

TOWN OF MORRISTOWN  
604 MAIN ST. / P.O. BOX 240  
MORRISTOWN, NY 13664  
(315) 375-8572

## SEWAGE TREATMENT SYSTEM PERMIT APPLICATION

This packet contains all the information needed to obtain a construction permit and certificate of approval from the Town of Morristown as required by Article IX, of the St. Lawrence County Sanitary Code and Individual Residence Wastewater Treatment Systems Design Handbook 1996 NYS Department of Health, Appendix 75-A of the New York State Sanitary Code.

**New or Replacement System - \$50.00**  
**Make Checks payable to – Town of Morristown**

### INSTRUCTIONS:

- (1) Fill out the Permit Form. Please include all the relevant information about your proposed or existing home.
- (2) Consult the Town of Morristown, whether the septic system is a new or replacement system.

(3) **A NEW SYSTEM:**

If your lot is in a Realty Subdivision approved by the Town of Morristown, your soil evaluation has already been done for you. Proceed to Step 5.

If your lot is not in a Realty Subdivision, you will need a Professional Soil Evaluator to conduct the soil tests on your site. Make arrangements for the Soil Evaluator to come to your site and perform the tests. Inform the Soil Evaluator of the location of the proposed system and have him/her indicate on the Plot Plan exactly where the tests were performed. The Soil Evaluator will fill out the Soil and Site Data Sheets.

**Provide two (1) sets of engineered blueprints stamped by a New York State licensed design professional**

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#### HOMEOWNER RESPONSIBILITIES

1. Determine location of the individual sewage treatment system.
2. Arrange for all necessary excavations.
3. Supply an adequate amount of water for Percolation tests.
4. Obtain completed Soil & Site Data Sheets From the Soil Evaluator

#### SOIL & SITE EVALUATOR RESPONSIBILITIES

1. Conduct all soil & site evaluations according to NYS Sanitary Code, Appendix 75-A Standards.
2. Conduct deep-hole test and use test data to determine proper depth for percolation tests.
3. Conduct percolation tests.
4. Fill out Soil & Data Sheets with test results; Mark test locations on Plot Plan Sheet.

\* The Soil & Site Evaluator is not responsible for the actual design of the septic system. The Town of Morristown can provide technical assistance and shall reserve the right to present any soil and site evaluation.

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## INSTRUCTIONS CONTINUED:

### **B: REPLACEMENT SYSTEM**

Fill out the “Determination of Status” from page 3 and have this form reviewed by the Town of Morristown. Once the Town of Morristown determines that the system is a replacement system, you may continue with these replacement system instructions; otherwise, you must follow the instructions for a new system.

You will need soil tests conducted on your site. For replacement systems, these tests may be performed by either; 1) a Soil Evaluator on the approved list, pages 14-15; 2) your chosen contractor or 3) yourself. Whoever is chosen as “Soil Evaluator” must fill out the Soil & Site Data Sheets.

**Engineered blueprints stamped by a New York State licensed design professional may be required by the New York State Department of Health.**

- (4) If soil tests are satisfactory, refer to pages 11-12 for absorption trench requirements.
- (5) Before any construction, complete and submit the Construction Permit Application form along with the Soil & Site Data Sheets to the Town of Morristown. For lots in an approved subdivision, the Soil & Site Data Sheets are not necessary as the soil and site information is taken from the approved subdivision plan on file at the Town of Morristown.
- (6) Only with an approved Construction Permit in your possession may you proceed with the installation of the sewage treatment system. You should also contact any other agencies which may have jurisdiction to ensure compliance with their regulations. The system must be installed as specified on the Construction Permit. It, in the course of installing the system, field changes become necessary, the Town of Morristown must be notified. The Town of Morristown must approve the proposed changes and revise the approved Construction Permit before changes can be made to the system.
- (7) When the sewage treatment system has been completed, but not covered, notify the Town of Morristown at least 24 hours in advance that you are ready for final inspection. An inspector will visit the site sometime between 8 a.m. and 4 p.m. to check the installed system against the Town of Morristown’s copy of the approved Construction Permit.
- (8) If the final inspection is satisfactory, a Certificate of Acceptance for the individual sewage treatment system will be issued to the owner. Possession of a copy of the Certificate of Acceptance is your assurance that the system has been installed in accordance with New York State Standards, and if well maintained, will function properly.

**SEWAGE TREATMENT SYSTEM**

**DETERMINATION OF STATUS**

**\*\*\*REQUIRED FOR REPLACEMENT SYSTEMS ONLY\*\*\***

Is this new construction on previously undeveloped property? **YES** **NO**  
\_\_\_\_\_

Is a new Certificate of Occupancy required by the Town? \_\_\_\_\_

**CHANGE IN SIZE / INTENDED USAGE:**

Is there an addition of one or more bedrooms compared with the pre-existing structure? \_\_\_\_\_

Is this a seasonal dwelling converted to year-round use? \_\_\_\_\_

**PRIOR SYSTEM:**

Was there a previous septic system installed on this lot? \_\_\_\_\_

Has it been in use for the past 5 years? \_\_\_\_\_

Was it approved by the Town of Morristown? \_\_\_\_\_

**OCCUPANCY:**

Has the lot been continuously occupied in present? \_\_\_\_\_

Has the lot been unoccupied for 5 years or more? \_\_\_\_\_

Is there a prior Certificate of Occupancy granted by the Town Codes Officer? \_\_\_\_\_

What year was the house build / structure placed on lot? \_\_\_\_\_

What year was sewage system installed? \_\_\_\_\_

**I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE:**

\_\_\_\_\_  
OWNER'S SIGNATURE

\_\_\_\_\_  
DATE

<b>TOWN OF MORRISTOWN USE ONLY</b>	
<b>Based on the above criteria the system is:</b>	
<b>New</b>	<b>Replacement</b>
<b>Duty Officer / Program Supervisor</b> _____ <b>Date:</b> _____	



**\*\*\* NOTES \*\*\***

**SEWAGE TREATMENT SYSTEM  
CONSTRUCTION PERMIT APPLICATION**

**(Please print or type all information below)**

**Date:** \_\_\_\_\_

**Property Owner** \_\_\_\_\_

**Owner Telephone Number: (day)** \_\_\_\_\_ **(evening)** \_\_\_\_\_

**Mailing Address** \_\_\_\_\_

(Street) (City / Town) (State) (Zip)

**(Please circle / enter the description that applies)**

**E-911 Address of Property** \_\_\_\_\_

**Tax Map #** \_\_\_\_\_ **Estimated Construction Cost \$** \_\_\_\_\_

**Lot Type:** Private Lot / Approved Subdivision Subdivision **Name** \_\_\_\_\_ **Lot #** \_\_\_\_\_

**Wetlands:** Is there a DEC regulated wetland on-site: **Yes / No** If yes, is the wetland permit attached? **Yes / No**

**Building Type:** Wood frame / Mobile Home / Double-Wide Mobile Home / Other \_\_\_\_\_

**Number of Bedrooms:** 1 / 2 / 3 / 4 / 5 / Other \_\_\_\_\_

**Foundation:** Full Basement / Half-Basement / Slab / Block Supports / Other \_\_\_\_\_

**Type of Septic System:** New / Replacement / Engineered (Consult Health Dept. for definitions)

**Water Supply:** Drilled Well / Dug Well / Public Water Supply / Other \_\_\_\_\_

**If not on public water, indicate type of water pump:** Submersible (pressure) / Siphon-jet (suction)

**Will low-flow fixtures (1991 or newer, 1.6 gallons / flush toilets) be installed in the home? Yes / No**

**Will a garbage disposal be installed? Yes / No** (if so, you will need a dual compartment tank with gas deflection baffle)

**Will a several-person hot tub or spa be installed? Yes / No**

**Leach Field Type:** Crushed Stone Trenches / Plastic Chambers / Eljen Units / Other \_\_\_\_\_

**Septic Tank Size:** 1000 gal / 1250 gal / 1500 gal / 2000 gal

**System to be Installed by:** \_\_\_\_\_

**Owner's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**CONSTRUCTION SAFETY FOR  
DEEP-HOLE TESTS AND SEPTIC  
SYSTEM INSALLATIONS**

Excavations, such as for deep-hole tests and septic tanks, may create safety hazards. Experience warns us that depths as shallow as five feet (5') below ground level have caused injury and loss of life. It is the contractor's and the soil evaluator's responsibility to ensure that

<b><u>TOWN OF MORRISTOWN USE ONLY</u></b>
FEE PAID _____
DATE _____
RECIEPT # _____
<b>ALL FEES ARE NON- REFUNDABLE</b>

<b><u>TOWN OF MORRISTOWN USE ONLY</u></b>
Final Approval By: _____
Date: _____

working conditions on the work site are not hazardous to workers or to the public. Federal OSHA Construction Standards are applicable to excavation and trenches.

Homeowners constructing / repairing their own systems should be especially careful when working in or near excavations. Excavations should not be left open and unattended. Excavations should be covered, lighted and barricaded or fenced to prevent injury to the public.

It is recommended that the Underground Facilities Protection Corporation (UFPO) be contacted **PRIOR TO ANY EXCAVATION** to determine the location of

any underground utilities in the area and thereby avoiding potential hazards and disruption of utility service.

**THE UFPO TELEPHONE NUMBER FOR UPSTATE NEW YORK IS:**

**1 – 800 – 962 – 7962**

It is important to remember that not every utility is registered with this service. It may be necessary to do a thorough investigation into the history of a site to identify all the potential hazards which may lie underground there.

## PERCOLATION TEST INSTRUCTION SHEET

### INSTRUCTIONS:

Once the deep-hole test has been completed, dig two percolation test holes in the existing soil, in the area of the proposed leaching system.

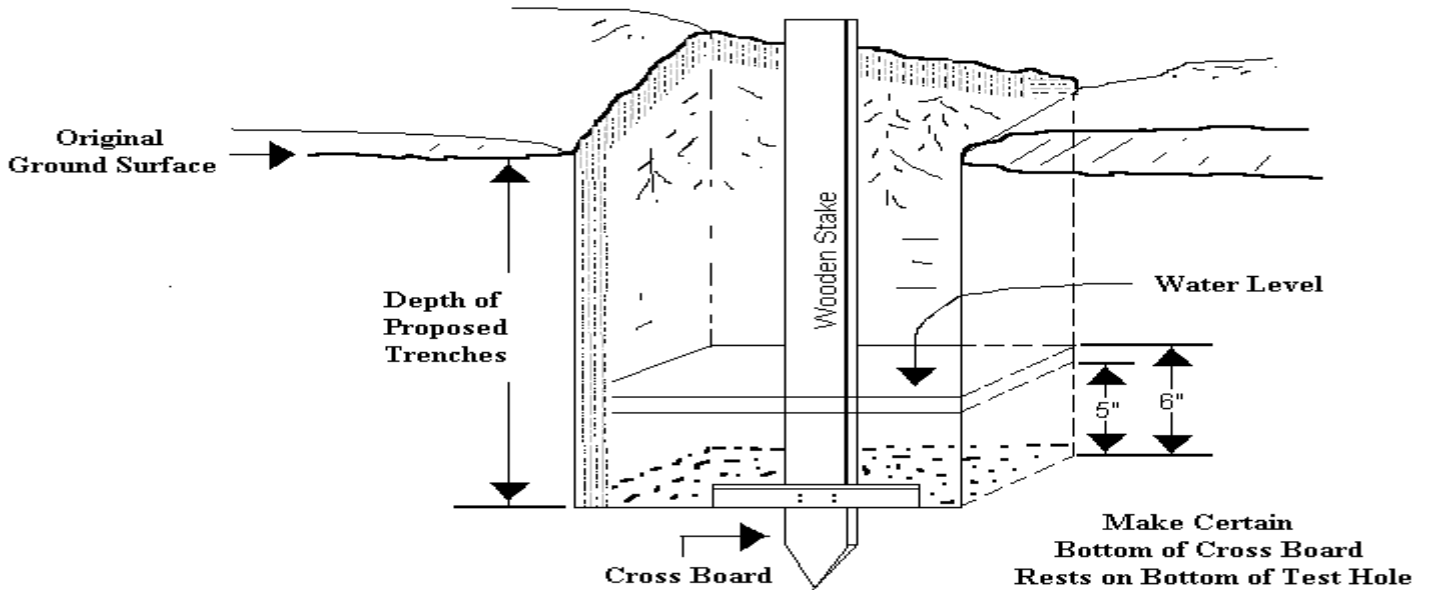
**NOTE:** Percolation test holes must be **dug to the depth of the proposed absorption trenches**. If the trench bottoms are to be installed at grade or less than 6” into grade, the percolation tests must be conducted 6” into the original soil. The depth of the proposed absorption trenches is determined by the deep-hole test, as trench bottoms must be a minimum of 2 ft. above any limiting factors (seasonal high groundwater, bedrock, or impermeable soils) that may be found during a deep-hole test. For on-site soil testing, please follow the sequence below:

1. Conduct deep-hole test
2. Determine limiting factors from deep-hole test results
3. Determine type of septic system allowed by limiting factors
4. Conduct percolation tests at the depth of the proposed system

### FOR EACH HOLE:

1. Holes must be 12” X 12” square (or 12” in diameter for circular holes) and spaced at least 20 ft. apart within the proposed leach field area.
2. Scrape the sides of the hole and remove any loose soil from the bottom.
3. Line the bottom of the hole with 2” of crushed stone (to prevent siltation on the bottom of the hole).
4. Pre-soak the soil (Thoroughly saturate the hole by filling with water).
5. After pre-soaking, fill the hole with 6” of water.
6. Count the number of minutes it takes the water to drop a distance of 1”, from the 6” mark down to the 5” mark. Enter the times on the percolation test data sheet.
7. Fill the hole back up to the 6” mark and repeat the test. Run the test at **least** 3 times in each hole until percolation times **stabilize** (time trials should be within 1 minute of each other for 1-30 min. soil; within 2 minutes for 31-60 min. soil).
8. Mark the location where each hole was dug (P1 &P2) on the Plot Plan.

**Soil Percolation Test Hole (12" by 12" Hole)**



**REQUIRED SEPARATION DISTANCES FROM WASTEWATER SYSTEM COMPONENTS**

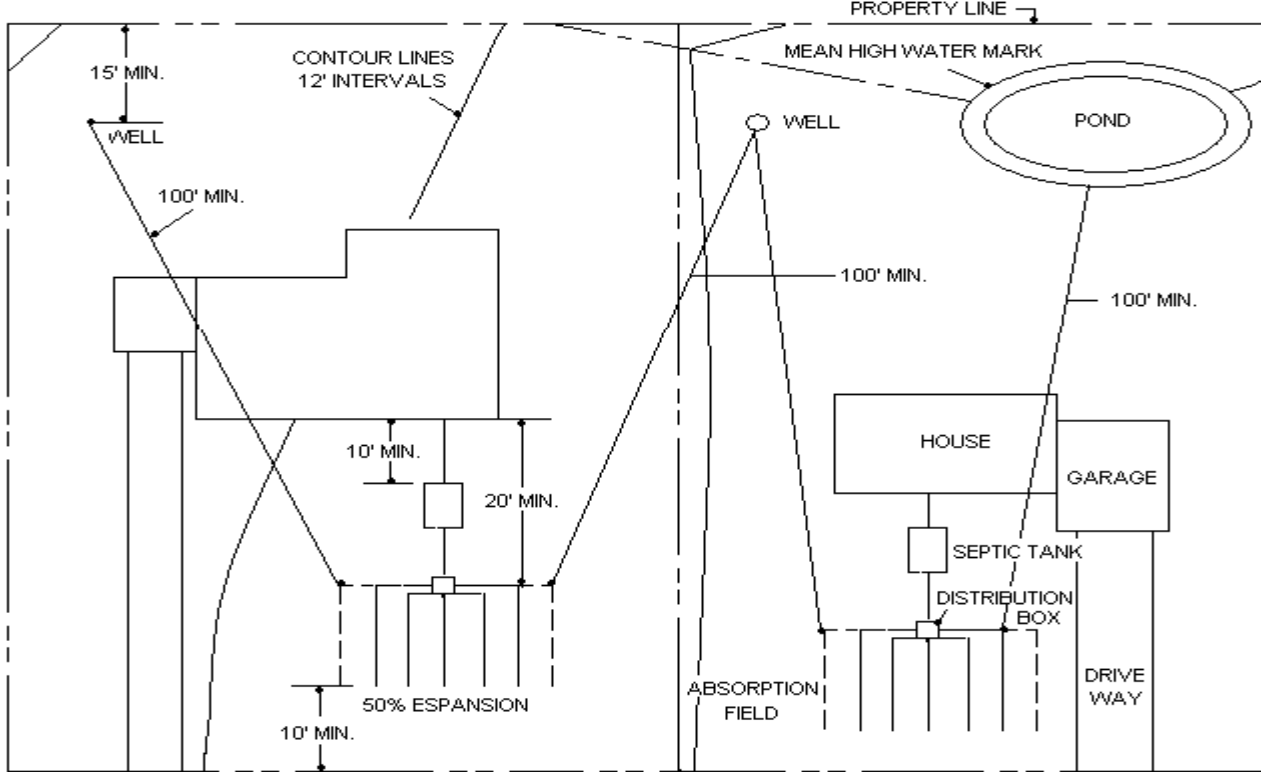
System Components	Well (d) or Suction Line	To Stream, Lake Watercourse (b) or Wetland	Dwelling	Property line	Drainage Ditch
House Sewer (Watertight Joints)	25' if cast iron or PVC w/O-ring joints; 50' if not	25'	3'	10'	-----
Septic Tank	50'	50'	10'	10'	10'
Effluent Line to D-Box	50'	50'	10'	10'	10'
Distribution Box	100'	100'	20'	10'	20'
Absorption Field (c) (incl. replacement area)	100'	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'

**NOTES:**

- (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 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 – HOUSE TO SEPTIC TANK

1. Four inch (4") minimum diameter.
2. Tight joining pipe (PVC, Cast Iron, etc...) with 1/4" wall thickness.
3. The septic tank connection must be watertight.
4. Pipe should have no less than 1/4" per foot slope.
5. Pipe must have a clean-out fitting in the basement or crawl space.
6. Inlet and outlet pipe must have ends cut flush with the inside of the tank (within 1/2")
7. Pipe must have no sharp bends (angles of more than 45 degrees).

## SEPTIC TANK REQUIREMENTS

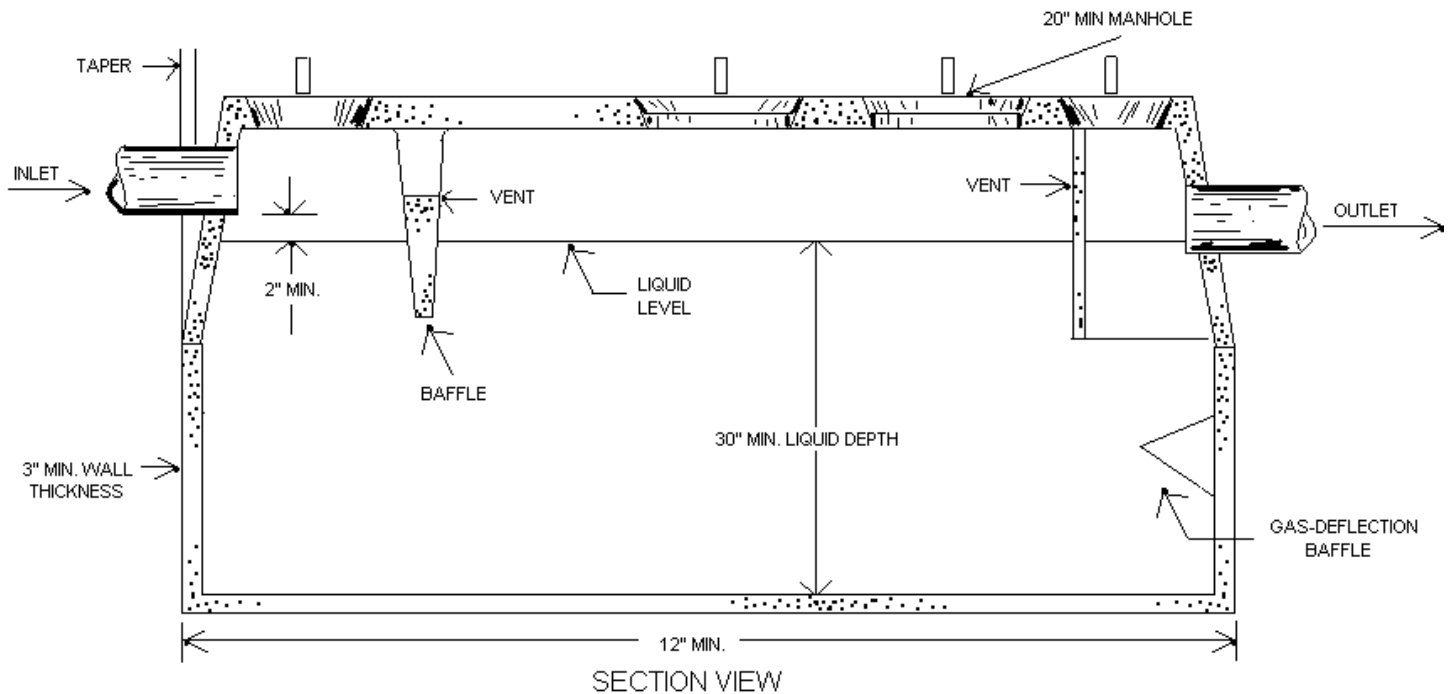
### MINIMUM TANK SIZE

# 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*
6	1,750	2,000 DC*	2,000	2,250 DC*

\*DC = Dual Compartment Septic Tank Required

**DUAL COMPARTMENT TANKS MUST MEET HEALTH DEPARTMENT SPECIFICATIONS AND INCLUDE A GAS DEFLECTION BAFFLE OR OTHER ACCEPTABLE OUTLET MODIFICATION**

## TYPICAL CONCRETE TANK



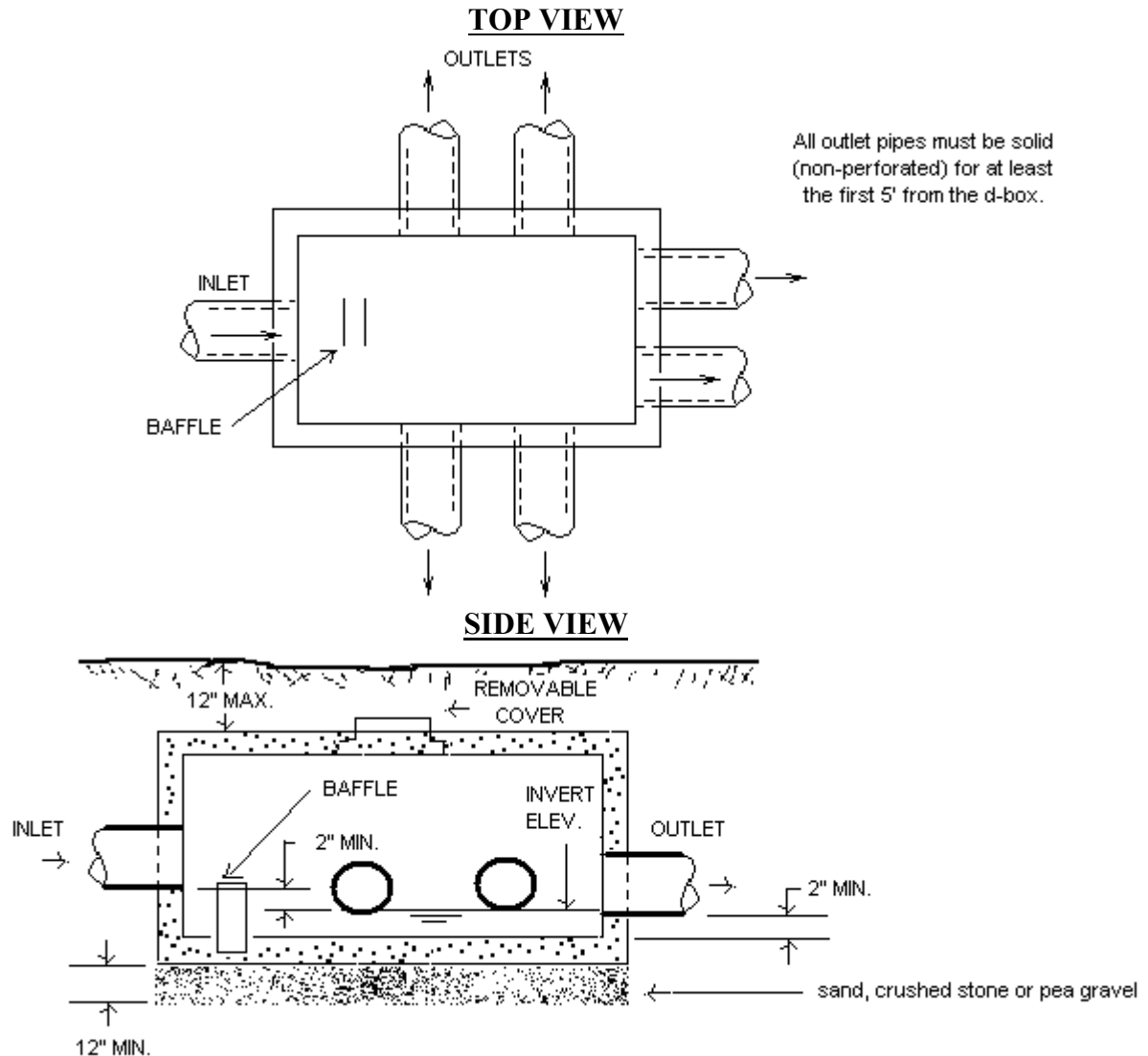
## SEWER PIPE REQUIREMENTS – SEPTIC TANK TO DISTRIBUTION BOX

The pipe from the septic tank to the distribution box must be 4" minimum diameter tight joining pipe (PVC, Cast Iron, etc...) with 1/4" wall thickness. Pipe must have a slope of no less than 1/8" per foot.

## DISTRIBUTION BOX REQUIREMENTS

1. Must have a removable cover and be located not more than 12" below grade, on a 12" bed of sand, crushed stone or pea gravel.
2. The distribution box must be level and all outlet pipes must be at the same level to insure even distribution of floe. All outlet pipes leaving the distribution box must be solid for at least the first 5 ft. Each absorption trench must be connected directly to an outlet of the distribution box (no "T"s allowed). The number of outlets required will be determined by the number of trenches. You may wish to get an oversized distribution box with extra outlets to provide for future expansion/replacement of the leach field. Pre-cast distribution boxes are available in a variety of sizes.

## TYPICAL DISTRIBUTION BOX



## CONVENTIONAL STONE ABSORPTION TRENCH REQUIREMENTS

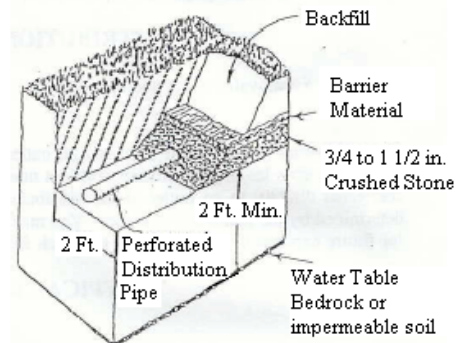
1. Trenches are to be 24" wide, and installed parallel to ground contours
2. Trench bottoms must be **level**, and at least 2' above the high ground water level, bedrock, impermeable soil, or limiting factor.
3. Sides and bottoms of trenches must be raked prior to placement of crushed stone.
4. The aggregate required is washed gravel or crushed stone  $\frac{3}{4}$ " to  $1\frac{1}{2}$ " in diameter. Larger diameter material, finer substances, or run of bank gravel are unacceptable.
5. Minimum depth of crushed stone must be 12" (6" of crushed stone **below** the distribution pipeline and 2" **above** the pipe).
6. Perforated pipe is to be graded between  $\frac{1}{16}$ " and  $\frac{1}{32}$ " per foot

within the crushed stone.

7. All absorption trenches are to be of equal length, a maximum of 60' long.
8. All lines must originate **directly** from the distribution box. At least the first 5' of each pipe connecting the D-box to the trenches must be solid, and all of these solid pipes should have the same pitch.
9. There must be at least 4' of undisturbed soil between adjacent trenches.
10. All absorption trenches must be a minimum of 100' from **any** well or body of water.
11. All absorption trenches must be at least 10' from any property line and 20' from a basement foundation.
12. Finished trenches are to be covered with untreated building paper, permeable geotextile fabric, or a 4" thick layer of hay.
13. The soil backfills over the hay or building paper should not exceed 12".
14. Ends of pipes must be properly capped (i.e., standard PVC plastic and caps).

**LINEAR FEET OF ABSORPTION TRENCH NEEDED  
(Based on 2' wide trench)**

Time of water to drop 1" in test hole	2 BR HOME	3 BR HOME	4 BR HOME	5 BR HOME
	(LOW-FLOW FIXTURES/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 / *	* / *

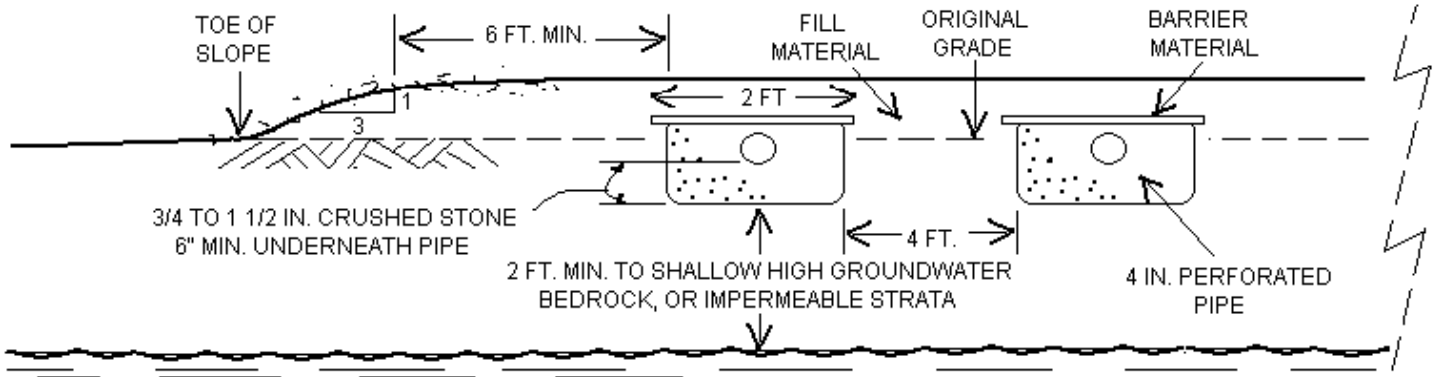


\* ABOVE 500 LINEAR FEET REQUIRES DOSING / SPECIAL DESIGN \*

**SHALLOW ABSORPTION TRENCHES**

APPLICATION: There is an alternative to conventional trenches for the sites that have less than 4' of usable soil. As long as there is at least **2' of useable soil** above groundwater, bedrock, or impermeable soil. **SHALLOW ABSORPTION TRENCHES** may be used. Shallow trenches are constructed in fill material, extending into the existing natural soil.

**SHALLOW TRENCH SYSTEM – END VIEW**



**CONSTRUCTION NOTES**

**TRENCHES ARE INSTALLED AS DESCRIBED UNDER “CONVENTIONAL TRENCHES” (P.16) WITH THE FOLLOWING ADDITIONAL CONSIDERATIONS:**

1. Useable fill shall have a percolation rate similar to, but not faster than, the useable soil percolation rate. And the fill must be placed **prior** to excavating the trenches.
2. The depth of the fill shall not be greater than 30” (including 6” of topsoil).
3. Fill shall extend at least 6’ beyond edges of trenches (in all directions) before starting the tapered edge.
4. The edge of the fill material shall be tapered at a slope of no greater than one vertical to three horizontal.
5. Bottoms of all trenches shall **not** be above original soil.
6. Trench bottoms shall be level, and trenches shall be parallel to ground contours.
7. All separation distances noted in the diagram above must be met. If trench bottoms are to be at grade, all separation distances are to be measured from the “toe of the slope” (see diagram).
8. On sloped sites, a diversion ditch must be constructed uphill from the fill to prevent surface runoff from entering the fill.

**ALTERNATIVE TYPES OF SYSTEMS**

If a soil and site evaluation reveals that there is **less than 2’ of useable soil** on a site, then **ALTERNATIVE** types of sewage treatment systems such as modified sites, mounds, etc... may be used. The plans for these systems must be designed and submitted by an engineer. The engineer that you choose may reserve the right to base his/her design on his/her **own** deep-hole and percolation tests. The following procedure is used for the approval of alternative systems.

1. Engineered plans for alternative systems must be submitted to the Health Department to be reviewed by a Health Department contract engineer. Please allow adequate time (several weeks) for the review process.
2. Once the plans are approved by the Health department, the system may be installed.
3. After the system is installed, the design engineer will inspect the system to make sure that it was installed according to his/her plan, and will issue a “Letter of Completed Works” to the Health Department which will assure that the system meets his/her specifications.
4. Once the Health Department receives the Letter of Completed Works from the design engineer, a Certificate of Approval will be issued.

**TOWN OF MORRISTOWN  
SEWAGE TREATMENT SYSTEM INSPECTION**

**OWNER:** \_\_\_\_\_ **PERMIT #** \_\_\_\_\_

<u>ITEM</u>	<u>REQUIREMENT</u>	<u>NOTES</u>
Septic Tank	_____ Gallons	_____
	_____ Level, 2” drop inlet to outlet	_____
	_____ Baffled/Tees installed	_____
	_____ 1/4” thickness wall pipe	_____

inlet pipe 1/4" per foot slope  
 Outlet pipe 1/8" per foot slope  
 Pipes sealed  
 10' from foundation  
 50' from well(s)  
 Multi-compartment  
 Gas/Deflection baffle

D-Box

Level (on crushed stone/pea gravel)  
 1/4" thickness inlet pipe  
 Pipes sealed  
 2" drop inlet to outlet  
 2" outlet above bottom  
 Baffled (if slope over 1/2" per foot)

Pipes to trenches

Solid for first 5'  
 All outlet pipes at same level

Trenches

Stone trench / SB-2 pipe  
 \_\_\_\_\_ Feet Total  
 No water in trench  
 No mottling  
 Not in too deep  
 1/16" – 1/32" per foot slope  
 End Caps  
 Crushed Stone  
 Hay/Paper/Cover  
 10' to property lines  
 20' to basement  
 100' to all wells

Subdivision Specs/other \_\_\_\_\_

**WAIVER NEEDED? YES / NO**

**WAIVER GRANTED? YES / NO**

**Inspected by:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Remarks:** \_\_\_\_\_

**Re-inspected by:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Remarks:** \_\_\_\_\_

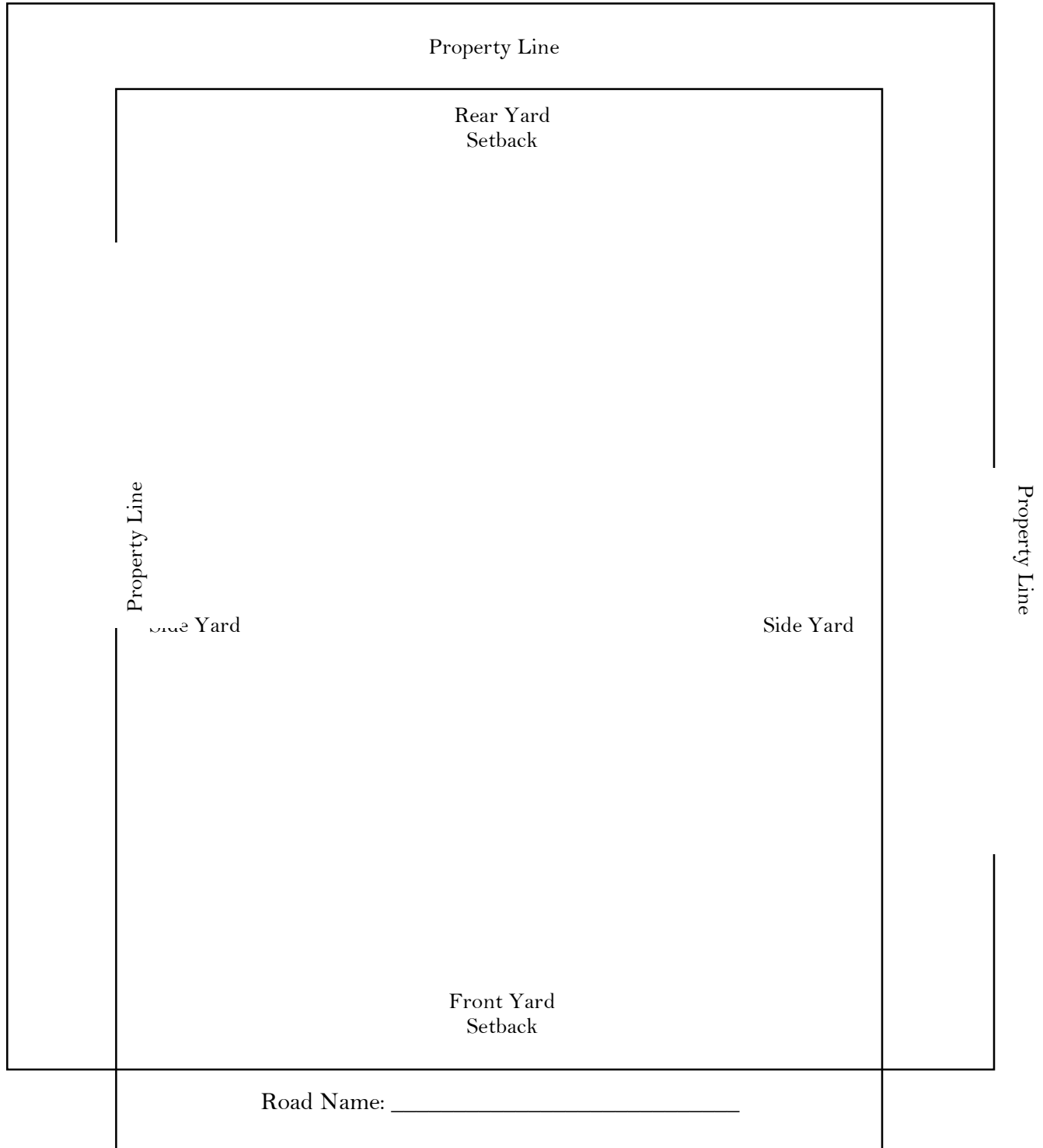
**Conditions of Approval:** \_\_\_\_\_

**SYSTEM APPROVED FOR BACKFILLING? YES / NO**

**By:** \_\_\_\_\_ **Date:** \_\_\_\_\_



*Town of Morrístown  
Code Enforcement Office  
PO BOX 240  
604 Main Street  
Morrístown, NY 13664  
315-375-8572*



**Septic System Plot Plan**