

SUMMARY 98 Mystic Dr, Norwich, VT 05055 Laura Perras March 21, 2024



# 2.2.1 Coverings DRIP-EDGE/CEDAR

- Recommendation

The roof covering was installed with a cedar dripline at all eaves.

This is a nice and traditional way to extend the drip-line, but the shingle edge is usually capped with drip-edge flashing.

- No drip-edge flashing installed at cedar eaves and I noted moderate moisture intrusion and some decay to cedar edges particularly at the back eave.

From what I could see, this is becoming the weakpoint in the roof covering. The cedar can wick moisture up its length/under shingles.

Expect that eave repairs will likely be needed before the main roof has come to the end of it's life.

Recommendation Contact a qualified professional.



Uncapped cedar absorbing a lot of moisture



- Recommendation

lower courses of siding and trim under roof eaves are exposed to excessive splash around this home, and this is leading to siding/trim decay.

- At the front entry door splash off the stone steps has lead to casing and jamb decay.

Repairs will be needed, and I recommend installing flashing between the stone and home to protect wooden siding (damp behind stone as well).

- At the back door the the garage splash has rotted the casing and jamb. A diverter was added at the eave above, but at the time of the inspection this door was still receiving a lot of splash. Door frame repairs or (more likely) replacement will be needed.

- Similar decay noted to corner trim at the back of the home and lattice wrap/trim around the back porch as well as bottom edges of garage door casings

Siding and trim repairs needed. Adding gutters and correcting grading around the home will likely be beneficial as well.

Consider installing materials suitable for ground contact at lower courses/sections such as PVC, PT etc

Recommendation Contact a qualified professional.



Splash at front steps



Garage rear



Decay at front entry



Ditto at front entry jamb



Rotting jamb



Back corner



Lattice and porch trim



Garage

### 3.2.2 Siding, Flashing & Trim WINDOW EXTERIORS

Brosco brand windows. These are nice units, but traditionally built wood units, so they require regular ongoing maintenance.

Decay to window sills and bottom edges of window jambs is common for this age and style of Brosco window.

- Decayed window casings noted intermittently around the home (most notable at the back of the living room)

- Sills, jambs and sashes are due for painting/re-sealing

NOTE: Several windows show signs of past patches/repairs already.

This will be ongoing repairs with these windows. Brosco has since changed their design and uses composite sills and jambs to prevent this.

IT is very important to keep these well sealed in paint/finish.

Recommendation Contact a qualified professional.



Brosco Window units

Keep sills and jambs sealed







Soft behind paint

Paint/protect sills

Ditto

# 3.3.2 Exterior Doors BASEMENT EGRESS



All living areas should have at least two means of egress (exit). Basement living areas lack direct egress.

- Windows in boiler room are too high above ground for egress

- No egress from living room, and basement door leads to garage (not directly to outdoors as required). Additionally, for a stairwell to qualify as egress it must be lit and have a handrail.

This basement is not really suitable for use as living space in its current configuration.

NOTE: Local or State Fire Marshalls can make exemptions as they see fit.



No egress

Through utility room into garage

Too high for egress and not in living room

### 3.5.1 Decks, Balconies, Porches & Steps **NO RAILINGS**

Because of the height of the screen porch (30 inches or greater above the ground) railings should be installed.

The railings should be set 36 inches high (minimum), and no opening below the top rail should exceed 4 inches.

Proper railings should be installed by a qualified contractor.

Recommendation Contact a qualified professional.

3.5.2 Decks, Balconies, Porches & Steps HANDRAILS- ALL

Any steps with four or more risers should have a handrail installed.

Handrails should be set between 34-38 inches, and run continuously from the lowest tread to the upper landing.

Steps four feet wide or greater should have handrails installed on both sides.

- No handrails installed at front entry steps

- No handrail installed at el entry steps
- no handrails installed at deck steps
- Recommendation Contact a qualified professional.







# 4.3.2 Basements & Crawlspaces MOISTURE/MOLD



Staining noted on baseboard trim in basement closet, storage area and in the area of the water softener. This is light staining consistent with mold/fungal growth from elevated moisture.

- One self-draining dehumidifier installed in closet, staining remains in this area and should be cleaned

- not self-draining dehumidifier in storage area; this is only as effective as you are at emptying the collected water

Staining remains here on baseboard, and light staining is visible on ceilings.

While staining is light it is fairly widespread around the basement.

This is really toeing the line of needing professional cleaning to prevent recurrence.

Assessment and cleaning by a mold remediation company would not be a bad idea for this space.

Without completing air-sealing/insulation you are fighting outdoor moisture/humidity.

See air-sealing and moisture prevention notes in this section



Light staining at basement closet



Storage room



Light staining on baseboard



Light staining on ceilings (hard to se in picture)

5.3.1 Main & Subpanels, Service & Grounding, Main Overcurrent Device

#### DOUBLE TAPPED

Recommendation

There is a breaker (#1) in the main panel that has been double tapped.

This is when multiple lines are fed into a terminal that is designed to only accept one.

This is a common occurrence, but it is considered incorrect/unsafe wiring practice.

This can be easily corrected.

I recommend correction by a qualified electrical contractor.



5.4.1 Branch Wiring Circuits, Breakers & Fuses UNCOVERED JUNCTION BOXES

Recommendati

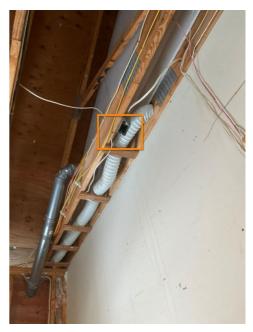
In the home there is an uncovered junction box.

- garage ceiling 1x

# ALL receptacles need to have an appropriate cover installed.

This can be very easily (and inexpensively) corrected.

Recommendation Contact a qualified professional.



#### 5.4.2 Branch Wiring Circuits, Breakers & Fuses **EXPOSED ROMEX**

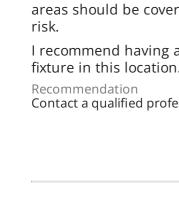
Recommendation

Wiring in living spaces should be properly secured/covered or sealed in an appropriate conduit to prevent accidental damage.

- Unsecured and unprotected wire in master bedroom knee-wall storage area.

This can allow wire to be damaged or snagged.

This should be secured and better protected.



5.5.1 Lighting Fixtures, Switches & Receptacles

### **UNCOVERED FIXTURE**

Uncovered fixtures were found:

- in bedroom closets

Fixtures above shelving/closet poles, and in storage areas, or traffic areas should be covered to protect from breakage, and minimize fire

I recommend having a qualified electrical contractor install a covered fixture in this location.

Contact a qualified professional.

### 5.6.1 GFCI & AFCI **MISSING GFCI**

The outlets in the following areas should be upgraded to GFCI protected units by a qualified electrical contractor.

-garage (one existing GFCI no longer functions, and this needs a new cover plate as well)

- basement utility area incomplete
- Kitchen (one inoperable GFCI, one unprotected outlet by fridge)







Recommendation Contact a qualified professional.







Garage

Basement

Kitchen



Kitchen

### 5.7.1 Smoke/CO Detectors MONITORED DETECTORS



Smoke detectors that are tied to the monitored alarm system need to be periodically cleaned and inspected by a qualified alarm technician.

I can not verify the proper operation or age of these units during a residential inspection.

I recommend requesting service records from the homeowner.

If records from the past 12 months are not available, the detectors should be serviced/inspected by a qualified technician

- Heat and one smoke detector tied to central system.

If not current/up to date, a local heat detector should be installed in the garage



# 5.7.2 Smoke/CO Detectors INADEQUATE DETECTORS



All smoke and carbon monoxide detectors in the home have either already expired or will in the next 6 months.

- Basement expired and lacks CO
- First floor hallway expired and lacks CO
- Second floor hallway expired
- bedrooms expired or expire in the next 6 months

Detectors must be replaced at all locations.

When hard-wired locations are available, detectors must be hardwired (all are and must stay hard-wired)



Expired and disconnected in second hall

Recommendation Contact a qualified professional.

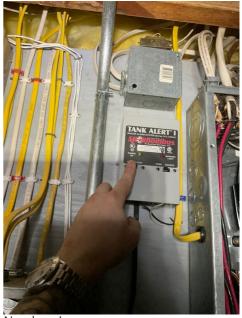
6.3.1 Drain, Waste, & Vent Systems **PUMP ALARM** 



The septic pump alarm did not function during the inspection.

If this does not alert to pump failure you could end up with a real sewage issue.

the pump control/alarm should be replaced by a qualified contractor



No alarm!

# 6.5.1 Hot Water Systems, Controls, Flues & Vents **SETUP INFO AND NOTES**



Solar collectors circulate first through the small AET transfer tank mounted above the boiler.

From here, water is transferred to the SuperStor tank where it transfers heat to domestic hot water.

This tank is run in series with the Bradford White tank which is indirectly heated by the boiler.

With this system, solar collectors pre-heat domestic hot water and the boiler will make up the difference when solar doesn't keep up with demand.

- The Bradford White (boiler fed) tank is starting to show its age with corrosion forming at the base and at the boiler inlet.

This unit was manufactured in 2007, and may be nearing the end if it's life.



From solar collectors...

To transfer tank...

... to SuperStor



BW tank with base corrosion

And weeping/corrosion at boiler inlet

### 6.5.2 Hot Water Systems, Controls, Flues & Vents **MIXING VALVE/SETTING**



Water heaters installed in 2005 or later should have a mixing valve installed to prevent potential scalding while maintaining a water temperature in the tank that is sufficient to kill bacteria. Water temperature should be set between 120 and 130 degrees Fahrenheit, to maintain a temperature adequate to kill bacteria, but without reaching scalding levels.

- Domestic hot water does have a mixing valve installed, but water temperature exceeded 140 degrees at fixtures.

This is adequate to cause scalds/burns. Temperature should not exceed 125.

the mixing valve should be adjusted or replaced by a qualified contractor

Recommendation Contact a qualified professional.



Mixing valve

тоо нот

#### 6.6.1 Fuel Storage & Distribution Systems **PROPANE TANK**



The blocks supporting the propane tank have settled and tipped.

The tank and/or blocks should be re-set/shimmed to provide a stable base.

Recommendation Contact a qualified professional.



6.6.2 Fuel Storage & Distribution Systems **OIL TANK INSPECTION- SOON** 



- Tank inspected in 2021, coming due for next inspection this summer.

Tank manufactured in 1998

NOTE: The State of VT now requires above-ground oil tanks to be inspected every three years, and at transfer of ownership.

Recommendation Contact a qualified professional.



Service Performed								
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### 7.2.1 Equipment **NEEDS SERVICING/CLEANING**



7.2.2 Equipment

need regular repairs.

#### 7.4.1 Distribution Systems AGE/CORROSION/LEAKS

The heating distribution system is showing it's age:

- Weeping and mineral buildup noted at valves and fittings throughout the system, including at mixing valve on transfer tank

- Leaking TPR valve in need of replacement

The time for repairing/replacing valves and main heating distribution components is near Recommendation Contact a qualified professional.

### The boiler was manufactured in 1998 Peerless boilers are well known for their reliability, and longevity.

AGE AND CONDITION

- This unit is showing it's age and records show dwindling efficiency (now barely above 80%)

A boiler of this age will require regular upkeep, and may begin to

It would be reasonable to plan for boiler replacement in the near future.

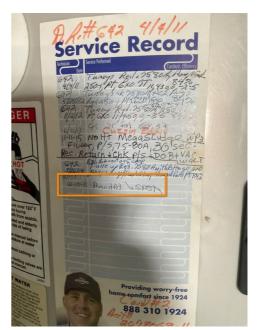
Heating appliances should be serviced annually.

A record of all service and repairs should be kept within sight of the unit.

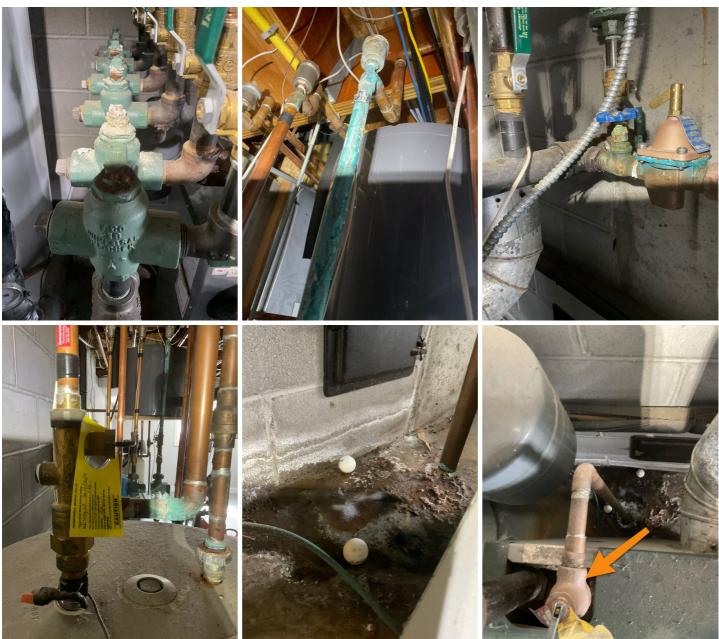
I was unable to locate a log of maintenance beyond 2019.

I recommend having this unit serviced by a qualified technician prior to use.

NOTE: The homeowners may have receipt of more recent servicing.







TPR leak



### 8.2.1 Vents, Flues & Chimneys CHIMNEY MAINTENACE- UPCOMING



Keeping masonry chimneys well sealed and mortar joints sound will help minimize moisture absorption that leads to deterioration.

This chimney was found on good condition, but a few minor maintenance items will be due soon:

- Wash-cap at the top of the chimney would benefit from re-sealing

- minor moisture absorption/retention noted around crown (moss/algae growth).

Cleaning and re-sealing mortar joints will help prevent deterioration

NOTE: Having a water-proof coating applied over the exterior portion of the chimney can help minimize moisture absorption and deterioration



Cap re-sealing upcoming



Cap sealing upcoming



Early moisture absorption at mortar joints

### 9.2.1 Attic Insulation DOOR/HATCH INSULATION



I recommend installing insulation on the backside of the attic access door to minimize heat-loss.

Installing weatherstripping/seals around the hatch would also be a good idea.

- Creating a well insulated, sealed hatch/door is an important part of preventing warm-air infiltration into the attic

Recommendation Contact a qualified professional.



Bare hatch is the weak-point in attic insulation

9.5.1 Exhaust Systems UPGRADING VENT FAN

Older bathroom exhaust fans can loose pressure over time.

- The first floor bathroom fan is very loud, pulls minimal air and vents into the soffit (roof trim by el entry door).

I recommend replacing this fan and extending the vent to terminate outdoors



### 12.4.1 Range/Oven/Cooktop EXHAUST FAN NOTE

- Recommendation

The range hood is a down-draft style and vents under the screen porch. this is not ideal as it will introduce excess moisture and grease into this space. Ideally this would be extended to the actual exterior.

### 12.5.1 Garbage Disposal SEPTIC SYSTEMS

- Recommendation

Garbage disposals are not generally recommended for use in homes with a septic system.

I recommend removing this appliance



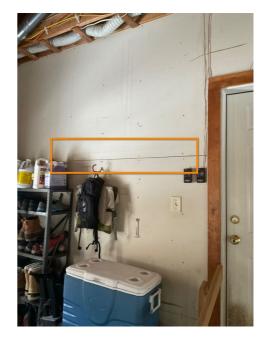
13.4.1 Walls & Firewalls
INADEQUATE SEPARATION



The wall between a garage and attached living space should be finished with drywall to stop/slow the spread of fire.

- to complete fire separation, drywall joints and fasteners should be finished with joint-compound

Recommendation Contact a qualified professional.



13.7.1 Occupant Door (From garage to inside of home)

### SEPARATION REQUIREMENTS

Recommendatior

Doors separating garage and home does not meet safety standards. Doors in firewalls must be at least 1 3/8-inch thick, metal/steel, or a 20-minute fire-rated door.

Glass in separation doors need to be fire-rated glass.

Additionally, the door should be installed on self-closing hinges.

These standards are to prevent the spread of fire into the home, and to prevent carbon monoxide from entering when cars are running in this space.

