



INTRODUCTION TO INSPECTION REQUEST STANDARDS



HOW TO BE READY FOR YOUR INSPECTION

PRESENTED BY: Joshua Barker

COMMON OBSERVATIONS

SOME KEY POINTS

- BEFORE YOU START
- WHEN SHOULD YOU REQUEST YOUR INSPECTION
- CHECKLIST
- TIMING
- AS-BUILT VS. AMENDED
- DO-NOT-BACKFILL LITERATURE
- INSPECTOR PRE-SITE VISIT

DISCLAIMER: THESE ARE SOME KEY POINTS NOT ALL



BEFORE YOU START

ASSESS YOUR SITE AND PLAN TO LOOK FOR DISCREPENCIES

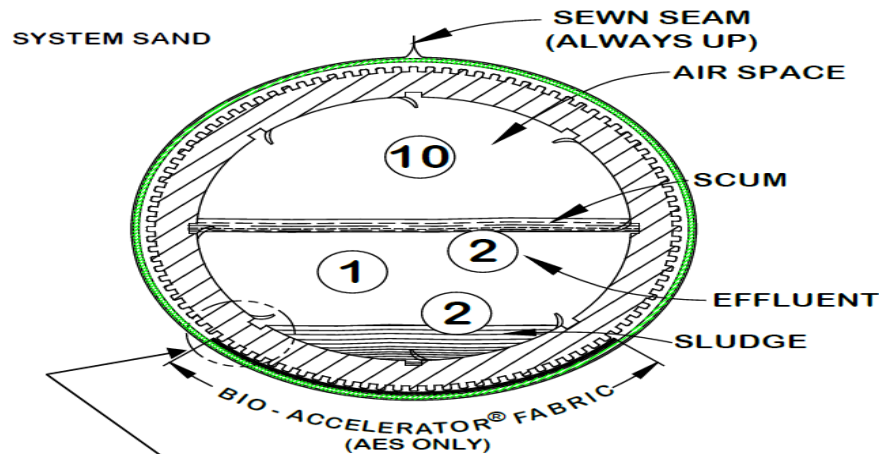
- ***LOOK AT THE PLAN WHILE ONSITE.***
- ***IS THE PLAN COMPLETE***
- **IF DISCREPENCIES ARE FOUND THE DESIGNER SHOULD BE NOTIFIED.**

Env-Wq 1004.06 Posting of Construction Approval Required. The construction approval shall be posted in a location at the site that is readily visible from a public way during construction.

SYSTEM SPECIFIC REQUIREMENTS

SEAM ALWAYS UP. WHY

Advance Enviro-Septic (AES) and Enviro-Septic (ES)

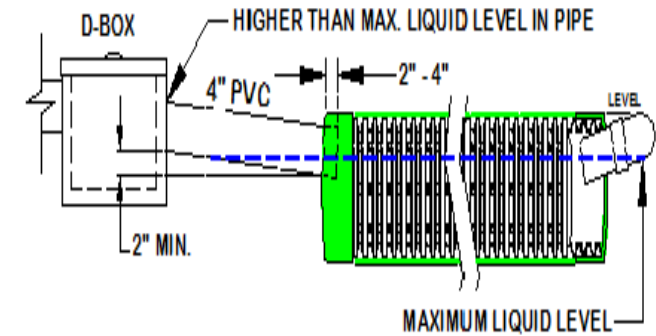


****REQUIRED AT INSPECTION****

PRESBY AES or ES

14.16 Two Inch Rule

The outlet of a septic tank or distribution box must be set at least 2 in. above the highest inlet of the AES or ES row, with the connecting pipe slope not less than 1% (approximately 1/8 in. per foot). Illustration of 2 in. rule:

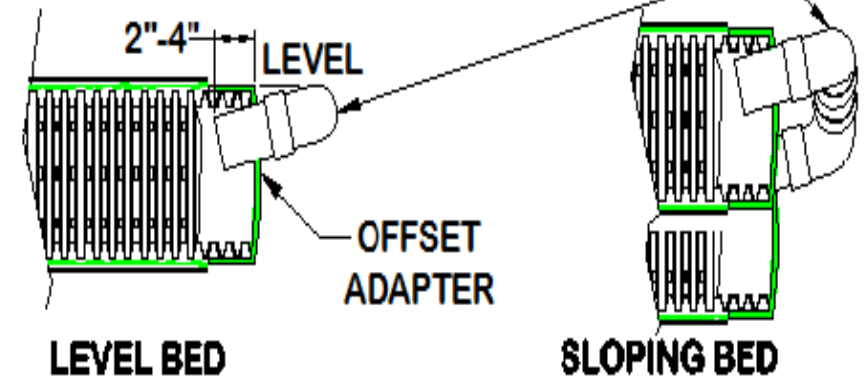


3.6 Flow Equalizers

All Presby Systems that divide flow (as do Combination Serial distribution, D-box distribution, Butterfly configuration or Multiple Bed distribution systems) must use Flow Equalizers in each distribution box outlet. A Flow Equalizer is an adjustable plastic insert installed in the outlet holes of a distribution box to equalize effluent distribution to each outlet whenever flow is divided. Each Bed or section of Combination Serial distribution is limited to a maximum of 20 gallons per minute, due to the flow constraints of the equalizers. Example: pumping to a combination system with 3 sections (using 3 D-box outlets). The maximum delivery rate is $(3 \times 20) = 60$ GPM. Always provide a means of velocity reduction when needed.

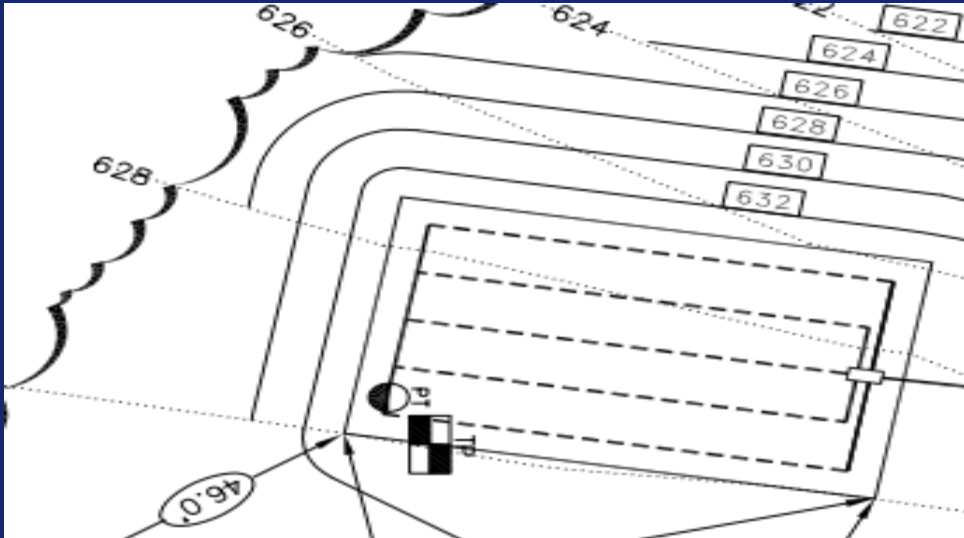


4" DIA. RAISED CONNECTION BETWEEN ROWS



SYSTEM SPECIFIC REQUIREMENTS

- PERIMETER
- SUPPLY LINES UNPERFORATED



STONE AND PIPE

****REQUIRED AT INSPECTION****

- IF THE APPROVED PLAN HAS FLOW EQUALIZERS OR EFFLUENT FILTER, THEY MUST BE INSTALLED.
- ALL SLOPES MUST BE FINISHED PRIOR TO INSPECTION.
- END MANIFOLD PIPES.

Env-Wq 1017.05 Requirements for All Effluent Conduits.

- All effluent conduits for ISDS for which an application is filed on or after the 2016 effective date of this chapter shall be equivalent to SDR 35 or stronger.
- Supply lines from the distribution box to the effluent conduits shall be unperforated pipe.

SYSTEM SPECIFIC REQUIREMENTS

ELGEN GSF

PERIMETER SUPPLY LINES UNPERFORATED

****REQUIRED AT INSPECTION****



- EFFLUENT FILTERS ARE
REQUIRED PER MANUFACTURE
DESIGN MANUAL.

All systems are required to have a minimum of:

- 6 inches of Specified Sand is at the edges of the GSF module.
- 6 inches of Specified Sand is at the beginning and end of each GSF Row.
- 6 inches of Specified Sand is directly below the GSF module.
- Minimum 12 inches of cover above the module.

WHEN SHOULD YOU REQUEST AN INSPECTION

VERIFY EVERYTHING IS COMPLETED

- PIPE FITINGS GLUED FROM HOUSE TO THE TANK
- BAFFLES INSTALLED
- STAINLESS STEEL SCREWS (IF YOU BUILT YOUR BAFFLE SCREWS REQUIRED ON THE DOWNTUBE ALSO)
- DOES THE PLAN CALL FOR AN EFFLUENT FILTER? IS THE RISER TO GRADE INSTALLED. IF SO, DOES THE CLIENT KNOW ABOUT IS MAINTENANCE?
- IS THE PIPING ENTERING AND EXITING THE TANK LEVEL.(INSIDE)
- IS THE DBOX LEVEL AND DOES IT REQUIRE FLOW EQUALIZERS(SPEED LEVELERS) OR A CONCRETE PAD.
- DO YOUR LINES EXITING THE DBOX HAVE NEGATIVE PITCH.

*****NO LINE EXITING THE DBOX SHALL BE PERFORATED.*****

- IS THERE A VENT WITH CANDYCANE(IF REQUIRED)
- IS THERE A SECOND HIGH VENT OR DBOX BYPASS BECAUSE OF A PUMP(PRESBY)

If your Address is just a street name no number, use your installer notes when inspecting to give proper directions, in between addresses on same side of road or a cone at end of driveway, company sign.

TIMING

PUTTING AN INSPECTION REQUEST IN BEFORE YOU HAVE RECEIVED AN AMENDED PLAN SHOULD NOT HAPPEN. WE NEED THE AMENDED PLAN TO VERIFY THE CORRECTIONS.

IF YOU'RE NOT DONE, **DO NOT REQUEST INSPECTION DUE TO WEATHER.**



DESIGNERS

- SDR-35 MINIMUM
- MAKE SITE VISITS
- EXISTING TANK, SHOOT
OUTLET PIPE GRADE.
- WORK WITH REVIEW
STAFF



DO-NOT-BACKFILL LITERATURE

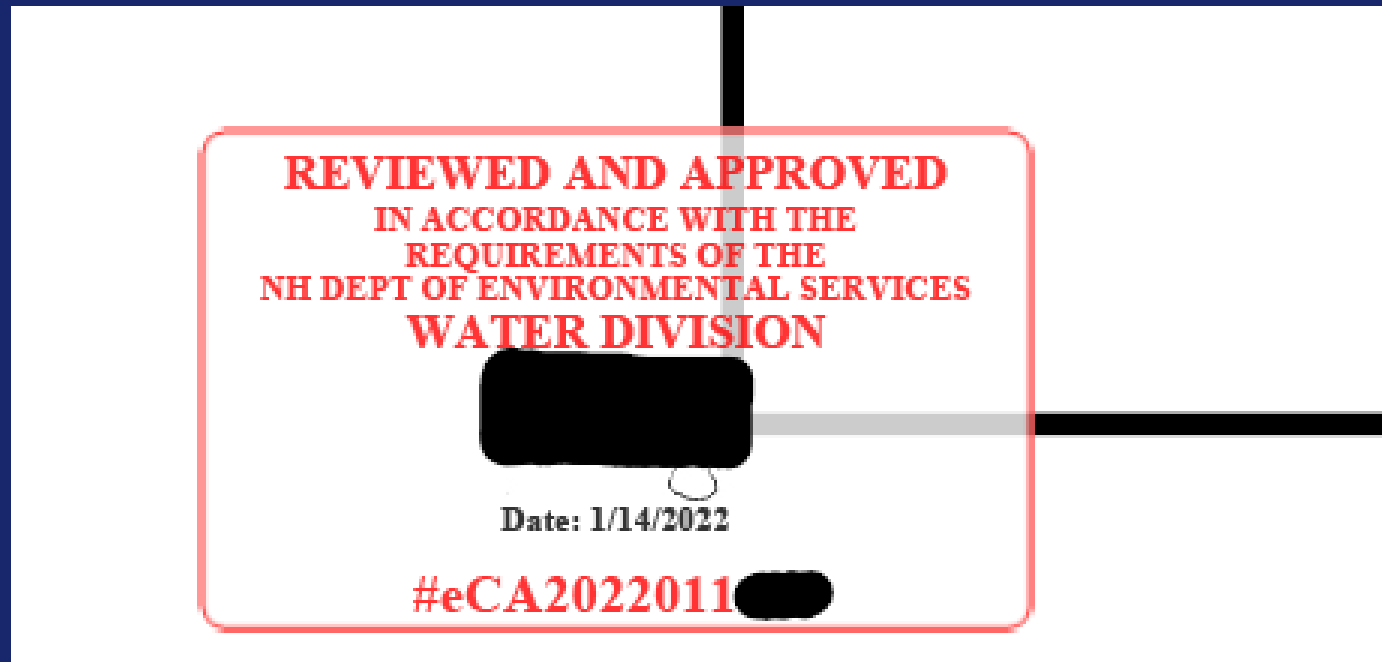
IV. REASONS:

1. Effluent Disposal Area (EDA) not as shown on approved plan. Changes to the EDA location or configuration must be reviewed by JOSHUA BARKER at JOSHUA.P.BARKER@DES.NH.GOV

IF YOU SEE THIS LITERATURE THIS DOES NOT MEAN YOU NEED TO RESUBMIT YOUR APPLICATION FOR A REVISED PLAN AND NEW eCA. THE FIELD INSPECTOR IS TELLING YOU; YOU NEED TO CALL OR EMAIL THE REVIEWER TO WORK WITH THEM SO THEY MAY MAKE THAT DETERMINATION.

JOB OF AN INSPECTOR

THE JOB OF YOUR INSPECTOR IS TO VERIFY CONDITIONS OF THE ACTUAL PHYSICAL FIELD AND SITE FOR PROPER INSTALLATION OF THE APPROVED PLAN.



****DO NOT USE A PLAN THAT DOES NOT HAVE THE APPROVAL STAMP****

ONESTOP IS A TOOL, USE IT TO VERIFY YOU HAVE RECEIVED CORRECT DOCUMENTS

BEST PRACTICES

PRESENTED BY: Jay Baas

POLE NUMBER ON PLAN FOR LOCUS



SANITARY TEE INVERTED



PUMP CHAMBER

No tape on electrical connectors inside pump chamber, use approved electrical strap clamps.

Env-Wq 1013.04 Wiring for Pumps and Alarms. All wiring for pumps and alarms shall be done by an electrician licensed to work in New Hampshire.



BAFFLES



T-BAFFLE EXTENTIONS IF USED
STILL NEED TO MAINTIN 1"
SEPARATION FROM COVER

BAFFLE EXTENTION TOP VIEW



ELECTRICAL SCH-40 4" FITTING



SCH-40 ELECTRICAL SWEEP IN SEWER LINE IS OK.



SEPTIC TANK

- Fake rock to locate tank cover.
- Grouted pipe penetration on older tank.
- Pipe support with grade stakes and tape.
- Waiver needed due to no flexible joint.



VISUAL OF FAKE ROCK OVER
TANK COVERS

DISTRIBUTION BOX BYPASS VENTING

A Visual of a great demonstration
for bypass venting.

Eliminates high vent at distribution box

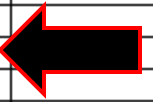


FOUNDATION DRAIN



Table 1008-2: Minimum Separation Distances (in Feet)

Component→	Septic Tank	Bed	Sewer Line
Receptor↓			
Surface Water	75	75	
Poorly Drained Jurisdictional Wetland	50	50	
Very Poorly Drained Jurisdictional Wetland	75	75	
Open Drainage	75	75	
Culvert, Tight Pipe	10	25	
Catch Basin	35	35	
Reservoir	75	75	
Water Lines, pressure	10	25	10
Water lines, suction	50	50	50
Property lines	5	10	5
Foundation, any type, with Foundation Drains	5	15	
Foundation, full cellar, without Foundation Drains	5	10	
Foundation, slab, without Foundation Drains	5	5	
Foundation Drains Outfall Pipe (Solid)	5	5	
Foundation Drain Outfall (Discharge)	25	25	
Top of Natural Embankment or Natural Steep Slope	5	20	
Stormwater Pond intercepting SHWT	50	75	
Stormwater Pond not intercepting SHWT	25	35	
Geothermal well, open loop	75	75	
Geothermal well, closed loop	25	25	
Upgradient swale to divert surface water from EDA not intercepting SHWT, below finished grade of EDA	10	25	
Upgradient swale to divert surface water from EDA not intercepting SHWT, above finished grade of EDA	10	10	
Upgradient interceptor drain intercepting SHWT to divert groundwater from EDA		25	
Outfall of upgradient interceptor drain intercepting SHWT to divert groundwater from EDA		75	



SYSTEM SETBACK TO WELL HEAD?



SEPTI-TECH



INSPECT

SEPTI-TECH CONTINUED

DRAIN BACK HOLE IN
PUMP BACK LINE
REQUIRED





SUBSURFACE SYSTEMS BUREAU REGIONAL INSPECTORS
2021



Regional map



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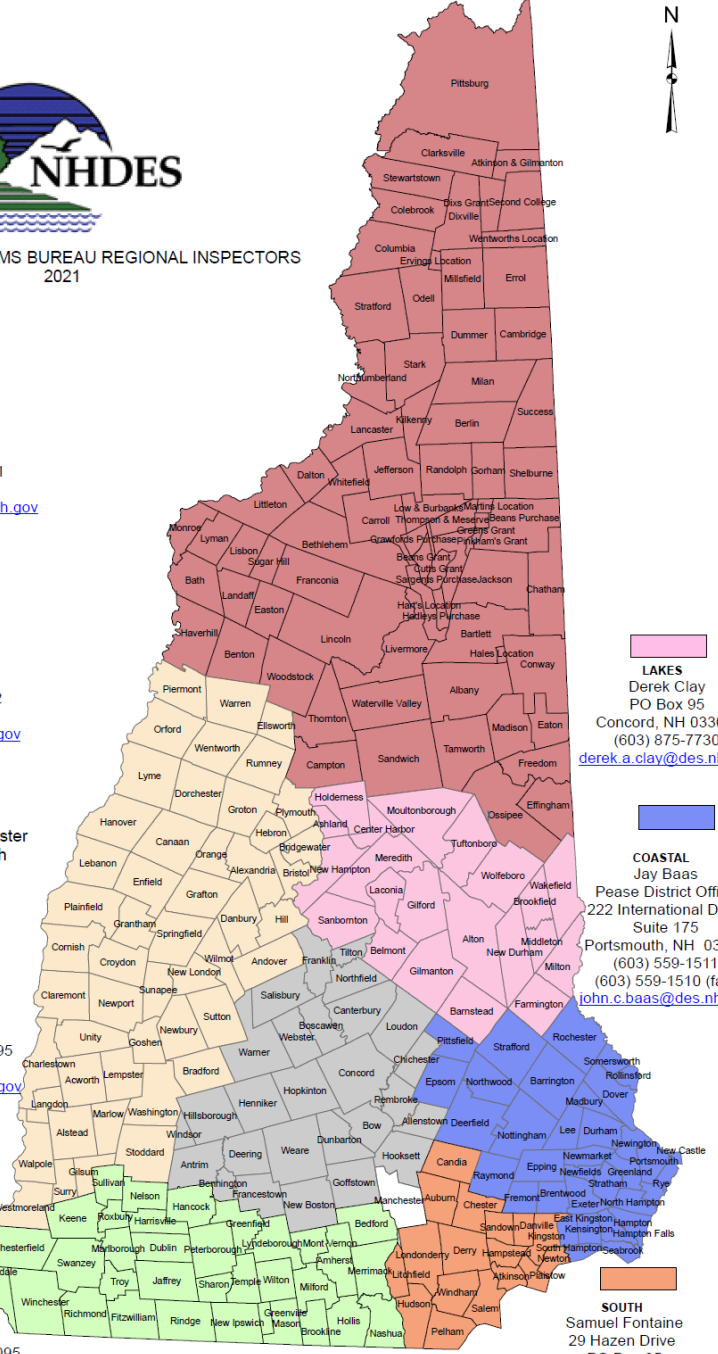
MANCHESTER
Contact City of Manchester
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Construction Approval

Operational Approval

Septic Application



An inspector will determine whether the system meets requirements

A NHDES inspector will inspect the newly-constructed septic system and evaluate the system to ensure that it has been installed in accordance with the intent of the approved plan. Once the inspector has determined that the system meets all applicable requirements, an electronic Approval for Septic System Operation will be completed with a digital copy maintained by NHDES.

REGIONAL INSPECTORS

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/ssb-regions.pdf>

QUESTIONS?

"SLOMFAST, FASTISLOW"