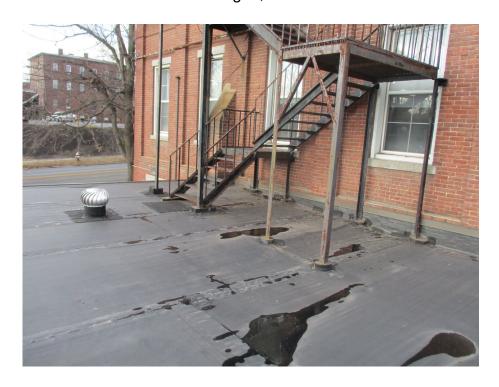
ROOF ASSESSMENT REPORT

TOWN HALL ANNEX, REAR ENTRANCE ROOF & EQUIPMENT ROOM ROOF ONE AVENUE A TURNER FALLS, MA 01376

Prepared For:

Mr. Steven Ellis Town Administrator Town of Montague, Massachusetts



Prepared By:

Northeast Roof Consultants, LLC 2 Peggy Drive Southborough, MA 01772 (508) 277-0284

Date: January 24, 2022

NRC Project No. 22-001

January 24, 2022

Mr. Steven Ellis
Town Administrator
Town of Montague
One Avenue A
Turners Falls, MA 01376
(Email: townadmin@montague-ma.gov)

RE: Roofing Consulting Services
Roof Assessment and Report
Town Hall Annex, Rear Entrance Roof & Equipment Room Roofs
Turners Falls, MA

I. INTRODUCTION

On Thursday, January 6, 2022, Northeast Roof Consultants was on site to perform a visual assessment of the existing low-slope roofing systems on the Town Hall Annex Garage Roof and low rear Equipment Room Roof attached the Town Hall building. Both of these roof areas were replaced in 2019 by R&H Roofing, LLP of Easthampton, MA, as part of a larger project. Access to the roof was made via an aluminum extension ladder. The weather on the day of the inspection was mostly clear with temperatures in the 30's. Following are the results of our assessment. The report includes a general overview of the facility, verified roof sizes and areas, general roof observations, existing issues (if any), conclusions and recommendations with cost estimates for the recommended scope of work. Photo documentation of the assessment and a roof sketch showing the locations of the problem areas is also included.

II. GENERAL DESCRIPTION

The roofs inspected at the Town Hall Annex and Town Hall include the Garage/Office roof, the Rear Entrance roof and the Equipment Room roof. All three areas are one story, and either wood framed or masonry and wood framed structures. The roof deck on the Annex Garage/Office is wood plank. The rear entrance roof is most likely wood. No exploratory tests cuts were taken in this roof due to its' age and overall good condition. The equipment room roof has a structural concrete roof deck. All roofs are low-slope and drain to either internal roof drains or to perimeter gutters or both. The garage roof is multi-sloped and drains to both a center drain line and to the northeast perimeter where a box gutter is located. The rear entrance roof slopes to one side where perimeter scupper boxes and down spouts are located. The equipment room roof slopes to the northeast roof perimeter and drains in to an aluminum box gutter with down spouts.

Roof Measurements

- Roof heights of all roofs 8'-10'.
- Roof Area Garage/Office area 100' x 67' = 6,700 sq. ft.

- Roof Area Rear Entrance Roof 26' x 11' = 286 sq. ft.
- Roof Area Equipment Room Roof 24'-6" x 17'-6" = 430 sq. ft.

Existing Roof Components and Thickness

The existing roofing assembly at the rear entrance roof was not verified. He roof is relatively new and exploratory test cuts could void the warranty. The visible roof membrane is 60 mil thick EPDM adhered to polyisocyanurate insulation board. The insulation is secured to the structural roof deck with screw type fasteners and three inch distribution plates.

The existing roofing assembly at the Annex Garage/Office consists of the following components from top to bottom:

- 60 mil thick reinforced Ethylene Propylene Diene Monomer (EPDM) membrane mechanically attached.
- EPDM flashing at base walls, curbs and penetrations.
- Two layers of 2.6 inch thick polyisocyanurate insulation board.
- Tapered crickets between roof drains
- 6 mil thick loose laid polyethylene vapor barrier with taped seams
- ½" thick thermal barrier board.
- Wood plank deck.
- ANSI/SPRI ES-1 Approved metal edging.
- Aluminum box gutters and down spouts.

The existing roofing assembly at the Equipment Room Roof consists of the following components from top to bottom:

- 60 mil thick reinforced Ethylene Propylene Diene Monomer (EPDM) membrane mechanically attached.
- EPDM flashing at base walls, curbs and penetrations.
- Tapered polyisocyanurate insulation board (1/4" per 12").
- Structural concrete deck.
- ANSI/SPRI ES-1 Approved metal edging.
- Aluminum box gutters and down spouts.

III. ROOFING/FLASHING ISSUES

(Town Hall Annex Garage/Office) - Our inspection of the Annex Garage/Office revealed the following minor issues:

- The wood blocking under the exterior emergency stairs has no buffer sheet between the blocking and roof surface.
- The sealant joint above the metal wall base counterflashing is a maintenance item and should be removed and replaced periodically as needed.
- The existing box gutter should be cleaned of all leaves and debris at least twice a year and also after heavy wind storms to prevent clogging of the outlets.
- The roof drain baskets should be cleaned twice a year or as needed.

(Rear Entrance Roof)

- The perimeter scupper boxes are clogged with leaves/debris and require periodic cleaning a minimum of twice a year.
- The sealant joint over the metal wall base counterflashing is weathered and should be removed and replaced periodically as needed.

(Equipment Room Roof)

- The existing box gutter should be cleaned of all leaves and debris at least twice a year and also after heavy wind storms to prevent clogging of the outlets.
- The sealant joint above the metal wall base counterflashing is a maintenance item and should be removed and replaced periodically as needed.

IV. CONCLUSIONS/RECOMMENDATIONS

(Annex Garage and Equipment Room Roofs – 2019 Installation) - The 2019 roof areas are in good condition and require no immediate repairs at this time. The existing positive slope of the roofs combined with the sumped roof drains and tapered crickets between the drains, appears to prevent standing water from accumulating on the roof surface. A lack of standing water will prolong the useful service life of the roofs. Periodic maintenance should include a visual inspection of the roof and clearing of any debris accumulating on the surface of the membrane, around the internal roof drain assemblies and at the perimeter gutters. As sealant is a maintenance item, remove and reseal sealant joints above the metal counterflashing along the base of the intersecting Town Hall Main Building wall every five years or as needed. Refill the pourable sealer pockets or top off the pockets on an as needed basis.

A review of the terms and conditions of the roof warranties will often require that a roof inspection be done and documented on a yearly basis to keep the warranty intact. These inspections can be performed by a qualified installer of the roofing system or from a qualified roof consultant.

We hope this provides you with the information you require. After your review of this report, feel free to call with any questions, comments or concerns. Please see the following photo pages to view the existing conditions and areas of concern at each location.

Sincerely,

John R. Skypeck, RRC

John L. Shypeh

President

Northeast Roof Consultants, LLC

Roof Assessment and Report Town Hall Annex, Rear Entrance and Equipment Room Roofs Turners Falls, MA

Reliance:

This report is for exclusive use and may be relied upon by the Town of Montague officials. No parties or persons other than those identified as authorized users may use or rely on the information or opinions in this report without the express written consent of Town of Montague officials and Northeast Roof Consultants, LLC.

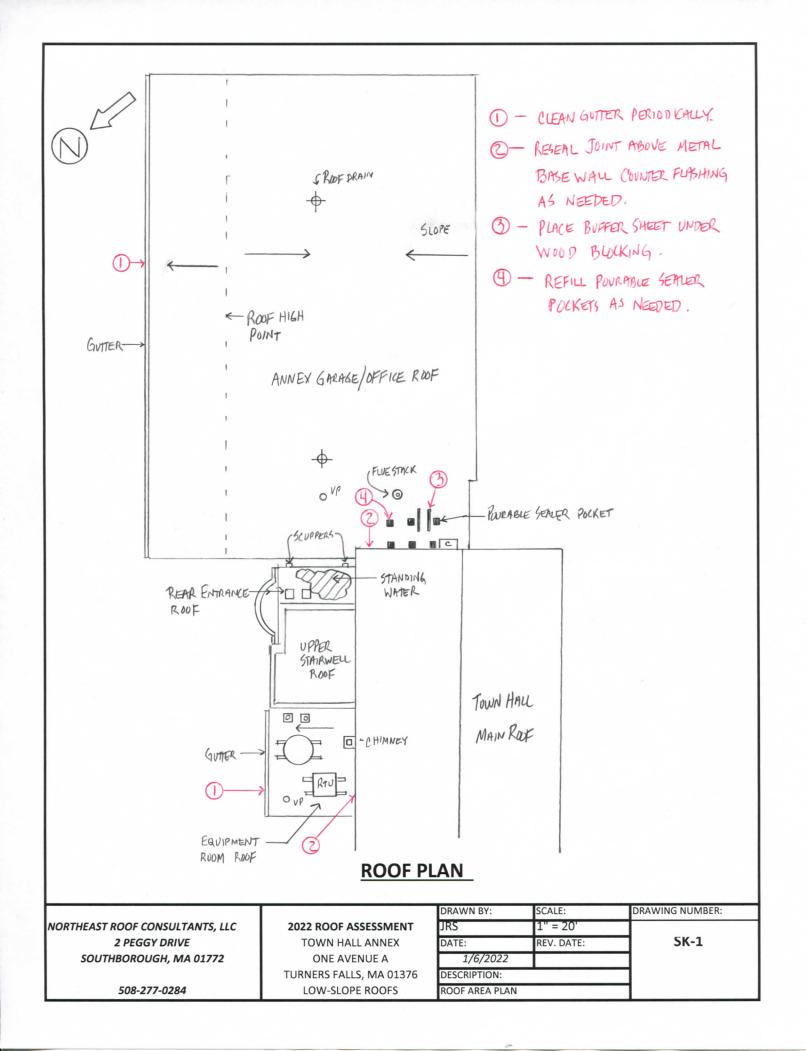




Photo R1 01/06/22

Photo Location:
Annex Roof

<u>Description:</u>
Wood blocking
under base of
emergency stairs
has no visible
buffer sheet
between the wood
blocking and roof
surface.

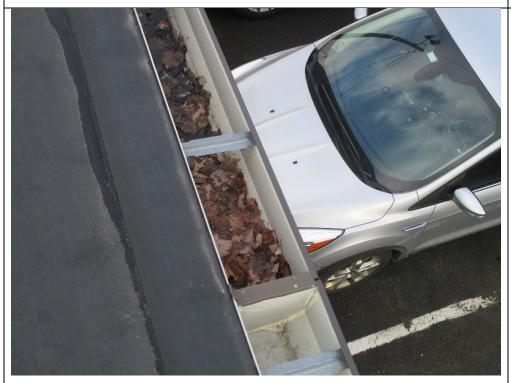


Photo R2 01/06/22

<u>Photo Location:</u> Annex Roof Gutter

<u>Description:</u>
Periodic
maintenance to
remove leaves and
debris from gutter
required at least
twice a year.



Photo R3 01/06/22

Photo Location: Annex Roof

<u>Description:</u> View of roof drain line shows very little standing water on the roof.



Photo R4 01/06/22

<u>Photo Location:</u> Rear Entrance Roof

Description: View of rear entrance roof shows leaves accumulating in the scupper box, standing water on the roof and plastic sheeting over the skylight.



Photo R5 01/06/22

Photo Location: Rear Overhang Roof

Description: View of rear overhang roof with minor standing water. No roof issues found during inspection.

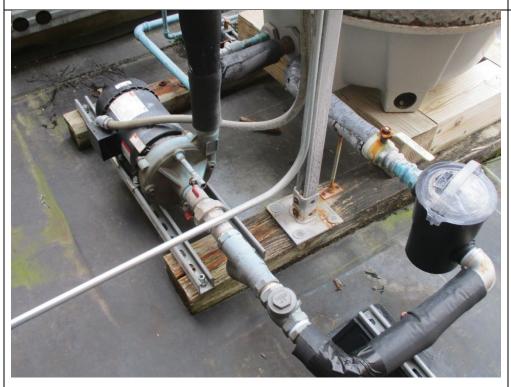


Photo R6 01/06/22

<u>Photo Location:</u> Equipment Room Roof

<u>Description:</u> View of rooftop unit reinstalled over 2019 EPDM roof membrane.



Photo R7 01/06/22

<u>Photo Location:</u> Equipment Room Roof

<u>Description:</u> View of new bronze perimeter metal and new pipe

insulation on HVAC lines.



Photo R8 01/06/22

<u>Photo Location:</u> Equipment Room Roof

<u>Description:</u> View of new box

gutter with minor accumulation of leaves and debris in gutter.