

Form 1. Individual Project Proposal Descriptions and Justification

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Project Title: GFS/JWL Roofs

Date Prepared: January 6, 2017
Program Area: School Facilities

Project Description: GFS (2001) roof is 16 years old. There is approximately 55,000 square feet of asphalt shingle roofing and approximately 2,700 square feet of EPDM single ply membrane roofing. The EPDM area conditions are consistent with the age of the roof; however the shingle areas have shown significant deterioration for their age. The type of damage to the asphalt shingles (brittle/broken/worn) seems to be indicative of poor roof deck ventilation. Other areas of concern appear to imply poor flashings and substrates: significant ice damming issues have occurred at the perimeter of the roof; leaking has occurred at expansion joints, valleys, hips, and dormer sidewall/roof connections. Spring 2015 thaw found evidence of water infiltration at 47 ceiling locations, although it is likely that such evidence at the ceiling level can emanate from a single roof penetration above; best estimates are that 20-25 separate issues occurred at that time from sources including the above: ice damming, expansion joints, hips, valleys and sidewall connections.

JWL (1993) roof is 23 years old; it is approximately 38,875 square feet of 4-ply built-up hot asphalt roof system with flood coat and gravel surfacing. While JWL suffers from less evidence of water infiltration than GFS, there are several areas that do leak, especially after periods of hard, prolonged rain. These leaks are likely from poor perimeter adhesion as well as poor drainage around roof penetrations, as the roof pitch is <1/4" per foot, and would need to be pitched upon reroofing.

Evaluation Category: SR

Planning Context: Related work that should take place upon roof replacement include, at JWL: replacement of skylights which are in poor condition, and masonry brick work, including: new flashings, areas of mortar repointing, and refurbishing of the masonry chimney. At GFS: Dormer siding repair/replacement, as well as assessment of roofing insulation and ventilation. Currently, a roof condition report and budget estimates have been received from a roofing vendor; preliminary conversations have been started with solar power contractors to explore the possibility of defraying town cost with electricity savings.

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Schedule: As GFS roof has shown significant deterioration, and JWL roof is past its anticipated lifespan, it would be prudent to address these issues within a 2-4 year timespan.

Coordination: Work is not contingent upon other CIP projects.

Previous Town Meeting Action: No previous Town action.

Project Priority:

H priority within department/program area

M Risk of deferring project

Estimated Cost: \$

2019: \$3,000,000

Basis of Cost Estimate: Check one of the following. If you want to provide more detail on the estimate, do so with a narrative after indicating the type of estimate.

Cost of comparable facility or equipment

Rule of thumb indicator, unit costs

From the cost estimate from engineer, architect, or vendor

From bids received

Preliminary estimate, (e.g. no other basis for estimate, guesstimate)

Alternative Financing: CSDE Grant
