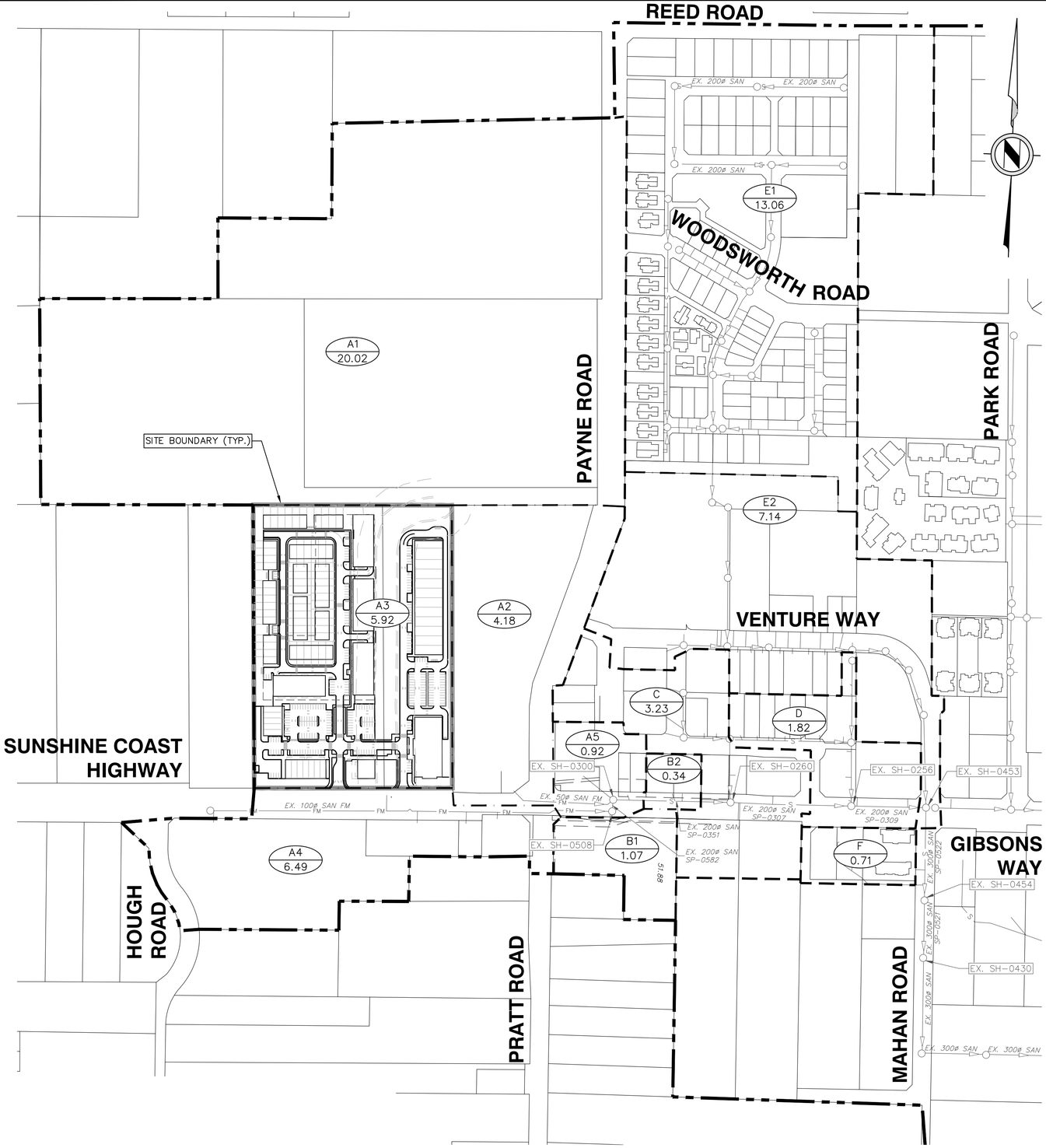

SANITARY SYSTEM DESIGN - CALCULATION SHEET

Municipal Proj #
Project Title: Mixed Use Development
Project Location: 1118 & 1150 Sunshine Coast Gibsons, BC
Developer: Seacliff Properties Ltd

AVERAGE DAILY FLOW
Residential= 410 L/cap/day
MANNINGS "n" 0.013
Inflow & Infiltration 11,200 L/hectare/day

MAXIMUM DEPTH OF FLOW
50% for Prop. Local Sewers
70% for Prop. Trunk Sewers

Peaking Factor = Harmon Equation

Consultant: APLIN MARTIN
APLIN MARTIN ENGINEERING ARCHITECTURE PLANNING SURVEYING

A&M Proj # 23-339
Page: 1 of 1
Designed by: MEC
Checked by: MEC
Date:

Locations			Sub-Catchments								Flow Calculations					Pipe Parameters					Results			
Street	Manhole		Sub-Catchment No.	Area	Cum Area	Land Usage	Pop Density	Density	Pop Rate	Population	Cum Pop	Usage Level	Avg Flow	Peaking Factor	Peak Flow	Inflow & Infiltration	Design Flow	Sewer Design					Flow Ratio	Partial Velocity	Velocity Check	Depth of Flow
	From	To		A (ha)	(ha)		(cap/ha)	(units/ha)	(cap/unit)			L/cap/day	ADWF (L/s)	Pt	PDWF (L/s)	I&I (L/s)	Q (L/s)	S %	DIA mm	L m	V_{cap} m/s	Q_{cap} (L/s)	Q/Q_{cap} %	V_{act} (m/s)	$V_{act} \geq$ 0.60 (m/s)	d/D %
			A1	20.02		AG	11			220				4.50												
			A2	4.18		CM-2	90			376																
			A3	5.92		CM-2	170			1006																
			A4	6.49		CI-1	90			584																
			A5	0.92		CM-2	90			83																
GIBSONS WAY	SH-0508	SH-0300	A	37.53	37.53					2270	2270	410	10.77	3.54	38.15	4.87	43.02	5.08	200	13.00	2.35	73.92	58%	2.44	OK	55%
			B1	1.07		CM-2	90			96																
			B2	0.34		CM-2	90			31																
GIBSONS WAY	SH-0300	SH-0260	B	1.41	38.94					127	2397	410	11.37	3.52	40.07	5.05	45.12	1.57	200	122.86	1.31	41.10	110%	1.31	OK	100%
GIBSONS WAY	SH-0260	SH-0256	C	3.23	42.17	CI-2	90			291	2687	410	12.75	3.48	44.41	5.47	49.88	1.81	200	127.34	1.40	44.13	113%	1.40	OK	100%
GIBSONS WAY	SH-0256	SH-0453	D	1.82	43.99	CI-2	90			164	2851	410	13.53	3.46	46.83	5.70	52.53	0.78	200	78.23	0.92	28.97	181%	0.92	OK	100%
			E1	13.06		RL-1	50			653																
			E2	7.14		CI-2	90			643																
MAHAN ROAD	SH-0453	SH-0454	E	20.20	64.19					1296	4147	410	19.68	3.32	65.32	8.32	73.64	5.88	300	97.56	3.32	234.49	31%	2.94	OK	38%
MAHAN ROAD	SH-0454	SH-0430	D	0.71	64.90	CI-2	90			64	4211	410	19.98	3.31	66.20	8.41	74.62	6.83	300	59.75	3.58	252.72	30%	3.11	OK	37%

LEGEND

- EXISTING SANITARY MANHOLE NUMBER (EX S1)
- EXISTING SANITARY MANHOLE
- LOCAL AREA NAME AND AREA IN HECTARES (E 20.20)
- MAJOR CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- LOCAL AREA BOUNDARY
- EXISTING SANITARY SEWER (S)
- EXISTING SANITARY FORCEMAIN (FM)

NOT FOR CONSTRUCTION

NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD

LEGAL DESCRIPTION: PLAN ON PART OF LOT 'A' BK 4 OF BK 'C' DL 690 GP 1 NWD PLAN 4973 & PART OF LOT 3 BK 'C' DL 690 GP 1 NWD PLAN 3598
B.M. MONUMENT NO. . ELEVATION: .
LOCATED AT . STREET & . AVENUE

REV. NO.	DESCRIPTION	DR	CH	DATE	APP

APLIN MARTIN
EGBC Permit to Practice Number #1001018
Aplin & Martin Consultants Ltd.
#201 - 12448 82 Avenue, Surrey, B.C. Canada V3W 3E9
Tel: (604) 597-9058, Fax: (604) 597-9061, Email: general@aplinmartin.com

CLIENT:
SEACLIFF PROPERTIES (GIBSONS) LTD.
#305-1788 WEST 5TH AVENUE, VANCOUVER, BC V6J 1P2
PH. 604-957-4219

PROJECT:
INFRASTRUCTURE CAPACITY ANALYSIS
1118 & 1150 SUNSHINE COAST HIGHWAY, GIBSONS, BC

The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

TITLE: **SANITARY CATCHMENT PLAN**
DESIGN: MEC CHECK: MEC
DRAWN: OA APPR: MEC
A & M FILE: **23-339**
PROJECT NO. .
SCALE : HORZ. 1:2500 VERT. N/A
DRAWING DATE: **MAY, 2026**
DRAWING NO. .
A & M DRAWING NO. **23-339 - 03**
SHEET NO. **03 of 03**
REV.

0 5 1:500 25m

Sep 23 2026 - 11:01am M:\SUR-LD\2023\23-339\DWG\OFFSITE PRODUCTION\23-339 - SANITARY CATCHMENT PLAN.dwg/A&M A1 Sheet cclark