

Valley County Planning and Zoning

PO Box 1350 • 219 North Main Street
Cascade, ID 83611-1350



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STAFF REPORT:	C.U.P. 23-35 Dobson Multiple Residences
HEARING DATE:	September 14, 2023
TO:	Planning and Zoning Commission
STAFF:	Cynda Herrick, AICP, CFM Planning and Zoning Director
APPLICANT / PROPERTY OWNER:	Patricia J Dobson 42 Flemming LN, McCall, ID 8363
LOCATION:	42 Flemming Lane Parcel RP17N03E334665 located in the SENW Section 33, T.17N R.3E, Boise Meridian, Valley County, Idaho.
PROPERTY SIZE:	5.2-acre Parcel
REQUEST:	Two (2) Residential Homes on One Parcel
EXISTING LAND USE:	Agricultural (Irrigated) with an Existing Residence

Patricia Dobson is requesting a conditional use permit for two residences on a 5.2-acre parcel. The new home would be located north of the existing home. The existing home is 1188-sqft; the proposed home would be 1491-sqft.

The homes would share a well and have individual septic systems.

The existing home is addressed at 42 Flemming Lane.

Access would be from a shared driveway onto Flemming Lane. This is a private road owned by Charles E Scheline and Kay L Scheline. The road is shown as a 70-ft nonexclusive easement on the Assessor's Plat (attached).

FINDINGS:

1. The application was submitted on July 11, 2023.
2. Legal notice was posted in the *Star News* on August 24, 2023, and August 31, 2023. Potentially affected agencies were notified on August 15, 2023. Property owners within 300 feet of the property line were notified by fact sheet sent August 16, 2023. The site was posted on August 29, 2023. The notice and application were posted online at www.co.valley.id.us on August 15, 2023.
3. Agency comment received:

Mike Reno states Central District Health has no objections. Permit 7462A has been written for an additional 3-bedroom home on this parcel. (August 16, 2023)

Jess Ellis, Donnelly Fire Marshal, listed requirements. (August 30, 2023)

4. Neighbor comment received:

Charles Scheline called on August 22, 2023. As the current owner of the private road, he would like an association to be formed so he can deed the roadway to an association to own and maintain.

5. Physical characteristics of the site: The building site is relatively flat.

6. The surrounding land use and zoning includes:

North: Agricultural (Irrigated Grazing)

South: Agricultural

East: Single-family Residential Parcels with Homes

West: Single-family Residential Parcels with Homes

7. Valley County Code (Title 9): In Table 9-3-1, this proposal is categorized under:

- 2. Residential Uses (j) Multiple Residences on One Parcel

Review of Title 9 - Chapter 5 Conditional Uses should be done.

9-5B-7: FIRE PROTECTION:

Provisions must be made to implement prefire activities that may help improve the survivability of people and homes in areas prone to wildfire. Activities may include vegetation management around the home, use of fire resistant building materials, appropriate subdivision design, removal of fuel, providing a water source, and other measures. Recommendations of the applicable fire district will be considered.

9-5C-4: MAXIMUM BUILDING HEIGHT AND FLOOR AREA:

- A. Maximum Height: Building heights, except as may be modified by a PUD, shall not exceed thirty five feet (35') above the lower of existing or finished grade.
- B. Building Size Or Floor Area: The building size or floor area, except as may be modified by a PUD, shall not exceed the limitations of subsections 9-5-3A and C of this chapter.
- C. Lot Coverage: No structure or combination of structures, except as may be modified by a PUD, may cover more than forty percent (40%) of the lot or parcel.

9-5C-5: SITE IMPROVEMENT:

- A. Off Street Parking Spaces: Two (2) off street parking spaces shall be provided for each dwelling unit. These spaces may be included in driveways, carports, or garages.
- B. Utility Lines: All utility lines, including service lines, that are to be located within the limits of the improved roadway in new residential developments must be installed prior to placing the leveling coarse material.

9-5C-6: DENSITY:

- A. The density of any residential development or use requiring a conditional use permit shall not exceed two and one-half (2.5) dwelling units per acre, except for planned unit developments or long-term rentals. Long-term rental density can be determined by the Planning and Zoning Commission in regards to compatibility with surrounding land uses and will require a deed restriction.
 - B. Density shall be computed by dividing the total number of dwelling units proposed by the total acreage of land within the boundaries of the development. The area of existing road rights of way on the perimeter of the development and public lands may not be included in the density computation.
-

SUMMARY:

Compatibility Rating: Staff's compatibility rating is a +18.

The Planning and Zoning Commission should do their own compatibility rating prior to the meeting (form with directions attached).

STAFF COMMENTS / QUESTIONS:

1. This site is within the Donnelly Fire District and a herd district. It is not within an irrigation district.

ATTACHMENTS:

- Conditions of Approval
- Blank Compatibility Evaluation and Instructions
- Compatibility Evaluation by Staff
- Vicinity Map
- Aerial Map
- Assessor Plat – T.17N R.3E Section 33
- Site Plan
- Pictures
- Responses
- Septic System Handouts

Conditions of Approval

1. The application, the staff report, and the provisions of the Land Use and Development Ordinance are all made a part of this permit as if written in full herein. Any violation of any portion of the permit will be subject to enforcement and penalties in accordance with Title 9-2-5; and, may include revocation or suspension of the conditional use permit.
2. Any change in the nature or scope of land use activities shall require an additional Conditional Use Permit.
3. The issuance of this permit and these conditions will not relieve the applicant from complying with applicable County, State, or Federal laws or regulations or be construed as permission to operate in violation of any statute or regulations. Violation of these laws, regulations or rules may be grounds for revocation of the Conditional Use Permit or grounds for suspension of the Conditional Use Permit.
4. The use shall be established within two years, or a permit extension will be required.
5. Building permits will be required for all structures.
6. A letter of approval is required from McCall Fire Department.
7. Shall clearly post the addresses at the driveway entrance and both residences. Different

addresses for each residence shall be assigned.

8. All lighting must comply with the Valley County Lighting Ordinance. All lights shall be fully shielded so that there is not upward or horizontal projection of lights.
9. Central District Health approval required prior to submittal of building permit. Shall maintain septic systems and drainfields as required.
10. No residences can be used as a short-term rental unless a new conditional use permit is approved.
11. All noxious weeds on the property must be controlled.
12. Shall work with Valley County Road Department on an agreement for off-site infrastructure improvements that will be approved by the Board of County Commissioners.

END OF STAFF REPORT

Compatibility Questions and Evaluation

Matrix Line # / Use: _____

Prepared by: _____

YES/NO X Response
Value

Use Matrix Values:

(+2/-2) X 4 _____

1. Is the proposed use compatible with the dominant adjacent land use?

(+2/-2) X 2 _____

2. Is the proposed use compatible with the other adjacent land uses (total and average)?

(+2/-2) X 1 _____

3. Is the proposed use generally compatible with the overall land use in the local vicinity?

Site Specific Evaluation (Impacts and Proposed Mitigation)

(+2/-2) X 3 _____

4. Is the property large enough, does the existence of wooded area, or does the lay of the land help to minimize any potential impacts the proposed use may have on adjacent uses?

(+2/-2) X 1 _____

5. Is the size or scale of proposed lots and/or structures similar to adjacent ones?

(+2/-2) X 2 _____

6. Is the traffic volume and character to be generated by the proposed use similar to the uses on properties that will be affected by proximity to parking lots, on-site roads, or access roads?

(+2/-2) X 2 _____

7. Is the potential impact on adjacent properties due to the consuming or emission of any resource or substance compatible with that of existing uses?

(+2/-2) X 2 _____

8. Is the proposed use compatible with the abilities of public agencies to provide service or of public facilities to accommodate the proposed use demands on utilities, fire and police protection, schools, roads, traffic control, parks, and open areas?

(+2/-2) X 2 _____

9. Is the proposed use cost effective when comparing the cost for providing public services and improving public facilities to the increases in public revenue from the improved property?

Sub-Total (+) _____

Sub-Total (--) _____

Total Score _____

The resulting values for each questions shall be totaled so that each land use and development proposal receives a single final score.

9-11-1: APPENDIX A, COMPATIBILITY EVALUATION:

- A. General: One of the primary functions of traditional zoning is to classify land uses so that those which are not fully compatible or congruous can be geographically separated from each other. The county has opted to substitute traditional zoning with a multiple use concept in which there is no separation of land uses. Proposed incompatible uses may adversely affect existing uses, people, or lands in numerous ways: noise, odors, creation of hazards, view, water contamination, loss of needed or desired resources, property values, or infringe on a desired lifestyle. To ensure that the county can continue to grow and develop without causing such land use problems and conflicts, a mechanism designed to identify and discourage land use proposals which will be incompatible at particular locations has been devised. The compatibility evaluation of all conditional uses also provides for evaluations in a manner which is both systematic and consistent.
- B. Purpose; Use:
1. The compatibility rating is to be used as a tool to assist in the determination of compatibility. The compatibility rating is not the sole deciding factor in the approval or denial of any application.
 2. Staff prepares a preliminary compatibility rating for conditional use permits, except for conditional use permits for PUDs. The commission reviews the compatibility rating and may change any value.
- C. General Evaluation: Completing the compatibility questions and evaluation (form):
1. All evaluations shall be made as objectively as possible by assignment of points for each of a series of questions. Points shall be assigned as follows:
 - Plus 2 - assigned for full compatibility (adjacency encouraged).
 - Plus 1 - assigned for partial compatibility (adjacency not necessarily encouraged).
 - 0 - assigned if not applicable or neutral.
 - Minus 1 - assigned for minimal compatibility (adjacency not discouraged).
 - Minus 2 - assigned for no compatibility (adjacency not acceptable).
 2. Each response value shall be multiplied by some number, which indicates how important that particular response is relative to all the others. Multipliers shall be any of the following:
 - x4 - indicates major relative importance.
 - x3 - indicates above average relative importance.
 - x2 - indicates below average relative importance.
 - x1 - indicates minor relative importance.
- D. Matrix - Questions 1 Through 3: The following matrix shall be utilized, wherever practical, to determine response values for questions one through three (3). Uses classified and listed in the left hand column and across the top of the matrix represent possible proposed, adjacent, or vicinity land uses. Each box indicates the extent of compatibility between any two (2) intersecting uses. These numbers should not be changed from proposal to proposal, except where distinctive uses arise which may present unique compatibility considerations. The commission shall determine whether or not there is a unique consideration.
- E. Terms:
- DOMINANT ADJACENT LAND USE:** Any use which is within three hundred feet (300') of the use boundary being proposed; and
1. Comprises at least one-half (1/2) of the adjacent uses and one-fourth (1/4) of the total adjacent area; or
 2. Where two (2) or more uses compete equally in number and are more frequent than all the other uses, the one with the greatest amount of acreage is the dominant land use; or
 3. In all other situations, no dominant land use exists. When this occurs, the response value shall be zero.
- LOCAL VICINITY:** Land uses within a one to three (3) mile radius. The various uses therein should be identified and averaged to determine the overall use of the land.
- F. Questions 4 Through 9:
1. In determining the response values for questions 4 through 9, the evaluators shall consider the information contained in the application, the goals and objectives of the comprehensive plan, the provisions of this title and related ordinances, information gained from an actual inspection of the site, and information gathered by the staff.
 2. The evaluator or commission shall also consider proposed mitigation of the determined impacts. Adequacy of the mitigation will be a factor.

APPENDIX A

MATRIX FOR RATING

QUESTIONS 1, 2, and 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. AGRICULTURAL		+2	-1	-2	-2	-2	-2	+1	+1	+1	+1	+2	+1	+1	-1	-1	+2	-1	-2	-1	+1	+2	+1
2. RESIDENCE, S.F.	+2		+2	+1	+1	+1	+1	+1	+1	-1	+2	+1	-2	+1	-1	+1	+1	+1	-1	+1	+1	-2	-2
3. SUBDIVISION, S.F.	-1	+2		+1	+1	+1	+1	+1	+1	-1	+2	+1	-2	+1	-1	+1	+2	+1	-1	+2	+1	-2	-2
4. M.H. or R.V. PARK	-2	+1	+1		+1	+1	+1	+1	+1	-1	+2	+1	-2	+1	-1	+1	+1	+1	-1	+1	+1	-2	-2
5. RESIDENCE, M.F.	-2	+1	+1	+1		+2	+2	+1	+1	-1	+2	+1	-2	+1	-1	+1	+1	+1	-1	+1	+1	-2	-2
6. SUBDIVISION, M.F.	-2	+1	+1	+1	+2		+2	+1	+1	-1	+2	+1	-2	+1	-1	+1	+1	+1	-1	+1	+1	-2	-2
7. P.U.D., RES.	-2	+1	+1	+1	+2	+2		+1	+1	-1	+2	+1	-2	+1	-1	+1	+1	+1	-1	+1	+1	-2	-2
8. REL, EDUC & REHAB	+1	+2	+1	+1	+1	+1	+1		+1	+1	-1	+2	-2	-1	-1	+2	+2	+1	+1	-1	+1	-2	-1
9. FRAT or GOVT	+1	+1	+1	+1	+1	+1	+1	+1		+1	-1	+2	-2	-1	-1	+1	+1	+1	+1	-1	+1	-2	-2
10. PUBLIC UTIL. (1A-3.1)	+1	-1	-1	-1	-1	-1	-1	+1	+1		+1	+1	-1	+1	+1	+1	-1	+1	+1	+1	+1	+2	+2
11. PUBLIC REC	+1	+2	+2	+2	+2	+2	+2	-1	-1	+1		+2	-1	+1	+1	+1	+2	+1	+1	+1	+1	-1	+1
12. CEMETERY	+2	+1	+1	+1	+1	+1	+1	+2	+2	+2	+2		+1	+1	+1	+1	+1	+1	+1	+1	+2	+1	+1
13. LANDFILL or SWR PLANT	+1	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1	+1		-1	-1	-2	-2	-2	-2	-1	+2	+2	+2
14. PRIV. REC. (PER)	+1	+1	+1	+1	+1	+1	+1	-1	-1	+1	+1	+1	-1		+1	+1	+1	+2	+1	+2	+2	-1	+1
15. PRIV. REC. (CON)	-1	-1	-1	-1	-1	-1	-1	-1	-1	+1	+1	+1	-1	+1		-2	-2	-1	-2	-2	+2	-1	+1
16. NEIGHBORHOOD BUS.	-1	+1	+1	+1	+1	+1	+1	+2	+1	+1	+1	+1	-2	+1	-2		+1	+2	+2	+1	+2	-1	-1
17. RESIDENCE BUS.	+2	+2	+2	+1	+1	+1	+1	+2	+1	-1	+2	+1	-2	+1	-2	+1		+1	-1	+1	+1	-2	-2
18. SERV. BUS.	-1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2	+1		+2	+2	+1	+1	+1
19. AREA BUS.	-2	-1	-1	-1	-1	-1	-1	+1	+1	+1	+1	+1	-2	+1	-2	+2	-1	+2		+1	+2	-2	-2
20. REC. BUS.	-2	+2	+2	+1	+1	+1	+1	-1	-1	+1	+1	+1	-1	+2	-2	+1	+1	+2	+1		+2	-2	+1
21. LIGHT IND.	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2	+2	+2	+2	+2		+1	+1
22. HEAVY IND.	+2	-2	-2	-2	-2	-2	-2	-2	-2	+2	-1	+1	+2	-1	-1	-1	-1	-2	-1	-2	+1		+2
23. EXTR. IND.	+2	-2	-2	-2	-2	-2	-2	-1	-2	+2	+1	+1	+2	+1	+1	-1	-1	-2	-1	-2	+1	+1	+2

RATE THE SOLID SQUARES AS +2

Compatibility Questions and Evaluation

Matrix Line # / Use: 5 *Multiple Residential* Prepared by: CH

YES/NO X Response Value

Use Matrix Values:

(+2/-2) -2 X 4 -8

1. Is the proposed use compatible with the dominant adjacent land use?

Agricultural

(+2/-2) +1 X 2 +2

2. Is the proposed use compatible with the other adjacent land uses (total and average)?

S.F. Residential

(+2/-2) 0 X 1 0

3. Is the proposed use generally compatible with the overall land use in the local vicinity?

A mix of H2 w/rural non-ag parcels

Site Specific Evaluation (Impacts and Proposed Mitigation)

(+2/-2) +2 X 3 +6

4. Is the property large enough, does the existence of wooded area, or does the lay of the land help to minimize any potential impacts the proposed use may have on adjacent uses?

Yes - it is 5 acres w/some trees

(+2/-2) +2 X 1 +2

5. Is the size or scale of proposed lots and/or structures similar to adjacent ones?

Yes - S.F. residential

(+2/-2) +2 X 2 +4

6. Is the traffic volume and character to be generated by the proposed use similar to the uses on properties that will be affected by proximity to parking lots, on-site roads, or access roads?

Yes - see #5

(+2/-2) +2 X 2 +4

7. Is the potential impact on adjacent properties due to the consuming or emission of any resource or substance compatible with that of existing uses?

Yes

(+2/-2) +2 X 2 +4

8. Is the proposed use compatible with the abilities of public agencies to provide service or of public facilities to accommodate the proposed use demands on utilities, fire and police protection, schools, roads, traffic control, parks, and open areas?

Yes

(+2/-2) +2 X 2 +4

9. Is the proposed use cost effective when comparing the cost for providing public services and improving public facilities to the increases in public revenue from the improved property?

Yes

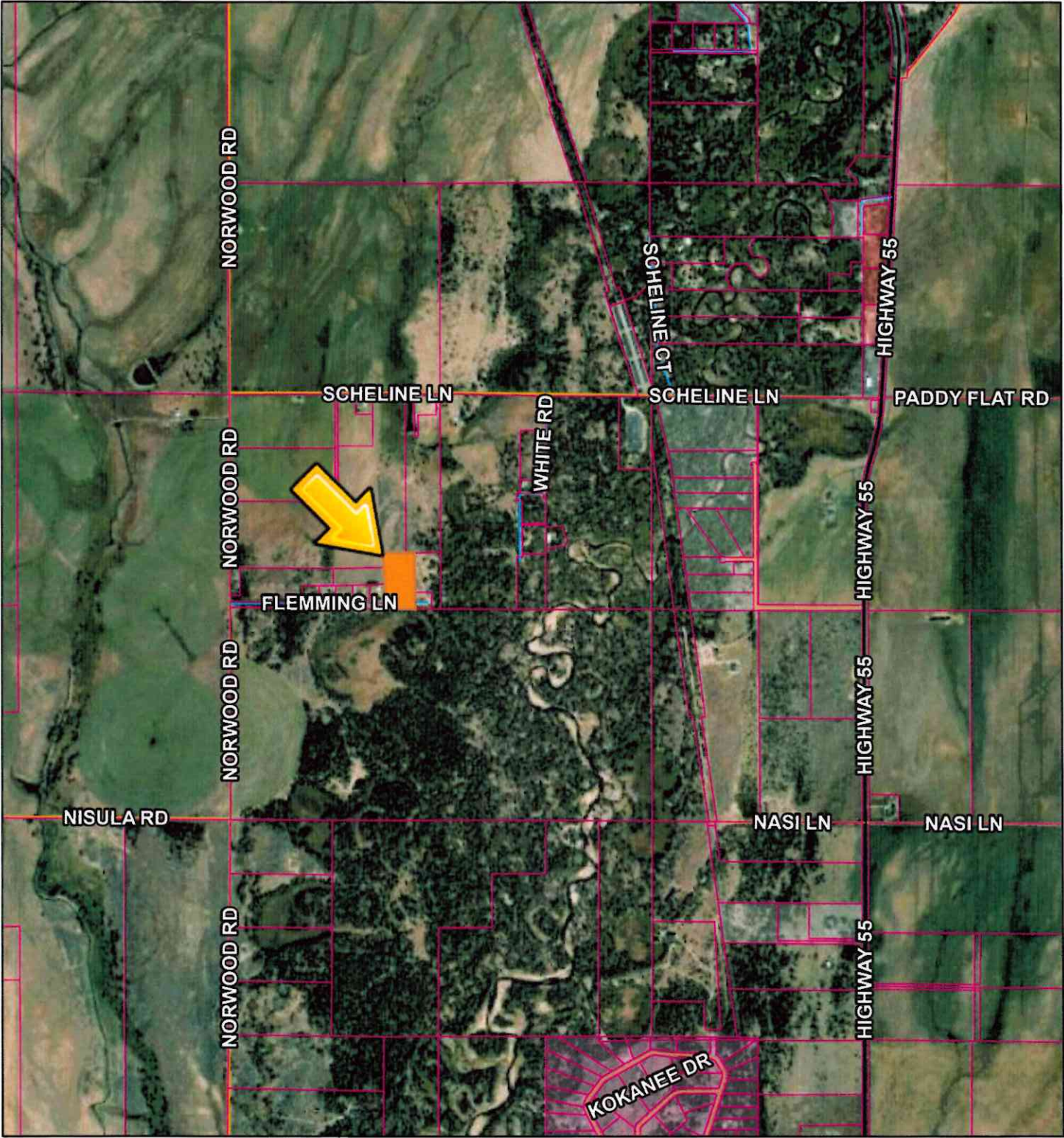
Sub-Total (+) 26

Sub-Total (-) 8

Total Score +18

The resulting values for each questions shall be totaled so that each land use and development proposal receives a single final score.

C.U.P. 23-35 Vicinity Map



8/4/2023, 9:30:20 AM

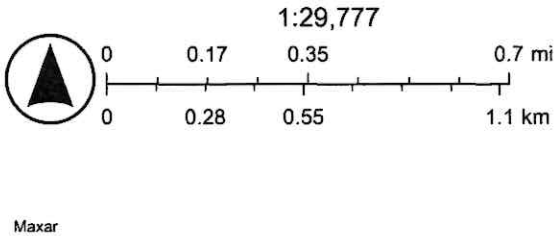
- Parcel Boundaries

URBAN/RURAL

Roads

MAJOR

PRIVATE

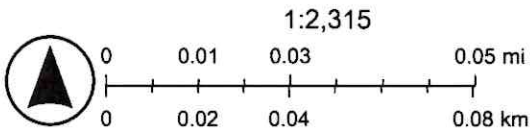


C.U.P. 23-35 Aerial Map



8/4/2023, 9:16:54 AM

- Address Points
- Parcel Boundaries
- Roads
- PRIVATE

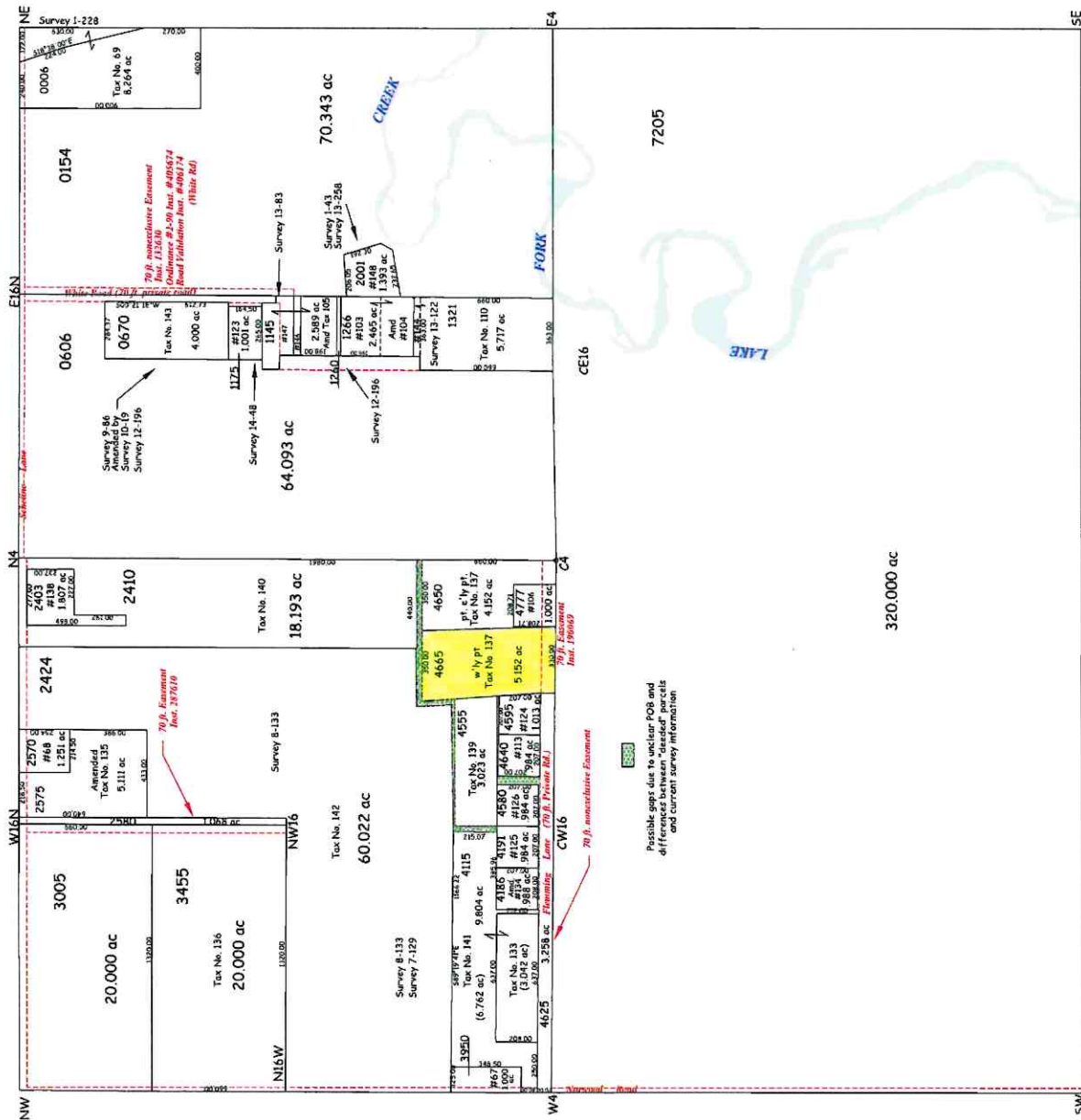


Maxar, Microsoft

T W P . 17 N R O S E S E C . 33

VALLEY COUNTY
Cartography Dept.
Assessor's Office
Cascade, ID 83611

Filename: Valley County Base Map
Scale: 1" = 400 ft.
Date: 5/27/2022
Drawn by: L Frederick



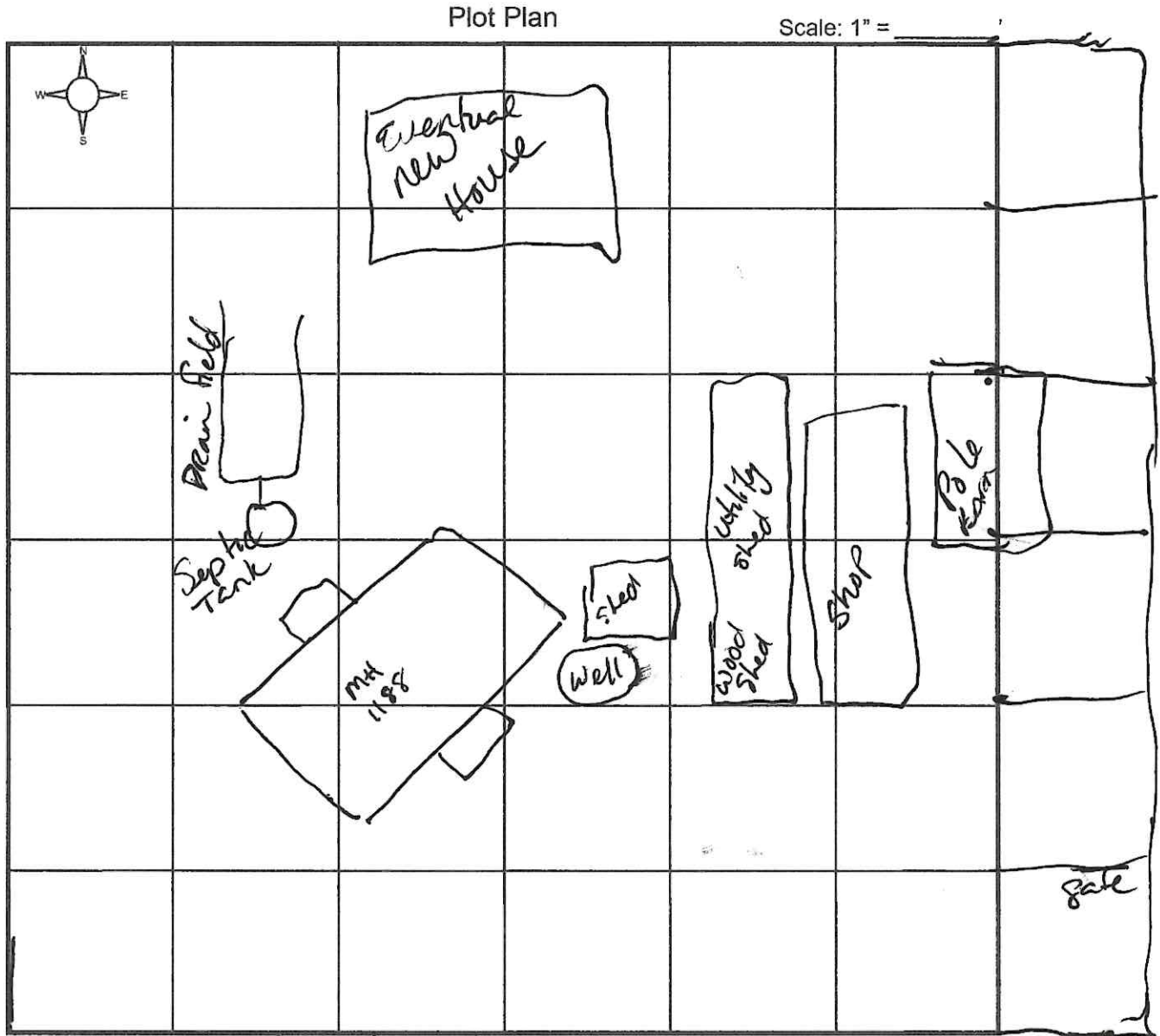
This Drawing is to be Used for Reference Purposes ONLY. The County is NOT Responsible for Any Inaccuracies Contained Herein.



Public Health
Prevents. Promotes. Protects.

Idaho Public Health Districts

Please draw an aerial view of the property showing the outline of buildings, property lines, well location(s), water lines, location of septic tank and drainfields, location of drainfield replacement area, ditches and streams, easements and right of ways, driveway and parking area, cut banks, and location of street or road. Indicate dimensions and separation distances of each from septic tank and drainfield.



Signature: *[Signature]* 42 Flemming Ln

Date: 6/30/23

By my signature above, I certify that all answers and statements on this application are true and complete to the best of my knowledge. I understand that should evaluation disclose untruthful or misleading answers, my application may be rejected or my permit canceled. I understand that any deviation from the plans, conditions, and specifications, is prohibited unless it is approved in advance by the Director or his designee. I hereby authorize the Health District to have access to this property for the purpose of conducting a site-evaluation.

(Official Use Only)

Plot Plan Approval Date: _____ EHS Name: _____ EHS #: _____

Revision Date: 10/2010 NRU











Valley County Transmittal
Division of Community and Environmental Health

Return to:

- ☐ Cascade
☐ Donnelly
☐ McCall
☐ McCall Impact
☒ Valley County

Rezone # _____

Conditional Use # Cup 23-35

Preliminary / Final / Short Plat _____

Sec 33
42 Fleming Lane

- ☐ 1. We have No Objections to this Proposal.
- ☐ 2. We recommend Denial of this Proposal.
- ☐ 3. Specific knowledge as to the exact type of use must be provided before we can comment on this Proposal.
- ☐ 4. We will require more data concerning soil conditions on this Proposal before we can comment.
- ☐ 5. Before we can comment concerning individual sewage disposal, we will require more data concerning the depth of:
☐ high seasonal ground water ☐ waste flow characteristics
☐ bedrock from original grade ☐ other _____
- ☐ 6. This office may require a study to assess the impact of nutrients and pathogens to receiving ground waters and surface waters.
- ☐ 7. This project shall be reviewed by the Idaho Department of Water Resources concerning well construction and water availability.
- ☐ 8. After written approvals from appropriate entities are submitted, we can approve this proposal for:
☐ central sewage ☐ community sewage system ☐ community water well
☐ interim sewage ☐ central water
☐ individual sewage ☐ individual water
- ☐ 9. The following plan(s) must be submitted to and approved by the Idaho Department of Environmental Quality:
☐ central sewage ☐ community sewage system ☐ community water
☐ sewage dry lines ☐ central water
- ☐ 10. Run-off is not to create a mosquito breeding problem
- ☐ 11. This Department would recommend deferral until high seasonal ground water can be determined if other considerations indicate approval.
- ☐ 12. If restroom facilities are to be installed, then a sewage system MUST be installed to meet Idaho State Sewage Regulations.
- ☐ 13. We will require plans be submitted for a plan review for any:
☐ food establishment ☐ swimming pools or spas ☐ child care center
☐ beverage establishment ☐ grocery store

☒ 14. CDEH has no objections. A permit has been written for an additional 3 bedroom home on this parcel. (Permit 7462A written on 7/28/23)

Reviewed By: [Signature]

Date: 8-16-23



Donnelly Rural Fire Protection District

P.O. Box 1178 Donnelly, Idaho 83615

208-325-8619 Fax 208-325-5081

August 30, 2023

Valley County Planning & Zoning Commission
P.O. Box 1350
Cascade, Idaho 83611

RE: C.U.P. 23-35 Dobson Multiple Residences

After review, the Donnelly Rural Fire Protection District will require the following.

- Section 503.7 IFC 2018 Driveways shall be provided when any portion of an exterior wall of the first story of a building is located more than 150 feet from a fire apparatus access road. Driveways shall provide a minimum unobstructed width of 12 feet and a minimum unobstructed height of 13 feet 6 inches. Driveways in excess of 150 feet in length shall be provided with turnarounds. Driveways in excess of 200 feet in length and 20 feet in width may require turnouts in addition to turnarounds.
- Section 503.7.5 IFC 2018 all buildings shall have a permanently posted address, that shall be placed at each driveway entrance and be visible from both directions of travel along the road. In all cases, the address shall be posted at the beginning of construction and maintained thereafter.
- Section 503.7.7 IFC 2018 where security gates are installed, they shall have an approved means of emergency operation. The security gates and emergency operation shall be maintained operational at all times.
- Section 503.7.8 IFC 2018 Driveways shall be designed and maintained to support the imposed loads of local responding fire apparatus and shall be surfaced as to provide all weather driving capabilities.
- Driveways shall be inspected and approved by Donnelly Rural Fire Protection District personnel prior to certificate of occupancy being issued.

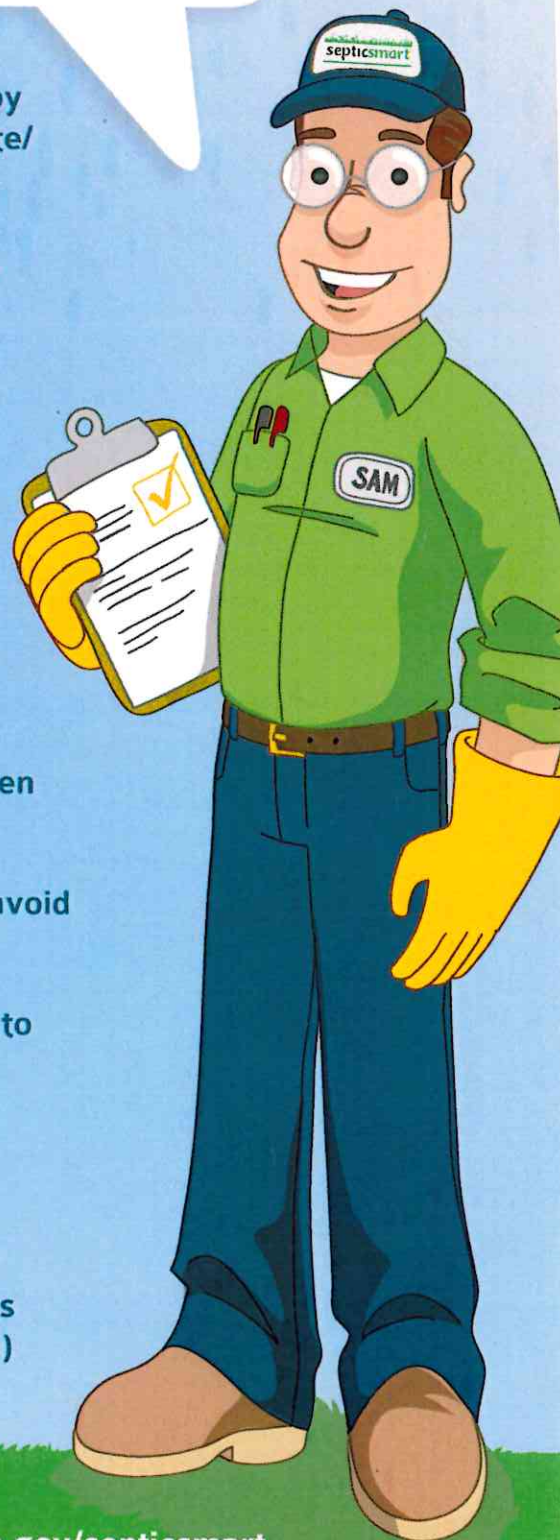
Please call 208-325-8619 with any questions.

Jess Ellis

Fire Marshal
Donnelly Fire Department

Top 10 Ways to Be a Good Septic Owner

- ✓ Have your system inspected every three years by a qualified professional or according to your state/ local health department's recommendations
- ✓ Have your septic tank pumped, when necessary, generally every three to five years
- ✓ Avoid pouring harsh products (e.g., oils, grease, chemicals, paint, medications) down the drain
- ✓ Discard non-degradable products in the trash (e.g., floss, disposable wipes, cat litter) instead of flushing them
- ✓ Keep cars and heavy vehicles parked away from the drainfield and tank
- ✓ Follow the system manufacturer's directions when using septic tank cleaners and additives
- ✓ Repair leaks and use water efficient fixtures to avoid overloading the system
- ✓ Maintain plants and vegetation near the system to ensure roots do not block drains
- ✓ Use soaps and detergents that are low-suds, biodegradable, and low- or phosphate-free
- ✓ Prevent system freezing during cold weather by inspecting and insulating vulnerable system parts (e.g., the inspection pipe and soil treatment area)



A Homeowner's Guide to Septic Systems



**Idaho Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706**

January 2001

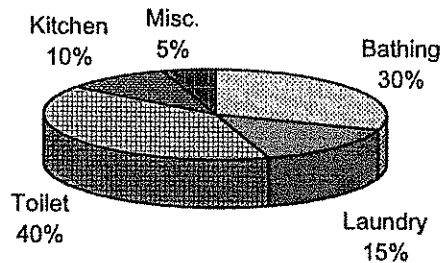


Do you have a home septic system? As an Idaho resident, there is a good chance you do—thirty-six percent of Idaho's homes, or about 210,000 residences, use septic systems to treat their sewage. These systems discharge more than 53 million gallons of wastewater into Idaho's soils annually, and this figure grows each year. In 1999, Idaho's seven health districts issued over 6,100 permits for new septic systems.

Septic systems dispose of household sewage, or wastewater, generated from toilet use, bathing, laundry, and kitchen and cleaning activities. Because septic systems are underground and seldom require daily care, many homeowners rarely think about routine operations and maintenance. However, if a septic system is not properly designed, located, constructed, and maintained, groundwater may become contaminated.

Household Wastewater

Households that are not served by public sewers depend on septic tank systems to treat and dispose of wastewater. Household wastewater carries with it all wastes that go down the drains in our homes, including human waste, dirt, food, toilet paper, soap, detergents, and cleaning products. It contains dissolved nutrients, household chemicals, grease, oil, microorganisms (including some that cause disease), and solid particles. If not properly treated by your septic system, chemicals and microorganisms in wastewater can travel through the soil to groundwater and pose a health hazard.



The average person uses between 50 and 75 gallons of water per day; mostly in the bathroom. Reducing your water use will help your septic system to work more efficiently.

Your Septic System

A conventional septic system has three working parts: a septic tank, a drainfield, and surrounding soil.

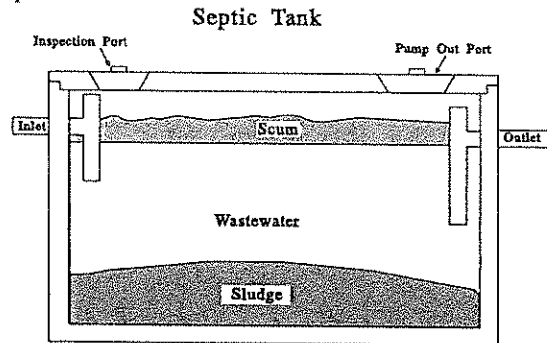
Septic Tank

Septic tanks can be made of concrete, fiberglass, or plastic and must be approved by the state. Minimum sizes of tanks have been established for residences based on the number of bedrooms in the dwelling. In Idaho, a 1,000-gallon septic tank is required for homes with three or four bedrooms. Larger tanks are required for larger homes. Local district health departments issue permits for septic systems and specify the minimum size tank. Some systems installed before the current rules and regulations may have smaller septic tanks.

A septic tank has three main functions:

- to remove as many solids as possible from household wastewater before sending the liquid, called “effluent,” to a drainfield;
- to decompose solids in the tank; and
- to store solids that do not decompose.

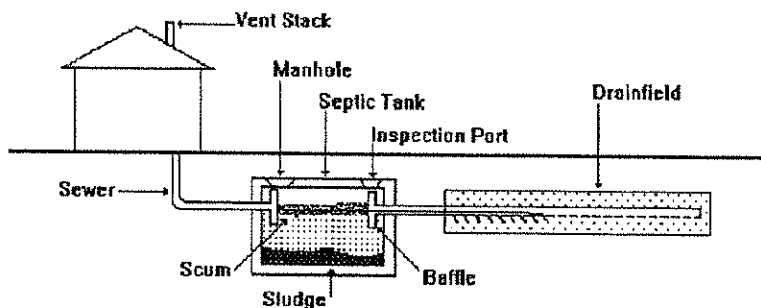
When raw wastewater enters the tank, heavy solids sink to the bottom of the tank as sludge. Light solids, such as grease and paper, float to the surface as scum. During the wastewater storage period, bacteria digest organic material in the wastewater. During this process, the solid material is reduced in volume and composition. Solids that do not decompose accumulate in the tank and eventually must be pumped out.



Tees, or baffles, are provided at the tank's inlet and outlet pipes. The inlet tee slows the incoming wastes and reduces disturbance of the settled sludge. The outlet tee keeps the solids and scum in the tank. As new wastewater enters the tank through the inlet tee, an equal amount of wastewater is pushed out of the tank through the outlet tee. The effluent that leaves the tank has been partially treated but still contains disease-causing bacteria and other pollutants.

Drainfield

Each time raw wastewater enters the tank it forces an equal amount of effluent into a drainfield. A standard drainfield is composed of a series of perforated pipes buried in gravel-filled trenches in the soil. The effluent seeps out of the perforated pipes and percolates through the gravel to the soil.



Soil

The soil below the drainfield provides the final treatment and disposal of the septic tank effluent. After the effluent has passed into the soil, most of it percolates downward and outward, eventually entering the groundwater. Soils are critical to the treatment of septic tank wastewater.

A system that is not functioning properly will release nutrient-rich and bacterial-laden wastewater into the groundwater and/or surface water. These contaminated waters pose a significant public health threat to people that come into contact with them. Wastewater that moves with groundwater can transport bacteria considerable distances. This can result in a threat to public health and adversely affect the quality of ground and surface waters.

Caring for Your Septic System

Installing Your System

In order to have a septic system installed on your property, you must first obtain a permit. Permit applications are available from your local district health department. Next, you must have a site evaluation performed. Make arrangements for this with your district health department and with a licensed septic system installer. Note that not all property is suitable for septic systems, so some permits may be denied. It is recommended that you have a site evaluation performed before you purchase property. Finally, have your system installed by a licensed installer and inspected by your local health district. Provide regular, preventative, maintenance to keep your system running smoothly.

Inspecting Your System

When too much sludge and scum are allowed to accumulate in your tank, the incoming sewage will not have enough time in the septic tank for solids to settle. Solids may flow to the drainfield and clog the pipes, causing the sewage to overflow to the ground surface, where it exposes humans and animals to disease-causing organisms. To prevent this from happening, it is very important to inspect your tank regularly and have it serviced when needed. All tanks have accessible manholes for inspecting and pumping. Some excavation work may be needed to uncover the manhole.

Properly designed tanks should have enough capacity for three to eight years of use before needing service. This is dependent upon the amount of wastewater generated. It is recommended that an average family of four have its septic tank pumped out every three to five years. Don't wait for signs of system failure to have your tank pumped. Your tank should be checked annually to measure sludge and scum levels. A licensed septic tank pumper can provide a septic tank inspection and recommend when the tank should be pumped. A tank inspection should include measuring the depth of scum and sludge and inspecting the tees in the septic tank.

If you do the inspection yourself, it is important to understand that septic tanks always appear full because both the inlet and the outlet are at the top of the tank. What you will need to know is how much of the tank's volume is being taken up by scum and sludge. When sludge and scum take up more than 35 percent of the tank volume, these solids need to be removed by pumping. A pole wrapped in a coarse weave cloth can be used to check the sludge depth. An extension on the pole can be used to measure the scum depth. Record these measurements as part of your pumping records. To check the tees, uncover the inspection ports.

Never allow anyone to enter your septic tank. Dangerous gases and the lack of oxygen can kill in minutes.

While it is impractical to inspect the pipes in your drainfield, it is important to watch for drainfield failure or overuse. See "Warning Signs of System Failure" in this booklet for information.

Maintaining Your System

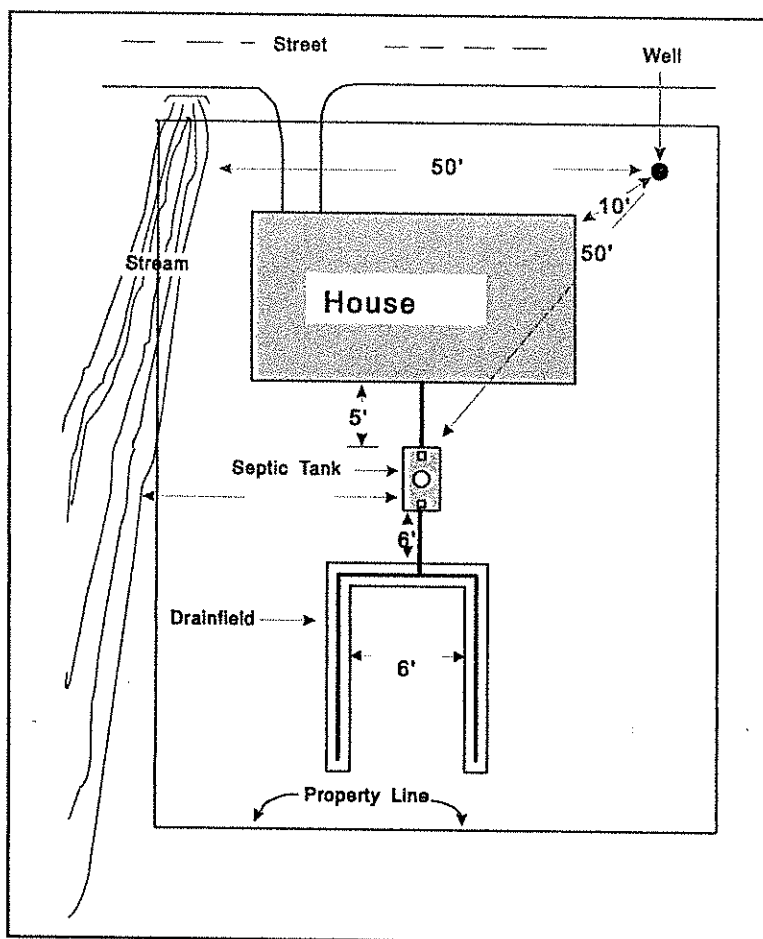
Pumping your septic tank every three years (or as determined by your inspections) will remove accumulations of solids, help keep the drainfield from becoming clogged, and help prevent you from experiencing sewage backups or septic system failure. An accumulation of sludge exceeding 35% of the total water depth in the septic tank could cause solids to enter the drainfield and clog the system. Hire a licensed septic tank pumper to pump your tank for you.

Mapping Your System

In order to take proper care of your septic system, you must know the location of the septic tank and drainfield. The location of your septic tank can be determined from plot plans, septic system inspection records, architectural or landscape drawings, or from observations of the house plumbing. If you do not have access to drawings, find where the sewer pipe leaves your house. Some installers mark the location where the waste pipe comes out of the house with an "S" on the foundation. You may want to do this as well. Probe in the ground 10 to 15 feet directly out from the location where the pipe leaves your house to find your tank.

Once the septic tank has been located, make several plot plan diagrams (with measurements) that include a rough sketch of your house, septic tank cover, drainfield area, well, and any other permanent reference points (such as trees or large rocks) and place them with your important papers. You'll find a sample system diagram on the next page, and a place to draw your own inside the front cover of this booklet. You may also want to hang a diagram in your garage and provide one to your local district health office.

Maintain a permanent record of any septic system maintenance, repair, sludge and scum levels, pumping, drainfield condition, household backups, and operations notes.



Create a septic system diagram, similar to this one, for your system.

Warning Signs of System Failure

While proper use, inspections, and maintenance should prevent most septic tank problems, it is still important to be aware of changes in your septic system and to act immediately if you suspect a system failure. There are many signs of septic system failure:

- surfacing sewage or wet spots in the drainfield area;
- plumbing or septic tank backups;
- slow draining fixtures;
- gurgling sounds in the plumbing system;
- sewage odors in the house or yard (note that the house plumbing vent on the roof will emit sewage odors and this is normal); and
- tests showing the presence of bacteria in well water.

If you notice any of these signs, or if you suspect your septic tank system may be having problems, contact a licensed septic system professional or your local district health agency for assistance.

Septic System Dos and Don'ts

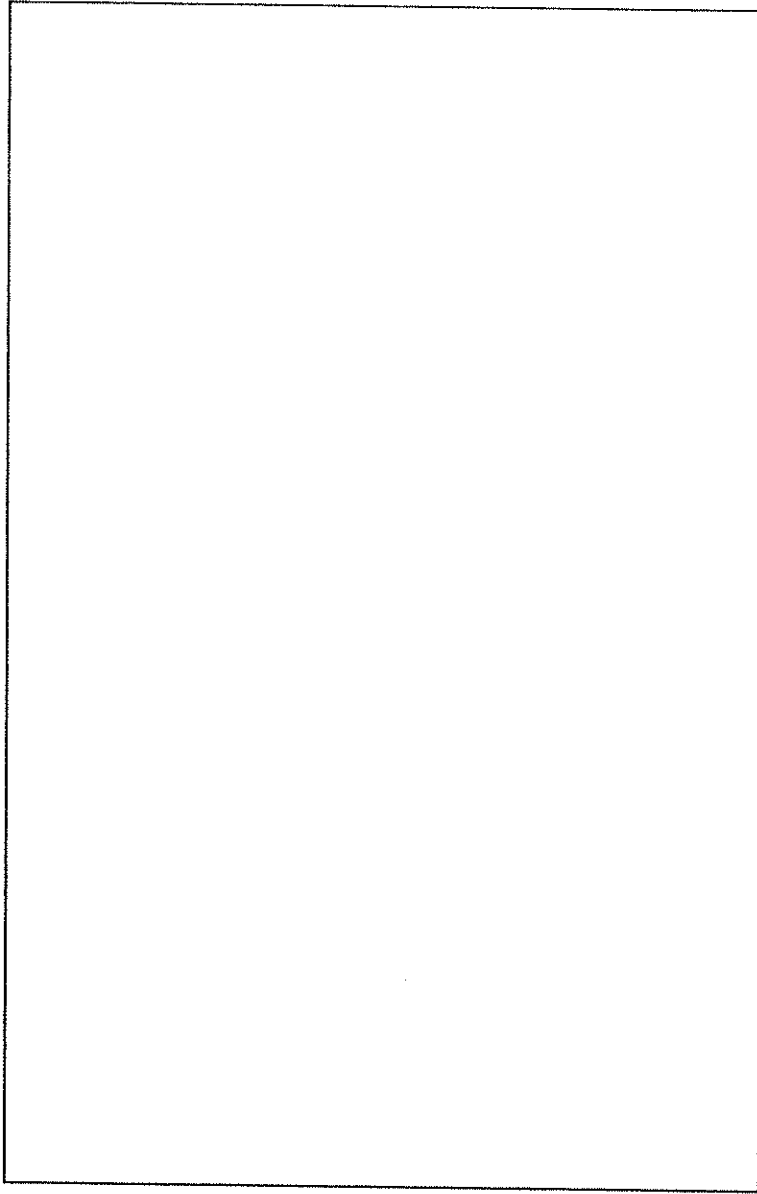
Proper operation of a septic system can prevent costly repairs or replacement. Observing the following guidelines will help to keep your system running efficiently.

Do

- ...practice water conservation. The more wastewater you produce, the more wastewater your system must treat and dispose. By reducing and balancing your use, you can extend the life of your system and avoid costly repairs.
 - Use water saving devices such as low flow showerheads.
 - Repair leaky faucets and plumbing fixtures immediately.
 - Reduce toilet reservoir volume or flow.
 - Take short showers.
 - Take baths with a partially filled tub.
 - Wash only full loads of dishes and laundry.
 - Shut off the water while shaving or brushing your teeth.
 - Balance your water use (e.g., avoid washing several loads of laundry in one day).
- ...keep accurate records. Know where your septic tank is, keep a diagram of its location using the space provided in this booklet, and keep a record of system maintenance.
- ...inspect your system annually. Check the sludge and scum levels inside the tank and periodically check the drainfield for odors, wet spots, or surfacing sewage.
- ...pump your system routinely. Pumping your septic tank is probably the single most important thing you can do to protect your system.
- ...keep all runoff away from your system. Water from roofs and driveways should be diverted away from the septic tank and drainfield area. Soil over your system should be mounded slightly to encourage runoff.
- ...protect your system from damage. Keep vehicles and livestock off your drainfield. The pressure can compact the soil or damage the pipes. Before you dig for any reason, check the location of your system and drainfield area.
- ...landscape your system properly. Plant grass over the drainfield area. Don't plant trees or shrubs or place impermeable materials, such as concrete or plastic, over the drainfield.
- ...use cleaning chemicals in moderation and only according to manufacturer's directions.

Don't

- ...flood irrigate over your system or drainfield area. The best way to irrigate these areas is with sprinklers.
- ...use caustic drain openers for clogged drains. Use boiling water or a drain snake to clean out clogs.
- ...enter a septic tank. Poisonous gases or a lack of oxygen can be fatal.
- ...use septic tank additives. They are not necessary for the proper functioning of your tank and they do not reduce the need for pumping. In fact, some additives can even harm your system.
- ...flush harmful materials into your tank. Grease, cooking oil, coffee grounds, sanitary napkins, and cigarettes do not easily decompose in septic tanks. Chemicals, such as solvents, oils, paints, and pesticides, are harmful to your systems operation and may pollute groundwater.
- ...use a garbage disposal. Using a garbage disposal will increase the amount of solids entering the septic tank and will result in the need for more frequent pumping.



Map your septic system here

For More Information

If you need to obtain a permit for a new or replacement septic system, or if you have questions about septic systems and their operation and maintenance, please contact your local health district.

Panhandle District Health Department
8500 N. Atlas Road
Hayden, ID 83835
208-415-5100

North Central District Health Department
215 10th Street
Lewiston, ID 83501
208-799-0353

Southwest District Health Department
920 Main Street
Caldwell, ID 83605
208-455-5400

Central District Health Department
707 N. Armstrong Place
Boise, ID 83704
208-327-7499

South Central District Health Department
1020 Washington Street North
Twin Falls, ID 83303
208-734-5900

Southeastern District Health Department
1901 Alvin Ricken Drive
Pocatello, ID 83201
208-239-5270

District 7 Health Department
254 "E" Street
Idaho Falls, ID 83402
208-523-5382