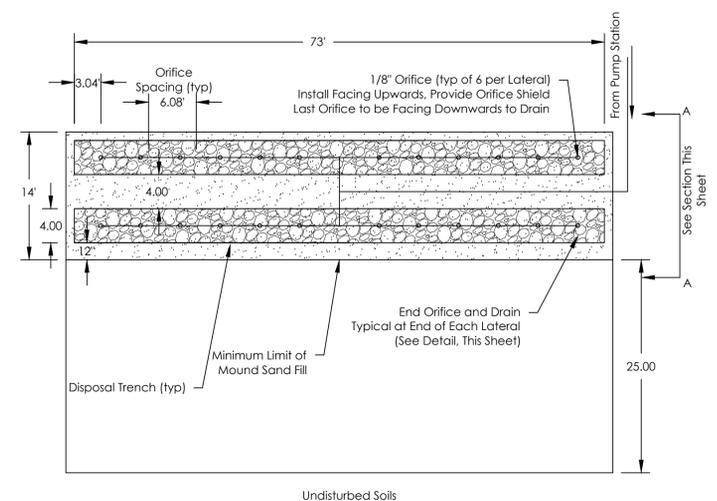


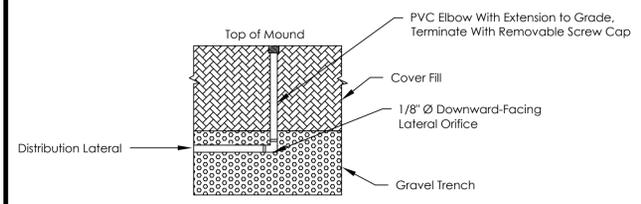
Mound sand fill shall meet one of the following sieve analyses:

SIEVE #	PERCENT PASSING	SIEVE #	PERCENT PASSING
48	95-100	4	95-100
60	90-100	10	80-100
75	80-100	20	60-100
100	50-100	40	30-100
200	10-100	100	10-100

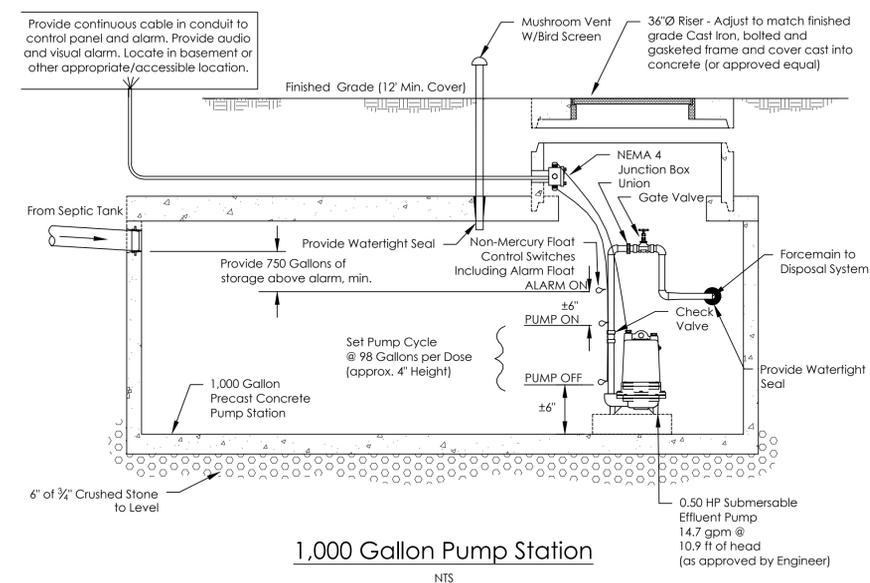
SIEVE #	PERCENT PASSING
10	85-100
20	50-100
40	10-100
200	5-10



Mound Plan
NTS



End Orifice/Drain and Access Port Detail
NTS



1,000 Gallon Pump Station
NTS

Construction Notes:

- DISPOSAL FIELD**
- SDR 26 PVC pipe meeting the requirements of the latest revision of ASTM Specification shall be used. Fittings used in the disposal fields shall be compatible with distribution lines material.
 - Crushed stone shall be clean, durable and no smaller than 3/4 or larger than 1 1/2 inches in diameter.
- MOUND CONSTRUCTION**
- The Mound system shall be inspected during critical stages of construction by a representative from Engineered Solutions, Inc. This shall include the staking of the mound, the plowed surface prior to sand placement, installation and pressure test of the distribution piping, and a final inspection of the entire system. The Contractor will be responsible for contacting Engineered Solutions, Inc. to set up the inspection schedule.
 - Above-ground vegetation shall be closely cut and removed from the ground surface throughout the area where the fill material is to be placed. Prior to plowing, the dosing pump discharge line from the pump chamber or dosing chamber to the point of connection with the distribution piping header shall be installed. The area shall then be plowed to a depth of seven to eight inches, parallel to the land contour with the plow throwing the soil up slope to provide a proper interface between the fill and natural soils. Tree stumps should be cut flush with the surface of the ground and roots should not be pulled. Once plowing of the mound area is completed, the area shall be fenced to prevent vehicles and equipment from entering the plowed area.
 - To prevent compaction, construction equipment shall not be moved across the plowed surface or the effluent disposal area. However, after placement of a minimum of six inches of sand fill over the plowed area, construction equipment may be driven over the protected surface to expedite construction. Construction equipment shall be kept off the area down gradient of the disposal field. Construction and/or plowing shall not be initiated when the soil moisture content is high.
 - Construction should be initiated immediately after preparation of the soil interface by placing all of the sand fill needed for the mound. Prior to covering, the distribution network shall be tested with water for even distribution, see "Testing." The entire area shall be seeded, sodded or otherwise provided with vegetative cover to assure stability of the installation.
 - The area surrounding the bed shall be graded to provide diversion of stormwater run-off.
 - All work shall be done in accordance with the State of Vermont Environmental Protection Rules.

- TESTING**
- For testing purposes, the distribution piping shall be established with holes facing up using unglued joints where required. Testing of pressure distribution shall be done in the Engineer's presence. Pressure shall be measured to insure a minimum of 1 psi.
 - It is the contractor's responsibility to review all applicable permits and ensure that all required testing and inspections are conducted.

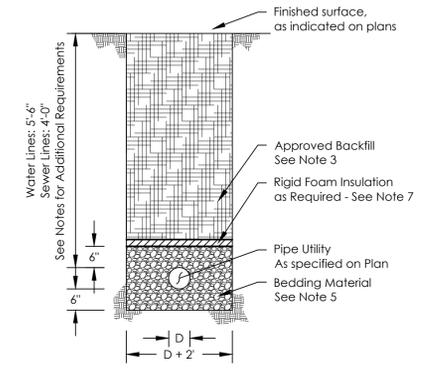
Inspection and Testing

Sewer service and force main to be tested and inspected in accordance with Environmental Protection Rules - Subchapter 9.

Septic Tank Maintenance

- Per VTDEC EPR Chapter I Appendix 3A
- At least once a year, the depth of sludge and scum in the septic tank should be measured. The tank should be pumped if:
 - the sludge is closer than 12" from the outlet,
 - the scum layer is closer than 3" to the outlet
 - Following septic tank cleaning of units over 5,000 gallons, all interior surfaces of the tank should be inspected for leaks and cracks
 - At least once a year, dosing tanks and distribution boxes should be opened and settled solids removed as necessary and the dosing tank or distribution box checked for level.
 - Toxic or hazardous substances should, in general, not be disposed of in septic systems. These substances may pass through the system in an unaltered state and contaminate the soil or crops at the site of ultimate disposal.

Performance of this system is dependant on proper construction and usage, including maintaining approved flowrates, minimizing introduction of non-human wastes and routine maintenance of all system components including vents, tanks and trenches.



Typical Piping Trench Detail
NTS

- Notes:**
- Typical trench for water, sewer and drainage pipe.
 - Compaction of backfill and bedding shall be a minimum of 90% (95% under roadway surfaces) of maximum dry density determined in the standard Proctor Test (ASTM D698).
 - Approved backfill shall not contain any stones more than 6" in largest dimension, 2" maximum diameter within 2' of the pipe.
 - Trenches shall be completely dewatered prior to placing of pipe bedding material and kept dewatered during installation of pipe and backfill.
 - Bedding material for wastewater lines shall consist of 3/4" crushed stone. Water line bedding material shall be sand. Submit a sample to the Engineer for approval. Bedding material shall not be placed on frozen subgrade.
 - The sides of trenches 4' or more in depth entered by personnel shall be stabilized as required by O.S.H.A Standards.
 - Insulation Requirements:

Total Depth of Cover	Insulation Thickness
4.5' to 5.5'	1"
3.5' to 4.5'	2"
2.5' to 3.5'	3"
 - Sewer lines crossing paved surfaces shall have an additional 1' of cover.



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Inn Road Septic
Replacement
95 Inn Road
Charlotte, VT

Water -
Wastewater
Details



Revisions	By	Date

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