



MANCHESTER-BY-THE-SEA

BOARD OF HEALTH

TOWN HALL - 10 CENTRAL STREET

Manchester-by-the-Sea, Massachusetts 01944-1399

Telephone (978) 526-7385

FAX (978) 526-2009

June 25, 2024

Clifford T. Hughes
2 Orchard Lane
Manchester-by-the-Sea, MA 01944

NOTIFICATION TO OWNER

Upon receipt of the Title 5 Inspection Report amendments for the onsite sewage disposal system at:

Property Address: **2 ORCHARD LANE, MANCHESTER-BY-THE-SEA**
Property Owner: **HUGHES, CLIFFORD T and NANCY F**

Licensed Title 5 Inspector: Benjamin Prescott, D.F. Clark, Inc. SI# 13851

The Title 5 Inspection Report dated: 2/29/2024 Received at Board of Health office: 3/26/2024

Further action has been resolved:

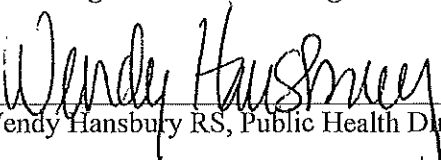
- A licensed plumber's receipt to confirm the removal of the garbage grinder was received on June 21, 2024.
- A licensed plumber's receipt to confirm the disconnection and capping of the water treatment system was received on June 25, 2024. The plumber has confirmed the disconnection of the water softener from the building sewer. Title 5 does not allow backwash of water treatment units to discharge to an on-site septic system (310 CMR 15.004(8). 'Backwash of water purification or filtration devices shall not be discharged to an on-site system. The owner of a dry well shall register the dry well in accordance with 310 CMR 27.00: *Underground Injection Control Regulations*.'

Note:

- The property is served by a private drinking water supply well. No current water quality report is on file with the Board of Health.
- The septic system is designed for 5 bedrooms/11 rooms maximum.
- The septic tank was not pumped as part of the inspection.

The Board of Health DID NOT find the septic system, as it is now used, to constitute a danger to the public health and subsequently did not order its repair/replacement at this time.

Reviewing Board of Health Agent:


Wendy Hansbury RS, Public Health Director

THIS INSPECTION reflects the present condition of the sanitary disposal system and is not any guarantee as to the life or future condition of said system. A passing Title 5 Inspection Report with pump receipts for three years within each calendar year may be used for sale of property. (Explanation: If there is a potential that your home will be sold within three years, you MUST have the septic tank pumped once a year, within a year of the date of the approved Title 5 Inspection Report for each of the three years. This allows the sale to occur with the use of the pumping reports and annual receipts abates the need for a "Title 5 System Inspection" for a property transfer within three years of the passing inspection, otherwise a passing Title 5 Inspection Report is only good for two years.)



D.F. CLARK, INC.

RECEIVED
MAR 26 2024

BOARD OF HEALTH

pd CK 48205
#135 by DF-Clark, Inc

March 19, 2024

Clifford T. Hughes
2 Orchard Lane
Manchester-by-the-Sea, MA 01944

RE: 2 Orchard Lane, Manchester-by-the-Sea

Dear Clifford:

Please find enclosed the Subsurface Sewage Disposal System Inspection Report for the above-referenced property. As noted on Part B (Certification) of the report, the system Passes the inspection criteria. The inspection is good for the next two (2) years; you may extend the life of the inspection to three (3) years by having the cesspool pumped annually (before anniversary date of inspection).

Thank you for allowing us to be of service to you on this project. Please contact us if you have any questions regarding this matter.

Sincerely,
D.F. Clark, Inc.

Benjamin "Jamie" Prescott
Title 5 Inspector

Enclosure

cc: ✓ Manchester-by-the-Sea Board of Health w/ review fee
D.F. Clark, Inc. file





Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

Inspection results must be submitted on this form. Inspection forms may not be altered in any way. Please see completeness checklist at the end of the form.

Important: When
filling out forms
on the computer,
use only the tab
key to move your
cursor - do not
use the return
key.



A. Inspector Information

Benjamin "Jamie" Prescott

Name of Inspector

D.F. Clark, Inc.

Company Name

22 Mitchell Road, PO Box 265

Company Address

Ipswich

City/Town

(978) 356-5638

Telephone Number

MA

State

01938

Zip Code

SI13851

License Number

B. Certification

I certify that: I am a DEP approved system inspector in full compliance with Section 15.340 of Title 5 (310 CMR 15.000); I have personally inspected the sewage disposal system at the property address listed above; the information reported below is true, accurate and complete as of the time of my inspection; and the inspection was performed based on my training and experience in the proper function and maintenance of on-site sewage disposal systems. After conducting this inspection I have determined that the system:

- ☒ Passes
- ☐ Conditionally Passes
- ☐ Needs Further Evaluation by the Local Approving Authority
- ☐ Fails

Inspector's Signature

Date

The system inspector shall submit a copy of this inspection report to the Approving Authority (Board of Health or DEP) within 30 days of completing this inspection. If the system has a design flow of 10,000 gpd or greater, the inspector and the system owner shall submit the report to the appropriate regional office of the DEP. The original form should be sent to the system owner and copies sent to the buyer, if applicable, and the approving authority.

Please note: This report only describes conditions at the time of inspection and under the conditions of use at that time. This inspection does not address how the system will perform in the future under the same or different conditions of use.



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

C. Inspection Summary

Inspection Summary: Complete 1, 2, 3, or 5 and all of 4 and 6.

1) System Passes:

- ☒ I have not found any information which indicates that any of the failure criteria described in 310 CMR 15.303 or in 310 CMR 15.304 exist. Any failure criteria not evaluated are indicated below.

Comments:

The system meets all the criteria for a passing Title 5 Inspection as described in 310 CMR 15.300.

Cleaned effluent filter in the septic tank at time of inspection. D.F. Clark, Inc. recommends filter be

cleaned on a yearly basis to prevent filter from clogging and possibly backing sewerage into

residence.

2) System Conditionally Passes:

- ☐ One or more system components as described in the "Conditional Pass" section need to be replaced or repaired. The system, upon completion of the replacement or repair, as approved by the Board of Health, will pass.

Check the box for "yes", "no" or "not determined" (Y, N, ND) for the following statements. If "not determined," please explain.

The septic tank is metal and over 20 years old* or the septic tank (whether metal or not) is structurally unsound, exhibits substantial infiltration or exfiltration or tank failure is imminent. System will pass inspection if the existing tank is replaced with a complying septic tank as approved by the Board of Health.

* A metal septic tank will pass inspection if it is structurally sound, not leaking and if a Certificate of Compliance indicating that the tank is less than 20 years old is available.

☐ Y ☐ N ☐ ND (Explain below):



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

C. Inspection Summary (cont.)

2) System Conditionally Passes (cont.):

☐ Pump Chamber pumps/alarms not operational. System will pass with Board of Health approval if pumps/alarms are repaired.

☐ Observation of sewage backup or break out or high static water level in the distribution box due to broken or obstructed pipe(s) or due to a broken, settled or uneven distribution box. System will pass inspection if (with approval of Board of Health):

☐ broken pipe(s) are replaced ☐ Y ☐ N ☐ ND (Explain below):

☐ obstruction is removed ☐ Y ☐ N ☐ ND (Explain below):

☐ distribution box is leveled or replaced ☐ Y ☐ N ☐ ND (Explain below):

☐ The system required pumping more than 4 times a year due to broken or obstructed pipe(s). The system will pass inspection if (with approval of the Board of Health):

☐ broken pipe(s) are replaced ☐ Y ☐ N ☐ ND (Explain below):

☐ obstruction is removed ☐ Y ☐ N ☐ ND (Explain below):

3) Further Evaluation is Required by the Board of Health:

☐ Conditions exist which require further evaluation by the Board of Health in order to determine if the system is failing to protect public health, safety or the environment.

a. System will pass unless Board of Health determines in accordance with 310 CMR 15.303(1)(b) that the system is not functioning in a manner which will protect public health, safety and the environment:



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

Owner
information is
required for every
page.

C. Inspection Summary (cont.)

- ☐ Cesspool or privy is within 50 feet of a surface water
- ☐ Cesspool or privy is within 50 feet of a bordering vegetated wetland or a salt marsh

b. System will fail unless the Board of Health (and Public Water Supplier, if any) determines that the system is functioning in a manner that protects the public health, safety and environment:

- ☐ The system has a septic tank and soil absorption system (SAS) and the SAS is within 100 feet of a surface water supply or tributary to a surface water supply.
- ☐ The system has a septic tank and SAS and the SAS is within a Zone 1 of a public water supply.
- ☐ The system has a septic tank and SAS and the SAS is within 50 feet of a private water supply well.
- ☐ The system has a septic tank and SAS and the SAS is less than 100 feet but 50 feet or more from a private water supply well**.

Method used to determine distance: _____

** This system passes if the well water analysis, performed at a DEP certified laboratory, for fecal coliform bacteria indicates absent and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.

c. Other:

4) System Failure Criteria Applicable to All Systems:

You must indicate "Yes" or "No" to each of the following for all inspections:

Yes No

☐ ☒

Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool

☐ ☒

Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool



Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

C. Inspection Summary (cont.)

4) System Failure Criteria Applicable to All Systems: (cont.)

Yes	No	
☐	☒	Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool
☐	☒	Liquid depth in cesspool is less than 6" below invert or available volume is less than ½ day flow
☐	☒	Required pumping more than 4 times in the last year NOT due to clogged or obstructed pipe(s). Number of times pumped: _____.
☐	☒	Any portion of the SAS, cesspool or privy is below high ground water elevation.
☐	☒	Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply.
☐	☒	Any portion of a cesspool or privy is within a Zone 1 of a public water supply well.
☐	☒	Any portion of a cesspool or privy is within 50 feet of a private water supply well.
☐	☒	Any portion of a cesspool or privy is less than 100 feet but greater than 50 feet from a private water supply well with no acceptable water quality analysis. [This system passes if the well water analysis, performed at a DEP certified laboratory, for fecal coliform bacteria indicates absent and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis and chain of custody must be attached to this form.]
☐	☒	The system is a cesspool serving a facility with a design flow of 2000 gpd-10,000 gpd.
☐	☒	The system fails. I have determined that one or more of the above failure criteria exist as described in 310 CMR 15.303, therefore the system fails. The system owner should contact the Board of Health to determine what will be necessary to correct the failure.

5) Large Systems: To be considered a large system the system must serve a facility with a design flow of 10,000 gpd to 15,000 gpd.

For large systems, you must indicate either "yes" or "no" to each of the following, in addition to the questions in Section C.4.

Yes	No	
☐	☐	the system is within 400 feet of a surface drinking water supply
☐	☐	the system is within 200 feet of a tributary to a surface drinking water supply
☐	☐	the system is located in a nitrogen sensitive area (Interim Wellhead Protection Area – IWPA) or a mapped Zone II of a public water supply well



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

Owner
information is
required for every
page.

C. Inspection Summary (cont.)

If you have answered "yes" to any question in Section C.5 the system is considered a significant threat, or answered "yes" to any question in Section C.4 above the large system has failed. The owner or operator of any large system considered a significant threat under Section C.5 or failed under Section C.4 shall upgrade the system in accordance with 310 CMR 15.304. The system owner should contact the appropriate regional office of the Department.

6. You must indicate "yes" or "no" for each of the following for *all* inspections:

Yes No

- | | | |
|-------------------------------------|-------------------------------------|--|
| ☒ | ☐ | Pumping information was provided by the owner, occupant, or Board of Health |
| ☐ | ☒ | Were any of the system components pumped out in the previous two weeks? |
| ☒ | ☐ | Has the system received normal flows in the previous two week period? |
| ☐ | ☒ | Have large volumes of water been introduced to the system recently or as part of this inspection? |
| ☒ | ☐ | Were as built plans of the system obtained and examined? (If they were not available note as N/A) |
| ☒ | ☐ | Was the facility or dwelling inspected for signs of sewage back up? |
| ☒ | ☐ | Was the site inspected for signs of break out? |
| ☒ | ☐ | Were all system components, excluding the SAS, located on site? |
| ☒ | ☐ | Were the septic tank manholes uncovered, opened, and the interior of the tank inspected for the condition of the baffles or tees, material of construction, dimensions, depth of liquid, depth of sludge and depth of scum? |
| ☐ | ☒ | Was the facility owner (and occupants if different from owner) provided with information on the proper maintenance of subsurface sewage disposal systems? The size and location of the Soil Absorption System (SAS) on the site has been determined based on: |
| ☒ | ☐ | Existing information. For example, a plan at the Board of Health. |
| ☒ | ☐ | Determined in the field (if any of the failure criteria related to Part C is at issue approximation of distance is unacceptable) [310 CMR 15.302(5)] |



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

D. System Information

1. Residential Flow Conditions:

Number of bedrooms (design): Five (5) Number of bedrooms (actual): Five (5)

DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): 550 gpd

Description:

As per plan prepared by Eastern Land Survey Associates. The design flow was found on the

construction permit as well as being confirmed as a five (5) bedroom system in a letter dated

February 14, 2002. There is no design plan on file.

Number of current residents: Two (2)

Does residence have a garbage grinder? ☒ Yes ☐ No

Does residence have a water treatment unit? ☒ Yes ☐ No

If yes, discharges to: Water softener backwash discharges to building sewer pipe

Is laundry on a separate sewage system? (Include laundry system inspection information in this report.) ☐ Yes ☒ No

Laundry system inspected? ☐ Yes ☒ No

Seasonal use? ☐ Yes ☒ No

Water meter readings, if available (last 2 years usage (gpd)): Private well

Detail:

The property is serviced by a private well.

Sump pump? ☐ Yes ☒ No

Last date of occupancy: Currently occupied



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

D. System Information (cont.)

2. Commercial/Industrial Flow Conditions:

Type of Establishment:

Design flow (based on 310 CMR 15.203):

Gallons per day (gpd)

Basis of design flow (seats/persons/sq.ft., etc.):

Grease trap present?

☐ Yes ☐ No

Water treatment unit present?

☐ Yes ☐ No

If yes, discharges to:

Industrial waste holding tank present?

☐ Yes ☐ No

Non-sanitary waste discharged to the Title 5 system?

☐ Yes ☐ No

Water meter readings, if available:

Last date of occupancy/use:

Date

Other (describe below):

3. Pumping Records:

Source of information:

According to homeowner, system was last pumped in 2022.

Was system pumped as part of the inspection?

☐ Yes ☒ No

If yes, volume pumped:

gallons

How was quantity pumped determined?

Reason for pumping:



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

D. System Information (cont.)

4. Type of System:

- ☒ Septic tank, distribution box, soil absorption system
- ☐ Single cesspool
- ☐ Overflow cesspool
- ☐ Privy
- ☐ Shared system (yes or no) (if yes, attach previous inspection records, if any)
- ☐ Innovative/Alternative technology. Attach a copy of the current operation and maintenance contract (to be obtained from system owner) and a copy of latest inspection of the I/A system by system operator under contract
- ☐ Tight tank. Attach a copy of the DEP approval.
- ☐ Other (describe):

Approximate age of all components, date installed (if known) and source of information:

The Certificate of Compliance on file with the Board of Health is dated October 14, 1994.

Were sewage odors detected when arriving at the site?

☐ Yes ☒ No

5. Building Sewer (locate on site plan):

Depth below grade:

2.08
feet

Material of construction:

☐ cast iron

☒ 40 PVC

☐ other (explain):

Distance from private water supply well or suction line:

50'+/-
feet

Comments (on condition of joints, venting, evidence of leakage, etc.):

The building sewer pipe is in good condition with no evidence of leakage. The backwash from the water treatment discharges into the building sewer pipe.



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

D. System Information (cont.)

6. Septic Tank (locate on site plan):

Depth below grade:

1.33
feet

Material of construction:

☒ concrete

☐ metal

☐ fiberglass

☐ polyethylene

☐ other (explain)

If tank is metal, list age:

years

Is age confirmed by a Certificate of Compliance? (attach a copy of certificate)

☐ Yes ☐ No

Dimensions:

10' L x 5' W x 4' D

Sludge depth:

4"

Distance from top of sludge to bottom of outlet tee or baffle

25"

Scum thickness

0"

Distance from top of scum to top of outlet tee or baffle

N/A

Distance from bottom of scum to bottom of outlet tee or baffle

N/A

How were dimensions determined?

Tape measure & Sludge Judge

Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.):

The septic tank is 16" below grade under the paved driveway. The inlet baffle is in place and there is

a filter present in the outlet tee. The filter was cleaned at the time of inspection. The liquid level is

normal and equals the outlet invert. There is no evidence of leakage and the septic tank appears to

structurally sound. Pumping is not required based on the guidelines set forth in 310 CMR 15.351.



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

D. System Information (cont.)

7. Grease Trap (locate on site plan):

Depth below grade:

feet

Material of construction:

☐ concrete

☐ metal

☐ fiberglass

☐ polyethylene

☐ other (explain):

Dimensions:

Scum thickness

Distance from top of scum to top of outlet tee or baffle

Distance from bottom of scum to bottom of outlet tee or baffle

Date of last pumping:

Date

Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.):

8. Tight or Holding Tank (tank must be pumped at time of inspection) (locate on site plan):

Depth below grade:

Material of construction:

☐ concrete

☐ metal

☐ fiberglass

☐ polyethylene

☐ other (explain):

Dimensions:

Capacity:

gallons

Design Flow:

gallons per day



Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

D. System Information (cont.)

8. Tight or Holding Tank (cont.)

Alarm present:

☐ Yes

☐ No

Alarm level: _____

Alarm in working order:

☐ Yes

☐ No

Date of last pumping:

Date

Comments (condition of alarm and float switches, etc.):

* Attach copy of current pumping contract (required). Is copy attached?

☐ Yes

☐ No

9. Distribution Box (if present must be opened) (locate on site plan):

Depth of liquid level above outlet invert

0"

Comments (note if box is level and distribution to outlets equal, any evidence of solids carryover, any evidence of leakage into or out of box, etc.):

The distribution box ("d-box") is 15" below grade and measures 30" x 20". The liquid level is normal

and equals the outlet inverts. There is equal distribution between the five (5) lines leaving. There are

speed levelers in the outlets. There is no evidence of leakage or infiltration. There is no evidence of

solids carryover.



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

D. System Information (cont.)

10. Pump Chamber (locate on site plan):

Pumps in working order:

☐ Yes

☐ No*

Alarms in working order:

☐ Yes

☐ No*

Comments (note condition of pump chamber, condition of pumps and appurtenances, etc.):

* If pumps or alarms are not in working order, system is a conditional pass.

11. Soil Absorption System (SAS) (locate on site plan, excavation not required):

If SAS not located, explain why:

Type:

☐

leaching pits

number:

☐

leaching chambers

number:

☐

leaching galleries

number:

☐

leaching trenches

number, length:

☒

leaching fields

number, dimensions:

One (1) @
32' x 25'

☐

overflow cesspool

number:

☐

innovative/alternative system

Type/name of technology:



Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

D. System Information (cont.)

11. Soil Absorption System (SAS) (cont.)

Comments (note condition of soil, signs of hydraulic failure, level of ponding, damp soil, condition of vegetation, etc.):

There is no ponding over or signs of hydraulic failure within the soil absorption system ("SAS"). The

SAS consists of five (5) lines. The vegetation is overgrown over the d-box and SAS. The soil is

normal and not damp. There was minimal solids carryover when the SAS was inspected by camera.

The bottom of the SAS is 33" below the current grade.

12. Cesspools (cesspool must be pumped as part of inspection) (locate on site plan):

Number and configuration

Depth – top of liquid to inlet invert

Depth of solids layer

Depth of scum layer

Dimensions of cesspool

Materials of construction

Indication of groundwater inflow

☐ Yes ☐ No

Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.):



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

D. System Information (cont.)

13. Privy (locate on site plan):

Materials of construction:

Dimensions

Depth of solids

Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.):

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

MA

01944

February 29, 2024

State

Zip Code

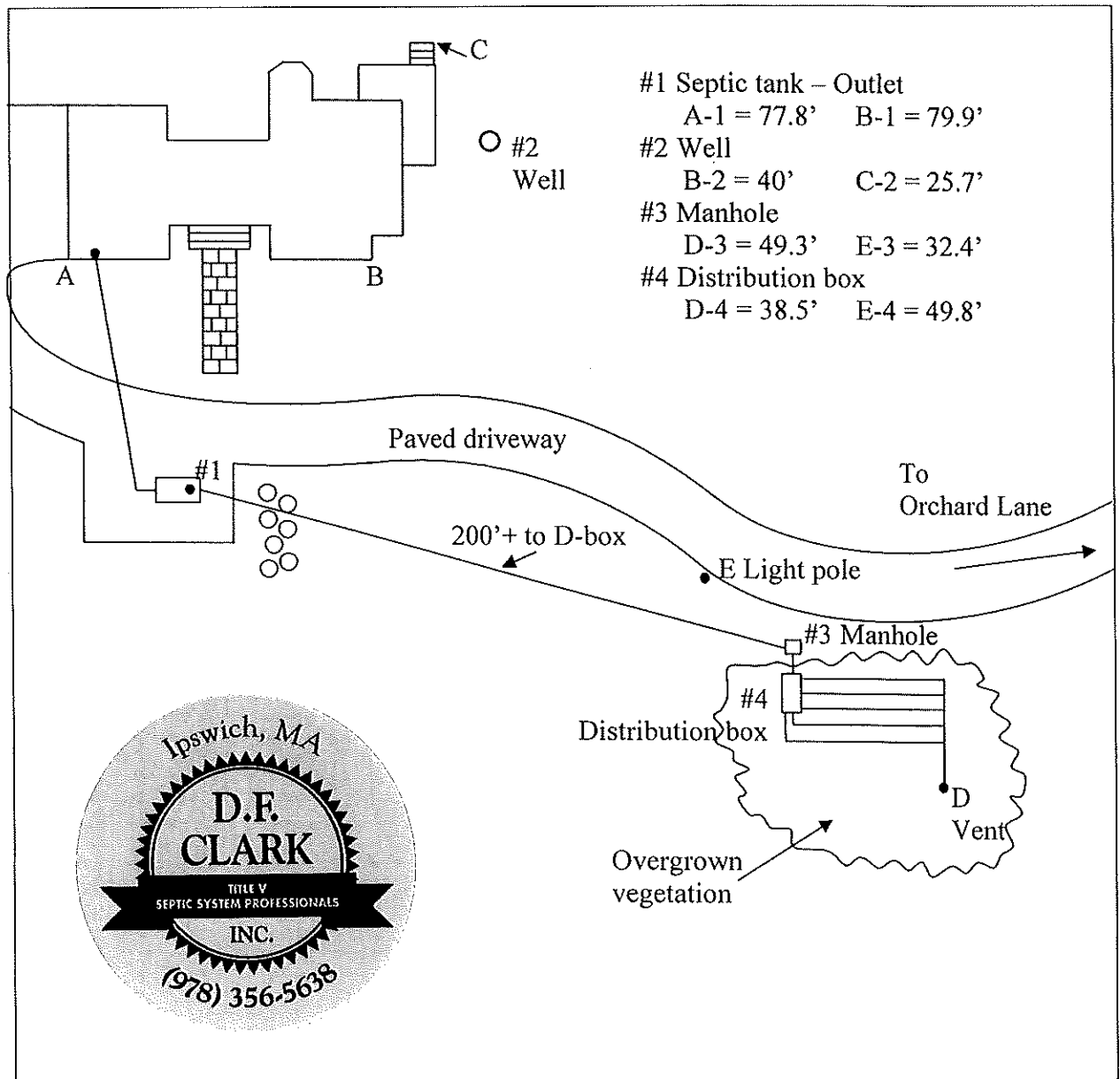
Date of Inspection

D. System Information (cont.)

14. Sketch Of Sewage Disposal System:

Provide a view of the sewage disposal system, including ties to at least two permanent reference landmarks or benchmarks. Locate all wells within 100 feet. Locate where public water supply enters the building. Check one of the boxes below:

- ☒ hand-sketch in the area below
☐ drawing attached separately





Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

D. System Information (cont.)

15. Site Exam:

- ☒ Check Slope – There is a steep slope in the back of the property.
- ☒ Surface water – None observed.
- ☒ Check cellar – Dry with no sump pump.
- ☒ Shallow wells – None located.

Estimated depth to high ground water: > 6'
feet

Please indicate all methods used to determine the high ground water elevation:

- ☐ Obtained from system design plans on record

If checked, date of design plan reviewed:
Date

- ☐ Observed site (abutting property/observation hole within 150 feet of SAS)

- ☐ Checked with local Board of Health - explain:

- ☐ Checked with local excavators, installers - (attach documentation)

- ☒ Accessed USGS database - explain:

USDA Soil Conservation Service Soil Survey of Essex County, Massachusetts, Southern
Part Sheet Number 8

You **must** describe how you established the high ground water elevation:

The U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Essex County,

Massachusetts, Southern Part, Sheet Number 8 describes the soil in this area as Chatfield-Hollis-

Rock outcrop association with high groundwater greater than 6'. No soil testing within 150' of the SAS
is available. There is no indication of interfacing between the bottom of the SAS and seasonal high
groundwater.

Before filing this Inspection Report, please see Report Completeness Checklist on next page.



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner
information is
required for every
page.

2 Orchard Lane

Property Address

Clifford T. Hughes

Owner's Name

Manchester-by-the-Sea

City/Town

MA

State

01944

Zip Code

February 29, 2024

Date of Inspection

E. Report Completeness Checklist

Complete all applicable sections of this form inclusive of:

☒ A. Inspector Information: Complete all fields in this section.

☒ B. Certification: Signed & Dated and 1, 2, 3, or 4 checked

☒ C. Inspection Summary:

1, 2, 3, or 5 completed as appropriate

4 (Failure Criteria) and 6 (Checklist) completed

☒ D. System Information:

For 8: Tight/Holding Tank – Pumping contract attached

For 14: Sketch of Sewage Disposal System drawn on pg. 16 or attached

For 15: Explanation of estimated depth to high groundwater included