

**Broad Development Parameters of the Indicative
Development Proposal in Respect of Application No. Y/YL-LFS/14**
關乎申請編號 Y/YL-LFS/14 而只作指示用途的擬議發展計劃的概括發展規範

Revised broad development parameters in view of
the further information received on 22.11.2023
因應於 2023 年 11 月 22 日接獲的進一步資料而修訂的概括發展規範

Application No. 申請編號	Y/YL-LFS/14
Location/address 位置／地址	<p>Lots 3 S.A ss.1, 3 S.B, 4, 5 S.A RP, 9, 10 RP, 12 S.A, 12 RP, 13, 14 S.A ss.1 S.A, 14 S.A ss.1 RP, 14 S.A ss.2, 14 S.A RP, 14 S.B ss.1 S.A, 14 S.B ss.1 RP, 14 S.B RP, 14 RP, 15 S.A ss.1, 15 S.A RP, 15 S.B, 15 RP, 16 S.A, 16 S.B, 16 RP, 17 S.A ss.1, 17 S.A RP, 17 S.B, 17 S.C and 17 RP in D.D. 128, Lots 2128, 2129, 2136 RP, 2138 RP, 2148, 2153 S.A and 2388 S.A ss.2 (Part) in D.D. 129, and adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories</p> <p>新界元朗流浮山丈量約份第 128 約地段第 3 號 A 分段第 1 小分段、第 3 號 B 分段、第 4 號、第 5 號 A 分段餘段、第 9 號、第 10 號餘段、第 12 號 A 分段、第 12 號餘段、第 13 號、第 14 號 A 分段第 1 小分段 A 分段、第 14 號 A 分段第 1 小分段餘段、第 14 號 A 分段第 2 小分段、第 14 號 A 分段餘段、第 14 號 B 分段第 1 小分段 A 分段、第 14 號 B 分段第 1 小分段餘段、第 14 號 B 分段餘段、第 14 號餘段、第 15 號 A 分段第 1 小分段、第 15 號 A 分段餘段、第 15 號 B 分段、第 15 號餘段、第 16 號 A 分段、第 16 號 B 分段、第 16 號餘段、第 17 號 A 分段第 1 小分段、第 17 號 A 分段餘段、第 17 號 B 分段、第 17 號 C 分段及第 17 號餘段、第 129 約地段第 2128 號、第 2129 號、第 2136 號餘段、第 2138 號餘段、第 2148 號、第 2153 號 A 分段及第 2388 號 A 分段第 2 小分段(部分)和毗連政府土地</p>
Site area 地盤面積	About 約 20,455 sq. m 平方米 (Includes Government Land of about 包括政府土地 約 4,594 sq. m 平方米)
Plan 圖則	<p style="text-align: center;"><u>Section 12A application</u> 第 12A 條申請</p> <p style="text-align: center;">Draft Lau Fau Shan & Tsim Bei Tsui Outline Zoning Plan No. S/YL-LFS/10 流浮山及尖鼻咀分區計劃大綱草圖編號 S/YL-LFS/10</p> <hr/> <p style="text-align: center;"><u>Further information received</u> 接獲進一步資料</p> <p style="text-align: center;">Approved Lau Fau Shan & Tsim Bei Tsui Outline Zoning Plan No. S/YL-LFS/11 流浮山及尖鼻咀分區計劃大綱核准圖編號 S/YL-LFS/11</p>
Zoning 地帶	<p style="text-align: center;"><u>Section 12A application</u> 第 12A 條申請</p> <p style="text-align: center;">"Residential (Group C)" and "Residential (Group D)" 「住宅(丙類)」及「住宅(丁類)」</p> <hr/> <p style="text-align: center;"><u>Further information received</u> 接獲進一步資料</p> <p style="text-align: center;">"Residential (Group C)" and "Residential (Group D)" 「住宅(丙類)」及「住宅(丁類)」</p>

Proposed Amendment(s) 擬議修訂	To rezone the application site from "Residential (Group C)" and "Residential (Group D)" to "Residential (Group B)" 把申請地點由「住宅(丙類)」及「住宅(丁類)」地帶改劃為「住宅(乙類)」地帶		
Gross floor area and/or plot ratio 總樓面面積及/或地積比率		sq. m 平方米	Plot ratio 地積比率
	Domestic 住用	About 約 61,365	Not more than 不多於 3
	Non-domestic 非住用	About 約 1,166	About 約 0.057
No. of block 幢數	Domestic 住用	13	
	Non-domestic 非住用	-	
	Composite 綜合用途	1	
Building height/No. of storeys 建築物高度/層數	Domestic 住用	-	m 米
		Not more than 不多於 90	mPD 米(主水平基準上)
		3 - 25	Storey(s) 層
	Non-domestic 非住用	2	Exclude 不包括 Basement 地庫
		-	m 米
		-	mPD 米(主水平基準上)
	Composite 綜合用途	-	Storey(s) 層
		Not more than 不多於 90	m 米
		24	mPD 米(主水平基準上)
	Composite 綜合用途	2	Exclude 不包括 Basement 地庫
		-	Storey(s) 層
		-	mPD 米(主水平基準上)
Site coverage 上蓋面積	-		
No. of units 單位數目	1,246 Flats 住宅單位		
Open space 休憩用地	Private 私人	Not less than 不少於 3,489	sq. m 平方米
	Public 公眾	-	sq. m 平方米

No. of parking spaces and loading / unloading spaces 停車位及上落客貨車位數目	Total no. of vehicle spaces 停車位總數	595
	Private Car Parking Spaces 私家車車位	417
	Motorcycle Parking Spaces 電單車車位	13
	Bicycle Parking Spaces 單車停泊位	165
	Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位／停車處總數	7
	Heavy Goods Vehicle Spaces 重型貨車車位	5
	Lay-by 停車處	2

* 有關資料是為方便市民大眾參考而提供。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。

The information is provided for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

Submitted Plans, Drawings and Documents 提交的圖則、繪圖及文件

	<u>Chinese</u> 中文	<u>English</u> 英文
<u>Plans and Drawings 圖則及繪圖</u>		
Master layout plan(s)/Layout plan(s) 總綱發展藍圖／布局設計圖	<input type="checkbox"/>	<input type="checkbox"/>
Block plan(s) 樓宇位置圖	<input type="checkbox"/>	<input type="checkbox"/>
Floor plan(s) 樓宇平面圖	<input type="checkbox"/>	<input type="checkbox"/>
Sectional plan(s) 截視圖	<input type="checkbox"/>	<input type="checkbox"/>
Elevation(s) 立視圖	<input type="checkbox"/>	<input type="checkbox"/>
Photomontage(s) showing the proposed development 顯示擬議發展的合成照片	<input type="checkbox"/>	<input type="checkbox"/>
Master landscape plan(s)/Landscape plan(s) 園境設計總圖／園境設計圖	<input type="checkbox"/>	<input type="checkbox"/>
Others (please specify) 其他（請註明）	<input type="checkbox"/>	<input type="checkbox"/>
<u>Reports 報告書</u>		
Planning Statement / Justifications 規劃綱領 / 理據	<input type="checkbox"/>	<input type="checkbox"/>
Environmental assessment (noise, air and/or water pollutions) 環境評估（噪音、空氣及／或水的污染）	<input type="checkbox"/>	<input type="checkbox"/>
Traffic impact assessment (on vehicles) 就車輛的交通影響評估	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Traffic impact assessment (on pedestrians) 就行人的交通影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Visual impact assessment 視覺影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Landscape impact assessment 景觀影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Tree Survey 樹木調查	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical impact assessment 土力影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Drainage impact assessment 排水影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Sewerage impact assessment 排污影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Risk Assessment 風險評估	<input type="checkbox"/>	<input type="checkbox"/>
Others (please specify) 其他（請註明）	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Traffic Review Report 交通評審報告</u>		

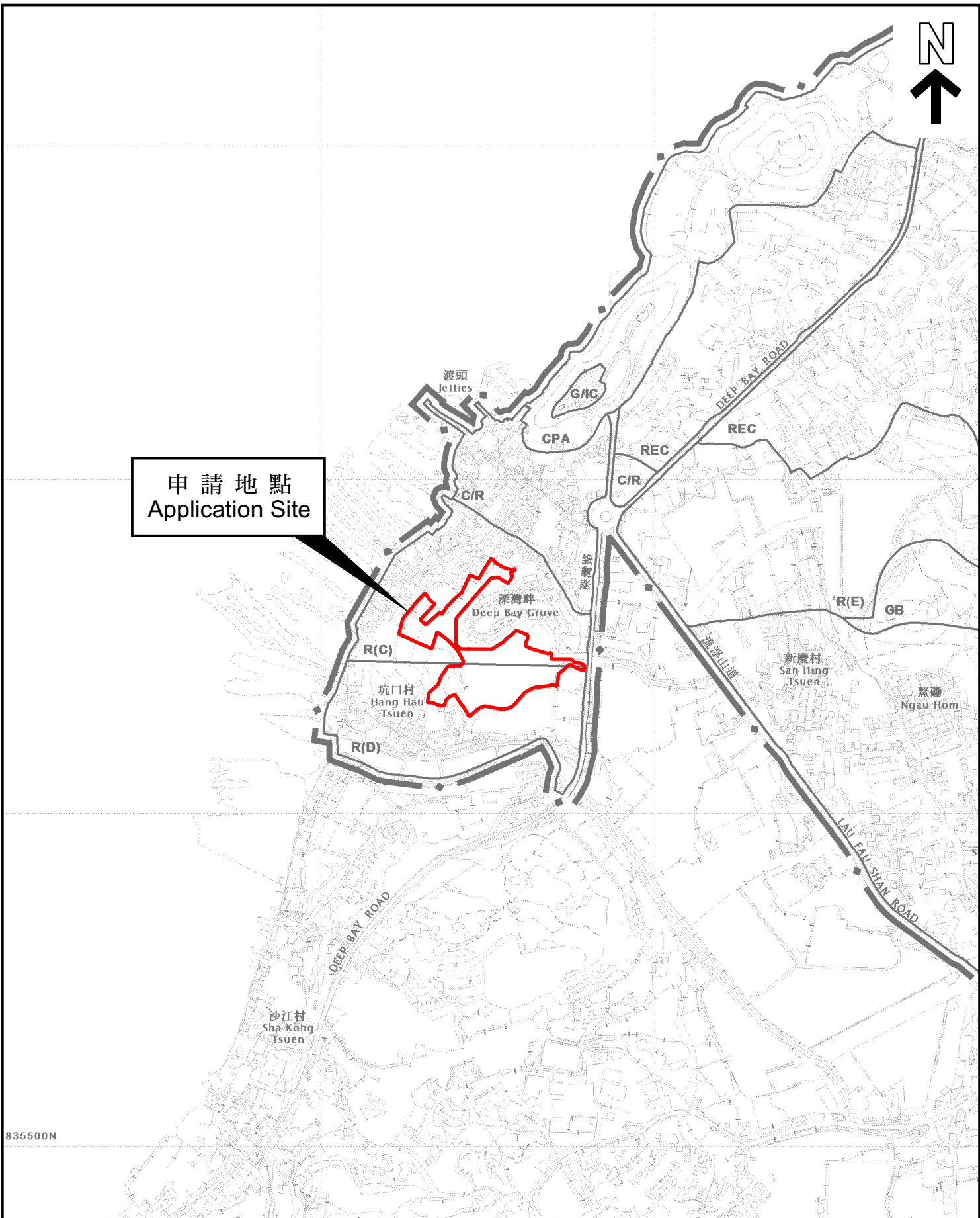
Note: May insert more than one 「✓」. 註：可在多於一個方格內加上「✓」號

Note: The information in the Gist of Application above is provided by the applicant for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

註：上述申請摘要的資料是由申請人提供以方便市民大眾參考。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。

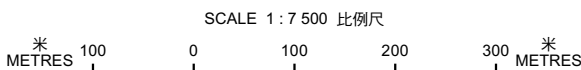


申請地點
Application Site



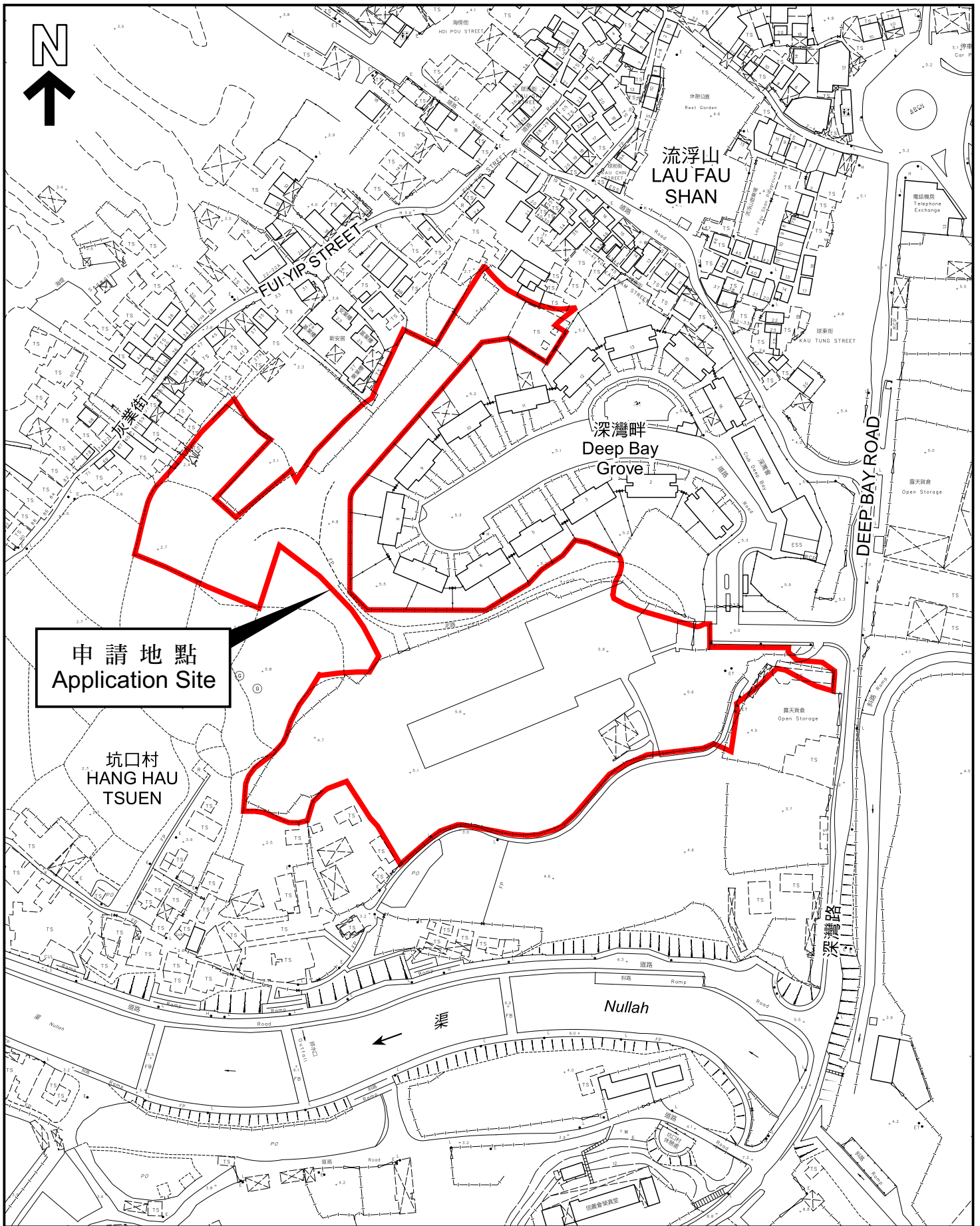
本摘要圖於2023年11月28日擬備，
所根據的資料為於2022年4月12日
核准的分區計劃大綱圖編號 S/YL-LFS/11
EXTRACT PLAN PREPARED ON 28.11.2023
BASED ON OUTLINE ZONING PLAN No.
S/YL-LFS/11 APPROVED ON 12.4.2022

位置圖 LOCATION PLAN



申請地點界線只作識別用
APPLICATION SITE BOUNDARY
FOR IDENTIFICATION PURPOSE ONLY

參考編號
REFERENCE No.
Y/YL-LFS/14



申請地點
Application Site

坑口村
HANG HAU
TSUEN

流浮山
LAU FAU
SHAN

深灣畔
Deep Bay
Grove

Nullah

DEEP BAY ROAD

本摘要圖於2023年11月28日擬備，
所根據的資料為測量圖編號
2-SW-21D
EXTRACT PLAN PREPARED ON 28.11.2023
BASED ON SURVEY SHEET No.
2-SW-21D

平面圖 SITE PLAN

申請地點界線只作識別用
APPLICATION SITE BOUNDARY
FOR IDENTIFICATION PURPOSE ONLY

參考編號
REFERENCE No.

Y/YL-LFS/14

申請編號 Application No. : Y/YL-LFS/14

備註 Remarks

申請人提交進一步資料，以回應運輸署的意見，並提交經修訂的就車輛的交通影響評估及交通評審報告。

The applicant submitted Further Information in response to comments of Transport Department, and submitted a revised Traffic Impact Assessment and Traffic Review Report.

有關資料是為方便市民大眾參考而提供。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。The information is provided for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

Your ref TPB/YL-LFS/14
Our ref 283826/01/MYNL/TKML/05179

ARUP

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22 November 2023

Dear Sir/Madam,

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories (Planning Application No. Y/YL-LFS/14)

Submission of Further Information

Thank you for agreeing to our deferral request for the captioned S12A Planning Application on 22 September 2023.

In response to Transport Department's request for a sensitivity analysis, we are pleased to submit a new Traffic Review Report (**Annex A**) for your kind consideration.

We sincerely seek favourable consideration from the Town Planning Board to approve the captioned S12A Planning Application.

Should you have any queries, please contact the undersigned or our Mr Mark Lim at 2268 3887.

Yours faithfully



Natalie LEUNG
Chief Urban Planner

Encl. - 70 copies of Traffic Review Report (Annex A)
cc - Client
- Tuen Mun and Yuen Long West District Planning Office - Mr WONG Pok Shaan, Keith (kpswong@pland.gov.hk)

Reference number CHK50605510/PTC/L2301861/sys

APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D. 128 AND D.D. 129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES (PLANNING APPLICATION NO. Y/YL-LFS/14)

TRAFFIC REVIEW



1. INTRODUCTION

1.1 Background

- 1.1.1 The Application site is located at various Lots in D.D.128 and D.D. 129, and adjoining government land, Lau Fau Shan as indicated in **Drawing No. 1.1**. A section 12A application (Planning Application No. Y/YL-LFS/14) has been submitted to the Government to rezone the Application site for the proposed residential development and Social Welfare Facility (Child Care Centre).
- 1.1.2 The tentative completion year of the proposed development is 2030. A traffic impact assessment (TIA) report for the design year of 2033 was submitted to the Government in support of the application. During the application, a proposed temporary transitional housing, being located at the subject rezoning site, was approved by Town Planning Board in 2022 (Application No. A/YL-LFS/425). In this regard, a sensitivity test for another assessment year has been requested by Transport Department (TD) to assess in case there is a later development completion year.
- 1.1.3 In response to TD's request and taking into account of the planned operation period of transitional housing, a sensitivity test for the design year of 2036 was conducted by assuming that the completion year of the proposed development to be in year 2033. This traffic review is to review the traffic impact to the surrounding road network if the completion year of the proposed development is assumed to be in year 2033.

2. TRAFFIC FORECSATING

2.1 Design Year for Sensitivity Test

- 2.1.1 By assuming that the completion year of the proposed development to be in year 2033, the design year of 2036, three years upon operation of the proposed development, has been adopted for sensitivity test.

2.2 Identified Road Junction and Links

- 2.2.1 Same as previously submitted TIA report, a total of five junctions/road links, as listed in **Table 2.1**, have been identified for assessment purposes in accordance with the major ingress/egress routes. The locations of the identified junctions and road links are indicated in **Drawing 2.1**.

Table 2.1 Identified Key Junctions

Ref. ⁽¹⁾	Key Junction/Road Links	Type	Drawing No.
Junction			
J1	Lau Fau Shan Road / Deep Bay Road	Roundabout	2.2
J2	Tin Wah Road/Lau Fau Shan Road/Ping Ha Ro	Priority	2.3
J3	Tin Wah Road/Tin Ying Road	Signal	2.4
Road Link			
L1	Deep Bay Road (section between Lau Fau Shan Roundabout and the subject site)	Single Track Access Road	2.1
L2	Lau Fau Shan Road	Single-2	2.1

Remark: (1) Refer to **Drawing 2.1** for locations.

2.3 Forecasting Assumptions

2.3.1 According to the Legislative Council Paper No. CB(1)230/19-20(03) “Funding Applications for Hung Shui Kiu/Ha Tsuen New Development Area”, the Hung Shui Kiu/Ha Tsuen New Development Area (HSK/HT NDA) will be developed in phases. Phase 1 and Phase 2 developments are scheduled to be completed by 2032 whilst the Phase 3 development is scheduled to be completed in 2037/2038.

2.3.2 Phase 1 and Phase 2 developments of HSK/HT NDA would be completed before the design year 2036 and has been considered in this traffic forecast. Nevertheless, taking into consideration that the Phases 1 & 2 developments are not in close proximity to the identified study area, their traffic impact would be limited on the identified study area. Therefore, same as the previously submitted TIA report, the 2036 reference traffic flows were derived by adopting appropriate growth rates onto the observed traffic flows.

2.3.3 To derive the 2036 reference traffic flows for sensitivity test, the year 2033 reference flows in the previously submitted TIA report are adopted as basis.

Traffic Growth Rate from 2033 to 2036

2.3.4 For the long-term traffic growth rate from Year 2033 up to 2036, reference has been made to the Hong Kong Resident Population extracted from “Hong Kong Population Projections 2022-2046” published by Census and Statistics Department. The average annual growth from year 2033 to 2036 is illustrated in **Table 2.2**.

Table 2.2 Hong Kong Resident Population for Years 2033-2036

	Year 2033 (ppl)	Year 2036 (ppl)	Growth Rate per annum (2033/2036)
Hong Kong Population	7,903,600	8,022,400	+0.50%

2.3.5 As indicated in **Table 2.2**, the average growth rate of Hong Kong Resident Population is +0.5% p.a. from year 2033 to 2036, which was adopted to project the year 2033 traffic flows up to year 2036 traffic flows.

Adjacent Planned/Committed Developments

2.3.6 The planned/committed developments in the vicinity of the development that are expected to be completed by year 2036 will be included in the traffic forecast. The details of these committed developments and the estimated traffic flows are listed in **Table 2.3** and **Table 2.4** respectively. The locations of planned/committed developments in the vicinity are indicated in **Drawing 2.5**.

Table 2.3 Committed/Approved Developments

Ref. (1)	Committed/Approved Developments	Parameter
1	Proposed Public Housing Development nearby Tin Wah Road	4390 flats with 14580m ² retail GFA, 2906m ² GIC GFA and proposed ancillary facilities/carpark
2	Proposed Residential Development at Tin Shui Wai Area 112	2031 flats with 8403m ² retail GFA
3	Proposed Residential Development at Tin Shui Wai Area 115	1727 flats with 1858m ² retail GFA
4	Proposed Residential Development at Tin Shui Wai Area 33	1938 flats with 205m ² retail GFA

Remark: (1) Locations refer to **Drawing No. 2.5**.

Table 2.4 Estimated Trips for other Committed/Approved Developments

Ref. (1)	Committed/Approved Developments	Trip Generations (pcu/hr)			
		AM Peak		PM Peak	
		Gen	Attr	Gen	Attr
1	Proposed Public Housing Development nearby Tin Wah Road ⁽²⁾	400	287	232	341
2	Proposed Residential Development at Tin Shui Wai Area 112 ⁽³⁾	176	124	109	119
3	Proposed Residential Development at Tin Shui Wai Area 115	128	78	55	71
4	Proposed Residential Development at Tin Shui Wai Area 33	139	82	56	73

Remarks: (1) Locations refer to **Drawing No. 2.5**.

(2) Trip Generations are based on its TIA report under RNTPC Paper No.4/21.

(3) Included the trips of Public Vehicle Park (90 car parking, 45 coach parking & 9 motorcycle parking).

2.4 Development Traffic Generations

2.4.1 The subject site is proposed to be developed into a residential development of 1,246 unit with average flat size of about 50m² with a 100-place child care center. The traffic generated from the proposed development as derived from the previously submitted TIA would be included for traffic forecasting. The estimated trip generation of the proposed development extracted from TIA report is listed in **Table 2.5**.

Table 2.5 Estimated Trip Generation of Proposed Development

		AM Peak		PM Peak	
		Gen	Attr	Gen	Attr
Residential	Trip Rates (pcu/hr/flat) ⁽¹⁾	0.0718	0.0425	0.0286	0.037
	No. of Unit	1246			
	Proposed Development (pcu/hr)	89	53	36	46
G/IC	Child Care Centre (pcu/hr) ⁽²⁾	20	20	20	20
Total		109	73	56	66

Remarks: (1) Trip rates extracted from TPDM mean trip rates for Private Housing R(A) Average Flat Size of 60sqm.

(2) Nominal Trips.

2.5 Year 2036 Traffic Flows

- 2.5.1 According to the above, the anticipated 2036 peak hour reference traffic flows are obtained by applying the adopted growth rates to the 2033 traffic flows and superimposing the estimated trip generations of the planned developments. The 2036 reference peak-hour traffic flows are shown in **Drawing 2.6**.
- 2.5.2 The estimated development traffic trips as derived in **Table 2.5** are superimposed onto the year 2036 reference traffic flows, to produce the anticipated year 2036 peak hour design traffic flows. The year 2036 design peak-hour traffic flows are shown in **Drawings 2.7**.

3. TRAFFIC IMPACT ASSESSMENT FOR SENSITIVITY TEST

3.1 Junction Assessment

3.1.1 To investigate the traffic impact of the proposed development on the surrounding road network at the design year 2036, operational performance of the identified key local junctions and critical links have been assessed for both reference and design scenarios.

Government’s Planned Junction Improvement Work at Tin Wah Road/Lau Fau Shan Road/Ping Ha Road (J2) and Road Widening Works at Tin Wah Road

3.1.2 The Government gazetted on 18 November 2022 the road works for PWP Item No. B847CL Site Formation and Infrastructure works for Public Housing Development at Tin Wah Road, Lau Fau Shan. Under the Gazette Plan, the existing priority junction at Tin Wan Road/Lau Fau Shan Road/Ping Ha Road (J2) will be converted to a roundabout, and a section of Tin Wah Road between Tin Ying Road and Lau Fau Shan Road will be widened to a dual 2-lane road. The possible planned layout for junction and road improvement works are shown in **Drawing No. 3.1** and **Drawing No. 3.2** respectively. The works are scheduled to commence in March 2024 and will take about 46 months to complete. The planned schematic improvement layouts were adopted for assessment.

Junction Operation Performance

3.1.3 Based on the existing/planned layouts, the junction assessment results for the 2036 reference and design scenarios are summarized in **Table 3.1**. The junction calculation sheets are attached in **Annex A**.

Table 3.1 Year 2036 Junction Operational Performance

Ref. (1)	Junction	Type	RC/RFC ⁽²⁾			
			Reference Case		Design Case	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Lau Fau Shan Road / Deep Bay Road	Roundabout	0.40	0.34	0.49	0.46
J2	Planned Junction of Tin Wah Road/Lau Fau Shan Road/Ping Ha Road ⁽²⁾	Roundabout ⁽²⁾	0.72	0.81	0.76	0.84
J3	Planned Junction of Tin Wah Road/Tin Ying Road ⁽³⁾	Signal	15%	25%	11%	21%

Remarks:(1) Refer to **Drawing 2.1** for junction locations.

(2) Based on the planned junction improvement works on **Drawing No. 3.1**.

(3) Based on the planned road improvement works on **Drawing No. 3.2**.

(4) RC = reserved capacity for signal junction, RFC = ratio-of-flow to capacity for roundabout junction.

3.1.4 The assessment results in **Table 3.1** revealed that among the identified key junctions, the planned junction Tin Wah Road/Ting Ying Road (J3) would be operated with over-capacity under both reference and design cases.

3.2 Road Link Assessment

3.2.1 Apart from junction capacity assessment, the road link operation performance was also undertaken for both reference and design scenarios.

PWP Item No. 6878th (Part)- Government’s Planned Upgrading Works at Deep Bay Road

3.2.2 The Government gazetted on 10 December 2021 the widening works at a section of Deep Bay between Lau Fau Shan Roundabout and Nim Wan Road from a single track access road to a single two-lane carriageway to serve the traffic demand in the area. Under the Gazette Plan, a section of Deep Bay Road abutting the subject site will be widened to around 7m with footpath as illustrated in **Drawing No. 3.3**. The road widening works is anticipated to be completed in phases by around 2029 according to the LegCo Paper (No. CB(1)177/2022(05)). This road layout was adopted for assessment.

Link Operational Performance

3.2.3 Based on the existing/planned layouts with traffic forecast, the results of the assessment are summarized in **Table 3.2**.

Table 3.2 Year 2036 Road Link Operational Performance

Ref. (1)	Road Link	Capacity (veh/hr)	Reference Case				Design Case			
			Two-way Traffic Flows (veh/hr)		Volume to Capacity Ratio (V/C)		Two-way Traffic Flows (veh/hr)		Volume to Capacity Ratio (V/C)	
			AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
L1	Upgraded Deep Bay Road ⁽²⁾	1400 ⁽³⁾	205	320	0.15	0.23	375	435	0.27	0.31
L2	Lau Fau Shan Road	1400 ⁽³⁾	390	525	0.28	0.38	565	640	0.40	0.46

Remarks:(1) Refer to **Drawing 2.1** for locations.

(2) Based on the planned road layout as shown in **Drawing No. 3.3**.

(3) According to TPDM Volume 2 Section.2.4.1, road capacity of single 2-lane carriageway with the road width of 6.75m, the peak hourly flow of 1400 veh/hr for both directions under district distributor.

3.2.4 The assessment result in **Table 3.2** revealed that all the identified key road links will operate with ample capacity under both reference and design cases.

3.3 Improvement Proposal

Proposed Junction Improvement at Tin Wah Road/Tin Ying Road (J3)

3.3.1 In the previously submitted TIA report, a local junction improvement measure has been proposed for the planned junction Tin Wah Road/Tin Ying Road (J3) to resolve the foreseeable traffic problems. It is proposed to provide an additional right-turn traffic lane at the approach arm of Tin Wah Road eastbound, increase the number of straight-ahead traffic lane at Tin Ying Road southbound from 2 to 3, and convert a shared traffic lane (straight ahead & right-turn) into a right-turn traffic lane at Tin Yin Road northbound. The detail of junction improvement scheme is shown in **Drawing No. 3.4**.

3.3.2 The operational performance of the junction of Tin Wah Road/Tin Ying Road (J3) was re-assessed based on the proposed improvement scheme. The result is summarized in **Table 3.3**.

Table 3.3 Year 2036 Junction Operational Performance with Proposed Improvement Scheme

Ref.	Junction	Type	Reserve Capacity	
			AM Peak	PM Peak
J3	Tin Wah Road/Tin Ying Road ⁽¹⁾	Signal	17%	25%

Remarks: (1) Based on the proposed junction improvement works on **Drawing 3.4**.

- 3.3.3 The junction assessment results shown in **Table 3.3** indicates that the planned junction Tin Wah Road/Tin Ying Road (J3) could be alleviated with the proposed improvement measure at the design year 2036.

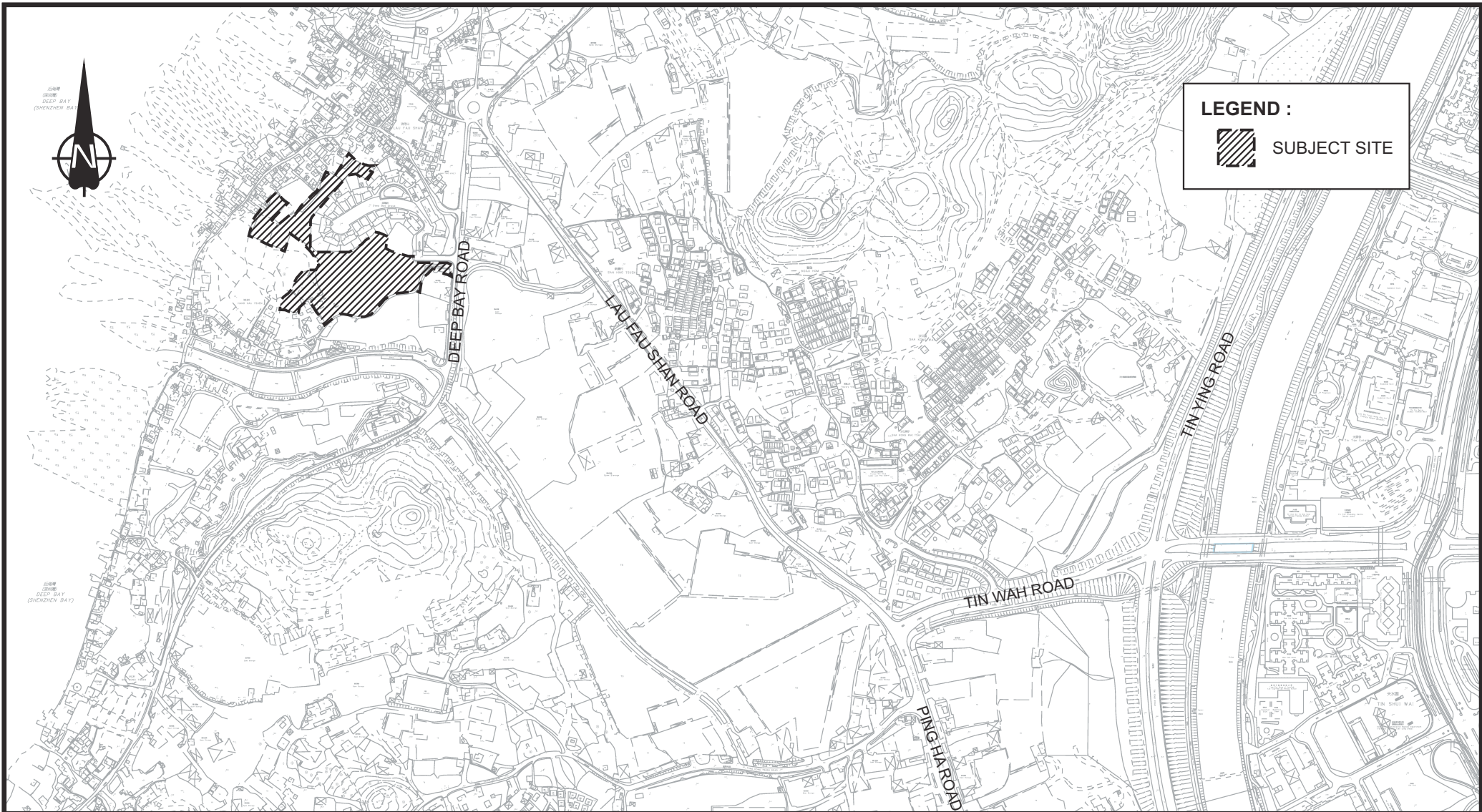
4. CONCLUSION

4.1 Summary

- 4.1.1 The Application site is located at various Lots in D.D.128 and D.D. 129, and adjoining government land, Lau Fau Shan as indicated in **Drawing No. 1.1**. A section 12A application (Planning Application No. Y/YL-LFS/14) has been submitted to the Government to rezone the Application site for the proposed residential development and Social Welfare Facility (Child Care Centre).
- 4.1.2 The tentative completion year of the proposed development is 2030. A traffic impact assessment (TIA) report for the design year of 2033 was submitted to the Government in support of the application. During the application, a proposed temporary transitional housing, being located at the subject rezoning site, was approved by Town Planning Board in 2022 (Application No. A/YL-LFS/425). In this regard, a sensitivity test for another assessment year has been requested by Transport Department (TD) to assess in case there is a later development completion year. In response to TD's request and taking into account of the planned operation period of transitional housing, a sensitivity test for the design year of 2036 was conducted by assuming that the completion year of the proposed development to be in year 2033.
- 4.1.3 The Government gazetted on 10 December 2021 the widening works at a section of Deep Bay between Lau Fau Shan Roundabout and Nim Wan Road from a single track access road to a single two-lane carriageway to serve the traffic demand in the area. Under the Gazette Plan, a section of Deep Bay Road abutting the subject site will be widened to around 7m with footpath as illustrated in **Drawing No. 3.3**. The road widening works is anticipated to be completed in phases by around 2029 according to the LegCo Paper. This planned road layout was adopted for assessment.
- 4.1.4 Peak-hour traffic forecast for year 2036 were generated based on the same methodology in the previously submitted TIA report. Operational performance of the identified local junctions and road links have been assessed based on the anticipated year 2036 traffic flows and the existing/planned layouts. The assessment results revealed that all identified key junctions and road links will operate with ample capacity, except the planned junction Tin Wah Road/Tin Ying Road (J3).
- 4.1.5 In the previously submitted TIA report, a local junction improvement measure has been proposed for the planned junction Tin Wah Road/Tin Ying Road (J3) to resolve the foreseeable traffic problems. According to the junction assessment result, the problematic junction Tin Wah Road/Tin Ying Road (J3) could still be alleviated upon completion of the proposed improvement measure at the design year of 2036.


4.2 Conclusion

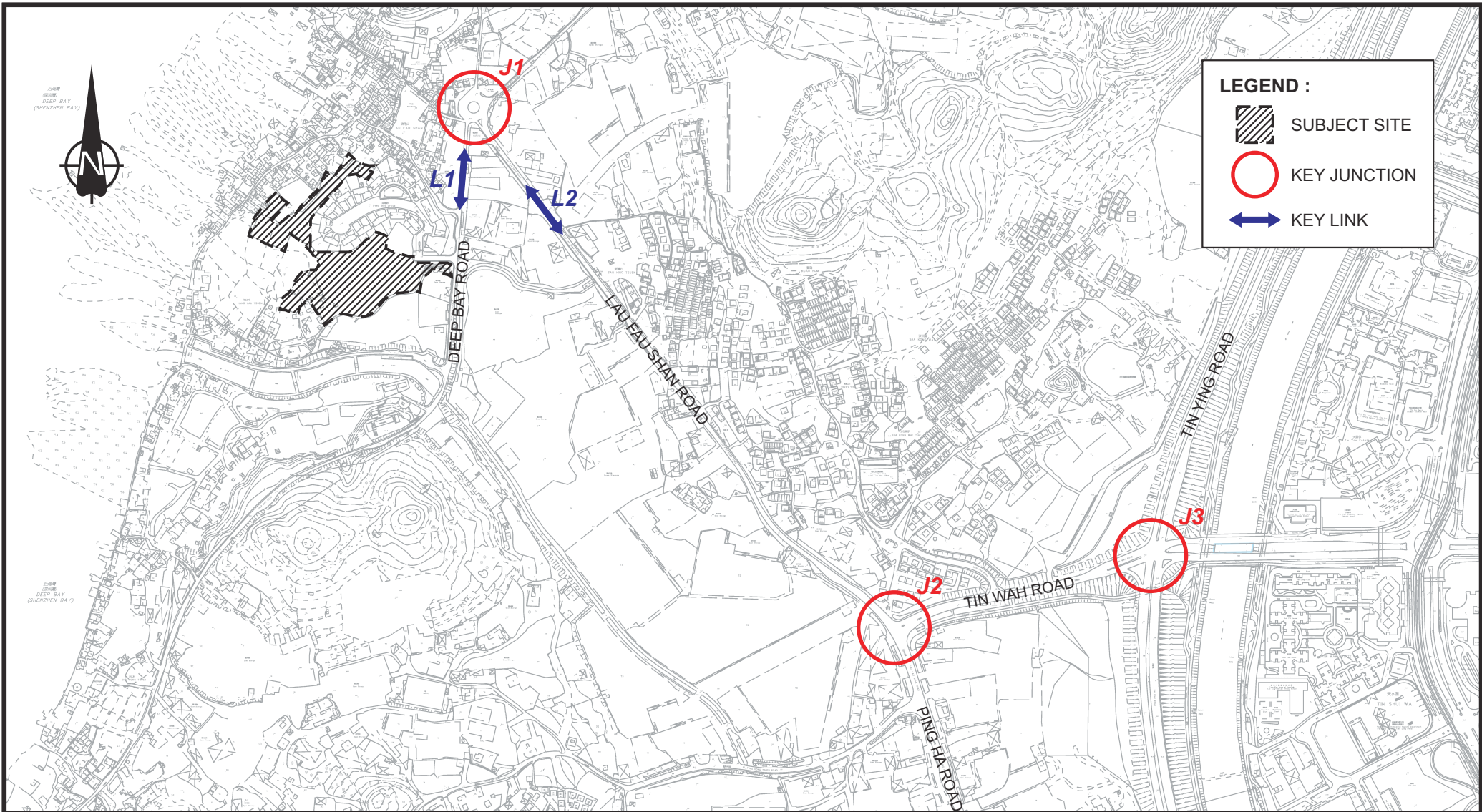
- 4.2.1 In conclusion, the result of the sensitivity test has demonstrated that even if the project completion year is postponed to 2033, the development traffic generation by the subject site can still be absorbed by the nearby road network and would not cause any adverse traffic impact (with the proposed local junction improvement).






LEGEND :

 SUBJECT SITE

-	-	-	-	-	-	-	-	-	-	-	-
Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
Project Title				Drawing Title				<p style="text-align: center;">SITE LOCATION</p> 			
<p>APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES</p>				<p>Designed FSC Checked PTC Scale NTS Date NOV 2023 Drawing No. 1.1 Rev. -</p>							

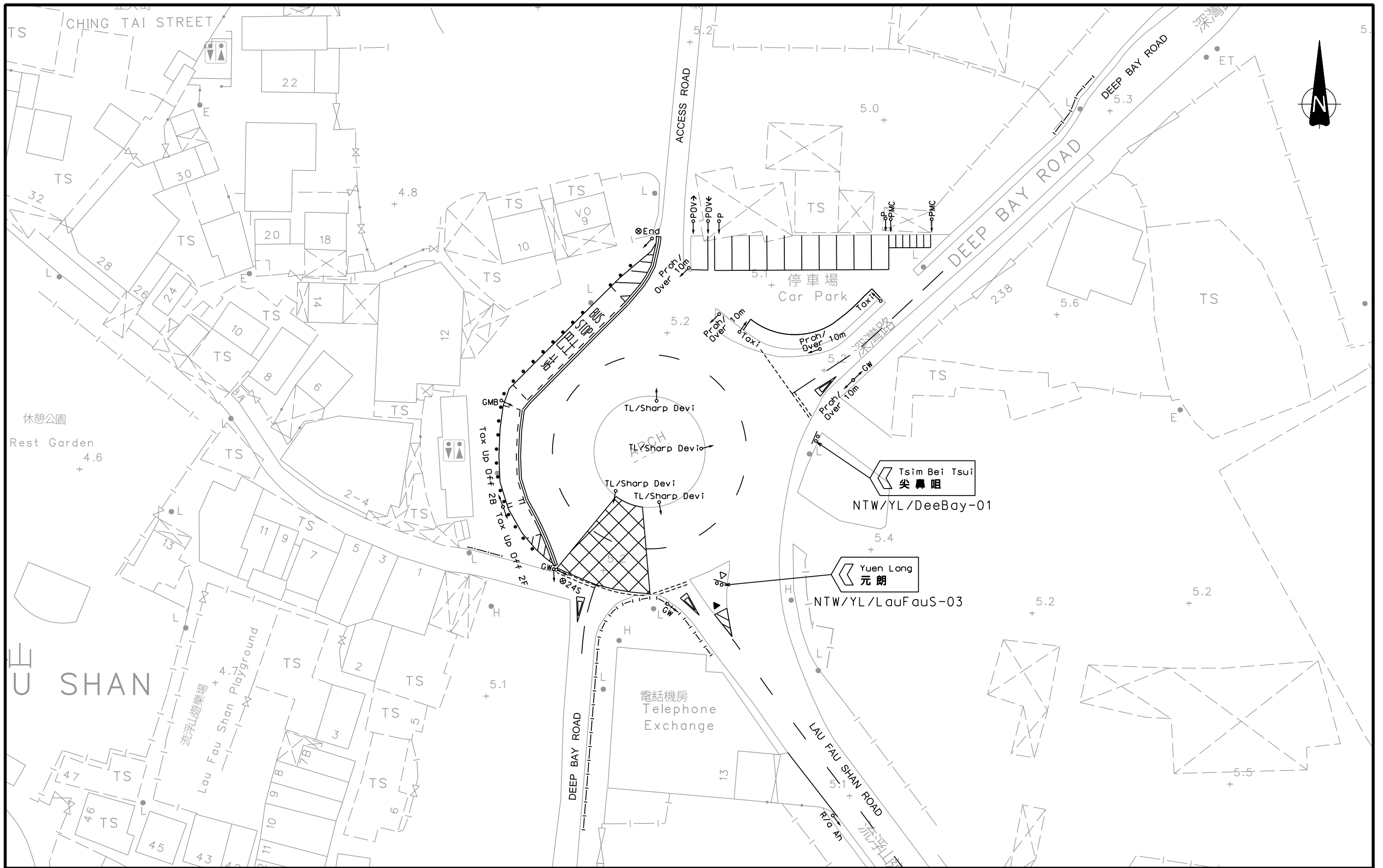


LEGEND :

-  SUBJECT SITE
-  KEY JUNCTION
-  KEY LINK

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
Project Title				Drawing Title							
APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES				IDENTIFIED KEY JUNCTIONS							
				Designed	FSC	Checked	PTC	Scale	NTS	Date	NOV 2023



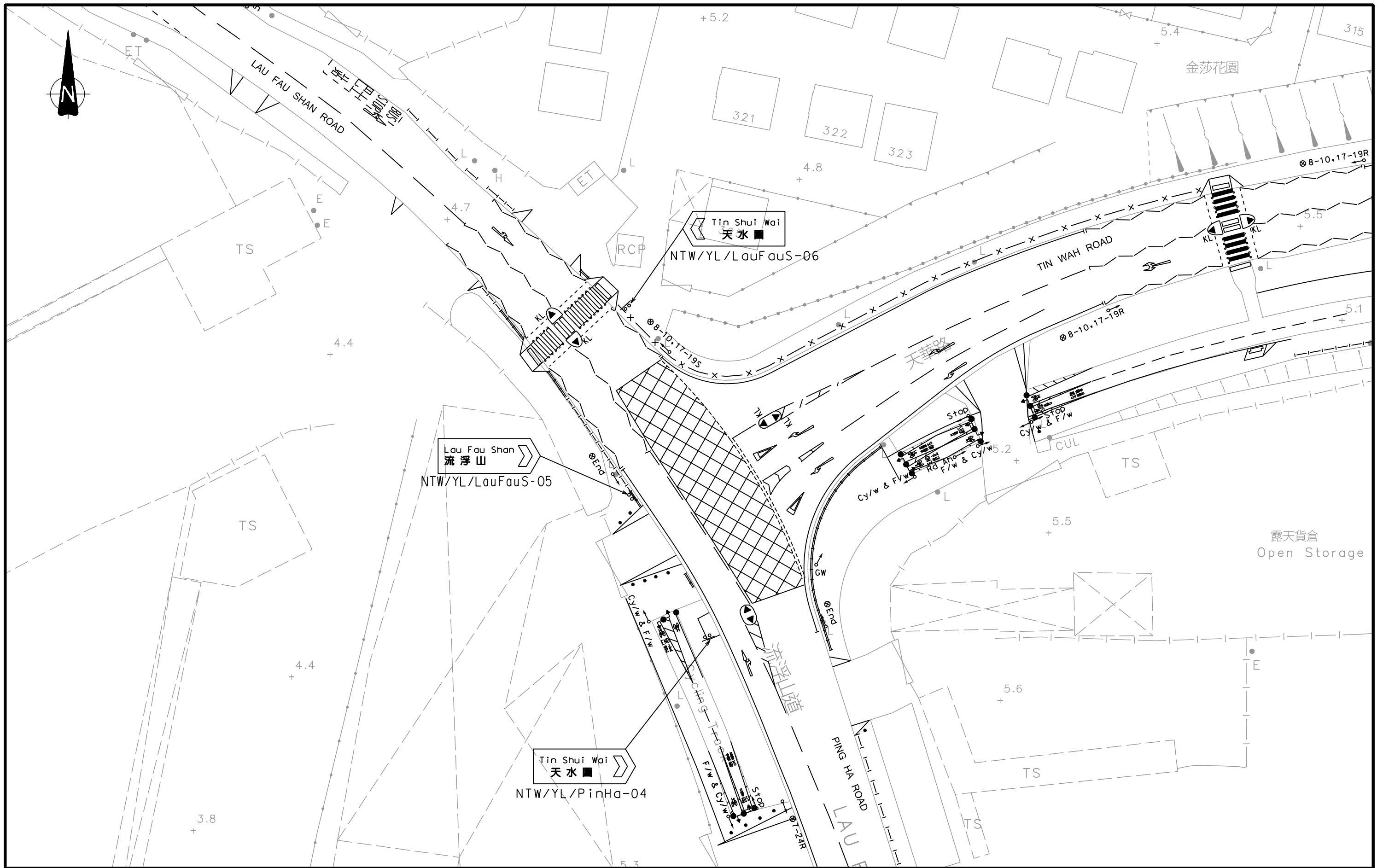


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Rev.	Description	Checked	Date

Project Title
APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title EXISTING JUNCTION LAYOUT OF LAU FAU SHAN ROAD / DEEP BAY ROAD (J1)							
Designed	FSC	Checked	PTC	Scale	1:500(A3)	Date	NOV 2023
						Drawing No.	2.2
						Rev.	-





Rev.	Description	Checked	Date
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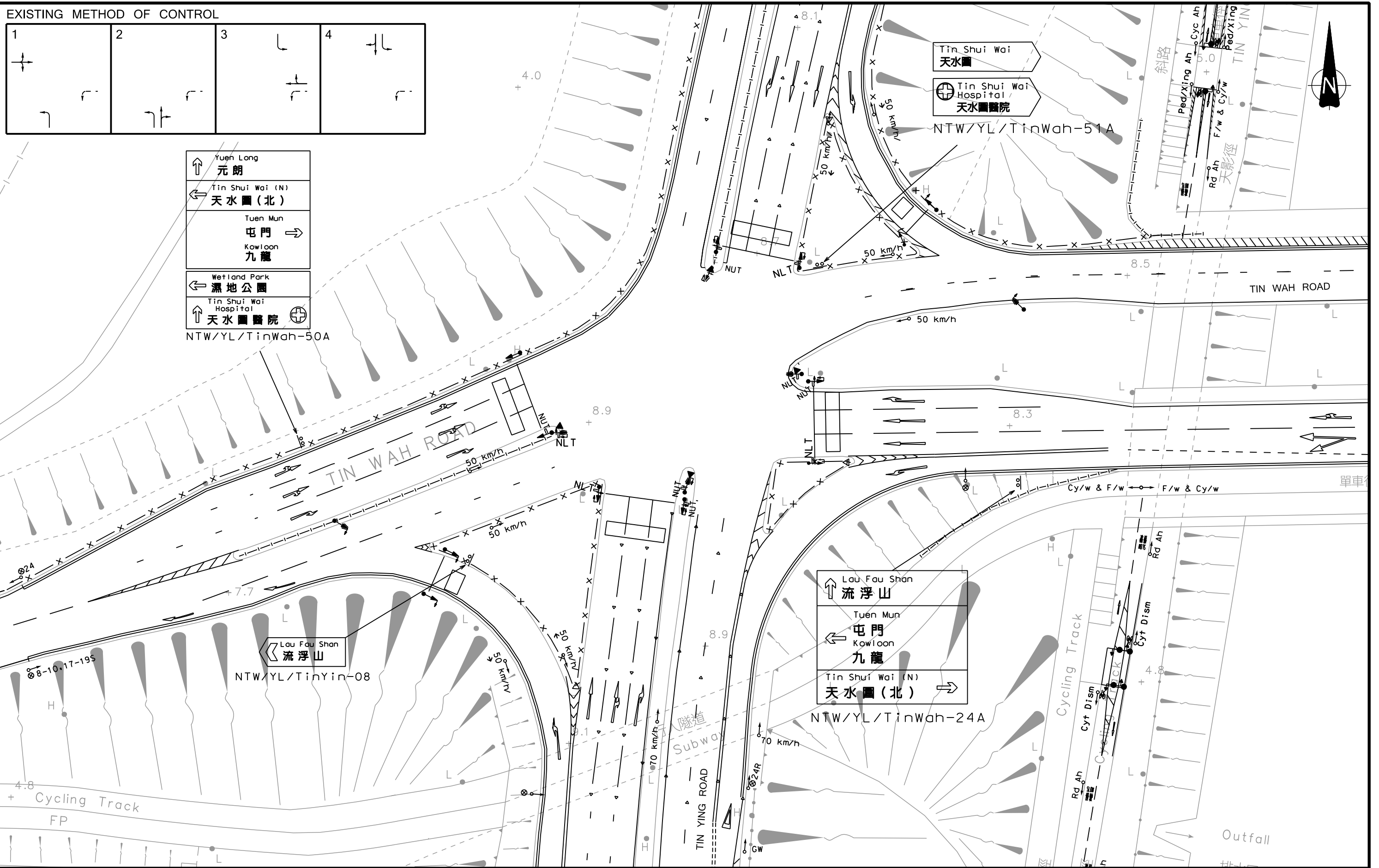
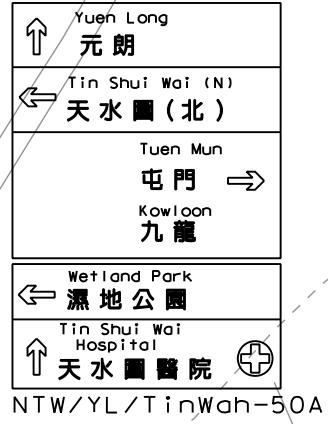
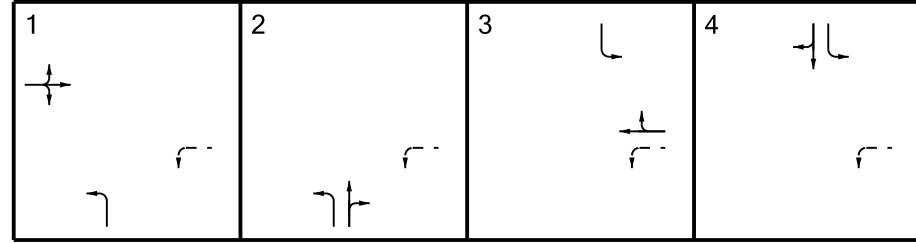
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 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
EXISTING JUNCTION LAYOUT OF TIN WAH ROAD / LAU FAU SHAN ROAD / PING HA ROAD (J2)

Designed: FSC Checked: PTC Scale: 1:500(A3) Date: NOV 2023 Drawing No. **2.3** Rev. -



EXISTING METHOD OF CONTROL



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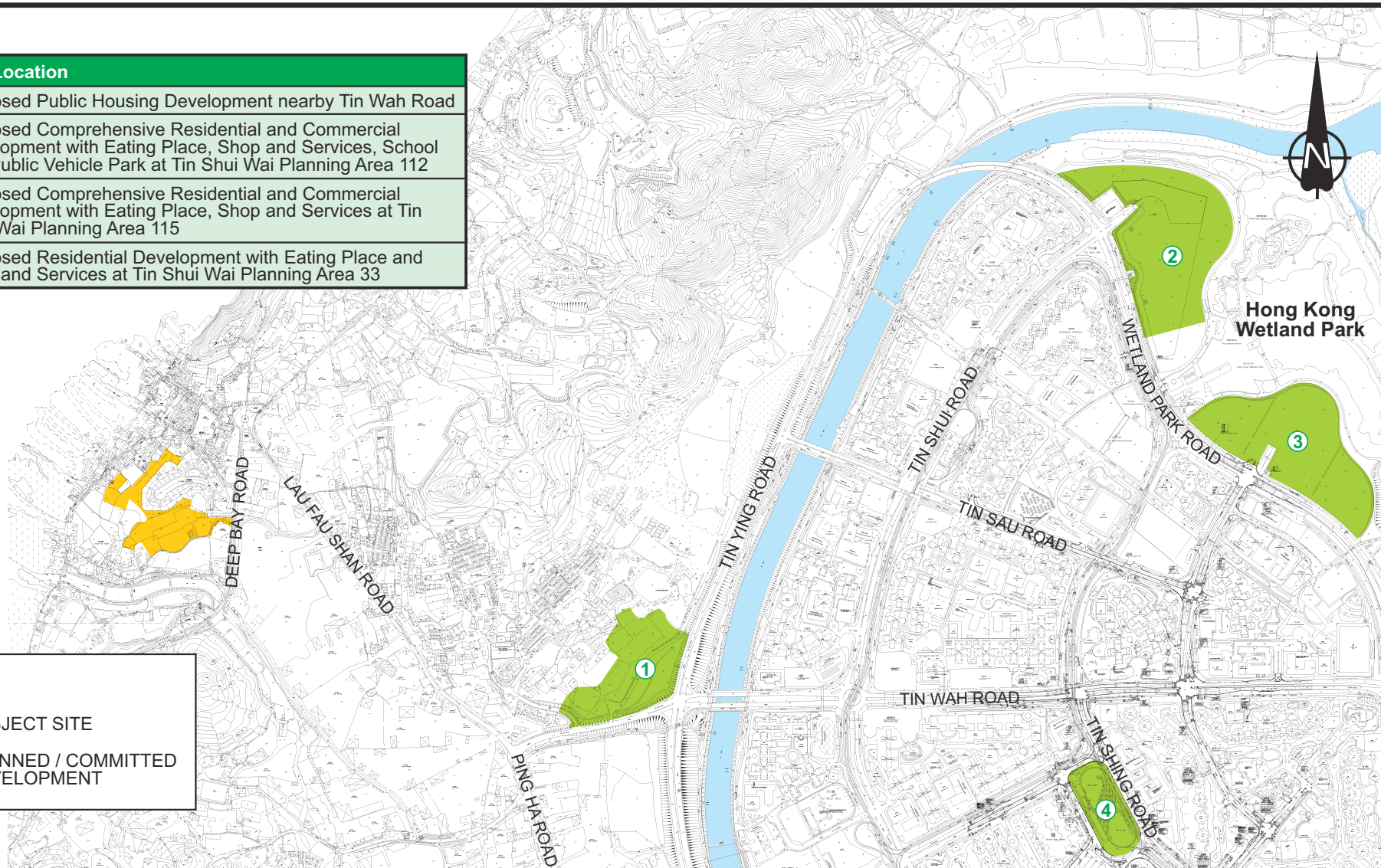
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Drawing Title
EXISTING JUNCTION LAYOUT OF TIN WAH ROAD / TIN YING ROAD (J3)

Designed FSC Checked PTC Scale 1:500(A3) Date NOV 2023 Drawing No. **2.4** Rev. -



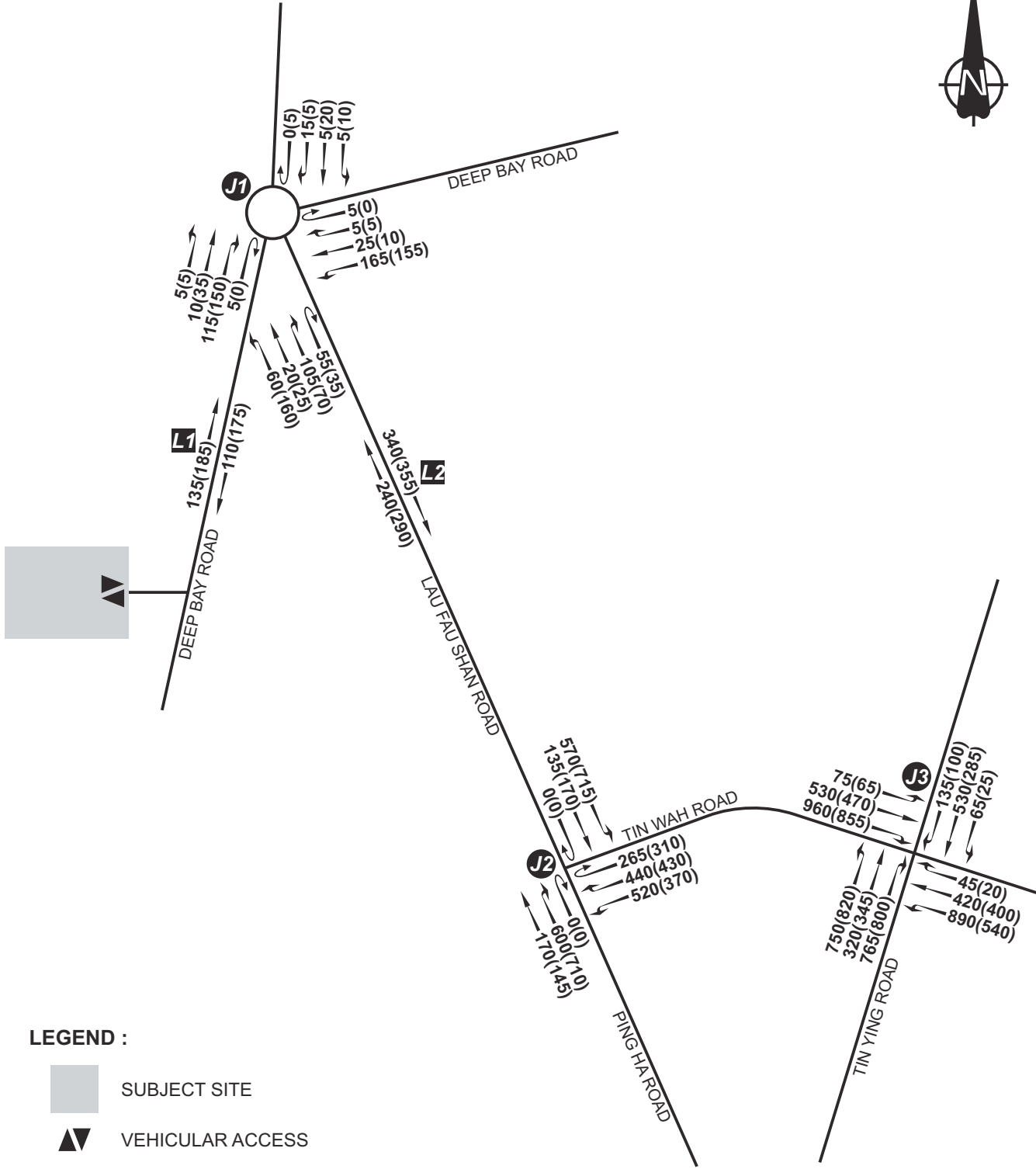
Ref. No.	Site Location
①	Proposed Public Housing Development nearby Tin Wah Road
②	Proposed Comprehensive Residential and Commercial Development with Eating Place, Shop and Services, School and Public Vehicle Park at Tin Shui Wai Planning Area 112
③	Proposed Comprehensive Residential and Commercial Development with Eating Place, Shop and Services at Tin Shui Wai Planning Area 115
④	Proposed Residential Development with Eating Place and Shop and Services at Tin Shui Wai Planning Area 33



LEGEND :

	SUBJECT SITE
	PLANNED / COMMITTED DEVELOPMENT

Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
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Project Title				Drawing Title							
APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES				<p align="center">PLANNED / COMMITTED DEVELOPMENTS</p>							
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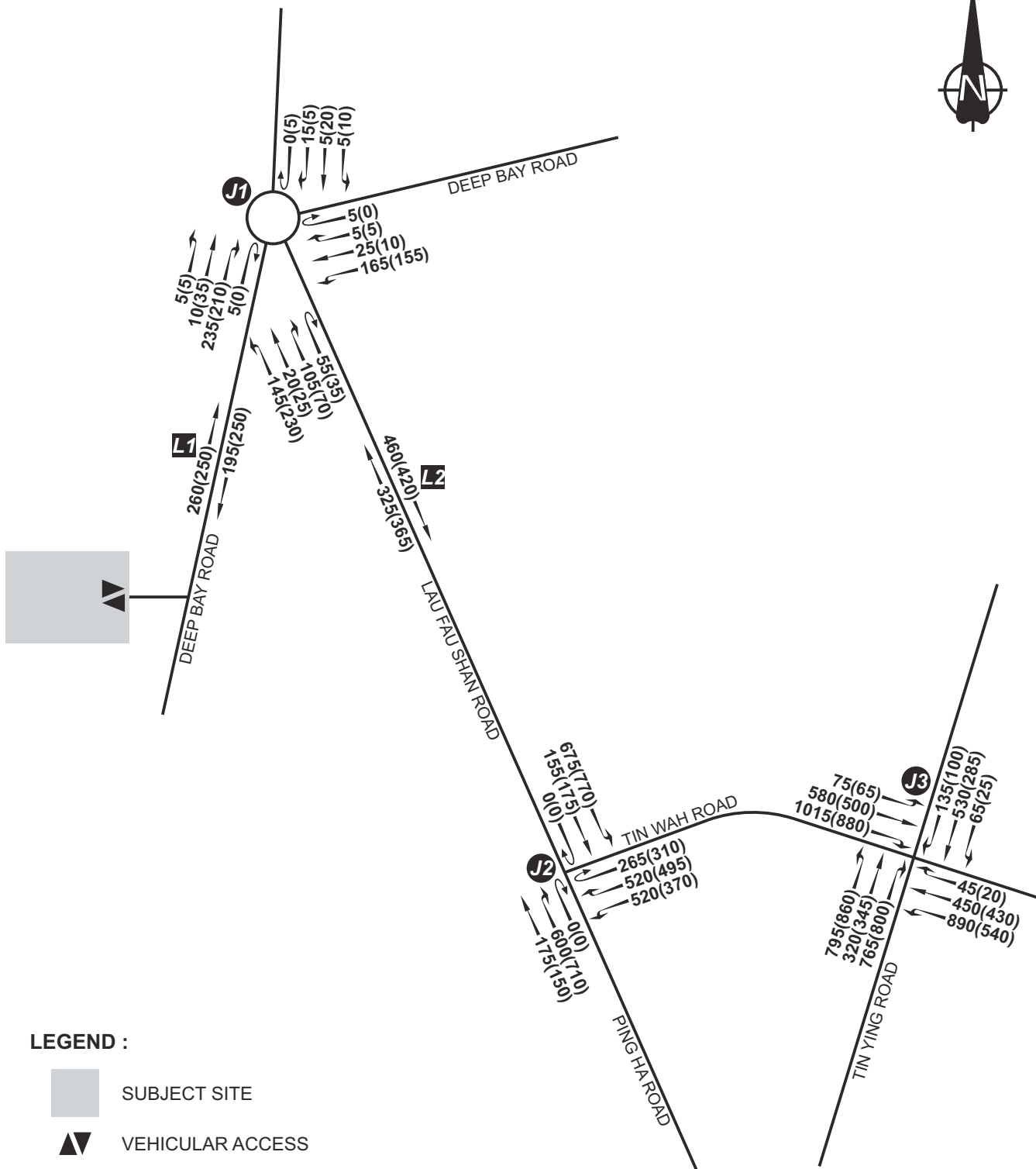
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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title
 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
2036 REFERENCE TRAFFIC FLOWS



Designed	FSC	Checked	PTC	Scale	NTS	Date	NOV 2023	Drawing No.	2.6	Rev.	-
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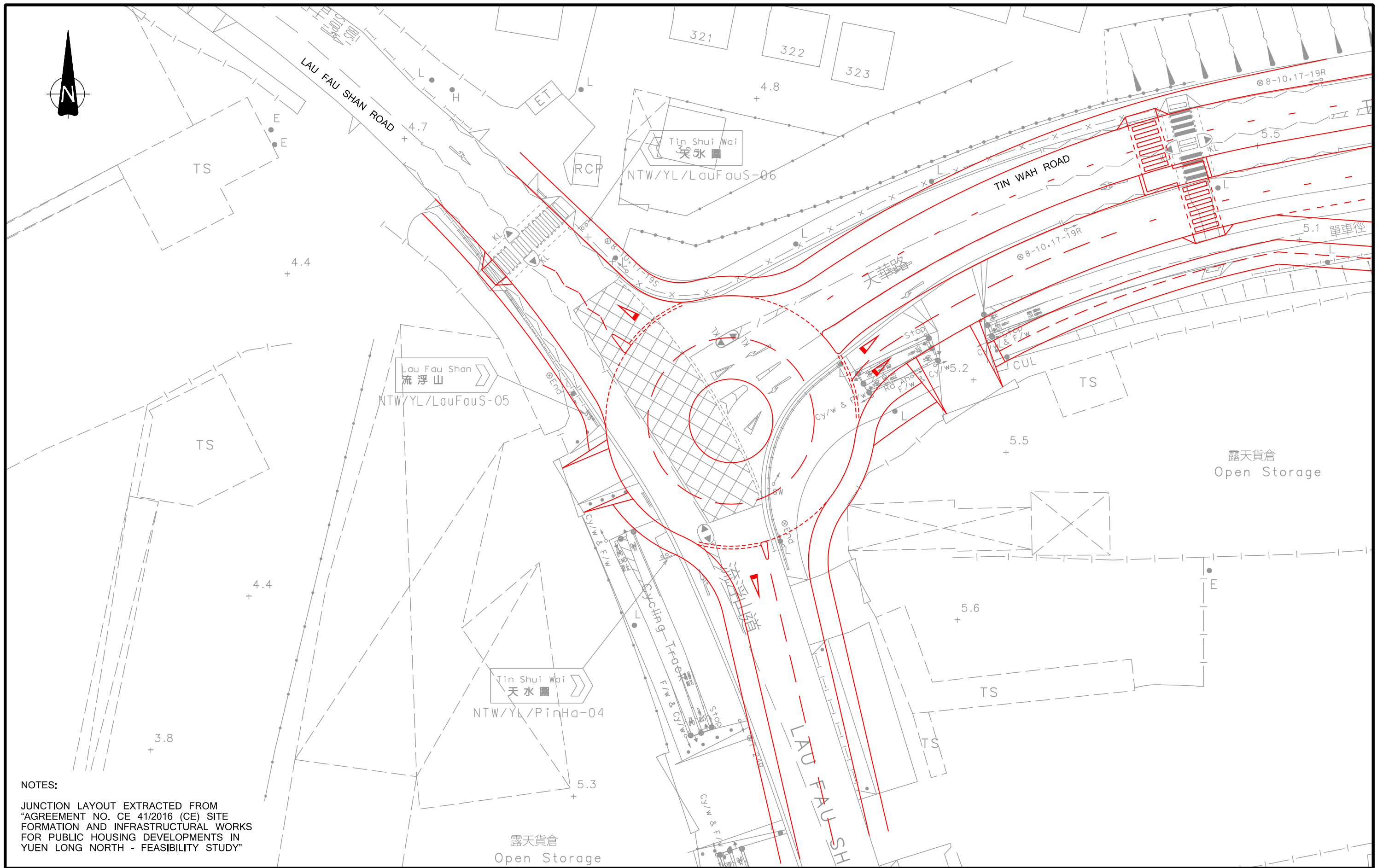
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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

Project Title
 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
2036 DESIGN TRAFFIC FLOWS



Designed	FSC	Checked	PTC	Scale	NTS	Date	NOV 2023	Drawing No.	2.7	Rev.	-
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NOTES:
 JUNCTION LAYOUT EXTRACTED FROM
 "AGREEMENT NO. CE 41/2016 (CE) SITE
 FORMATION AND INFRASTRUCTURAL WORKS
 FOR PUBLIC HOUSING DEVELOPMENTS IN
 YUEN LONG NORTH - FEASIBILITY STUDY"

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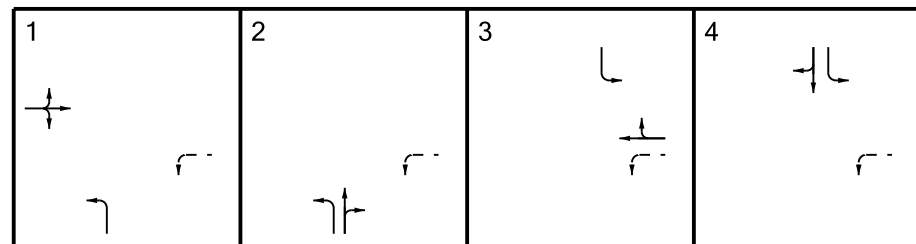
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APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
PLANNED JUNCTION IMPROVEMENT WORK AT TIN WAH ROAD / LAU FAU SHAN ROAD / PING HA ROAD (J2) AND ROAD WIDENING WORKS AT TIN WAH ROAD

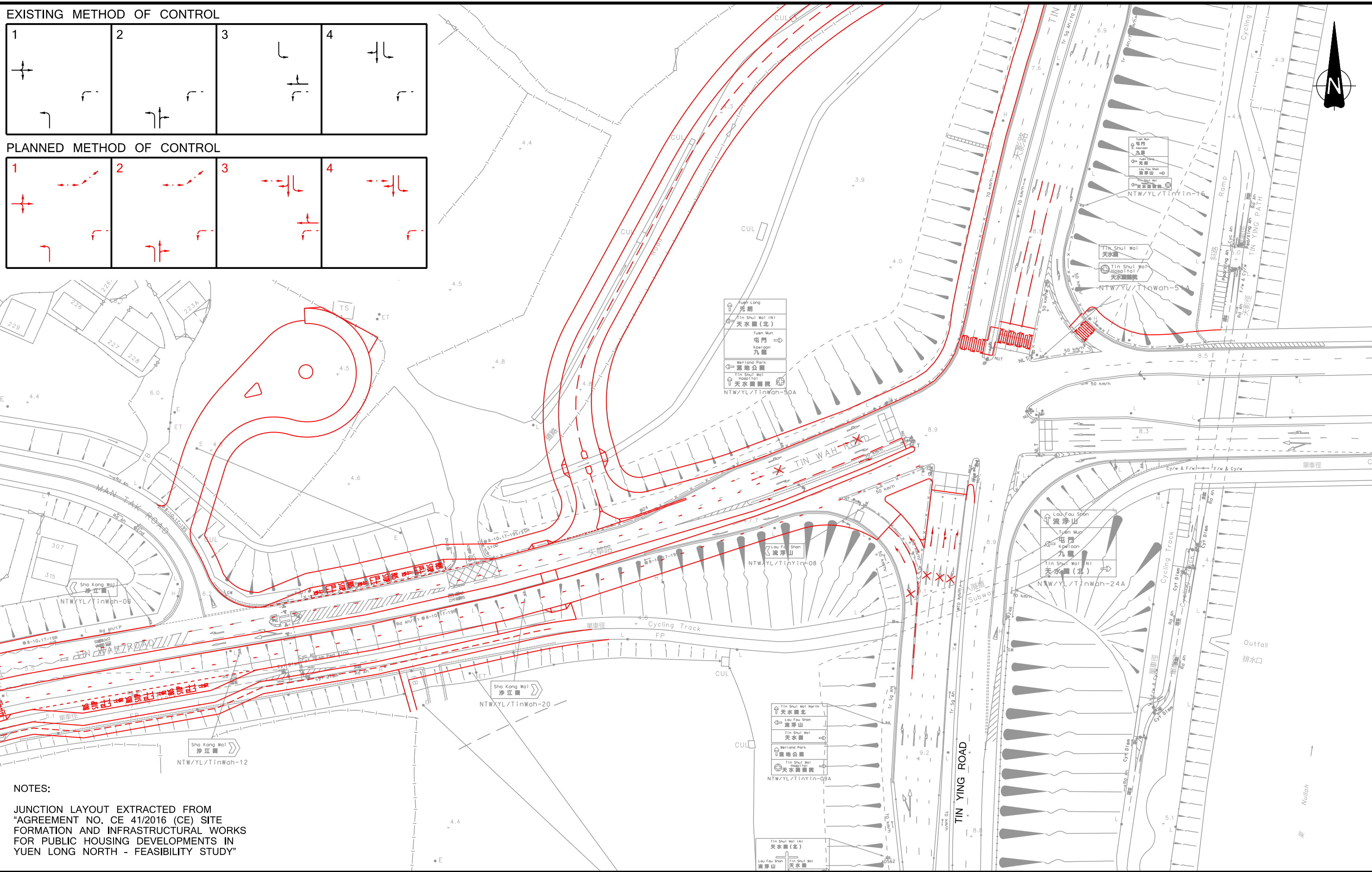
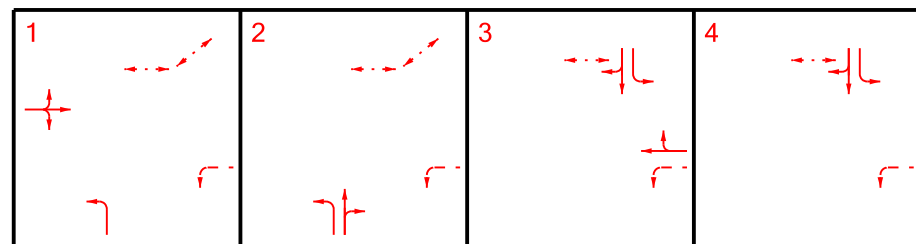
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EXISTING METHOD OF CONTROL



PLANNED METHOD OF CONTROL



NOTES:
 JUNCTION LAYOUT EXTRACTED FROM
 "AGREEMENT NO. CE 41/2016 (CE) SITE
 FORMATION AND INFRASTRUCTURAL WORKS
 FOR PUBLIC HOUSING DEVELOPMENTS IN
 YUEN LONG NORTH - FEASIBILITY STUDY"

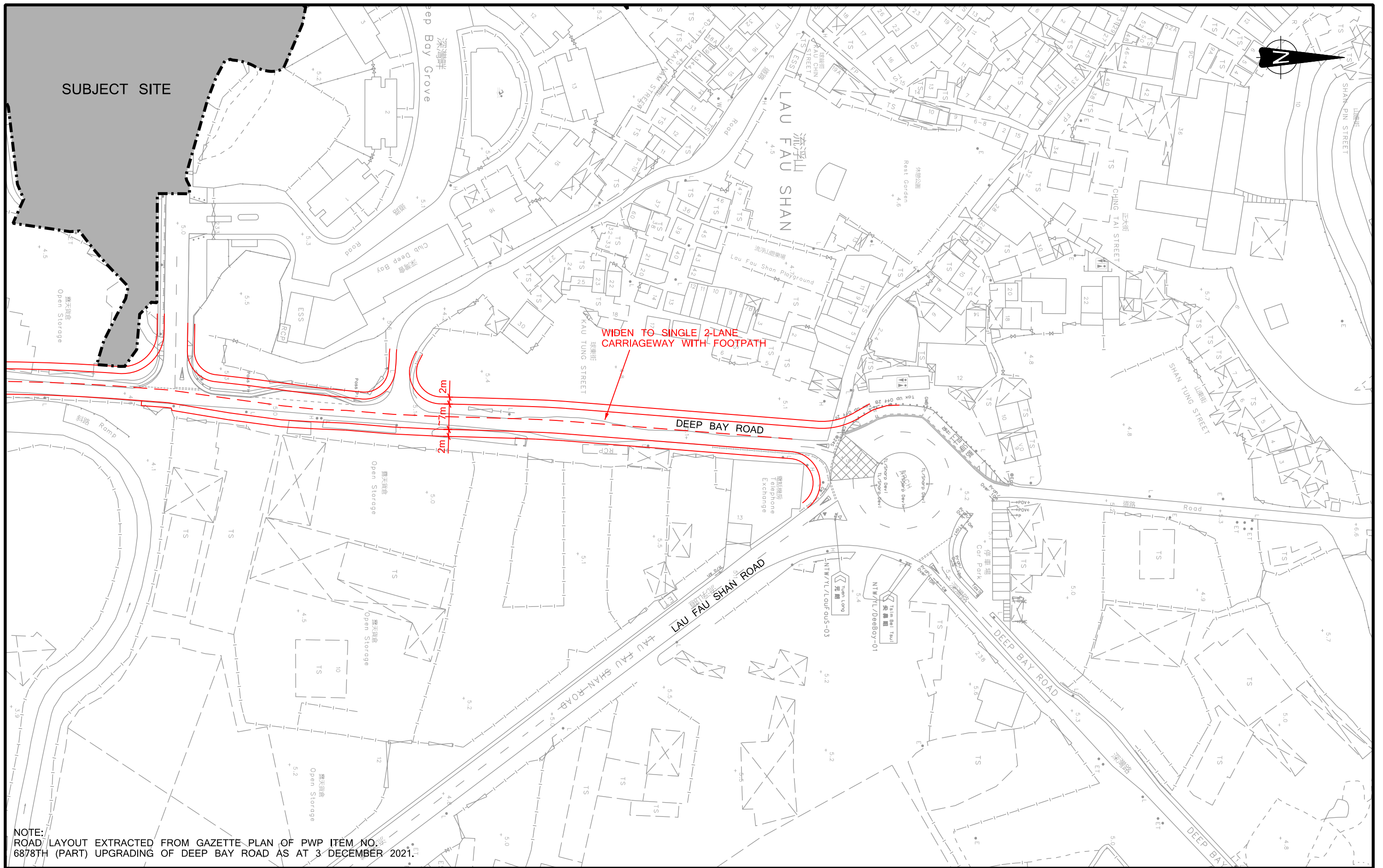
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Project Title
 APPLICATION FOR AMENDMENT OF PLAN UNDER
 SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131)
 FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL
 WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS
 LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT
 LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
**PLANNED JUNCTION IMPROVEMENT WORK
 AT TIN WAH ROAD / TIN YING ROAD (J3)
 AND ROAD WIDENING WORKS AT TIN WAH ROAD**

Designed FSC Checked PTC Scale 1:1000(A3) Date NOV 2023 Drawing No. **3.2** Rev. -





NOTE:
ROAD LAYOUT EXTRACTED FROM GAZETTE PLAN OF PWP ITEM NO. 6878TH (PART) UPGRADING OF DEEP BAY ROAD AS AT 3 DECEMBER 2021.

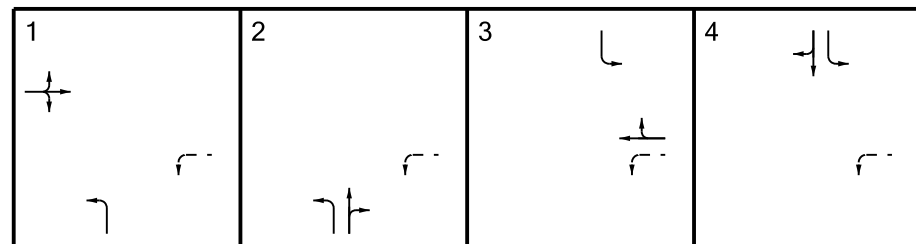
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Project Title
APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

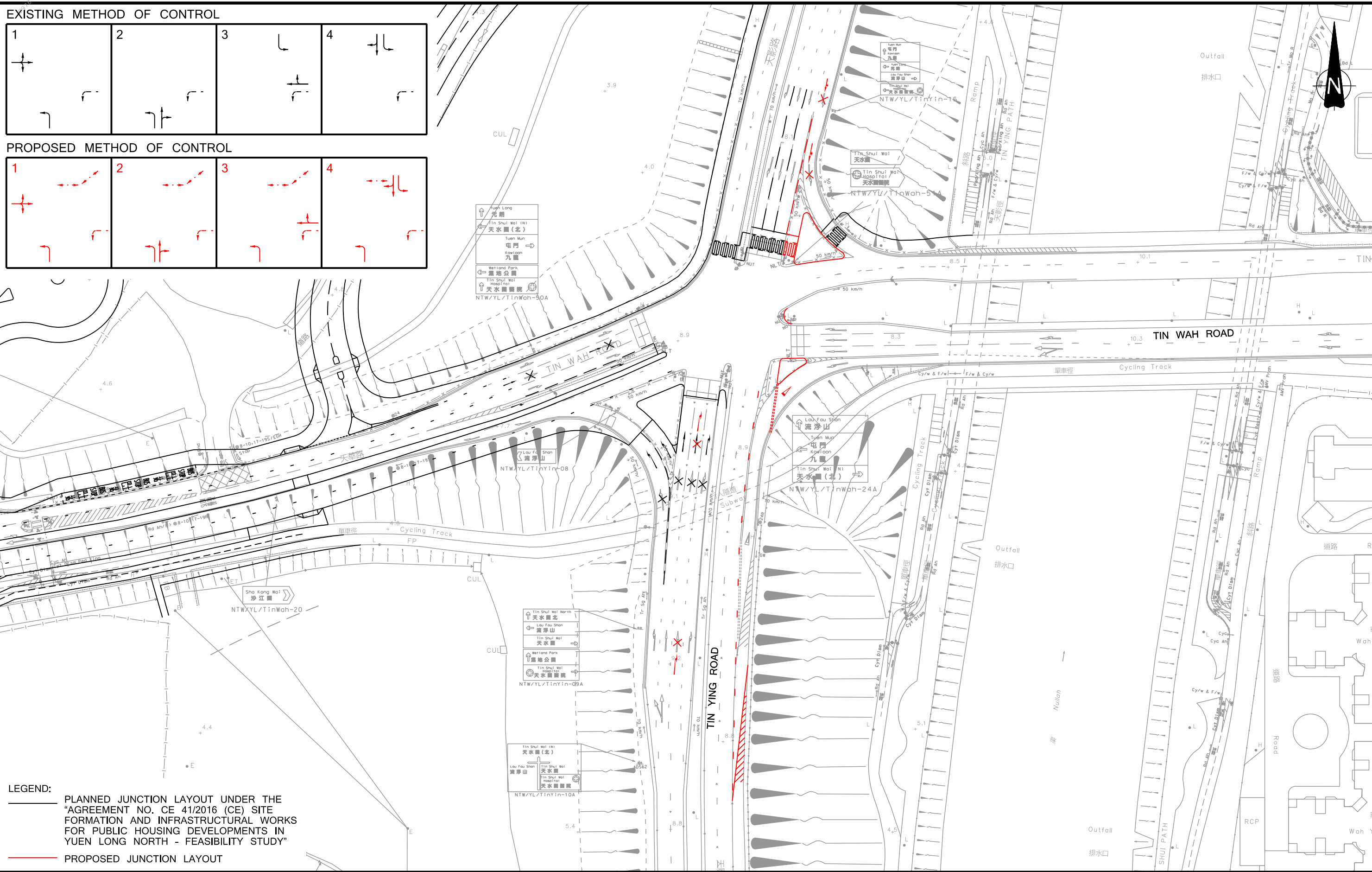
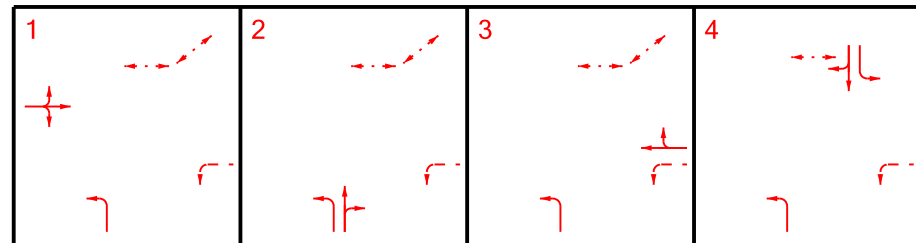
Drawing Title PLANNED UPGRADING WORKS AT DEEP BAY ROAD			
Designed	FSC	Checked	PTC
Scale	1:1000(A3)	Date	NOV 2023
Drawing No.	3.3	Rev.	-



EXISTING METHOD OF CONTROL



PROPOSED METHOD OF CONTROL



LEGEND:
 PLANNED JUNCTION LAYOUT UNDER THE "AGREEMENT NO. CE 41/2016 (CE) SITE FORMATION AND INFRASTRUCTURAL WORKS FOR PUBLIC HOUSING DEVELOPMENTS IN YUEN LONG NORTH - FEASIBILITY STUDY"
 PROPOSED JUNCTION LAYOUT

Rev.	Description	Checked	Date
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Project Title
 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
PROPOSED JUNCTION IMPROVEMENT OF TIN WAH ROAD / TIN YING ROAD (J3)

Designed FSC Checked PTC Scale 1:1000(A3) Date NOV 2023 Drawing No. **3.4** Rev. -

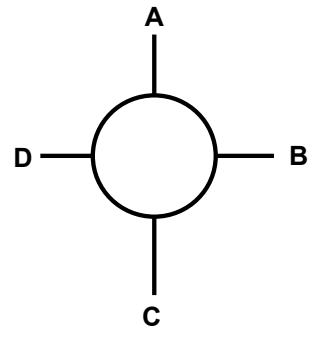


Annex A – Junction Calculation Sheets

Roundabout Capacity Calculation

Job Title: Section 12A Application for Proposed Residential Development in DD128 and DD129 Lau Fau Shan			
Junction: J1 - Deep Bay Road / Lau Fau Shan Road		Ref. No.: J1	
Scheme: 2036 - Reference		Ref. No.:	
Year: 2036	Job No.: CHK50605510	Rev.:	

AM PM Weekend
 ARM A: Deep Bay Road SB approach
 ARM B: Lau Fau Shan Road
 ARM C: Deep Bay Road NB approach
 ARM D: Access Road



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	1.50	4.10	2.3	46	38	52	1.81
B	3.20	4.20	1.5	7.4	38	19.5	1.07
C	1.90	3.70	1.8	7.5	38	51	1.60
D	1.50	1.50	1	14	38	42	0.00

AM FLOWS

from \ to	A	B	C	D	Circ	Entry
A	5	165	27	5	198	203
B	104	55	60	22	60	242
C	11	115	5	5	192	137
D	5	5	16	0	297	27

PM FLOWS

from \ to	A	B	C	D	Circ	Entry
A	0	154	11	5	214	170
B	71	33	159	27	27	291
C	33	148	0	5	143	187
D	11	22	5	5	286	44

CALCULATIONS

ARM	K	X ₂	M	F	t _D	f _c	Q _E		RFC	
							AM	PM	AM	PM
A	0.95	2.06	0.11	625	1.45	0.43	514	507	0.40	0.34
B	0.95	3.52	0.11	1066	1.45	0.52	986	1003	0.25	0.29
C	0.85	2.33	0.11	706	1.45	0.45	524	543	0.26	0.34
D	0.94	1.50	0.11	455	1.45	0.40	316	320	0.09	0.14

Critical Arm: A A
RFC: 0.40 0.34
AM PM

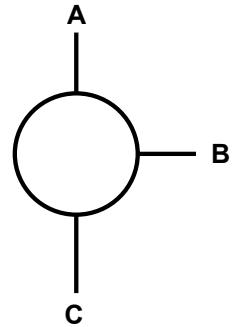
- In accordance with TPDM V2.4 & V2.Appendix 2

Calculated by: FSC	Date: Nov 2023	Checked by: PTC
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Roundabout Capacity Calculation

Job Title: Section 12A Application for Proposed Residential Development in DD128 and DD129 Lau Fau Shan			
Junction: J2 - Deep Bay Road / Lau Fau Shan Road		Ref. No.: J2	
Scheme: 2036 - Reference (with planned layout)		Ref. No.:	
Year: 2036	Job No.: CHK50605510	Rev.:	

AM PM Weekend
 ARM A: Lau Fau Shan Road SB approach
 ARM B: Tin Wah Road WB approach
 ARM C: Lau Fau Shan Road NB approach



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	5.50	7.50	15.6	11	36	65	0.21
B	7.30	7.30	1	15	36	30	0.00
C	5.20	6.50	2.1	15	36	66	0.99
D							

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	571	137	869	709
B	440	267	522	137	1229
C	170	602	0	707	773
				1479	0

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	714	170	1017	885
B	429	308	368	170	1105
C	143	709	0	736	852
				1588	0

CALCULATIONS

ARM	K	X ₂	M	F	t _D	f _c	Q _E		RFC	
							AM	PM	AM	PM
A	0.84	6.92	0.09	2096	1.46	0.73	1226	1135	0.58	0.78
B	0.98	7.30	0.09	2212	1.46	0.75	2074	2050	0.59	0.54
C	0.86	5.64	0.09	1708	1.46	0.65	1071	1055	0.72	0.81

Critical Arm: C C
RFC: 0.72 0.81
AM PM

- In accordance with TPDM V2.4 & V2. Appendix 2

Calculated by: FSC	Date: Nov 2023	Checked by: PTC
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TRAFFIC SIGNALS CALCULATION

Job No.: CHK50605510

MVA HONG KONG LIMITED

Junction: J3 - Tin Ying Road / Tin Wah Road

Design Year: 2036

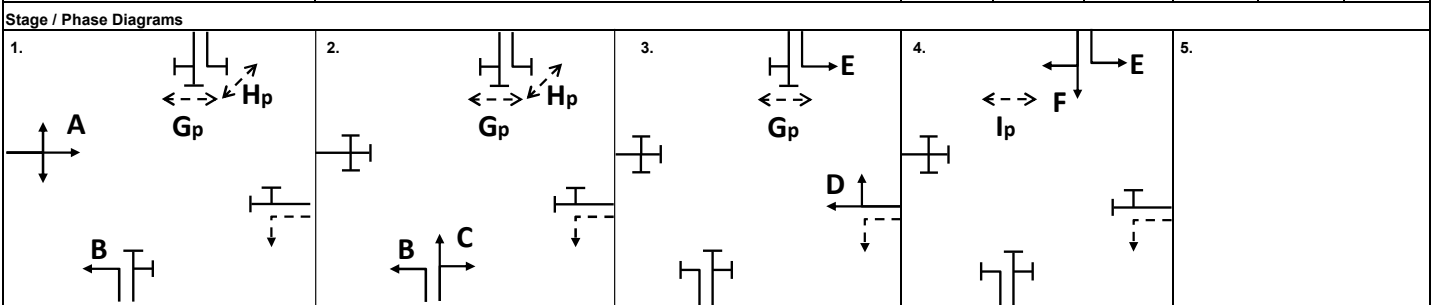
Description: 2036 - Reference (with planned layout)

Designed By: FSC

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tin Wah Road (EB)	↔	A	1	3.400	25			27%	26%	1925	1925	290	0.151		257	0.134	
Tin Wah Road (EB)	→	A	1	3.400						2095	2095	316	0.151		280	0.134	
Tin Wah Road (EB)	↘	A	1	3.400	15					1905	1905	480	0.252	0.252	427	0.224	
Tin Wah Road (EB)	↙	A	1	3.400	15					1905	1905	479	0.251		427	0.224	
Tin Ying Road (NB) *	↖	B	1,2	5.000	25					2025	2025	748	0.369		819	0.404	0.404
Tin Ying Road (NB)	↑	C	2	3.350						2090	2090	322	0.154		343	0.164	
Tin Ying Road (NB)	↗	C	2	3.350	35			100%	100%	2005	2005	383	0.191		400	0.199	
Tin Ying Road (NB)	↘	C	2	3.350	30					1990	1990	381	0.191	0.191	398	0.200	
Tin Wah Road (WB)	↑	D	3	3.300						1945	1945	203	0.104	0.104	203	0.104	
Tin Wah Road (WB)	↑	D	3	3.300						2085	2085	217	0.104		218	0.105	0.105
Tin Wah Road (WB)	↗	D	3	3.300	20					1940	1940	44	0.023		22	0.011	
Tin Ying Road (SB)	↖	E	3,4	3.300	25					1835	1835	66	0.036		27	0.015	
Tin Ying Road (SB)	↑	F	4	3.300						1945	1945	256	0.132		137	0.070	
Tin Ying Road (SB)	↑	F	4	3.300						2085	2085	275	0.132	0.132	148	0.071	0.071
Tin Ying Road (SB)	↗	F	4	3.300	45					2020	2020	137	0.068		99	0.049	
Pedestrian Crossing		Gp	1,2,3	Min. Green + Flash =		5	+	9	=	14							
		Hp	1,2	Min. Green + Flash =		5	+	5	=	10							
		Ip	4	Min. Green + Flash =		5	+	7	=	12							

Notes: * 30 pcu/hr has been added to the saturation flows due to flared approach	Flow: (pcu/hr) 					Group	B,D,F	A,C,D,F	Group	A,C,D,Ip	B,D,F
	y	0.606	0.680	y	0.529	0.580					
	L (sec)	23	16	L (sec)	31	23					
	C (sec)	120	120	C (sec)	120	120					
	y pract.	0.728	0.780	y pract.	0.668	0.728					
	R.C. (%)	20%	15%	R.C. (%)	26%	25%					

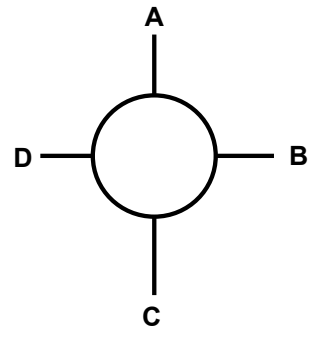


I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 16	I/G=
I/G=	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G=	I/G=
Date: NOV, 2023					Junction: J3 Tin Ying Road / Tin Wah Road	

Roundabout Capacity Calculation

Job Title: Section 12A Application for Proposed Residential Development in DD128 and DD129 Lau Fau Shan			
Junction: J1 - Deep Bay Road / Lau Fau Shan Road		Ref. No.: J1	
Scheme: 2036 - Design		Ref. No.:	
Year: 2036	Job No.: CHK50605510	Rev.:	

AM PM Weekend
 ARM A: Deep Bay Road SB approach
 ARM B: Lau Fau Shan Road
 ARM C: Deep Bay Road NB approach
 ARM D: Access Road



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	1.50	4.10	2.3	46	33	52	1.81
B	3.20	4.20	1.5	7.4	33	19.5	1.07
C	1.90	3.70	1.8	7.5	33	51	1.60
D	1.50	1.50	1	14	33	42	0.00

AM FLOWS

from \ to	A	B	C	D	Circ	Entry
A	5	165	27	5	319	203
B	104	55	145	22	60	327
C	11	236	5	5	192	258
D	5	5	16	0	418	27

PM FLOWS

from \ to	A	B	C	D	Circ	Entry
A	0	154	11	5	276	170
B	71	33	231	27	27	363
C	33	210	0	5	143	249
D	11	22	5	5	348	44

CALCULATIONS

ARM	K	X ₂	M	F	t _D	f _c	Q _E		RFC	
							AM	PM	AM	PM
A	0.95	2.06	0.07	625	1.47	0.44	463	480	0.44	0.35
B	0.95	3.52	0.07	1066	1.47	0.53	986	1003	0.33	0.36
C	0.85	2.33	0.07	706	1.47	0.45	523	542	0.49	0.46
D	0.94	1.50	0.07	455	1.47	0.40	269	295	0.10	0.15

Critical Arm: C C
RFC: 0.49 0.46
 AM PM

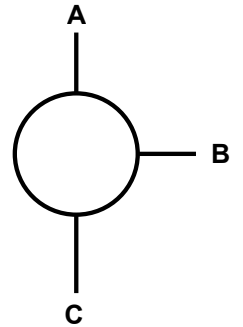
- In accordance with TPDM V2.4 & V2.Appendix 2

Calculated by: FSC	Date: Nov 2023	Checked by: PTC
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Roundabout Capacity Calculation

Job Title: Section 12A Application for Proposed Residential Development in DD128 and DD129 Lau Fau Shan			
Junction: J2 - Deep Bay Road / Lau Fau Shan Road		Ref. No.: J2	
Scheme: 2036 - Design (with planned layout)		Ref. No.:	
Year: 2036	Job No.: CHK50605510	Rev.:	

AM PM Weekend
 ARM A: Lau Fau Shan Road SB approach
 ARM B: Tin Wah Road WB approach
 ARM C: Lau Fau Shan Road NB approach



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	5.50	7.50	15.6	11	36	65	0.21
B	7.30	7.30	1	15	36	30	0.00
C	5.20	6.50	2.1	15	36	66	0.99
D							

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	677	153	869	830
B	519	267	522	153	1308
C	175	602	0	786	778
				1564	0

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	769	177	1017	947
B	494	308	368	177	1170
C	149	709	0	802	858
				1660	0

CALCULATIONS

ARM	K	X ₂	M	F	t _D	f _c	Q _E		RFC	
							AM	PM	AM	PM
A	0.84	6.92	0.09	2096	1.46	0.73	1226	1135	0.68	0.83
B	0.98	7.30	0.09	2212	1.46	0.75	2063	2044	0.63	0.57
C	0.86	5.64	0.09	1708	1.46	0.65	1027	1018	0.76	0.84

Critical Arm: C C
RFC: 0.76 0.84
 AM PM

- In accordance with TPDM V2.4 & V2.Appendix 2

Calculated by: FSC	Date: Nov 2023	Checked by: PTC
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TRAFFIC SIGNALS CALCULATION

Job No.: CHK50605510

MVA HONG KONG LIMITED

Junction: J3 - Tin Ying Road / Tin Wah Road

Design Year: 2036

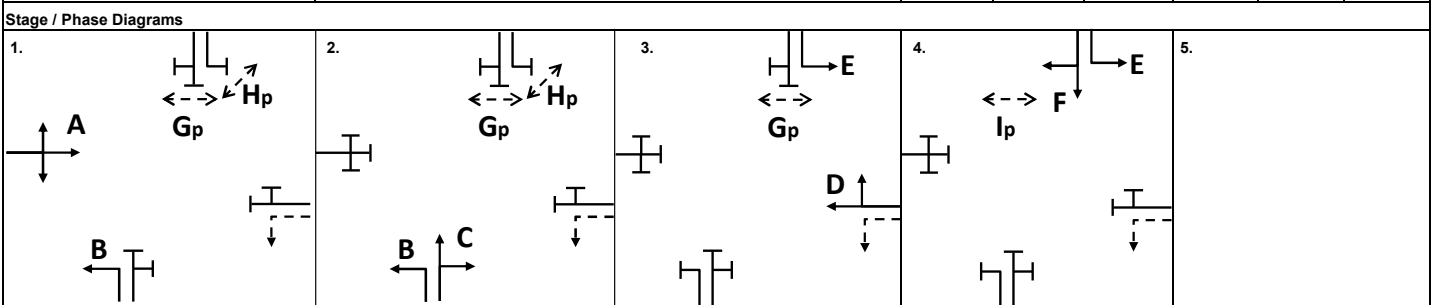
Description: 2036 - Design (with planned layout)

Designed By: FSC

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tin Wah Road (EB)	↔	A	1	3.400	25			24%	24%	1925	1925	315	0.164		270	0.140	
Tin Wah Road (EB)	→	A	1	3.400						2095	2095	342	0.163		294	0.140	
Tin Wah Road (EB)	↘	A	1	3.400	15					1905	1905	507	0.266	0.266	441	0.231	
Tin Wah Road (EB)	↙	A	1	3.400	15					1905	1905	507	0.266		441	0.232	
Tin Ying Road (NB) *	↖	B	1,2	5.000	25					2025	2025	796	0.393		858	0.424	0.424
Tin Ying Road (NB)	↑	C	2	3.350						2090	2090	322	0.154		343	0.164	
Tin Ying Road (NB)	↗	C	2	3.350	35			100%	100%	2005	2005	383	0.191		400	0.199	
Tin Ying Road (NB)	↘	C	2	3.350	30					1990	1990	381	0.191	0.191	398	0.200	
Tin Wah Road (WB)	↑	D	3	3.300						1945	1945	218	0.112	0.112	206	0.106	
Tin Wah Road (WB)	↑	D	3	3.300						2085	2085	234	0.112		222	0.106	0.106
Tin Wah Road (WB)	↗	D	3	3.300	20					1940	1940	44	0.023		22	0.011	
Tin Ying Road (SB)	↖	E	3,4	3.300	25					1835	1835	66	0.036		27	0.015	
Tin Ying Road (SB)	↑	F	4	3.300						1945	1945	256	0.132		137	0.070	
Tin Ying Road (SB)	↑	F	4	3.300						2085	2085	275	0.132	0.132	148	0.071	0.071
Tin Ying Road (SB)	↗	F	4	3.300	45					2020	2020	137	0.068		99	0.049	
Pedestrian Crossing		Gp	1,2,3	Min. Green + Flash =			5	+	9	=	14						
		Hp	1,2	Min. Green + Flash =			5	+	5	=	10						
		Ip	4	Min. Green + Flash =			5	+	7	=	12						

Notes:	Flow: (pcu/hr)	Group	B,D,F	A,C,D,F	Group	A,C,D,Ip	B,D,F
* 30 pcu/hr has been added to the saturation flows due to flared approach		y	0.637	0.702	y	0.538	0.601
		L (sec)	23	16	L (sec)	31	23
		C (sec)	120	120	C (sec)	120	120
		y pract.	0.728	0.780	y pract.	0.668	0.728
		R.C. (%)	14%	11%	R.C. (%)	24%	21%



I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 16	I/G=
I/G=	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G=	I/G=
Date: NOV, 2023					Junction: J3 Tin Ying Road / Tin Wah Road	

TRAFFIC SIGNALS CALCULATION

Job No.: **CHK50605510**

MVA HONG KONG LIMITED

Junction: J3 - Tin Ying Road / Tin Wah Road

Design Year: 2036

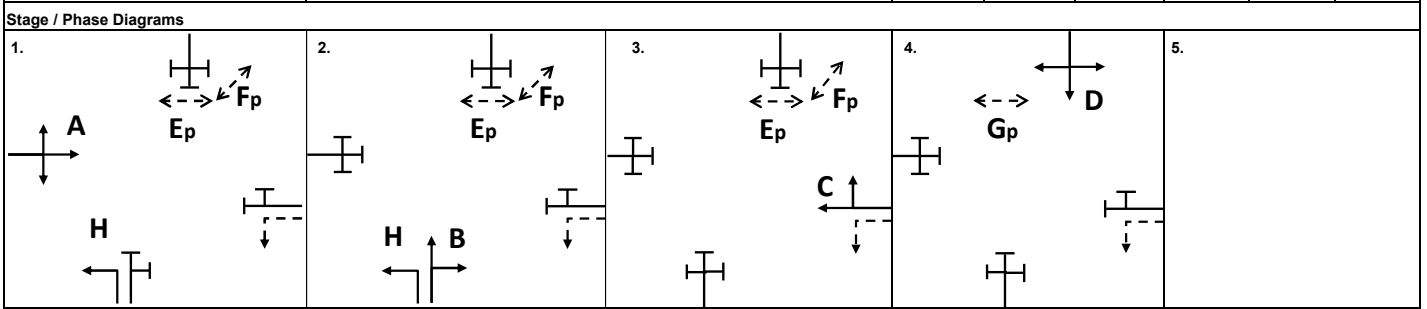
Description: 2036 - Design (with proposed improvement)

Designed By: FSC

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tin Wah Road (EB)	↔	A	1	3.400	25			24%	24%	1925	1925	315	0.164		270	0.140	
Tin Wah Road (EB)	→	A	1	3.400						2095	2095	342	0.163		294	0.140	
Tin Wah Road (EB)	↘	A	1	3.400	15					1905	1905	507	0.266	0.266	441	0.231	
Tin Wah Road (EB)	↙	A	1	3.400	15					1905	1905	507	0.266		441	0.232	0.232
Tin Ying Road (NB)*	↑	H	1,2	5.000	25					2025	2025	796	0.393		858	0.424	
Tin Ying Road (NB)	↑	B	2	3.350						2090	2090	322	0.154		343	0.164	
Tin Ying Road (NB)	↘	B	2	3.350	35					2005	2005	383	0.191		401	0.200	0.200
Tin Ying Road (NB)	↙	B	2	3.350	30					1990	1990	381	0.191	0.191	397	0.200	
Tin Wah Road (WB)	←	C	3	3.300						2085	2085	226	0.108	0.108	214	0.103	0.103
Tin Wah Road (WB)	←	C	3	3.300						2085	2085	226	0.108		214	0.102	
Tin Wah Road (WB)	↙	C	3	3.300	15					1895	1895	44	0.023		22	0.012	
Tin Ying Road (SB)	↓	D	4	3.300	25			35%	28%	1905	1915	187	0.098		98	0.051	
Tin Ying Road (SB)	↓	D	4	3.300						2085	2085	205	0.098		107	0.051	
Tin Ying Road (SB)	↘	D	4	3.300						2085	2085	205	0.098	0.098	107	0.051	
Tin Ying Road (SB)	↙	D	4	3.300	45					2020	2020	137	0.068		99	0.049	
Pedestrian Crossing		Ep	1,2,3	Min. Green + Flash =			6	+	12	=	18						
		Fp	1,2,3	Min. Green + Flash =			5	+	5	=	10						
		Gp	4	Min. Green + Flash =			5	+	7	=	12						*

Notes:	Flow: (pcu/hr)	Group	A,B,C,Gp	A,B,C,D	Group	A,B,C,D	A,B,C,Gp
* 30 pcu/hr has been added to the saturation flows due to flared approach		y	0.566	0.664	y	0.586	0.534
		L (sec)	31	16	L (sec)	16	31
		C (sec)	120	120	C (sec)	120	120
		y pract.	0.668	0.780	y pract.	0.780	0.668
		R.C. (%)	18%	17%	R.C. (%)	33%	25%



I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 10	12	I/G=
I/G= 2	I/G= 5	I/G= 5	I/G= 5	I/G= 5			
Date: NOV, 2023						Junction: Tin Ying Road / Tin Wah Road	
						J3	