Annex 5

Traffic Impact Assessment and Related Information

Technical Feasibility Study for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP

APR 2026

Reference number CHK50686610

TRAFFIC IMPACT ASSESSMENT REPORT

SYSTRA MVA

TECHNICAL FEASIBILITY STUDY FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO, KOWLOON, N.K.I.L. NO. 3762 & 3635RP

TRAFFIC IMPACT ASSESSMENT REPORT

IDENTIFICATION TABLE	
Client/Project owner	Hong Kong Sheng Kung Hui
Project	Technical Feasibility Study for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP
Study	Traffic Impact Assessment Report
Date	Apr 2026
File name	St_Thomas_TFS_TIA_20260409.docx
Reference number	CHK50686610
Number of pages	18
Version	2

TABLE OF CONTENTS

LIST OF DRAWINGS

Drawing No.	Description
1.1	Site Location
2.1	Ground Floor Layout with Proposed Run-in/out
2.2	Vehicular Access Routings
3.1	Existing Public Transport Facilities within 500m Radius
3.2	Surveyed Junction For Traffic Assessment
3.3	Existing Junction Layout of Pei Ho Street/Berwick Street (J1)
3.4	Existing Junction Layout of Nam Cheong Street/Berwick Street (J2)
3.5	Existing Junction Layout of Shek Kip Mei Street/Berwick Street (J3)
3.6	Existing Junction Layout of Shek Kip Mei Street/Tai Po Road/Un Chau Street (J4)
3.7	Existing Junction Layout of Nam Cheong Street/Tai Po Road (J5)
3.8	2024 Existing Traffic Flows
4.1	2034 Reference Traffic Flows
4.2	2034 Design Traffic Flows

LIST OF TABLES

1. INTRODUCTION

1.1 Background

1.1.1 MVA Hong Kong Ltd. has been commissioned by Hong Kong Sheng Kung Hui (HKSKH), as the traffic consultant for the Technical Feasibility Study (TFS) for the proposed redevelopment project of Hong Kong Sheng Kung Hui St. Thomas' Church at Sham Shui Po.

1.1.2 The project comprises the redevelopment of HKSKH St. Thomas' Church into a complex building at 43 Berwick Street and **Drawing No. 1.1** shows the site location.

1.1.3 MVA has been commissioned by HKSKH to conduct a Traffic Impact Assessment (TIA) in support of the proposed church redevelopment.

1.1.4 This report is prepared to provide the Town Planning Board (TPB) and relevant government departments with technical information on the traffic aspects for their consideration.

1.2 Study Objective

1.2.1 The main objective of this study is to examine the potential traffic impact to be generated by the proposed development on the adjacent local road network. The key tasks are summarised as follows:

- to assess the existing traffic conditions in the vicinity of the proposed development;
- to forecast traffic demands on the adjacent road network for the design year;
- to estimate the likely traffic generated by the proposed development; and
- to assess the impact of the generated traffic on the adjacent road network.

1.3 Report Structure

1.3.1 This TIA report is structured into the following chapters:

Chapter 2 – Proposed Development Context – presents the proposed development schedule, the proposed car parking and servicing facilities provisions, pick-up/drop-off arrangement and the vehicular and pedestrian access arrangements.

Chapter 3 – Existing Traffic Conditions – describes the existing road network, public transport facilities in the vicinity of the proposed development, presents the traffic survey findings and assesses the existing traffic conditions.

Chapter 4 – Traffic Forecast – summarises the methodology of traffic forecasts and presents the traffic generations and attractions of the proposed development.

Chapter 5 – Traffic Impact Assessment – presents the findings of the traffic impact assessment for the design year and recommends improvement measures, where appropriate.

Chapter 6 – Summary and Conclusion – presents the findings of the study and conclusion regarding the traffic issue related to the proposed development.

2. PROPOSED DEVELOPMENT CONTEXT

2.1 Overview

2.1.1 The subject site is located at 43 Berwick Street (section between Pei Ho Street and Nam Cheong Street, Sham Shui Po, Kowloon. The location is shown in **Drawing No. 1.1**. The existing developments include the HKSKH St. Thomas' Church (268 seats) and Religious Education Resource Centre.

2.1.2 The subject site comprises NKIL No. 3762 and 3635RP, which are zoned as "Government, Institution or Community" (G/IC) with a maximum 4 storeys of building height in the Approved Cheung Sha Wan Outline Zoning Plan (OZP) No. S/K5/39.

2.1.3 The proposed church redevelopment will become a 12 storeys building with social welfare facilities and includes a car park at ground level for goods vehicle loading/unloading and light bus parking. The proposed redevelopment tentatively scheduled for completion by Q4 2032.

2.1.4 The vehicular and pedestrian access of the proposed development will be located at the southern kerb side of Berwick Street.

2.2 Proposed Development Schedule

2.2.1 The proposed building will accommodate the following facilities:

(1) Special Child Care Centre / Child Care Centre;

(2) Day Care Centre for the Elderly;

(3) Neighbourhood Elderly Centre;

(4) Integrated Elderly Rehabilitation Services Centre, and

(5) Church Hall (268 seats can extended to 332 seats), Church Activity Centre, and Pastor's Flat.

2.3 Parking and Serving Facilities Provision

2.3.1 Currently there is no car park provided for St. Thomas' Church. Since the site is easily accessed by various public transport including bus, minibus and within reasonable walking distance from two MTR stations (Shek Kip Mei Station and Sham Shui Po Station), and the social welfare facilities are mainly serving the local residents; the demand of arriving by parking will be minimal. Therefore the parking and servicing provision of the proposed redevelopment are proposed according to the operational need of HKSKH, which include three light bus parking spaces (8 m long x 3 m wide each) and a goods vehicle loading/unloading bay (9m long x 3.5m wide) such that the proposed parking and servicing facilities will be sufficient for the operation of the proposed redevelopment.

2.3.2 The proposed three light bus parking spaces and one loading/unloading bay will be located at G/F and connected to the proposed vehicular run-in/out at Berwick Street.

2.4 Vehicular Access Arrangement

2.4.1 The vehicular access would be located at ground level of Berwick Street in right-in / right-out traffic arrangement. The ground floor layout with the proposed run-in/out is shown in **Drawing No. 2.1**.

2.4.2 The major vehicular access routings to/from the proposed development are shown in **Drawing No. 2.2**.

2.4.3 Vehicles from Kowloon West (via Cheung Sha Wan) and New Territories West (via Ching Cheung Road) will travel along Tai Po Road, Pei Ho Street and Berwick Street to the proposed development. Vehicles leaving the proposed development to Kowloon West (via Cheung Sha Wan) and New Territories West (via Ching Cheung Road) will travel along Berwick Street, Shek Kip Mei Street and Tai Po Road / Un Chau Street.

2.4.4 Vehicles from Kowloon Central (via Tai Hang Tung) will travel along Tai Hang Tung Road, Woh Chai Street, Pak Tin Street and Berwick Street to the proposed development. Vehicles leaving the proposed development to Kowloon Central (via Tai Hang Tung) will travel along Berwick Street, Shek Kip Mei Street, Woh Chai Street, Tai Hang Tung Road.

2.4.5 Vehicles from Kowloon South (via Tai Kok Tsui) will travel along Nam Cheong Street, Woh Chai Street, Pak Tin Street and Berwick Street to the proposed development. Vehicles leaving the proposed development to Kowloon South (via Tai Kok Tsui) will travel along Berwick Street, Shek Kip Mei Street, Un Chau Street and Nam Cheong Street.

2.4.6 Vehicles from Kowloon South (via Mong Kok) will travel along Tai Po Road, Nam Cheong Street, Woh Chai Street, Pak Tin Street and Berwick Street to the proposed development. Vehicles leaving the proposed development to Kowloon South (via Mong Kok) will travel along Berwick Street, Shek Kip Mei Street and Tai Po Road.

2.4.7 Vehicles from Kowloon East (via Lung Cheung Road or Cornwall Street) will travel along Lung Cheung Road / Cornwall Street, Nam Cheong Street, Pak Wan Street, Pak Tin Street and Berwick Street to the proposed development. Vehicles leaving the proposed development to Kowloon East (via Lung Cheung Road or Cornwall Street) will travel along Berwick Street, Nam Cheong Street and Lung Cheung Road / Cornwall Street.

3. EXISTING TRAFFIC CONDITIONS

3.1 Existing Road Network

3.1.1 The existing road network in the vicinity of the proposed development is shown in the location plan in **Drawing No. 1.1**. The major roads of the access routings connecting to and from the site include Berwick Street, Shek Kip Mei Street, Tai Po Road and Nam Cheong Street.

3.1.2 Berwick Street is a local distributor road connecting between Saviour Lutheran School and Tsung Tsin Primary School. The section between Pak Tin Street and Shek Kip Mei Street adjacent to the site is in one-way road running in eastbound direction which intersects with Pak Tin Street by priority controlled junction and intersects with Pei Ho Street, Nam Cheong Street and Shek Kip Mei Street by signalised controlled junction.

3.1.3 Shek Kip Mei Street is a district distributor road connecting between Woh Chai Street and Yee Kuk Street. The section of Shek Kip Mei Street between Berwick Street and Tai Po Road adjacent to the site is in one-way southbound direction, while the section between Woh Chai Street and Berwick Street is a dual carriageway running in north-south direction. The intersections of Shek Kei Mei Street with Tai Po Road, Berwick Street and Woh Chai Street are in form of signalized controlled junction.

3.1.4 Tai Po Road is a primary distributor road connecting between Cheung Sha Wan Road and Tai Po Road – Piper's Hill, which is primarily a dual-two carriageway running in east-west direction.

3.1.5 Nam Cheong Street is a district distributor road connecting between Lung Ping Road and Tung Chau Street running in north-south direction. The section of Nam Cheong Street between Pak Wan Street and Tai Po Road adjacent to the site is single carriageway with three to four traffic lanes. The whole section of Nam Cheong Street southbound from Woh Chai Street to Un Chau Street is a bus only lane effective daily from 7:00 am to 12:00 midnight.

3.2 Public Transport Services

3.2.1 The existing public transport facilities within 500m of the site are shown **in Drawing No 3.1**.

3.2.2 Numerous franchised bus routes stopping at Nam Cheong Street, Cheung Sha Wan Road, Un Chau Street, Tai Po Road, Woh Chai Street adjacent to the site, and these routes are connecting to other districts in Hong Kong, Kowloon, and New Territories. The franchised bus routes with bus stops within 500m walking distance from the proposed development are shown in **Table 3.1**.

Table 3.1 Franchised Bus Services within 500m Walking Distance from the Proposed Development

ROUTE NO.	BUS OPERATOR	ROUTING (ORIGIN AND DESTINATION)
2B	KMB	Chuk Yuen Estate <–> Cheung Sha Wan

ROUTE NO.	BUS OPERATOR	ROUTING (ORIGIN AND DESTINATION)
2D	KMB	Chak On Estate <–> Wong Tai Sin
2E	KMB	Pak Tin (North) <–> Kowloon City Ferry
2F	KMB	Tsz Wan Shan (North) <–> Cheung Sha Wan
6	KMB	Lai Chi Kok <–> Star Ferry
6C	KMB	Mei Foo <–> Kowloon City Ferry
6D	KMB	Mei Foo <–> Ngau Tau Kok
6F	KMB	Cheung Sha Wan (Lai Kok Estate) <–> Kowloon City Ferry
6P (1)	KMB	So Uk Estate <–> Lei Yue Mun Estate
6X	KMB	Mei Foo <–> Kowloon City Ferry / Shing Tak Street
13P (1)	KMB	Po Tat –> Cheung Sha Wan (Lai Kok Estate)
30X	KMB	Allway Gardens <–> Whampoa Garden
31B	KMB	Shek Lei <–> Olympic Station
33A	KMB	Tsuen Wan (Nina Tower) <–> Mong Kok (Park Avenue)
35A	KMB	On Yam Estate <–> Tsim Sha Tsui East
35X (2)	KMB	On Yam Estate <–> Tsim Sha Tsui East
36A	KMB	Lei Muk Shue <–> Cheung Sha Wan (Hoi Tat Estate) (Circular)
37	KMB	Kwai Shing (Central) <–> Olympic Station
42A	KMB	Cheung Hang Estate <–> Jordan (West Kowloon Station)
43C (2)	KMB	Island Harbourview –> Cheung Hang Estate
45	KMB	Lai Yiu Estate <–> Kowloon City Ferry
52X	KMB	Tuen Mun Central <–> Mong Kok (Park Avenue)
58X	KMB	Leung King Estate <–> Mong Kok East Station
59X	KMB	Tuen Mun Pier Head <–> Mong Kok East Station
60X	KMB	Tuen Mun Central <–> Jordan (West Kowloon Station)
66X	KMB	Tai Hing Estate <–> Olympic Station
67X	KMB	Siu Hong Court <–> Mong Kok East Station
68X	KMB	Hung Shui Kiu (Hung Fuk Estate) <–> Mong Kok (Park Avenue)
69X	KMB	Tin Shui Estate <–> Jordan (West Kowloon Station)
72	KMB	Tai Po (Tai Wo) <–> Cheung Sha Wan
79X	CTB	Cheung Sha Wan (Kom Tsun Street) <–> Queen's Hill
81	KMB	Wo Che <–> Jordan (West Kowloon Station)

ROUTE NO.	BUS OPERATOR	ROUTING (ORIGIN AND DESTINATION)
86	KMB	Wong Nai Tau <–> Mei Foo
86A	KMB	Sha Tin Wai <–> Cheung Sha Wan (Kom Tsun Street)
86C	KMB	Lee On <–> Cheung Sha Wan
87B	KMB	Sun Tin Wai <–> Island Harbourview
98C	KMB	Hang Hau (North) <–> Mei Foo
98E (1)	KMB	Hang Hau (North) <–> Mei Foo
98S (1)	KMB	Lohas Park Station <–> Mei Foo
102	KMB & CTB	Shau Kei Wan <–> Mei Foo
102P (1)	KMB & CTB	Shau Kei Wan <–> Mei Foo
104	KMB & CTB	Kennedy Town <–> Pak Tin Estate
112	KMB & CTB	North Point <–> So Uk Estate
118	KMB & CTB	Siu Sai Wan (Island Resort) <–> Cheung Sha Wan (Sham Mong Road)
118P (2)	KMB & CTB	Siu Sai Wan (Island Resort) <–> Cheung Sha Wan (Sham Mong Road)
171	KMB & CTB	South Horizons <–> Lai Chi Kok
171A (2)	KMB & CTB	Lei Tung Estate –> Lai Chi Kok
171P (2)	KMB & CTB	South Horizons –> Lai Chi Kok
214	KMB	Yau Tong <–> Cheung Sha Wan (Kom Tsun Street)
214P (1)	KMB	On Sau Road –> Lai Chi Kok Station
234X	KMB	Bayview Garden <–> Tsim Sha Tsui East (Mody Road)
238X	KMB	Riviera Gardens <–> China Ferry Terminal
270B	KMB	Sheung Shui <–> Olympic Station
270D (1)	KMB	Luen Wo Hui –> Sham Shui Po
272E (1)	KMB	Tai Po (Tai Wo) <–> Mong Kok (Park Avenue)
293S (4)	KMB	Hang Hau (Ngan O Road) <–> Mei Foo
296C	KMB	Sheung Tak <–> Cheung Sha Wan (Hoi Ying Estate)
296P (1)	KMB	Sheung Tak <–> Lai Chi Kok Station
298C(1)	KMB	Lohas Park Station <–> Mei Foo
298X (1)	KMB	Hang Hau (North) <–> Cheung Sha Wan (Kom Tsun Street)
702	CTB	Hoi Lai Estate <–> Kowloon Tong (Festival Walk) (Circular)
702A (1)	CTB	Hoi Ying Estate –> Pak Tin Estate
702B	CTB	Pak Tin (North) <–> Hoi Ying Estate (Circular)

ROUTE NO.	BUS OPERATOR	ROUTING (ORIGIN AND DESTINATION)
793	CTB	Tseung Kwan O Industrial Estate <–> So Uk Estate
904	KMB & CTB	Lai Chi Kok <–> Kennedy Town (Belcher Bay)
905	KMB & CTB	Lai Chi Kok <–> Exhibition Centre Station
970	CTB	Cyberport <–> So Uk Estate
970X	CTB	Aberdeen <–> Cheung Sha Wan (Kom Tsun Street)
A20	CTB	Hung Hom Station <–> Airport
A23	CTB	Tsz Wan Shan (North) <–> Airport
E21	CTB	Tai Kok Tsui (Island Harbourview) <–> Asiaworld-Expo
E21A	CTB	Tung Chung (Yat Tung Estate) <–> Ho Man Tin (Oi Man Estate)
E21B	CTB	Tung Chung (Yat Tung Estate) <–> Ho Man Tin (Oi Man Estate)
E21C (1)	CTB	Tai Kok Tsui (Island Harbourview) <–> Aircraft Maintenance Area
E21D	CTB	Tai Kok Tsui (Island Harbourview) <–> Asiaworld-Expo
N21 (4)	CTB	Tsim Sha Tsui (Star Ferry) <–> Airport
N21A (4)	CTB	Tsim Sha Tsui (Star Ferry) <–> Airport
N118 (4)	KMB & CTB	Siu Sai Wan (Island Resort) <–> Cheung Sha Wan (Sham Mong Road)
N122 (4)	KMB & CTB	Mei Foo <–> Shau Kei Wan
N171 (4)	KMB & CTB	Lai Chi Kok <–> Ap Lei Chau Estate
N241 (4)	KMB	Hung Hom Station <–> Cheung Wang Estate
NA20 (4)	CTB	Whampoa Garden <–> HZMB Hong Kong Port
X6C (1)	KMB	Mei Foo <–> Kowloon Bay
X970 (1)	CTB	South Horizons –> Cheung Sha Wan (Kom Tsun Street)

Notes: (1) Peak hour service on Monday to Friday only
(2) Peak hour service on Monday to Saturday only
(3) Saturday and Sunday service
(4) Overnight service

3.2.3 Green minibus (GMB) routes stopping adjacent to the site are mainly the local feeder routes to the nearby housing estates, such as Pak Tin Estate, Chak On Estate, Beacon Heights and Yau Yat Tsuen. The GMB routes with stops within the 500m walking distance from the proposed development are shown in **Table 3.2**.

Table 3.2 GMB Services within 500m Walking Distance from the Proposed Development

ROUTE NO.	ROUTING (ORIGIN AND DESTINATION)
9M	Upper Pak Tin Estate <–> Shek Kip Mei MTR Station (Circular)

ROUTE NO.	ROUTING (ORIGIN AND DESTINATION)
12	Pak Tin <–> Mong Kok East Station
30A	Chak On Estate <–> Mong Kok Station
30B	Chak On Estate <–> Shek Kip Mei MTR Station (Circular)
32M	Lung Ping Road <–> Shek Kip Mei MTR Station (Circular)
41A	Yau Yat Tsuen <–> Shek Kip Mei MTR Station (Circular)
41M	Yau Yat Tsuen <–> Shek Kip Mei MTR Station (Circular)
42	Chak On Estate <–> Cheung Sha Wan (Yu Chau West Street)

3.2.4 The site is also located within 500m distances of two MTR Stations (Shek Kip Mei Station and Sham Shui Po Station), which is 360m walking distance from Sham Shui Po Station Exit B2 and 440m walking distance from Shek Kip Mei Station Exit A.

3.2.5 The accessible level of the site is therefore well served by public transport systems with MTR station within 500m of the site.

3.3 Traffic Survey

3.3.1 In order to investigate the traffic impact to the surrounding road network of the proposed development, five key junctions adjacent to the development site are identified for traffic survey and assessment and as shown in **Table 3.3** and their locations are shown in **Drawing No. 3.2**. The existing junction layout of the surveyed junctions are shown in **Drawing Nos. 3.3** to **3.7**.

Table 3.3 Identified Key Junctions for Traffic Survey and Assessment

JUNCTION	DRAWING NO.	LOCATION	TYPE
J1	3.3	Pei Ho Street / Berwick Street	Signal-controlled Junction
J2	3.4	Nam Cheong Street / Berwick Street	Signal-controlled Junction
J3	3.5	Shek Kip Mei Street / Berwick Street	Signal-controlled Junction
J4	3.6	Shek Kip Mei Street / Tai Po Road / Un Chau Street	Signal-controlled Junction
J5	3.7	Nam Cheong Street / Tai Po Road	Signal-controlled Junction

3.3.2 Classified traffic survey had been conducted at the above five junctions in a normal weekday in mid of December 2023 and weekday AM and PM peak hour are identified from 07:30 to 08:30 and from 17:30 to 18:30 respectively.

3.3.3 The 2024 existing weekday AM and PM peak hour traffic flows are as shown in **Drawing No. 3.8**.

3.4 Existing Junction Capacity Assessment

3.4.1 **Table 3.4** shows the existing junction capacity assessment results of the identified key junctions. The junction calculations are attached in the **Appendix T1** of the TIA.

Table 3.4 Junction Capacity Assessment – Existing 2024

JUNCTION	LOCATION	R.C.	
		AM PEAK	PM PEAK
J1	Pei Ho Street / Berwick Street	>100%	>100%
J2	Nam Cheong Street / Berwick Street	>100%	>100%
J3	Shek Kip Mei Street / Berwick Street	>100%	>100%
J4	Shek Kip Mei Street / Tai Po Road / Un Chau Street	65%	69%
J5	Nam Cheong Street / Tai Po Road	>100%	>100%

Note: Reserve Capacity (R.C.) indicated in %, provides an indication of signal junction performance. R.C. >15% implies that it is operating satisfactorily, while a negative R.C. suggests that it is overloaded.

3.4.2 Results of the junction capacity assessment have indicated that all junctions are currently operating within capacity.

4. TRAFFIC FORECAST

4.1 Methodology of Traffic Forecast

4.1.1 The proposed development is tentatively scheduled for completion by year 2031. According to the "Guidelines and Requirements of Traffic Impact Assessment (TIA) for Proposed Developments and Transport Facilities" from Transport Department in February 2011, the TIA for the planned developments in the vicinity on an area/district basis should take at least 3 years after the planned completion of the development. Therefore, 3 years after completion (i.e. 2034) is adopted as design year for traffic impact assessment.

4.1.2 The traffic forecast has been derived by taking into account of the following information:

i. Historical traffic growth in the Annual Traffic Census (ATC) published by the Transport Department;
ii. 2019-Based Territorial Population and Employment Data Matrix (TPEDM) planning data published by the Planning Department;
iii. Projections of Population Distribution 2021-2029 published by the Planning Department; and
iv. Future planned developments in the vicinity of subject site.

(i) Traffic Growth Trend from the Annual Traffic Census

4.1.3 Transport Department has several traffic count stations in the vicinity of the proposed development in Sham Shui Po area. The annual average daily traffic count at the concerned stations over the recent 5 years from 2018 to 2022 extracted from the ATC published by Transport Department and the traffic growth rate derived from the ATC are summarized in **Table 4.1**.

Table 4.1 Traffic Growth Rates between 2018 and 2022 from the Annual Traffic Census

STATION NO.	LOCATION	ANNUAL AVERAGE DAILY TRAFFIC (VEH/DAY)				
		2018	2019	2020	2021	2022
3009	Tai Po Road (From Nam Cheong St to Kweilin St)	19,060	20,300	20,260	20,970	19,720
3656	Nam Cheong Street (From Tai Po Rd to Un Chau St)	10,130	9,920	8,260	8,800	8,380
3431	Tai Po Road (From Castle Peak Rd to Tai Woh Ping Rd)	33,380	29,420	27,200	28,360	27,020
3465	Castle Peak Road (From Kweilin St to Slip Road Adjoining Tai Po Rd)	2,810	2,970	3,220	3,310	3,150
3228	Tai Po Road (From Castle Peak Rd to Kweilin St)	23,670	21,210	19,910	20,190	19,120
3667	Castle Peak Road (From Yen Chow St to Slip Rd Adjoining Tai Po Rd)	30,740	30,110	24,900	28,000	26,680

STATION NO.	LOCATION	ANNUAL AVERAGE DAILY TRAFFIC (VEH/DAY)				
		2018	2019	2020	2021	2022
3456	Nam Cheong Street (From Cheung Sha Wan Rd to Lai Chi Kok Rd)	8,290	8,400	7,020	7,210	6,870
3847	Nam Cheong Street (From Woh Chai St to Tai Po Rd)	7,580	7,640	7,150	7,460	7,010
4047	Nam Cheong Street (From Pak Tin St to Who Chai St)	9,780	9,850	9,220	9,610	9,370
3823	Tai Po Road (From Wong Chuk St to Shek Kip Mei St)	31,840	31,400	29,470	34,500	30,680
4021	Tai Po Road (From Shek Kip Mei St to Nam Cheong St)	24,320	23,980	22,510	22,820	21,910
3666	Un Chau Street (From Shek Kip Mei St to Nam Cheong St)	13,340	13,070	10,810	12,690	12,090
4053	Shek Kip Mei Street (From Woh Chai St to Tai Po Rd)	11,640	11,720	10,970	11,440	11,800
3657	Woh Chai Street (From Nam Cheong St to Shek Kip Mei St)	8,490	8,560	8,420	8,610	8,200
3855	Un Chau Street (From Yen Chow St to Nam Cheong St)	10,620	10,410	10,030	9,130	8,640
3626	Cheung Sha Wan Road (From Nam Cheong St to Wong Chuk St)	22,630	22,310	23,860	24,890	23,580
Total		**268,320**	**261,270**	**243,210**	**257,990**	**244,220**
Annual Growth Rate (2018-2022)		**-1.71% p.a.**				
Annual Growth Rate (2018-2019)		**-1.19% p.a.**				

4.1.4 As shown in **Table 4.1**, it is observed that over the past 5 years trend, the average annual daily traffic growth pattern in the vicinity of the subject site from 2018 to 2022 has a decrease trend of 1.71% per annum. The traffic pattern between 2020 and 2022 may decrease due to COVID-19 situation, however the traffic pattern from 2018-2019 still appears in negative growth of 1.19% per annum.

(ii) Planning Data from 2019-Based TPEDM

4.1.5 Reference has also been made to the 2019-Based Territorial Population and Employment Data Matrix (TPEDM) planning data published by the Planning Department for years 2019, 2026 and 2031 in the relevant Planning Data District (i.e. Sham Shui Po). The population and employment data in 2019, 2026 & 2031 are summarized in **Table 4.2** and the annual growth rate between 2019/2026 & 2026/2031 are summarized in **Table 4.3**.

Table 4.2 2019, 2026 & 2031 Population and Employment Growth in Sham Shui Po from TPEDM

2019		2026		2031	
Population	Employment	Population	Employment	Population	Employment
454,450	246,800	492,450	243,300	464,900	236,350

Table 4.3 Population and Employment Growth Rate in Sham Shui Po from TPEDM

ANNUAL GROWTH RATE (%)			
Population 2019 / 2026	Employment 2019 / 2026	Population 2026 / 2031	Employment 2026 / 2031
1.15%	-0.20%	-1.14%	-0.58%

4.1.6 As shown in **Table 4.3**, the population growth rate in Sham Shui Po has an increasing trend of 1.15% per annum from 2019 to 2026, and has a decreasing trend of 1.14% per annum from 2026 to 2031. The employment growth rate has a decreasing trend of 0.20% per annum per annum from 2019 to 2026, and has a decreasing trend of 0.58% per annum from 2026 to 2031.

(iii) Projections of Population Distribution 2021-2029

4.1.7 Reference has also been made to the "Projections of Population Distribution 2021-2029" published by the Planning Department. The projected population in Sham Shui Po District from 2024 to 2029 are extracted and the average population growth rate from 2024 to 2029 are derived as shown in **Table 4.4**.

Table 4.4 Sham Shui Po District Projected Population from 2024 to 2029

Year	Population
2024	468,000
2025	468,000
2026	463,900
2027	462,000
2028	455,600
2029	454,200
Average Population Growth Rate from 2024 to 2029 = -0.60% p.a.	

Note: Population figures are extracted from Table 1 : Projected Population by District Council District, 2021-2029 in "Projections of Population Distribution 2021-2029"

4.1.8 As shown in **Table 4.4**, the population growth rate in Sham Shui Po District has a decreasing trend of 0.60% per annum from 2024 to 2029.

4.1.9 For short term traffic forecast from 2024 to 2026, taking into account the ATC and TPEDM planning data and by comparing the annual growth rates. Only the population growth rate from 2019 to 2026 shows a positive growth (+1.15% p.a.) while the others show a negative growth rate. For conservative, 1.15% p.a. is adopted for traffic growth from 2024 to 2026.

4.1.10 For long term traffic forecast from 2026 to 2034, taking into account the TPEDM and Projection of Population Distribution data and by comparing the annual growth rates, both appear a negative growth trend in Sham Shui Po District. For conservative, it is assumed 0.50% growth rate per annum to reflect minimal increase in background traffic.

4.1.11 The adopted growth rates for traffic forecast are summarized in **Table 4.5**.

Table 4.5 Adopted Growth Rate for Traffic Forecast

YEAR	TRAFFIC GROWTH RATE
2024 to 2026	1.15 % p.a.
2026 to 2034	0.50 % p.a.

4.1.12 It is deemed sufficient to allow for any unexpected future growth as a result of some changes in land use or redevelopment in the area. These adopted growth rates would be able to ensure a reasonable estimation of future traffic flows.

(iv) Future Planned Developments in the vicinity of the Subject Site

4.1.13 Other planned future new developments in the vicinity of the application site which are assumed to be completed between 2024 and 2034 and which may have traffic impact to the road network in the vicinity of the site have also been considered in the future background traffic flow in 2034. The traffic trip generation/ attraction of these planned developments based on the latest known development parameters are shown in **Table 4.6** below.

Table 4.6 Traffic Trip Generation and Attraction from Other Planned Future Developments in the Vicinity of the Subject Site

DEVELOPMENT PARAMETERS	EXPECTED YEAR OF COMPLETION	AM PEAK (PCU/HR)		PM PEAK (PCU/HR)	
		Gen.	Att.	Gen.	Att.
Public Housing Development at Chak On Road South and Pak Tin Extension - Estimated No. of flats: about 1,000 (1)	In phases from 2030/31	43(7)	33(7)	24(7)	30(7)
Pak Tin Estate Redevelopment Phase 10 (Nga Tin House) - No. of flats: 924 (2)	2023/24	40(7)	30(7)	22(7)	28(7)
Pak Tin Estate Redevelopment Phase 12 - Estimated No. of flats: 1,944 (3)	2028/29	82(7)	62(7)	45(7)	57(7)
Pak Tin Estate Redevelopment Phase 13 - Estimated No. of flats: 2,627 (4)	2027/28	114(7)	86(7)	63(7)	79(7)
Redevelopment of Tai Hang Sai Estate (Section 16 Application No.: A/K4/76) (5) - Estimated No. of flats: 3,347 - Proposed Retail GFA 13,899 sqm - Proposed GIC GFA 6,500 sqm - Proposed Kindergarten GFA 1,675 sqm	2029	364	257	210	256

DEVELOPMENT PARAMETERS	EXPECTED YEAR OF COMPLETION	AM PEAK (PCU/HR)		PM PEAK (PCU/HR)	
		Gen.	Att.	Gen.	Att.
Development of Shek Kip Mei Community Health Centre (Section 16 Planning Application No.: A/K4/78) (6) - 64 consulting rooms and 30 nos. of PVP spaces	2029	32	25	20	24

Notes:
(1) Source: Legislative Council Paper No. CB(1)70/2023(04) dated 6 February 2023
(2) Source: Sham Shui Po District Council, RODS Paper 7/21 from Housing Department, June 2021
(3) Source: Sham Shui Po District Council, EHHAC Paper 22/22 from Housing Department, July 2022
(4) Source: Replies to initial questions raised by Legislative Council Members in examining the Estimates of Expenditure 2023-24 from Secretary for Housing, Reply Serial No. HB015, April 2023
(5) Source: TIA report of the Approved TPB Application No. A/K4/76
(6) Source: TIA report of the Approved TPB Application No. A/K4/78
(7) Based on peak hour trip rates for Subsidized Housing: Public Rental, TPDM Volume 1, Chapter 3, Annex D, Table 1

4.1.14 With reference to the planned developments nearby the subject site, the reference traffic flows in year 2034 are derived by applying the adopted growth factor in **Table 4.5** to 2024 existing traffic flows with addition to traffic flows in the planned developments in the vicinity of the site as shown in **Table 4.6**. The 2034 reference traffic flows are derived and as shown in **Drawing No. 4.1**.

4.2 Proposed Development Traffic Generation

4.2.1 Currently there is no standard trip generation rate for church or social welfare facilities provided in "Traffic Generation and Attraction Rates" as stated in Annex D of Volume 1 - Chapter 3 in the Transport Planning and Design Manual (TPDM) published by the Transport Department, the estimated trip generation rates for both vehicular traffic and pedestrian for the proposed development will be derived based on the following assumptions.

4.2.2 Since there is no public parking space provided for the church visitors, and as reviewed in Section 3.2, the proposed development is well served by public transport; therefore it is estimated that the visitors will arrive and leave the development mainly by public transport.

4.2.3 The number of seats of church hall of the proposed redevelopment scheme will be 268, which is less than 400 seats provision of existing St. Thomas' Church. Therefore the estimated future number of visitor and traffic trips during Sunday Worship should be less than existing scenario.

4.2.4 Moreover, the church fellowship gatherings and Sunday school lessons are only to be arranged during weekday off peak period or Sunday morning period, which it outside the weekday AM and PM traffic peak period. Thus, the estimated traffic generated from the church will during AM and PM peak will be minimal.

4.2.5 For the social welfare facilities, the operation hours will be outside the weekday AM and PM peak period. Therefore it is assuming only minimal traffic trips by the staff will be generated by these social welfare facilities. Also as reviewed in Section 3.2, the proposed

development is well served by public transport; therefore it is estimated that the staff will arrive and leave the development mainly by public transport.

4.2.6 For traffic impact assessment purpose, it is conservatively assumed that only minor development traffic (20 pcu/hr) will be arrived and departed within weekday AM and PM peak hour to account for the possible traffic trips generated by the development. The estimated traffic generations are summarized in **Table 4.7**.

Table 4.7 Estimated Traffic Generations of the Proposed Development

AM PEAK (PCU/HR)		PM PEAK (PCU/HR)	
Generation	Attraction	Generation	Attraction
20	20	20	20

4.2.7 The estimated development traffic trips as shown in **Table 4.7** will then be superimposed onto the 2034 reference traffic flows and become the 2034 design traffic flow. The 2034 design traffic flows are shown in **Drawing No. 4.2**.

5. TRAFFIC IMPACT ASSESSMENT

5.1 Junction Capacity Assessment

5.1.1 For conservative purpose, the traffic impact of the proposed development on the surrounding road network has been assessed under the weekday AM and PM peak hour periods. The junction capacity analysis of the selected key junctions in the reference scenario (without proposed development) and design scenarios in Year 2034 (with proposed development) are shown in **Table 5.1**. The junction calculations are attached in the **Appendix T1** for reference.

Table 5.1 Junction Capacity Analysis – 2034 Reference and Design Scenarios

JUNCTION	LOCATION	2034 REFERENCE (WITHOUT DEVELOPMENT)		2034 DESIGN (WITH DEVELOPMENT)	
		R.C.(1)		R.C.(1)	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK
J1	Pei Ho Street / Berwick Street	>100%	>100%	>100%	>100%
J2	Nam Cheong Street / Berwick Street	>100%	>100%	>100%	>100%
J3	Shek Kip Mei Street / Berwick Street	76%	>100%	74%	>100%
J4	Shek Kip Mei Street / Tai Po Road / Un Chau Street	25%	39%	24%	38%
J5	Nam Cheong Street / Tai Po Road	90%	85%	89%	83%

Note: (1) Reserve Capacity (R.C.) indicated in %, provides an indication of signal junction performance. R.C. >15% implies that it is operating satisfactorily, while a negative R.C. suggests that it is overloaded.

5.1.2 As shown in **Table 5.1**, the results have indicated all assessed junctions would be operated within capacity in the design scenario with proposed development traffic.

5.2 Traffic Impact Conclusion

5.2.1 In terms of junction capacity, the assessed junctions will be operated within capacity in design year 2034.

5.2.2 As the major activity hours of the proposed development will be outside the weekday traffic peak hours, therefore the traffic impact to the surrounding junctions from the proposed development during peak hour will be very minor.

5.2.3 It is therefore concluded that the proposed development would not cause adverse traffic impact to the surrounding road network from the traffic point of view.

6. SUMMARY AND CONCLUSION

6.1 Summary

6.1.1 Traffic Impact Assessment (TIA) has been carried out to support the proposed church redevelopment project of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, which comprises the redevelopment of HKSKH St. Thomas' Church into a complex building including church and social welfare facilities.

6.1.2 The tentative completion year of the proposed development is 2031 and the TIA design year for assessment is 2034.

6.1.3 As there is no specific requirement of parking and servicing facilities provision for an church and social welfare facilities in the HKPSG, the proposed parking provision has been proposed according to the operation need of HKSKH.

6.1.4 Five identified key junctions adjacent to the proposed development have been assessed to determine the traffic impacts of the proposed development on the local junctions during weekday AM and PM peak periods in design year 2034. Assessment results show all assessed junctions will be operated within capacity in 2034.

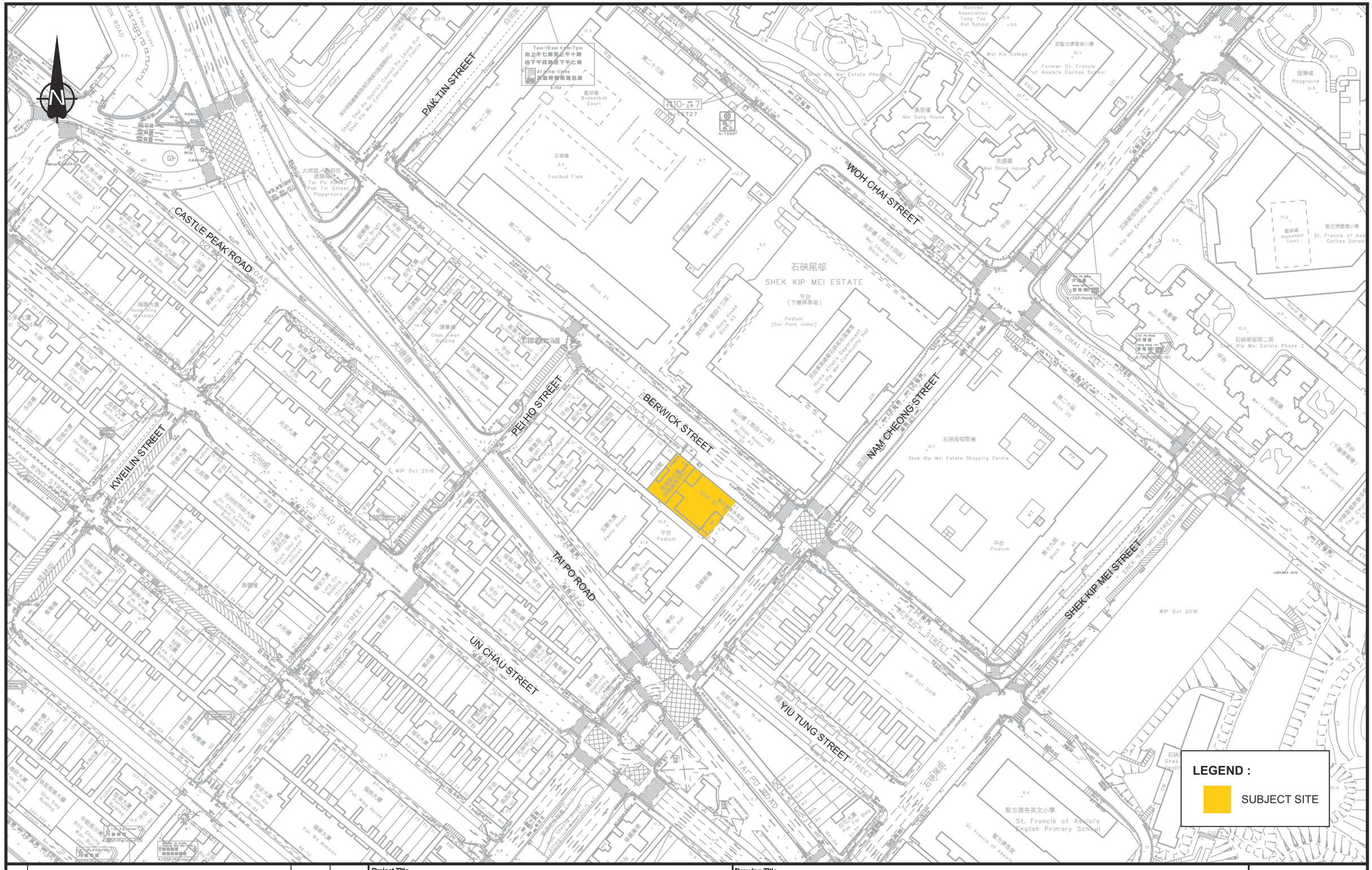
6.1.5 As the major activity hours of the proposed development will be outside the weekday traffic peak hours, therefore the traffic impact to the surrounding junctions from the proposed development during peak hour will be very minor.

6.2 Conclusion

6.2.1 Based on the above findings, it is concluded that the proposed development is feasible from a traffic perspective and will not lead to adverse traffic impact to the surrounding road network.

Appendix T1

JUNCTION CALCULATIONS



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

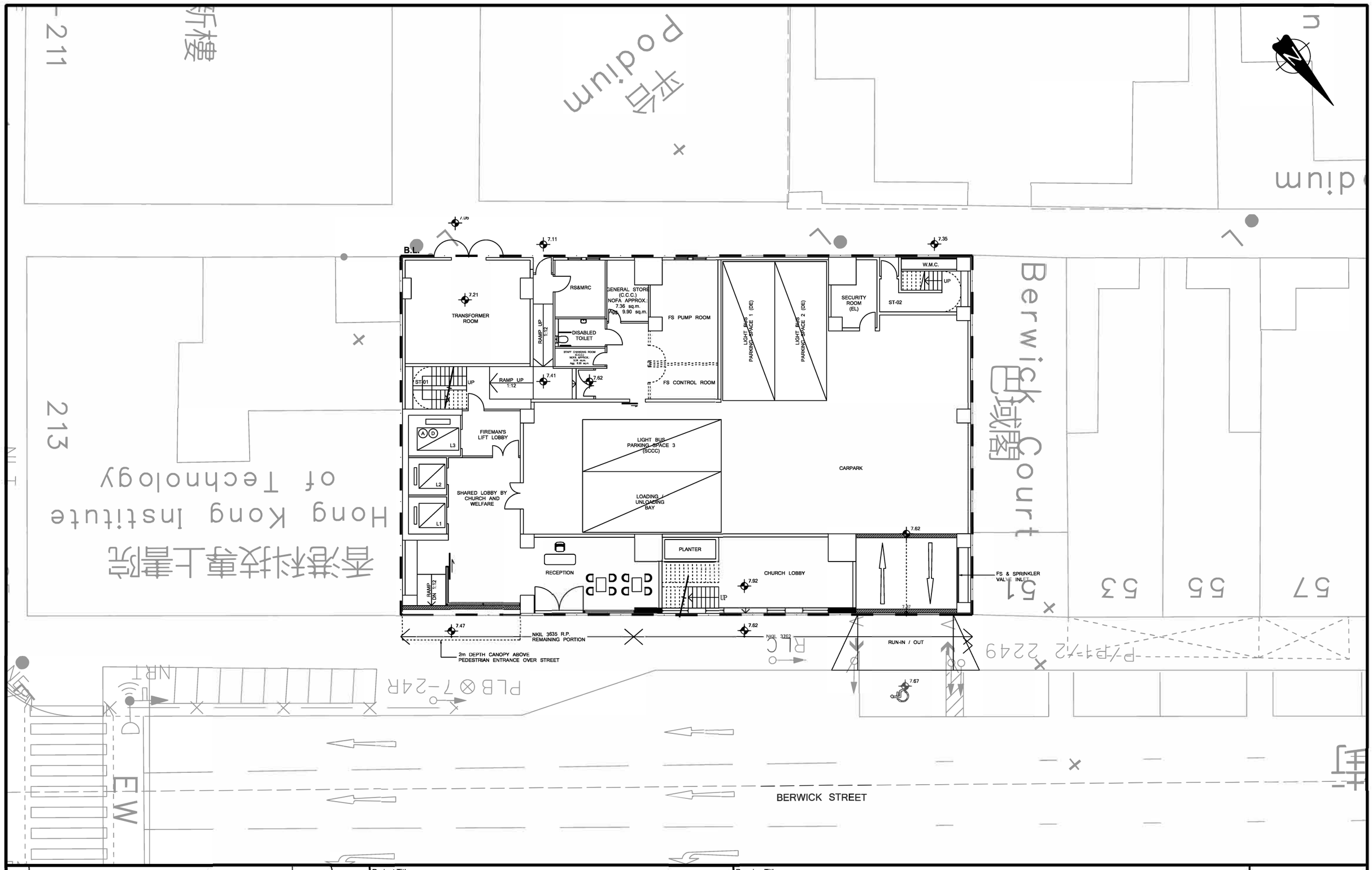
SITE LOCATION

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	NTS	JUN 2025	1.1	-

SYSTRA MVA

CHK50686610/TIA_S12A/F11.CDR/LLH/18JUN25

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

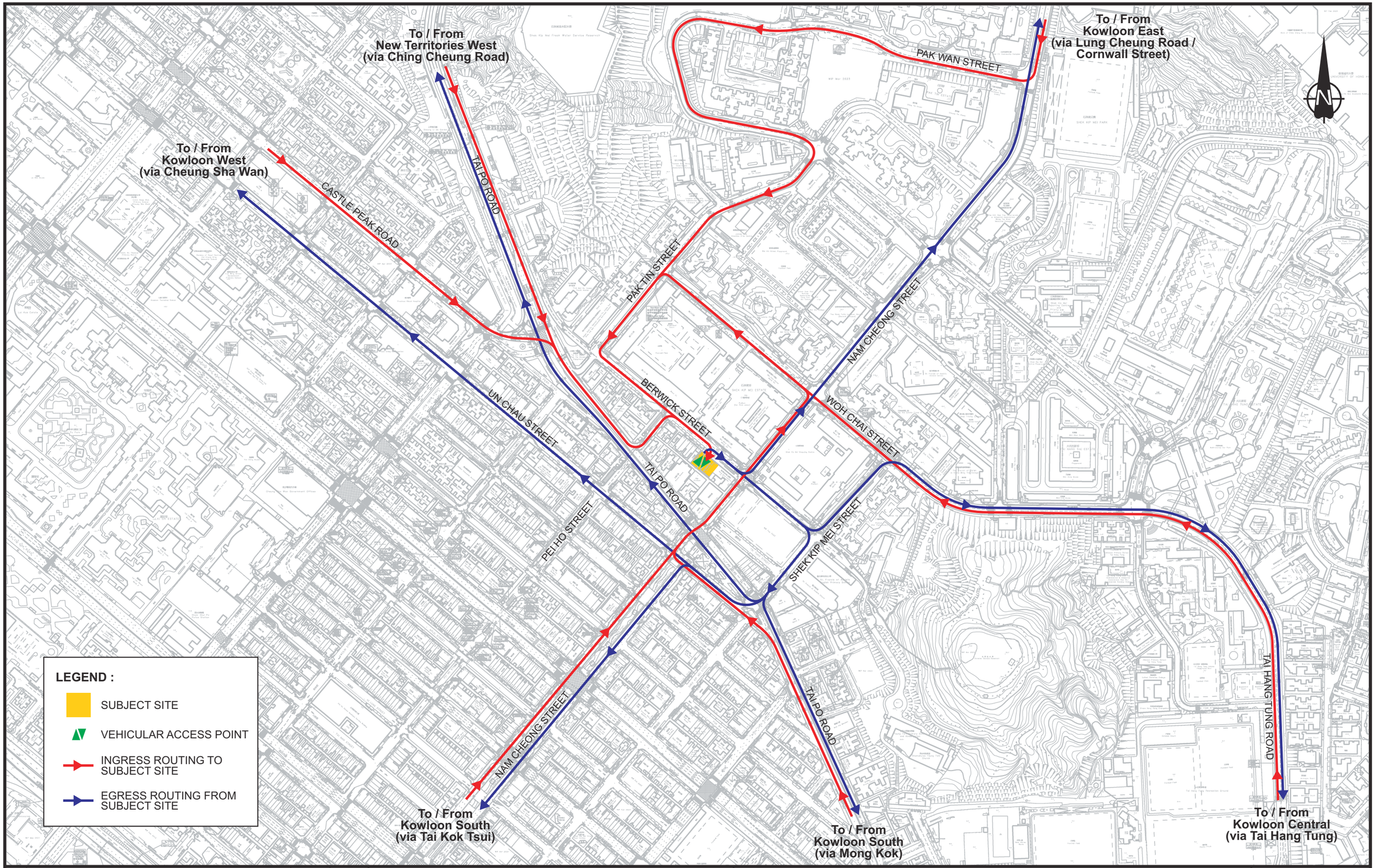
GROUND FLOOR LAYOUT WITH PROPOSED RUN-IN/OUT

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	1:200(A3)	JUN 2025	2.1	-

SYSTRA MVA

CHK50686610/TIA_S12A/F21.DGN/KCM/19JUN25

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

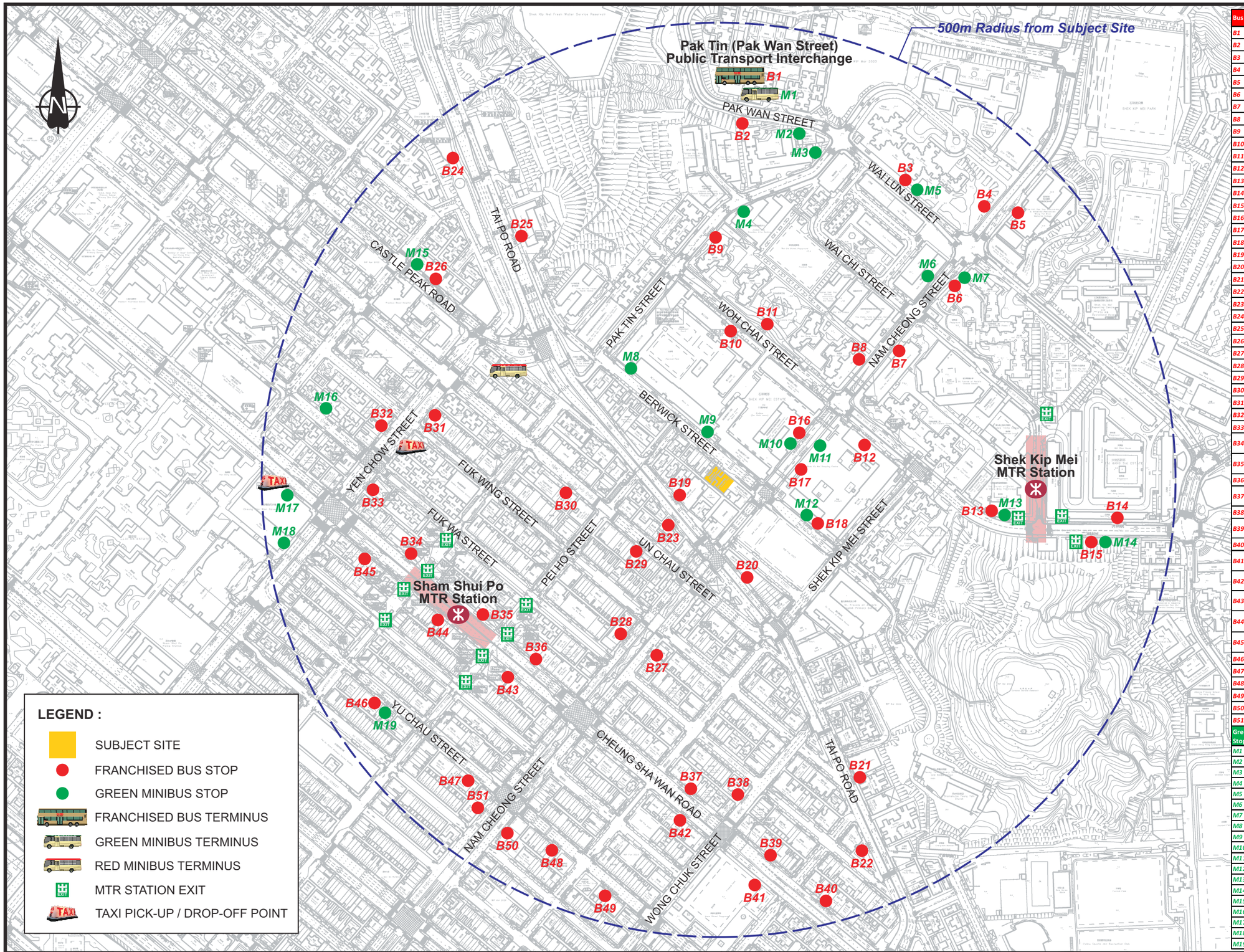
VEHICULAR ACCESS ROUTINGS

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	NTS	JUN 2025	2.2	-

SYSTRA MVA

CHK50686610/TIA_S12A/F22.CDR/LLH/18JUN25

Original Size : A3



Bus Stop No.	Stopping Routes
B1	2D, 2E, 104, 702A, 702B
B2	2D
B3	2E, 104, 702B
B4	2E, 86, 86A, 86C, 87B, 104, 286A
B5	2B, 2F, 86, 86A, 86C, 87B, 214, 214P, N214
B6	104, A23
B7	86, 86A, 702B
B8	2B, 2F, 86, 86A, 214, 286A, 702A, 702B, A23
B9	2D
B10	2D
B11	2B, 6D, 6E, 6P, 86, 86A, 286A, 702, 702A, 702B
B12	2D, 6D, 6E, 6P
B13	2D, 6D, 6E, 6P, 104, 702
B14	2D, 6D, 6E, 6P, 104, 702
B15	2D, 6D, 6E, 6P, 104, 702
B16	2E, 86C, 87B
B17	2B, 2E, 2F, 86C, 87B, 214, 214P, 702, 702B, A23, N214
B18	2D
B19	6, 6C, 6X, X6C
B20	35X, 81, 793, N241
B21	6, 6C, 35X, 81, 793, N241
B22	6, 6C, 81, N241, X6C
B23	81
B24	2P, 72, 81
B25	72, 81
B26	6, 6C, 6D, 6E, 6P, 793, N241, X6C
B27	2E, 86C, 87B
B28	2E, 2F, 86C, 214, A23
B29	6, 6C, 6D, 6E, 6P, 86, 702, 702B, A23, N241, X6C
B30	2B, 2F, 86A, 214, 214P, N214
B31	2F, 31B, 36A, 702, 702B, 970, A23, N122
B32	36B, 702B
B33	86C, 112, 118, 118P, N118
B34	45, 98C, 98E, 98S, 234X, 238X, 270D, 286D, 293S, 296P, 298X, A20, A23, E21, E21A, E21B, E21C, E21D, N21, N21A, NA20
B35	2F, 30X, 33A, 35A, 37, 42A, 58X, 59X, 60X, 66X, 67X, 68X, 69X, 79X, 86C, 102, 102P, 112, 118, 118P, 171, 904, 905, 970, 970X, N118, N122, N171
B36	A23, E21, E21A, E21B, E21C, E21D, N21, N21A
B37	45, 98C, 98E, 98S, 234X, 238X, 293S, 296P, 298X, A20, E21, E21A, E21B, E21C, E21D, N21, N21A, NA20
B38	87B
B39	30X, 35A, 42A, 60X, 69X, 79X, 102, 102P, 112, 118, 118P, 171, 904, 905, 970, 970X, N118, N122, N171
B40	33A, 37, 58X, 59X, 66X, 67X, 68X
B41	6X, 79X, 102, 102P, 102R, 112, 171, 171A, 171P, 793, 904, 905, 970, 970X, N122, N171, X970
B42	52X, 58X, 59X, 60X, 66X, 67X, 68X, 69X, 265B, 270B, 272E, E21, E21A, E21B, E21C, E21D, N21, N21A
B43	30X, 35A, 42A, 43C, 45, 234X, 238X, A20, E21, E21A, E21B, E21C, E21D, N21, N21A, NA20
B44	6F, 6X, 13P, 79X, 98C, 98S, 102, 102P, 102R, 112, 171, 171A, 171P, 270B, 272E, 293S, 296C, 298X, 793, 904, 905, 970, 970X, N122, N171, X970
B45	1R, 52X, 58X, 59X, 60X, 66X, 67X, 68X, 69X, 265B, E21, E21A, E21B, E21C, E21D, N21, N21A
B46	2X, 98E, 117, 118, 118P, 296P, N118
B47	33A, 36B, 37, 42, 44, 86C
B48	117, 118, 118P, N118
B49	2X, 33A, 36B, 37, 42, 44, 98E, 296P
B50	2E, 87B
B51	2E, 214

Green Minibus Stop No.	Stopping Routes
M1	9M, 12
M2	42
M3	42
M4	9M
M5	12
M6	9M, 30A, 30B, 32M
M7	30A, 30B, 32M
M8	9M
M9	42
M10	42
M11	30B, 32M
M12	9M, 30A, 30B, 32M, 41A, 41M
M13	9M, 30A, 30B, 32M, 41A, 41M
M14	41A, 41M
M15	42
M16	75S
M17	75, 75S
M18	75, 75S
M19	75S

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

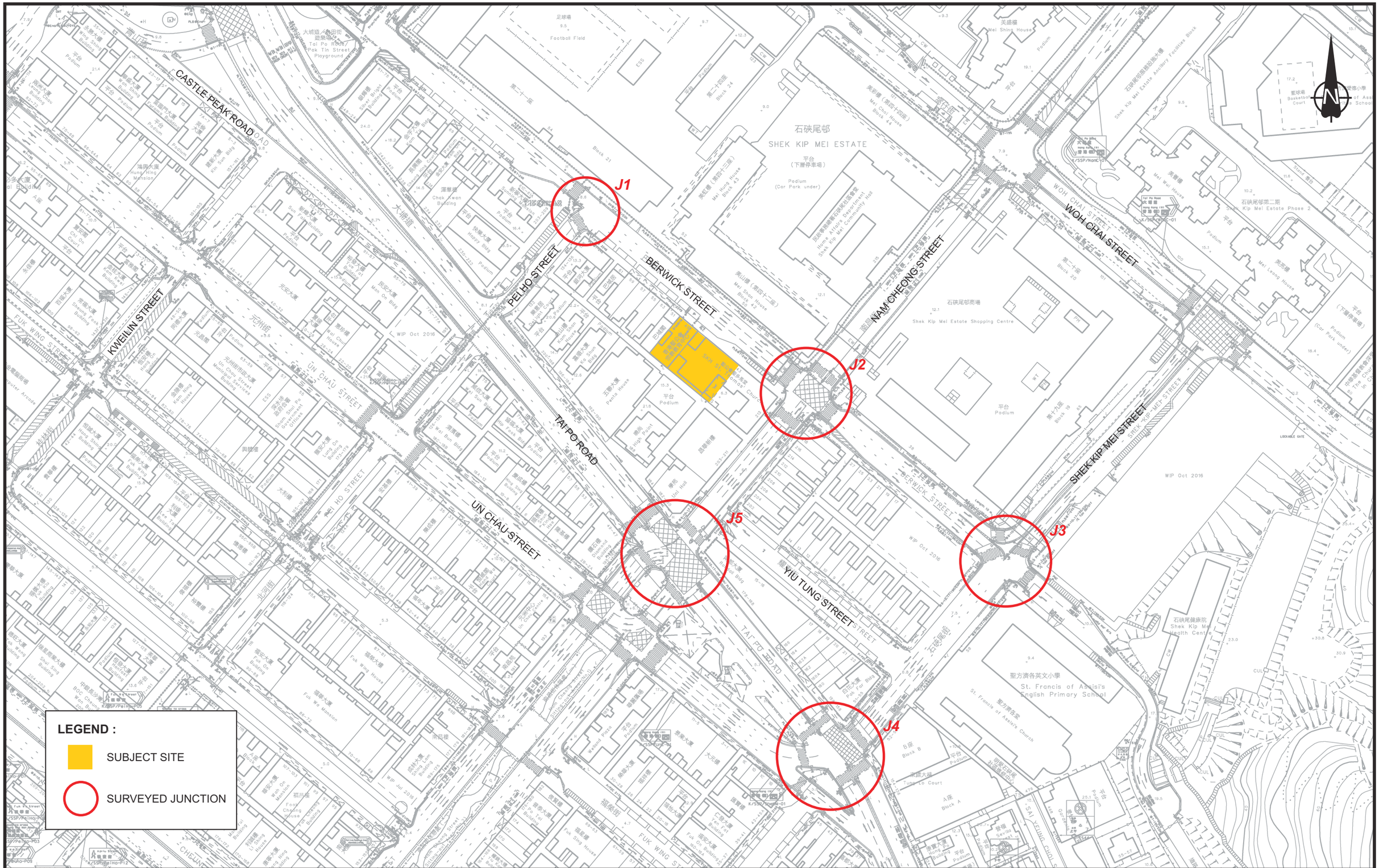
EXISTING PUBLIC TRANSPORT FACILITIES WITHIN 500M RADIUS

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	NTS	JUN 2025	3.1	-

SYSTRA MVA

CHK50686610/TIA_S12A/F31.CDR/LLH/18JUN25

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

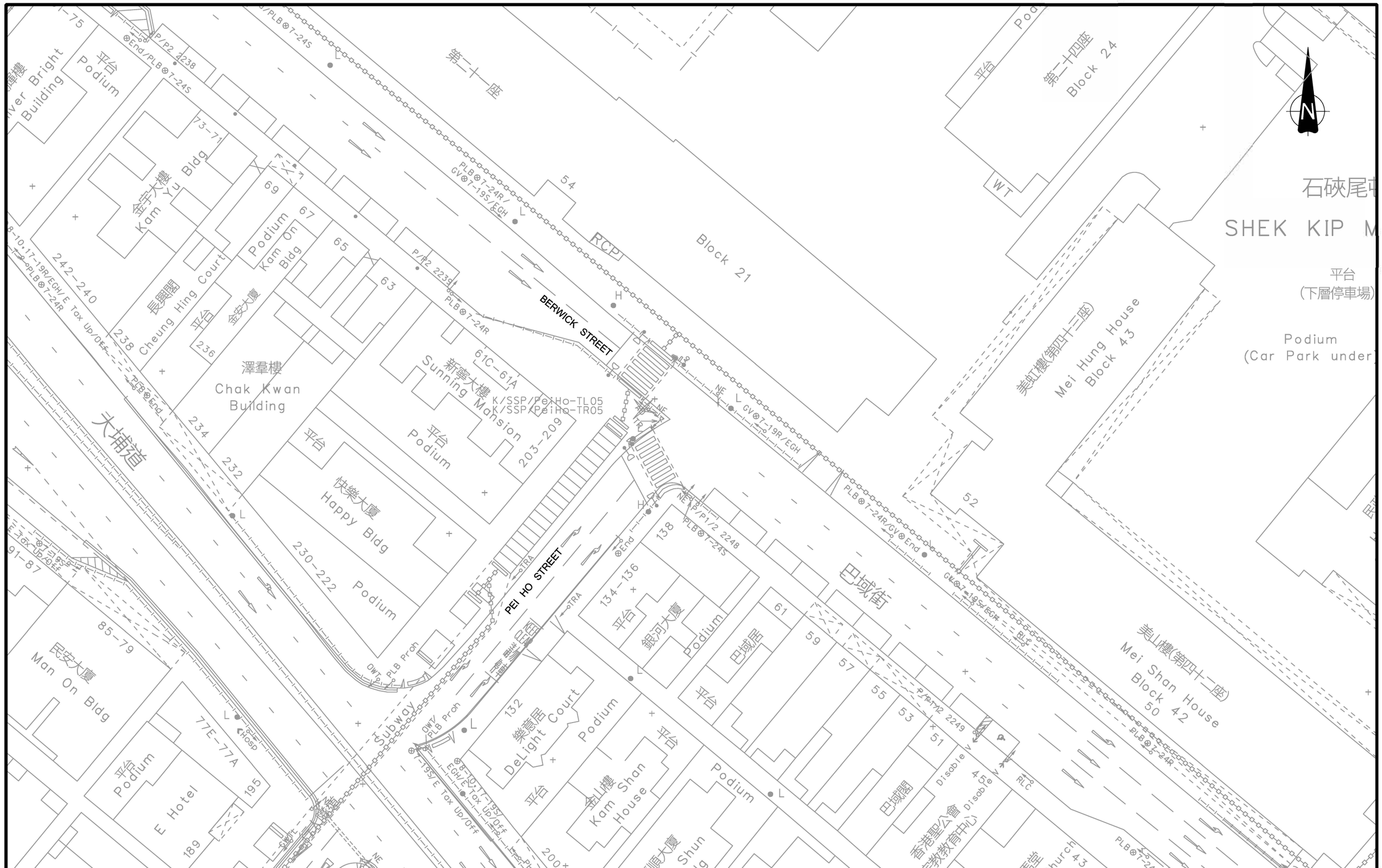
Drawing Title

SURVEYED JUNCTION FOR TRAFFIC ASSESSMENT

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	NTS	JUN 2025	3.2	-

CHK50686610/TIA_S12A/F32.CDR/LLH/19JUN25

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

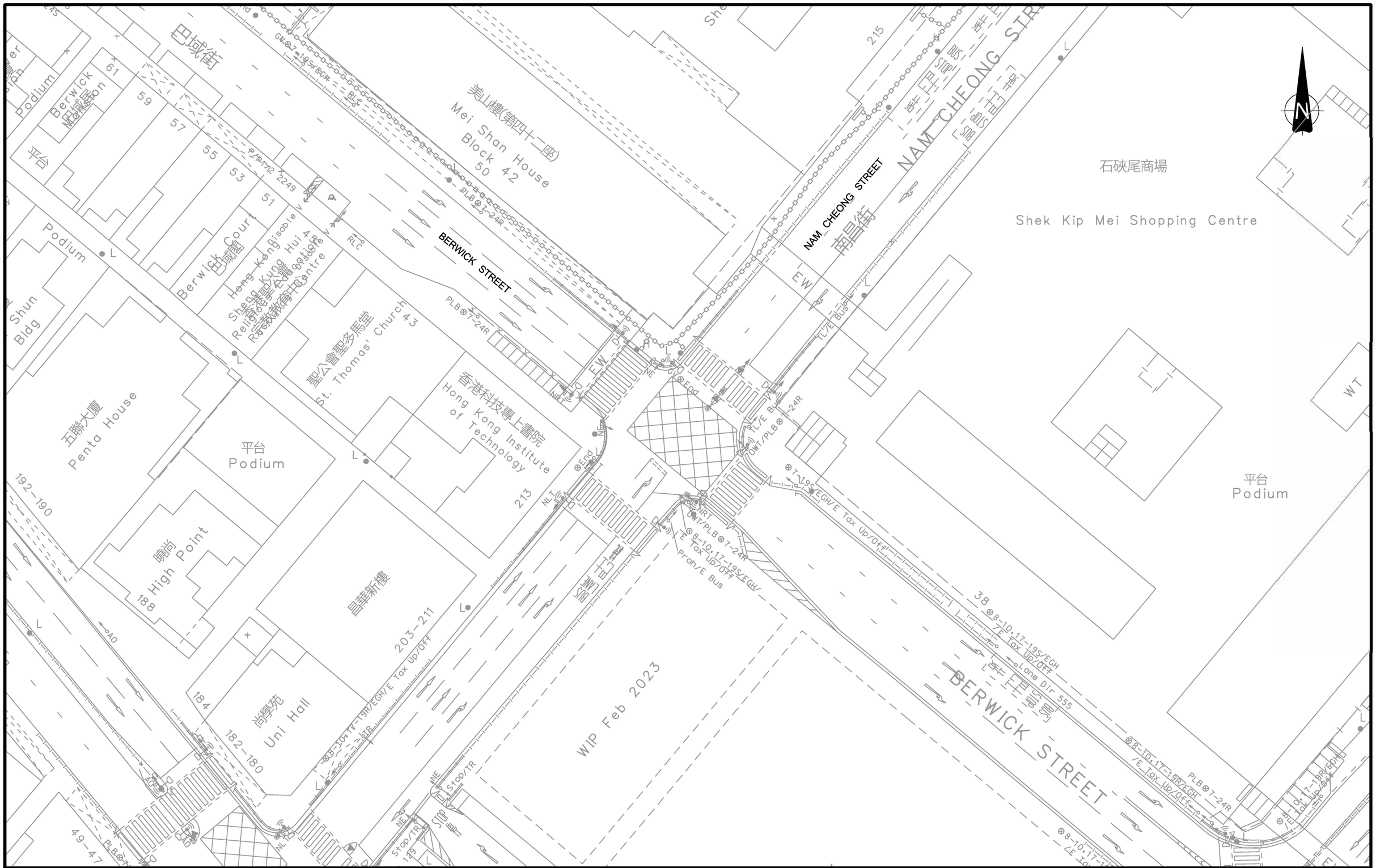
EXISTING JUNCTION LAYOUT OF PEI HO STREET/BERWICK STREET (J1)

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	1:500(A3)	JUN 2025	3.3	-

SYSTRA MVA

CHK50686610/TIA_S12A/F33.DGN/KCM/19JUN25

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

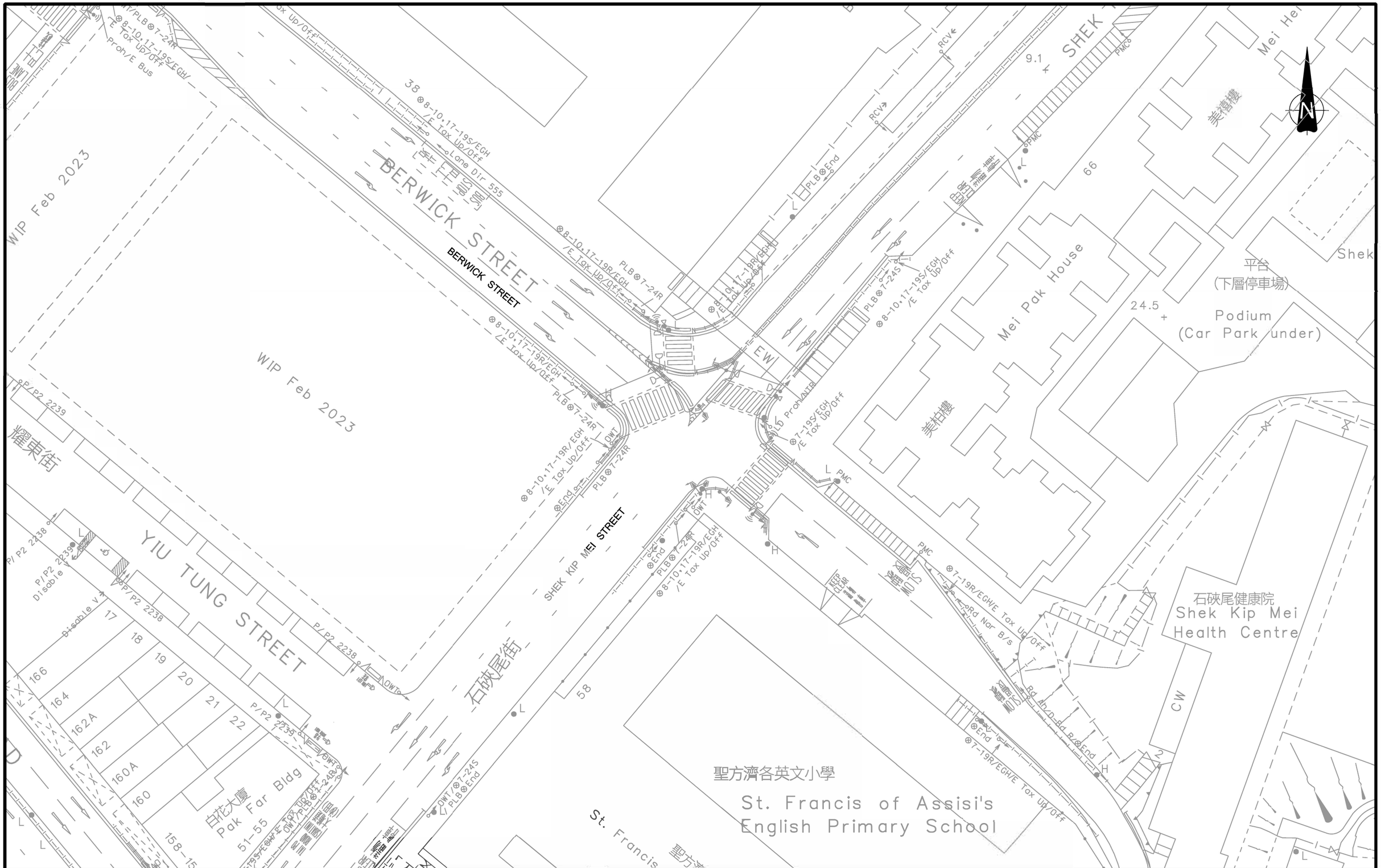
EXISTING JUNCTION LAYOUT OF NAM CHEONG STREET/BERWICK STREET (J2)

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	1:500(A3)	JUN 2025	3.4	-

SYSTRA MVA

CHK50686610/TIA_S12A/F34.DGN/KCM/19JUN25

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

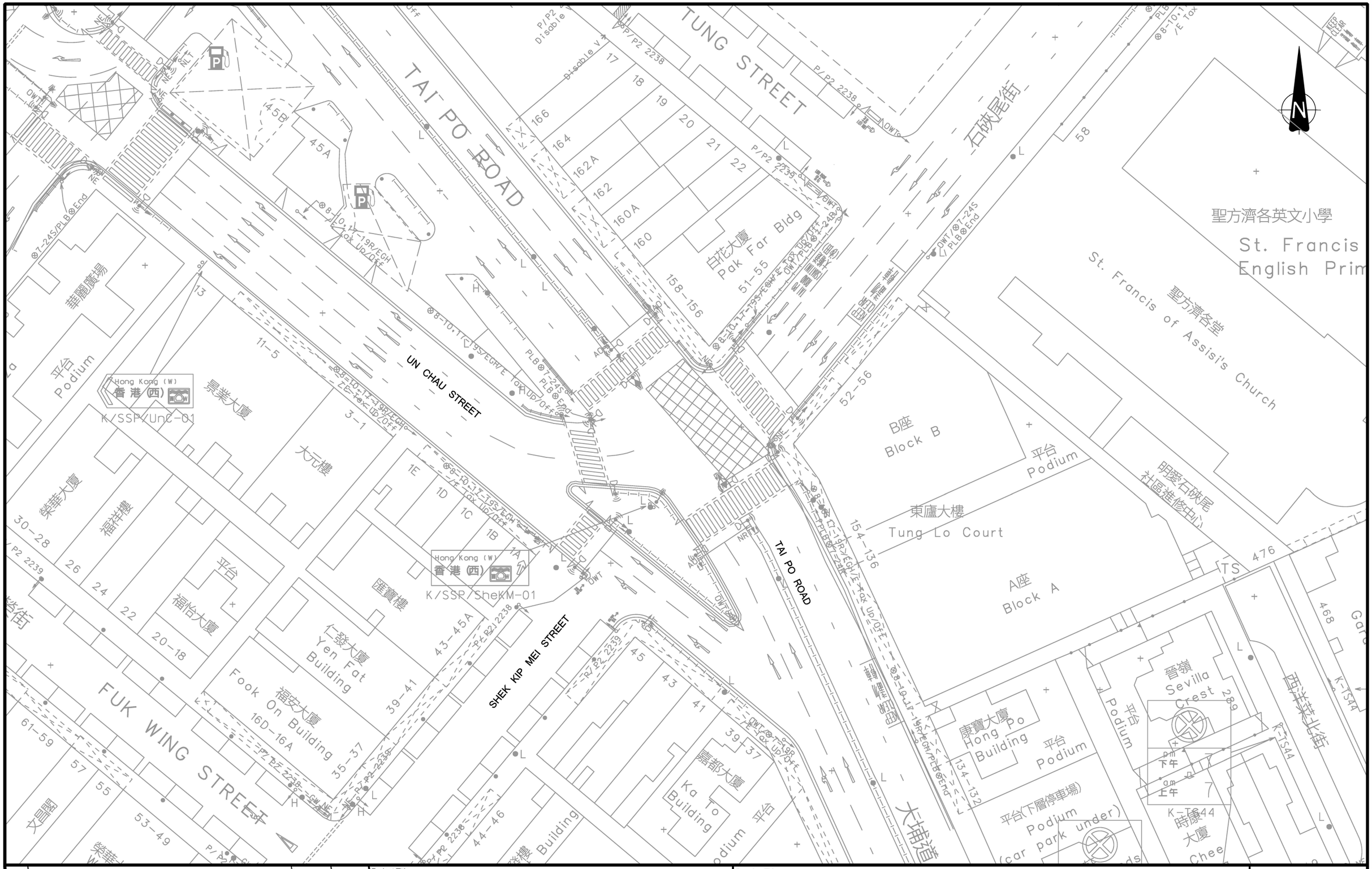
EXISTING JUNCTION LAYOUT OF SHEK KIP MEI STREET/BERWICK STREET (J3)

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	1:500(A3)	JUN 2025	3.5	-

SYSTRA MVA

CHK50686610/TIA_S12A/F35.DGN/KCM/19JUN25

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

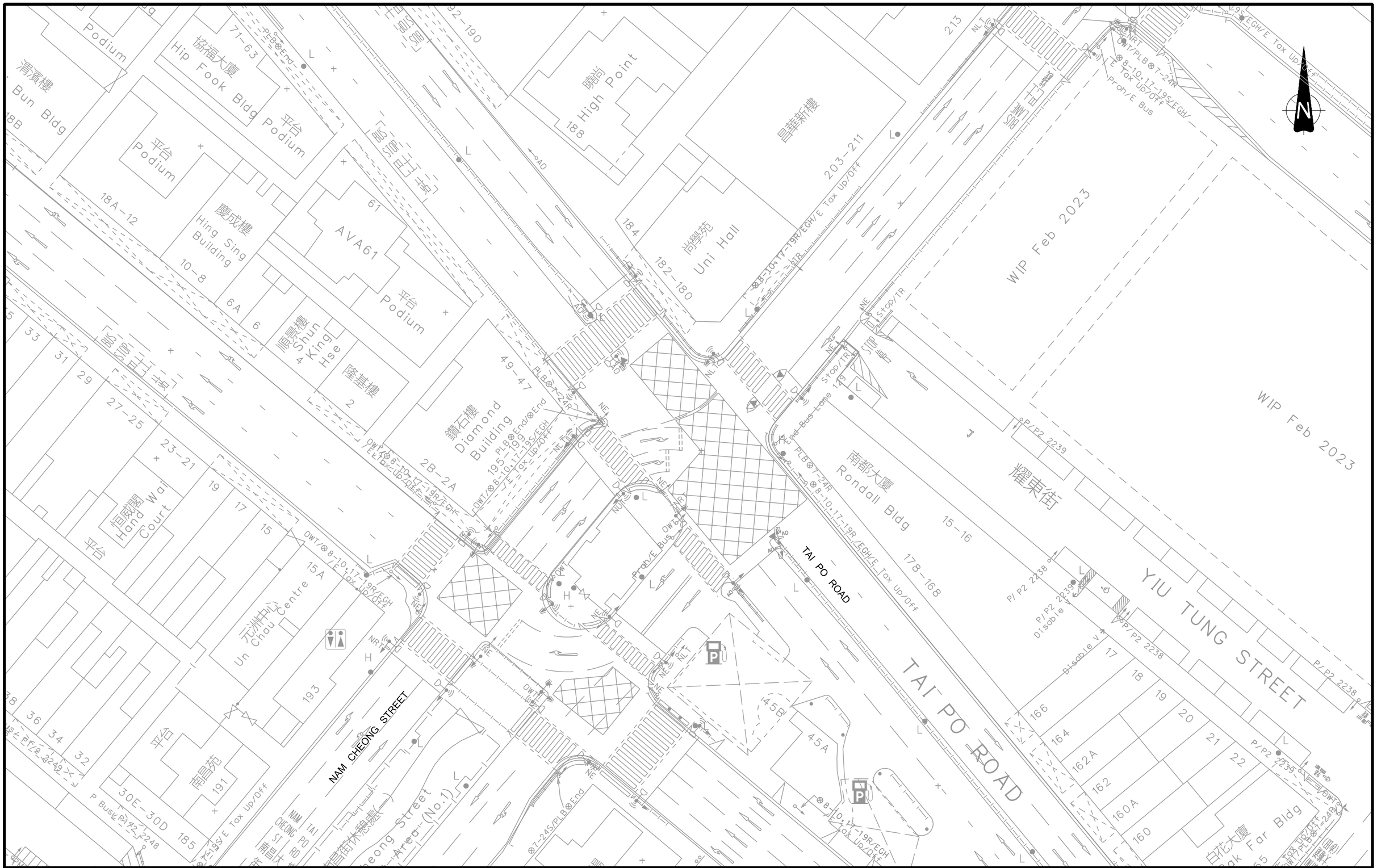
EXISTING JUNCTION LAYOUT OF SHEK KIP MEI STREET/TAI PO ROAD/UN CHAU STREET (J4)

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	1:500(A3)	JUN 2025	3.6	-

SYSTRA MVA

CHK50686610/TIA_S12A/F36.DGN/KCM/19JUN25

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

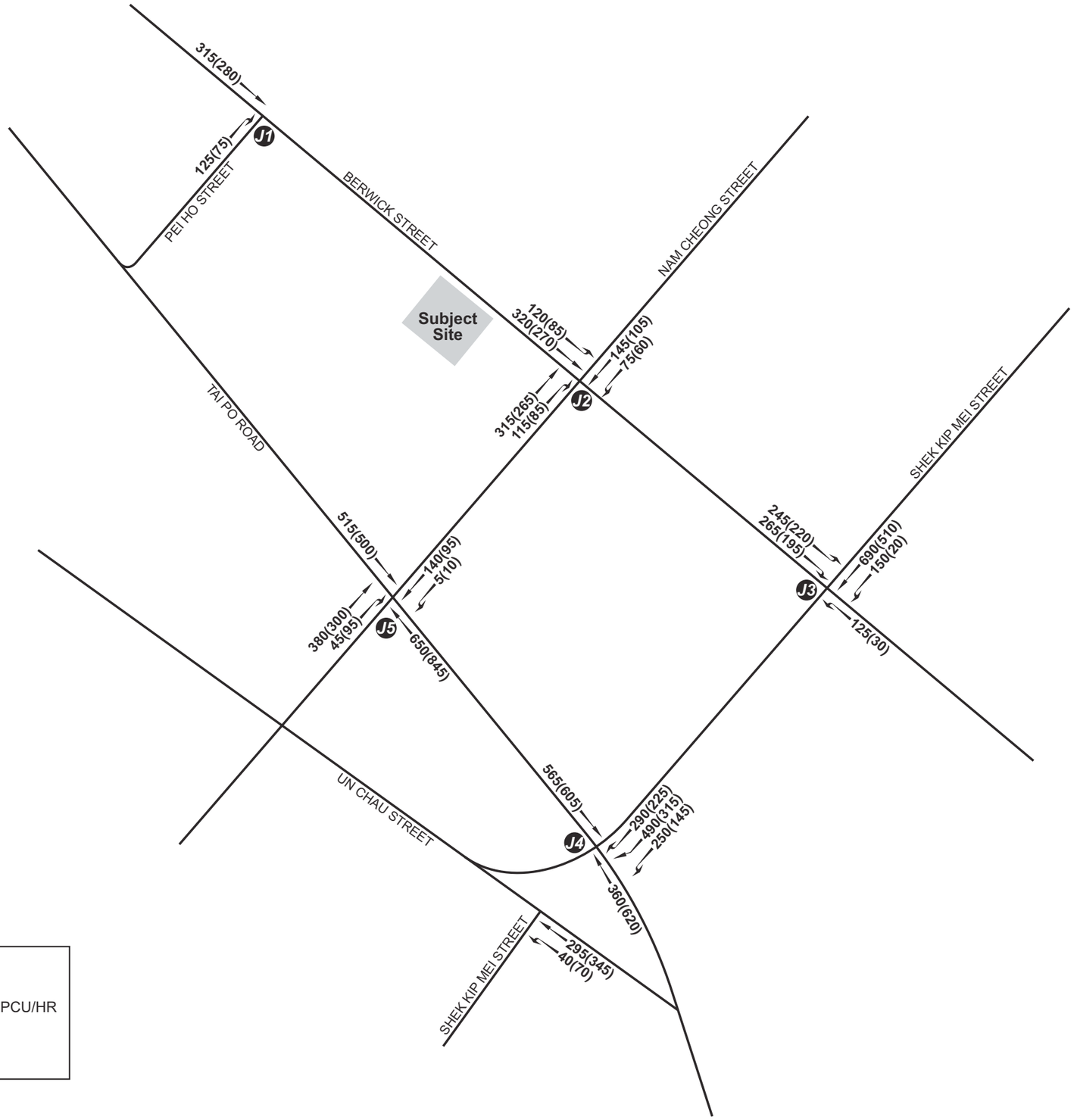
EXISTING JUNCTION LAYOUT OF NAM CHEONG STREET/TAI PO ROAD (J5)

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	1:500(A3)	JUN 2025	3.7	-

SYSTRA MVA

CHK50686610/TIA_S12A/F37.DGN/KCM/19JUN25

Original Size : A3



LEGEND :

565(605) AM(PM) PEAK HOUR TRAFFIC FLOW IN PCU/HR

Note :
1. Traffic flows are rounded to nearest 5

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

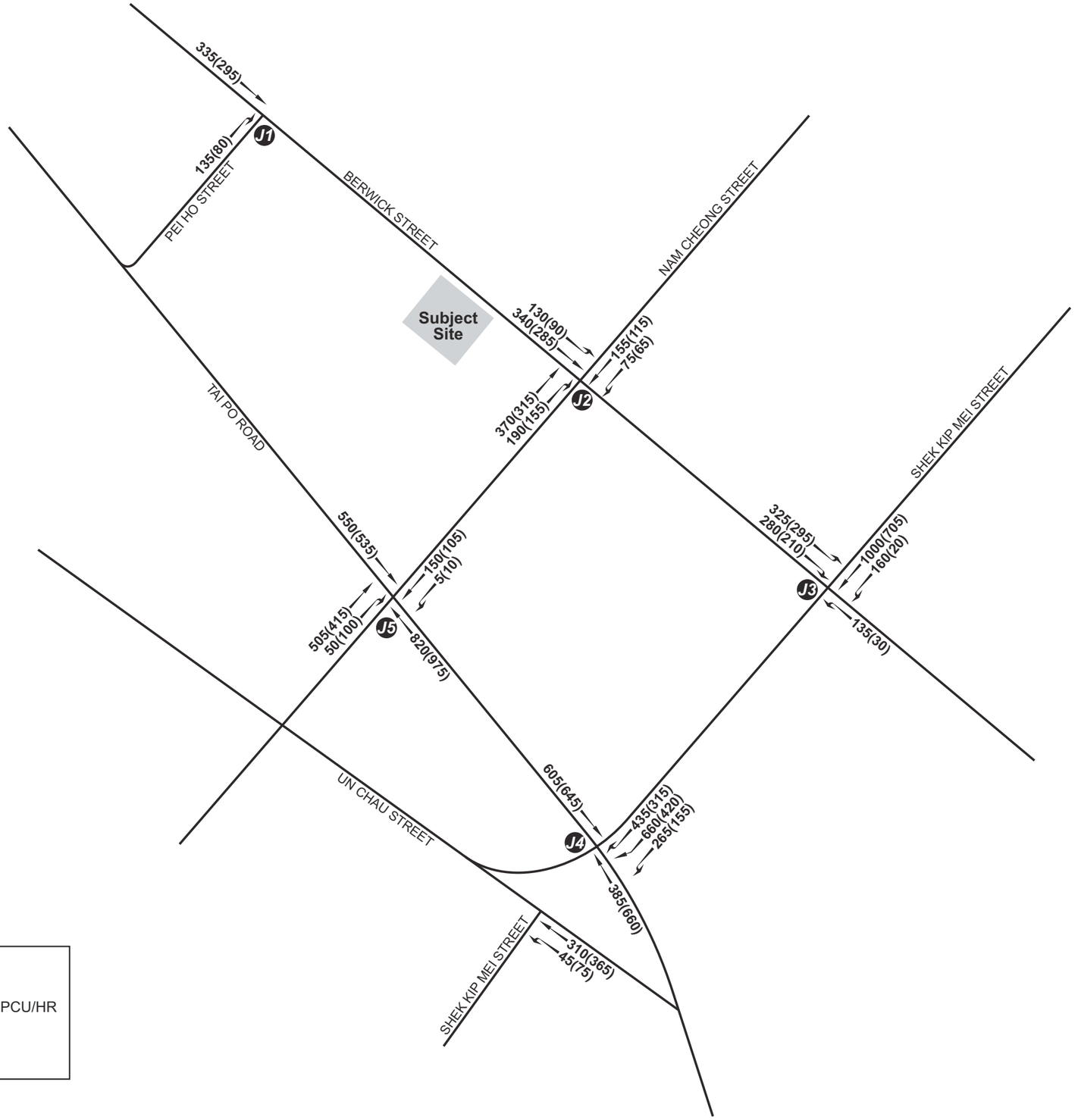
2024 EXISTING TRAFFIC FLOWS

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	NTS	JUN 2025	3.8	-

SYSTRA MVA

CHK50686610/TIA_S12A/F38.CDR/LLH/19JUN25

Original Size : A3



LEGEND :

605(645) AM(PM) PEAK HOUR TRAFFIC FLOW IN PCU/HR

Note :
1. Traffic flows are rounded to nearest 5

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

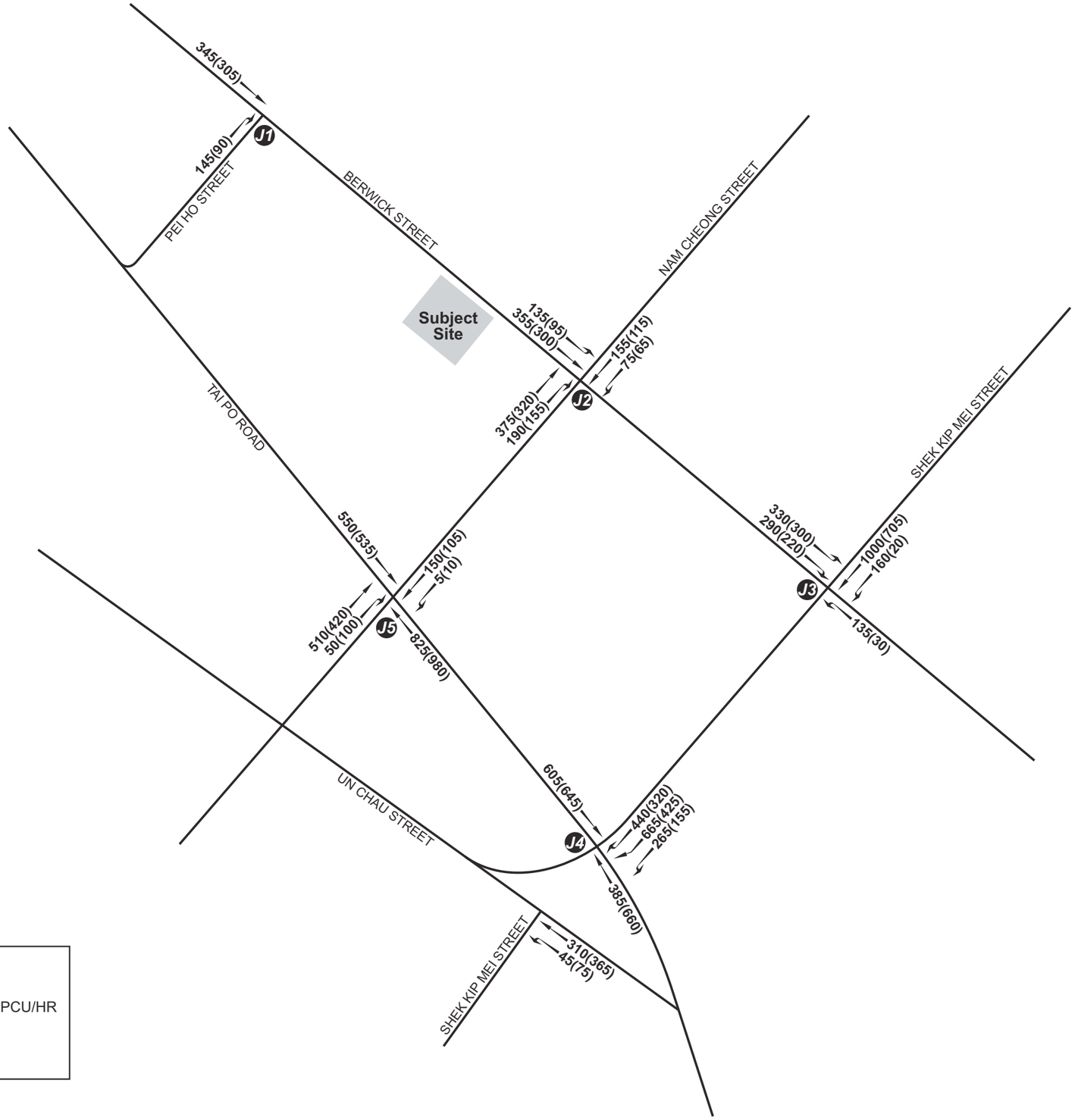
2034 REFERENCE TRAFFIC FLOWS

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	NTS	JUN 2025	4.1	-

SYSTRA MVA

CHK50686610/TIA_S12A/F41.CDR/LLH/19JUN25

Original Size : A3



LEGEND :

605(645) AM(PM) PEAK HOUR TRAFFIC FLOW IN PCU/HR

Note :
1. Traffic flows are rounded to nearest 5

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

SECTION 12A PLANNING APPLICATION FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO

Drawing Title

2034 DESIGN TRAFFIC FLOWS

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	NTS	JUN 2025	4.2	-

SYSTRA MVA

CHK50686610/TIA_S12A/F42.CDR/LLH/19JUN25

Original Size : A3

Appendix A - Reply from Transport Department on TIA in Technical Feasibility Study

KQV6W

By Fax
2527 8490

運輸署
Transport Department

CHK50686610

MVA		
Job No.		
Reg. No.	66337719	
Date In	29-7-2024	
Initials	Action Date	Copy Date
PM/ TCM		email
PD/		
DIC/		
HMC	✓	email
Duplicate	Filing Clerk	Day File
		✓
Reply Ref.		
Reply Date		
File No.		

本署檔案 Our Ref. : (KR3PT) in TD KR146/193/B-9
來函檔號 Your Ref. : CHK50686610/TKM/L2400994/jch
電　話 Tel. : 2399 2479
圖文傳真 Fax : 2397 8046
電　郵 Email :

23 July 2024

MVA Hong Kong Limited
22/F Genesis,
33-35 Wong Chuk Hand Road,
Hong Kong
(Attn: Mr. William HUNG)

Dear Sir/Madam,

Technical Feasibility Study for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635 RP

I refer to your above referenced letter dated 19 June 2024 submitting the traffic impact assessment (TIA) report.

It is noted in the TIA report that all assessed junctions near the proposed development will be operated within the capacity in 2034 with the proposed development traffic. I have no comment from traffic engineering point of view on the report.

Yours faithfully,

(YU Wai-ho)
for Commissioner for Transport

市區(九龍)及新界分區辦事處
Urban (Kln.) & NT Regional Office
九龍聯運街三十號旺角政府合署七樓及八樓
7th & 8th Floors, Mong Kok Government Offices, 30 Luen Wan Street, Kowloon.
圖文傳真 Fax No.: 2381 3799 (新界區) (NTRO) 2397 8046 (九龍市區) (U(K)RO)
網址 Web Site: http://www.td.gov.hk

Appendix T1

JUNCTION CALCULATIONS

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

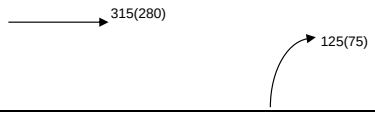
Junction: J1 - Pei Ho Street / Berwick Street Design Year: 2024

Description: 2024 Existing Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Berwick Street (EB)	* →	A	1	3.000						1340	1340	124	0.093		111	0.083	0.083
	→	A	1	3.000						2055	2055	191	0.093	0.093	169	0.082	
Pei Ho Street (NB)	↱	B	2	3.500		13				1885	1885	64	0.034		39	0.021	0.021
	↱	B	2	3.500		14				1775	1775	61	0.034	0.034	36	0.020	
Pedestrian Crossing		Cp	1	MIN GREEN + FLASH =			6	+	9	=	15						
		Dp	2	MIN GREEN + FLASH =			6	+	6	=	12						

Notes:

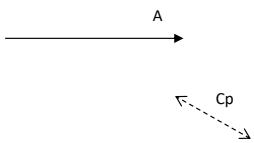
* On-street illegal parking with 0.7 site factor adopted



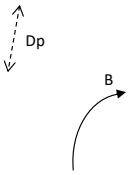
Group	A,Dp	A,B	Group	A,Dp	A,B
y	0.093	0.127	y	0.083	0.104
L (sec)	23	10	L (sec)	23	10
C (sec)	110	110	C (sec)	110	110
y pract.	0.712	0.818	y pract.	0.712	0.818
R.C. (%)	666%	543%	R.C. (%)	759%	690%

Stage / Phase Diagrams

1.



2.



3.

4.

5.

AM Critical Case: A,B									
I/G= 5	G = 72	I/G= 7	G = 26	I/G=	#N/A	I/G=		I/G=	
PM Critical Case: A,B									
I/G= 5	G = 79	I/G= 7	G = 19	I/G=	#N/A	I/G=		I/G=	

Date: MAR, 2024 **Junction:** J1 - Pei Ho Street / Berwick Street (1)

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

Junction: J2 - Nam Cheong Street / Berwick Street Design Year: 2024

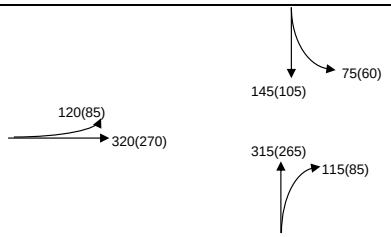
Description: 2024 Existing Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Nam Cheong Street (SB)		C	2	4.000	13			34%	36%	1940	1935	220	0.113		165	0.085	
	*	A	1	3.250	12					1205	1205	120	0.100	0.100	85	0.071	0.071
Berwick Street (EB)		A	1	3.250						2080	2080	160	0.077		135	0.065	
		A	1	3.250						2080	2080	160	0.077		135	0.065	
	*	B	2,3	3.000						1340	1340	124	0.093		105	0.078	0.078
Nam Cheong Street (NB)		B	2,3	3.000						2055	2055	191	0.093	0.093	160	0.078	
	**	B	2,3	3.000		15				1660	1660	115	0.069		85	0.051	
Pedestrian Crossing		Dp	1,4	MIN GREEN + FLASH =			5	+	10	=	15						
		Ep	2,3,4	MIN GREEN + FLASH =			5	+	10	=	15						
		Fp	4	MIN GREEN + FLASH =			5	+	10	=	15			*			*

Notes:

* On-street illegal parking with 0.7 site factor adopted

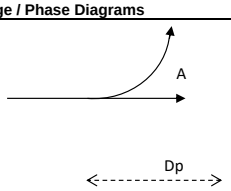
** Oppositing lane



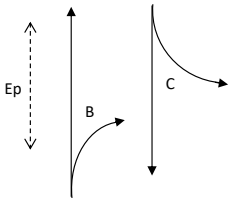
Group	A,Ep	A,B,Fp	Group	Dp,B	A,B,Fp
y	0.100	0.193	y	0.078	0.149
L (sec)	22	33	L (sec)	22	33
C (sec)	110	110	C (sec)	110	110
y pract.	0.720	0.630	y pract.	0.720	0.630
R.C. (%)	623%	227%	R.C. (%)	819%	323%

Stage / Phase Diagrams

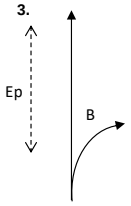
1.



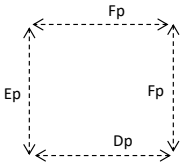
2.



3.



4.



5.

AM Critical Case: A,B,Fp									
I/G= 3	G = 39	I/G= 7	G = 36	I/G=	G = 15	I/G= 10		I/G=	
PM Critical Case: A,B,Fp									
I/G= 3	G = 35	I/G= 7	G = 40	I/G=	G = 15	I/G= 10	15	I/G=	

Date: MAR, 2024 **Junction:** J2 - Nam Cheong Street / Berwick Street (2)

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

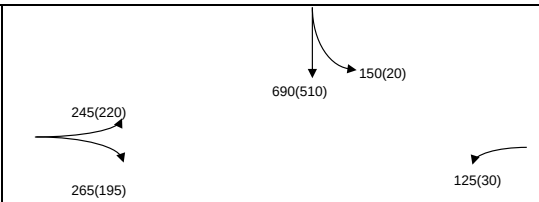
Junction: J3 - Shek Kip Mei Street / Berwick Street Design Year: 2024

Description: 2024 Existing Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Shek Kip Mei Street (SB)		C	3	3.300	7			39%	8%	1795	1915	389	0.217	0.217	254	0.133	0.133
		C	3	3.300						2085	2085	451	0.216		276	0.132	
Berwick Street (EB)	*	B	1,3	4.000	14					1275	1275	245	0.192		220	0.173	
		A	1	4.000		18				1990	1990	162	0.081	0.081	119	0.060	0.060
	*	A	1	4.000		14				1275	1275	103	0.081		76	0.060	
Berwick Street (WB)		D	2	4.000	14					1820	1820	125	0.069	0.069	30	0.016	
Pedestrian Crossing		Ep	2,3	MIN GREEN + FLASH =			5	+	9	=	14						
		Fp	2	MIN GREEN + FLASH =			5	+	5	=	10						*
		Gp	1,2	MIN GREEN + FLASH =			5	+	9	=	14						
		Hp	1	MIN GREEN + FLASH =			5	+	8	=	13						

Notes:

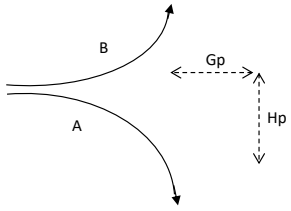
* On-street bus stop with 0.9 site factor adopted



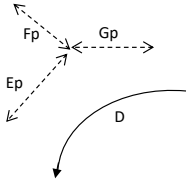
Group	Hp,D,C	A,D,C	Group	A,D,C	A,Fp,C
y	0.285	0.367	y	0.209	0.192
L (sec)	26	12	L (sec)	12	21
C (sec)	110	110	C (sec)	110	110
y pract.	0.687	0.802	y pract.	0.802	0.728
R.C. (%)	141%	119%	R.C. (%)	284%	278%

Stage / Phase Diagrams

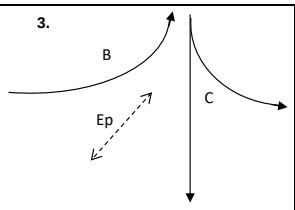
1.



2.



3.



4.

5.

AM Critical Case: A,D,C

1.	2.	3.	4.	5.
I/G= 5 G = 21	I/G= 5 G = 17	I/G= 5 G = 57	I/G=	I/G=
PM Critical Case: A,Fp,C				
I/G= 5 G = 27	I/G= 5 G = 10	I/G= 3 G = 60	I/G=	I/G=

Date: MAR, 2024 **Junction:** 3 J3 - Shek Kip Mei Street / Berwick Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

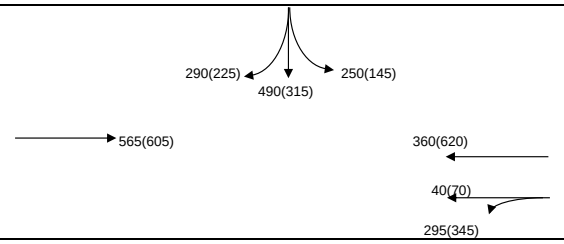
Junction: J4 - Shek Kip Mei Street / Tai Po Road / Un Chau Street — Design Year: 2024

Description: 2024 Existing Traffic Flows - Weekday — Designed By: CHM — Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Shek Kip Mei Street (SB)	*	C	3	3.000	12					1190	1190	168	0.141		104	0.087	
		C	3	3.000	13			29%	23%	1990	2000	281	0.141		176	0.088	
		C	3	3.000						2055	2055	291	0.142		180	0.088	
	*	C	3	3.000		18				1235	1235	290	0.235	0.235	225	0.182	0.182
Tai Po Road (EB)	*	A	1	3.650						1385	1385	223	0.161		239	0.173	
		A	1	3.650						2120	2120	342	0.161		366	0.173	
Tai Po Road (WB)		A	1	3.300						2085	2085	245	0.118		422	0.202	
	**	A	1	3.300						975	975	115	0.118		198	0.203	
Un Chau Street (WB)	***	B	1	3.650	9			12%	17%	1940	1925	335	0.173	0.173	415	0.216	0.216
Pedestrian Crossing		Dp	1,2	MIN GREEN + FLASH =			11	+	11	=	22						
		Ep	1,2	MIN GREEN + FLASH =			7	+	10	=	17						
		Fp	2	MIN GREEN + FLASH =			5	+	7	=	12			*			*
		Gp	2,3	MIN GREEN + FLASH =			5	+	6	=	11						

Notes:

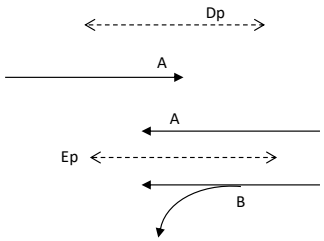
* On-street illegal parking with 0.7 site factor adopted
** Site factor 0.5 adopted due to lane capacitiy affected by Un Chau Street bound traffic
*** Assume one lane configuration due to illegal paking at kerb side lane



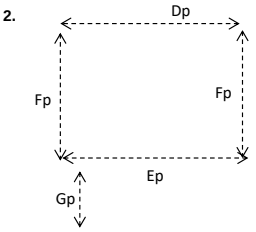
Group	A,Fp,C	B,Fp,C	Group	A,Fp,C	B,Fp,C
y	0.396	0.407	y	0.385	0.398
L (sec)	28	28	L (sec)	28	28
C (sec)	110	110	C (sec)	110	110
y pract.	0.671	0.671	y pract.	0.671	0.671
R.C. (%)	69%	65%	R.C. (%)	74%	69%

Stage / Phase Diagrams

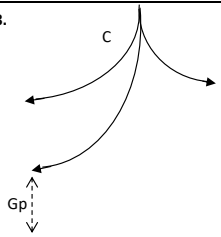
1.



2.



3.



4.

5.

AM Critical Case: B,Fp,C							
I/G= 9	G = 34	I/G= 5	G = 12	I/G= 4	G = 46	I/G=	I/G=
PM Critical Case: B,Fp,C							
I/G= 9	G = 43	I/G= 5	G = 12	I/G= 4	G = 37	I/G=	I/G=

Date: MAR, 2024 **Junction:** J4 - Shek Kip Mei Street / Tai Po Road / Un Chau Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

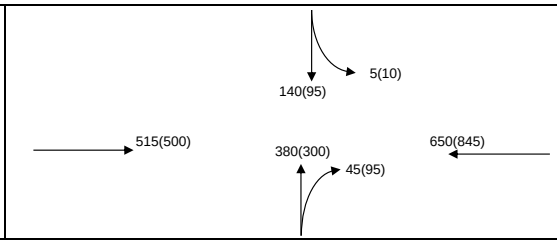
Junction: J5 - Nam Cheong Street / Tai Po Road Design Year: 2024

Description: 2024 Existing Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Nam Cheong Street (SB)		D	2	3.000	12			3%	10%	1905	1890	145	0.076		105	0.056	
Tai Po Road (EB)	* →	A	1	3.300						1360	1360	203	0.149		197	0.145	
	→	A	1	3.300						2085	2085	312	0.150		303	0.145	
Tai Po Road (WB)	←	B	1	3.650						2120	2120	393	0.185		511	0.241	
	* ←	B	1	3.650						1385	1385	257	0.186	0.186	334	0.241	0.241
Nam Cheong Street (NB)	↑	C	2	3.000						1915	1915	257	0.134		206	0.108	
	** ↑→	C	2	3.000		18		0%	4%	915	910	123	0.134	0.134	98	0.108	
	** ↱	C	2	3.000		17				840	840	45	0.054		91	0.108	0.108
Pedestrian Crossing		Ep	1	MIN GREEN + FLASH =			9	+	9	=	18						
		Fp	2	MIN GREEN + FLASH =			8	+	9	=	17						

Notes:

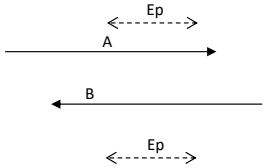
* On-street bus stop with 0.7 site factor adopted
** 0.5 site factor adopted due to short queueing length and right turn pocket configuration



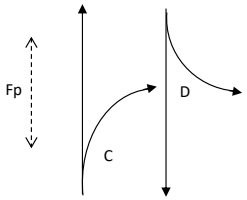
Group	A,C	B,C	Group	B,D	B,C
y	0.284	0.320	y	0.297	0.349
L (sec)	14	14	L (sec)	21	14
C (sec)	110	110	C (sec)	110	110
y pract.	0.785	0.785	y pract.	0.728	0.785
R.C. (%)	177%	145%	R.C. (%)	145%	125%

Stage / Phase Diagrams

1.



2.



3.

4.

5.

AM Critical Case: B,C									
I/G= 5	G = 55	I/G= 11	G = 39	I/G=	#N/A	I/G=		I/G=	
PM Critical Case: B,C									
I/G= 5	G = 65	I/G= 11	G = 29	I/G=	#N/A	I/G=		I/G=	

Date: MAR, 2024 **Junction:** J5 - Nam Cheong Street / Tai Po Road 5

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

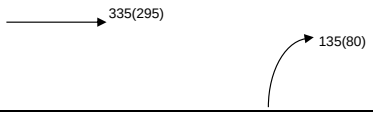
Junction: J1 - Pei Ho Street / Berwick Street — Design Year: 2034

Description: 2034 Reference Traffic Flows - Weekday — Designed By: CHM — Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Berwick Street (EB)	* →	A	1	3.000						1340	1340	132	0.099		116	0.087	
	→	A	1	3.000						2055	2055	203	0.099	0.099	179	0.087	0.087
Pei Ho Street (NB)	↱	B	2	3.500		13				1885	1885	70	0.037	0.037	41	0.022	
	↱	B	2	3.500		14				1775	1775	65	0.037		39	0.022	0.022
Pedestrian Crossing		Cp	1	MIN GREEN + FLASH =			6	+	9	=	15						
		Dp	2	MIN GREEN + FLASH =			6	+	6	=	12						

Notes:

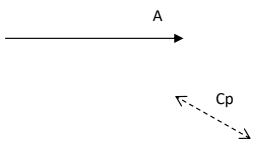
* On-street illegal parking with 0.7 site factor adopted



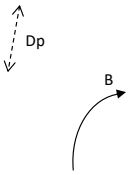
Group	A,Dp	A,B	Group	A,Dp	A,B
y	0.099	0.136	y	0.087	0.109
L (sec)	23	10	L (sec)	23	10
C (sec)	110	110	C (sec)	110	110
y pract.	0.712	0.818	y pract.	0.712	0.818
R.C. (%)	621%	502%	R.C. (%)	717%	650%

Stage / Phase Diagrams

1.



2.



3.

4.

5.

AM Critical Case: A,B									
I/G= 5	G = 72	I/G= 7	G = 26	I/G=	#N/A	I/G=		I/G=	
PM Critical Case: A,B									
I/G= 5	G = 79	I/G= 7	G = 19	I/G=	#N/A	I/G=		I/G=	

Date: MAR, 2024 **Junction:** J1 - Pei Ho Street / Berwick Street (1)

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

Junction: J2 - Nam Cheong Street / Berwick Street Design Year: 2034

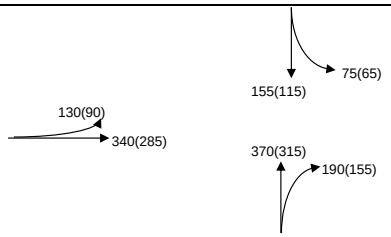
Description: 2034 Reference Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Nam Cheong Street (SB)		C	2	4.000	13			33%	36%	1940	1935	230	0.119		180	0.093	
	*	A	1	3.250	12					1205	1205	130	0.108	0.108	90	0.075	0.075
Berwick Street (EB)		A	1	3.250						2080	2080	170	0.082		143	0.069	
		A	1	3.250						2080	2080	170	0.082		142	0.068	
	*	B	2,3	3.000						1340	1340	146	0.109		124	0.093	
Nam Cheong Street (NB)		B	2,3	3.000						2055	2055	224	0.109		191	0.093	
	**	B	2,3	3.000		15				1660	1660	190	0.114	0.114	155	0.093	0.093
Pedestrian Crossing		Dp	1,4	MIN GREEN + FLASH =	5	+	10	=	15								
		Ep	2,3,4	MIN GREEN + FLASH =	5	+	10	=	15								
		Fp	4	MIN GREEN + FLASH =	5	+	10	=	15					*			*

Notes:

* On-street illegal parking with 0.7 site factor adopted

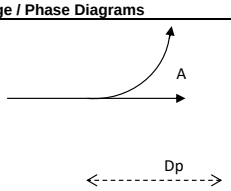
** Oppositing lane



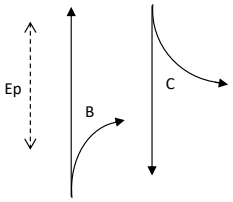
Group	Dp,B	A,B,Fp	Group	Dp,B	A,B,Fp
y	0.114	0.222	y	0.093	0.168
L (sec)	22	33	L (sec)	22	33
C (sec)	110	110	C (sec)	110	110
y pract.	0.720	0.630	y pract.	0.720	0.630
R.C. (%)	529%	183%	R.C. (%)	671%	275%

Stage / Phase Diagrams

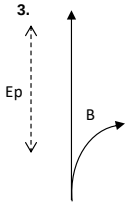
1.



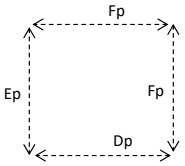
2.



3.



4.



5.

AM Critical Case: A,B,Fp									
I/G= 3	G = 36	I/G= 7	G = 39	I/G=	G = 15	I/G= 10		I/G=	
PM Critical Case: A,B,Fp									
I/G= 3	G = 33	I/G= 7	G = 42	I/G=	G = 15	I/G= 10	15	I/G=	

Date: MAR, 2024 **Junction:** J2 - Nam Cheong Street / Berwick Street (2)

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

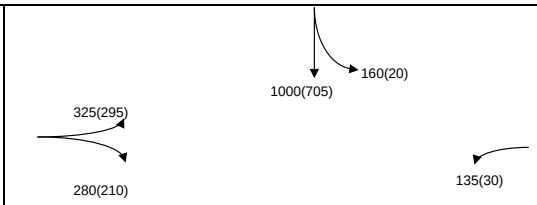
Junction: J3 - Shek Kip Mei Street / Berwick Street Design Year: 2034

Description: 2034 Reference Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Shek Kip Mei Street (SB)		C	3	3.300	7			30%	6%	1830	1920	542	0.296		348	0.181	0.181
		C	3	3.300						2085	2085	618	0.296	0.296	377	0.181	
Berwick Street (EB)	*	B	1,3	4.000	14					1275	1275	325	0.255		295	0.231	
		A	1	4.000		18				1990	1990	171	0.086	0.086	128	0.064	0.064
	*	A	1	4.000		14				1275	1275	109	0.085		82	0.064	
Berwick Street (WB)		D	2	4.000	14					1820	1820	135	0.074	0.074	30	0.016	
Pedestrian Crossing		Ep	2,3	MIN GREEN + FLASH =	5	+	9	=	14								
		Fp	2	MIN GREEN + FLASH =	5	+	5	=	10								*
		Gp	1,2	MIN GREEN + FLASH =	5	+	9	=	14								
		Hp	1	MIN GREEN + FLASH =	5	+	8	=	13								

Notes:

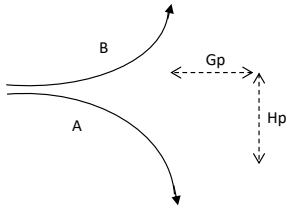
* On-street bus stop with 0.9 site factor adopted



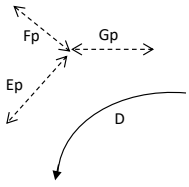
Group	Hp,D,C	A,D,C	Group	A,D,C	A,Fp,C
y	0.371	0.457	y	0.262	0.246
L (sec)	26	12	L (sec)	12	21
C (sec)	110	110	C (sec)	110	110
y pract.	0.687	0.802	y pract.	0.802	0.728
R.C. (%)	85%	76%	R.C. (%)	206%	197%

Stage / Phase Diagrams

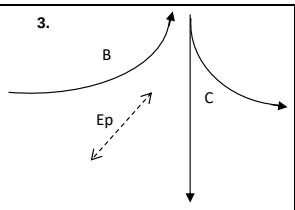
1.



2.



3.



4.

5.

AM Critical Case: A,D,C

1.	2.	3.	4.	5.
I/G= 5 G = 17	I/G= 5 G = 15	I/G= 5 G = 63	I/G=	I/G=

PM Critical Case: A,Fp,C

1.	2.	3.	4.	5.
I/G= 5 G = 22	I/G= 5 G = 10	I/G= 3 G = 65	I/G=	I/G=

Date: MAR, 2024 **Junction:** J3 - Shek Kip Mei Street / Berwick Street (3)

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

Junction: J4 - Shek Kip Mei Street / Tai Po Road / Un Chau Street — Design Year: 2034

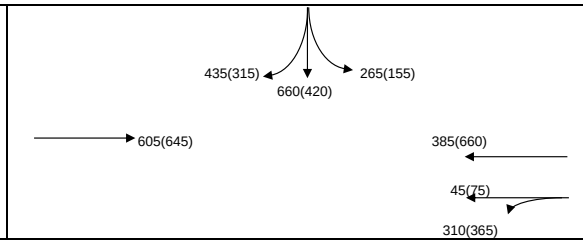
Description: 2034 Reference Traffic Flows - Weekday — Designed By: CHM — Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Shek Kip Mei Street (SB)	*	C	3	3.000	12					1190	1190	209	0.176		130	0.109	
		C	3	3.000	13			16%	11%	2020	2030	355	0.176		221	0.109	
		C	3	3.000						2055	2055	361	0.176		224	0.109	
	*	C	3	3.000		18				1235	1235	435	0.352	0.352	315	0.255	0.255
Tai Po Road (EB)	*	A	1	3.650						1385	1385	239	0.173		255	0.184	
		A	1	3.650						2120	2120	366	0.173		390	0.184	
Tai Po Road (WB)		A	1	3.300						2085	2085	262	0.126		450	0.216	
	**	A	1	3.300						975	975	123	0.126		210	0.215	
Un Chau Street (WB)	***	B	1	3.650	9			13%	17%	1940	1925	355	0.183	0.183	440	0.229	0.229

Pedestrian Crossing	Dp	1,2	MIN GREEN + FLASH =	11	+	11	=	22		
	Ep	1,2	MIN GREEN + FLASH =	7	+	10	=	17		
	Fp	2	MIN GREEN + FLASH =	5	+	7	=	12	*	*
	Gp	2,3	MIN GREEN + FLASH =	5	+	6	=	11		

Notes:

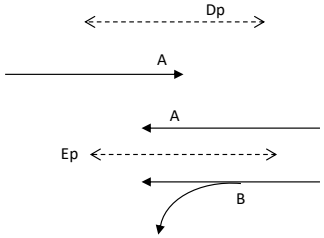
* On-street illegal parking with 0.7 site factor adopted
** Site factor 0.5 adopted due to lane capacitiy affected by Un Chau Street bound traffic
*** Assume one lane configuration due to illegal paking at kerb side lane



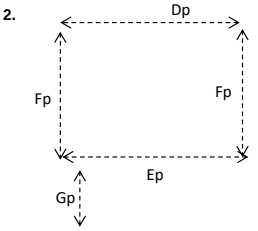
Group	A,Fp,C	B,Fp,C	Group	A,Fp,C	B,Fp,C
y	0.525	0.535	y	0.471	0.484
L (sec)	28	28	L (sec)	28	28
C (sec)	110	110	C (sec)	110	110
y pract.	0.671	0.671	y pract.	0.671	0.671
R.C. (%)	28%	25%	R.C. (%)	42%	39%

Stage / Phase Diagrams

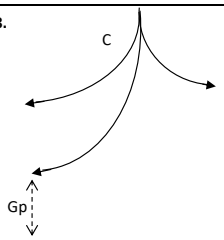
1.



2.



3.



4.

5.

AM Critical Case: B,Fp,C

I/G= 9	G = 27	I/G= 5	G = 12	I/G= 4	G = 53	I/G=	I/G=
PM Critical Case: B,Fp,C							
I/G= 9	G = 38	I/G= 5	G = 12	I/G= 4	G = 42	I/G=	I/G=

Date: MAR, 2024 **Junction:** J4 - Shek Kip Mei Street / Tai Po Road / Un Chau Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

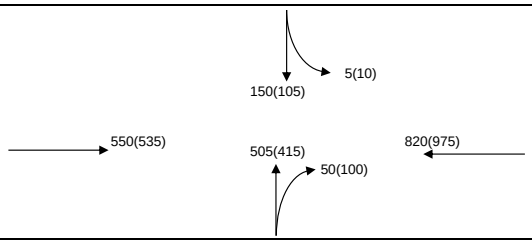
Junction: J5 - Nam Cheong Street / Tai Po Road Design Year: 2034

Description: 2024 Existing Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Nam Cheong Street (SB)		D	2	3.000	12			3%	9%	1905	1895	155	0.081		115	0.061	
Tai Po Road (EB)	* →	A	1	3.300						1360	1360	217	0.160		211	0.155	
	→	A	1	3.300						2085	2085	333	0.160		324	0.155	
Tai Po Road (WB)	←	B	1	3.650						2120	2120	496	0.234	0.234	590	0.278	0.278
	* ←	B	1	3.650						1385	1385	324	0.234		385	0.278	
Nam Cheong Street (NB)	↑	C	2	3.000						1915	1915	342	0.179	0.179	281	0.147	0.147
	** ↑→	C	2	3.000		18		0%	0%	915	915	163	0.178		134	0.146	
	** ↱	C	2	3.000		17				840	840	50	0.060		100	0.119	
Pedestrian Crossing		Ep	1	MIN GREEN + FLASH =			9	+	9	=	18						
		Fp	2	MIN GREEN + FLASH =			8	+	9	=	17						

Notes:

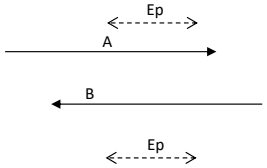
* On-street bus stop with 0.7 site factor adopted
** 0.5 site factor adopted due to short queueing length and right turn pocket configuration



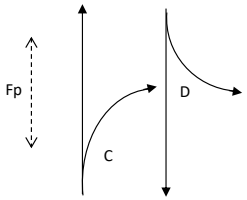
Group	B,D	B,C	Group	B,D	B,C
y	0.315	0.413	y	0.339	0.425
L (sec)	21	14	L (sec)	21	14
C (sec)	110	110	C (sec)	110	110
y pract.	0.728	0.785	y pract.	0.728	0.785
R.C. (%)	131%	90%	R.C. (%)	115%	85%

Stage / Phase Diagrams

1.



2.



3.

4.

5.

AM Critical Case: B,C									
I/G= 5	G = 53	I/G= 11	G = 41	I/G=	#N/A	I/G=		I/G=	
PM Critical Case: B,C									
I/G= 5	G = 62	I/G= 11	G = 32	I/G=	#N/A	I/G=		I/G=	

Date: MAR, 2024 **Junction:** J5 - Nam Cheong Street / Tai Po Road 5

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

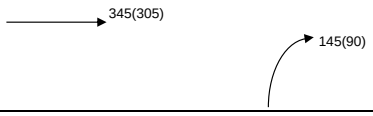
Junction: J1 - Pei Ho Street / Berwick Street — Design Year: 2034

Description: 2034 Design Traffic Flows - Weekday — Designed By: CHM — Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Berwick Street (EB)	* →	A	1	3.000						1340	1340	136	0.101		120	0.090	
	→	A	1	3.000						2055	2055	209	0.102	0.102	185	0.090	0.090
Pei Ho Street (NB)	↱	B	2	3.500		13				1885	1885	75	0.040	0.040	46	0.024	
	↱	B	2	3.500		14				1775	1775	70	0.039		44	0.025	0.025
Pedestrian Crossing		Cp	1	MIN GREEN + FLASH =			6	+	9	=	15						
		Dp	2	MIN GREEN + FLASH =			6	+	6	=	12						

Notes:

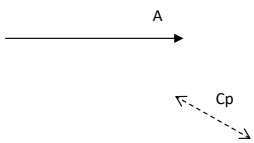
* On-street illegal parking with 0.7 site factor adopted



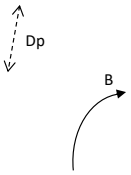
Group	A,Dp	A,B	Group	A,Dp	A,B
y	0.102	0.141	y	0.090	0.115
L (sec)	23	10	L (sec)	23	10
C (sec)	110	110	C (sec)	110	110
y pract.	0.712	0.818	y pract.	0.712	0.818
R.C. (%)	600%	478%	R.C. (%)	691%	613%

Stage / Phase Diagrams

1.



2.



3.

4.

5.

AM Critical Case: A,B									
I/G= 5	G = 71	I/G= 7	G = 27	I/G=	#N/A	I/G=		I/G=	
PM Critical Case: A,B									
I/G= 5	G = 77	I/G= 7	G = 21	I/G=	#N/A	I/G=		I/G=	

Date: MAR, 2024 **Junction:** J1 - Pei Ho Street / Berwick Street (1)

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

Junction: J2 - Nam Cheong Street / Berwick Street Design Year: 2034

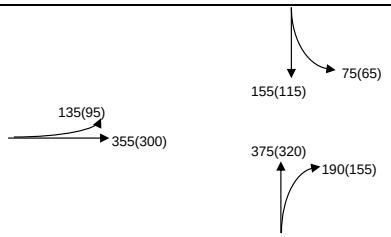
Description: 2034 Design Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Nam Cheong Street (SB)		C	2	4.000	13			33%	36%	1940	1935	230	0.119		180	0.093	
	*	A	1	3.250	12					1205	1205	135	0.112	0.112	95	0.079	0.079
Berwick Street (EB)		A	1	3.250						2080	2080	178	0.086		150	0.072	
		A	1	3.250						2080	2080	177	0.085		150	0.072	
	*	B	2,3	3.000						1340	1340	148	0.110		126	0.094	
Nam Cheong Street (NB)		B	2,3	3.000						2055	2055	227	0.110		194	0.094	0.094
	**	B	2,3	3.000		15				1660	1660	190	0.114	0.114	155	0.093	
Pedestrian Crossing		Dp	1,4	MIN GREEN + FLASH =			5	+	10	=	15						
		Ep	2,3,4	MIN GREEN + FLASH =			5	+	10	=	15						
		Fp	4	MIN GREEN + FLASH =			5	+	10	=	15			*			*

Notes:

* On-street illegal parking with 0.7 site factor adopted

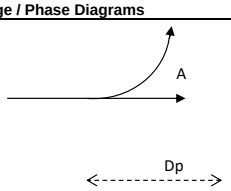
** Oppositing lane



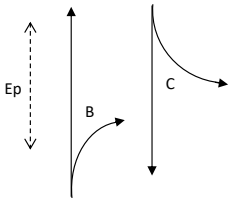
Group	Dp,B	A,B,Fp	Group	Dp,B	A,B,Fp
y	0.114	0.226	y	0.094	0.173
L (sec)	22	33	L (sec)	22	33
C (sec)	110	110	C (sec)	110	110
y pract.	0.720	0.630	y pract.	0.720	0.630
R.C. (%)	529%	178%	R.C. (%)	663%	264%

Stage / Phase Diagrams

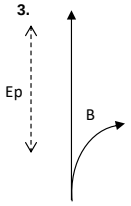
1.



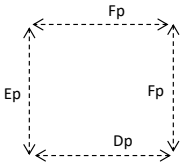
2.



3.



4.



5.

AM Critical Case: A,B,Fp									
I/G= 3	G = 37	I/G= 7	G = 38	I/G=	G = 15	I/G= 10		I/G=	
PM Critical Case: A,B,Fp									
I/G= 3	G = 34	I/G= 7	G = 41	I/G=	G = 15	I/G= 10	15	I/G=	

Date: MAR, 2024 **Junction:** J2 - Nam Cheong Street / Berwick Street (2)

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

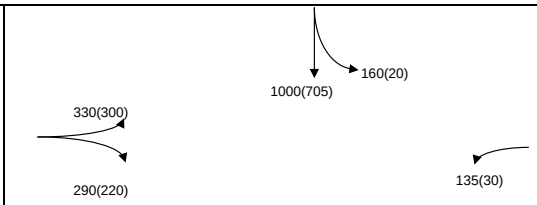
Junction: J3 - Shek Kip Mei Street / Berwick Street Design Year: 2034

Description: 2034 Design Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Shek Kip Mei Street (SB)		C	3	3.300	7			30%	6%	1830	1920	542	0.296		348	0.181	0.181
		C	3	3.300						2085	2085	618	0.296	0.296	377	0.181	
Berwick Street (EB)	*	B	1,3	4.000	14					1275	1275	330	0.259		300	0.235	
		A	1	4.000		18				1990	1990	177	0.089	0.089	134	0.067	
	*	A	1	4.000		14				1275	1275	113	0.089		86	0.067	0.067
Berwick Street (WB)		D	2	4.000	14					1820	1820	135	0.074	0.074	30	0.016	
Pedestrian Crossing		Ep	2,3	MIN GREEN + FLASH =	5	+	9	=	14								
		Fp	2	MIN GREEN + FLASH =	5	+	5	=	10								*
		Gp	1,2	MIN GREEN + FLASH =	5	+	9	=	14								
		Hp	1	MIN GREEN + FLASH =	5	+	8	=	13								

Notes:

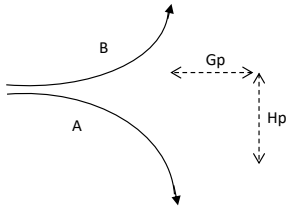
* On-street bus stop with 0.9 site factor adopted



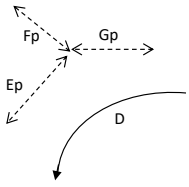
Group	Hp,D,C	A,D,C	Group	A,D,C	A,Fp,C
y	0.371	0.460	y	0.265	0.249
L (sec)	26	12	L (sec)	12	21
C (sec)	110	110	C (sec)	110	110
y pract.	0.687	0.802	y pract.	0.802	0.728
R.C. (%)	85%	74%	R.C. (%)	202%	193%

Stage / Phase Diagrams

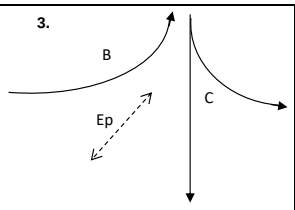
1.



2.



3.



4.

5.

AM Critical Case: A,D,C

1.	2.	3.	4.	5.
I/G= 5 G = 18	I/G= 5 G = 15	I/G= 5 G = 62	I/G=	I/G=

PM Critical Case: A,Fp,C

1.	2.	3.	4.	5.
I/G= 5 G = 23	I/G= 5 G = 10	I/G= 3 G = 64	I/G=	I/G=

Date: MAR, 2024 **Junction:** J3 - Shek Kip Mei Street / Berwick Street (3)

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

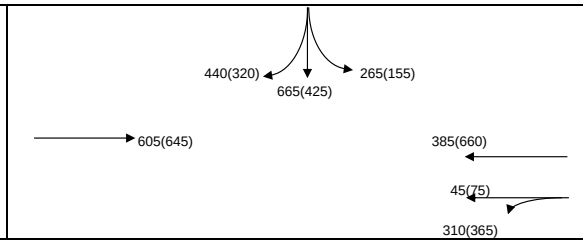
Junction: J4 - Shek Kip Mei Street / Tai Po Road / Un Chau Street Design Year: 2034

Description: 2034 Design Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Shek Kip Mei Street (SB)	*	C	3	3.000	12					1190	1190	210	0.176		131	0.110	
		C	3	3.000	13			15%	11%	2020	2030	357	0.177		223	0.110	
		C	3	3.000						2055	2055	363	0.177		226	0.110	
	*	C	3	3.000		18				1235	1235	440	0.356	0.356	320	0.259	0.259
Tai Po Road (EB)	*	A	1	3.650						1385	1385	239	0.173		255	0.184	
		A	1	3.650						2120	2120	366	0.173		390	0.184	
Tai Po Road (WB)		A	1	3.300						2085	2085	262	0.126		450	0.216	
	**	A	1	3.300						975	975	123	0.126		210	0.215	
Un Chau Street (WB)	***	B	1	3.650	9			13%	17%	1940	1925	355	0.183	0.183	440	0.229	0.229
Pedestrian Crossing		Dp	1,2	MIN GREEN + FLASH =			11	+	11	=	22						
		Ep	1,2	MIN GREEN + FLASH =			7	+	10	=	17						
		Fp	2	MIN GREEN + FLASH =			5	+	7	=	12			*			*
		Gp	2,3	MIN GREEN + FLASH =			5	+	6	=	11						

Notes:

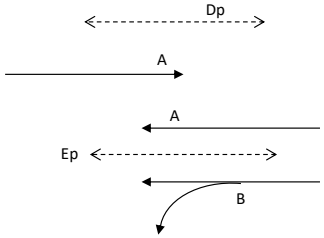
* On-street illegal parking with 0.7 site factor adopted
** Site factor 0.5 adopted due to lane capacitiy affected by Un Chau Street bound traffic
*** Assume one lane configuration due to illegal paking at kerb side lane



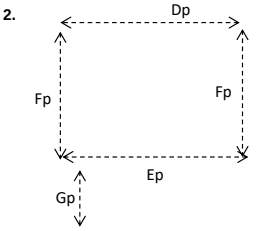
Group	A,Fp,C	B,Fp,C	Group	A,Fp,C	B,Fp,C
y	0.529	0.539	y	0.475	0.488
L (sec)	28	28	L (sec)	28	28
C (sec)	110	110	C (sec)	110	110
y pract.	0.671	0.671	y pract.	0.671	0.671
R.C. (%)	27%	24%	R.C. (%)	41%	38%

Stage / Phase Diagrams

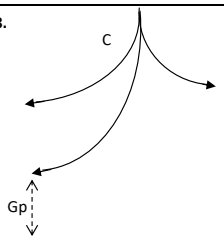
1.



2.



3.



4.

5.

AM Critical Case: B,Fp,C

I/G= 9	G = 27	I/G= 5	G = 12	I/G= 4	G = 53	I/G=	I/G=
PM Critical Case: B,Fp,C							
I/G= 9	G = 37	I/G= 5	G = 12	I/G= 4	G = 43	I/G=	I/G=

Date: MAR, 2024 **Junction:** J4 - Shek Kip Mei Street / Tai Po Road / Un Chau Street

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50686610 **MVA HONG KONG LIMITED**

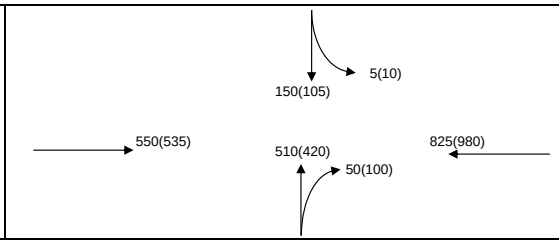
Junction: J5 - Nam Cheong Street / Tai Po Road Design Year: 2034

Description: 2024 Existing Traffic Flows - Weekday Designed By: CHM Checked By: HWL

Approach	Movements	Phase	Stage	Width (m)	Radius (m) Left	Radius (m) Right	Gradient (%)	Pro. Turning (%) AM	Pro. Turning (%) PM	Revised Saturation Flow (pcu/hr) AM	Revised Saturation Flow (pcu/hr) PM	AM Peak Flow (pcu/hr)	AM Peak y Value	AM Peak Critical y	PM Peak Flow (pcu/hr)	PM Peak y Value	PM Peak Critical y
Nam Cheong Street (SB)	↓→	D	2	3.000	12			3%	9%	1905	1895	155	0.081		115	0.061	
Tai Po Road (EB)	* →	A	1	3.300						1360	1360	217	0.160		211	0.155	
	→	A	1	3.300						2085	2085	333	0.160		324	0.155	
Tai Po Road (WB)	←	B	1	3.650						2120	2120	499	0.235		593	0.280	0.280
	* ←	B	1	3.650						1385	1385	326	0.235	0.235	387	0.279	
Nam Cheong Street (NB)	↑	C	2	3.000						1915	1915	345	0.180		284	0.148	
	** ↑→	C	2	3.000		18		0%	0%	915	915	165	0.180	0.180	136	0.149	0.149
	** ↱	C	2	3.000		17				840	840	50	0.060		100	0.119	
Pedestrian Crossing		Ep	1	MIN GREEN + FLASH =			9	+	9	=	18						
		Fp	2	MIN GREEN + FLASH =			8	+	9	=	17						

Notes:

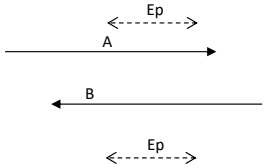
* On-street bus stop with 0.7 site factor adopted
** 0.5 site factor adopted due to short queueing length and right turn pocket configuration



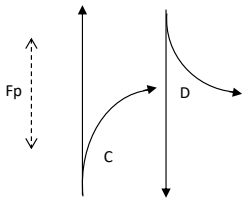
Group	B,D	B,C	Group	B,D	B,C
y	0.317	0.416	y	0.340	0.428
L (sec)	21	14	L (sec)	21	14
C (sec)	110	110	C (sec)	110	110
y pract.	0.728	0.785	y pract.	0.728	0.785
R.C. (%)	130%	89%	R.C. (%)	114%	83%

Stage / Phase Diagrams

1.



2.



3.

4.

5.

AM Critical Case: B,C									
I/G= 5	G = 53	I/G= 11	G = 41	I/G=	#N/A	I/G=		I/G=	
PM Critical Case: B,C									
I/G= 5	G = 62	I/G= 11	G = 32	I/G=	#N/A	I/G=		I/G=	

Date: MAR, 2024 **Junction:** J5 - Nam Cheong Street / Tai Po Road 5

Annex 5

Other Related Traffic Information

Proposed Metered Car Parking Space Relocation

(Submission and Approval from Transport Department)

Appendix 14.2 - Proposed Metered Car Parking Space Relocation Submission & Approval from Transport Department

SYSTRA MVA

Ms. YAU Kit Yu, Ada
Transport Department
Urban Regional Office
Traffic Engineering (Kln) Division
Kln. District West Section
8/F, Mongkok Government Offices
30 Luen Wan Street,
Mongkok, Kowloon

Our Ref: CHK50686610/TKM/L2301026/jch

BY HAND & EMAIL

Technical Feasibility Study (TFS) for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP

29th June 2023

Proposed Relocation of the Metered Car Parking Spaces

Responses to Comments

Dear Madam,

Further to our recent submissions via email regarding the captioned study. We are pleased to submit the enclosed revised Technical Note with Responses to Comments for your record.

The Project comprises the redevelopment of St. Thomas Church into a complex building at NKIL No. 3762 and NKIL No. 3635RP, Sham Shui Po with one level of basement of car park. The location of the subject site is shown in **Drawing No.1**.

The proposed building will accommodate the following facilities:-
1. Day Care Centre for the Elderly;
2. Child Care Centre;
3. Early Education and Training Centre;
4. Neighbourhood Elderly Centre;
5. After School Care Programme;
6. Integrated Elderly Rehabilitation Services Centre;
7. Staff Training Unit;
8. Church, Church Activity Centre and Pastor's Flat.

Currently, no car parking space is provided for the church as shown in the existing traffic condition in **Drawing No.2**. With the additional facilities provided within the church as mentioned on the above, one level of basement car park will be provided and thus a vehicular access will need to be provided as shown in **Drawing No.3** for operation use.

As shown in **Drawing No.3**, due to the church will be located in the middle of the site and the pedestrian access of the church will be planned to locate close to the staircase of the existing footbridge for easy access. The location of the vehicular access will need to be located at the eastern end of the site and locate away from the junction of Nam Cheong Street / Berwick Street. The proposed vehicular access will affect 3

MVA Hong Kong Limited
22/F Genesis • 33-35 Wong Chuk Hang Road • Hong Kong
T. +852 2529 7037 • F. +852 2527 8490 • E. info@mvaasia.com • www.mvaasia.com

existing metered car parking spaces. The existing disabled car parking will be shifted approximately 15m to the west and 3 existing metered car parking spaces will need to be removed permanently as shown in **Drawing No.**4. Moreover, the exiting lay-by area outside the site will be filled into footpath as shown in order to provide additional footpath area for the public (The details of the civil works and highway design drawings (e.g. railing, signage location and etc) will be further submitted to relevant departments for comments by the Client in the next stage of the study).

A metered car parking utilization survey was conducted in the vicinity of the subject site in order to observe the current car parking utilization situation. The metered car parking utilization survey was carried out on one regular Sunday between 7:30 am to 1:30 pm in February 2023, which was continuously throughout the morning to noon peak period during the regular Sunday activities (e.g. Sunday Worship and Sunday School) of HKSKH St. Thomas' Church, to cover adequately the anticipated peak parking occupancy within the Core Area. This could review if there is any implication if permanently remove the two metered car parking spaces in front of the subject site. The details and the location of the surveyed metered car parking are shown in **Drawing No.5**.

As shown in **Drawing No.5**, all the surveyed metered car parking spaces are fully utilised during the peak hours.

In view of that, the permanently removed metered car parking spaces in front of the subject site are proposed to be re-provided total number of 4 metered car parking spaces at Pak Tin Street and Who Chai Street as shown in **Drawing Nos. 6** and **7**, respectively. As shown in the drawing, these proposed metered car parking spaces will not affect any traffic arrangement/ facilities on the local road network.

According to the above findings, it can be concluded that the proposed locations of the metered car parking spaces is acceptable from a traffic engineering point of view and would not impose adverse impact on the local road network.

The tentative programme of the project has been attached in the Appendix of this letter for your reference.

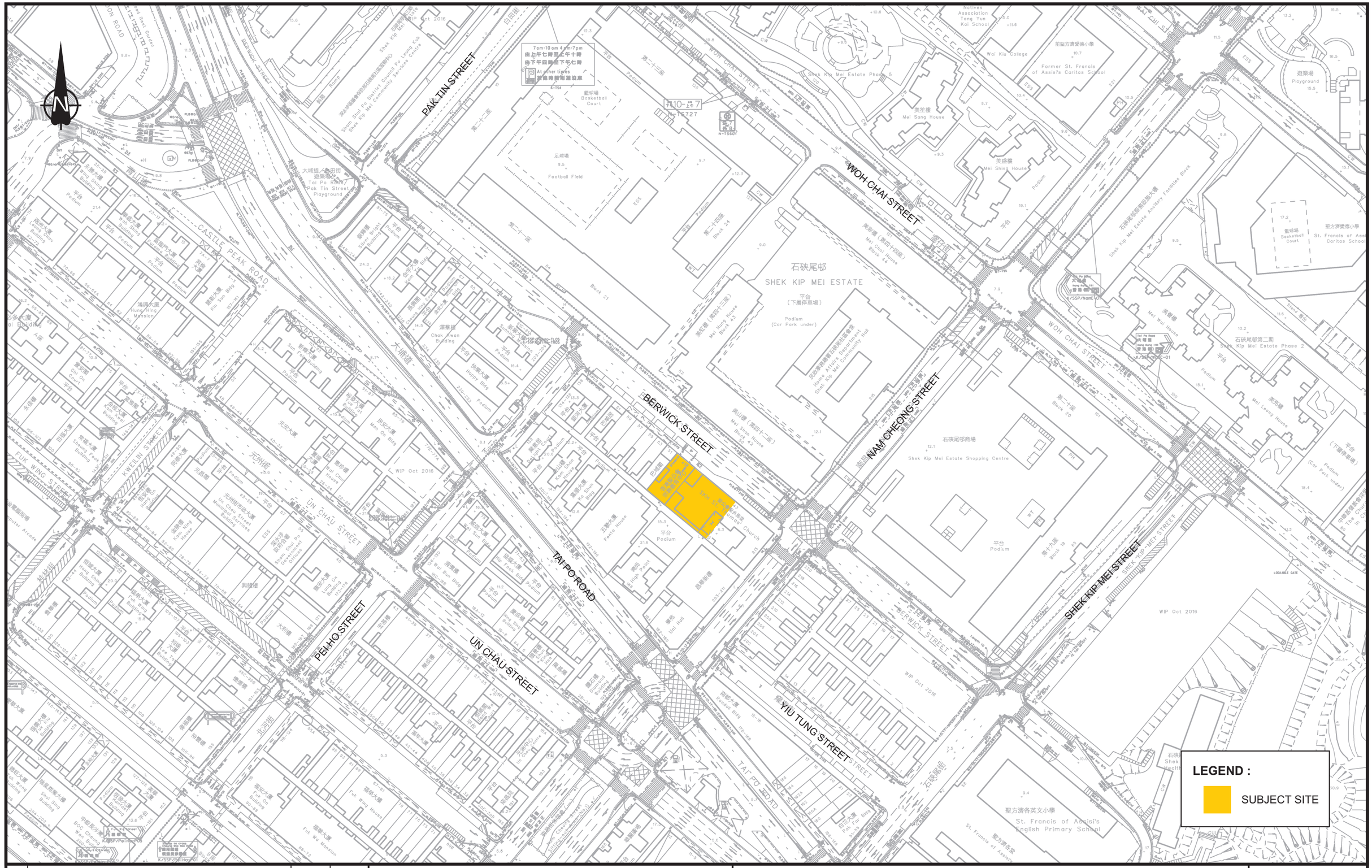
Should you have any queries, please feel free to contact the undersigned at 2864 6452.

Thank you for your kind attention.

Yours faithfully,

Gary Tsui
Associate Director

Encl.



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
A	TD'S COMMENTS INCORPORATED	TKM	10MAY23

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS CHURCH

Drawing Title

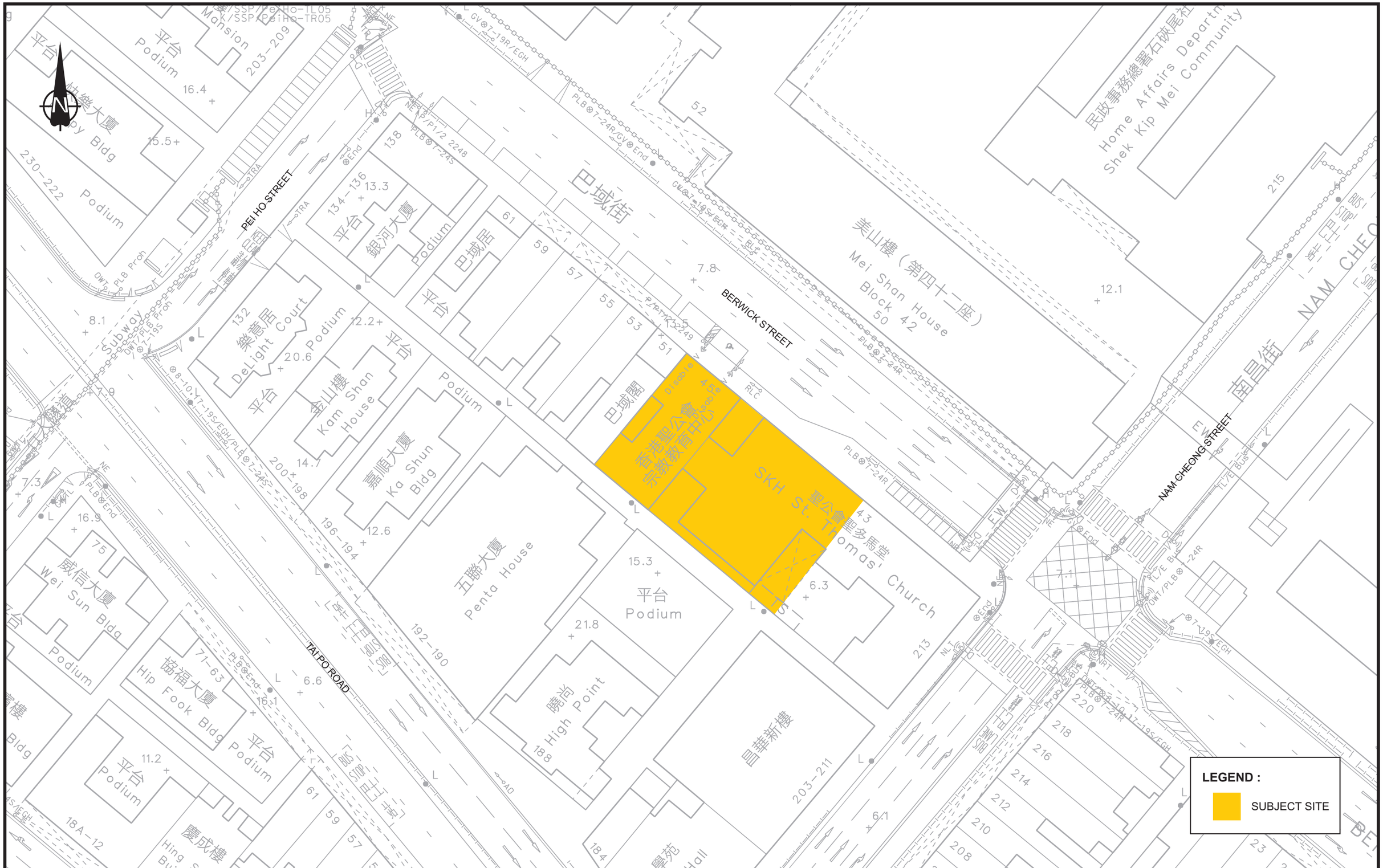
SITE LOCATION

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	1	A

SYSTRA MVA

CHK50686610/TFS/F1-A.CDR/LLH/10MAY23

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
A	TD'S COMMENTS INCORPORATED	TKM	10MAY23

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS CHURCH

Drawing Title

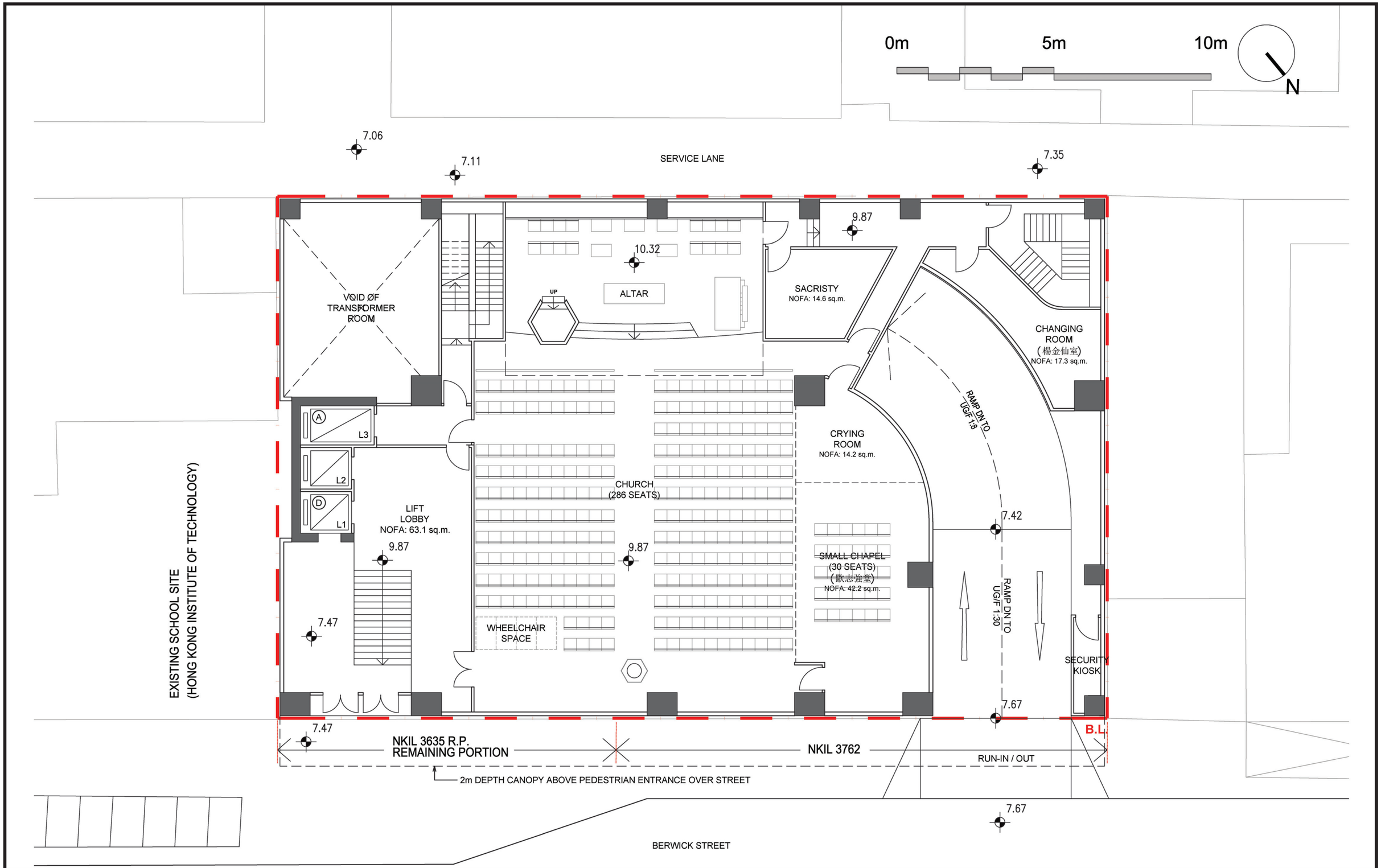
EXISTING TRAFFIC CONDITION

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	2	A

SYSTRA MVA

CHK50686610/TFS/F2-A.CDR/LLH/10MAY23

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
A	TD'S COMMENTS INCORPORATED	TKM	10MAY23

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS CHURCH

Drawing Title

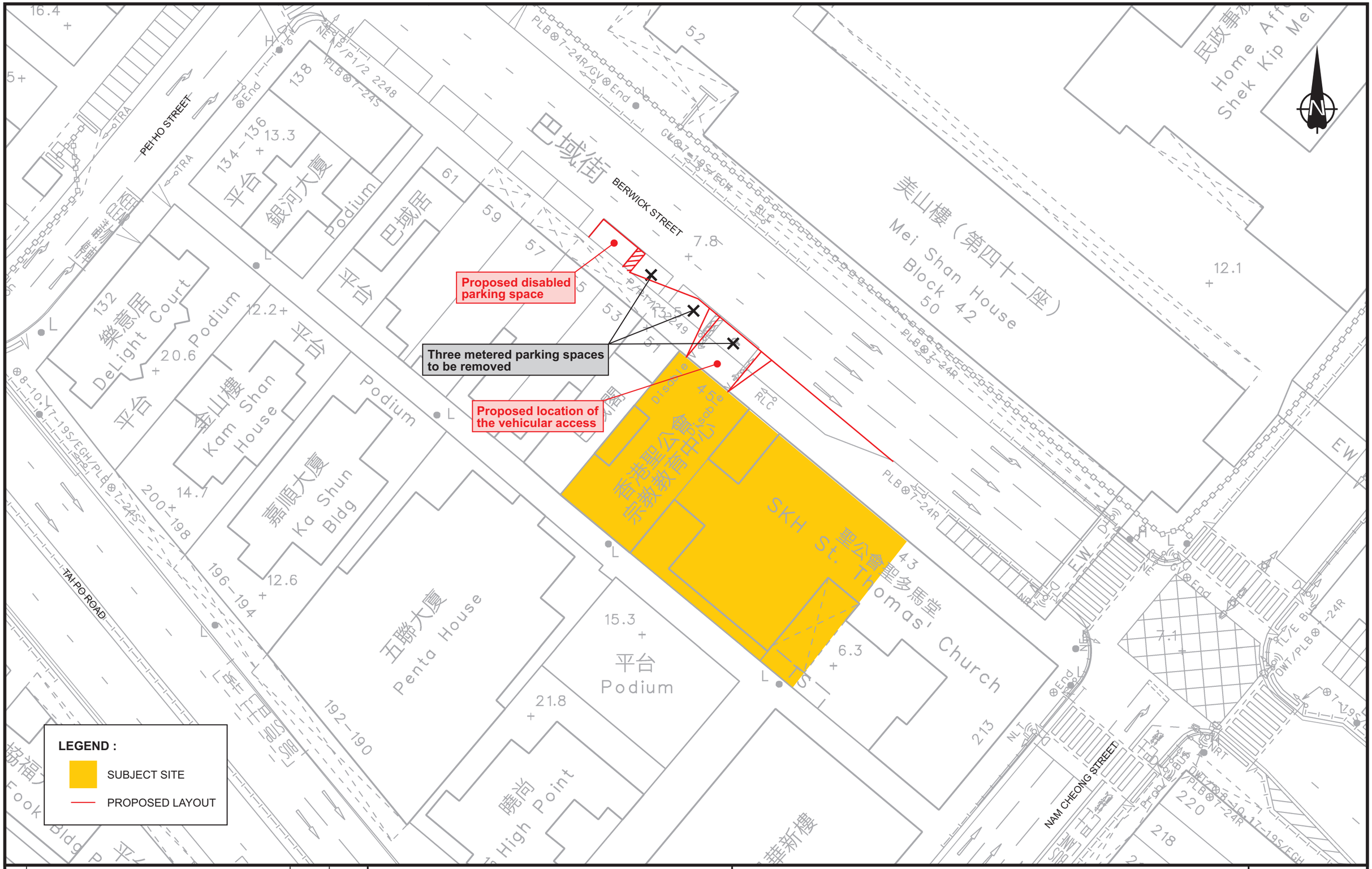
GROUND FLOOR LAYOUT PLAN

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	3	A

SYSTRA MVA

CHK50686610/TFS/F3-A.CDR/LLH/10MAY23

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
A	TD'S COMMENTS INCORPORATED	TKM	10MAY23

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS CHURCH

Drawing Title

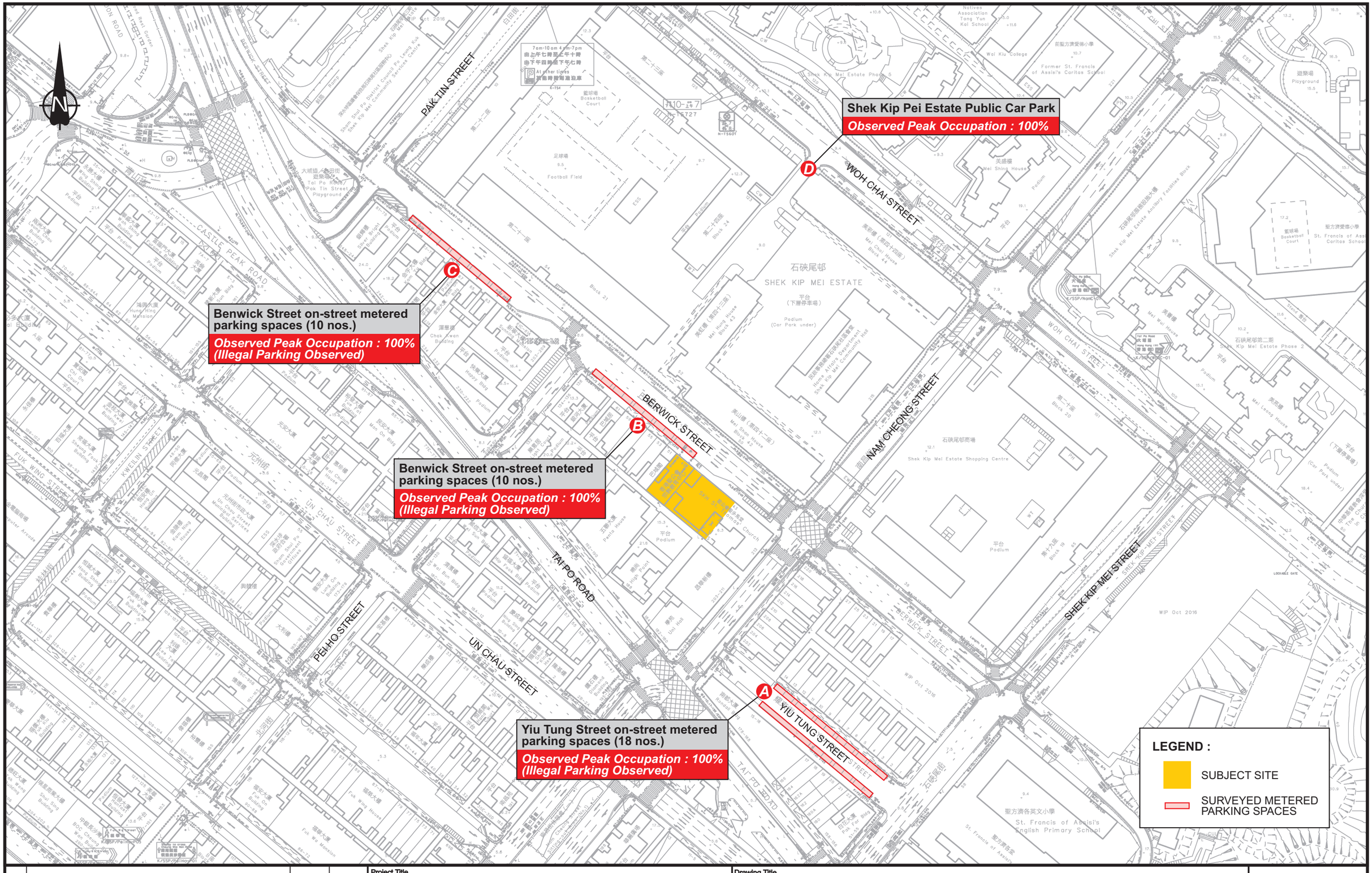
PROPOSED ROAD LAYOUT

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	4	A

SYSTRA MVA

CHK50686610/TFS/F4-A.CDR/LLH/10MAY23

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
A	TD'S COMMENTS INCORPORATED	TKM	10MAY23

Project Title

TECHNICAL FEASIBILITY STUDY (TFS) FOR THE REDEVELOPMENT OF HKSKH ST. THOMAS CHURCH

Drawing Title

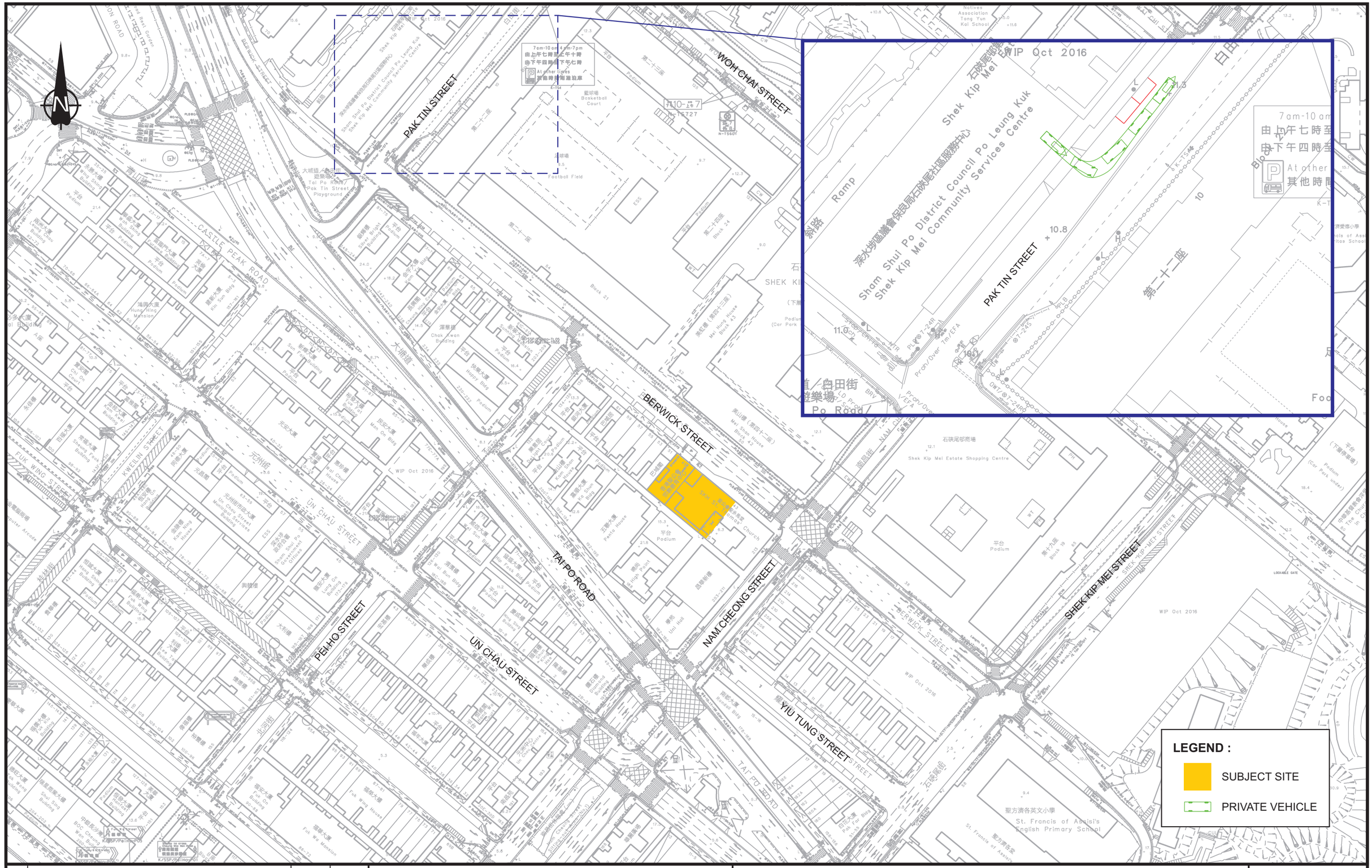
LOCATION OF SURVEYED PUBLIC CAR PARK AND METERED PARKING SPACE

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	5	A

SYSTRA MVA

CHK50686610/TFS/F5-A.CDR/LLH/10MAY23

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
B	TD'S COMMENTS INCORPORATED	TKM	24MAY23
A	TD'S COMMENTS INCORPORATED	TKM	10MAY23

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS CHURCH

Drawing Title

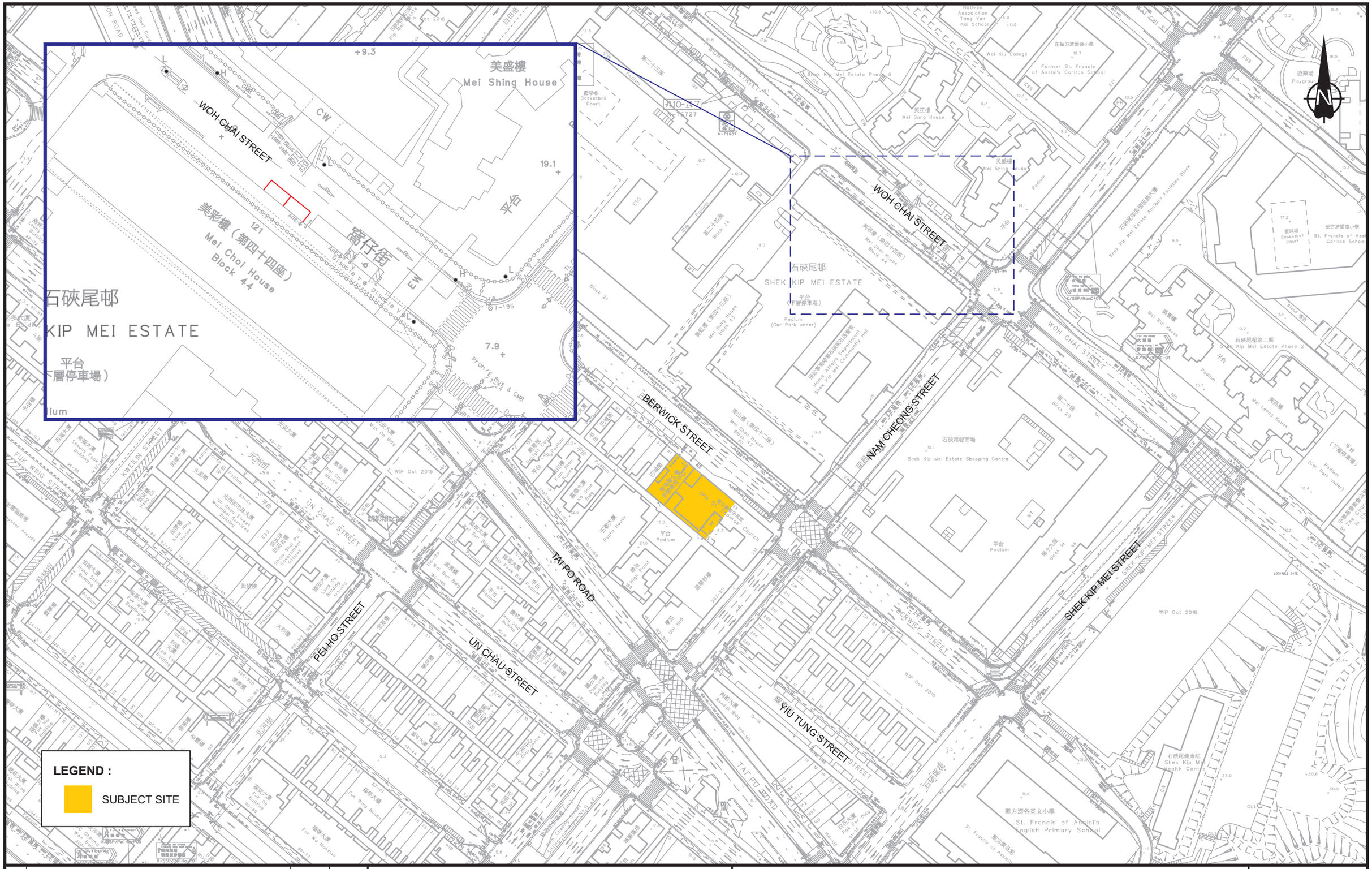
PROPOSED LOCATION OF METERED PARKING AT PAK TIN STERET

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	6	B

SYSTRA MVA

CHK50686610/TFS/F6-B.CDR/LLH/24MAY23

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS CHURCH

Drawing Title

PROPOSED LOCATION OF METERED PARKING AT WOH CHAI STERET

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	MAY 2023	7	-

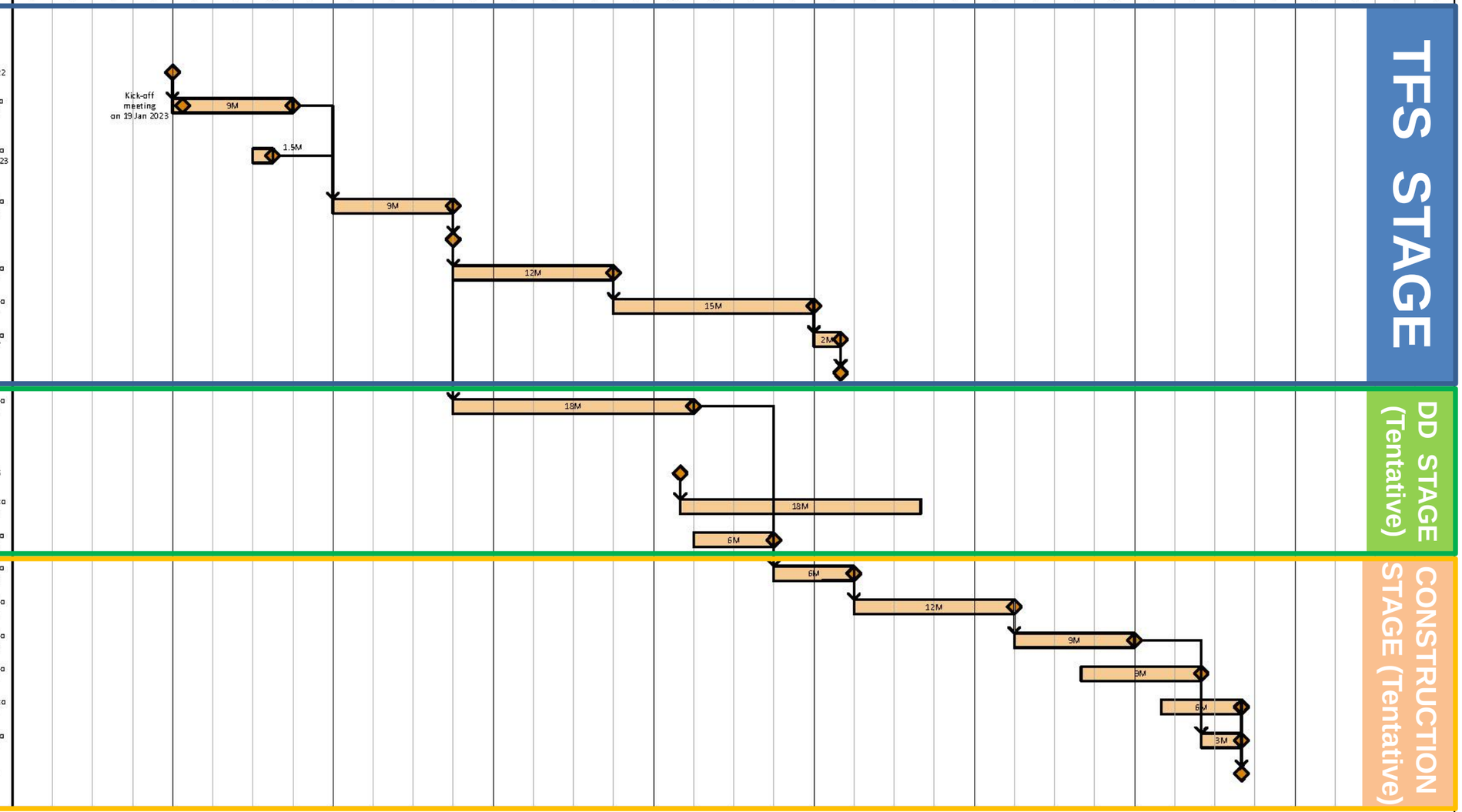
SYSTRA MVA

CHK50686610/TFS/F7.CDR/LLH/10MAY23

Original Size : A3

Master Programme for Proposed Redevelopment of HKSKH St. Thomas Church at 43 Berwick Street, Sham Shui Po, Kowloon

	Activity	Duration/ Date
	Technical Feasibility Study (Part 1)	
1	Part 1 Consultants on board and commencement of agreement	28 Dec 2022
2	Preparation, Completion and Approval of Technical Feasibility Statement by SWD	Jan 2023 to Oct 2023
3	Preparation and pre-submission of s.12A Submission to PlanD (including preliminary technical assessment submissions, obtaining preliminary departmental comments, and revising technical assessments, if any)	July 2023 to Mid-Aug 2023
4	Formal s.12a submission to TPB	Jan 2024 to Oct 2024
5	Approval of s.12a submission by TPB	1D
6	TPB directs PlanD to prepare draft plan*	Oct 2024 to Oct 2025
7	Statutory Plan-making process	Oct 2025 to Jan 2027
8	CE in C's Approval of Amendments to the Plan	Jan 2027 to Mar 2027
9	Gazette	1D
10	Lease Modification / Land Exchange (after approval of planning application)	Oct 2024 to Apr 2026
11	Execution Stage (Part 2)	
12	Part 2 Consultants on board	Mar 2026
13	Design, Statutory Submission & Tender Preparation	Mar 2026 to Sep 2027
14	Existing building tenant move-out	Apr 2026 to Oct 2026
15	Asbestos Survey, Hoarding & Demolition	Oct 2026 to Apr 2027
16	Foundation & ELS	Apr 2027 to Apr 2028
17	Basement & Superstructure	Apr 2028 to Jan 2029
18	MEP	Sep 2028 to Jun 2029
19	Fitting-out & FF&E	Mar 2029 to Sep 2029
20	Obtain Occupation Permit	Jun 2029 to Sep 2029
21	Formal handover to Client	Sep 2029



(*) - subject to PlanD's plan drafting process and considerations of TPB on proposed amendment

Responses to Comments

Comments	Response
Via email 18th April 2023	
There is an existing car park entrance/exit at/ near your proposed location of metered parking at Pak Tin Street. Also, the traffic aids at Pak Tin Street is not updated. Please review.	Noted. The existing car park entrance near to the proposed location of the metered parking at Pak Tin Street has been added. The traffic aids at Pak Tin Street has also been updated.
In fact, please consider shifting your proposed vehicular access of your site to avoid affecting the existing car parking spaces at Berwick Street.	As shown in Drawing No.3, due to the church will be located in the middle of the site and the pedestrian access of the church will be planned to locate close to the staircase of the existing footbridge for easy access. Thus, the location of the vehicular access will need to be located at the eastern end of the site and locate away from the junction of Nam Cheong Street / Berwick Street.
Via email 22nd May 2023	
Regarding Dwg No. 6, please ensure that there should be no parking spaces within the run-in's visibility splay. Please refer to TPDM for guidelines and review your proposal.	Noted. The proposed location of the metered parking have been further updated.
I have no comment on Dwg No. 7.	Noted.
Via email 8th June 2023	
I have no further comment on your proposed relocation of the metered car parking spaces subject to the following conditions: -	
1. All the local consultations in relation to the relocation of the metered car parking spaces and road modification works (if any) should be done by you/ the applicant. You should obtain no objections from the locals/ relevant stakeholders prior to carrying out any works.	Noted. Our Client will obtain no objections from the locals/ relevant stakeholders prior to carrying out any works.
2. The cost incurred due to the above should be borne by you/ the applicant.	Noted.

TSUI Gary

From: Ada KY YAU <adakyyau@td.gov.hk>
Sent: Thursday, June 8, 2023 2:58 PM
To: TSUI Gary
Cc: Wai Chung KWOK
Subject: RE: TFS for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP - Proposed Relocation of the Metered Car Parking Spaces
Attachments: F6-B_mva20230605.pdf

Dear Gary,

I have no further comment on your proposed relocation of the metered car parking spaces subject to the following conditions: -

1.

1. All the local consultations in relation to the relocation of the metered car parking spaces and road modification works (if any) should be done by you/ the applicant. You should obtain no objections from the locals/ relevant stakeholders prior to carrying out any works.

2. The cost incurred due to the above should be borne by you/ the applicant.

Thanks.

Regards,
Ada YAU
EK/SSP, TEK, TD
Tel: 2399 2479

From: TSUI Gary <gtsui@systra.com>
To: Ada KY YAU <adakyyau@td.gov.hk>
Cc: Wai Chung KWOK <wckwok@td.gov.hk>
Date: 05/06/2023 03:15 PM
Subject: RE: TFS for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP - Proposed Relocation of the Metered Car Parking Spaces

Dear Ada,

Thank you very much for your quick response. Further review the proposed car parking location, in order to fulfill the TPDM requirement, we have shifted the car parking spaces to the northeast as shown in the attached for your further comment and approval.

According to our previous telephone discussion, please note that our Client will fill up the lay-by into footpath as shown in Figure No.4 in the attached. The details of the civil works and highway design drawings (e.g. railing, signage location and etc) will be further submitted to relevant departments for comments in the next stage of the study.

Should you have no further comment on the proposed location of the metered car parking spaces. We will update the whole technical note again and resubmit for your record.

Best Regards,

Gary Tsui
Associate Director
Tel: +852 2864 6452 (Direct Line) • Gen: +852 2529 7037 • Fax: +852 2527 8490
SYSTRA MVA
22nd Floor • Genesis • 33-35 Wong Chuk Hang Road • Hong Kong
www.mvaasia.com
MVA email disclaimer: www.mvaasia.com/disclaimer
Please consider the environment before printing.

From: Ada KY YAU <adakyyau@td.gov.hk>
Sent: Monday, May 22, 2023 4:46 PM
To: TSUI Gary <gtsui@systra.com>
Cc: Wai Chung KWOK <wckwok@td.gov.hk>
Subject: RE: TFS for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP - Proposed Relocation of the Metered Car Parking Spaces

Dear Gary,

Regarding Dwg No. 6, please ensure that there should be no parking spaces within the run-in's visibility splay. Please refer to TPDM for guidelines and review your proposal.

I have no comment on Dwg No. 7.

Thanks.

Regards,
Ada YAU
EK/SSP, TEK, TD
Tel: 2399 2479

From: TSUI Gary <gtsui@systra.com>
To: Ada KY YAU <adakyyau@td.gov.hk>
Cc: Wai Chung KWOK <wckwok@td.gov.hk>
Date: 12/05/2023 04:28 PM
Subject: RE: TFS for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP - Proposed Relocation of the Metered Car Parking Spaces

Dear Ada,

Thank you for your quick response for the captioned. Please see attached updated letter and figures for your further review and comment.

We would greatly appreciate if you would kindly furnish your comments on the locations of the metered car parking spaces if any, on or before **26th May 2023**. A **NIL** return is also required.

Should you have any queries, please feel free to contact the undersigned at 2864 6452.

Thank you for your kind assistance.

Best Regards,

Gary Tsui
Associate Director
Tel: +852 2864 6452 (Direct Line) • Gen: +852 2529 7037 • Fax: +852 2527 8490
SYSTRA MVA
22nd Floor • Genesis • 33-35 Wong Chuk Hang Road • Hong Kong
www.mvaasia.com
MVA email disclaimer: www.mvaasia.com/disclaimer
Please consider the environment before printing.

From: Ada KY YAU <adakyyau@td.gov.hk>
Sent: Tuesday, April 18, 2023 10:40 AM
To: TSUI Gary <gtsui@systra.com>
Cc: Wai Chung KWOK <wckwok@td.gov.hk>
Subject: Re: TFS for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP - Proposed Relocation of the Metered Car Parking Spaces

Dear Gary,

There is an existing car park entrance/exit at/ near your proposed location of metered parking at Pak Tin Street. Also, the traffic aids at Pak Tin Street is not updated. Please review.

In fact, please consider shifting your proposed vehicular access of your site to avoid affecting the existing car parking spaces at Berwick Street.

Thanks.

Regards,
Ada YAU
EK/SSP, TEK, TD
Tel: 2399 2479

From: TSUI Gary <gtsui@systra.com>

To: "adakyyau@td.gov.hk" <adakyyau@td.gov.hk>
Date: 17/04/2023 02:29 PM
Subject: TFS for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP - Proposed Relocation of the Metered Car Parking Spaces

---

Dear Madam,

We have been commissioned by Hong Kong Sheng Kung Hui St. Thomas' Church, as the traffic consultant for the captioned study.

We are pleased to submit the attached regarding the proposed relocation of the metered car parking spaces at Berwick Street for your comment and approval. The hard copy of the letter should will delivered to your office by this week.

We would greatly appreciate if you would kindly furnish your comments on the locations of the metered car parking spaces if any, on or before **5th May 2023**. A **NIL** return is also required.

Should you have any queries, please feel free to contact the undersigned at 2864 6452.

Thank you for your kind assistance.

Best Regards,

Gary Tsui
Associate Director
Tel: +852 2864 6452 (Direct Line) • Gen: +852 2529 7037 • Fax: +852 2527 8490
SYSTRA MVA
22nd Floor • Genesis • 33-35 Wong Chuk Hang Road • Hong Kong
www.mvaasia.com
MVA email disclaimer: www.mvaasia.com/disclaimer
Please consider the environment before printing.

1st submission to TD on 14 Apr 2023

Ms. YAU Kit Yu, Ada
Transport Department
Urban Regional Office
Traffic Engineering (Kln) Division
Kln. District West Section
8/F, Mongkok Government Offices
30 Luen Wan Street,
Mongkok, Kowloon

Our Ref: CHK50686610/TKM/L2300629/jch

BY HAND & EMAIL

Technical Feasibility Study (TFS) for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP

14th April 2023

Proposed Relocation of the Metered Car Parking Spaces

Dear Madam,

We have been commissioned by Hong Kong Sheng Kung Hui St. Thomas' Church, as the traffic consultant for the captioned study.

The Project comprises the redevelopment of St. Thomas Church into a complex building at NKIL No. 3762 and NKIL No. 3635RP, Sham Shui Po with one level of basement of car park. The location of the subject site is shown in **Drawing No.1**.

The proposed building will accommodate the following facilities:-
1. Day Care Centre for the Elderly;
2. Child Care Centre;
3. Early Education and Training Centre;
4. Neighbourhood Elderly Centre;
5. After School Care Programme;
6. Integrated Elderly Rehabilitation Services Centre;
7. Staff Training Unit;
8. Church, Church Activity Centre and Pastor's Flat.

Currently, no car parking space is provided for the church as shown in the existing traffic condition in **Drawing No.2**. With the additional facilities provided within the church as mentioned on the above, one level of basement car park will be provided and thus a vehicular access will need to be provided as shown in **Drawing No.3** for operation use.

As shown in **Drawing No.3**, the location of the vehicular access will be located as far as away from the junction of Nam Cheong Street / Berwick Street. The proposed vehicular access will also affect 3 existing metered car parking spaces. The existing disabled car parking will be shifted approximately 15m to the west and 3 existing metered car parking spaces will need to be removed permanently.

MVA Hong Kong Limited
22/F Genesis • 33-35 Wong Chuk Hang Road • Hong Kong
T. +852 2529 7037 • F. +852 2527 8490 • E. info@mvaasia.com • www.mvaasia.com

A metered car parking utilization survey was conducted in the vicinity of the subject site in order to observe the current car parking utilization situation. The metered car parking utilization survey was carried out on one regular Sunday between 7:30 am to 1:30 pm in February 2023, which was continuously throughout the morning to noon peak period during the regular Sunday activities (e.g. Sunday Worship and Sunday School) of HKSKH St. Thomas' Church, to cover adequately the anticipated peak parking occupancy within the Core Area. This could review if there is any implication if permanently remove the two metered car parking spaces in front of the subject site. The details and the location of the surveyed metered car parking are shown in **Drawing No.4**.

As shown in **Drawing No.4**, all the surveyed metered car parking spaces are fully utilised during the peak hours.

In view of that, the permanently removed metered car parking spaces in front of the subject site are proposed to be re-provided at Pak Tin Street as shown in **Drawing No. 5**. As shown in the drawing, these proposed metered car parking spaces will not affect any traffic arrangement/ facilities on the local road network.

According to the above findings, it can be concluded that the proposed locations of the metered car parking spaces is acceptable from a traffic engineering point of view and would not impose adverse impact on the local road network.

We would greatly appreciate if you would kindly furnish your comments on the locations of the metered car parking spaces if any, on or before **5th May 2023**. A **NIL** return is also required.

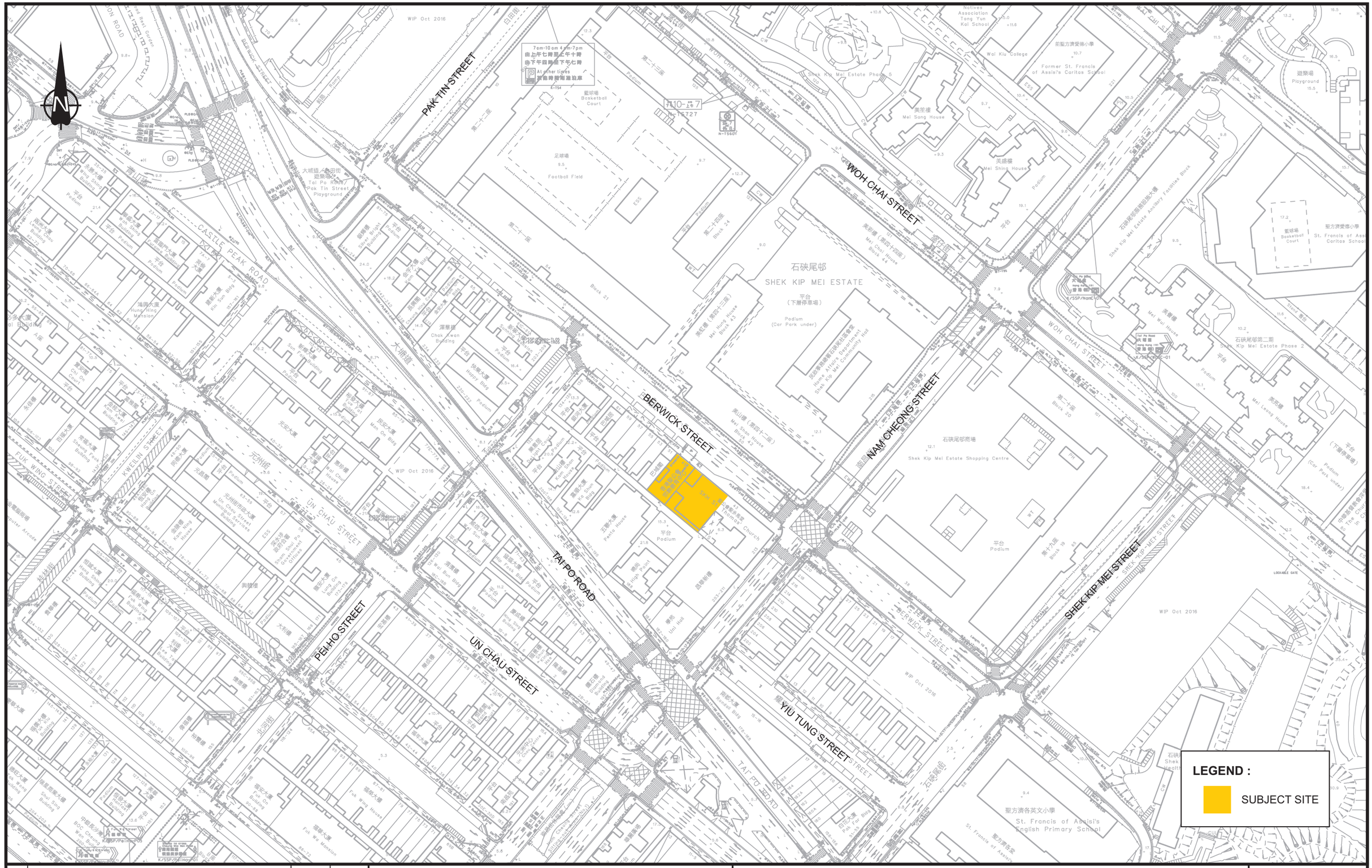
Should you have any queries, please feel free to contact the undersigned at 2864 6452.

Thank you for your kind assistance.

Yours faithfully,

Gary Tsui
Associate Director

Encl.



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS CHURCH

Drawing Title

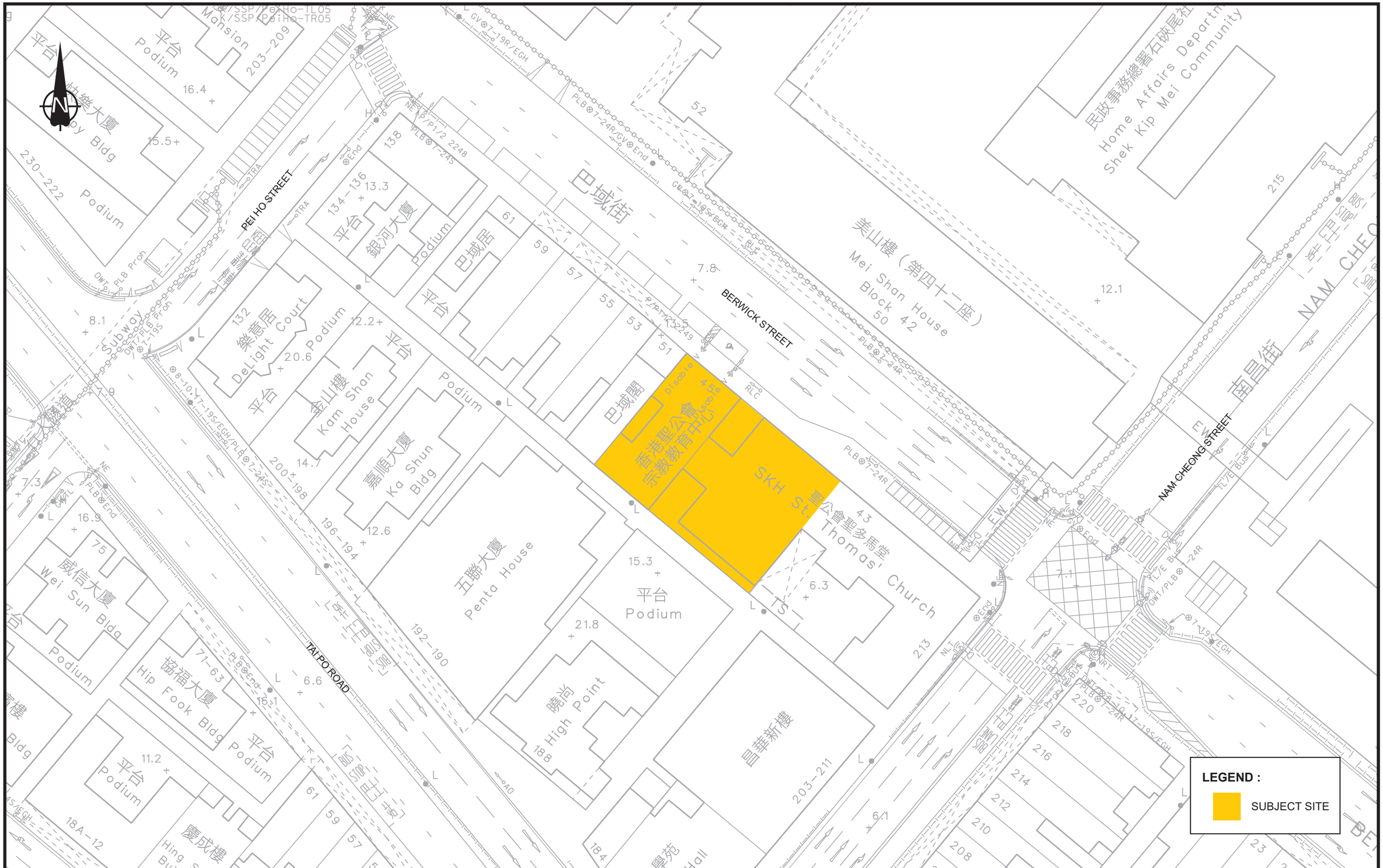
SITE LOCATION

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	1	-

SYSTRA MVA

CHK50686610/TFS/F1.CDR/LLH/14APR23

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS CHURCH

Drawing Title

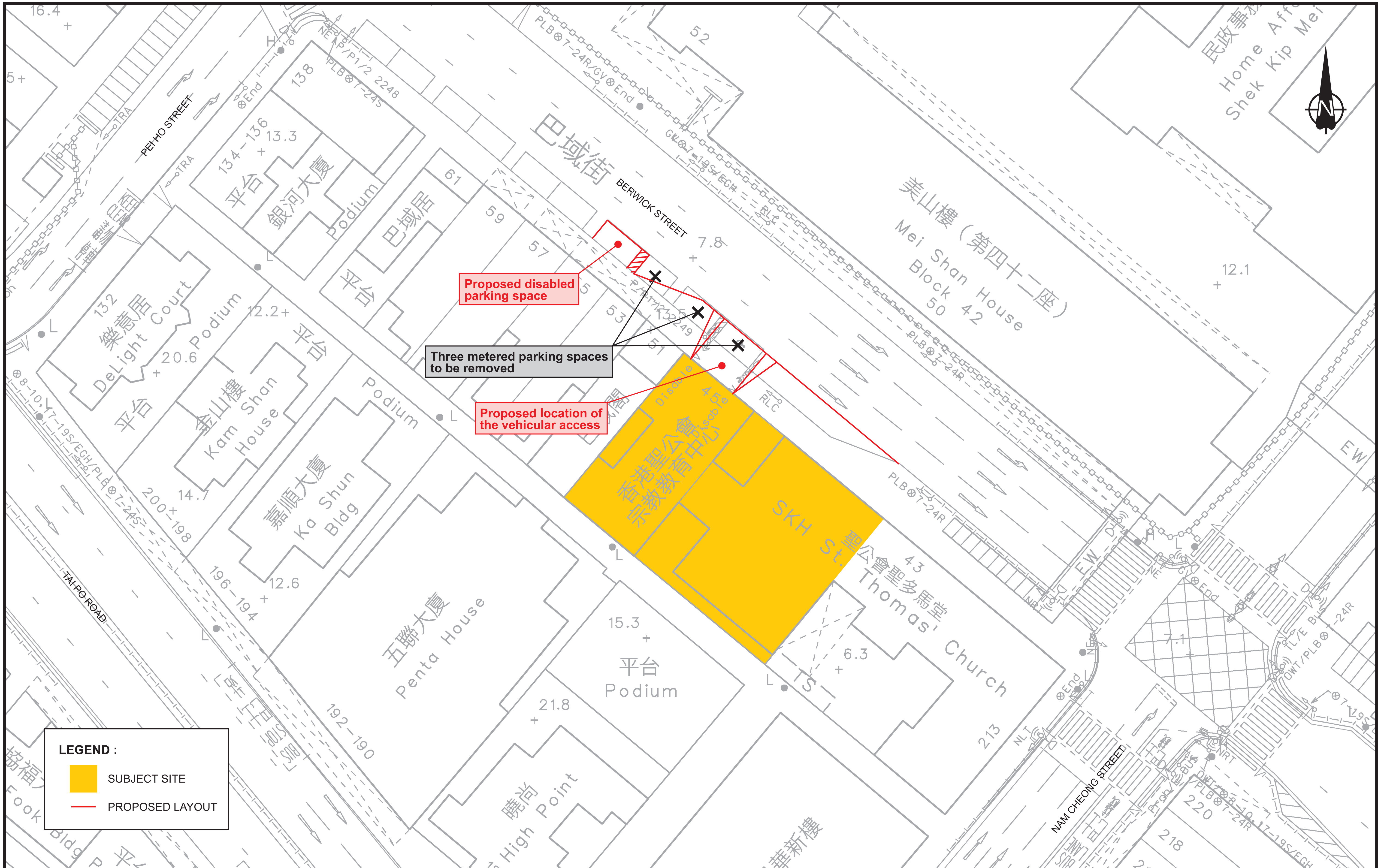
EXISTING TRAFFIC CONDITION

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	2	-

SYSTRA MVA

CHK50686610/TFS/F2.CDR/LLH/14APR23

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

TECHNICAL FEASIBILITY STUDY (TFS) FOR THE REDEVELOPMENT OF HKSKH ST. THOMAS CHURCH

Drawing Title

PROPOSED ROAD LAYOUT

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	3	-

SYSTRA MVA

CHK50686610/TFS/F3.CDR/LLH/17APR23

Original Size : A3

Shek Kip Pei Estate Public Car Park
Observed Peak Occupation : 100%

Benwick Street on-street metered parking spaces (10 nos.)
Observed Peak Occupation : 100% (Illegal Parking Observed)

Benwick Street on-street metered parking spaces (10 nos.)
Observed Peak Occupation : 100% (Illegal Parking Observed)

Yiu Tung Street on-street metered parking spaces (18 nos.)
Observed Peak Occupation : 100% (Illegal Parking Observed)

LEGEND :

SUBJECT SITE

SURVEYED METERED PARKING SPACES

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS CHURCH

Drawing Title

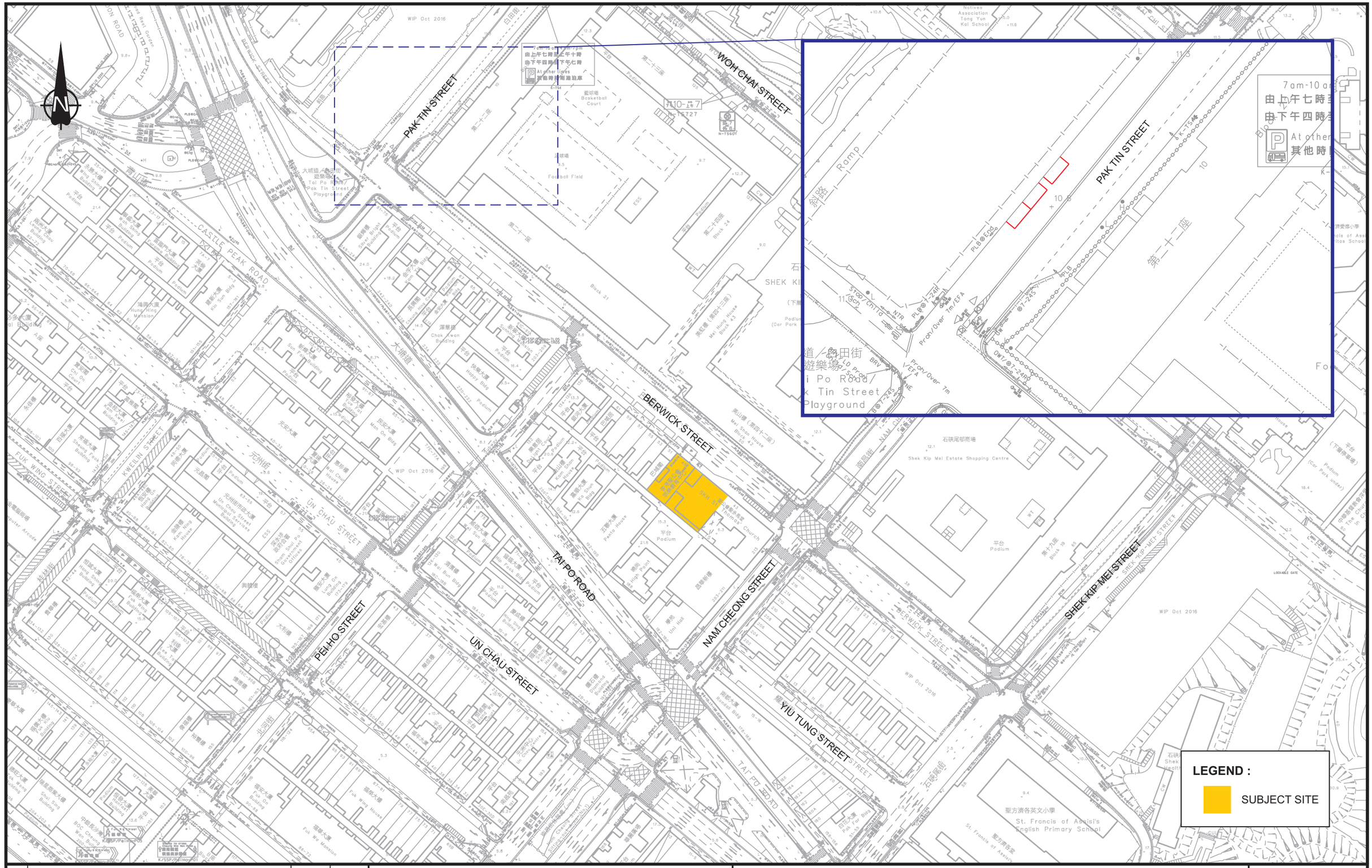
LOCATION OF SURVEYED PUBLIC CAR PARK AND METERED PARKING SPACE

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	4	-

SYSTRA MVA

CHK50686610/TFS/F4.CDR/LLH/14APR23

Original Size : A3



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS CHURCH

Drawing Title

PROPOSED LOCATION OF METERED PARKING AT PAK TIN STERET

Designed	Checked	Scale	Date	Drawing No.	Rev.
HMC	TKM	NTS	APR 2023	5	-

SYSTRA MVA

CHK50686610/TFS/F5.CDR/LLH/17APR23

Original Size : A3

Swept Path Analysis

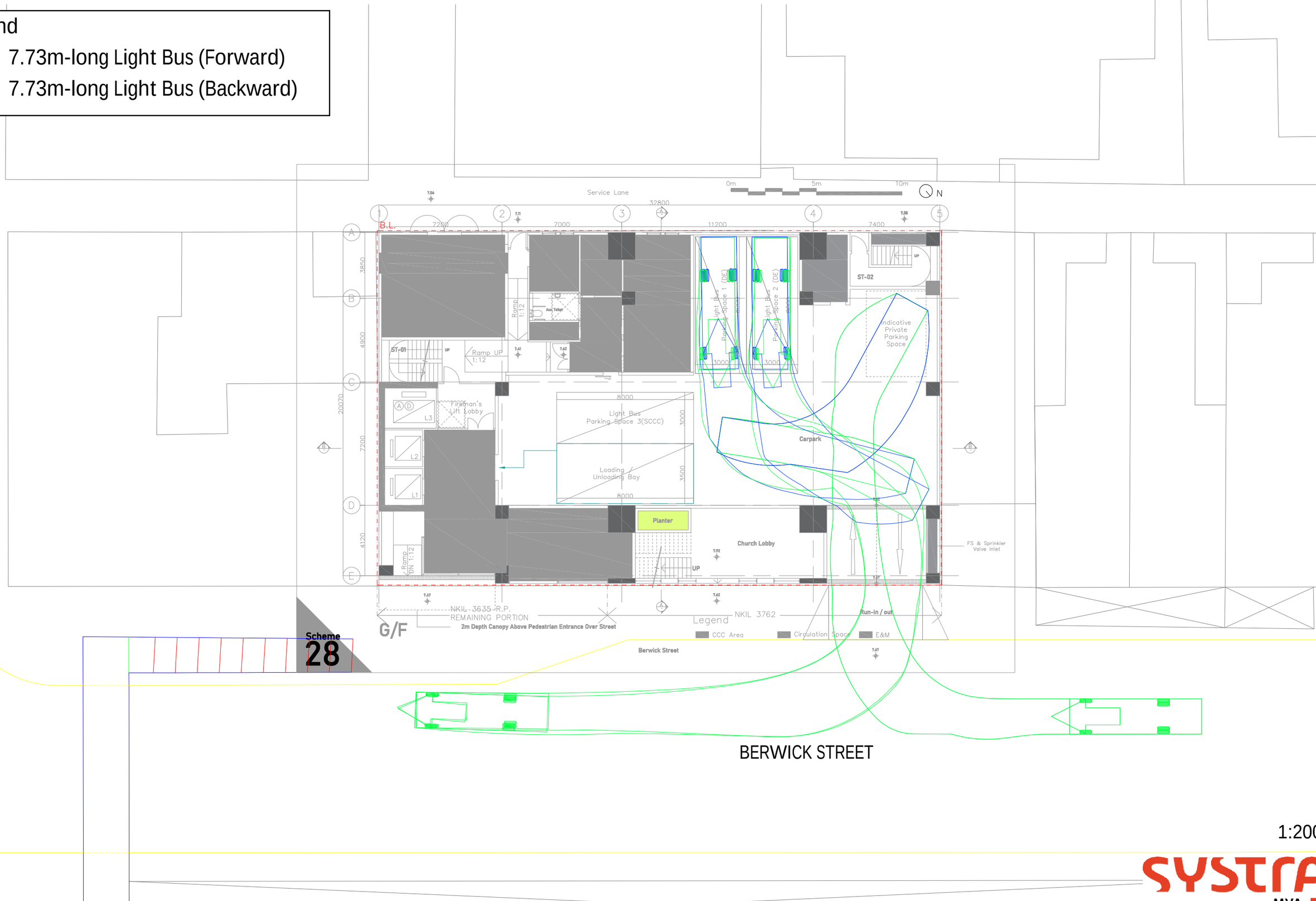
Access Review (Scheme 28)

07/02/2025

Swept Path Analysis for Light Bus Parking Space (1) and (2)

Legend

- 7.73m-long Light Bus (Forward)
- 7.73m-long Light Bus (Backward)



1:200 (A3)

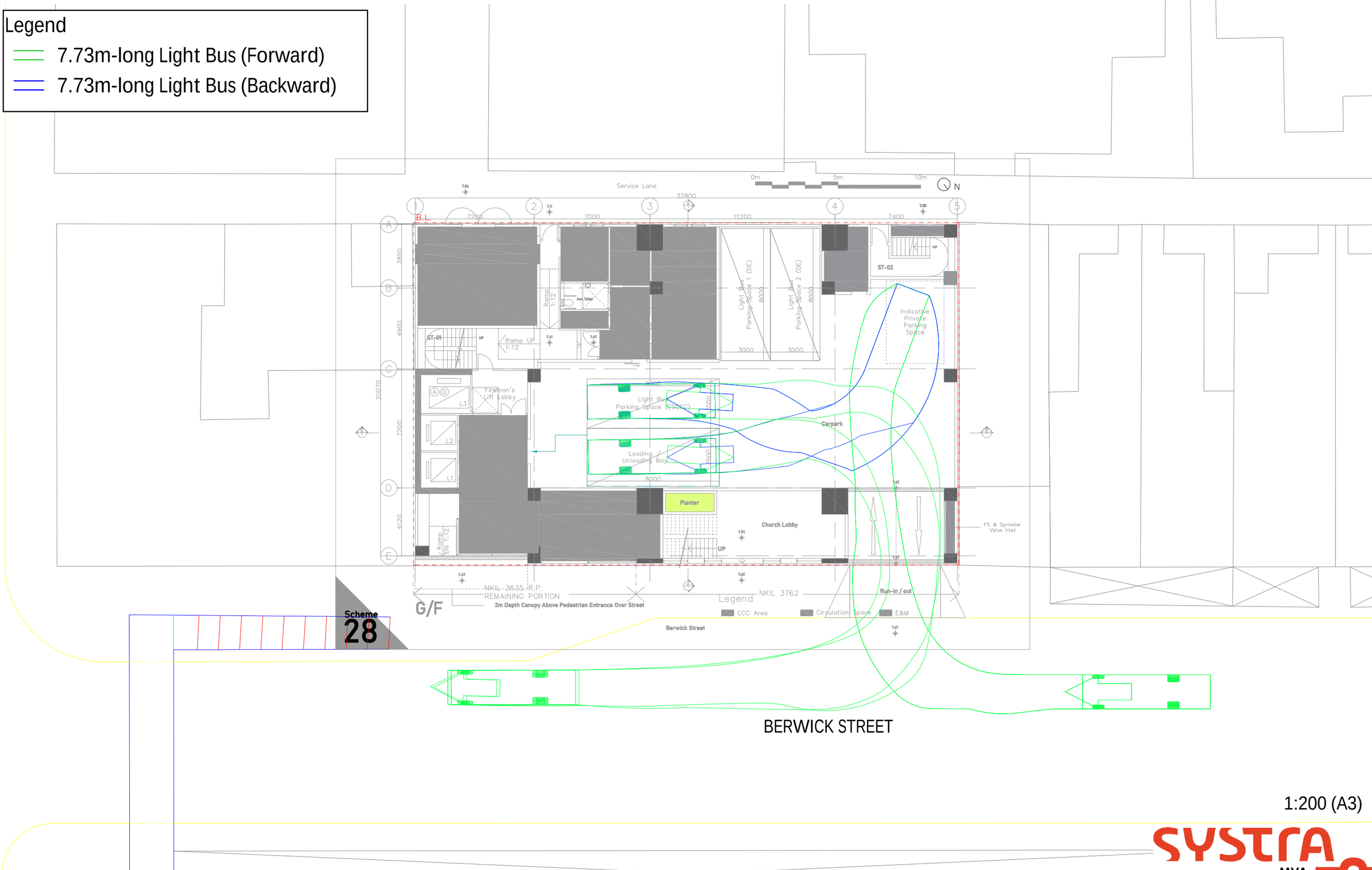
SYSTRA MVA

Access Review (Scheme 28)

07/02/2025

Swept Path Analysis for Light Bus Parking Space (3) and Shared Loading Bay

Legend
- 7.73m-long Light Bus (Forward)
- 7.73m-long Light Bus (Backward)



1:200 (A3)

SYSTRA MVA

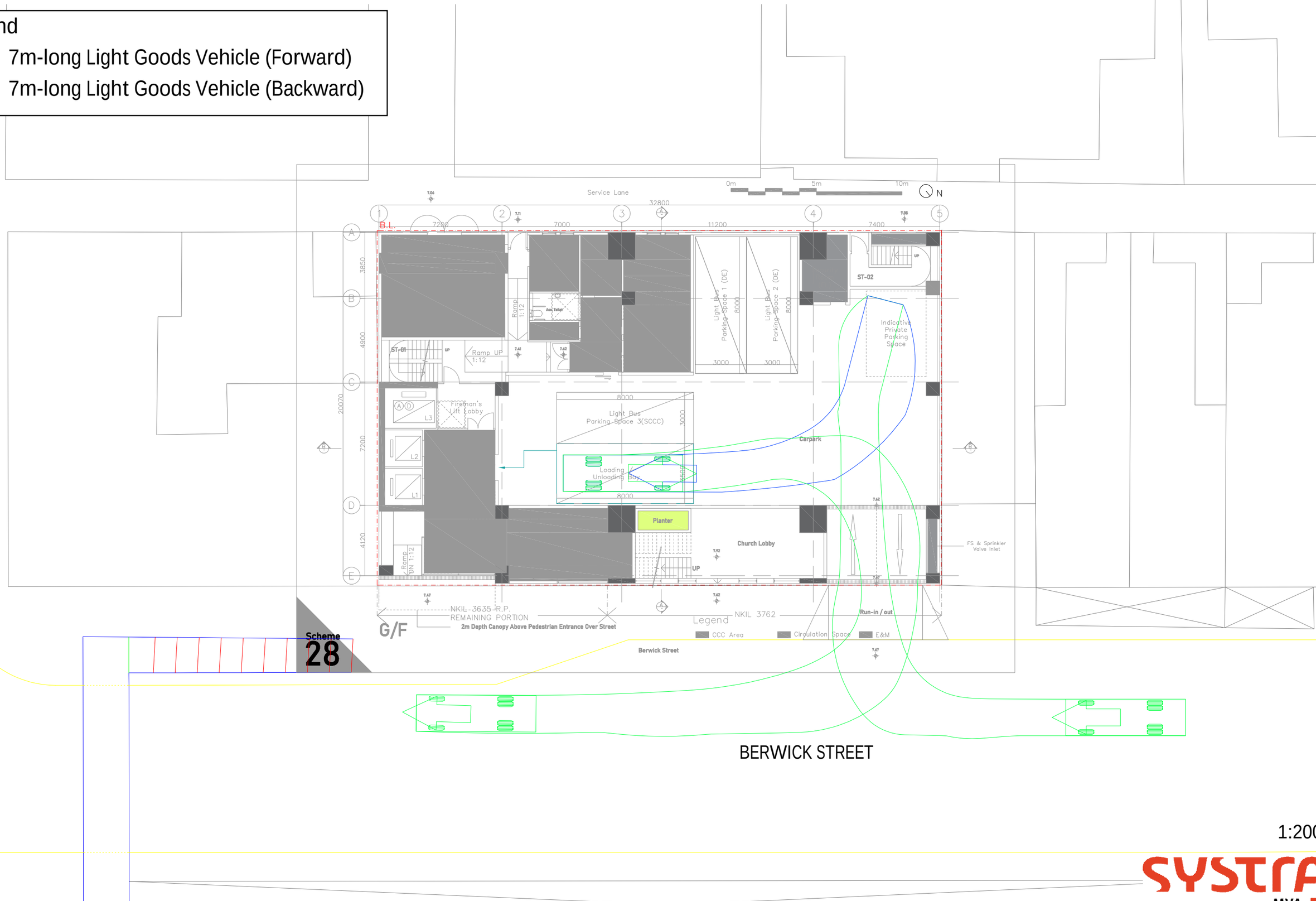
Access Review (Scheme 28)

07/02/2025

Swept Path Analysis for Shared Loading Bay (LGV)

Legend

- 7m-long Light Goods Vehicle (Forward)
- 7m-long Light Goods Vehicle (Backward)



1:200 (A3)

SYSTRA MVA

Technical Note Submitted to the Transport Department

Mr. YU Wai Ho
Project Coordinator/Sham Shui Po
Transport Department
Urban Regional Office
Traffic Engineering (Kln.) Division
Kowloon District West Section
8/F, Mongkok Government Offices
30 Luen Wan Street,
Mongkok, Kowloon

Our Ref: CHK50686610/CHM/L2501675/jch

BY HAND & EMAIL

Technical Feasibility Study for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP

4th November 2025

Technical Note on Traffic Forecast for Environmental Assessment Study

Dear Sir,

MVA Hong Kong Limited has been commissioned by Hong Kong Sheng Kung Hui as the traffic consultant, for the provision of traffic forecasts for the environmental assessment of the proposed redevelopment project of Hong Kong Sheng Kung Hui St. Thomas' Church at Sham Shui Po.

We are pleased to provide herewith a technical note which summarizes the methodology and results of the traffic forecasts for environmental assessment for your review and approval, to support the environmental assessment submission by the environmental consultant to Environmental Protection Department.

We would greatly appreciate if you could kindly furnish your comments, if any, on or before 28th November 2025.

Should you have any queries, please feel free to contact the undersigned at 2864 6431 or our Mr. Ray Chan at 2864 6395.

Thank you very much for your kind assistance.

Yours faithfully,

Edmund Kwok
Director (Traffic Engineering)

Encl.

MVA Hong Kong Limited
22/F Genesis • 33-35 Wong Chuk Hang Road • Hong Kong
T. +852 2529 7037 • F. +852 2527 8490 • E. info@mvaasia.com • www.mvaasia.com

Technical Feasibility Study for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP

NOV 2025

Reference number CHK50686610

TECHNICAL NOTE ON TRAFFIC FORECAST FOR ENVIRONMENTAL ASSESSMENT STUDY

SYSTRA MVA

TECHNICAL FEASIBILITY STUDY FOR THE PROPOSED REDEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. THOMAS' CHURCH AT 43 BERWICK STREET, SHAM SHUI PO, KOWLOON, N.K.I.L. NO. 3762 & 3635RP

TECHNICAL NOTE ON TRAFFIC FORECAST FOR ENVIRONMENTAL ASSESSMENT STUDY

IDENTIFICATION TABLE	
Client/Project owner	Hong Kong Sheng Kung Hui
Project	Technical Feasibility Study for the Proposed Redevelopment of Hong Kong Sheng Kung Hui St. Thomas' Church at 43 Berwick Street, Sham Shui Po, Kowloon, N.K.I.L. No. 3762 & 3635RP
Study	Technical Note on Traffic Forecast for Environmental Assessment Study
Date	Nov 2025
File name	St. Thomas_TN_EA_MVA20251104.docx
Reference number	CHK50686610
Number of pages	12
Version	1

TABLE OF CONTENTS

LIST OF DRAWINGS

Drawing No.	Description
1	Site Location
2	Environmental Assessment Study Area and Road Links

LIST OF TABLES

1. INTRODUCTION

1.1 MVA Hong Kong Ltd. has been commissioned by Hong Kong Sheng Kung Hui (HKSKH), as the traffic consultant for the Technical Feasibility Study (TFS) for the proposed redevelopment project of Hong Kong Sheng Kung Hui St. Thomas' Church at Sham Shui Po. The project comprises the redevelopment of HKSKH St. Thomas' Church into a complex building.

1.2 The site of the proposed redevelopment project of Hong Kong Sheng Kung Hui St. Thomas' Church is located at 43 Berwick Street, Sham Shui Po and **Drawing No. 1** shows the site location.

1.3 This technical note is prepared for summarizing the approach and results of the traffic forecast in support of the environmental assessment of the proposed development. The estimated completion year of the proposed development will be 2031.

2. TRAFFIC FORECAST FOR DESIGN YEAR

2.1 The 300m assessment boundary from the subject site for traffic noise assessment boundary from the subject site, and the identified road links within boundary for assessment are shown in **Drawing No. 2**.

2.2 **Table 2.1** summarizes the details of the studied road links for Environmental Assessment Study (EAS) within the assessment area.

Table 2.1 Details of Studied Road Links within Assessment Area

LINK NO.	ROAD	TRAFFIC BOUND (1)	ROAD TYPE (2)(3)	SPEED LIMIT (KM/HR)
1	Tai Po Road	SB	PD	50
2	Tai Po Road	SB	PD	50
3	Tai Po Road	SB	PD	50
4	Tai Po Road	SB	PD	50
5	Tai Po Road	NB	PD	50
6	Tai Po Road	NB	PD	50
7	Tai Po Road	NB	PD	50
8	Tai Po Road	NB	PD	50
9	Nam Cheong Street	NB	DD	50
10	Nam Cheong Street	NB	DD	50
11	Nam Cheong Street	NB	DD	50
12	Nam Cheong Street	NB	DD	50
13	Nam Cheong Street	SB	DD	50
14	Nam Cheong Street	SB	DD	50
15	Nam Cheong Street	SB	DD	50
16	Nam Cheong Street	SB	DD	50
17	Nam Cheong Street	SB	DD	50
18	Woh Chai Street	EB	DD	50
19	Woh Chai Street	EB	DD	50
20	Woh Chai Street	WB	DD	50
21	Woh Chai Street	WB	DD	50
22	Berwick Street	EB	LD	50
23	Berwick Street	EB	LD	50
24	Berwick Street	EB	LD	50
25	Berwick Street	WB	LD	50
26	Yiu Tung Street	EB	LD	50
27	Castle Peak Road	WB	DD	50

LINK NO.	ROAD	TRAFFIC BOUND (1)	ROAD TYPE (2)(3)	SPEED LIMIT (KM/HR)
28	Castle Peak Road	NB	DD	50
29	Castle Peak Road	SB	DD	50
30	Un Chau Street	WB	DD	50
31	Un Chau Street	WB	DD	50
32	Fuk Wing Street	EB	LD	50
33	Fuk Wing Street	EB	LD	50
34	Fuk Wing Street	EB	LD	50
35	Fuk Wa Street	EB	LD	50
36	Fuk Wa Street	EB	LD	50
37	Kweilin Street	NB	LD	50
38	Kweilin Street	SB	LD	50
39	Pak Tin Street	NB	LD	50
40	Pak Tin Street	NB	LD	50
41	Pak Tin Street	SB	LD	50
42	Pei Ho Street	SB	LD	50
43	Pei Ho Street	NB	LD	50
44	Pei Ho Street	NB	LD	50
45	Shek Kip Mei Street	NB	DD	50
46	Shek Kip Mei Street	SB	DD	50
47	Shek Kip Mei Street	SB	DD	50
48	Shek Kip Mei Street	SB	DD	50
49	Wong Chuk Street	NB	DD	50
50	Wong Chuk Street & Sai Yeung Choi Street North	EB	LD	50
51	Sai Yeung Choi Street North	NB	LD	50
52	Sai Yeung Choi Street North	SB	LD	50
53	Wong Chuk Street	EB	LD	50
54	Wong Chuk Street	WB	LD	50
55	Cheung Sha Wan Road	EB	PD	50
56	Cheung Sha Wan Road	EB	PD	50
57	Kowloon Road	SB	LD	50
58	Castle Peak Road	NB	LD	50
59	Berwick Street	NB	LD	50
60	Berwick Street	SB	LD	50

LINK NO.	ROAD	TRAFFIC BOUND (1)	ROAD TYPE (2)(3)	SPEED LIMIT (KM/HR)
61	Wai Chi Street	EB	LD	50
62	Wai Chi Street	WB	LD	50
63	Wai Chi Street	EB	LD	30
64	Wai Chi Lane	NB	LD	50
65	Wai Chi Lane	SB	LD	50
66	Nam Cheong Street	NB	DD	50
67	Nam Cheong Street	SB	DD	50
68	Berwick Street	EB	LD	50
69	Un Chau Street	WB	DD	50
70	Wong Chuk Street	NB	LD	50

Notes:

(1) For Traffic Bound: NB – North bound, EB – East bound, WB – West bound, SB – South bound.

(2) For Road Type: PD – Primary Distributor, DD – District Distributor and LD – Local Distributor

(3) Road types for corresponding road links are extracted from the Annual Traffic Census (ATC). For road link types not specified in the ATC, the road link types are estimated by comparing between road links of similar traffic flows.

2.3 The Annual Growth Rate Method is adopted to estimate the traffic flow for EAS purpose.

2.4 The tentative completion year of the proposed development is 2031. 17 years after completion of the development, i.e. 2048, is adopted for the design year of environmental assessment. Traffic forecast for 2048 is thus derived.

2.5 The traffic forecast has been based on the review of the following information:

- Historical traffic growth in Annual Traffic Census (ATC) published by Transport Department;
- 2019-Based Territorial Population and Employment Data Matrix (TPEDM) planning data published by Planning Department;
- Projections of Population Distribution 2021-2029 published by Planning Department; and
- Future planned developments in the vicinity of subject site.

2.6 For short term traffic growth, reference has also been made to the ATC recent traffic growth trend and TPEDM planning data.

2.7 Transport Department has several traffic count stations in the vicinity of the proposed development in Sham Shui Po area. The traffic counts at the concerned stations nearby the Application Site in the recent 5 years from 2018 and 2022 which reported in the Annual Traffic Census published by Transport Department are summarized in **Table 2.2**.

Table 2.2 Traffic Growth Rates between 2018 and 2022 from Annual Traffic Census (ATC)

ATC STATION NO.	LOCATION	ANNUAL AVERAGE DAILY TRAFFIC (VEH/DAY)				
		2018	2019	2020	2021	2022
3009	Tai Po Road (From Nam Cheong St to Kweilin St)	19,060	20,300	20,260	20,970	19,720
3656	Nam Cheong Street (From Tai Po Rd to Un Chau St)	10,130	9,920	8,260	8,800	8,380
3431	Tai Po Road (From Castle Peak Rd to Tai Woh Ping Rd)	33,380	29,420	27,200	28,360	27,020
3465	Castle Peak Road (From Kweilin St to Slip Road Adjoining Tai Po Rd)	2,810	2,970	3,220	3,310	3,150
3228	Tai Po Road (From Castle Peak Rd to Kweilin St)	23,670	21,210	19,910	20,190	19,120
3667	Castle Peak Road (From Yen Chow St to Slip Rd Adjoining Tai Po Rd)	30,740	30,110	24,900	28,000	26,680

ATC STATION NO.	LOCATION	ANNUAL AVERAGE DAILY TRAFFIC (VEH/DAY)				
		2018	2019	2020	2021	2022
3456	Nam Cheong Street (From Cheung Sha Wan Rd to Lai Chi Kok Rd)	8,290	8,400	7,020	7,210	6,870
3847	Nam Cheong Street (From Woh Chai St to Tai Po Rd)	7,580	7,640	7,150	7,460	7,010
4047	Nam Cheong Street (From Pak Tin St to Who Chai St)	9,780	9,850	9,220	9,610	9,370
3823	Tai Po Road (From Wong Chuk St to Shek Kip Mei St)	31,840	31,400	29,470	34,500	30,680
4021	Tai Po Road (From Shek Kip Mei St to Nam Cheong St)	24,320	23,980	22,510	22,820	21,910
3666	Un Chau Street (From Shek Kip Mei St to Nam Cheong St)	13,340	13,070	10,810	12,690	12,090
4053	Shek Kip Mei Street (From Woh Chai St to Tai Po Rd)	11,640	11,720	10,970	11,440	11,800
3657	Woh Chai Street (From Nam Cheong St to Shek Kip Mei St)	8,490	8,560	8,420	8,610	8,200
3855	Un Chau Street (From Yen Chow St to Nam Cheong St)	10,620	10,410	10,030	9,130	8,640
3626	Cheung Sha Wan Road (From Nam Cheong St to Wong Chuk St)	22,630	22,310	23,860	24,890	23,580
Total		**268,320**	**261,270**	**243,210**	**257,990**	**244,220**
Average traffic growth rate per annum (2018 – 2022) = -1.71 %						
Average traffic growth rate per annum (2018 – 2019) = -1.19 %						

2.8 As shown in **Table 2.2**, it can be noted that over the recent 5 years, the average annual daily traffic growth pattern in the area in the vicinity of the proposed development from 2018 to 2022 has a decreasing trend of 1.71% per annum. The traffic pattern between 2020 and 2022 may decrease due to COVID-19 situation, however the traffic pattern from 2018-2019 still appears in negative growth of 1.19% per annum.

2.9 Reference has also been made to the 2019-Based Territorial Population and Employment Data Matrix (TPEDM) planning data published by Planning Department for years 2019, 2026 and 2031 in the relevant Planning Data District (i.e. Sham Shui Po). The population and employment data and growth rates are summarized in **Tables 2.3** and **2.4**, respectively.

Table 2.3 2019, 2026 & 2031 Population and Employment Growth in Sham Shui Po from TPEDM

PLANNING DATA DISTRICT	2019		2026		2031	
	Population	Employment	Population	Employment	Population	Employment
Sham Shui Po	454,450	246,800	492,450	243,300	464,900	236,350

Table 2.4 Population and Employment Growth Rate in Sham Shui Po from TPEDM

PLANNING DATA DISTRICT	ANNUAL GROWTH RATE (%)			
	2019/2026		2026/2031	
	Population	Employment	Population	Employment
Sham Shui Po	1.15%	-0.20%	-1.14%	-0.58%

2.10 As shown in **Table 2.4**, the population growth rate in Sham Shui Po has an increasing trend of 1.15% per annum from 2019 to 2026, and a decreasing trend of 1.14% per annum from 2026 to 2031. The employment growth rate in Sham Shui Po also has a decreasing trend of 0.20% per annum from 2019 to 2026, and a decreasing trend of -0.58% per annum from 2026 to 2031.

2.11 Taking into account the ATC and TPEDM planning data, only the population growth rates from 2019 to 2026 shows a positive growth (+1.15% p.a.) while the others show a negative growth rate. For conservative purpose, traffic growth factor of +1.15 % p.a. from 2024 is adopted for the short-term traffic projection up to 2026 to allow for any unexpected future growth as a result of some changes in land use or redevelopment in the area.

2.12 For long-term traffic forecast from 2026 to 2048, reference has been made to the "Projections of Population Distribution 2021-2029" published by Planning Department. The projected population in Sham Shui Po District from 2024 to 2029 are extracted from the publication and the average population growth rate from 2024 to 2029 are as shown in **Table 2.5**.

Table 2.5 Sham Shui Po District Projected Population from 2024 to 2029

YEAR	POPULATION PROJECTIONS
2024	468,000

YEAR	POPULATION PROJECTIONS
2025	468,000
2026	463,900
2027	462,000
2028	455,600
2029	454,200
Average Population Growth Rate from 2024 to 2029 = -0.60% p.a.	

2.13 As shown in **Table 2.5**, the annual population growth rate from 2024 to 2029 is -0.60% p.a.. With reference to TPEDM data and the Projections of Population Distribution, a steady decreasing trend in population and employment figures is observed. For conservative estimation, 0.50 % annual growth rate is proposed for the traffic growth forecast from 2026 to 2048 to account for the minimal increase in background traffic.

2.14 The adopted growth rates for traffic forecast are summarized in **Table 2.6**.

Table 2.6 Adopted Traffic Growth Rates

YEAR	ADOPTED GROWTH RATE FOR TRAFFIC FORECAST
2024 to 2026	1.15 % p.a.
2026 to 2048	0.50 % p.a.

2.15 It is deemed sufficient to allow for any unexpected future growth as a result of some changes in land use or redevelopment in the area. The adopted growth rate would be able to ensure a reasonable estimation of future traffic flows.

2.16 Other planned future new developments in the vicinity of the application site which are assumed to be completed between 2024 and 2034 and which may have traffic impact to the road network in the vicinity of the site have also been considered in the future background traffic flow. The traffic trip generation/attraction of these planned developments based on the latest known development parameters are shown in **Table 2.7** below.

Table 2.7 Traffic Trip Generation and Attraction from Other Planned Future Developments in the Vicinity of the Subject Site

DEVELOPMENT PARAMETERS	EXPECTED YEAR OF COMPLETION	AM PEAK (PCU/HR)		PM PEAK (PCU/HR)	
		Gen.	Att.	Gen.	Att.
Public Housing Development at Chak On Road South and Pak Tin Extension - Estimated No. of flats: about 1,000 (1)	In phases from 2030/31	43(7)	33(7)	24(7)	30(7)
Pak Tin Estate Redevelopment Phase 10 (Nga Tin House) - No. of flats: 924 (2)	2023/24	40(7)	30(7)	22(7)	28(7)

DEVELOPMENT PARAMETERS	EXPECTED YEAR OF COMPLETION	AM PEAK (PCU/HR)		PM PEAK (PCU/HR)	
		Gen.	Att.	Gen.	Att.
Pak Tin Estate Redevelopment Phase 12 - Estimated No. of flats: 1,944 (3)	2028/29	82(7)	62(7)	45(7)	57(7)
Pak Tin Estate Redevelopment Phase 13 - Estimated No. of flats: 2,627 (4)	2027/28	114(7)	86(7)	63(7)	79(7)
Redevelopment of Tai Hang Sai Estate (Section 16 Application No.: A/K4/76) (5) - Estimated No. of flats: 3,347 - Proposed Retail GFA 13,899 sqm - Proposed GIC GFA 6,500 sqm - Proposed Kindergarten GFA 1,675 sqm	2029	364	257	210	256
Development of Shek Kip Mei Community Health Centre (Section 16 Planning Application No.: A/K4/78) (6) - 64 consulting rooms and 30 nos. of PVP spaces	2029	32	25	20	24

Notes:
(1) Source: Legislative Council Paper No. CB(1)70/2023(04) dated 6 February 2023
(2) Source: Sham Shui Po District Council, RODS Paper 7/21 from Housing Department, June 2021
(3) Source: Sham Shui Po District Council, EHHAC Paper 22/22 from Housing Department, July 2022
(4) Source: Replies to initial questions raised by Legislative Council Members in examining the Estimates of Expenditure 2023-24 from Secretary for Housing, Reply Serial No. HB015, April 2023
(5) Source: TIA report of the Approved TPB Application No. A/K4/76
(6) Source: TIA report of the Approved TPB Application No. A/K4/78
(7) Based on peak hour trip rates for Subsidized Housing: Public Rental, TPDM Volume 1, Chapter 3, Annex D, Table 1

2.17 With reference to the planned developments nearby the subject site, the reference traffic flows in year 2048 are derived by applying the adopted growth factor **in Table 2.6** to 2024 existing traffic flows with addition to traffic flows in the planned developments in the vicinity of the site as shown in **Table 2.7**.

2.18 The estimated traffic trip generations/attractions of the proposed development during AM/PM peaks are shown in **Table 2.8** with reference to the Traffic Impact Assessment. It is conservatively assumed that only minor development traffic (20 pcu/hr) will be arrived and departed within weekday AM and PM peak hour to account for the possible traffic trips generated by the development.

Table 2.8 Estimated Traffic Generations of the Proposed Development

AM PEAK (PCU/HR)		PM PEAK (PCU/HR)	
Generation	Attraction	Generation	Attraction
20	20	20	20

2.19 The estimated development traffic trips in **Table 2.8** will be superimposed onto the reference traffic flows to derive the design traffic flows in Year 2048.

2.20 The estimated traffic flows and heavy vehicle (HV) proportion during AM/PM peaks in design year 2048 are tabulated in **Table 2.9** below and the flows have been converted to units in veh/hr for environmental noise quality impact assessment purposes.

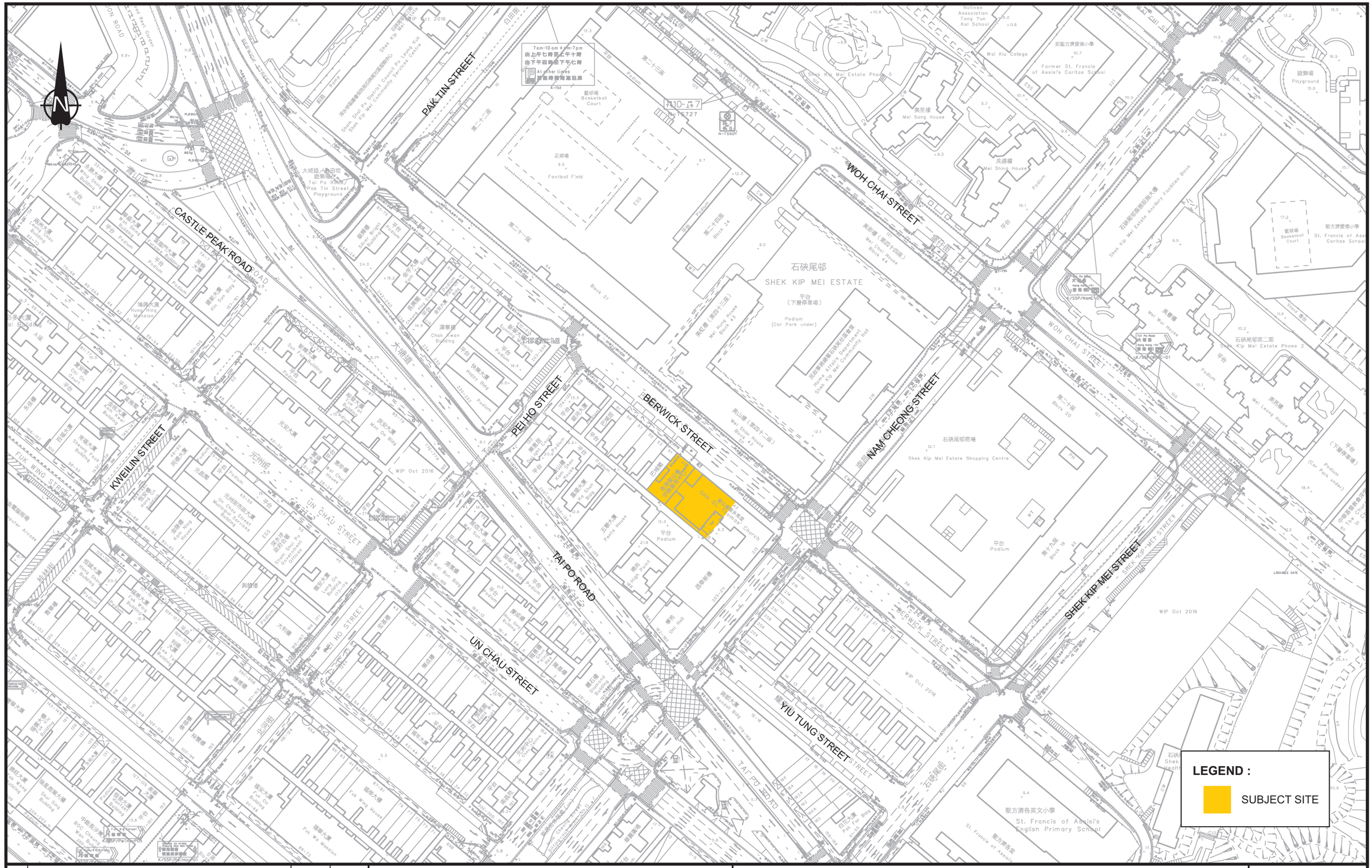
Table 2.9 Estimated Traffic Flows in Design Year 2048

LINK NO.	ROAD	AM PEAK TRAFFIC FLOW (VEH/HR) (1)	AM PEAK HV PROPORTION (%) (2)	PM PEAK TRAFFIC FLOW (VEH/HR) (1)	PM PEAK HV PROPORTION (%) (2)
1	Tai Po Road	1725	35%	1300	35%
2	Tai Po Road	1530	45%	1145	40%
3	Tai Po Road	910	25%	700	15%
4	Tai Po Road	1125	20%	885	15%
5	Tai Po Road	340	30%	590	25%
6	Tai Po Road	710	25%	855	25%
7	Tai Po Road	1160	50%	1290	30%
8	Tai Po Road	1080	35%	1200	30%
9	Nam Cheong Street	630	40%	565	25%
10	Nam Cheong Street	495	25%	420	30%
11	Nam Cheong Street	455	25%	370	25%
12	Nam Cheong Street	500	45%	360	20%
13	Nam Cheong Street	580	45%	395	50%
14	Nam Cheong Street	205	100%	160	100%
15	Nam Cheong Street	140	100%	100	100%
16	Nam Cheong Street	135	100%	90	100%
17	Nam Cheong Street	540	50%	310	55%
18	Woh Chai Street	280	50%	200	50%
19	Woh Chai Street	580	40%	455	40%
20	Woh Chai Street	465	35%	350	20%
21	Woh Chai Street	95	50%	135	35%
22	Berwick Street	435	30%	355	30%
23	Berwick Street	550	35%	460	40%
24	Berwick Street	145	10%	20	10%
25	Berwick Street	120	10%	30	20%
26	Yiu Tung Street	50	30%	50	30%
27	Castle Peak Road	425	60%	385	35%

LINK NO.	ROAD	AM PEAK TRAFFIC FLOW (VEH/HR) (1)	AM PEAK HV PROPORTION (%) (2)	PM PEAK TRAFFIC FLOW (VEH/HR) (1)	PM PEAK HV PROPORTION (%) (2)
28	Castle Peak Road	860	55%	695	45%
29	Castle Peak Road	715	35%	565	40%
30	Un Chau Street	865	15%	700	40%
31	Un Chau Street	790	30%	685	65%
32	Fuk Wing Street	100	35%	75	30%
33	Fuk Wing Street	220	35%	170	30%
34	Fuk Wing Street	50	30%	30	35%
35	Fuk Wa Street	135	30%	155	35%
36	Fuk Wa Street	105	35%	70	30%
37	Kweilin Street	185	35%	75	30%
38	Kweilin Street	420	35%	380	30%
39	Pak Tin Street	425	35%	350	30%
40	Pak Tin Street	390	35%	310	25%
41	Pak Tin Street	180	35%	155	40%
42	Pei Ho Street	35	35%	20	30%
43	Pei Ho Street	260	35%	200	30%
44	Pei Ho Street	130	25%	80	30%
45	Shek Kip Mei Street	290	50%	265	60%
46	Shek Kip Mei Street	1025	20%	640	25%
47	Shek Kip Mei Street	1255	20%	845	25%
48	Shek Kip Mei Street	40	30%	70	35%
49	Wong Chuk Street	335	35%	415	20%
50	Wong Chuk Street & Sai Yeung Choi Street North	45	20%	30	15%
51	Sai Yeung Choi Street North	20	15%	15	15%
52	Sai Yeung Choi Street North	45	20%	30	20%
53	Wong Chuk Street	30	25%	25	15%
54	Wong Chuk Street	20	20%	20	15%
55	Cheung Sha Wan Road	1860	40%	1260	40%
56	Cheung Sha Wan Road	1955	35%	1495	35%
57	Kowloon Road	20	15%	25	10%

LINK NO.	ROAD	AM PEAK TRAFFIC FLOW (VEH/HR) (1)	AM PEAK HV PROPORTION (%) (2)	PM PEAK TRAFFIC FLOW (VEH/HR) (1)	PM PEAK HV PROPORTION (%) (2)
58	Castle Peak Road	340	45%	285	40%
59	Berwick Street	25	20%	25	20%
60	Berwick Street	25	20%	25	20%
61	Wai Chi Street	105	35%	165	25%
62	Wai Chi Street	115	30%	105	15%
63	Wai Chi Street	225	30%	210	20%
64	Wai Chi Lane	40	40%	60	25%
65	Wai Chi Lane	60	40%	55	30%
66	Nam Cheong Street	540	35%	360	30%
67	Nam Cheong Street	365	40%	190	25%
68	Berwick Street	395	30%	260	30%
69	Un Chau Street	415	25%	215	30%
70	Wong Chuk Street	285	35%	385	25%

Notes:
(1) Traffic flow round to the nearest 5.
(2) HV % round to the nearest 5 %.



Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS' CHURCH

Drawing Title

SITE LOCATION

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	HWL	NTS	JUN 2023	1	-

SYSTRA MVA

CHK50686610/TIA/F11.CDR/LLH/20JUN23

Original Size : A3

CASTLE PEAK ROAD
PAK TIN STREET
WOH CHAI STREET
WAI CHI STREET
SHEK KIP MEI ESTATE
TAI HANG SAI ESTATE
TAI PO ROAD
BERWICK STREET
KWEILIN STREET
PEI HO STREET
UN CHAU STREET
FUK WING STREET
NAM CHEONG STREET
FUK WA STREET
SHEK KIP MEI STREET
CHEUNG SHA WAN ROAD

LEGEND :

- SUBJECT SITE
- 300M ASSESSMENT BOUNDARY FOR TRAFFIC NOISE
- ROAD SECTION
- (9) ROAD LINK INDEX

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

TECHNICAL FEASIBILITY STUDY (TFS)
FOR THE REDEVELOPMENT OF
HKSKH ST. THOMAS' CHURCH

Drawing Title

ENVIRONMENTAL ASSESSMENT STUDY AREA AND ROAD LINKS

Designed	Checked	Scale	Date	Drawing No.	Rev.
CHM	EDK	NTS	OCT 2025	2	-

SYSTRA MVA

CHK50686610/EIA/F1.CDR/LLH/31OCT25

Original Size : A3