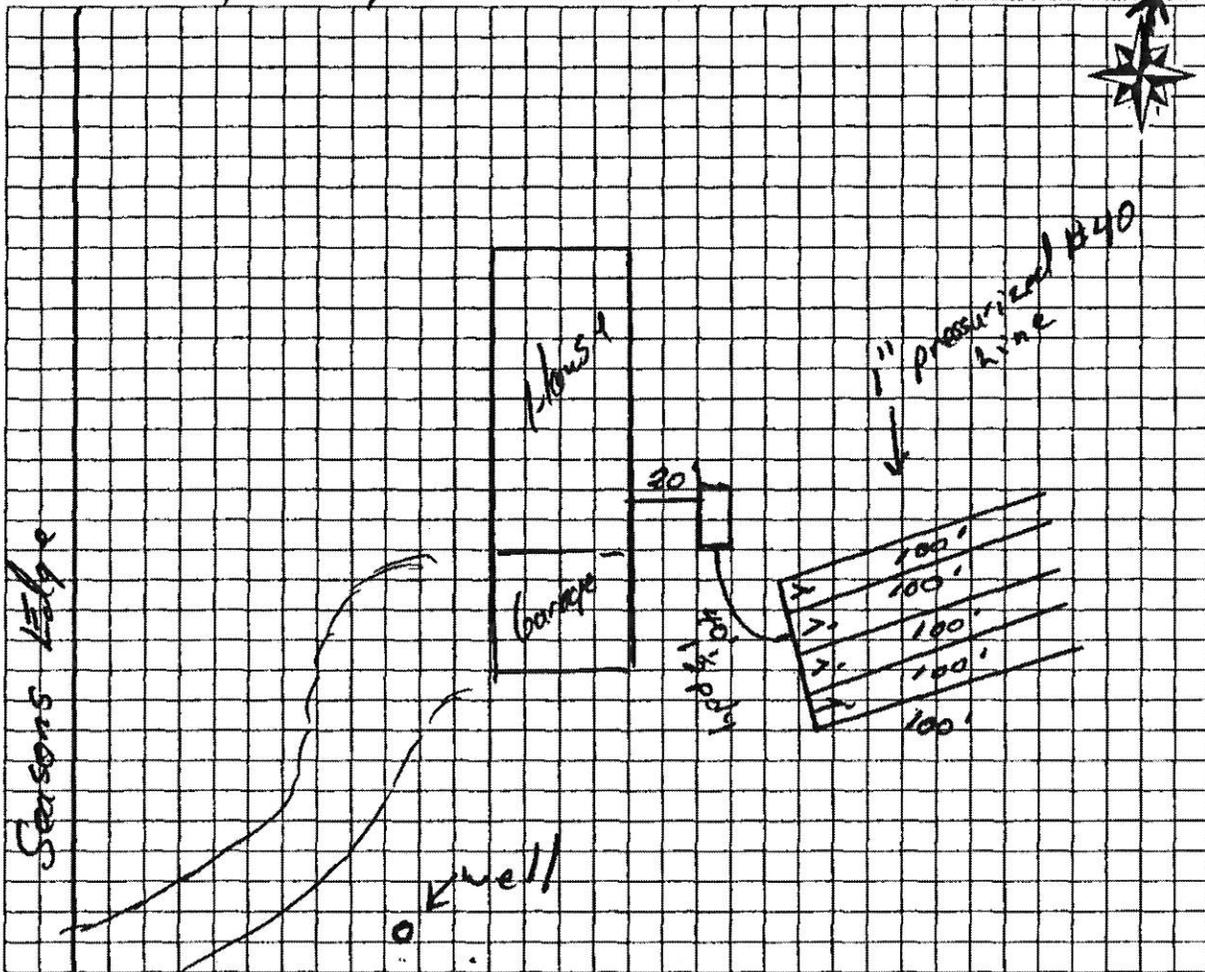


MISSOULA CITY-COUNTY HEALTH DEPARTMENT
 301 W. Alder Missoula, MT 59802 258-4755

INDIVIDUAL SEWER SYSTEM INSPECTION REPORT

Name of Owner James Love
 Legal Address/Location 566 Seasons Edge
 Certified Installer Deer Creek Exc.
 Type System: New Replacement No. of Bedrooms Permitted _____
 Septic Tank: Capacity: 1500 Gal., Material: Concrete Other _____, Depth to top: 1 ft. 6 in.
 Standard _____, Gravelless _____, Pressure Dist. Dosed _____
 Drainfield: Total length 500 ft., # of laterals 5, Trench Depth 24.56 in. to bottom
 Seepage Pit: Height _____ ft., Depth to Top _____ ft., _____ in.
 Distance of Installation From: Property Lines: _____ Wells: 100' Surface Water: _____ Other _____
 Soil Type Silty Clay Paved _____ Yes No _____
 Indicate North with Arrow



Approved Disapproved _____ Emily Luquin 7/20/06
 Sanitarian Date
 Self Inspected by: [Signature] _____ / /
 Corrections Necessary: _____ / /
 Inspection Witnessed By: _____ / /
 Deficiencies Corrected: Yes _____ No _____ / /
 Sanitarian Date

PERMIT #: HS20060043

FEE: \$177.00

PAID



Missoula City/County Health Department
301 W. Alder
Missoula, MT 59802-4123
(406) 258-4755

SEPTIC SYSTEM PERMIT

OWNER AND LAND INFORMATION

Owner Name: LOVE JAMES F & MAUREEN A Phone: 509-483-2663
Owner Address: Zip Code: 99208
Location of Installation: 1/4, NW 1/4, T 16, R 15, S 05
Temporary Location: 566 Seasons Edge General Area Name: Seeley Lake
Address of Site: 566 SEASONS EDGE SEL
Certificate of Survey#: 0 Subdivision: PLAT F4 Subdivision Name:
Lot: 003 Block: XXX Tract: 3 Geocode: 2540-052-0103-0000
Size of Parcel: 0 sq ft, 20 acres

INSTALLER INFORMATION

Certified Installer: DEER CREEK EXCAVATING Phone: 406 677-4072

PARCEL USE INFORMATION

Water Supply: INDIVIDUAL Comment:
Soil Type: Sandy clay, clay or silty clay Application Rate: 0.2
Intended Use: Residential /Individual
of Bedrooms: 3 Gallons per Day: 300
Commerical gallons per day flow: 0

TYPE OF SYSTEM TO BE INSTALLED:

New Individual Conventional Drainfield with Pressure distribution

SYSTEM SIZE & DESCRIPTION: System must provide 1000 gallon 500 pump concrete septic tank and 500 lineal feet of 36 inch wide drainfield in accordance with site plan attached. Install a minimum 8 inch filter access riser from tank outlet to surface. Provide 1.75 square foot access to each compartment and a minimum 8 inch riser above the tank inlet to within 12 inches of surface.

SPECIAL CONDITIONS: Pressure Dist system

NOTE: Any well and/or drainfield must be installed as shown on the Certificate of Subdivision Plat Approval (76-4-130 MCA)

As purchaser of this permit, I agree to comply with all requirements for installation as described in Missoula City-County Health Code Regulation #1, State Water Quality Bureau Regulations and special conditions described above. This document does not release me from complying with any other State, Federal or Local regulations including but not limited to zoning, building and floodplain regulations.

This permit is valid for twelve (12) months from date of purchase. Sewage disposal systems must be completed within this time and inspected by the department prior to covering the system. A copy of this permit is to be on site at all times during construction and inspection of the system. Please use the permit number in the upper right hand corner for reference when you call for final inspection.

Applicant: [Signature] Date: 3-30-06

Health Authority: [Signature] Date: 3/30/06
Issued by:



MISSOULA CITY-COUNTY HEALTH DEPT.
 301 W. ALDER
 MISSOULA MT 59802
 (406) 258-4755

INFORMATION REQUIRED FOR SEWER PERMIT APPLICATION

Owner's name James Love Phone# 509-466-4484
 Owner's address 9817-N Nez Perce Ct Spokane WA 99208-9342
 Location of installation: 1/4 NW 1/4 Section 5 T 16N R 15W

A. Legal description of site: Obtain a copy of property description. (One can be obtained from the Missoula County Property Data Base on the Web at: <http://www.co.missoula.mt.us/Owner/default.aspx>) complete below:

TAX ID: 5864820 GEOCODE: 2540-05-2-01-03-0000

Certificate of Survey # 06 3237 Or Subdivision name: _____

Lot 003 Block XXX

B. Assigned address from County Road Department (6089 Trainer Drive, PH: 258- 4753)

Address: 566 Seasons Edge

C. Size of lot or parcel 20 Acres

D. Provide a site map showing: Water supply, proposed wastewater system location & replacement area, driveways, proposed buildings, property lines, and any wells or surface waters within 100 feet of property lines. Provide all information required as described on page 2.

E. Any existing structure or sewage disposal facilities? Yes _____ No

If Yes, Explain _____

Type of system: New: or _____ Replacement

Residential #of bedrooms: 3 gal/day: _____
 _____ Commercial Use _____ gal/day: _____

Application Rate: (Gal/day or sq. ft./bedroom): _____ (From Plat Approval or Site Evaluation)

APPLICATION FEE (as of 11/01/2005) - \$143

Applicant's name: Angela Deer Creek Exc LLC
 Applicant's address: PO Box 523 Seeley Lake, MT 59868
 Phone: 677-4072

Seasons Edge Rd

N →

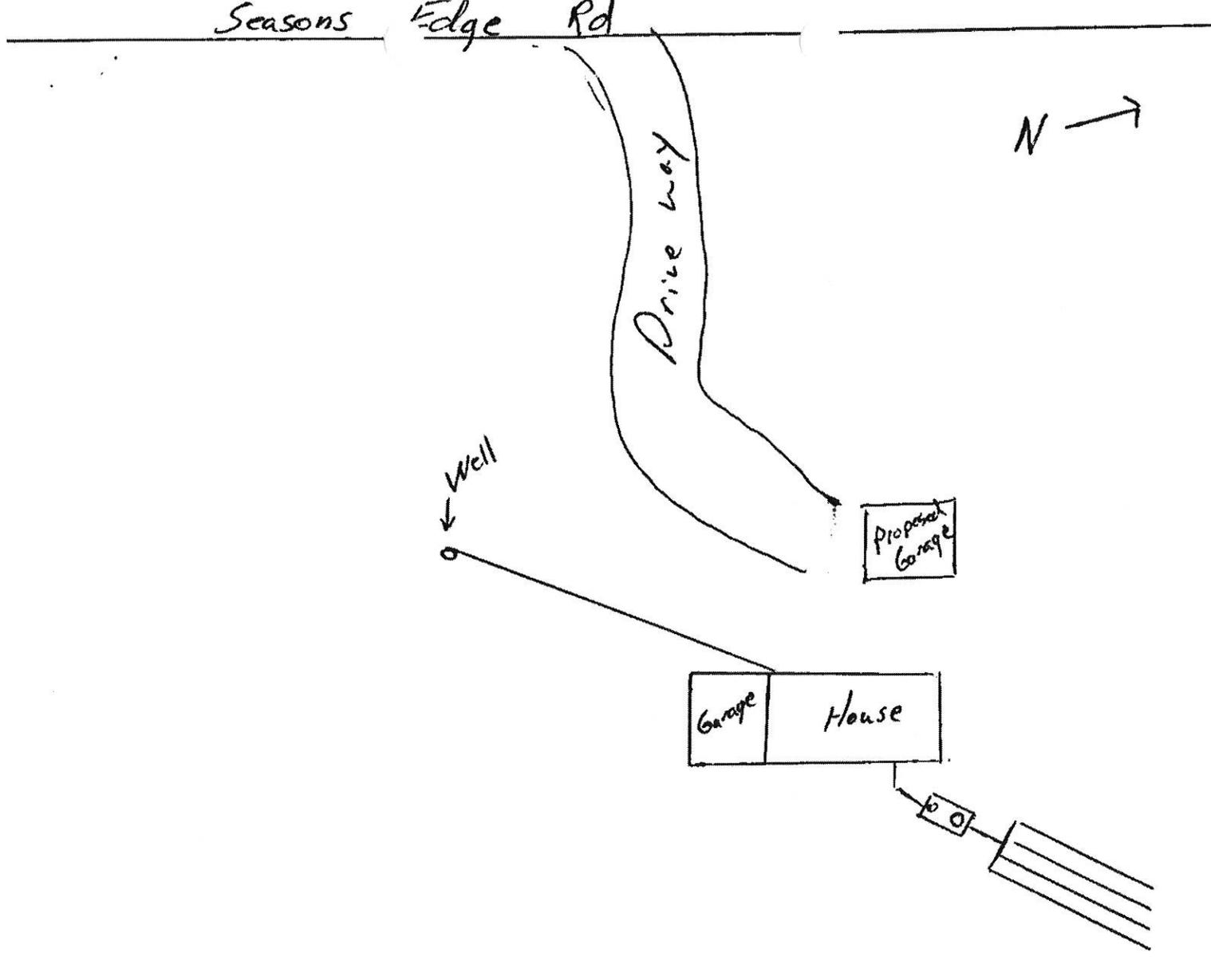
Well

Driveway

Proposed Garage

Garage House

2921 ft²/day



	A	B	C	D
1	LEVEL SITE			
2	ITEMS MARKED WITH AN ASTERISK REQUIRE ENTERING			
3	CENTRAL MANIFOLD ENTRY POINT FROM END OF MANIFOLD			
4	Name:			
5	James Love COS 3237, Tract 3			
6	LINEAL FEET REQUIRED	500 FT	ENTER LINEAL FEET OF PIPE	
7	NUMBER OF LATERALS	10	TOTAL NUMBER OF LATERALS (EACH SIDE)	
8	LATERAL SPACING	7 FT	DISTANCE BETWEEN CENTERS OF LATERALS	
9				
10	LENGTH OF LATERALS	50 FT.	COMPUTED (LENGTH ON EACH SIDE OF MANIFOLD)	
11	SPACES BETWEEN LATERALS	4	COMPUTED FOR MANIFOLD LENGTH	
12				
13	ORIFICE SPACING	5 FT	SELECTIVE DISTANCE FOR SANDS	
14			FOR CLAY SOILS	
15			IF YOU WANT	
16			ORIFICE SPACING	
17			ORIFICE SPACING	
18				
19	ORIFICES PER LATERAL	10	THIS VALUE IS COMPUTED FOR YOU	
20			1/2 THE ORIFICE SPACING	
21				
22				
23				
24				
25				
26				
27				
28				
29	ORIFICE DISCHARGE RATE	0.43 GPM	ORIFICE DISCHARGE RATE COMPUTED	
30			RATE = (12.38) * (d)^2 * h^1.5	
31	LATERAL DISCHARGE RATE	4.3 GPM	TOTAL FLOW PER LATERAL	
32				
33	PUMPING VOLUME			
34				
35	MANIFOLD LENGTH	28	THIS IS COMPUTED USING LAT SPACING	
36				
37				
38	MANIFOLD VOLUME	5 GAL	COMPUTED FOR YOU	
39				
40	LATERAL DOSE VOLUME	102 GAL	COMPUTED	
41				
42	TRANSPORT PIPE VOL.	3 GAL	COMPUTED	
43				
44				
45			YOU MINIMIZE HEAD LOSS TABLE 9	
46	TOTAL PUMPING VOLUME	110 GAL	COMPUTED	
47				
48	TOTAL DISCHARGE RATE	43 GAL/MIN	(COMPUTED)	
49				
50	PUMPING HEAD			
51				
52	FRICITION LOSS	COMPUTED $f=10.46*L*Q^{1.85}/C^{1.85}*D^{4.87}$		
53	MANIFOLD	0.28 FT	$(10.46*(B35/3)*B47^{1.85})/(150^{1.85}*B35^{4.87})$	
54	LATERALS	0.73 FT	$(10.46*B10*B31^{1.85})/(150^{1.85}*B22^{4.87})$	
55	TRANSPORT PIPE	0.6 FT	$((10.46*B43*B48^{1.85})/(150^{1.85}*B44^{4.87}))$	

	A	B	C	D
56	TOTAL FRICTION LOSS	1.61 FT		
57				
58	RESERVE HEAD	5 FT	MIN OF 3" USE 6" OR MORE FOR 1/8" pipes	
59	ELEVATION DIFFERENCE	6 FT	ENTER DIFFERENCE IN ELEVATION	
60			BETWEEN PUMP AND LATERALS	
61	TOTAL HEAD REQUIRED	12.61 FT	COMPUTED	
62				
63	PUMP REQUIREMENTS	43 GPM	COMPUTED PUMP REQUIREMENTS	
64		12.61 FT	OF HEAD	
65				
66	PUMP SETTINGS			
67				
68	TOTAL VOLUME OF PUMP CHAMBER	400	400 OR 1000 FOR HUNTON	
69	VOLUME PER INCH IN CHAMBER	10.6	400 = 8.1; 20.5 FOR 1000; 10.64 for 500 and 250 HUNTON TANKS	
70	RESERVE VOLUME	150	GALLONS	
71	TOTAL PUMPING VOLUME	110	GALLONS	
72	DEPTH OF CHAMBER	51	INCHES	
73	DEPTH NEEDED FOR RESERVE	14.1	INCHES	
74	DEPTH NEEDED TOTAL DOSE	10.3	INCHES	
75	BUFFER BETWEEN ALARM & ON LEVEL	3	INCHES	
76	ELEVATION LEFT FOR PUMP COVER	23.6	INCHES, PUMP MUST BE SHORTER THAN	

	A	B	C	D
1	LEVEL SITE			
2	ITEMS MARKED WITH AN ASTERISK REQUIRE ENTERING			
3	CENTRAL MANIFOLD ENTRY POINT FROM END OF MANIFOLD			
4	Name:			
5	James Love COS 3237, Tract 3			
6	*LINEAL FEET REQUIRED	500 FT		ENTER LINEAL FEET OF PIPE
7	*NUMBER OF LATERALS	10		TOTAL NUMBER OF LATERALS (BOTH SIDES)
8	*LATERAL SPACING	7 FT		DISTANCE BETWEEN CENTERS OF LATS
9				
10	LENGTH OF LATERALS	50 FT.		COMPUTED (LENGTH ON EACH SIDE OF MANIFOLD)
11	SPACES BETWEEN LATERALS	4		COMPUTED FOR MANIFOLD LENGTH
12				
13	*ORIFICE SPACING	5 FT		SELECT LESS DISTANCE FOR SANDS
14	*ORIFICE SIZE			UP TO 6 FEET FOR CLAY SOILS
15	*ORIFICE TYPE			ENTER AND MODIFY AS NEEDED
16	*ORIFICE SIZE			AFTER COMPLETION IS RUN FOR
17	*ORIFICE SIZE			FIRST TIME AND JUST IF NEEDED
18				
19	ORIFICES PER LATERAL	10		THIS VALUE IS COMPUTED FOR YOU
20	*ORIFICE SIZE	12.5 FT		1/2 THE ORIFICE SPACING
21				
22	*LATERAL DIA			SELECT LATERAL DIA. ENTER
23	*LATERAL DIA			USING ORIFICE DIA. AND
24	*LATERAL DIA			ORIFICE DIA. AND ORIFICE SIZE
25				
26	*ORIFICE SIZE			SELECT SMALLEST ORIFICE SIZE
27	*ORIFICE SIZE			ORIFICE SIZE ALLOWED TO MINIMIZE
28	*ORIFICE SIZE			PUMP SIZE
29	ORIFICE DISCHARGE RATE	0.43 GPM		ORIFICE DISCHARGE RATE COMPUTED
30				RATE = (12.38) * (d)^2 * h^1.5
31	LATERAL DISCHARGE RATE	4.3 GPM		TOTAL FLOW PER LATERAL
32				
33	PUMPING VOLUME			
34				
35	MANIFOLD LENGTH	28		THIS IS COMPUTED USING LAT SPACING
36	*MANIFOLD DIA	20 INCH		ENTER MANIFOLD DIA. AND MANIFOLD LENGTH
37	*MANIFOLD DIA			ORIFICE DIA. AND ORIFICE SIZE
38	MANIFOLD VOLUME	5 GAL		THIS IS COMPUTED FOR YOU
39				
40	LATERAL DOSE VOLUME	102 GAL		COMPUTED
41	*PIPE VOLUME PER LATERAL DOSE	3		ENTER # OF PIPE VOLUMES YOU WANT FOR DOSE
42	TRANSPORT PIPE VOL.	3 GAL		COMPUTED
43	*LENGTH OF TRANSPORT PIPE	20 FT		HOW LONG IS TRANSPORT PIPE?
44	*DIAMETER OF TRANSPORT PIPE	2.07 INCH		USE FRICTION LOSS TABLE TO
45				YOU MINIMIZE HEAD LOSS TABLE 9
46	TOTAL PUMPING VOLUME	110 GAL		COMPUTED
47				
48	TOTAL DISCHARGE RATE	43 GAL/MIN (COMPUTED)		
49				
50	PUMPING HEAD			
51				
52	FRICTION LOSS	COMPUTED $f=10.46*L*Q^{1.85}/C^{1.85}*D^{4.87}$		
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