

Sewerage System Operation and Maintenance Plan

Part 1: Operation Plan for Owners and Operators

Introduction

Civic Address: 2160 NARAMATA ROAD NARAMATA B.C.

Legal Description: LOT 1 PLAN KAP 31970 D.L. 206 LA 54

System Completed On (Date): 30/04/2022

Onsite wastewater systems require proper operation and maintenance to ensure adequate performance, service life expectancy, and protection of public health and the environment. Pursuant to section 10 of the BC Sewerage Regulation 326/2004 the owner/user of an onsite wastewater system must ensure it is operated and maintained in accordance with the operation/maintenance plan provided by the designer/planner. In addition, the owner/user is required to keep records of the system and inspections and maintenance performed on the system.

The operations and maintenance plan: system inspection and maintenance schedule. Contact lists, and system do's and don'ts.

IMPORTANT: This system has been designed to service a residence as listed on the general specifications of the sewerage system. Therefore, addition of a bedroom or any additional square footage added to the house, a suite or use as a bed and breakfast will require alterations to the onsite wastewater system that must be designed by an Authorized Person and filed with the Health Authority.

System Operation

Under the laws of BC, the sewerage system that has been installed on the above listed property must be maintained by a Registered Maintenance Provider in accordance with specifications outlined in this Operation and Maintenance Plan.

Cautions and Warnings

- Garbage disposal unit is NOT to be used with septic systems. A garbage disposal will overload the septic tank, degrade wastewater treatment and decrease drain field life.
- No water softeners, floor drains, roof drains or perimeter drains to drain into wastewater system.



- Irrigation over mound or drain field should be closely monitored. Excessive irrigation infiltrates into and hydraulically overloads system. Hydraulic overload will cause failure in system.
- Structures, roads, parking, swimming pools, and any impervious materials are prohibited from being placed on drain fields. Any of these will cause failure of system.
- Gases within septic tank and pump chamber can be explosive and/or cause asphyxiation. DO NOT enter tank risers or tanks at any time. Lids are to be secured at all times.

Do's and Don'ts For Successful Operation

- DO NOT introduce or put any non-biodegradable substances into the system such as:
 - *Chemicals, including paint (do not wash paint brushes inside house)
 - *Solvents, antifreeze, gas, herbicides, pesticides
 - *Coffee grounds
 - *Cigarette butts
 - *Disposable diapers
 - *Feminine hygiene products
 - *Condoms
 - *Paper towel, facial tissue, sanitary wipes
 - *Cat litter
 - *Hair
- DO NOT discharge from water treatment devices including water softeners into system.
- DO NOT use powdered laundry detergent or dish washer soap, liquid soap is acceptable.
- DO NOT flush anything (e.x. condoms, Q-tips, etc.) into system that does not pass through the human body with the only exception being toilet paper.
- DO NOT introduce excessive amounts of fats, oils, or grease into system.
- DO NOT drive on disposal system, piping, distribution box or tanks at any time.
- MINIMIZE the use of bleach and cleaning solvents.
- DO NOT use commercial septic tank additives: they are unnecessary, expensive and can impair system performance.
- DO NOT stress system with multiple laundry loads on one day – spread laundry throughout the week.
- DO practice water conservation and ensure that fixtures do not leak.
- DO check toilets for leaks annually by placing dye in tank (food coloring) and leaving it for several hours. The dye should not appear in the toilet bowl.
- DO have a maintenance provider in place to maintain and monitor the system.
- DO keep maintenance/service records at all times. These records are to stay with the system (and passed to new owners if property changes ownership).



DISPERSAL AREA PROTECTION

- 1) NO SOILS TO BE ADDED
- 2) NO SOILS TO BE REMOVED
- 3) NO SOILS DISTURBED
- 4) NO ONE TO DRIVE OR PARK ON DESIGNATED DISPERSAL AREA

Please note that a full updated list of registered Maintenance Providers can be obtained from your local Health Authority.

Operation and Maintenance Plan: Source Control Policy

(For Residential Systems with Design Flow Rate of 550 Imperial Gallons/Day or Less)

Effluent Quantity/Quality Guidelines

The residence is permitted to discharge up to a design flow rate 500 Imperial Gallons per day of effluent into the system at a peak flow; however, the average flow the system over any week period must not exceed 250 Imperial Gallons per day (50% of design flow rate).

The system is intended for use with normal residential effluent. There are various quality requirements for the effluent discharged from the home to the system, and it is the owner's responsibility to ensure that these are complied with. It is recommended that owners ensure that their liability insurance covers them for liability associated with discharge of effluent that causes damage to the environment. The following should not be discharged:

1. Any sewage in a volume or flow rate greater than shown above;
2. Any sewage in flow rate exceeding 14 Imp. Gallons per minute;
3. Any sewage in flow rate exceeding 9/ Imp. Gallons per hour (18% of design flow rate);
4. Any liquid or vapor having an average temperature higher than 50°C;
5. Any flammable or explosive material;
6. Any garbage;
7. Any metal, plastic, wood or other solid viscous substances capable of causing obstruction or interference with the proper operation of the sewerage system or treatment process;
8. Any sewage or industrial waste having a pH limit less than six (6.0) or greater than nine and a half (9.5);
9. Any sewage or industrial waste containing any of the following materials in excess of the indicated concentrations:

B.O.D.5

300 mg/L



Suspended Solids	400 mg/L
Total sulfide expressed as H2	5 mg/L
Phenolic compounds	2 mg/L
Oil and grease	50.0 mg/L

Part 2: Maintenance Plan for Maintenance Providers

Introduction

Design Flow Rate: 500 IMP GAL/DAY 2300 L/DAY

Type of System (description): TYPE 2 SYSTEM
GRAVITY TO ELSEN SEEPAGE BED

The Maintenance Provider is to perform the maintenance outlined below as required:

TANKS:

- Measure sludge and scum levels in septic tanks and pump chamber. Pump-out and clean as required.
- Clean floats and pump as needed.

CONTROL SYSTEM, AND HOUSING:

- Test pump on/off float, the high level alarm float and the audible/visual alarm to ensure they are operating properly. The pump on/off float is set to provide a pump draw down of 12 inches. The alarm float is set 6 inches above the pump "on" float position. Adjust floats if and when necessary.

FILTERS:

- Check effluent filters and clean when required.
- Replace filters as needed.

DISPERSAL FIELD: PRESSURIZED

- Check operation, cycle, test residual head.
- Lateral lines to be opened at clean out ends and flushed as required. Initial frequency is once every ___ months.
- Inspect observation ports.
- Check pipelines for signs of leakage.

NA

DISPERSAL FIELD: GRAVITY

- Inspect observation ports.
- Inspect distribution box (Adjust flows/speed levelers as needed).
- Ensure that surface of dispersal field is not collecting surface water.



- Inspect diversion valve.
- Inspect observation ports bi-annually (Observation Port is to observe biomat formation and effluent ponding at the zone of infiltration within the dispersal trench or bed).

VALVES:

- Check Hydrotek valve operation.

DISHCHARGE MONITORING:

- Record flow data, accumulation run time.

Septic (Trash) Tanks (All Systems)

Septic tank pump out intervals projected to be 3-5 years, with effluent filter inspection and cleaning intervals expected to be 1 year(s) (6 months for the first two years), depending on use and influent quality. Tank sludge/scum depth should be assessed annually at time of effluent filter cleaning.

PUMP, FLOATS AND ALARMS

Annual pump check to include visual inspection of floats and manual test of alarm/float operation. Visual inspection of pump chamber and cleaning as required.

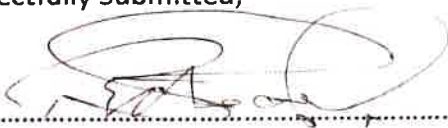
Package Treatment Plants

Operations as per manufacture manual specifications.

R.O.W.P. DISCLAIMER

I hereby certify that the information provided in this report is accurate and true to the best of my knowledge, I wave any and all responsibility and/or liability for the system problems malfunctions or health hazards that arise from any faulty system components, improper installation, damage resulting from misuse and/or failure to operate and maintain the system in accordance with the operation/maintenance plan.

Respectfully Submitted,



.....R.O.W.P.

R.A. Savage



Contact List

R.O.W.P. Maintenance Provider

Company Name: RICKS SEPTIC SERVICE

Contact: _____

Address: _____

Phone #: 250-493-2777

Tank, pump out, filter cleaning, under drain line pump out, lateral line flushing, or general service and maintenance of the system.

R.O.W.P. Installer

Company Name: SAVAGE SERVICES

Contact: B.A. SAVAGE

Address: 458 BRAIN STREET PENTICTON B.C.

Phone #: 250-487-9120

Questions or concerns pertaining to installation.

Package Treatment Plant Supplier

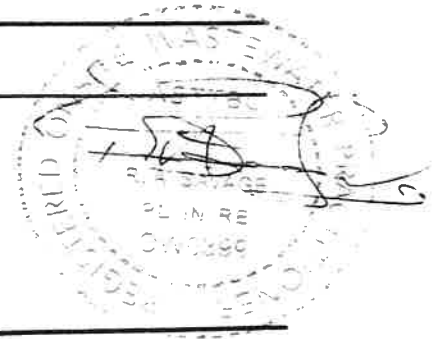
Company Name: _____

Contact: _____

Address: _____

Phone #: _____

Maintenance and servicing of package treatment plants.



Electrician

Company Name: _____

Contact: _____

Address: _____

Phone #: _____

Questions or concerns regarding electrical components of septic system.

Tank/Pump Chamber Supplier

Company Name: SUMMERLAND RENTALS

Contact: AARLAS or KIM

Address: 10008 S VICTORIA ROAD SUMMERLAND

Phone #: 250-494-6916

Questions or concerns regarding concrete septic tanks, pump chambers, risers or distribution boxes.

Pump Materials and Supplier

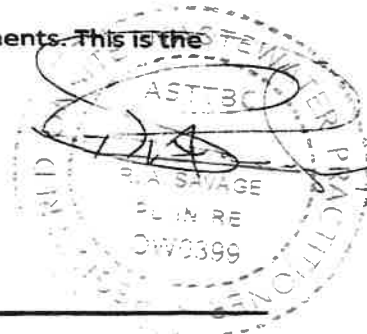
Company Name: _____

Contact: _____

Address: _____

Phone #: _____

Questions or concerns regarding pumps, high float alarm or system components. This is the parts supplier.



PL-122 Filter

The PL-122 was the original Polylok filter. It was the first filter on the market with an automatic shut-off ball installed with every filter. When the filter is removed for regular servicing, the ball will float up and prevent any solids from leaving the tank. Our patented design cannot be duplicated.

Features:

- Offers 122 linear feet of 1/16" filter slots, which significantly extends time between cleaning.
- Has a flow control ball that shuts off the flow of effluent when the filter is removed for cleaning.
- Has its own gas deflector ball which deflects solids away.
- Installs easily in new tanks, or overfits in existing systems.
- Comes complete with its own housing. No gluing of tees or pipe, no extra parts to buy.
- Has a modular design, allowing for increased filtration.

PL-122 Installation:

Ideal for residential waste flows up to 3,000 gallons per day (GPD). Easily installs in any new or existing 4" outlet tee.

1. Locate the outlet of the septic tank.
2. Remove the tank cover and pump tank if necessary.
3. Glue the filter housing to the outlet pipe, or use a Polylok Extend & Lok if not enough pipe exists.
4. Insert the PL-122 filter into tee.
5. Replace and secure the septic tank cover.

PL-122 Maintenance:

The PL-122 Effluent Filter will operate efficiently for several years under normal conditions before requiring cleaning. It is recommended that the filter be cleaned every time the tank is pumped, or at least every three years.

1. Do not use plumbing when filter is removed.
2. Pull PL-122 cartridge out of the tee.
3. Close off filter over the septic tank. Make sure all solids fall back into septic tank.
4. Insert filter back into tee/housing.



Polylok offers the only filter on the market where you can get more GPD by simply snapping on filters together!

Patent Numbers
 6,015,488 & 5,871,641

www.polylok.com



1/16" Filtration Slots

3,000 GPD



Gas Deflector
 Automatic Shut-Off Ball



Outdoor SmartFilter[®] Alarm Polylok, Zabel & Best filters accept the SmartFilter[®] switch and alarm

1-877-765-9565

Acknowledgement by Owner

I/We the undersigned are the legal property owners of land and buildings located at

Civic/Common Address: 2160 NARAMATA ROAD NARAMATA BC

Or,

Legal Description: _____

I/We acknowledge receipt of copies of the following items from the Authorized Person as defined in the B.C. Sewerage System Regulation 326/2004 pursuant to the construction of the sewerage system at the above location:

Drawings and specifications of sewerage system as constructed at the location
Letter of Certification as filed with the Health Authority
Operation Maintenance Plan

I/We acknowledge that I/we have read and understood the operation and maintenance plan and do hereby agree to operate and maintain the sewerage system as specified in this operations/maintenance plan and in accordance to the filing documents submitted to the Health Authority.

Further I/we agree that the land and building(s) will be used in accordance with filing documents and that any change or alteration will not be conducted without written approval by a qualified Registered Practitioner.

I/We agree that upon any sale or transfer of the property to another person, we shall inform the new owner of the contents and details of the operation and maintenance plan.

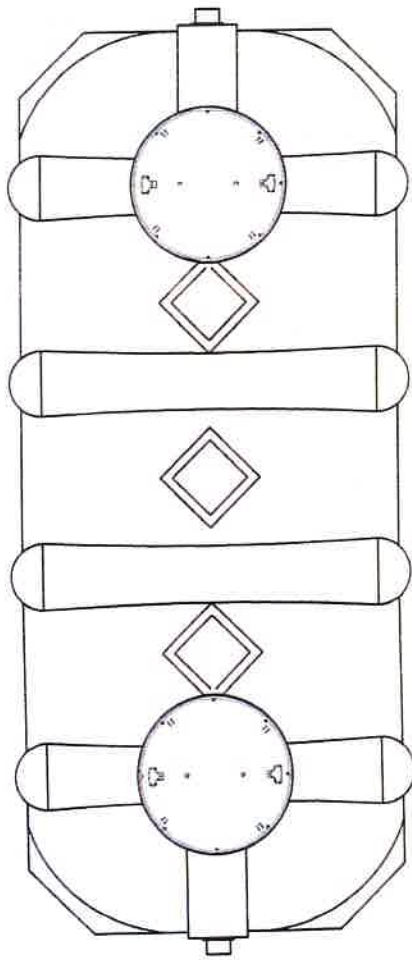
JEFFREY NEUBECKER

OWNER'S NAME

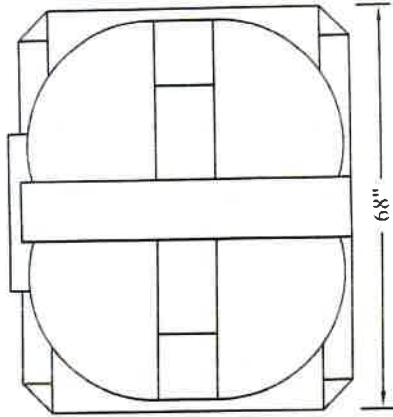
OWNER'S NAME

DATE: 02/06/2022

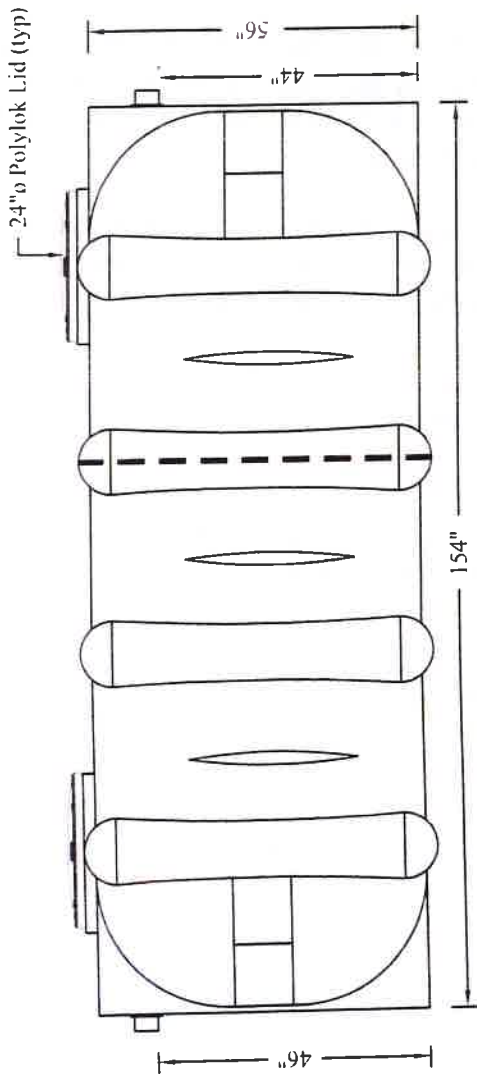




TOP VIEW



END VIEW



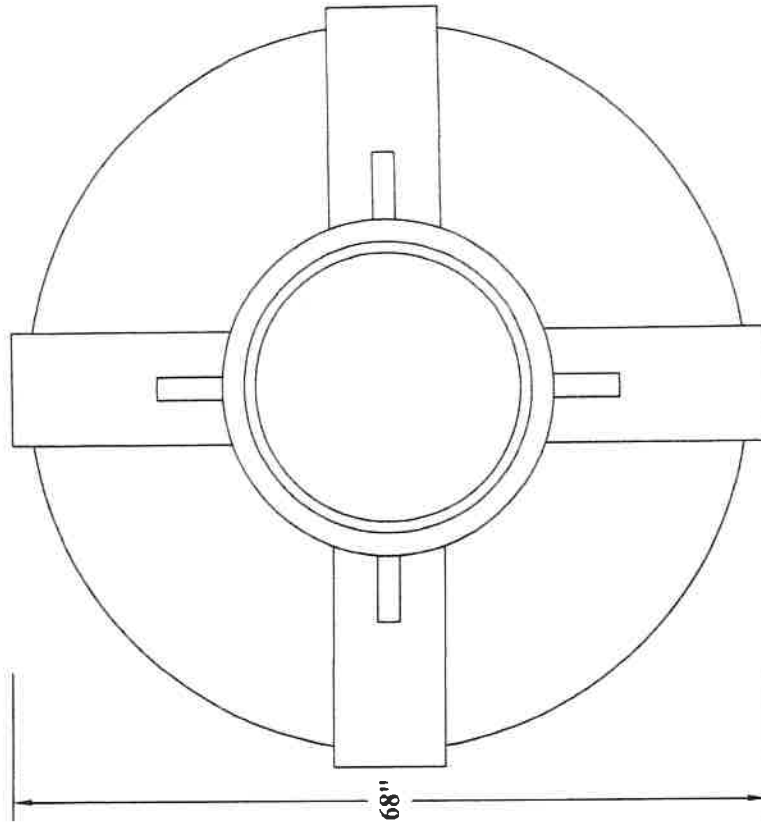
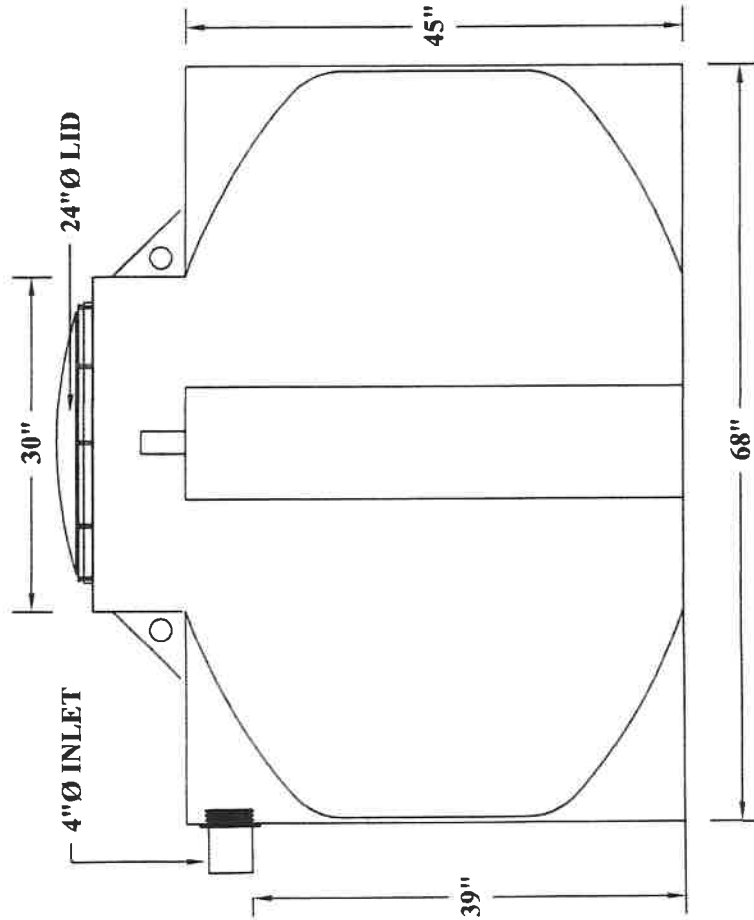
SIDE VIEW

MOD. RKS1400L/P/2
TWO CHAMBER HDLPE SEPTIC TANK

WORKING CAP. 1,400 I.GALS
TOTAL CAP. 1,550 I.GALS

SHEET NO.	PROJECT			
		DATE	SHEET	OF
TOTAL VOLUME	FEET	FEET	FEET	TOTAL FEET
NO. OF TANKS	NO. OF CHAMBERS	NO. OF INLET	NO. OF OUTLET	
DRAWN BY: L.J.		CANWEST TANKS & ECOLOGICAL SYSTEMS LTD. www.canwest-tanks.com		

**HDPE POLYETHYLENE PUMP CHAMBER
MODEL No. RKP500**



CAPACITY

IMP. GAL. = 500

U.S. GAL. = 600

LTR. = 2,273

**Canwest Tanks &
Ecological Systems Ltd.**

11975 Old Yale Road
Surrey, B.C. V3V 3X4
Canada

Tel.: (604) 580-3030

Fax: (604) 580-1171

E-Mail: canwest@direct.ca

This drawing is loaned "as is" for purpose of information only and is the sole property of Canwest Tanks & Ecological Systems Ltd.

Model No. RKP500

500 I gals Pump chamber

Dwg. No.

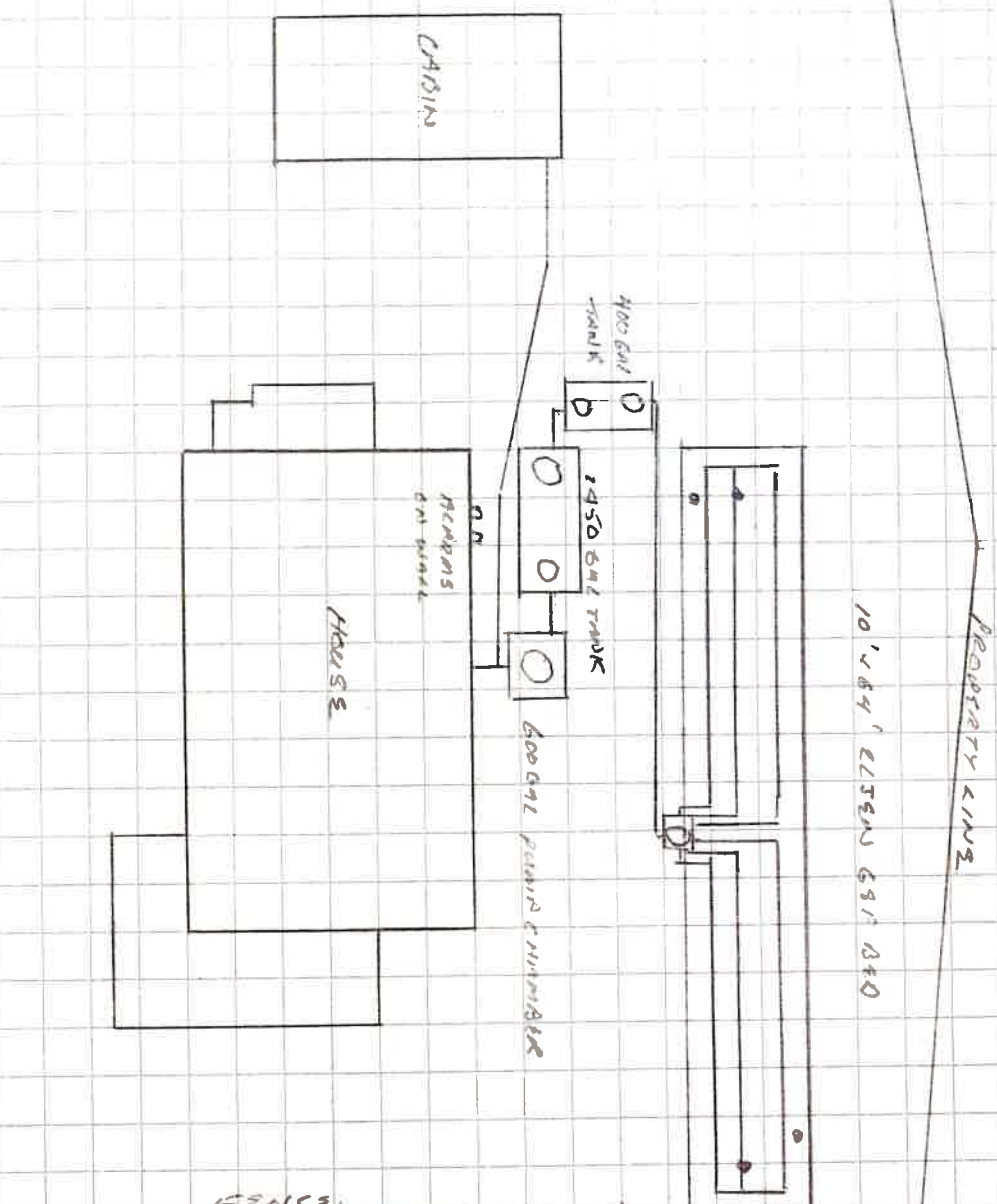
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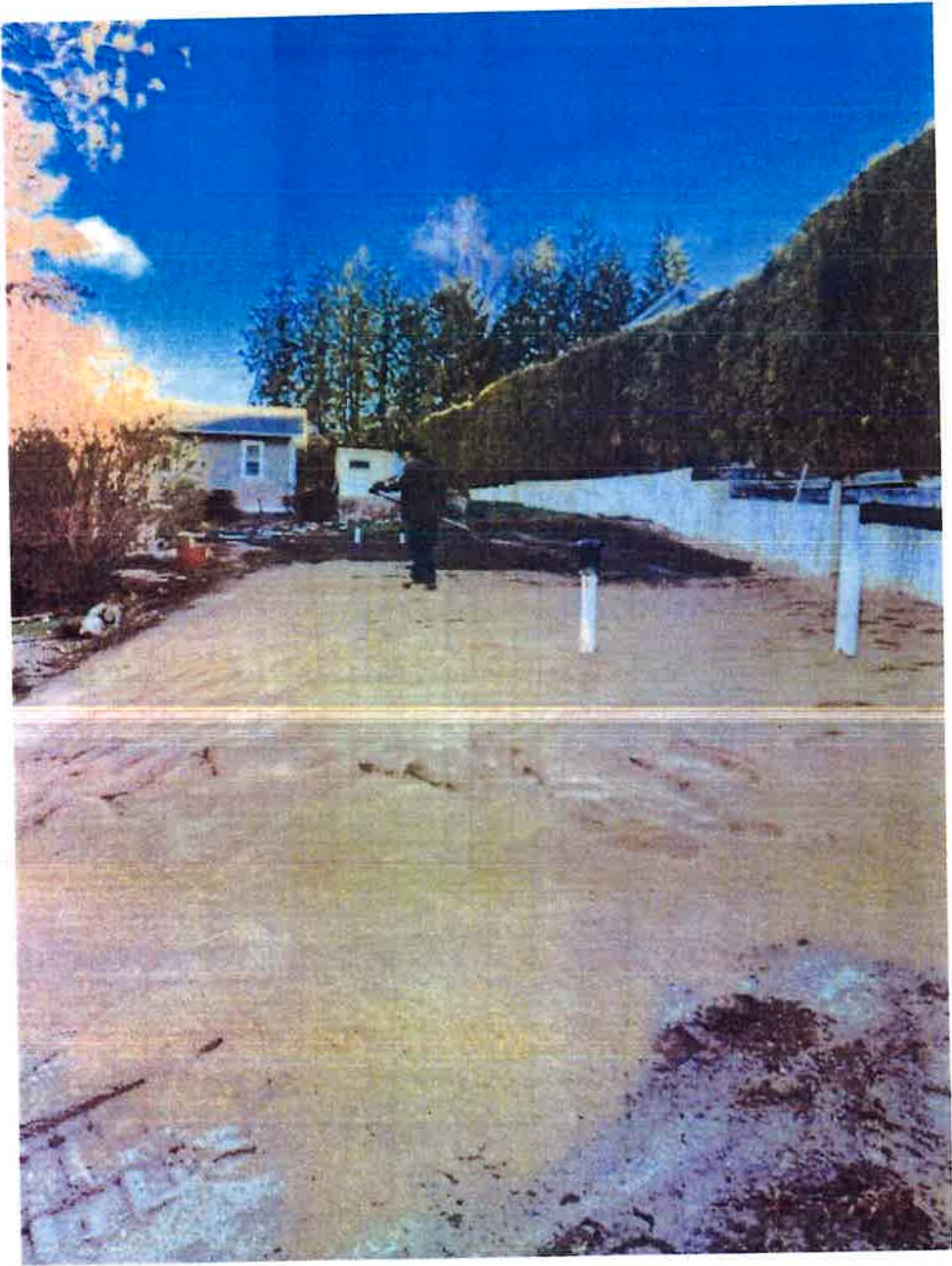


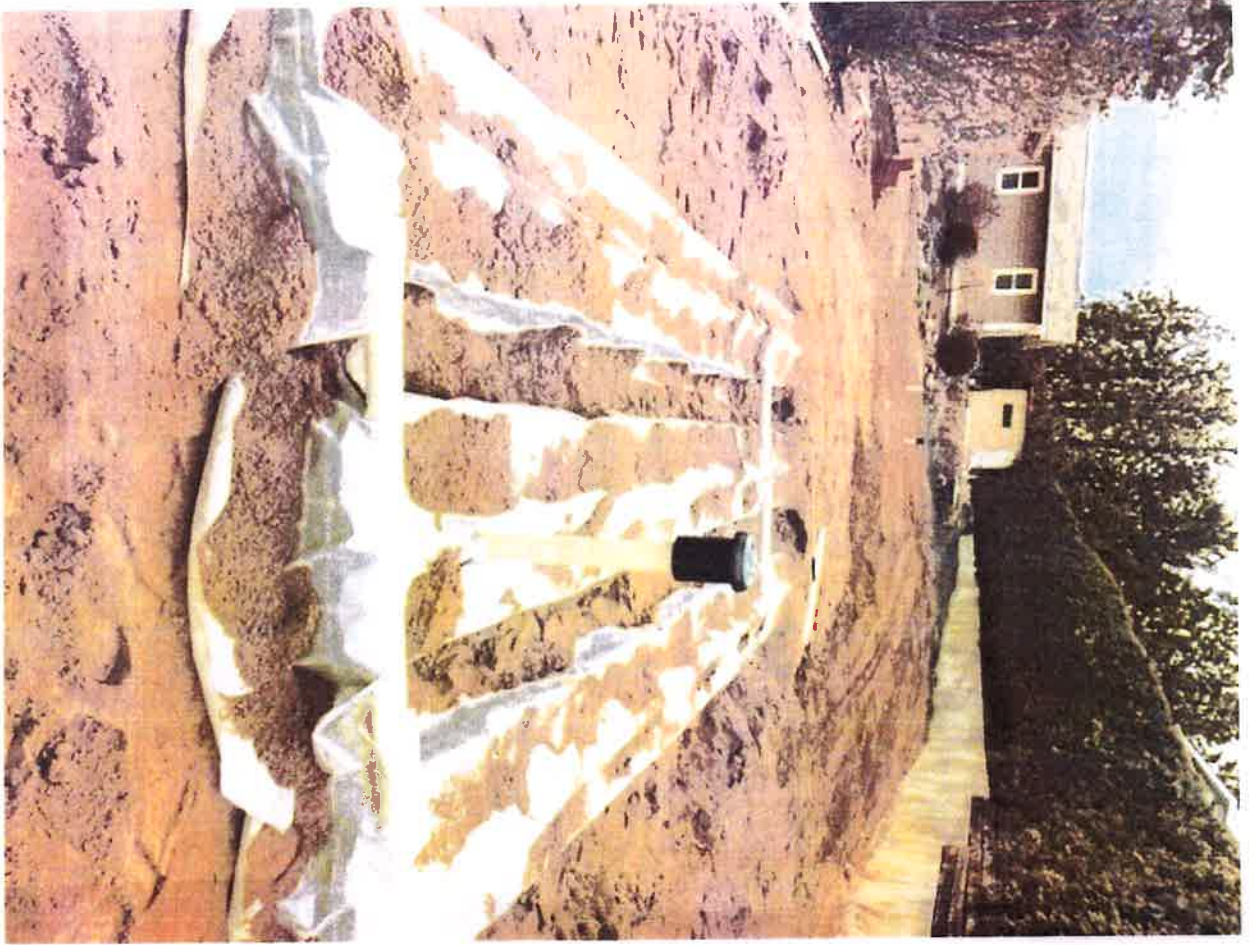
145 BUILT SITE PLAN
2180 WINDHAMPTON ROAD
WINDHAMPTON B.C.

SCALE $\frac{1}{4}'' = 4'$

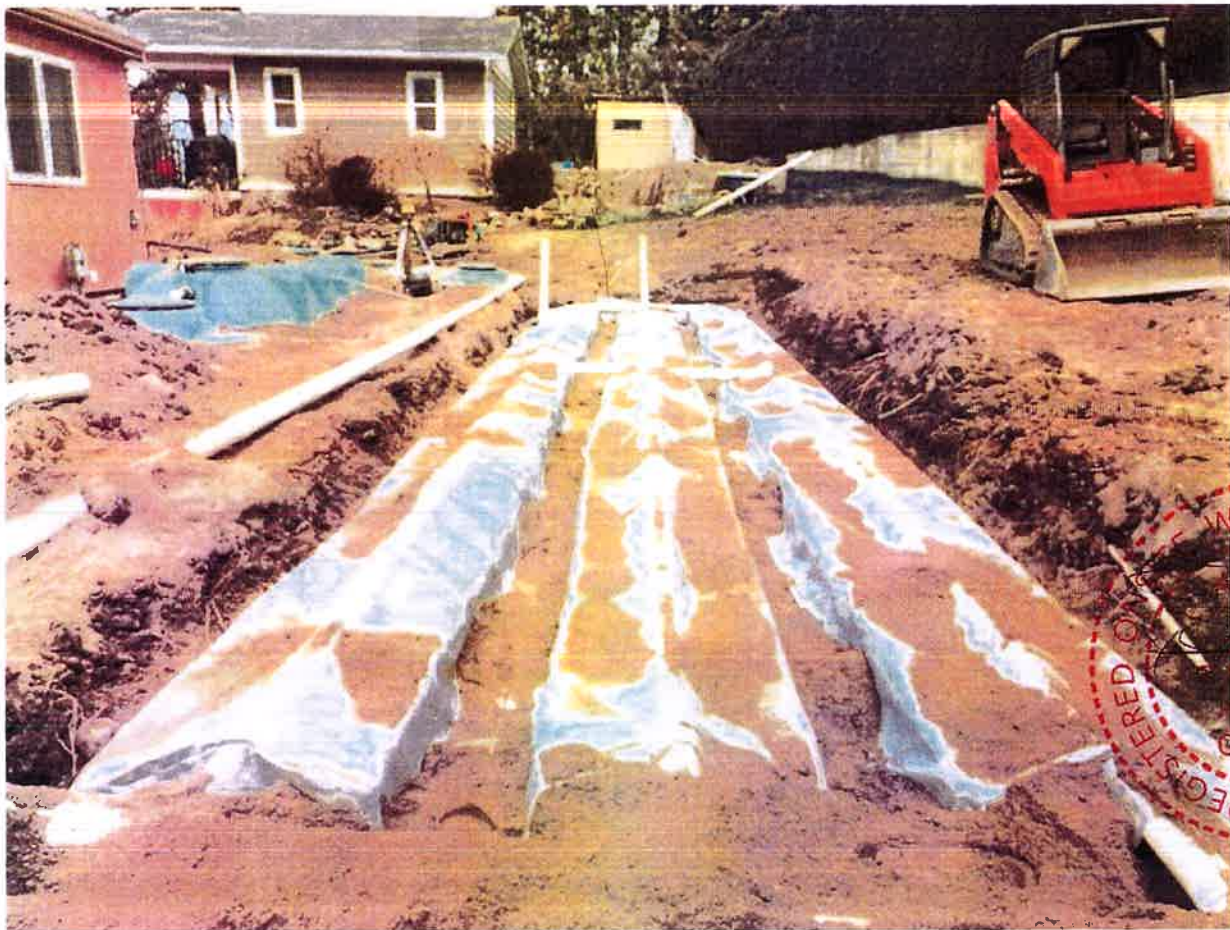
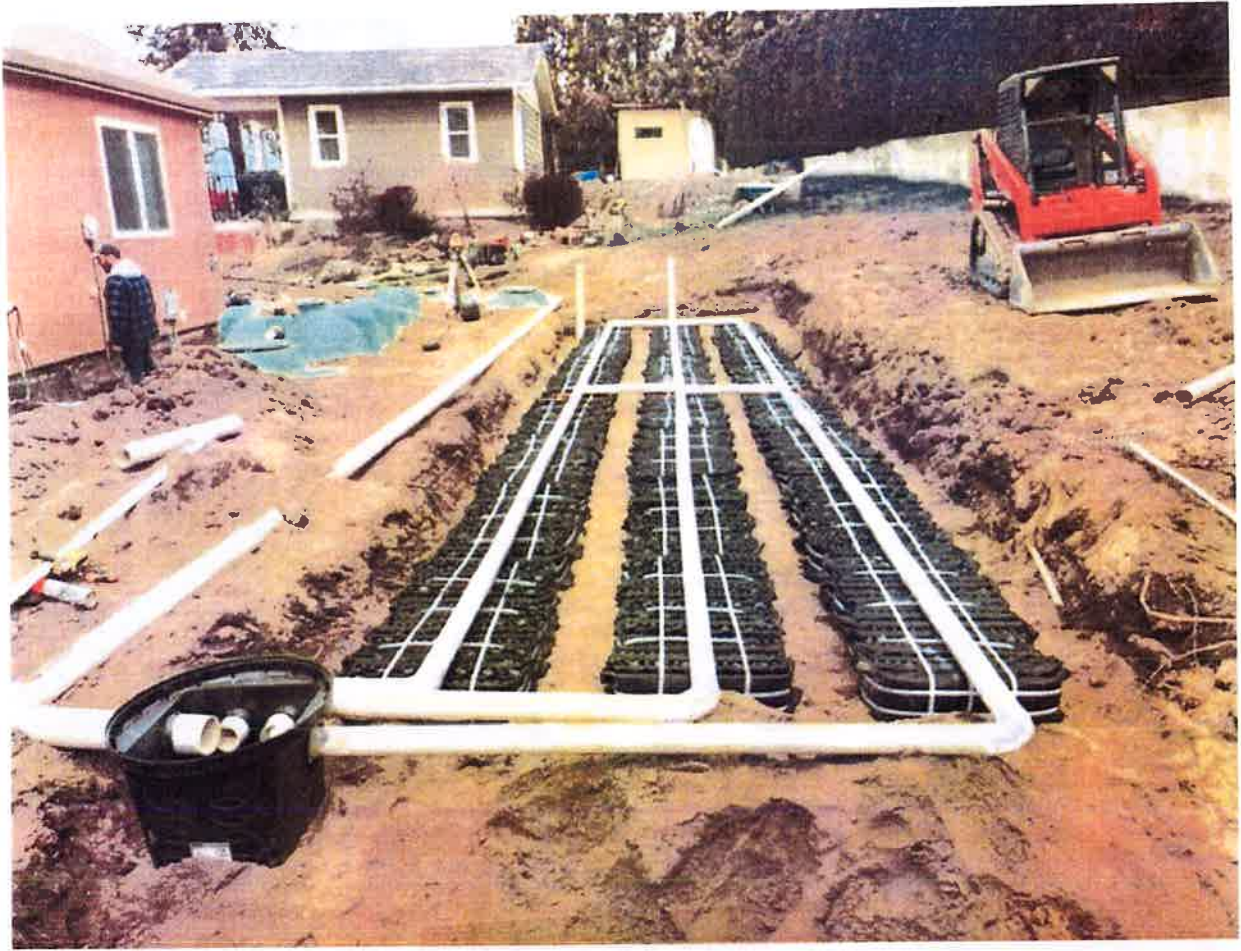


Subject: Naramate job

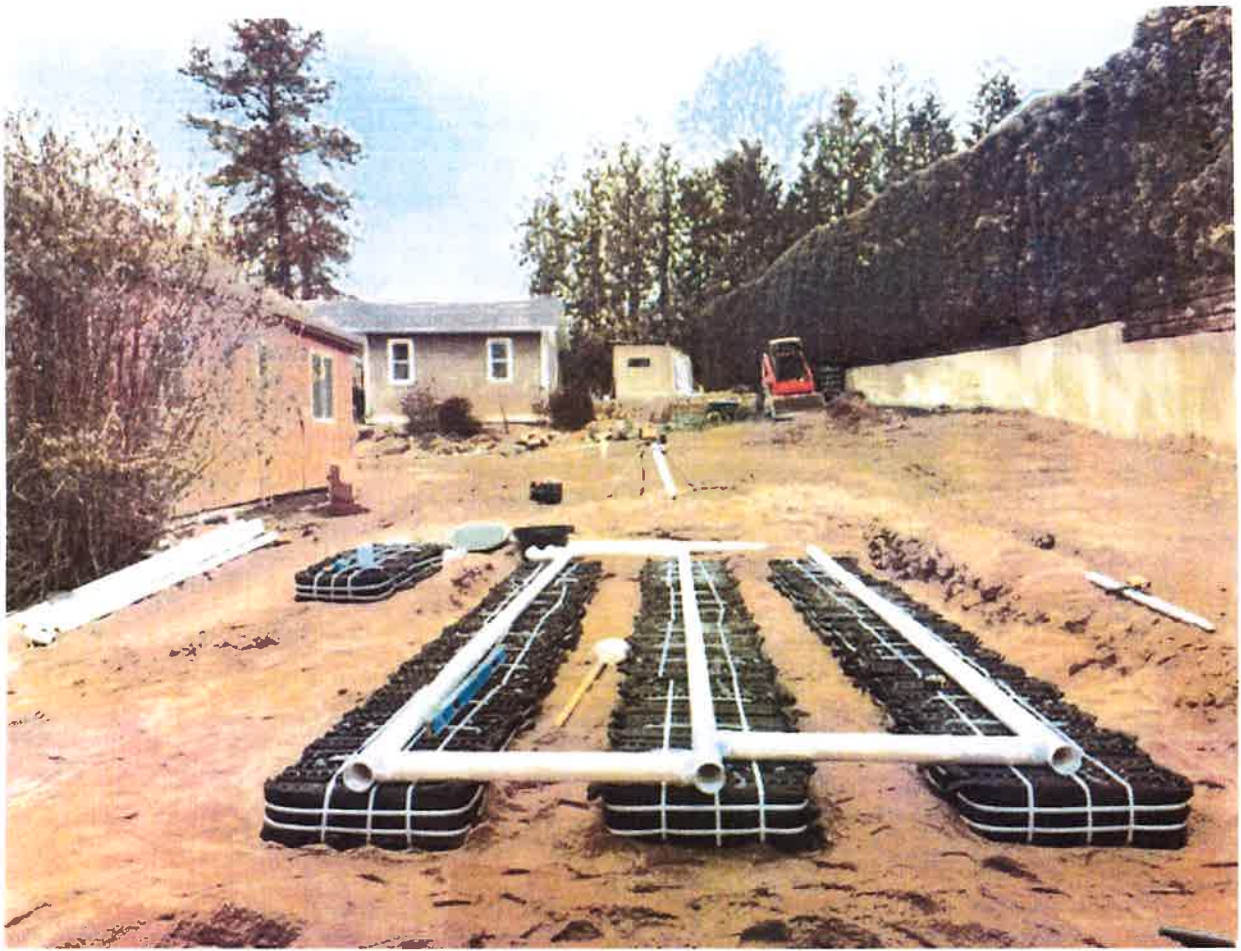


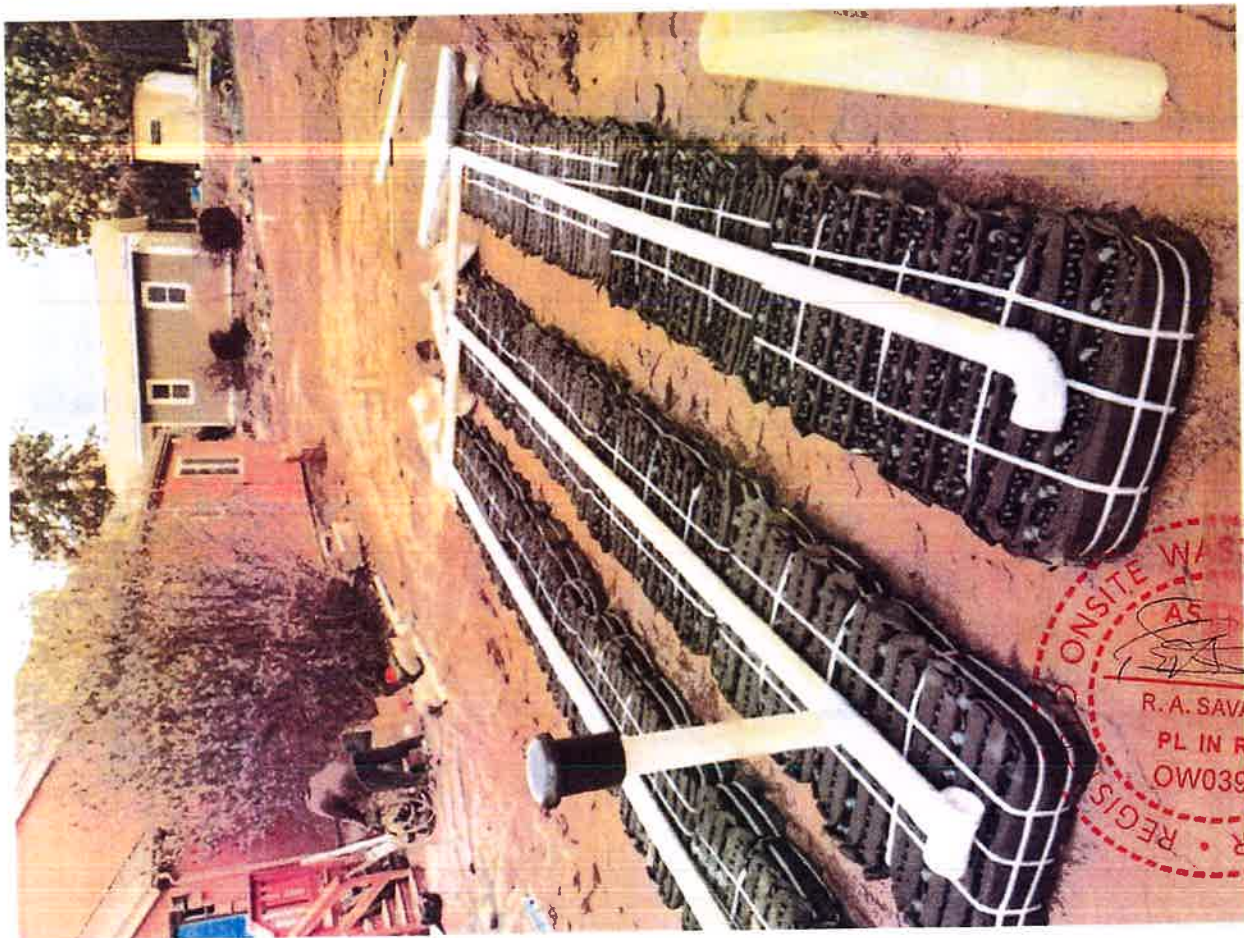
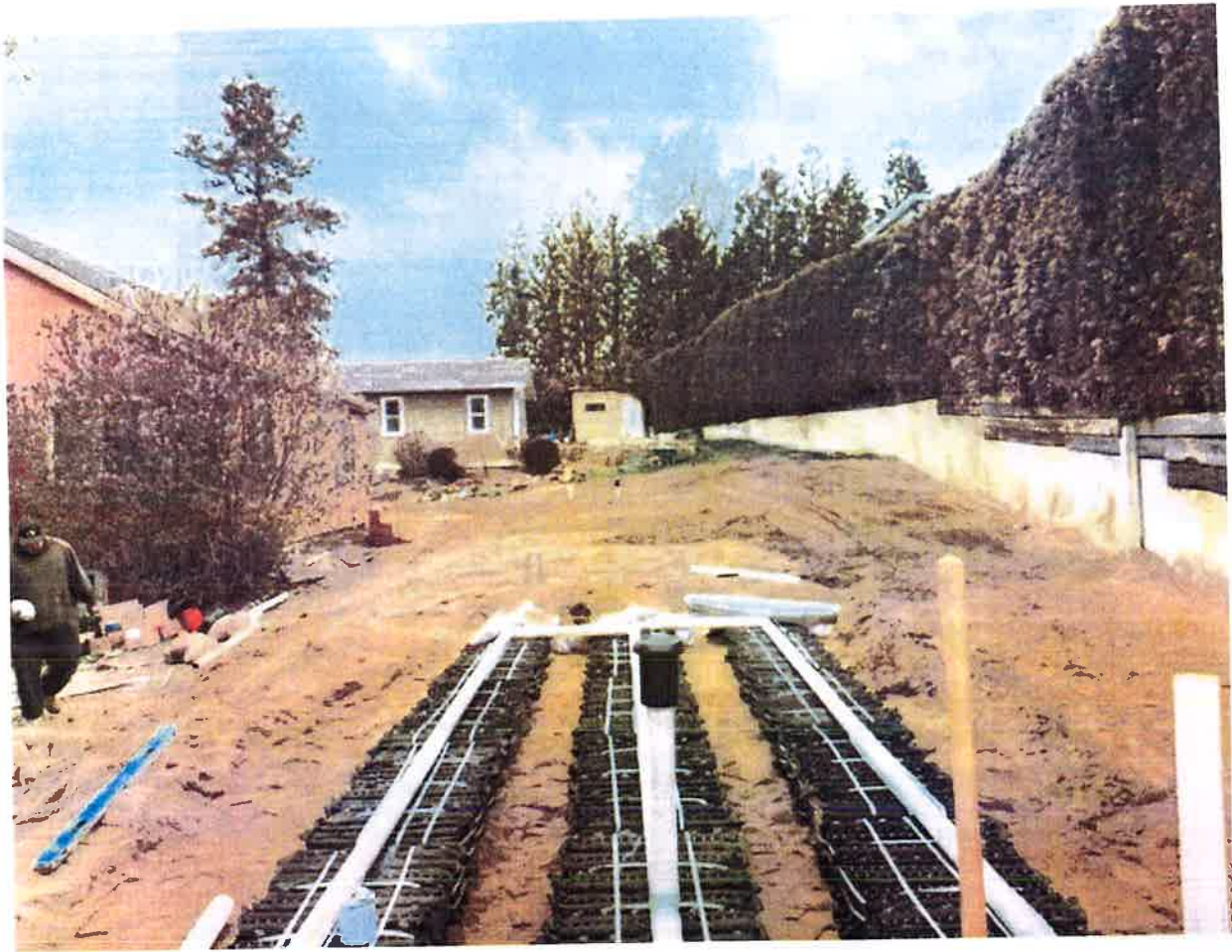


REGISTERED ONSITE WASTEWATER PRACTITIONER •
ASTTBC
R. W. Savage
R. W. SAVAGE
PL IN RE
6830MO



REGISTERED PROFESSIONAL WASTEWATER PRACTITIONER
A. SAVAGE
L IN RE
0W0399
STTBC





ON-SITE WASTEWATER PRACTITIONER
AS ABC
R.A. SAVAGE
PL IN RE
OW0399
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