RAINFALL INTENSITY - DURATION - FREQUENCY VALUES

$I = AT^{B}$

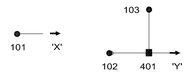
I = RAINFALL RATE (mm/hr)

T = TIME (hrs)

	5 YR.	10 YR.	100 YR.
COEFF. A	25.2	29.0	40.8
EXPONENT B	-0.557	-0.557	-0.555

IDF VALUES PUBLISHED BY ENVIRONMENT CANADA FOR SHEARWATER AIRPORT WEATHER STATION BASE DATA FOR THE PERIOD 1955 - 1997.

PRE-DEVELOPMENT CONDITION



OTTHYMO MODEL SCHEMATIC

OTTHYMO MODEL SUMMARY OF UNIT HYDROGRAPH PARAMETERS

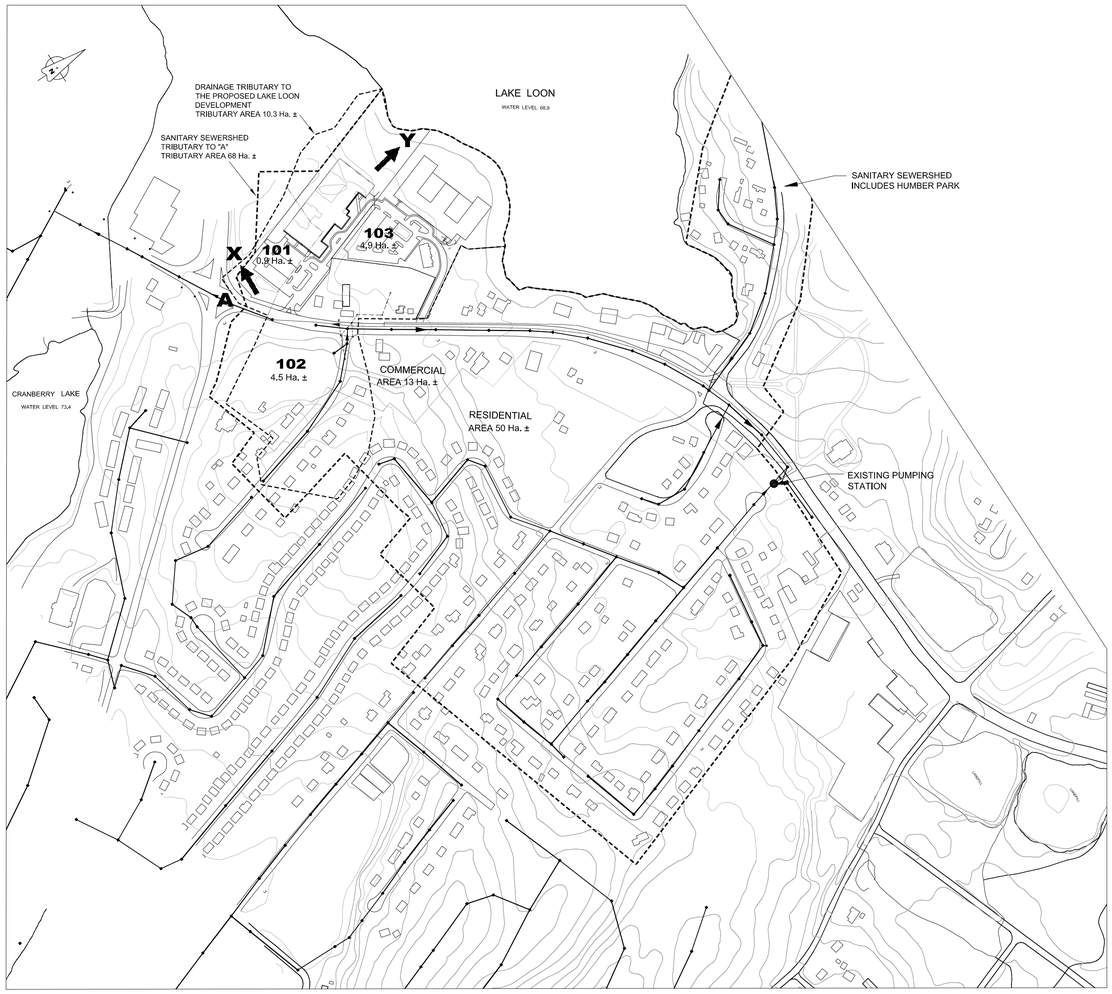
	DRAINAGE AREA		IMPERVIOUS AREA			PERVIOUS AREA	
	#	AREA (Ha)	XIMP	TIMP	DPSI (mm)	CN	IA (mm)
STANDHYD	101	0.9	0.40	0.80	1.5	78	5.0
	102	4.5	0.40	0.65	1.5	78	5.0
NASHYD	103	4.9				77	5.0

PRE-DEVELOPMENT PEAK FLOW ESTIMATES

REFERENCE POINT	PEAK FLOW (cms)		
	5 YR.	10 YR.	100 YR.
X	0.13	0.16	0.23
Y	0.68	0.84	1.46

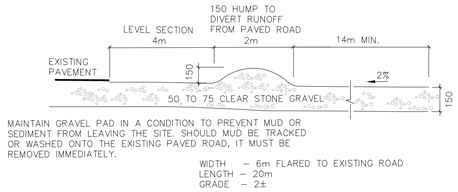
POST-DEVELOPMENT PEAK FLOW

ON-SITE DETENTION STOARGE (COMBINED VOLUME OF SURFACE PONDING AND UNDERGROUND PIPE STORAGE) SHALL BE DESIGNED TO CONTROL THE POST DEVELOPMENT STORM WATER FLOWS TO PRE-DEVELOPMENT CONDITIONS.



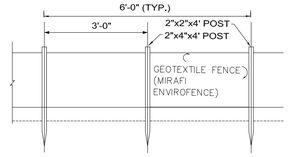
SCALE 1:4000

EROSION & SEDIMENT CONTROL



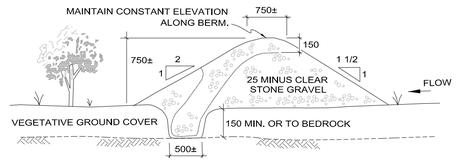
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

N.T.S.



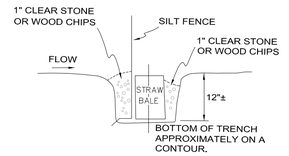
SILTATION FENCE

N.T.S.



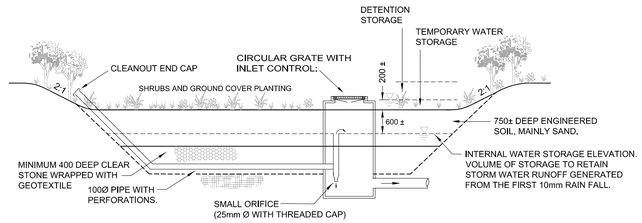
GRAVEL FILTER

N.T.S.



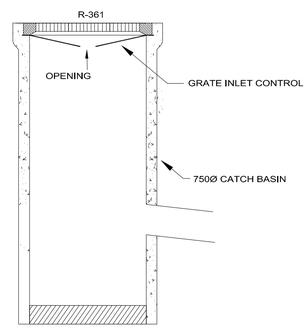
FILTER SPREADER

N.T.S.



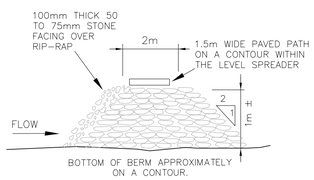
SECTION
BIORETENTION FACILITY

N.T.S.



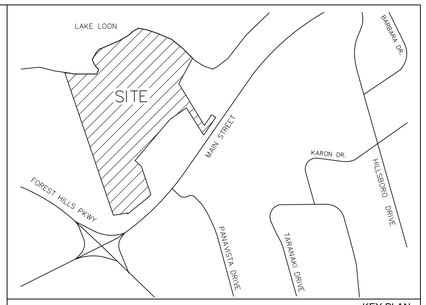
OFF SITE CATCH BASIN

N.T.S.



LEVEL SPREADER

N.T.S.



KEY PLAN

EROSION & SEDIMENT CONTROL

- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED TO PROTECT ALL NATURAL WATERCOURSE FROM DAMAGE DUE TO SILT LADEN RUN-OFF FROM CONSTRUCTION.
- RECOMMENDED CONSTRUCTION AND MAINTENANCE PROCEDURES MAY BE OBTAINED FROM THE LATEST REVISION OF "EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION SITE", PREPARED BY THE NOVA SCOTIA DEPARTMENT OF THE ENVIRONMENT.
- PERIODICALLY INSPECT AND CORRECT EROSION AND SEDIMENTATION CONTROL MEASURES TO ENSURE CONTINUED EFFECTIVENESS.
- STABILIZE ALL DISTURBED AREAS TO PREVENT EROSION IMMEDIATELY AFTER COMPLETION OF WORK.
- PROTECT ALL POINTS OF CONSTRUCTION SITE ENTRANCE AND EXIT TO PREVENT TRACKING OF MUD ONTO PUBLIC STREETS.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION INSTALL SILT CONTROL MEASURES SUCH AS SILT FENCE OR FILTER SPREADER OF GRAVEL FILTER.
- CONSTRUCT STORM SEWER TO DIVERT FLOW FROM OFF SITE DRAINAGE AWAY FROM THE WORK AREA. PUMP THE FLOW, IF REQUIRED AROUND THE WORK SITE.
- ANY SILT LADEN WATER PUMPED FROM THE TRENCH IS TO PASS THROUGH A FILTERING SYSTEM.

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

REGISTERED PROFESSIONAL ENGINEER – PROVINCE OF NOVA SCOTIA
AUGUST 25, 2021
original signed
M. Sooriyakumaran
4921

ckm engineering inc.

LANDS OF
QUEST CAPITAL INC.

PID 00619627 PID 41332503

DETAILS

CONCEPTUAL STORMWATER MANAGEMENT

LAKE LOON DEVELOPMENT

HIGHWAY No. 7 WESTPHAL, N.S.

DRAWN	DATE	PLAN NO.
M.D.M.	AUGUST 25, 2021	21-171-03
ENGINEER	SCALE	SHEET
SOORI	AS SHOWN	3