DESIGN FLOW CALCULATION

Owner Contact	Property Loc	ation		
Ross Robbins	7395 Twenty Ro	oad		
	ARN: 260203	001248900	Township Lo	ts and Concesssions: Grimsby
	ARN	260203001248900	Township	Grimsby
	Street	7395	Lot	Lot 2
	Number		Concession	Range 2
	Street Name	20	Full Text	Grimsby Township Lot 2 Range 2
	Full Street	20 ROAD	T dil Toxe	Offiniably Township Lot 2 Runge 2

Total Daily Design Sanitary Sewage (TDDSS) Flow

Item Contributing to the TDDSS Flow	Quantity	Sewage Flow (L/day)
Base Flow for Dwelling		
Bedroom Units (Q _B)	4	2000.0
Additional Flow Modifiers		
Bedrooms (>5)	0	1000
Fixture units (Q _F)	32.5	625.0
Floor Area m ² (Q _A)	260	600.0

Unit Flow Calculation	TDDSS Flow
TDDSS Flow $(Q_B+QB) =$	3500.0 L/day
TDDSS Flow $(Q_B+Q_F) =$	2625.0 L/day
TDDSS Flow $(Q_B+Q_A) =$	2600.0 L/day

Based on the Criteria of Section 8.2.1.3 of the OBC, the higher flow is chosen for design:

Total Design Daily Sanitary Sewage Flow:	2625.0 L/day
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	Number	Fixture Units	Total
Bathroom Group (with flush tank)	3	6.0	18.0
Additional Toilets	1	4.0	4.0
Additional bathroom shower	1	1.5	1.5
Additional bathroom sink	3	1.5	4.5
Kitchen Sinks	1	1.5	1.5
Dishwasher*	1	0.0	0.0
Clothes washer	1	1.5	1.5
Laundry Tub	1	1.5	1.5
additional fixture unit load for dishwashe	er if connected to kitche	n sink	
			32.5

2767.7 ft ²	10.76426265 ft ² /m ²
	257.11933 m ²

Finished Floor Area Flow Modifie	r Calculation	
Home (m ²)	Flow Adjustment	
200	0.0	
60	600.0	
0	0.0	
0	0.0	
260	600.0	

Main Floor 2767.7 ft2 4-bedroom 2-bathroom groups	
2-extra bathroom sinks 1-extra bathroom show 1-powder room	

Basement 0-bedrooms 1-bathroom group

RAISED FILTER BED INSTALLATION SPECIFICATIONS Fully Raised Filter Bed

T underlying soil = > 50

Owner Contact	Property Loca	ation	
Ross Robbins	7395 Twenty Ro	oad	
	ARN: 2602030	001248900	Township Lots and Concesssions: Grimsby
	ARN	260203001248900	Township Grimsby
		7395	Lot Lot 2
	Number	20	Concession Range 2
	Street Name	20	Full Text Grimsby Township Lot 2 Range 2
	Full Street	20 ROAD	

Application Rate (L/m2)	Q (L/day)		Required Filter bed area (m²)
	75	2625.0	35.0

Area Bed Installation Summary:

	Stone Loading Area	<u>35.0</u> m ²	
Number	of runs:	6	
Length o	f run (m):	6.1	20.0 ft
Total len	gth of pipes (m):	36.6	120.1 ft
Length o	f header/footer (m)	3.6	11.8 ft
Stone Lo	ad Area length (m):	6.3	20.7 ft
Stone Lo	ad Area Width (m):	5.6	18.4 ft
Each Filter Bed Summary:	Stone Loading Area (2 stone load areas 5 m apart provided)	35.28 m ²	379.6 ft ²
ritter bed Summary:			
Α	Underlying filter media contact area (QT/850) =	154.41 m ²	1661.5 ft ²
	Filter Media Length (m) =	15.50 m	50.9 ft
	Filter Media Width (m) =	10.00 m	32.8 ft
	Each Filter Media Contact Area =	155.00 m ²	1667.8 ft ²
B Mantle C	Contact Area (Q/4) =	656.25 m ²	
	Square Mantle in direction of flow		
	Mantle Length (m) =	31.25 m	102.5 ft
	Trapezoid Mantle Start Width =	21.00 m	68.9 ft
	Trapezoid Mantle Finish Width =	21.00	68.9 ft
	Expanded Mantle Average Width (m) =	21.00 m	68.9 ft
	Mantle Contact Area Provided	656.25 m ²	7061.3 ft ²

Sentic	Tank	Summary	,
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Standard Septic Tank Size (2 x Q)
Septic tank provided

5250 litres 5400 litres

PROFILE SKETCH



