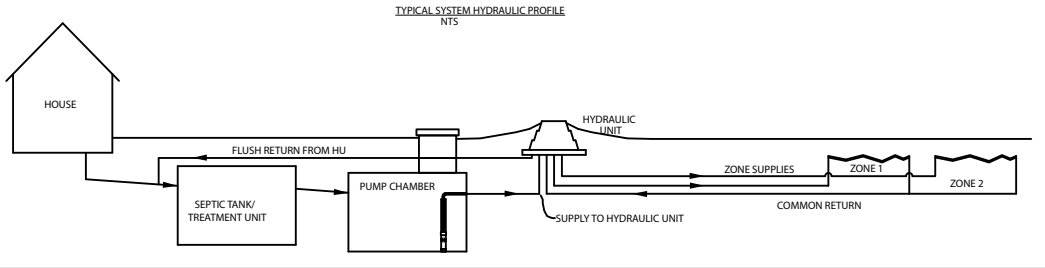
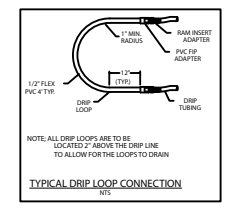
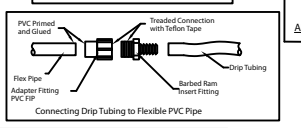
TYPICAL SYSTEM HYDRAULIC PROFILE
NTS

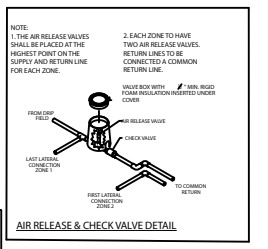




TYPICAL DRIP LOOP CONNECTION
NTS



Connecting Drip Tubing to Flexible PVC Pipe



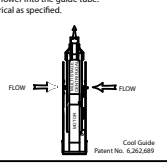
AIR RELEASE & CHECK VALVE DETAIL

General Construction Notes
"Perc-Rite" Drip Dispersal Systems

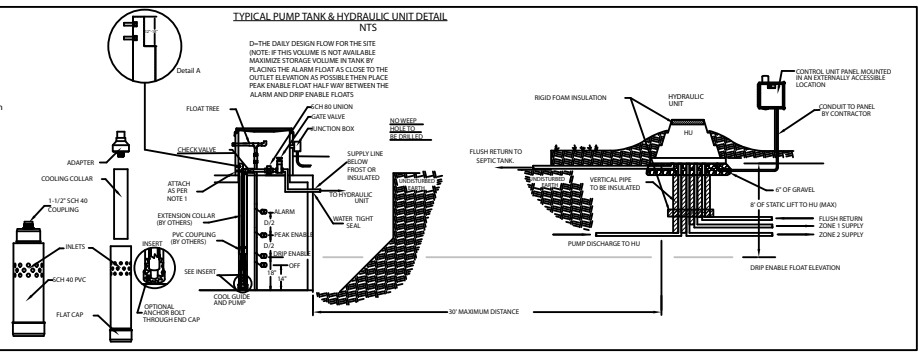
1. The system shall not be installed in wet or frozen soils.
2. Do not park, drive large equipment, or store materials on the dispersal area. No activity should occur on dispersal area other than the minimum required to install the system.
3. All installation and construction techniques shall conform to state and local codes pertaining to on-site sewage systems and the permit for the site.
4. The installation shall be in accordance with specifications and procedures as supplied by the Manufacturer of the equipment.
5. The contractor shall be certified to install this type of system and should hold a pre-construction meeting with the individuals responsible for the site design and inspections. The meeting should be held prior to the beginning of the site work to ensure protection of the site conditions and to ensure that the system is installed according to design.
6. If site conditions are determined to require the installation of the system to deviate from the design plans, all work shall stop immediately and the Designer and Health Agent shall be notified. Any ongoing work shall be the sole responsibility of the contractor.
7. Drip tubing may be installed with a vibratory plow, a static plow, a narrow trencher (<6" width), by hand trenching, or by scarifying the surface and bedding the drip tubing in clean sand meeting the requirements for fill material in Title 5 at 310 CMR 15.255(3) with cover consisting of sand and topsoil meeting the 6" to 12" depth requirement. The designer may indicate for the tubing to be installed up to 24" below grade.
   All drip tubing is to be installed parallel with the contour.
   Vegetative cover must be replaced for installations where it is removed or buried during installation.
8. All cutting of rigid PVC pipe, flexible PVC and drip tubing of size 1 ½" or smaller shall be accomplished with pipe cutters approved by Manufacturer. No sawing of PVC, flexible PVC or drip tubing of size 1 ½" or smaller is allowed. All rigid PVC pipe, flexible PVC and drip tubing in the work area shall have the ends covered with duct tape after cutting to prevent construction debris from entering the pipe. Prior to gluing, all joints shall be inspected for and cleared of any debris. All PVC pipe and fittings in the field shall be SCH 40. All glued joints shall be cleaned and primed with PVC primer prior to being glued. All force mains shall be tested for leaks prior to being backfilled by pressurizing the system and observing for leakage.
9. The Hydraulic Unit is to be placed on a bed of 4"- 6" thick of ¾"- 1½" gravel for drainage. If standing groundwater is a problem in the vicinity of the Hydraulic Unit, a screened drain to daylight is required.

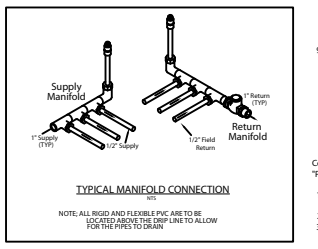
INSTALLATION INSTRUCTIONS

1. Measure the distance from the bottom of the tank to 6" down from the top of the riser. Cut the extension pipe (by others) to the length necessary to reach this height. Cut 1/2 of the pipe down 12" to 18" away from the top of the pipe for pump discharge pipe. 12" to 18" away from the top of the pipe for pump discharge pipe and attach to riser (see detail A).
2. Glue the extension coupling (by others) to the extension pipe and to the Cool Guide.
3. For re-use of existing concrete pump chambers: glue on the Cool Guide flat cap and place the Cool Guide firmly in the bottom of the tank. Attach the extension to the riser, with the extension to the riser, with the anchors as shown.
4. For use in new concrete pump chambers: Anchor the flat cap to the bottom of the tank in the proper location to hold Cool Guide and extension. The cap may or may not be glued to the device. Attach the extension with the anchors as shown.
5. Place the pipe dope on the Cool Guide adapter threads and thread them into pump discharge.
6. Attach cooling collar to adapter with set screw provided.
7. Glue pipe into flow collar and with pump attached, lower into the guide tube.
8. Attach to discharge pipe, valves, and connect electrical as specified.



TYPICAL PUMP TANK & HYDRAULIC UNIT DETAIL
NTS





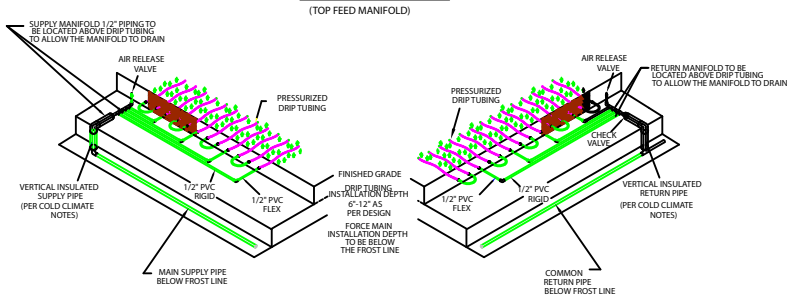
TYPICAL MANIFOLD CONNECTION
NTS

NOTE; ALL RIGID AND FLEXIBLE PVC ARE TO BE LOCATED ABOVE THE DRIP LINE TO ALLOW FOR THE PIPES TO DRAIN

Cold Climate Construction Standards
"Perc-Rite" Drip Dispersal Systems

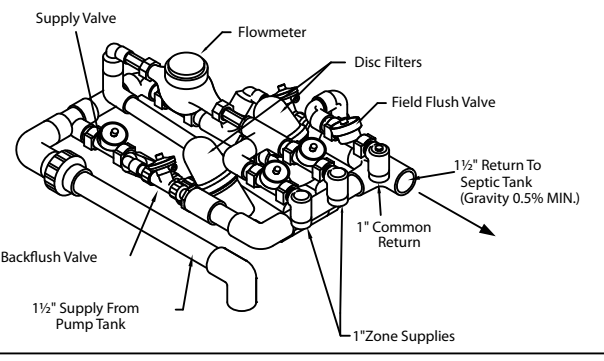
1. "Top feed" manifolds are to be used to allow for proper manifold drainage. Top feed manifolds are to be located slightly higher than the drip tubing.
2. All attempts should be made to place the Hydraulic Unit with an open southern exposure for warming purposes.
3. The supply and return lines shall be installed below the frost line. The vertical sections of pipe that connect to the supply and return lines shall be insulated SCH 40 PVC pipe. Insulation shall be minimum ½" thick foam (or equivalent). ½" Rigid Foam Insulation may be installed under the Hydraulic Unit to protect the supply and return lines in extreme conditions. Sufficient ground cover around the hydraulic unit is required for insulation. All pipes entering and leaving the hydraulic unit shall elbow vertically down 90 degrees to a depth below the frost line prior to extending away from the unit horizontally. Additional insulation inside the hydraulic unit is encouraged. Insulation to consist of blue board, bagged Styrofoam, peanuts or equivalent. If fiberglass insulation is used it must be sealed to prevent it from becoming saturated.
4. Dense vegetative cover is to be established over the supply trench, return trench and drip tubing prior to the first exposure to freezing temperatures. If vegetation cannot be established, then trenches and tubing are to be covered with a thick layer (minimum 6") of mulch, straw/hay, etc. until such turf cover is established. Established vegetation height over the dispersal area should be a minimum 4"-6" throughout winter months.
5. Contractor shall insulate all "air release valves." Insulation to consist of blue board, bagged Styrofoam peanuts, or equivalent. If fiberglass insulation is used, it must be sealed to prevent it from becoming saturated release valves shall be placed below the ground surface inside a valve box but at an elevation above the highest drip line in that particular zone.
6. All loops connecting drip runs shall be slightly elevated (minimum 1"- 2") so that they drain into the drip tubing after the pump shuts off. It is the contractor's responsibility to ensure these loops stay elevated during and after the loops are backfilled.
7. All conduit entering into the control panel shall be sealed to prevent condensation inside the panel.

STANDARD DRIP SYSTEM DETAILS
(TOP FEED MANIFOLD)



NOTE: THE DRIP TUBING SHALL BE THE LOWEST POINT TO ALLOW FOR DRAINAGE FROM BOTH THE VERTICAL INSULATED SUPPLY AND RETURN PIPES

PERC-RITE -15 GPM HYDRAULIC UNIT DETAIL



ZONE DETAIL