

OPERATION & MAINTENANCE SERVICE CONTRACT

RECEIVED

FEB 18 2022

CLATSOP CO. PUBLIC HEALTH

Date: 1/4/22

Pd 1/31/23

JK

#186-22-000053

Service-Provider: Complete Septic Service
41092 Ziak-Gnat Creek Lane
Astoria, OR. 97103
Oregon DEQ Maintenance Provider License #RM134

Owner: GEARHART MEADOWS LLC

Billing Address: Box 2772

GEARHART, OR 97138

System Location: 051 MEADOWLANE

GEARHART, OR 97138

6N-10N-3EC-5600 LOT 22

DESCRIPTION OF WORK TO BE PROVIDED BY THE SERVICE PROVIDER

1. **Systems Inspections.** We will provide a minimum of one inspection/service visit (per year) over the two-year period of this contract. This includes inspecting, adjusting and servicing the septic tank/dosing tank, effluent filters, pumps, controls; and inspecting the bottomless sandfilter, seepage bed or seepage trenches which are part of the system. Also included is measuring the sludge and scum depth in the tank, cleaning screens, testing float functions and calibrating the effluent pump. We will visually assess color, turbidity and scum overflow and smell for odors. Performance assessment and operation may include sampling for proper operation of the facility. Any samples collected for testing will not be done without advising you first of their need and cost.
2. **DEQ Annual Report.** We will submit the annual required report to the DEQ office in Astoria along with the required fee.
3. **Record Keeping.** We will maintain accurate records of performance data and inspections. These records will be available for inspection upon request by the DEQ.
4. **Emergency Service.** We will provide emergency service of the septic system components within 48 hours of your service request.
5. **Notification of Tank Pumping.** We will advise you of the need to pump a tank(s).
6. **Rate Increases.** We will advise within 30 days of the current contract expiration of any proposed increase in the rates for the coming two-year period.
7. **Service Invoices.** We will invoice you after each scheduled service. If the system is improperly functioning and cannot be remedied during the time of inspection, we shall notify you of when the correction shall be made.
8. **DEQ Notification of Termination.** We will notify the DEQ office in Astoria within 30 days if the service contract is not renewed or terminated.

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#186-22-000053

OWNER RESPONSIBILITIES:

1. **Vegetation Control.** The owner shall control vegetation around ~~the tank and sandfilter.~~ ^{the tank and sandfilter.}
3. **Notification of System Failure.** The owner shall report evidence of any system failures to the DEQ office and to the Service Provider.

COST/BILLING:

1. **Annual Fee.** The contract service work shall be charged at \$200 per year.
2. **Billing.** Billing shall be sent to the Owner prior to the 1st of the month with payment due by the 10th of each month.
3. **Annual Report Fee.** The annual report fee (currently at \$62) shall be billed to the owner at the time as well.
4. **Tank Pumping.** Pumping the tank(s) shall be an additional charge and are usually required every 3 - 5 years at a cost of \$600 (subject to change).

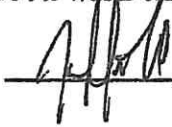
CONTRACT TERM: The commencement date of this contract shall be the date the Service Provider receives the fully signed contract from the Owner. The service contract shall run for two years from the commencement date. We require contract renewal for the next two year period within 30 days of this contract expiration.

DISPUTES: All disputes arising out of or related to this contract shall be settled by arbitration administered by the American Arbitration Association, and judgment on the arbitration award may be entered in any court having jurisdiction. The prevailing party in the arbitration shall be entitled to reasonable attorney fees.

ACCEPTANCE OF PROPOSAL

I agree to these terms of the contract, including payment immediately upon being invoiced. You are authorized to proceed with the work.

Jerry or Jeffery Lebo
Service Provider

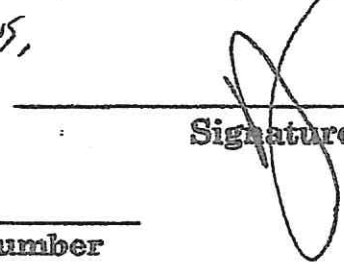


Signature

1/4/22
Date

GEARHART MEADOWS,
LLC

System Owner (print)



Signature

1/4/22
Date

503 395 0999

System Owner phone number

Next payment due 1/4/23

Two Year Service contract expires on 1/4/24



Certificate of Satisfactory Completion

Installation Permit - Residential - New

186-22-000053-PRMT

Clatsop County Onsite
 820 Exchange Street
 Astoria, Oregon 97103
 503-325-9302
 Fax: 503-325-9303
 health@co.clatsop.or.us
 Website:
<https://www.co.clatsop.or.us/publichealth/page/onsite-septic-system-program>

Date Certificate Issued: 08/31/2022
Work Description: Construction/Installation; SFD

Applicant: Septic System Design Address: 89647 Manion Drive Warrenton OR 97145 Phone: 503-739-3221 Email: owensepticdesign@yahoo.com	Primary Contractor: Osburn-Olson, L.L.C. Installer License: 38583 Address: 33485 SW Old Pine Rd Warrenton OR 97146 Phone: (503) 717-3907 Email: grosburn@hotmail.com
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Owner: GEARHART MEADOWS / Max Ritchie Address: P.O. Box 2772 GEARHART OR 97138	Property Address: 0 ⁶⁵¹ Lot On Meadow Ln, Gearhart, OR 97138
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Parcel: 61003BC05600 - Primary **Township:** 6 **Range:** 10 **Section:** 3BC

Lot Size: 0.23 acre	Water Supply: Community Water Supply
Zoning: N/A	City/County/UGB: City
Land Use Approval: yes	

Category of Construction: Single Family Dwelling

	Existing	Proposed
Use of Structure:	N/A	3 bedroom
Number of Bedrooms:	N/A	3

System Specifications

Type:	Bottomless Sand Filter	
Max Peak Design Flow:	450 gpd.	Proposed Flow: 375 gpd.
Min Septic Tank Volume:	1000 gal.	Min Dosing Tank Volume: 500 gal.
		Sand filter sqft: 360

Drain Field Specifications

Drain Field Type:	Bottomless Sand Filter	System Distribution Type: Equal
Drainfield Sizing:	N/A	Distribution Method: Pressurized
Seepage Bed Specs:	N/A	Bottomless sand filter sqft: 360
Media Type:	DEQ Spec Sand	Media Depth: 24 in.
Max Depth:	12 in.	Undisturbed Soil Between Trenches: N/A
Min Depth:	12 in.	Capping Fills-Min Depth of Fill Material: N/A

Special Requirements

Groundwater Type:	Permanent	Groundwater Depth: N/A
Pump to Drainfield Required:	Yes	Filter Fabric on Top of Drain Media: Yes

Date Certificate Issued: 08/31/2022

Work Description: Construction/Installation; SFD

Conditions of Approval

In accordance with Oregon Revised Statute 454.66 and Oregon Administrative Rules 340-71, this Certificate is issued as evidence of satisfactory completion and installation of components as described in the permit at the location identified.

Issuance of this Certificate does not constitute a warranty or guarantee that this onsite wastewater treatment system will function indefinitely without failure. Conditions imposed as permit requirements continue for the life of the system.

The area of the initial and the identified replacement area must not be subjected to activity that is likely to adversely affect the soil or the functioning of the system. Such activities may include, but are not limited to, vehicular traffic, livestock, covering of the area with asphalt or concrete, filling, cutting or other soil modification activities.

This system must operate in compliance with OAR Chapter 340, Division 071 and must not create a public health hazard or pollute public waters.

Unless otherwise required by the agent, the system installer must backfill (cover) this system within 10 days after issuance of this Certification of Satisfactory Completion.

Clatsop County Public Health recommends that the owner inspect the septic tank every 3 years and pump it when necessary.

Certificate of Satisfactory Completion

System Inspection: No Operation of Law - 7 Days Notice: No Pre-Cover Inspection Waived Per 340-071: No

Comments: N/A

Lucas Marshall

Environmental Health Specialist I

CALL BEFORE YOU DIG...IT'S THE LAW

ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth by Oregon Administration Rules. You may obtain copies of the rules by calling the center. (Note: The telephone number for the Oregon Utility Notification Center is 1-800-332-2344.)

Final Inspection Request and Notice - Septic ID: 186-22-000053-PRMT

Pursuant to the requirements within ORS 454.665, OAR 340-071-0170 and OAR 340-071-0175, the system installer and/or the permittee must notify the Department of Environmental Quality (or its authorized Agent) when the construction, alteration or repair of a system for which a permit was issued is completed and prior to backfilling or covering the installation. The Department (or Agent) has 7 days to perform an inspection of the completed construction/installation following the official notice date, unless the Department (or Agent) elects to waive the inspection and authorizes the system to be backfilled. Receipt and acceptance of this completed form by the Department (or Agent) establishes the official notice date of your request for the pre-cover inspection. Faxed copies are acceptable for inspection request purposes only. Originals must be received before a Certificate of Satisfactory Completion is issued. Please complete sections 1 through 4 on the form and return it to the office that issued the permit. Forms that are determined to be incomplete will be returned.

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AUG 25 2022
CLATSOP CO. PUBLIC HEALTH

SECTION 1: Owner/Permittee Information:

Twncshp: 6 Range: 10 Sect: 3BC
Lot: 05600

Name: GEARHART MEADOWS / Max Ritchie

Property 0 lot on Meadow Ln, Gearhart, OR 97138
Address:

SECTION 2: System Component Specifications:

A. Tanks/Pumps		System Type:	Water tight verification*
Tanks(1)	Volume: 1500	Compartments: 2	Manufacturer: AL REDIMUX Date: 8/23/22
Tanks(2)	Volume: N/A	Compartments:	Manufacturer: Date:
Pump(s)	HP: 1/2	Model/Manuf. PP5005 ORENCO	Float(s)Type(1): P 3EA Model/Manuf. MF ORENCO
			Float(s)Type(2): N/A Model/Manuf.

B. Piping

Effluent Sewer (tank to drainfield)	Yes	No <input checked="" type="checkbox"/>	Diameter:	ASTM#/Other:	Length:
Pressure Transport Pipe	Yes <input checked="" type="checkbox"/>	No	Diameter: 1 1/4"	ASTM#/Other: D1785	Length: 35 FT

C. Secondary Treatment Unit:

Sand Filter** LATERALS	Yes <input checked="" type="checkbox"/>	No	Type: BOTTOMLESS	Container Dimensions: 18' X 20'
Underdrain pipe	Diameter: 1 1/4"		ASTM#/Other: D1785	Length: 136 FT
Manifold piping	Diameter: 1 1/4"		ASTM#/Other: D1785	Length: 17 FT
Internal Pump	HP:	Model/Manufacturer		
Floats(1)	Type:	Model/Manufacturer		
Floats(2)	Type:	Model/Manufacturer		
ATT	Yes	No <input checked="" type="checkbox"/>	Model:	
Certified Maint.	Provider Name: COMPLETE SEPTIC SERVICE			
Operation and Maint.	Contract Received?	Yes <input checked="" type="checkbox"/>	No	

D. Drainfield Media

Type	(Gravel, Pipe or alternative?) 28 yds DEER SAND; 7 yds EA. DEEP PERGRAVEL & DR. ROCK				
Distribution Box	Yes	No <input checked="" type="checkbox"/>			
Drop Box	Yes	No <input checked="" type="checkbox"/>			
Distribution Pipe	Yes	No <input checked="" type="checkbox"/>	Diameter:	ASTM#/Other:	Length:
Comment	2-24" RISERS W/LIDS; FILTER FABRIC				

Clatsop County Department
of Public Health
On-Site Waste Water Program
Approved By: LM
Permit No. 186-22-000053
Date: 8/31/22

*All Tanks(s) were tested for water-tightness after installation and passed in accordance with OAR 340-073-0023(3)

**Attach sieve analysis for Underdrain Media and Filter Sand

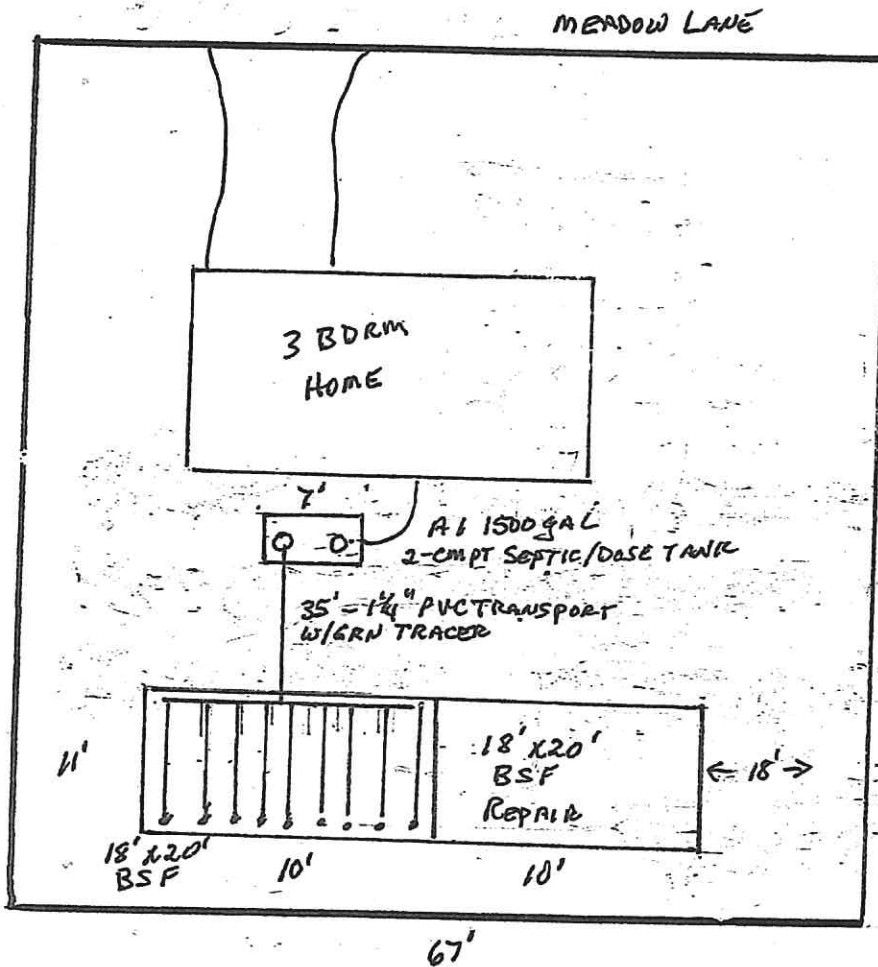
SECTION 3 - As Built Plan

AS-BUILT PLAN OF THE CONSTRUCTED SYSTEM. Indicate the direction of NORTH. Show locations of all wells within 200 feet of the system. Show system setback distances from property lines, structures, wells, streams, etc.

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NT NOT TO SCALE
 GEARHART MEADOWS
 GN-1010-3 BC-5600
 OSBORN/OLSON LLC
 #38583

103.21'

SECTION 4 - Construction was performed by (Signature Required)

I certify that the information provided on both pages of this document is correct and that the construction of this system was in accordance with the permit and the rules regulating the construction of onsite wastewater treatment systems (OAR Chapter 340, Divisions 71 and 73).

Owner/Permittee or Certified Installer w/Certification#: OSBORN/OLSON LLC Print Name:

Licensed Installer: Yes No License#: 38583 Certification#: RT 826

Owner/ Certified Installer: Signature: Scott Tomlin Phone#: 503-707-3907
 Date: 8/25/22

SECTION 5 - Office Use Only:

Notice Accepted Yes No Date: _____

Installer/Owner (Permittee) Notified: Yes No Date: _____

If No, Reason for Non Acceptance: _____

Comment: _____

Clatsop County Department of Public Health
 On-Site Waste Water Program
 Approved By [Signature]
 Permit No. 186-22-00053
 Date 8/31/22



Septic Permit

Installation Permit - Residential - New

186-22-000053-PRMT

Clatsop County Onsite
820 Exchange Street
Astoria, Oregon 97103
503-325-9302
Fax: 503-325-9303
health@co.clatsop.or.us
Website:

<https://www.co.clatsop.or.us/publichealth/page/onsite-septic-system-program>

Date issued: 2/25/22	Expiration date: 2/25/23
Work description: Construction/Installation; SFD	

Applicant: Septic System Design
Address: 89647 Manion Drive
Warrenton OR 97145
Phone: 503-739-3221
Email: owensepticdesign@yahoo.com

Primary contractor: Osburn-Olson, L.L.C.
Installer License: 38583
Address: 33485 SW Old Pine Rd
Warrenton OR 97146
Phone: (503) 717-3907
Email: grosburn@hotmail.com

Business License: N/A

Owner: GEARHART MEADOWS / Max
Ritchie
Address: P.O. Box 2772
GEARHART OR 97138

Property address: 0 Lot On Meadow Ln, Gearhart, OR
97138

Parcel: 61003BC05600 - Primary **Township:** 6 **Range:** 10 **Section:** 3BC

Lot size:	0.23 acre	Water supply:	Community Water Supply
Zoning:	N/A	City/County/UGB:	City
Land use approval:	yes	County:	N/A
Action:	New	Type of application:	Construction Permit - Residential
System failing:	N/A	Septic tank last pumped:	N/A
Comments:	N/A		

Category of construction: Single Family Dwelling

	Existing	Proposed
Use of structure:	N/A	3 bedroom
Number of bedrooms:	N/A	3

System Specifications

Type:	Bottomless Sand Filter	ATT description:	N/A
Max peak design flow:	450 gpd.	Proposed flow:	375 gpd.
Min septic tank volume:	1000 gal.	Min dosing tank volume:	500 gal.
		Sand filter sqft:	360

Drain Field Specifications

Drain field type:	Bottomless Sand Filter	System distribution Ttpe:	Equal
Drainfield sizing:	N/A	Distribution method:	Pressurized
Seepage bed specs:	N/A	Bottomless sand filter sqft:	360
Media type:	Other - Indicate Product/Manufacturer	Media depth:	24 in.
Media type description:	DEQ Spec Sand		
Max depth:	12 in.	Undisturbed soil between trenches:	N/A
Min depth:	12 in.	Capping fills-min depth of fill material:	N/A

CALL BEFORE YOU DIG...IT'S THE LAW

ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth by Oregon Administration Rules. You may obtain copies of the rules by calling the center. (Note: The telephone number for the Oregon Utility Notification Center is 1-800-332-2344.)

Onsite Permit 186-22-000053-PRMT

Date issued: 2/25/22	Expiration date: 2/25/23
Work description: Construction/Installation; SFD	

Special Requirements

Stake out required:	No		
Groundwater type:	Permanent	Groundwater depth:	N/A
Pump to drainfield reqd:	Yes	Filter fabric on top of drain media:	Yes

Conditions of approval

Have a copy of the approved plot plan and permit on site during construction and for all inspections. Submit a complete As-Built and Materials list form prior to final inspection on all construction-installation permits.

Modifications to the approved plan or proposed use need to be approved prior to installation. A construction-installation permit is valid for one year from the date of issuance.

All work is to conform to Oregon Administrative Rules, Chapter 340, Divisions 071 and 073. Make no changes in system location or specifications without written approval from the permit issuing agent.

Install with dry soil conditions.

Vehicular traffic and livestock must be restricted from the system area.

All roof drains must be directed away from the system area.

Meet all required setbacks.

A pre-cover inspection of the installed absorption facility (prior to backfill) is required.

A final inspection request and notice form including a detailed and accurate as-built plan of the constructed system and a list of all materials used in the construction of the system must be completed and submitted prior to requesting a final inspection.

Lucas Marshall

Environmental Health Specialist I

2/25/22



#186-22-000053

Clatsop County
Onsite Septic System Program
820 Exchange Street, Suite 100
Astoria, Oregon 97103
Phone 503 325-9502
www.co.clatsop.or.us

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CLATSOP CO. PUBLIC HEALTH

(PA) OK #3173
\$1750

Application for Onsite Sewage Treatment System

A. Property Owner Information

Max Richie PO Box 2772 Gearhart OR 97138 503-200-0077
Name GEARHART MEADOWS LLC Mailing Address (Street, PO Box, City, State, Zip) Phone Number

B. Legal Property Description

6N 10W 3BC 5600 56525 0.23
Township Range Section Tax Lot Tax Account Number Acreage or Lot Size
Clatsop County Subdivision Name 22 Block

Property Address: Lot 22 on Meadows LN Gearhart OR 97138
(Street, City, State, Zip)

Directions to Property 101 south turn right at Gearhart Ln then left at
Cottage turn left on Meadows head right 5th property on right

C. Existing Facility / Proposed Facility / Water Information

Existing Facility Proposed Facility Water Supply
[] Single Family Residence [X] Single Family Residence [X] Public Gearhart
Number of Bedrooms 3 Name
[] Other [] Other Well, Spring, Shared

D. Type of Application

- [] Site Evaluation [X] Construction BSF [] Permit Repair [] Major [] Minor [] Alteration Permit [] Major [] Minor
[] Renewal Permit [] Existing System Evaluation [] Permit Transfer [] Permit Reinstatement [] Compliance Record Review
[] Authorization Notice for: [] Connecting to an Existing System Not in Use [] Replacing a Mobile Home or House with Another [] Mobile Home or House [] The Addition of One or More Bedrooms [] Personal Hardship [] Temporary Housing [] Other-Please Specify

If the required fee and attachments are not included with this application, it will be returned to you as incomplete. Post a flag or sign with your name and address at the entrance to the property. Flag and number the test holes.

By my signature I certify that the information I have furnished is correct and hereby grant Clatsop County and its' authorized agents permission to enter onto the above described property for the sole purpose of this application

Signature Date 2-12-22

Matthew Owen 503 739 3221 owensepticdesign@yahoo.com
Applicant's Name (Please Print Legibly) Applicant's Phone Applicant's E-Mail Address

89647 Manion Dr Warrenton OR 97146
Applicant's Mailing Address

Applicant is the [] Owner [X] Authorized Representative [X] Licensed Septic Installer
[] Authorization Attached Osburn / Olson Exc # 38583
Installers Name



Clatsop County
 Environmental Health
 820 Exchange Street, Suite 100
 Astoria, Oregon 97103
 Phone 503 325-8500

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CLATSOP CO. PUBLIC HEALTH

mmcnicke@co.clatsop.or.us www.co.clatsop.or.us

#186-22-000053

Notice Authorizing Representative

I, Max Richie, have authorized
 (Property Owner – Please Print)
Matthew Owen To act as my agent in performing
 (Authorized Representative – Please Print)

the activities necessary to obtain site evaluations, permits, and other onsite wastewater treatment program services provided by Clatsop County on the property described below in accordance with OAR chapter 340, division 071. I agree that any costs not satisfied by the Authorized Representative are my responsibility.

PROPERTY IDENTIFICATION

Lot 22 on Meadows Ln Gearhart OR 97138

Property Situs or Road Address

And described in the records of Clatsop County as: Clatsop

Township 6N Range 10W Section 3BC Tax Lot 5600 Map ID _____

Township _____ Range _____ Section _____ Tax Lot _____ Map ID _____

PROPERTY OWNER:

Name: Gearhart Meadows LLC Email: Coastalhomesnwa@gmail.com

Mail Address: PO Box 2772 City/State/Zip Gearhart OR 97138

Phone: 503-200-0077 FAX: _____

Signature: [Signature] Date: 2-12-22

AUTHORIZED REPRESENTATIVE:

Name: Matthew Owen Email: owensepticdesign@yahoo.com

Mail Address: 89647 Manion Dr City/State/Zip Warrenton OR 97146

Phone: 503-739-3221 FAX: 503-717-8681

Signature: [Signature] Date: 2-12-22

#106-22-000053
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SECTION 1 - TO BE COMPLETED BY APPLICANT

1. Applicant Name/Property Owner: Max Richie Gearhart Meadows LLC
Mailing Address: PO Box 2772
City/State/Zip: Gearhart OR 97138
Telephone: 503-200-0077

2. Property Information:
County: Clatsop Tax Lot No: 5600
Township: 6N Range: 10W Section: 3 BC
Physical Address: lot 22 on Meadows LN Gearhart OR 97138 (651 Meadow Ln)
Block: _____ Lot: 22
Subdivision Name (if applicable): _____

3. This proposed facility is for:
 An individual, single family dwelling
 Describe the type of development, business or facility and the provided services or products: _____


4. Permit or approval being requested:
 Construction-Installation permit for: New Construction Repair Alteration
 Non-water-carried facility requests (for example, pit, privy/vault toilet for campgrounds)
 Authorization Notice for: Replacement of dwelling Bedroom Addition
 Other changes in land use involving potential sewage flow increases

SECTION 2 - TO BE COMPLETED BY CITY OR COUNTY PLANNING OFFICIAL

5. Property Zoning: RI Zoning Minimum Parcel Size 10,000 Sq. Ft.
6. The facility is located: inside city limits inside UGB outside UGB
7. Does the proposed facility comply with all applicable local land use requirements: Yes No

If you answered "Yes" above, was this compliance based on:
 Compliance with local comprehensive plans and land use requirements (provide a citation to the applicable provisions)
 Conditional approval (provide findings and citation or attach a copy of the applicable land use decision)
 Measure 49 waiver (provide Department of Land Conservation and Development approval number)
Either provide reasons for affirmative compliance decision or attach findings of fact: _____

PAID
02/16/2022 CHK# 3172
(RP)

8. Planning Official Signature: 
Print Name: Chad Sweet Date: 02/16/2022
Title: City of Gearhart Administrator Telephone: (503) 738-5501

Max Richie

6N-10W-3BC-5600 RECEIVED

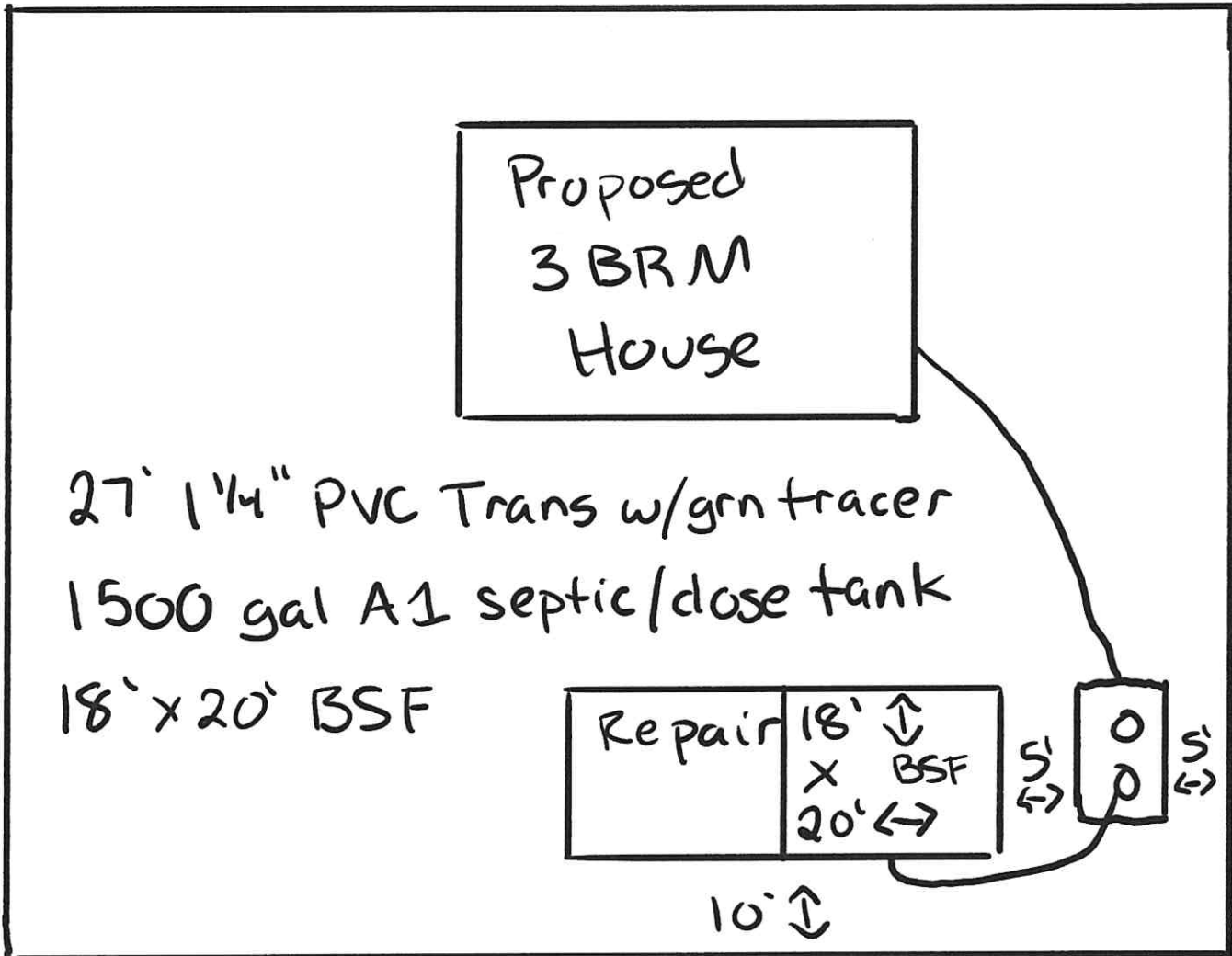
Osburn/Olson Exc# FEB 18 2022

38583

GLATSOP CO. PUBLIC HEALTH
#186-22-000053

Not to Scale

↑ N



20x18" Bottomless Sand Filter

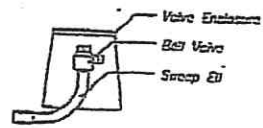
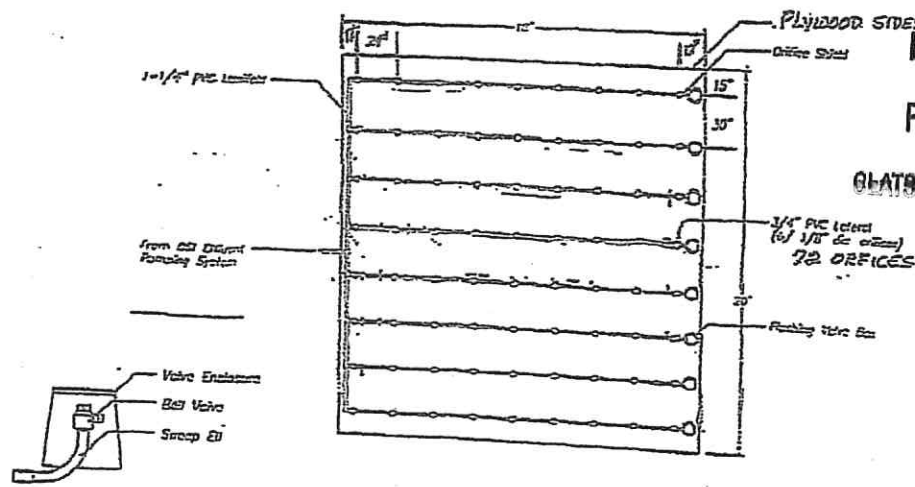
DESIGN FLOW 1.25 GPD/FT.²



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FEB 18 2022

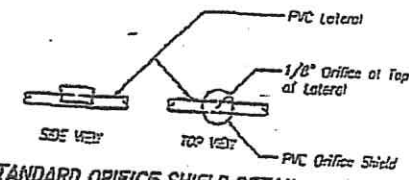
GLATFOP CO. PUBLIC HEALTH
 #186-22-
 000053



FLUSHING VALVE DETAIL
 SCALE 1" = 1'-0"

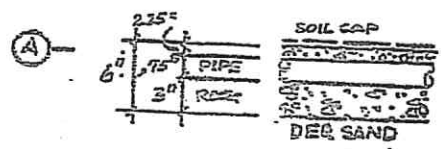
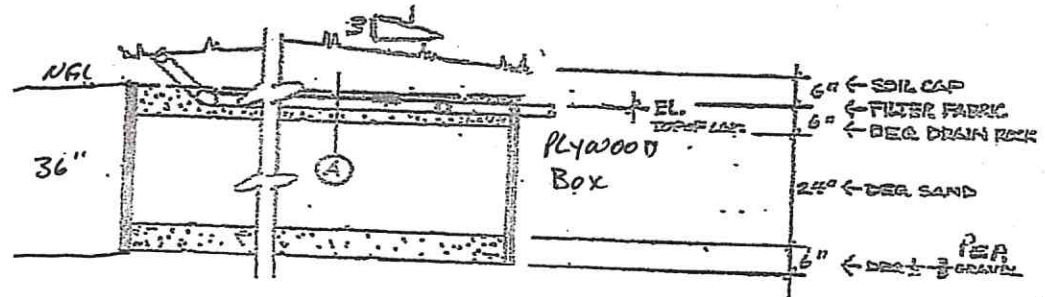
Part # 1 S-12555
 © 1991 Greco Systems, Inc.

TOP VIEW - 20x18" BOTTOMLESS SAND FILTER
 SHEET # 5-3
 Note: See additional details on
 DWG. 51-5-3



STANDARD ORIFICE SHIELD DETAIL

Max Richie
6N-10W-3BC-5600
 Osburn/Olson Exc # 38583



- EL. NATURAL GRADE ——— 0.00'
- EL. TOP OF MANIFOLD ——— 0.50'
- EL. PUMP BASE ——— 4.50'
- STATIC HEAD ——— = 5.00'

BOTTOMLESS SAND FILTER & MANIFOLD SECTION

Pump Selection for a Pressurized System - Single Family Residence Project

Gearhart Meadows LLC 6N-10W-3BC-5600 / Osburn/Olson LLC #38583

#186-22-000053

GLATSOP CO. PUBLIC HEALTH

Parameters

Discharge Assembly Size	2.00	inches
Transport Length	27	feet
Transport Pipe Class	40	
Transport Line Size	1.25	inches
Distributing Valve Model	None	
Max Elevation Lift	5	feet
Manifold Length	17.5	feet
Manifold Pipe Class	40	
Manifold Pipe Size	1.25	inches
Number of Laterals per Cell	8	
Lateral Length	17	feet
Lateral Pipe Class	40	
Lateral Pipe Size	1.25	inches
Orifice Size	1/8	inches
Orifice Spacing	2	feet
Residual Head	5	feet
Flow Meter	None	inches
'Add-on' Friction Losses	0	feet

Calculations

Minimum Flow Rate per Orifice	0.43	gpm
Number of Orifices per Zone	72	
Total Flow Rate per Zone	31.2	gpm
Number of Laterals per Zone	8	
% Flow Differential 1st/Last Orifice	0.1	%
Transport Velocity	6.7	fps

Frictional Head Losses

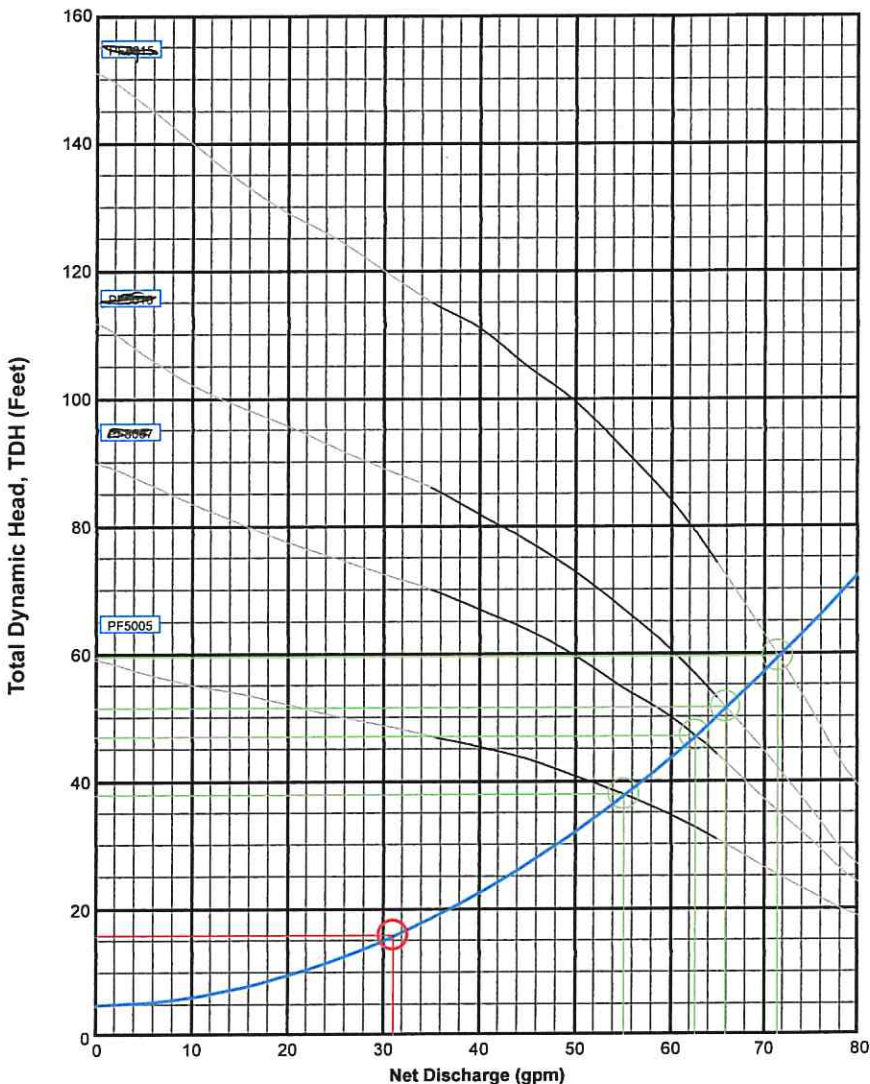
Loss through Discharge	1.9	feet
Loss in Transport	3.2	feet
Loss through Valve	0.0	feet
Loss in Manifold	0.6	feet
Loss in Laterals	0.0	feet
Loss through Flowmeter	0.0	feet
'Add-on' Friction Losses	0.0	feet

Pipe Volumes

Vol of Transport Line	2.1	gals
Vol of Manifold	1.4	gals
Vol of Laterals per Zone	10.6	gals
Total Volume	14.0	gals

Minimum Pump Requirements

Design Flow Rate	31.2	gpm
Total Dynamic Head	15.7	feet



PumpData

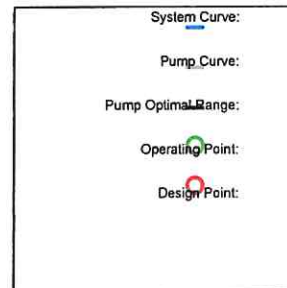
PF5005 High Head Effluent Pump
50 GPM, 1/2HP
115/230V 1Ø 60Hz, 200/230V 3Ø 60Hz

PF5007 High Head Effluent Pump
50 GPM, 3/4HP
230V 1Ø 60Hz, 200/230/460V 3Ø 60Hz

PF5010 High Head Effluent Pump
50 GPM, 1HP
230V 1Ø 60Hz, 200/460V 3Ø 60Hz

PF5015 High Head Effluent Pump
50 GPM, 1-1/2HP
230V 1Ø 60Hz, 200V 3Ø 60Hz

Legend



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GLATBAP 00: PUBLIC HEALTH

#186-22-000053

PARTS LIST

18' x 20' Bottomless Sandfilter

Gearhart Meadows LLC

6N-10W-3BC-5600

Osburn/Olson LLC \$38583

- 1 A-I Concrete 1500 gal 2-cmpt septic/dose tank
- 2 24" x 24" poly risers
- 2 24" poly lids w/screws
- 2 ADH200 adhesive
- 1 PF500511 pump, 115v.
- 1 PVU57-1819 pump vault
- 1 MVP-SI/DM control panel, 115v. (Timed dose)
- 1 SBEX4 splice box (external)
- 1 HV200BCX hose & valve assy.
- 1 MF3P floats and stem - 27" Stem for vault
- 72 OS125 (1") orifice shields
- 1 GL2 grommet
- 180ft PVC D1785 pipe
- 7 1" PVC "T"
- 2 IW PVC 90° ells
- 18 45° PVC ells
- 8 7" round valve covers
- 8 shut-off valves
- 1 2" x 1" reducer
- 7yds DEQ Peagravel
- 7yds DEQ Drain Rock
- 28yds DEQ Sand
- Filter fabric
- Plywood and boards for sand filter box

Max Richie
6N-10W-3BC-5600
 Osburn/Olson Exc # 38583

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GLATFOLP CO. PUBLIC HEALTH
 #186-22-000053



CALPORTLAND
 Quality Test Report

Plant 544A-Santosh
 Product AOR8364-CC Filter Sand
 Specification CalPortland



Sample Information

Sample No 1628349630
 Date Sampled 10/01/2021 15:23
 Sampled By Eric Egge
 Type Control
 Method Stockpile

Split Sample
 Resample

Gradation Results

Date Completed 10/01/2021 15:23
 Tested By Eric Egge

Unit	Moist Mass	Dry Mass	Wash Mass	Moisture %	Wash Loss %	Procedure
g	820.00	754.20	744.10	8.7	1.3	

Sieve	Mass Retained	Cum Mass Retained	Ind % Retained	% Retained	% Passing	Target	Specification	Comment
1/2" (12.5mm)	0.00	0.00	0	0	100			
3/8" (9.5mm)	1.70	1.70	0	0	100		100-100	
1/4" (6.3mm)	7.20	8.90	1	1	99			
#4 (4.75mm)	8.20	17.10	1	2	98		95-100	
#8 (2.36mm)	46.90	64.00	6	8	92		80-100	
#16 (1.18mm)	121.30	185.30	16	25	75		45-85	
#30 (.6mm)	246.90	432.20	33	57	43		15-60	
#50 (.3mm)	233.20	665.40	31	88	12		3-15	
#100 (.15mm)	60.80	726.20	8	96	4		0-4	
#200 (75µm)	13.90	740.10	1.8	98.1	1.9			
Pan	3.80	743.90	1.9	100.0	0.0			

Other Test Results

Test Name	Date	Result	Unit	Target	Specification	Comment
#200 (75µm)	10/01/2021 15:23	1.84	%			
FM	10/01/2021 15:23	2.77				
Grad Loss	10/01/2021 15:23	0.027	%			
Total Moisture	10/01/2021 15:23	8.72	%			

Max Richie
6N-10W-3BC-5600

Osburn/Olson Exc # 38583

RECEIVED
FEB 18 2022

HEALTH & PUBLIC HEALTH

#186-22-00053



CALPORTLAND
Quality Test Report

Plant 544A-Santosh
Product AOR8036D-3/8" - #8 PEA GRAVEL
Specification AOR8036 3/8" - #8 PEA GRAVEL



Sample Information

Sample No 1628348713
Date Sampled 10/05/2021 15:46
Sampled By Eric Egge
Type Shipping
Method Belt-Cut

Split Sample
Resample

Test Note
Front Ave.

Gradation Results

Date Completed 10/05/2021 15:46

Tested By Eric Egge

Unit g Moist Mass 1655.00 Dry Mass 1602.80 Wash Mass 1600.20 Moisture % 3.3 Wash Loss % 0.2 Procedure

Slava	Mass Retained	Cum Mass Retained	Ind % Retained	% Retained	% Passing	Target	Specification	Comment
1/2" (12.5mm)	2.90	2.90	0	0	100		100-100	
3/8" (9.5mm)	110.40	113.30	7	7	93		80-100	
1/4" (6.3mm)	741.90	855.20	46	53	47			
#4 (4.75mm)	512.90	1368.10	32	85	15		0-20	
#8 (2.36mm)	228.70	1596.80	14	100	0		0-10	
#16 (1.18mm)	1.10	1597.90	0	100	0		0-5	
#30 (.6mm)	0.50	1598.40	0	100	0			
#50 (.3mm)	0.50	1598.90	0	100	0			
#100 (.15mm)	0.30	1599.20	0	100	0			
#200 (75µm)	0.10	1599.30	0.0	99.8	0.2		0-1	
Pan	0.80	1600.10	0.2	100.0	0.0			

Other Test Results

Test Name	Date	Result	Unit	Target	Specification	Comment
	Procedure	Lab			Tested By	
FM	10/05/2021 15:46	5.91			Eric Egge	
Grad Loss	10/05/2021 15:46	0.006	%		Eric Egge	
Total Moisture	10/05/2021 15:46	3.26	%		Eric Egge	



Transaction Receipt
Record ID: 186-22-000053-PRMT
IVR Number: 186076135645

Clatsop County Onsite

820 Exchange Street
Astoria, Oregon 97103
503-325-9302
Fax: 503-325-9303
health@co.clatsop.or.us

Receipt Number: 458691

Receipt Date: 2/23/22

<https://www.co.clatsop.or.us/publichealth/page/onsite-septic-system-program>

Worksite address: 0 lot on Meadow Ln, Gearhart, OR 97138

Parcel: 61003BC05600

Fees Paid					
Transaction date	Units	Description	Account code	Fee amount	Paid amount
2/23/22	1.00 Ea	Install - Sand filter - by gallons per day	81-7203	\$1,641.00	\$1,641.00
2/23/22	1.00	GIS fee - Onsite	81-7045	\$9.00	\$9.00
2/23/22	1.00	DEQ Surcharge	78-9934	\$100.00	\$100.00

Payment Method: Check number: 3173 Payer: GEARHART Payment Amount: \$1,750.00
MEADOWS / Max Ritchie
Transaction Comment: Coastal Homes NW
PO Box 2772
Gearhart, OR 97138

Cashier: Annette Brodigan

Receipt Total: \$1,750.00

MAY 16 1996

Oregon

May 13, 1996 NORTH COAST BRANCH OFFICE
WARRENTON

RITCHIE DEVELOPMENT CORP
PO BOX 19267
PORTLAND OR 97280

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

NORTHWEST REGION

RE: OSS:NWR: CLATSOP COUNTY: SITE
EVALUATION REPORT FOR GEARHART
MEADOWS # 3 SUBDIVISION: LOTS 48
THROUGH 60: TWN 6N, RNG 10W, SEC 3B, TAX LOT
2501.

Dear Sir:

In response to your recent application for site evaluations of the proposed Gearhart Meadows No. 3 subdivision, the above-described property was examined on April 9 and 10, 1996, to determine the methods of on-site sewage disposal for which it is suited. This evaluation report consists of four (4) pages and a map of the approved area(s) for each lot. This subdivision is being re-evaluated due to proposed lot line adjustments. The initial evaluation report was issued in 1994.

The following lots have been found suitable for a conventional sand filter system that discharges effluent through the bottom.

Lots 48, 49, 50:

Lots 52, 53, 54, 55, 56, 57:

Lots 59, 60.

The system for each lot would have the capacity to serve a single family dwelling, with no more than 4 bedrooms. Peak daily sewage flow into the system is limited to 450 gallons, with an average daily sewage flow of not more than approximately 225 gallons per day. Premature system failure may occur if either flow limit is exceeded.

The initial systems will each consist of an 1100 gallon dosing septic tank, associated controls and alarm, and a 360 sq. ft. pressurized sand filter, discharging the effluent through the bottom. The replacement system when needed will consist of the same type system as the initial.

The system shall not exceed the following depths, in inches, at the lowest elevation point for the filter:

Lot	Maximum Depth	Lot	Maximum Depth
48...	11	55...	15
49...	27	56...	6
50...	30	57...	12
52...	10	59...	21
53...	12	60...	29
54...	7		

John A. Kitzhaber
Governor



2020 SW Fourth Avenue
Suite 400
Portland, OR 97201-4987
(503) 229-5263 Voice
TTY (503) 229-5471

The bottom of any sand filter cannot be above ground surface, (after all vegetation and sod is removed).

The following lot has been found suitable for a pressurized seepage bed installed with a capping fill.

Lot 58.

The system for this lot would have the capacity to serve a single family dwelling, with no more than 4 bedrooms. Peak daily sewage flow into the system is limited to 450 gallons, with an average daily sewage flow of not more than approximately 225 gallons per day. Premature system failure may occur if either flow limit is exceeded.

The initial system will consist of an 1100 gallon dosing septic tank, associated controls and alarm, and a 600 sq. ft. pressurized seepage bed. The bed shall be installed a minimum of 12 inches and no deeper than 14 inches into the native ground surface. The system shall be installed beginning 10 feet from the west property line. This will allow the system to be as high as possible above the groundwater. A capping fill will be placed over the entire system. If a system is proposed to be installed elsewhere on the lot, a sand filter will be required. The replacement system when needed will consist of the same type system as the initial.

Please refer to the enclosed map for information about the location of the disposal systems (including the future repair/replacement disposal systems).

The following lot is denied for on-site sewage disposal.

Lot 51.

This lot is denied due to indications in the soil that groundwater will rise to within 20 inches of the ground surface in the vicinity of pit #1 . The groundwater at the time of the evaluation was noted at 35 inches below ground surface. OAR Chapter 340-71-290(3)(b) requires that the bottom of a disposal area following treatment through a sand filter must be at least 24 inches above the highest point of groundwater, when installed in sands. With a bottomless sand filter placed on the surface of the ground this would require a minimum of 24 inches from ground surface to groundwater (after the area is removed of sod and vegetation) during any part of the year. As indicated above, the groundwater can be expected at 20 inches below ground surface.

The area of pit #2 does not meet the setback of 50 feet from surface public waters as required by OAR Chapter 340-71-290 (3)(g).

This site is therefore denied for on-site sewage disposal.

In accordance with Oregon Administrative Rules, (OAR Chap. 340-71), you have three possible alternatives in regards to lot 51:

1. You may provide test pits in another area of the property for evaluation. There will not be additional fees, if the Department is notified that these pits are available for evaluation within 90 days from the date of this letter. However, this site does not appear to have adequate area for another evaluation. The property has limited area available for on-site sewage disposal. After 90 days, any request for review will require a new evaluation application and necessary fees. The property will be evaluated using DEQ rules in effect at the time of this new application.
2. You may request a variance from these Rules. The variance request is through the Department of Environmental Quality. This is not an automatic variance. You must provide technical justification that demonstrates your proposed system will operate over an extended period of time, that it will not degrade the environment and will provide public health protection. An application; justification; and exhibits, including this report, a land use compatibility statement, and detailed plans of your proposed system will be necessary. Technical advice from a knowledgeable consultant is recommended. A variance application fee of \$255 is required. A Variance Officer from DEQ will review your application and the property. A determination will be made, in writing, following an informational hearing. All information from your file will be provided at your request. This property however, has severe limitations for on-site sewage disposal, as noted in the above report. Unless public health and environmental protection is assured, a variance request cannot be supported and will not likely be approved by DEQ.
3. If you conclude this report to be in error of these Rules, you may request a review pursuant to OAR Chap. 340. The report review is through the Department of Environmental Quality. The application is a written request that includes all information you have received from this evaluation, the reason the report is in error, citing the specific OAR's that conflict with the report, and a \$320 application fee. Other DEQ personnel will review this and visit the site to determine compliance with the appropriate rules.

For further information regarding a report review or a variance request, please contact the Oregon Department of Environmental Quality, NW Region, On-Site Sewage Disposal, 2020 SW 4th Ave, Portland OR 97201.

A construction-installation permit is required to install each sewage system on any approved site. Please contact the North Coast Branch Office of the Department of Environmental Quality for information regarding permit procedures and necessary fees. The phone number is 503-861-3280.

Any approvals referenced above are given on the basis that each lot or parcel described above will not be further partitioned or subdivided, and that conditions on the subject or adjacent properties have not been altered in any manner which would prohibit issuance of a permit in accordance with O.R.S. 454.605 through 454.745 and Administrative Rules of the Environmental Quality Commission (EQC). Any such subdivision, partitioning or alteration may void this report.

WARNING: This is a technical report for on-site sewage disposal only. It may be converted to a permit **only** if, at the time of permit application, the property has been found to be compatible with applicable LCDLDC-acknowledged local comprehensive land use plans and implementing measures or the Statewide Planning Goals. The report will remain valid until an on-site sewage system is installed pursuant to a construction-installation permit obtained from the Department of Environmental Quality, or until earlier cancellation, pursuant to EQC rules, with written notice thereof by the Department to the owners according to DEQ records or the County tax records. Subject to the foregoing, this report runs with the land and will automatically benefit subsequent owners.

If you have any questions regarding this report, please contact me at this office. The phone number is 503-229-6345.

Sincerely,



Dennis C. Illingworth, R.S.
Environmental Specialist

DCI:dcj

Cc: NCBO: DEQ

Karl F. Foeste,
361 SW Main
Warrenton OR 97146

City of Gearhart
Planning Office
PO Box 2510
Gearhart OR 97138

Clatsop County Dept. of Planning and Development
800 Exchange
Suite 100
Astoria OR 97103

Enclosure

SITE EVALUATION FIELD WORKSHEET

Tax Reference 610-38-2501

Evaluator Dewey Dardel/Dennis Illingworth

Applicant Garhart Meadows Stage III Date 3-1-94

Parcel Size LOT # 59
LOT # 60

Soil Matrix Color and Mottling (Notation), % Coarse Fragments, Roots, Structure, Layer Limiting Effective Soil Depth, etc.

LOT # 59

Depth	Texture	Soil Matrix Color and Mottling (Notation), % Coarse Fragments, Roots, Structure, Layer Limiting Effective Soil Depth, etc.
SAT Pit 1 0'-53"	FSL/MS	10YR2/1 + 2.5Y5/3
53'-68"	S	2.5Y5/2
68"	S	H ₂ O

LOT # 107

SAT Pit 2 0'-45"	FSL/MS	10YR2/1 & 2.5Y5/3
45'-62"	S	2.5Y5/2
62"		H ₂ O

LOT # 60

SAT Pit 1 0'-99"	FSL/MS	Augered
99'-117"	S	2.5Y5/2
117"		H ₂ O

SAT Pit 2 0-74"	FSL/MS	Augered
74'-86"	S	2.5Y5/2

Landscape Notes Stabilized Sand Dune

Slope _____ Aspect _____ Groundwater Type Permanent

Other Site Notes _____

SYSTEM SPECIFICATIONS

Type System: _____ Design Flow _____ gpd Disposal Field Size _____ Linear Feet

Initial _____ System Sizing _____ /150 g. Max. Depth Absorption Facility (in) _____

Replacement _____ System Sizing _____ /150 g. Max. Depth Absorption Facility (in) _____

Special Conditions _____

SCALE: 1"=20'

112.08'

25.17'

42.86'

32.94'

79.45'

42.063'

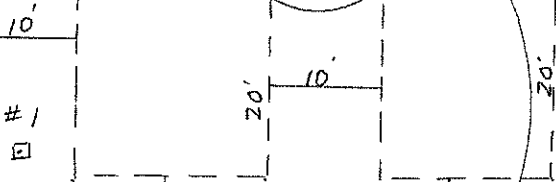
91.17'

Area approved for
bottomless sand
filters

59

58

86.95'



85.00'

85

#1

#2