

Appendix IV
Traffic Impact Assessment



Section 16 Planning Application for

Proposed Temporary Warehouse for Storage of Construction Materials and Machinery, Parking of Special Purpose Vehicles and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land, Filling of Pond and Excavation of Land in “Green Belt” Zone and Area Shown as “Road” at Various Lots in D.D.125 and Adjoining Government Land, Ha Tsuen, Yuen Long, New Territories

**TIA Report
December 2024**

Section 16 Planning Application for

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**TIA Report
December 2024**

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1 INTRODUCTION

1.1 General

- 1.1.1 The applicant intends to apply for 'Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land'.
- 1.1.2 The proposed site area is about 41,569m², including about 5,568m² of Government Land. Majority of the Site falls within an area zoned as "Green Belt" (GB) on the Approved Ha Tsuen Fringe Outline Zoning Plan (OZP) No. S/YL-HTF/12, while a minor portion of the Site falls within area shown as "Road" on the Approved Hung Shui Kiu and Ha Tsuen OZP No. S/HKS/2.
- 1.1.3 According to the Notes of the OZP, the applied uses are not a column 1 nor 2 use within the "GB" zone, which requires planning permission from the Board. Furthermore, filling of land, filling of pond and excavation of land within "GB" zone also required planning permission from the Board.
- 1.1.4 Ozzo Technology (HK) Limited was commissioned to undertake a Traffic Impact Assessment (TIA) Study in support of Section 16 (S16) of the Town Planning Ordinance (Cap. 131) (the Ordinance) to use Various Lots in D.D. 125 and Adjoining Government Land (GL), Ha Tsuen, Yuen Long, New Territories (the Site) for 'Proposed Temporary Warehouse for Storage of Construction Materials and Construction Machinery, Parking of Special Purpose Vehicles (SPV) and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land' ("the Project Site").

1.2 Study Objectives

- 1.2.1 The main objectives of this Traffic Impact Assessment ("TIA") Study are to:
- (i) evaluate the existing vehicular traffic and transport conditions of the project site and to assess the traffic and transport implications of the development to the adjacent road network and pedestrian facilities for the operation of the Project Site;
 - (ii) identify any existing and potential traffic and transport problems and to recommend possible mitigation measures and advise any necessary traffic arrangement;
 - (iii) recommend traffic improvement measures for the Project Site, as necessary.

1.3 Report Structure

1.3.1 Following this introductory chapter, this report is arranged as follow:

- Chapter 2 describes the Project Site;
- Chapter 3 summarizes the existing traffic conditions in the vicinity of the Project Site;
- Chapter 4 describes the methodology for estimating the amount of vehicular traffic to be induced by the development;
- Chapter 5 details the traffic forecast and the results of traffic impact assessment;
- Chapter 6 undertakes the construction traffic impact assessment;
- A summary of the findings and conclusion of this TIA study are given in Chapter 7.

2 DESCRIPTONS OF THE PROJECT SITE

2.1 Site Location

2.1.1 **Figure 2-1** shows the location of the Project Site, located at the west of Kong Sham Western Highway and adjacent to Ling To Tsz. The Project Site is accessible from Kong Sham Western Highway and via a local access road. To enhance the connectivity, an access road is also proposed parallel to the local access road.

2.2 Development Parameters for the Project Site

2.2.1 Based on the latest information, the Project Site involves 7 temporary single-storey structures for warehouse uses for storage of construction materials and construction machinery, Special Purpose Vehicles (SPVs) repair workshop, construction machinery repair workshop and offices, with a Project Site area of around 41,569m², and a total of GFA is about 11,299 m². The remaining area are designated for parking of SPVs, vehicle parking and loading/unloading (L/UL) spaces and circulation area.

2.2.2 The operation hours of the Site are Monday to Saturday from 09:00 to 19:00. No operation on Sunday and public holiday. It is estimated that the Site would be able to accommodate 15 staff. As no shopfront is proposed at the Site, no visitor is anticipated.

2.3 Parking and Loading/Unloading Facilities

2.3.1 **Table 2-1** summarizes the internal transport facilities to be provided in the Project Site. As there are no specific parking and loading/unloading requirements for temporary warehouse development in accordance to HKPSG, ancillary transport facilities are provided based on users' requirements to meet operational needs.

Table 2-1 Ancillary Transport Facilities Based on User's Requirement

Type of Ancillary Transport Facilities	Size	Provision based on User's Requirement
Private Car Parking Space	2.5m (W) x 5m (L)	18
Special Purpose Vehicle Parking Space	3.5m (W) x 11m (L)	32
Total Parking Facilities	-	50
L/UL Spaces for LGV	3.5m (W) x 7m (L)	3
L/UL Spaces for MGW	3.5m (W) x 11m (L)	6
Total L/UL Facilities	-	9

2.3.2 The proposed layout plan of the Project Site is included in **Appendix A** for easy reference.

2.4 Vehicular Access Arrangement and Proposed Access Road

2.4.1 The Project Site consists of 2 portions, with the larger portion (hereinafter named as “Portion A”) located at the north of the existing access road and the smaller portion (hereinafter named as “Portion B”) located at the south of the existing access road. Individual site accesses are proposed for Portion A and Portion B, with access locations are proposed at the eastern side of each portion. **Figure 2-2** also presents the locations for each portion.

2.4.2 To minimize the traffic impact to the existing single track access road, an access road with a single-2 configuration connecting Portion A is proposed. Layout of the proposed access road is also presented in **Figure 2-2**.

2.4.3 While Portion B only serves around 13.3% of the total development traffic and the operation traffic covers private cars and light goods vehicles only, development traffic to/from Portion B will travel via the existing access road.

2.4.4 Swept path analysis is also conducted for the vehicular accesses and the proposed access road, indicating sufficient turning spaces for goods vehicles. **Appendix A** also presents the swept path analysis for the access points and the access road.

3 EXISTING TRAFFIC AND TRANSPORT CONDITIONS

3.1 Existing Road Network

3.1.1 As shown in **Figure 2-1**, the Project Site is currently connecting to a local access road, with further connection to Kong Sham Western Highway. Current condition of the connecting carriageways are summarized as follows:

3.1.2 The connecting access road (Unnamed Road A) is a single track rural road connecting Ling To Tsz and in the west and access road underneath Kong Sham Western Highway in the east. Acting as single carriageway with 1-lane-2 way operation, passing bays are generally identified along the carriageway, while serving a low volume of traffic.

3.1.3 The access road underneath Kong Sham Western Highway (KSWH) is a current connecting road between local storage area / concrete plant and KSWH. The northern section of the access road is a single-2 carriageway (with no loading activities, standing vehicles and pedestrian crossings identified along the northern section) while the southern section of the access road is a single carriageway with 1-lane-2-way operation. Passing bays are generally identified the single carriageway section, while serving a low volume of traffic.

3.2 Traffic Surveys

3.2.1 To assess the existing traffic condition, vehicular traffic count surveys were conducted on 4 October 2023 (Wednesday) between 07:00 and 20:00. A summary of the types of surveys being undertaken and the survey locations are shown in **Figure 3-1** and **Table 3-1**.

Table 3-1 Summary of Comprehensive Surveys

Survey Type	Location	Figure	Survey Date	Data Collected
Vehicular Count Surveys	J1 to J5	Figure 3-1	2023-10-04 (Wednesday)	Manual Classified count in 15 min intervals
	L1 to L3	Figure 3-1	2023-10-04 (Wednesday)	Manual Classified count in 15 min intervals

3.3 Existing Vehicle Traffic Conditions

3.3.1 All vehicle flows recorded during the traffic surveys have been converted to passenger car unit (PCU) based on the PCU factors as indicated in Table 2.3.1.1 of Volume 2 of Transport Planning and Design Manual (TPDM) and shown in **Table 3-2**.

Table 3-2 Passenger Car Unit Conversion Factors

Vehicle Type	PCU Conversion Factor ⁽¹⁾
	Priority junction/ Roundabout
Car / Taxi	1.00
Public Light Bus / Minibus	1.50
Light Goods Vehicle	1.50
Medium/ Heavy Goods Vehicle	2.8
Bus / Coach	2.8

Notes: (1) Table 2.3.1.1, Chapter 2.3, Volume 2, TPDM-2024

3.3.2 By applying the above PCU factors, vehicular traffic flows in PCUs are calculated and the AM and PM peak hour is identified to occur at 10:45-11:45 and 15:15-16:15 for AM peak and PM peak respectively. **Figure 3-2** presents the 2023 observed Weekday AM and PM peak hour traffic flows on the road network in the vicinity of the Project Site.

3.3.3 Based on the existing traffic flows, the peak hour performance of the key junctions in the vicinity of the Project Site is assessed. The assessment results are indicated in **Table 3-3** and detailed junction calculation sheets are given in **Appendix B**.

Table 3-3 2023 Peak Hour Junction Capacity Assessment

Jn. ID.	Location ⁽¹⁾	Type	Capacity Index ⁽²⁾	2023 Weekday	
				AM Peak	PM Peak
J1	Unnamed Road A / Access to Portion A	Priority	DFC	<0.01	<0.01
J2	Unnamed Road A / Access to Existing Fish Farm	Priority	DFC	0.02	0.01
J3	Unnamed Road A / Access Road underneath KSWH	Priority	DFC	0.02	0.02
J4	Access Road underneath KSWH / Ha Tsuen Road	Priority	DFC	0.17	0.18
J5	KSWH Roundabout	Roundabout	DFC	0.53	0.43

Notes:

(1) Refer to **Figure 3-1** for junction locations

(2) DFC = Design Flow to Capacity for priority junction and roundabout

3.3.4 The results reveal that all the assessed key junctions are operated satisfactorily during the peak hours.

3.3.5 Based on the existing traffic flows, the peak hour performances of the key road links in the vicinity of the Project Site are also assessed and the results are indicated in **Table 3-4**.

Table 3-4 2023 Peak Hour Road Link Capacity Assessment

No.	Location ⁽¹⁾	Direction	Design ⁽²⁾ Capacity (veh/hr)	Weekday AM Peak		Weekday PM Peak	
				Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾
L1	Unnamed Road A	2-way	100	11	0.11	12	0.12
L2	Access Road underneath KSWH (Section south of Ha Tsuen Road)	2-way	100	67	0.67	73	0.73
L3	Access Road underneath KSWH (Section north of Ha Tsuen Road)	NB	850	377	0.44	302	0.36
		SB	850	375	0.44	325	0.38

Notes: (1) Refer to Figure 3-1 for road link locations
(2) TPDM Vol 2 Chapter 2.4.1.1 and TPDM Vol 3 Chapter 3.11.3.1
(3) P/Df = Peak Hourly Flows/Design Flow Ratios (P/Df) for road links

3.3.6 The results reveal that all the key road links in the vicinity of the Project Site operate within capacity during the peak hours.

4 ESTIMATION OF DEVELOPMENT FLOWS

4.1 Peak Hour Vehicular Flows

4.1.1 Development trips during the identified peak hours are summarized in **Table 4-1**.

Table 4-1 2023 Peak Hour Road Link Capacity Assessment

Time Period	Trip Generation and Attraction (veh/hr)						2-Way Total
	PC		LGV		MGV		
	In	Out	In	Out	In	Out	
Trips at AM Peak (10:45-11:45)	4	4	1	1	5	5	20
Trips at PM Peak (15:15-16:15)	2	3	1	1	3	3	13

4.1.2 For the purpose of this TIA, the captioned peak hour development trips will be adopted in the traffic impact assessment.

5 TRAFFIC IMPACT ASSESSMENT

5.1 Design Year

5.1.1 With the planning application for the Proposed Warehouse development involves a period of 3 years, the expected end year for the Project Site would be year 2028. For conservative, 2028 is adopted as the design year for this Study.

5.2 Methodology

5.2.1 In forecasting the future traffic flows on the road network in the Study Area, due considerations are given to the following information and factors:

- Historical traffic data from Annual Traffic Census (ATC) published by Transport Department;
- The forecast population and employment from the 2019-based Territorial Population and Employment Data Matrix (TPEDM) planning data published by Planning Department;
- Committed and planned developments in the Study Area.

5.2.2 The following steps are undertaken to derive the 2028 Peak Hour Reference Flows (i.e. without the Project Site) and Design Flows (i.e. with the Project Site).

2028 Background Flows = 2023 Flows x annual growth factors

2028 Reference Flows = 2028 Background Flows + additional traffic by
planned and committed developments

2028 Design Flows = 2028 Reference Flows + development traffic

5.2.3 The traffic impact to be induced by the Development is assessed by comparing the Peak Hour Reference Traffic Flows against the Design Traffic Flows for both Design Years.

5.3 Future Year Reference Traffic Flows

Historical Traffic Growth

5.3.1 To gain an understanding of the historical trends of traffic growth on the nearby road network, relevant traffic data over the 5-year period of 2013 to 2018 are extracted from the Annual Traffic Census (ATC) Reports for the ATC stations within the Study Area. The traffic data in 2019 and 2021 are excluded from the analysis due to social activities and outbreak of COVID-19 respectively. **Table 5-1** describes the location of the nearby available ATC station and provides the corresponding traffic data.

Table 5-1 Average Annual Daily Traffic from Annual Traffic Census

Station	Road	Between		2013	2014	2015	2016	2017	2018	Average Annual Growth
5907	KSWH	KSWH nr Yick Yuen Road	Shenzhen Bay Bridge (HK Section)	18,410	18,290	19,140	19,470	19,080	19,690	1.35%
				-	-0.65%	4.65%	1.72%	-2.0%	3.2%	
TOTAL				18,410	18,290	19,140	19,470	19,080	19,690	1.35%
				-	-0.65%	4.65%	1.72%	-2.0%	3.2%	

Source: 2013-2018 Annual Traffic Census (ATC) Reports published by Transport Department

5.3.2 The historical traffic data of ATC station 5907 between year 2017-2022 have also been reviewed, with a negative annual growth rate identified. Thus, the annual traffic growth rate on the road network within the Study Area of year 2013 to 2018 of 1.35%, as indicated in **Table 5-1**, will be more conservative.

2019-Based Territorial Population and Employment Data Matrix (TPEDM)

5.3.3 **Table 5-2** presents the population and employment data in Northwest New Territories for 2019, 2026 and 2031 from the 2019-based Territorial Population and Employment Data Matrix (TPEDM) planning data provided by Planning Department.

Table 5-2 2019-Based TPEDM for Northwest New Territories

Category	2019	2023 ⁽¹⁾	2026	2028 ⁽²⁾	2031	2023-2028 Average Growth (% p.a.)
Population	1,154,400	1,199,714	1,233,700	1,298,880	1,396,650	1.60%
Employment	292,350	308,636	320,850	349,750	393,100	2.53%
Total	1,446,750	1,508,350	1,554,550	1,648,630	1,789,750	1.79%

Source: 2019-based TPEDM published by Planning Department

Note (1): 2023 population and employment places are calculated by interpolation between 2019 and 2026.

(2): 2028 population and employment places are calculated by interpolation between 2026 and 2031.

- 5.3.4 It is anticipated that the population and employment places in Northwest New Territories would be increased by 1.60% and 2.53% p.a. respectively, i.e. an overall increase of 1.79% per annum.
- 5.3.5 For conservative, annual growth rate derived from 2019-Based TPEDM of 1.79% will be adopted in the Study.

Planned and Committed Developments

- 5.3.6 Based on the published information from Town Planning Board, no planned/committed developments in the site vicinity are identified in design year 2028 in the site vicinity.

2028 Reference Flows

- 5.3.7 Taking into account of the above factors, to summarize, the following steps are undertaken to derive the 2028 Reference Traffic Flows (i.e. without Project Site):
- 2028 Background Flows = 2023 Flows x annual growth factors (+1.79% p.a.)
- 2028 Reference Flows = 2028 Background Flows + Planned / Committed Development Traffic (refer to **Section 5.3.6**)
- 5.3.8 The 2028 Reference Traffic Flows (i.e. without Project Site) are presented in **Figure 5-1**.

5.4 Future Year Design Peak Hour Traffic Flows

- 5.4.1 The additional development traffic in **Table 4-1** is then assigned onto the nearby road network with reference to the existing traffic distribution pattern in the Study Area. The resulting peak hour development flows are shown in **Figure 5-2**.
- 5.4.2 By adding the development flows in **Figure 5-2** to the 2028 Reference Peak Hour Flows (i.e. without Project Site) in Figure 5-1, the 2028 Design Peak Hour Flows (i.e. with Project Site) are derived and shown in **Figure 5-3**.

5.5 Future Year Junction Capacity Assessments

- 5.5.1 Based on the Reference Flows (i.e. without Project Site) and Design Flows (i.e. with Project Site) for the Design Year, junction capacity assessment is undertaken and the results shown in **Table 5-3** with detailed calculation sheets provided in **Appendix C**.

Table 5-3 2028 Peak Hour Junction Capacity Assessment

Jn. ID.	Location ⁽¹⁾	Type	Capacity Index ⁽²⁾	2028 Reference Scenario		2028 Design Scenario	
				AM Peak	PM Peak	AM Peak	PM Peak
J1	Unnamed Road A / Access to Portion A	Priority	DFC	<0.01	<0.01	<0.01	<0.01
J2	Unnamed Road A / Proposed Access Road ⁽³⁾	Priority	DFC	0.02	0.02	0.02	0.02
J3	Unnamed Road A / Access Road underneath KSWH	Priority	DFC	0.03	0.02	0.05	0.04
J4	Access Road underneath KSWH / Ha Tsuen Road	Priority	DFC	0.19	0.20	0.23	0.23
J5	KSWH Roundabout	Roundabout	DFC	0.58	0.47	0.59	0.48

Notes:

(1) Refer to **Figure 3-1** for junction locations

(2) DFC = Design Flow to Capacity for priority junction and roundabout

(3) With the Proposed Access Road in place, geometry of J2 has also been modified.

- 5.5.2 It is indicated in **Table 5-3** that all the key junctions in the vicinity of the Project Site will operate within capacity during peak hours for both the Reference (without Project Site) and Design (with Project Site) scenarios.

5.6 Future Year Link Capacity Assessments

5.6.1 Based on the Reference Flows (i.e. without Project Site) and Design Flows (i.e. with Project Site), link capacity assessments for Design Year 2028 are carried out and the results are presented in **Table 5-4**.

Table 5-4 2028 Peak Hour Road Link Capacity Assessment

No.	Location ⁽¹⁾	Dir.	Design ⁽²⁾ Capacity (veh/hr)	2028 Reference Scenario (AM Peak)		2028 Reference Scenario (PM Peak)		2028 Design Scenario (AM Peak)		2028 Design Scenario (PM Peak)	
				Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾
L1	Unnamed Road A	2-way	100	13	0.13	14	0.14	15	0.15	16	0.16
L2	Access Road underneath KSWH (Section south of Ha Tsuen Road)	2-way	100	75	0.75	82	0.82	95	0.95	95	0.95
L3	Access Road underneath KSWH (Section north of Ha Tsuen Road)	NB	850	413	0.49	331	0.39	423	0.50	338	0.40
		SB	850	411	0.48	356	0.42	421	0.50	362	0.43
L4	Proposed Access Road	EB	400	0	0.00	0	0.00	9	0.02	6	0.02
		WB	400	0	0.00	0	0.00	9	0.02	5	0.01

Notes: (1) Refer to Figure 3-1 for road link locations
(2) TPDM Vol 2 Chapter 2.4.1.1 and TPDM Vol 3 Chapter 3.11.3.1
(3) P/Df = Peak Hourly Flows/Design Flow Ratios (P/Df) for road links

5.6.2 The results in the table indicate that all the key road links in the Study Area will operate within capacity during the peak hours for both Reference scenario (i.e. without Project Site) and Design scenario (i.e. with Project Site).

6 CONSTRUCTION TRAFFIC IMPACT ASSESSMENT

6.1 Design Year and Peak Hour Construction Traffic

6.1.1 Under current programme, the construction works will be completed in year 2025. Thus 2025 will be adopted as the design year for construction traffic impact assessment.

6.1.2 The construction traffic mainly consists of concrete delivery and dump trucks. To limit the construction traffic onto nearby road network (particularly for the Access Road underneath HSWH), construction traffic for the Project Site during peak hour is limited to 8 veh/hr, which is equivalent to 16 pcu/hr.

6.1.3 The same approach in forecasting the 2028 Design Peak Hour Traffic (refers to Chapter 5) is adopted to forecast the 2025 Design Peak Hour Traffic as summarized below:

2025 Background Flows = 2023 Flows x annual growth factors

2025 Reference Flows = 2025 Background Flows + additional traffic by planned and committed developments

2025 Design Flows = 2025 Reference Flows + construction traffic

6.2 Construction Traffic Impact Assessment

6.2.1 The 2025 Peak Hour Traffic Flows during construction period are shown in **Figure 6-1** and **Figure 6-2** respectively. Based on the traffic forecasts, results of the junction and link capacity assessments during the construction year are presented in **Table 6-1** and **Table 6-2** respectively. Detailed calculation sheets of the junction assessment are provided in **Appendix D**.

Table 6-1 2025 Peak Hour Junction Capacity Assessment

Jn. ID.	Location ⁽¹⁾	Type	Capacity Index ⁽²⁾	2025 Reference Scenario		2025 Design Scenario	
				AM Peak	PM Peak	AM Peak	PM Peak
J1	Unnamed Road A / Access to Portion A	Priority	DFC	<0.01	<0.01	<0.01	<0.01
J2	Unnamed Road A / Proposed Access Road ⁽³⁾	Priority	DFC	0.02	0.02	0.02	0.02
J3	Unnamed Road A / Access Road underneath KSWH	Priority	DFC	0.03	0.02	0.05	0.05
J4	Access Road underneath KSWH / Ha Tsuen Road	Priority	DFC	0.18	0.19	0.22	0.23
J5	KSWH Roundabout	Roundabout	DFC	0.55	0.45	0.56	0.46

Notes:

(1) Refer to **Figure 3-1** for junction locations

(2) DFC = Design Flow to Capacity for priority junction and roundabout

(3) With the Proposed Access Road in place, geometry of J2 has also been modified.

Table 6-2 2025 Peak Hour Road Link Capacity Assessment

No.	Location ⁽¹⁾	Dir.	Design ⁽²⁾ Capacity (veh/hr)	2025 Reference Scenario (AM Peak)		2025 Reference Scenario (PM Peak)		2025 Design Scenario (AM Peak)		2025 Design Scenario (PM Peak)	
				Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾
L1	Unnamed Road A	2-way	100	13	0.13	14	0.14	15	0.15	16	0.16
L2	Access Road underneath KSWH (Section south of Ha Tsuen Road)	2-way	100	72	0.72	79	0.79	88	0.88	95	0.95
L3	Access Road underneath KSWH (Section north of Ha Tsuen Road)	NB	850	392	0.46	314	0.37	400	0.47	322	0.38
		SB	850	390	0.46	338	0.40	398	0.47	346	0.41
L4	Proposed Access Road	EB	400	0	0.00	0	0.00	7	0.02	7	0.02
		WB	400	0	0.00	0	0.00	7	0.02	7	0.02

Notes: (1) Refer to Figure 3-1 for road link locations

(2) TPDM Vol 2 Chapter 2.4.1.1 and TPDM Vol 3 Chapter 3.11.3.1

(3) P/Df = Peak Hourly Flows/Design Flow Ratios (P/Df) for road links

6.2.2 The results indicate that the key junctions and road links in the vicinity of the project site would operate at an acceptable level during the weekday AM and PM peak hours even with the construction traffic to be generated during the construction period.

7 SUMMARY AND CONCLUSION

7.1 Summary

- 7.1.1 Ozzo Technology (HK) Limited is commissioned to undertake this Traffic Impact Assessment (TIA) Study to assess the traffic impact to be induced by the Project Site on the nearby road network.
- 7.1.2 Capacity assessments are undertaken to reveal the 2023 AM and PM peak hour traffic conditions in the vicinity of the Project Site. The assessment results indicate that all the key junctions and road links perform satisfactorily during the AM and PM peak hours on a normal weekday.
- 7.1.3 To minimize the traffic impact to the existing single track access road, an access road with a single-2 configuration connecting Portion A is proposed.
- 7.1.4 With the planning application for the Temporary Warehouse development involves a period of 3 years, while the expected end year for the Project Site would be year 2028, year 2028 is adopted as the design year for this Study.
- 7.1.5 For traffic impact assessments, junction and link capacity assessments are undertaken for the 2028 AM and PM peak hours on a normal weekday. With the trivial development traffic generated from the Project Site, assessment results indicate that all the key junctions and road links would perform satisfactorily in the Design Year even with the Project Site in place.
- 7.1.6 Construction traffic impact assessment also indicate that the key junctions and road links in the vicinity of the project site would operate at an acceptable level during the weekday AM and PM peak hours even with the construction traffic to be generated during the construction period.

7.2 Conclusion

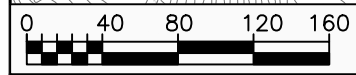
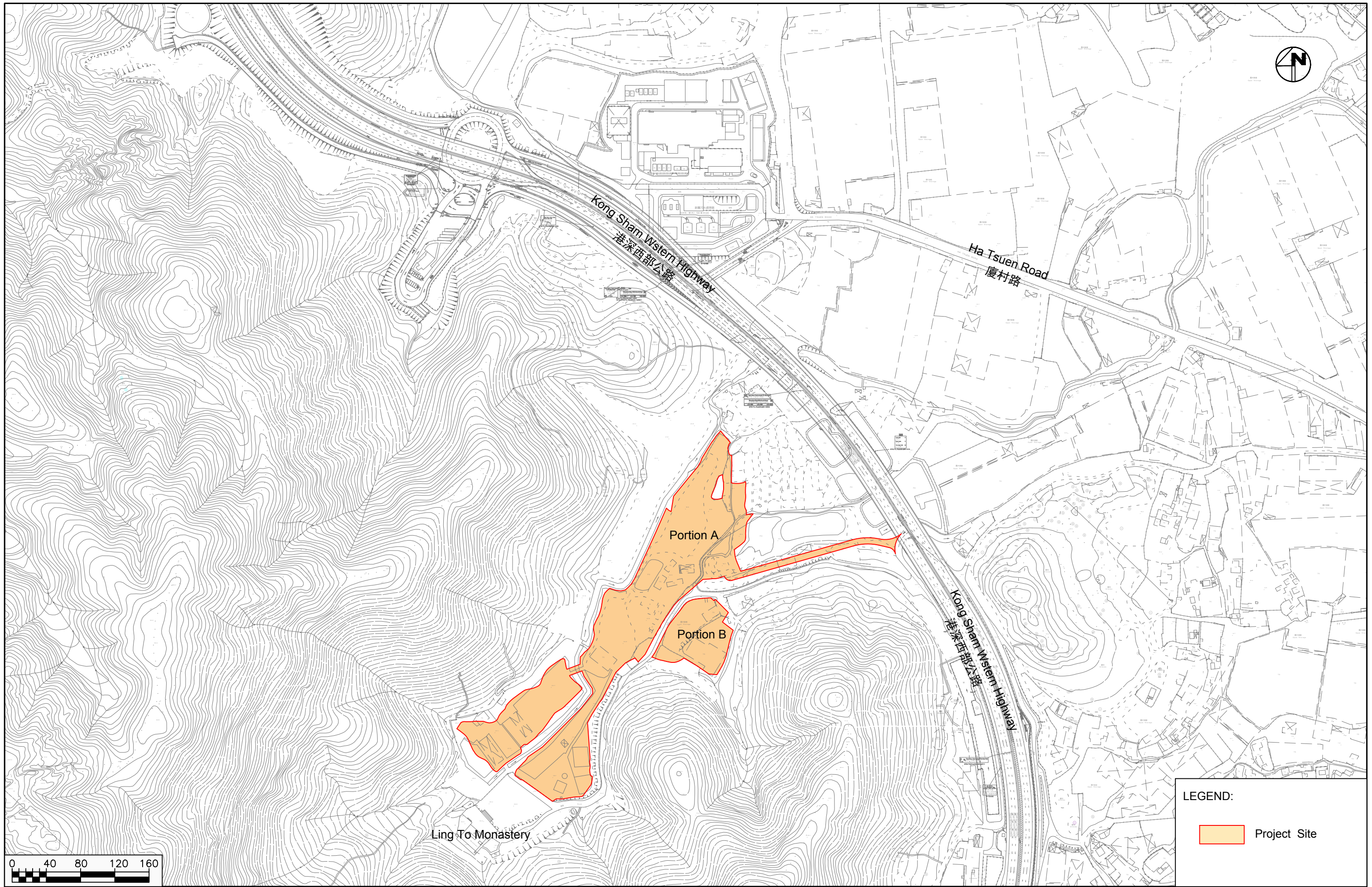
- 7.2.1 The impact assessment results indicate that the Project Site would not create adverse impact on the surrounding road network.

Proposed Temporary Warehouse for Storage of Construction Materials and Machinery, Parking of Special Purpose Vehicles and Rural Workshop with Ancillary Facilities for a Period of 3 Years at Various Lots in D.D.125 and Adjoining Government Land, Ha Tsuen, Yuen Long, New Territories
TIA Report



Figures

X:\Ozzo\83133_S16 for Temporary Warehouse, Parking of Special Purpose Vehicles and Rural Workshop in Ha Tsuen\Data\Dwg\83133_Figure 2-1.dwg 2024/12/10 14:52:32



LEGEND:

Project Site

Date	Scale
06/12/2024	1:4000

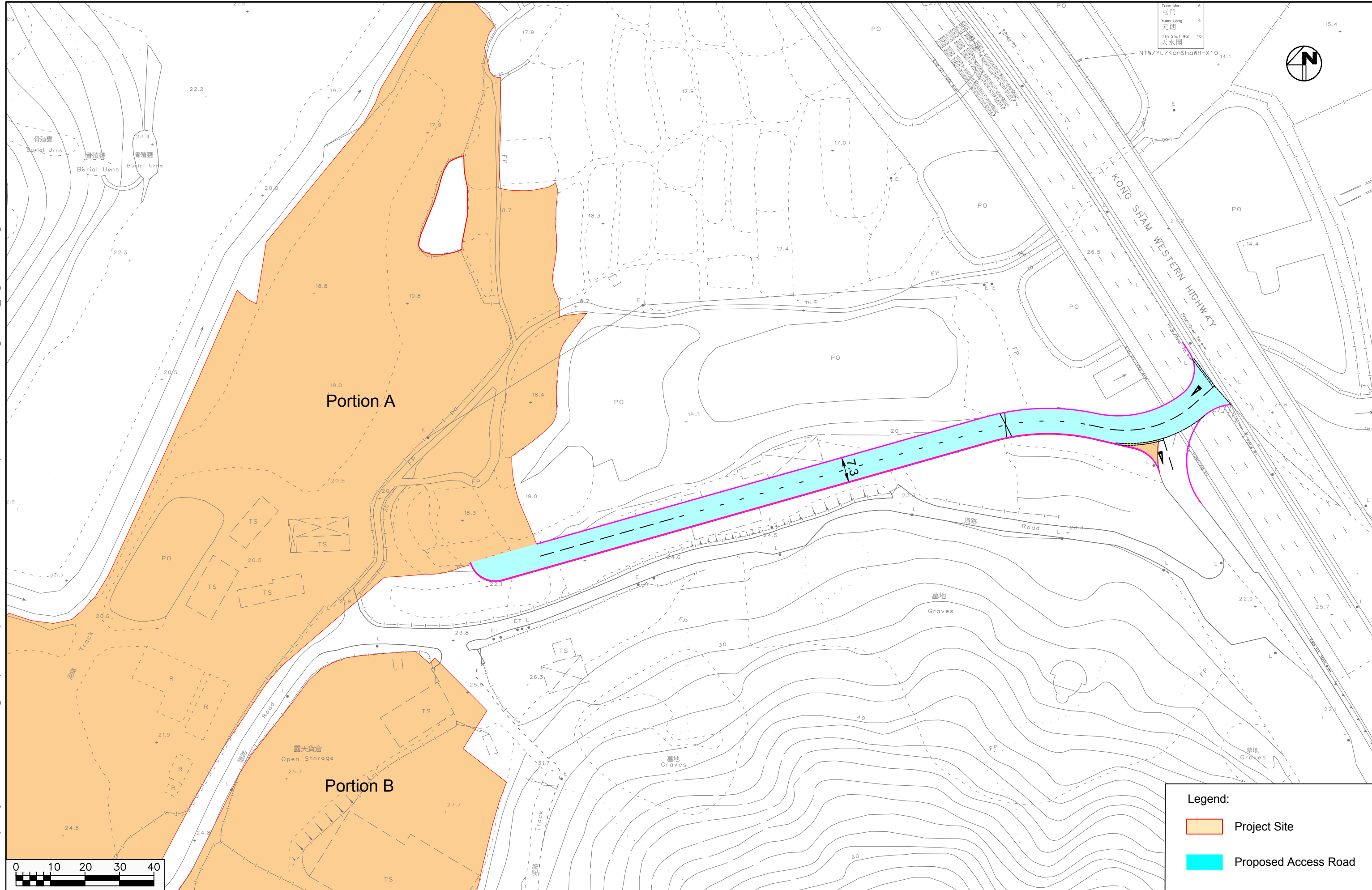
Project Title
Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

Site Location

OZZO TECHNOLOGY

Project No. 83133	Rev.
Dwg No. Figure 2-1	-

X:\Ozzo\83133_S16 for Temporary Warehouse, Parking of Special Purpose Vehicles and Rural Workshop in Ha Tsuen\Data\Dwg\83133_Figure 2-2.dwg 2024/12/10 14:52:47



Legend:

- Project Site
- Proposed Access Road

Project Title
Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land
 Proposed Access Road

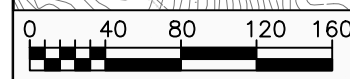
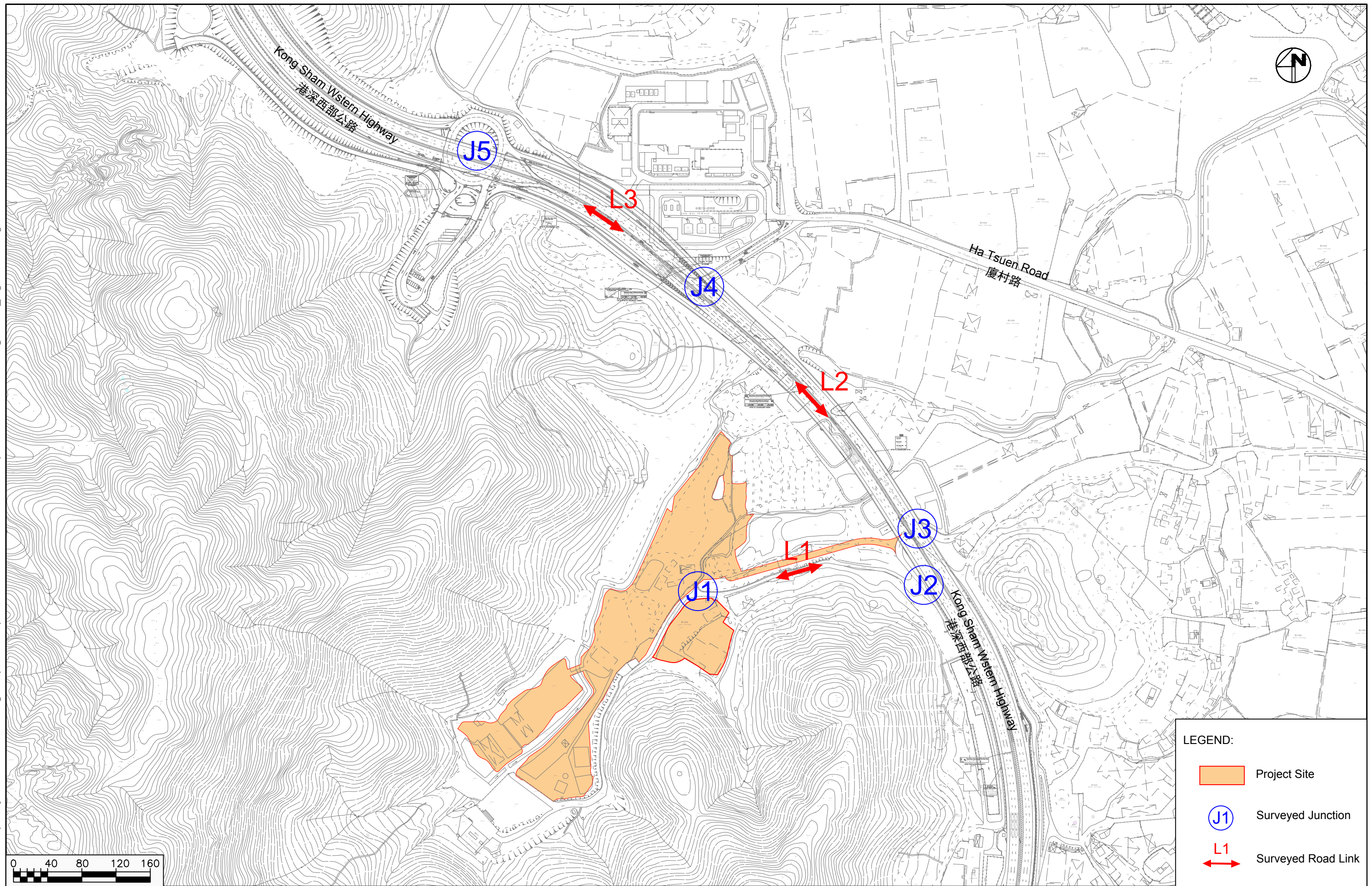
Date: 06/12/2024
 Scale: 1:1000

OZZO TECHNOLOGY

Project No. 83133
 Dwg No. Figure 2-2

Rev. -

X:\Ozzo\83133_S16 for Temporary Warehouse, Parking of Special Purpose Vehicles and Rural Workshop in Ha Tsuen\Data\Dwg\83133_Figure 3-1.dwg 2024/12/10 14:53:17



LEGEND:

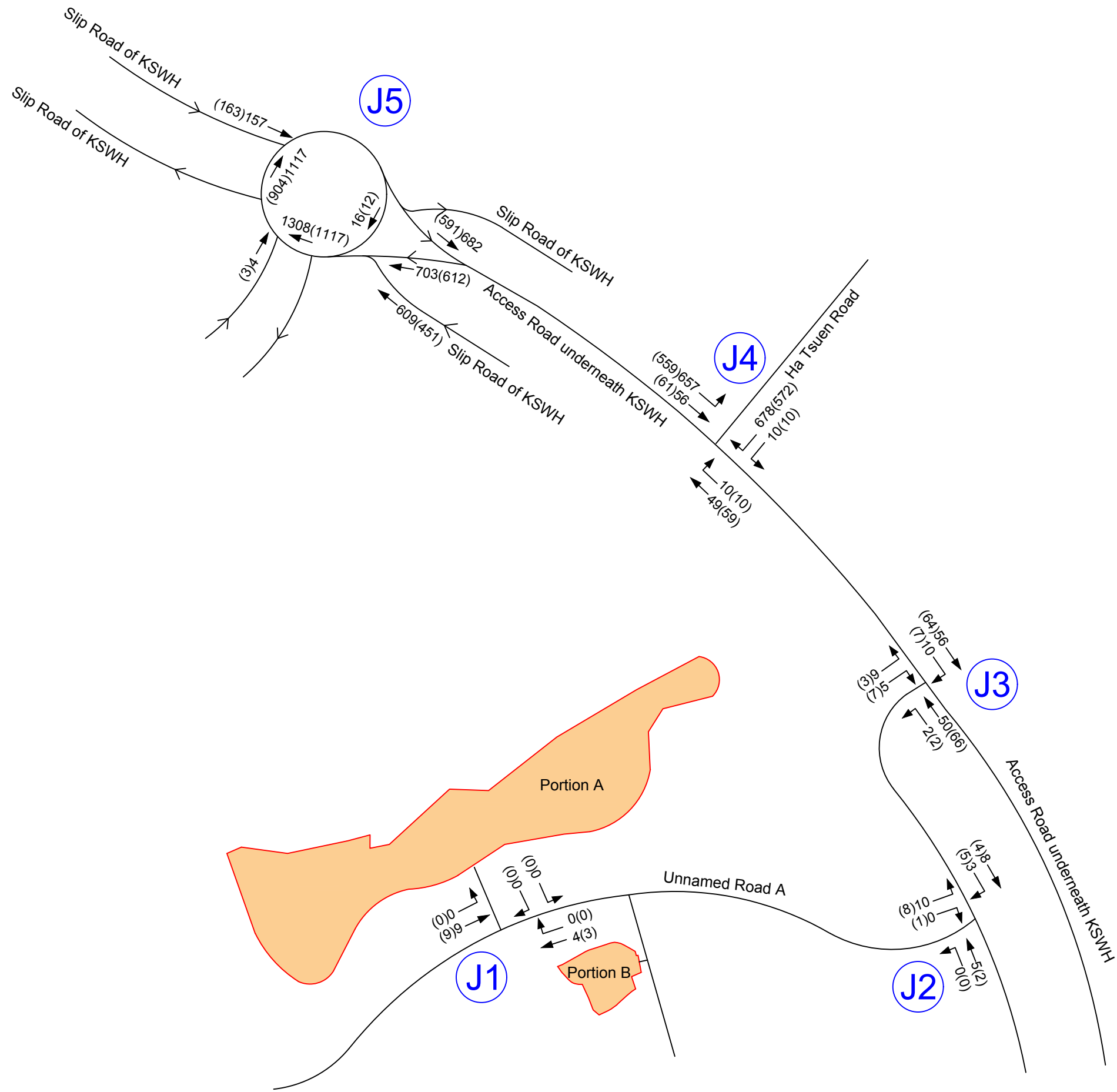
- Project Site
- J1 Surveyed Junction
- Surveyed Road Link

Date 06/12/2024	Scale 1:4000
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Project Title
Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land
 Locations of Types Traffic Surveyed

OZZO TECHNOLOGY

Project No. 83133	Rev.
Dwg No. Figure 3-1	-



Legend:

- Project Site
- J1 Surveyed Junction
- AM Peak Hour Traffic Flows
- 123(123) PM Peak Hour Traffic Flows

Note: Minor Road Link not shown for clarity

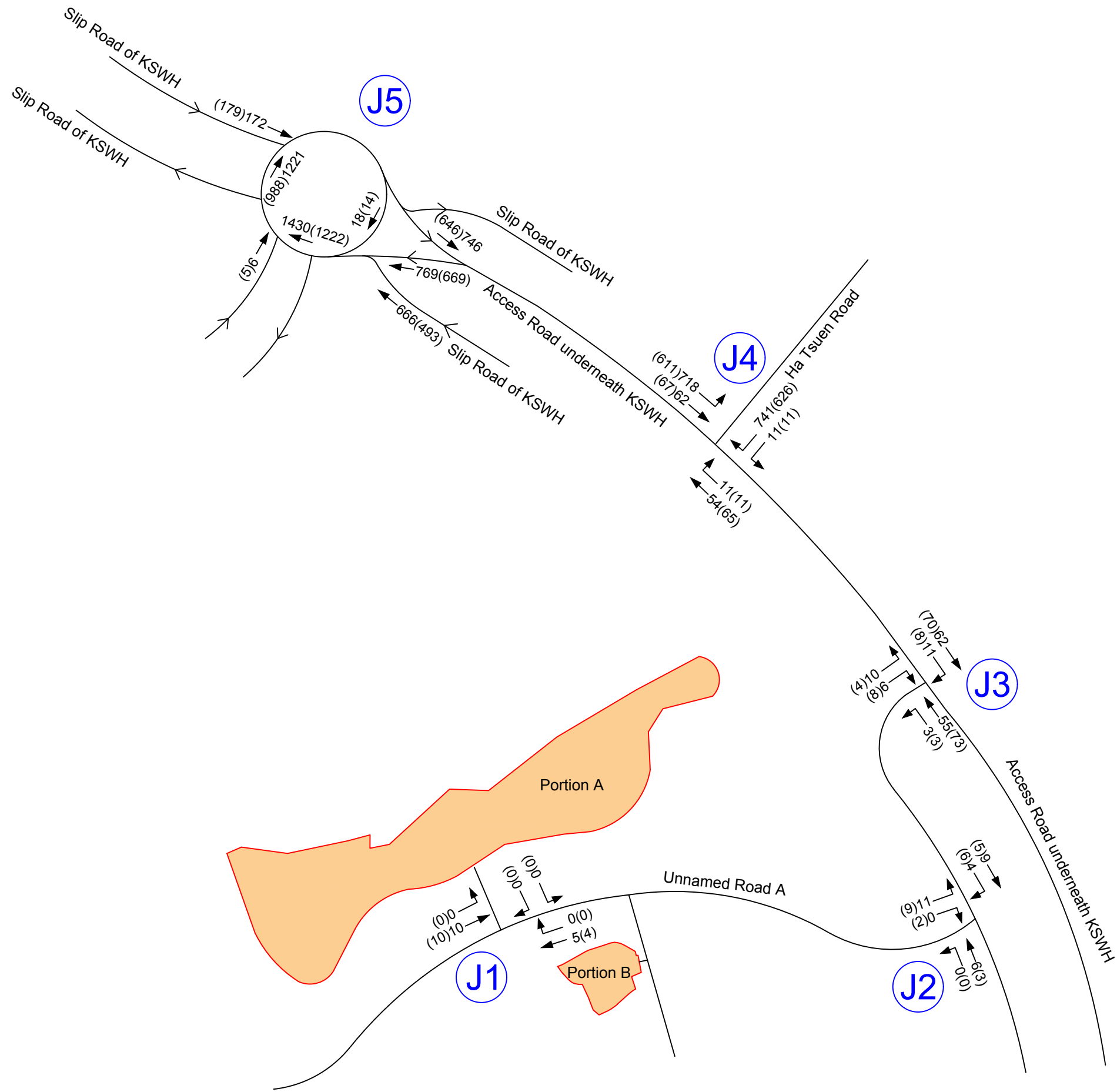
Date	Scale
10/12/2024	N.T.S

Project Title
Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

2023 Observed Peak Hour Traffic Flows

OZZO TECHNOLOGY	
Project No. 83133	Rev.
Dwg No. Figure 3-2	-

X:\Ozzo\83133_S16 for Temporary Warehouse, Parking of Special Purpose Vehicles and Rural Workshop in Ha Tsuen\Data\Dwg\83133_Figure 5-1.dwg 2024/12/10 14:53:28



Legend:

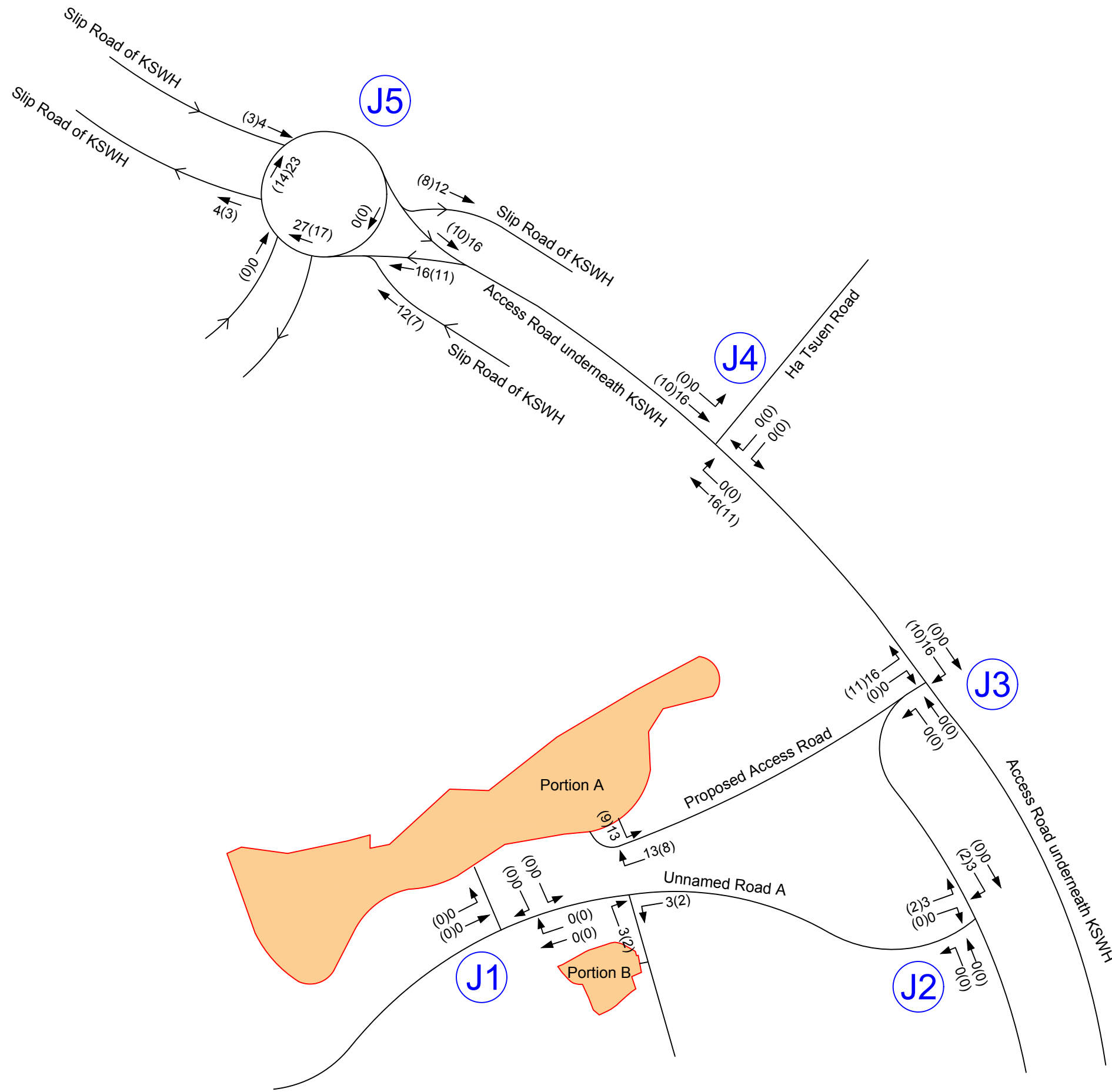
- Project Site
- J1 Surveyed Junction
- AM Peak Hour Traffic Flows
- 123(123) PM Peak Hour Traffic Flows

Note: Minor Road Link not shown for clarity

Date	Scale
10/12/2024	N.T.S

Project Title
Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land
 2028 Reference Peak Hour Traffic Flows

OZZO TECHNOLOGY	
Project No. 83133	Rev.
Dwg No. Figure 5-1	-



Legend:

- Project Site
- J1 Surveyed Junction
- AM Peak Hour Traffic Flows
- 123(123) PM Peak Hour Traffic Flows

Note: Minor Road Link not shown for clarity

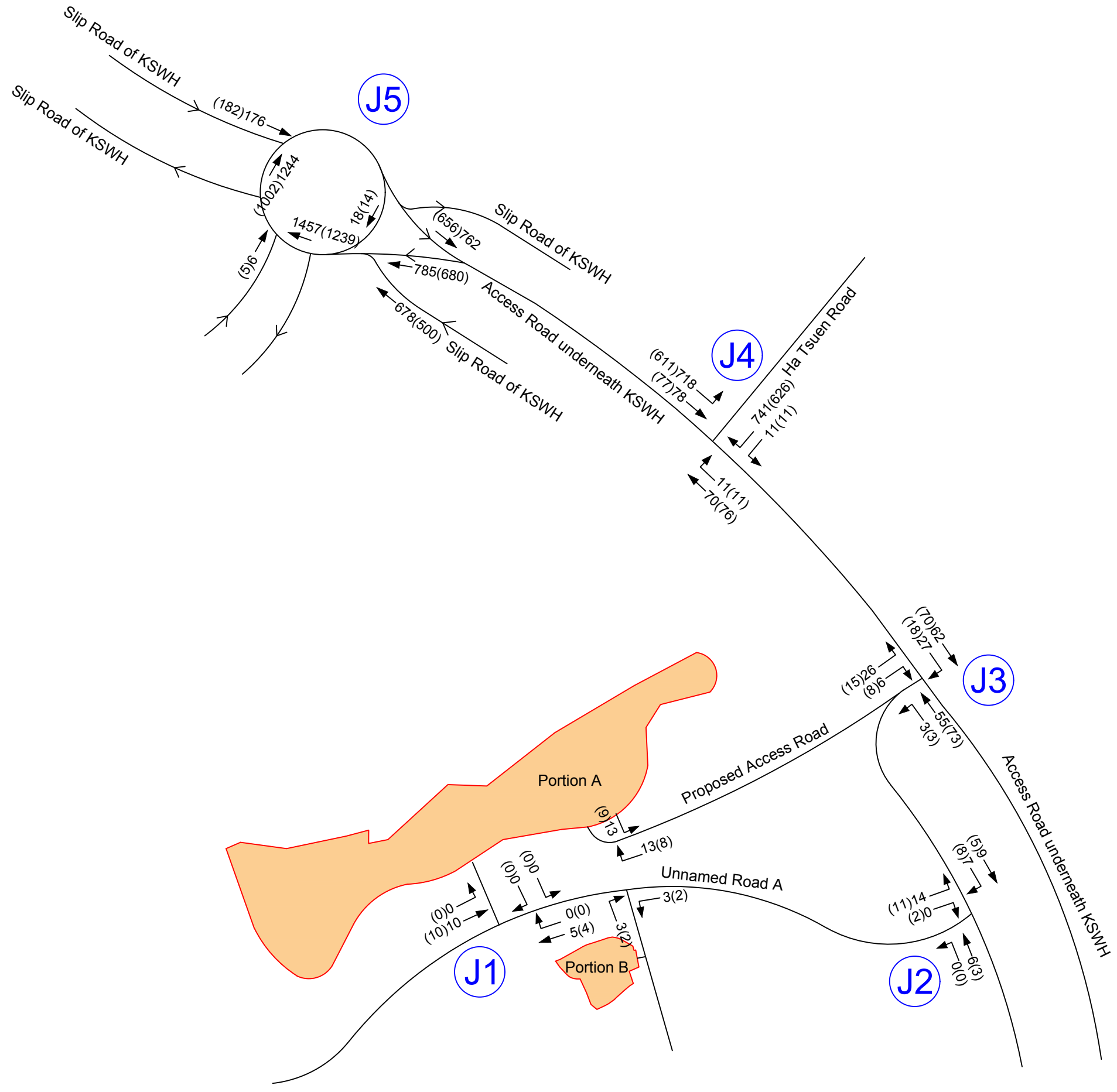
Date	Scale
10/12/2024	N.T.S

Project Title
Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

Peak Hour Development Traffic Flows

OZZO TECHNOLOGY	
Project No. 83133	Rev.
Dwg No. Figure 5-2	-

X:\Ozzo\83133_S16 for Temporary Warehouse, Parking of Special Purpose Vehicles and Rural Workshop in Ha Tsuen\Data\Dwg\83133_Figure 5-3.dwg 2024/12/10 14:53:48



Legend:

- Project Site
- J1 Surveyed Junction
- AM Peak Hour Traffic Flows
- 123(123) PM Peak Hour Traffic Flows

Note: Minor Road Link not shown for clarity

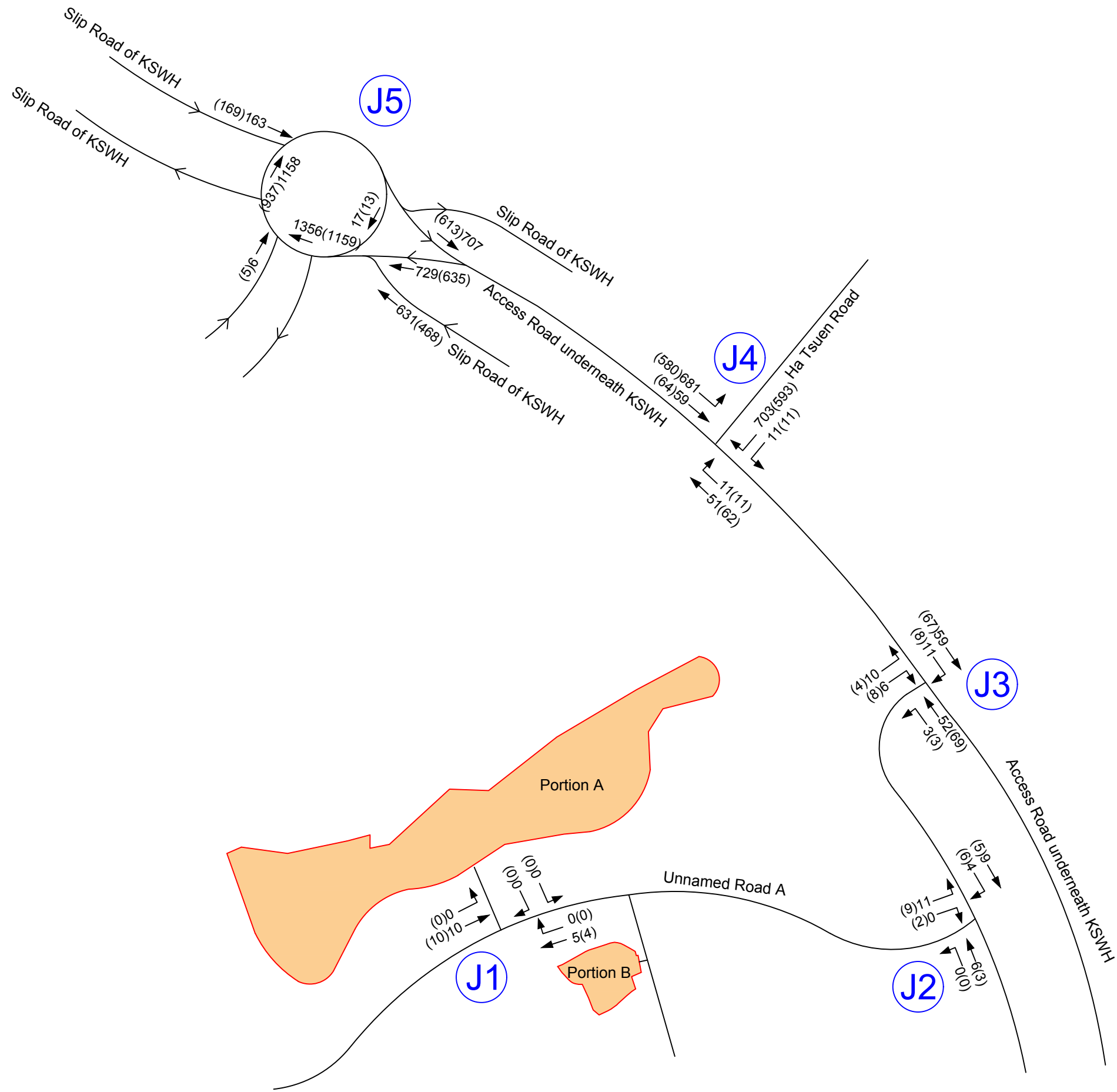
Date	Scale
10/12/2023	N.T.S

Project Title
Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

2028 Design Peak Hour Traffic Flows

OZZO TECHNOLOGY	
Project No. 83133	Rev.
Dwg No. Figure 5-3	-

X:\Ozzo\83133_S16 for Temporary Warehouse, Parking of Special Purpose Vehicles and Rural Workshop in Ha Tsuen\Data\Dwg\83133_Figure 6-1.dwg 2024/12/10 14:53:38



Legend:

- Project Site
- J1 Surveyed Junction
- AM Peak Hour Traffic Flows
- 123(123) PM Peak Hour Traffic Flows

Note: Minor Road Link not shown for clarity

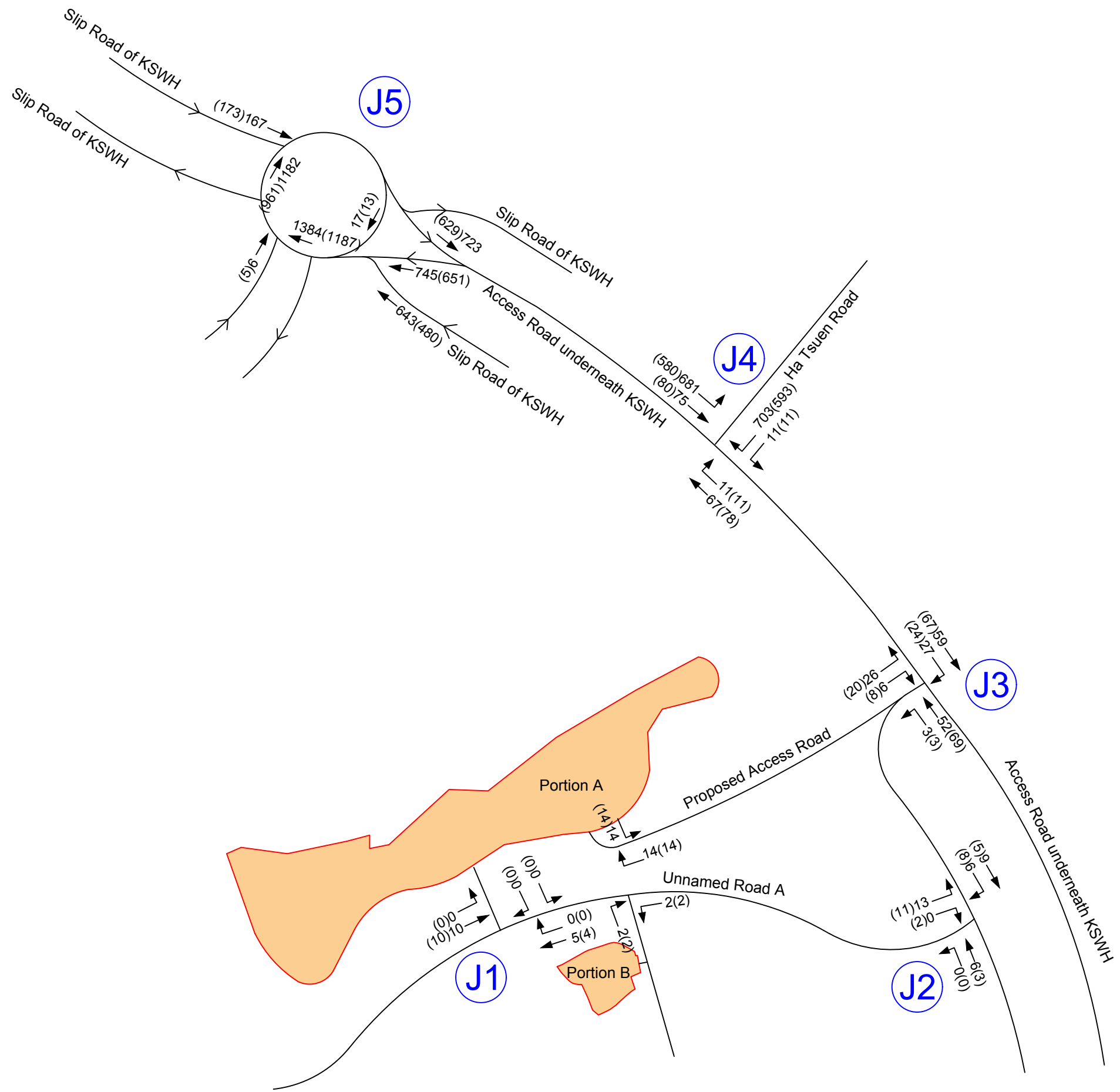
Date	Scale
10/12/2023	N.T.S

Project Title
Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

2025 Reference Peak Hour Traffic Flows

OZZO TECHNOLOGY	
Project No. 83133	Rev.
Dwg No. Figure 6-1	-

X:\Ozzo\83133_S16 for Temporary Warehouse, Parking of Special Purpose Vehicles and Rural Workshop in Ha Tsuen\Data\Dwg\83133_Figure 6-2.dwg 2024/12/10 14:53:43



Legend:

- Project Site
- J1 Surveyed Junction
- AM Peak Hour Traffic Flows
- 123(123) PM Peak Hour Traffic Flows

Note: Minor Road Link not shown for clarity

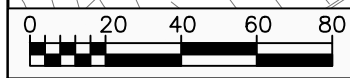
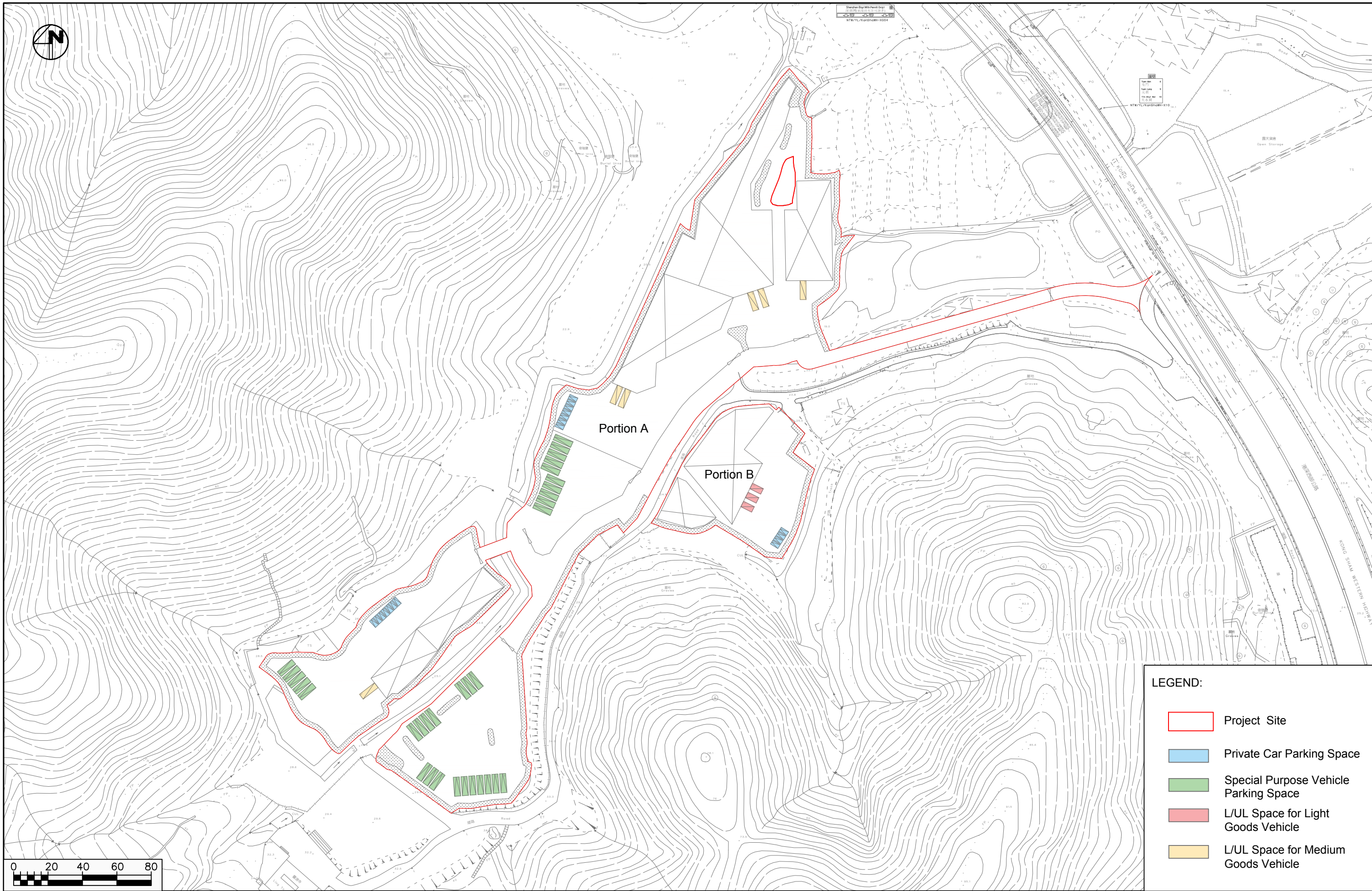
Project Title		Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land	
Date		2025 Design Peak Hour Traffic Flows	
Date	Scale	Project No.	Rev.
10/12/2023	N.T.S	83133	-
		Dwg No. Figure 6-2	

Proposed Temporary Warehouse for Storage of Construction Materials and Machinery, Parking of Special Purpose Vehicles and Rural Workshop with Ancillary Facilities for a Period of 3 Years at Various Lots in D.D.125 and Adjoining Government Land, Ha Tsuen, Yuen Long, New Territories
TIA Report



Appendix A

Proposed Layout Plan and Swept Path Analysis



LEGEND:

- Project Site
- Private Car Parking Space
- Special Purpose Vehicle Parking Space
- L/UL Space for Light Goods Vehicle
- L/UL Space for Medium Goods Vehicle

Date 10/12/2024	Scale 1:2000
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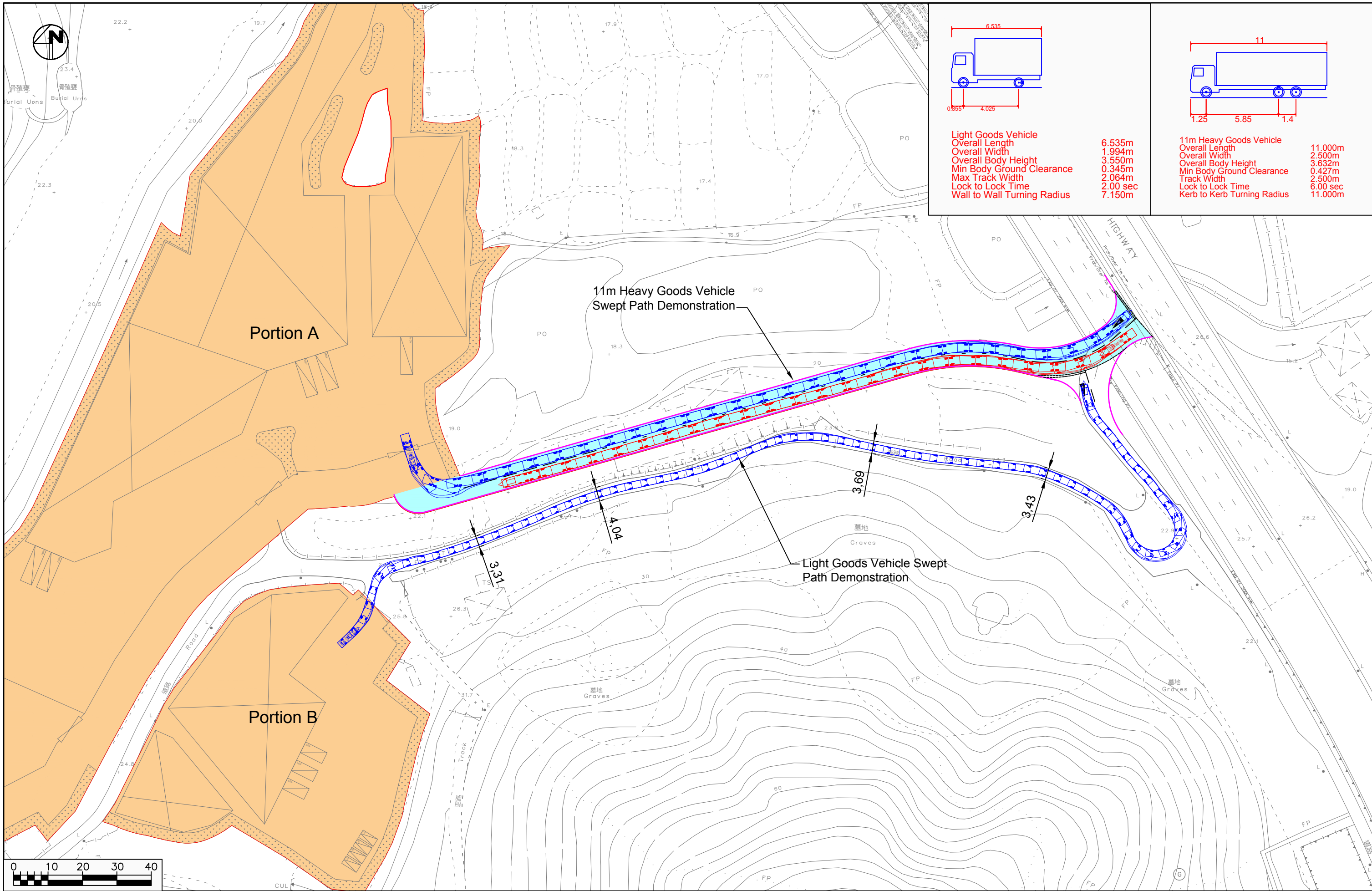
Project Title
Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

Proposed Layout Plan

OZZO TECHNOLOGY

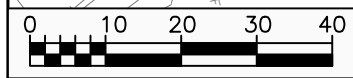
Project No. 83133	Rev.
Dwg No. Appendix A-1	-

X:\Ozzo\83133_S16 for Temporary Warehouse, Parking of Special Purpose Vehicles and Rural Workshop in Ha Tsuen\Data\Dwg\83133_Appendix A.dwg 2024/12/10 17:23:48



Light Goods Vehicle	
Overall Length	6.535m
Overall Width	1.994m
Overall Body Height	3.550m
Min Body Ground Clearance	0.345m
Max Track Width	2.064m
Lock to Lock Time	2.00 sec
Wall to Wall Turning Radius	7.150m

11m Heavy Goods Vehicle	
Overall Length	11.000m
Overall Width	2.500m
Overall Body Height	3.632m
Min Body Ground Clearance	0.427m
Track Width	2.500m
Lock to Lock Time	6.00 sec
Kerb to Kerb Turning Radius	11.000m



Project Title		Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land
Swept Path Assessment		
Date	Scale	
10/12/2024	1:1000	

Project No. 83133	Rev.
Dwg No. Appendix A-2	-

Proposed Temporary Warehouse for Storage of Construction Materials
and Machinery, Parking of Special Purpose Vehicles and Rural
Workshop with Ancillary Facilities for a Period of 3 Years
at Various Lots in D.D.125 and Adjoining Government Land,
Ha Tsuen, Yuen Long, New Territories
TIA Report



Appendix B

2023 Junction Calculations

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J1: Unnamed Road A / Access to Portion A

2023 AM

FILENAME :

CHECKED BY: LL

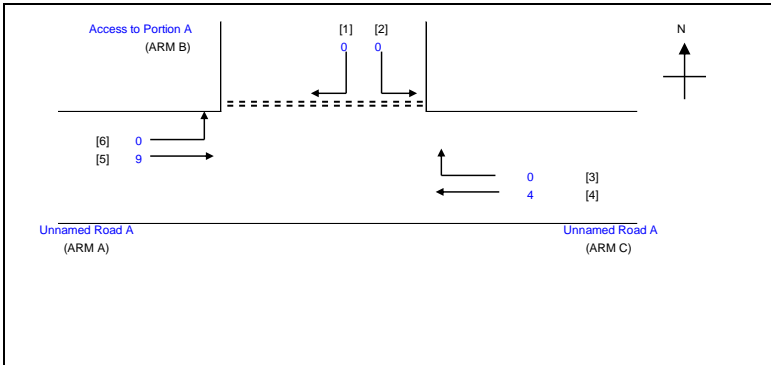
Dec-24

2023 Observed AM Peak Hour Traffic Flows

J1_Unnamed Road A_Access to Portion A_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
 W = 4.20 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 9 (pcu/hr)

D = 0.68744683
 E = 0.731326415
 F = 0.803411444
 Y = 0.8551

Q b-a = 429
 Q b-c = 543
 Q c-b = 596
 Q b-ac = 429

DFC b-a = 0.0000
 DFC b-c = 0.0000
 DFC c-b = 0.0000
 DFC b-c (share lane) = 0.0000

MAJOR ROAD (ARM C)
 W c-b = 2.5 (metres)
 Vr c-b = 14 (metres)
 q c-a = 4 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 13 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
 W b-a = 1.5 (metres)
 W b-c = 1.5 (metres)
 Vi b-a = 50 (metres)
 Vr b-a = 30 (metres)
 Vr b-c = 30 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 0 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J1: Unnamed Road A / Access to Portion A

2023 PM

FILENAME :

CHECKED BY: LL

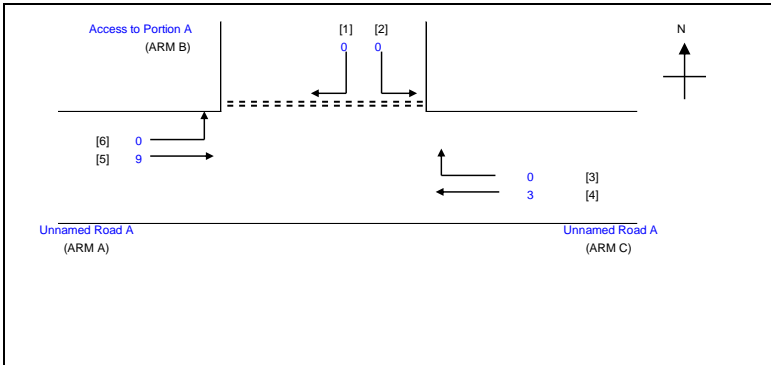
Dec-24

2023 Observed PM Peak Hour Traffic Flows

J1_Unnamed Road A_Access to Portion A_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
 W = 4.20 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 9 (pcu/hr)

D = 0.68744683
 E = 0.731326415
 F = 0.803411444
 Y = 0.8551

Q b-a = 429
 Q b-c = 543
 Q c-b = 596
 Q b-ac = 429

DFC b-a = 0.0000
 DFC b-c = 0.0000
 DFC c-b = 0.0000
 DFC b-c (share lane) = 0.0000

MAJOR ROAD (ARM C)
 W c-b = 2.5 (metres)
 Vr c-b = 14 (metres)
 q c-a = 3 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 12 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
 W b-a = 1.5 (metres)
 W b-c = 1.5 (metres)
 Vi b-a = 50 (metres)
 Vr b-a = 30 (metres)
 Vr b-c = 30 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 0 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY:

CSY

Dec-24

J2: Unnamed Road A / Access to Existing Fish Farm

2023 AM

FILENAME :

CHECKED BY:

LL

Dec-24

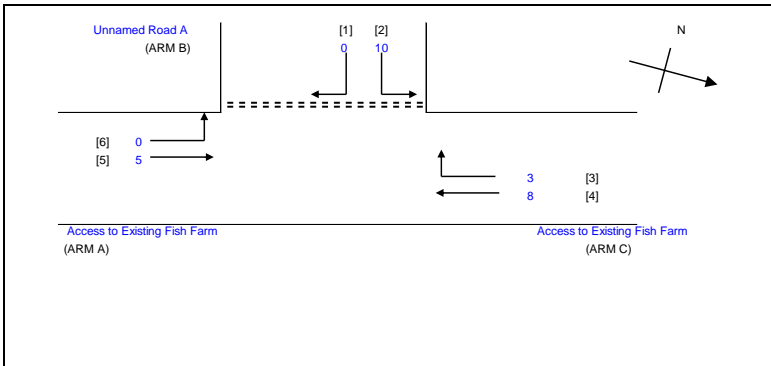
2023 Observed AM Peak Hour Traffic Flows

J2_Unnamed Road A_Access to Existing Fish Farm_P.xls

REVIEWED BY:

PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.23 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 5 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.793305108
 E = 0.862663232
 F = 0.79459942
 Y = 0.854065

THE CAPACITY OF MOVEMENT :

Q b-a = 494
 Q b-c = 641
 Q c-b = 591
 Q b-ac = 641

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0156
 DFC c-b = 0.0051
 DFC b-c (share lane) = 0.0156

MAJOR ROAD (ARM C)
 W c-b = 2.4 (metres)
 Vr c-b = 12 (metres)
 q c-a = 8 (pcu/hr)
 q c-b = 3 (pcu/hr)

F for (Qb-ac) = 1

TOTAL FLOW = 26 (PCU/HR)

CRITICAL DFC = 0.02

MINOR ROAD (ARM B)
 W b-a = 2.9 (metres)
 W b-c = 2.9 (metres)
 Vi b-a = 16 (metres)
 Vr b-a = 40 (metres)
 Vr b-c = 40 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 10 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY:

CSY

Dec-24

J2: Unnamed Road A / Access to Existing Fish Farm

2023 PM

FILENAME :

CHECKED BY:

LL

Dec-24

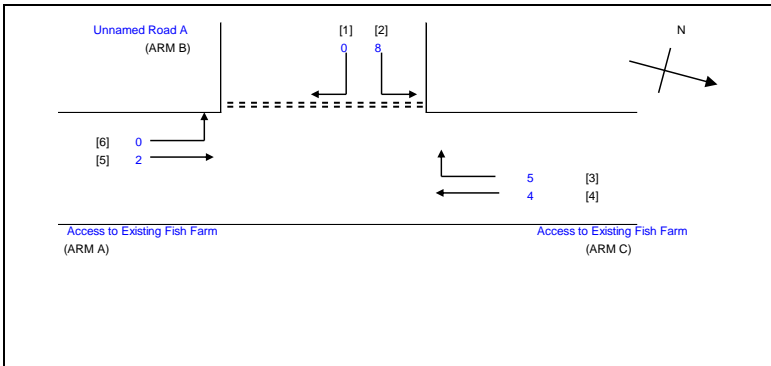
2023 Observed PM Peak Hour Traffic Flows

J2_Unnamed Road A_Access to Existing Fish Farm_P.xls

REVIEWED BY:

PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.23 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 2 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.793305108
 E = 0.862663232
 F = 0.79459942
 Y = 0.854065

THE CAPACITY OF MOVEMENT :

Q b-a = 495
 Q b-c = 642
 Q c-b = 591
 Q b-ac = 642

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0125
 DFC c-b = 0.0085
 DFC b-c (share lane) = 0.0125

MAJOR ROAD (ARM C)
 W c-b = 2.4 (metres)
 Vr c-b = 12 (metres)
 q c-a = 4 (pcu/hr)
 q c-b = 5 (pcu/hr)

F for (Qb-ac) = 1

TOTAL FLOW = 19 (PCU/HR)

CRITICAL DFC = 0.01

MINOR ROAD (ARM B)
 W b-a = 2.9 (metres)
 W b-c = 2.9 (metres)
 Vi b-a = 16 (metres)
 Vr b-a = 40 (metres)
 Vr b-c = 40 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 8 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J3: Unnamed Road A / Access Road underneath KSWH

2023 AM

FILENAME :

CHECKED BY: LL

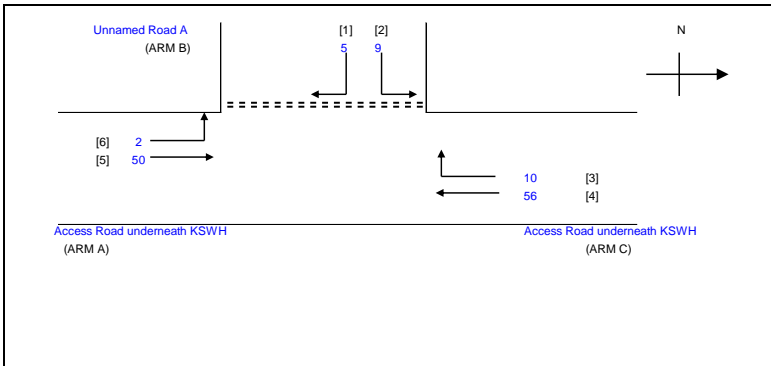
Dec-24

2023 Observed AM Peak Hour Traffic Flows

Unnamed Road A_Access Road underneath KSWH_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.75 (metres)
 W cr = 0 (metres)
 q a-b = 2 (pcu/hr)
 q a-c = 50 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.819750132
 E = 0.86654348
 F = 0.91047865
 Y = 0.836125
 F for (Qb-ac) = 0.642857143

THE CAPACITY OF MOVEMENT :

Q b-a = 489
 Q b-c = 632
 Q c-b = 664
 Q b-ac = 572
 TOTAL FLOW = 132 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0102
 DFC b-c = 0.0142
 DFC c-b = 0.0151
 DFC b-c (share lane) = 0.0245

MAJOR ROAD (ARM C)
 W c-b = 3.5 (metres)
 Vr c-b = 35 (metres)
 q c-a = 56 (pcu/hr)
 q c-b = 10 (pcu/hr)

MINOR ROAD (ARM B)
 W b-a = 2.7 (metres)
 W b-c = 2.7 (metres)
 Vi b-a = 60 (metres)
 Vr b-a = 67 (metres)
 Vr b-c = 67 (metres)
 q b-a = 5 (pcu/hr)
 q b-c = 9 (pcu/hr)

CRITICAL DFC = 0.02

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY:

CSY

Dec-24

J3: Unnamed Road A / Access Road underneath KSWH

2023 PM

FILENAME :

CHECKED BY:

LL

Dec-24

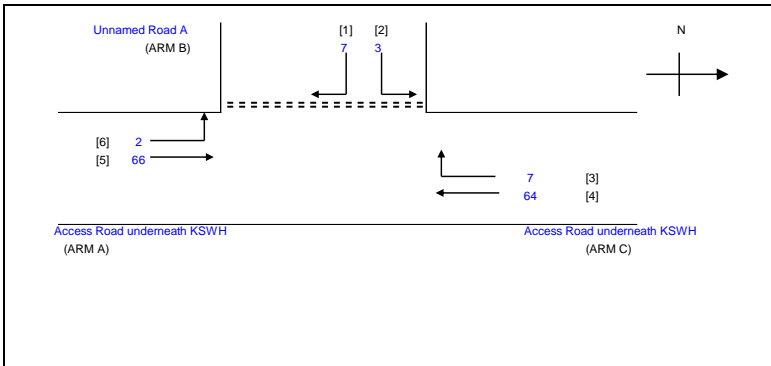
2023 Observed PM Peak Hour Traffic Flows

Unnamed Road A_Access Road underneath KSWH_P.xls

REVIEWED BY:

PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.75 (metres)
 W cr = 0 (metres)
 q a-b = 2 (pcu/hr)
 q a-c = 66 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.819750132
 E = 0.86654348
 F = 0.91047865
 Y = 0.836125

THE CAPACITY OF MOVEMENT :

Q b-a = 485
 Q b-c = 628
 Q c-b = 659
 Q b-ac = 521

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0144
 DFC b-c = 0.0048
 DFC c-b = 0.0106
 DFC b-c (share lane) = 0.0192

MAJOR ROAD (ARM C)
 W c-b = 3.5 (metres)
 Vr c-b = 35 (metres)
 q c-a = 64 (pcu/hr)
 q c-b = 7 (pcu/hr)

F for (Qb-ac) = 0.3

TOTAL FLOW = 149 (PCU/HR)

CRITICAL DFC = 0.02

MINOR ROAD (ARM B)
 W b-a = 2.7 (metres)
 W b-c = 2.7 (metres)
 Vi b-a = 60 (metres)
 Vr b-a = 67 (metres)
 Vr b-c = 67 (metres)
 q b-a = 7 (pcu/hr)
 q b-c = 3 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J4: Access Road underneath KSWH / Ha Tsuen Road

2023 AM

FILENAME :

CHECKED BY: LL

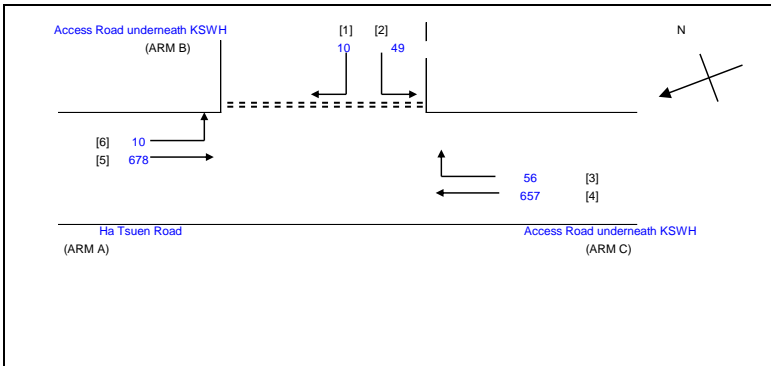
Dec-24

2023 Observed AM Peak Hour Traffic Flows

_Access Road underneath KSWH_Ha Tsuen Road_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 7.41 (metres)
 W cr = 0 (metres)
 q a-b = 10 (pcu/hr)
 q a-c = 678 (pcu/hr)

MAJOR ROAD (ARM C)
 W c-b = 3.7 (metres)
 Vr c-b = 45 (metres)
 q c-a = 657 (pcu/hr)
 q c-b = 56 (pcu/hr)

MINOR ROAD (ARM B)
 W b-a = 1.3 (metres)
 W b-c = 1.3 (metres)
 Vi b-a = 123 (metres)
 Vr b-a = 45 (metres)
 Vr b-c = 45 (metres)
 q b-a = 10 (pcu/hr)
 q b-c = 49 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.711636816
 E = 0.72335517
 F = 0.9325
 Y = 0.7445275
 F for (Qb-ac) = 0.830508475

THE CAPACITY OF MOVEMENT :

Q b-a = 220
 Q b-c = 405
 Q c-b = 521
 Q b-ac = 354
 TOTAL FLOW = 1460 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0455
 DFC b-c = 0.1210
 DFC c-b = 0.1075
 DFC b-c (share lane) = 0.1664

CRITICAL DFC = 0.17

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J4: Access Road underneath KSWH / Ha Tsuen Road

2023 PM

FILENAME :

CHECKED BY: LL

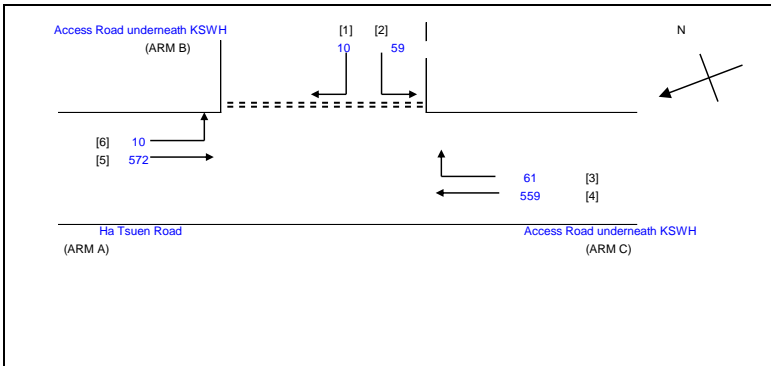
Dec-24

2023 Observed PM Peak Hour Traffic Flows

_Access Road underneath KSWH_Ha Tsuen Road_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
 W = 7.41 (metres)
 W cr = 0 (metres)
 q a-b = 10 (pcu/hr)
 q a-c = 572 (pcu/hr)

D = 0.711636816
 E = 0.72335517
 F = 0.9325
 Y = 0.7445275

Q b-a = 250
 Q b-c = 426
 Q c-b = 548
 Q b-ac = 387

DFC b-a = 0.0400
 DFC b-c = 0.1385
 DFC c-b = 0.1113
 DFC b-c (share lane) = 0.1785

MAJOR ROAD (ARM C)
 W c-b = 3.7 (metres)
 Vr c-b = 45 (metres)
 q c-a = 559 (pcu/hr)
 q c-b = 61 (pcu/hr)

F for (Qb-ac) = 0.855072464

TOTAL FLOW = 1271 (PCU/HR)

CRITICAL DFC = 0.18

MINOR ROAD (ARM B)
 W b-a = 1.3 (metres)
 W b-c = 1.3 (metres)
 Vi b-a = 123 (metres)
 Vr b-a = 45 (metres)
 Vr b-c = 45 (metres)
 q b-a = 10 (pcu/hr)
 q b-c = 59 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY Dec-24

J5: KSWH Roundabout

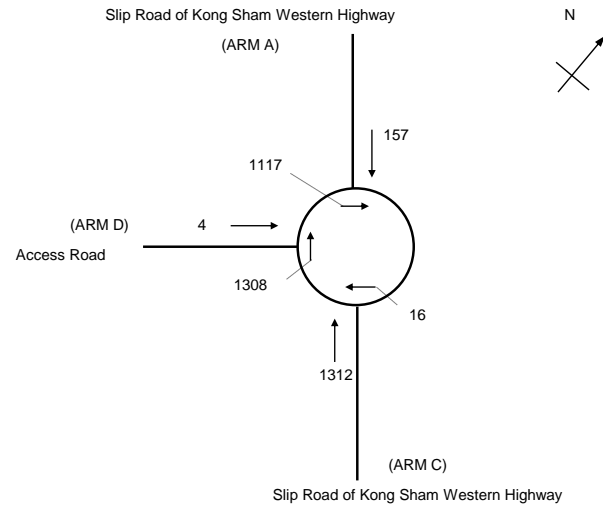
2023 AM

FILENAME : J5_KSWH Roundabout_R.xls

CHECKED BY: LL Dec-24

2023 Observed AM Peak Hour Traffic Flows

REVIEWED BY: PCN Dec-24



ARM	A	C	D		
INPUT PARAMETERS:					
V	= Approach half width (m)	4.0	7.9	8.2	
E	= Entry width (m)	6.7	7.9	9.3	
L	= Effective length of flare (m)	4.8	1.0	1.8	
R	= Entry radius (m)	30.0	100.0	10.0	
D	= Inscribed circle diameter (m)	71.0	71.0	71.0	
A	= Entry angle (degree)	12.0	31.0	21.0	
Q	= Entry flow (pcu/h)	157	1312	4	
Qc	= Circulating flow across entry (pcu/h)	1117	16	1308	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = 1.6(E-V)/L	0.90	0.00	0.98	
K	= 1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.04	0.98	
X2	= V + ((E-V)/(1+2S))	4.96	7.90	8.57	
M	= EXP((D-60)/10)	3	3	3	
F	= 303*X2	1504	2394	2597	
Td	= 1+(0.5/(1+M))	1.12	1.12	1.12	
Fc	= 0.21*Td(1+0.2*X2)	0.47	0.61	0.64	
Qe	= K(F-Fc*Qc)	1055	2469	1728	
					Total In Sum = 1473 PCU
DFC	= Design flow/Capacity = Q/Qe	0.15	0.53	0.00	DFC of Critical Approach = 0.53

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY Dec-24

J5: KSWH Roundabout

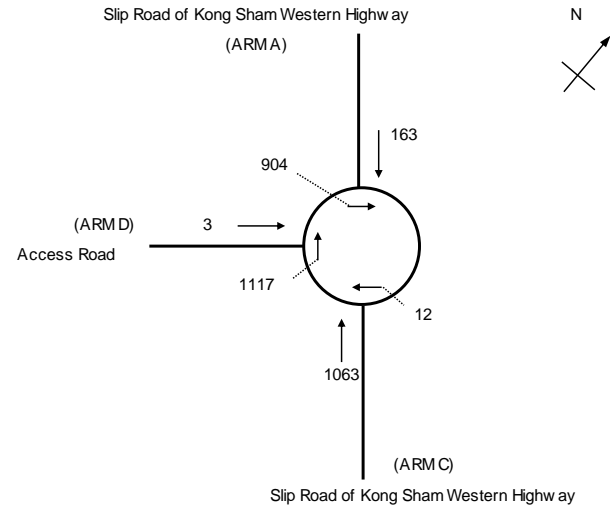
2023 PM

FILENAME : J5_KSWH Roundabout_R.xls

CHECKED BY: LL Dec-24

2023 Observed PM Peak Hour Traffic Flows

REVIEWED BY: PCN Dec-24



ARM	A	C	D		
INPUT PARAMETERS:					
V = Approach half width (m)	4.0	7.9	8.2		
E = Entry width (m)	6.7	7.9	9.3		
L = Effective length of flare (m)	4.8	1.0	1.8		
R = Entry radius (m)	30.0	100.0	10.0		
D = Inscribed circle diameter (m)	71.0	71.0	71.0		
A = Entry angle (degree)	12.0	31.0	21.0		
Q = Entry flow (pcu/h)	163	1063	3		
Qc = Circulating flow across entry (pcu/h)	904	12	1117		
OUTPUT PARAMETERS:					
S = Sharpness of flare = 1.6(E-V)/L	0.90	0.00	0.98		
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.04	0.98		
X2 = V + ((E-V)/(1+2S))	4.96	7.90	8.57		
M = EXP((D-60)/10)	3	3	3		
F = 303*X2	1504	2394	2597		
Td = 1+(0.5/(1+M))	1.12	1.12	1.12		
Fc = 0.21*Td(1+0.2*X2)	0.47	0.61	0.64		
Qe = K(F-Fc*Qc)	1164	2471	1848	Total In Sum =	1229 PCU
DFC = Design flow/Capacity = Q/Qe	0.14	0.43	0.00	DFC of Critical Approach =	0.43

Proposed Temporary Warehouse for Storage of Construction Materials
and Machinery, Parking of Special Purpose Vehicles and Rural
Workshop with Ancillary Facilities for a Period of 3 Years
at Various Lots in D.D.125 and Adjoining Government Land,
Ha Tsuen, Yuen Long, New Territories
TIA Report



Appendix C

2028 Junction Calculations

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J1: Unnamed Road A / Access to Portion A

2028Ref_AM

FILENAME :

CHECKED BY: LL

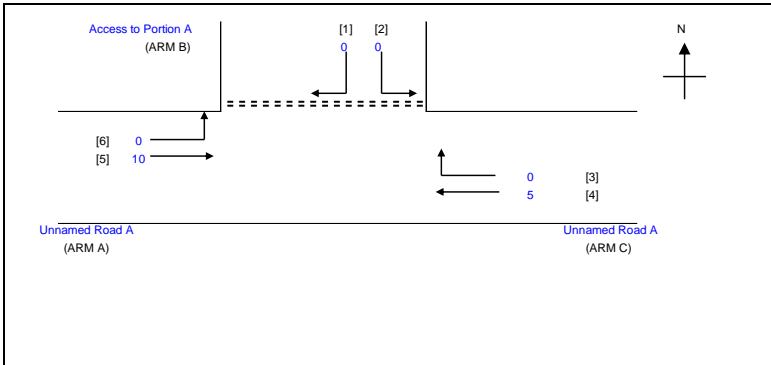
Dec-24

2028 Reference AM Peak Hour Traffic Flows

J1_Unnamed Road A_Access to Portion A_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.20 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 10 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.68744683
 E = 0.731326415
 F = 0.803411444
 Y = 0.8551

THE CAPACITY OF MOVEMENT :

Q b-a = 428
 Q b-c = 543
 Q c-b = 596
 Q b-ac = 428

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0000
 DFC c-b = 0.0000
 DFC b-c (share lane) = 0.0000

MAJOR ROAD (ARM C)
 W c-b = 2.5 (metres)
 Vr c-b = 14 (metres)
 q c-a = 5 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 15 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
 W b-a = 1.5 (metres)
 W b-c = 1.5 (metres)
 Vi b-a = 50 (metres)
 Vr b-a = 30 (metres)
 Vr b-c = 30 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 0 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J1: Unnamed Road A / Access to Portion A

2028Ref_PM

FILENAME :

CHECKED BY: LL

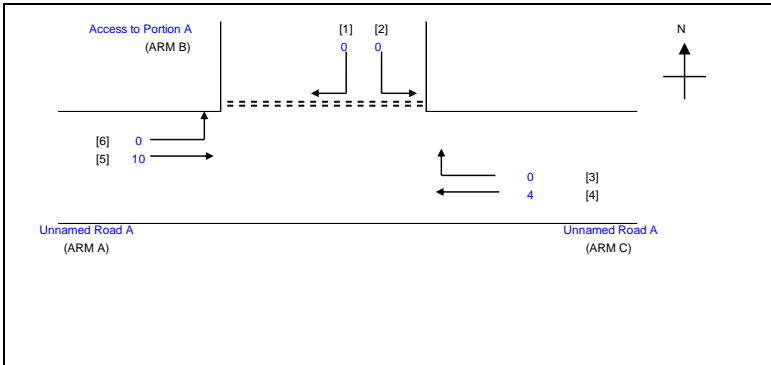
Dec-24

2028 Reference AM Peak Hour Traffic Flows

J1_Unnamed Road A_Access to Portion A_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.20 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 10 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.68744683
 E = 0.731326415
 F = 0.803411444
 Y = 0.8551

THE CAPACITY OF MOVEMENT :

Q b-a = 428
 Q b-c = 543
 Q c-b = 596
 Q b-ac = 428

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0000
 DFC c-b = 0.0000
 DFC b-c (share lane) = 0.0000

MAJOR ROAD (ARM C)
 W c-b = 2.5 (metres)
 Vr c-b = 14 (metres)
 q c-a = 4 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 14 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
 W b-a = 1.5 (metres)
 W b-c = 1.5 (metres)
 Vi b-a = 50 (metres)
 Vr b-a = 30 (metres)
 Vr b-c = 30 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 0 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J1: Unnamed Road A / Access to Portion A

2028Des_AM

FILENAME :

CHECKED BY: LL

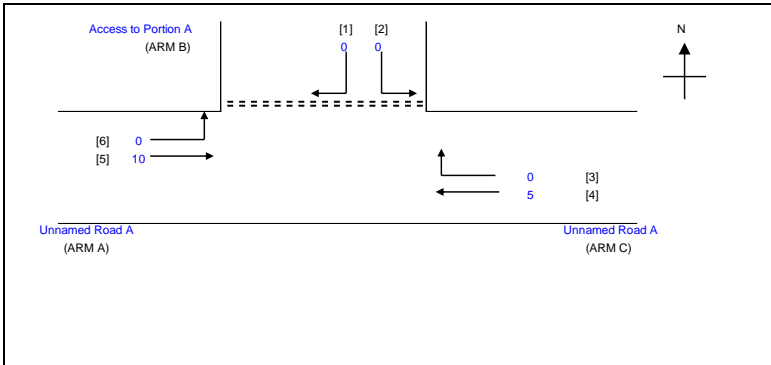
Dec-24

2028 Reference AM Peak Hour Traffic Flows

J1_Unnamed Road A_Access to Portion A_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.20 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 10 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.68744683
 E = 0.731326415
 F = 0.803411444
 Y = 0.8551

THE CAPACITY OF MOVEMENT :

Q b-a = 428
 Q b-c = 543
 Q c-b = 596
 Q b-ac = 428

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0000
 DFC c-b = 0.0000
 DFC b-c (share lane) = 0.0000

MAJOR ROAD (ARM C)
 W c-b = 2.5 (metres)
 Vr c-b = 14 (metres)
 q c-a = 5 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 15 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
 W b-a = 1.5 (metres)
 W b-c = 1.5 (metres)
 Vi b-a = 50 (metres)
 Vr b-a = 30 (metres)
 Vr b-c = 30 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 0 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J1: Unnamed Road A / Access to Portion A

2028Des_PM

FILENAME :

CHECKED BY: LL

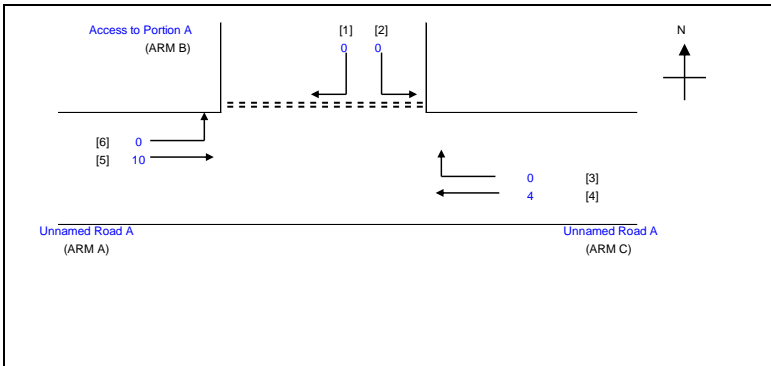
Dec-24

2028 Reference AM Peak Hour Traffic Flows

J1_Unnamed Road A_Access to Portion A_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.20 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 10 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.68744683
 E = 0.731326415
 F = 0.803411444
 Y = 0.8551

THE CAPACITY OF MOVEMENT :

Q b-a = 428
 Q b-c = 543
 Q c-b = 596
 Q b-ac = 428

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0000
 DFC c-b = 0.0000
 DFC b-c (share lane) = 0.0000

MAJOR ROAD (ARM C)
 W c-b = 2.5 (metres)
 Vr c-b = 14 (metres)
 q c-a = 4 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 14 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
 W b-a = 1.5 (metres)
 W b-c = 1.5 (metres)
 Vi b-a = 50 (metres)
 Vr b-a = 30 (metres)
 Vr b-c = 30 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 0 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J2: Unnamed Road A / Access to Existing Fish Farm

2028Ref_AM

FILENAME :

CHECKED BY: LL

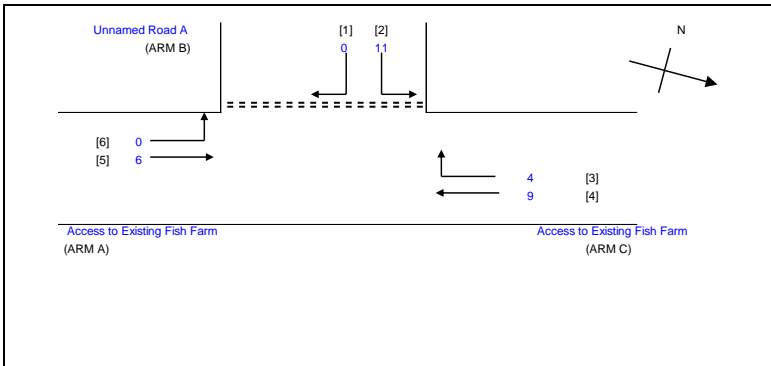
Dec-24

2028 Reference AM Peak Hour Traffic Flows

J2_Unnamed Road A_Access to Existing Fish Farm_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
 W = 4.23 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 6 (pcu/hr)

D = 0.793305108
 E = 0.862663232
 F = 0.79459942
 Y = 0.854065

Q b-a = 493
 Q b-c = 641
 Q c-b = 590
 Q b-ac = 641

DFC b-a = 0.0000
 DFC b-c = 0.0172
 DFC c-b = 0.0068
 DFC b-c (share lane) = 0.0172

MAJOR ROAD (ARM C)
 W c-b = 2.4 (metres)
 Vr c-b = 12 (metres)
 q c-a = 9 (pcu/hr)
 q c-b = 4 (pcu/hr)

F for (Qb-ac) = 1

TOTAL FLOW = 30 (PCU/HR)

CRITICAL DFC = 0.02

MINOR ROAD (ARM B)
 W b-a = 2.9 (metres)
 W b-c = 2.9 (metres)
 Vi b-a = 16 (metres)
 Vr b-a = 40 (metres)
 Vr b-c = 40 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 11 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J2: Unnamed Road A / Access to Existing Fish Farm

2028Ref_PM

FILENAME :

CHECKED BY: LL

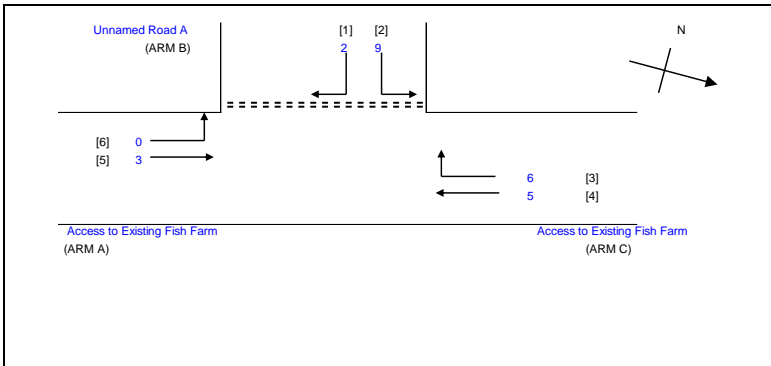
Dec-24

2028 Reference AM Peak Hour Traffic Flows

J2_Unnamed Road A_Access to Existing Fish Farm_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.23 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 3 (pcu/hr)

MAJOR ROAD (ARM C)
 W c-b = 2.4 (metres)
 Vr c-b = 12 (metres)
 q c-a = 5 (pcu/hr)
 q c-b = 6 (pcu/hr)

MINOR ROAD (ARM B)
 W b-a = 2.9 (metres)
 W b-c = 2.9 (metres)
 Vi b-a = 16 (metres)
 Vr b-a = 40 (metres)
 Vr b-c = 40 (metres)
 q b-a = 2 (pcu/hr)
 q b-c = 9 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.793305108
 E = 0.862663232
 F = 0.79459942
 Y = 0.854065

F for (Qb-ac) = 0.818181818

THE CAPACITY OF MOVEMENT :

Q b-a = 494
 Q b-c = 642
 Q c-b = 591
 Q b-ac = 609

TOTAL FLOW = 25 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0040
 DFC b-c = 0.0140
 DFC c-b = 0.0102
 DFC b-c (share lane) = 0.0181

CRITICAL DFC = 0.02

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J2: Unnamed Road A / Access to Existing Fish Farm

2028Des_AM

FILENAME :

CHECKED BY: LL

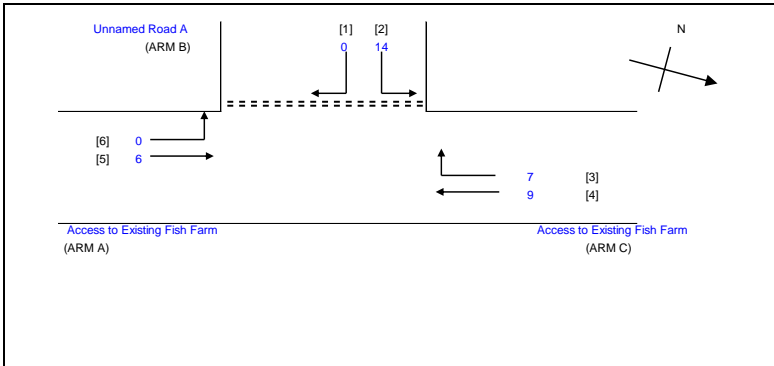
Dec-24

2028 Reference AM Peak Hour Traffic Flows

J2_Unnamed Road A_Access to Existing Fish Farm_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.23 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 6 (pcu/hr)

MAJOR ROAD (ARM C)
 W c-b = 2.4 (metres)
 Vr c-b = 12 (metres)
 q c-a = 9 (pcu/hr)
 q c-b = 7 (pcu/hr)

MINOR ROAD (ARM B)
 W b-a = 2.9 (metres)
 W b-c = 2.9 (metres)
 Vi b-a = 16 (metres)
 Vr b-a = 40 (metres)
 Vr b-c = 40 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 14 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.793305108
 E = 0.862663232
 F = 0.79459942
 Y = 0.854065

F for (Qb-ac) = 1

THE CAPACITY OF MOVEMENT :

Q b-a = 492
 Q b-c = 641
 Q c-b = 590
 Q b-ac = 641

TOTAL FLOW = 36 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0218
 DFC c-b = 0.0119
 DFC b-c (share lane) = 0.0218

CRITICAL DFC = 0.02

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J2: Unnamed Road A / Access to Existing Fish Farm

2028Des_PM

FILENAME :

CHECKED BY: LL

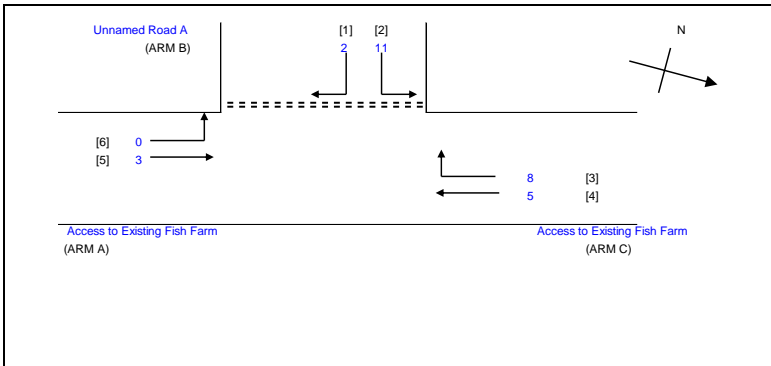
Dec-24

2028 Reference AM Peak Hour Traffic Flows

J2_Unnamed Road A_Access to Existing Fish Farm_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
 W = 4.23 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 3 (pcu/hr)

D = 0.793305108
 E = 0.862663232
 F = 0.79459942
 Y = 0.854065

Q b-a = 493
 Q b-c = 642
 Q c-b = 591
 Q b-ac = 613

DFC b-a = 0.0041
 DFC b-c = 0.0171
 DFC c-b = 0.0135
 DFC b-c (share lane) = 0.0212

MAJOR ROAD (ARM C)
 W c-b = 2.4 (metres)
 Vr c-b = 12 (metres)
 q c-a = 5 (pcu/hr)
 q c-b = 8 (pcu/hr)

F for (Qb-ac) = 0.846153846

TOTAL FLOW = 29 (PCU/HR)

CRITICAL DFC = 0.02

MINOR ROAD (ARM B)
 W b-a = 2.9 (metres)
 W b-c = 2.9 (metres)
 Vi b-a = 16 (metres)
 Vr b-a = 40 (metres)
 Vr b-c = 40 (metres)
 q b-a = 2 (pcu/hr)
 q b-c = 11 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J3: Unnamed Road A / Access Road underneath KSWH

2028Ref_AM

FILENAME :

CHECKED BY: LL

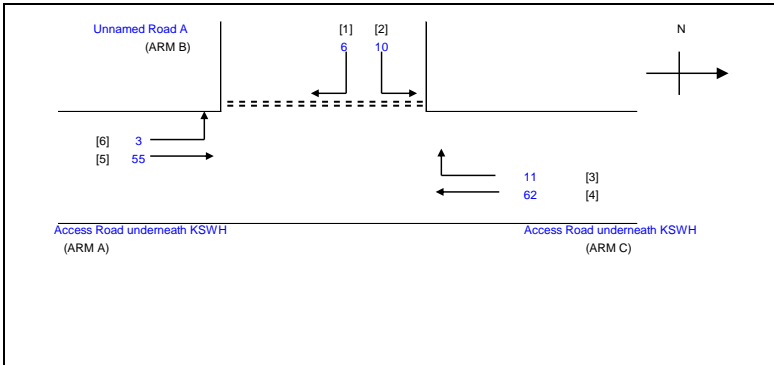
Dec-24

2028 Reference AM Peak Hour Traffic Flows

Unnamed Road A_Access Road underneath KSWH_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- VI b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.75 (metres)
 W cr = 0 (metres)
 q a-b = 3 (pcu/hr)
 q a-c = 55 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.819750132
 E = 0.86654348
 F = 0.91047865
 Y = 0.836125

THE CAPACITY OF MOVEMENT :

Q b-a = 486
 Q b-c = 631
 Q c-b = 662
 Q b-ac = 568

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0123
 DFC b-c = 0.0158
 DFC c-b = 0.0166
 DFC b-c (share lane) = 0.0282

MAJOR ROAD (ARM C)
 W c-b = 3.5 (metres)
 Vr c-b = 35 (metres)
 q c-a = 62 (pcu/hr)
 q c-b = 11 (pcu/hr)

F for (Qb-ac) = 0.625

TOTAL FLOW = 147 (PCU/HR)

CRITICAL DFC = 0.03

MINOR ROAD (ARM B)
 W b-a = 2.7 (metres)
 W b-c = 2.7 (metres)
 VI b-a = 60 (metres)
 Vr b-a = 67 (metres)
 Vr b-c = 67 (metres)
 q b-a = 6 (pcu/hr)
 q b-c = 10 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J3: Unnamed Road A / Access Road underneath KSWH

2028Ref_PM

FILENAME :

CHECKED BY: LL

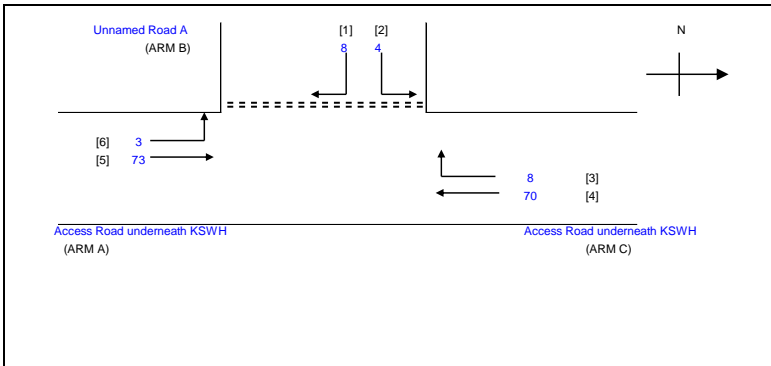
Dec-24

2028 Reference AM Peak Hour Traffic Flows

Unnamed Road A_Access Road underneath KSWH_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
 W = 4.75 (metres)
 W cr = 0 (metres)
 q a-b = 3 (pcu/hr)
 q a-c = 73 (pcu/hr)

D = 0.819750132
 E = 0.86654348
 F = 0.91047865
 Y = 0.836125

Q b-a = 482
 Q b-c = 626
 Q c-b = 657
 Q b-ac = 522

DFC b-a = 0.0166
 DFC b-c = 0.0064
 DFC c-b = 0.0122
 DFC b-c (share lane) = 0.0230

MAJOR ROAD (ARM C)
 W c-b = 3.5 (metres)
 Vr c-b = 35 (metres)
 q c-a = 70 (pcu/hr)
 q c-b = 8 (pcu/hr)

F for (Qb-ac) = 0.33333333

TOTAL FLOW = 166 (PCU/HR)

CRITICAL DFC = 0.02

MINOR ROAD (ARM B)
 W b-a = 2.7 (metres)
 W b-c = 2.7 (metres)
 Vi b-a = 60 (metres)
 Vr b-a = 67 (metres)
 Vr b-c = 67 (metres)
 q b-a = 8 (pcu/hr)
 q b-c = 4 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J3: Unnamed Road A / Access Road underneath KSWH

2028Des_AM

FILENAME :

CHECKED BY: LL

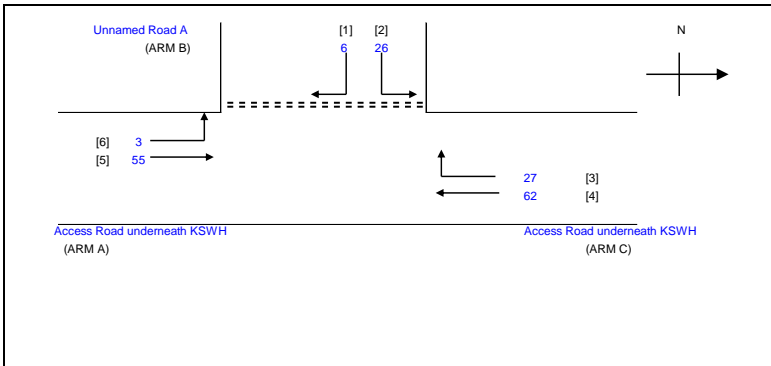
Dec-24

2028 Reference AM Peak Hour Traffic Flows

Unnamed Road A_Access Road underneath KSWH_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.75 (metres)
 W cr = 0 (metres)
 q a-b = 3 (pcu/hr)
 q a-c = 55 (pcu/hr)

MAJOR ROAD (ARM C)
 W c-b = 3.5 (metres)
 Vr c-b = 35 (metres)
 q c-a = 62 (pcu/hr)
 q c-b = 27 (pcu/hr)

MINOR ROAD (ARM B)
 W b-a = 2.7 (metres)
 W b-c = 2.7 (metres)
 Vi b-a = 60 (metres)
 Vr b-a = 67 (metres)
 Vr b-c = 67 (metres)
 q b-a = 6 (pcu/hr)
 q b-c = 26 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.819750132
 E = 0.86654348
 F = 0.91047865
 Y = 0.836125
 F for (Qb-ac) = 0.8125

THE CAPACITY OF MOVEMENT :

Q b-a = 481
 Q b-c = 631
 Q c-b = 662
 Q b-ac = 596
 TOTAL FLOW = 179 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0125
 DFC b-c = 0.0412
 DFC c-b = 0.0408
 DFC b-c (share lane) = 0.0537

CRITICAL DFC = 0.05

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J3: Unnamed Road A / Access Road underneath KSWH

2028Des_PM

FILENAME :

CHECKED BY: LL

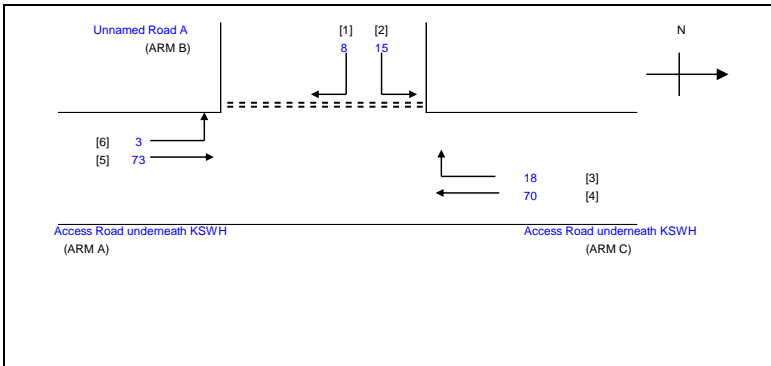
Dec-24

2028 Reference AM Peak Hour Traffic Flows

Unnamed Road A_Access Road underneath KSWH_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.75 (metres)
 W cr = 0 (metres)
 q a-b = 3 (pcu/hr)
 q a-c = 73 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.819750132
 E = 0.86654348
 F = 0.91047865
 Y = 0.836125

THE CAPACITY OF MOVEMENT :

Q b-a = 478
 Q b-c = 626
 Q c-b = 657
 Q b-ac = 565

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0167
 DFC b-c = 0.0240
 DFC c-b = 0.0274
 DFC b-c (share lane) = 0.0407

MAJOR ROAD (ARM C)
 W c-b = 3.5 (metres)
 Vr c-b = 35 (metres)
 q c-a = 70 (pcu/hr)
 q c-b = 18 (pcu/hr)

F for (Qb-ac) = 0.652173913

TOTAL FLOW = 187 (PCU/HR)

CRITICAL DFC = 0.04

MINOR ROAD (ARM B)
 W b-a = 2.7 (metres)
 W b-c = 2.7 (metres)
 Vi b-a = 60 (metres)
 Vr b-a = 67 (metres)
 Vr b-c = 67 (metres)
 q b-a = 8 (pcu/hr)
 q b-c = 15 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J4: Access Road underneath KSWH / Ha Tsuen Road

2028Ref_AM

FILENAME :

CHECKED BY: LL

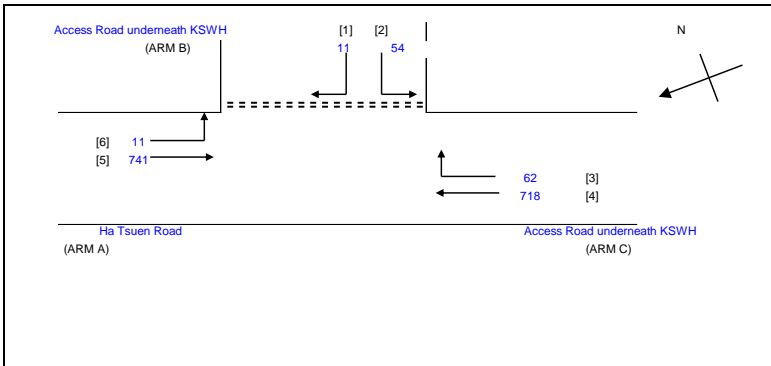
Dec-24

2028 Reference AM Peak Hour Traffic Flows

_Access Road underneath KSWH_Ha Tsuen Road_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 7.41 (metres)
 W cr = 0 (metres)
 q a-b = 11 (pcu/hr)
 q a-c = 741 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.711636816
 E = 0.72335517
 F = 0.9325
 Y = 0.7445275

THE CAPACITY OF MOVEMENT :

Q b-a = 198
 Q b-c = 393
 Q c-b = 505
 Q b-ac = 337

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0556
 DFC b-c = 0.1374
 DFC c-b = 0.1228
 DFC b-c (share lane) = 0.1930

MAJOR ROAD (ARM C)
 W c-b = 3.7 (metres)
 Vr c-b = 45 (metres)
 q c-a = 718 (pcu/hr)
 q c-b = 62 (pcu/hr)

F for (Qb-ac) = 0.830769231

TOTAL FLOW = 1597 (PCU/HR)

CRITICAL DFC = 0.19

MINOR ROAD (ARM B)
 W b-a = 1.3 (metres)
 W b-c = 1.3 (metres)
 Vi b-a = 123 (metres)
 Vr b-a = 45 (metres)
 Vr b-c = 45 (metres)
 q b-a = 11 (pcu/hr)
 q b-c = 54 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J4: Access Road underneath KSWH / Ha Tsuen Road

2028Ref_PM

FILENAME :

CHECKED BY: LL

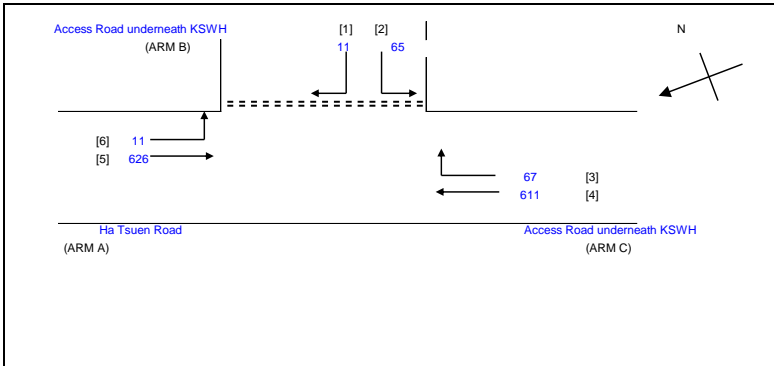
Dec-24

2028 Reference AM Peak Hour Traffic Flows

_Access Road underneath KSWH_Ha Tsuen Road_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 7.41 (metres)
 W cr = 0 (metres)
 q a-b = 11 (pcu/hr)
 q a-c = 626 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.711636816
 E = 0.72335517
 F = 0.9325
 Y = 0.7445275

THE CAPACITY OF MOVEMENT :

Q b-a = 232
 Q b-c = 415
 Q c-b = 534
 Q b-ac = 372

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0474
 DFC b-c = 0.1566
 DFC c-b = 0.1255
 DFC b-c (share lane) = 0.2040

MAJOR ROAD (ARM C)
 W c-b = 3.7 (metres)
 Vr c-b = 45 (metres)
 q c-a = 611 (pcu/hr)
 q c-b = 67 (pcu/hr)

F for (Qb-ac) = 0.855263158

TOTAL FLOW = 1391 (PCU/HR)

CRITICAL DFC = 0.20

MINOR ROAD (ARM B)
 W b-a = 1.3 (metres)
 W b-c = 1.3 (metres)
 Vi b-a = 123 (metres)
 Vr b-a = 45 (metres)
 Vr b-c = 45 (metres)
 q b-a = 11 (pcu/hr)
 q b-c = 65 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J4: Access Road underneath KSWH / Ha Tsuen Road

2028Des_AM

FILENAME :

CHECKED BY: LL

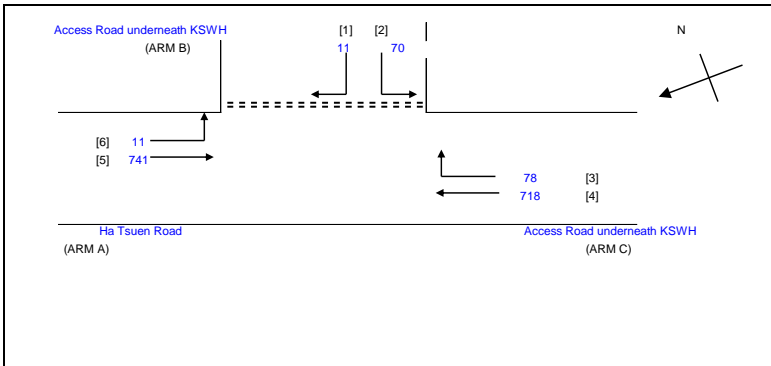
Dec-24

2028 Reference AM Peak Hour Traffic Flows

_Access Road underneath KSWH_Ha Tsuen Road_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
 W = 7.41 (metres)
 W cr = 0 (metres)
 q a-b = 11 (pcu/hr)
 q a-c = 741 (pcu/hr)

D = 0.711636816
 E = 0.72335517
 F = 0.9325
 Y = 0.7445275

Q b-a = 194
 Q b-c = 393
 Q c-b = 505
 Q b-ac = 345

DFC b-a = 0.0567
 DFC b-c = 0.1781
 DFC c-b = 0.1545
 DFC b-c (share lane) = 0.2348

MAJOR ROAD (ARM C)
 W c-b = 3.7 (metres)
 Vr c-b = 45 (metres)
 q c-a = 718 (pcu/hr)
 q c-b = 78 (pcu/hr)

F for (Qb-ac) = 0.864197531

TOTAL FLOW = 1629 (PCU/HR)

CRITICAL DFC = 0.23

MINOR ROAD (ARM B)
 W b-a = 1.3 (metres)
 W b-c = 1.3 (metres)
 Vi b-a = 123 (metres)
 Vr b-a = 45 (metres)
 Vr b-c = 45 (metres)
 q b-a = 11 (pcu/hr)
 q b-c = 70 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J4: Access Road underneath KSWH / Ha Tsuen Road

2028Des_PM

FILENAME :

CHECKED BY: LL

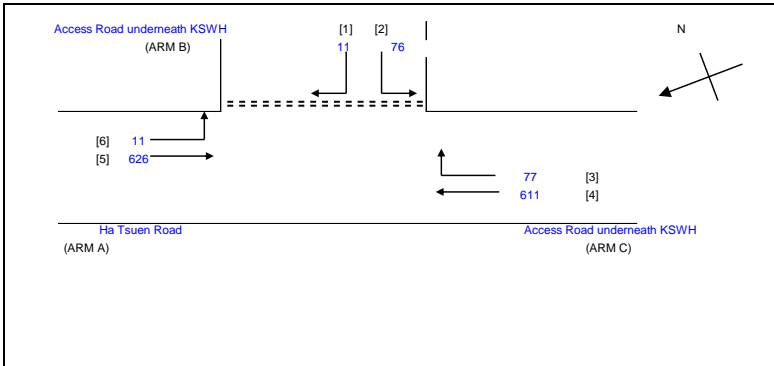
Dec-24

2028 Reference AM Peak Hour Traffic Flows

_Access Road underneath KSWH_Ha Tsuen Road_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 7.41 (metres)
 W cr = 0 (metres)
 q a-b = 11 (pcu/hr)
 q a-c = 626 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.711636816
 E = 0.72335517
 F = 0.9325
 Y = 0.7445275

THE CAPACITY OF MOVEMENT :

Q b-a = 229
 Q b-c = 415
 Q c-b = 534
 Q b-ac = 376

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0480
 DFC b-c = 0.1831
 DFC c-b = 0.1442
 DFC b-c (share lane) = 0.2312

MAJOR ROAD (ARM C)
 W c-b = 3.7 (metres)
 Vr c-b = 45 (metres)
 q c-a = 611 (pcu/hr)
 q c-b = 77 (pcu/hr)

F for (Qb-ac) = 0.873563218

TOTAL FLOW = 1412 (PCU/HR)

CRITICAL DFC = 0.23

MINOR ROAD (ARM B)
 W b-a = 1.3 (metres)
 W b-c = 1.3 (metres)
 Vi b-a = 123 (metres)
 Vr b-a = 45 (metres)
 Vr b-c = 45 (metres)
 q b-a = 11 (pcu/hr)
 q b-c = 76 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY Dec-24

J5: KSWH Roundabout

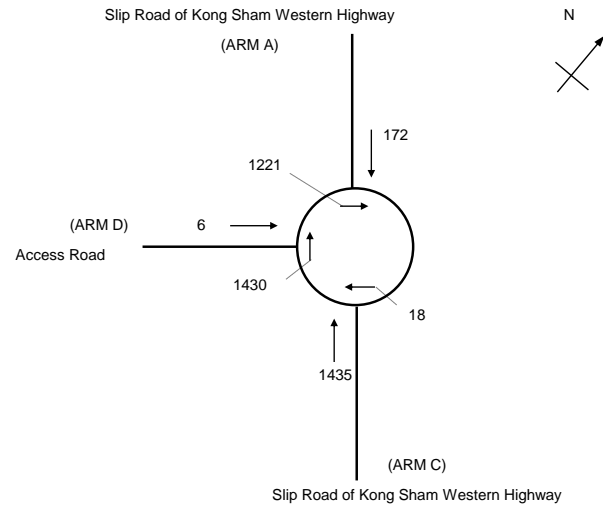
2028Ref_AM

FILENAME : J5_KSWH Roundabout_R.xls

CHECKED BY: LL Dec-24

2028 Reference AM Peak Hour Traffic Flows

REVIEWED BY: PCN Dec-24



ARM	A	C	D		
INPUT PARAMETERS:					
V	= Approach half width (m)	4.0	7.9	8.2	
E	= Entry width (m)	6.7	7.9	9.3	
L	= Effective length of flare (m)	4.8	1.0	1.8	
R	= Entry radius (m)	30.0	100.0	10.0	
D	= Inscribed circle diameter (m)	71.0	71.0	71.0	
A	= Entry angle (degree)	12.0	31.0	21.0	
Q	= Entry flow (pcu/h)	172	1435	6	
Qc	= Circulating flow across entry (pcu/h)	1221	18	1430	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = 1.6(E-V)/L	0.90	0.00	0.98	
K	= 1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.04	0.98	
X2	= V + ((E-V)/(1+2S))	4.96	7.90	8.57	
M	= EXP((D-60)/10)	3	3	3	
F	= 303*X2	1504	2394	2597	
Td	= 1+(0.5/(1+M))	1.12	1.12	1.12	
Fc	= 0.21*Td(1+0.2*X2)	0.47	0.61	0.64	
Qe	= K(F-Fc*Qc)	1003	2468	1651	Total In Sum = 1613 PCU
DFC	= Design flow/Capacity = Q/Qe	0.17	0.58	0.00	DFC of Critical Approach = 0.58

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY Dec-24

J5: KSWH Roundabout

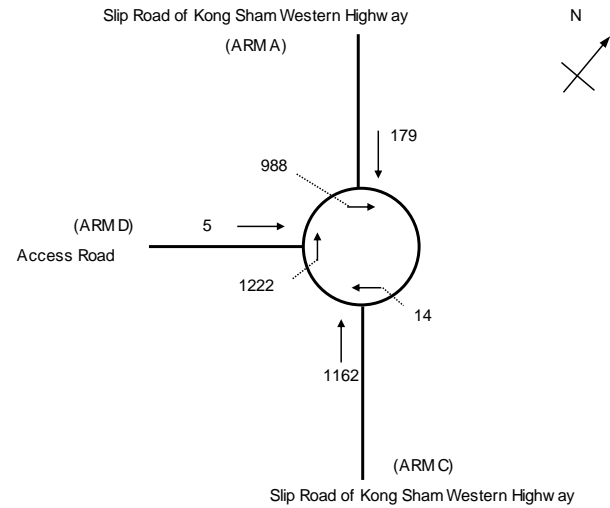
2028Ref_PM

FILENAME : J5_KSWH Roundabout_R.xls

CHECKED BY: LL Dec-24

2028 Reference AM Peak Hour Traffic Flows

REVIEWED BY: PCN Dec-24



ARM	A	C	D		
INPUT PARAMETERS:					
V	= Approach half width (m)	4.0	7.9	8.2	
E	= Entry width (m)	6.7	7.9	9.3	
L	= Effective length of flare (m)	4.8	1.0	1.8	
R	= Entry radius (m)	30.0	100.0	10.0	
D	= Inscribed circle diameter (m)	71.0	71.0	71.0	
A	= Entry angle (degree)	12.0	31.0	21.0	
Q	= Entry flow (pcu/h)	179	1162	5	
Qc	= Circulating flow across entry (pcu/h)	988	14	1222	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = 1.6(E-V)/L	0.90	0.00	0.98	
K	= 1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.04	0.98	
X2	= V + ((E-V)/(1+2S))	4.96	7.90	8.57	
M	= EXP((D-60)/10)	3	3	3	
F	= 303*X2	1504	2394	2597	
Td	= 1+(0.5/(1+M))	1.12	1.12	1.12	
Fc	= 0.21*Td(1+0.2*X2)	0.47	0.61	0.64	
Qe	= K(F-Fc*Qc)	1121	2470	1782	
					Total In Sum = 1346 PCU
DFC	= Design flow/Capacity = Q/Qe	0.16	0.47	0.00	DFC of Critical Approach = 0.47

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY Dec-24

J5: KSWH Roundabout

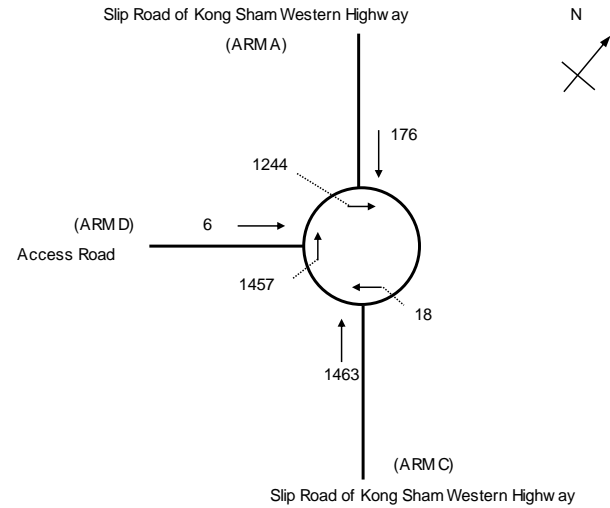
2028Des_AM

FILENAME : J5_KSWH Roundabout_R.xls

CHECKED BY: LL Dec-24

2028 Reference AM Peak Hour Traffic Flows

REVIEWED BY: PCN Dec-24



ARM	A	C	D		
INPUT PARAMETERS:					
V = Approach half width (m)	4.0	7.9	8.2		
E = Entry width (m)	6.7	7.9	9.3		
L = Effective length of flare (m)	4.8	1.0	1.8		
R = Entry radius (m)	30.0	100.0	10.0		
D = Inscribed circle diameter (m)	71.0	71.0	71.0		
A = Entry angle (degree)	12.0	31.0	21.0		
Q = Entry flow (pcu/h)	176	1463	6		
Qc = Circulating flow across entry (pcu/h)	1244	18	1457		
OUTPUT PARAMETERS:					
S = Sharpness of flare = 1.6(E-V)/L	0.90	0.00	0.98		
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.04	0.98		
X2 = V + ((E-V)/(1+2S))	4.96	7.90	8.57		
M = EXP((D-60)/10)	3	3	3		
F = 303*X2	1504	2394	2597		
Td = 1+(0.5/(1+M))	1.12	1.12	1.12		
Fc = 0.21*Td(1+0.2*X2)	0.47	0.61	0.64		
Qe = K(F-Fc*Qc)	991	2468	1634	Total In Sum =	1645 PCU
DFC = Design flow/Capacity = Q/Qe	0.18	0.59	0.00	DFC of Critical Approach =	0.59

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY Dec-24

J5: KSWH Roundabout

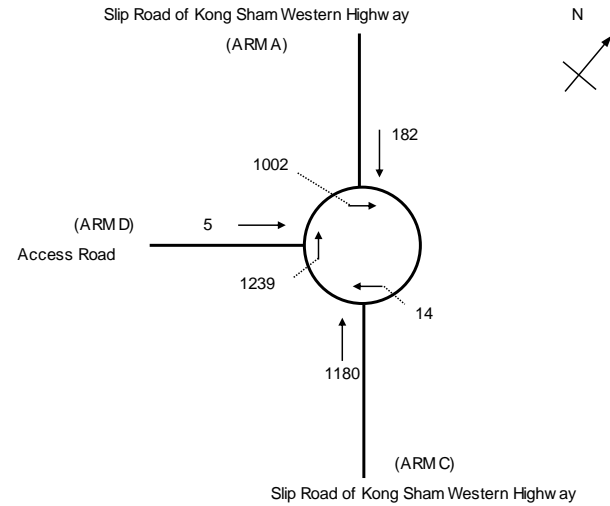
2028Des_PM

FILENAME : J5_KSWH Roundabout_R.xls

CHECKED BY: LL Dec-24

2028 Reference AM Peak Hour Traffic Flows

REVIEWED BY: PCN Dec-24



ARM	A	C	D		
INPUT PARAMETERS:					
V	= Approach half width (m)	4.0	7.9	8.2	
E	= Entry width (m)	6.7	7.9	9.3	
L	= Effective length of flare (m)	4.8	1.0	1.8	
R	= Entry radius (m)	30.0	100.0	10.0	
D	= Inscribed circle diameter (m)	71.0	71.0	71.0	
A	= Entry angle (degree)	12.0	31.0	21.0	
Q	= Entry flow (pcu/h)	182	1180	5	
Qc	= Circulating flow across entry (pcu/h)	1002	14	1239	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = 1.6(E-V)/L	0.90	0.00	0.98	
K	= 1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.04	0.98	
X2	= V + ((E-V)/(1+2S))	4.96	7.90	8.57	
M	= EXP((D-60)/10)	3	3	3	
F	= 303*X2	1504	2394	2597	
Td	= 1+(0.5/(1+M))	1.12	1.12	1.12	
Fc	= 0.21*Td(1+0.2*X2)	0.47	0.61	0.64	
Qe	= K(F-Fc*Qc)	1114	2470	1771	Total In Sum = 1367 PCU
DFC	= Design flow/Capacity = Q/Qe	0.16	0.48	0.00	DFC of Critical Approach = 0.48

Proposed Temporary Warehouse for Storage of Construction Materials and Machinery, Parking of Special Purpose Vehicles and Rural Workshop with Ancillary Facilities for a Period of 3 Years at Various Lots in D.D.125 and Adjoining Government Land, Ha Tsuen, Yuen Long, New Territories
TIA Report



Appendix D

2025 Junction Calculations

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J1: Unnamed Road A / Access to Portion A

2025Ref_AM

FILENAME :

CHECKED BY: LL

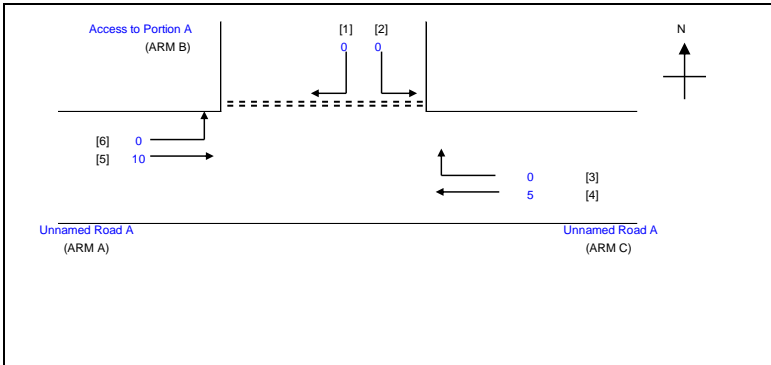
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

J1_Unnamed Road A_Access to Portion A_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.20 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 10 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.68744683
 E = 0.731326415
 F = 0.803411444
 Y = 0.8551

THE CAPACITY OF MOVEMENT :

Q b-a = 428
 Q b-c = 543
 Q c-b = 596
 Q b-ac = 428

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0000
 DFC c-b = 0.0000
 DFC b-c (share lane) = 0.0000

MAJOR ROAD (ARM C)
 W c-b = 2.5 (metres)
 Vr c-b = 14 (metres)
 q c-a = 5 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 15 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
 W b-a = 1.5 (metres)
 W b-c = 1.5 (metres)
 Vi b-a = 50 (metres)
 Vr b-a = 30 (metres)
 Vr b-c = 30 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 0 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY:

CSY

Dec-24

J1: Unnamed Road A / Access to Portion A

2025Ref_PM

FILENAME :

CHECKED BY:

LL

Dec-24

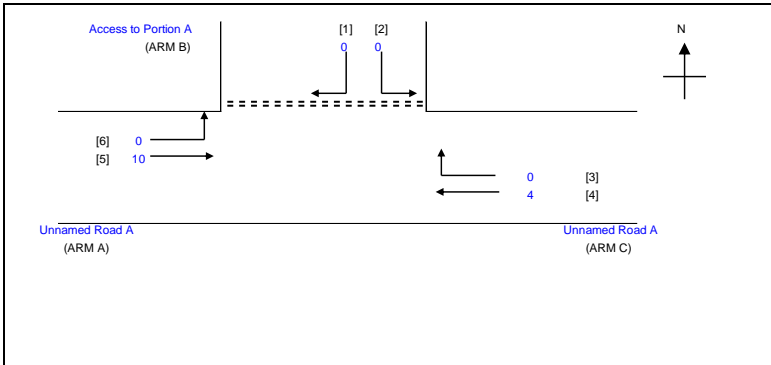
2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

J1_Unnamed Road A_Access to Portion A_P.xls

REVIEWED BY:

PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.20 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 10 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.68744683
 E = 0.731326415
 F = 0.803411444
 Y = 0.8551

THE CAPACITY OF MOVEMENT :

Q b-a = 428
 Q b-c = 543
 Q c-b = 596
 Q b-ac = 428

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0000
 DFC c-b = 0.0000
 DFC b-c (share lane) = 0.0000

MAJOR ROAD (ARM C)
 W c-b = 2.5 (metres)
 Vr c-b = 14 (metres)
 q c-a = 4 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 14 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
 W b-a = 1.5 (metres)
 W b-c = 1.5 (metres)
 Vi b-a = 50 (metres)
 Vr b-a = 30 (metres)
 Vr b-c = 30 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 0 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J1: Unnamed Road A / Access to Portion A

2025Des_AM

FILENAME :

CHECKED BY: LL

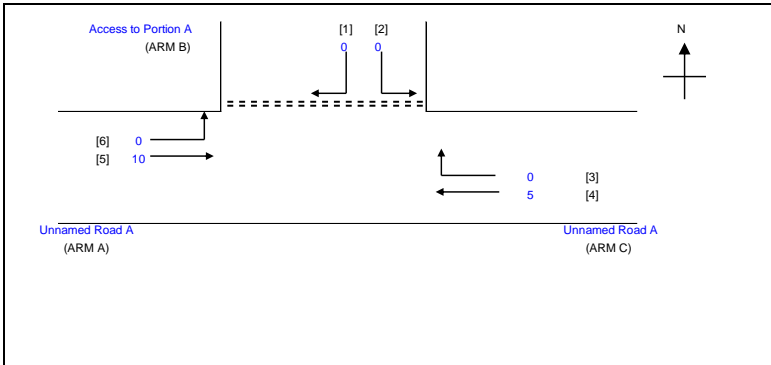
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

J1_Unnamed Road A_Access to Portion A_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.20 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 10 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.68744683
 E = 0.731326415
 F = 0.803411444
 Y = 0.8551

THE CAPACITY OF MOVEMENT :

Q b-a = 428
 Q b-c = 543
 Q c-b = 596
 Q b-ac = 428

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0000
 DFC c-b = 0.0000
 DFC b-c (share lane) = 0.0000

MAJOR ROAD (ARM C)
 W c-b = 2.5 (metres)
 Vr c-b = 14 (metres)
 q c-a = 5 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 15 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
 W b-a = 1.5 (metres)
 W b-c = 1.5 (metres)
 Vi b-a = 50 (metres)
 Vr b-a = 30 (metres)
 Vr b-c = 30 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 0 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J1: Unnamed Road A / Access to Portion A

2025Des_PM

FILENAME :

CHECKED BY: LL

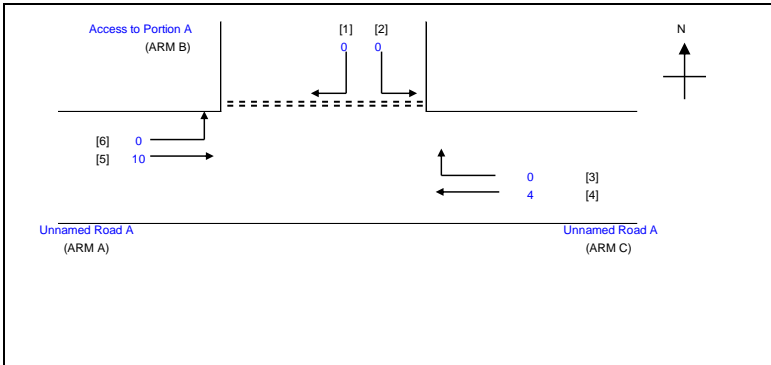
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

J1_Unnamed Road A_Access to Portion A_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.20 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 10 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.68744683
 E = 0.731326415
 F = 0.803411444
 Y = 0.8551

THE CAPACITY OF MOVEMENT :

Q b-a = 428
 Q b-c = 543
 Q c-b = 596
 Q b-ac = 428

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0000
 DFC c-b = 0.0000
 DFC b-c (share lane) = 0.0000

MAJOR ROAD (ARM C)
 W c-b = 2.5 (metres)
 Vr c-b = 14 (metres)
 q c-a = 4 (pcu/hr)
 q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 14 (PCU/HR)

CRITICAL DFC = 0.00

MINOR ROAD (ARM B)
 W b-a = 1.5 (metres)
 W b-c = 1.5 (metres)
 Vi b-a = 50 (metres)
 Vr b-a = 30 (metres)
 Vr b-c = 30 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 0 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J2: Unnamed Road A / Access to Existing Fish Farm

2025Ref_AM

FILENAME :

CHECKED BY: LL

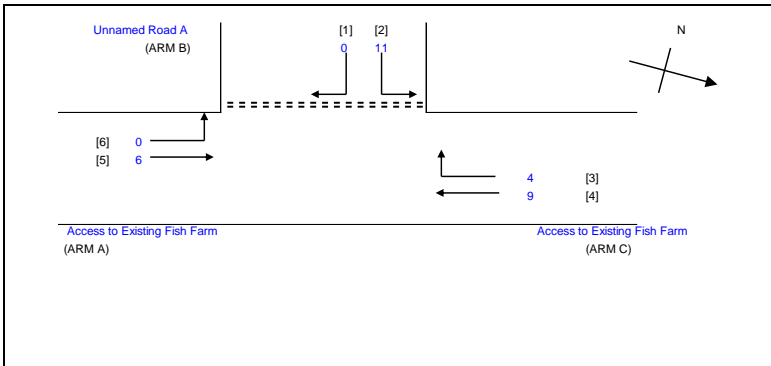
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

J2_Unnamed Road A_Access to Existing Fish Farm_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.23 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 6 (pcu/hr)

MAJOR ROAD (ARM C)
 W c-b = 2.4 (metres)
 Vr c-b = 12 (metres)
 q c-a = 9 (pcu/hr)
 q c-b = 4 (pcu/hr)

MINOR ROAD (ARM B)
 W b-a = 2.9 (metres)
 W b-c = 2.9 (metres)
 Vi b-a = 16 (metres)
 Vr b-a = 40 (metres)
 Vr b-c = 40 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 11 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.793305108
 E = 0.862663232
 F = 0.79459942
 Y = 0.854065

F for (Qb-ac) = 1

THE CAPACITY OF MOVEMENT :

Q b-a = 493
 Q b-c = 641
 Q c-b = 590
 Q b-ac = 641

TOTAL FLOW = 30 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0172
 DFC c-b = 0.0068
 DFC b-c (share lane) = 0.0172

CRITICAL DFC = 0.02

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY:

CSY

Dec-24

J2: Unnamed Road A / Access to Existing Fish Farm

2025Ref_PM

FILENAME :

CHECKED BY:

LL

Dec-24

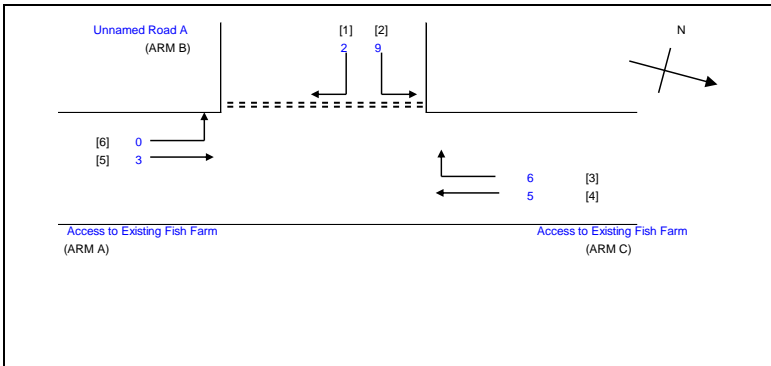
2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

J2_Unnamed Road A_Access to Existing Fish Farm_P.xls

REVIEWED BY:

PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.23 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 3 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.793305108
 E = 0.862663232
 F = 0.79459942
 Y = 0.854065

THE CAPACITY OF MOVEMENT :

Q b-a = 494
 Q b-c = 642
 Q c-b = 591
 Q b-ac = 609

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0040
 DFC b-c = 0.0140
 DFC c-b = 0.0102
 DFC b-c (share lane) = 0.0181

MAJOR ROAD (ARM C)
 W c-b = 2.4 (metres)
 Vr c-b = 12 (metres)
 q c-a = 5 (pcu/hr)
 q c-b = 6 (pcu/hr)

F for (Qb-ac) = 0.818181818

TOTAL FLOW = 25 (PCU/HR)

CRITICAL DFC = 0.02

MINOR ROAD (ARM B)
 W b-a = 2.9 (metres)
 W b-c = 2.9 (metres)
 Vi b-a = 16 (metres)
 Vr b-a = 40 (metres)
 Vr b-c = 40 (metres)
 q b-a = 2 (pcu/hr)
 q b-c = 9 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J2: Unnamed Road A / Access to Existing Fish Farm

2025Des_AM

FILENAME :

CHECKED BY: LL

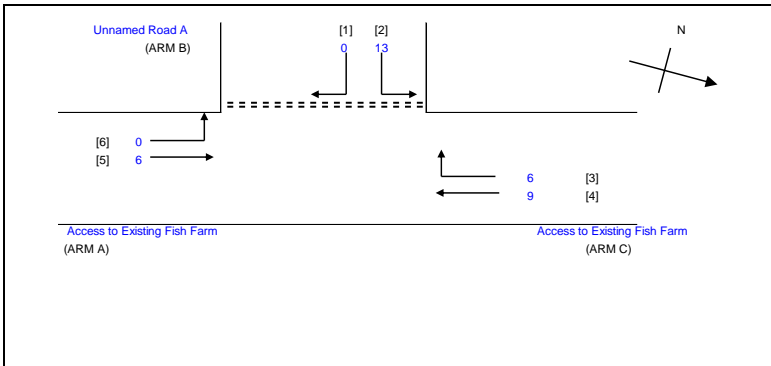
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

J2_Unnamed Road A_Access to Existing Fish Farm_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- VI b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.23 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 6 (pcu/hr)

MAJOR ROAD (ARM C)
 W c-b = 2.4 (metres)
 Vr c-b = 12 (metres)
 q c-a = 9 (pcu/hr)
 q c-b = 6 (pcu/hr)

MINOR ROAD (ARM B)
 W b-a = 2.9 (metres)
 W b-c = 2.9 (metres)
 VI b-a = 16 (metres)
 Vr b-a = 40 (metres)
 Vr b-c = 40 (metres)
 q b-a = 0 (pcu/hr)
 q b-c = 13 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.793305108
 E = 0.862663232
 F = 0.79459942
 Y = 0.854065

F for (Qb-ac) = 1

THE CAPACITY OF MOVEMENT :

Q b-a = 492
 Q b-c = 641
 Q c-b = 590
 Q b-ac = 641

TOTAL FLOW = 34 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0000
 DFC b-c = 0.0203
 DFC c-b = 0.0102
 DFC b-c (share lane) = 0.0203

CRITICAL DFC = 0.02

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J2: Unnamed Road A / Access to Existing Fish Farm

2025Des_PM

FILENAME :

CHECKED BY: LL

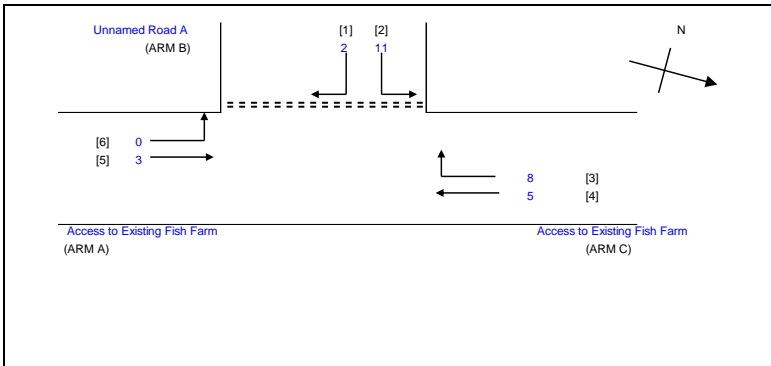
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

J2_Unnamed Road A_Access to Existing Fish Farm_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.23 (metres)
 W cr = 0 (metres)
 q a-b = 0 (pcu/hr)
 q a-c = 3 (pcu/hr)

MAJOR ROAD (ARM C)
 W c-b = 2.4 (metres)
 Vr c-b = 12 (metres)
 q c-a = 5 (pcu/hr)
 q c-b = 8 (pcu/hr)

MINOR ROAD (ARM B)
 W b-a = 2.9 (metres)
 W b-c = 2.9 (metres)
 Vi b-a = 16 (metres)
 Vr b-a = 40 (metres)
 Vr b-c = 40 (metres)
 q b-a = 2 (pcu/hr)
 q b-c = 11 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.793305108
 E = 0.862663232
 F = 0.79459942
 Y = 0.854065

F for (Qb-ac) = 0.846153846

THE CAPACITY OF MOVEMENT :

Q b-a = 493
 Q b-c = 642
 Q c-b = 591
 Q b-ac = 613

TOTAL FLOW = 29 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0041
 DFC b-c = 0.0171
 DFC c-b = 0.0135
 DFC b-c (share lane) = 0.0212

CRITICAL DFC = 0.02

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J3: Unnamed Road A / Access Road underneath KSWH

2025Ref_AM

FILENAME :

CHECKED BY: LL

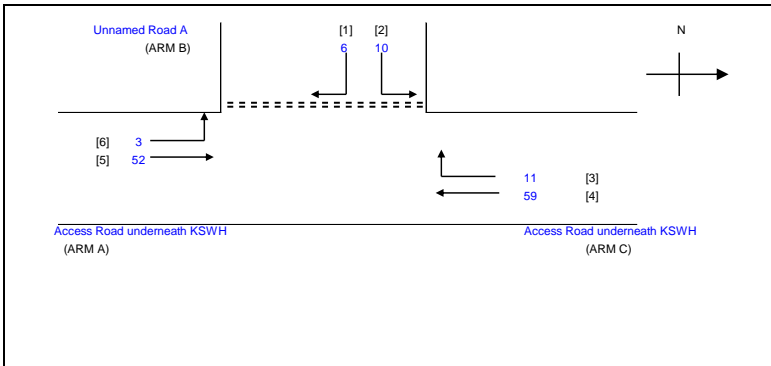
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

Unnamed Road A_Access Road underneath KSWH_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- VI b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)
 W = 4.75 (metres)
 W cr = 0 (metres)
 q a-b = 3 (pcu/hr)
 q a-c = 52 (pcu/hr)

D = 0.819750132
 E = 0.86654348
 F = 0.91047865
 Y = 0.836125

Q b-a = 488
 Q b-c = 632
 Q c-b = 663
 Q b-ac = 569

DFC b-a = 0.0123
 DFC b-c = 0.0158
 DFC c-b = 0.0166
 DFC b-c (share lane) = 0.0281

MAJOR ROAD (ARM C)
 W c-b = 3.5 (metres)
 Vr c-b = 35 (metres)
 q c-a = 59 (pcu/hr)
 q c-b = 11 (pcu/hr)

F for (Qb-ac) = 0.625

TOTAL FLOW = 141 (PCU/HR)

CRITICAL DFC = 0.03

MINOR ROAD (ARM B)
 W b-a = 2.7 (metres)
 W b-c = 2.7 (metres)
 VI b-a = 60 (metres)
 Vr b-a = 67 (metres)
 Vr b-c = 67 (metres)
 q b-a = 6 (pcu/hr)
 q b-c = 10 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY:

CSY

Dec-24

J3: Unnamed Road A / Access Road underneath KSWH

2025Ref_PM

FILENAME :

CHECKED BY:

LL

Dec-24

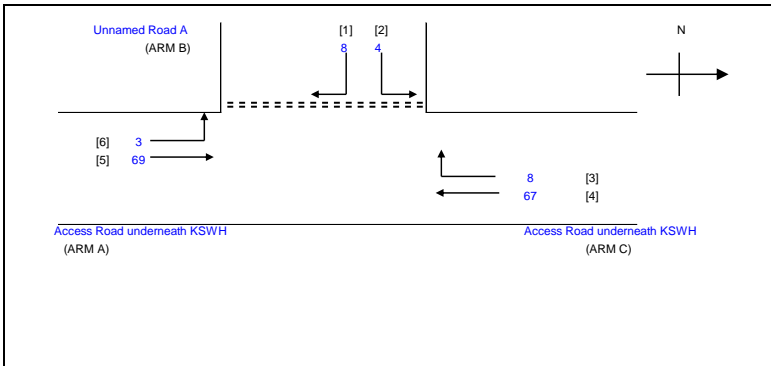
2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

Unnamed Road A_Access Road underneath KSWH_P.xls

REVIEWED BY:

PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.75 (metres)
 W cr = 0 (metres)
 q a-b = 3 (pcu/hr)
 q a-c = 69 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.819750132
 E = 0.86654348
 F = 0.91047865
 Y = 0.836125

THE CAPACITY OF MOVEMENT :

Q b-a = 483
 Q b-c = 627
 Q c-b = 658
 Q b-ac = 523

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0166
 DFC b-c = 0.0064
 DFC c-b = 0.0122
 DFC b-c (share lane) = 0.0229

MAJOR ROAD (ARM C)
 W c-b = 3.5 (metres)
 Vr c-b = 35 (metres)
 q c-a = 67 (pcu/hr)
 q c-b = 8 (pcu/hr)

F for (Qb-ac) = 0.33333333

TOTAL FLOW = 159 (PCU/HR)

CRITICAL DFC = 0.02

MINOR ROAD (ARM B)
 W b-a = 2.7 (metres)
 W b-c = 2.7 (metres)
 Vi b-a = 60 (metres)
 Vr b-a = 67 (metres)
 Vr b-c = 67 (metres)
 q b-a = 8 (pcu/hr)
 q b-c = 4 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J3: Unnamed Road A / Access Road underneath KSWH

2025Des_AM

FILENAME :

CHECKED BY: LL

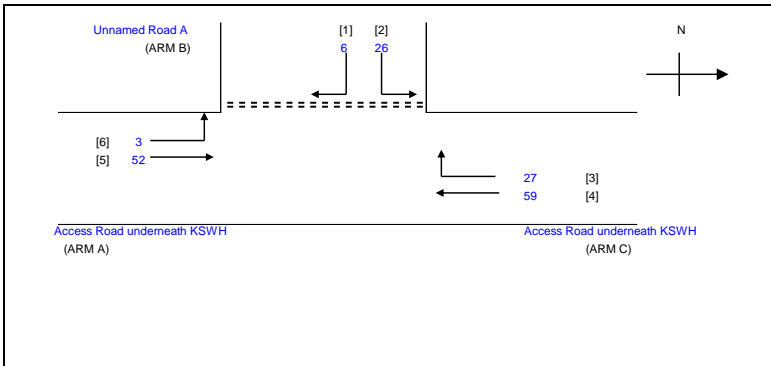
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

Unnamed Road A_Access Road underneath KSWH_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.75 (metres)
 W cr = 0 (metres)
 q a-b = 3 (pcu/hr)
 q a-c = 52 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.819750132
 E = 0.86654348
 F = 0.91047865
 Y = 0.836125

THE CAPACITY OF MOVEMENT :

Q b-a = 482
 Q b-c = 632
 Q c-b = 663
 Q b-ac = 597

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0124
 DFC b-c = 0.0411
 DFC c-b = 0.0407
 DFC b-c (share lane) = 0.0536

MAJOR ROAD (ARM C)
 W c-b = 3.5 (metres)
 Vr c-b = 35 (metres)
 q c-a = 59 (pcu/hr)
 q c-b = 27 (pcu/hr)

F for (Qb-ac) = 0.8125

TOTAL FLOW = 173 (PCU/HR)

CRITICAL DFC = 0.05

MINOR ROAD (ARM B)
 W b-a = 2.7 (metres)
 W b-c = 2.7 (metres)
 Vi b-a = 60 (metres)
 Vr b-a = 67 (metres)
 Vr b-c = 67 (metres)
 q b-a = 6 (pcu/hr)
 q b-c = 26 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY:

CSY

Dec-24

J3: Unnamed Road A / Access Road underneath KSWH

2025Des_PM

FILENAME :

CHECKED BY:

LL

Dec-24

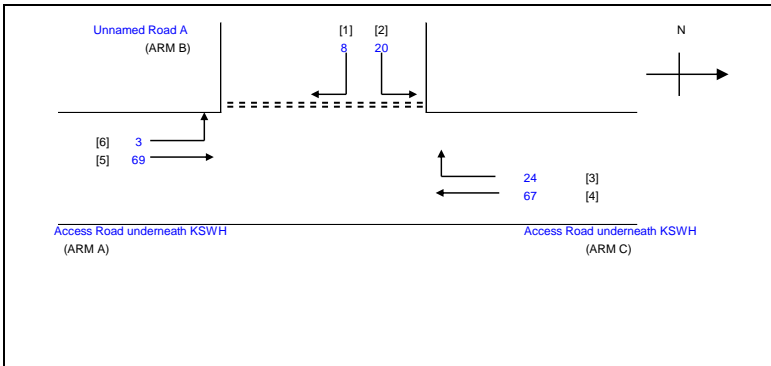
2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

Unnamed Road A_Access Road underneath KSWH_P.xls

REVIEWED BY:

PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 4.75 (metres)
 W cr = 0 (metres)
 q a-b = 3 (pcu/hr)
 q a-c = 69 (pcu/hr)

MAJOR ROAD (ARM C)
 W c-b = 3.5 (metres)
 Vr c-b = 35 (metres)
 q c-a = 67 (pcu/hr)
 q c-b = 24 (pcu/hr)

MINOR ROAD (ARM B)
 W b-a = 2.7 (metres)
 W b-c = 2.7 (metres)
 Vi b-a = 60 (metres)
 Vr b-a = 67 (metres)
 Vr b-c = 67 (metres)
 q b-a = 8 (pcu/hr)
 q b-c = 20 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.819750132
 E = 0.86654348
 F = 0.91047865
 Y = 0.836125
 F for (Qb-ac) = 0.714285714

THE CAPACITY OF MOVEMENT :

Q b-a = 477
 Q b-c = 627
 Q c-b = 658
 Q b-ac = 575
 TOTAL FLOW = 191 (PCU/HR)

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0168
 DFC b-c = 0.0319
 DFC c-b = 0.0365
 DFC b-c (share lane) = 0.0487

CRITICAL DFC = 0.05

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J4: Access Road underneath KSWH / Ha Tsuen Road

2025Ref_AM

FILENAME :

CHECKED BY: LL

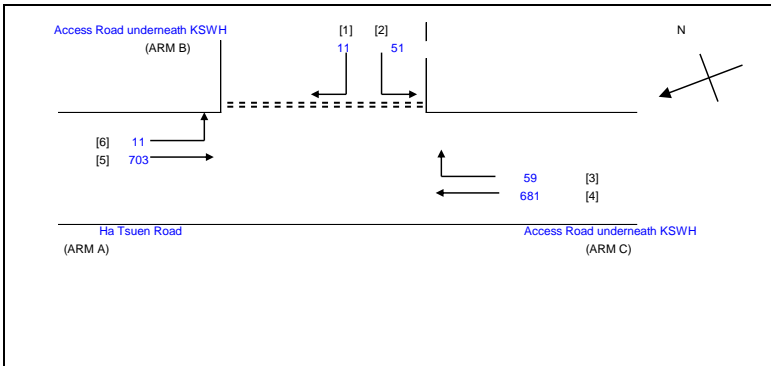
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

_Access Road underneath KSWH_Ha Tsuen Road_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 7.41 (metres)
 W cr = 0 (metres)
 q a-b = 11 (pcu/hr)
 q a-c = 703 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.711636816
 E = 0.72335517
 F = 0.9325
 Y = 0.7445275

THE CAPACITY OF MOVEMENT :

Q b-a = 211
 Q b-c = 400
 Q c-b = 514
 Q b-ac = 345

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0521
 DFC b-c = 0.1275
 DFC c-b = 0.1148
 DFC b-c (share lane) = 0.1796

MAJOR ROAD (ARM C)
 W c-b = 3.7 (metres)
 Vr c-b = 45 (metres)
 q c-a = 681 (pcu/hr)
 q c-b = 59 (pcu/hr)

F for (Qb-ac) = 0.822580645

TOTAL FLOW = 1516 (PCU/HR)

CRITICAL DFC = 0.18

MINOR ROAD (ARM B)
 W b-a = 1.3 (metres)
 W b-c = 1.3 (metres)
 Vi b-a = 123 (metres)
 Vr b-a = 45 (metres)
 Vr b-c = 45 (metres)
 q b-a = 11 (pcu/hr)
 q b-c = 51 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J4: Access Road underneath KSWH / Ha Tsuen Road

2025Ref_PM

FILENAME :

CHECKED BY: LL

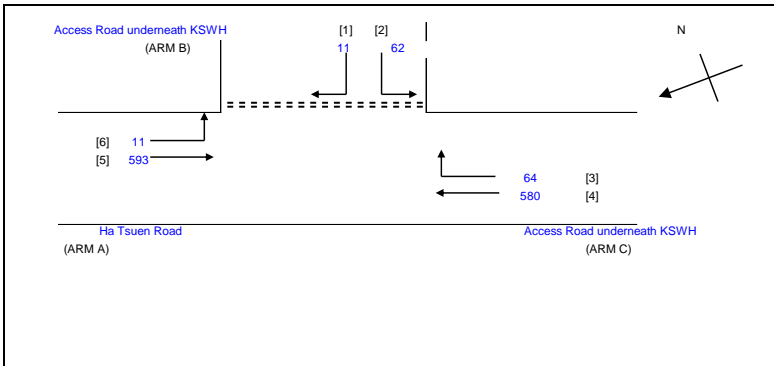
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

_Access Road underneath KSWH_Ha Tsuen Road_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 7.41 (metres)
 W cr = 0 (metres)
 q a-b = 11 (pcu/hr)
 q a-c = 593 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.711636816
 E = 0.72335517
 F = 0.9325
 Y = 0.7445275

THE CAPACITY OF MOVEMENT :

Q b-a = 243
 Q b-c = 422
 Q c-b = 542
 Q b-ac = 380

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0453
 DFC b-c = 0.1469
 DFC c-b = 0.1181
 DFC b-c (share lane) = 0.1922

MAJOR ROAD (ARM C)
 W c-b = 3.7 (metres)
 Vr c-b = 45 (metres)
 q c-a = 580 (pcu/hr)
 q c-b = 64 (pcu/hr)

F for (Qb-ac) = 0.849315068

TOTAL FLOW = 1321 (PCU/HR)

CRITICAL DFC = 0.19

MINOR ROAD (ARM B)
 W b-a = 1.3 (metres)
 W b-c = 1.3 (metres)
 Vi b-a = 123 (metres)
 Vr b-a = 45 (metres)
 Vr b-c = 45 (metres)
 q b-a = 11 (pcu/hr)
 q b-c = 62 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J4: Access Road underneath KSWH / Ha Tsuen Road

2025Des_AM

FILENAME :

CHECKED BY: LL

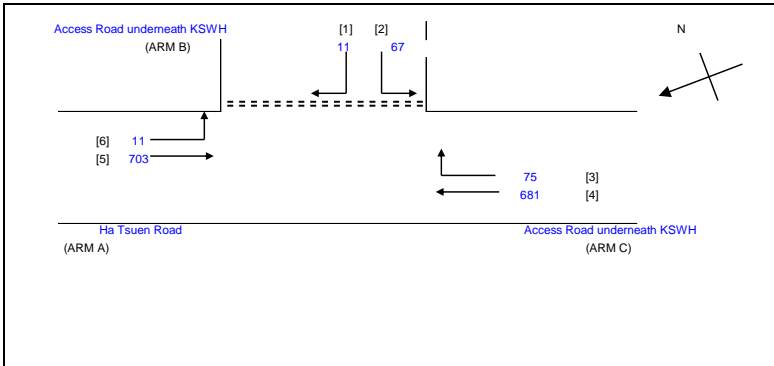
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

_Access Road underneath KSWH_Ha Tsuen Road_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 7.41 (metres)
 W cr = 0 (metres)
 q a-b = 11 (pcu/hr)
 q a-c = 703 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.711636816
 E = 0.72335517
 F = 0.9325
 Y = 0.7445275

THE CAPACITY OF MOVEMENT :

Q b-a = 206
 Q b-c = 400
 Q c-b = 514
 Q b-ac = 353

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0534
 DFC b-c = 0.1675
 DFC c-b = 0.1459
 DFC b-c (share lane) = 0.2209

MAJOR ROAD (ARM C)
 W c-b = 3.7 (metres)
 Vr c-b = 45 (metres)
 q c-a = 681 (pcu/hr)
 q c-b = 75 (pcu/hr)

F for (Qb-ac) = 0.858974359

TOTAL FLOW = 1548 (PCU/HR)

CRITICAL DFC = 0.22

MINOR ROAD (ARM B)
 W b-a = 1.3 (metres)
 W b-c = 1.3 (metres)
 Vi b-a = 123 (metres)
 Vr b-a = 45 (metres)
 Vr b-c = 45 (metres)
 q b-a = 11 (pcu/hr)
 q b-c = 67 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY

Dec-24

J4: Access Road underneath KSWH / Ha Tsuen Road

2025Des_PM

FILENAME :

CHECKED BY: LL

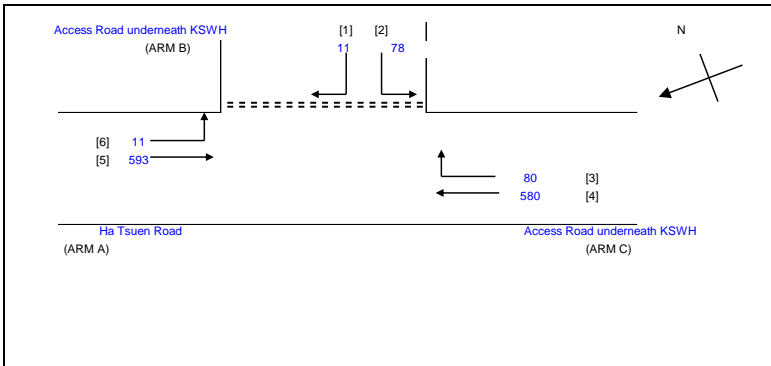
Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

_Access Road underneath KSWH_Ha Tsuen Road_P.xls

REVIEWED BY: PCN

Dec-24



NOTES : (GEOMETRIC INPUT DATA)

- W = MAJOR ROAD WIDTH
- W cr = CENTRAL RESERVE WIDTH
- W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
- W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
- W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
- Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
- Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
- Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
- D = STREAM-SPECIFIC B-A
- E = STREAM-SPECIFIC B-C
- F = STREAM-SPECIFIC C-B
- Y = (1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)
 W = 7.41 (metres)
 W cr = 0 (metres)
 q a-b = 11 (pcu/hr)
 q a-c = 593 (pcu/hr)

GEOMETRIC FACTORS :

D = 0.711636816
 E = 0.72335517
 F = 0.9325
 Y = 0.7445275

THE CAPACITY OF MOVEMENT :

Q b-a = 239
 Q b-c = 422
 Q c-b = 542
 Q b-ac = 386

COMPARISON OF DESIGN FLOW TO CAPACITY:

DFC b-a = 0.0460
 DFC b-c = 0.1848
 DFC c-b = 0.1476
 DFC b-c (share lane) = 0.2309

MAJOR ROAD (ARM C)
 W c-b = 3.7 (metres)
 Vr c-b = 45 (metres)
 q c-a = 580 (pcu/hr)
 q c-b = 80 (pcu/hr)

F for (Qb-ac) = 0.876404494

TOTAL FLOW = 1353 (PCU/HR)

CRITICAL DFC = 0.23

MINOR ROAD (ARM B)
 W b-a = 1.3 (metres)
 W b-c = 1.3 (metres)
 Vi b-a = 123 (metres)
 Vr b-a = 45 (metres)
 Vr b-c = 45 (metres)
 q b-a = 11 (pcu/hr)
 q b-c = 78 (pcu/hr)

OZZO TECHNOLOGY (HK) LIMITED

TRAFFIC SIGNAL CALCULATION

INITIALS DATE

Proposed Temporary Warehouse for Construction Materials and Construction Machineries, Parking of SPVs and Rural Workshop with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond and Excavation of Land

PROJECT NO.: 83133

PREPARED BY: CSY Dec-24

J5: KSWH Roundabout

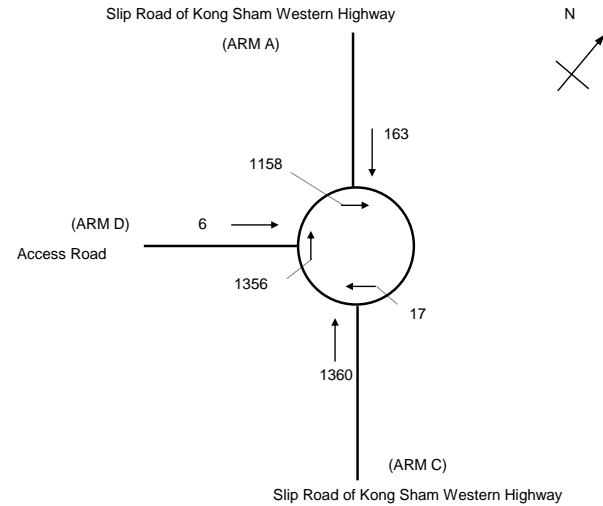
2025Ref_AM

FILENAME : J5_KSWH Roundabout_R.xls

CHECKED BY: LL Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

REVIEWED BY: PCN Dec-24



ARM	A	C	D		
INPUT PARAMETERS:					
V	= Approach half width (m)	4.0	7.9	8.2	
E	= Entry width (m)	6.7	7.9	9.3	
L	= Effective length of flare (m)	4.8	1.0	1.8	
R	= Entry radius (m)	30.0	100.0	10.0	
D	= Inscribed circle diameter (m)	71.0	71.0	71.0	
A	= Entry angle (degree)	12.0	31.0	21.0	
Q	= Entry flow (pcu/h)	163	1360	6	
Qc	= Circulating flow across entry (pcu/h)	1158	17	1356	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = 1.6(E-V)/L	0.90	0.00	0.98	
K	= 1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.04	0.98	
X2	= V + ((E-V)/(1+2S))	4.96	7.90	8.57	
M	= EXP((D-60)/10)	3	3	3	
F	= 303*X2	1504	2394	2597	
Td	= 1+(0.5/(1+M))	1.12	1.12	1.12	
Fc	= 0.21*Td(1+0.2*X2)	0.47	0.61	0.64	
Qe	= K(F-Fc*Qc)	1035	2468	1697	Total In Sum = 1529 PCU
DFC	= Design flow/Capacity = Q/Qe	0.16	0.55	0.00	DFC of Critical Approach = 0.55

OZZO TECHNOLOGY (HK) LIMITED

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PROJECT NO.: 83133

PREPARED BY: CSY Dec-24

J5: KSWH Roundabout

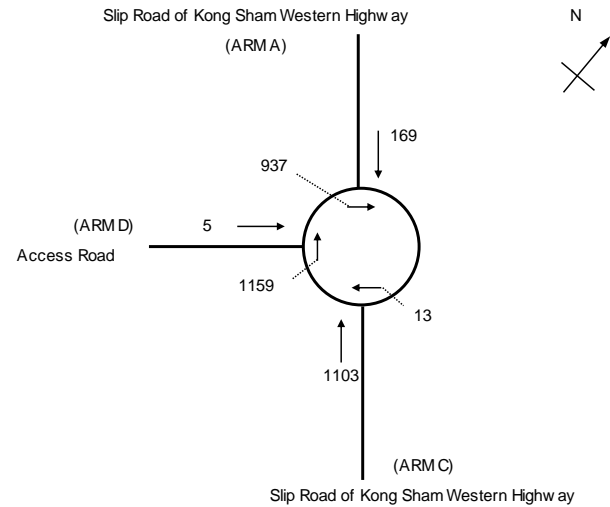
2025Ref_PM

FILENAME : J5_KSWH Roundabout_R.xls

CHECKED BY: LL Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

REVIEWED BY: PCN Dec-24



ARM	A	C	D		
INPUT PARAMETERS:					
V	= Approach half width (m)	4.0	7.9	8.2	
E	= Entry width (m)	6.7	7.9	9.3	
L	= Effective length of flare (m)	4.8	1.0	1.8	
R	= Entry radius (m)	30.0	100.0	10.0	
D	= Inscribed circle diameter (m)	71.0	71.0	71.0	
A	= Entry angle (degree)	12.0	31.0	21.0	
Q	= Entry flow (pcu/h)	169	1103	5	
Qc	= Circulating flow across entry (pcu/h)	937	13	1159	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = 1.6(E-V)/L	0.90	0.00	0.98	
K	= 1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.04	0.98	
X2	= V + ((E-V)/(1+2S))	4.96	7.90	8.57	
M	= EXP((D-60)/10)	3	3	3	
F	= 303*X2	1504	2394	2597	
Td	= 1+(0.5/(1+M))	1.12	1.12	1.12	
Fc	= 0.21*Td(1+0.2*X2)	0.47	0.61	0.64	
Qe	= K(F-Fc*Qc)	1147	2471	1821	Total In Sum = 1277 PCU
DFC	= Design flow/Capacity = Q/Qe	0.15	0.45	0.00	DFC of Critical Approach = 0.45

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PROJECT NO.: 83133

PREPARED BY: CSY Dec-24

J5: KSWH Roundabout

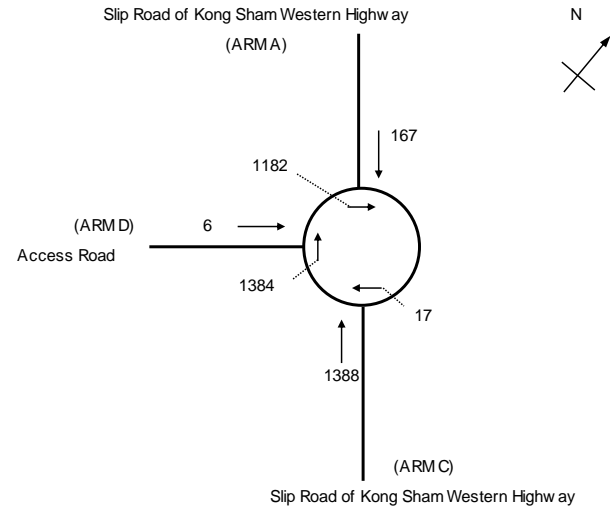
2025Des_AM

FILENAME : J5_KSWH Roundabout_R.xls

CHECKED BY: LL Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

REVIEWED BY: PCN Dec-24



ARM	A	C	D		
INPUT PARAMETERS:					
V	= Approach half width (m)	4.0	7.9	8.2	
E	= Entry width (m)	6.7	7.9	9.3	
L	= Effective length of flare (m)	4.8	1.0	1.8	
R	= Entry radius (m)	30.0	100.0	10.0	
D	= Inscribed circle diameter (m)	71.0	71.0	71.0	
A	= Entry angle (degree)	12.0	31.0	21.0	
Q	= Entry flow (pcu/h)	167	1388	6	
Qc	= Circulating flow across entry (pcu/h)	1182	17	1384	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = 1.6(E-V)/L	0.90	0.00	0.98	
K	= 1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.04	0.98	
X2	= V + ((E-V)/(1+2S))	4.96	7.90	8.57	
M	= EXP((D-60)/10)	3	3	3	
F	= 303*X2	1504	2394	2597	
Td	= 1+(0.5/(1+M))	1.12	1.12	1.12	
Fc	= 0.21*Td(1+0.2*X2)	0.47	0.61	0.64	
Qe	= K(F-Fc*Qc)	1022	2468	1680	
					Total In Sum = 1561 PCU
DFC	= Design flow/Capacity = Q/Qe	0.16	0.56	0.00	DFC of Critical Approach = 0.56

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TRAFFIC SIGNAL CALCULATION

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PROJECT NO.: 83133

PREPARED BY: CSY Dec-24

J5: KSWH Roundabout

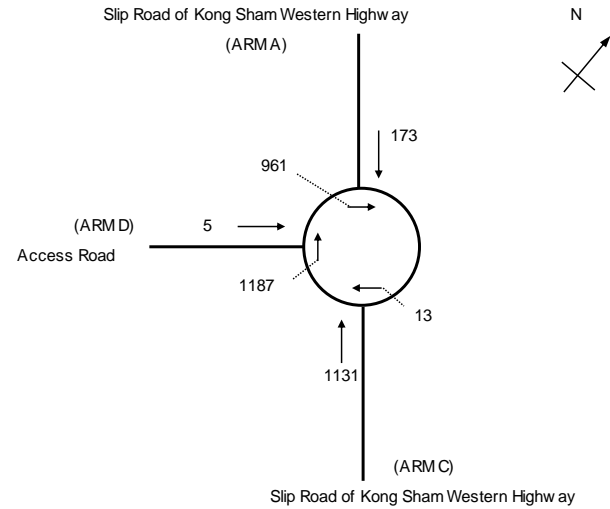
2025Des_PM

FILENAME : J5_KSWH Roundabout_R.xls

CHECKED BY: LL Dec-24

2025 Reference AM Peak Hour Traffic Flows (Construction Stage)

REVIEWED BY: PCN Dec-24



ARM	A	C	D		
INPUT PARAMETERS:					
V	= Approach half width (m)	4.0	7.9	8.2	
E	= Entry width (m)	6.7	7.9	9.3	
L	= Effective length of flare (m)	4.8	1.0	1.8	
R	= Entry radius (m)	30.0	100.0	10.0	
D	= Inscribed circle diameter (m)	71.0	71.0	71.0	
A	= Entry angle (degree)	12.0	31.0	21.0	
Q	= Entry flow (pcu/h)	173	1131	5	
Qc	= Circulating flow across entry (pcu/h)	961	13	1187	
OUTPUT PARAMETERS:					
S	= Sharpness of flare = 1.6(E-V)/L	0.90	0.00	0.98	
K	= 1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.04	0.98	
X2	= V + ((E-V)/(1+2S))	4.96	7.90	8.57	
M	= EXP((D-60)/10)	3	3	3	
F	= 303*X2	1504	2394	2597	
Td	= 1+(0.5/(1+M))	1.12	1.12	1.12	
Fc	= 0.21*Td(1+0.2*X2)	0.47	0.61	0.64	
Qe	= K(F-Fc*Qc)	1135	2471	1804	
					Total In Sum = 1309 PCU
DFC	= Design flow/Capacity = Q/Qe	0.15	0.46	0.00	DFC of Critical Approach = 0.46