

SANITARY FLOW ESTIMATES

ESTIMATED TRIBUTARY AREA AND LAND USE TO 'A'

SUB AREA	DENSITY	UNITS / AREA (m <sup>2</sup> )	DESIGN POPULATION	TRIBUTARY AREA ha
EXISTING DEVELOPMENT				
RESIDENTIAL	3.35 ppu	350	1,173	50.0
GENERAL COMMERCIAL C-4 ZONE	125 ppha		1,625	13.0
LAKE LOON DEVELOPMENT				
PID: 41332503				
BUILDING - A	TOWNHOUSE	3.35 ppu	4	13
	MULTI-UNIT	2.25 ppu	300	675
PID: 00619627				
BUILDING - B	MULTI-UNIT	2.25 ppu	135	304
	SENIOR HOME	2.0 ppu	165	330
	MISC. ★		20	
TOTAL				68.2

★ SENIOR HOME @ 600 L/u/d: OFFICE, STORE @ 6 L / sm / d: BEAUTY PARLOR 200 L/SEAT/d: COFFEE SHOP, RESTAURANT 160 L / SEAT/d, PER ATLANTIC CANADA WASTEWATER GUIDELINE MANUAL.

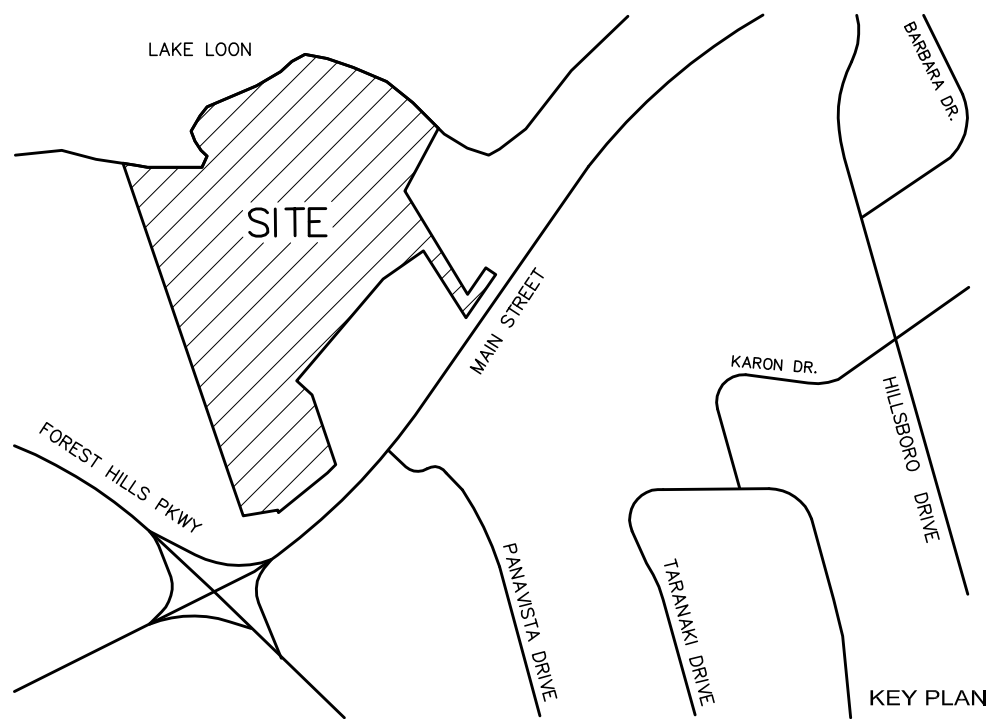
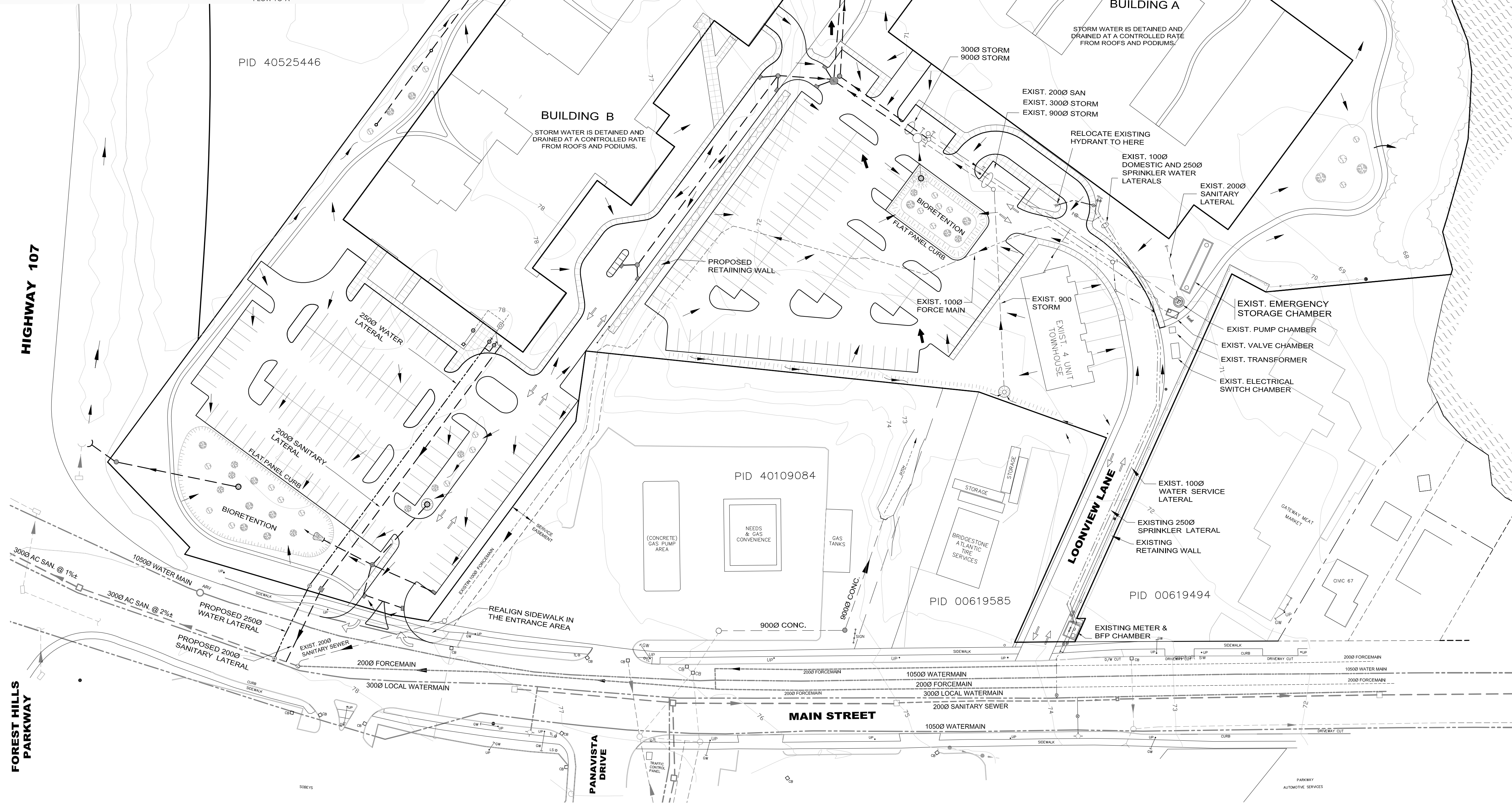
ESTIMATED PEAK FLOW TO 'A'

AVERAGE SEWERAGE FLOW	0.300	m <sup>3</sup> /p/d
INFILTRATION / INFLOW ALLOWANCE	24	m <sup>3</sup> /ha/d
TOTAL TRIBUTARY AREA	68.2	ha
DESIGN POPULATION	4,140	p
PEAK FLOW FACTOR, M	3.32	
AVE. SEWERAGE FLOW	1,242	m <sup>3</sup> /d
AVE. DRY WEATHER FLOW	2,879	m <sup>3</sup> /d
	79	L / s
ESTIMATED DESIGN FLOW	0.079	cms

PIPE FLOW - CARRYING CAPACITY

DOWNSTREAM PIPE FROM 'A' (3000 @ 1.0%)		FULL FLOW FEATURES
DIA. (mm)		300
SLOPE (%)		1.00
MANNINGS n		0.013
DEPTH (mm)		300
FLOW (cms)		0.10★
VEL. (mps)		1.38

★ CARRYING CAPACITY OF THE EXISTING DOWNSTREAM SANITARY MAIN EXCEEDS THE PEAK DRY WEATHER FLOW TO 'A'



GENERAL NOTES

- ALL WORK INCLUDING MATERIAL AND WORKMANSHIP TO BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION OF THE HALIFAX REGIONAL MUNICIPALITY, "MUNICIPAL SERVICES SYSTEMS" AND IN ACCORDANCE WITH THE LATEST REVISION OF THE HALIFAX REGIONAL WATER COMMISSION, "DESIGN AND CONSTRUCTION SPECIFICATIONS".
- ALL WATER, SANITARY SEWER AND STORM SEWER DESIGN SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE HALIFAX REGIONAL WATER COMMISSION DESIGN AND CONSTRUCTION SPECIFICATIONS.
- ALL WORK TO BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS OF THE NOVA SCOTIA DEPARTMENT OF THE ENVIRONMENT.
- INFORMATION SHOWN AS TO EXISTING SERVICES IS APPROXIMATE.
- ALL WATER SERVICES SYSTEM LOCATED WITHIN THE PROPERTY FOR THE PROPOSED DEVELOPMENT ARE PRIVATE AND ARE TO BE OWNED AND MAINTAINED BY THE PROPERTY OWNERS.
- ALL SANITARY AND STORM SYSTEMS LOCATED WITHIN THE PROPERTY ARE PRIVATE AND ARE TO BE OWNED AND MAINTAINED BY THE PROPERTY OWNERS.
- EXISTING ELECTRICAL UNDERGROUND SERVICES BEYOND THE TOWNHOUSE ARE TO BE RE-CONFIGURED TO SUITE.
- UNLESS NOTED OTHERWISE ALL STORM SEWERS ARE 3000 PIPES AND CATCH BASIN LEADS ARE 2000 PIPES.

LEGEND:

EXISTING		PROPOSED
—	SANITARY SEWER	—
—	STORM SEWER	—
—	WATER LATERAL	—
□	SANITARY MANHOLE	■
○	STORM MANHOLE	●
□	PRECAST CATCH BASIN	□
○	OFF STREET CATCH BASIN	○
○	WATER VALVE	○
○	HYDRANT	○
UP*	UTILITY POLE	UP*
→	SURFACE FLOW DIRECTION	→
→	STORM OVERFLOW DIRECTION	→
→	FRENCH DRAIN / BIOSWALE	→
→	FLOWOVER LEVEL SPREADER	→
○	BIORETENTION / BIOSWALE	○
—	CONTOUR (1m INTERVAL)	—

1	25 AUG. 21	ISSUED FOR APPROVAL	
NO.	DATE	REVISION DESCRIPTION	APPR'D



ckm engineering inc.

LANDS OF  
QUEST CAPITAL INC.

PID 00619627

PID 41332503

SERVICING SCHEMATIC

LAKE LOON DEVELOPMENT

HIGHWAY No. 7		WESTPHAL, N.S.
DRAWN	DATE AUGUST 25, 21	PLAN NO. 21-171-01
ENGINEER SOORI	SCALE 1:600	SHEET 1