

Seeley Lake Sewer District
REGULAR BOARD MEETING AGENDA

DATE: Thursday, January 20, 2022
PLACE: Virtual Meeting via Zoom
Computer: <https://us02web.zoom.us/j/8563339071?pwd=Z0NhbmRoWitlUFpyME8vTWJ0QlZ0Zz09>
Telephone: 1 669 900 6833
Meeting ID: 856 333 9071
Password: 123528
TIME: 6:00 p.m.

ROLL CALL

Tom Morris, President	○	05/2024
Pat Goodover, Vice President	○	05/2022
Jason Gilpin, Director	○	05/2024
Cheri Thompson, Director	○	05/2022
Vacant, Director	○	05/2022
Felicity Derry, Secretary	○	

1. OPENING: Scheduled for 6:00 PM Via Zoom
2. APPROVAL OF AGENDA:
3. EXECUTIVE SESSION:
 - a} Executive Session Minutes – *Discussion/Action*
 - b} Manager Contract - *Discussion*
4. PRESIDENT’S COMMENTS:
5. PUBLIC COMMENT: On Items not on the Agenda of the Meeting and within the Jurisdiction of the Sewer District [MCA 2-3-103 (1)a]
6. CORRESPONDENCE: Missoula County Public Works
7. MINUTES: December 16, 2021 - *Action*
8. FINANCIAL REPORTS:
 - a} Invoices – *Action*
 - b} November 2021
9. MANAGER’S REPORT: Status Report
10. UNFINISHED BUSINESS:
 - a} Action Plan for 2021-2022
 - i. Committee Reports -*Discussion/Action*
 - b} Mission Update – *Discussion/Action*
 - c} Income Survey – *Discussion*
 - d} Board Appointee Interview - *Discussion/Action*
 - e} Resolution 01202022 – Nutrient Budget Analysis – *Discussion/Action*
 - f} Amendments to the Website - *Discussion/Action*
11. NEW BUSINESS:
 - a} Manager Contract – *Discussion/Action*
 - b} RFP - *Discussion/Action*
12. NEXT SCHEDULED MEETING: February 17, 2022
13. AGENDA ITEMS FOR NEXT SCHEDULED MEETING:
14. ADJOURNMENT:

From: **Shane Stack** <sstack@missoulacounty.us>
Date: Thu, Dec 23, 2021, 1:58 PM
Subject: Seeley Lake Sewer District Questions
To: Tom Morris <sldsboard1@gmail.com>
Cc: Michelle Denman <mdenman@missoulacounty.us>, Kim Myre <kmyre@missoulacounty.us>, Mike Snook <msnook@missoulacounty.us>, John Hart <jhart@missoulacounty.us>, Bob Parcell <bparcell@missoulacounty.us>

Hi Tom,

It was good to visit with you this afternoon. Here is a summary of the topics we covered, and some answers to your questions and requests.

File Storage

You are welcome to use the office for file storage. Kim has electronic files on SharePoint at the county as well as a thumb drive. Kim will send a letter and a thumb drive with the electronic files. We will keep the files at the county as a backup if you ever happen to need them. Kim, please add anything I may have missed here.

Conference Room

I have cc'd Bob Parcel regarding the use of the conference room. It sounds like he is your best contact for access once the district resumes in person meetings.

Assessments

Kim managed the assessments in the past, however she won't be available to do that work now. She will help with any questions you might have for the next tax season as the Seeley Sewer District manages that process.

Michelle Denman in Finance and Mike Snook in GIS would be the two best contacts to assist with assessments in the future. I have cc'd both of them on this email.

\$100,000 Set Aside

The \$100,000 set aside that was in the previous agreement will not be a commitment by the county at this time. If and when the Seeley Sewer District has a project that is ready for construction, that would be the time to make the request to the commissioners for a \$100,000 to help fund the project.

Two Year Agreement

Another two year agreement at this time isn't necessary given the changes since the signing of the previous agreement. If the Seeley Sewer District reaches a point in the process of developing a sewer system for the community of Seeley Lake, the county would be interested in revisiting the development of another agreement.

Tom, as I stated earlier today, feel free to keep in touch and let us know if you need any assistance from Public Works or the county. If you have questions, let me know, and I can do my best to help answer those.

Happy holidays Tom.

Best,
Shane



Shane Stack P.E.

Public Works Director

MISSOULA COUNTY PUBLIC WORKS

☎ (o) 406.258.4818
[c] 406.830.0103

✉ sstack@missoulacounty.us

🌐 missoulacounty.us

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MISSOULA COUNTY
PUBLIC WORKS DEPARTMENT
SEELEY LAKE
PO Box 415
Seeley Lake, MT 59868-0415
P: 406.546.2581
E: kmyre@missoulacounty.us



December 27, 2021

CERTIFIED MAIL

Seeley Lake – Missoula County Sewer District
PO Box 403
Seeley Lake, MT 59868-0403

Dear Seeley Lake – Missoula County Sewer District:

The enclosed flash drive provides a copy of the electronic files maintained by Missoula County Public Works Department for the Seeley Lake – Missoula County Sewer District.

Regards,

A handwritten signature in black ink, appearing to read "Kim Myre".

Kim Myre
Seeley Lake Projects and Operations Coordinator

enclosure (1 flash drive)

**SEELEY LAKE SEWER DISTRICT
REGULAR BOARD MEETING
December 16, 2021**

Tom Morris	President	PRESENT	Jason Gilpin	Director	PRESENT
Pat Goodover	Vice President	PRESENT	Cheri Thompson	Director	PRESENT
	Director	VACANT	Felicity Derry	Secretary	PRESENT
	Manager	VACANT	Kim Myre	Missoula Co	ABSENT

Public Attendance - Appendix A

CALL TO ORDER:

The meeting was called to order at 6:01pm and was held remotely via Zoom. Tom Morris requested that everybody who had joined the meeting identify themselves for the record.

APPROVAL OF AGENDA:

The Board discussed rearranging several items on the agenda.

Tom Morris moved to move the vote to hire a manager after Correspondence and the Sewer Presentation after that. Pat Goodover seconded the motion. There was no further discussion. The motion was carried.

Tom Morris	Aye
Pat Goodover	Aye
Jason Gilpin	Aye
Cheri Thompson	Aye
Director	Vacant

Tom Morris called for an Executive Session at 6:05pm and requested that all of the meeting attendees who would not be attending the Executive Session be placed in the Zoom waiting room for the duration of the Executive Session.

EXECUTIVE SESSION:

The Board entered into the Executive Session at 6:06pm. The Executive Session concluded and the public rejoined the meeting from the Zoom waiting room. The Regular Board Meeting resumed at 6:23pm.

PRESIDENT'S COMMENTS:

Tom Morris apologized that the Executive Session had taken so long, but it had been an important discussion regarding hiring an interim manager. Tom Morris noted that it was a full agenda and requested that everyone be respectful of everybody's time.

PUBLIC COMMENT:

None.

CORRESPONDENCE:

None.

Vote to Hire a Manager

Tom Morris noted that this was an interim position, not a permanent fulltime job, and the Board might be looking at the other candidate for a position in the future. It was a difficult decision as both of the candidates were highly qualified.

Jason Gilpin moved to hire William Decker as the interim manager for the Seeley Lake Sewer District. Pat Goodover seconded the motion. Cheri Thompson agreed that it had been a very difficult decision, as the candidates were so equal and the only thing that swayed the decision was William Decker's sewer experience. David Losee thanked the Board for their consideration and to let him know if he could be of help in the future. There was no further discussion. The motion was carried.

Tom Morris	Aye
Pat Goodover	Aye
Jason Gilpin	Aye
Cheri Thompson	Aye
Director	Vacant

MINUTES:

November 18, 2021 Regular Meeting

Cheri Thompson moved to approve the minutes of the November 18, 2021 Board Meeting. Tom Morris seconded the motion. Jason Gilpin noted a typo on page 7. Cheri Thompson restated her motion to move to accept the minutes with the correction of the spelling of December. Tom Morris seconded the motion. There was no further discussion. The motion was carried.

Tom Morris	Aye
Pat Goodover	Aye
Jason Gilpin	Aye
Cheri Thompson	Aye
Director	Vacant

Sewer System Presentation - BioMicrobics

Nathan Pierce from BioMicrobics felt that a better sewer solution for the Seeley Lake area would be to look at an individual approach, as well as a community approach. Their proposed treatment solution would be for approximately 160,000 gallons per day, which was twice the requested amount of 80,000 gallons. A treatment system of that size would not exceed \$2.5million. BioMicrobics had a product, the Retrofast, that could rectify failing septic systems and bring them up to the needed treatment level. These products could be installed into existing septic tanks. The Retrofast cost \$3,600, not including installation. Most of their systems had been approved by DEQ for individual residential use, as well as some commercial use, and systems could treat to below 10mg/L for nitrate.

Tom Morris questioned if treating below 7.5mg/L would substantially increase the cost. Nathan Pierce, felt that it would not. Most of BioMicrobic's systems met or exceeded that level. BioMicrobic was currently working with DEQ to get a designation below the 7mg/L. The effluent was clean and could be used for non-food crop irrigation, which could open up possibilities for smaller properties. Due to BioMicrobic's treatment level, DEQ had given them an approximately 50% reduction in the size of their drainfields. The size of the drainfield was reviewed.

Nathan Pierce outlined the possibility of utilizing cluster systems for some properties and reviewed how their products worked with existing septic systems. Also, how neighborhood systems that utilized irrigation could be more efficient in some areas. Nathan Pierce estimated that the cost of such a system for 12,000 gallons per day, would be under \$500,000.

Nathan Bourne questioned how the step tank effected the treatment. Nathan Pierce then outlined how their step system worked. Nathan Pierce also reviewed how the Retrofast product worked with existing systems and how high nitrate levels could be lowered. Typically, the installation cost for the Retrofast was \$500 to \$750. The equipment cost was \$3,600, without shipping.

FINANCIAL REPORTS:

Invoices – November 2021

Tom Morris reviewed the November invoices.

Tom Morris moved to pay the invoices. Cheri Thompson seconded the motion. There was no discussion. The motion was carried.

Tom Morris	Aye
Pat Goodover	Aye
Jason Gilpin	Aye
Cheri Thompson	Aye
Director	Vacant

October 2021 Financial Reports

Felicity Derry reviewed the October financial reports. The Board had no questions regarding the October financial reports.

MANGERS REPORT:

Hopefully there would be one next month.

UNFINISHED BUSINESS:

Action Plan for 2021-2022

Committee Report

Tom Morris had not received any further correspondence from Shane Stack and would report when there had been some progress. Cheri Thompson requested that Gregory Robertson unmute himself and confirm who he was. There was no answer from the attendee listed as Gregory Robertson.

Pat Goodover noted that he had not heard from Beth Hutchinson regarding the income survey. Pat Goodover suggested that the Board draft a request for proposals (RFP) to send to the various sewer system presenters. The Board discussed using an RFP as the next step. The Board agreed that the questions should be sent to all of the presenters. Formulating an RFP was discussed further. The District boundaries were discussed. Tom Morris appointed Pat Goodover and Jason Gilpin to form a committee to work on an RFP.

Nathan Bourne suggested that the Board wait for the manager to come onboard, as he might have input on how to get the project done.

Cheri Thompson had written an article about how septic tanks work, but had not had a chance to circulate it to the Board prior to the meeting and requested that the Board approve the article for publication. Cheri Thompson also requested that Reorganizing the Website be moved to the January agenda.

Tom Morris moved to publish Cheri's article. Pat Goodover seconded the motion. There was no discussion. The motion was carried.

Tom Morris	Aye
Pat Goodover	Aye
Jason Gilpin	Aye
Cheri Thompson	Aye
Director	Vacant

Mission Update

Nathan Bourne informed the Board that Missoula County did not receive the grant for the water study and recommended that the District look at drilling test wells, utilizing the Bureau of Mines for guidance on the well locations. Tom Morris noted that the wells were in the budget and the Board could discuss utilizing the Bureau of Mines.

Income Survey

None.

Board Appointee Interview

Tom Morris noted that there was nobody to interview and that the election was coming up pretty soon.

NEW BUSINESS:

Resolution 12162021 – Nutrient Budget Analysis

Tom Morris suggested that a resolution could be used as an agreement with CRC, which would save the cost of using legal counsel. Discussion followed. **Cheri Thompson moved to table this item until CRC comes to us with a proposal in a common language.** Utilizing a contract was discussed further. Nathan Bourne added that at the previous meeting the Board had voted to spend \$5,515 to do the testing regiment. The Board continued to discuss the possibility of CRC creating a contract.

Cheri Thompson moved to move this to next month and request that they (CRC) submit a contract. Discussion followed on the Board using a resolution rather than just a vote to accept CRC's proposal for the eDNA testing or if a contract was needed. The CRC testing proposal was reviewed and whether a contract was required was discussed further. The Board agreed that a contract was not needed and discussed what should be included in a resolution. This item would be moved to the January agenda.

Finalize Questions – Sewer System Presentations

The Board agreed that these questions should be sent to all of the sewer system presenters.

Amendments to the Website

Moved to the January agenda.

NEXT REGULARLY SCHEDULED MEETING: January 20, 2022

AGENDA ITEMS FOR NEXT SCHEDULED MEETING:

Tom Morris noted that the following items should be added to the January agenda: Action Plan – Committee Reports, Mission Update, Income Survey, RFP, Reorganize the Website, Resolution for CRC Testing and Board Appointee Interview. The newly hired manager should be invited to the meeting.

Having the brochure at the Historical Society was discussed. There were no objections from the Board.

ADJOURNMENT OF MONTHLY BOARD MEETING:
Tom Morris moved to adjourn the meeting at 7:39pm.

Attest:

Tom Morris, President

Felicity Derry, Secretary

DRAFT

**Seeley Lake Sewer District
Invoices for December 2021**

District:

Seeley Lake Water District - <i>Inv#204 December 2021</i>		\$98.35
Pathfinder - <i>Inv#27146 Annual Subscription</i>		\$44.00
Felicity Derry - <i>December/January</i>		\$315.00
Flathead Lake Bio Station - <i>Inv#FRL5268</i>		\$1,120.00
		\$1,577.35

Account Balances as of 01/14/2022

Citizens Alliance Account	\$4,670.28		\$4,670.28
Reserve	\$28,000.00		\$28,000.00
Missoula County Account	\$160,210.79		\$158,633.44
	<u>\$192,881.07</u>	(\$1,577.35)	<u>\$191,303.72</u>
	\$192,881.07		\$191,303.72

Seeley Lake - Missoula County Water District

PO Box 503
 Seeley Lake, MT 59868-0503

Phone # 406-677-2559

Invoice

DATE	INVOICE #
1/1/2022	204

BILL TO
Seeley Lake Sewer District PO Box 403 Seeley Lake, MT 59868-0403

SHIP TO

P.O. NUMBER	TERMS	REP	SHIP	VIA	
	Due on Receipt		1/1/2022	Vince	

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
6	MiscI	Bookkeeping & Admin December 2021	15.00	90.00
167	MiscO	Copies	0.05	8.35

THANK YOU!	Total	\$98.35
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Pathfinder LLC, PO Box 702, Seeley Lake MT 59868
406-677-2022

Seeley Lake Sewer District
PO Box 403
Seeley Lake, MT 59868

Invoice #:
00027146

				TERMS	DATE	PG.
				Net 10	12/31/21	1
QTY.	DESCRIPTION	PRICE	UNIT		EXTENDED	
1	Subscriptions-Local, 1/18/23	\$44.00	1		\$44.00	
				TOTAL	\$44.00	
				ON ACCOUNT	\$0.00	
				BALANCE	\$44.00	

ENTERED
11/9/22

Please pay promptly; a Late Charge will be added to all past due balances.
Each month a \$10 late charge will be added to outstanding balances under \$100, and balances of \$100 and over will be charged 10% of the outstanding balance.

Felicity Derry
November/December 2021

Date	Time	Subject	Hours
12/16/2021	12:30 -2:00p	Admin	1.50
12/16/2021	5:45 -7:45p	Meeting Prep & Meeting	2.00
1/5/2022	4:00 - 5:15p	Mintes	1.25
1/10/2022	5:45-9:15p	Minutes & Admin	3.50
1/11/2022	7:00-9:30p	Minutes & Admin	2.50
1/12/2022	6:45-11:45a	Minutes & Admin	5.00
1/13/2022	7:15-9:00p	Admin	1.75
			<hr/> 17.50
	17.5 x \$18 = \$315		

\$315.00
\$315.00



**FLATHEAD LAKE
BIO STATION**
UNIVERSITY OF MONTANA

Analyses Summary

Invoice

FRL_5268

Invoice Date: Jan 13, 2022

Customer ID: SHS

Bill To: Seeley-Swan High School Water Chems
456 Airport Road

Seeley Lake, MT 59868

Attn: SLWD (Felicity Derry)

Quantity	Test Description	Unit Price	Extension
15	Total Suspended Solids	\$16.00	\$240.00
2	E. Coli	\$35.00	\$70.00
15	_TN/TP	\$31.00	\$465.00
15	_NO2/3&PO4	\$23.00	\$345.00
	SLWD (Felicity Derry) Subtotal		\$1,120.00
	We Appreciate Your Business.		

Payment Terms: Net 30 Days

Total \$1,120.00

Please make payment to:
Flathead Lake Biological Station
University of Montana
32125 Bio Station Lane
Polson, MT 59860-6815
Please direct inquiries to:
Teri Bales
(406) 872-4502
Thank you.

Sample ID	Collection		ANALYTE UNITS	NO3/NO2 (µg/L-N)	Total N (µg/L-N)	SRP (µg/L-P)	Total P (µg/L-P)	TSS (mg/L)	E. Coli (CFU/100mL)
	Date	Collection Time							
MC01 DUPE	4/9/2021	12:25	MDL	1.5	25.0	0.8	1.5	0.2	n.a.
MC01 BLANK	4/9/2021	12:20		4.3	< 25.0	< 0.8	< 1.5	< 0.2	
MC01	4/9/2021	12:25		112	197	1.4	9.5	5.1	
MC01	4/30/2021	10:58		107	320	1.2	32.4	26.9	
MC01	4/22/2021	10:08		96.7	170	< 0.8	5.2	2	
MC01	4/16/2021	11:44		86.7	153	< 0.8	4.9	1.5	
MC01	5/5/2021	11:02		115	248	1.2	7.7	3.9	
MC01	5/13/2021	8:58		115	211	1.2	5.9	1.8	
MC01	5/27/2021	10:52		94.5	776	1.4	20.8	7.2	
MC01	6/22/2021	9:00		52.5	145	0.8	7.6	7.8	
MC01	6/11/2021	9:33		84.3	173	1	8	5.1	
MC01	7/20/2021	8:00		29.3	85.2	< 0.8	2.2	0.6	
MC01	7/7/2021	16:03		31.5	99.6	0.9	5	0.9	
MC01 BLANK	7/7/2021	15:56		< 1.5	< 25.0	< 0.8	3.8	< 0.2	
MC01 DUPE	7/7/2021	16:15		31.1	86.1	< 0.8	4	2.9	
MC01	7/22/2021	8:15							30
MC01	9/21/2021	9:47							2

*Data approved by A. Baumann; 1/13/2022

	NOVEMBER 2021	MTHLY BUDGET	2022 FISCAL YTD	YTD BUDGET	2022 BUDGET	% OF BUDGET
OPERATING BILLED INCOME						
Fee Assessment	\$53,006.18	\$10,341.83	\$59,012.18	\$51,709.17	\$124,102.00	47.6
Interest Income CAB	\$4.29	\$0.00	\$32.66	\$0.00	\$0.00	
Interest Income Missoula County	\$17.22	\$0.00	\$116.33	\$0.00	\$0.00	
TOTAL OPERATING INCOME	\$53,027.69	\$10,341.83	\$59,161.17	\$51,709.17	\$124,102.00	47.7

OPERATING EXPENSES

Audit	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0
Bookkeeping	\$135.00	\$583.33	\$900.00	\$2,916.67	\$7,000.00	12.9
Dues & Subscriptions	\$0.00	\$70.83	\$203.21	\$354.17	\$850.00	23.9
Election	\$0.00	\$83.33	\$0.00	\$416.67	\$1,000.00	0.0
Equipment	\$0.00	\$4.17	\$0.00	\$20.83	\$50.00	0.0
Income Survey	\$0.00	\$62.50	\$0.00	\$312.50	\$750.00	0.0
Insurance - Liability	\$0.00	\$833.33	\$0.00	\$4,166.67	\$10,000.00	0.0
Legal	\$0.00	\$1,250.00	\$0.00	\$6,250.00	\$15,000.00	0.0
Licenses & Fees	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0
Meals, etc.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0
Office Supplies	\$8.90	\$29.17	\$63.15	\$145.83	\$350.00	18.0
Postage	\$0.00	\$25.00	\$0.00	\$125.00	\$300.00	0.0
Public Relations	\$0.00	\$29.17	\$114.40	\$145.83	\$350.00	32.7
Manager	\$0.00	\$2,140.42	\$0.00	\$10,702.08	\$25,685.00	0.0
Secretary	\$364.50	\$500.00	\$1,867.50	\$2,500.00	\$6,000.00	31.1
Trainng	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0
Travel	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0
Water Testing	\$0.00	\$133.33	\$0.00	\$666.67	\$1,600.00	0.0
Well/Lake Monitoring	\$0.00	\$228.33	\$340.50	\$1,141.67	\$2,740.00	12.4
Nutrient Budget Analysis	\$0.00	\$459.58	\$0.00	\$2,297.92	\$5,515.00	0.0
Drill 5 Wells	\$0.00	\$2,083.33	\$0.00	\$10,416.67	\$25,000.00	0.0
Repay Missoula Co Loan	\$0.00	\$1,826.00	\$21,912.00	\$9,130.00	\$21,912.00	100.0
TOTAL OPERATING EXPENSES	\$508.40	\$10,341.83	\$25,400.76	\$51,709.17	\$124,102.00	20.47

NET OP. INCOME (LOSS)	\$52,519.29	\$0.00	\$33,760.41	\$0.00	\$0.00	
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BALANCE SHEET

ASSETS

09/30/21

10/31/21

11/30/21

CURRENT ASSETS

	09/30/21	10/31/21	11/30/21
Cash Accounts			
Citizens Alliance Bank Account	\$4,691.83	\$4,661.83	\$32,666.12
- District Reserve Funds	\$0.00	\$0.00	\$28,000.00
- General District Funds	\$4,691.83	\$4,661.83	\$4,666.12
Missoula County Account	\$136,292.53	\$136,074.34	\$160,589.34
Total Cash Assets	\$145,676.19	\$145,398.00	\$193,255.46
Accounts Receivable	\$0.00	\$0.00	\$0.00
TOTAL CURRENT ASSETS	\$145,676.19	\$145,398.00	\$193,255.46
FIXED ASSETS			
Total Fixed Assets	\$2,033,813.16	\$2,033,813.16	\$2,033,813.16
TOTAL ASSETS	\$2,179,489.35	\$2,179,211.16	\$2,227,068.62

BALANCE SHEET**LIABILITIES & EQUITY****09/30/21****10/31/21****11/30/21****CURRENT LIABILITIES**

Accounts Payable	\$114.40	\$0.00	\$0.00
Advance LOR Grant Income	\$0.00	\$0.00	\$0.00
Total Current Liabilities	\$114.40	\$0.00	\$0.00

TOTAL LIABILITIES**\$114.40****\$0.00****\$0.00****OWNERS' EQUITY**

Retained Earnings	\$2,193,338.21	\$2,193,338.21	\$2,193,338.21
Net Income (Loss)	(\$18,655.09)	(\$18,788.88)	\$33,730.41
Total Owners' Equity	\$2,174,683.12	\$2,174,549.33	\$2,227,068.62

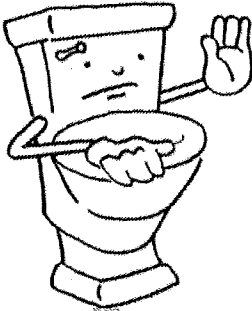
TOTAL LIABILITIES & EQUITY**\$2,174,797.52****\$2,174,549.33****\$2,227,068.62**

CASH FLOW RECONCILIATION

	31-Oct	30-Nov	FISCAL YTD
TOTAL NET INCOME (LOSS)	(\$111.29)	\$52,519.29	\$33,730.41
Operating Activities			
Accounts Payable	(\$114.40)	\$0.00	(\$3,834.00)
Total Investing Activities	(\$114.40)	\$0.00	(\$3,834.00)
INCREASE (DECREASE) IN NON-CASH ASSETS			
Accounts Receivable	\$0.00	\$0.00	\$0.00
NET CASH INCREASE (DECREASE)	(\$225.69)	\$52,519.29	\$29,896.41
CHANGE IN ACCOUNT BALANCES			
Cash at Beginning of Period	\$140,961.86	\$140,736.17	\$163,359.05
Cash at End of Period	\$140,736.17	\$193,255.46	\$193,255.46
Change in Account Balances	(\$225.69)	\$52,519.29	\$29,896.41

Seeley Lake - Missoula County Sewer District
Check Detail
November 2021

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check	1958	11/05/2021	Seeley Lake Sewer District		1001 · Missoula Co...	-28,000.00	-28,000.00
			District Funds		1203 · Accounts Re...	-28,000.00	28,000.00
TOTAL						-28,000.00	28,000.00
Bill Pmt-Check	1959	11/23/2021	Seeley Lake Water District		1001 · Missoula Co...	-143.90	-143.90
Bill	Inv#202	11/01/2021			6652 · Bookkeeping ... Copies	-135.00 -8.90	135.00 8.90
TOTAL						-143.90	143.90
Check	1960	11/23/2021	Felicity Derry		1001 · Missoula Co...	-364.50	-364.50
					6110 · Secretary	-364.50	364.50
TOTAL						-364.50	364.50



Sewer District - LOWDOWN BULLETIN

WHY DO WE CARE?

Because it isn't good for our living environment.

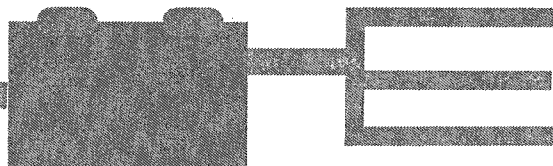
When a septic system fails, it causes untreated sewage to be released and transported to where it shouldn't be. This may cause sewage to come to the surface of the ground around the tank or the drainfield or to back up in pipes in the building. The sewage could also find its way into groundwater, surface water, or marine water without us ever seeing it. The sewage carries pathogens and other dangerous contaminants. Exposure to these pathogens and contaminants can make people and animals sick. They can also contaminate water sources and make them unsafe for drinking, swimming, fishing, shellfish harvesting, and agricultural uses.

8 Signs of Septic System Failure

- Water and sewage from toilets, drains, and sinks are backing up into the home.
- Bathtubs, showers, and sinks drain very slowly.
- Gurgling sounds in the plumbing system.
- Standing water or damp spots near the septic tank or drainfield.
- Bad odors around the septic tank or drainfield.
- Bright green, spongy lush grass over the septic tank or drainfield, even during dry weather.
- Algal blooms in nearby ponds or lakes.
- High levels of nitrates or coliform bacteria in water wells.

Some resources to help with septic tank education from the Department of Health, Washington State.

- <https://www.doh.wa.gov/CommunityandEnvironment/WastewaterManagement/SepticSystem/101SepticBasicsVideo>
- <https://www.doh.wa.gov/CommunityandEnvironment/WastewaterManagement/SepticSystem/DoItYourselfInspectionVideo>
- <https://www.doh.wa.gov/CommunityandEnvironment/WastewaterManagement/SepticSystem/CaringforYourSystem>



**NEXT MONTH:
MORE REASONS
TO CARE**

Clearwater Resource Council

Alternative A: E. Coli

From June-September 2021, CRC collected E. Coli samples on the following lakes: Seely, Big Sky, Salmon, Placid, Alva and Inez. Samples were taken once a month at multiple locations on each lake. The E. Coli data will give us a better idea about impacts associated with septic leachate. Our funding for this effort ended September 2021. However, CRC would like to continue collecting E. Coli data on two locations on Seeley Lake from October 2021 – May 2022 to understand potential nutrient loads during the summer as compared to the winter months.

\$43 per sample, 2 sites/samples per round during off season (Lindy's and SLCG): $\$86 \times 8 = \688

Staff Time (Collection and Travel/Delivery) 4 hours at \$20/hr: $\$80 \times 8 = \640

Travel Expenses (RT to Flathead Lake Biological Station): 1376 miles x .56 = \$772

(samples must reach the lab w/in 4 hours of collection)

Oversight/Training/reporting = $\$35 \times 10 = \350

Subtotal: \$2450

Indirect: \$245

Total: \$2695

Alternative B: eDNA

E. Coli lives in the intestines of both people and animals. If the Board would like to obtain data that can differentiate between human and animal E. Coli, eDNA techniques would need to be employed. While eDNA sampling is far more specific, the cost is also higher. Moreover, since CRC did not collect eDNA samples previously, we would recommend that samples be collected over a 12-month period, as compared to an 8-month period as noted above.

\$150 per sample, 2 sites/samples per round during off season (Lindy's and SLCG): $\$300 \times 12 = \3600

Staff Time 2 hours at \$20/hr: $\$40 \times 12 = \480

Travel Expenses per round: 60 miles x .56 = \$35

Oversight/Training/reporting = $\$35 \times 12 = \420

Mailing costs: $12 \times 40 = \$480$

Subtotal: \$5015

Indirect: \$500

Total: \$5515

This budget includes two sites per monthly sampling event. We recommend that 1-2 additional sites be included to obtain more uniform data.

Table 1

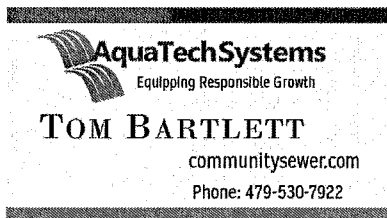
HOME		CUST SERV		DOCUMENTS DISTRICT INFORMATION	
Mission Statement	x	Contact Us	x	district map	
Notices	x	Location	x	project info	
board meetings info	x	Assessment Methodology ?		working documents	
Link to meeting	x	Online Pay?		District Map	
Link to Agenda	x	Fee Assessment		Office Hours	x
District Map Link				Office Contact Information	
weather	x			Manager information	
				Interlocal agreement	x
				Commissioner letter	x
				By-laws	x
				Rules/Regs	x
				Designated Agent form	x
					x
MOVE or REMOVE				MOVE or REMOVE	
Operating Budget to M/B				Letter from board of health to archives	
Fee assessment methodology - this is actually fee assessment to DI				Who can vote to archives	
Fee protest letters - gone				Resolutions 11192020 to archives	
Missoula Property Information to R				subdistrict boundary adjustment to archives	
Fee methodology WRITE TO DI				Borad Admin move to M/B	
Director qualifications to M/B				Archive present project info	
Director Questions to M/B					

HOME	MEET & BRD INFO	RESOURCES
Mission Statement	board members - hot link	x District Map
Notices	meetings	sewer information
board meetings info	board papers	x sewer based.
Link to meeting	agenda	x Brochure
Link to Agenda	minutes	x FAQ
District Map Link	budget/financials	County Property Information
weather	archives	
	There are a bunch of doubles. What are the parameters for archiving documents.	
	Can we set up folders with labels within archives?	
	board admin	
MOVE or REMOVE		
Operating Budget to M/B		
Fee assessment methodology - this is actually fee assessment to DI		
Fee protest letters - gone		
Missoula Property Information to R		
Fee methodology WRITE TO DI		
Director qualifications to M/B		
Director Questions to M/B		

REQUEST FOR PROPOSAL
MISSOULA COUNTY SEELEY LAKE SEWER DISTRICT
SEELEY LAKE, MONTANA

"Each provider will be provided a link to the P.E.R. We would ask them to provide their recommendation and proposal to address the nitrate and pollution issues in the Seeley Lake Sewer District, all 4 phases if possible. The Board knows what it wants; a way to treat the septic systems and sewer products in a way to reduce nitrates to 7.5 or below. We just don't know how to do that, and that's where these providers come in."

1. Does your system work with a septic system or is the septic system removed? Yes it can, I will explain during the next online meeting.
2. Can your system be considered a neighborhood system or a district system? Yes, they are called that or community sewer or decentralized sewer.
3. Are you piping effluents alone, or solids as well? Only the effluent water is put into the drip irrigation system.
4. Do you treat the waste water before piping? Yes, the wastewater is treated to a high standard as determined by the state prior to discharge.
5. What size pipe does your system require? What we have quoted was a 1/2" drip irrigation pipe/system.
6. Based on 500 houses and businesses, how much space does the plant need or plants need? That is to be determined by your soils report.
7. What happens to the waste after treatment? Depending on required design. Pumped by a pumper truck and disposed as septic would be or screened and dried onsite and brought to a landfill or appropriate area.
8. What are the three top reasons to choose your system? Treatment plant size, easy operation and maintenance, Price and Quality. Sorry, 4 reasons.
9. What challenges might we have if we choose your system? Can't think of any challenges. I would like to answer any questions on this that you may have on the online meeting.
10. To what nitrate level does your system treat the effluent? We custom design our system to whatever your needs are. We are designing right now to 2.5 TN in another state. Also several other systems in the same state to a 7 TN.
11. Based on 500 houses and businesses, what is the predicted cost per unit? I would have to first know how many gallons per day to figure per home x the number of homes. That would give me the size of your treatment plant. To be accurate I would also need to know the discharge standard or limit to the drip irrigation. If I have the GPD flows for the complete system I can guesstimate the discharge standard.
12. How does the design process work? Please see attached process drawing and explanation.



[Visit Our Website](#)



SepticNET, Inc.
510 East Park Street
Butte, MT 59701

Phone: (406) 498-6850
Fax: (406) 723-1537

December 29, 2021

Subject: Answers to Questions Regarding SepticNET Capabilities

Dear Seeley Lake Sewer District:

The following sections provide responses to your questions relating to the future upgrades to the Seeley Lake sewer system and the capabilities of the SepticNET system as they relate to the needs of the District. Please let me know if you need anything additional.

1. Does your system work with a septic system or is the septic system removed?
RESPONSE: SepticNET is an approved Level 2 on-site wastewater treatment system that is used in addition to a standard septic tank and soil absorption system. The septic tank is necessary to provide primary treatment, which converts incoming forms of nitrogen to ammonia/ammonium.
2. Can your system be considered a neighborhood system or a district system?
RESPONSE: SepticNET is designed to provide maximum removal of nitrogen with no limits on wastewater flow. However, our preferred niche is for systems from individual houses to flows up to 5,000 gallons per day. SepticNET is the only approved system in Montana to remove nitrate to below 7.5 mg/L for systems in this size range. For your potential project, SepticNET should be considered a neighborhood system.
3. Are you piping effluents alone or solids as well?
RESPONSE: Effluent from the SepticNET system contains treated water with low concentrations of nitrate (less than 7.5 mg/L), total suspended solids (TSS) (less than 10 mg/L), and bio-chemical oxygen demand (BOD) (less than 15 mg/L).
4. Do you treat the waste before piping?
RESPONSE: The SepticNET system treats wastewater after it leaves a standard septic tank. For individual houses, raw wastewater is piped to the septic tank, then through the SepticNET system, and is finally piped to the absorption system. For a larger shared system each house can have its own septic tank and then be piped to the SepticNET system, or one large common septic tank can be used prior to the SepticNET system. Treated water would then be piped to the absorption system or discharge point.
5. What size pipe does your system require?
RESPONSE: Piping sizes would be determined by total flows and local topographical conditions. SepticNET would not require any special piping requirements.
6. Based on 500 houses and businesses, how much space does the plant need or plants need?
RESPONSE: As stated in a previous question, SepticNET should be considered for individual and neighborhood systems with flows up to 5,000 gallons per day (GPD). The size for the SepticNET systems, not including a standard septic tank, range from approximately 6-

feet wide by 10-feet long by 8-feet tall for the 500 GPD system to 6-feet wide by 35-feet long by 8-feet tall for the 5,000 GPD system. I have attached Excavation Guides for the two systems mentioned to provide you a little more information regarding size and installation requirements.

7. What happens to the waste after treatment?

RESPONSE: Treated effluent from the SepticNET system is piped to a soil absorption system or other discharge point designed by the engineer. The nitrogen that is removed from the wastewater is converted to nitrogen gas as is released back into the atmosphere to begin the nitrogen cycle. Any solids generated are collected in the standard septic tank, which would need to be pumped at normal intervals.

8. What are the top three reasons to choose your system?

RESPONSE: The following are the main reasons to choose the SepticNET system:

1. **Highest Treatment Levels:** The SepticNET system is approved by the Montana DEQ to treat to less than 7.5 mg/L total nitrogen. Actual levels are 3.5 mg/L total nitrogen.
2. **Design Flexibility:** SepticNET can be designed for almost any flow and topographical conditions.
3. **Low Maintenance:** SepticNET is equipped with state-of-the-art controls that provide remote monitoring and control of the systems. Patented design components provide a system that requires very little maintenance.

9. What challenges might we have if we choose your system?

RESPONSE: Choosing the SepticNET system would not create challenges unique to the system.

10. To what nitrate levels does your system treat the effluent?

RESPONSE: The SepticNET system is approved by the Montana DEQ to treat to less than 7.5 mg/L total nitrogen. Actual levels are 3.5 mg/L total nitrogen.

11. Based on 500 houses and businesses, what is the projected cost per unit?

RESPONSE: As stated in a previous question, SepticNET should be considered for individual and neighborhood systems with flows up to 5,000 gallons per day (GPD). The unit costs (costs per household assuming 350 GPD) range from approximately \$26,000/unit for the individual system (up to 500 GPD) to \$15,000/unit for the 5,000 GPD system. I have attached a general pricing guide for the systems mentioned previously. Due to current supply pricing fluctuations, actual pricing cannot be determined.

12. How does the design process work?

RESPONSE: SepticNET personnel will work with the design engineer to provide detailed drawings and design reports specific to the project and application of the SepticNET system.

Please let me know if you need additional information.

Sincerely,

Steve Anderson, Ph.D., P.E.
SepticNET, Inc.

Encl:

Individual System Excavation Guides



SepticNET, Inc.
480 East Park Street
Butte, MT 59701

Phone: (406) 498-6850
Fax: (406) 723-1537

SepticNET Excavation and Installation Guide

Important – Please Read This Document Carefully Before Installing SepticNET

1. Excavation

- a. Surrounding soil must be undisturbed native soil or well compacted engineered fill.
- b. Measurements for the specific **SepticNET** model are provided in a separate communication.
- c. Excavate and provide a well-compacted support layer of washed gravel with a minimum thickness of 6 inches for soil terrain and 12 inches for rock terrain. The **SepticNET** vault must be installed on a compacted, level surface.
- d. Allow for approximately 12 inches of fill over the top of the **SepticNET** system (fill to a level that allows proper operation of the roof hatch). Maximum bury depth is 24 inches.
- e. Allow a minimum of 12 inches around the entire **SepticNET** system.

2. Installation (to be completed by **SepticNET**, Inc. approved installers **ONLY**)

- a. Center the **SepticNET** system in excavation using lifting straps running underneath the system.
- b. The **SepticNET** systems arrive at the site pre-plumbed and ready to connect to septic tank effluent pipe and to the drainfield or pressure dose tank.
- c. Connect the **SepticNET** inflow side to the septic tank effluent line using 4-inch schedule 40 pipe and appropriate fittings.
- d. Connect the **SepticNET** outflow side to the pressure dose tank of the drainfield line using 4-inch schedule 40 pipe and appropriate fittings.
- e. Connect the **SepticNET** return pump bulkhead fitting using 1-inch HDPE pipe and appropriate fittings to the 4-inch PVC wye installed at the septic tank inlet.
- f. A 1-inch bulkhead fitting is supplied for running power and alarm wires from the electrical supply box to the **SepticNET** control panel.
- g. Risers, riser lids, and a roof hatch are pre-installed on the **SepticNET** system.

3. Backfilling

- a. Backfill evenly around the entire tank using washed gravel to the grade break of the treatment vault. The gravel should be 100% smaller than 1½-inch, and a maximum 50% smaller than ¾-inch. All fill should be free of any wood, masonry debris, silt or clay.
- b. Tamp and compact backfill (bed) under inlet and outlet pipes.
- c. Mound soil over septic tank to drain away from tank and allow for settling soil. Six inches of native soil may be used for mounding.
- d. Add water to the Flow Equalization Tank and to the individual reactors to maintain uniform internal and external pressure on tank as backfill is added.

NEVER INSTALL THIS PRODUCT IN AN AREA WITH A HIGH WATER TABLE OR IN WATER-SATURATED CLAY MIX. WATER TABLE SHALL NOT BE ABOVE BOTTOM OF TANK.

NEVER INSTALL THIS PRODUCT BENEATH VEHICULAR OR HEAVY EQUIPMENT TRAFFIC. THIS PRODUCT WAS NOT DESIGNED TO BE DRIVEN UPON.

4. Tank Dimensions and General Installation Requirements

The physical dimensions for the SepticNET treatment vault is as follows:

- Height = 96" This is the total height of the system including risers (includes a 1-foot riser. I need to know before the install if that is enough).
- Width = 69-1/2"
- Length = 121"
- Weight = 2,800 lbs
- 4-inch PVC outlet pipe = 63-1/2" from ground to bottom of pipe (this height is fixed).
- 4-inch PVC Inlet pipe = 66" Minimum (will adjust in the field).

The following items will need to be supplied by you for ONLY the SepticNET system install:

1. Two separate 110v circuits (1 for the alarm and 1 for the system).
2. Electrician or qualified person to make connections to SepticNET system.
3. Trench, conduit, and wire from house wiring location to the SepticNET system.
4. Septic tank installed and hole excavated to the dimensions provided above to accommodate SepticNET system and pressure dose tank, if needed.
5. Excavator or similar equipment to place SepticNET system in the excavation (figure 2,800 pounds for the treatment vault).
6. Washed gravel for bedding and backfill of the SepticNET system as per the Installation Guides.

The following items will be supplied by SepticNET, Inc.:

1. SepticNET R-500 Treatment System.
2. Plumbing from septic tank to SepticNET system.
3. Plumbing from SepticNET System to Pressure Dose Tank or gravity D-box.
4. Risers and access hatch for SepticNET System.
5. Alarm for SepticNET System.

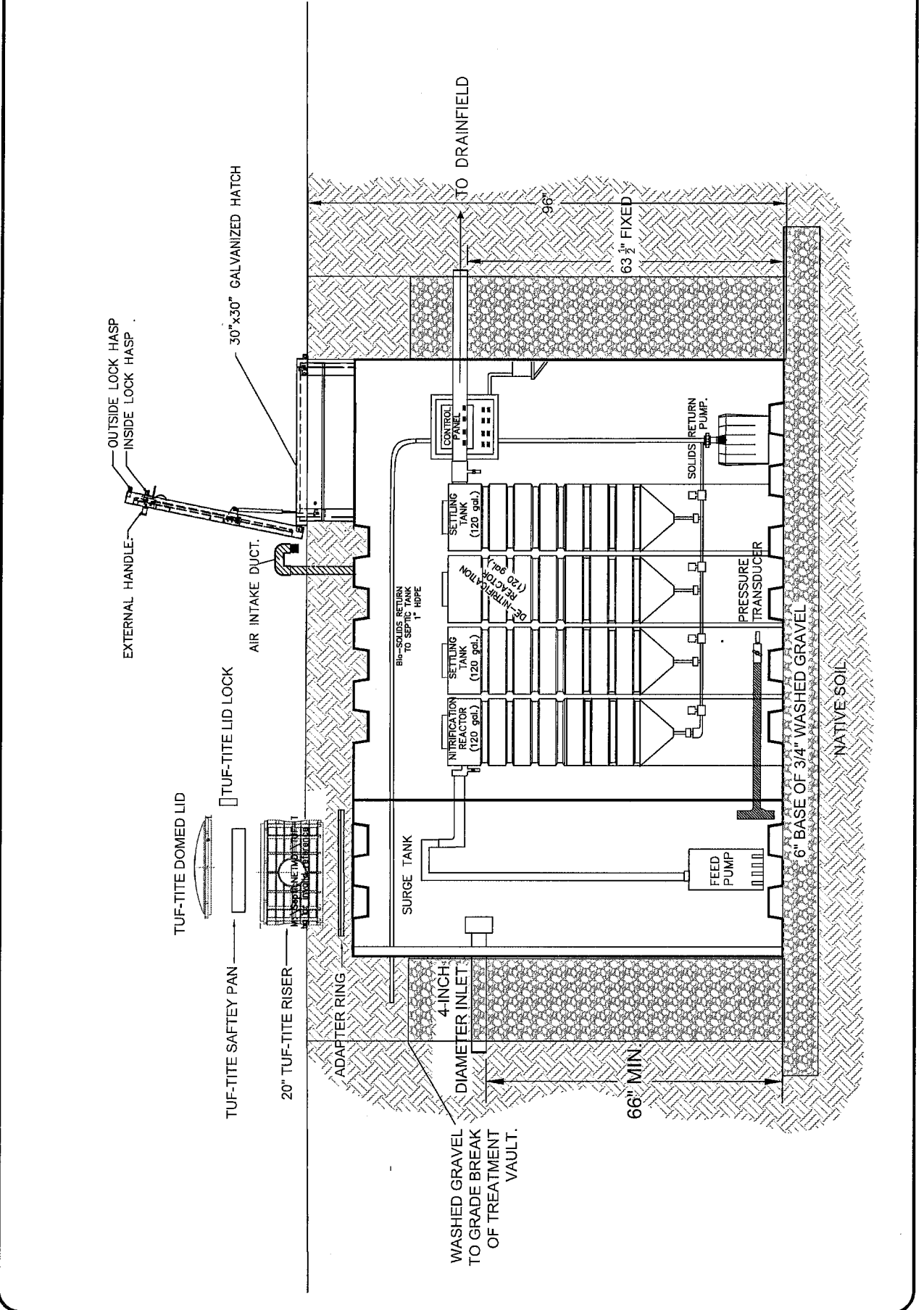
No.	Description	Date	Drawn By

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PROJECT NAME: SepticNET R-500
 LOCATION: _____
 JOB NO.: _____
 DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____

SHEET
R-500S



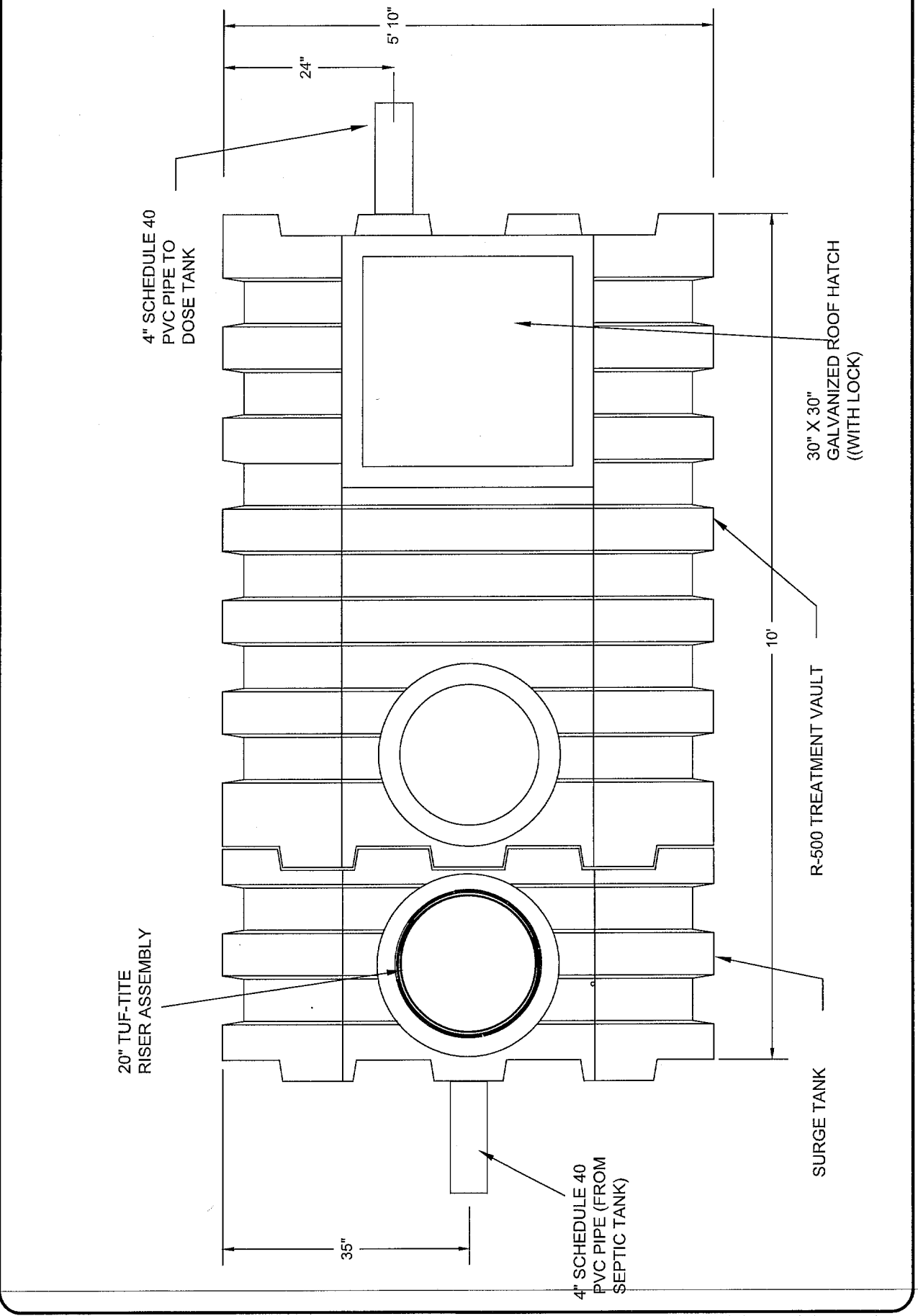
SepticNET, INC. 4845 ADAMS STREET, SUITE 200, BOSTON, MA 02118-1147 (617) 552-1111

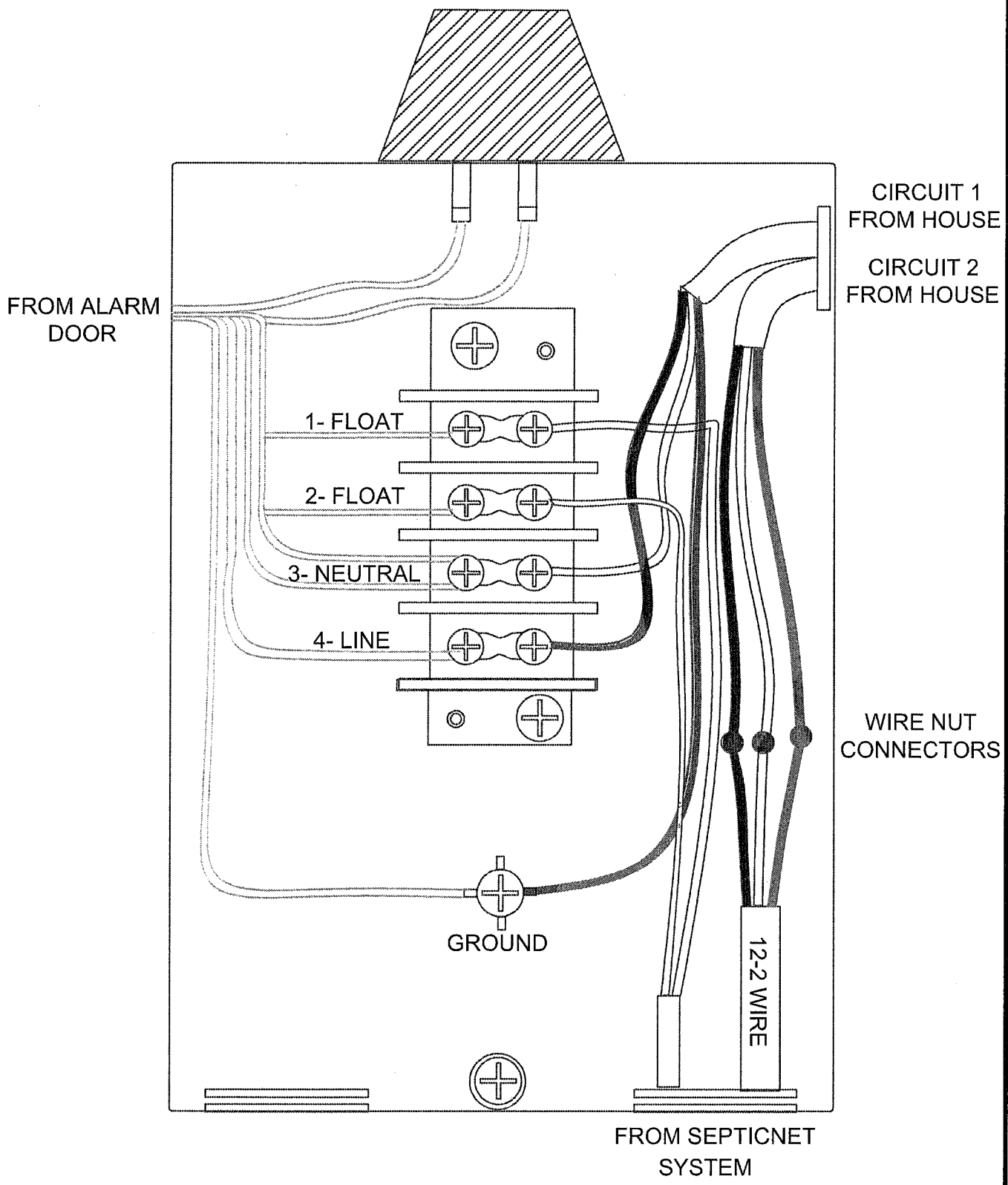
No.	Description	Date	Drawn By



SepticNET R-500

PROJECT NAME: BIRNH
 LOCATION: BIRNH
 DATE: 10/20/10
 CHECKED BY: JSA
 SHEET: R-500T





C:\Users\cjs\Documents\37.5.dwg PLOT DATE 2017-12-14 15:08 USER: cjsrk

SJE RHOMBUS
TANK ALERT XT

JOB NO: SEPTICNET
DATE: 12/11/17
DRAFTER: CC
CHECKED BY: SA

PROJECT NAME: CONTROL PANEL
LOCATION: SILVERBOW, MT
FILE NO. 37.5.dwg

SHEET
FIG-49

5,000 GPD System Excavation Guides



SepticNET, Inc.
510 East Park Street
Butte, MT 59701

Phone: (406) 498-6850
Fax: (406) 723-1537

SepticNET Excavation and Installation Guide – SC-5K System

Important – Please Read This Document Carefully Before Installing SepticNET

1. Excavation (Provided by OWNER)

- a. Surrounding soil must be undisturbed native soil or well compacted engineered fill.
- b. Measurements for the specific **SepticNET** model are provided in a separate communication.
- c. Excavate and provide a well-compacted support layer of washed gravel with a minimum thickness of 6 inches for soil terrain and 12 inches for rock terrain. The **SepticNET** vault must be installed on a compacted, level surface.
- d. Allow for approximately 12 inches of fill over the top of the **SepticNET** system (fill to a level that allows proper operation of the roof hatch).
- e. Allow a minimum of 12 inches around the entire **SepticNET** system.

2. Installation (to be completed by **SepticNET**, Inc. approved installers **ONLY**)

- a. Center the **SepticNET** system in excavation using lifting straps running underneath the system.
- b. The **SepticNET** systems arrive at the site pre-plumbed and ready to connect to septic tank effluent pipe and to the drainfield or pressure dose tank.
- c. Connect the **SepticNET** inflow side to the septic tank effluent line using 4-inch schedule 40 pipe and appropriate fittings.
- d. Connect the **SepticNET** outflow side to the pressure dose tank of the drainfield line using 4-inch schedule 40 pipe and appropriate fittings.
- e. Connect the **SepticNET** return pump bulkhead fitting using 1-inch HDPE pipe and appropriate fittings to the 4-inch PVC wye installed at the septic tank inlet.
- f. A 1-inch bulkhead fitting is supplied for running power and alarm wires from the electrical supply box to the **SepticNET** control panel.
- g. Risers, riser lids, and a roof hatch are pre-installed on the **SepticNET** system.

3. Backfilling (Provided by OWNER)

- a. Backfill evenly around the entire tank using washed gravel to the grade break of the treatment vault. The gravel should be 100% smaller than 1½-inch, and a maximum 50% smaller than ¾-inch. All fill should be free of any wood, masonry debris, silt or clay.
- b. Tamp and compact backfill (bed) under inlet and outlet pipes.
- c. Mound soil over septic tank to drain away from tank and allow for settling soil. Six inches of native soil may be used for mounding.
- d. Add water to the Flow Equalization Tank and to the individual reactors to maintain uniform internal and external pressure on tank as backfill is added.

NEVER INSTALL THIS PRODUCT IN AN AREA WITH A HIGH WATER TABLE OR IN WATER-SATURATED CLAY MIX. WATER TABLE SHALL NOT BE ABOVE BOTTOM OF TANK.

NEVER INSTALL THIS PRODUCT BENEATH VEHICULAR OR HEAVY EQUIPMENT TRAFFIC. THIS PRODUCT WAS NOT DESIGNED TO BE DRIVEN UPON.

4. Tank Dimensions and General Installation Requirements

The physical dimensions for the SepticNET treatment vault are as follows (see detailed drawing in plan set).

The following items will need to be supplied by **OWNER** for ONLY the SepticNET system installation:

1. Two separate electrical circuits (110v circuit for the alarm and 220v circuit for the treatment system).
2. Electrician or qualified person to make connections to SepticNET system.
3. Trench, conduit, and wire from building wiring location to the SepticNET system.
4. Septic tank installed and hole excavated to the dimensions provided above to accommodate SepticNET system (Reactors, Vault, and surge Tank).
5. Excavation as described in Section 1.
6. Excavator or similar equipment to place SepticNET system in the excavation (figure 3,000 pound minimum lifting capacity).
7. **Washed gravel for bedding and backfill of the SepticNET system as describe in Section 3.**

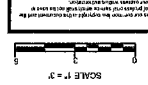
The following items will be supplied by **SepticNET, Inc.** at the time of installation:

1. SepticNET SC-5k Treatment Vault.
2. Surge Tank (5,000-gallon fiberglass tank).
3. Plumbing from septic tank to SepticNET system.
4. Plumbing from SepticNET System to Pressure Dose Tank.
5. Risers and access hatch for SepticNET System.
6. Alarm for SepticNET System.
7. Labor to make connections and test system.

No.	1	Revised	4/17
Revision/Issue			
Date			

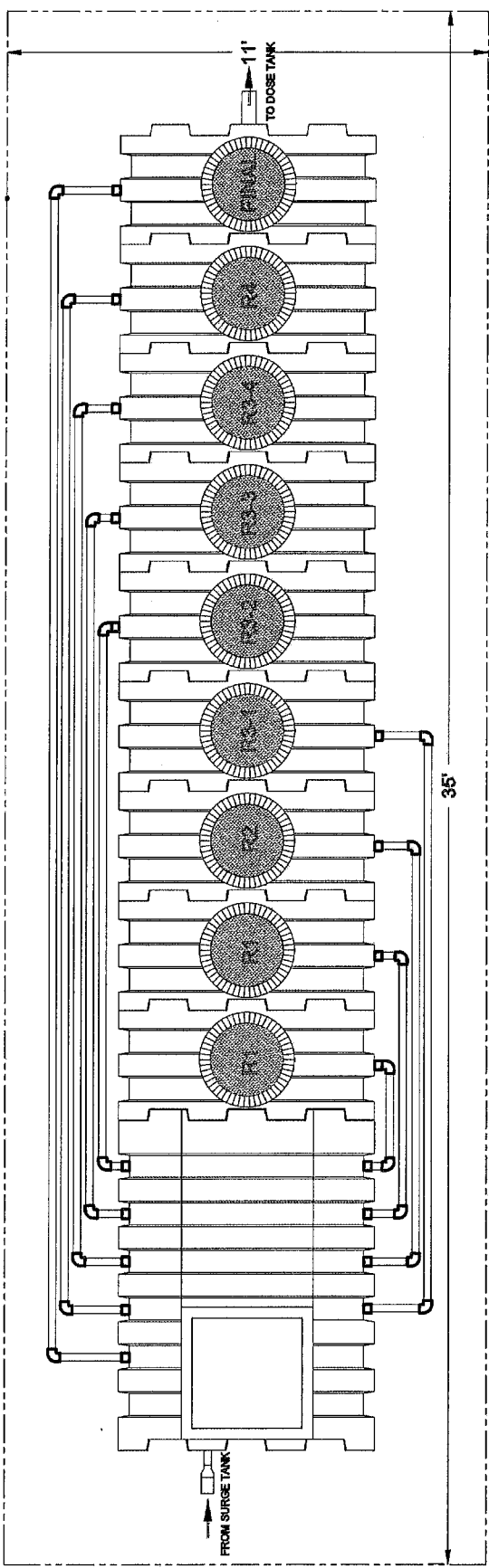
PRELIMINARY
 NOT FOR
 CONSTRUCTION

Suite 200
 480 E. Park Street
 Butte, MT 59701
 (406)-782-5220



FOOTPRINT
 SeptiNET SC-5K
 DETAIL
 SEPTONET
 COPYRIGHT 2014
 CHIKO BRISA
 BUTTE, MT
 DATE: 12/20/17

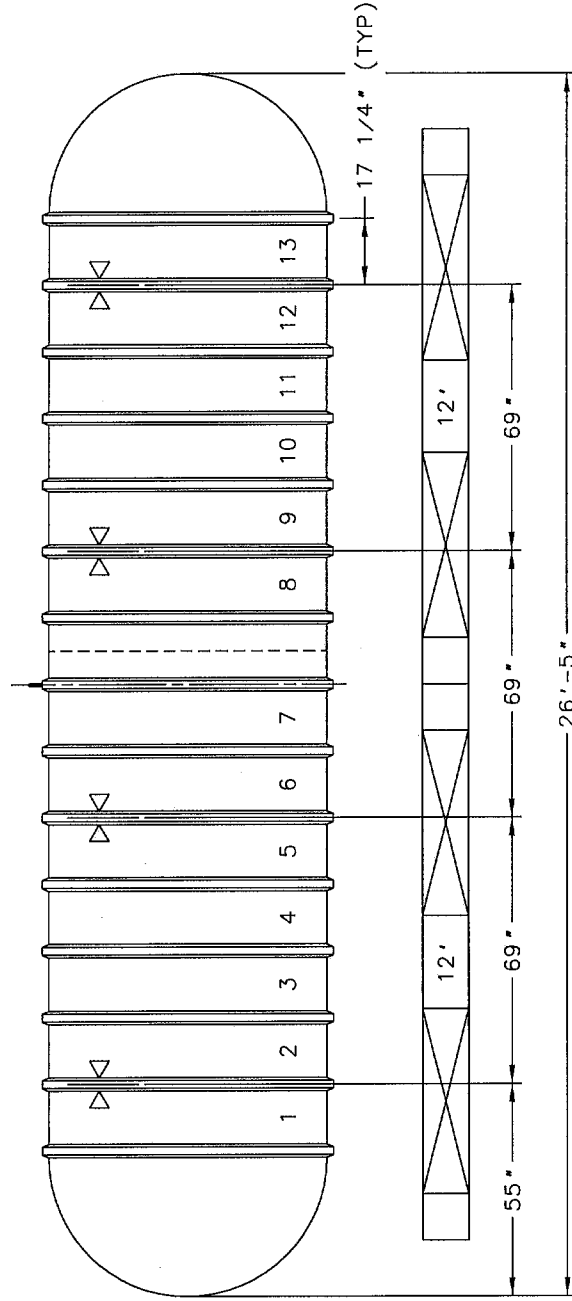
SC-5K



EXCAVATION LINE

56'

FROM SURGE TANK



Optional prefabricated engineered concrete deadmen shown

XERXES[®]
CORPORATION

TITLE
6' DIA. SINGLE-WALL
CAP. 5,000 GALLONS

DATE 8-08 DR. NO. S10-867.04

SepticNET SC-5K
WASTEWATER TREATMENT SYSTEM
PROFILE

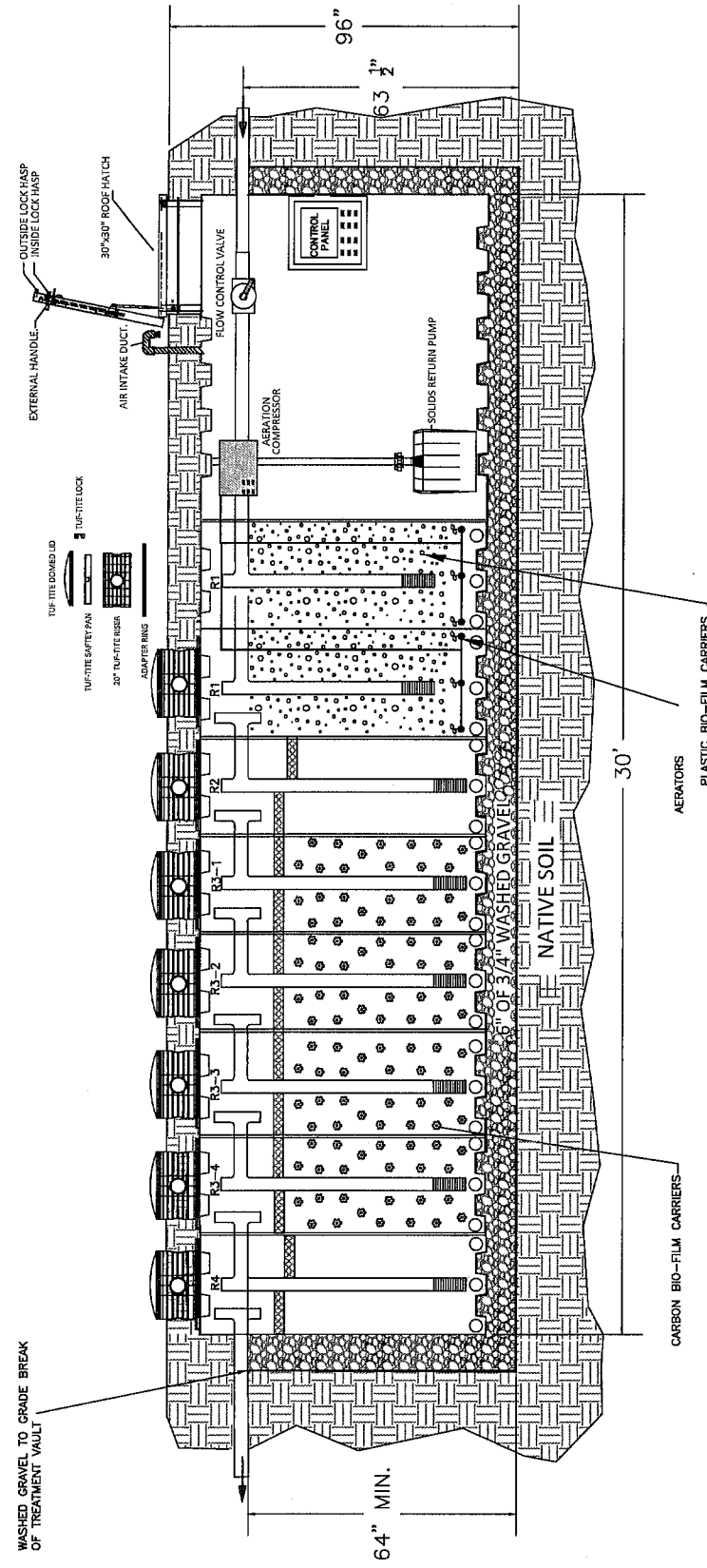
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SC-5K

Site 200
480 E. Park Street
Butte, MT 59701
(406)-782-5220



No.	Revision/Issue	Date



Note: 1 Systems installed in high groundwater environments will require additional components and anchoring systems
 Note: 2 SepticNET Systems can ONLY be installed by a Certified Installer
 Contact SepticNET Inc. for Details

SepticNET 2021 General Pricing



SepticNET, Inc.
 510 East Park Street
 Butte, MT 59701

Office: (406) 723-1527
 Mobile: (406) 498-6850

SepticNET Pricing – May 2021

Thank you for the inquiry regarding SepticNET for your potential project. The costs provided in this document are preliminary, scoping type costs and are based on the following assumptions: 1) All houses within the subdivision will have 300 GPD minimum flows and 500 GPD maximum flows; 2) The site has a background nitrate concentration of approximately 10 mg/L; 3) the projected septic tank effluent total nitrogen concentration will be approximately 50 mg/L (residential strength wastewater); 4) water will be supplied by individual wells; and 5) no water softener or other drinking water treatment regenerate water will enter the primary treatment tanks or the SepticNET treatment units. The costs represented in the table below include **only the SepticNET treatment units**. **DOES NOT INCLUDE:** individual septic tanks, drainfields; service and maintenance fees; plumbing to the treatment units; wiring; system setup; final design/construction document costs; transportation costs; and excavation costs. A more detailed, binding quote will be prepared as the project moves forward and more project specific information is available. Please call me if you have any questions.

	System Description	Design Flow Rate	System Cost	Per House Cost
1.	Individual System (SepticNET R-500)	500 GPD MAX @ 50 mg/L TN (1 house) (10 or more systems*)	\$25,900 \$24,500	\$25,900 \$24,500
2.	Shared System (SepticNET R-1000)	1,000 GPD MAX @ 50 mg/L TN (2-3 houses) (8 or more systems*)	\$48,600 \$46,200	\$16,200 to \$24,300 \$15,400 to \$23,100
3.	Small Cluster System (SepticNET SC-2500)	2,500 GPD MAX @ 50 mg/L TN (5-8 houses) (5 or more systems*)	\$115,400 \$109,600	\$14,425 to \$23,080 \$13,700 to \$21,920
4.	Large Cluster System (SepticNET SC-5K)	5,000 GPD MAX @ 50 mg/L TN (10-15 houses) (3 or more systems*)	\$219,000 \$208,000	\$14,600 to \$21,900 \$13,867 to \$20,800

* Sales Agreements, including manufacturing retainers, must be received within 60 days of each other to receive this pricing.

Montana law (ARM 17.30.718) requires 2 maintenance visits per year for the first two years and single annual visits thereafter. The effluent from the system is sampled annually for the following constituents: Ammonia as N; Nitrate as N; Nitrite as N; Total Kjeldahl Nitrogen; BOD; TSS; and Specific Conductance. The costs associated with the O & M activities include the analytical cost, the labor associated with each visit, and a communication fee for the telemetry components. The approximate O & M costs vary depending on the system size and regulatory requirements. The following are approximate costs associated with a 500 GPD individual system: Years 1 and 2: \$1,200; Years 3 and beyond: \$525 per year. Please call me if you have any questions. (NOTE: Due to volatility in supply pricing, the prices on this sheet are only valid for the month of May 2021.)

Steve Anderson
 Principal/Inventor – SepticNET, Inc.
sanderson@septic-net.com
 406-498-6850

Seeley Lake, MT

Sewer related questions

1. Does your system work with a septic system or is the septic system removed?

We can incorporate existing septic tanks into our pressure sewer, either by installing a pump vault into the existing tank or by adding a pump tank. Utilization of an existing tank would require that the existing septic tank is adequately sized, structurally sound and watertight. In our experience existing tanks do not satisfy this criterion. Additionally, it is cost prohibitive to do the inspection and testing to evaluate an existing tank and then modify it, rather than simply installing a high-quality tank.

There are two common methods to installing the new system. The first is to install the new system adjacent to the existing tank, switch over service, collapse the old tank in-place and then backfill the old tank in-place.

If space is limited the old tank can be pulled and the new system installed in the same location as the old tank.

2. Can your system be considered a neighborhood system or a district system?

Our system can be considered either. Orenco's liquid only sewer can be found in very small systems of just a couple of homes but also is part of large municipal systems with that will have thousands of liquid only sewer connections. Also, we provide decentralized treatment that scales from a single home up to 100,000 gpd. In municipal systems, the wastewater is often conveyed to large, centralized plants.

3. Are you piping effluents alone, or solids as well?

The Prelos processor not only conveys the wastewater offsite for final treatment, it also provides primary treatment and retains solids at the source. By keeping the solids at the source, the wastewater becomes much easier and more efficient to pump. We don't have to worry about solids settling or clogging wastewater mains and we can size piping to avoid any need for lift stations. Solids are harvested from the Processor every 10 to 12 years on average. Solids are reduced by up to 80% at the wastewater treatment plant.

4. Do you treat the wastewater before piping?

Yes, the wastewater receives primary treatment at each Prelos processor. The processor will reduce settleable solids by 90% to 95%, suspended solids by 70% to 90%. BOD₅ by 60% to 70% and fats, oil, and grease (FOG) by 75% to 90% before it enters the collection system. Please see the table below for a comparison to a primary clarifier at a wastewater treatment plant. Lower wastewater strength results in indirect savings in the capital cost and operating costs for wastewater treatment.

Characteristic	Typical Prelos Sewer Processor Efficiency	Typical Clarifier Efficiencies - Primary Clarifiers
Settleable Solids	90-95%	90-95%
Suspended Solids	70-90%	40-60%
BOD ₅	60-70%	25-50%
Fats, Oil, & Grease	75-90%	60-80%
Cost	Free ☺ (passive, no energy)	1/3± of total plant cost

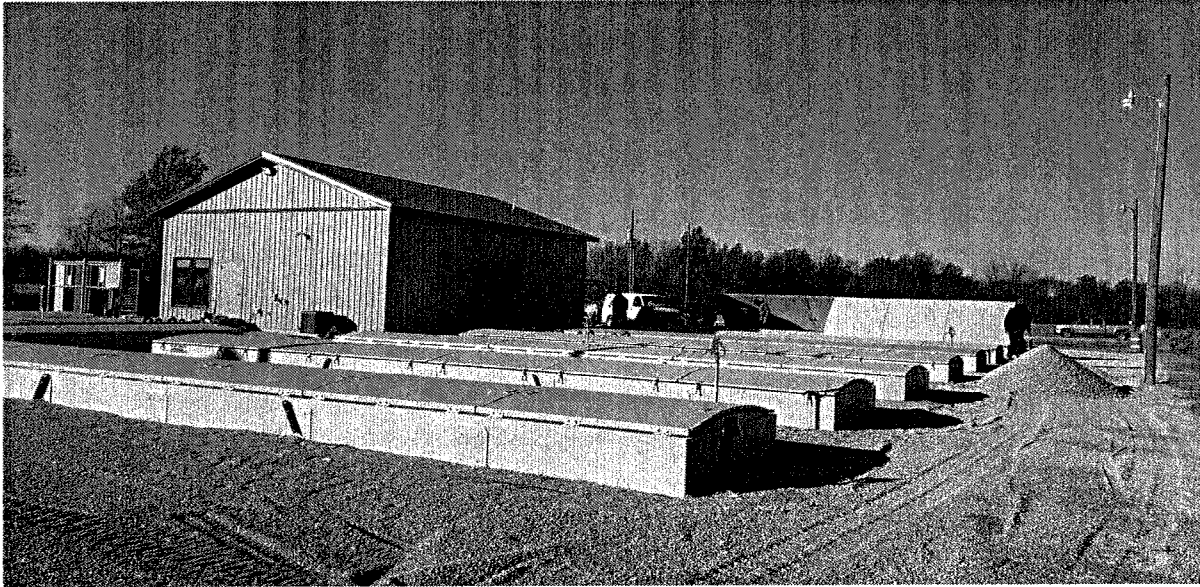
5. What size pipe does your system require?

In most system we see almost all local collection mains being 2" diameter. This is typically in the range of 80% of the pipe installed. Trunk mains that collect the wastewater from the local collection mains and convey it to the treatment plant are typically oversized for full build-out and/or future expansion and are typically in the range of 4 to 8 inches in diameter.

6. Based on 500 houses and businesses, how much space does the plant need or plants need?

This isn't a simple answer as the number of AdvanTex Pods that we use is dependent on the treatment limits. Each pod is 42 feet long and 7.5 ft wide. We

typically see 5 to 10 ft between the pods, and we may need as little as 10 pods to provide 75,000 gallons of treatment. The space requirement is roughly 5,000 to 7,000 square feet, not including any building, disposal, or buffer. The picture below shows 10 pods and a building in Ohio.



7. What happens to the waste after treatment?

By waste, we are assuming that you are either referring to the solids from the tanks or the final effluent.

Sludge and scum are monitored in the Prelos processors to maximize the time between pump-outs. The sludge and scum that is removed can be taken to the same locations that septic sludge is already begin handles. It is also appropriate to incorporate drying beds into the wastewater treatment plant that are capable of handling sludge from 1/10th of the Prelos processors. The dried sludge can be removed and taken to a landfill as daily cover material.

Effluent from the plant can be disposed of in subsurface disposal systems, surface discharges, beneficial reuse or any typical disposal method that is appropriate with the region and the regulators. The disposal method often dictates the treatment limits and should be considered accordingly.

8. What are the three top reasons to choose your system?

1. Lower initial capital cost
2. Faster, easier, and less disruptive construction
3. Sustainable operating cost with no lift stations

Other benefits would include:

- Flexible phasing and connection schedules. Properly operating onsite systems could be on a deferred connections schedule
- Adaptable and expandable
- Can be maintained with a basic truck and basic tools. Gravity sewer requires very expensive equipment
- 5-year warranty on Prelos processor and 10-year warranty on all pumps
- Typically, one pump model throughout the system for all residential connections.
- At least 200 gallons in emergency storage at each connection
- If a system fails, it only impacts one customer

9. What challenges might we have if we choose your system?

Liquid only sewer isn't taught in engineering school and most operators are only familiar with gravity sewer/activated sludge plants. Finding engineers and operators that have experience with these systems can be difficult. Orenco provides engineering support and operator training to overcome this challenge.

10. To what nitrate level does your system treat the effluent?

Our standards single stage AdvanTex will reduce TN below 20 mg/L, which will mostly be nitrate and organic nitrogen. With the addition of a primary anoxic tank and an MBBR configured as a second anoxic basin, we can get below 8 mg/L TN which would include approximately 5 mg/L nitrate. An 8 mg/L TN system will also require alkalinity and supplemental carbon addition.

11. Based on 500 homes and businesses, what is the predicted cost per unit.

In terms of cost, we like to break it into components. Costs are extremely depended on factors that we have not fully vetted yet. The components are:

1. Collection: the cost to front property with collection mains
2. Onsite: This is the cost to connect a home and includes installation of the Prelos processor
3. Transmission: the cost to connect the collection mains to the treatment plant



Montana Distributor

Answers to - Seeley Lake Sewer Board, Questions for Sewer System Presenters

1. Does your system work with a septic system or is the septic system removed?

We have treatment equipment that will work with existing septic systems and often achieve Level II or greater treatment capabilities such as our RetroFAST. We also have other systems that can be install with some modification to existing septic tanks or with the installation of the separate treatment tank in front of or beside the existing septic tank before discharge to the drain-field, where room permits such applications. Our BioSTEP system is an appropriate solution if the septic systems are required to be removed or there is not adequate space for a new septic system, it will also work with existing tanks before pumping to a larger more centralized treatment system if that option is selected by the board. Our MyFast systems are a perfect solution for a District wide treatment option that works seamlessly with our BioSTEP collections systems.

- RetroFAST - This high-performance “submerged aerated biological filter” provides proven treatment of residential (domestic-strength) wastewater installed either in an existing tank or for new construction. The RetroFAST® wastewater treatment systems are designed in 3 specific sizes for 1 to up to 8 persons living on the property. Ideal for upgrading a conventional septic system, the RetroFAST enhances or repairs any existing septic systems that have biologically failed. The RetroFAST® system inserts into an existing 18” manhole without the need for heavy equipment. A very cost-effective solution that meets environmental standards with long term results.
- Bio-Step – BioSTEP® packaged pump system with the engineered design of our effluent filter to transfer screened liquids for various small diameter, collection system applications. Standard design package incorporates a superior ¾” solids handling sewage pump and a comprehensive control system. Other pump options are available. If you have a potential product requiring a STEP (Septic Tank Effluent Pumping) filtering pump vault to filter and transport wastewater, let us know how we can assist!
- High Strength FAST – The BioMicrobics FAST® systems provide significantly improved nitrification/denitrification performance over traditional systems and exceeding typical effluent requirements for wastewater recycling opportunities or reducing the size of the leach field with less aesthetic disturbance of property value or system components. Offering versatility and consistent high performance, the FAST® are also a favorite on

marine vessels and offshore platforms of all types to produce high-quality effluent, specifically designed for extreme environments.

Ideal for small communities or commercial properties, the MyFAST® maintains consistent high performance, low maintenance, and sludge management all in one tank. Available for flows ranging from 20,000 gallons/day (75 m³/d) to 160,000 gallons/day (600 m³/d), the MyFAST® utilizes multiple treatment units in one tank. This culminates in a large, decentralized system ideally suited for smaller municipalities and isolated schools and business parks that release effluent directly into vulnerable environments.

- Bio-Barrier – The BioBarrier® MBR and BioBarrier®-N were the first systems certified for water reuse (NSF/ANSI Std 350, class R) for total blackwater and greywater recycling. BioBarrier® MBR system is designed specifically for the unique needs and characteristics of the onsite and decentralized wastewater industry making it the most advanced system on the market. The BioBarrier®-N adds an additional anoxic zone to achieve higher Nitrogen Reduction for environmentally sensitive areas:
 - BOD less than 5 mg/L
 - TSS less than 2 mg/L
 - Turbidity less than 0.2 NTU
 - Fecal coliform less than 200 CFU/100 mL (without disinfection)

The BioBarrier® MBR combines the advantages of activated sludge treatment with ultrafiltration flat sheet membranes with a pore size of 0.03 µm – eliminating the need for secondary clarification tanks (in most cases). The result is a system with a smaller footprint. With the solids-liquid separation process inside the tank, the system produces a clear, highly purified effluent that is suitable for water reuse, direct discharge into the receiving environment, a reduction in drainfield size (please check with local regulation) or further treatment by other technologies to achieve Net Zero Water goals.

The BioBarrier® HSMBR® (High Strength Membrane Bioreactor) Systems help meet the increasingly stringent needs of specialized applications. The membranes and processes used in this advanced system act as an impenetrable physical barrier for nearly all common pollutants found in wastewater today. The advanced technology offers the highest quality effluent possible on the market. The BioBarrier® MBR was the first system to be approved for water reuse (NSF/ANSI Std 350, class R) by the NSF (National Sanitation Foundation) International. The complete, optimized design of these “ULTRAFILTRATION” of the BioBarrier Membrane BioReactors (MBR) dramatically simplifies the settling, screening, direct aeration and ultrafiltration of the wastewater treatment process to remove 99.9% of the contaminants. As a scaled up version of the certified NSF/ANSI 40 class 1, 245 (nitrogen reduction), 350 (water reuse) and EN12566-3 BioBarrier MBR System, the BioBarrier HSMBR system treats all the blackwater and greywater from the home, building, or community in flows greater than 1500 GPD.

2. Can your system be considered a neighborhood system or a district system?

We have systems that offer treatment for individual homes, commercial/industrial, marine, neighborhood, or municipal/district wide applications.

3. Are you piping effluents alone, or solids as well?

Our systems are capable of pumping both influent liquids and solids at the same time.

4. Do you treat the wastewater before piping?

We can treat the wastewater before piping however this is not necessary for our systems. In some instances, treatment before piping can cause biological and bacteriological issues at the final treatment destination if that option is selected.

5. What size pipe does your system require?

Our residential systems operate with standard 4-inch inlet piping and typically use 1.5 to 2-inch discharge pipe. Our BioSTEP system uses a 2-inch discharge pipe. For a community system mainline size, based on the estimated daily average flow rate, a 6 to 8-inch pipe seems the most appropriate. For future expansion purposes the board might find it necessary to select a larger size mainline collection system pipe. Our systems are compatible with any mainline size selected by the board.

6. Based on 500 houses and businesses, how much space does the plant need or plants need?

For a single municipal/district wide treatment, a minimum area of 100 feet by 100 feet is adequate for the treatment system plant capable of treating up to 80,000 GPD, this will also allow for vehicle and equipment maneuverability during construction and for future service and maintenance needs. If the board selects an option to uses more than 1 system across the district, for example 2-8.0 systems, a smaller area may work for the treatment plant.

Depending on the discharge method selected a site up-to 2.5 acres or greater may be necessary.

7. What happens to the waste after treatment?

Some of our systems have NSF approval for reuse of the effluent due to the high level of treatment offered by our systems. This treated effluent can be used for irrigation of non-food plants such as trees, shrubbery, flowers, and grass. We have a system installed at the International Commerce Center in, Mexico, that re-uses the treated effluent to irrigate the grounds of the property along with the living wall inside the building. It is also it is piped back into the building, re-used to flush toilets and to assist with heating and cooling applications.

Typically for larger municipal application the effluent is directly discharged to a body of water, with appropriate MTDEQ & EPA-NPDES permits or is discharge to a pond system or larger drain-field area. The bio-solids can disposed of using a digester to produce methane, land applied or disposed of by any other legal method allowed by MTDEQ or the EPA.

8. What are the three top reasons to choose your system?

- Our systems are cost effective, simple to use and have a robust build so that they will last through the toughest conditions. With over 65,000 systems in more than 70 countries, our treatment systems are a result of decades of experience, research & development, and real word operating history.
- With the multiple treatment system options and sizes that we offer, we can provide many options that are already MTDEQ approved, tailored specifically for your community's treatments needs, rather than a 1 size fits all solution. This also allows the treatment systems to grow with your community, or the selection of a lager single treatment to service the entire community, to include effluent re-use programs. With our RetroFAST systems we can increasing treatment capabilities using existing septic tanks that have biologically failed, reducing infrastructure costs and ground water contamination, until a larger district wide system is built.
- By having offices located in Montana service, maintenance, and operations of the systems can be accomplished with ease. The lead time on parts replacements and service calls is also significantly reduced.

9. What challenges might we have if we choose your system?

- If the system is open air and not housed underground or in a building, there may be climate issues to deal with in the winter months.
- With the selection of a larger district wise system there may be MTDEQ wastewater operator requirements.
- Due to the distance between our company location in Shepherd, Montana, and the system location in Seeley Lake, Montana, emergency response times make take slightly longer.

10. To what nitrate level does your system treat the effluent?

Many of our systems already have level II MTDEQ approval for 10mg/L or less and often treat well below that level. We are currently working with MTDEQ and have all the necessary data to receive the 7mg/L or less designation. Some of our systems have the NSF/ANSI 350 re-use designation that includes requirements for two categories of facilities – **residential (up to 1,500 gallons per day)**, and commercial. It covers four different types of influent water – combined black and gray water; gray water only; bathing water only; and laundry water only.

11. Based on 500 houses and businesses, what is the predicted cost per unit?

- RetroFAST systems with installation is **\$4,200-4,600** per unit for residential home application only, unless otherwise approved by MTDEQ. For new systems tankage, drain-field, and electrical costs separate and not included in price.
- BioSTEP systems without install **\$3,200-4,950** per unit, for residential or business/commercial applications. Install costs will vary depending on depth and distance to mainline and from the home or structure and electrical source. Different sizes available. Final treatment system will be needed, BioStep is a collection and transfer system only.
- High Strength FAST up to 1,000 GPD, with installation **\$7,800-8,500** can be used for residential or business/commercial applications. Tankage, drain-field, and electrical costs separate and not included in price. Larger treatment systems sizes available for additional costs.
- BioBarrier-N 0.5 up to 500 GPD with installation of treatment equipment **\$9,800**, can be used for residential or business/commercial applications. Tankage, drain-field, and electrical costs separate and not included in price. Larger treatment systems sizes available for additional costs.
- For a quantity of 4 - MyFAST 2.0 treating up to 20,000 GPD including the AMS, BMS, MyTEE, and SciCHLOR options and with installation **\$6,350** per unit. Discharge method and collection system not included in price.
- For a MyFAST 16.0 treating up to 160,000 GPD including the AMS, BMS, MyTEE, and SciCHLOR options and with installation **\$6,000** per unit. Discharge method and collection system not included in price.

12. How does the design process work?

Our team will work directly with you and your engineers to select the correct equipment and see the project through to completion. We have a large team of engineers, scientists, biologists and PHD's, that work for our factory that can assist with every stage of the design process. All of our products have CAD drawing available so they can incorporate into any plans or drawing with ease. Our engineers can help develop some plans and drawings, however they will need to be review, approved, and stamped by a Montana PE.

We can also provide Montana engineers for the project at an additional cost. In short, we can be involved in the design process as much as or as little as you require.