

THIS IS A TWO-SIDED DOCUMENT

 Adirondack Park Agency P.O. Box 99, 1133 NYS Route 86 Ray Brook, New York 12977 Tel: (518) 891-4050 www.apa.ny.gov	APA Permit 2025-0294
In the Matter of the Application of GARTH W. LEANING DAVID K. LEANING Permittees for a permit pursuant to § 809 of the Adirondack Park Agency Act and 9 NYCRR Part 577 and 9 NYCRR Part 578	Date Issued: June 17, 2026 To the County Clerk: Please index this permit in the grantor index under the following name(s): 1. Garth W. Leaning 2. David K. Leaning

SUMMARY AND AUTHORIZATION

This permit authorizes a two-lot subdivision in an area classified Resource Management on the Adirondack Park Land Use and Development Plan Map in the Town of Essex, Essex County.

This authorization shall expire unless recorded in the Essex County Clerk's Office within 60 days of issuance of a signed and notarized permit. The signed and notarized permit shall be recorded in the names of all persons listed above and in the names of all owners of record of any portion of the project site on the recordation date

The project shall not be undertaken or continued unless the project authorized herein is in existence within five years of the date the permit is recorded in the Essex County Clerk's Office. The Agency will consider the project in existence when the permit has been recorded.

The project shall be undertaken in compliance with all conditions stated herein. Failure to comply with this permit is a violation and may subject the permittee, successors, and assigns to civil penalties and other legal proceedings.

This permit does not convey any right to trespass upon the lands or interfere with the riparian rights of others in order to undertake the authorized project, nor does it authorize the impairment of any easement, right, title or interest in real or personal property.

Nothing contained in this permit shall be construed to satisfy any legal obligations of the permittee to comply with all applicable laws and regulations or to obtain any governmental approval or permit from any entity other than the Agency, whether federal, State, regional, or local.

PROJECT SITE

The project site is a 171±-acre parcel of land located on NYS Route 22 in the Town of Essex, Essex County, in an area classified Resource Management on the Adirondack Park Land Use and Development Plan Map. The site is identified as Tax Map Section 49.1, Block 1, Parcels 3.100 and 4.000, and is described in a deed from Kirk C. Leaning to Garth Ward Leaning and David Kirk Leaning, dated August 7, 1995, and recorded August 11, 1995 in the Essex County Clerk's Office at Book 1093, Page 247.

The project site contains shoreline on the Boquet River and associated wetlands located along the property boundary between Lot 1 and Lot 2. Additional wetlands not described herein or depicted on the Site Plan may be located on or adjacent to the project site.

The project site is partially located within the designated Boquet River Recreational River area and is partially located within the NYS Route 22 Highway Critical Environmental Area.

The project site is improved by an existing single family dwelling and multiple accessory barns and outbuildings.

PROJECT DESCRIPTION

The project as conditionally approved herein involves a two-lot subdivision, creating:

- Lot 1, a 9±-acre parcel located on the west side of NYS Route 22 with approximately 530 feet of shoreline on the Boquet River and improved by an existing single family dwelling and two barns; and
- Lot 2, a 162±-acre parcel on the east and west sides of NYS Route 22 with approximately 1000 feet of shoreline on the Boquet River and improved by accessory structures on the eastern side of NYS Route 22.

The project site constituted a portion of a larger property on the May 22, 1973, enactment date of the Adirondack Park Land Use and Development Plan, and was created by subdivision from this larger property in 1974. As this subdivision occurred on Resource Management lands and within a designated river area, it appears that an Agency permit was required for its undertaking. Agency records indicate that no permit was obtained. By issuance of this permit, the project site shall be recognized as lawful for Agency purposes.

The proposed subdivision, existing development and a proposed building location are depicted on "Map of Limited Survey of the Leaning Subdivision," prepared by Kevin A. Hall, L.S., with a final revision date of June 3, 2026 (Site Plan). The soil test pit data and on-site wastewater treatment system design details are depicted on an eight-page set of plans prepared by Earth Science Engineering, P.C., received by the Agency December 2, 2025 (Septic Plan).

Reduced-scale copies of the Site Plan and Septic Plan for the project, are attached as a part of this permit for reference.

AGENCY JURISDICTION

Pursuant to Section 809(2)(a) of the Adirondack Park Agency Act, a permit is required from the Adirondack Park Agency prior to any subdivision in a Resource Management land use area in the Adirondack Park.

Pursuant to Section 809(2)(a) of the Adirondack Park Agency Act and Adirondack Park Agency regulations at 9 NYCRR Part 578, a permit is required from the Adirondack Park Agency prior to any subdivision involving wetlands in the Adirondack Park.

Pursuant to Adirondack Park Agency regulations at 9 NYCRR Part 577, a permit is required from the Adirondack Park Agency prior to any subdivision of Resource Management lands located within any designated Recreational river area in the Adirondack Park.

Pursuant to Section 809(2)(a) of the Adirondack Park Agency Act, a permit is required from the Adirondack Park Agency prior to any subdivision of Resource Management lands within 300 feet of the edge of the right-of-way of any state highway in the Adirondack Park.

CONDITIONS

THE PROJECT IS APPROVED SUBJECT TO THE FOLLOWING CONDITIONS:

1. The project shall not be undertaken until this permit has been recorded in the Essex County Clerk's Office.
2. This permit is binding on the permittee, all present and future owners or lessees of the project site, and all persons undertaking all or a portion of the project. Copies of this permit and Site Plan and Septic Plan shall be furnished by the permittee to all subsequent owners or lessees of the project site prior to sale or lease, and by the permittee and/or any subsequent owner or lessee to all persons undertaking any development activities authorized herein.
3. In addition to complying with all terms and conditions of this permit, all future activities on the project site shall be undertaken in compliance with the requirements of New York State's Adirondack Park Agency Act, Freshwater Wetlands Act, Wild, Scenic and Recreational Rivers System Act, and the Adirondack Park Agency's implementing regulations [9 NYCRR §§ 570-588].
4. All deeds conveying all or a portion of the lands subject to this permit shall contain references to this permit as follows: "The lands conveyed are subject to Adirondack Park Agency Permit 2025-0294, issued June 17, 2026, the conditions of which are binding upon the heirs, successors and assigns of the grantors and all subsequent grantees."

5. Subject to the conditions stated herein, this permit authorizes a two-lot subdivision as depicted on the Site Plan. Any subdivision the project site not depicted on the Site Plan shall require a new or amended permit.
6. The construction of any single family dwelling and associated on-site wastewater treatment system on Lot 2 in the location depicted on the Site Plan and design depicted on the Septic Plan shall require prior written Agency authorization.
7. The undertaking of any new land use or development not authorized herein on the project site within one-quarter mile of the Boquet River or within 300 feet of the right of way of NYS Route 22 shall require a new or amended permit. The undertaking of any activity involving wetlands shall also require a new or amended permit.
8. The construction of any additional dwelling or other principal building on the project site shall require a new or amended permit.
9. Prior to undertaking construction of any dock or boathouse on the project site, written authorization of plans for the boathouse, including all attached docks or walkways, shall be obtained from the Agency.
10. Pursuant to the Adirondack Park Agency Act and Agency regulations implementing the Wild, Scenic and Recreational Rivers System Act, new structures are prohibited within 150 feet, measured horizontally, of the mean high water mark of the Boquet River.

Docks and boathouses as defined under 9 NYCRR § 570.3 are excepted from this requirement. Fences, poles, lean-tos, and bridges are also excepted from this requirement, except that no fence, pole, lean-to, or bridge greater than 100 square feet in size may be located within 150 feet of the mean high water mark.
11. Between April 1 and October 31, no trees shall be removed or disturbed on the project site without prior written Agency authorization.
12. There shall be no principal buildings located on Lot 1 other than the existing single family dwelling.
13. There shall be no more than four principal buildings located on Lot 2. The Agency makes no assurances that the maximum development mathematically allowed can be approved.

CONCLUSIONS OF LAW

The Agency has considered all statutory and regulatory criteria for project approval set forth in the Adirondack Park Agency Act, the Freshwater Wetlands Act and 9 NYCRR Part 578, the Wild, Scenic and Recreational Rivers System Act and 9 NYCRR Part 577, and 9 NYCRR Part 574. The Agency hereby finds that the subdivision/single family dwelling authorized as conditioned herein:

- a. will be consistent with the land use and development plan;
- b. will be compatible with the character description and purposes, policies, and objectives of the Resource Management land use area;
- c. will be consistent with the overall intensity guidelines for the Resource Management land use area;
- d. will comply with the shoreline restrictions of § 806 of the Adirondack Park Agency Act;
- e. will not have an undue adverse impact upon the natural, scenic, aesthetic, ecological, wildlife, historic, recreational or open space resources of the Park or upon the ability of the public to provide supporting facilities and services made necessary by the project;
- f. will be consistent with the purposes and policies of the Wild, Scenic and Recreational Rivers System Act;
- g. will comply with the restrictions and standards of 9 NYCRR § 577.6; and
- h. will not cause an undue adverse impact upon the natural, scenic, aesthetic, ecological, botanical, fish and wildlife, historic, cultural, archeological, scientific, recreational or open space resources of the river area, taking into account the commercial, industrial, residential, recreational or other benefits that might be derived therefrom.

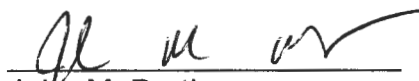
Dated:

June 17th, 2026

Ray Brook, New York

ADIRONDACK PARK AGENCY

By:


 John M. Burth

Deputy Director, Regulatory Programs

STATE OF NEW YORK
COUNTY OF ESSEX

On the 17th day of June in the year 2026, before me, the undersigned, a Notary Public in and for said State personally appeared John M. Burth, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that they executed the same in their capacity, and that by their signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Stephanie L. Petith
 Notary Public

ESE Earth Science Engineering, P.C.

Owner Name David K. Leaning Telephone (H) _____ (C) (860) 916-6939
Mailing Address: 1096 Middle Road, Willsboro, NY 12996

DESIGN CRITERIA

Tax Map ID# 14-1-1-3.100 [Lots <1 acre **MUST** attach a COPY of your TAX MAP;
Township Essex Legislative District —

911 Address or distance and direction from an identifiable 911 address: _____
Exact Directions to Site: 1.75 mi. N of hamlet of Whallonsburg on Route 22,
west side of road.

If lot is in the APA, is a permit required? (Yes) No (if yes, please contact the APA first for coordination of soil tests).

Lot Type: Private Lot Approved Subdivision (5 lots or more) **OR** Local (Minor) Subdivision (4 lots or less)

Subdivision Name: _____ Lot # _____

System Type: Conventional (New) / Replacement **OR** Engineered New / Replacement [If Replacement, see Page 3]

Building Information: Residential? (Number of Bedrooms 3) **OR** Other use? _____ -GPD Demand _____

Foundation: Full Basement / Half-Basement / Slab / Block Supports / Other TBD

Water Supply: Public Water / Drilled Well / Dug Well / Surface water; Describe _____

Private water - Water Pump Type: Submersible in well / Siphon-Jet (Suction-Show pump location on plot drawing)

Plumbing fixtures: NEW-Low Flow **OR** OTHER _____; *Indoor hot tub/spa (w/ filter & backwash): YES / NO

*Kitchen Sink Garbage Disposal: YES / NO; *Grinder Pump (basement toilet to feed sewer main): YES / NO

Tank Type / Size: Concrete **OR** Plastic; Gallons: 1,000; Dual Compartment? *Gas Deflection Baffle?

Leach Field Type: Crushed Stone Trenches / Plastic Chambers / Eljen Units / Other _____

System To be installed by: Contractor TBD; Phone _____ **OR** Homeowner

Homeowner installations require OWNER to confirm/know all attached construction specifics
Attached Requirements understood by Owner/Contractor? _____ (Note: (*) Septic tank size will relate to asterisk items)

Owner's Signature David K. Leaning; Date 7/10/25 Owners' signature is **REQUIRED!**
[Do not sign until all above information and Plot Plan Drawing are complete and confirmed to be your intentions.]

HEALTH DEPARTMENT USE ONLY	
Fee Paid _____	Receipt # _____
Permit Approved by _____	Approval Date _____
Permit expires 2 years from the date of approval	

HEALTH DEPARTMENT USE ONLY	
Final Construction Approval By _____	
Date _____	

PERMIT APPLICATION [App. Page 2]

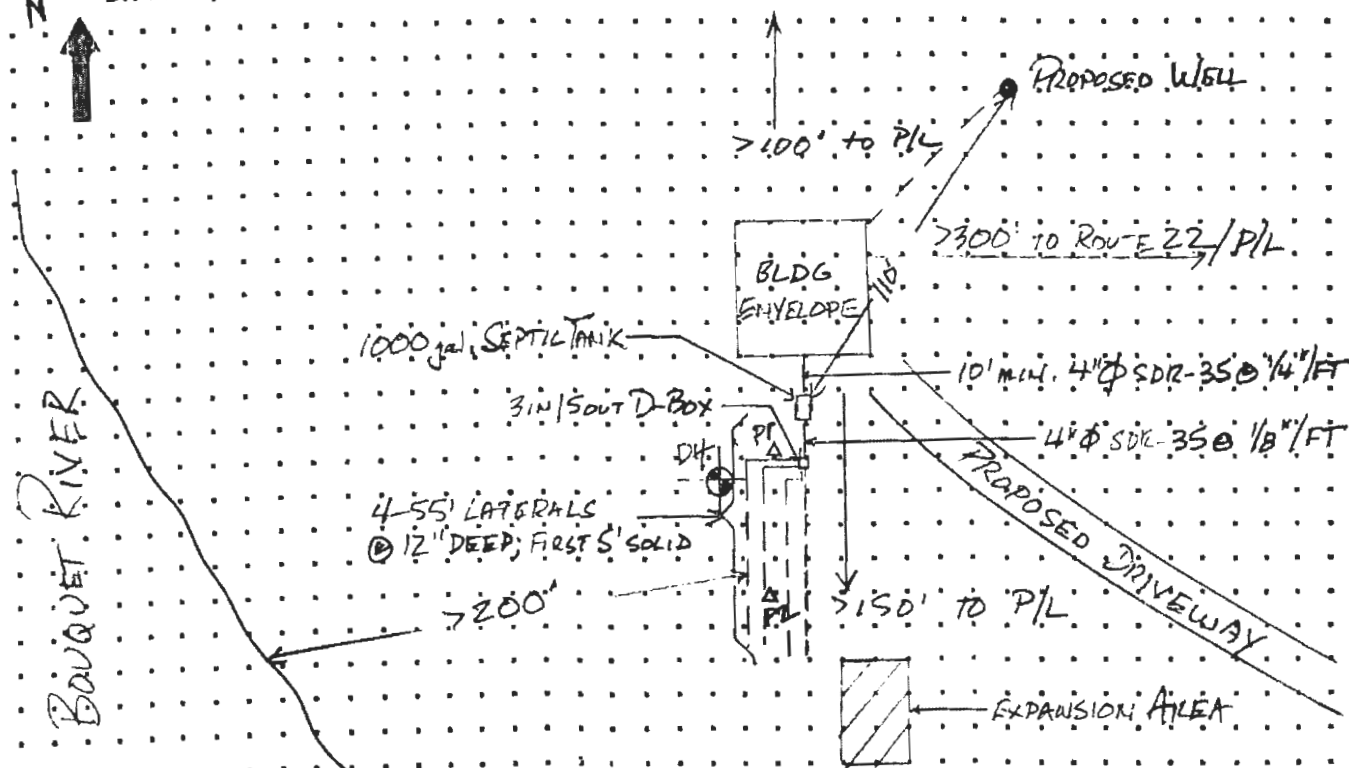
PLOT PLAN SKETCH

PERMIT #:20 _____ - _____

Use "Construction Requirements" (Req. Page 1) drawing as a guide to complete a drawing showing all separation distances. Check item when drawn and distance labelled OR write N/A if not present or not intended.

☒	Property Lines (location or distance + direction)	☒	Access Roads
☒	Drainage: ditches/swales /buried collection pipes	☒	Driveways
☒	Public Water lines & Connection to Home (+10')	☒	Home- show shape incl.: porches, decks, etc.
☒	Water Supply Line from Well to Home	☒	Other structures- garages, sheds, pools, etc.
☒	Septic Tank – show orientation of inlet and outlet	☒	Distance from Well to Septic Tank (+50')
☒	Proposed D-Box and Leach lines	☒	Well suction pump location(s); yours/ neighbors
☒	50% Leach expansion area (All distances apply)	☒	Suction Water line(s) to leach-field (+100')
☒	Distance from Proposed Well (PW)	☒	Distance from Leach field - Property Line (+10')
☒	Neighbor's Well (NW) to leach area (+100')	☒	Distance from Existing Well
☒	Distance from Leach Field (+100') & Tank (+50') to Nearby Stream, Lake or Wetland Boundaries		

SOILS EVALUATOR must show deep-hole and percolation test locations orientation to property lines; North direction; Downward slope direction and establish a SCALE: Each 4-dot square on grid is (circle) 10'x10' OR 5'x5' OR x
 DH = Deep-Hole Test Location P1 = Percolation Test #1 Location P2 = Percolation Test #2 Location



SYSTEM SPECIFIC REQUIREMENTS

Leach-field type of trenches: Crushed Stone / Plastic Chambers / Eljen Units / Other

Septic tank: Concrete OR Plastic Minimum Tank Size (gallons) 1,000 / 1,250 / 1,500 / 1,750 / 2,000

Required Tank Components: Dual-Compartment / Gas Deflection Baffle / Effluent Filter

Bottoms of trenches are to be no deeper than 12 inches below the grade (Determined at deep-hole test);

Additional Fill to be placed in area prior to Trench Build; 18-inches (-) Available Usable Soil (inches) = 0 (inches);

Minimum Total Trench Length: 207 feet; Minimum # of Eljen Units: N/A; Sand Source N/A

NOTE: Replacement Systems using Existing Tank require prior PUMPING - **MUST** be empty for inspection.

ALL CONSTRUCTION MUST BE INSPECTED PRIOR TO BACK-FILLING; REVIEW "CONSTRUCTION INSPECTION POLICY and PROCEDURE;" THEN CALL 963-8555 to REQUEST an INSPECTION

SITE DESCRIPTION

TAX MAP NUMBER OR ADDRESS: 49-1-1-3.100 PERMIT #: 20 -

SLOPE in the area of proposed leach-field: Flat (<1%) / Slight (1-5%) / Steep (> 15%)
Describe downward slope direction and label the slope on "Plot Plan Sketch":

Are there ANY nearby streams, wetlands, or waterbodies? YES / NO - Describe Bouquet River

VEGETATION: Dense Woods / Sparse Trees / Open Field / Lawn / Other. Label limitations on drawing.

GRADING: Will any original soil be removed from the proposed leach-field area? YES / NO
If yes, how many inches? ; WHY?

FILL MATERIAL: Has any been placed on the intended leach area within the recent past? YES / NO
If yes, how many inches? ; WHY?

DEEP-HOLE TEST DATA

INSTRUCTIONS:

At least **ONE (1)** deep-hole test must be performed in the area of the proposed leaching system. The hole must be at least 6-feet (72-inches) deep. The Health Department recommends that the deep-hole test be completed during the high groundwater season (*in the spring before June 30th*). **Safety and caution must be exercised** when examining the hole in order to obtain the following information:

DESCRIPTION OF SOIL LAYERS

DEPTH	SOIL HORIZON	COLOR	TEXTURE	MOTTLING
<u>0 " to 8 "</u>	<u>O</u>	<u>Dark Brown</u>	<u>TOPSOIL</u>	<u>—</u>
<u>8 " to 16 "</u>	<u>A1</u>	<u>Orange-Brown</u>	<u>c-mf SAND; little mf GRAVEL</u>	<u>—</u>
<u>16 " to 36 "</u>	<u>A2</u>	<u>Brown</u>	<u>mf SAND and c-mf GRAVEL</u>	<u>—</u>
<u>36 " to 60 "</u>	<u>A3</u>	<u>Brown</u>	<u>Similar Soils</u>	<u>—</u>
<u>60 " to 72 "</u>	<u>A4</u>	<u>Gray-Brown</u>	<u>mf SAND; trace SILT</u>	<u>Yes</u>
<u>" to "</u>				

Depth of hole: (If under 72" explain why?) equals 72 inches
Was bedrock encountered? YES / NO at — inches
Was an impermeable till or clay layer encountered? YES / NO at — inches
Was groundwater seepage observed? YES / NO at 36 inches
Soil mottling - Evidence of seasonal high groundwater? YES / NO at 60 inches

A - Total depth of useable soil (*): (smallest # above)..... is 36 inches
B - Minimum Separation to Limiting Factor (i.e., Water Table, Clay Soil, Bedrock): = 24 inches
Maximum Trench Bottom Depth (A - B): = 12 inches

(*) Above Limiting Factor (i.e., bedrock, impermeable soil layer, seasonal high groundwater; smallest above #)

I CERTIFY THAT THE DEEP-HOLE TEST RESULTS and Site DESCRIPTION ARE TRUE, and ACCURATE with Location of deep-hole test (DH) labelled on plot plan sketch.

George R. Ferris, P.E. 5/8/25
SIGNATURE OF PERSON CONDUCTING TESTS TEST DATE STAMP/CERT. #

Circle Title: P.E. / L.L.S / R. A. / AIPG Geologist / Certified Soil Scientist / Contractor / Homeowner
NYS Lic. # 068035

PERCOLATION TEST DATA

TAX MAP NUMBER OR ADDRESS: 49-1-1-3.100 PERMIT #:20 -

PERCOLATION TEST RESULTS – HOLE 1 (P1)

TEST	START TIME	FINISH TIME	TOTAL TIME
#1	0:00	8:31	8:31
#2	0:00	8:47	8:47
#3	0:00	8:56	8:56
#4			
#5			
#6			
#7			

Depth of Hole 1: 12 inches

Stabilized percolation rate for Hole 1: 8:56 min. (longest time).

PERCOLATION TEST RESULTS – HOLE 2 (P2)

TEST	START TIME	FINISH TIME	TOTAL TIME
#1	0:00	9:01	9:01
#2	0:00	9:49	9:49
#3	0:00	10:04	10:04
#4			
#5			
#6			
#7			

Depth of Hole 1: 12 inches

Stabilized percolation rate for Hole 1: 10:04 min. (longest time).

STABILIZED PERCOLATION RATE OF SOIL: 10:04 MINUTES
(The longer of the two stabilized percolation times for both holes)

I CERTIFY THAT THE PERCOLATION TEST RESULTS ARE TRUE, and ACCURATE, with the locations of Percolation Tests (P1 and P2) labelled on the Plot Plan Sketch.

Alvin R. Lewis, P.E.
Signature of Person Conducting Tests

6/17/25
Test Date

Alvin R. Lewis, P.E.
Stamp / Cert. #

NYSD 010035

CIRCLE TITLE: P. E. / L. L. S / R. A. / AIPG Geologist / Cert. Soil Scientist / Contractor / Homeowner

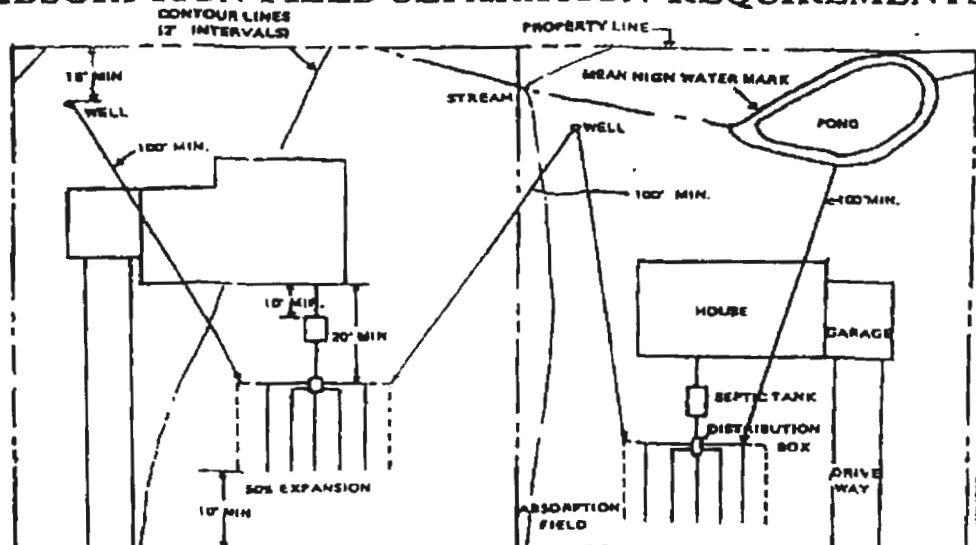
CONSTRUCTION REQUIREMENTS (Req. Page 1)

REQUIRED SEPARATION DISTANCES FROM WASTEWATER SYSTEM COMPONENTS

System Components	Well (d) or Suction Line	To Stream, Lake Watercourse (b) or Wetland	Dwelling	Property Line	Drainage Ditch
House Sewer (Watertight Joints)	25' if cast iron or PVC w/o-ring joints; 50' if not	25'	3'	10'	
Septic Tank	50'	50'	10'	10'	10'
Effluent Line to D-Box	50'	50'	10'	10'	10'
Distribution Box	100'	100'	20'	10'	20'
Absorption Field (c) (Incl. replacement area)	100' (a)	100'	20'	10'	20'
Dry Well (Roof & Footing)	50'	25'	20'	10'	10'
Sanitary Privy Pit	100'	50'	20'	10'	20'
Privy, Watertight Vault	50'	50'	20'	10'	10'

- (a) When sewage treatment systems are located in coarse gravel or upgrade and in the general path of drainage to a well, the closest part of the treatment system shall be at least 200' away from the well. The leach field must also be 200' away from any public water supply wells.
- (b) Mean high water mark.
- (c) For all systems involving the placement of fill material, separation distances are measured from the toe of slope of the fill.
- (d) Any water service under pressure located within 10' of any absorption field, seepage pit or sanitary privy shall be installed inside a larger diameter water main to protect the potable water supply.

ABSORPTION FIELD SEPARATION REQUIREMENTS



SEWER PIPE REQUIREMENTS – STRUCTURE TO SEPTIC TANK (Req. Page 2)

1. Four inch (4") minimum diameter ridged pipe laid on a firm foundation of soil.
2. Pipe should have no less than 1/4" per foot slope.
3. All connections must be sealed watertight.
4. Pipe must have no sharp bends (angles of more than 45°). If a sharp turn is needed; consider tank rotation and/or side entry **OR** separate 45° fittings with 5-10 feet separation.
5. Tank Inlet pipe must extend approximately one inch inside the tank wall.
6. Pipe must have a clean-out fitting in the basement or crawl space.
7. If pipe must be under a vehicle pathway; a method of protection must be approved.

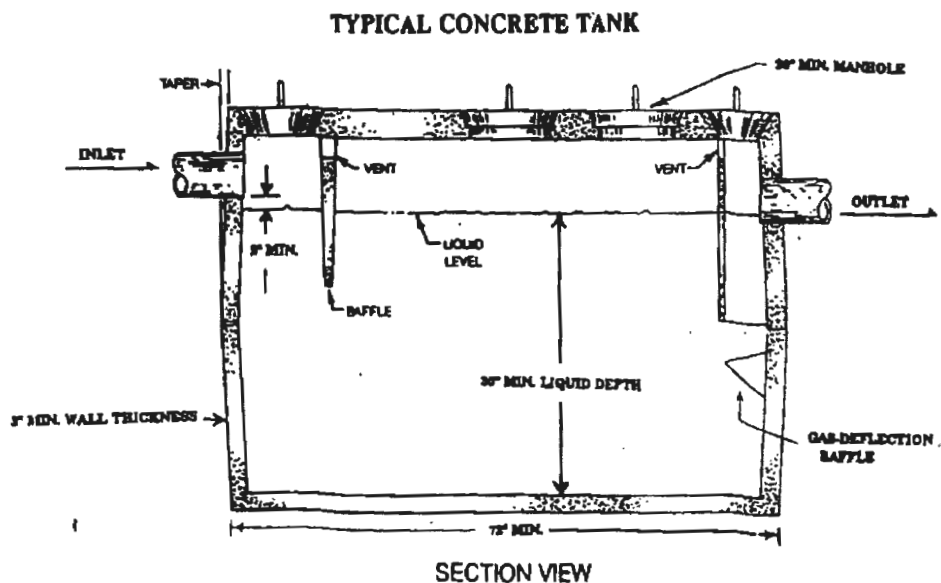
SEPTIC TANK REQUIREMENTS Minimum Tank Size

# Bedrooms	W/O Accessories	With Garbage Disposal	With hot tub/Spa	Garbage Disposal & Hot tub/Spa
1-2	1,000	1,000 DC*	1,000	1,250 DC*
3	1,000	1,250 DC*	1,250	1,500 DC*
4	1,250	1,500 DC*	1,500	1,750 DC*
5	1,500	1,750 DC*	1,750	2,000 DC*

(*)DC = **Dual Compartment Septic Tank Required. DUAL COMPARTMENT TANKS MUST MEET HEALTH DEPARTMENT SPECIFICATIONS, AND MAY INCLUDE A GAS DEFLECTION BAFFLE OR OTHER OUTLET MODIFICATION.**

PLASTIC SEPTIC TANKS ARE NOT TYPICAL! Requirements for Plastic Septic Tanks cannot be properly evaluated with simple measurements and observations. The MANUFACTURER'S SPECIFICATIONS should be provided as part of the Permit Application for review and **MUST** be also be provided at the inspection.

All tanks must be level on a firm foundation of soil, with sealed connections, and open cleared vents.



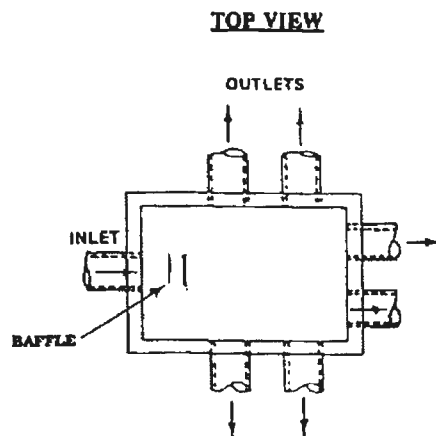
SEWER PIPE REQUIREMENTS – SEPTIC TANK TO DISTRIBUTION BOX (Req. Page 3)

1. Four inch (4") minimum diameter ridged pipe laid on a firm foundation of soil.
2. Pipe should have no less than 1/8 inch per foot slope.
3. All connections must be sealed watertight.
4. Pipe must have no sharp bends (angles of more than 45°). If a sharp turn is needed; consider tank rotation and/or side entry **OR** separate 45° fittings with 5-10 feet separation.
5. Pipe must extend approximately one inch inside the tank and D-box walls.
6. If pipe must be under a vehicle pathway; a method of protection must be approved.

DISTRIBUTION BOX REQUIREMENTS

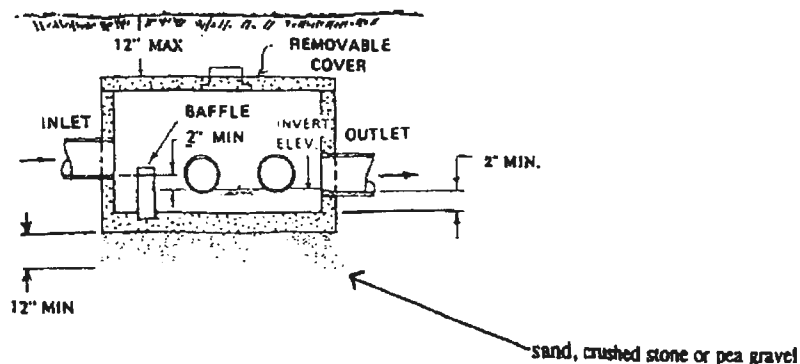
1. A removable cover not located more than 12" below final grade.
2. Level on firm foundation of sand, crushed stone or pea gravel.
3. Outlet pipes **MUST** be solid, not perforated. Perforated pipe/stone can start after 5-feet from D-box.
4. Outlet pipes connect directly to an individual trench. No "T's" from one pipe to multiple trenches.
5. All outlet pipes must be with the same angle, trim, and level to insure even flow distribution.

TYPICAL DISTRIBUTION BOX



All outlet pipes must be solid (non-perforated) for at least the first 5' from the d-box.

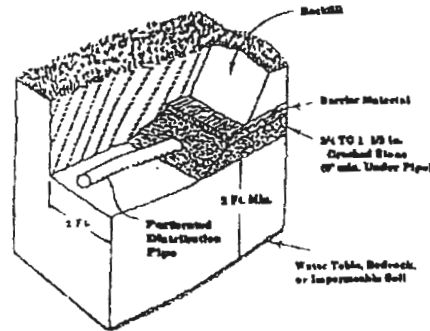
SIDE VIEW



CONSTRUCTION REQUIREMENTS (Req. Page 4)

CONVENTIONAL STONE ABSORPTION TRENCH REQUIREMENTS

1. If fill is required, the fill must have similar percolation rate as undisturbed soils, and be placed **BEFORE** excavation.
2. Trenches are to be a minimum of **24-inches wide**, and installed **parallel** to ground contours (**Across Slope**). The undisturbed soil between adjacent trenches must be at least 2-times the trench width (typically 4-feet required).
3. Trench bottoms must be **level**, and at least 2-feet above limiting factor determined on permit. **Trench bottoms do not need to be at the same elevation.**
4. All minimum separation distances on Req. Page 1 apply.
5. All trenches are to be similar length; and less than 60 feet length.
6. Trench bottoms are to be on undisturbed soil; **NOT ON TOP OF FILL.**
7. Sides and bottoms of trenches must be raked prior to placement of crushed stone.
8. The aggregate **must** be washed gravel or crushed stone 3/4" to 1-1/2" in diameter. Larger diameter material, finer substances, or run of bank gravel are unacceptable.
9. Perforated pipe is to be sloped between 1/16" and 1/32" per foot within the crushed stone. This requires the **start of the trenches** to have **14"** of crushed stone; with **8" below** perforated pipe.
10. Minimum depth of crushed stone at end of trenches must be **12"** with **6" below** the 4" perforated pipe and 2" **above** the perforate pipe. Pipe ends must be capped, sealed, and visible at inspection.
11. Perforated pipe/stone can start after a 5-foot radius from D-box. D-box solid outlet pipes must connect directly to an individual trench. Solid pipes can have various slopes allowing trench bottoms to be at equal depths on a slope.
12. Finished trenches must have **square** top corners (not rounded) and are to be covered with permeable paper, fabric, or 4" thick layer of hay. Place this cover as the stone is placed.
13. The intended backfill (including topsoil) over the trench cover should be 6 to 12 inches.



LINEAR FEET OF ABSORPTION TRENCH NEEDED (based on 2 feet wide trench)

Time for water to drop 1-inch in Test Hole	2 BR HOME	3 BR HOME	4 BR HOME	5 BR HOME
NEW - LOW-FLOW FIXTURES / OLD-STANDARD FIXTURES				
1-5 minutes	92 / 125	140 / 190	185 / 250	230 / 315
6-7 minutes	110 / 150	165 / 225	220 / 300	275 / 375
8-10 minutes	125 / 170	185 / 250	245 / 335	310 / 420
11-15 minutes	140 / 190	210 / 285	275 / 375	345 / 470
16-20 minutes	160 / 215	240 / 325	315 / 430	395 / *
21-30 minutes	185 / 250	275 / 375	370 / 500	460 / *
31-45 minutes	220 / 300	330 / 450	440 / *	* / *
46-60 minutes	245 / 335	370 / 500	490 / *	* / *

NOTE - (*) MORE THAN 500 LINEAR FEET OF TRENCHES REQUIRES DOSING / SPECIAL DESIGN SHALLOW ABSORPTION TRENCHES