

GENERAL NOTES:

1. SITE INVESTIGATION CONSISTING OF ONE (1) DEEP TEST PIT AND TWO PERCOLATION (PERC) TESTS, WAS PERFORMED ON AUGUST 3, 2017 BY WILLIAM J. GROVE, P.E. SEE "SOILS INFORMATION" FOR SUMMARIZED SITE INVESTIGATION RESULTS. BASED ON THE RESULTS OF THE SITE INVESTIGATION, A PRESBY ENVIRO-SEPTIC REPLACEMENT SEPTIC SYSTEM IS PROPOSED.
2. LOCATIONS OF THE SYSTEM COMPONENTS ARE SHOWN IN THE PLAN VIEW AND COMPONENT DETAILS ARE SHOWN SEPARATELY.
3. THE SEPTIC SYSTEM IS DESIGNED FOR A MAXIMUM OF 750 GALLONS PER DAY BASED ON THE EXISTING 3 BEDROOM RESIDENCE AND THE PROPOSED 2 BEDROOM ADDITION, ITS PROPOSED USE AND THE DOH REGULATIONS.
4. WATER SUPPLY IS SERVICED BY TOWN WATER SERVICE, LOCATED AS SHOWN ON PLAN.
5. THE BACKFILL IS TO BE GRADED TO ROUTE SURFACE WATER AWAY FROM THE ABSORPTION FIELD.
6. WATER TREATMENT SYSTEM WASTES (SUCH AS FROM A WATER SOFTENER) ARE TO BE EXCLUDED FROM THE SYSTEM.
7. IF THE HOUSE USES A WATER SOFTENER, THE WATER SOFTENER DISCHARGE SHALL NOT BE ROUTED TO THE WASTEWATER SYSTEM. THE WATER SOFTENER DISCHARGE SHOULD BE DIRECTED TO ITS OWN SUBSURFACE DISPOSAL SYSTEM LOCATED AWAY FROM THE PROPOSED LEACH AREA.
8. NO "CLEAN" WATER IS TO ENTER THE SYSTEM VIA ROOF DRAINS, SUMP PUMPS, FOOTING DRAINS, ETC. THE SYSTEM IS A DISPOSAL UNIT FOR COMMON BATHROOM, LAUNDRY AND KITCHEN WASTES ONLY. GARBAGE GRINDERS ARE NOT TO BE USED ON THIS SYSTEM.
9. THE CONTRACTOR IS TO CONTACT DIG SAFELY NEW YORK AT 800-962-7962 TO VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO DOING ANY EXCAVATION WORK.
10. NO PART OF THE SYSTEM IS TO BE LOCATED UNDER DRIVEWAYS, BUILDINGS, SWIMMING POOLS OR OTHER AREAS SUBJECT TO HEAVY LOADING UNLESS DESIGNED FOR SUCH.
11. HEAVY CONSTRUCTION EQUIPMENT MUST NOT BE ALLOWED WITHIN THE AREA OF THE SYSTEM PRIOR TO CONSTRUCTION
12. ALL VEGETATION SHALL BE CUT AS CLOSE TO GRADE AS POSSIBLE AND THE SOD SHALL BE REMOVED.
13. AFTER REMOVING VEGETATION, PLACE 6" OF SYSTEM SAND ON REQUIRED AREA AND RAKE INTO UNDERLYING SOIL USING THE TEETH OF THE BUCKET TO ENSURE A MIXED INTERFACE BETWEEN THE TWO SOILS. SYSTEM SAND MUST MEET THE REQUIREMENTS OF ASTM C-33 AND THE PRESBY ENVIRONMENTAL DESIGN MANUAL. CONCRETE SAND MAY BE ACCEPTABLE FOR USE AS SYSTEM SAND PROVIDING THAT NO MORE THAN 2% CAN PASS A #200 SIEVE.
14. INSTALL THE ENVIRO-SEPTIC PIPES ON THE SYSTEM SAND. FILL AROUND THE PIPES AND 6" ON TOP OF PIPES WITH SYSTEM SAND AS SHOWN ON THE CROSS SECTION.
15. THE ENVIRO-SEPTIC PIPES SHOULD NEVER BE DOSED WITH A FLOW GREATER THAN 40 GPM.
16. THE TOPSOIL SURFACE OF THE FILL SHALL BE GRADED TO ENHANCE RUNOFF OF PRECIPITATION.
17. ON SLOPED SITES, A DIVERSION DITCH OR CURTAIN DRAIN SHALL BE CONSTRUCTED UPHILL FROM THE FILL TO PREVENT SURFACE RUNOFF FROM ENTERING THE FILL.
18. RAISED SYSTEM SHALL INCORPORATE AN AUTOMATIC DOSING DEVICE OR PRESSURE DISTRIBUTION. GRAVITY DISTRIBUTION MAY BE INSTALLED UNDER THE JURISDICTION OF A LOCAL HEALTH DEPARTMENT WITH A SYSTEM DESIGN AND CONSTRUCTION INSPECTION CERTIFICATION PROGRAM.
19. THE CONTRACTOR SHALL PROVIDE AN ACCURATE AS-BUILT MAP TO THE OWNER REFERENCING ALL SYSTEM COMPONENTS TO PERMANENT SITE FEATURES FOR LATER RECOVERY.
20. AFTER AN ENVIRONMENTAL ASSESSMENT, THE ENGINEER HAS DETERMINED THAT THE DEVELOPMENT OF THE SITE WITH THE PROPOSED SYSTEM IS CONSISTENT WITH THE OVERALL DEVELOPMENT OF THE AREA AND WILL CAUSE NO ADVERSE ENVIRONMENTAL IMPACTS.
21. THE PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM MUST BE DESIGNED AND THE INSTALLATION SUPERVISED AND CERTIFIED BY A DESIGN PROFESSIONAL.
22. IT IS THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR TO CONTACT THE LOCAL CODE ENFORCEMENT OFFICER ABOUT ANY REQUIRED PERMITS OR FEES BEFORE STARTING WORK ON THE SYSTEM INSTALLATION.

DESIGN CALCULATIONS:

DESIGN FLOW	3 BEDROOM HOUSE AND 2 BEDROOM ADDITION (5 BEDROOMS TOTAL) @ 150 GALLONS PER DAY (GPD)/BEDROOM = 750 GPD
SEPTIC TANK:	1500 SEPTIC TANK
DESIGN PERC. RATE:	31 TO 45 MINUTES/INCH
REQUIRED ENVIRO SEPTIC TRENCH LENGTH:	350 FEET (70 LF PER BEDROOM) 350 FEET PROPOSED
REQUIRED BASAL AREA:	1250 SQ. FEET (0.6 GPD/SF) 1352 SQ. FEET PROPOSED (32' x 26')
SEVEN (7) 50 FOOT LONG PRESBY AES LINES ARE PROPOSED (TOTAL 350 FEET). PIPES TO BE SPACED AT 1.5 FT ON CENTER	

CALCULATION REFERENCE BASED ON N.Y.S.D.O.H., "INDIVIDUAL RESIDENTIAL WASTEWATER TREATMENT SYSTEMS - DESIGN HANDBOOK", 2012 AND PRESBY ENVIRONMENTAL INC. DESIGN AND INSTALLATION MANUAL

PERCOLATION TEST RESULTS:

TESTS PERFORMED ON AUGUST 3, 2017

	PERC RATES (MIN/INCH)	STABILIZED PERC RATE
PT -1	12"	18, 34, 26
PT -2	12"	24, 27, 29

SOILS INFORMATION:

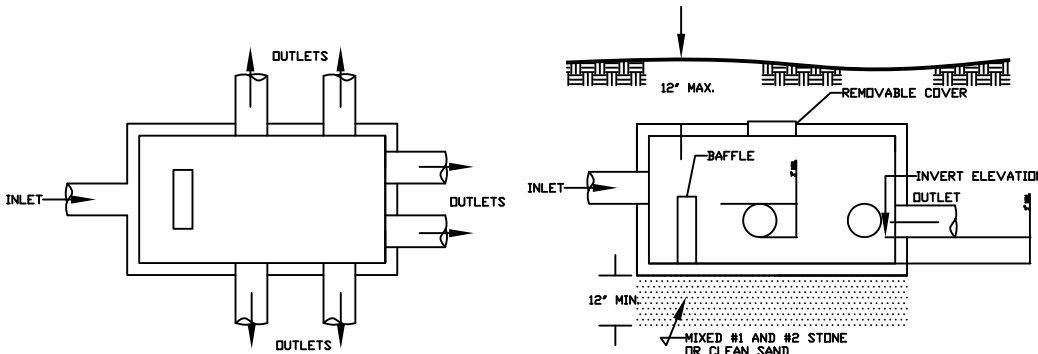
DH - 1	
0" - 8"	DARK BROWN LOAMY TOPSOIL
8" - 30"	SILTY LOAM WITH FRACTURED SHALE
NO MOTTLING ROOTS TO 30"	

KEY:

- PT-1 PERC TEST LOCATION
- DH-1 TEST PIT LOCATION

DISTRIBUTION & DROP BOX NOTES:

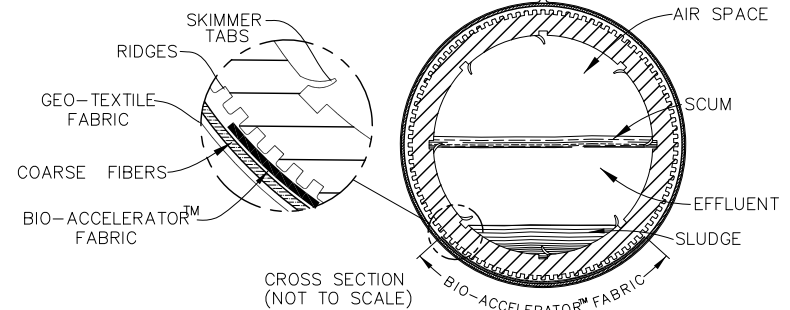
1. DISTRIBUTION BOX OR DROP BOXES USED MUST BE ACCEPTABLE TO THE WATERSHED INSPECTOR. (SEE "SYSTEM PLAN SKETCH " ON SHEET 1 OF 2 FOR LOCATION AND NUMBER OF LINES; DISTRIBUTION BOX OR DROP BOX TO HAVE AT LEAST ONE EXTRA PLUGGED OUTLET).
2. PIPE JOINTS TO BE WATERTIGHT
3. INVERT ELEVATIONS OF ALL OUTLET PIPES FROM THE DISTRIBUTION BOX MUST BE EQUAL USE OF FLOW ADJUSTABLE LEVELING DEVICES IS REQUIRED ON EACH OUTLET.
4. INVERT ELEVATIONS OF ALL OUTLET TRENCHLINE PIPES FROM DROP BOXES MUST BE EQUAL. USE OF FLOW ADJUSTABLE LEVELING DEVICES IS REQUIRED ON EACH TRENCHLINE OUTLET.
5. THE SLOPE OF OUTLET PIPES BETWEEN THE DISTRIBUTION BOX OR DROP BOX AND DISTRIBUTOR LATERALS TO BE AT LEAST $\frac{1}{8}$ " PER FOOT.
6. BAFFLES ARE REQUIRED. INLET PIPE SLOPE SHALL BE AT LEAST $\frac{1}{8}$ "
7. A MINIMUM OF 2 FEET OF SOLID PIPE SHALL EXTEND LEVEL OUT OF DISTRIBUTION BOX OR DROP BOX FROM ALL OUTLETS.



DISTRIBUTION BOX DETAILS

NOT TO SCALE

ADVANCED ENVIRO-SEPTIC®
LEACHING SYSTEM



Warning and Disclaimer of Liability:
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It is a violation of the NYS Education Law for any person, unless he is acting under the direction of a licensed professional engineer or land surveyor, to alter an item in any way. If an item bearing the seal of an engineer or land surveyor is altered, the altering engineer or land surveyor shall affix to the item his seal and the notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.



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PRESBY REPLACEMENT
SEPTIC SYSTEM

CAMPBELL
RESIDENCE

4681 NORTH MENTETH DR
TM# 140.11-1-12.000

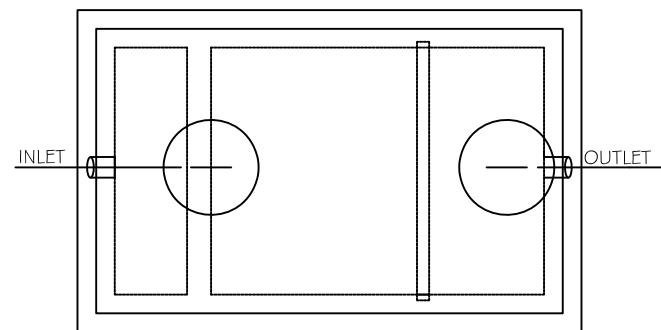
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NEW YORK

APRIL 29, 2021

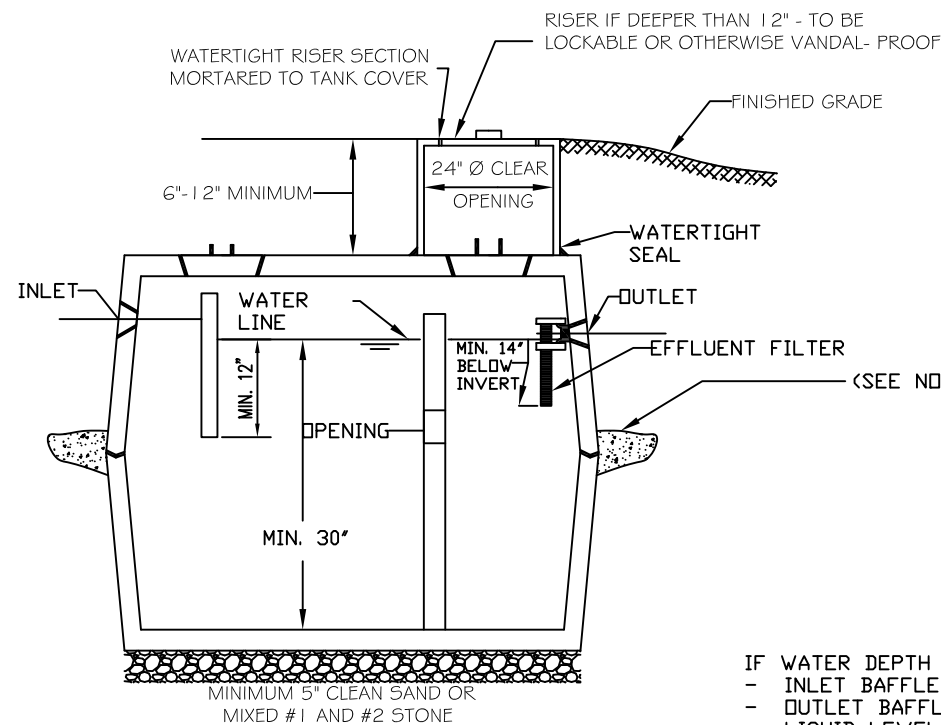
SHEET 2 OF 6



WILLIAM J. GROVE, PE
NYS LICENSE #084111



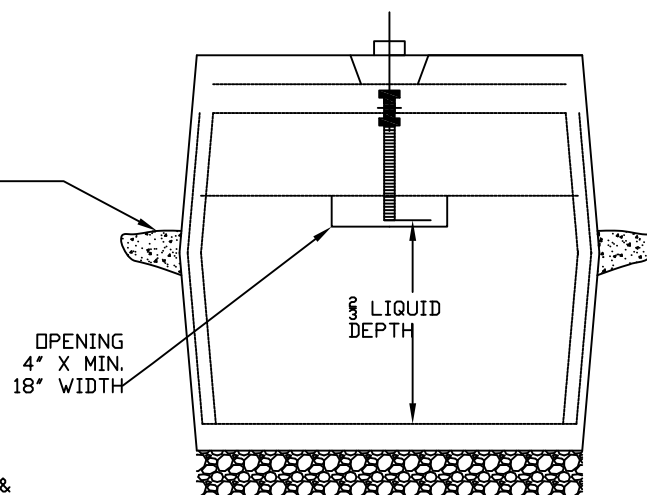
TOP VIEW



SECTION VIEW

SEPTIC TANK NOTES:

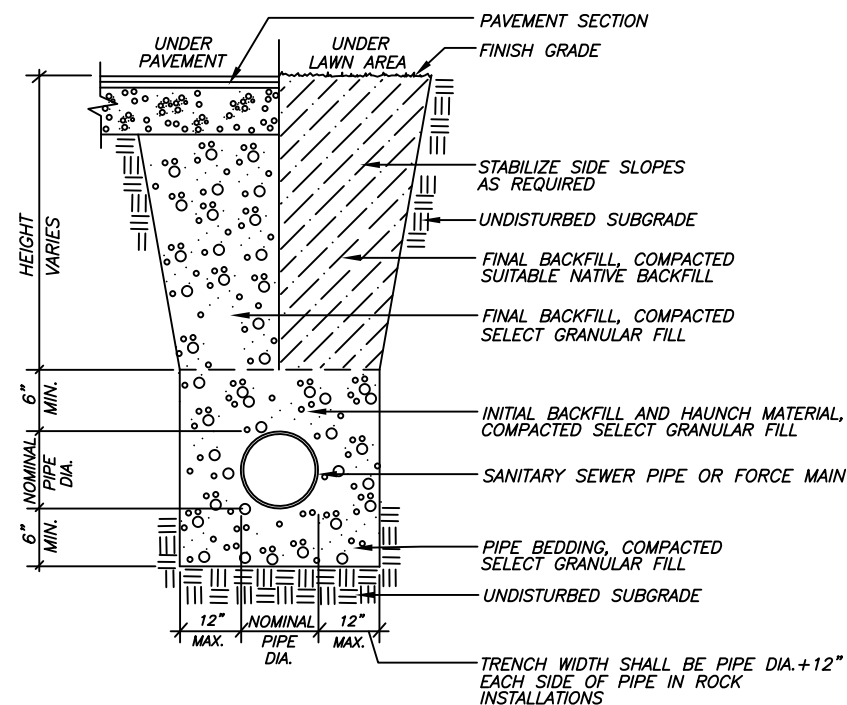
1. ALL PIPE CONNECTION SHALL BE WATERTIGHT.
2. BAFFLES SHALL BE PROVIDED AT INLET AND OUTLET OF SEPTIC TANK (WITH OUTLET FILTER)
3. A 2" MINIMUM DROP FROM INLET TO OUTLET
4. SEPTIC TANK SHALL BE PRECAST CONCRETE WITH WIRE MESH REINFORCING, OR POLYETHYLENE MINIMUM AS SHOWN ON THE SITE PLAN, DUAL-CHAMBER REQUIRED.
5. INSPECTION PORTS TO BE OF ADEQUATE DIAMETER, ONE TO BE LOCATED OVER BAFFLE TO ACCESS FILTER/BAFFLE.
6. TANK INSTALLATION IN AREA OF HIGH GROUNDWATER SHALL BE INSTALLED WITH ANTI-FLOATING DEVICE AS PER TANK MANUFACTURER.
7. TANK SPECIFICATIONS SHALL CONFORM TO NYS APPENDIX 75- A OR CURRENT STANDARDS.



END VIEW

IF WATER DEPTH OVER 40"
 - INLET BAFFLE MIN 16" &
 - OUTLET BAFFLE MIN 18" BELOW
 LIQUID LEVEL

NOT TO SCALE



SANITARY SEWER PIPE TRENCH

NOT TO SCALE

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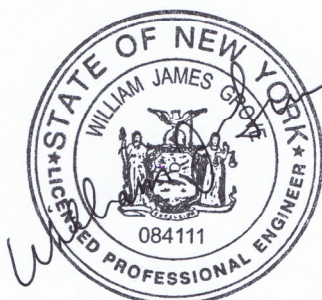
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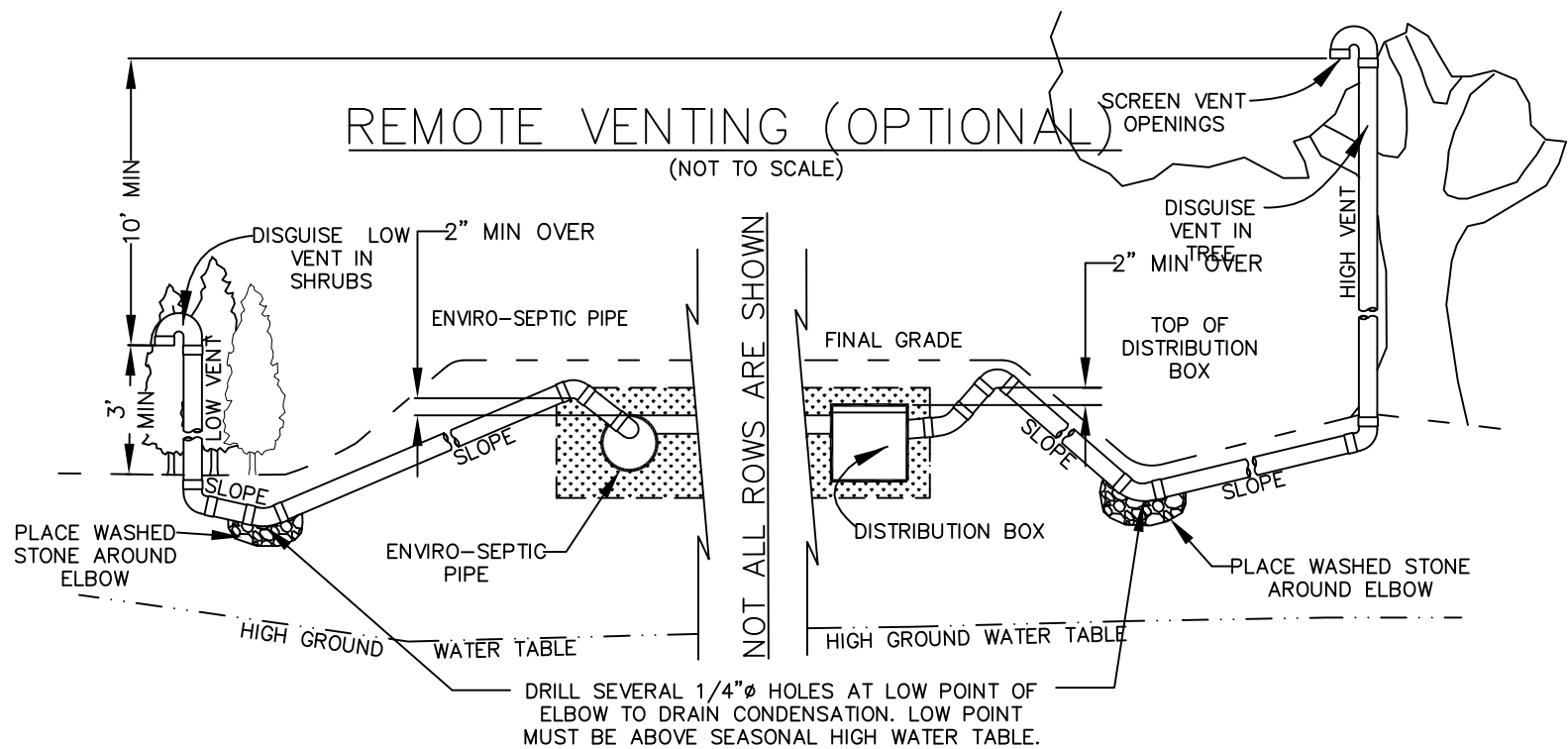
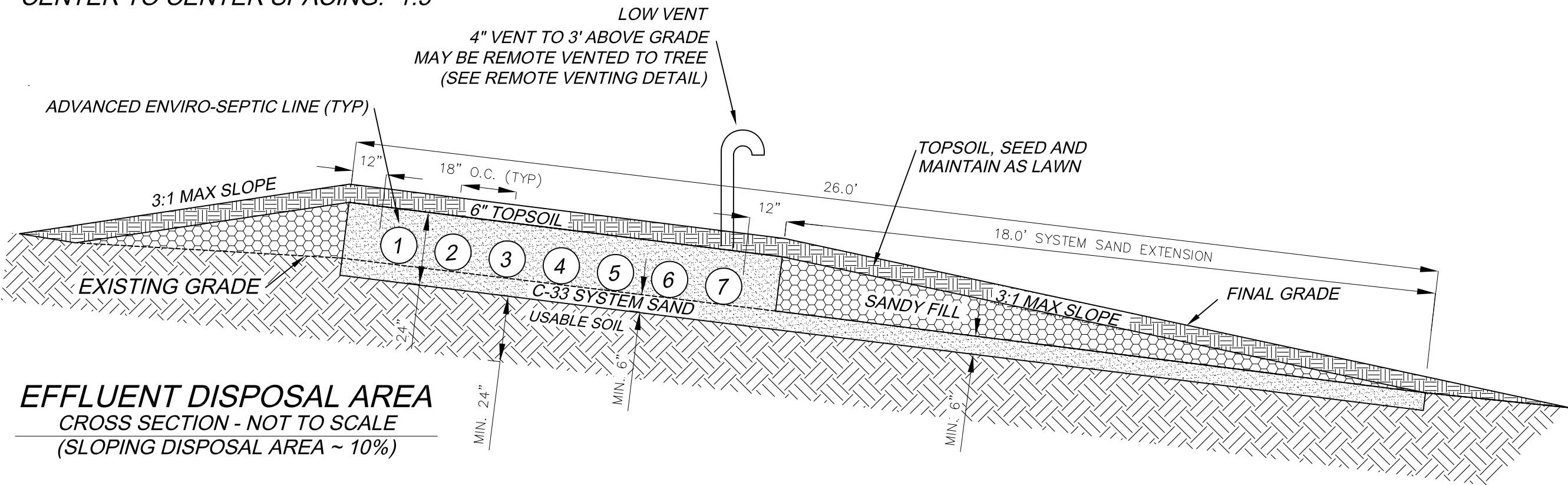
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SHEET 3 OF 6



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NUMBER OF ENVIRO-SEPTIC LINES: 7
LENGTH OF EACH LINE: 50'
CENTER TO CENTER SPACING: 1.5'



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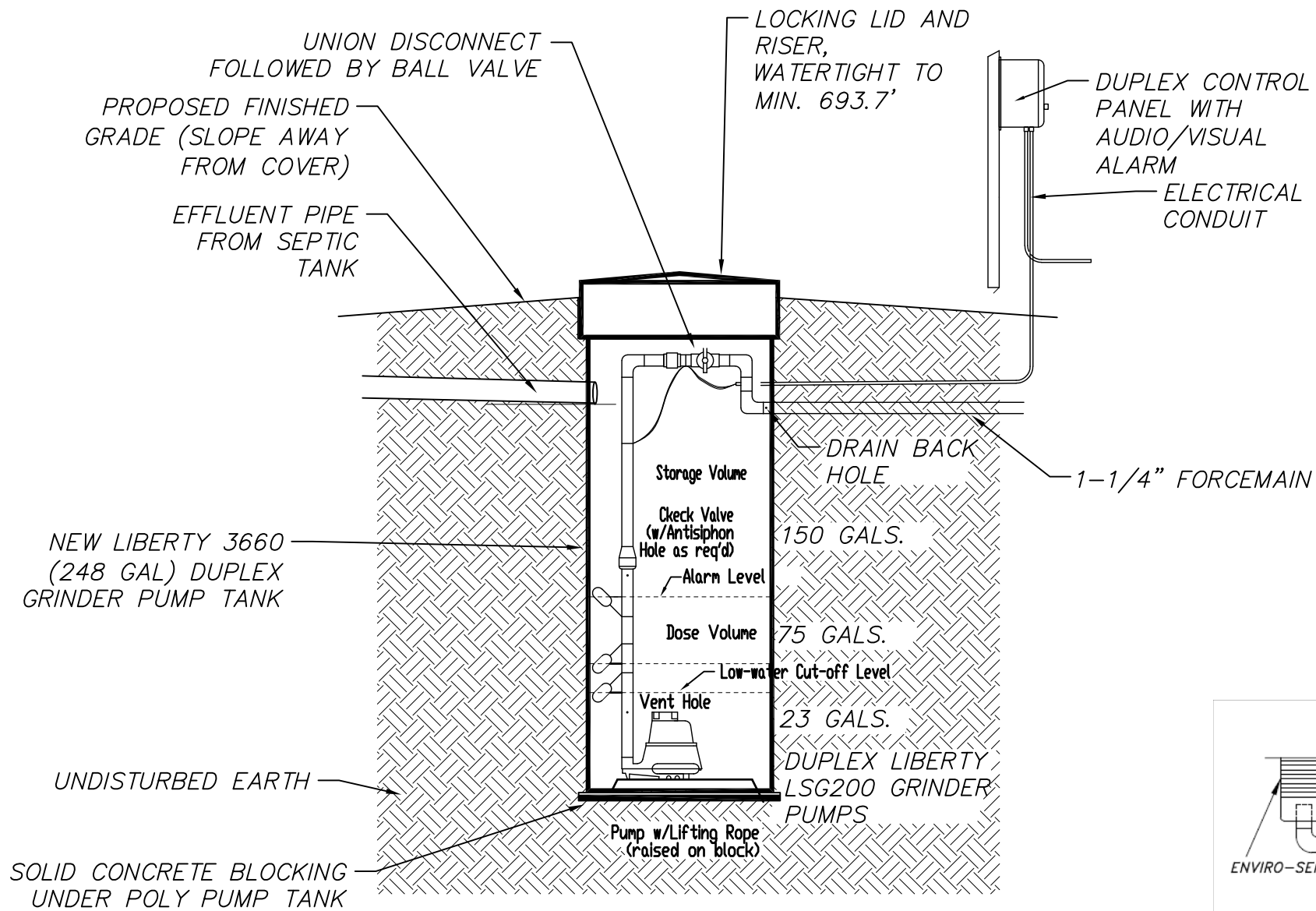
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SHEET 4 OF 6



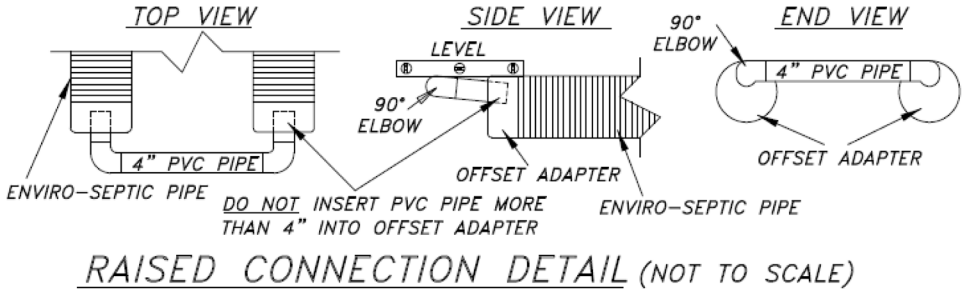
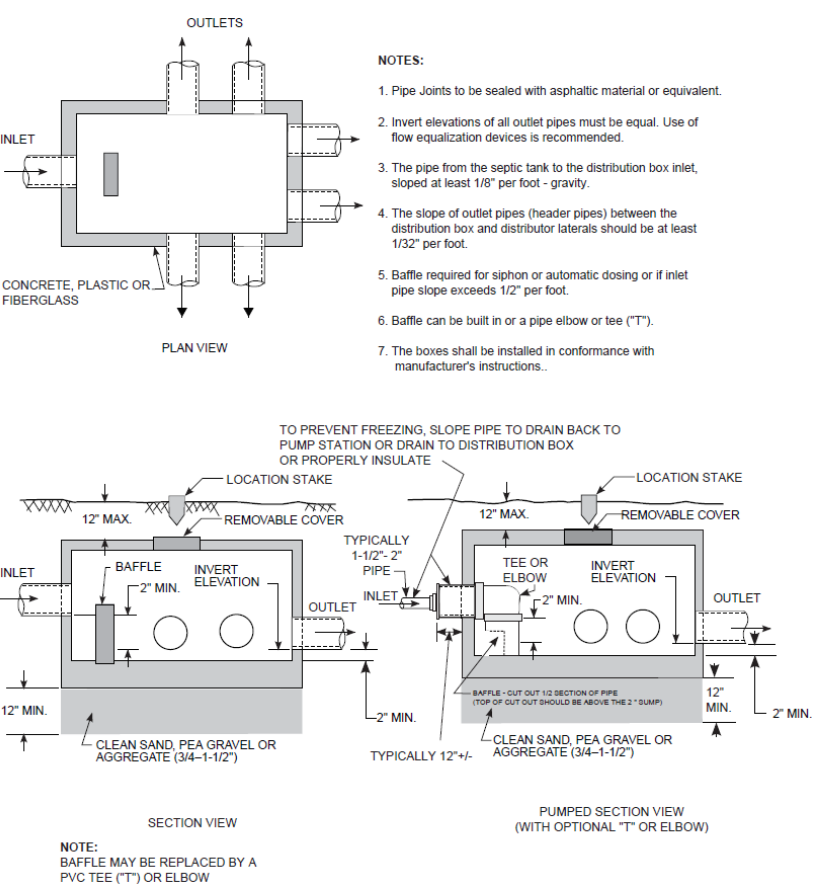
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DUPLEX GRINDER PUMP TANK DETAIL

NOT TO SCALE





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SHEET 5 OF 6



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D3600-Series Specifications

Features:

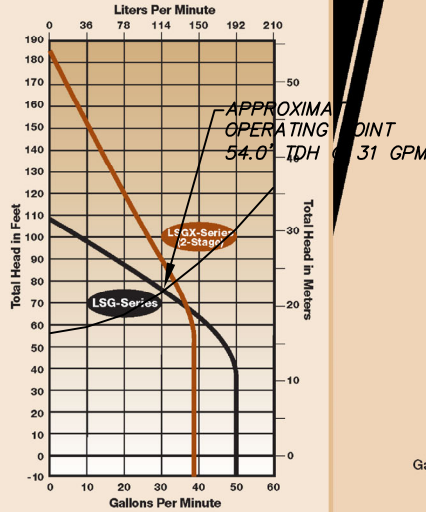
2 hp. Grinder Pump
Choose from single stage LSG or two stage LSGX-Series pumps



- Available in a wide range of voltages
- 2" discharge (exiting basin)
- 25' power cable length

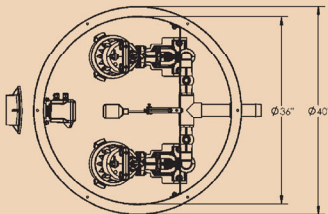
(See LSG or LSGX-Series literature for complete pump specifications.)

Performance Curves:

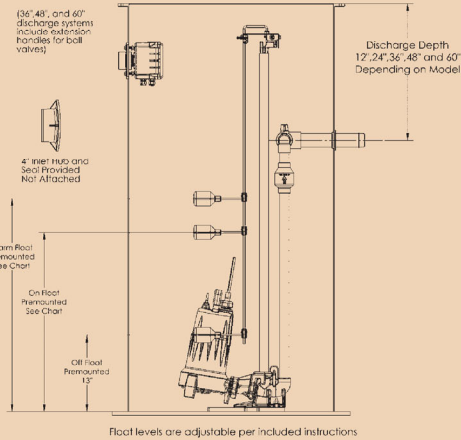


Dimensional Data

Top View



Side View



Galvanized guide rails standard. For stainless steel rails add "S" to model number.
Example: (galvanized) D3672LSG202-24-C
For steel cover option add "-SC" suffix to model number.
Example: (steel) D3672LSG202-24-SC

Factory set control levels 3600-Series

Model	Off level	On Level	Alarm Level	Volume per Pump Cycle	Total Basin Capacity
D3648	13" (33 cm)	25" (64 cm)	31" (79 cm)	62 gal. (235 liters)	211 gal. (799 liters)
D3660	13" (33 cm)	28" (71 cm)	34" (86 cm)	75 gal. (284 liters)	264 gal. (999 liters)
D3672	13" (33 cm)	31" (79 cm)	37" (94 cm)	88 gal. (333 liters)	317 gal. (1200 liters)
D3684	13" (33 cm)	34" (86 cm)	40" (102 cm)	101 gal. (382 liters)	370 gal. (1400 liters)
D3696	13" (33 cm)	37" (94 cm)	43" (109 cm)	115 gal. (435 liters)	423 gal. (1601 liters)

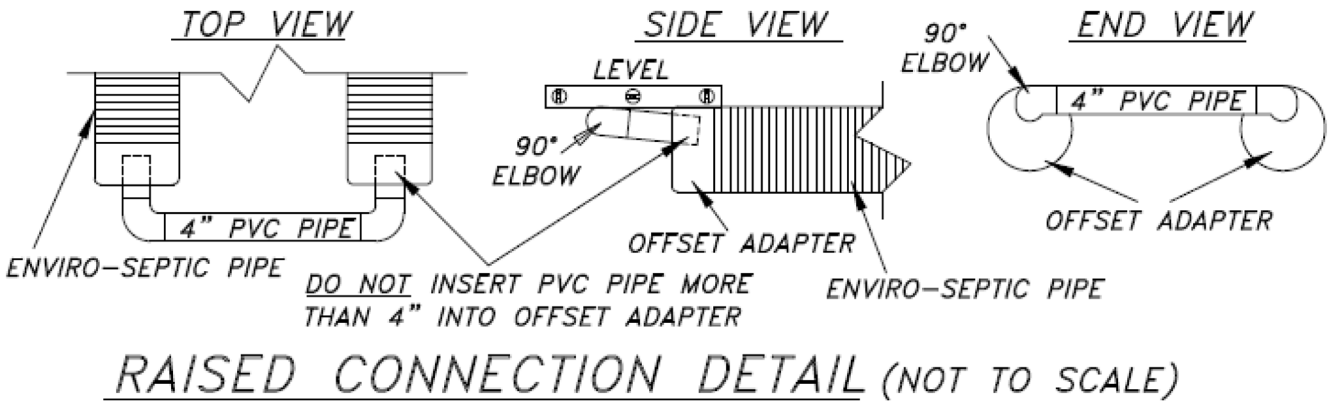
Specifications are subject to change without notice.



inno

GRINDER PUMP DESIGN CALCULATIONS

PUMP ELEVATION	687.4
OUTLET ELEVATION	744.0
STATIC HEAD	56.6
FORCE MAIN LENGTH	152
FORCE MAIN DIAMETER	1.25'
FORCE MAIN VOLUME/LF	0.0638
TOTAL FORCE MAIN VOLUME	9.7
ANTICIPATED FLOW RATE	31 GPM
FRICTION HEAD AT FLOW RATE	20.0
TOTAL DYNAMIC HEAD	76.6
DOSE VOLUME	75 GAL (65 GAL + DRAINBACK)



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SHEET 6 OF 6



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