Appendix 5

Drainage & Sewerage Impact Assessment

Prepared for

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PROPOSED FLAT WITH SHOP AND SERVICES/EATING PLACES AT NOS.152-164 WELLINGTON STREET IN SHEUNG WAN (AMENDMENT TO THE APPROVED DEVELOPMENT SCHEME)

DRAINAGE AND SEWERAGE IMPACT ASSESSMENT

Date	**October 2026**
Prepared by	**Miko Wan** **Environmental Consultant**
Signed	
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Signed	
Project Reference	**CHPWELTNEI00**
Document No.	**R10291_v1.0**

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1. INTRODUCTION

1.1 Project Background

1.1.1 A Section 16 application (No. A/H3/449) for the composite redevelopment at 152-164 Wellington Street, Central (the Proposed Development) was approved on 6 December 2024. The Application Site is currently zoned as "Commercial" under the Approved Sai Ying Pun and Sheung Wan Outline Zoning Plan (OZP) No. S/H3/34.

1.1.2 This S16 application is based on the approved S16 application (No. A/H3/449) and proposes an increase in building height and gross floor area (GFA).

1.1.3 Ramboll Hong Kong Limited is commissioned by the Applicant to conduct this Drainage and Sewerage Impact Assessment (DSIA) based on the Proposed Development. The design parameters of the Proposed Development are provided by project proponent.

1.2 Application Site and its Environs

1.2.1 The Application Site amounts to about 614.8m^2. It is bounded by Wellington Street to the northeast and Aberdeen Street to the northwest. The Wa On Lane Sitting-out Area is located to the south of the Application Site.

1.2.2 The location of the Application Site and its surrounding environs are shown in **Figure 1.1**.

1.3 Proposed Development

1.3.1 The proposed development is a composite building comprising residential and retail use. It includes a residential tower with 26 residential storeys and a total of 178 flat units, 1 clubhouse storeys, and 3 storeys allocated for retail space. A 78.6 m^2 outdoor swimming pool is planned.

1.3.2 It is tentatively completed in 2030.

1.3.3 Master layout plan of the proposed development is included in **Appendix 1.1**.

1.4 Appraisal of Drainage Impact

1.4.1 The Application Site is served by existing public drainage system. A Ø300mm drainage pipe on east side receives runoff from the Application Site. The Application Site is already developed and currently occupied by existing buildings and are fully paved.

1.4.2 According to Building Department's (BD) Practice Note (APP-152), the minimum greenery coverage for residential developments is 20%. In other words, there will be reduction of surface runoff when compared with the existing condition after development. The surface runoff generated from the Application Site will be collected by the same drainage pipe tentatively so that there is no change of flow regime.

1.4.3 As such, it is expected that the Proposed Development (with reduced surface runoff and same flow regime) would not result in worsened drainage impact. Drainage submission including assessment if required will be provided in detailed design stage.

2. SEWERAGE IMPACT ASSESSMENT

2.1 Scope of Work

2.1.1 The aim of this SIA is to assess whether the capacity of the existing sewerage network serving the Application Site is sufficient to cope with the sewage flow from the proposed development. Drainage Record Plans from Drainage Services Department (DSD) were obtained for the purposes of this SIA.

2.2 Assessment Criteria and Methodology

2.2.1 Environmental Protection Department's (EPD's) Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning, Version 1 (GESF) has been referred to for the purposes of estimating the quantity of the sewage generated from the proposed development and the existing catchment area. Sewage flow parameters and peaking factors in this document have been adopted for this SIA.

2.2.2 Based on the building types in the area, the following unit flow factors are used in the SIA calculation:

- Residents: 0.27 m^3/person/day (R2)
- Clubhouse employee: 0.28 m^3/day (J11 - Community, Social & Personal Services)
- Retail employee: 0.28 m^3/day (J4 – Wholesale & Retail)
- F&B employee: 1.58 m^3/day (J10 – Restaurants & Hotels)
- Office employee: 0.08 m3/day (J6 – Finance, Insurance, Real Estate & Business Services)

2.2.3 Catchment Inflow Factor (P_{CIF}) of Central (1.00) has been applied in the assessment.

2.3 Existing and Future Sewerage System

2.3.1 According to the Drainage Record Plans obtained from DSD, there are existing Ø150mm pipes (Manhole reference no. FMH7029762, FMH7029761, FMH7029760 and FMH7029758) connected from the Application Site to the Ø400mm sewage pipe along Wellington Street. The pipe is then connected to the Ø600mm to Ø750mm sewerage pipe along the Queen's Road Central and Bonham Strand.

2.3.2 The existing sewers in the vicinity of the Application Site are shown in **Figure 2.1**.

2.3.3 Four existing Ø150mm pipes (FWD7033376, FWD7033375, FWD7033374 and FWD7033372) will be abandoned and the applicant is responsible for the proposed abandoning works.; a new sewer will be constructed to connect from the Application Site to manhole no.: FMH7030011 (S1) as shown in **Figure 2.1**.

2.4 Wastewater Generated by the Proposed Development

2.4.1 Wastewater arising from the proposed development will be primarily contributed by the residents, clubhouse (no F&B) staff and retail (assuming 100% F&B for conservation) employee.

2.4.2 Detailed calculation for the proposed development is given in **Table 2.1** below and **Appendix 2.1**.

Table 2.1 Estimated Peak Flow

Development Parameters	Proposed Development		
	Residential	**Clubhouse**	**F&B**
Area (m^2)	-	285	851
Number of flats	178	-	-
Assumed Household Size	2.3(1)	-	-
Assumed Population	409	9	43
Design Flow (m^3/person/day)	0.27(2)	0.28(4)	1.58 (3)
Flow Rate (m^3/day)	**110.5**	**2.6**	**68.6**
Flow Rate with P_{CIF} (m^3/day)	**181.7**		
Peak Flow (L/s)	**21.4(5)**		

(1) 2.3 person/flat – 2021 Population Census: Average Household Size in Chung Wan
(2) Refer to Table T-1 of GESF – R2
(3) Refer to Table T-2 of GESF – J10 Restaurants & Hotels
(4) Refer to Table T-2 of GESF – J11 Community, Social & Personal Services
(5) Backwash discharge from swimming pool is included in the peak flow

2.5 Assessment of Sewerage Impact

2.5.1 **Appendix 2.1** shows the detailed calculation on the estimated hydraulic capacity of the proposed sewer sections and existing downstream sewers and the calculation of the amount of the sewage entering each segment of the said sewer network. Total flow from the proposed development is assessed in the calculations.

2.6 Discussion

2.6.1 The potential sewerage impact due to the proposed development has been quantitatively addressed. Sewage generation rate from the proposed development is estimated to be 181.7 m^3/day (i.e. peak flow with backwash from swimming pool is 21.4 litre/sec).

2.6.2 According to Table 4a of **Appendix 2.1**, regarding the sewage generation rate from the proposed development and surrounding areas (**Figure 2.2**), the new connection and existing sewer pipe would be of adequate capacity to receive the flow with consideration of freeboard under the surcharge condition.

3. OVERALL CONCLUSION

3.1 Conclusion

3.1.1 A residential development is proposed at 152-164 Wellington Street, Central. The potential drainage and sewerage impact has been quantitatively addressed.

3.1.2 The Proposed Development would result in reduced surface runoff and follow the same flow regime as under existing condition. It would not result in worsened drainage impact. Drainage submission including assessment where required will be provided in detailed design stage.

3.1.3 New sewer will be constructed to connect from the Application Site to manhole no.: FMH7030011. The project proponent will be responsible for the implementation of the proposed new connection pipes (T1) while the section of the new pipes (all within government land) downstream of the proposed terminal manhole is assumed to be handed over to DSD for future maintenance. Four existing sewers (FWD7033376, FWD7033375, FWD7033374 and FWD7033372) will be abandoned and the applicant is responsible for the proposed abandoning works.

3.1.4 Based on the sewerage impact assessment results, it is found that the capacity of the existing sewerage system serving the area and freeboard would be sufficient to cater for the sewage generation from the proposed development and nearby catchment areas.

3.1.5 With the proposed sewerage pipeline in place, this SIA confirms the feasibility of the proposed development in terms of impacts to the public sewerage system.

Figures

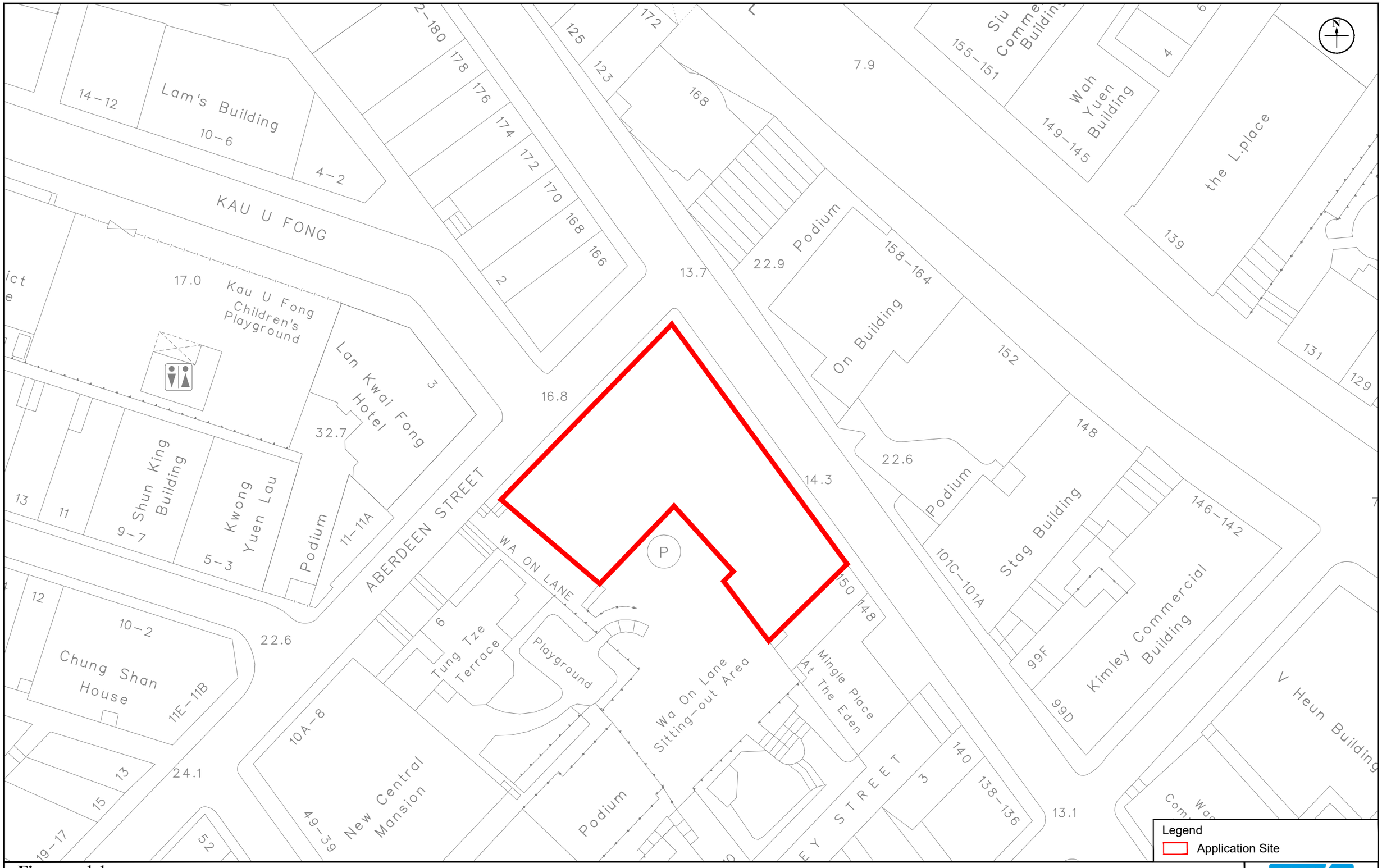


Figure: 1.1	RAMBOLL
Title: Location of the Application Site and its Environs	Drawn by: MW
	Checked by: CC
Project: Proposed Flat with Shop and Services/Eating Places at Nos. 152 - 164 Wellington Street in Sheung Wan (Amendment to the Approved Development Scheme)	Rev.: 1.0
	Date: Oct 2026

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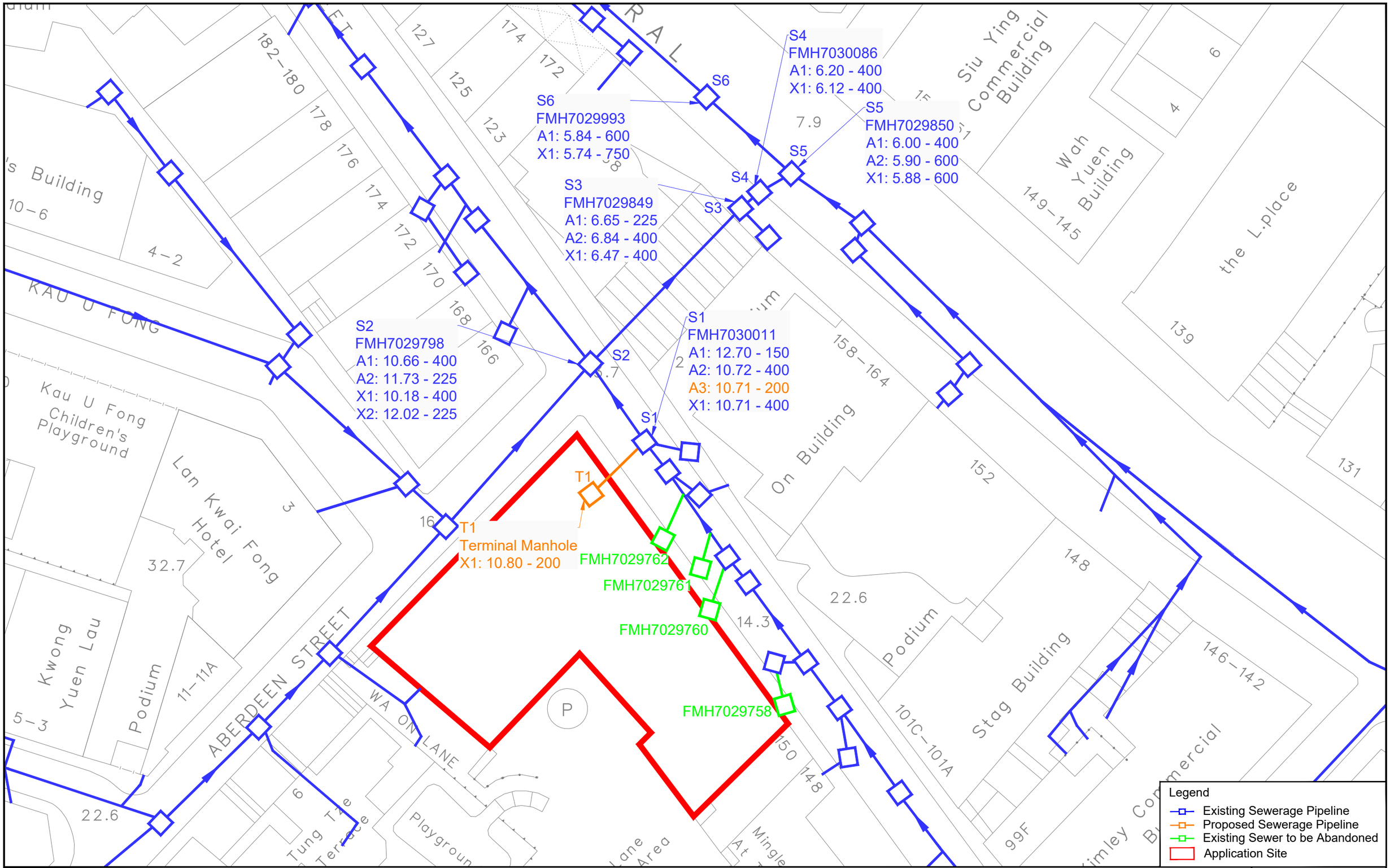


Figure: 2.1	RAMBOLL
Title: Existing and Proposed Sewerage System in the Vicinity of the Application Site	Drawn by: MW Checked by: CC
Project: Proposed Flat with Shop and Services/Eating Places at Nos. 152 – 164 Wellington Street in Sheung Wan (Amendment to the Approved Development Scheme)	Rev.: 1.0 Date: Oct 2026

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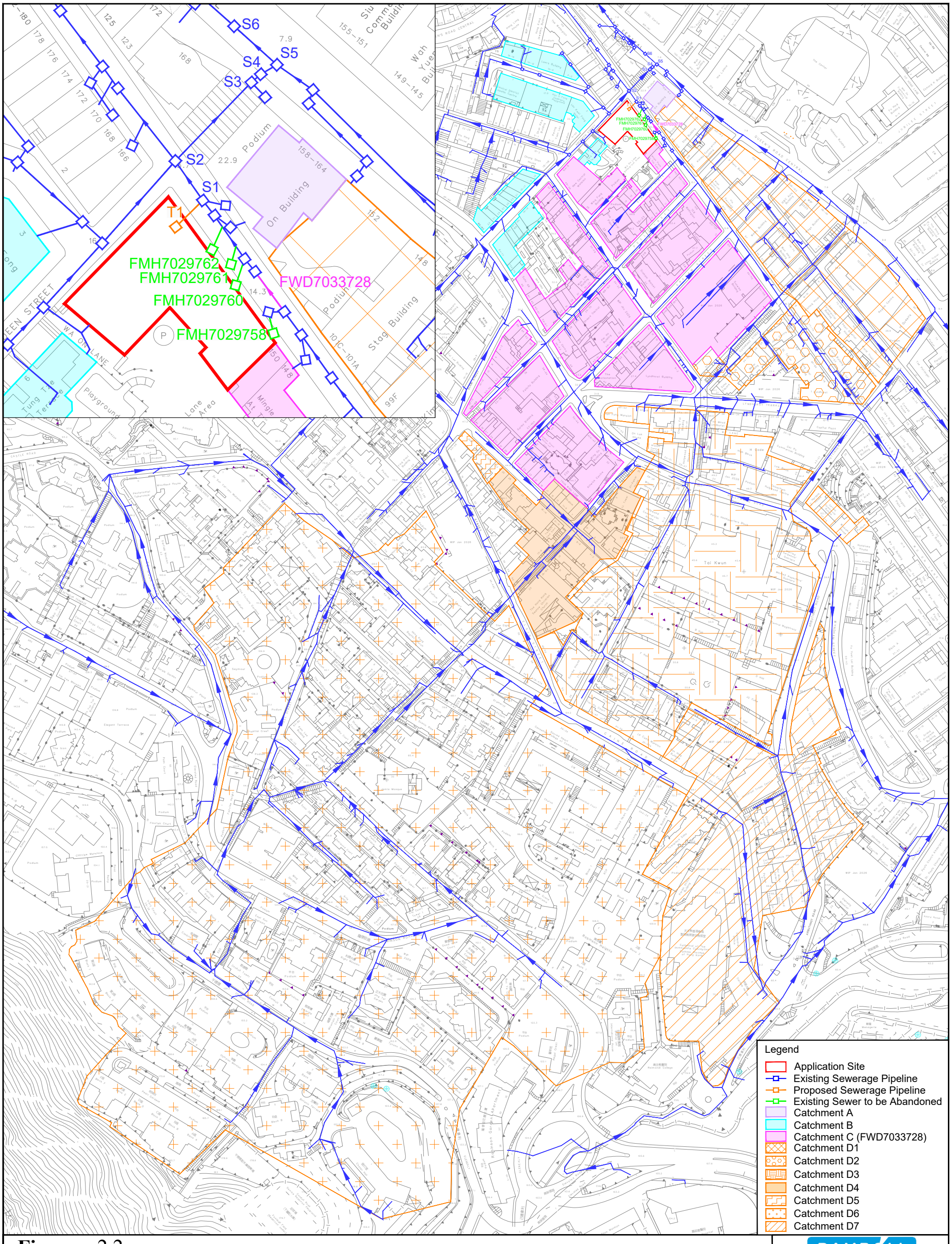
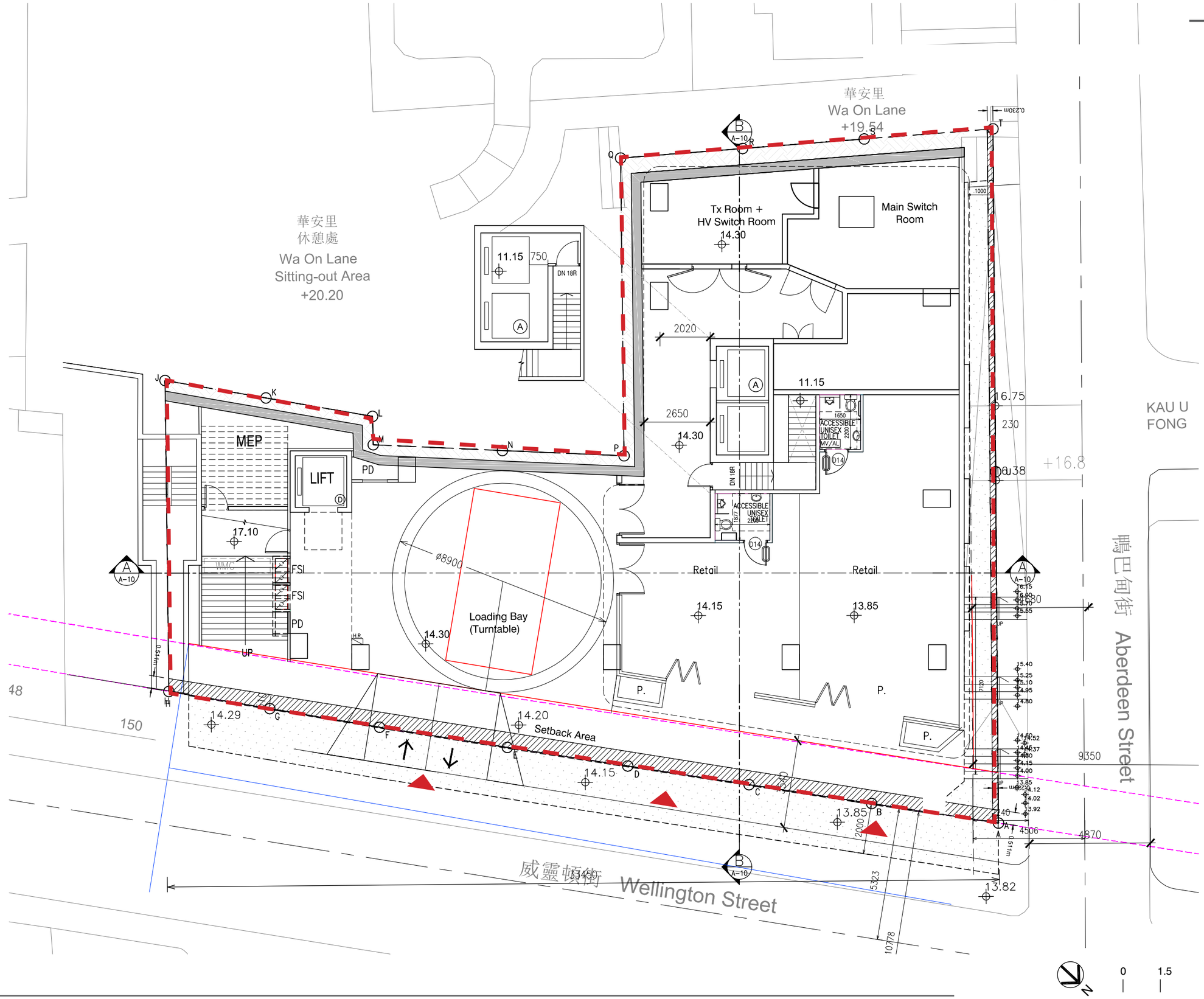


Figure: 2.2	RAMBOLL
Title: Catchment Areas in the Vicinity of the Application Site	Drawn by: MW
	Checked by: CC
Project: Proposed Flat with Shop and Services/Eating Places at Nos. 152 – 164 Wellington Street in Sheung Wan (Amendment to the Approved Development Scheme)	Rev.: 1.0
	Date: Oct 2026

Appendix 1.1 Master Layout Plan (MLP)

PODIUM PLANS

GF



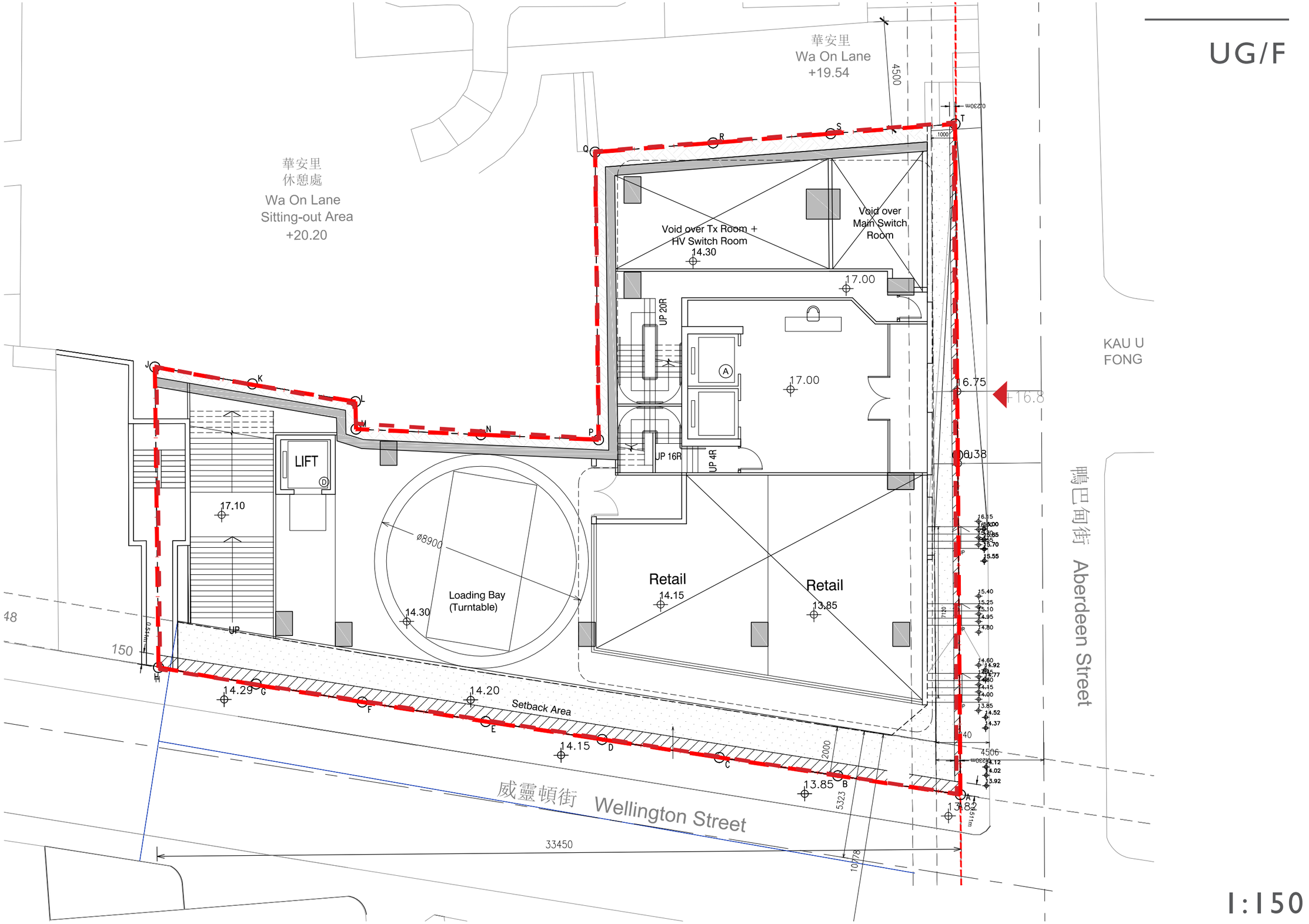
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PODIUM PLANS

UG/F



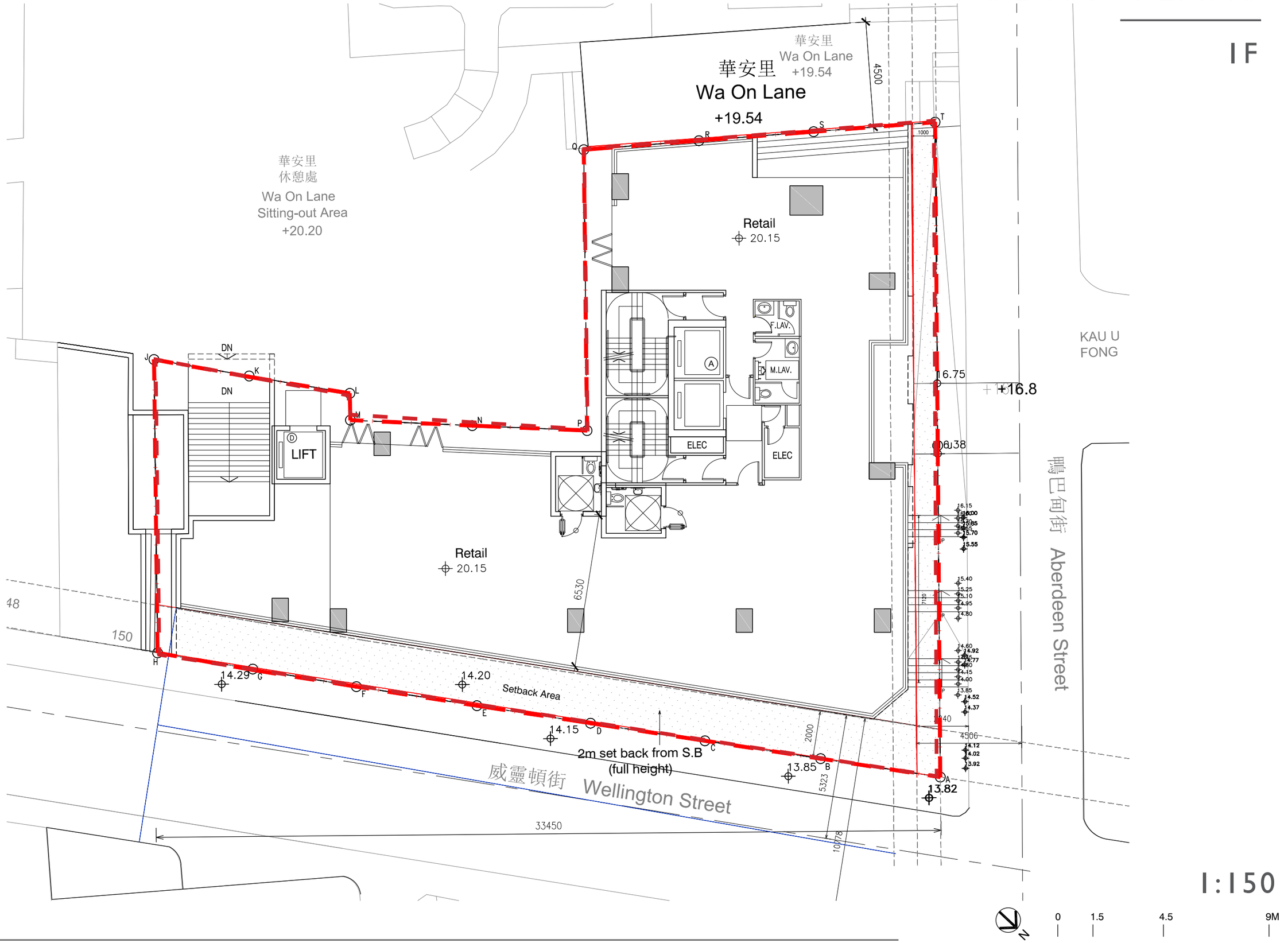
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PODIUM PLANS

1F



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N

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PODIUM PLANS

2F

華安里
Wa On Lane
+19.54

華安里
休憩處
Wa On Lane
Sitting-out Area
+20.20

華安里
休憩處
Wa On Lane
Sitting-out Area
+20.15

華安里
Wa On Lane
+19.54

華安里
Wa On Lane
+19.54

KAU U FONG

鵝巴甸街 Aberdeen Street

威靈頓街 Wellington Street

Setback Area

124m³ SPRINKLER WATER TANK

ELV. DUCT

P.D

ST-01

F.H.

UP

EXIT

4.5kg CO_2F.E.

F.S. & SPRINKLER BOOSTER PUMP ROOM

A

CMC

ELEC

DN

27m³FS WATER TANK

3000 L. SURGE TANK FOR OUTDOOR POOL

FILTRATION PLANT ROOM

EL CABINET (CLUBHOUSE)

CMC

H.R.

POTABLE WATER & FLUSHING WATER PUMP ROOM

ELV. ROOM

EL. ROOM (CLUBHOUSE)

P.D.

TBE MAF ROOM

3000 L. R.C. FLUSHING WATER TANK

3000 L. R.C. FLUSHING WATER TANK

13000 L. R.C. POTABLE WATER TANK

13000 L. R.C. POTABLE WATER TANK

TBE ROOM (FOR RESIDENTIAL)

TBE ROOM (RETAIL)

A/C PLANT ROOM (FOR G/F&1/F RETAIL)

A.H.U. ROOM (FOR G/F & 1/F RETAIL)

J K L M N P Q R S T

H G F E D C B A

16.75

+16.8

16.38

14.29

14.20

14.15

13.85

13.82

33450

10870

10778

5323

3540

2000

4680

2740

9350

4870

4506

7120

1000

300

150

48

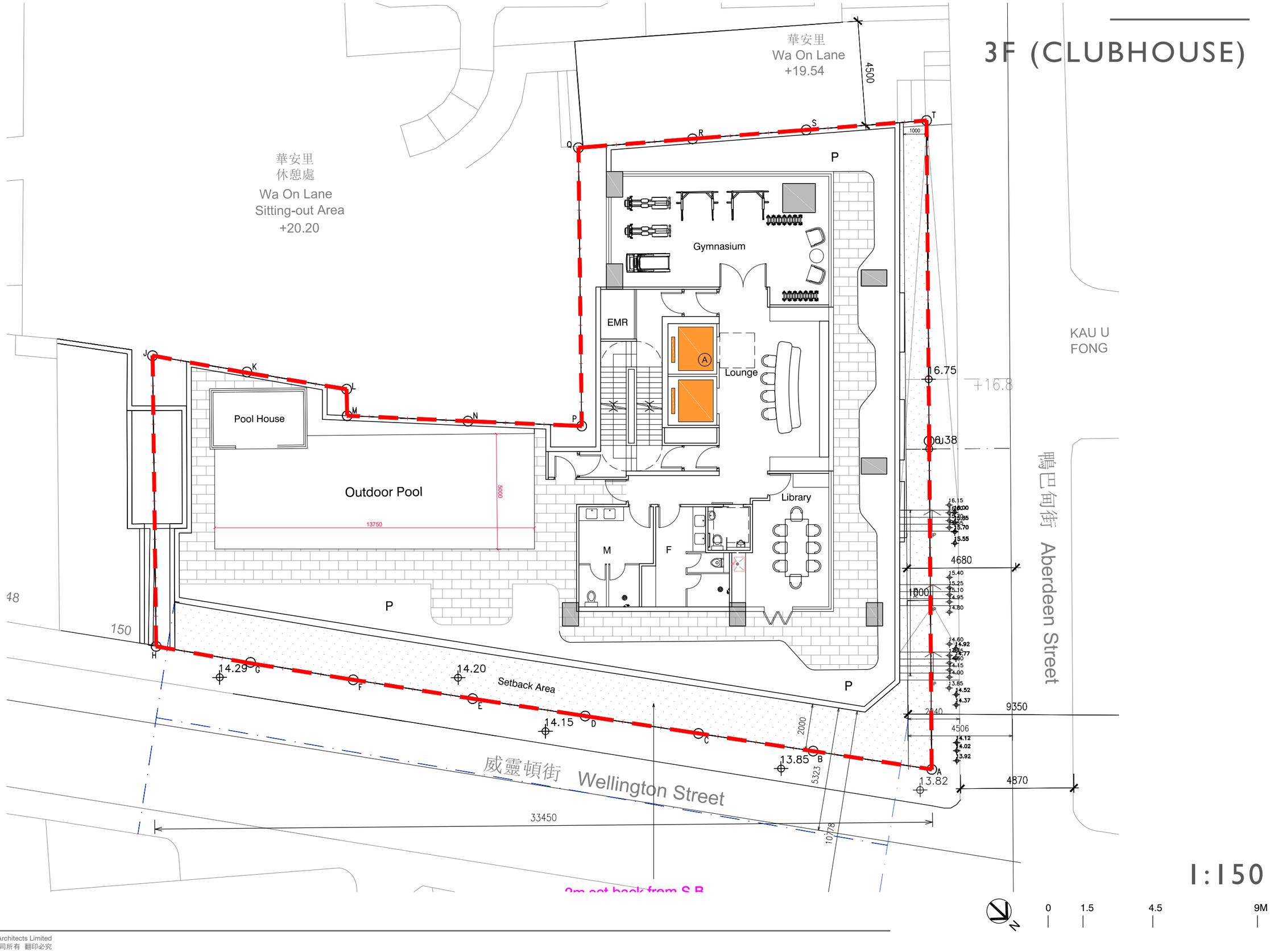
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PODIUM PLANS

3F (CLUBHOUSE)



1:150

0 1.5 4.5 9M

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1 Bedroom (Open Kitchen)

2 Bedroom (Open Kitchen)

TOWER SIMPLIFIED PLAN

LOW ZONE GARDEN UNIT

華安里
Wa On Lane
+19.54

華安里
休憩處
Wa On Lane
Sitting-out Area
+20.20

A
B
C
D
E
F
G

P.D.
P.D.
P.D.
TRS
TRS
1850
1650
1150
1300
2400
2000
2000
1000
0.230m
0.230m
0.515m
+16.8
16.15
16.00
15.70
15.55
15.40
15.25
15.10
14.95
14.80
14.60
14.45
14.30
14.15
14.00
13.85
UP
UP
UP
7120
2240
4506
0.5
48
150
KAU I
FONG
鴨巴甸街 Aberdeen Street

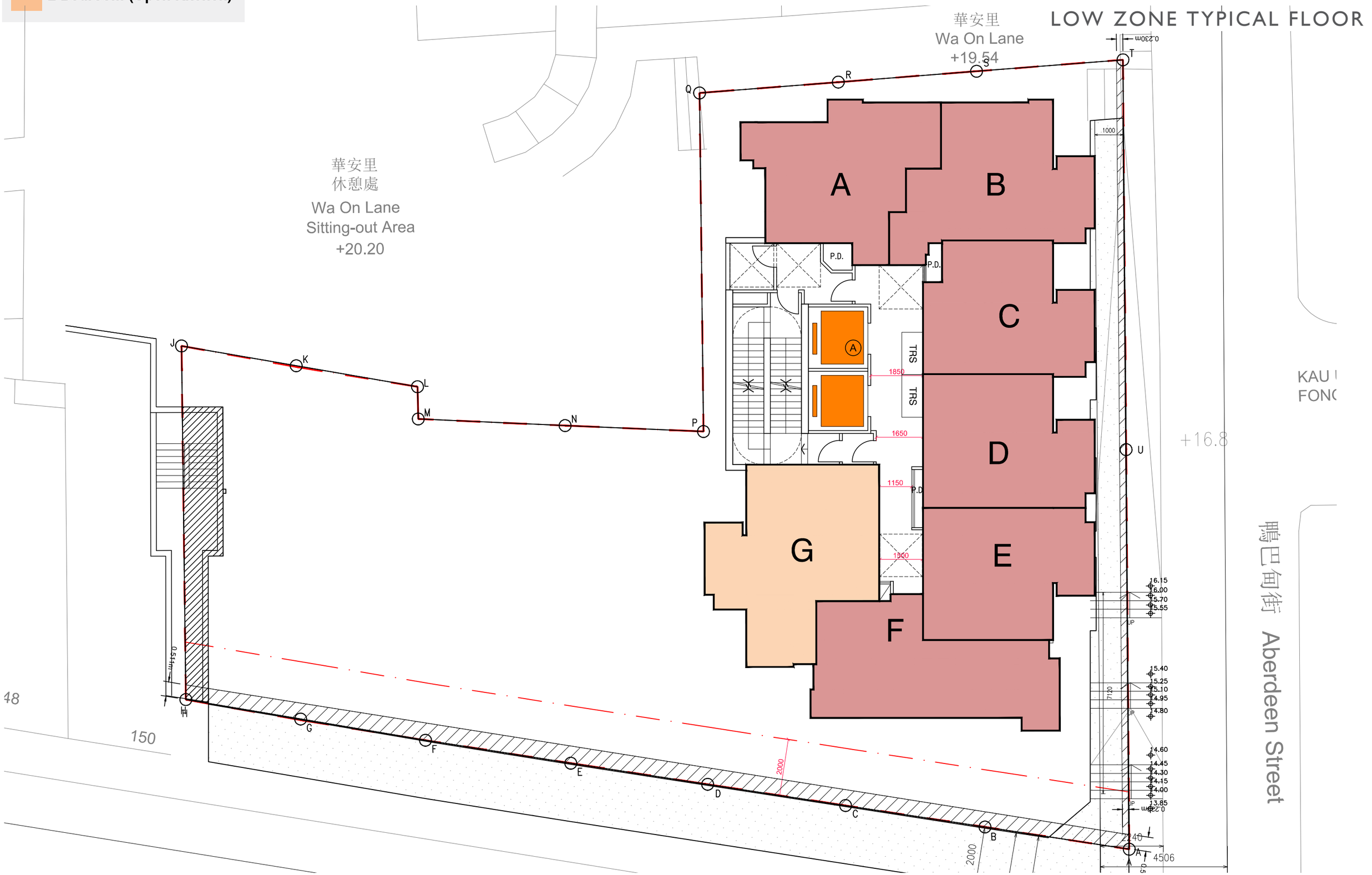
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TOWER SIMPLIFIED PLAN

LOW ZONE TYPICAL FLOOR

1 Bedroom (Open Kitchen)

2 Bedroom (Open Kitchen)



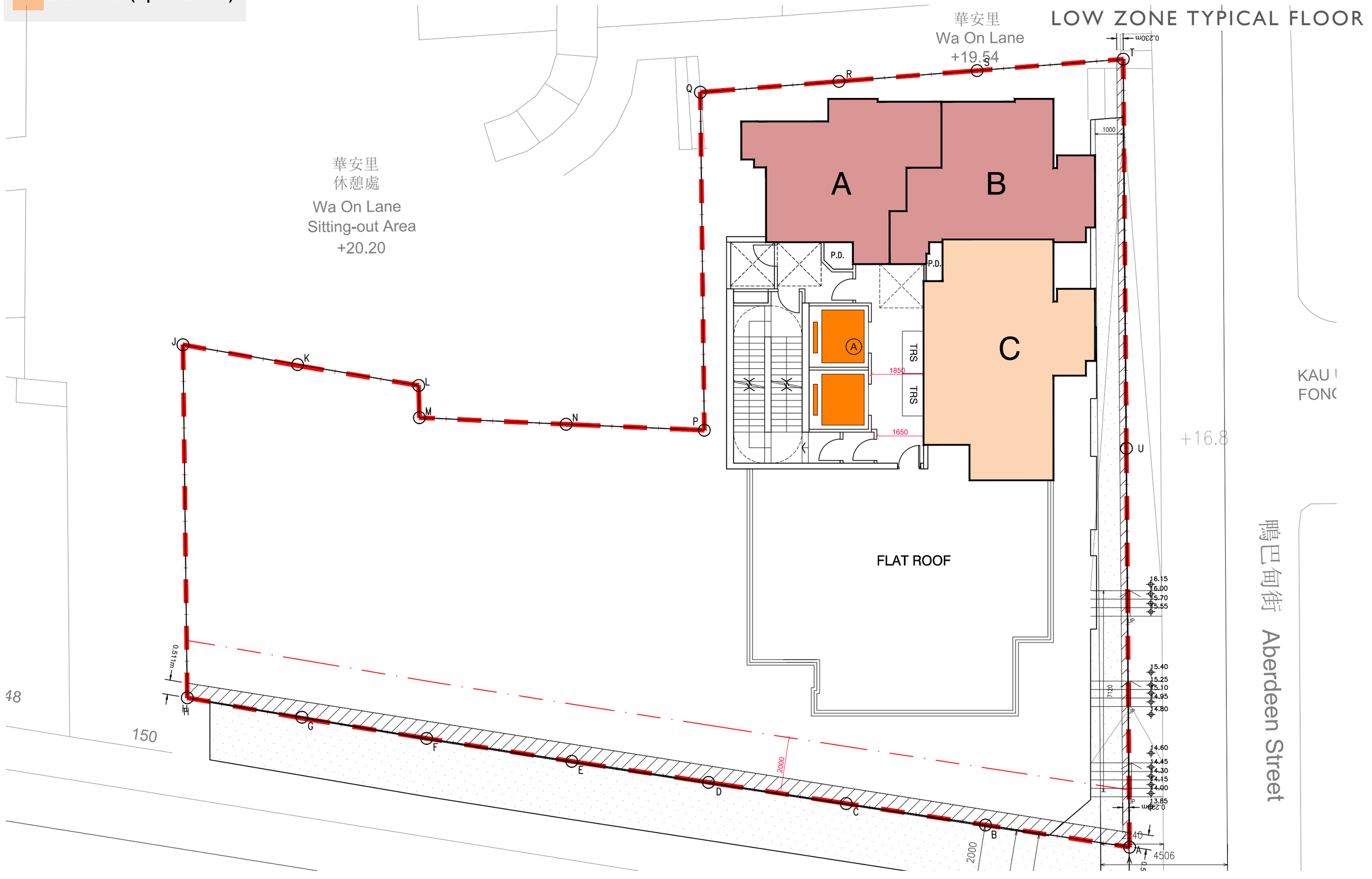
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TOWER SIMPLIFIED PLAN

LOW ZONE TYPICAL FLOOR

1 Bedroom (Open Kitchen)

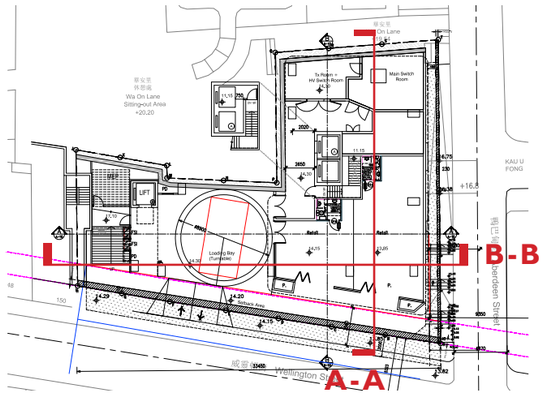
2 Bedroom (Open Kitchen)

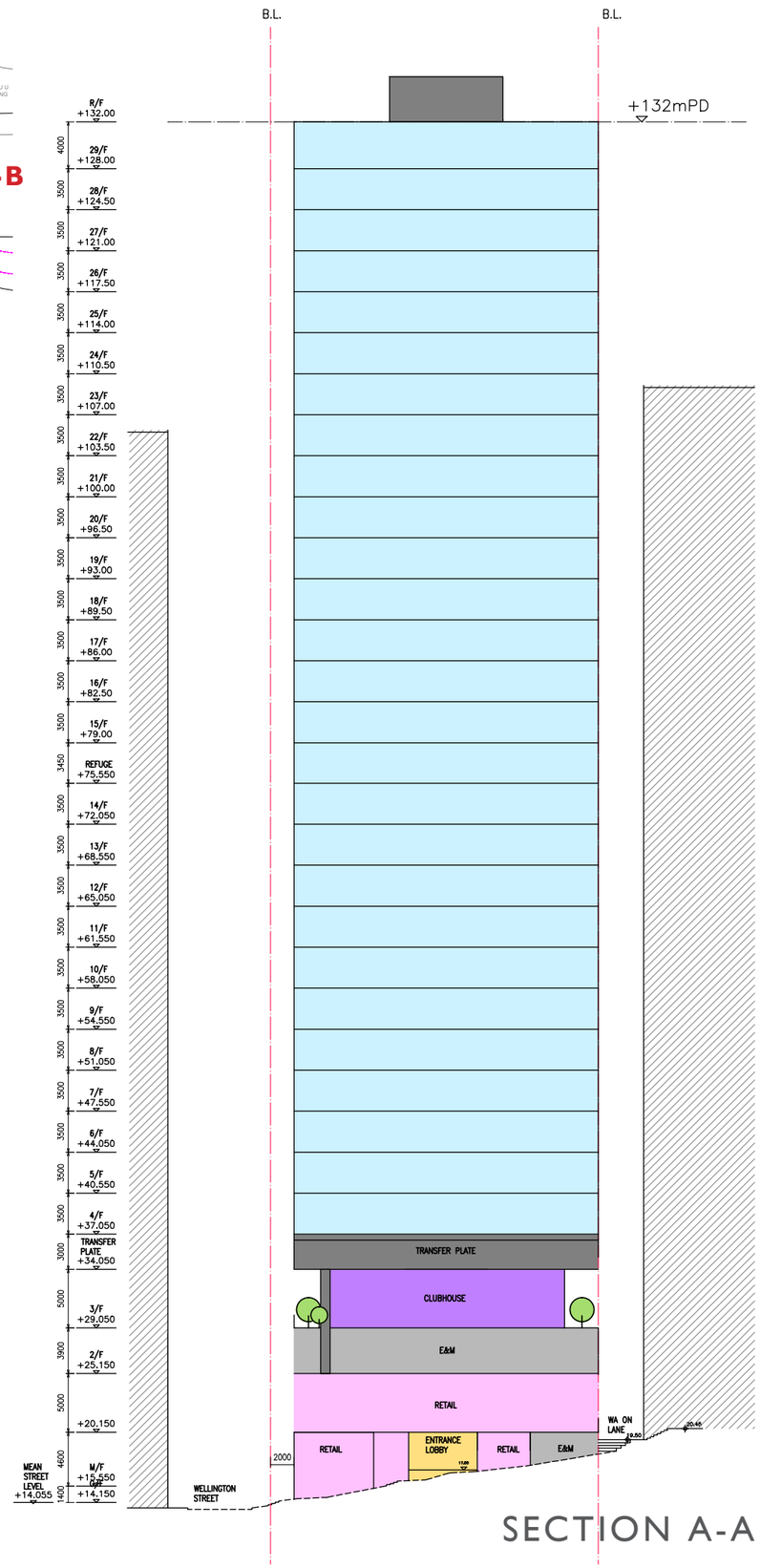


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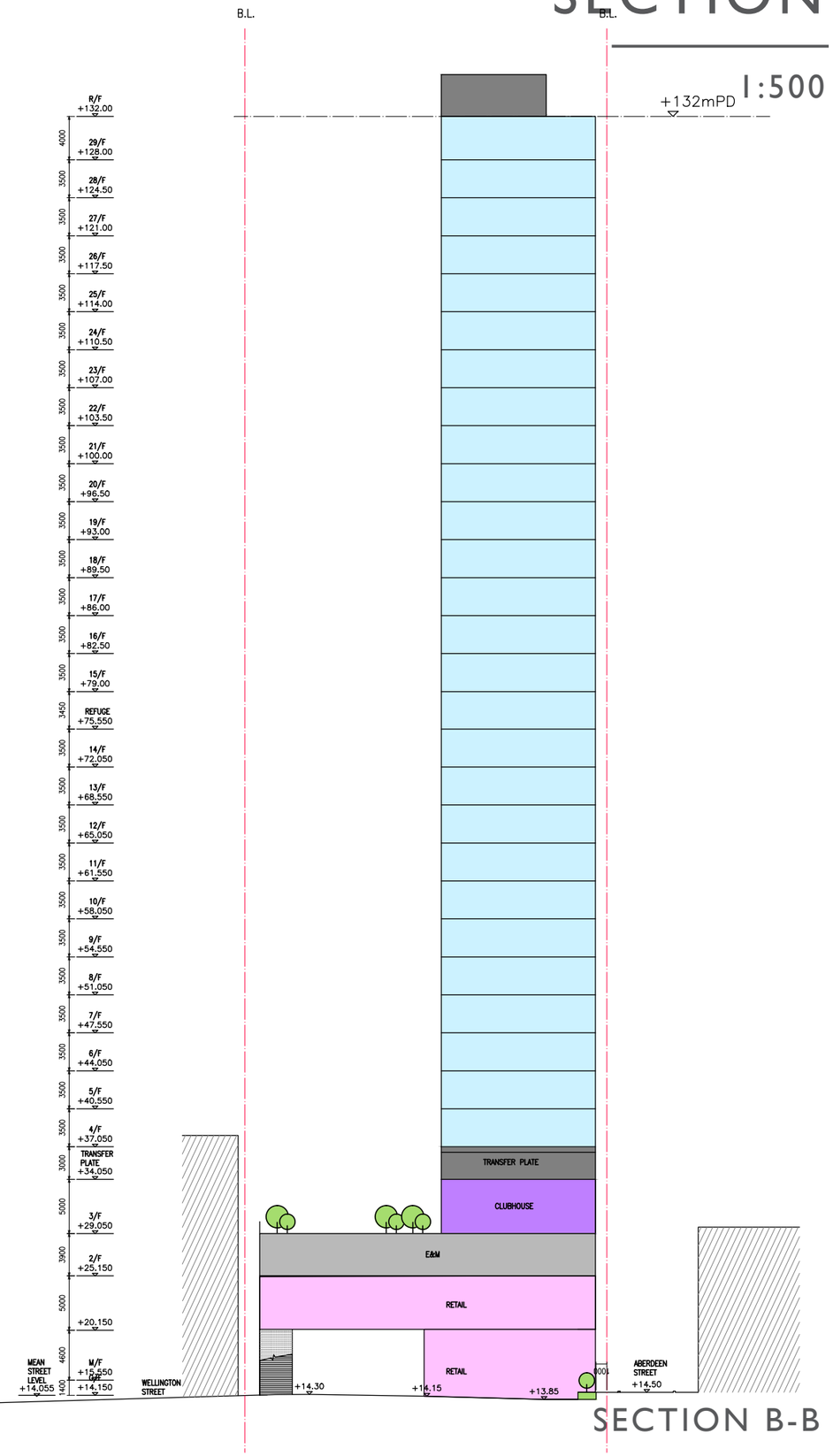
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SECTION A-A



SECTION B-B

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Appendix 2.1 Detailed Sewerage Impact Assessment Calculation

Table 1 Calculation for Sewage Generation Rate of the Proposed Development at the Application Site

1. Residential Tower			
Total number of residential units	=	178	units
Total number of residents	=	409	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)[(1)]
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**110.5**	m^3/day
2. Clubhouse			
2a. Assumed Area	=	285	m^2
2b. Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
2c. Total number of employees	=	9	employees
2d. Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
2e. Sewage Generation rate	=	**2.6**	m^3/day
3. Commercial Area (F&B)			
F&B			
Assumed Area	=	851	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	43	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**68.6**	m^3/day
Swimming Pool			
Assumed Area of Swimming Pool	=	78.6	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	98.3	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	16	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.3	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	50	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	1.9	m^3/day
Design flow for Swimming Pool Backwashing	=	**4.55**	litre/sec
Total Flow from Proposed Development			
Flow Rate (without Catchmnet Inflow Factor)	=	**181.7**	m^3/day
Catchment Inflow Factor	=	1.0	Catchment Inflow Factor for Central in Table T-4 of GEFS
Flow Rate (with Catchmnet Inflow Factor)	=	**181.7**	m^3/day
Contributing Population	=	673	people
Peaking factor	=	8	Refer to Table T-5 of GESF for population < 1,000 incl. stormwater allowance
Peak Flow	=	**16.8**	litre/sec
Peak Flow (with backwash from Swimming Pool)	=	**21.4**	litre/sec

Note:

1. It is clarified that while the average household size of 2.3 ppl per flat is indicated in "Population Census 2021 - District Council Constituency Area of Chung Wan", this area includes some part of mid-levels with larger flat size and in turn more population. Therefore, it is considered that making reference to the average household size of 2.1 ppl per flat in "Population Census 2021 – Tertiary Planning Units - 114 " which covers the Application Site but exclude those mid-level areas is more representative. Nevertheless, a more conservative assumption is now adopted by referencing to average household size of 2.3 ppl per flat as indicated in "Population Census 2021 - District Council Constituency Area of Chung Wan".

Table 2a Hydraulic Capacity of Existing Sewers at 152 -164 Wellington Street, Central

Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	g	k_s	s	v	V	Area	Q	Estimated Capacity
			mm	m	mPD	mPD	m/s^2	m		m^2/s	m/s	m^2	m^3/s	L/s
S1-S2	FMH7030011	FMH7029798	400	8.0	10.71	10.66	9.81	0.00060	0.006	0.000001	1.49	0.13	0.19	187
S2-S3	FMH7029798	FMH7029849	400	19.7	10.18	6.84	9.81	0.00060	0.170	0.000001	7.81	0.13	0.98	982
S3-S4	FMH7029849	FMH7030086	400	1.2	6.47	6.20	9.81	0.00060	0.229	0.000001	9.08	0.13	1.14	1141
S4-S5	FMH7030086	FMH7029850	400	2.7	6.12	6.00	9.81	0.00060	0.044	0.000001	3.99	0.13	0.50	502
S5-S6	FMH7029850	FMH7029993	600	10.0	5.88	5.84	9.81	0.00060	0.004	0.000001	1.53	0.28	0.43	434

Table 2b Hydraulic Capacity of Proposed Sewers at 152 -164 Wellington Street, Central

Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	g	k_s	s	v	V	Area	Q	Estimated Capacity
			mm	m	mPD	mPD	m/s^2	m		m^2/s	m/s	m^2	m^3/s	L/s
T1-S1	-	FMH7030011	200	5.5	10.80	10.71	9.81	0.00030	0.016	0.000001	1.70	0.03	0.05	53

Remarks: (1) g=gravitational acceleration; k_s=equivalent sand roughness; s=gradient; v=kinematic viscosity of water; V=mean velocity

(2) Table 2a: The value of ks = 0.6mm is used for the calculation of slimed clayware sewer, poor condition (based on Table 5: Recommended roughness values in Sewerage Manual)

(3) Table 2c: The value of k_s = 0.3mm is used for the calculation of slimed polyethelyene for the proposed sewers, poor condition (based on Table 5: Recommended roughness values in Sewerage Manual)

(4) The value of velocity (V) is referred to the Tables for the hydraulic design of pipes, sewers and channels (8th edition)

(5) Equation used: $$V = -\sqrt{(8gDs)}\log\left(\frac{k_s}{3.7D} + \frac{2.51\nu}{D\sqrt{(2gDs)}}\right)$$

Table 3a Calculation for Sewage Generation Rate of the Existing Surrounding Building

Catchment A

On Building

Assumed Area	=	5942	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	327	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**26.1**	m^3/day

Overall Catchment A

Flow Rate (without Catchmnet Inflow Factor)	=	26.1	m^3/day
Catchment Inflow Factor	=	1.0	Catchment Inflow Factor for Central in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	**26.1**	m^3/day

Catchment B

1. Lam's Building

Total number of units	=	46	units
Total number of residents	=	106	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**28.6**	m^3/day

F&B

Assumed Area	=	229	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	12	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**18.5**	m^3/day
Sewage Generation rate (15.4%)	=	**2.8**	m^3/day

2. 2-4 Kau U Fong

Total number of units	=	10	units
Total number of residents	=	23	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.2**	m^3/day

F&B

Assumed Area	=	67	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**5.4**	m^3/day
Sewage Generation rate (15.4%)	=	**0.8**	m^3/day

3. 12-14 Kau U Fong

Total number of units	=	10	units
Total number of residents	=	23	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.2**	m^3/day

F&B

Assumed Area	=	112	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**9.1**	m^3/day
Sewage Generation rate (15.4%)	=	**1.4**	m^3/day

4. 16-18 Kau U Fong

Total number of units	=	15	units
Total number of residents	=	35	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.3**	m^3/day

F&B

Assumed Area	=	121	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**9.8**	m^3/day
Sewage Generation rate (15.4%)	=	**1.5**	m^3/day

5. Central District Health Centre

Assumed Area	=	827	m^2
Assumed floor area per employee	=	30.3	m^2 per employee -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	27	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J11 Community, Social & Personal Services)
Sewage Generation rate	=	**7.6**	m^3/day

6. Public Toilet inside Kau U Fong Children's Playground

3a. Discharge Unit (DU) from WC (Qty * DU)	=	16.2	L/s
3b. Discharge Unit (DU) from Single Urinal with Cistern (Qty * DU)	=	1.6	L/s
3c. Discharge Unit (DU) from Basin (Qty * DU)	=	2.7	L/s
3d. Sum of DUs	=	20.5	L/s
3e. Wastewater Flow Rate ($K\sqrt{\sum DU}$)	=	4.53	L/s

Remarks

1. Calculation of Wastewater Flow Rate is followed Plumbing Engineering Services Design Guide (PESDG).

2. Discharge Unit (DU) of WC = 1.8 L/s; DU of Basin = 0.3 L/s; DU of Single Urinal with Cistern = 0.4L/s, extracted from Table 5 of PESDG.

3. Assumed total number of WC = 9; total number of Single Urinal with Cistern = 4; Total number of Basin = 9.

4. Frequency of use, K = 1, extracted from Table 6 of PESDG.

7. Tung Tze Terrace

Total number of units	=	77	units
Total number of residents	=	177	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**47.8**	m^3/day

Clubhouse

Assumed Area	=	133	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	4	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**1.2**	m^3/day

8. Lan Kwai Fong Hotel

Numer of hotel rooms	=	167	rooms
Assumed number of employees	=	50	employees -- (assume 3 workers per 10 rooms)
Design Flow	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF J10 - Restaurants & Hotels)
Sewage Generation Rate	=	**79.2**	m^3/day

9. 13 Aberdeen Street (25.7%)[1][2]

Total number of units	=	25	units
Total number of residents	=	58	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**15.5**	m^3/day
Sewage Generation rate (25.7%)	=	**4.0**	m^3/day

F&B

Assumed Area	=	49	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**3.9**	m^3/day
Sewage Generation rate (25.7%)	=	**1.0**	m^3/day

10. 14-16 Aberdeen Street (25.7%)[1][2]

Total number of units	=	15	units
Total number of residents	=	35	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.3**	m^3/day
Sewage Generation rate (25.7%)	=	**2.4**	m^3/day

F&B

Assumed Area	=	47	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**3.8**	m^3/day
Sewage Generation rate (25.7%)	=	**1.0**	m^3/day

11. 17-19 Aberdeen Street (25.7%)[1][2]

Total number of units	=	15	units
Total number of residents	=	35	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.3**	m^3/day
Sewage Generation rate (25.7%)	=	**2.4**	m^3/day

F&B

Assumed Area	=	48	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**3.8**	m^3/day
Sewage Generation rate (25.7%)	=	**1.0**	m^3/day

Retail

Assumed Area	=	48	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (25.7%)	=	**0.1**	m^3/day

12. 21 Aberdeen Street (25.7%)[1][2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (25.7%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	52	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (25.7%)	=	**0.1**	m^3/day

13. 23 Aberdeen Street (25.7%)[1][2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (25.7%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	50	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (25.7%)	=	**0.1**	m^3/day

14. 25 Aberdeen Street (25.7%)[1][2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (25.7%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	50	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (25.7%)	=	**0.1**	m^3/day

15. 27 Aberdeen Street (25.7%)[1][2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (25.7%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	51	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (25.7%)	=	**0.1**	m^3/day

16. 29 Aberdeen Street (25.7%)[1][2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (25.7%)	=	**0.8**	m^3/day

F&B

Assumed Area	=	49	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**4.0**	m^3/day
Sewage Generation rate (15.4%)	=	**0.6**	m^3/day
Sewage Generation rate (25.7%)	=	**0.2**	m^3/day

17. 31 Aberdeen Street (25.7%)[1][2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (25.7%)	=	**0.8**	m^3/day

F&B

Assumed Area	=	49	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**4.0**	m^3/day
Sewage Generation rate (15.4%)	=	**0.6**	m^3/day
Sewage Generation rate (25.7%)	=	**0.2**	m^3/day

18. 83-85 Hollywood Road (25.7%)[1][2]

Total number of units	=	15	units
Total number of residents	=	35	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.3**	m^3/day
Sewage Generation rate (25.7%)	=	**2.4**	m^3/day

Retail

Assumed Area	=	119	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	4	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.2**	m^3/day
Sewage Generation rate (25.7%)	=	**0.3**	m^3/day

19. 14-16 Aberdeen Street (25.7%)[1][2]

Total number of units	=	15	units
Total number of residents	=	35	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.3**	m^3/day
Sewage Generation rate (25.7%)	=	**2.4**	m^3/day

F&B

Assumed Area	=	71	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**5.7**	m^3/day
Sewage Generation rate (15.4%)	=	**0.9**	m^3/day
Sewage Generation rate (25.7%)	=	**0.2**	m^3/day

Retail

Assumed Area	=	71	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.7**	m^3/day
Sewage Generation rate (25.7%)	=	**0.2**	m^3/day

20. 16A Aberdeen Street (25.7%)[1][2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (25.7%)	=	**0.8**	m^3/day

F&B

Assumed Area	=	51	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**4.1**	m^3/day
Sewage Generation rate (15.4%)	=	**0.6**	m^3/day
Sewage Generation rate (25.7%)	=	**0.2**	m^3/day

21. 18-18A Aberdeen Street (25.7%)[1][2]

Total number of units	=	10	units
Total number of residents	=	23	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.2**	m^3/day
Sewage Generation rate (25.7%)	=	**1.6**	m^3/day

Retail

Assumed Area	=	45	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.4**	m^3/day
Sewage Generation rate (25.7%)	=	**0.1**	m^3/day

22. 18C Aberdeen Street (25.7%)[1][2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (25.7%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	47	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (25.7%)	=	**0.1**	m^3/day

23. 77-81 Hollywood Road (25.7%)[1][2]

Total number of units	=	20	units
Total number of residents	=	46	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**12.4**	m^3/day
Sewage Generation rate (25.7%)	=	**3.2**	m^3/day

F&B

Assumed Area	=	93	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**7.5**	m^3/day
Sewage Generation rate (15.4%)	=	**1.2**	m^3/day
Sewage Generation rate (25.7%)	=	**0.3**	m^3/day

Retail

Assumed Area	=	93	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.9**	m^3/day
Sewage Generation rate (25.7%)	=	**0.2**	m^3/day

23. 75A Hollywood Road (25.7%)[1][2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (25.7%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	45	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.4**	m^3/day
Sewage Generation rate (25.7%)	=	**0.1**	m^3/day

24. 75 Hollywood Road (25.7%)[1][2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (25.7%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	38	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	1	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.4**	m^3/day
Sewage Generation rate (25.7%)	=	**0.1**	m^3/day

Overall Catchment B

Flow Rate (without Catchmnet Inflow Factor)	=	224.8	m^3/day
Catchment Inflow Factor	=	1.0	Catchment Inflow Factor for Central in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	**224.8**	m^3/day
Flow Rate (with Catchment Inflow Factor) (64%) [3]	=	**143.9**	m^3/day

Note:

(1) It is observed that the existing sewerage pipes after Manhole number: FMH7029772 are separated into 2 flows (i.e. Pipe number: FWD7033854 (225mm) and Pipe number: FWD7033839 (300mm)). As such, discharge from upstream Catchment B is therefore assumed to be split into 42.9% generated sewage at each direction.

(2) It is observed that the existing sewerage pipes after Manhole number: FMH7029616 are separated into 2 flows (i.e. Pipe number: FWD7033249 (225mm) and Pipe number: FWD7033250 (150mm)). As such, discharge from upstream Catchment B is therefore assumed to be split into 60.0% generated sewage at each direction.

(3) It is observed that the existing sewerage pipes after Manhole number:FMH7029798 are separated into 2 flows (i.e. Pipe number: FWD7033443 (400mm) and Pipe number: FWD7033861 (225mm)). As such, discharge from upstream Catchment B is therefore assumed to be split into 64.0% generated sewage at each direction.

g. Gravitational Acceleration	=	9.81	ms^{-2}
Catchment C (FWD7033728) (upstream)			
a. Assumed Pipe Capacity	=	100	%
b. Pipe Diameter	=	400	mm
c. Pipe Length	=	8.51	m
d. Invert Level 1	=	10.87	mPD
e. Invert Level 2	=	10.82	mPD
f. Invert Level Difference	=	0.05	m
g. Gravitational Acceleration	=	9.81	ms^{-2}
h. Equivalent Sand Roughness	=	0.0006	m
i. Gradient	=	0.0059	
j. Kinematic Viscosity of Water	=	0.000001	m^2/s
k. Mean Velocity	=	1.44	m/s
l. Cross Sectional Area of the Pipe	=	0.13	m^2
m. Velocity of the Concerned Pipe	=	0.18	m^3/s
n. Estimated Capacity	=	**181.4**	litre/sec

Catchment D1

1. 152 Queen's Road Central

Assumed Area	=	4835	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	266	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**21.3**	m^3/day

Retail

Assumed Area	=	879	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	31	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**8.6**	m^3/day

F&B

Assumed Area	=	440	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	22	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**35.4**	m^3/day

2. Stag Building

Assumed Area	=	1018	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	56	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**4.5**	m^3/day

Retail

Assumed Area	=	93	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.9**	m^3/day

3. Kimley Commercial Building

Assumed Area	=	2928	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	161	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**12.9**	m^3/day

Retail

Assumed Area	=	209	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	7	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.0**	m^3/day

4. V. Heun Building

Assumed Area	=	5439	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	299	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**23.9**	m^3/day

5. 1-9 Graham Street

Total number of units	=	20	units
Total number of residents	=	46	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**12.4**	m^3/day

F&B

Assumed Area	=	29	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	1	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**2.3**	m^3/day

Retail

Assumed Area	=	29	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	1	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.3**	m^3/day

6. Waga Commercial Centre

Assumed Area	=	3291	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	181	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**14.5**	m^3/day

F&B

Assumed Area	=	82	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.6**	m^3/day

Retail

Assumed Area	=	82	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.8**	m^3/day

7. YIN Serviced Apartments

Numer of hotel rooms	=	45	rooms
Assumed number of employees	=	14	employees -- (assume 3 workers per 10 rooms)
Design Flow	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF J10 - Restaurants & Hotels)
Sewage Generation Rate	=	**21.3**	m^3/day

F&B

Assumed Area	=	180	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	9	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**14.5**	m^3/day

8. Virtus Medical Tower

Assumed Area	=	2685	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	148	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**11.8**	m^3/day

Retail

Assumed Area	=	575	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	20	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**5.6**	m^3/day

9. Luen Shing Building

Assumed Area	=	1440	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	79	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**6.3**	m^3/day

10. Wings Building

Assumed Area	=	5045	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	277	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**22.2**	m^3/day

Retail

Assumed Area	=	505	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	18	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**4.9**	m^3/day

11. 9-11 Cochrane Street (Retail)

Assumed Area	=	268	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	9	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.6**	m^3/day

Retail

Assumed Area	=	57	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.6**	m^3/day

12. Welley Building

Total number of units	=	48	units
Total number of residents	=	110	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**29.8**	m^3/day

F&B

Assumed Area	=	268	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	14	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**21.6**	m^3/day

13. 82 Stanley Street

Assumed Area	=	158	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	9	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**0.7**	m^3/day

F&B

Assumed Area	=	268	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	14	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**21.6**	m^3/day

14. 80 Stanley Street

Assumed Area	=	130	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	7	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**0.6**	m^3/day

Retail

Assumed Area	=	32	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	1	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.3**	m^3/day

15. Won Hing Building

Assumed Area	=	2387	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	131	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**10.5**	m^3/day

F&B

Assumed Area	=	109	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.7**	m^3/day

16. Cochrane Commercial House

Assumed Area	=	1761	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	97	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**7.7**	m^3/day

F&B

Assumed Area	=	75	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.1**	m^3/day

17. Kwong Yuen Building

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day

Retail

Assumed Area	=	38	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	1	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.4**	m^3/day

18. 93 Wellington Street

Total number of units	=	4	units -- (https://hk.centanet.com/estate/en/list/2-SEDKBPYXPE)
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day

Retail

Assumed Area	=	38	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	1	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.4**	m^3/day

19. 91 Wellington Street

Total number of units	=	3	units
Total number of residents	=	7	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**1.9**	m^3/day

F&B

Assumed Area	=	38	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**3.1**	m^3/day

20. 83 Wellington Street

Assumed Area	=	269	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	9	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.6**	m^3/day

Retail

Assumed Area	=	85	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.8**	m^3/day

F&B

Assumed Area	=	85	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.8**	m^3/day

21. 100 Queen's Road Central

Assumed Area	=	12021	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	661	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**52.9**	m^3/day

Retail

Assumed Area	=	751	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	26	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**7.4**	m^3/day

F&B

Assumed Area	=	751	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	38	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**60.5**	m^3/day

22. Regent Centre

Assumed Area	=	5295	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	291	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**23.3**	m^3/day

F&B

Assumed Area	=	279	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	14	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**22.5**	m^3/day

Retail

Assumed Area	=	1394	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	49	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**13.7**	m^3/day

23. H Queen's

Assumed Area	=	8551	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	470	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**37.6**	m^3/day

24. 8 COCHRANE STREET

Assumed Area	=	277	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	15	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**1.2**	m^3/day

Retail

Assumed Area	=	55	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day

25. Kai Tak Commercial Building

Assumed Area	=	2319	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	128	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**10.2**	m^3/day

Retail

Assumed Area	=	193	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	7	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.9**	m^3/day

F&B

Assumed Area	=	193	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	10	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**15.6**	m^3/day

26. Pearl Oriental House

Assumed Area	=	3250	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	179	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**14.3**	m^3/day

Retail

Assumed Area	=	464	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	16	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**4.5**	m^3/day

27. World Trust Tower

Assumed Area	=	4691	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	258	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**20.6**	m^3/day

Retail

Assumed Area	=	213	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	7	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.1**	m^3/day

F&B

Assumed Area	=	213	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	11	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**17.2**	m^3/day

28. Winning House

Assumed Area	=	966	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	53	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**4.3**	m^3/day

Retail

Assumed Area	=	197	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	7	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.9**	m^3/day

F&B

Assumed Area	=	197	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	10	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**15.8**	m^3/day

Total Flow from Catchment D1

Flow Rate (without Catchmnet Inflow Factor)	=	685.0	m^3/day
Catchment Inflow Factor	=	1.0	Catchment Inflow Factor for Central in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	**685.0**	m^3/day

Note:
(1) It is observed that the existing sewerage pipes after Manhole number: FMH7029923 are separated into 2 flows (i.e. Pipe number: FWD7033498 (600mm) and Pipe number: FWD7033806 (225mm)). As such, discharge from Catchment D1 is therefore assumed to be split into 72.7% generated sewage at each direction.

Catchment D2

1. 18 Cochrane Street (72.7%)[1]

Assumed Area	=	303	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	17	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**1.3**	m^3/day
Sewage Generation rate (72.7%)	=	**1.0**	m^3/day

2. 75-77 Wellington Street (72.7%)[1]

Total number of units	=	7	units
Total number of residents	=	16	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**4.3**	m^3/day
Sewage Generation rate (72.7%)	=	**3.2**	m^3/day

F&B

Assumed Area	=	120	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**9.7**	m^3/day

3. 71-73 Wellington Street (72.7%)[1]

Total number of units	=	6	units
Total number of residents	=	14	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.7**	m^3/day
Sewage Generation rate (72.7%)	=	**2.7**	m^3/day

Retail

Assumed Area	=	87	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.9**	m^3/day
Sewage Generation rate (72.7%)	=	**0.6**	m^3/day

4. Fortuna Building (72.7%)[1]

Total number of units	=	16	units
Total number of residents	=	37	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.9**	m^3/day
Sewage Generation rate (72.7%)	=	**7.2**	m^3/day

Retail

Assumed Area	=	80	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.8**	m^3/day
Sewage Generation rate (72.7%)	=	**0.6**	m^3/day

F&B

Assumed Area	=	80	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.4**	m^3/day

5. 59-61 Wellington Street (72.7%)[1]

Total number of units	=	10	units -- (https://www.okay.com/en/building/59-61-wellington-street/5924)
Total number of residents	=	23	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.2**	m^3/day
Sewage Generation rate (72.7%)	=	**4.5**	m^3/day

F&B

Assumed Area	=	90	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**7.2**	m^3/day
Sewage Generation rate (72.7%)	=	**5.3**	m^3/day

6. 57 Wellington Street (72.7%)[1,2]

Assumed Area	=	266	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	9	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.6**	m^3/day
Sewage Generation rate (72.7%)	=	**1.9**	m^3/day

Retail

Assumed Area	=	45	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.4**	m^3/day
Sewage Generation rate (72.7%)	=	**0.3**	m^3/day

7. 55 Wellington Street (72.7%)[1]

Total number of units	=	3	units -- (https://hk.centanet.com/estate/en/55-Wellington-Street/2-OUDOQRFXRU)
Total number of residents	=	7	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**1.9**	m^3/day
Sewage Generation rate (72.7%)	=	**1.4**	m^3/day

F&B

Assumed Area	=	45	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**3.6**	m^3/day
Sewage Generation rate (72.7%)	=	**2.6**	m^3/day

8. 53 Wellington Street (72.7%)[1]

Total number of units	=	3	units -- (https://hk.centanet.com/estate/en/53-Wellington-Street/2-OURRQRFRRU)
Total number of residents	=	7	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**1.9**	m^3/day
Sewage Generation rate (72.7%)	=	**1.4**	m^3/day

F&B

Assumed Area	=	45	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**3.6**	m^3/day
Sewage Generation rate (72.7%)	=	**2.6**	m^3/day

9. 51 Wellington Street (72.7%)[1]

Total number of units	=	4	units -- (https://hk.centanet.com/estate/en/51-Wellington-Street/2-OUFCURFRRU)
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (72.7%)	=	**1.8**	m^3/day

F&B

Assumed Area	=	45	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**3.6**	m^3/day
Sewage Generation rate (72.7%)	=	**2.6**	m^3/day

10. Jade Centre (72.7%)[1]

Assumed Area	=	1296	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	71	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**5.7**	m^3/day
Sewage Generation rate (72.7%)	=	**4.1**	m^3/day

Retail

Assumed Area	=	273	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	10	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.7**	m^3/day
Sewage Generation rate (72.7%)	=	**1.9**	m^3/day

F&B

Assumed Area	=	273	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	14	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**22.0**	m^3/day
Sewage Generation rate (72.7%)	=	**16.0**	m^3/day

11. DL Tower (92, 94 & 96 Wellington Street) (72.7%)[1]

Assumed Area	=	3196	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	176	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**14.1**	m^3/day
Sewage Generation rate (72.7%)	=	**10.2**	m^3/day

12. Tung Chai Building (72.7%)[1]

Assumed Area	=	1605	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	88	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**7.1**	m^3/day
Sewage Generation rate (72.7%)	=	**5.1**	m^3/day

Retail

Assumed Area	=	134	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	5	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.3**	m^3/day
Sewage Generation rate (72.7%)	=	**1.0**	m^3/day

F&B

Assumed Area	=	172	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	9	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**13.9**	m^3/day
Sewage Generation rate (72.7%)	=	**10.1**	m^3/day

13. 1 Lyndhurst Tower (72.7%)[1]

Assumed Area	=	7144	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	393	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**31.4**	m^3/day
Sewage Generation rate (72.7%)	=	**22.9**	m^3/day

14. 26 Cochrane Street (72.7%)[1]

Total number of units	=	4	units
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (72.7%)	=	**1.8**	m^3/day

15. 28 Cochrane Street (72.7%)[1]

Total number of units	=	4	units
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (72.7%)	=	**1.8**	m^3/day

16. Merlin Building (72.7%)[1]

Total number of units	=	16	units
Total number of residents	=	37	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.9**	m^3/day
Sewage Generation rate (72.7%)	=	**7.2**	m^3/day

F&B

Assumed Area	=	187	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	10	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**15.0**	m^3/day
Sewage Generation rate (72.7%)	=	**10.9**	m^3/day

17. 36 Cochrane Street (72.7%)[1]

Total number of units	=	3	units
Total number of residents	=	7	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**1.9**	m^3/day
Sewage Generation rate (72.7%)	=	**1.4**	m^3/day

F&B

Assumed Area	=	59	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**4.8**	m^3/day
Sewage Generation rate (72.7%)	=	**3.5**	m^3/day

18. 38 Cochrane Street (72.7%)[1]

Total number of units	=	4	units
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (72.7%)	=	**1.8**	m^3/day

Retail

Assumed Area	=	59	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.6**	m^3/day
Sewage Generation rate (72.7%)	=	**0.4**	m^3/day

19. Cheung Hing Commercial Building (72.7%)[1]

Assumed Area	=	803	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	44	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**3.5**	m^3/day
Sewage Generation rate (72.7%)	=	**2.6**	m^3/day

Retail

Assumed Area	=	62	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.6**	m^3/day
Sewage Generation rate (72.7%)	=	**0.4**	m^3/day

F&B

Assumed Area	=	62	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**5.0**	m^3/day
Sewage Generation rate (72.7%)	=	**3.6**	m^3/day

Total Flow from Catchment D2

Flow Rate (without Catchmnet Inflow Factor)	=	173.1	m^3/day
Catchment Inflow Factor	=	1.0	Catchment Inflow Factor for Central in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	**173.1**	m^3/day

Note:
(2) It is observed that that the existing sewerage pipes after Manhole number: FMH7029930 are separated into 2 flows (i.e. Pipe number: FWD7033506 (600mm) and Pipe number: FWD7057384 (250mm)). As such, discharge from upstream Catchment D2 is therefore assumed to be split into 51.3% generated sewage at each direction.

Catchment D3

1. Cheung Fai Building (51.3%)[2]

Total number of units	=	36	units
Total number of residents	=	83	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**22.4**	m^3/day
Sewage Generation rate (51.3%)	=	**11.5**	m^3/day

2. Oriental Crystal Commercial Building (51.3%)[2]

Assumed Area	=	7025	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	386	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**30.9**	m^3/day
Sewage Generation rate (51.3%)	=	**15.9**	m^3/day

Retail

Assumed Area	=	133	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	5	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.3**	m^3/day
Sewage Generation rate (51.3%)	=	**0.7**	m^3/day

3. 48-50 Lyndhurst Terrace (51.3%)[2]

Total number of units	=	8	units
Total number of residents	=	18	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**5.0**	m^3/day
Sewage Generation rate (51.3%)	=	**2.6**	m^3/day

4. Sun Fung Mansion (51.3%)[2]

Total number of units	=	35	units
Total number of residents	=	81	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**21.7**	m^3/day
Sewage Generation rate (51.3%)	=	**11.2**	m^3/day

5. The Mood Lyndhurst (30.8%)[3,7]

Numer of hotel rooms	=	31	rooms
Assumed number of employees	=	9	employees -- (assume 3 workers per 10 rooms)
Design Flow	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF J10 - Restaurants & Hotels)
Sewage Generation Rate	=	**14.7**	m^3/day
Sewage Generation rate (30.8%)	=	**4.5**	m^3/day

6. FOCO (46-48 Cochrane Street) (30.8%)[3]

Assumed Area	=	3908	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	215	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**17.2**	m^3/day
Sewage Generation rate (30.8%)	=	**5.3**	m^3/day

F&B

Assumed Area	=	195	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	10	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**15.7**	m^3/day
Sewage Generation rate (30.8%)	=	**4.8**	m^3/day

7. H Code (High Block) (30.8%)[3,7]

Assumed Area	=	8755	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	482	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**38.5**	m^3/day
Sewage Generation rate (30.8%)	=	**11.9**	m^3/day

8. H Code (Low Block) (30.8%)[3]

Assumed Area	=	1011	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	56	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**4.4**	m^3/day
Sewage Generation rate (30.8%)	=	**1.4**	m^3/day

9. Amber Lodge (30.8%)[3]

Total number of units	=	36	units
Total number of residents	=	83	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**22.4**	m^3/day
Sewage Generation rate (30.8%)	=	**6.9**	m^3/day

F&B

Assumed Area	=	175	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	9	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**14.1**	m^3/day
Sewage Generation rate (30.8%)	=	**4.3**	m^3/day

10. 15 Hollywood Road (30.8%)[3]

Assumed Area	=	2676	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	147	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**11.8**	m^3/day
Sewage Generation rate (30.8%)	=	**3.6**	m^3/day

11. Chinachem Hollywood Centre (30.8%)[3]

Assumed Area	=	5692	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	313	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**25.0**	m^3/day
Sewage Generation rate (30.8%)	=	**7.7**	m^3/day

12. Hollywood House (30.8%)[3]

Total number of units	=	8	units
Total number of residents	=	18	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**5.0**	m^3/day
Sewage Generation rate (30.8%)	=	**1.5**	m^3/day

Retail

Assumed Area	=	62	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.6**	m^3/day
Sewage Generation rate (30.8%)	=	**0.2**	m^3/day

F&B

Assumed Area	=	62	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**5.0**	m^3/day
Sewage Generation rate (30.8%)	=	**1.5**	m^3/day

13. 31-33 Hollywood Road (30.8%)[3]

Assumed Area	=	887	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	31	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**8.7**	m^3/day
Sewage Generation rate (30.8%)	=	**2.7**	m^3/day

F&B

Assumed Area	=	111	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.9**	m^3/day
Sewage Generation rate (30.8%)	=	**2.8**	m^3/day

14. C Wisdom Centre (30.8%)[3]

Assumed Area	=	1655	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	91	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**7.3**	m^3/day
Sewage Generation rate (30.8%)	=	**2.2**	m^3/day

15. Winning House (30.8%)[3]

Total number of units	=	4	units
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (30.8%)	=	**0.8**	m^3/day

F&B

Assumed Area	=	133	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	7	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**10.7**	m^3/day
Sewage Generation rate (30.8%)	=	**3.3**	m^3/day

16. 24 Hollywood Road (30.8%)[3]

Total number of units	=	4	units
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (30.8%)	=	**0.8**	m^3/day

F&B

Assumed Area	=	60	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**4.9**	m^3/day
Sewage Generation rate (30.8%)	=	**1.5**	m^3/day

17. 22 Hollywood Road (30.8%)[3]

Total number of units	=	3	units
Total number of residents	=	7	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**1.9**	m^3/day
Sewage Generation rate (30.8%)	=	**0.6**	m^3/day

F&B

Assumed Area	=	77	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.2**	m^3/day
Sewage Generation rate (30.8%)	=	**1.9**	m^3/day

18. 20 Hollywood Road (30.8%)[3]

Total number of units	=	1	units
Total number of residents	=	2	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**0.6**	m^3/day
Sewage Generation rate (30.8%)	=	**0.2**	m^3/day

F&B

Assumed Area	=	82	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.6**	m^3/day
Sewage Generation rate (30.8%)	=	**2.0**	m^3/day

19. Hollywood Commercial House (30.8%)[3]

Assumed Area	=	1605	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	88	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**7.1**	m^3/day
Sewage Generation rate (30.8%)	=	**2.2**	m^3/day

Retail

Assumed Area	=	372	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	13	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**3.6**	m^3/day
Sewage Generation rate (30.8%)	=	**1.1**	m^3/day

20. 7 Old Bailey Street (30.8%)[3]

Total number of units	=	10	units
Total number of residents	=	23	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.2**	m^3/day
Sewage Generation rate (30.8%)	=	**1.9**	m^3/day

F&B

Assumed Area	=	82	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.6**	m^3/day
Sewage Generation rate (30.8%)	=	**2.0**	m^3/day

21. Ho Fook Building (30.8%)[3]

Total number of units	=	6	units
Total number of residents	=	14	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.7**	m^3/day
Sewage Generation rate (30.8%)	=	**1.1**	m^3/day

F&B

Assumed Area	=	82	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.6**	m^3/day
Sewage Generation rate (30.8%)	=	**2.0**	m^3/day

22. 11-13 Old Bailey Street (30.8%)[3]

Total number of units	=	14	units
Total number of residents	=	32	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**8.7**	m^3/day
Sewage Generation rate (30.8%)	=	**2.7**	m^3/day

F&B

Assumed Area	=	66	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**5.3**	m^3/day
Sewage Generation rate (30.8%)	=	**1.6**	m^3/day

23. 15 Old Bailey Street (30.8%)[2]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (30.8%)	=	**1.0**	m^3/day

F&B

Assumed Area	=	66	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**5.3**	m^3/day
Sewage Generation rate (30.8%)	=	**1.6**	m^3/day

24. 17 Old Bailey Street (30.8%)[3]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (30.8%)	=	**1.0**	m^3/day

F&B

Assumed Area	=	78	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.3**	m^3/day
Sewage Generation rate (30.8%)	=	**1.9**	m^3/day

25. Old Bailey Street Police Married Quarters (30.8%)[3]

Total number of units	=	144	units
Total number of residents	=	331	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**89.4**	m^3/day
Sewage Generation rate (30.8%)	=	**27.5**	m^3/day

26. 19 Old Bailey Street (30.8%)[2]

Total number of units	=	10	units
Total number of residents	=	23	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.2**	m^3/day
Sewage Generation rate (30.8%)	=	**1.9**	m^3/day

Retail

Assumed Area	=	66	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.6**	m^3/day
Sewage Generation rate (30.8%)	=	**0.2**	m^3/day

27. Sunrise House (30.8%)[3]

Total number of units	=	66	units
Total number of residents	=	152	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**41.0**	m^3/day
Sewage Generation rate (30.8%)	=	**12.6**	m^3/day

Retail

Assumed Area	=	382	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	13	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**3.7**	m^3/day
Sewage Generation rate (30.8%)	=	**1.2**	m^3/day

28. 46-50 Elgin Street (30.8%)[3]

Total number of units	=	12	units
Total number of residents	=	28	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**7.5**	m^3/day
Sewage Generation rate (30.8%)	=	**2.3**	m^3/day

Retail

Assumed Area	=	120	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	4	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.2**	m^3/day
Sewage Generation rate (30.8%)	=	**0.4**	m^3/day

F&B

Assumed Area	=	60	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**4.8**	m^3/day
Sewage Generation rate (30.8%)	=	**1.5**	m^3/day

29. 52 Elgin Street (30.8%)[3]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (30.8%)	=	**1.0**	m^3/day

Retail

Assumed Area	=	120	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	4	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.2**	m^3/day
Sewage Generation rate (30.8%)	=	**0.4**	m^3/day

30. 20-26 Old Bailey Street, 11 Chancery Lane (30.8%)[3]

Total number of units	=	90	units
Total number of residents	=	216	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**58.3**	m^3/day
Sewage Generation rate (30.8%)	=	**18.0**	m^3/day

31. Cambridge Villa (30.8%)[3]

Total number of units	=	33	units
Total number of residents	=	79	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**21.4**	m^3/day
Sewage Generation rate (30.8%)	=	**6.6**	m^3/day

Retail

Assumed Area	=	263	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	9	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.6**	m^3/day
Sewage Generation rate (30.8%)	=	**0.8**	m^3/day

32. Tung Yuen Building (30.8%)[3]

Total number of units	=	18	units
Total number of residents	=	43	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**11.7**	m^3/day
Sewage Generation rate (30.8%)	=	**3.6**	m^3/day

Retail

Assumed Area	=	148	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	5	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.4**	m^3/day
Sewage Generation rate (30.8%)	=	**0.4**	m^3/day

33. 6 Chancery Lane (30.8%)[3]

Total number of units	=	11	units
Total number of residents	=	26	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**7.1**	m^3/day
Sewage Generation rate (30.8%)	=	**2.2**	m^3/day

Retail

Assumed Area	=	148	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	5	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.4**	m^3/day
Sewage Generation rate (30.8%)	=	**0.4**	m^3/day

34. The Mood Soho (30.8%)[3]

Total number of units	=	15	units
Total number of residents	=	36	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.7**	m^3/day
Sewage Generation rate (30.8%)	=	**3.0**	m^3/day

35. Le Caine Mansion (30.8%)[3]

Total number of units	=	39	units
Total number of residents	=	94	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**25.3**	m^3/day
Sewage Generation rate (30.8%)	=	**7.8**	m^3/day

Retail

Assumed Area	=	324	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	11	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**3.2**	m^3/day
Sewage Generation rate (30.8%)	=	**1.0**	m^3/day

36. 39-41 Caine Road (30.8%)[3]

Total number of units	=	38	units
Total number of residents	=	91	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**24.6**	m^3/day
Sewage Generation rate (30.8%)	=	**7.6**	m^3/day

Retail

Assumed Area	=	160	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	6	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.6**	m^3/day
Sewage Generation rate (30.8%)	=	**0.5**	m^3/day

F&B

Assumed Area	=	53	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**4.3**	m^3/day
Sewage Generation rate (30.8%)	=	**1.3**	m^3/day

37. Tim Po Court (30.8%)[3]

Total number of units	=	46	units
Total number of residents	=	110	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**29.8**	m^3/day
Sewage Generation rate (30.8%)	=	**9.2**	m^3/day

Retail

Assumed Area	=	213	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	7	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.1**	m^3/day
Sewage Generation rate (30.8%)	=	**0.6**	m^3/day

38. Tai Kwun (30.8%)[3]

Assumed Area	=	12878	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	425	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**119.0**	m^3/day
Sewage Generation rate (30.8%)	=	**36.7**	m^3/day

F&B

Assumed Area	=	5519	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	281	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**444.7**	m^3/day
Sewage Generation rate (30.8%)	=	**137.0**	m^3/day

Total Flow from Catchment D3

Flow Rate (without Catchmnet Inflow Factor)	=	419.9	m^3/day
Catchment Inflow Factor	=	1.0	Catchment Inflow Factor for Central in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	**419.9**	m^3/day

Note:
(3) It is observed that the existing sewerage pipes after Manhole number: FMH7029933 are separated into 2 flows (i.e. Pipe number: FWD7033509 (600mm) and Pipe number: FWD7033510 (400mm)). As such, discharge from upstream Catchment D3 is therefore assumed to be split into 30.8% generated sewage at each direction.

Catchment D4

1. AL-Aqmar House (18.5%)[4]

Assumed Area	=	2203	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	121	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**9.7**	m^3/day
Sewage Generation rate (18.5%)	=	**1.8**	m^3/day

Retail

Assumed Area	=	54	m^2
Assumed floor area per employee	=	28.6	m2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (30.8%)	=	**0.2**	m^3/day

F&B

Assumed Area	=	54	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**4.3**	m^3/day
Sewage Generation rate (30.8%)	=	**1.3**	m^3/day

2. LL Tower (18.5%)[4]

Assumed Area	=	3419	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	188	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**15.0**	m^3/day
Sewage Generation rate (18.5%)	=	**2.8**	m^3/day

F&B

Assumed Area	=	54	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**4.3**	m^3/day
Sewage Generation rate (30.8%)	=	**1.3**	m^3/day

3. Lilian Court (18.5%)[4]

Total number of units	=	48	units
Total number of residents	=	110	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**29.8**	m^3/day
Sewage Generation rate (18.5%)	=	**5.5**	m^3/day

4. Maison Libanaise (10 Shelley Street) (18.5%)[4]

F&B

Assumed Area	=	124	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**10.0**	m^3/day
Sewage Generation rate (18.5%)	=	**1.9**	m^3/day

5. Bakehouse (5 Staunton Street) (18.5%)[4]

Retail

Assumed Area	=	34	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	1	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.3**	m^3/day
Sewage Generation rate (18.5%)	=	**0.1**	m^3/day

F&B

Assumed Area	=	34	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**2.8**	m^3/day
Sewage Generation rate (18.5%)	=	**0.5**	m^3/day

6. Asiarich Court (18.5%)[4]

Total number of units	=	10	units
Total number of residents	=	23	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.2**	m^3/day
Sewage Generation rate (18.5%)	=	**1.1**	m^3/day

7. Villa Serene (18.5%)[4]

Total number of units	=	46	units -- (https://hk.centanet.com/estate/en/Villa%20Serene/2-SEYKGPDJPE)
Total number of residents	=	106	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**28.6**	m^3/day
Sewage Generation rate (18.5%)	=	**5.3**	m^3/day

Retail

Assumed Area	=	144	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	5	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.4**	m^3/day
Sewage Generation rate (18.5%)	=	**0.3**	m^3/day

8. Chui Man House (18.5%)[4]

Total number of units	=	4	units
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (18.5%)	=	**0.5**	m^3/day

F&B

Assumed Area	=	48	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**3.9**	m^3/day
Sewage Generation rate (18.5%)	=	**0.7**	m^3/day

9. Shama Soho (18.5%)[4]

Total number of units	=	8	units
Total number of residents	=	18	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**5.0**	m^3/day
Sewage Generation rate (18.5%)	=	**0.9**	m^3/day

F&B

Assumed Area	=	75	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.0**	m^3/day
Sewage Generation rate (18.5%)	=	**1.1**	m^3/day

10. 13 Staunton Street (18.5%)[4]

Total number of units	=	3	units
Total number of residents	=	7	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**1.9**	m^3/day
Sewage Generation rate (18.5%)	=	**0.3**	m^3/day

F&B

Assumed Area	=	48	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**3.9**	m^3/day
Sewage Generation rate (18.5%)	=	**0.7**	m^3/day

11. 15 Staunton Street (18.5%)[4]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (18.5%)	=	**0.6**	m^3/day

Retail

Assumed Area	=	48	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (18.5%)	=	**0.1**	m^3/day

12. 17 Staunton Street (18.5%)[4]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (18.5%)	=	**0.6**	m^3/day

Retail

Assumed Area	=	48	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (18.5%)	=	**0.1**	m^3/day

13. 6-8 Staunton Street (18.5%)[4]

Total number of units	=	10	units
Total number of residents	=	23	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.2**	m^3/day
Sewage Generation rate (18.5%)	=	**1.1**	m^3/day

F&B

Assumed Area	=	112	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**9.0**	m^3/day
Sewage Generation rate (18.5%)	=	**1.7**	m^3/day

14. 2-4 Staunton Street (18.5%)[4]

Total number of units	=	10	units
Total number of residents	=	23	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.2**	m^3/day
Sewage Generation rate (18.5%)	=	**1.1**	m^3/day

F&B

Assumed Area	=	112	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**9.0**	m^3/day
Sewage Generation rate (18.5%)	=	**1.7**	m^3/day

15. 14 Shelley Street (18.5%)[4]

Total number of units	=	8	units
Total number of residents	=	18	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**5.0**	m^3/day
Sewage Generation rate (18.5%)	=	**0.9**	m^3/day

F&B

Assumed Area	=	117	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**9.5**	m^3/day
Sewage Generation rate (18.5%)	=	**1.7**	m^3/day

16. Yuppie Tel (18.5%)[4]

Total number of units	=	45	units
Total number of residents	=	104	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**27.9**	m^3/day
Sewage Generation rate (18.5%)	=	**5.2**	m^3/day

17. 18 Shelley Street (18.5%)[4]

Total number of units	=	8	units
Total number of residents	=	18	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**5.0**	m^3/day
Sewage Generation rate (18.5%)	=	**0.9**	m^3/day

F&B

Assumed Area	=	164	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	8	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**13.2**	m^3/day
Sewage Generation rate (18.5%)	=	**2.4**	m^3/day

18. The Hong Kong Swatow Christian Church (18.5%)[4]

Assumed Area	=	4086	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	135	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**37.8**	m^3/day
Sewage Generation rate (18.5%)	=	**7.0**	m^3/day

19. 40 Elgin Street (18.5%)[4]

Total number of units	=	10	units
Total number of residents	=	23	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.2**	m^3/day
Sewage Generation rate (18.5%)	=	**1.1**	m^3/day

Retail

Assumed Area	=	94	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.9**	m^3/day
Sewage Generation rate (18.5%)	=	**0.2**	m^3/day

20. 30 Staunton Street (18.5%)[4]

Total number of units	=	4	units
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (18.5%)	=	**0.5**	m^3/day

F&B

Assumed Area	=	71	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**5.7**	m^3/day
Sewage Generation rate (18.5%)	=	**1.1**	m^3/day

21. 28 Staunton Street (18.5%)[4]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (18.5%)	=	**0.6**	m^3/day

F&B

Assumed Area	=	80	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (18.5%)	=	**1.2**	m^3/day

22. The Staunton Suites (18.5%)[4]

Numer of hotel rooms	=	78	rooms
Assumed number of employees	=	23	employees -- (assume 3 workers per 10 rooms)
Design Flow	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF J10 - Restaurants & Hotels)
Sewage Generation Rate	=	**37.0**	m^3/day
Sewage Generation rate (18.5%)	=	**6.8**	m^3/day

F&B

Assumed Area	=	255	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	13	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**20.5**	m^3/day
Sewage Generation rate (18.5%)	=	**3.8**	m^3/day

23. Staunton Building (18.5%)[4]

Total number of units	=	25	units
Total number of residents	=	58	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**15.5**	m^3/day
Sewage Generation rate (18.5%)	=	**2.9**	m^3/day

F&B

Assumed Area	=	205	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	10	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**16.5**	m^3/day
Sewage Generation rate (18.5%)	=	**3.0**	m^3/day

24. Treasure View Soho (18.5%)[4]

Total number of units	=	23	units
Total number of residents	=	53	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**14.3**	m^3/day
Sewage Generation rate (18.5%)	=	**2.6**	m^3/day

F&B

Assumed Area	=	190	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	10	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**15.3**	m^3/day
Sewage Generation rate (18.5%)	=	**2.8**	m^3/day

25. 9-13 Shelley Street (18.5%)[4]

Total number of units	=	16	units
Total number of residents	=	37	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.9**	m^3/day
Sewage Generation rate (18.5%)	=	**1.8**	m^3/day

F&B

Assumed Area	=	195	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	10	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**15.7**	m^3/day
Sewage Generation rate (18.5%)	=	**2.9**	m^3/day

Total Flow from Catchment D4

Flow Rate (without Catchmnet Inflow Factor)	=	82.8	m^3/day
Catchment Inflow Factor	=	1.0	Catchment Inflow Factor for Central in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	**82.8**	m^3/day

Note:
(4) It is observed that the existing sewerage pipes after Manhole number: FSH7001020 are separated into 2 flows (i.e. Pipe number: FWD7033190 (450mm) and Pipe number: FWD7033192 (300mm)). As such, discharge from upstream Catchment D4 is therefore assumed to be split into 18.5% generated sewage at each direction.

Catchment D5

1. 34B Staunton Street (9.2%)[5]

Total number of units	=	4	units
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (9.2%)	=	**0.2**	m^3/day

F&B

Assumed Area	=	83	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.7**	m^3/day
Sewage Generation rate (9.2%)	=	**0.6**	m^3/day

2. 32A-32C Staunton Street (9.2%)[5]

Total number of units	=	11	units
Total number of residents	=	25	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.8**	m^3/day
Sewage Generation rate (9.2%)	=	**0.6**	m^3/day

Retail

Assumed Area	=	77	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.8**	m^3/day
Sewage Generation rate (9.2%)	=	**0.1**	m^3/day

F&B

Assumed Area	=	39	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**3.1**	m^3/day
Sewage Generation rate (9.2%)	=	**0.3**	m^3/day

3. 32 Staunton Street (9.2%)[5]

Total number of units	=	4	units
Total number of residents	=	9	people -- (2021 Population Census: Average Household Size of 2.3 in Chung Wan District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (9.2%)	=	**0.2**	m^3/day

Retail

Assumed Area	=	64	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.6**	m^3/day
Sewage Generation rate (9.2%)	=	**0.1**	m^3/day

Total Flow from Catchment D5

Flow Rate (without Catchmnet Inflow Factor)	=	2.1	m^3/day
Catchment Inflow Factor	=	1.0	Catchment Inflow Factor for Central in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	**2.1**	m^3/day

Note:

(5) It is observed that the existing sewerage pipes after Manhole number: FMH7029561 are separated into 2 flows (i.e. Pipe number: FWD7033966 (225mm) and Pipe number: FWD7033202 (225mm)). As such, discharge from upstream Catchment D5 is therefore assumed to be split into 18.5% generated sewage at each direction.

Catchment D6

1. The Elgin (12.3%)[6]

Total number of units	=	20	units
Total number of residents	=	48	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**13.0**	m^3/day
Sewage Generation rate (12.3%)	=	**1.6**	m^3/day

F&B

Assumed Area	=	129	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	7	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**10.4**	m^3/day
Sewage Generation rate (12.3%)	=	**1.3**	m^3/day

2. Escapade (12.3%)[6]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.4**	m^3/day

F&B

Assumed Area	=	101	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.2**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

3. Ho Shing Lau (12.3%)[6]

Total number of units	=	10	units
Total number of residents	=	24	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	82	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.8**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

4. Cheong Ngar Court (12.3%)[6]

Total number of units	=	10	units
Total number of residents	=	24	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	82	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.8**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

5. 55 Caine Road (12.3%)[6]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.4**	m^3/day

Retail

Assumed Area	=	82	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.8**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

6. 51-53 Caine Road (12.3%)[6]

Total number of units	=	10	units
Total number of residents	=	24	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.8**	m^3/day

F&B

Assumed Area	=	162	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	8	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**13.0**	m^3/day
Sewage Generation rate (12.3%)	=	**1.6**	m^3/day

7. Ho Kin Building (12.3%)[6]

Total number of units	=	10	units
Total number of residents	=	24	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	78	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.8**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

8. 47A-47B Caine Road (12.3%)[6]

Total number of units	=	10	units
Total number of residents	=	24	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	32	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	1	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.3**	m^3/day
Sewage Generation rate (12.3%)	=	**0.03**	m^3/day

F&B

Assumed Area	=	32	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	2	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**2.6**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

9. Upper Central (12.3%)[m]

Total number of units	=	85	units
Total number of residents	=	204	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**55.1**	m^3/day
Sewage Generation rate (12.3%)	=	**6.8**	m^3/day

Clubhouse

Assumed Area	=	172	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	6	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**1.6**	m^3/day
Sewage Generation rate (12.3%)	=	**0.2**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	107	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	134	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	22	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.4	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	1.6	m^3/day
Design flow for Swimming Pool Backwashing	=	**3.73**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.5**	litre/sec

10. Gramercy (12.3%)[6]

Total number of units	=	106	units
Total number of residents	=	254	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**68.7**	m^3/day
Sewage Generation rate (12.3%)	=	**8.5**	m^3/day

F&B

Assumed Area	=	381	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	19	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**30.7**	m^3/day
Sewage Generation rate (12.3%)	=	**3.8**	m^3/day

Clubhouse

Assumed Area	=	550	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	18	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**5.1**	m^3/day
Sewage Generation rate (12.3%)	=	**0.6**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	7	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	9	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	2	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.0	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	0.1	m^3/day
Design flow for Swimming Pool Backwashing	=	**0.26**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.03**	litre/sec

11. Sacred Heart Canossian School Private Section (12.3%)[6]

Total number of teachers & staff	=	32	teachers & staff (from the website)
Design flow for teachers & staff	=	0.28	m^3/person/day (refer to Table T-2, Commercial Employee)
Total number of students	=	540	students (from the website)
Design flow for students	=	0.04	m^3/person/day (refer to Table T-2, School Student)
Sewage Generation rate	=	**30.6**	m^3/day
Sewage Generation rate (12.3%)	=	**3.8**	m^3/day

12. Sacred Heart Chapel (Canossian Missions) (12.3%)[6]

Assumed Area	=	377	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	12	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**3.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.4**	m^3/day

13. Dragon Court (12.3%)[6]

Total number of units	=	52	units
Total number of residents	=	125	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**33.7**	m^3/day
Sewage Generation rate (12.3%)	=	**4.2**	m^3/day

F&B

Assumed Area	=	53	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**4.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.5**	m^3/day

Retail

Assumed Area	=	211	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	7	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.1**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

14. Sacred Heart Canossian School (12.3%)[m]

Total number of teachers & staff	=	59	teachers & staff (from the website)
Design flow for teachers & staff	=	0.28	m^3/person/day (refer to Table T-2, Commercial Employee)
Total number of students	=	900	students (from the website)
Design flow for students	=	0.04	m^3/person/day (refer to Table T-2, School Student)
Sewage Generation rate	=	**52.5**	m^3/day
Sewage Generation rate (12.3%)	=	**6.5**	m^3/day

15. 24-24A Caine Road (12.3%)[6]

Total number of units	=	24	units
Total number of residents	=	58	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**15.6**	m^3/day
Sewage Generation rate (12.3%)	=	**1.9**	m^3/day

Retail

Assumed Area	=	183	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	6	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.8**	m^3/day
Sewage Generation rate (12.3%)	=	**0.2**	m^3/day

16. 22A-22 Caine Road (12.3%)[6]

Total number of units	=	106	units
Total number of residents	=	254	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**68.7**	m^3/day
Sewage Generation rate (12.3%)	=	**8.5**	m^3/day

Retail

Assumed Area	=	102	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	4	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.0**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

17. Scenic Rise (12.3%)(6)

Total number of units	=	143	units
Total number of residents	=	343	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**92.7**	m^3/day
Sewage Generation rate (12.3%)	=	**11.4**	m^3/day

Clubhouse

Assumed Area	=	465	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	15	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**4.3**	m^3/day
Sewage Generation rate (12.3%)	=	**0.5**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	71	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	89	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	15	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.3	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	1.0	m^3/day
Design flow for Swimming Pool Backwashing	=	**2.47**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.3**	litre/sec

18. Sun Fat Building (12.3%)[6]

Total number of units	=	18	units
Total number of residents	=	43	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**11.7**	m^3/day
Sewage Generation rate (12.3%)	=	**1.4**	m^3/day

19. Tak Mansion (12.3%)[6]

Total number of units	=	28	units
Total number of residents	=	67	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**18.1**	m^3/day
Sewage Generation rate (12.3%)	=	**2.2**	m^3/day

20. Jamia Mosque (12.3%)[6]

Assumed Area	=	312	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	10	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**2.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.4**	m^3/day

21. 14-18 Mosque Street (12.3%)[6]

Total number of units	=	98	units
Total number of residents	=	235	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**63.5**	m^3/day
Sewage Generation rate (12.3%)	=	**7.8**	m^3/day

Clubhouse

Assumed Area	=	288	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	9	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**2.7**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

Retail

Assumed Area	=	144	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	5	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.4**	m^3/day
Sewage Generation rate (12.3%)	=	**0.2**	m^3/day

22. Maxluck Court (12.3%)[6]

Total number of units	=	24	units
Total number of residents	=	58	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**15.6**	m^3/day
Sewage Generation rate (12.3%)	=	**1.9**	m^3/day

23. Central 8 (12.3%)[6]

Total number of units	=	99	units
Total number of residents	=	238	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**64.2**	m^3/day

Clubhouse

Assumed Area	=	61	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	2	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**0.6**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	30	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	37	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	6	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.1	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	0.4	m^3/day
Design flow for Swimming Pool Backwashing	=	**1.04**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.1**	litre/sec

24. Fook Kee Court (12.3%)[6]

Total number of units	=	23	units
Total number of residents	=	55	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**14.9**	m^3/day
Sewage Generation rate (12.3%)	=	**1.8**	m^3/day

25. The Grand Panorama (Tower 1 to Tower 5) (12.3%)[6]

Total number of units	=	558	units
Total number of residents	=	1339	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**361.6**	m^3/day
Sewage Generation rate (12.3%)	=	**44.6**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	154	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	193	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	32	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.6	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	2.3	m^3/day
Design flow for Swimming Pool Backwashing	=	**5.36**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.66**	litre/sec

26. Robinson Heights (12.3%)[6]

Total number of units	=	484	units
Total number of residents	=	1162	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**313.6**	m^3/day
Sewage Generation rate (12.3%)	=	**38.6**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	129	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	162	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	27	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.5	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	1.9	m^3/day
Design flow for Swimming Pool Backwashing	=	**4.49**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.6**	litre/sec

27. Bishop Lei International House (12.3%)[6]

Total number of units	=	484	units
Total number of residents	=	1162	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**313.6**	m^3/day
Sewage Generation rate (12.3%)	=	**38.6**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	266	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	332	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	55	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	1.1	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	3.9	m^3/day
Design flow for Swimming Pool Backwashing	=	**9.22**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**1.1**	litre/sec

28. Honor Villa (12.3%)[6]

Total number of units	=	78	units
Total number of residents	=	187	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**50.5**	m^3/day
Sewage Generation rate (12.3%)	=	**6.2**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	123	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	154	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	26	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.5	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	1.8	m^3/day
Design flow for Swimming Pool Backwashing	=	**4.27**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.5**	litre/sec

29. Caine Hill (12.3%)[6]

Total number of units	=	187	units
Total number of residents	=	449	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**121.2**	m^3/day
Sewage Generation rate (12.3%)	=	**14.9**	m^3/day

30. Ideal House (12.3%)[6]

Total number of units	=	17	units
Total number of residents	=	41	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**11.0**	m^3/day
Sewage Generation rate (12.3%)	=	**1.4**	m^3/day

Retail

Assumed Area	=	131	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	5	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.3**	m^3/day
Sewage Generation rate (12.3%)	=	**0.2**	m^3/day

31. Cameo Court (12.3%)[6]

Total number of units	=	86	units
Total number of residents	=	206	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**55.7**	m^3/day
Sewage Generation rate (12.3%)	=	**6.9**	m^3/day

Retail

Assumed Area	=	474	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	17	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**4.6**	m^3/day
Sewage Generation rate (12.3%)	=	**0.6**	m^3/day

32. Ichang House (12.3%)[6]

Total number of units	=	10	units
Total number of residents	=	24	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.8**	m^3/day

F&B

Assumed Area	=	134	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	7	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**10.8**	m^3/day
Sewage Generation rate (12.3%)	=	**1.3**	m^3/day

33. Castle One By V (12.3%)[6]

Total number of units	=	112	units
Total number of residents	=	269	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**72.6**	m^3/day
Sewage Generation rate (12.3%)	=	**8.9**	m^3/day

34. Caine Mansion (12.3%)[6]

Total number of units	=	144	units
Total number of residents	=	346	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**93.3**	m^3/day
Sewage Generation rate (12.3%)	=	**11.5**	m^3/day

Retail

Assumed Area	=	395	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	14	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**3.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.5**	m^3/day

F&B

Assumed Area	=	395	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	20	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**31.9**	m^3/day
Sewage Generation rate (12.3%)	=	**3.9**	m^3/day

35. Ying Fai Court (12.3%)[6]

Total number of units	=	74	units
Total number of residents	=	178	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**48.0**	m^3/day
Sewage Generation rate (12.3%)	=	**5.9**	m^3/day

36. Bella Vista (12.3%)[6]

Total number of units	=	174	units
Total number of residents	=	418	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**112.8**	m^3/day
Sewage Generation rate (12.3%)	=	**13.9**	m^3/day

37. The Fortune Gardens (12.3%)[6]

Total number of units	=	186	units
Total number of residents	=	446	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**120.5**	m^3/day
Sewage Generation rate (12.3%)	=	**14.9**	m^3/day

38. 13 Seymour Road (12.3%)[6]

Total number of units	=	10	units
Total number of residents	=	24	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	186	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	7	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.8**	m^3/day
Sewage Generation rate (12.3%)	=	**0.2**	m^3/day

39. Seymour (12.3%)[6]

Total number of units	=	82	units
Total number of residents	=	197	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**53.1**	m^3/day
Sewage Generation rate (12.3%)	=	**6.5**	m^3/day

Clubhouse

Assumed Area	=	769	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	25	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**7.1**	m^3/day
Sewage Generation rate (12.3%)	=	**0.9**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	80	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	100	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	17	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.3	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	1.2	m^3/day
Design flow for Swimming Pool Backwashing	=	**2.77**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.3**	litre/sec

40. Palatial Crest (12.3%)[6]

Total number of units	=	188	units
Total number of residents	=	451	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**121.8**	m^3/day
Sewage Generation rate (12.3%)	=	**15.0**	m^3/day

Retail

Assumed Area	=	340	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	12	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**3.3**	m^3/day
Sewage Generation rate (12.3%)	=	**0.4**	m^3/day

41. Fairview Height (12.3%)[6]

Total number of units	=	198	units
Total number of residents	=	475	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**128.3**	m^3/day
Sewage Generation rate (12.3%)	=	**15.8**	m^3/day

Retail

Assumed Area	=	148	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	5	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.2**	m^3/day

F&B

Assumed Area	=	592	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	30	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**47.7**	m^3/day
Sewage Generation rate (12.3%)	=	**5.9**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	62	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	77	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	13	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.3	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	0.9	m^3/day
Design flow for Swimming Pool Backwashing	=	**2.15**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.3**	litre/sec

42. Golden Pavilion (12.3%)[6]

Total number of units	=	77	units
Total number of residents	=	185	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**49.9**	m^3/day
Sewage Generation rate (12.3%)	=	**6.1**	m^3/day

Retail

Assumed Area	=	111	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	4	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.1**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

43. Midland Court (12.3%)(6)

Total number of units	=	96	units
Total number of residents	=	230	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**62.2**	m^3/day
Sewage Generation rate (12.3%)	=	**7.7**	m^3/day

Retail

Assumed Area	=	116	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	4	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.1**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

F&B

Assumed Area	=	116	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**9.4**	m^3/day
Sewage Generation rate (12.3%)	=	**1.2**	m^3/day

44. Hong Kong Baptist Church (12.3%)[w]

Assumed Area	=	6211	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	205	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**57.4**	m^3/day
Sewage Generation rate (12.3%)	=	**7.1**	m^3/day

45. 17-19 Prince's Terrace (12.3%)[w]

Total number of units	=	12	units
Total number of residents	=	29	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**7.8**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

46. 13 Prince's Terrace (12.3%)[6]

Total number of units	=	15	units
Total number of residents	=	36	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.7**	m^3/day
Sewage Generation rate (12.3%)	=	**1.2**	m^3/day

Retail

Assumed Area	=	24	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	1	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.03**	m^3/day

47. 11 Prince's Terrace (12.3%)[6]

Total number of units	=	14	units
Total number of residents	=	34	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.1**	m^3/day
Sewage Generation rate (12.3%)	=	**1.1**	m^3/day

48. 9 Prince's Terrace (12.3%)[6]

Total number of units	=	10	units
Total number of residents	=	24	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.8**	m^3/day

49. 5-7 Prince's Terrace (12.3%)[w]

Total number of units	=	20	units
Total number of residents	=	48	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**13.0**	m^3/day
Sewage Generation rate (12.3%)	=	**1.6**	m^3/day

Retail

Assumed Area	=	36	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	1	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.4**	m^3/day
Sewage Generation rate (12.3%)	=	**0.0**	m^3/day

50. 3 Prince's Terrace (12.3%)[6]

Total number of units	=	6	units
Total number of residents	=	14	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.5**	m^3/day

F&B

Assumed Area	=	101	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.1**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

51. 1 Prince's Terrace (12.3%)[6]

Total number of units	=	6	units -
Total number of residents	=	14	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.5**	m^3/day

F&B

Assumed Area	=	101	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.1**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

52. Nikken Heights (12.3%)[6]

Total number of units	=	46	units
Total number of residents	=	110	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**29.8**	m^3/day
Sewage Generation rate (12.3%)	=	**3.7**	m^3/day

53. Prince's Court (12.3%)[6]

Total number of units	=	14	units
Total number of residents	=	34	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.1**	m^3/day
Sewage Generation rate (12.3%)	=	**1.1**	m^3/day

Retail

Assumed Area	=	103	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	4	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.0**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

54. Prince Palace (12.3%)[6]

Total number of units	=	10	units
Total number of residents	=	24	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.8**	m^3/day

Retail

Assumed Area	=	103	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	4	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.0**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

55. Po Fat Building (12.3%)[6]

Total number of units	=	12	units
Total number of residents	=	29	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**7.8**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

56. Bonito Casa (12.3%)[6]

Total number of units	=	12	units
Total number of residents	=	29	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**7.8**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

F&B

Assumed Area	=	101	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.1**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

57. Sung Tak Mansion (12.3%)[6]

Total number of units	=	14	units
Total number of residents	=	34	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**9.1**	m^3/day
Sewage Generation rate (12.3%)	=	**1.1**	m^3/day

F&B

Assumed Area	=	101	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.1**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

58. The Rednaxela (12.3%)[6]

Total number of units	=	75	units
Total number of residents	=	180	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**48.6**	m^3/day
Sewage Generation rate (12.3%)	=	**6.0**	m^3/day

59. ACTS Rednaxela (12.3%)[6]

Numer of hotel rooms	=	15	rooms
Assumed number of employees	=	5	employees -- (assume 3 workers per 10 rooms)
Design Flow	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF J10 - Restaurants & Hotels)
Sewage Generation Rate	=	**7.1**	m^3/day
Sewage Generation rate (12.3%)	=	**0.9**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	49	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	62	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	10	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.2	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	0.7	m^3/day
Design flow for Swimming Pool Backwashing	=	**1.71**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.2**	litre/sec

60. 15 Shelley Street (12.3%)[6]

Total number of units	=	4	units
Total number of residents	=	10	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.6**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

61. 17 Shelley Street (12.3%)[6]

Total number of units	=	3	units
Total number of residents	=	7	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**1.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.2**	m^3/day

62. 17A Shelley Street (12.3%)[b]

Total number of units	=	4	units
Total number of residents	=	10	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.6**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

63. Shelley Court (21Shelley Street) (12.3%)[6]

Total number of units	=	24	units
Total number of residents	=	58	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**15.6**	m^3/day
Sewage Generation rate (12.3%)	=	**1.9**	m^3/day

64. Shelley Court (23-25 Shelley Street) (12.3%)[b]

Total number of units	=	24	units
Total number of residents	=	58	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**15.6**	m^3/day
Sewage Generation rate (12.3%)	=	**1.9**	m^3/day

65. 3 Chico Terrace (12.3%)[6]

Total number of units	=	36	units
Total number of residents	=	86	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**23.3**	m^3/day
Sewage Generation rate (12.3%)	=	**2.9**	m^3/day

66. 4 Chico Terrace (12.3%)[6]

Total number of units	=	6	units
Total number of residents	=	14	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.5**	m^3/day

67. Kam Lei Building (12.3%)[b]

Total number of units	=	36	units
Total number of residents	=	86	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**23.3**	m^3/day
Sewage Generation rate (12.3%)	=	**2.9**	m^3/day

Retail

Assumed Area	=	216	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	8	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.1**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

68. Kin Hing House (12.3%)[b]

Total number of units	=	10	units
Total number of residents	=	24	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**6.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.8**	m^3/day

F&B

Assumed Area	=	100	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.0**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

69. 27 Shelley Street (12.3%)[6]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.4**	m^3/day

70. 29 Shelley Street (12.3%)[b]

Total number of units	=	4	units
Total number of residents	=	10	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.6**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

71. Orchid (12.3%)[6]

Total number of units	=	46	units
Total number of residents	=	110	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**29.8**	m^3/day
Sewage Generation rate (12.3%)	=	**3.7**	m^3/day

F&B

Assumed Area	=	221	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	11	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**17.8**	m^3/day
Sewage Generation rate (12.3%)	=	**2.2**	m^3/day

72. Ryan Mansion (12.3%)[b]

Total number of units	=	78	units
Total number of residents	=	187	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**50.5**	m^3/day
Sewage Generation rate (12.3%)	=	**6.2**	m^3/day

Retail

Assumed Area	=	95	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

F&B

Assumed Area	=	95	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**7.6**	m^3/day
Sewage Generation rate (12.3%)	=	**0.9**	m^3/day

73. Rich Court (12.3%)[6]

Total number of units	=	40	units
Total number of residents	=	96	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**25.9**	m^3/day
Sewage Generation rate (12.3%)	=	**3.2**	m^3/day

74. 8 Shelley Street (12.3%)[6]

F&B

Assumed Area	=	86	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.9**	m^3/day

75. Soho 38 (12.3%)[b]

Total number of units	=	77	unit
Total number of residents	=	185	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**49.9**	m^3/day
Sewage Generation rate (12.3%)	=	**6.1**	m^3/day

76. Ka Yee Court (12.3%)[6]

Total number of units	=	48	units
Total number of residents	=	115	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**31.1**	m^3/day
Sewage Generation rate (12.3%)	=	**3.8**	m^3/day

Retail

Assumed Area	=	68	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.7**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

F&B

Assumed Area	=	68	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	3	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**5.4**	m^3/day
Sewage Generation rate (12.3%)	=	**0.7**	m^3/day

77. 21 Mosque Street (12.3%)[6]

Total number of units	=	6	units
Total number of residents	=	14	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.5**	m^3/day

Retail

Assumed Area	=	51	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

78. Peach Blossom (12.3%)[b]

Total number of units	=	50	units
Total number of residents	=	120	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**32.4**	m^3/day
Sewage Generation rate (12.3%)	=	**4.0**	m^3/day

79. 11 Mosque Street (12.3%)[6]

Total number of units	=	4	units
Total number of residents	=	10	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**2.6**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

80. Floral Tower (12.3%)[b]

Total number of units	=	124	units
Total number of residents	=	298	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**80.4**	m^3/day
Sewage Generation rate (12.3%)	=	**9.9**	m^3/day

Retail

Assumed Area	=	388	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	14	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**3.8**	m^3/day
Sewage Generation rate (12.3%)	=	**0.5**	m^3/day

81. Lily Court (12.3%)[6]

Total number of units	=	98	units
Total number of residents	=	235	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**63.5**	m^3/day
Sewage Generation rate (12.3%)	=	**7.8**	m^3/day

Retail

Assumed Area	=	259	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	9	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	56	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	70	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	12	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.2	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	0.8	m^3/day
Design flow for Swimming Pool Backwashing	=	**1.93**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.2**	litre/sec

82. Kar Ling House (12.3%)[b]

Total number of units	=	12	units
Total number of residents	=	29	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**7.8**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

Retail

Assumed Area	=	124	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	4	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

83. Sherwood Court (12.3%)[6]

Total number of units	=	48	units
Total number of residents	=	115	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**31.1**	m^3/day
Sewage Generation rate (12.3%)	=	**3.8**	m^3/day

84. 29 Mosque Junction (12.3%)[6]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.4**	m^3/day

Retail

Assumed Area	=	55	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

85. 31 Mosque Junction (12.3%)[6]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.4**	m^3/day

Retail

Assumed Area	=	55	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

86. Chuk Siu House (12.3%)[6]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.4**	m^3/day

Retail

Assumed Area	=	55	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

87. Wise Mansion (12.3%)[6]

Total number of units	=	111	units
Total number of residents	=	266	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**71.9**	m^3/day
Sewage Generation rate (12.3%)	=	**8.9**	m^3/day

Retail

Assumed Area	=	1124	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	39	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**11.0**	m^3/day
Sewage Generation rate (12.3%)	=	**1.4**	m^3/day

88. Losion Villa (12.3%)[6]

Total number of units	=	48	units
Total number of residents	=	115	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**31.1**	m^3/day
Sewage Generation rate (12.3%)	=	**3.8**	m^3/day

89. 2J Mosque Junction (12.3%)[6]

Total number of units	=	6	units
Total number of residents	=	14	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.5**	m^3/day

90. Peace Tower (12.3%)[6]

Total number of units	=	41	units
Total number of residents	=	98	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**26.6**	m^3/day
Sewage Generation rate (12.3%)	=	**3.3**	m^3/day

Retail

Assumed Area	=	100	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.0**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

F&B

Assumed Area	=	100	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.0**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

91. 34 Robinson Road (12.3%)[6]

Total number of units	=	5	units
Total number of residents	=	12	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**3.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.4**	m^3/day

F&B

Assumed Area	=	91	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**7.4**	m^3/day
Sewage Generation rate (12.3%)	=	**0.9**	m^3/day

92. Arts Building (12.3%)[b]

Total number of units	=	46	units
Total number of residents	=	110	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**29.8**	m^3/day
Sewage Generation rate (12.3%)	=	**3.7**	m^3/day

Retail

Assumed Area	=	114	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	4	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**1.1**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

F&B

Assumed Area	=	114	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	6	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**9.2**	m^3/day
Sewage Generation rate (12.3%)	=	**1.1**	m^3/day

93. 42 Robinson Road (12.3%)[6]

Total number of units	=	7	units
Total number of residents	=	17	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**4.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.6**	m^3/day

Retail

Assumed Area	=	96	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

94. 44 Robinson Road (12.3%)[b]

Total number of units	=	7	units
Total number of residents	=	17	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**4.5**	m^3/day
Sewage Generation rate (12.3%)	=	**0.6**	m^3/day

Retail

Assumed Area	=	96	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.9**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

95. Ming Garden (12.3%)[6]

Total number of units	=	46	units
Total number of residents	=	110	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**29.8**	m^3/day
Sewage Generation rate (12.3%)	=	**3.7**	m^3/day

Retail

Assumed Area	=	217	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	8	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.1**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

96. 49B-49C Robinson Road (12.3%)[6]

Total number of units	=	8	units
Total number of residents	=	19	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**5.2**	m^3/day
Sewage Generation rate (12.3%)	=	**0.6**	m^3/day

97. Vantage Park (12.3%)[6]

Total number of units	=	336	units
Total number of residents	=	806	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**217.7**	m^3/day
Sewage Generation rate (12.3%)	=	**26.8**	m^3/day

98. Ivory Court (12.3%)[6]

Total number of units	=	17	units
Total number of residents	=	41	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**11.0**	m^3/day
Sewage Generation rate (12.3%)	=	**1.4**	m^3/day

99. Cimbria Court (12.3%)[6]

Total number of units	=	28	units
Total number of residents	=	67	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**18.1**	m^3/day
Sewage Generation rate (12.3%)	=	**2.2**	m^3/day

100. East Sun Mansion (12.3%)[b]

Total number of units	=	52	units
Total number of residents	=	125	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**33.7**	m^3/day
Sewage Generation rate (12.3%)	=	**4.2**	m^3/day

101. 33-35 Robinson Road (12.3%)[6]

Total number of units	=	12	units
Total number of residents	=	29	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**7.8**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

Retail

Assumed Area	=	70	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	2	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.7**	m^3/day
Sewage Generation rate (12.3%)	=	**0.1**	m^3/day

102. No. 31 Robinson Road (12.3%)[6]

Total number of units	=	84	units
Total number of residents	=	202	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**54.4**	m^3/day
Sewage Generation rate (12.3%)	=	**6.7**	m^3/day

Clubhouse

Assumed Area	=	764	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	25	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**7.1**	m^3/day
Sewage Generation rate (12.3%)	=	**0.9**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	283	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	354	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	59	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	1.2	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	4.1	m^3/day
Design flow for Swimming Pool Backwashing	=	**9.83**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**1.2**	litre/sec

103. Right Mansion (12.3%)[6]

Total number of units	=	30	units
Total number of residents	=	72	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**19.4**	m^3/day
Sewage Generation rate (12.3%)	=	**2.4**	m^3/day

104. Jing Tai Garden Mansion (12.3%)[b]

Total number of units	=	80	units
Total number of residents	=	192	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**51.8**	m^3/day
Sewage Generation rate (12.3%)	=	**6.4**	m^3/day

105. Wellesley (12.3%)[6]

Total number of units	=	106	units
Total number of residents	=	254	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**68.7**	m^3/day
Sewage Generation rate (12.3%)	=	**8.5**	m^3/day

Clubhouse

Assumed Area	=	1265	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	42	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**11.7**	m^3/day
Sewage Generation rate (12.3%)	=	**1.4**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	283	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	354	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	59	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	1.2	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	4.1	m^3/day
Design flow for Swimming Pool Backwashing	=	**9.83**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**1.2**	litre/sec

106. Good View Court (12.3%)[b]

Total number of units	=	48	units
Total number of residents	=	115	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**31.1**	m^3/day
Sewage Generation rate (12.3%)	=	**3.8**	m^3/day

Retail

Assumed Area	=	233	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	8	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.3**	m^3/day
Sewage Generation rate (12.3%)	=	**0.3**	m^3/day

107. Golden Court (12.3%)[6]

Total number of units	=	12	units
Total number of residents	=	29	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**7.8**	m^3/day
Sewage Generation rate (12.3%)	=	**1.0**	m^3/day

108. Roc Ye Court (12.3%)[b]

Total number of units	=	48	units
Total number of residents	=	115	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**31.1**	m^3/day
Sewage Generation rate (12.3%)	=	**3.8**	m^3/day

109. Regal Crest (12.3%)[6]

Total number of units	=	48	units
Total number of residents	=	115	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**31.1**	m^3/day
Sewage Generation rate (12.3%)	=	**3.8**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	91	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	114	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	19	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.4	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	1.3	m^3/day
Design flow for Swimming Pool Backwashing	=	**3.17**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.4**	litre/sec

110. Yukon Court (12.3%)[6]

Total number of units	=	54	units
Total number of residents	=	130	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**35.0**	m^3/day
Sewage Generation rate (12.3%)	=	**4.3**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	117	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	146	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	24	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.5	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	1.7	m^3/day
Design flow for Swimming Pool Backwashing	=	**4.05**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.5**	m^3/day

111. Tycoon Court (12.3%)[6]

Total number of units	=	186	units
Total number of residents	=	446	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**120.5**	m^3/day
Sewage Generation rate (12.3%)	=	**14.9**	m^3/day

112. Mountain View Court (12.3%)[6]

Total number of units	=	26	units
Total number of residents	=	62	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**16.8**	m^3/day
Sewage Generation rate (12.3%)	=	**2.1**	m^3/day

113. Emerald Court (12.3%)[6]

Total number of units	=	16	units
Total number of residents	=	38	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**10.4**	m^3/day
Sewage Generation rate (12.3%)	=	**1.3**	m^3/day

114. Conduit 18 (12.3%)[6]

Total number of units	=	32	units
Total number of residents	=	77	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**20.7**	m^3/day
Sewage Generation rate (12.3%)	=	**2.6**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	82	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	102	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	17	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.3	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	1.2	m^3/day
Design flow for Swimming Pool Backwashing	=	**2.85**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.4**	litre/sec

115. Conduit Tower (12.3%)[6]

Total number of units	=	108	units
Total number of residents	=	259	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**70.0**	m^3/day
Sewage Generation rate (12.3%)	=	**8.6**	m^3/day

Swimming Pool

Assumed Area of Swimming Pool	=	50	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	62	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	10	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.2	m^2
Backwash Duration	=	7	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	0.7	m^3/day
Design flow for Swimming Pool Backwashing	=	**1.73**	litre/sec
Design flow for Swimming Pool Backwashing (12.3%)	=	**0.2**	m^3/day

116. Panorama (12.3%)[6]

Total number of units	=	52	units
Total number of residents	=	125	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**33.7**	m^3/day
Sewage Generation rate (12.3%)	=	**4.2**	m^3/day

117. Elegant Garden (12.3%)[6]

Total number of units	=	39	units
Total number of residents	=	94	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**25.3**	m^3/day
Sewage Generation rate (12.3%)	=	**3.1**	m^3/day

118. Olympian Mansion (12.3%)[6]

Total number of units	=	42	units
Total number of residents	=	101	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**27.2**	m^3/day
Sewage Generation rate (12.3%)	=	**3.4**	m^3/day

119. Pearl Gardens (12.3%)[6]

Total number of units	=	120	units
Total number of residents	=	288	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**77.8**	m^3/day
Sewage Generation rate (12.3%)	=	**9.6**	m^3/day

120. Botanic Terrace (12.3%)[6]

Total number of units	=	82	units
Total number of residents	=	197	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**53.1**	m^3/day
Sewage Generation rate (12.3%)	=	**6.5**	m^3/day

121. Chater Hall (12.3%)[6]

Total number of units	=	53	units
Total number of residents	=	127	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**34.3**	m^3/day
Sewage Generation rate (12.3%)	=	**4.2**	m^3/day

Total Flow from Catchment D6

Flow Rate (without Catchmnet Inflow Factor)	=	699.1	m^3/day
Catchment Inflow Factor	=	1.0	Catchment Inflow Factor for Central in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	**699.1**	m^3/day

Note:
(6) It is observed that the existing sewerage pipes after Manhole number: FMH7031483 are separated into 2 flows (i.e. Pipe number: FWD7035513 (450mm) and Pipe number: FWD7035641 (225mm)). As such, discharge from upstream Catchment D6 is therefore assumed to be split into 18.5% generated sewage at each direction.

Catchment D7

1. Chancery House (5-5A Chancery Lane) (15.4%)[7]

Total number of units	=	24	units
Total number of residents	=	58	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**15.6**	m^3/day
Sewage Generation rate (15.4%)	=	**2.4**	m^3/day

2. 1-4 Chancery Lane (15.4%)[7]

Total number of units	=	80	units
Total number of residents	=	192	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**51.8**	m^3/day
Sewage Generation rate (15.4%)	=	**8.0**	m^3/day

3. Avon Court (15.4%)[7]

Total number of units	=	33	units
Total number of residents	=	79	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**21.4**	m^3/day
Sewage Generation rate (15.4%)	=	**3.3**	m^3/day

Retail

Assumed Area	=	243	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	9	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.4**	m^3/day
Sewage Generation rate (15.4%)	=	**0.4**	m^3/day

4. 25-27 Caine Road (15.4%)[7]

Total number of units	=	21	units
Total number of residents	=	50	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**13.6**	m^3/day
Sewage Generation rate (15.4%)	=	**2.1**	m^3/day

Retail

Assumed Area	=	266	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	9	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**2.6**	m^3/day
Sewage Generation rate (15.4%)	=	**0.4**	m^3/day

5. 29-31 Caine Road (15.4%)[7]

Total number of units	=	17	units
Total number of residents	=	41	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**11.0**	m^3/day
Sewage Generation rate (15.4%)	=	**1.7**	m^3/day

6. Fan Hing Christian Association (15.4%)[7]

Assumed Area	=	204	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	7	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**1.9**	m^3/day
Sewage Generation rate (15.4%)	=	**0.3**	m^3/day

7. Universal Trade Centre (15.4%)[7]

Assumed Area	=	17276	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	950	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**76.0**	m^3/day
Sewage Generation rate (15.4%)	=	**11.7**	m^3/day

Retail

Assumed Area	=	564	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	20	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**5.5**	m^3/day
Sewage Generation rate (15.4%)	=	**0.9**	m^3/day

8. Cordial Mansion (15.4%)[7]

Total number of units	=	93	units
Total number of residents	=	223	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**60.3**	m^3/day
Sewage Generation rate (15.4%)	=	**9.3**	m^3/day

9. Yuen Ming Building (15.4%)[7]

Total number of units	=	26	units
Total number of residents	=	62	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**16.8**	m^3/day
Sewage Generation rate (15.4%)	=	**2.6**	m^3/day

10. Caritas Institute of Community Education (11 Caine Road) (15.4%)[7]

Total number of teachers & staff	=	19	teachers & staff (from the website)
Design flow for teachers & staff	=	0.28	m^3/person/day (refer to Table T-2, Commercial Employee)
Total number of students	=	11	students (from the website)
Design flow for students	=	0.04	m^3/person/day (refer to Table T-2, School Student)
Sewage Generation rate	=	**5.8**	m^3/day
Sewage Generation rate (15.4%)	=	**0.9**	m^3/day

11. Bel Mount Garden (15.4%)[7]

Total number of units	=	66	units
Total number of residents	=	158	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**42.8**	m^3/day
Sewage Generation rate (15.4%)	=	**6.6**	m^3/day

12. Botanical Court (15.4%)[7]

Total number of units	=	24	units
Total number of residents	=	58	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**15.6**	m^3/day
Sewage Generation rate (15.4%)	=	**2.4**	m^3/day

13. Tutor Time 多多 (15.4%)[7]

Total number of teachers & staff	=	4	teachers & staff (from the website)
Design flow for teachers & staff	=	0.28	m^3/person/day (refer to Table T-2, Commercial Employee)
Total number of students	=	17	students (from the website)
Design flow for students	=	0.04	m^3/person/day (refer to Table T-2, School Student)
Sewage Generation rate	=	**1.8**	m^3/day
Sewage Generation rate (15.4%)	=	**0.3**	m^3/day

14. Townplace Soho (15.4%)[7]

Numer of hotel rooms	=	293	rooms
Assumed number of employees	=	88	employees -- (assume 3 workers per 10 rooms)
Design Flow	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF J10 - Restaurants & Hotels)
Sewage Generation Rate	=	**138.9**	m^3/day
Sewage Generation rate (15.4%)	=	**21.4**	m^3/day

15. Catholic Diocese Centre (15.4%)[7]

Assumed Area	=	13740	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	453	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**127.0**	m^3/day
Sewage Generation rate (15.4%)	=	**19.6**	m^3/day

16. Cathedral Office (15.4%)[7]

Assumed Area	=	2714	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	149	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**11.9**	m^3/day
Sewage Generation rate (15.4%)	=	**1.8**	m^3/day

17. Hong Kong Catholic Cathedral of the Immaculate Conception (15.4%)[7]

Assumed Area	=	1575	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	52	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**14.6**	m^3/day
Sewage Generation rate (15.4%)	=	**2.2**	m^3/day

18. Caritas House (2 Caine Road) (15.4%)[7]

Assumed Area	=	10962	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	362	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**101.3**	m^3/day
Sewage Generation rate (15.4%)	=	**15.6**	m^3/day

19. Fortune Court (15.4%)[7]

Total number of units	=	48	units
Total number of residents	=	115	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**31.1**	m^3/day
Sewage Generation rate (15.4%)	=	**4.8**	m^3/day

20. Mandarin Court (15.4%)[7]

Total number of units	=	20	units
Total number of residents	=	48	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**13.0**	m^3/day
Sewage Generation rate (15.4%)	=	**2.0**	m^3/day

21. Arbuthnot House (15.4%)[7]

Total number of units	=	65	units
Total number of residents	=	156	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**42.1**	m^3/day
Sewage Generation rate (15.4%)	=	**6.5**	m^3/day

Retail

Assumed Area	=	329	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	12	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**3.2**	m^3/day
Sewage Generation rate (15.4%)	=	**0.5**	m^3/day

22. Shiu King Court (15.4%)[7]

Total number of units	=	42	units
Total number of residents	=	101	people -- (2021 Population Census: Average Household Size of 2.4 in Mid Levels East District)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**27.2**	m^3/day
Sewage Generation rate (15.4%)	=	**4.2**	m^3/day

23. Ovolo Central (15.4%)[7]

Numer of hotel rooms	=	45	rooms
Assumed number of employees	=	14	employees -- (assume 3 workers per 10 rooms)
Design Flow	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF J10 - Restaurants & Hotels)
Sewage Generation Rate	=	**21.3**	m^3/day

24. The Centrium (15.4%)[7]

Assumed Area	=	20860	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	1147	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**91.8**	m^3/day
Sewage Generation rate (15.4%)	=	**14.1**	m^3/day

25. Winsome House (15.4%)[7]

Assumed Area	=	4571	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	251	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**20.1**	m^3/day
Sewage Generation rate (15.4%)	=	**3.1**	m^3/day

Retail

Assumed Area	=	85	m^2
Assumed floor area per employee	=	28.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	3	employees
Design flow for commercial employee	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	**0.8**	m^3/day
Sewage Generation rate (15.4%)	=	**0.1**	m^3/day

F&B

Assumed Area	=	85	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	4	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**6.8**	m^3/day
Sewage Generation rate (15.4%)	=	**1.1**	m^3/day

26. Carfield Commercial Building (15.4%)[7]

Assumed Area	=	2148	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	118	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**9.5**	m^3/day
Sewage Generation rate (15.4%)	=	**1.5**	m^3/day

F&B

Assumed Area	=	107	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.7**	m^3/day
Sewage Generation rate (15.4%)	=	**1.3**	m^3/day

27. Harilela House (15.4%)[7]

Assumed Area	=	1041	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Financial, Insurance, Real Estate & Business Services)
Total number of employees	=	57	employees
Design flow for commercial employee	=	0.08	m^3/employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	**4.6**	m^3/day
Sewage Generation rate (15.4%)	=	**0.7**	m^3/day

F&B

Assumed Area	=	104	m^2
Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	5	employees
Design flow for commercial employee	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	**8.4**	m^3/day
Sewage Generation rate (15.4%)	=	**1.3**	m^3/day

Total Flow from Catchment D7

Flow Rate (without Catchmnet Inflow Factor)	=	195.8	m^3/day
Catchment Inflow Factor	=	1.0	Catchment Inflow Factor for Central in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	**195.8**	m^3/day

Note:
(7) It is observed that the existing sewerage pipes after Manhole number: FMH7031328 are separated into 2 flows (i.e. Pipe number: FWD7035600 (225mm) and Pipe number: FWD7035419 (225mm)). As such, discharge from upstream Catchment D7 is therefore assumed to be split into 18.5% generated sewage at each direction.

Table 4a Comparision of the Hydraulic Capacity of Existing Sewers for Sewerage generated from the Proposed Development and Surrounding Catchment Areas

Segment	Pipe Dia. (mm)	Pipe Length (m)	Gradient	Estimated Capacity (L/s)	ADWF (m^3/day)	Contributing Population	Peaking Factor	Swimming Pool/Public Toilet (L/s)	Peak Flow from the Proposed Development and Catchment Areas (L/s)	Contribution from the Proposed Development and the Surrounding Catchment Areas (%)	Status
S1-S2	400	8.0	0.006	187	207.9	770	8	4.5	205.2	109.6%	Spill
S2-S3	400	19.7	0.170	982	351.8	1303	6	9.1	214.9	21.9%	OK
S3-S4	400	1.2	0.229	1141	351.8	1303	6	9.1	214.9	18.8%	OK
S4-S5	400	2.7	0.044	502	351.8	1303	6	9.1	214.9	42.8%	OK
S5-S6	600	10.0	0.004	434	2609.6	9665	5	17.8	350.2	80.7%	OK

Remarks: (1) The value of peaking factor = 4 is used for population 5,000-10,000 incl. stormwater allowance (refers to Table T-5 of GESF)
(2) The value of peaking factor = 6 is used for population 1,000-5,000 incl. stormwater allowance (refers to Table T-5 of GESF)
(3) The value of peaking factor = 8 is used for population <1,000 incl. stormwater allowance (refers to Table T-5 of GESF)

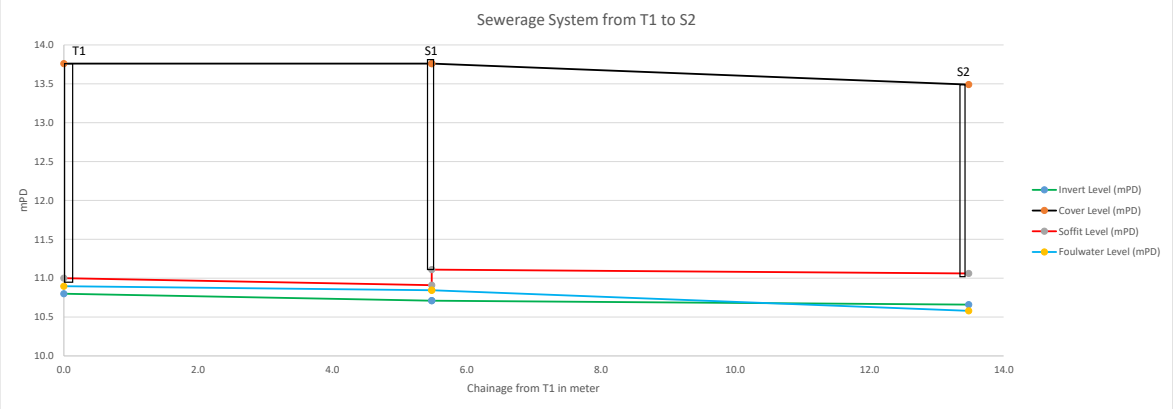
Table 4b Comparision of the Hydraulic Capacity of Proposed Sewers from the Terminal Manhole of the Proposed Development for Sewage generated from the Proposed Development

Segment	Pipe Dia. (mm)	Pipe Length (m)	Gradient	Estimated Capacity (L/s)	ADWF (m^3/day)	Contributing Population	Peaking Factor	Swimming Pool/Public Toilet (L/s)	Peak Flow from the Proposed Development and Catchment Areas (L/s)	Contribution from the Proposed Development and the Surrounding Catchment Areas (%)	Status
T1-S1	200	5.5	0.016	53	181.7	673	8	4.5	21.4	40.1%	OK

Remarks: (1) The value of peaking factor = 8 is used for population <1,000 incl. stormwater allowance (refers to Table T-5 of GESF)

Table 5a Hydraulic Capacity of Existing Sewers - surcharge condition

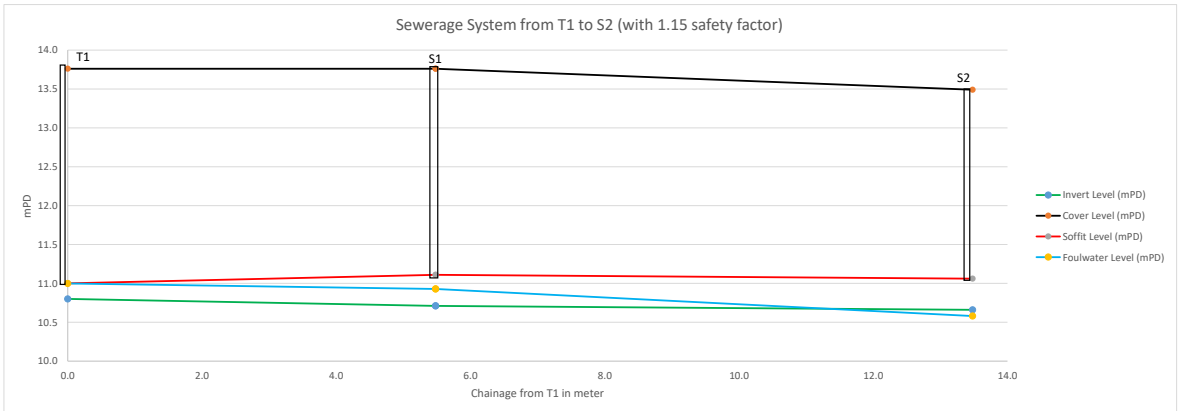
Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	Foulwater Level 1	Foulwater Level 2	Cover Level 1	Cover Level 2	Freeboard 1	Freeboard 2	Friction Loss	Entry and Exit Loss	g	k_s	Required $s_{hydraulic}$	v	V	Area	Q	Delivered Flow rate
			mm	m	mPD	mPD	mPD	mPD	mPD	mPD	m	m	m	m	m/s²	m		m²/s	m/s	m²	m³/s	L/s
T1-S1	-	FMH7030011	200	5.5	10.80	10.71	10.90	10.84	13.76	13.76	2.86	2.92	0.02	0.04	9.81	0.0006	0.0032	0.000001	0.68	0.03	0.02	21.4
S1-S2	FMH7030011	FMH7029798	400	8.0	10.71	10.66	10.84	10.58	13.76	13.49	2.92	2.91	0.06	0.20	9.81	0.0006	0.0075	0.000001	1.63	0.13	0.21	205.2
S2-S3	FMH7029798	FMH7029849	400	19.7	10.18	6.84	10.58		13.49													



Note: 1. The invert level of sewers significantly drops at manhole S2,Sufficient freeboard is expected downstream S2. Therefore,Backwater calculation is conducted upstream manhole S2. Foulwater level at S2 is assumed to be: 6.84 (IL) + 0.400 (pipe dia.) = 10.58mPD as a conservative approach
2. For this assessment, the Colebrook-White Equation has been used to calculate the friction loss. (Sewerage Mannual section 5.2.1)
3. According to DSD'sSewerage Manual (Part 1) section 5.2.2, Local losses are usually small in realtion to the pipeline head losses and are not normally considered. However, as a conservative approach, further allowances have been included for local losses at pipe entry (K=0.5) and exit (K = 1), with a total local loss coefficient of 1.5
4. Comparing the Cover levels and foulwater levels at each manhole, the freeboards are found sufficient (>1m). Therefore, no unacceptable adverse sewerage impacts are identified.
5. Friction loss is deduced by required hydraulic gradient x pipe length, while the local loss is deduced by the equation: $h_f = K\frac{V^2}{2g}$

Table 5b Hydraulic Capacity of Existing Sewers - surcharge condition with 1.15 safety factor

Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	Foulwater Level 1	Foulwater Level 2	Cover Level 1	Cover Level 2	Freeboard 1	Freeboard 2	Friction Loss	Entry and Exit Loss	g	k_s	Required $s_{hydraulic}$	v	V	Area	Q	Required Peak Flow
			mm	m	mPD	mPD	mPD	mPD	mPD	mPD	m	m	m	m	m/s²	m		m²/s	m/s	m²	m³/s	L/s
T1-S1	-	FMH7030011	200	5.5	10.80	10.71	11.00	10.93	13.76	13.76	2.76	2.83	0.02	0.05	9.81	0.0006	0.0042	0.000001	0.78	0.03	0.02	24.6
S1-S2	FMH7030011	FMH7029798	400	8.0	10.71	10.66	10.93	10.58	13.76	13.49	2.83	2.91	0.08	0.27	9.81	0.0006	0.0099	0.000001	1.88	0.13	0.24	236.0
S2-S3	FMH7029798	FMH7029849	400	19.7	10.18	6.84	10.58		13.49													



Note: 1. The invert level of sewers significantly drops at manhole S2,Sufficient freeboard is expected downstream S2. Therefore,Backwater calculation is conducted upstream manhole S2. Foulwater level at S2 is assumed to be: 6.84 (IL) + 0.400 (pipe dia.) = 10.58mPD as a conservative approach
2. For this assessment, the Colebrook-White Equation has been used to calculate the friction loss. (Sewerage Mannual section 5.2.1)
3. According to DSD'sSewerage Manual (Part 1) section 5.2.2, Local losses are usually small in realtion to the pipeline head losses and are not normally considered. However, as a conservative approach, further allowances have been included for local losses at pipe entry (K=0.5) and exit (K = 1), with a total local loss coefficient of 1.5
4. Comparing the Cover levels and foulwater levels at each manhole, no overflowing is found (freeboard >0m). Therefore, no unacceptable adverse sewerage impacts are identified.
5. Friction loss is deduced by required hydraulic gradient x pipe length, while the local loss is deduced by the equation: $h_f = K\frac{V^2}{2g}$

Remarks: (1) g=gravitational acceleration; k_s=equivalent sand roughness; s=gradient; v=kinematic viscosity of water; V=mean velocity
(2) Table 1a: The value of ks = 0.6mm is used for the calculation of slimed clayware sewer, poor condition (based on Table 5: Recommended roughness values in Sewerage Manual)
(3) The value of velocity (V) is referred to the Tables for the hydraulic design of pipes, sewers and channels (8th edition)
(4) Equation used: $V=-\sqrt{(8gDs)}\log\left(\frac{k_s}{3.7D}+\frac{2.51v}{D\sqrt{(2gDs)}}\right)$