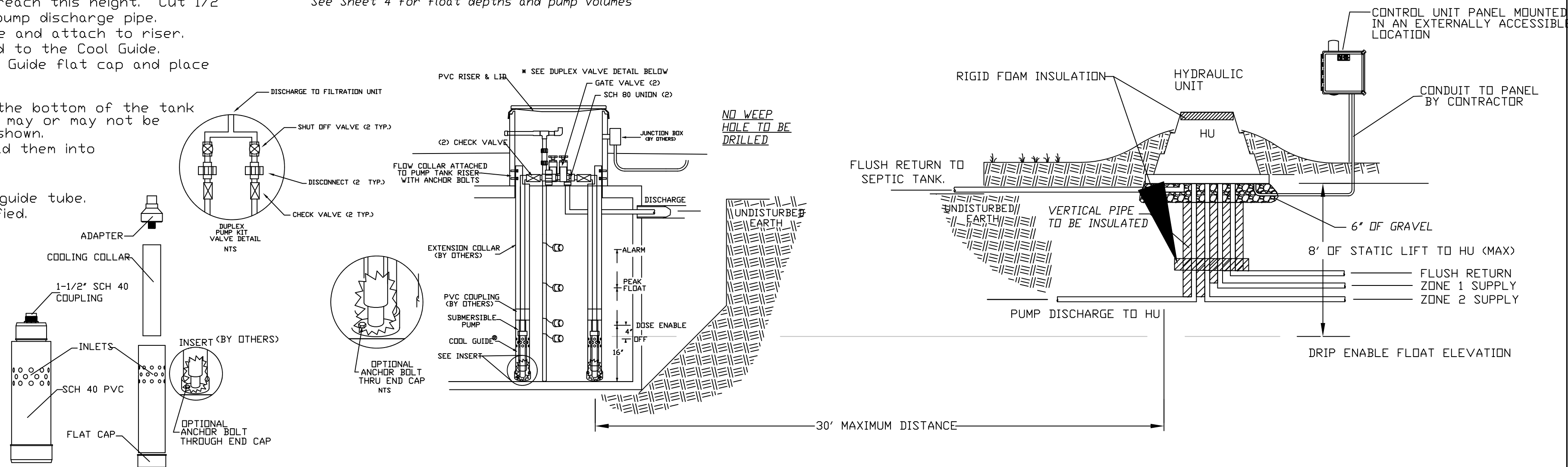


INSTALLATION INSTRUCTIONS

1. Measure the distance from the bottom of the tank to the 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.
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 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 - DUPLEX PUMPS
NTS

Note:
See Sheet 4 for float depths and pump volumes

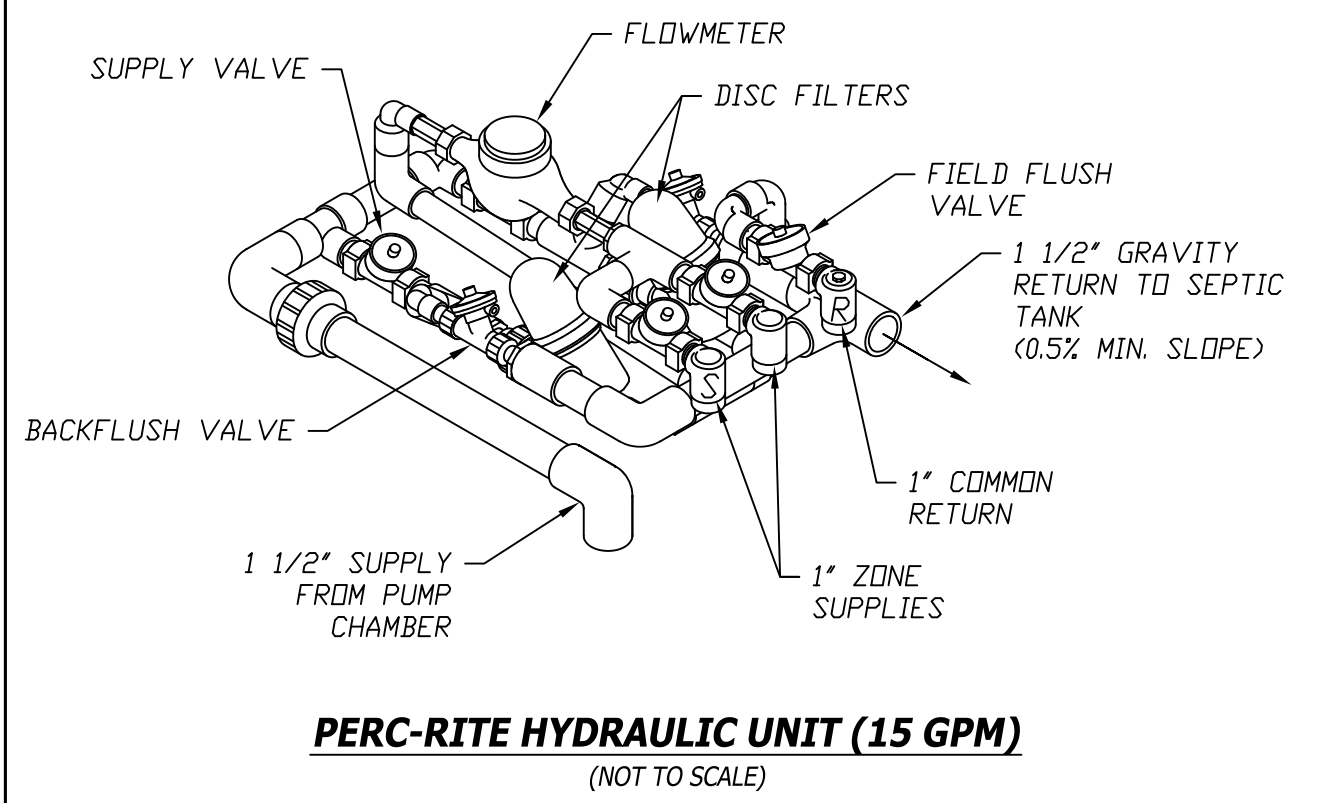


GENERAL CONSTRUCTION NOTES:

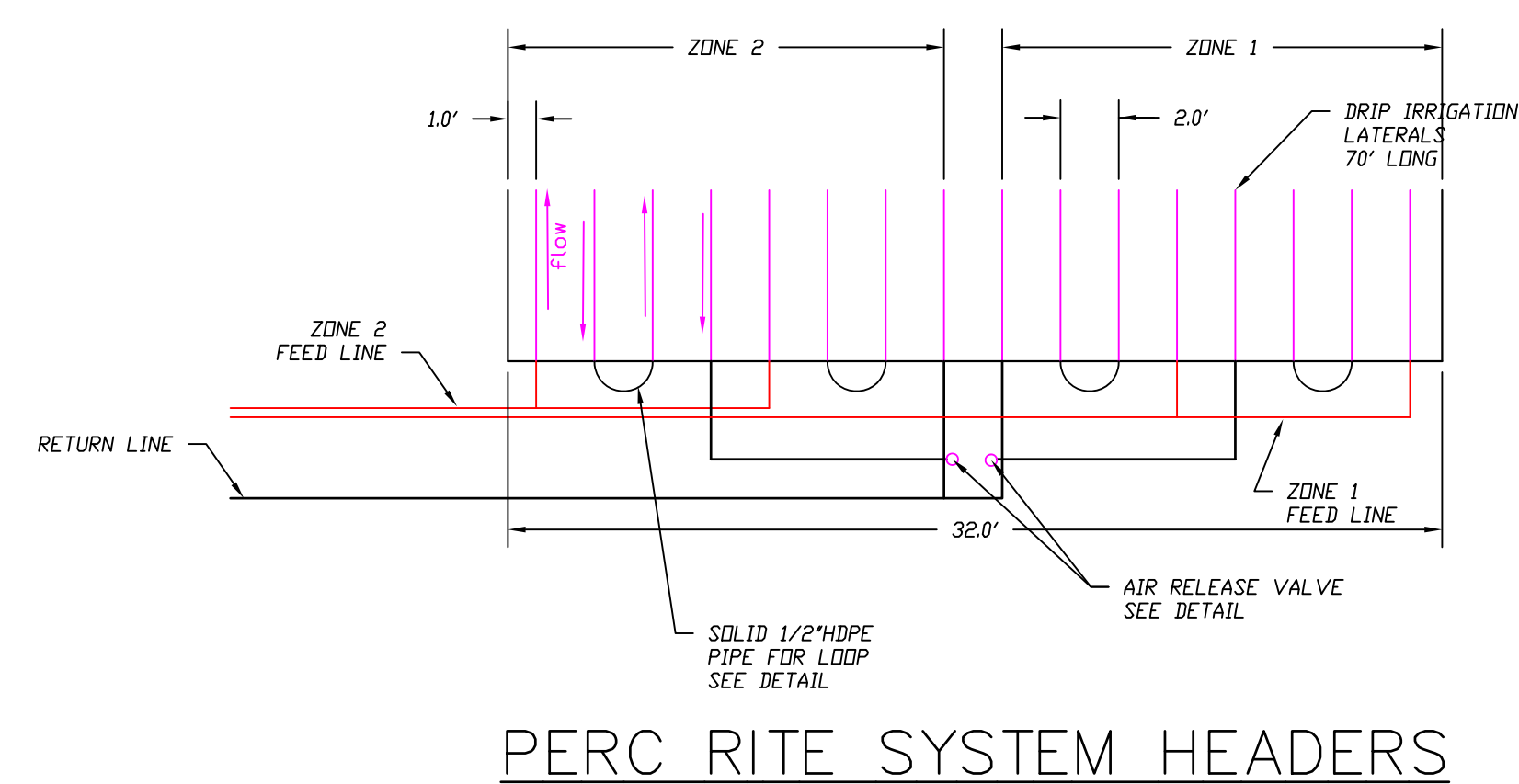
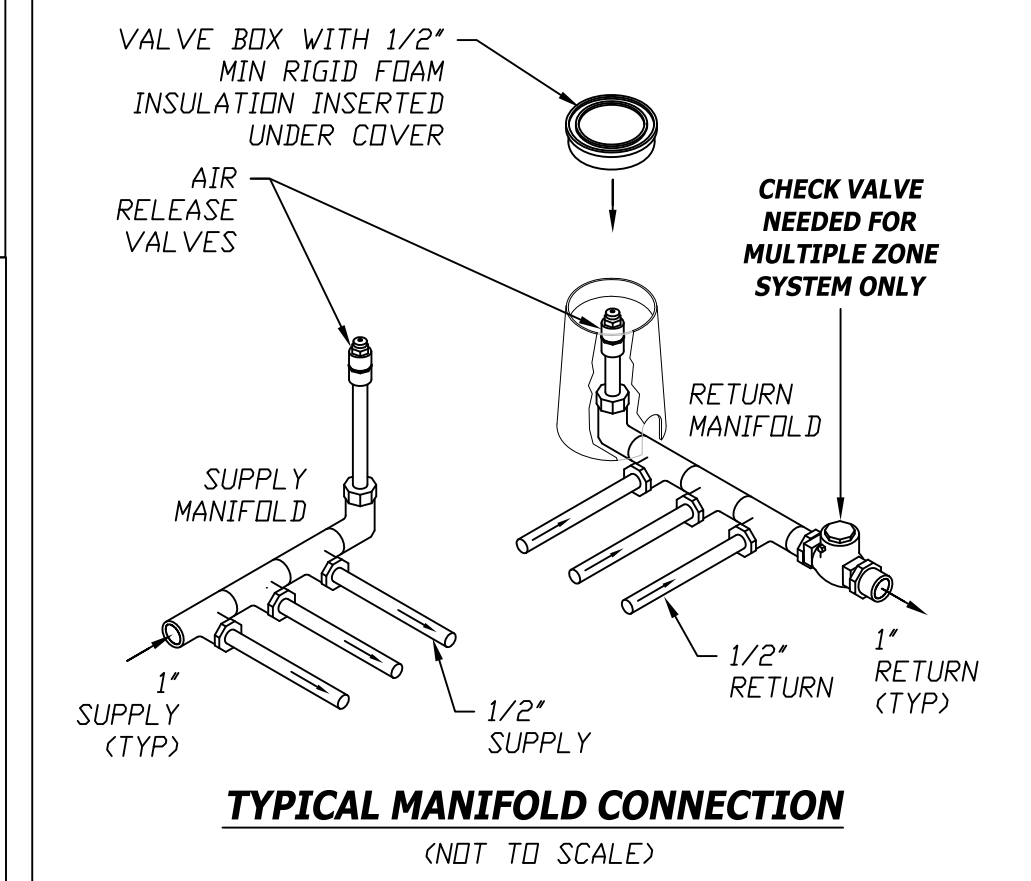
1. The system shall not be installed in wet or frozen soils.
2. Do not park, drive large equipment, or store materials on the dispersal area. No activity should occur on the dispersal area other than the minimum required to install the system.
3. All installation and construction techniques shall conform to the state and local codes pertaining to on-site wastewater systems and the permit for the site.
4. 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 inspector shall be notified. Any ongoing work shall be the sole responsibility of the contractor.
5. Drip tubing may be installed with a vibratory plow, a static plow, a narrow trencher (< 6' wide), by hand trenching, or by scarifying the surface and bedding the drip tubing in clean sand meeting the requirements for fill material in the state code. For sand fill systems, cover consisting of 2" of the same sand and then topsoil meeting the approved depth requirement shall be provided.
6. All drip tubing is to be installed parallel to the contour.
7. Air release valves shall be placed below the ground surface in an insulated valve box but at an elevation above the highest drip line in that particular zone.
8. Vegetative cover must be replaced for installations where it is removed or buried during installation.
9. All cutting of rigid pvc pipe, flexible pvc, and drip tubing of size 2" or smaller shall be accomplished with pipe cutters. No sawing is allowed.
10. All rigid PVC pipe, flexible PVC pipe and drip tubing shall have the ends covered with duct tape after cutting to prevent construction debris from entering the pipe.
11. Prior to gluing, all joints shall be inspected for and cleared of any debris. All joints shall be cleaned and primed with pvc primer prior to being glued.
12. All PVC pipe and fittings shall be sch 40.
13. Whenever possible, all force mains shall be tested for leaks prior to being back-filled by pressurizing the system and observing for leakage.
14. The hydraulic unit shall be placed on top of the septic/treatment tank, pump chamber, or on a bed of 4' - 6' thick 3/4" gravel in a location within 30' of the pump.
15. If standing water is a problem in the vicinity of the hydraulic unit, a screened drain to daylight is required.
16. Electrician to provide separate circuits for the pump and controls/alarm, or as required by state and local codes.
17. All conduit entering the control panel shall be sealed at both ends to prevent condensation or gases inside the panel.

COLD CLIMATE NOTES:

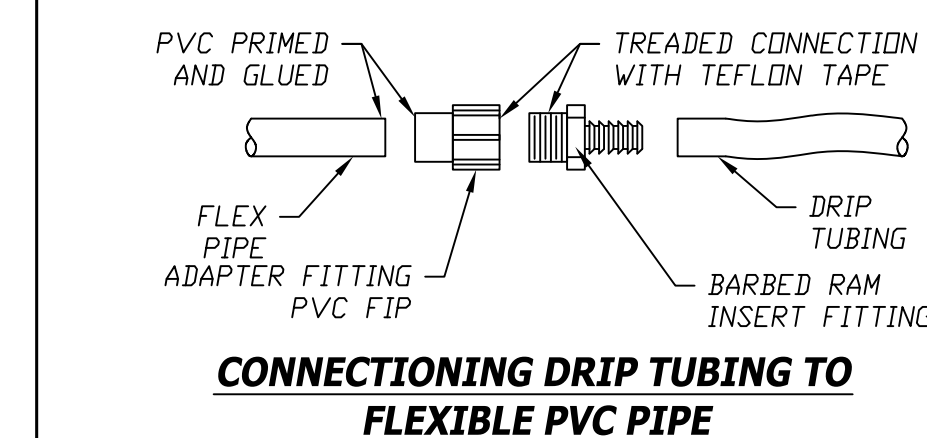
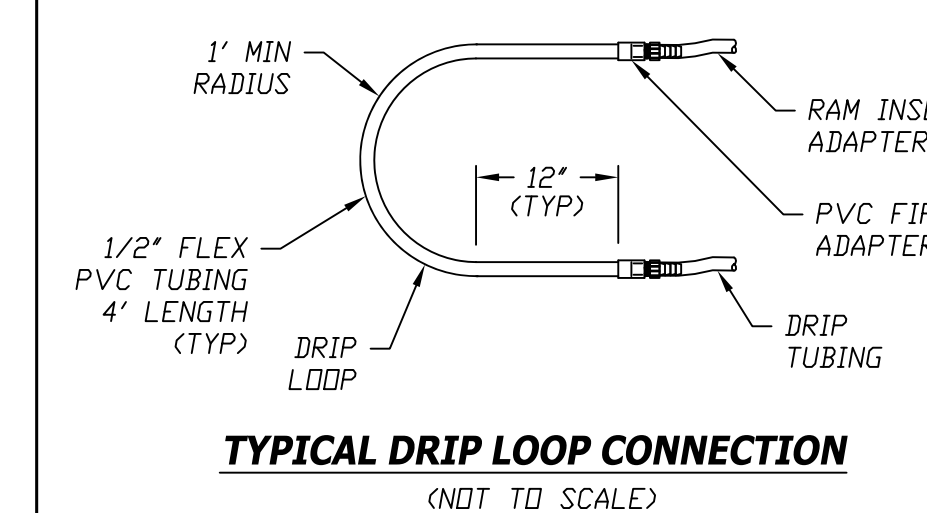
1. All attempts should be made to place the hydraulic unit in a location with an open southern exposure for warming purposes.
2. All pipes entering and leaving the hydraulic unit shall elbow vertically down 90 degrees to a depth below the frost line prior to extending away from the unit horizontally.
3. The supply and return lines shall be installed below the frost line. When this is not possible, rigid foam insulation (min 1" thick) shall be placed over those pipes that are above the frost line.
4. The vertical sections of pipe that travel through the frost zone and connect the supply and return lines to the manifolds shall be insulated sch 40 pvc pipe. Insulation shall consist of foam pipe wrap insulation and 1" rigid foam insulation strips made into a box. (see insulation detail)
5. Foil wrap insulation shall be placed over the supply/return manifolds and loop connectors so that at least 1' of insulation extends each direction beyond the fittings. (see insulation detail)
6. Air release valve enclosures shall be insulated with bagged Styrofoam peanuts, foil wrap insulation, and rigid foam insulation inside the lid. (see insulation detail)
7. 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 that these loops stay elevated during and after the loops are backfilled.
8. Dense vegetative cover is to be established over the supply trench, return trench, manifolds, and drip tubing prior to the first exposure to freezing temperatures. If vegetation cannot be established then the entire drip dispersal field is to be covered with a thick layer (minimum 6") of mulch, straw/hay, or frost blanket until such turf cover is established.
9. Vegetation height over the drip dispersal area should be a minimum of 4' - 6' throughout the winter months.



- NOTES:**
1. ALL RIGID AND FLEXIBLE PVC ARE TO BE LOCATED ABOVE THE DRIP LINE TO ALLOW THE PIPES TO DRAIN.
 2. THE AIR RELEASE VALVES SHALL BE PLACED AT THE HIGHEST POINT ON THE SUPPLY AND RETURN LINE FOR EACH ZONE.
 3. EACH ZONE TO HAVE TWO AIR RELEASE VALVES.
 4. RETURN LINES TO BE CONNECTED TO A COMMON RETURN LINE.



NOTE:
ALL DRIP LOOPS ARE TO BE LOCATED 2' ABOVE THE DRIP LINE TO ALLOW FOR THE LOOPS TO DRAIN.



OWNER & APPLICANT

BRENNAN, CONSTANCE J.
REVOCABLE LIVING TRUST
225 BEAVER DAM ROAD
PLYMOUTH, MA 02370
LOCUS: PARCEL Nos. 075-013-004 & 005

PERC RITE DETAILS
THE RESIDENCES AT SERENITY HILL
221 BEAVER DAM ROAD
PLYMOUTH, MA 02370

SCALE: 1"=20' DATE: JULY 27,2020

JAMES ENGINEERING, INC.
125 GREAT ROCK ROAD
HANOVER, MASS. 02339
TEL: 1- (781)-878-1795

1	12/15/20	response to engineering	GDJ
2	12/23/20	ADDED LOT NUMBERS	GDJ
NO.	DATE	DESCRIPTION	BY