Article 1: Shea Theater Upper Roof Replacement and Repair Request for Supplemental Appropriation February 19, 2019

Selectboard's Request

This is the third appropriation requested relative to the Shea Theater and its roofs (upper and lower) over a four year period. The total appropriated to date is \$69,000, with an additional \$47,975 requested through this article, which would bring total costs \$116,975 for past repair of the Shea's lower roof and a current project to replace and properly insulate the upper roof.

This request reflects a shift from an understanding that we could simply re-seal/repair the upper roof to a better grounded understanding, informed by professional assessment, that replacement is the most viable and efficient option. Through this project, we hope to settle the matter of the Shea's roof for many years to come and to dramatically enhance the building's energy efficiency through insulation that meets modern energy code.

Project History

In May of 2015 Town Meeting granted an initial appropriation of \$20,000 to deal with the deterioration of the Shea's roof, with a focus on the smallest "lower" section of the Shea's roofline, closest to Avenue A. The project goal was to improve the most vulnerable areas of the Shea's aging roof through re-sealing of its existing rubber membrane. This work was completed in October of 2017, at the time of installation of new HVAC ducting. The ducting project was supported by Green Communities funding.

In September of 2017, as part of a request for estimates of the lower roof re-sealing job, the Town also received a quote for re-sealing the upper roof. This was understood to be a viable, warrantied, 10+ year solution for that larger roof. The estimate was much lower than expected and it was believed that both the lower and upper roofs could be re-sealed at the same time for \leq \$27,500. Doing this at the same time the HVAC duct replacement project was performed would have been very desirable.

When formal bidding was completed in the opening days of October, quotes for the upper roof portion of the job were much higher (\$43,800 to \$52,900) than the estimate we received. Accordingly, at the October 5, 2017 Special Town Meeting, the Selectboard requested a "no" vote on an article to add \$7,500 to the original \$20,000 appropriation of May 2015, with the stated intention of bringing a new article forward at a future STM and improving the upper roof in 2018. The lower roof work was completed in October 2017, but that late October and early November featured pounding rains followed by extreme cold. The upper roof proved fragile and leaked substantially, leading to an insurance loss. The leak has not recurred, but the roof remains vulnerable.

At the February 2018 STM, based on the quotes received in the fall 2017, Town Meeting was asked to appropriate \$49,000 to re-seal the upper roof. Discussion of the article included concern that repair may not offer the best value and replacement should be considered; but there was also sensitivity to cost. The \$49,000 was approved. When the Town bid the project in May 2018, neither of the original bidders attended the on-site inspection. Contractors who did attend raised concerns about the project and their ability to warranty the work, with one issue being the need for a fastening system to be designed to replace the functionality of stone ballast that was to be removed through the re-sealing project.

In June 2018 an architect and a product manufacturer were engaged and a fastening schedule was developed; however, the manufacturer later deemed the project unwarrantable due to uncertainty regarding both the membrane and its substrate. At this point the CIC requested a professional roof estimate for the Shea upper roof to provide a better basis for decision making and cost planning for the project, which the Selectboard supported. The vendor, Northeast Roof Consultants, recommended against re-sealing and presented the expected costs of partial or full replacement. Total replacement was described as the most cost-effective and beneficial option and this recommendation was affirmed by the Montague CIC.

The Current Request

The Shea Theater is a town-owned building and it is expressly our responsibility to maintain its basic structure, including the roof. The Capital Improvements Committee believes that the Town now has a credible plan that will ensure the integrity of the upper roof for decades to come, with the benefit of greatly improved energy efficiency over that time period. It will also be much easier to maintain than the current, ballasted roof system. Having fully explored other, lower cost options to the fullest extent possible, this is viewed as the right proposal for Montague.

The cost of the currently proposed project is \$96,975, which includes a substantial (25%) construction contingency. The CIC views as necessary due to the age of the building, uncertainties of what may be found when the existing roof is removed, and the complexity of lifting and re-installing the HVAC ducting. We hope not to have to spend the contingency, but the goal is to complete the project and not have further delays if bids or change orders are greater than expected.

The project will include removal of all roofing ballast, and existing roof and insulation down to the upper roof's wooden deck. The new roof will feature a 60 mil EPDM membrane and R-30 insulation, as well as installation of new pads under the HVAC ducting and any other structures, as well as walkway pads for maintenance access. A 20-year warranty is anticipated, with the roof likely to outlive that warranty with proper maintenance. The project will also include a re-inspection of the lower roof and address any issues that may be identified with that project, as it was re-sealed rather than replaced.

This project was recommended unanimously by the Montague Capital Improvements Committee (5-0), Finance Committee (6-0), and Selectboard (2-0).



Photo R1 — Overview of main Shea Theater roof. Note ballast stone pulled away from base of duct work.



Photo R3 — Overview of rear raised roof at the rear of Shea Theater



Photo R2 – Overview of main Shea Theater low-slope roof with deteriorated concrete paver walkway across roof.



Photo R4 — View of wall base, cupping insulation and bridging wall flashing at Shea Theater.