SANITARY SERVICING REPORT

EDGEWOOD SUBDIVISION
MOUNT BRYDGES, ONTARIO

LDS PROJECT NO. LD-00135

SEPTEMBER 11, 2024

Submitted to:

MUNICIPALITY OF STRATHROY-CARADOC
52 FRANK STREET
STRATHROY, ONTARIO N7G 2R4

DISTRIBUTION (VIA EMAIL):

MUNICIPALITY OF STRATHROY-CARADOC
1960726 ONTAIRO INC.

INTRODUCTION

1960726 Ontario Inc. has retained LDS Consultants Inc. (LDS) to investigate and develop a sanitary servicing strategy for the Edgewood subdivision. The development is situated in the southwestern most quadrant of the Village of Mount Brydges. The 19.3-hectare site consists primarily of agricultural land for fallow production, woodlots and locally significant wetlands. The site is bounded by existing single-family residential developments on Pamela Drive and Church Street to the north and east, Rougham Road and agricultural lands to the west, and Parkhouse Drive and agricultural lands to the south. A site location plan is presented in **Figure 1**. The site will be developed into 168 single-family lots, one stormwater management block and multiple parkland and open space blocks.

Background Information

This document was developed using the following information presented in the following reports:

- Engineering Drawing Set – Edgewood Subdivision, prepared by LDS Consultants Inc., dated July 2024.
- Strathroy-Caradoc Servicing Capacity and Constraints Study, prepared by WSP, dated July 2022.
- Servicing Standards, prepared by Strathroy-Caradoc, dated October 2021.

SANITARY SERVICING

As shown in **Appendix A**, Sanitary Drainage Area Plan, a proposed 375 mm diameter sanitary sewer is located within the Parkhouse Drive R.O.W. Phases 1 and 2 of the subdivision will convey the domestic flows to this sewer with two connections. One connection will be made at the intersection of Edgewood Lane and Parkhouse Drive. Most of the subdivision conveys the domestic flows at the connection located underneath the Trillium Way and Parkhouse Drive intersection.

Sanitary Servicing Demands

The anticipated sanitary discharge rate from the proposed development was estimated using the Strathroy-Caradoc Servicing Standards criteria and population densities based on the proposed residential units. The Sanitary Design Sheet in the **Appendix** provides the expected sanitary discharge from the site to the two outlets described above.

Proposed Sanitary Servicing Plan

The proposed 200 mm diameter sanitary sewers within Edgewood Lane vary in slope, with the flattest portion installed at 0.25% and the steepest at 0.7% having sufficient capacity to convey domestic flows based on the expected sanitary sewer discharge. A proposed 200 mm diameter sanitary sewer within Trillium Way and Perring Drive varies in slope, with the flattest portion installed at 0.35% and the steepest at 1.6%. The proposed 300 mm diameter sanitary sewer within Trillium Way, Block 120 and Perring Drive varies in slope. Still, it maintains a minimum of 0.2%. The sewer underneath Perring Drive has been adequately sized to convey external flows from the neighbouring Forest View development. The design had to consider multiple factors, such as the elevation of the proposed sewers on Parkhouse Drive, the profile of the internal storm sewer system and the grading constraints resulting from setting the underside of footing (U.S.F.) for all dwellings 300 mm above the measured high groundwater level. The depth of the sanitary sewer within the R.O.W. is also set based on maintaining adequate depth to allow sanitary PDCs to be installed beneath the dwellings U.S.F. This results in a buried depth of approximately 2.9 m to 4.3 m for the subdivision R.O.W. sanitary sewer. Please refer to the Edgewood civil engineering design drawing set prepared by LDS, which is provided separately.

WSP conducted a sanitary trunk sewer analysis for the Adelaide Road sewer, showing that the remaining capacity in the existing trunk sanitary sewer will be 80% after the subject site and other future development projects are serviced; see Strathroy-Caradoc Servicing Capacity and Constraints Study (prepared by WSP, July 2022). Therefore, based on this analysis, the existing sanitary trunk sewers will sufficiently serve the development.

CONCLUSIONS

The analyses and results described in this report demonstrate that sanitary servicing can adequately service the proposed development.

We trust this report to be complete and contents satisfactory. Should you have any questions concerning the findings presented herein, please do not hesitate to contact the undersigned,

LDS CONSULTANTS INC.

Luke Jesson, P.Eng.
Water Resources
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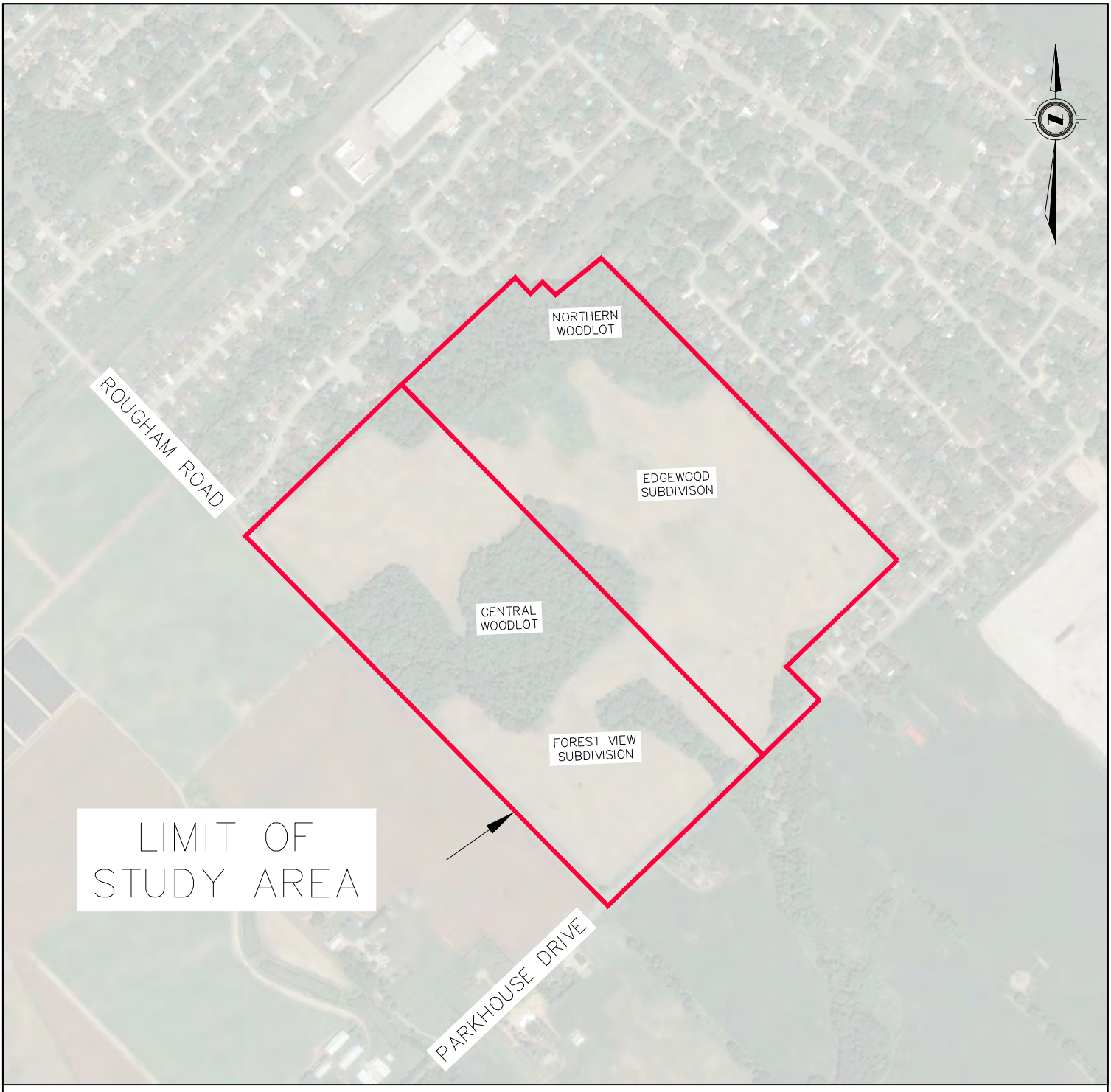
C: 519.859.5942
luke.jesson@LDSconsultants.ca

APPENDIX



EDGEWOOD SUBDIVISION

1960726 ONTARIO INC.

LOCATION PLAN

PROJECT: LD-00135

SCALE: N.T.S.

FIGURE 1

NOTE:
THE OWNER AGREES TO PROVIDE AND INSTALL PARSON MANHOLE INSERTS (OR APPROVED ALTERNATIVE SATISFACTORY TO THE MUNICIPAL ENGINEER) IN ALL SANITARY MAINTENANCE HOLES WITHIN THIS PLAN, UNLESS APPROVED OTHERWISE BY THE MUNICIPAL ENGINEER, AT THE TIME OF THE INSTALLATION OF THE SANITARY MAINTENANCE HOLE. THE OWNER FURTHER AGREES THAT THESE INSERTS ARE TO REMAIN IN PLACE UNTIL ASSUMPTION OF THE SUBDIVISION, AND THAT THEY WILL BE REMOVED, BY THE OWNER, AT NO COST TO THE MUNICIPALITY.

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2024-09-11 3:31:37 PM by: MARY.GEORGE

EXISTING SERVICES	DRAWING #, SOURCE	DATE	CONSTRUCTED SERVICES	COMPLETION

DETAILS		No.	REVISIONS	DATE	CONSULTANT
DESIGN	AH/SB	1	AS PER SPRIET'S COMMENTS	OCT. 2019	LDS
DRAWN BY	AH/SB	2	AS PER SPRIET'S COMMENTS	MAR. 2020	LDS
CHECKED	AH/SB	3	REVISED SEWERS ON PARKHOUSE DR.	MAR. 2021	LDS
APPROVED	AG	4	AS PER MUNICIPAL COMMENTS	AUG. 2021	LDS
DATE	2024-09-11	5	REVISED SEWER SIZES	NOV. 2022	LDS
		6	AS PER MUNICIPAL COMMENTS	JUN. 2023	LDS
		7	REVISED SEPARATED SERVICING	SEPT. 2023	LDS
		8	AS PER MUNICIPAL/SPRIET COMMENTS	OCT. 2023	LDS
00135_03-04_SAN.dwg		9	AS PER MUNICIPAL COMMENTS	DEC. 2023	LDS
		10	REVISED DRAFT PLANS	JUL. 2024	LDS

CONSULTANT OR DIVISION

LDS

ENGINEER'S STAMP

LICENSED PROFESSIONAL ENGINEER
A. H. GUBBELS
JUL 2024
PROVINCE OF ONTARIO

STRATHROY-CARADOC
URBAN OPPORTUNITY – RURAL HOSPITALITY

SCALE
HORZ – 1 : 1000
10 0 20m

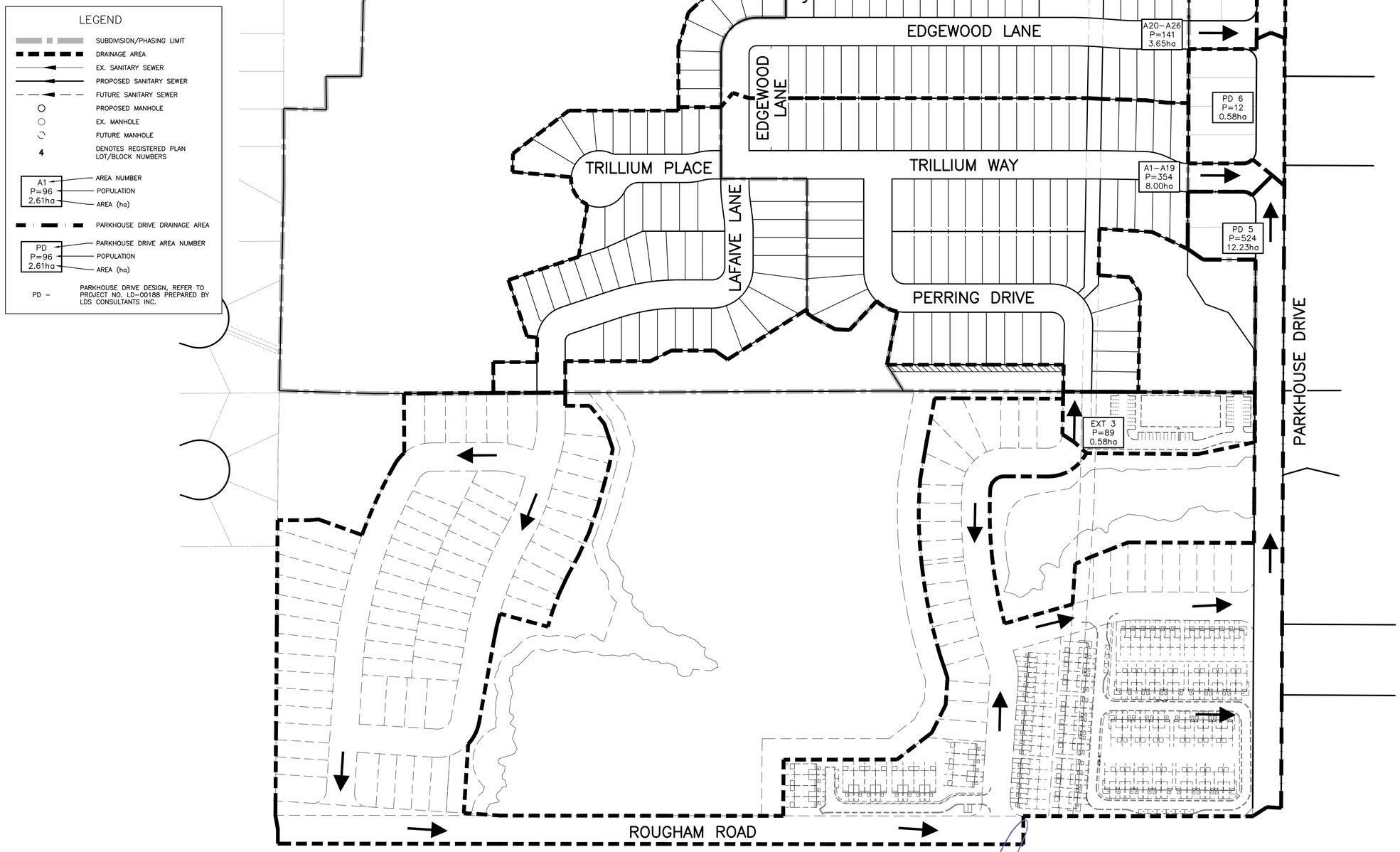
TITLE
EDGEWOOD SUBDIVISION
1960726 ONTARIO INC.

SANITARY DRAINAGE AREA PLAN

PROJECT No. LD-00135

SHEET No. 3 of 24

PLAN FILE No.



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						9	AS PER MUNICIPAL COMMENTS	DEC. 2023	LDS
					00135_03-04_SAN.dwg	10	REVISED DRAFT PLANS	JUL. 2024	LDS

CONSULTANT OR DIVISION
LDS

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LICENSED PROFESSIONAL ENGINEER
A. H. GUBBELS
JUL. 2024
PROVINCE OF ONTARIO

STRATHROY-CARADOC
URBAN OPPORTUNITY - RURAL HOSPITALITY

SCALE
HORZ – 1 : 1500
15 0 30m

TITLE
EDGEWOOD SUBDIVISION
1960726 ONTARIO INC.

EXTERNAL SANITARY DRAINAGE AREA PLAN

PROJECT No.
LD–00135

SHEET No.
4 of 24

PLAN FILE No.

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RESIDENTIAL COMMERCIAL AND INSTITUTIONAL POPULATION DENSITIES

SANITARY SEWER DESIGN SHEET
MUNICIPALITY OF STRATHROY-CARADOC

THE FOLLOWING POPULATION ALLOWANCES WILL APPLY WHEN DESIGNING SANITARY SEWERS:
LOW DENSITY (SINGLE-FAMILY / SEMI-DETACHED) = 30 UNITS / HECTARE @ 3 PEOPLE / UNIT
MEDIUM DENSITY (MULTI-FAMILY / TOWNHOUSE / ROWHOUSE) = 75 UNITS / HECTARE @ 2.4 PEOPLE / UNIT
HIGH DENSITY (APARTMENTS) = 150 - 300 UNIT / HECTARE @ 1.6 PEOPLE / UNIT
COMMERCIAL / INSTITUTIONAL = 100 PEOPLE / HECTARE
SECONDARY SCHOOL = 1500 PEOPLE
ELEMENTARY SCHOOL = 400 PEOPLE

DESIGN CRITERIA
SEWAGE = 365 LITRE / CAPITA / DAY
INFILTRATION = 6740 LITRES / HECTARE / DAY
PEAKING FACTOR $1 + \frac{14}{4 + P^{0.5}}$

DATE: July 15, 2024
DESIGNED BY: AH

PROJECT NAME: EDGEWOOD SUBDIVISION

PROJECT FILE NO. LD-00135

LOCATION				AREA			POPULATION						SEWAGE FLOWS		Q	SEWER DESIGN						PROFILE			INVERT ELEVATION		
AREA No.	STREET	FROM MANHOLE	TO MANHOLE	NET OR GROSS	DELTA HECTARES	TOTAL HECTARES	PER HECTARE	PER LOT	NO. OF LOTS	DELTA POP.	TOTAL POP.	PEAKING FACTOR	INFILT L / s	SEWAGE L / s	TOTAL L / s	PIPE SIZE mm	n	SLOPE %	CAP L / s	VELOCITY m / s	LENGTH m	FALL IN SEWER	HEADLOSS IN U.S. MH	DROP IN MANHOLE	U.S.	D.S.	
A1	Lafaive Lane	S1	S2	N	0.15	0.15		3	1	3	3	4.45	0.01	0.06	0.07	200	0.013	0.70	27.44	0.87	27.2	0.190	0.000	0.030	246.234	246.043	
A2	Lafaive Lane	S2	S3	N	0.12	0.27		3	2	6	9	4.42	0.02	0.18	0.21	200	0.013	0.70	27.44	0.87	15.8	0.111	0.000	0.030	246.013	245.903	
A3	Lafaive Lane	S3	S4	N	0.50	0.77		3	9	27	36	4.34	0.06	0.73	0.79	200	0.013	0.35	19.40	0.62	60.4	0.211	0.000	0.030	245.873	245.661	
A4	Lafaive Lane	S4	S5	N	0.51	1.28		3	9	27	63	4.29	0.10	1.26	1.36	200	0.013	0.35	19.40	0.62	51.4	0.180	0.000	0.030	245.631	245.451	
A5	Lafaive Lane	S5	S6	N	0.23	1.51		3	3	9	72	4.28	0.12	1.43	1.55	200	0.013	0.35	19.40	0.62	17.2	0.060	0.000	0.030	245.421	245.361	
A6	Lafaive Lane	S6	S9	N	0.41	1.92		3	5	15	87	4.26	0.15	1.72	1.87	200	0.013	0.35	19.40	0.62	80.2	0.281	0.000	0.030	245.331	245.050	
A7	Trillium Place	S7	S8	N	0.43	0.43		3	6	18	18	4.39	0.03	0.37	0.40	200	0.013	0.60	25.40	0.81	25.4	0.152	0.000	-	246.860	246.708	
A8	Trillium Place	S8	S9	N	0.64	1.07		3	11	33	51	4.31	0.08	1.02	1.11	200	0.013	1.60	41.49	1.32	78.6	1.258	-	0.030	246.678	245.420	
A9	Trillium Way	S9	S10	N	0.25	3.24		3	2	6	144	4.20	0.25	2.81	3.06	200	0.013	0.35	19.40	0.62	37.7	0.132	0.000	0.489	244.931	244.800	
A10	Trillium Way	S10	S12	N	0.35	3.59		3	5	15	159	4.18	0.28	3.09	3.37	200	0.013	0.80	29.34	0.93	63.4	0.507	0.000	0.200	244.600	244.092	
A11	Perring Drive	S11	S12	N	0.60	0.60		3	7	21	21	4.38	0.05	0.43	0.47	200	0.013	0.80	29.34	0.93	86.9	0.695	0.000	0.050	244.795	244.100	
A12	Trillium Way	S12	S13	N	0.83	5.02		3	14	42	222	4.13	0.39	4.26	4.65	200	0.013	1.75	43.39	1.38	91.0	1.593	0.000	0.500	243.592	242.000	
A13	Trillium Way	S13	S19	N	0.53	5.55		3	9	27	249	4.11	0.43	4.76	5.19	200	0.013	0.50	23.19	0.74	60.4	0.302	0.000	0.152	241.848	241.546	
A14	Perring Drive	S14	S15	N	0.56	0.56		3	9	27	27	4.36	0.04	0.55	0.59	200	0.013	1.30	37.40	1.19	55.5	0.722	0.000	-	243.389	242.668	
A15	Perring Drive	S15	S17	N	0.66	1.22		3	11	33	60	4.30	0.10	1.20	1.29	200	0.013	0.81	29.57	0.94	70.1	0.570	0.000	0.600	242.068	241.498	
EXT 1	Fut. Development	CAP2	S16	N	0.58	0.58		-	-	89	89	4.26	0.05	1.76	1.81	300	0.013	0.40	61.16	0.87	4.7	0.019	-	0.025	241.671	241.652	Values in this row obtained from Forest View Development
A16	Perring Drive	S16	S17	N	0.44	1.02		3	5	15	104	4.24	0.08	2.05	2.13	300	0.013	0.35	57.29	0.81	58.2	0.204	-	0.025	241.627	241.423	
	Block 120	S17	S18	N	0.00	2.24		3	0	0	164	4.18	0.17	3.18	3.36	300	0.013	0.20	43.24	0.61	12.8	0.026	0.000	0.025	241.398	241.372	
	Block 120	S18	S19	N	0.00	2.24		3	0	0	164	4.18	0.17	3.18	3.36	300	0.013	0.20	43.24	0.61	88.5	0.177	0.000	0.025	241.348	241.171	
A17	Trillium Way	S19	S20	N	0.32	8.11		3	4	12	425	4.01	0.63	7.92	8.55	300	0.013	0.20	43.24	0.61	30.5	0.061	0.000	0.025	241.146	241.085	
A18	Trillium Way	S20	CAP3 (B.O.)	N	0.36	8.47		3	6	18	443	4.00	0.66	8.24	8.90	300	0.013	0.20	43.24	0.61	39.6	0.079	0.000	0.025	241.060	240.980	
	Trillium Way	CAP3 (B.O.)	S14 (B.O.)	N	0.00	8.47		3	0	0	443	4.00	0.66	8.24	8.90	300	0.013	0.20	43.24	0.61	4.2	0.008	0.000	0.000	240.980	240.972	
A19	Trillium Way	S14 (B.O.)	S34 (B.O.)	N	0.11	8.58		3	0	0	443	4.00	0.67	8.24	8.91	300	0.013	0.20	43.24	0.61	55.5	0.111	0.000	0.021	240.951	240.840	
A20	Edgewood Lane	S21	S22	N	0.19	0.19		3	3	9	9	4.42	0.01	0.18	0.20	200	0.013	0.70	27.44	0.87	34.2	0.239	0.000	-	246.133	245.893	
A21	Edgewood Lane	S22	S23	N	0.12	0.31		3	2	6	15	4.40	0.02	0.31	0.33	200	0.013	0.40	20.74	0.66	14.5	0.058	0.000	0.300	245.593	245.535	
A22	Edgewood Lane	S23	S24	N	0.92	1.23		3	13	39	54	4.31	0.10	1.08	1.18	200	0.013	1.28	37.11	1.18	94.0	1.203	0.000	0.300	245.235	244.032	
A23	Edgewood Lane	S24	S25	N	0.81	2.04		3	14	42	96	4.25	0.16	1.90	2.05	200	0.013	1.20	35.93	1.14	80.1	0.961	0.000	0.500	243.532	242.571	
A24	Edgewood Lane	S25	S26	N	0.69	2.73		3	8	24	120	4.22	0.21	2.35	2.57	200	0.013	0.60	25.40	0.81	69.8	0.419	0.000	0.600	241.971	241.552	
A25	Edgewood Lane	S26	S27	N	0.58	3.31		3	9	27	147	4.19	0.26	2.86	3.12	200	0.013	0.35	19.40	0.62	62.0	0.217	0.000	0.400	241.152	240.935	
A26	Edgewood Lane	S27	CAP1 (B.O.)	N	0.35	3.66		3	3	9	156	4.19	0.29	3.03	3.32	250	0.013	0.25	29.73	0.61	6.5	0.016	0.000	0.050	240.885	240.869	
	Edgewood Lane	CAP1 (B.O.)	S33 (B.O.)	N	0.00	3.66		3	0	0	156	4.19	0.29	3.03	3.32	250	0.013	0.25	29.73	0.61	59.6	0.149	0.000	-	240.869	240.720	

STORM SEWER DESIGN SHEET
MUNICIPALITY OF STRATHROY-CARADOC

THE FOLLOWING 'C' VALUES WILL APPLY WHEN DESIGNING STORM SEWERS:
PARKS, OPEN SPACE 0.20
SINGLE FAMILY / SEMI DETACHED 0.35
TOWNHOUSE / ROWHOUSE 0.65
APARTMENTS 0.65
COMMERCIAL, INSTITUTIONAL & INDUSTRIAL 0.70
DENSELY BUILT, PAVED 0.70

FLOW Q - 2.78 x C x A x I
WHERE Q=PEAK FLOW IN LITRES PER SECOND (L / s)
A=AREA IN HECTARES (Ha)
C=RUNOFF COEFFICIENT
I=RAINFALL INTENSITY (mm / hr)
RETURN PERIOD = 5 YEARS

DATE: July 15, 2024
DESIGNED BY: AH/MG

PROJECT NAME: EDGEWOOD SUBDIVISION

PROJECT FILE NO. LD-00135

LOCATION				AREA		TOTAL (A x C)						RAINFALL INTENSITY			Q	SEWER DESIGN							PROFILE			INVERT ELEVATION		
												TIME ENTRY mm																
AREA No.	STREET	FROM MANHOLE	TO MANHOLE	DELTA HECTARE	TOTAL HECTARES	'C'	AxC	TOTAL SECTION	TOTAL LATERAL	TOTAL SEWER	TOTAL 2.78AxC	SECTION	ACCUM.	INTENSITY mm/hr	L / s	PIPE SIZE mm	n	SLOPE %	CAP L / s	VELOCITY m / s	LENGTH m	TIME OF FLOW	FALL IN SEWER	HEADLOSS IN U.S. MH	DROP IN MANHOLE	U.S.	D.S.	
A1	Lafaive Lane	R1	R2	0.14	0.14	0.35	0.049	0.000	0.000	0.049	0.136	0.00	10.0	107.7	14.7	300	0.013	0.45	64.9	0.92	31.8	0.58	0.143	0.000	0.000	246.893	246.750	
A2	Lafaive Lane	R2	R3	0.12	0.26	0.35	0.042	0.049	0.000	0.091	0.253	0.58	10.6	105.0	26.6	300	0.013	0.45	64.9	0.92	13.3	0.24	0.060	0.000	0.030	246.720	246.660	
A3	Lafaive Lane	R3	R4	0.50	0.76	0.35	0.175	0.091	0.000	0.266	0.739	0.24	10.8	103.5	76.5	375	0.013	0.35	103.7	0.94	59.9	1.06	0.210	0.000	0.075	246.585	246.376	
A4	Lafaive Lane	R4	R5	0.45	1.21	0.35	0.158	0.266	0.000	0.424	1.179	1.06	11.9	98.9	116.6	375	0.013	0.50	124.0	1.12	50.9	0.76	0.255	0.000	0.030	246.346	246.091	
A5	Lafaive Lane	R5	R6	0.20	1.41	0.35	0.070	0.424	0.000	0.494	1.373	0.76	12.6	95.5	131.2	450	0.013	0.30	156.2	0.98	21.7	0.37	0.065	0.000	0.075	246.016	245.951	
A6	Lafaive Lane	R6	R10	0.49	1.90	0.35	0.172	0.494	0.000	0.666	1.851	0.37	13.0	93.9	173.9	450	0.013	0.40	180.3	1.13	77.7	1.14	0.311	0.000	0.030	245.921	245.610	
A7	Trillium Place	R7	R8	0.47	0.47	0.35	0.165	0.000	0.000	0.165	0.459	0.00	10.0	107.7	49.4	300	0.013	0.45	64.9	0.92	28.3	0.51	0.127	0.000	-	247.381	247.254	
A8	Trillium Place	R8	R10	0.60	1.07	0.35	0.210	0.165	0.000	0.375	1.043	0.51	10.5	105.0	109.5	300	0.013	1.85	131.5	1.86	81.6	0.73	1.510	0.000	0.030	247.224	245.714	
A9	Edgewood Lane	R11	R9	0.13	0.13	0.35	0.046	0.000	0.000	0.046	0.128	0.00	10.0	107.7	13.8	300	0.013	0.45	64.9	0.92	12.7	0.23	0.057	0.000	0.000	246.237	246.180	
A10	Edgewood Lane	R9	R10	0.33	0.46	0.35	0.116	0.046	0.000	0.162	0.450	0.23	10.2	106.6	48.0	300	0.013	0.60	74.9	1.06	85.2	1.34	0.511	0.000	0.030	246.150	245.639	
A11	Trillium Way	R10	R18	0.16	3.59	0.35	0.056	0.375	0.828	1.259	3.500	*	**13.0**	93.9	328.7	525	0.013	0.65	346.7	1.60	29.0	0.30	0.189	0.196	0.300	245.414	245.225	HL=(1.5x1.0)x(1.60^2/(2*9.8)) = 0.196
A12	Trillium Way	R18	R19	0.57	4.16	0.35	0.200	1.259	0.000	1.459	4.056	0.30	13.3	92.8	376.2	525	0.013	0.90	408.0	1.88	94.8	0.84	0.853	0.000	0.030	245.195	244.342	
A13	Trillium Way	R19	R20	0.58	4.74	0.35	0.203	1.459	0.000	1.662	4.620	0.84	14.2	89.9	415.2	525	0.013	1.00	430.0	1.99	60.8	0.51	0.608	0.000	0.400	243.942	243.334	
A14	Trillium Way	R20	R23	0.59	5.33	0.35	0.207	1.662	0.000	1.869	5.196	0.51	14.7	88.2	458.1	600	0.013	0.60	475.6	1.68	67.4	0.67	0.404	0.000	0.750	242.584	242.180	
A15	Edgewood Lane	R11	R12	0.34	0.34	0.35	0.119	0.000	0.000	0.119	0.331	0.00	10.0	107.7	35.6	300	0.013	2.00	136.8	1.93	38.4	0.33	0.768	0.000	0.000	246.029	245.261	
A16	Edgewood Lane	R12	R13	0.58	0.92	0.35	0.203	0.119	0.000	0.322	0.895	0.33	10.3	106.1	95.0	300	0.013	1.60	122.3	1.73	58.6	0.56	0.938	0.000	0.030	245.231	244.293	
A17	Edgewood Lane	R13	R14	0.70	1.62	0.35	0.245	0.322	0.000	0.567	1.576	0.56	10.9	103.5	163.1	375	0.013	1.60	221.8	2.01	72.1	0.60	1.153	0.000	0.075	244.218	243.065	
A18	Edgewood Lane	R14	R15	0.35	1.97	0.35	0.123	0.567	0.000	0.690	1.918	0.60	11.5	100.7	193.1	450	0.013	0.60	220.8	1.39	36.4	0.44	0.218	0.000	0.122	242.943	242.725	
A19	Edgewood Lane	R15	R17	0.40	2.37	0.35	0.140	0.690	0.000	0.830	2.307	0.44	11.9	98.4	227.1	450	0.013	0.70	238.5	1.50	39.1	0.43	0.274	0.000	0.050	242.675	242.401	
EXT 3	Parkhouse Drive	-	R27 (B.O.)	0.25	0.25	0.90	0.225	0.000	0.000	0.225	0.626	-	11.0	102.5	64.1													
A20	Edgewood Lane	R27 (B.O.)	CAP2 (B.O.)	0.71	0.96	0.35	0.249	0.225	0.000	0.474	1.318	0.00	11.0	102.5	135.1	450	0.013	0.25	142.5	0.90	56.6	1.05	0.142	0.000	-	243.485	243.343	
	Edgewood Lane	CAP2 (B.O.)	R16	0.00	0.96	0.35	0.000	0.474	0.000	0.474	1.318	1.05	12.1	98.0	129.1	450	0.013	0.25	142.5	0.90	23.4	0.44	0.059	0.000	0.000	243.343	243.285	
A21	Edgewood Lane	R16	R17	0.36	1.32	0.35	0.126	0.474	0.000	0.600	1.668	0.44	12.5	96.3	160.7	525	0.013	0.25	215.0	0.99	42.3	0.71	0.106	0.000	0.075	243.210	243.104	
A22	Block 119	R17	R23	0.08	3.77	0.20	0.016	0.600	0.830	1.446	4.020	*	**12.7**	95.1	382.3	675	0.013	0.23	403.1	1.13	93.5	1.38	0.215	0.000	0.950	242.154	241.939	
EXT 4	Parkhouse Drive	-	R29 (B.O.)	0.20	0.20	0.90	0.180	0.000	0.000	0.180	0.500	-	11.0	102.5	51.3													
A23	Trillium Way	R29 (B.O.)	CAP4 (B.O.)	0.37	0.57	0.35	0.130	0.180	0.000	0.310	0.862	0.00	11.0	102.5	88.3	375	0.013	0.35	103.7	0.94	56.6	1.00	0.198	0.000	-	242.989	242.791	
	Trillium Way	CAP4 (B.O.)	R21	0.00	0.57	0.35	0.000	0.310	0.000	0.310	0.862	1.00	12.0	98.0	84.5	375	0.013	0.35	103.7	0.94	1.0	0.02	0.004	0.000	0.000	242.791	242.787	
A24	Trillium Way	R21	R22	0.36	0.93	0.35	0.126	0.310	0.000	0.436	1.212	0.02	12.0	98.0	118.8	450	0.013	0.25	142.5	0.90	38.9	0.72	0.097	0.000	0.000	242.787	242.690	
A25	Trillium Way	R22	R23	0.22	1.15	0.35	0.077	0.436	0.000	0.513	1.426	0.72	12.7	95.1	135.6	450	0.013	0.25	142.5	0.90	27.7	0.52	0.069	0.000	0.000	242.690	242.621	
A26	Block 120	R23	R31	0.05	10.30	0.35	0.018	1.869	1.959	3.846	10.692	*	**14.8**	87.8	939.0	900	0.013	0.30	991.5	1.56	59.8	0.64	0.179	0.000	0.000	241.939	241.759	
A27	Perring Drive	R24	R25	0.41	0.41	0.35	0.144	0.000	0.000	0.144	0.400	-	10.0	107.7	43.1	300	0.013	0.60	74.9	1.06	55.8	0.88	0.335	0.000	-	245.348	245.013	
A28	Perring Drive	R25	R26	0.24	0.65	0.35	0.084	0.144	0.000	0.228	0.634	0.88	10.9	103.5	65.6	300	0.013	0.60	74.9	1.06	18.5	0.29	0.111	0.000	0.500	244.513	244.402	
A29	Perring Drive	R26	R27	0.67	1.32	0.35	0.235	0.228	0.000	0.463	1.287	0.29	11.2	102.0	131.3	375	0.013	0.90	166.3	1.51	73.7	0.82	0.663	0.121	0.600	243.802	243.138	HL=(1.5x0.70)x(1.51^2/(2*9.8)) =0.121
A30	Perring Drive	R27	R30	0.55	1.87	0.35	0.193	0.463	0.000	0.656	1.824	0.82	12.0	98.4	179.5	450	0.013	0.80	255.0	1.60	65.5	0.68	0.524	0.000	0.604	242.534	242.010	
EXT 1	Future Development	CAP 3	R28	8.72	8.72	0.466	4.067	0.000	0.000	4.067	11.306	-	28.1	59.2	668.9	900	0.013	0.15	701.1	1.10	9.4	0.14	0.014	0.000	-	242.199	242.185	Values in this row obtained from Forest View Development
A31	Block 117	CBMH12	R28	0.22	0.22	0.20	0.044	0.000	0.000	0.044	0.122	-	10.0	107.7	13.2	300	0.013	0.50	68.4	0.97	15.0	0.26	0.075	0.000	-	242.830	242.755	
A32	Perring Drive	R28	R29	0.30	9.24	0.35	0.105	4.067	0.044	4.216	11.720	0.14	28.2	59.0	691.7	900	0.013	0.15	701.1	1.10	43.0	0.65	0.065	0.000	0.030	242.155	242.090	
A33	Perring Drive	R29	R30	0.08	9.32	0.35	0.028	4.216	0.000	4.244	11.798	0.65	28.9	58.2	686.4	900	0.013	0.15	701.1	1.10	16.5	0.25	0.025	0.000	0.030	242.060	242.035	
A34	Block 120	R30	R31	0.03	11.22	0.35	0.011	0.656	4.244	4.911	13.653	0.25	29.1	57.8	788.6	900	0.013	0.21	829.6	1.30	31.4	0.40	0.066	0.000	0.110	241.925	241.859	
A35	Block 122 (SWM)	R31	HDWL 1	0.00	21.52	0.50	0.000	3.846	4.911	8.757	24.344	*	**21.9**	69.6	1694.4	1200	0.013	0.20	1743.5	1.54	9.7	0.10	0.019	0.000	0.100	241.759	241.740	
EXT 2a	Block 118	EX. SEWER	R32			Max. capacity of the existing 525mm dia. storm sewer, included in all down stream sewers -									235.5													
	Block 118	R32	R33	0.00	0.00	0.35	0.000	0.000	0.000	0.000	0.000	-	-	-	235.5	525	0.013	0.33	247.0	1.14	6.6	0.10	0.022	0.000	-	242.531	242.510	
EXT 2b	Block 118	EX. SEWER	R33			Max. capacity of the existing 450mm dia. storm sewer, included in all down stream sewers -									156.2													
	Block 118	R33	R34	0.00	0.00	0.35	0.000	0.000	0.000	0.000	0.000	-	-	-	391.7	600	0.013	0.45	411.9	1.46	13.0	0.15	0.059	0.000	0.150	242.360	242.301	
	Block 119	R34	R35	0.00	0.00	0.35	0.000	0.000	0.000	0.000	0.000	-	-	-	391.7	600	0.013	0.45	411.9	1.46	93.2	1.07	0.419	0.000	0.043	242.258	241.839	
	Block 119	R35	R36	0.00	0.00	0.35	0.000	0.000	0.000	0.000	0.000	-	-	-	391.7	600	0.013	1.45	739.3	2.61	25.0	0.16	0.363	0.000	0.000	241.839	241.476	
	Block 120	R36	R37	0.00	0.00	0.35	0.000	0.000	0.000	0.000	0.000	-	-	-	391.7	750	0.013	0.13	401.4	0.91	35.5	0.65	0.046	0.000	0.150	241.326	241.280	
	Block 122 (SWM)	R37	R38	0.00	0.00	0.35	0.000	0.000	0.000	0.000	0.000	-	-	-	391.7	750	0.013	0.13	401.4	0.91	33.5	0.61	0.044	0.000	0.157	241.123	241.079	
	Block 122 (SWM)	R38	HDWL 4	0.00	0.00	0.35	0.000	0.000	0.000	0.000	0.000	-	-	-	391.7	750	0.013	0.13	255.0	1.60	35.7	0.77	0.046	0.000	0.033	241.046	241.000	

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EXISTING SERVICES	DRAWING #, SOURCE	DATE	CONSTRUCTED SERVICES	COMPLETION	DETAILS		No.	REVISIONS	DATE	CONSULTANT
					DESIGN	AH/SB	1	AS PER SPRIET'S COMMENTS	OCT. 2019	LDS
					DRAWN BY	AH/SB	2	AS PER SPRIET'S COMMENTS	MAR. 2020	LDS
					CHECKED	AH/SB	3	REVISED SEWERS ON PARKHOUSE DR.	MAR. 2021	LDS
					APPROVED	AG	4	AS PER MUNICIPAL COMMENTS	AUG. 2021	LDS
					DATE	2024-07-17	5	REVISED SEWER SIZES	NOV. 2022	LDS
							6	AS PER MUNICIPAL COMMENTS	JUN. 2023	LDS
							7	REVISED SEPARATED SERVICING	SEPT. 2023	LDS
							8	AS PER MUNICIPAL/SPRIET COMMENTS	OCT. 2023	LDS
							9	AS PER MUNICIPAL COMMENTS	DEC. 2023	LDS
					00135_07_DESIGN SHEET.dwg		10	REVISED DRAFT PLANS	JUL. 2024	LDS

CONSULTANT OR DIVISION

ENGINEER'S STAMP
LICENSED PROFESSIONAL ENGINEER
A. H. GUBBELS
JUL. 2024
PROVINCE OF ONTARIO

URBAN OPPORTUNITY - RURAL HOSPITALITY

SCALE: NOT TO SCALE

TITLE
EDGEWOOD SUBDIVISION
WESTDELL DEVELOPMENT CORP.
SANITARY & STORM SEWER DESIGN SHEETS

PROJECT No. LD-00135
SHEET No. 7 of 24
PLAN FILE No.

LDS CONSULTANTS INC.

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