK

#### The Proposed Temporary Public Vehicle Park

- 3.1 The Proposed Temporary Public Vehicle Park provides 201 car parking spaces and 10 parking spaces shared-use for HGV and coach, and the layout plan is shown in **Figure 3.1**.

#### Swept Path Analysis

- 3.2 The CAD-based swept path analysis programme, **AUTODESK VEHICLE TRACKING**, was used to check the ease of manoeuvring of vehicles within the Proposed Temporary Public Vehicle Park, and the swept path analysis drawings are found in **Appendix B**. Vehicles are found to have no manoeuvring problems.

## 4.0 TRAFFIC ANALYSIS

### Design Year

- 4.1 The Proposed Temporary Public Vehicle Park is scheduled to commence operation in 2026 and operate until 2029. Hence, the design year adopted for traffic analysis is 2029.

### Traffic Forecasting

- 4.2 Year 2029 peak hour traffic flows for the junction capacity analysis is produced (i) with reference to existing traffic flows; (ii) estimated traffic growth rate from 2024 to 2029; and (iii) expected net increase in traffic generation due to the Proposed Temporary Public Vehicle Park.

### Estimated Traffic Growth Rate from 2024 to 2029

- 4.3 Reference is made to the (i) the Annual Average Daily Traffic ("AADT") of the core stations which are located in the vicinity found in the Annual Traffic Census ("ATC") published by Transport Department, and (ii) the population projection for Tai Po District from the "Projections of Population Distribution 2023 – 2031" published by the Planning Department. The above information is presented in **Tables 4.1** and **4.2** respectively.

TABLE 4.1 AADT OF THE CORE STATIONS LOCATED IN THE VICINITY OF THE APPLICATION SITE

| Station                              | 5507                                     | 5461                    | Overall |
|--------------------------------------|--|-------------------------|---------|
| Road                                 | Tai Wo Service Rd W                      | Fanling Highway         | –       |
| From                                 | Lam Kam Rd INT                           | Lam Kam Rd INT          | –       |
| To                                   | Kau Lung Hang Flyover<br>near Kiu Tau Rd | Kau Lung Hang Lo<br>Wai | –       |
| 2017                                 | 5,540*                                   | 92,220*                 | 97,760  |
| 2018                                 | 5,670*                                   | 95,160*                 | 100,830 |
| 2019                                 | 4,570                                    | 95,760                  | 100,330 |
| 2020                                 | 4,330                                    | 92,630                  | 96,960  |
| 2021                                 | 4,500*                                   | 97,150*                 | 101,650 |
| 2022                                 | 4,360*                                   | 92,840*                 | 97,200  |
| 2023                                 | 4,470*                                   | 98,660*                 | 103,130 |
| Average Annual<br>Growth (2017-2023) | -3.51%                                   | 1.13%                   | 0.90%   |

Note: \* Estimated by Growth Factor

TABLE 4.2 POPULATION PROJECTIONS OF TAI PO DISTRICT

| Year                               | Population in Tai Po |
|------------------------------------|----------------------|
| 2024                               | 331,800              |
| 2029                               | 341,200              |
| Average Annual Growth 2024 to 2029 | 0.56%                |

- 4.4 **Table 4.1** shows that the annual average traffic growth of 0.90%, between 2017 and 2023. **Table 4.2** shows that the annual population growth between 2024 – 2029 is 0.56%. To be conservative, an annual average traffic growth of 0.90% is adopted for year 2024 – 2029.

## Net Increase in Traffic Generation of the Proposed Temporary Public Vehicle Park

### Traffic Generation of the Existing uses

- 4.5 The traffic generation of the existing uses are estimated based on the traffic generation survey conducted at the application site during AM and PM peak of Wednesday, 19<sup>th</sup> June 2024. The survey result is presented in **Table 4.3**.

TABLE 4.3 TRAFFIC GENERATION OF EXISTING USES

| Items  | AM Peak    |            | PM Peak    |            |
|--|------------|------------|------------|------------|
|  | Generation | Attraction | Generation | Attraction |
| Traffic Generation of Existing Uses<br>(plant nursery, ancillary storage) (pcu/hr) | 17         | 13         | 18         | 21         |
|  | 30 (2-way) |            | 39 (2-way) |            |

- 4.6 **Table 4.3** shows that the existing uses generates 30 and 39 pcu (2-way) in AM and PM peak hours respectively.

### Traffic Generation of the Proposed Temporary Public Vehicle Park

- 4.7 The TPDM has no trip rates for temporary public vehicle park, hence, the traffic generation of the Proposed Temporary Public Vehicle Park is calculated based on the trip rates derived from the traffic generation survey conducted at a temporary car park at Ma Wo Road in Tai Po. The traffic generation survey was conducted on Wednesday, 19<sup>th</sup> June 2024, and the survey results, the derived trip rate and the calculated traffic generation of the Proposed Temporary Public Vehicle Park is presented in **Table 4.4**.

TABLE 4.4 TRAFFIC GENERATION OF THE PROPOSED TEMPORARY PUBLIC VEHICLE PARK

| Items  |                                   | Parameter    | AM Peak    |        | PM Peak    |        |
|--|-----------------------------------|--------------|------------|--------|------------|--------|
|  |                                   |              | GEN        | ATT    | GEN        | ATT    |
| Skye Parking, Ma Wo Road, Tai Po (246 spaces)  | Traffic Generation <sup>(1)</sup> | pcu/hr       | 16         | 15     | 10         | 30     |
|  | Derived Trip Rate <sup>(2)</sup>  | pcu/space/hr | 0.0650     | 0.0610 | 0.0407     | 0.1220 |
| The Proposed Temporary Public Vehicle Park (Total 211 spaces: 201 for car, 10 for HGV/Coach) | Traffic Generation <sup>(1)</sup> | pcu/hr       | 14         | 13     | 9          | 26     |
|  |                                   |              | 27 (2-way) |        | 35 (2-way) |        |

GEN – Generation

ATT – Attraction

- 4.8 **Table 4.4** shows that the Proposed Temporary Public Vehicle Park is expected to generate 27 and 35 pcu (2-way) in AM and PM peak hours respectively.

### Net Increase in Traffic Generation

- 4.9 The net increase in traffic generation between the existing uses and the Proposed Temporary Public Vehicle Park is presented in **Table 4.5**.

TABLE 4.5 NET INCREASE IN TRAFFIC GENERATION

| Scheme  | Traffic Generation (pcu/ hr) |            |                   |            |
|---|------------------------------|------------|-------------------|------------|
|   | AM Peak                      |            | PM Peak           |            |
|   | Generation                   | Attraction | Generation        | Attraction |
| The Proposed Temporary Public Vehicle Park (from Table 4.4) [a] | 14                           | 13         | 9                 | 26         |
| Existing Uses (from Table 4.3) [b]                              | 17                           | 13         | 18                | 21         |
| Net Increase [a] – [b]:   | -3                           | +0         | -9                | +5         |
|   | <b>-3 (2-way)</b>            |            | <b>-4 (2-way)</b> |            |

- 4.10 Compared to the existing uses, the Proposed Temporary Public Vehicle Park is expected to have net increase of -3 and -4 pcu / hour (2-way) in AM and PM peak respectively.

#### Year 2029 Peak Hour Traffic Flows

- 4.11 Year 2029 peak hour traffic flows for the following cases are derived:

*Year 2029 Without the Proposed Temporary Public Vehicle Park [A]* = *Existing Traffic Flow + estimated traffic growth between 2024 and 2029*

*Year 2029 With the Proposed Temporary Public Vehicle Park [B]* = *[A] + Net Increase in traffic generation*

- 4.12 Year 2029 peak hour traffic flows for the above two cases are shown in **Figures 4.1** and **4.2** respectively.

#### 2029 Junction Capacity Analysis

- 4.13 Year 2029 junction capacity analysis for the case without and with the Proposed Temporary Public Vehicle Park are summarised in **Table 4.6** and detailed calculations are found in the **Appendix A**.

TABLE 4.6 2029 JUNCTION PERFORMANCE

| Ref | Junction  | Type of Junction (Parameter) | Without the Proposed Temporary Public Vehicle Park |         | With the Proposed Temporary Public Vehicle Park |         |
|-----|---|------------------------------|--|---------|---|---------|
|     |   |                              | AM Peak  | PM Peak | AM Peak   | PM Peak |
| J1  | Tai Wo Service Road West / Hong Lok Yuen Road   | Signal (RC)                  | 57%  | 51%     | 57%   | 51%     |
| J2  | Lam Kam Road Interchange / Tai Po Road – Tai Wo | Priority (DFC)               | 0.615  | 0.514   | 0.615   | 0.516   |
| J3  | Lam Kam Road Interchange                        | RA (DFC)                     | 0.510  | 0.665   | 0.510   | 0.669   |

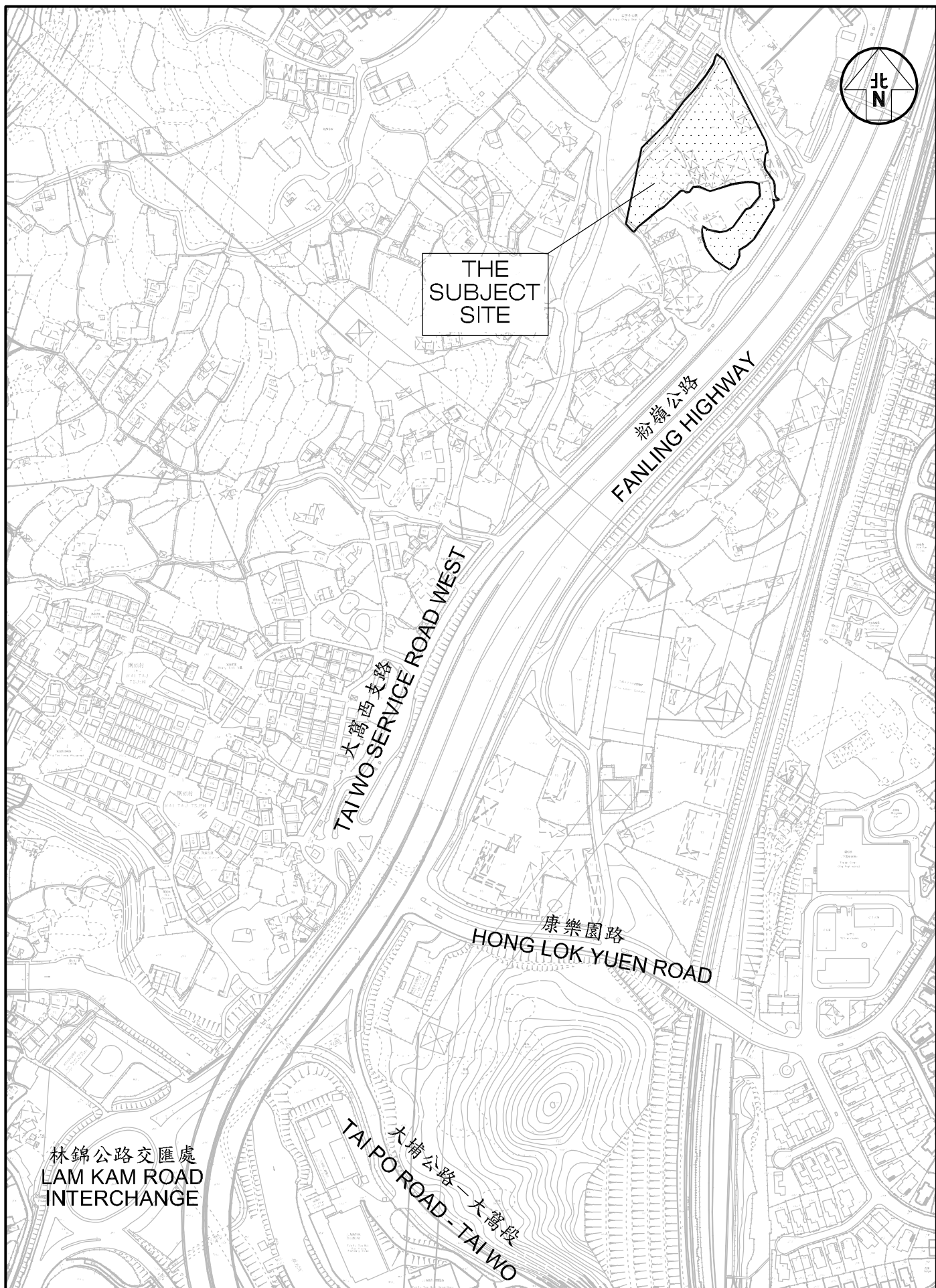
Note: RA – roundabout RC – reserve capacity DFC - design flow/capacity ratio

- 4.14 The results in **Table 4.6** indicate that the junctions analysed will operate with sufficient capacities in 2029, and the Proposed Temporary Public Vehicle Park has no adverse traffic impact.

## 5.0 SUMMARY

- 5.1 The application site is located at various lots in D.D. 7 at Kau Lung Hang, Tai Po. Access to the Proposed Temporary Public Vehicle Park is via its existing vehicular access which is provided at the Tai Wo Service Road West.
- 5.2 The Proposed Temporary Public Vehicle Park provides 201 car parking spaces and 10 parking spaces shared-use for HGV and coach for a period of 3 years.
- 5.3 Year 2029 peak hour traffic flows for the junction capacity analysis is produced (i) with reference to existing traffic flows; (ii) estimated traffic growth rate from 2024 to 2029; and (iii) expected net increase in traffic generation due to the Proposed Temporary Public Vehicle Park.
- 5.4 A comparison is made of the performance of the junctions assessed for the cases without and with the Proposed Temporary Public Vehicle Park. The traffic analysis concluded that the junctions analysed will operate with sufficient capacities in 2029, and the Proposed Temporary Public Vehicle Park has no adverse traffic impact.





Project Title  
PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES

Job No.  
J7353

Figure No.

1.1

Scale in A4

1 : 4,000

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L K W

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S C Y

Checked by  
K C

Revision  
B

Date  
03 SEP 2025

Figure Title

LOCATION OF THE APPLICATION SITE

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# LEGEND :



Surveyed Junction



THE  
SUBJECT  
SITE

粉嶺公路  
FANLING HIGHWAY

大窩西支路  
TAI WO SERVICE ROAD WEST

J01

康樂園路  
HONG LOK YUEN ROAD

J02

J03

林錦公路交匯處  
LAM KAM ROAD  
INTERCHANGE

大埔公路—大窩段  
TAI PO ROAD—TAI WO

Project Title  
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OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES

Job No.  
J7353

Figure No.

2.1

Scale in A4

1 : 4,000

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Revision  
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Date  
03 SEP 2025

Figure Title

LOCATIONS OF SURVEYED JUNCTIONS

**CKM Asia Limited**

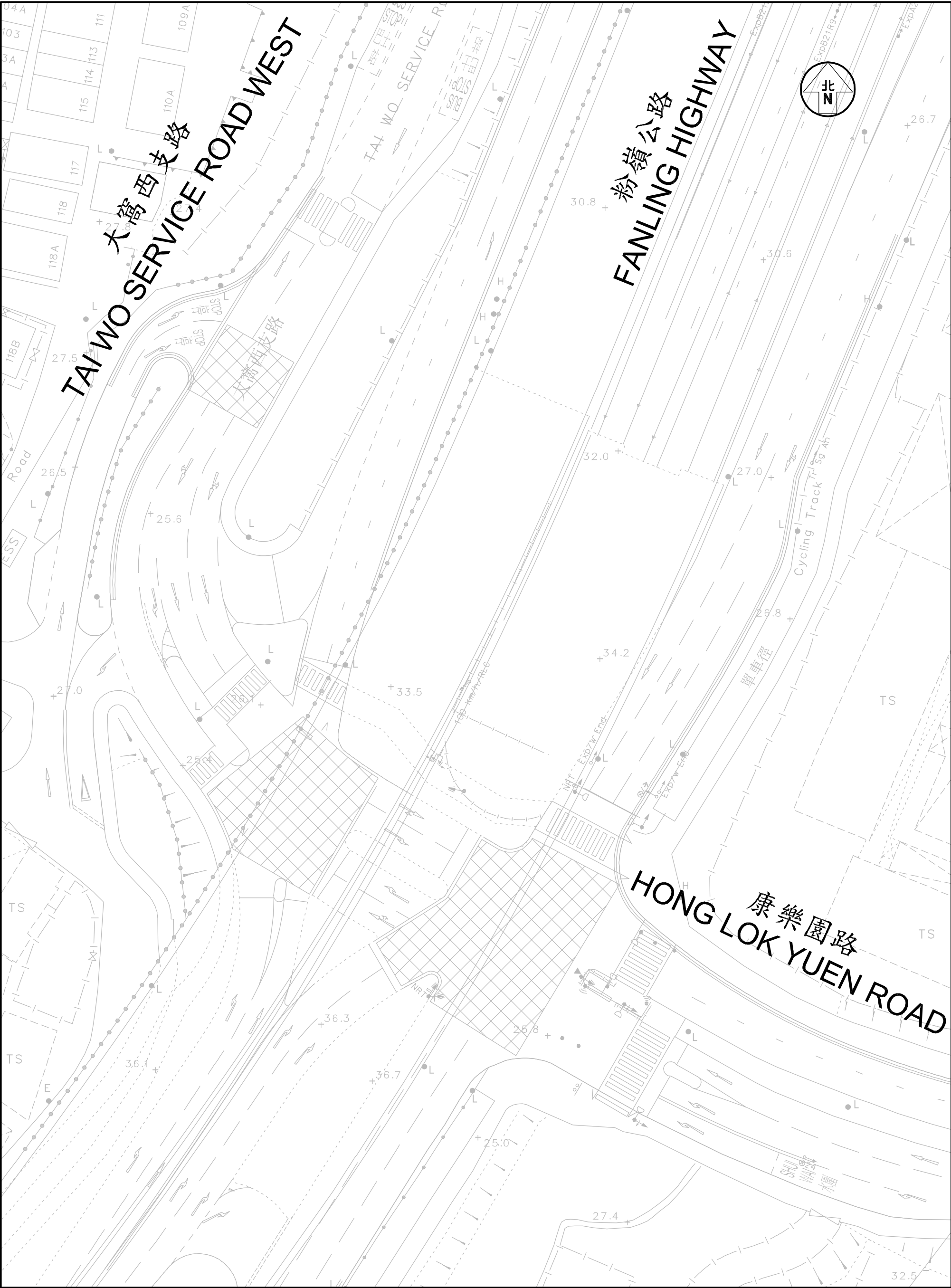
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21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong

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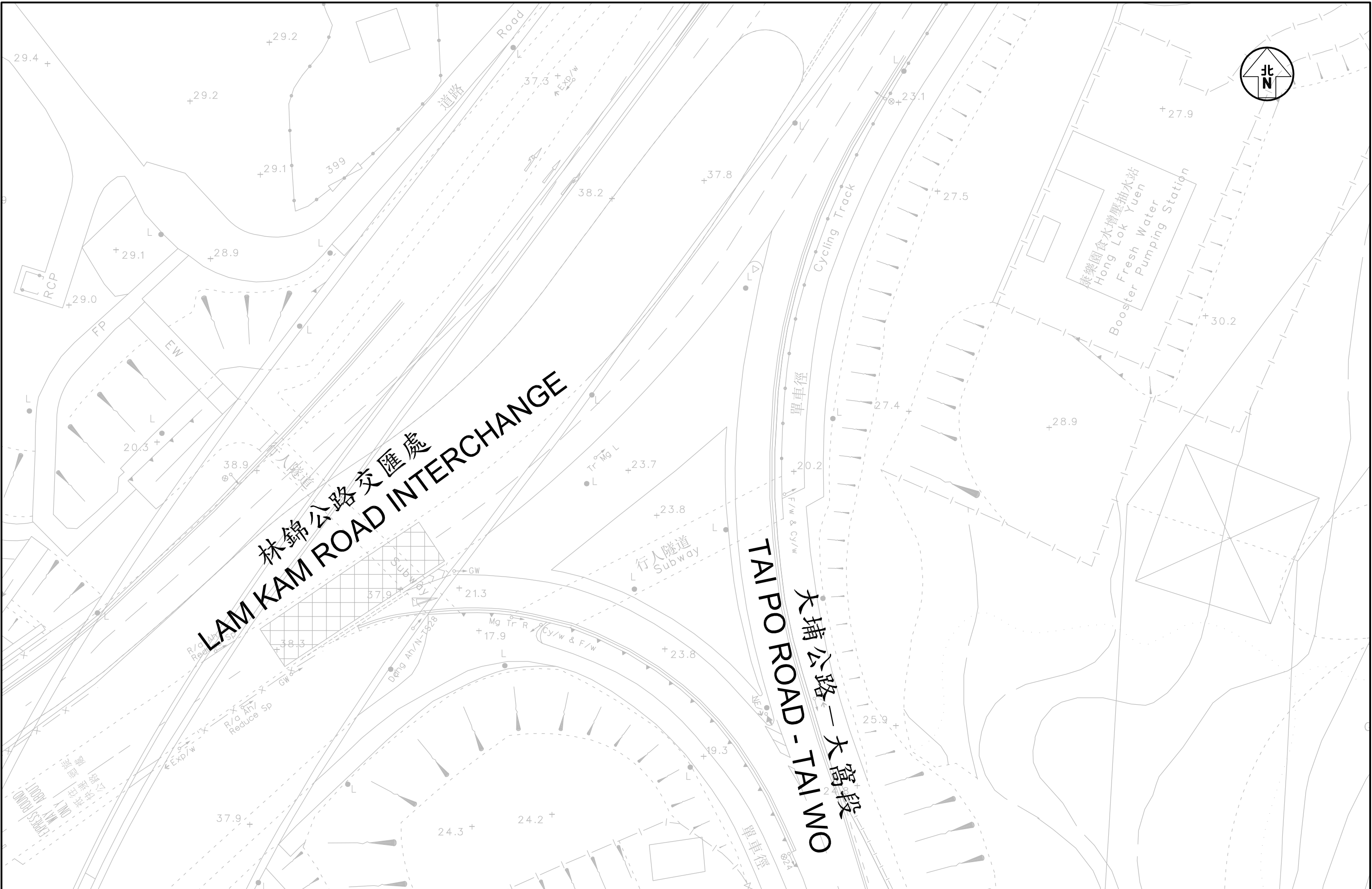
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| Figure Title  | LAYOUT OF TAI WO SERVICE ROAD WEST / HONG LOK YUEN ROAD   | CKM Asia Limited<br>Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong<br>Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk |                   |                   |               |                        |

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| Figure Title  | LAYOUT OF LAM KAM ROAD INTERCHANGE / TAI PO ROAD – TAI WO   |  |  |  |  | Designed by<br>L K W   | Drawn by<br>S C Y | Checked by<br>K C   |  |   |
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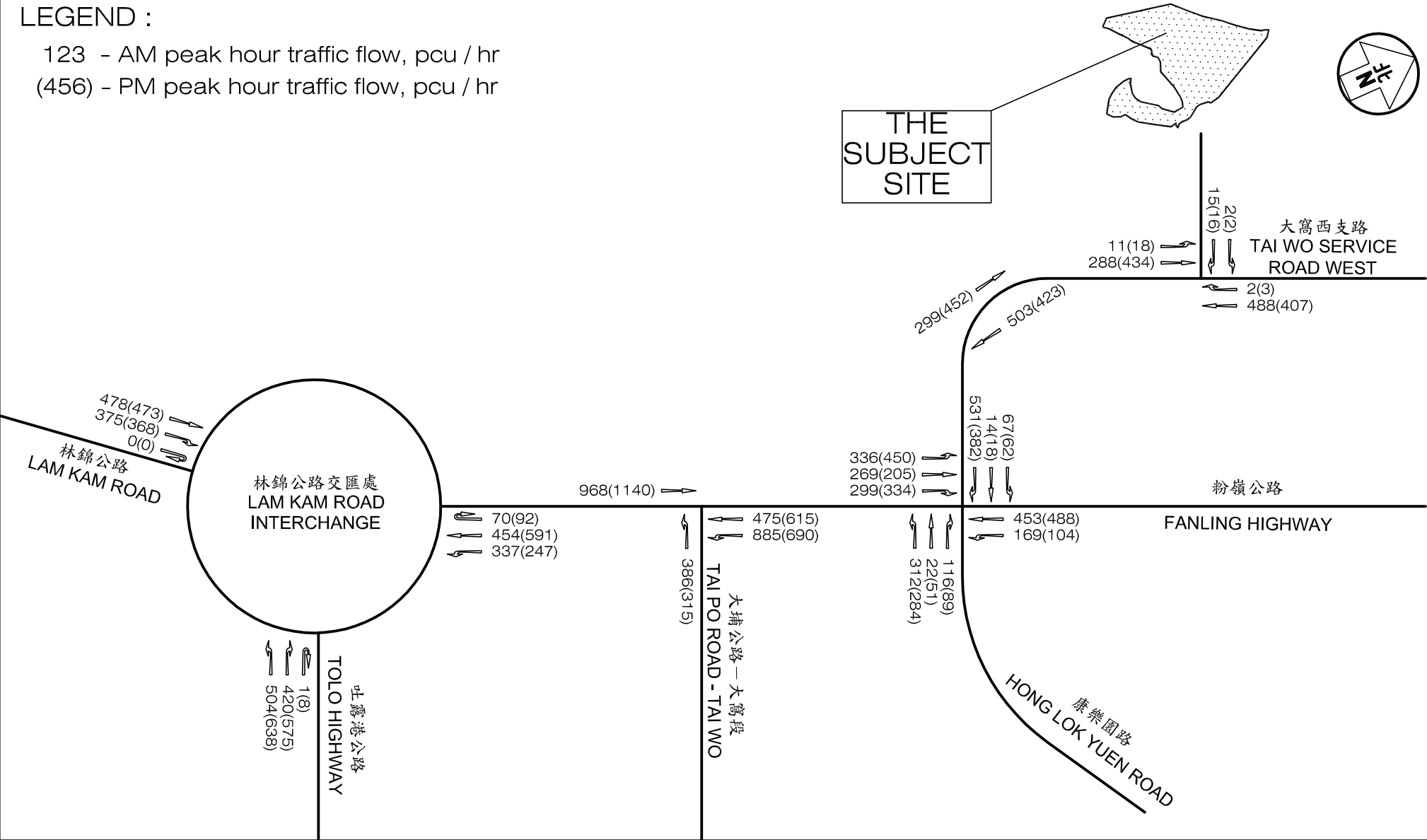


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| Figure Title  | LAYOUT OF LAM KAM ROAD INTERCHANGE  |  |  |  |  | Designed by<br>L K W   | Drawn by<br>S C Y   | Checked by<br>K C |   |
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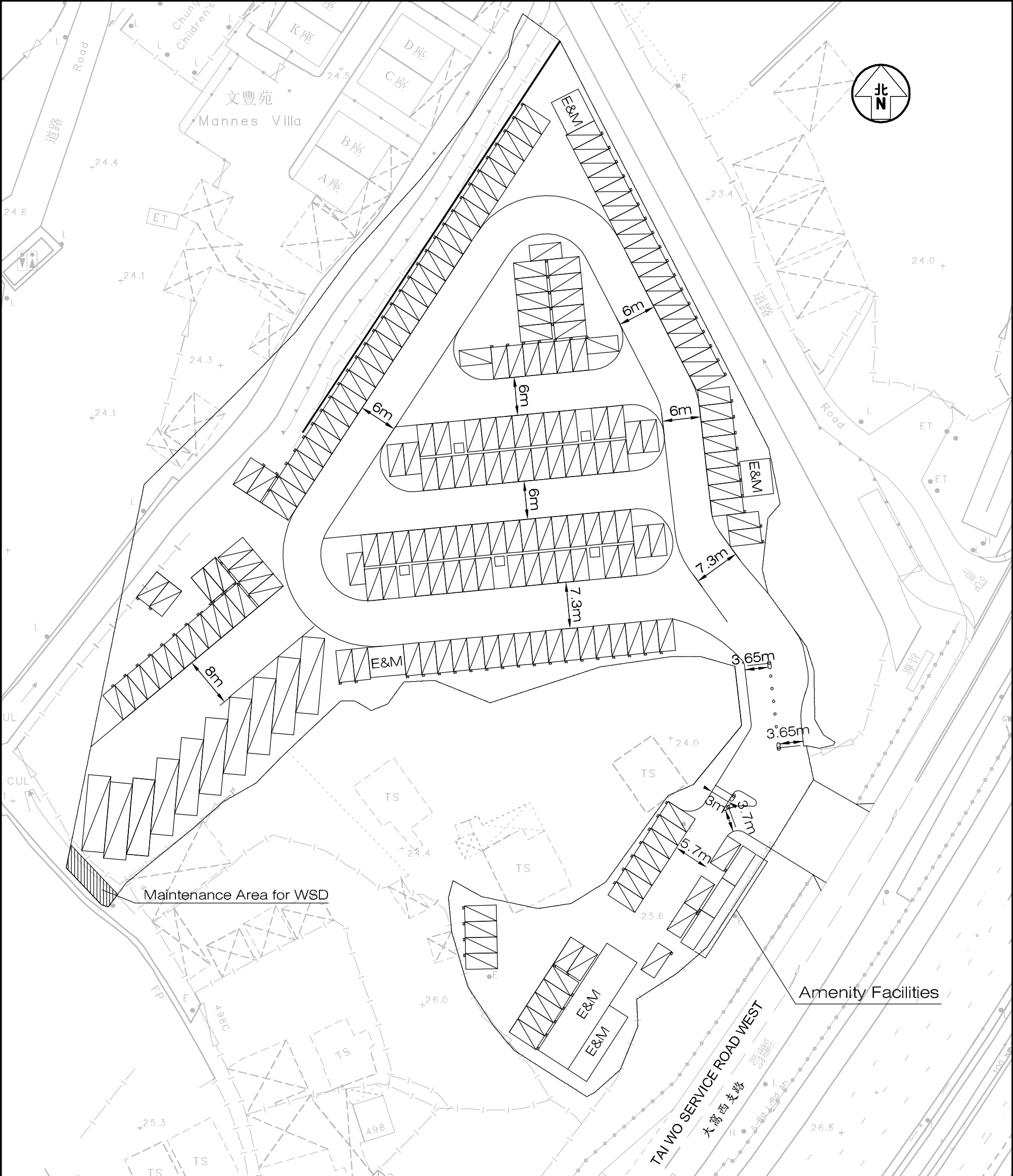
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
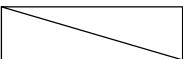
123 - AM peak hour traffic flow, pcu / hr  
(456) - PM peak hour traffic flow, pcu / hr



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| Project Title | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES |        |  |             |  | J7353 | Figure No.  | 2.5      |            | Revision | B | CKM Asia Limited<br>Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong<br>Tel : (852) 2520 5990    Fax : (852) 2528 6343<br>Email : mail@ckmasia.com.hk |
| Figure Title  | EXISTING PEAK HOUR TRAFFIC FLOWS  |        |  |             |  | J7353 | Designed by | Drawn by | Checked by |          |   |  |
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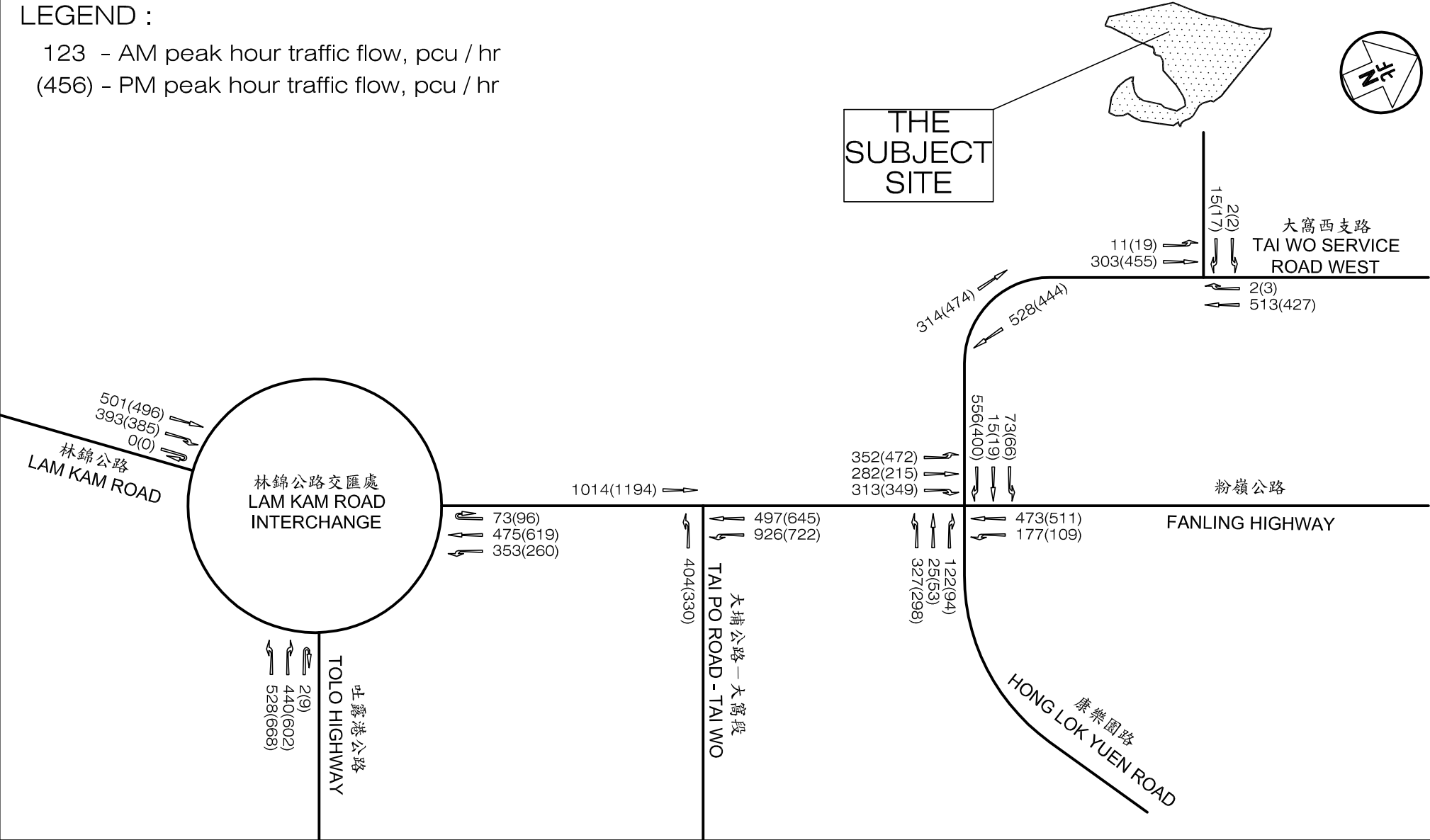
-  Car Parking Space  
@5.0m(L) X 2.5m(W)
-  Parking Space  
Shared-use for HGV and Coach  
@12.0m(L) X 3.5m(W)

|               |   |   |                   |                   |               |                        |
|---------------|---|---|-------------------|-------------------|---------------|------------------------|
| Project Title | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES | Job No.<br>J7353  | Figure No.<br>3.1 |                   |               | Scale in A3<br>1 : 600 |
|               |   | Designed by<br>L K W  | Drawn by<br>S C Y | Checked by<br>K C | Revision<br>B | Date<br>12 SEP 2025    |
| Figure Title  | LAYOUT PLAN OF PROPOSED TEMPORARY PUBLIC VEHICLE PARK   | <b>CKM Asia Limited</b><br>Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong<br>Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk |                   |                   |               |                        |

I:\JOB\J7350-J7399\J7353\2025 09\Fig 3.1 SP RevB.dwg

LEGEND :

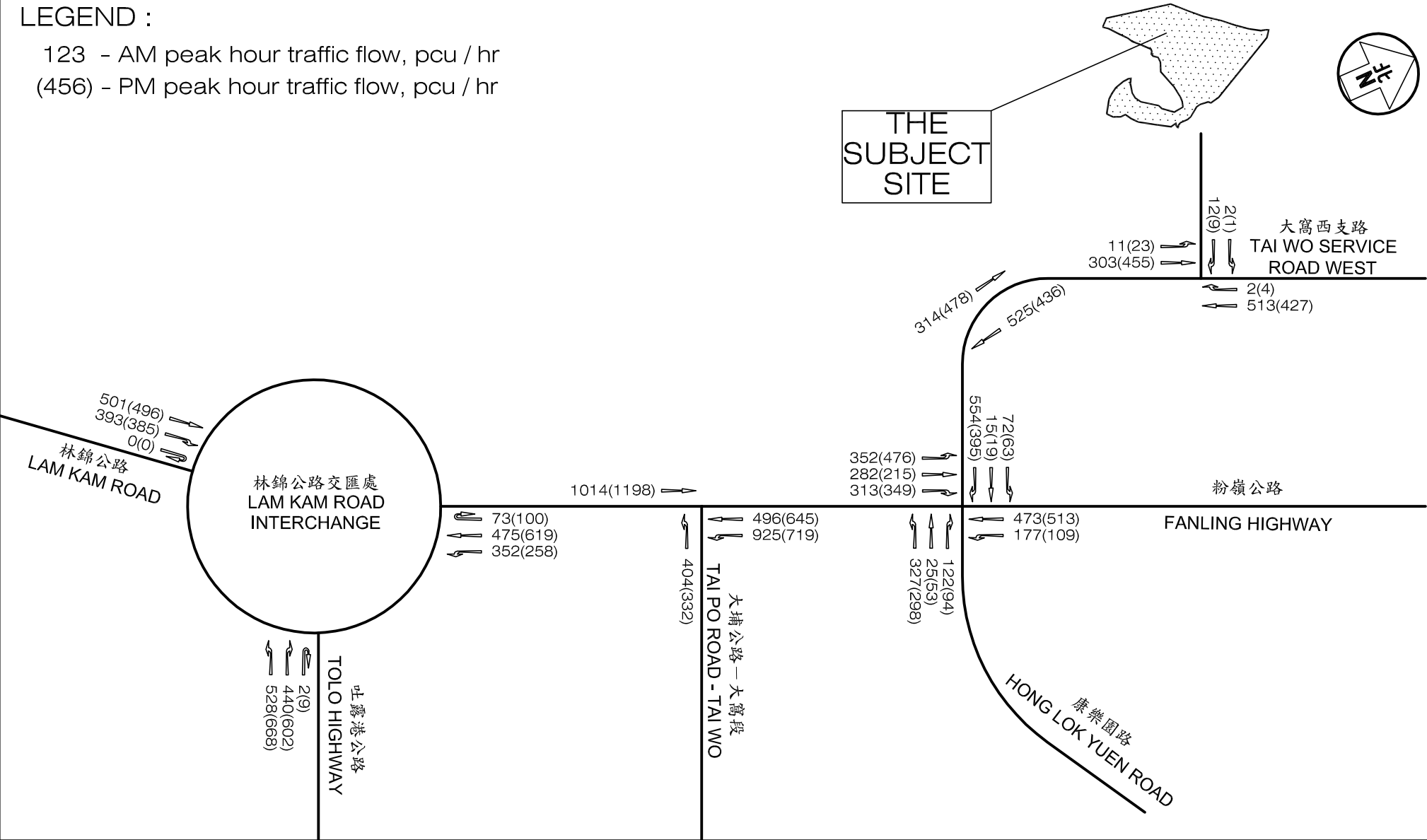
123 - AM peak hour traffic flow, pcu / hr  
(456) - PM peak hour traffic flow, pcu / hr



|               |   |  |  |  |  |       |             |          |             |            |     |  |  |
|---------------|---|--|--|--|--|-------|-------------|----------|-------------|------------|-----|--|--|
| Project Title | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES |  |  |  |  | J7353 | Figure No.  | 4.1      |             | Revision   | B   |  | CKM Asia Limited<br>Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong<br>Tel : (852) 2520 5990    Fax : (852) 2528 6343<br>Email : mail@ckmasia.com.hk |
| Figure Title  | 2029 PEAK HOUR TRAFFIC FLOWS WITHOUT THE PROPOSED TEMPORARY PUBLIC VEHICLE PARK   |  |  |  |  | J7353 | Designed by | Drawn by |             | Checked by |     |  |  |
|               |   |  |  |  |  |       | L K W       |          | S C Y       |            | K C |  |  |
|               |   |  |  |  |  |       | Scale in A4 |          | Date        |            |     |  |  |
|               |   |  |  |  |  |       | N.T.S.      |          | 03 SEP 2025 |            |     |  |  |

LEGEND :

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



|               |   |  |  |  |  |       |             |          |             |            |   |  |  |
|---------------|---|--|--|--|--|-------|-------------|----------|-------------|------------|---|--|--|
| Project Title | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES |  |  |  |  | J7353 | Figure No.  | 4.2      |             | Revision   | B |  | CKM Asia Limited<br>Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong<br>Tel : (852) 2520 5990    Fax : (852) 2528 6343<br>Email : mail@ckmasia.com.hk |
| Figure Title  | 2029 PEAK HOUR TRAFFIC FLOWS WITH THE PROPOSED TEMPORARY PUBLIC VEHICLE PARK  |  |  |  |  | J7353 | Designed by | Drawn by |             | Checked by |   |  |  |
|               |   |  |  |  |  |       | L K W       | S C Y    |             | K C        |   |  |  |
|               |   |  |  |  |  |       | Scale in A4 |          | Date        |            |   |  |  |
|               |   |  |  |  |  |       | N.T.S.      |          | 03 SEP 2025 |            |   |  |  |

## **Appendix A**

### **Junction Analysis**

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# Signal Junction Analysis

Junction: Tai Wo Service Road West / Hong Lok Yuen Road

Job Number: J7353

Scenario: Existing Condition

P. 1

Design Year: 2024

Designed By: \_\_\_\_\_

Checked By: \_\_\_\_\_

Date: 8 Sep 2025

| Approach<br><small>(Approach Name)</small> | 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 |
| Fanling Highway NB                         | LT               | A1    | 1,2       | 3.50       | 25.0                |           | 100                | 1854          | 336     | 0.181      |           | 100                | 1854          | 450     | 0.243      |
|  | SA               | A2    | 1,2       | 3.50       |                     |           |                    | 1965          | 269     | 0.137      |           |                    | 1965          | 205     | 0.104      |
|  | RT               | B1    | 2         | 3.50       | 30.0                |           | 100                | 2005          | 150     | 0.075      |           | 100                | 2005          | 168     | 0.084      |
|  | RT               | B2    | 2         | 3.50       | 25.0                |           | 100                | 1986          | 149     | 0.075      | 0.075     | 100                | 1986          | 166     | 0.084      |
| Fanling Highway SB                         | LT+SA            | F1    | 1         | 3.50       | 10.0                |           | 94                 | 1722          | 181     | 0.105      | 0.105     | 58                 | 1808          | 178     | 0.098      |
|  | SA               | F2    | 1         | 3.50       |                     |           |                    | 2105          | 221     | 0.105      |           |                    | 2105          | 207     | 0.098      |
|  | SA               | F3    | 1         | 3.50       |                     |           |                    | 2105          | 221     | 0.105      |           |                    | 2105          | 207     | 0.098      |
| Hong Lok Yuen Road WB                      | LT               | C1    | 2,3       | 3.50       | 10.0                |           | 100                | 1709          | 147     | 0.086      |           | 100                | 1709          | 134     | 0.078      |
|  | LT               | C2    | 2,3       | 3.50       | 15.0                |           | 100                | 1914          | 165     | 0.086      |           | 100                | 1914          | 150     | 0.078      |
|  | SA               | D1    | 3         | 3.50       |                     |           |                    | 1965          | 138     | 0.070      | 0.070     |                    | 1965          | 140     | 0.071      |
|  | SA+RT            | E1    | 3         | 4.00       | 15.0                |           | 69                 | 2016          | 70      | 0.035      |           | 29                 | 2094          | 72      | 0.035      |
|  | RT               | E2    | 3         | 4.00       | 15.0                |           | 100                | 1959          | 68      | 0.035      |           | 100                | 1959          | 68      | 0.035      |
| Tai Wo Service Rd West EB                  | LT+SA            | H1    | 4         | 4.00       | 10.0                |           | 24                 | 1754          | 275     | 0.157      | 0.157     | 30                 | 1749          | 207     | 0.118      |
|  | SA               | H2    | 4         | 4.00       |                     |           |                    | 2155          | 337     | 0.157      |           |                    | 2155          | 255     | 0.118      |
|  | SA+RT            | G1    | 4         | 4.00       | 20.0                |           | 95                 | 1881          | 267     | 0.142      |           | 91                 | 1886          | 196     | 0.104      |
|  | RT               | G2    | 4         | 4.00       | 15.0                |           | 100                | 1959          | 278     | 0.142      |           | 100                | 1959          | 204     | 0.104      |
| Tai Wo Service Road West SB                | SA               | I1    | 1,2,4     | 4.00       |                     |           |                    | 2015          | 503     | 0.250      |           |                    | 2015          | 423     | 0.210      |
| Tai Wo Service Road West NB                | SA               | I2    | 1,2,4     | 4.00       |                     |           |                    | 2015          | 299     | 0.148      |           |                    | 2015          | 452     | 0.224      |
|  |                  |       |           |            |                     |           |                    |               |         |            |           |                    |               |         |            |
|  |                  |       |           |            |                     |           |                    |               |         |            |           |                    |               |         |            |
|  |                  |       |           |            |                     |           |                    |               |         |            |           |                    |               |         |            |
|  |                  |       |           |            |                     |           |                    |               |         |            |           |                    |               |         |            |
| pedestrian phase                           | J <sub>(P)</sub> | 4     |           |            | min crossing time = | 7         |                    | sec GM +      | 7       |            | sec FGM = | 14                 |               | sec     |            |
|  | K <sub>(P)</sub> | 4     |           |            | min crossing time = | 9         |                    | sec GM +      | 7       |            | sec FGM = | 16                 |               | sec     |            |
|  | L <sub>(P)</sub> | 2,3,4 |           |            | min crossing time = | 7         |                    | sec GM +      | 12      |            | sec FGM = | 19                 |               | sec     |            |
|  | M <sub>(P)</sub> | 3     |           |            | min crossing time = | 14        |                    | sec GM +      | 11      |            | sec FGM = | 25                 |               | sec     |            |
|  | N <sub>(P)</sub> | 1,2,3 |           |            | min crossing time = | 7         |                    | sec GM +      | 9       |            | sec FGM = | 16                 |               | sec     |            |
|  | O <sub>(P)</sub> | 1,4   |           |            | min crossing time = | 7         |                    | sec GM +      | 10      |            | sec FGM = | 17                 |               | sec     |            |
|  | P <sub>(P)</sub> | 3     |           |            | min crossing time = | 7         |                    | sec GM +      | 6       |            | sec FGM = | 13                 |               | sec     |            |

|  |   |  |                       |                       |  |  |                       |                       |                       |                       |       |       |       |       |       |       |    |    |    |    |       |     |     |     |     |             |       |       |       |       |          |     |     |     |     |       |
|--|---|--|-----------------------|-----------------------|--|--|-----------------------|-----------------------|-----------------------|-----------------------|-------|-------|-------|-------|-------|-------|----|----|----|----|-------|-----|-----|-----|-----|-------------|-------|-------|-------|-------|----------|-----|-----|-----|-----|-------|
| AM Traffic Flow (pcu/hr)   | PM Traffic Flow (pcu/hr)  | <div>S=1940+100(W-3.25)S=2080+100(W-3.25)</div> <div><math>S_M=S \div (1+1.5f/r)</math><math>S_M=(S-230) \div (1+1.5f/r)</math></div> <div><table><tr><td></td><td>1+2+3+4<br/>AM<br/>Peak</td><td>1,2+3+4<br/>AM<br/>Peak</td><td>1+2+3+4<br/>PM<br/>Peak</td><td>1,2+3+4<br/>PM<br/>Peak</td></tr><tr><td>Sum y</td><td>0.407</td><td>0.408</td><td>0.372</td><td>0.432</td></tr><tr><td>L (s)</td><td>29</td><td>24</td><td>29</td><td>24</td></tr><tr><td>C (s)</td><td>114</td><td>114</td><td>100</td><td>100</td></tr><tr><td>practical y</td><td>0.671</td><td>0.711</td><td>0.639</td><td>0.684</td></tr><tr><td>R.C. (%)</td><td>65%</td><td>74%</td><td>72%</td><td>58%</td></tr></table></div> |                       |                       |  |  | 1+2+3+4<br>AM<br>Peak | 1,2+3+4<br>AM<br>Peak | 1+2+3+4<br>PM<br>Peak | 1,2+3+4<br>PM<br>Peak | Sum y | 0.407 | 0.408 | 0.372 | 0.432 | L (s) | 29 | 24 | 29 | 24 | C (s) | 114 | 114 | 100 | 100 | practical y | 0.671 | 0.711 | 0.639 | 0.684 | R.C. (%) | 65% | 74% | 72% | 58% | Note: |
|  | 1+2+3+4<br>AM<br>Peak   | 1,2+3+4<br>AM<br>Peak  | 1+2+3+4<br>PM<br>Peak | 1,2+3+4<br>PM<br>Peak |  |  |                       |                       |                       |                       |       |       |       |       |       |       |    |    |    |    |       |     |     |     |     |             |       |       |       |       |          |     |     |     |     |       |
| Sum y  | 0.407   | 0.408  | 0.372                 | 0.432                 |  |  |                       |                       |                       |                       |       |       |       |       |       |       |    |    |    |    |       |     |     |     |     |             |       |       |       |       |          |     |     |     |     |       |
| L (s)  | 29  | 24   | 29                    | 24                    |  |  |                       |                       |                       |                       |       |       |       |       |       |       |    |    |    |    |       |     |     |     |     |             |       |       |       |       |          |     |     |     |     |       |
| C (s)  | 114   | 114  | 100                   | 100                   |  |  |                       |                       |                       |                       |       |       |       |       |       |       |    |    |    |    |       |     |     |     |     |             |       |       |       |       |          |     |     |     |     |       |
| practical y  | 0.671   | 0.711  | 0.639                 | 0.684                 |  |  |                       |                       |                       |                       |       |       |       |       |       |       |    |    |    |    |       |     |     |     |     |             |       |       |       |       |          |     |     |     |     |       |
| R.C. (%)   | 65%   | 74%  | 72%                   | 58%                   |  |  |                       |                       |                       |                       |       |       |       |       |       |       |    |    |    |    |       |     |     |     |     |             |       |       |       |       |          |     |     |     |     |       |
| <p>Diagram of AM Traffic Flow (pcu/hr):</p> <ul style="list-style-type: none"><li>Approach from North: 299 (left), 269 (right)</li><li>Approach from South: 336 (left), 299 (right)</li><li>Approach from East: 503 (left), 67 (right)</li><li>Approach from West: 22 (left), 116 (right)</li><li>Junction flows: 545 (left), 14 (right), 531 (left), 138 (right), 312 (left), 453 (left), 169 (right)</li></ul> | <p>Diagram of PM Traffic Flow (pcu/hr):</p> <ul style="list-style-type: none"><li>Approach from North: 452 (left), 423 (right)</li><li>Approach from South: 450 (left), 205 (right)</li><li>Approach from East: 51 (left), 89 (right)</li><li>Approach from West: 382 (left), 18 (right)</li><li>Junction flows: 400 (left), 62 (right), 488 (left), 104 (right), 284 (left), 140 (right)</li></ul> |  |                       |                       |  |  |                       |                       |                       |                       |       |       |       |       |       |       |    |    |    |    |       |     |     |     |     |             |       |       |       |       |          |     |     |     |     |       |

|    |             |             |              |             |
|----|-------------|-------------|--------------|-------------|
| 1  | 2           | 3           | 4            | 5           |
|    |             |             |              |             |
| AM | G = I/G = 6 | G = I/G = 5 | G = I/G = 13 | G = I/G = 9 |
| PM | G = I/G = 6 | G = I/G = 5 | G = I/G = 13 | G = I/G = 9 |

## Signal Junction Analysis

Junction: Tai Wo Service Road West / Hong Lok Yuen Road

Job Number: J7353

Scenario: Without the the Proposed Temporary Public Vehicle Park

P. 2

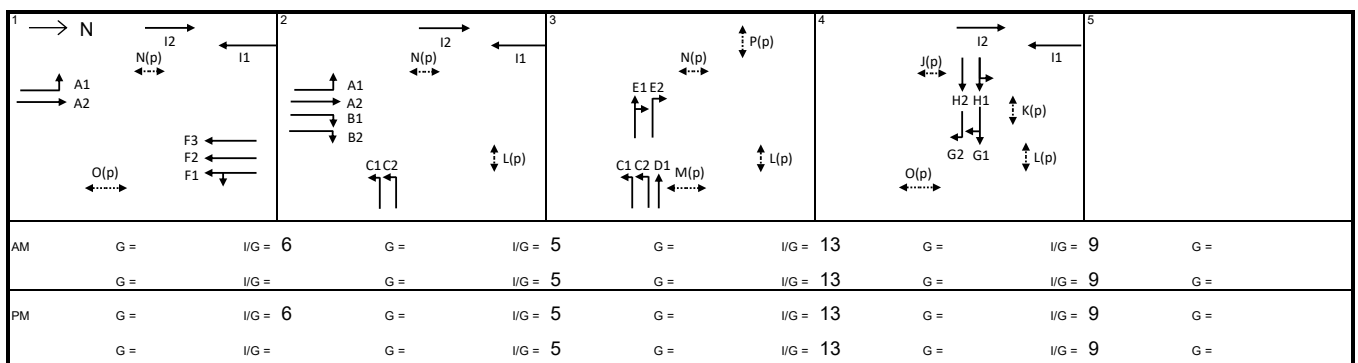
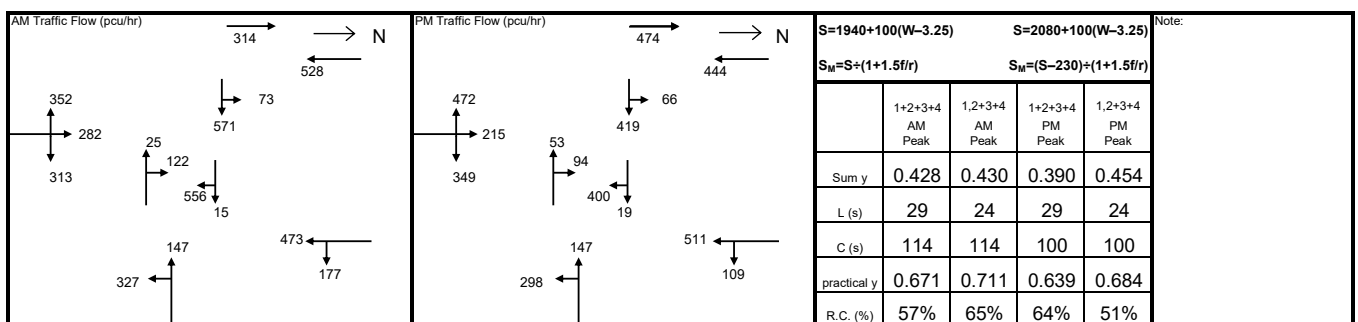
Design Year: 2029

Designed By: \_\_\_\_\_

Checked By: \_\_\_\_\_

Date: 8 Sep 2025

| 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 |       |
| Fanling Highway NB          | LT               | A1    | 1,2       | 3.50                | 25.0               |           | 100                | 1854          | 352     | 0.190      |           | 100                | 1854          | 472     | 0.255      |       |
|                             | SA               | A2    | 1,2       | 3.50                |                    |           |                    | 1965          | 282     | 0.144      |           |                    | 1965          | 215     | 0.109      |       |
|                             | RT               | B1    | 2         | 3.50                | 30.0               |           | 100                | 2005          | 157     | 0.078      |           | 100                | 2005          | 175     | 0.087      |       |
|                             | RT               | B2    | 2         | 3.50                | 25.0               |           | 100                | 1986          | 156     | 0.078      | 0.078     | 100                | 1986          | 174     | 0.087      | 0.087 |
| Fanling Highway SB          | LT+SA            | F1    | 1         | 3.50                | 10.0               |           | 94                 | 1722          | 189     | 0.110      | 0.110     | 59                 | 1805          | 186     | 0.103      | 0.103 |
|                             | SA               | F2    | 1         | 3.50                |                    |           |                    | 2105          | 231     | 0.110      |           |                    | 2105          | 217     | 0.103      |       |
|                             | SA               | F3    | 1         | 3.50                |                    |           |                    | 2105          | 231     | 0.110      |           |                    | 2105          | 217     | 0.103      |       |
| Hong Lok Yuen Road WB       | LT               | C1    | 2,3       | 3.50                | 10.0               |           | 100                | 1709          | 154     | 0.090      |           | 100                | 1709          | 141     | 0.082      |       |
|                             | LT               | C2    | 2,3       | 3.50                | 15.0               |           | 100                | 1914          | 173     | 0.090      |           | 100                | 1914          | 157     | 0.082      |       |
|                             | SA               | D1    | 3         | 3.50                |                    |           |                    | 1965          | 147     | 0.075      | 0.075     |                    | 1965          | 147     | 0.075      | 0.075 |
|                             | SA+RT            | E1    | 3         | 4.00                | 15.0               |           | 67                 | 2020          | 75      | 0.037      |           | 30                 | 2092          | 76      | 0.036      |       |
|                             | RT               | E2    | 3         | 4.00                | 15.0               |           | 100                | 1959          | 72      | 0.037      |           | 100                | 1959          | 71      | 0.036      |       |
| Tai Wo Service Road West EB | LT+SA            | H1    | 4         | 4.00                | 10.0               |           | 25                 | 1752          | 289     | 0.165      | 0.165     | 30                 | 1740          | 217     | 0.125      | 0.125 |
|                             | SA               | H2    | 4         | 4.00                |                    |           |                    | 2155          | 355     | 0.165      |           |                    | 2155          | 268     | 0.125      |       |
|                             | SA+RT            | G1    | 4         | 4.00                | 20.0               |           | 95                 | 1881          | 280     | 0.149      |           | 91                 | 1886          | 206     | 0.109      |       |
|                             | RT               | G2    | 4         | 4.00                | 15.0               |           | 100                | 1959          | 291     | 0.149      |           | 100                | 1959          | 213     | 0.109      |       |
| Tai Wo Service Road West SB | SA               | I1    | 1,2,4     | 4.00                |                    |           |                    | 2015          | 528     | 0.262      |           |                    | 2015          | 444     | 0.220      |       |
| Tai Wo Service Road West NB | SA               | I2    | 1,2,4     | 4.00                |                    |           |                    | 2015          | 314     | 0.156      |           |                    | 2015          | 474     | 0.235      |       |
|                             |                  |       |           |                     |                    |           |                    |               |         |            |           |                    |               |         |            |       |
|                             |                  |       |           |                     |                    |           |                    |               |         |            |           |                    |               |         |            |       |
|                             |                  |       |           |                     |                    |           |                    |               |         |            |           |                    |               |         |            |       |
|                             |                  |       |           |                     |                    |           |                    |               |         |            |           |                    |               |         |            |       |
| pedestrian phase            | J <sub>(P)</sub> | 4     |           | min crossing time = |                    |           | 7                  | sec GM +      |         | 7          | sec FGM = |                    | 14            | sec     |            |       |
|                             | K <sub>(P)</sub> | 4     |           | min crossing time = |                    |           | 9                  | sec GM +      |         | 7          | sec FGM = |                    | 16            | sec     |            |       |
|                             | L <sub>(P)</sub> | 2,3,4 |           | min crossing time = |                    |           | 7                  | sec GM +      |         | 12         | sec FGM = |                    | 19            | sec     |            |       |
|                             | M <sub>(P)</sub> | 3     |           | min crossing time = |                    |           | 14                 | sec GM +      |         | 11         | sec FGM = |                    | 25            | sec     |            |       |
|                             | N <sub>(P)</sub> | 1,2,3 |           | min crossing time = |                    |           | 7                  | sec GM +      |         | 9          | sec FGM = |                    | 16            | sec     |            |       |
|                             | O <sub>(P)</sub> | 1,4   |           | min crossing time = |                    |           | 7                  | sec GM +      |         | 10         | sec FGM = |                    | 17            | sec     |            |       |
|                             | P <sub>(P)</sub> | 3     |           | min crossing time = |                    |           | 7                  | sec GM +      |         | 6          | sec FGM = |                    | 13            | sec     |            |       |
|                             |                  |       |           |                     |                    |           |                    |               |         |            |           |                    |               |         |            |       |



# Signal Junction Analysis

Junction: Tai Wo Service Road West / Hong Lok Yuen Road Job Number: J7353  
 Scenario: With the the Proposed Temporary Public Vehicle Park P. 3  
 Design Year: 2029 Designed By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: 8 Sep 2025

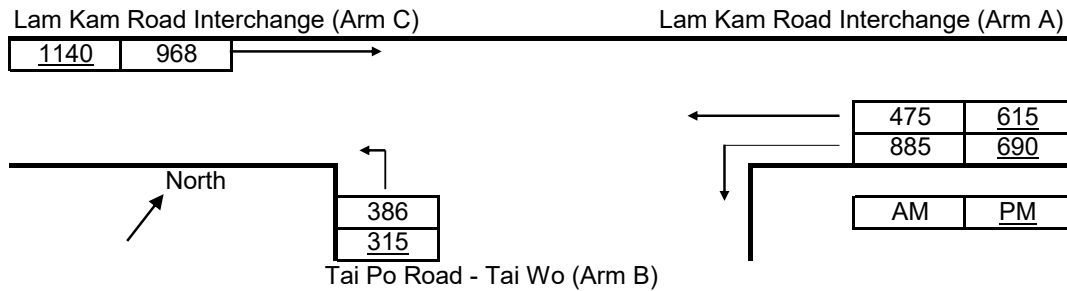
| Approach                    | Phase            | Stage | Width (m) | Radius (m) | % Up-hill Gradient  | AM Peak   |                    |               |         |            | PM Peak   |                    |               |         |            |       |
|-----------------------------|------------------|-------|-----------|------------|---------------------|-----------|--------------------|---------------|---------|------------|-----------|--------------------|---------------|---------|------------|-------|
|                             |                  |       |           |            |                     | Turning % | Sat. Flow (pcu/hr) | Flow (pcu/hr) | y value | Critical y | Turning % | Sat. Flow (pcu/hr) | Flow (pcu/hr) | y value | Critical y |       |
| Fanling Highway NB          | LT               | A1    | 1,2       | 3.50       | 25.0                |           | 100                | 1854          | 352     | 0.190      |           | 100                | 1854          | 476     | 0.257      |       |
|                             | SA               | A2    | 1,2       | 3.50       |                     |           |                    | 1965          | 282     | 0.144      |           |                    | 1965          | 215     | 0.109      |       |
|                             | RT               | B1    | 2         | 3.50       | 30.0                |           | 100                | 2005          | 157     | 0.078      |           | 100                | 2005          | 175     | 0.087      |       |
|                             | RT               | B2    | 2         | 3.50       | 25.0                |           | 100                | 1986          | 156     | 0.078      | 0.078     | 100                | 1986          | 174     | 0.087      | 0.087 |
| Fanling Highway SB          | LT+SA            | F1    | 1         | 3.50       | 10.0                |           | 94                 | 1722          | 189     | 0.110      | 0.110     | 58                 | 1808          | 187     | 0.103      | 0.103 |
|                             | SA               | F2    | 1         | 3.50       |                     |           |                    | 2105          | 231     | 0.110      |           |                    | 2105          | 218     | 0.103      |       |
|                             | SA               | F3    | 1         | 3.50       |                     |           |                    | 2105          | 231     | 0.110      |           |                    | 2105          | 218     | 0.103      |       |
| Hong Lok Yuen Road WB       | LT               | C1    | 2,3       | 3.50       | 10.0                |           | 100                | 1709          | 154     | 0.090      |           | 100                | 1709          | 141     | 0.082      |       |
|                             | LT               | C2    | 2,3       | 3.50       | 15.0                |           | 100                | 1914          | 173     | 0.090      |           | 100                | 1914          | 157     | 0.082      |       |
|                             | SA               | D1    | 3         | 3.50       |                     |           |                    | 1965          | 147     | 0.075      | 0.075     |                    | 1965          | 147     | 0.075      | 0.075 |
|                             | SA+RT            | E1    | 3         | 4.00       | 15.0                |           | 67                 | 2020          | 75      | 0.037      |           | 30                 | 2092          | 76      | 0.036      |       |
|                             | RT               | E2    | 3         | 4.00       | 15.0                |           | 100                | 1959          | 72      | 0.037      |           | 100                | 1959          | 71      | 0.036      |       |
| Tai Wo Service Road West EB | LT+SA            | H1    | 4         | 4.00       | 10.0                |           | 25                 | 1752          | 287     | 0.164      | 0.164     | 30                 | 1740          | 213     | 0.122      | 0.122 |
|                             | SA               | H2    | 4         | 4.00       |                     |           |                    | 2155          | 354     | 0.164      |           |                    | 2155          | 264     | 0.122      |       |
|                             | SA+RT            | G1    | 4         | 4.00       | 20.0                |           | 95                 | 1881          | 279     | 0.148      |           | 91                 | 1886          | 203     | 0.108      |       |
|                             | RT               | G2    | 4         | 4.00       | 15.0                |           | 100                | 1959          | 290     | 0.148      |           | 100                | 1959          | 211     | 0.108      |       |
| Tai Wo Service Road West SB | SA               | I1    | 1,2,4     | 4.00       |                     |           |                    | 2015          | 525     | 0.261      |           |                    | 2015          | 436     | 0.216      |       |
| Tai Wo Service Road West NB | SA               | I2    | 1,2,4     | 4.00       |                     |           |                    | 2015          | 314     | 0.156      |           |                    | 2015          | 478     | 0.237      |       |
|                             |                  |       |           |            |                     |           |                    |               |         |            |           |                    |               |         |            |       |
|                             |                  |       |           |            |                     |           |                    |               |         |            |           |                    |               |         |            |       |
|                             |                  |       |           |            |                     |           |                    |               |         |            |           |                    |               |         |            |       |
|                             |                  |       |           |            |                     |           |                    |               |         |            |           |                    |               |         |            |       |
| pedestrian phase            | J <sub>(P)</sub> | 4     |           |            | min crossing time = | 7         |                    | sec GM +      | 7       |            | sec FGM = | 14                 |               | sec     |            |       |
|                             | K <sub>(P)</sub> | 4     |           |            | min crossing time = | 9         |                    | sec GM +      | 7       |            | sec FGM = | 16                 |               | sec     |            |       |
|                             | L <sub>(P)</sub> | 2,3,4 |           |            | min crossing time = | 7         |                    | sec GM +      | 12      |            | sec FGM = | 19                 |               | sec     |            |       |
|                             | M <sub>(P)</sub> | 3     |           |            | min crossing time = | 14        |                    | sec GM +      | 11      |            | sec FGM = | 25                 |               | sec     |            |       |
|                             | N <sub>(P)</sub> | 1,2,3 |           |            | min crossing time = | 7         |                    | sec GM +      | 9       |            | sec FGM = | 16                 |               | sec     |            |       |
|                             | O <sub>(P)</sub> | 1,4   |           |            | min crossing time = | 7         |                    | sec GM +      | 10      |            | sec FGM = | 17                 |               | sec     |            |       |
|                             | P <sub>(P)</sub> | 3     |           |            | min crossing time = | 7         |                    | sec GM +      | 6       |            | sec FGM = | 13                 |               | sec     |            |       |
|                             |                  |       |           |            |                     |           |                    |               |         |            |           |                    |               |         |            |       |

|                          |                          |  |                 |                 |                 |       |
|--------------------------|--------------------------|--|-----------------|-----------------|-----------------|-------|
| AM Traffic Flow (pcu/hr) | PM Traffic Flow (pcu/hr) | $S=1940+100(W-3.25)$<br>$S_m=S \div (1+1.5f/r)$<br>$S=2080+100(W-3.25)$<br>$S_m=S \div (1+1.5f/r)$ |                 |                 |                 | Note: |
|                          |                          |  |                 |                 |                 |       |
|                          |                          | 1+2+3+4 AM Peak  | 1,2+3+4 AM Peak | 1+2+3+4 PM Peak | 1,2+3+4 PM Peak |       |
|                          |                          | Sum y  | 0.427           | 0.429           | 0.388           | 0.454 |
|                          |                          | L (s)  | 29              | 24              | 29              | 24    |
|                          |                          | C (s)  | 114             | 114             | 100             | 100   |
|                          |                          | practical y  | 0.671           | 0.711           | 0.639           | 0.684 |
|                          |                          | R.C. (%)   | 57%             | 66%             | 65%             | 51%   |

|    |             |             |              |             |
|----|-------------|-------------|--------------|-------------|
| 1  | 2           | 3           | 4            | 5           |
|    |             |             |              |             |
| AM | G = I/G = 6 | G = I/G = 5 | G = I/G = 13 | G = I/G = 9 |
|    | G = I/G =   | G = I/G = 5 | G = I/G = 13 | G = I/G = 9 |
| PM | G = I/G = 6 | G = I/G = 5 | G = I/G = 13 | G = I/G = 9 |
|    | G = I/G =   | G = I/G = 5 | G = I/G = 13 | G = I/G = 9 |

## Priority Junction Analysis

|              |  |             |            |
|--------------|--|-------------|------------|
| Junction:    | Lam Kam Interchange / Tai Po Road – Tai Wo |             |            |
| Design Year: | 2024                                       | Job Number: | J7353      |
| Scenario:    | Existing Condition                         | Date:       | 8 Sep 2025 |
|              |  |             | P. 4       |



The predictive equations of capacity of movement are:

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

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

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

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

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

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

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

where  $Y = 1 - 0.0345W$

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

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

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

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

| Geometry : | Input |       | Input |     | Input |      | Calculated |        |
|------------|-------|-------|-------|-----|-------|------|------------|--------|
|            | W     | 14.40 | V-rBA |     | w-BA  |      | D          | 0.5332 |
|            | W-CR  | 9.00  | V-lBA |     | w-BC  | 4.70 | E          | 1.1185 |
|            |       |       | V-rBC | 140 | w-CB  |      | F          | 0.5860 |
|            |       |       | V-rCB |     |       |      | Y          | 0.5032 |

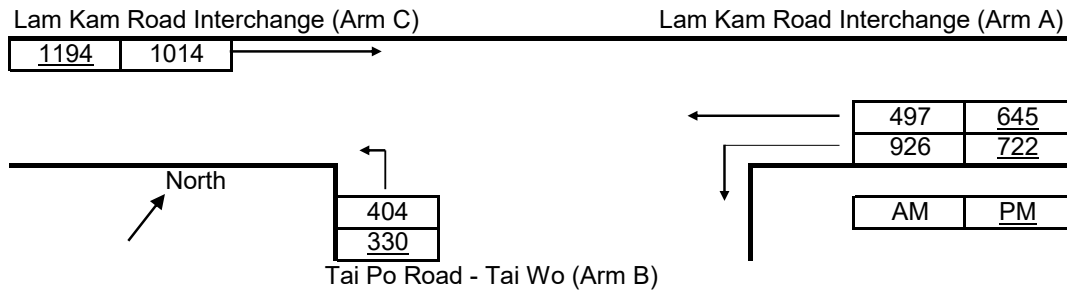
Analysis :

| Traffic Flows, pcu/hr | AM    | PM    | Capacity, pcu/hr | AM  | PM  |
|-----------------------|-------|-------|------------------|-----|-----|
| q-CA                  | 968   | 1140  | Q-BA             | 261 | 245 |
| q-CB                  | 0     | 0     | Q-BC             | 664 | 651 |
| q-AB                  | 885   | 690   | Q-CB             | 291 | 296 |
| q-AC                  | 475   | 615   | Q-BAC            | 664 | 651 |
| q-BA                  | 0     | 0     |                  |     |     |
| q-BC                  | 386   | 315   |                  |     |     |
| f                     | 1.000 | 1.000 |                  |     |     |

| Ratio-of-flow to Capacity | AM    | PM    |
|---------------------------|-------|-------|
| B-A                       | 0.000 | 0.000 |
| B-C                       | 0.581 | 0.484 |
| C-B                       | 0.000 | 0.000 |

## Priority Junction Analysis

|              |  |             |                  |
|--------------|--|-------------|------------------|
| Junction:    | Lam Kam Interchange / Tai Po Road – Tai Wo         |             |                  |
| Design Year: | 2029   | Job Number: | J7353            |
| Scenario:    | Without the Proposed Temporary Public Vehicle Park |             | Date: 8 Sep 2025 |
|              |  |             | P. 5             |



The predictive equations of capacity of movement are:

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

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

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

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

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

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

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

where  $Y = 1 - 0.0345W$

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

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

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

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

| Geometry : | Input |       | Input |     | Input |      | Calculated |        |
|------------|-------|-------|-------|-----|-------|------|------------|--------|
|            | W     | 14.40 | V-rBA |     | w-BA  |      | D          | 0.5332 |
|            | W-CR  | 9.00  | V-IBA |     | w-BC  | 4.70 | E          | 1.1185 |
|            |       |       | V-rBC | 140 | w-CB  |      | F          | 0.5860 |
|            |       |       | V-rCB |     |       |      | Y          | 0.5032 |

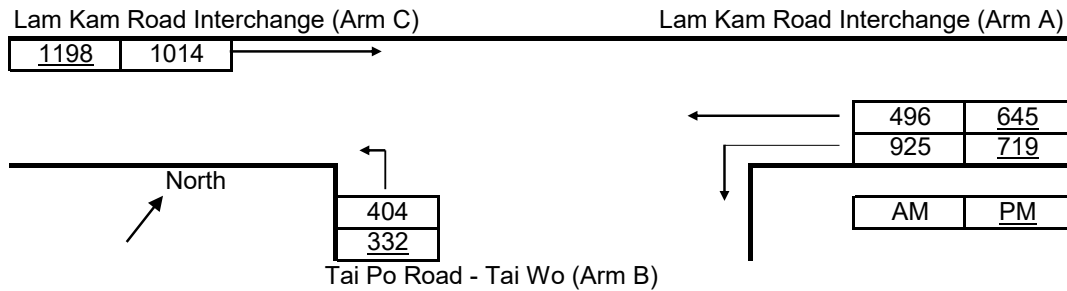
Analysis :

| Traffic Flows, pcu/hr | AM    | PM    | Capacity, pcu/hr | AM  | PM  |
|-----------------------|-------|-------|------------------|-----|-----|
| q-CA                  | 1014  | 1194  | Q-BA             | 255 | 237 |
| q-CB                  | 0     | 0     | Q-BC             | 656 | 643 |
| q-AB                  | 926   | 722   | Q-CB             | 284 | 290 |
| q-AC                  | 497   | 645   | Q-BAC            | 656 | 643 |
| q-BA                  | 0     | 0     |                  |     |     |
| q-BC                  | 404   | 330   |                  |     |     |
| f                     | 1.000 | 1.000 |                  |     |     |

| Ratio-of-flow to Capacity | AM    | PM    |
|---------------------------|-------|-------|
| B-A                       | 0.000 | 0.000 |
| B-C                       | 0.615 | 0.514 |
| C-B                       | 0.000 | 0.000 |

## Priority Junction Analysis

|              |   |             |                  |
|--------------|---|-------------|------------------|
| Junction:    | Lam Kam Interchange / Tai Po Road – Tai Wo      |             |                  |
| Design Year: | 2029  | Job Number: | J7353            |
| Scenario:    | With the Proposed Temporary Public Vehicle Park |             | Date: 8 Sep 2025 |
|              |   |             | P. 6             |



The predictive equations of capacity of movement are:

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

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

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

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

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

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

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

where  $Y = 1 - 0.0345W$

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

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

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

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

| Geometry : | Input |       | Input |     | Input |      | Calculated |        |
|------------|-------|-------|-------|-----|-------|------|------------|--------|
|            | W     | 14.40 | V-rBA |     | w-BA  |      | D          | 0.5332 |
|            | W-CR  | 9.00  | V-lBA |     | w-BC  | 4.70 | E          | 1.1185 |
|            |       |       | V-rBC | 140 | w-CB  |      | F          | 0.5860 |
|            |       |       | V-rCB |     |       |      | Y          | 0.5032 |

Analysis :

| Traffic Flows, pcu/hr | AM    | PM    | Capacity, pcu/hr | AM  | PM  |
|-----------------------|-------|-------|------------------|-----|-----|
| q-CA                  | 1014  | 1198  | Q-BA             | 255 | 237 |
| q-CB                  | 0     | 0     | Q-BC             | 657 | 643 |
| q-AB                  | 925   | 719   | Q-CB             | 284 | 290 |
| q-AC                  | 496   | 645   | Q-BAC            | 657 | 643 |
| q-BA                  | 0     | 0     |                  |     |     |
| q-BC                  | 404   | 332   |                  |     |     |
| f                     | 1.000 | 1.000 |                  |     |     |

| Ratio-of-flow to Capacity | AM    | PM    |
|---------------------------|-------|-------|
| B-A                       | 0.000 | 0.000 |
| B-C                       | 0.615 | 0.516 |
| C-B                       | 0.000 | 0.000 |

# Roundabout Analysis

|             |                     |            |       |      |             |  |  |  |      |   |
|-------------|---------------------|------------|-------|------|-------------|--|--|--|------|---|
| Location    | Lam Kam Interchange |            |       |      |             |  |  |  |      |   |
| Scenario    | Existing Condition  |            |       |      |             |  |  |  | Page | 7 |
| Design Year | 2024                | Job Number | J7353 | Date | 08 Sep 2025 |  |  |  |      |   |

## AM Peak

| Arm    | To A | To B | To C | To D | To E | To F | To G | To H | Total | q <sub>c</sub> |
|--------|------|------|------|------|------|------|------|------|-------|----------------|
| From A | 0    | 478  | 375  |      |      |      |      |      | 853   | 491            |
| From B | 454  | 70   | 0    |      |      |      |      |      | 524   | 376            |
| From C | 0    | 420  | 1    |      |      |      |      |      | 421   | 524            |
| From D |      |      |      |      |      |      |      |      |       |                |
| From E |      |      |      |      |      |      |      |      |       |                |
| From F |      |      |      |      |      |      |      |      |       |                |
| From G |      |      |      |      |      |      |      |      |       |                |
| From H |      |      |      |      |      |      |      |      |       |                |
| Total  | 454  | 968  | 376  |      |      |      |      |      | 1798  |                |

## PM Peak

| Arm    | To A | To B | To C | To D | To E | To F | To G | To H | Total | q <sub>c</sub> |
|--------|------|------|------|------|------|------|------|------|-------|----------------|
| From A | 0    | 473  | 368  |      |      |      |      |      | 841   | 675            |
| From B | 591  | 92   | 0    |      |      |      |      |      | 683   | 376            |
| From C | 0    | 575  | 8    |      |      |      |      |      | 583   | 683            |
| From D |      |      |      |      |      |      |      |      |       |                |
| From E |      |      |      |      |      |      |      |      |       |                |
| From F |      |      |      |      |      |      |      |      |       |                |
| From G |      |      |      |      |      |      |      |      |       |                |
| From H |      |      |      |      |      |      |      |      |       |                |
| Total  | 591  | 1140 | 376  |      |      |      |      |      | 2107  |                |

## Legend

| Arm | Road (in clockwise order) |
|-----|---------------------------|
| A   | Lam Kam Road              |
| B   | Lam Kam Road Interchange  |
| C   | Slip Road to Tolo Highway |
| D   |                           |
| E   |                           |
| F   |                           |
| G   |                           |
| H   |                           |

## Geometric Parameters

| Arm    | e (m) | v (m) | r (m) | L (m) | D (m) | ∅ (°) | S   |
|--------|-------|-------|-------|-------|-------|-------|-----|
| From A | 7.0   | 6.0   | 100.0 | 14.5  | 78    | 18    | 0.1 |
| From B | 4.5   | 4.0   | 33.5  | 9.5   | 78    | 60    | 0.1 |
| From C | 8.5   | 7.0   | 42.3  | 9.5   | 78    | 22    | 0.3 |
| From D |       |       |       |       |       |       |     |
| From E |       |       |       |       |       |       |     |
| From F |       |       |       |       |       |       |     |
| From G |       |       |       |       |       |       |     |
| From H |       |       |       |       |       |       |     |

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

|                |  |
|----------------|--|
| Q <sub>E</sub> | Entry Capacity                               |
| q <sub>c</sub> | Circulating Flow across the Entry            |
| K              | = 1-0.00347(∅-30)-0.978[(1/r)-0.05]          |
| F              | = 303x <sub>2</sub>                          |
| f <sub>c</sub> | = 0.210t <sub>D</sub> (1+0.2x <sub>2</sub> ) |
| t <sub>D</sub> | = 1+0.5/(1+M)                                |
| M              | = exp[(D-60)/10]                             |
| x <sub>2</sub> | = v+(e-v)/(1+2S)                             |
| S              | = 1.6(e-v)/L                                 |

## Limitation

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

## Ratio-of-Flow to Capacity (RFC)

| Arm    |                |       |                |       |      |                | Q <sub>E</sub> |      | Entry Flow |     | RFC   |       |
|--------|----------------|-------|----------------|-------|------|----------------|----------------|------|------------|-----|-------|-------|
|        | x <sub>2</sub> | M     | t <sub>D</sub> | K     | F    | f <sub>c</sub> | AM             | PM   | AM         | PM  | AM    | PM    |
| From A | 6.819          | 6.050 | 1.071          | 1.081 | 2066 | 0.532          | 1951           | 1845 | 853        | 841 | 0.437 | 0.456 |
| From B | 4.428          | 6.050 | 1.071          | 0.916 | 1342 | 0.424          | 1082           | 1082 | 524        | 683 | 0.484 | 0.631 |
| From C | 7.997          | 6.050 | 1.071          | 1.055 | 2423 | 0.585          | 2234           | 2136 | 421        | 583 | 0.188 | 0.273 |
| From D |                |       |                |       |      |                |                |      |            |     |       |       |
| From E |                |       |                |       |      |                |                |      |            |     |       |       |
| From F |                |       |                |       |      |                |                |      |            |     |       |       |
| From G |                |       |                |       |      |                |                |      |            |     |       |       |
| From H |                |       |                |       |      |                |                |      |            |     |       |       |

# Roundabout Analysis

|             |  |            |       |      |             |  |        |
|-------------|--|------------|-------|------|-------------|--|--------|
| Location    | Lam Kam Interchange                                |            |       |      |             |  |        |
| Scenario    | Without the Proposed Temporary Public Vehicle Park |            |       |      |             |  | Page 8 |
| Design Year | 2028   | Job Number | J7353 | Date | 08 Sep 2025 |  |        |

## AM Peak

| Arm    | To A | To B | To C | To D | To E | To F | To G | To H | Total | q <sub>c</sub> |
|--------|------|------|------|------|------|------|------|------|-------|----------------|
| From A | 0    | 501  | 393  |      |      |      |      |      | 894   | 515            |
| From B | 475  | 73   | 0    |      |      |      |      |      | 548   | 395            |
| From C | 0    | 440  | 2    |      |      |      |      |      | 442   | 548            |
| From D |      |      |      |      |      |      |      |      |       |                |
| From E |      |      |      |      |      |      |      |      |       |                |
| From F |      |      |      |      |      |      |      |      |       |                |
| From G |      |      |      |      |      |      |      |      |       |                |
| From H |      |      |      |      |      |      |      |      |       |                |
| Total  | 475  | 1014 | 395  |      |      |      |      |      | 1884  |                |

## PM Peak

| Arm    | To A | To B | To C | To D | To E | To F | To G | To H | Total | q <sub>c</sub> |
|--------|------|------|------|------|------|------|------|------|-------|----------------|
| From A | 0    | 496  | 385  |      |      |      |      |      | 881   | 707            |
| From B | 619  | 96   | 0    |      |      |      |      |      | 715   | 394            |
| From C | 0    | 602  | 9    |      |      |      |      |      | 611   | 715            |
| From D |      |      |      |      |      |      |      |      |       |                |
| From E |      |      |      |      |      |      |      |      |       |                |
| From F |      |      |      |      |      |      |      |      |       |                |
| From G |      |      |      |      |      |      |      |      |       |                |
| From H |      |      |      |      |      |      |      |      |       |                |
| Total  | 619  | 1194 | 394  |      |      |      |      |      | 2207  |                |

## Legend

| Arm | Road (in clockwise order) |
|-----|---------------------------|
| A   | Lam Kam Road              |
| B   | Lam Kam Road Interchange  |
| C   | Slip Road to Tolo Highway |
| D   |                           |
| E   |                           |
| F   |                           |
| G   |                           |
| H   |                           |

## Geometric Parameters

| Arm    | e (m) | v (m) | r (m) | L (m) | D (m) | ∅ (°) | S   |
|--------|-------|-------|-------|-------|-------|-------|-----|
| From A | 7.0   | 6.0   | 100.0 | 14.5  | 78    | 18    | 0.1 |
| From B | 4.5   | 4.0   | 33.5  | 9.5   | 78    | 60    | 0.1 |
| From C | 8.5   | 7.0   | 42.3  | 9.5   | 78    | 22    | 0.3 |
| From D |       |       |       |       |       |       |     |
| From E |       |       |       |       |       |       |     |
| From F |       |       |       |       |       |       |     |
| From G |       |       |       |       |       |       |     |
| From H |       |       |       |       |       |       |     |

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

|                |  |
|----------------|--|
| Q <sub>E</sub> | Entry Capacity                               |
| q <sub>c</sub> | Circulating Flow across the Entry            |
| K              | = 1-0.00347(∅-30)-0.978[(1/r)-0.05]          |
| F              | = 303x <sub>2</sub>                          |
| f <sub>c</sub> | = 0.210t <sub>D</sub> (1+0.2x <sub>2</sub> ) |
| t <sub>D</sub> | = 1+0.5/(1+M)                                |
| M              | = exp[(D-60)/10]                             |
| x <sub>2</sub> | = v+(e-v)/(1+2S)                             |
| S              | = 1.6(e-v)/L                                 |

## Limitation

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

## Ratio-of-Flow to Capacity (RFC)

| Arm    |                |       |                |       |      |                | Q <sub>E</sub> |      | Entry Flow |     | RFC   |       |
|--------|----------------|-------|----------------|-------|------|----------------|----------------|------|------------|-----|-------|-------|
|        | x <sub>2</sub> | M     | t <sub>D</sub> | K     | F    | f <sub>c</sub> | AM             | PM   | AM         | PM  | AM    | PM    |
| From A | 6.819          | 6.050 | 1.071          | 1.081 | 2066 | 0.532          | 1937           | 1827 | 894        | 881 | 0.461 | 0.482 |
| From B | 4.428          | 6.050 | 1.071          | 0.916 | 1342 | 0.424          | 1075           | 1075 | 548        | 715 | 0.510 | 0.665 |
| From C | 7.997          | 6.050 | 1.071          | 1.055 | 2423 | 0.585          | 2219           | 2116 | 442        | 611 | 0.199 | 0.289 |
| From D |                |       |                |       |      |                |                |      |            |     |       |       |
| From E |                |       |                |       |      |                |                |      |            |     |       |       |
| From F |                |       |                |       |      |                |                |      |            |     |       |       |
| From G |                |       |                |       |      |                |                |      |            |     |       |       |
| From H |                |       |                |       |      |                |                |      |            |     |       |       |



# Roundabout Analysis

|             |   |            |       |      |             |  |  |
|-------------|---|------------|-------|------|-------------|--|--|
| Location    | Lam Kam Interchange                             |            |       |      |             |  |  |
| Scenario    | With the Proposed Temporary Public Vehicle Park |            |       |      |             |  |  |
| Design Year | 2028  | Job Number | J7353 | Date | 08 Sep 2025 |  |  |

## AM Peak

| Arm    | To A | To B | To C | To D | To E | To F | To G | To H | Total | q <sub>c</sub> |
|--------|------|------|------|------|------|------|------|------|-------|----------------|
| From A | 0    | 501  | 393  |      |      |      |      |      | 894   | 515            |
| From B | 475  | 73   | 0    |      |      |      |      |      | 548   | 395            |
| From C | 0    | 440  | 2    |      |      |      |      |      | 442   | 548            |
| From D |      |      |      |      |      |      |      |      |       |                |
| From E |      |      |      |      |      |      |      |      |       |                |
| From F |      |      |      |      |      |      |      |      |       |                |
| From G |      |      |      |      |      |      |      |      |       |                |
| From H |      |      |      |      |      |      |      |      |       |                |
| Total  | 475  | 1014 | 395  |      |      |      |      |      | 1884  |                |

## PM Peak

| Arm    | To A | To B | To C | To D | To E | To F | To G | To H | Total | q <sub>c</sub> |
|--------|------|------|------|------|------|------|------|------|-------|----------------|
| From A | 0    | 496  | 385  |      |      |      |      |      | 881   | 711            |
| From B | 619  | 100  | 0    |      |      |      |      |      | 719   | 394            |
| From C | 0    | 602  | 9    |      |      |      |      |      | 611   | 719            |
| From D |      |      |      |      |      |      |      |      |       |                |
| From E |      |      |      |      |      |      |      |      |       |                |
| From F |      |      |      |      |      |      |      |      |       |                |
| From G |      |      |      |      |      |      |      |      |       |                |
| From H |      |      |      |      |      |      |      |      |       |                |
| Total  | 619  | 1198 | 394  |      |      |      |      |      | 2211  |                |

## Legend

| Arm | Road (in clockwise order) |
|-----|---------------------------|
| A   | Lam Kam Road              |
| B   | Lam Kam Road Interchange  |
| C   | Slip Road to Tolo Highway |
| D   |                           |
| E   |                           |
| F   |                           |
| G   |                           |
| H   |                           |

## Geometric Parameters

| Arm    | e (m) | v (m) | r (m) | L (m) | D (m) | ∅ (°) | S   |
|--------|-------|-------|-------|-------|-------|-------|-----|
| From A | 7.0   | 6.0   | 100.0 | 14.5  | 78    | 18    | 0.1 |
| From B | 4.5   | 4.0   | 33.5  | 9.5   | 78    | 60    | 0.1 |
| From C | 8.5   | 7.0   | 42.3  | 9.5   | 78    | 22    | 0.3 |
| From D |       |       |       |       |       |       |     |
| From E |       |       |       |       |       |       |     |
| From F |       |       |       |       |       |       |     |
| From G |       |       |       |       |       |       |     |
| From H |       |       |       |       |       |       |     |

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

|                |  |
|----------------|--|
| Q <sub>E</sub> | Entry Capacity                               |
| q <sub>c</sub> | Circulating Flow across the Entry            |
| K              | = 1-0.00347(∅-30)-0.978[(1/r)-0.05]          |
| F              | = 303x <sub>2</sub>                          |
| f <sub>c</sub> | = 0.210t <sub>D</sub> (1+0.2x <sub>2</sub> ) |
| t <sub>D</sub> | = 1+0.5/(1+M)                                |
| M              | = exp[(D-60)/10]                             |
| x <sub>2</sub> | = v+(e-v)/(1+2S)                             |
| S              | = 1.6(e-v)/L                                 |

## Limitation

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

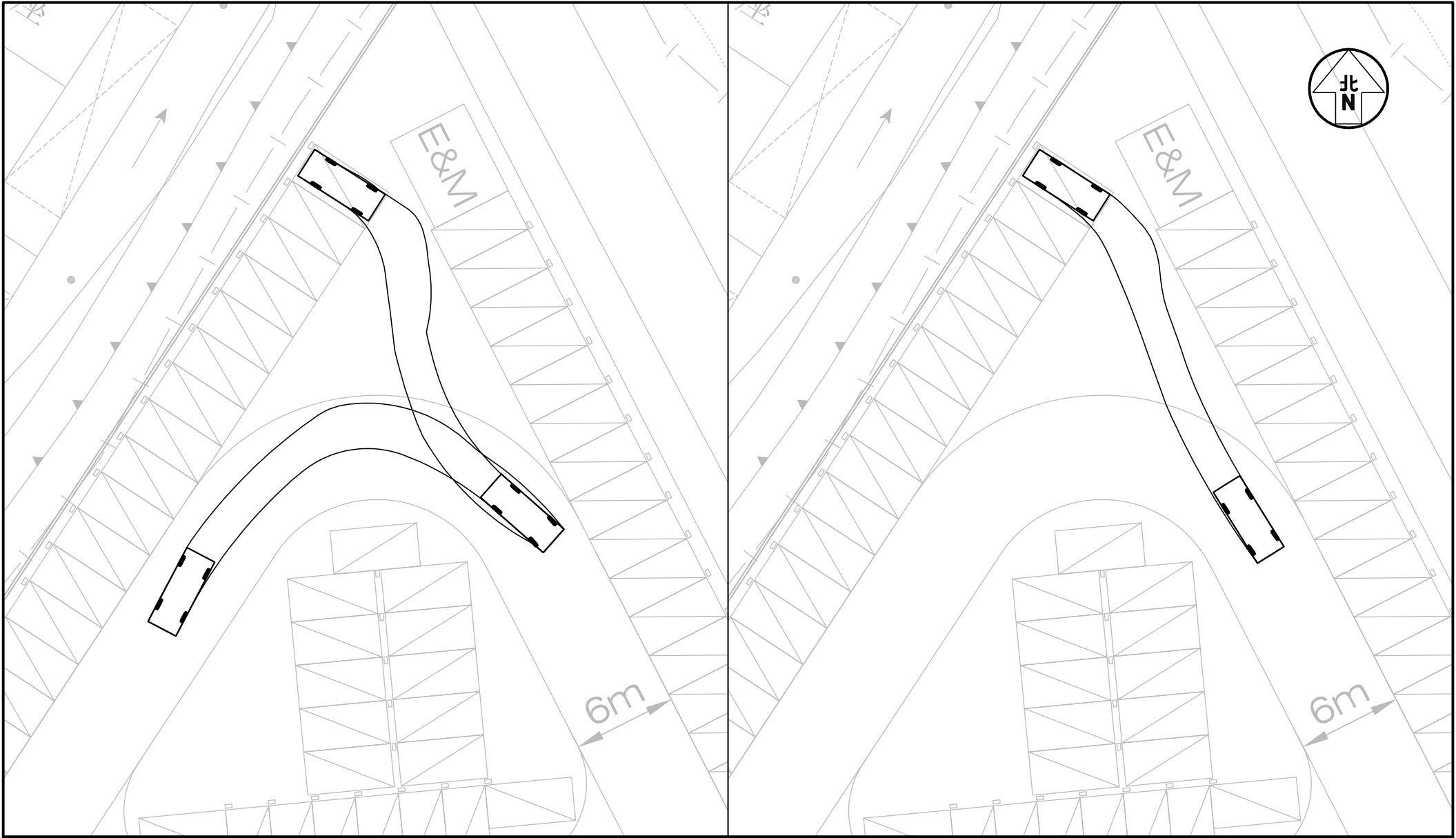
## Ratio-of-Flow to Capacity (RFC)

| Arm    |                |       |                |       |      |                | Q <sub>E</sub> |      | Entry Flow |     | RFC   |       |
|--------|----------------|-------|----------------|-------|------|----------------|----------------|------|------------|-----|-------|-------|
|        | x <sub>2</sub> | M     | t <sub>D</sub> | K     | F    | f <sub>c</sub> | AM             | PM   | AM         | PM  | AM    | PM    |
| From A | 6.819          | 6.050 | 1.071          | 1.081 | 2066 | 0.532          | 1937           | 1825 | 894        | 881 | 0.461 | 0.483 |
| From B | 4.428          | 6.050 | 1.071          | 0.916 | 1342 | 0.424          | 1075           | 1075 | 548        | 719 | 0.510 | 0.669 |
| From C | 7.997          | 6.050 | 1.071          | 1.055 | 2423 | 0.585          | 2219           | 2113 | 442        | 611 | 0.199 | 0.289 |
| From D |                |       |                |       |      |                |                |      |            |     |       |       |
| From E |                |       |                |       |      |                |                |      |            |     |       |       |
| From F |                |       |                |       |      |                |                |      |            |     |       |       |
| From G |                |       |                |       |      |                |                |      |            |     |       |       |
| From H |                |       |                |       |      |                |                |      |            |     |       |       |

## **Appendix B**

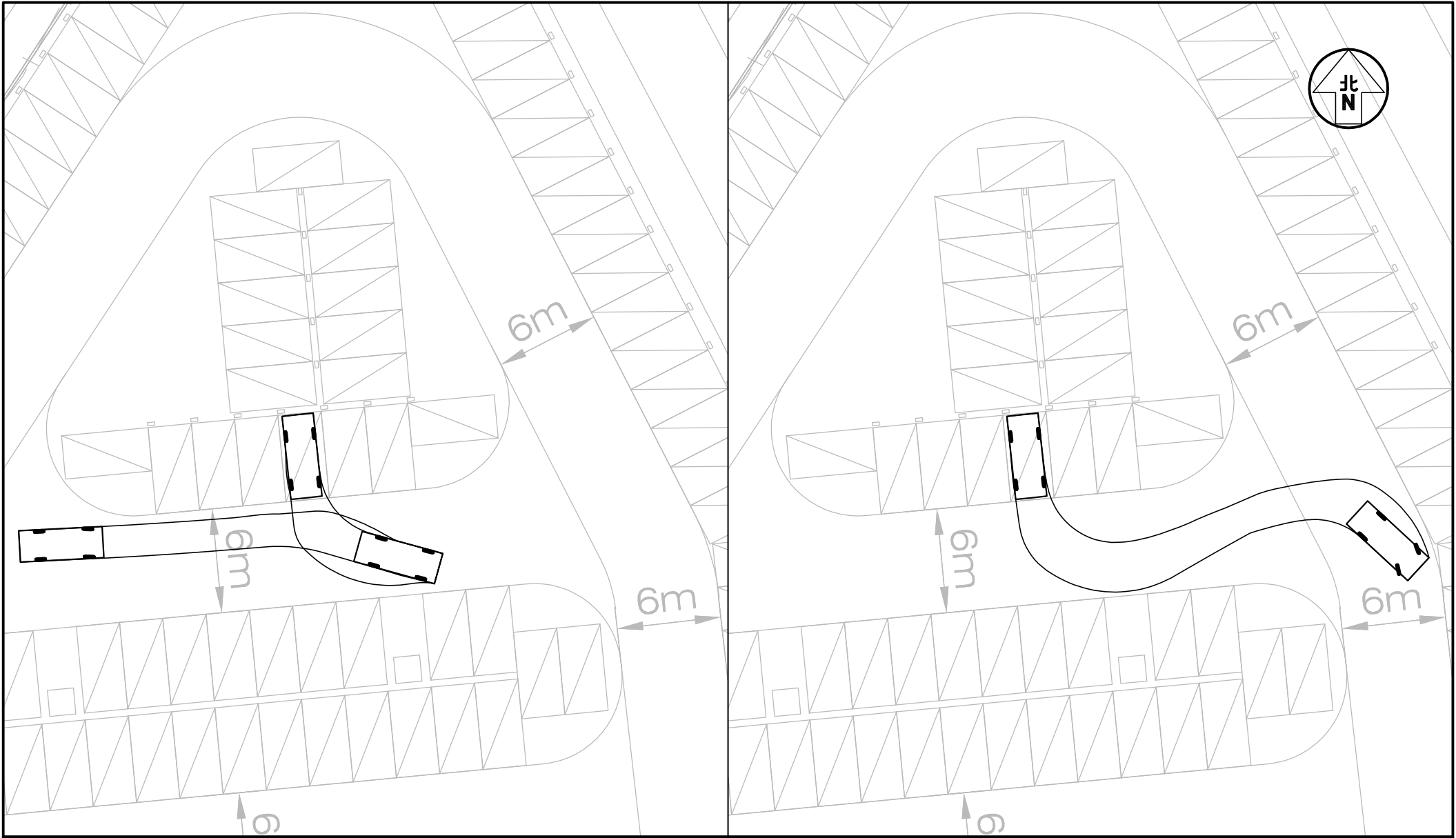
### **Swept Path Analysis**

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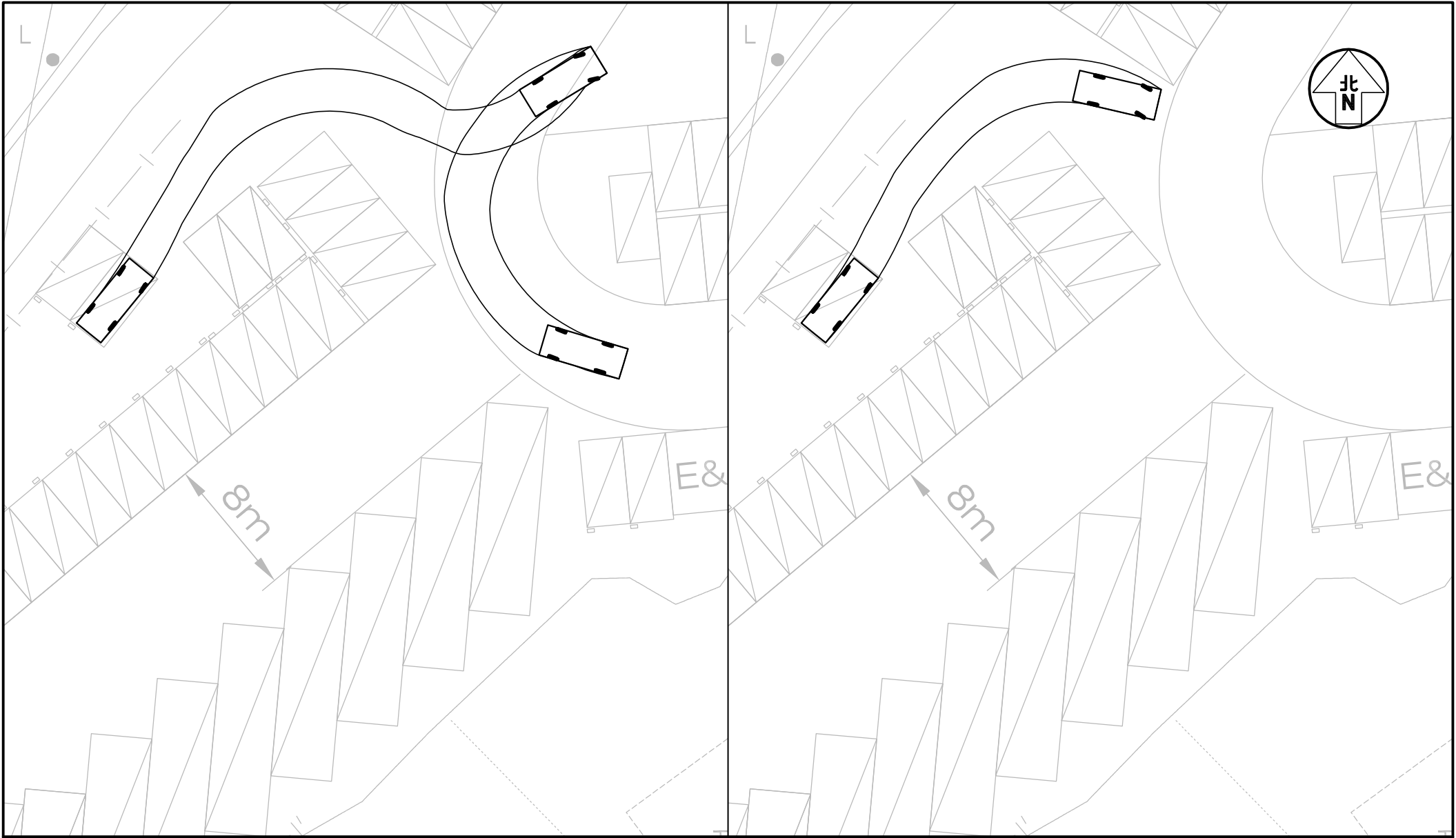
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| Project Title |  | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES |  |  | Figure No.  |  | Revision    |  | CKM Asia Limited<br>Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road,<br>Wan Chai, Hong Kong<br>Tel : (852) 2520 5990   Fax : (852) 2528 6343<br>Email : mail@ckmasia.com.hk |  |  |            |  |
| Figure Title  |  | SWEPT PATH OF PRIVATE CAR<br>ENTERING & LEAVING THE CAR PARKING SPACE   |  |  | J7353       |  | SP3         |  |  |  |  | B          |  |
|               |  |   |  |  | Designed by |  | Drawn by    |  |  |  |  | Checked by |  |
|               |  |   |  |  | L K W       |  | S C Y       |  | K C  |  |  |            |  |
|               |  |   |  |  | Scale in A4 |  | Date        |  |  |  |  |            |  |
|               |  |   |  |  | 1 : 300     |  | 12 SEP 2025 |  |  |  |  |            |  |

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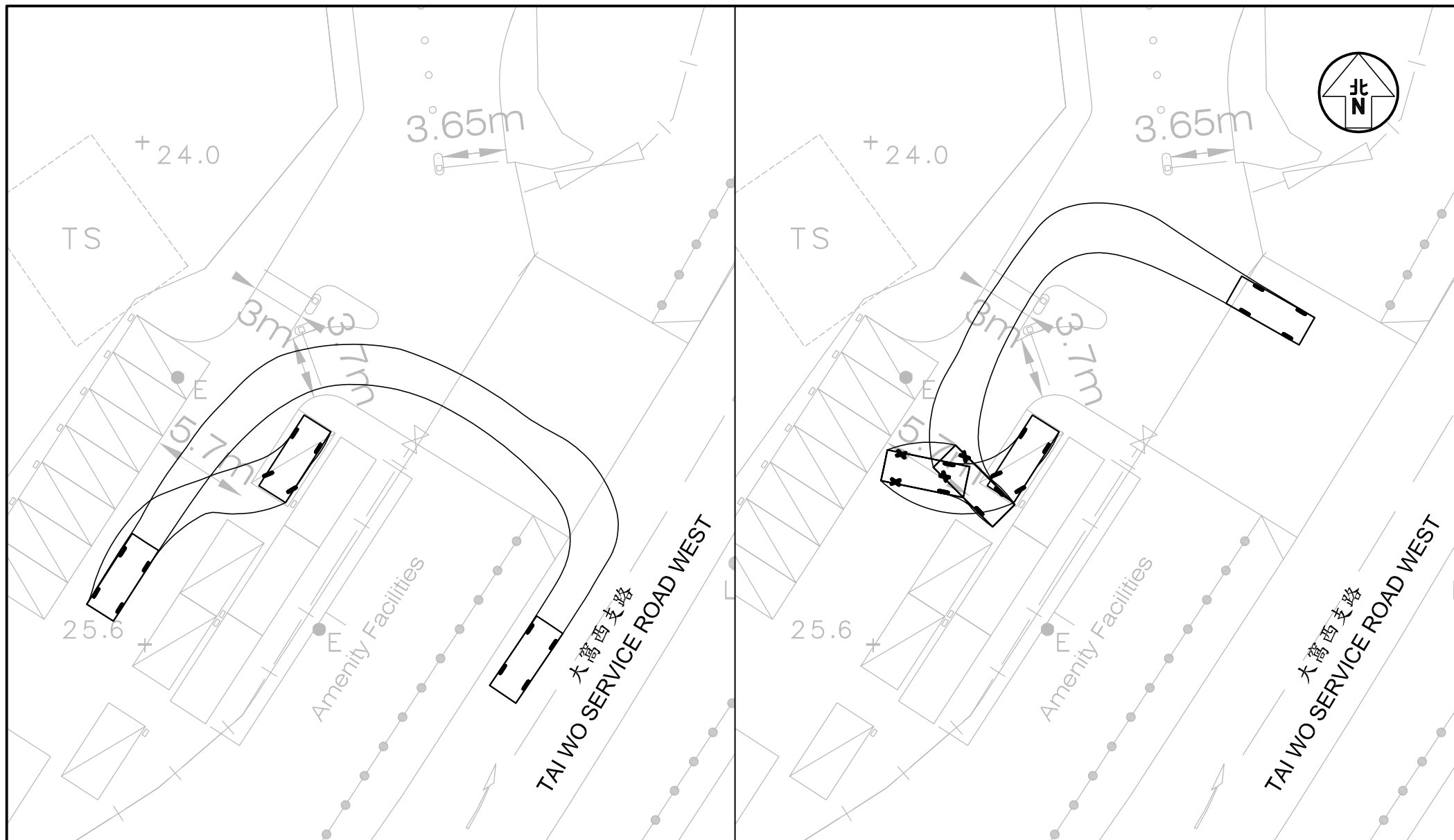
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| Project Title |  | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES |  | J7353 |  | Figure No.<br>SP4      |  | Revision<br>B       |  | CKM Asia Limited   |  |
| Figure Title  |  | SWEPT PATH OF PRIVATE CAR<br>ENTERING & LEAVING THE CAR PARKING SPACE   |  |       |  | Designed by<br>L K W   |  | Drawn by<br>S C Y   |  | Checked by<br>K C  |  |
|               |  |   |  |       |  | Scale in A4<br>1 : 300 |  | Date<br>12 SEP 2025 |  | Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road,<br>Wan Chai, Hong Kong<br>Tel : (852) 2520 5990 Fax : (852) 2528 6343<br>Email : mail@ckmasia.com.hk |  |

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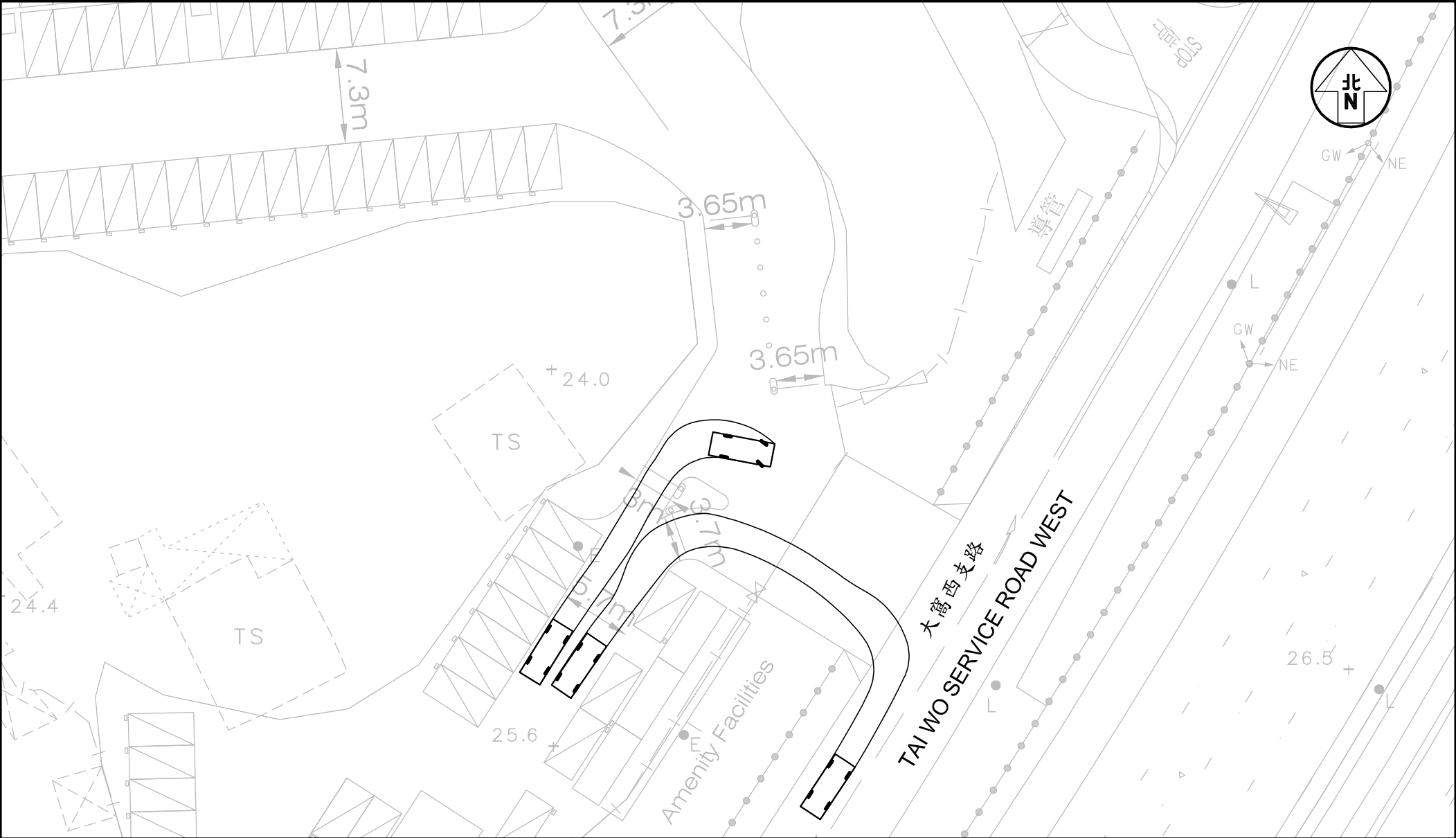


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| Project Title |  | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES |  | J7353 |  | Figure No.<br>SP5      |  | Revision<br>B       |  | CKM Asia Limited   |  |
| Figure Title  |  | SWEPT PATH OF PRIVATE CAR<br>ENTERING & LEAVING THE CAR PARKING SPACE   |  |       |  | Designed by<br>L K W   |  | Drawn by<br>S C Y   |  | Checked by<br>K C  |  |
|               |  |   |  |       |  | Scale in A4<br>1 : 300 |  | Date<br>12 SEP 2025 |  | Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road,<br>Wan Chai, Hong Kong<br>Tel : (852) 2520 5990 Fax : (852) 2528 6343<br>Email : mail@ckmasia.com.hk |  |

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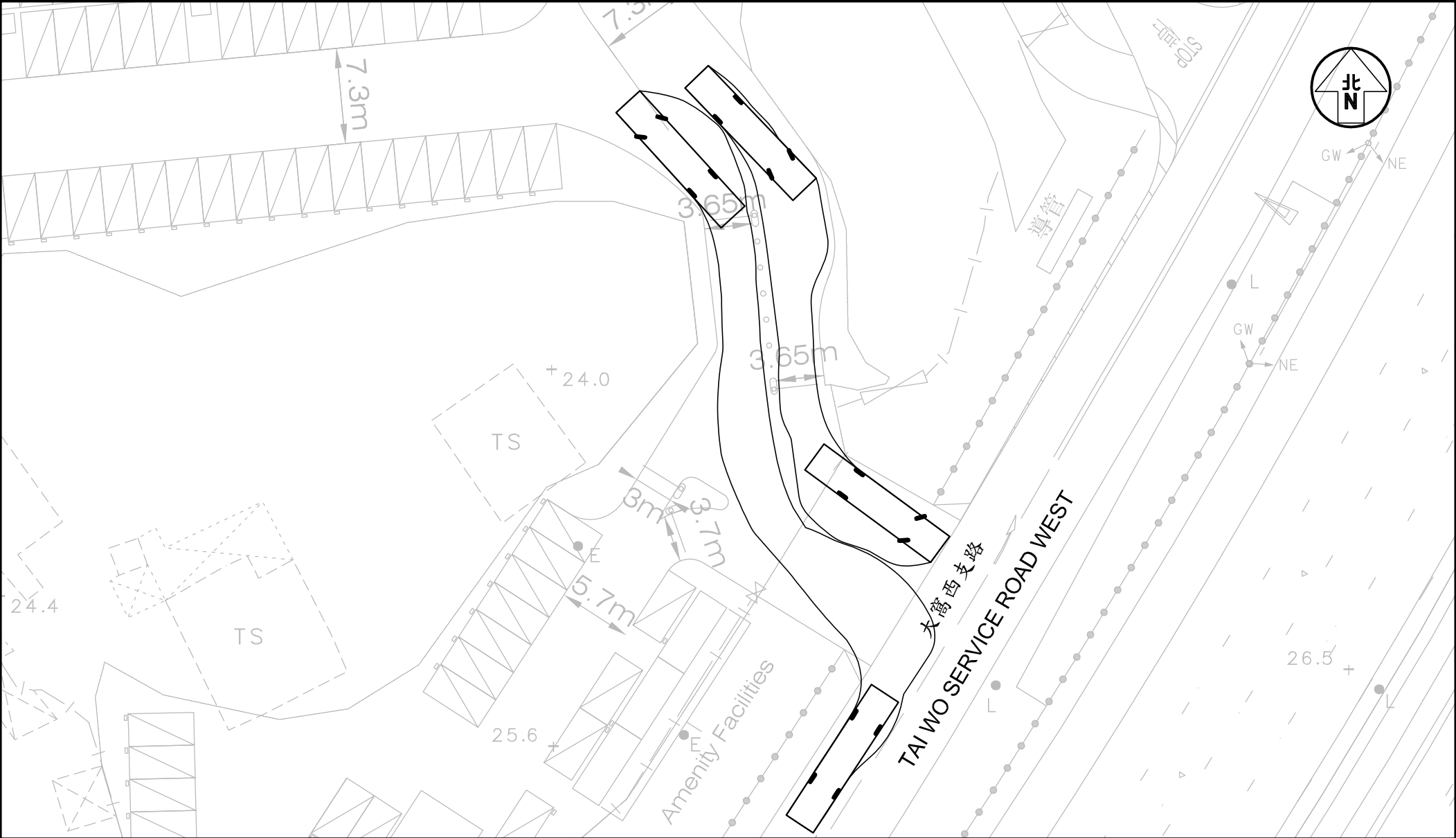


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| Project Title | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES |  |  | Figure No.<br><b>SP6</b>      |                            | <b>CKM Asia Limited</b><br>Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road,<br>Wan Chai, Hong Kong<br>Tel : (852) 2520 5990 Fax : (852) 2528 6343<br>Email : mail@ckmasia.com.hk |
| Figure Title  | <b>SWEPT PATH OF PRIVATE CAR<br/>ENTERING &amp; LEAVING THE CAR PARKING SPACE</b>   |  |  | Designed by<br><b>L K W</b>   | Drawn by<br><b>S C Y</b>   |   |
|               |   |  |  | Scale in A4<br><b>1 : 300</b> | Date<br><b>12 SEP 2025</b> |   |
|               |   |  |  | Revision<br><b>B</b>          |                            |   |



|               |  |   |  |       |  |                        |  |                     |  |  |  |                   |  |
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| Project Title |  | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES |  | J7353 |  | Figure No.<br>SP7      |  | Revision<br>B       |  | CKM Asia Limited<br>Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road,<br>Wan Chai, Hong Kong<br>Tel : (852) 2520 5990   Fax : (852) 2528 6343<br>Email : mail@ckmasia.com.hk |  |                   |  |
| Figure Title  |  | SWEPT PATH OF PRIVATE CAR 2-WAY MANOEUVRING AT ENTRANCE GATE  |  |       |  | Designed by<br>L K W   |  | Drawn by<br>S C Y   |  |  |  | Checked by<br>K C |  |
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| Project Title |  | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES |  |  |  | Figure No.  |  | Revision    |  | CKM Asia Limited<br>Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road,<br>Wan Chai, Hong Kong<br>Tel : (852) 2520 5990    Fax : (852) 2528 6343<br>Email : mail@ckmasia.com.hk |  |            |  |
| Figure Title  |  | SWEPT PATH OF COACH 2-WAY MANOEUVRING AT ENTRANCE GATE  |  |  |  | J7353       |  | SP8         |  |   |  | B          |  |
|               |  |   |  |  |  | Designed by |  | Drawn by    |  |   |  | Checked by |  |
|               |  |   |  |  |  | L K W       |  | S C Y       |  | K C   |  |            |  |
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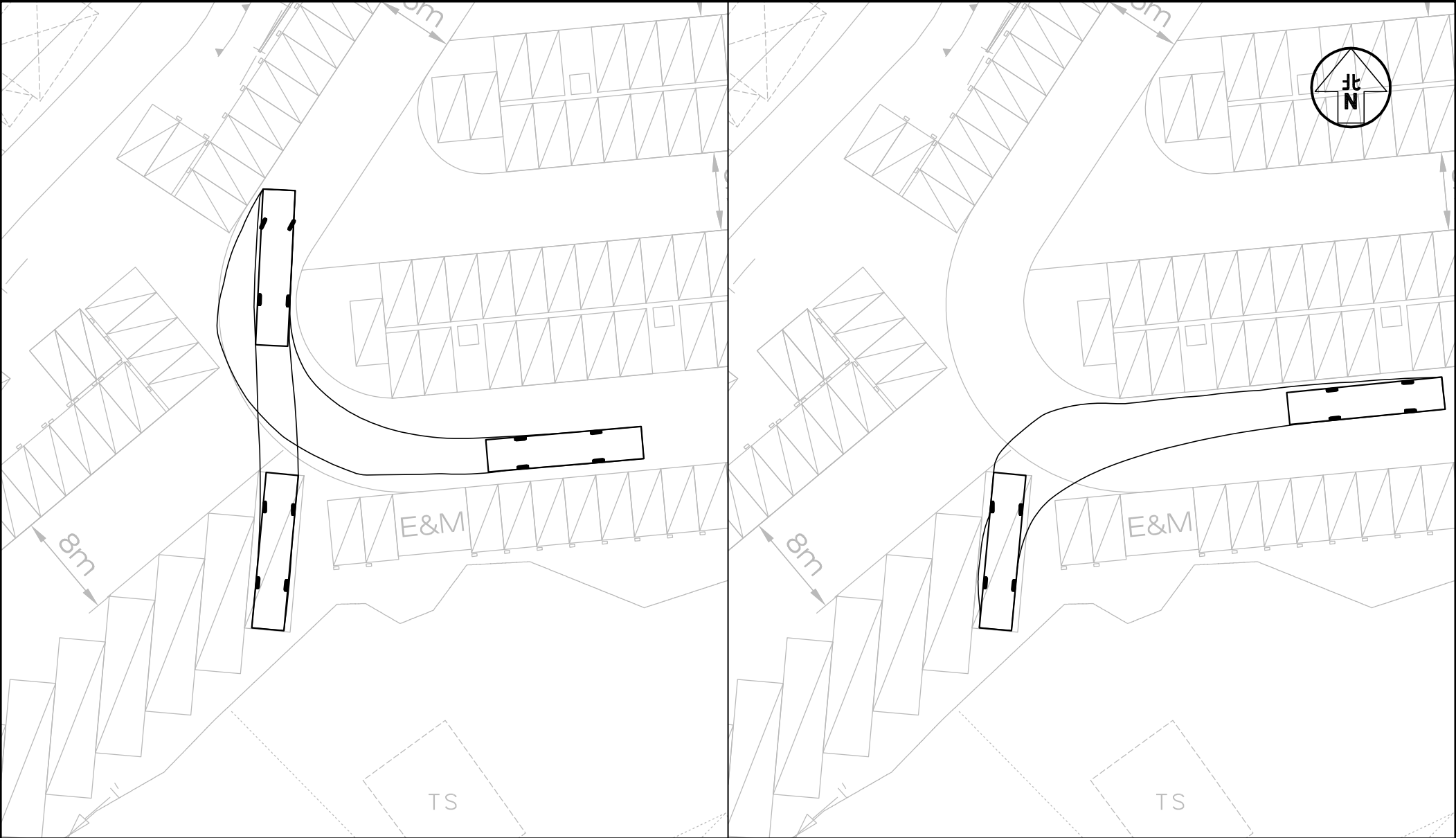
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| Project Title | PROPOSED TEMPORARY PUBLIC VEHICLE PARK WITH ELECTRIC VEHICLE CHARGING FACILITIES AND FILLING OF LAND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN DD7, KAU LUNG HANG, TAI PO, NEW TERRITORIES | J7353 | Figure No.  | SP1     | Revision | B           | CKM Asia Limited<br>Traffic and Transportation Planning Consultants<br>21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong<br>Tel : (852) 2520 5990 Fax : (852) 2528 6343<br>Email : mail@ckmasia.com.hk |            |     |
| Figure Title  | SWEPT PATH OF COACH ENTERING & LEAVING THE PARKING SPACE SHARED-USE FOR HGV AND COACH   |       | Designed by | L K W   | Drawn by | S C Y       |   | Checked by | K C |
|               |   |       | Scale in A4 | 1 : 400 | Date     | 12 SEP 2025 |   |            |     |
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| Figure Title  | SWEPT PATH OF COACH ENTERING & LEAVING THE<br>PARKING SPACE SHARED-USE FOR HGV AND COACH  |  |  |  |  | Designed by<br>L K W   | Drawn by<br>S C Y | Checked by<br>K C   |   |
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