

# **1408 & 1412 Commissioners Road West PROPOSED APARTMENT BUILDING**

## **SANITARY SERVICING BRIEF**

Prepared For



June 25, 2024





June 25, 2024

Domday Developments.  
P.O. Box 28145  
London, ON N6H 5E1

Attention: **Jason Leitch**

Re: **1408 & 1412 Commissioners Road West, London**  
**Proposed Apartment Building**  
**Sanitary Servicing Brief**

This brief has been prepared to present the sanitary servicing strategy for the proposed development at 1408 & 1412 Commissioners Road West in London. The 0.30 ha site is located along the south side of Commissioners Road between Griffith Street and Reynolds Road.

The proposed development will introduce a 4-storey apartment building containing 22 units, an internal parking area and amenity area (Figure 1).

## **Sanitary Servicing**

The existing 375mm diameter Commissioners Road sanitary sewer will be utilized to service the proposed development. A 150mm diameter sanitary service will be installed from the 375mm diameter sanitary sewer to an on-site inspection manhole. The sanitary sewer alignment internal to the property will be established through the detailed design process. Figure 2 shows a conceptual sanitary servicing layout for the subject property.

With 22 proposed high-density units (1.6 persons/unit) the theoretical population served by the building is **35 people**. Considering a per capita flow of 230 Liters/Day and an infiltration allowance of 0.100 Liters/Second/Hectare, the theoretical **peak flow** contribution from the development toward the Commissioners Road sanitary sewer will be **0.48 L/sec** (See Appendix A for Sanitary Design Sheet and Drainage Area Plan).

## **Summary**

The conceptual servicing and proposed sanitary peak flows presented in this brief are consistent with typical apartment developments. The final servicing design will be established through the site plan approval process and will be in accordance with the City of London Design Standards and the Ontario Building Code.

Please contact our office if you have any questions.

Prepared By,  
**Archibald, Gray & McKay Engineering Ltd.**



Kasim Abdulmonem, EIT  
Engineer-In-Training

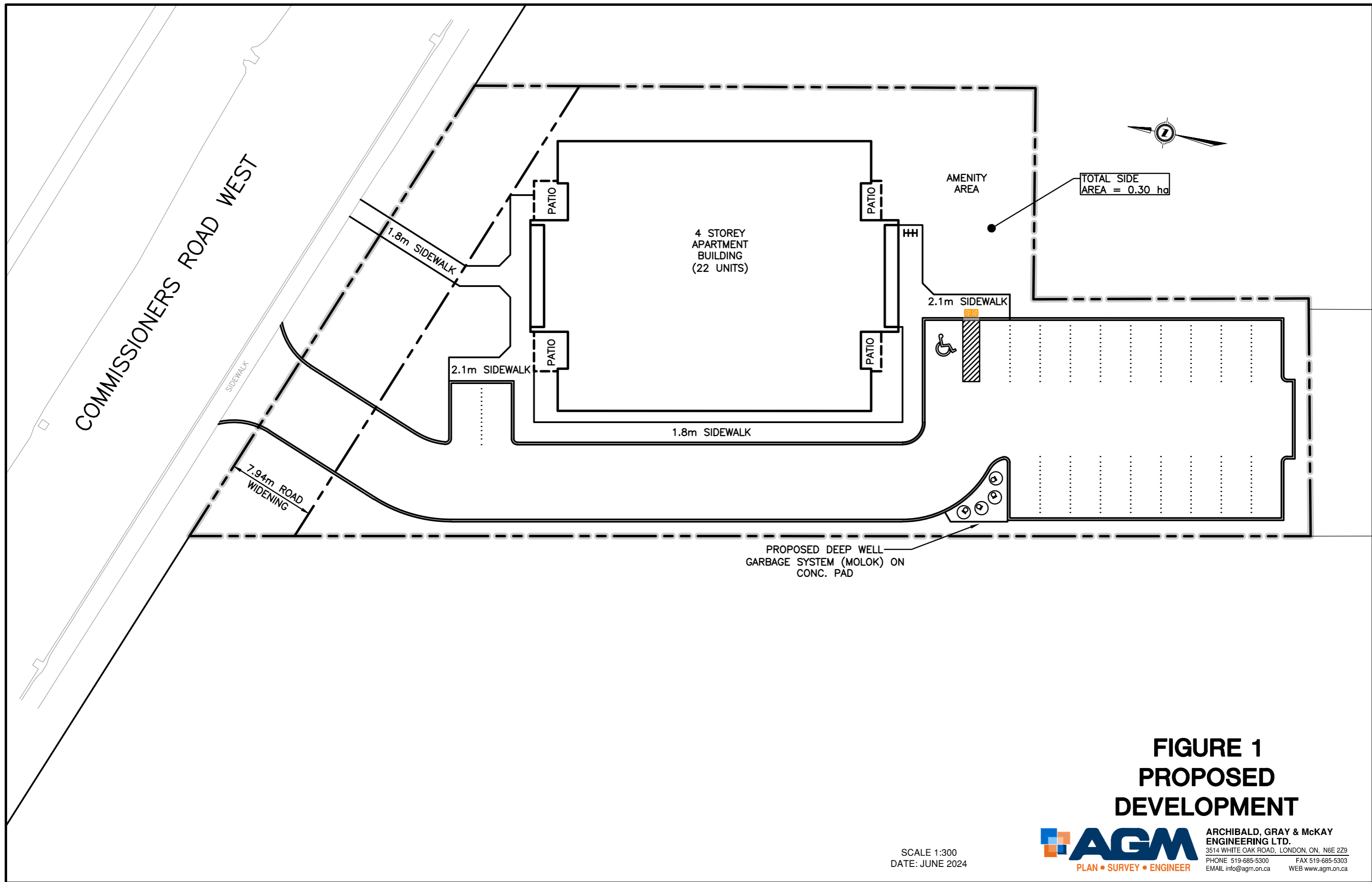


Lukas Grabowski, P.Eng.  
Project Engineer



## FIGURES

Plotted by Lukas Grabowski 2024-06-25 14:24



# FIGURE 1 PROPOSED DEVELOPMENT

SCALE 1:300  
DATE: JUNE 2024

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COMMISSIONERS ROAD WEST



4 STOREY APARTMENT BUILDING (22 UNITS)




82.8-375 SA  
100 SA PDC  
SIDEWALK

7.94m ROAD WIDENING

SA.1

150 SA

### LEGEND

-  82.8-375 SA SAMH EXISTING SANITARY SEWER AND MANHOLE
-  100 SA PDC EXISTING SANITARY SERVICE
-  150 SA SA.1 PROPOSED SANITARY SERVICE AND MANHOLE

SCALE 1:300  
DATE: JUNE 2024

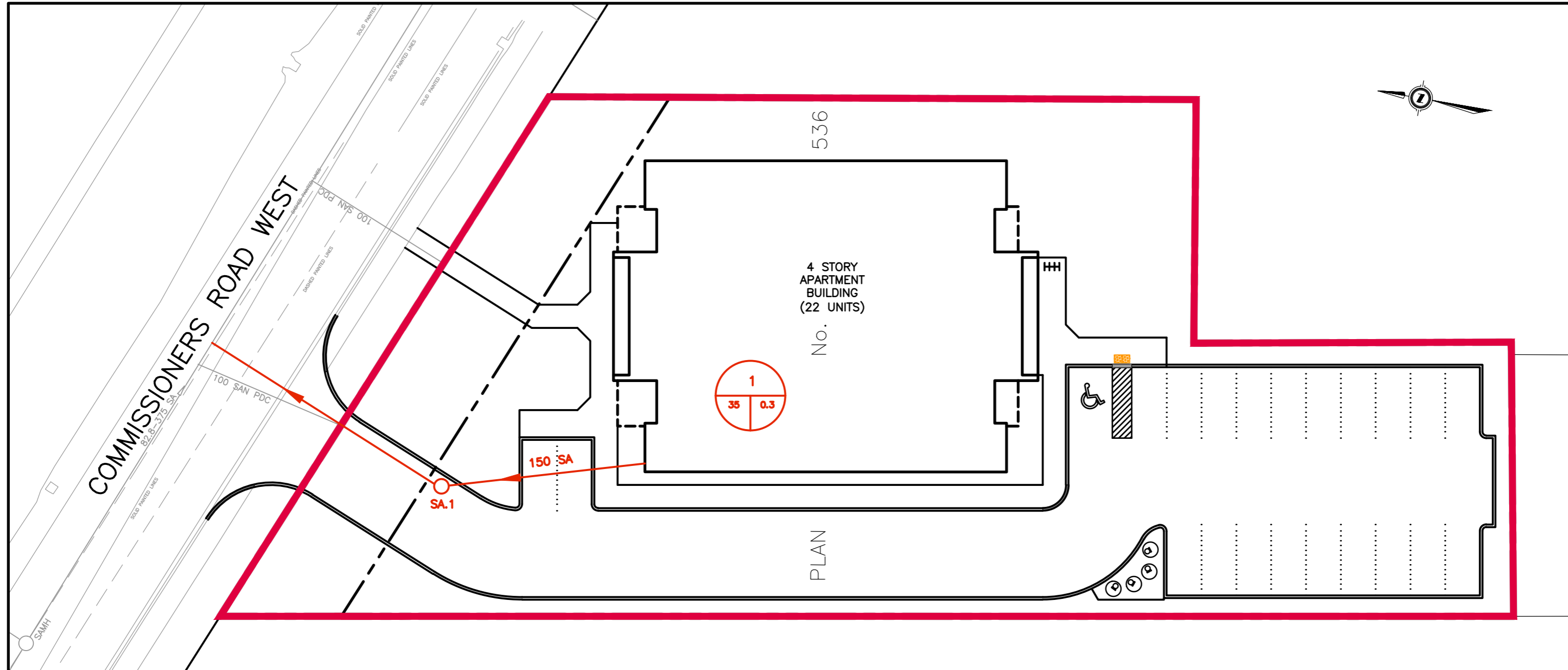
**FIGURE 2**  
**CONCEPTUAL**  
**SANITARY SERVICING**

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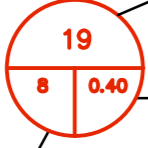
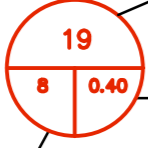
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**APPENDIX A**

**Sanitary Design Sheet and Drainage Area Plan**



### LEGEND

-  EXISTING SANITARY SEWER AND MANHOLE
-  EXISTING SANITARY SERVICE
-  PROPOSED SANITARY SERVICE AND MANHOLE
-  AREA NUMBER:  
SIZE OF AREA IN HECTARES
-  POPULATION

REGISTERED

## SANITARY SEWER DRAINAGE AREA PLAN

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**CITY OF LONDON  
SANITARY SEWER DESIGN SHEET**



**PROPOSED CONDOMINIUM DEVELOPMENT  
1408-1412 Commissioners Road West**

**RESIDENTIAL POPULATION DENSITIES**

(A) LOT BASIS	Single Family	3 Persons per Lot
	Medium Density	2.4 Persons per Unit
(B) AREA BASIS	High Density	1.6 Persons per Unit
	Medium Density	180 Persons per Ha
	High Density	240 Persons per Ha
	Commercial	100 Persons per Ha

**FLOW CRITERIA**

Q = 0.0027 Litres/second/Capita  
 Q = 0.0034 Litres/second/Capita (EXISTING)  
 Qinfiltr = 0.100 Litres/second/Hectare  
 Uncertainty factor 1.1

$PF = \{ 1 + [ 14 / ( 4 + P^{0.5} ) ] \}$

TOTAL FLOW INCLUDES UNCERTAIN DEVELOPMENT FACTOR  
 TOTAL = (SEWAGE \* 1.1) + INFILT

PROJECT No.: 1562-1  
 DESIGNED BY: LRG  
 DATE: JUNE 2024

CHECKED: LRG  
 APPROVED: LRG

LOCATION			AREA		POPULATION						SEWAGE FLOW				SEWER DESIGN								PROFILE	
AREA No.	STREET	FROM MH	TO MH	NET or GROSS	TOTAL Ha	PER Ha	PER UNIT	# of UNITS	SUM POP	TOTAL POP	PEAKING FACTOR	INFILT L/s	SEWAGE L/s	TOTAL L/s	SIZE mm	SLOPE %	CAP L/s	N	VEL m/s	LENGTH m	FALL IN SEWER	DROP IN MANHOLE	INVERT U.S.	INVERT D.S.
1	Proposed Road Commissioners Road	BLDG SA.1	SA.1 EX. SA	0.30	0.30		1.6	22	35.2	35	4.34	0.03	0.41	0.48	150	2.00%	21.54	0.013	1.22	22.17				
2		SA.1		0.00	0.00		0	0	0	0	4.50	0.00	0.00	0.00	150	2.00%	21.54	0.013	1.22	13.50				