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STANDARD SYSTEM - SELF INSTALLERS INFORMATION

This information is designed to assist property owner in installing their own STANDARD (with rock) subsurface sewage disposal system. This information is only a general summary of requirements; all installations must comply with all of the terms of the construction permit and with OAR chapter 340 divisions 71 and 73 (See Lincoln County Planning On-Site Wastewater site). This office also offers copies for sale to the public. Variation from the terms of the construction permit or the approved plot plan is prohibited except as specifically authorized by Lincoln County. The setback requirements outlined in Table 1 of this Division apply.

Drainfields should be installed only when the moisture content of the soil is low. Generally drainfields should be installed in the summer and early fall. Drainfields installed under wet soil conditions may have a reduced longevity due to soil smearing which significantly reduces the infiltrative capacity of the soil.

SEPTIC TANK

It is very important that the septic tank manufacturer's installation instructions be closely followed. The septic tank should be place on a stable level base. Be sure to set the tank at an elevation which will allow for an acceptable amount of fall from the septic tank to the drainfield (see effluent sewer pipe requirements below). A watertight riser to the soil surface is required on the septic tank.

The septic tank must be tested for watertightness after installation and before calling for the pre-cover inspection. The inlet and outlet must be plugged and the septic tank filled with water to two (2) inches into the riser. The tank must be able to maintain this water level for twenty four (24) hours - the loss of more than one gallon of water is not acceptable. The watertightness test may have to be repeated for concrete tanks as concrete initially absorbs water.

EFFLUENT SEWER PIPE

Connecting the septic tank to the drainfield is the effluent sewer pipe. This pipe should be at least five (5) feet in length, four (4) inches in diameter and must be ASTM 3034 or Schedule 40. Unless an effluent pump is used, the effluent sewer pipe must have a minimum fall rate of four (4) inches per hundred feet, but shall not have less than eight (8) inches of fall from the outlet of the tank to the pipe in the drainfield. If using the Equalizer 24 drainfield, please refer to the manufacturer's instructions for minimum fall requirements. The sewer effluent pipe should be bedded on stable undisturbed earth to eliminate settling. Also, the pipe identification numbers should be turned to the 'up' position.

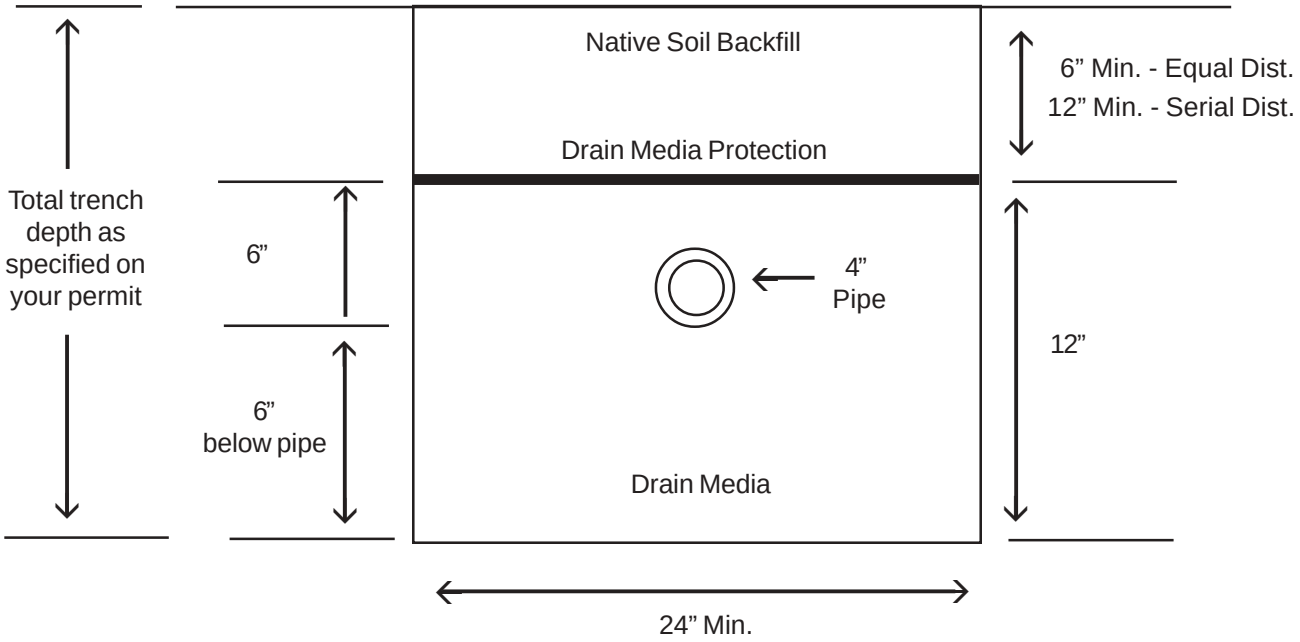
DRAINFIELD

See the attached diagrams of serial distribution and looped equal distribution drainfields. Serial distribution is generally used on sloping sites and equal distribution is used on level sites.

The minimum spacing between disposal trenches is ten (10) foot on center. The bottom of the disposal trenches must be excavated level from end to end to within plus or minus one (1) inch from the point of beginning. The side wall of the trench should be raked to remove any smeared soil. Trench depths are very important; trench depths must comply with the depths of specified on the permit.

The total rock depth in a standard trench is twelve (12) inches, the rock depth under the pipe is six (6) inches. The drain media (rock) may be **clean** crushed or round rock sized between .75 and 2.5 inches.

DISPOSAL TRENCH CROSS SECTION



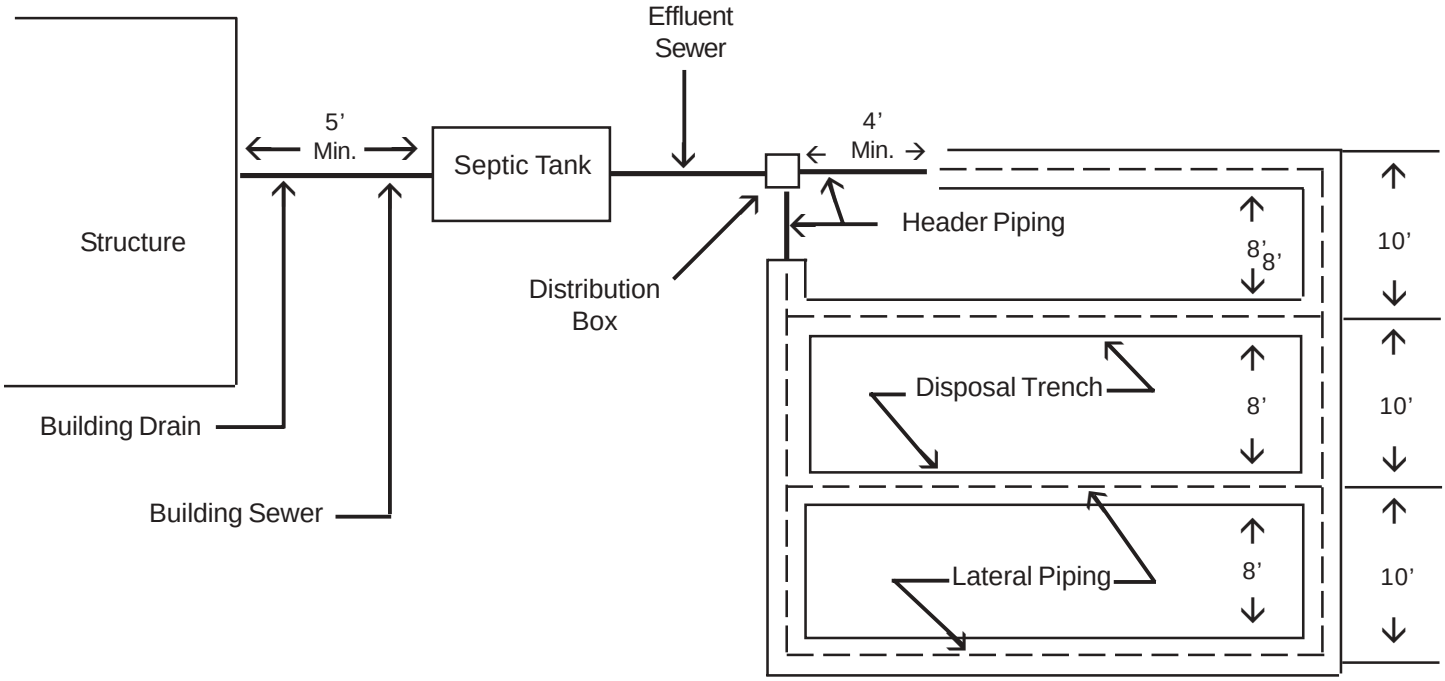
Pipe material requirements are contained in OAR 340-73-060. The header and distribution piping must be level from end to end to within plus or minus one (1) inch from the point of beginning. A four (4) foot section of solid header pipe is required between the drainfield pipe and a distribution box or drop box. Header pipes and drop boxes should be carefully bedded in soil; do not place a drain media around the header pipe or box. Drop boxes are used for serial distribution and distribution boxes are used for equal distribution: drop boxes and distribution boxes are not interchangeable.

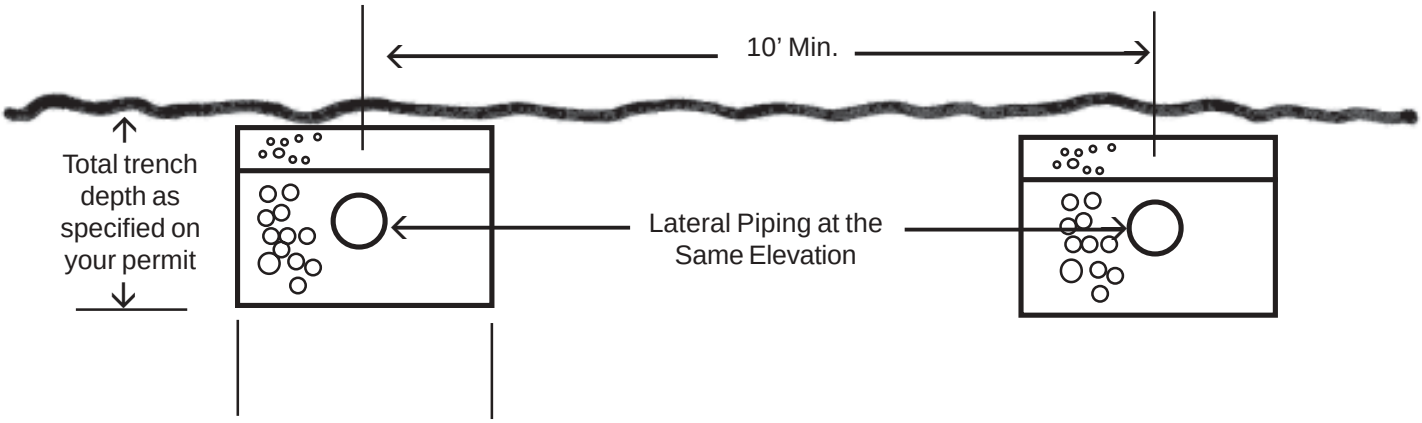
The drain media (rock) must be covered with untreated building paper or an approved filter fabric (Typar 3201 and Cerex 25 are approved). A small amount of solid may be used to secure the paper or fabric until the system has been inspected and is ready to cover.

COVER

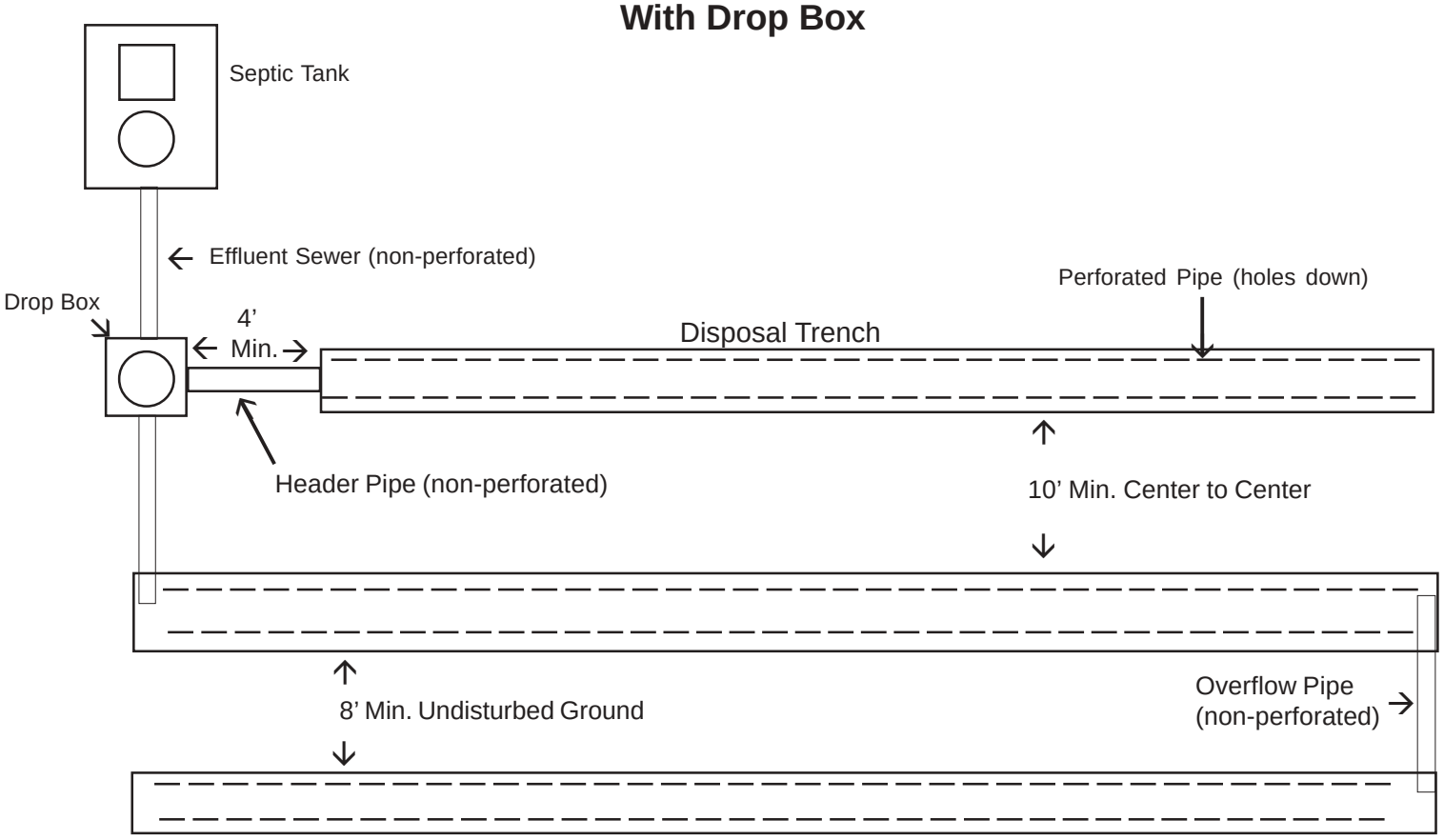
The system must pass inspection before it may be covered. Please contact this office to coordinate the installation with inspection dates. The permit number and map & tax lot numbers will be needed when requesting the inspection. The system may be covered after the inspection is passed. Equipment should travel perpendicular to the drain lines to avoid damage to the system during backfill. The 'as-built' is needed before the certificate of satisfactory completion can be issued.

EQUAL DISTRIBUTION
(LEVEL GROUND - All Drainlines are Level)

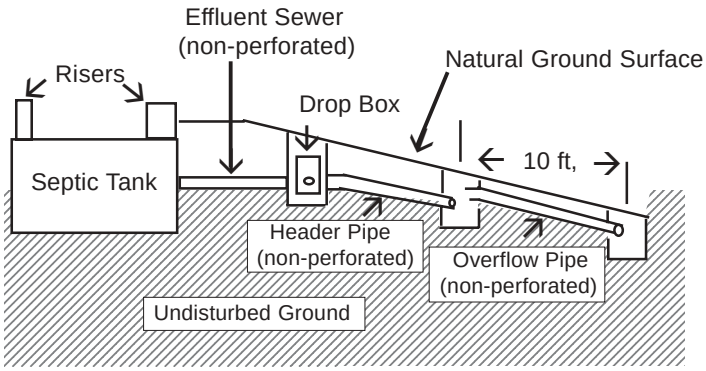




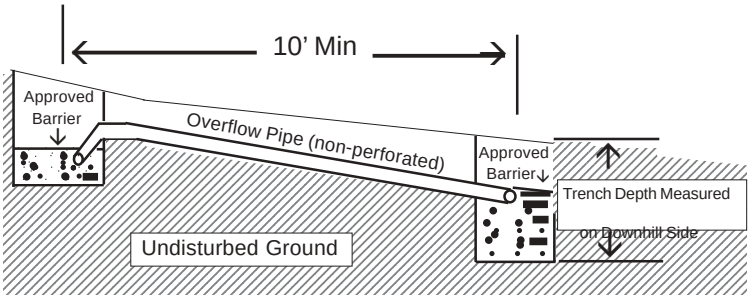
EXAMPLE SERIAL SYSTEM
With Drop Box



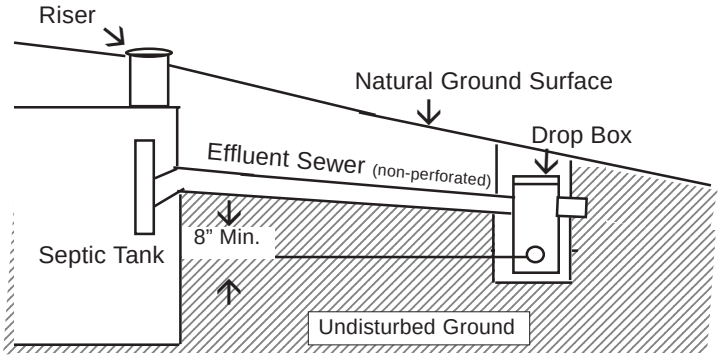
TOP VIEW



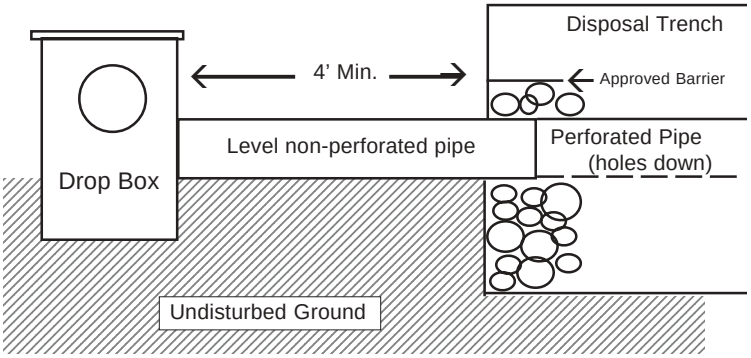
Side View



Overflow Detail



Effluent Sewer Detail



Drop Box Detail

SERIAL DISTRIBUTION
(SLOPED DOWN HILL)