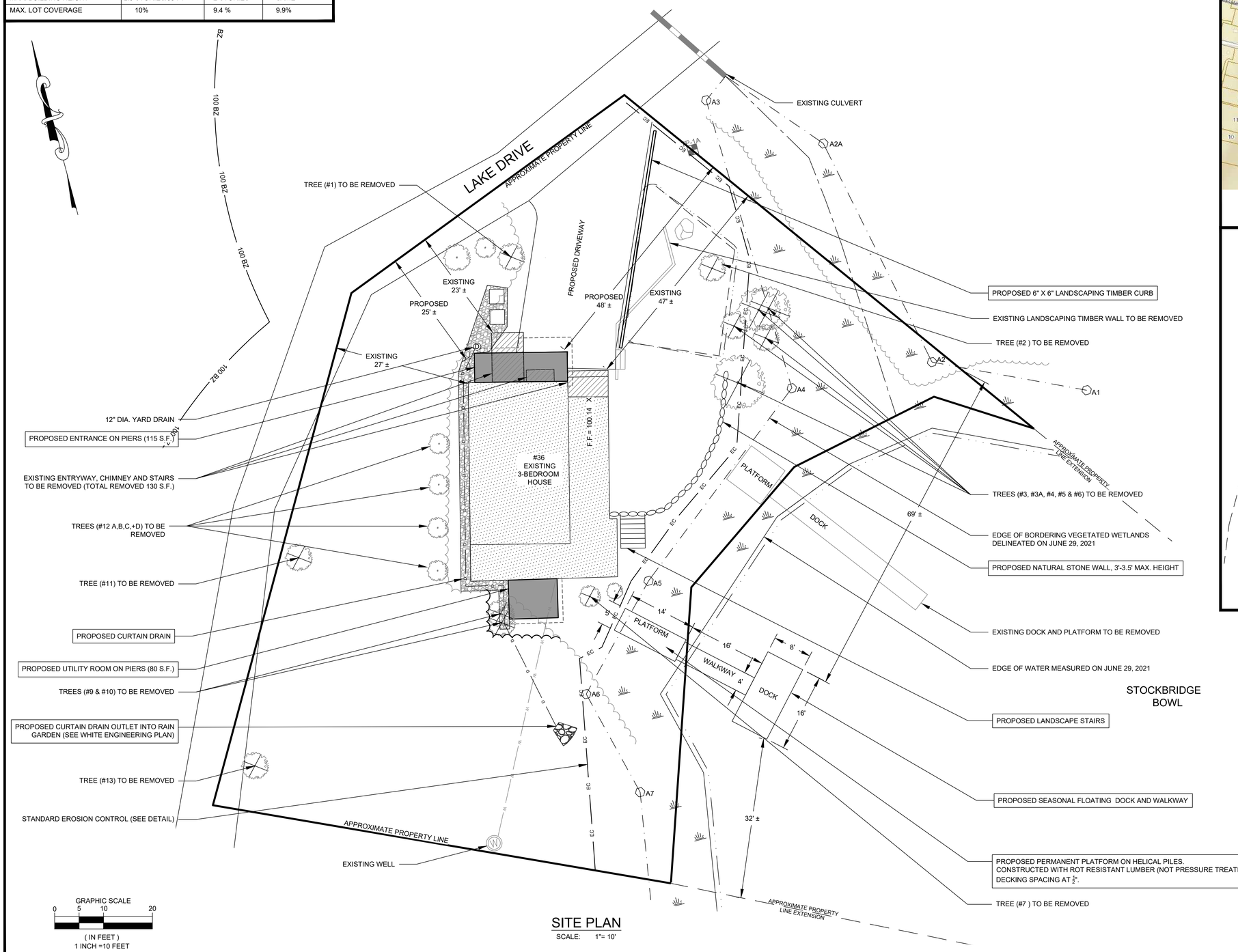
ZONING DIMENSIONAL REQUIREMENTS
RESIDENCE R-2 ZONE

	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA	87,120 S.F.	13,442 ± S.F.	SAME
MIN. LOT WIDTH & FRONTAGE	250 FT	177 ± FT	SAME
MIN. LOT YARD			
FRONT	40 FT	23 ± FT	25 ± FT
SIDE	35 FT	47 ± FT	48 ± FT
REAR	35 FT	15 ± FT	SAME
MAX. BUILDING HEIGHT	2.5 STORIES/35 FT	2 STORIES	SAME
MAX. LOT COVERAGE	10%	9.4 %	9.9%

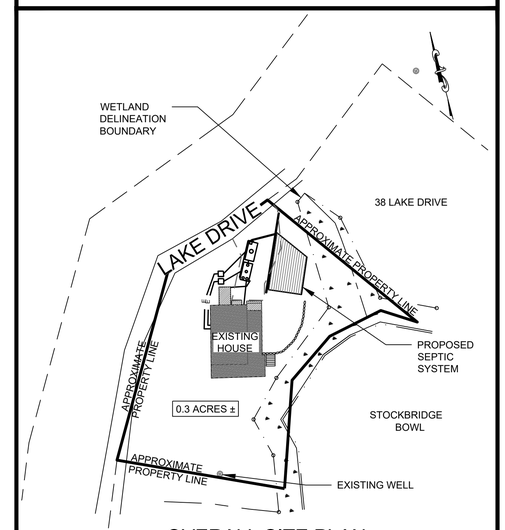
LEGEND

- APPROXIMATE PROPERTY LINE
- WETLAND DELINEATION BOUNDARY
- 200 — EXISTING CONTOUR
- EXISTING TREELINE
- W — EXISTING WATERLINE
- S — EXISTING SEWER



SITE PLAN
SCALE: 1"= 10'

LOCUS PLAN
SCALE: N.T.S.



OVERALL SITE PLAN
SCALE: 1" = 40'

NOTES:
1. EXISTING CONDITIONS PLAN SURVEYED BY SK DESIGN GROUP, INC. ON JUNE 29, 2021.
2. SEE PROPOSED PLANTING PLAN BY WHITE ENGINEERING

SEWER DESIGN AND SITE PLAN
PREPARED FOR:
AVERBUCH & RIVEST RESIDENCE
LOCATED AT:
36 LAKE DRIVE
STOCKBRIDGE, MA

Design Group, Inc.
Civil Engineers * Surveyors * Consultants
2 FEDERICO DRIVE * PITTSFIELD, MASSACHUSETTS 01201 * (413) 443-3537

PLAN DESCRIPTION:
SITE PLAN

SK DESIGN GROUP PROJECT #:
210280

COMMONWEALTH OF MASSACHUSETTS
MATTHEW D. PUNTIN
CIVIL
NO. 46069
REGISTERED PROFESSIONAL ENGINEER

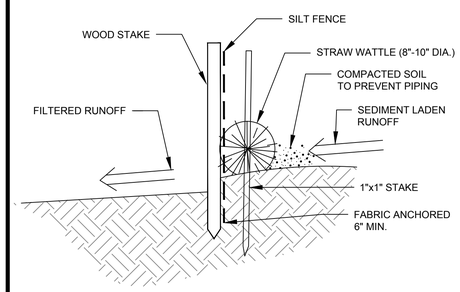
MATTHEW D. PUNTIN, P.E.
SK DESIGN GROUP
LICENSE #46069
PHONE: 413-443-3537

REVISION:
MAY 10,2022

DRAWN BY: HLP	CHECKED BY: MDP
ORIG. DATE: FEB. 9, 2022	SHEET NO. 1 OF 5
ISSUED FOR: Permit	
SCALE: As Noted	

G:\SK DESIGN GROUP\2021\210080 Plot-36 Lake Dr, Stockbridge-Septic & Dock\Drawings\Construction\210080 SITE PLAN (5-10-2022).dwg
Plotted On: Thursday, March 24, 2022 - 8:08am
User Name: HPuntin

NOTE:
1. STRAW WATTLE INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.



DETAIL - STANDARD EROSION BARRIER

SCALE: N.T.S.

INVERTS:
BUILDING
BUILDING B.F. = 100 ±
BUILDING INV. = 98

PROPOSED SEPTIC TANK
INV, IN = 97.00
INV, OUT = 96.75

PROPOSED PUMP
INV, IN = 96.50

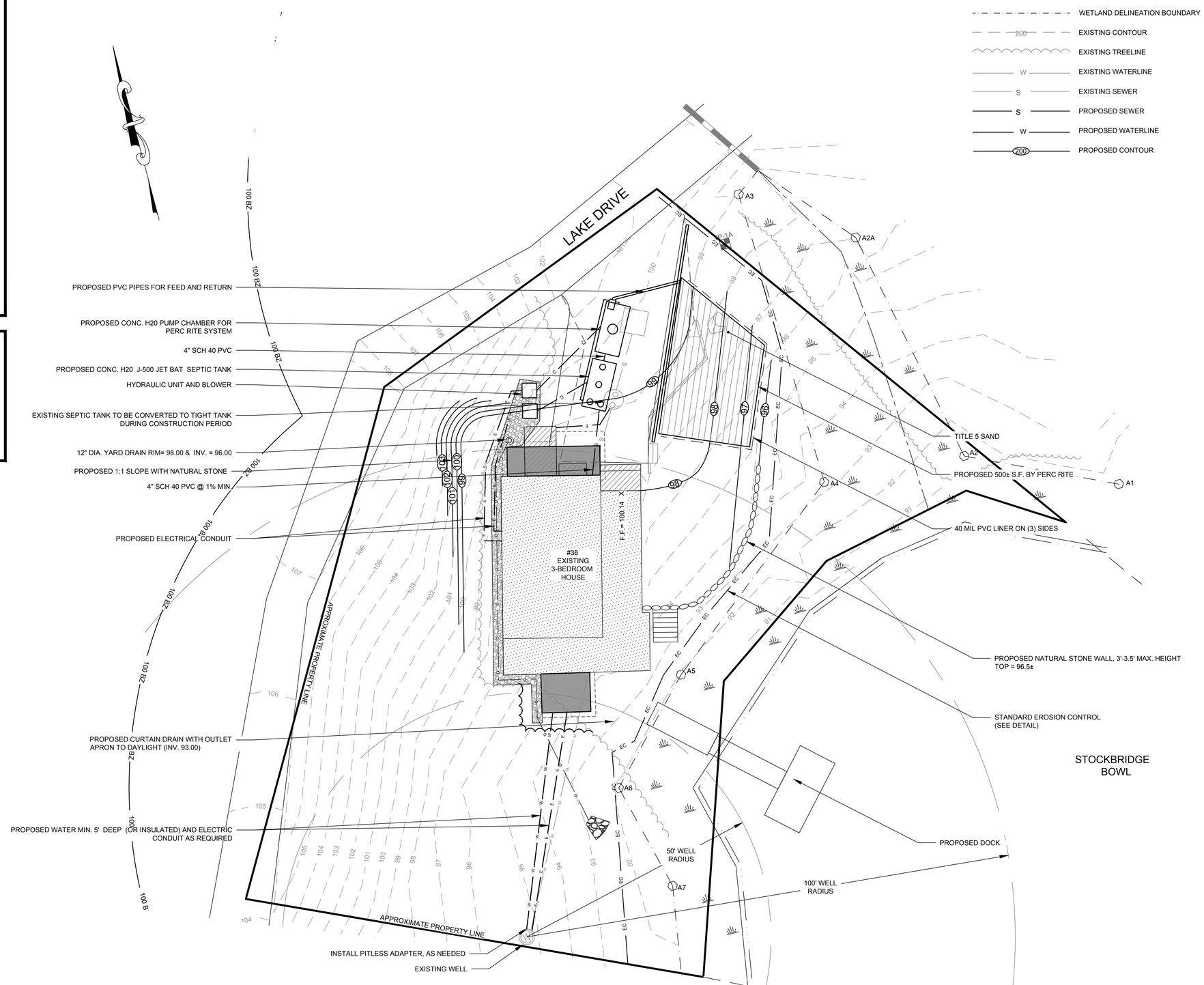
TOP FEED MANIFOLD
ELEVATION = 98.83

NOTES :
1. PIPE FROM BUILDING TO SEPTIC TANK MUST BE AT A MINIMUM OF 1.0%.
2. PIPE FROM TANK TO D-BOX MUST BE AT MINIMUM OF 0.5%.
3. INVERTS AT BUILDING OR TANK MAY BE ADJUSTED FOR FIELD CONDITIONS.
4. CONSULT ENGINEER FOR PERMISSION TO MAKE CHANGES.

TITLE 5 SAND MUST MEET THE FOLLOWING SPECIFICATIONS:

SIEVE SIZE	% PASSING
#4	100%
#50	10%-100%
#100	0%-20%
#200	0%-5%

NOTES:
1. EXISTING CONDITIONS PLAN SURVEYED BY SK DESIGN GROUP, INC. ON JUNE 29, 2021.



SITE PLAN

SCALE: 1"= 10'

SEWER DESIGN AND SITE PLAN
PREPARED FOR:
AVERBUCH & RIVEST RESIDENCE
LOCATED AT:
36 LAKE DRIVE
STOCKBRIDGE, MA

Design Group, Inc.
Civil Engineers • Surveyors • Consultants
2 FEDERICO DRIVE • PITTSFIELD, MASSACHUSETTS 01201 • (413) 443-3537

PLAN DESCRIPTION:
GRADING & UTILITY PLAN

SK DESIGN GROUP PROJECT #: 210080

COMMONWEALTH OF MASSACHUSETTS
MATTHEW D. PUNTIN
CIVIL
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LICENSE #46069
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REVISION:
MAY 10,2022

DRAWN BY: HLP	CHECKED BY: MDP
ORIG. DATE: FEB. 9, 2022	SHEET NO. 2 OF 5
ISSUED FOR: Permit	
SCALE: As Noted	

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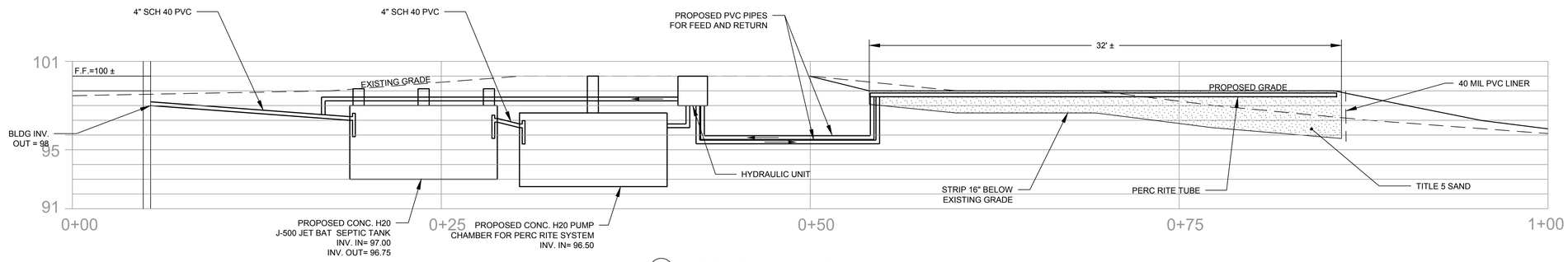
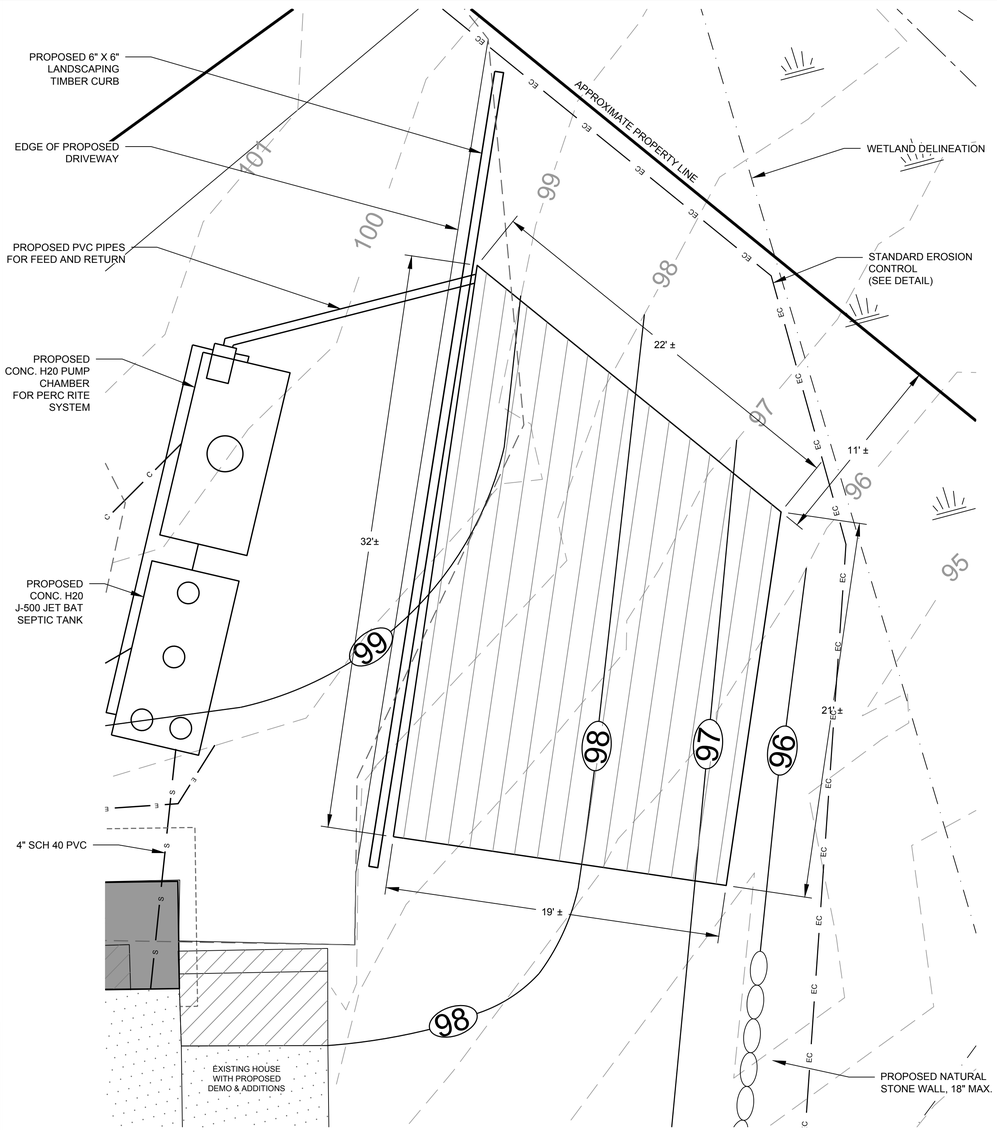
Plotted On: Thursday, March 24, 2022 - 8:06am
User Name: mPuntin



1 SEWER PROFILE

SCALE: 1"= 4'



2 ENLARGED S.A.S. FIELD

SCALE: 1" = 4'

DESIGN NOTES
FOLLOW ALL TITLE 5 (310 CMR 15.000) REGULATIONS

1. PERCOLATION RATE
ALTERNATIVE TO PERC TEST WITH LOADING RATE OF 30 GPD/S.F.
TESTING PERFORMED BY MIKE PARSONS ON 4/26/2021. WITNESSED BY JIM WILUSZ.

TP-1

DEPTH	HORIZON	TEXTURE	COLOR	CONSIST.	STRUCTURE	REDOX %	COURSE FRAGMENTS
0"-16"	Afill	SL	---	FRIABLE	CRUMB	>5%	---
16"-26"	B	SL	10 YR 4/6	FRIABLE	CRUMB	---	---
26"-64"	C	FSL	2.5 Y 4/3	FIRM	MASSIVE	---	---

ESTIMATED SEASONAL HIGH GROUNDWATER (ESHGW): 26"
STANDING WATER IN HOLE: 60"
WEEPING FROM PIT FACE: 36"

2. SEPTIC TANK
SEE DETAILS FOR JET BAT J-500 TANK.

3. PUMP CHAMBER
SEE DETAILS FOR PERC RITE SYSTEM

4. DESIGN FLOW
EXISTING 3 BEDROOM HOUSE. DESIGN FOR 3 BEDROOMS
110 GALLONS PER DAY/BEDROOM * 3 BEDROOMS = 330 GPD
NO GARBAGE GRINDER ALLOWED

5. SOIL ABSORPTION SYSTEM (S.A.S.)
EFFLUENT LOADING RATE - 0.33 GPD / SQUARE FOOT

330 GPD
0.33 GPD/S.F. = 1,000 SQUARE FEET. OF LEACHING AREA REQUIRED. UNDER LOCAL UPGRADE APPROVAL,
USE 50% REDUCTION OF LEACHING AREA.

INSTALL BED OF SAND FOR PERC RITE SYSTEM AT 500 S.F. TOTAL.

6. WATER SUPPLY
EXISTING HOUSE SERVICED BY PRIVATE WELL.

7. CONSTRUCTION STAKEOUT
CONTRACTOR MAY CONTACT ENGINEER FOR STAKEOUT OF SYSTEM.

8. SYSTEM INSPECTION
CONTRACTOR MUST NOTIFY ENGINEER 48 HOURS IN ADVANCE TO FACILITATE INSPECTION.

9. LOCAL UPGRADE APPROVAL
15.405 (1) (B) REDUCTION OF SETBACK FROM S.A.S..
15.405 (1) (E) REDUCTION OF SETBACK FROM B.V.W. TO 6 FEET.
15.405 (1) (H) REDUCTION IN SEPARATION TO HIGH GROUNDWATER TO 2 FEET.
15.405 (1) (I) PERFORMED SIEVE ANALYSIS INSTEAD OF SECOND TEST PIT.

10. VARIANCES REQUESTED
NONE.

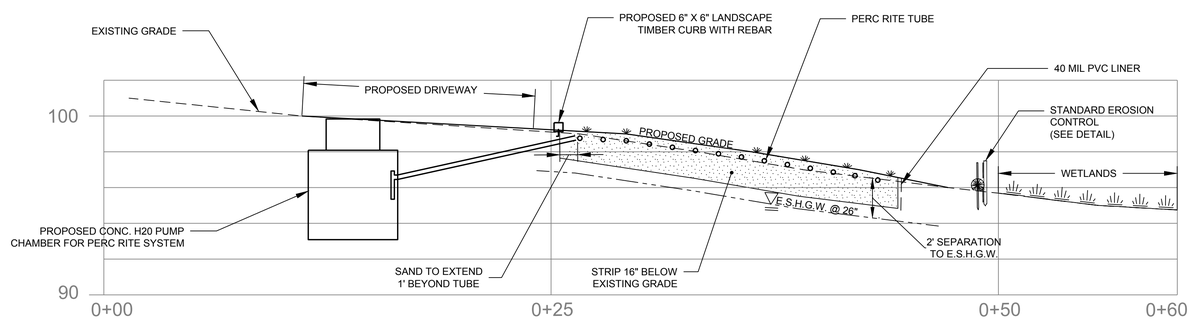
11. NOTIFY "DIGSAFE"
PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR MUST VERIFY LOCATION OF UTILITIES AND SUBSURFACE STRUCTURES IN THE FIELD. CONSTRUCTION PERMIT MUST BE OBTAINED FROM BOARD OF HEALTH PRIOR TO INSTILLATION.

12. NO DISCHARGE OF BACKWASH OF WATER PURIFICATION OF FILTRATION DEVICES IS ALLOWED.

13. CONTRACTOR AND OWNER SHALL BE AWARE OF THE WETLANDS PROTECTION ACT.

3 SEPTIC DESIGN NOTES

SCALE: 1" = 1'



4 SEPTIC FIELD SECTION

SCALE: 1"= 4'

SEWER DESIGN AND SITE PLAN
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AVERBUCH & RIVEST RESIDENCE
LOCATED AT:
36 LAKE DRIVE
STOCKBRIDGE, MA

Design Group, Inc.
Civil Engineers * Surveyors * Consultants
2 FEDERICO DRIVE * FITTSFIELD, MASSACHUSETTS 01201 * (413) 443-3537

PLAN DESCRIPTION:
DETAILS

SK DESIGN GROUP PROJECT #:
210080

COMMONWEALTH OF MASSACHUSETTS
MATTHEW D. PUNTIN
CIVIL
NO. 46069
REGISTERED PROFESSIONAL ENGINEER

MATTHEW D. PUNTIN, P.E.
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REVISION:
MAY 10,2022

DRAWN BY: HLP	CHECKED BY: MDP
ORIG. DATE: FEB. 9, 2022	SHEET NO. 3 OF 5
ISSUED FOR: Permit	
SCALE: As Noted	

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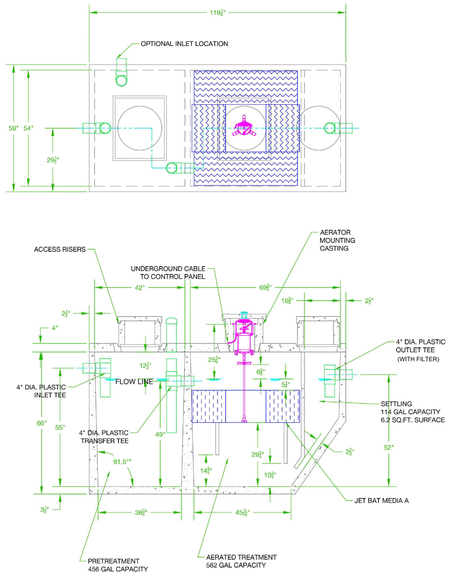
Plotted On: Tuesday, March 24, 2022 - 8:06am
User Name: mPuntin



NOTES:
1. AERATOR MODEL 700LL MUST BE USED IN CONTINUOUS OPERATION
2. DEVELOP RISERS TO GRADE OR WITHIN 12" BELOW GRADE
3. PLASTIC RISERS CAST INTO THE TANK LID MAY BE USED IN PLACE OF CONCRETE RISERS

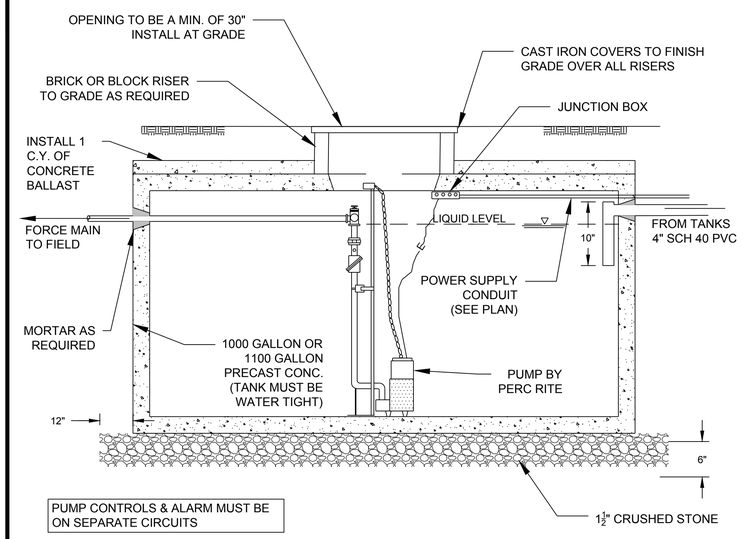
SK DESIGN GROUP NOTE:
1. INSTALL BALLAST PER MANUFACTURER SPECIFICATIONS. MIN. OF 1 C.Y. OF CONCRETE

REV	ECN	DATE	DESCRIPTION	DRFT	APRV
-	1407	08/14/14	REDRAWN	N J K	

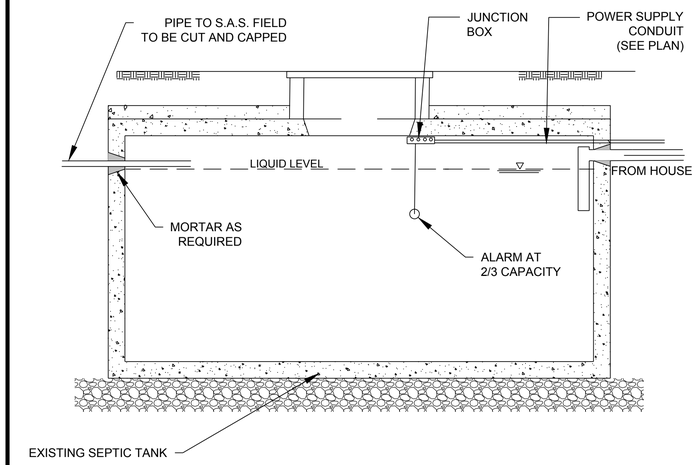
Jet® Wastewater Treatment Solutions
Innovation on Innovation. Anchored by Service.

TITLE: J-500 RESIDENTIAL WWTP ONE PIECE TANK CASTING	DRAWN BY: N J K; DATE: 08/14/14; APPROVED BY: ; DATE:
USED ON:	MATERIAL:
	SCALE: 1 : 20; SIZE: C
	UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES; DECIMAL: ± .005; FRACTIONAL: ± 1/64; DEGREE: ± 1°
PROPRIETARY PROPERTY: THIS DRAWING IS THE PROPERTY OF JET INC. AND MAY NOT BE REPRODUCED, COPIED OR USED WITHOUT WRITTEN PERMISSION.	DRAWING NUMBER: J-500; REV: -

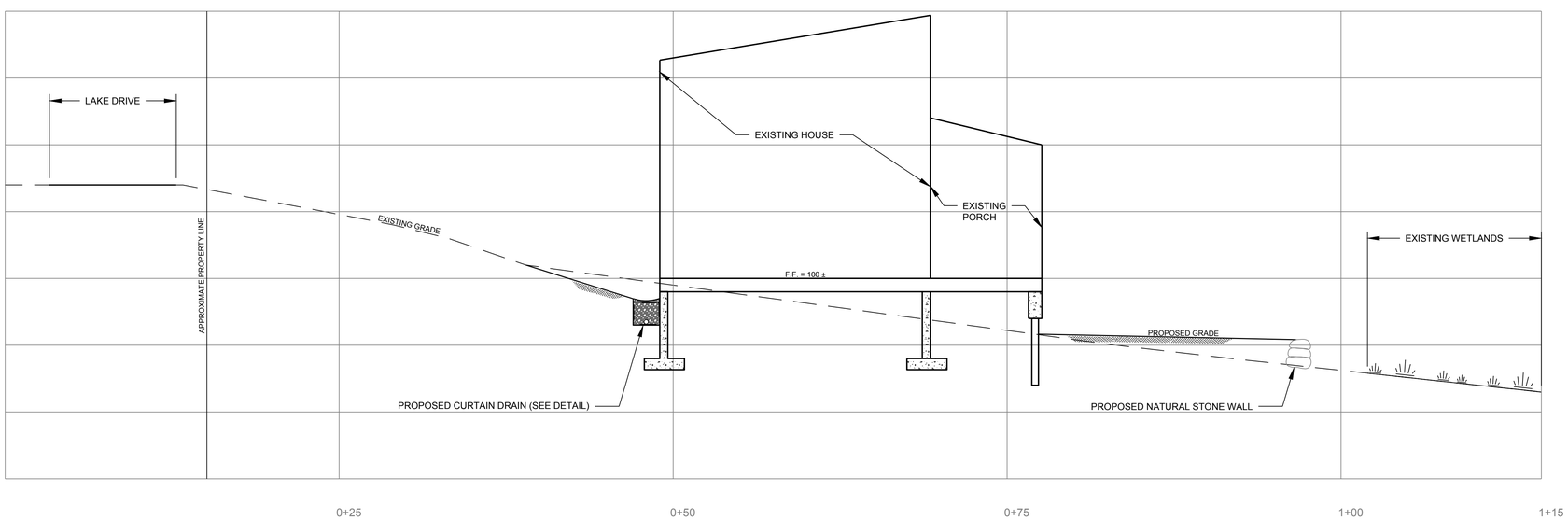
① JET BAT J-500 TANK DETAIL
SCALE: N.T.S.



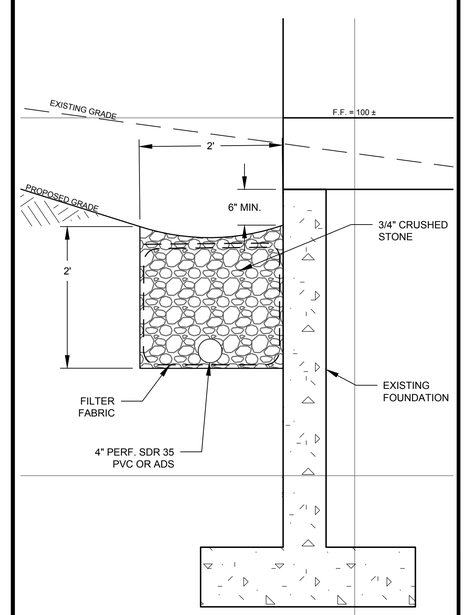
② SECTION: PUMP CHAMBER
SCALE: N.T.S.



③ SECTION: TIGHT TANK
SCALE: N.T.S.



④ SITE PROFILE
SCALE: 1" = 5'



⑤ DETAIL: CURTAIN DRAIN
SCALE: 1" = 1'

SEWER DESIGN AND SITE PLAN
PREPARED FOR:
AVERBUCH & RIVEST RESIDENCE
LOCATED AT:
36 LAKE DRIVE
STOCKBRIDGE, MA

Design Group, Inc.
Civil Engineers * Surveyors * Consultants
2 FEDERICO DRIVE * PITTSFIELD, MASSACHUSETTS 01201 * (413) 443-3537

PLAN DESCRIPTION: DETAILS

SK DESIGN GROUP PROJECT #: 210080

COMMONWEALTH OF MASSACHUSETTS
MATTHEW D. PUNTIN
CIVIL
NO. 46069
REGISTERED PROFESSIONAL ENGINEER

MATTHEW D. PUNTIN, P.E.
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LICENSE #46069
PHONE: 413-443-3537

REVISION:
MAY 10,2022

DRAWN BY: HLP	CHECKED BY: MDP
ORIG. DATE: FEB. 9, 2022	SHEET NO. 4 OF 5
ISSUED FOR: Permit	
SCALE: As Noted	

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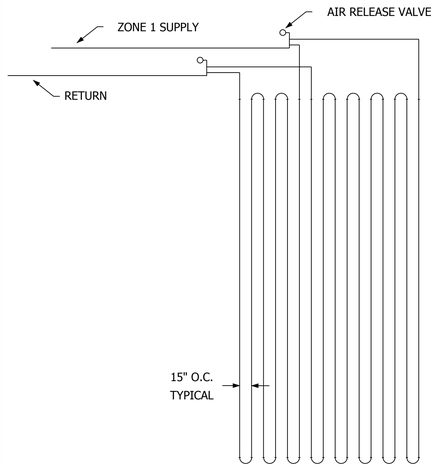
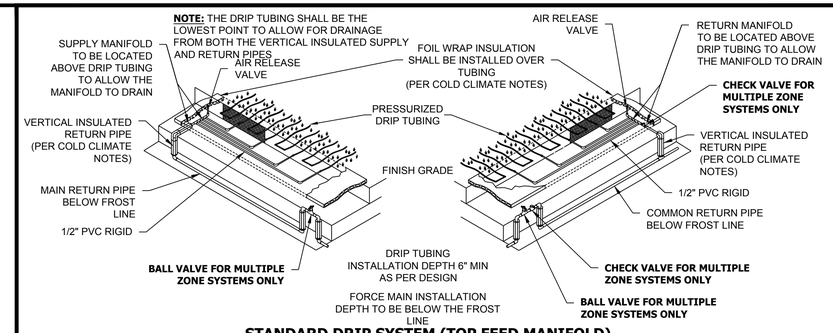
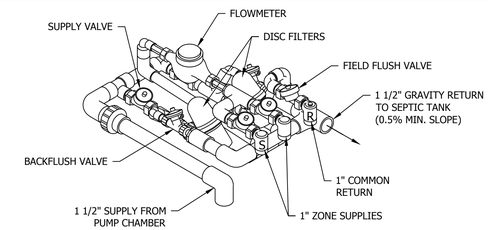
Plotted On: Thursday, March 24, 2022 - 8:06am
User Name: HPuntin





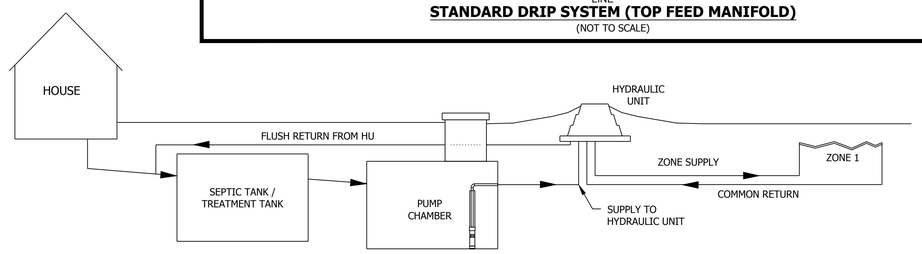
STANDARD DRIP SYSTEM (TOP FEED MANIFOLD)

(NOT TO SCALE)



PERC-RITE HYDRAULIC UNIT (15 GPM)

(NOT TO SCALE)



TYPICAL SYSTEM HYDRAULIC PROFILE

(NOT TO SCALE)

GENERAL CONSTRUCTION NOTES:

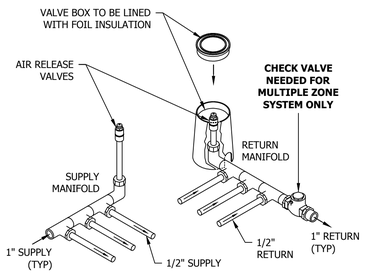
1. The system shall not be installed in wet or frozen soils.
2. Do not park, drive large equipment, or store materials on the dispersal area. No activity should occur on the dispersal area other than the minimum required to install the system.
3. All installation and construction techniques shall conform 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:

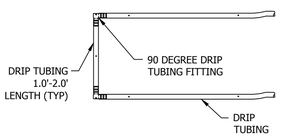
1. ALL RIGID AND FLEXIBLE PVC ARE TO BE LOCATED ABOVE THE DRIP LINE TO ALLOW THE PIPES TO DRAIN.
2. THE AIR RELEASE VALVES SHALL BE PLACED AT THE HIGHEST POINT ON THE SUPPLY AND RETURN LINE FOR EACH ZONE.
3. EACH ZONE TO HAVE TWO AIR RELEASE VALVES.
4. RETURN LINES TO BE CONNECTED TO A COMMON RETURN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



TYPICAL MANIFOLD CONNECTION

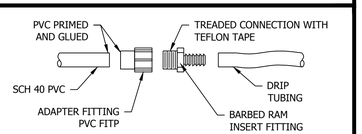
(NOT TO SCALE)

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

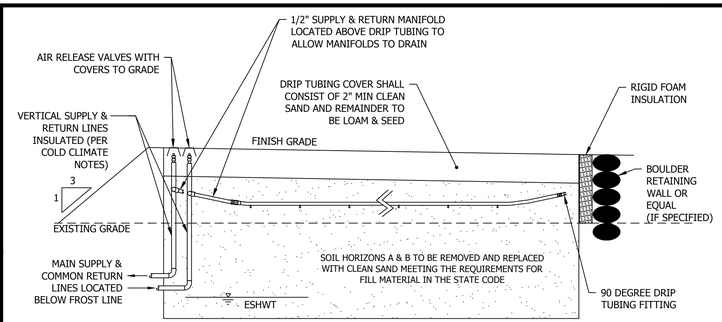


TYPICAL DRIP LOOP CONNECTION

(NOT TO SCALE)



CONNECTIONING DRIP TUBING TO SCH 40 PVC PIPE



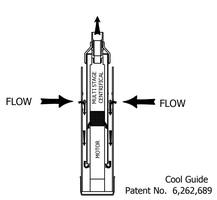
PERC-RITE FIELD (509 SF)

(NOT TO SCALE)

Note: All Perc-Rite components shall be obtained from Oakson, Inc, Gloucester, MA., 978-282-1322

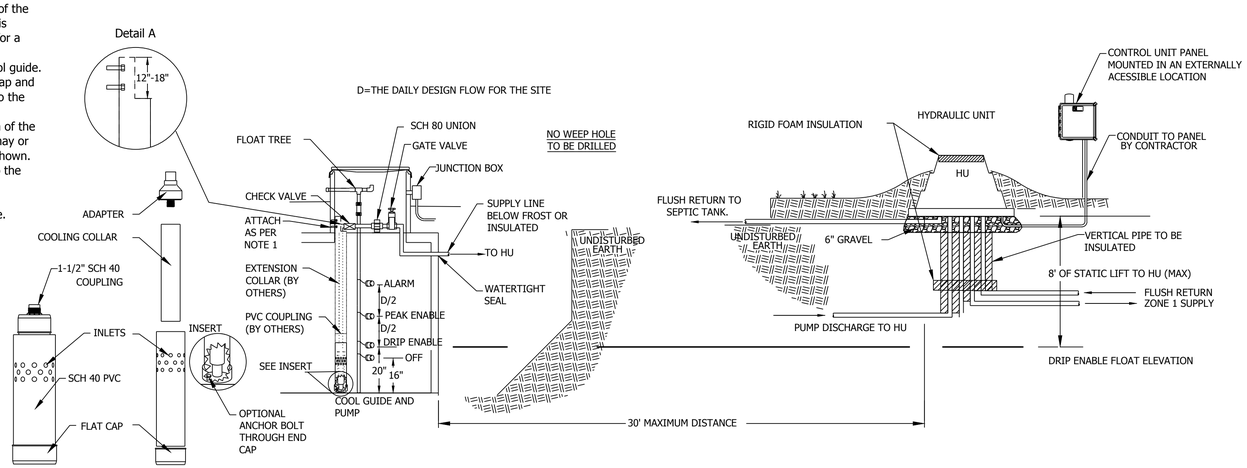
INSTALLATION INSTRUCTIONS:

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 half of the pipe down 12" to 18" away from the top of the pipe for a 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 reuse 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 the 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 the 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 and specified.



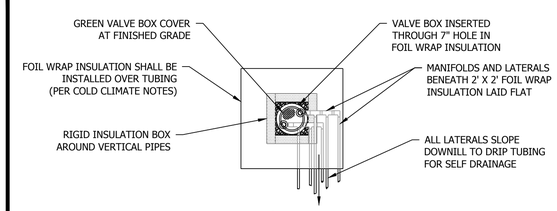
PERC-RITE HYDRAULIC UNIT (15 GPM)

(NOT TO SCALE)

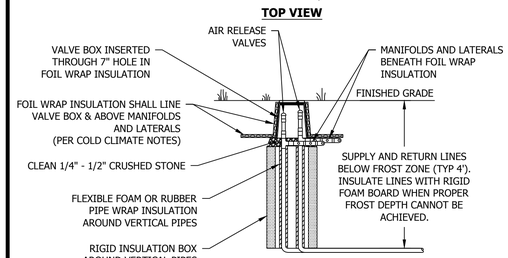


TYPICAL PUMP TANK & HYDRAULIC UNIT DETAIL

(NOT TO SCALE)



TOP VIEW



CROSS SECTION

INSULATION DETAIL

(NOT TO SCALE)

SEWER DESIGN AND SITE PLAN
PREPARED FOR:
AVERBUCH & RIVEST RESIDENCE
LOCATED AT:
36 LAKE DRIVE
STOCKBRIDGE, MA

Design Group, Inc.
Civil Engineers • Surveyors • Consultants
2 FEDERICO DRIVE • PITTSFIELD, MASSACHUSETTS 01201 • (413) 443-3537

PLAN DESCRIPTION:
PERC RITE DETAILS

SK DESIGN GROUP PROJECT #:
210080

COMMONWEALTH OF MASSACHUSETTS
MATTHEW D. PUNTIN
CIVIL
NO. 46069
REGISTERED PROFESSIONAL ENGINEER
MATTHEW D. PUNTIN, P.E.
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REVISION:
MAY 10,2022

DRAWN BY: HLP	CHECKED BY: MDP
ORIG. DATE: FEB. 9, 2022	SHEET NO. 5 OF 5
ISSUED FOR: Permit	
SCALE: As Noted	

C:\SK DESIGN GROUP\2021\210080 Pinn-36 Lake Dr, Stockbridge-Septic & Dock\Drawings\Construction\210080 SITE PLAN (5-10-2022).dwg
Plotted On: Thursday, March 24, 2022 - 8:06am
User Name: MPuntin