Community Preservation Committee
Town of Belmont

CPA Funding – Final Application

Ten copies of the completed Final Application must be submitted to the following address by no later than 7:00 pm on Monday, December 5, 2022:

Community Preservation Committee
Matthew Haskell, CPA Administrator
Office of the Select Board
Belmont Town Hall
455 Concord Avenue
Belmont, MA 02478

Unless an applicant can demonstrate that a significant opportunity would otherwise be lost, final applications will not be accepted after the submission deadline. In order for the CPC to consider a project proposal that cannot adhere to the deadlines as outlined in the Standard Application Process, the project must meet the additional selection criteria as outlined in the Special Application Process.

Project Title Town Hall Slate Roof Repairs

Project Location 455 Concord Ave, Belmont MA 02478

Applicant/Contact Person David T. Blazon, Director of Facilities

Organization Belmont Facilities Department

Mailing Address 19 Moore Street, Belmont MA 02478

Telephone 617 993 2646 **E-mail** Dblazon@Belmont-MA.Gov

Signature [signature] **Date** 9/9/2022

CPA Category (*check only one, in consultation with the CPC*):

- ☐ Community Housing
- ☒ Historic Preservation
- ☐ Open Space
- ☐ Recreation

Amount Requested $266,300

Total Project Cost $366,300

The CPC will review the Final Applications. Applicants will be contacted if additional information or an interview is required. The CPC may also request to visit the site of the proposed project. Applicants will be notified by mid-January whether the CPC plans to recommend their project at the next Annual Town Meeting.

Goals: To preserve the building's structure and maintain the integrity of the interior.

Community Need: The Town Hall is part of a three-building complex (which includes Homer Municipal Building and School Administration Building) that the community looks to as their government center. It is paramount to maintain each and every one of these buildings.

Community Support: The community over the years has approved and supported the renovations of the three buildings within this complex. This is one of the many continued steps needed to maintain those improvements and the continuation of keeping these historic Town buildings intact.

Project Documentation: The attached documents indicate the existing conditions; the recommendations; and the specifications which are to be bid on and carried out accordingly. These documents have been prepared by Ted Galante and The Galante Architecture Studio (TGAS).

Timeline: Currently the Town Hall chimneys are being preserved via other Community Preservation Committee (CPC) funding. Once this work is complete it will be too late to begin the slate roof repairs so the project will go out to bid in late winter with construction repairs anticipated for early spring.

Credentials: Prior to being the Director of Facilities for Town of Belmont, David Blazon was employed with City of Lowell where he managed over 100 buildings – some of them being similar in age and construction materials as those here in Belmont. Mr. Blazon has a degree in Architecture and a history of Construction Management, even still holding his Construction Supervisor License. He also benefits from the full weight and support of Ted Galante and TGAS regarding the design of this project.

Success Factors: Being able to stop water infiltration to the Town Hall.

Budget: Original application for this project was $100,000 and recent bid results were $333,000. The requested amount is $366,300 which represents the only bid plus another 10% for safety measures.

Other Funding: There are no other funding sources at this time.

Town Properties: This request is being made by David Blazon, Director of Facilities. Mr. Blazon has the express support of Patrice Garvin, Town Administrator.

Property Entity as a Private Sponsor: Not applicable in this case.

Maintenance: Periodic inspections will be done. Any future repairs will be carried out by the Belmont Facilities Department.

Impact on Town Budget: No direct impact on the Town's budget is expected. This work will actually help the Town avoid complete and costly roof replacement in the near future.

Additional Information: The requestor does not believe that "additional information" is applicable to the scope of work described herein.

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Belmont Town Hall Roof Assessment Report

Belmont Town Hall

455 Concord Avenue

Belmont, MA

02478

Date: 5.25.2021

The Belmont Town Hall is a masonry structure with a slate roof built in 1881 and has gone through several renovations. The town of Belmont observed, damage to the chimneys, damage to a roof spire, uplifting roof slate & a history of water intrusion in interior spaces of the building. The following is an assessment of the roof & brick chimneys outlining scope of work and recommendations.

The gray slate on the body of the roof are "Monson slate", originally from Monson Maine. Although Monson roofing slate have not been produced since 1968, they are one of only several North American slate types that have a service life in excess of 200 years. The "accent slate" are "Unfading Red " slate that are still available and quarried in a single quarry located in Hampton NY (on the Vermont border). Due to their density, these red slate also have an extensive service life. We could see in site inspections and in drone photography a "reasonable" amount of broken or missing slate of both types, which indicates a "routine maintenance" condition. We observed slate is fastened with copper nails, which is appropriate, in accordance with industry standards and will last for the life of the slate. What all this means is that the primary roof covering (the slate) are in serviceable condition with significant service life remaining. The slate requires routine maintenance only, not replacement. Although the Monson slate are no longer quarried, they are available in limited quantities on the "salvage" slate market.

Broken and Missing slate tiles were observed during site inspections.
Most often, water infiltration within the open roof areas is usually caused by cracked or broken slate which can be remediated by replacing them. All missing or broken slate should be replaced, this includes a slate that has in exposed butt corner in excess of 1-1/2" on either the vertical or horizontal leg.

There are areas of the roof where there are observable raised slate; this condition usually indicates a defect in the sheathing deck. It is recommended to be remediated, as the unsupported slate will eventually break under a live-load. This is typically repaired by removing the existing unsupported slate and "fairing" the wood deck to allow the slate to lie fully supported (usually the culprit is a protruding edge of a sheathing board).

During site visits we did not observe any active water infiltration.
If there is any active water infiltration in a certain area of the build the underlayment on the roof should be inspected above that area. This would require removing slate to inspect the underlayment in the event of active water infiltration documented in the large or "open" sections. Given the age of the roof, we can assume that the original (cellulose or asphalt impregnated sheet) underlayment is fully deteriorated if it was never replaced. So, we recommend avoiding removing the slate in the large roof "fields" just to replace the

underlayment, unless there is significant water infiltration caused by a lack of functioning underlayment. Most often, water infiltration within the open roof areas is usually caused by cracked or broken slate which can be remediated by replacing them.

Copper architectural details were visually inspected from the ground, on boom lift and by drone photography. Some spires, finials, hips, valleys, and secondary ridge caps have been "recently" replaced (noting the dark brown copper color and the absence of green patina). Except for the newer hip cap that is missing from one of the ridge spires, the more recent copper details appear to be in good condition. The older copper details (showing a light green patina) include the main crenelated ridge caps and several minor ridge spires. While the hue of the patina is an indication that those details may have limited-service life remaining, they appear to be currently intact and would be expensive to replace. This is consistent with the previous building renovations as noted on 1998 drawings issued by Court Street Architects. Intact self adhered membrane underlayment was observed near gutter line during physical inspection of slate roof from a boom lift, which is also consistent with previous renovation design documents.

Like the slate roof the chimneys will also require routine maintenance with spot repointing locations of missing mortar (being careful to match the existing mortar color and hardness) as well as replacement or rebuilding of each chimney head (a.k.a. wash or cap). The copper counterflashing of each chimney appears to be the same age as the more recent copper work and appears to be correctly installed. 3 chimneys are fully open to water intrusion at the top of the chimneys as caps are missing or partially removed. 2 chimneys will need a new (wash or cap). The 3rd chimney will need a special storm cap to allow for mechanical equipment exhaust fumes to escape as this chimney is serving as flue. It is also recommended to confirm the interior flue condition and part of this scope of work could be to install a B vent exhaust inside the existing chimney.

During site inspection of attic space roof sheathing was verified as 1" thick wood tongue and groove sheathing in good condition and appears to be the original wood sheathing. There were signs of previous water intrusion on the sheathing and structural wood beams as water staining was observed on the wood. Copper roofing nails were observed fastened into the wood sheathing from the exterior. Active water intrusion was not observed. Wood and insulation were dry.

Structural Masonry wall in attic was had noticeable signs of previous water intrusion as some areas were completely white due to efflorescence. Wood beams and wood sheathing directly adjacent to this wall also had signs of water intrusion from the brick and efflorescence had been carried from the masonry to the wood. No active water intrusion was observed. Masonry was dry at the time of observation. Water intrusion from the open masonry chimneys and missing slate may be contributing the masonry wall condition.

A flat portion of roof where mechanical equipment is located has a single membrane roof that appears to be in good condition.

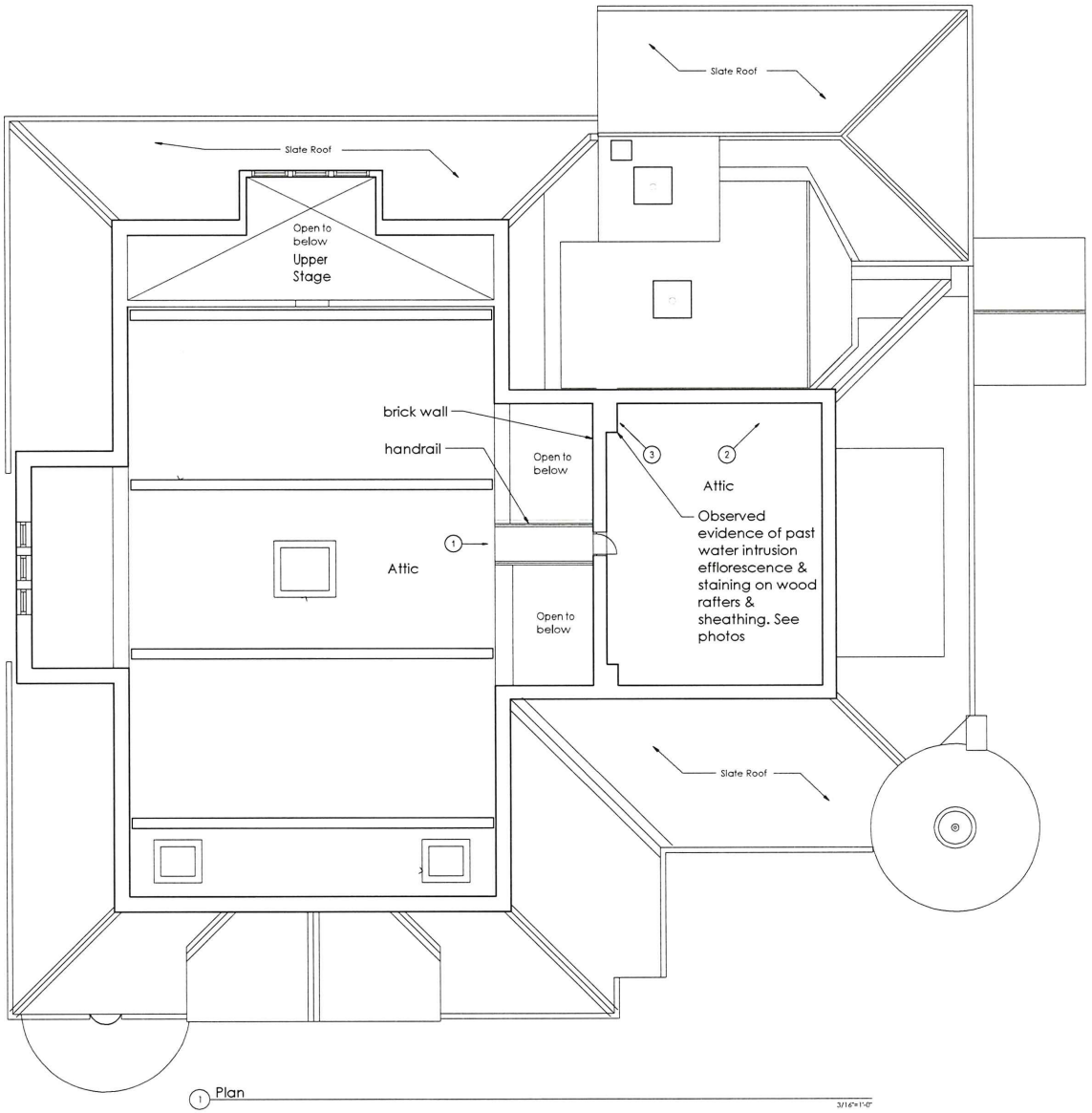
Previous water intrusion was observed in gypsum ceilings at top of stairwell. It was noted that previous water intrusion was observed in auditorium ceiling as well. We do not know of any active water intrusion in these areas.

Scope of Work & Recommendations:

1. Water intrusion testing of the roof should be performed by a 3rd party contractor.
2. Missing or broken slate should be replaced and match existing.
3. Slate that does not match the color of the existing slate should be removed and replaced with historic salvaged "Monson" and "Unfading Red".
4. In areas that have visible deflection in the roof & sheathing and areas where slate is lifting up, sheathing should be reinforced to allow the slate to be fully supported.
5. Chimney brick should be repaired as outlined.
6. Chimney caps should be replaced as outlined.
7. Restore roof spire that is missing copper hip.

8. If any active leaks appear under roof, underlayment should be exposed for inspection in those areas.
9. Construction / bidding documents should be prepared. It is recommended that the roof be repaired as soon as possible and before the winter weather approaches.

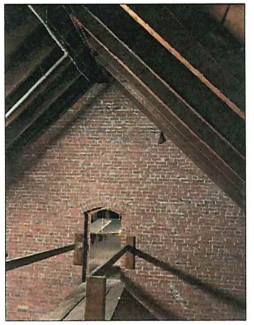
Attachments: Drawings & Site Photographs



1 Plan

3/16"=1'-0"

1



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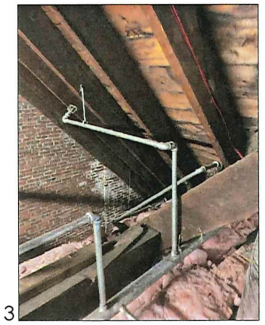
3



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Project Number
2105

Project Title
Belmont Town Hall

455 Concord Avenue
Belmont, MA 02478

Drawing Title
Attic Plan

Date/Issued For
05.25.21

Roof Assessment Report

NOT FOR CONSTRUCTION

Print 24x36

Scale
As Noted

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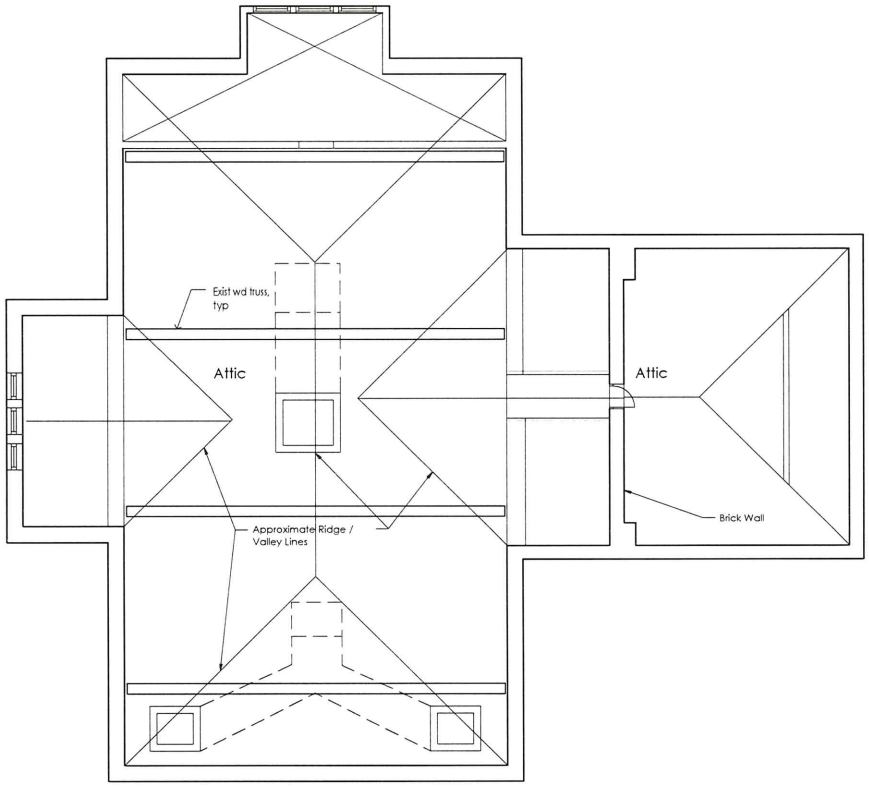
Drawing Number
A-101



1 Reflected Ceiling Plan

3/16"=1'-0"

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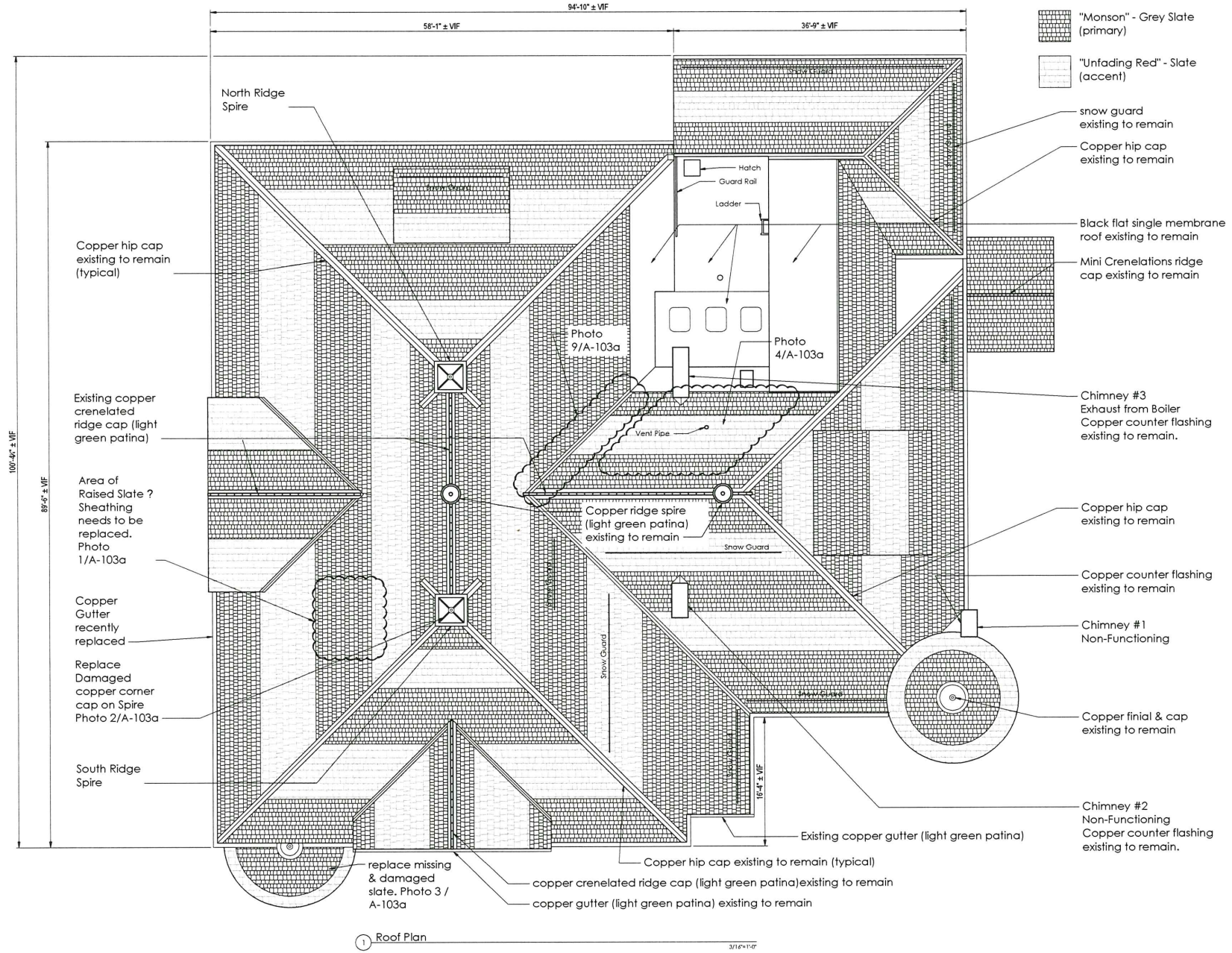
Drawing Number
A-102



1 Roof Plan
3/16"=1'-0"

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Roof Plan

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Drawing Number
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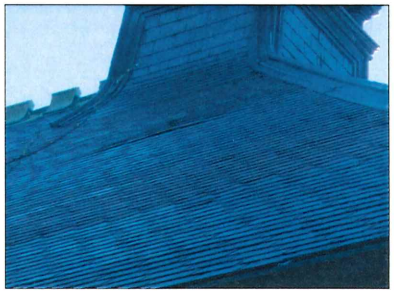
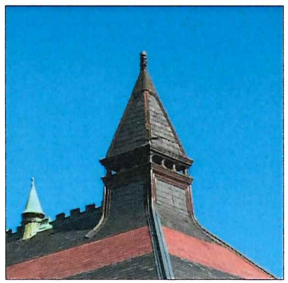
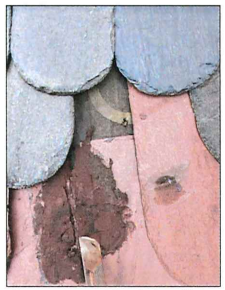


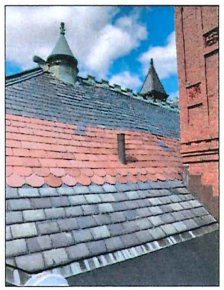
1. Raised Slate. Sheathing Damaged



2. Damaged Ridge on South Spire



3. Damaged & missing Slate



4. Deflection in Roof

5. Damaged, cracked and broken Slate

6. Typical Damaged Slate

7. Typical damaged and Missing Slate

8. Damaged Slate & Mismatched Color

9. Valley Flashing

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Print 24x36

Scale
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Drawing Number
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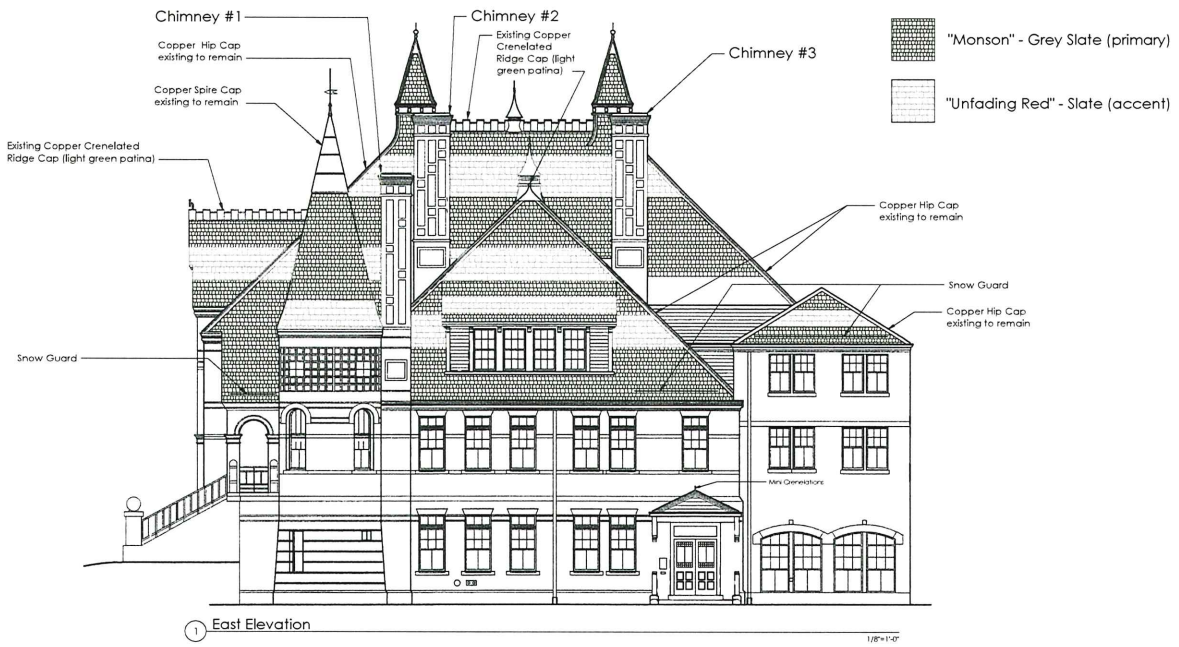
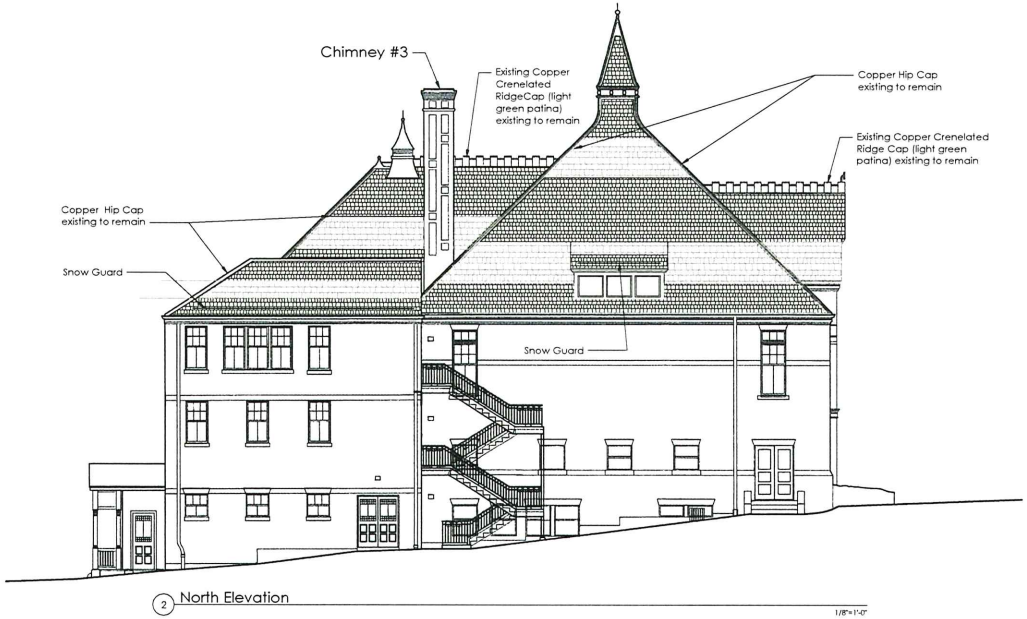


1 East Elevation

1/8"=1'-0"



2 North Elevation

1/8"=1'-0"

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Project Number
2105

Project Title
Belmont Town Hall

455 Concord Avenue
Belmont, MA 02478

Drawing Title
Building Elevations

Date/Issued For
05.25.21

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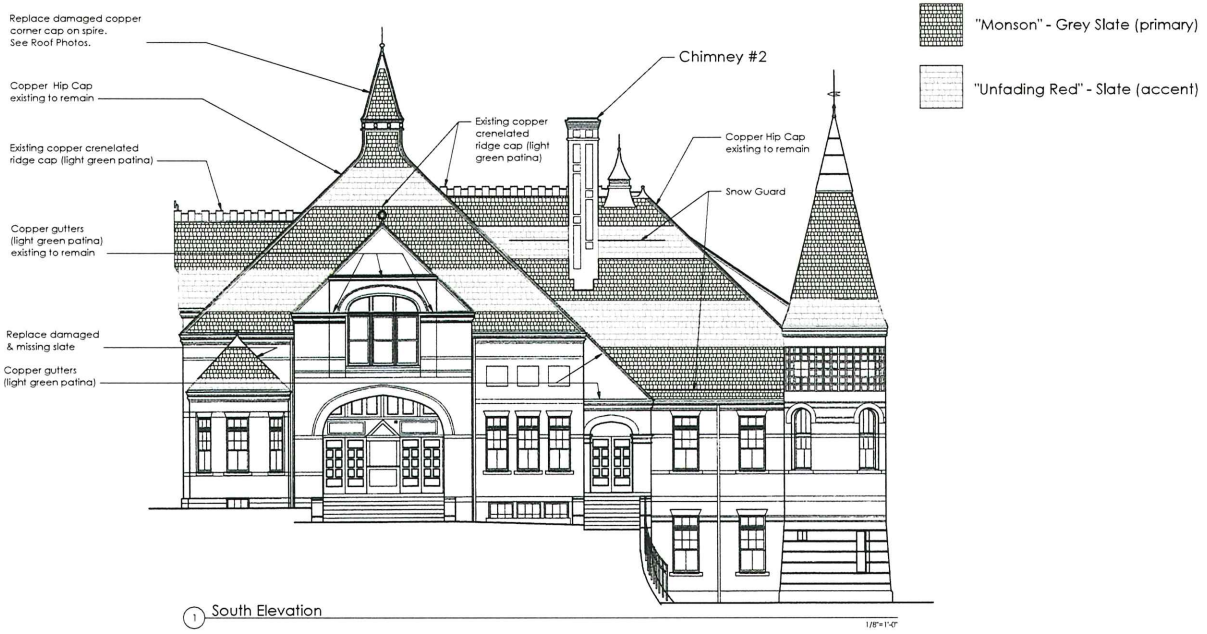
Drawing Number
A-401



1 South Elevation

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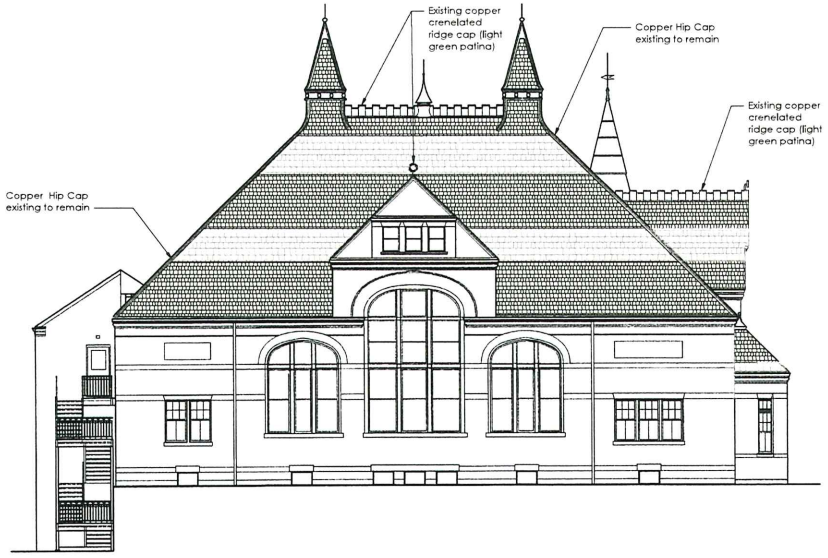

2 West Elevation

1/8"=1'-0"

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Drawing Number
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