TOWN OF HOLLIS, NEW HAMPSHIRE

Farley Building

WEATHER TIGHT ENVELOPE/EXTERIOR CONDITION ASSESSMENT & STABILIZATION PLAN

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Introduction

This report presents a condition assessment of the Farley Building and a stabilization plan based on that assessment. It is limited in scope and concentrates on damage/deterioration to the building’s weather tight envelope and on those exterior conditions that might relate to safety issues. All of the identified problems are visually observable; no destructive investigation was conducted, but that type of investigation may be warranted to further assess problem areas when stabilization work is implemented.

Through a primarily graphic interface, damaged/deteriorated areas are located & described on sheets with photographs that show frontal & oblique views of the building’s elevations. The elevation sheets are followed by additional graphic sheets that show close views of specific damage/deterioration problems. The numbers identifying problem areas are related throughout the document’s graphic sheets; they are not an indication of priority. They follow the standard practice of working from top to bottom when evaluating a building’s condition e.g. #1, 1A, 1B, etc., relate to the chimneystack, the highest architectural element on the building.

The condition assessment sheets are followed by a suggested stabilization plan. This is simply a prioritized list of the damage/deterioration noted in the condition assessment with additional notes on procedural methods of correcting the building’s problems.

Overview of Condition Assessments & Stabilization Plans

A condition assessment is the initial step in preparing a stabilization plan for an out of use building/property. The condition assessment locates and identifies damage to or deterioration of a building or property. A stabilization plan is developed from the condition assessment to correct or stabilize problems identified in the condition assessment. The stabilization plan is intended to prevent further deterioration of the building/property while decisions are made concerning its final disposition. Typically, stabilization plans are short-term solutions for the maintenance of a building in cases where final decisions

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1 A stabilization plan is a list of problems in order of priority with possible or suggested solutions; final determination of the best way to deal with specific problems of damage/deterioration is usually left to the specialty contractor hired to correct the problem after review by the managing authority.
concerning the property will be made in the near future. Stabilization differs from “mothballing” a building, the latter involves preparing a building, usually of significant historical importance, for a long term out of use state, often times for years. Mothballing a building is a significantly more involved and expensive process than stabilizing a building.

Stabilization plans concentrate heavily on maintaining & preserving the integrity of a building’s weather tight envelope and doing it in the most economical way possible. The weather tight envelope protects the building’s structural elements & its interior finish work. The corrective work recommended in a stabilization plan should be done in a sensitive/reversible way. A determination may be made during the decision making process to restore a building to the way it appeared at a particular point in its history. In this case, any stabilization work that appears inappropriate for that period will most likely need to be removed, particularly if it occurs on a publicly visible exterior part of the building.

Condition assessments and stabilization plans are usually formulated as a team effort although this is not always necessary. However, if a team effort, it would most likely include local preservationists, specialty contractors familiar & experienced with historical building construction & general preservation philosophy, possibly an architectural historian or other individuals with particular knowledge of or interest in a specific building/property. At a minimum, two site visits are necessary; a preliminary visit to familiarize interested parties with the building/property and at least one additional visit for close inspection, investigation, photography, note taking etc. The second visit will likely determine whether opinions are required of other specialist contactors.

The condition assessment involves an examination of a building/property at a particular moment in time. The stabilization plan is a response to a condition assessment that prioritizes the various problems identified during the

2 In cases where a building has been out of use for some time & its normal maintenance neglected, stabilization may also include structural repairs.

A structural review of the Farley Building was conducted and a report issued with structural improvements to be implemented in 2007 by Steffensen Engineering Associates, Inc. of Auburn, NH. The report stated that the inspection did not review for hidden rot or deterioration.
assessment and usually offers general or broad solutions/remedies for those problems. Both condition assessments and stabilization plans should be presented in document form. Digital technology, has allowed condition assessments, stabilization plans & similar preservation documents to consist of text, as well as annotated graphics (photographs & line drawings) to convey information in a very effective way.

The document form serves several purposes:

- It outlines & details the problems that need to be addressed to stabilize & prevent further deterioration in an out of use building.
- It suggest solutions for specific problems, information that will be useful to the contractor(s) who do the actual stabilization work.
- It assists the various contractors in formulating their bids for the work to be done.
- It allows project management at the town level e.g. Heritage Commission & others involved in developing the condition assessment & stabilization plan a way to track work as it is done.
- It allows a way to quality check completed work & ensure that areas that had problems are not further deteriorating.
- The original condition assessment and stabilization plan may be expanded upon over time if/when new problems arise. This turns these documents into working tools and maintenance records for the building/property.

In many ways, condition assessments and the stabilization plans developed from them serve for out of use buildings the same purpose that routine maintenance plans serve for in use buildings. As such, stabilization plans are not one time endeavors. Any areas stabilized will need periodic inspections to verify the integrity of the stabilization. This is particularly important after a severe weather occurrence.

The Farley Building Condition Overview

History

The Farley Building was constructed in 1877/78 and served as the primary Hollis school building from that date until 2005 when the new Hollis-Brookline High School was completed and put into service. The original Farley Building was a symmetrical Italianate structure complete with an ornate bell tower/observatory. Subsequent to its original construction date, the building
underwent two additional building phases in 1904 and again in 1920 to accommodate increasing student enrollment.

As a public school building, the Farley Building would have been well maintained, at least up until 2005. After that date, as in the case of most out of use buildings, routine maintenance most likely was not a primary concern. Because the building had been well maintained up until 2005, the 2012 condition assessment of the building’s weather tight envelope and exterior revealed relatively minor and certainly manageable problems. However, it must be stressed that corrective action needs to be taken to rectify present, manageable problems before they become much larger; more unmanageable and expensive problems.

**Description & Condition of Major Exterior Architectural Features/Elements Associated with the Building’s Weather Tight Envelope (Refer to graphic sheets 1-10)**

**Chimney**
- Red bricks set in mortar
  - Missing or damaged bricks
  - Cracking of some bricks, but cracking appears primarily along mortar joints
  - Missing/failing mortar between some bricks
  - Cracking & open mortar joints indicate that the chimney may be leaning

Note: Most damage/deterioration occurs above the lower belt/drip course.

**Roof**
- Asphalt shingles on high pitch surfaces, roll/membrane roofing on low pitch surfaces.
  - One missing shingle noted on the east-facing roof slope, other shingles & ridge cap on the east facing roof slope appear brittle & have edge loss.
  - One repaired/replaced shingle noted on the north facing roof slope of the one story addition on the west elevation, quality/adequacy of the repair/replacement should be verified.
  - On the north elevation the joint at the intersection of the level & raking fascia boards where the west facing roof slope joins to the low/flat slope roof is open to the interior roof framing & of adequate size to allow pest/rodent access/egress.
Note: The west facing roof slope has recently been re-shingled, other roof surfaces were inspected from the ground with binoculars, but accessibility for safely making a close inspection of the roof surfaces will likely require a bucket lift. Additionally, the two trees in close proximity to the east elevation of the building, particularly when they are fully leafed, makes accessibility to this part of the roof difficult even with a bucket lift; the trees also obscure visibility of the east roof surfaces from the ground. A number of broken shingle pieces were noted on the ground on all sides of the Farley Building.

Gutters/Downspouts
- Presently, only one PVC gutter exists on the building, it wraps around the corner of the low/flat slope roof at the intersection of the north & west elevations.
  - The downspout for this gutter is missing its lower end/diverter.

Note: There are several gutter brackets located on the north facing fascia board of the single story addition on the west elevation indicating that a gutter/downspout may be missing in this location. Additionally, the corner where the addition joins to the west elevation appears to be a low spot where water is likely to collect. There are also gutter brackets along the eaves of a section of the east facing roof on the east elevation of the Farley Building indicating a missing gutter in this location. A discharge pipe projecting from the concrete retaining wall on the right side of the cellar bulkhead/access on the east elevation indicates a missing downspout for this gutter.

Windows
- Several types of windows occur in the Farley Building; most are recent energy efficient replacement windows. There are also several 20th century wood window sash sets; with one exception, these windows are protected & insulated with triple track or earlier style storm windows. Four of the original 6 over 6 window sash sets with lamb’s tongue ogee molded profile survive in the east & north gables.
  - The right window in the east gable is missing its lower storm window & the upper storm is broken.
  - The two windows in the north gable have no storm windows, additionally the right window appears to be leaning in at the top & is probably missing some piece of its interior trim.
The window in the south-facing dormer of the single story addition to the Farley Building’s west facing elevation has no storm window.

Doors

- The Farley Building uses several types of doors for access & egress.
  - The basement access/egress door on the right side of the east elevation appears to be warped or twisted & not closing completely. Additionally, a drain within the open concrete stairwell/enclosure for this door appears to be completely clogged. It’s likely that during a heavy rain, the stairwell/enclosure would retain a significant amount of water; any water above the door’s concrete threshold would infiltrate into the basement of the Farley Building. Retention of rainwater within the stairwell & in contact with the cellar door could be the cause of the warped/twisted condition of this door.

Sidewalls

- Clapboards cover the sidewalls on all elevations of the building.
  - There are Missing/damaged clapboards on the east, west & south elevations.
  - All sidewall elevations show significant areas of paint failure, in many places peeling paint has exposed the clapboard’s wood substrate.
1A. CHIMNEY, MISSING MASONRY UNITS, CRACKING, MORTAR-JOINT DETERIORATION, (SEE DETAIL IMAGE). NOTE: MOST DAMAGE OCCURS ABOVE LOWER DRIPBELT COURSE.
STABILIZATION RECOMMENDATION: REMOVE CHIMNEY BRICKS TO THE DRIPBELT LEVEL.

2A/2B. MISSING/DAMAGED ROOF SHINGLE, (SEE DETAIL IMAGE 2A).
STABILIZATION RECOMMENDATION: REPAIR/REPLACE MISSING/DAMAGED SHINGLE.

3. EAST ELEVATION, RIGHT GABLE WINDOW: LOWER STORM SASH MISSING, UPPER STORM SASH BROKEN, (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION: INSTALL/REPAIR STORM SASH.

5. TREES IN TOO CLOSE PROXIMITY TO THE BUILDING.
STABILIZATION RECOMMENDATION: REMOVE BOTH TREES.

7A. MISSING/DAMAGED CLAPBOARD, (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION: REPLACE/REPAIR CLAPBOARD.

8. SIGNIFICANT AREAS OF PAINT LOSS/FAILURE ON BOTH THE EAST & NORTH ELEVATIONS, IN MANY CASES PAINT FAILURE HAS EXPOSED THEWOOD SUBSTRATE.
STABILIZATION RECOMMENDATION: PAINT PRIME AREAS OF BARE WOOD WITH OIL BASED PRIMER.

9. DETERIORATED WOOD LATTICE SLATS SHOULD BE REMOVED OR REPLACED.
STABILIZATION RECOMMENDATION: NO ACTION AT THIS TIME.

10. MISSING BALUSTRADE PARTS, REPLACE FOR POSSIBLE SAFETY ISSUES.
STABILIZATION RECOMMENDATION: NO ACTION AT THIS TIME.

11. BULKHEAD/Cellar ACCESS OPEN TO THE WEATHER.
STABILIZATION RECOMMENDATION: ENCLOSE BULKHEAD/Cellar ACCESS TO MAKE WEATHER TIGHT.

12A. GUTTER & DOWNSPOUT MISSING FROM THIS SECTION OF ROOF.
STABILIZATION RECOMMENDATION: INSTALL GUTTER & DOWNSPOUT.
1A/B. CHIMNEY, MISSING MASONRY UNITS, CRACKING, MORTAR JOINT DETERIORATION, (SEE DETAIL IMAGES). NOTE: MOST DAMAGE OCCURS ABOVE LOWER Drip/Belt COURSE.
STABILIZATION RECOMMENDATION:
REMOVE CHIMNEY BRICKS TO THE DRIP COURSE LEVEL.

2B. MISSING/DAMAGED ROOF SHINGLE, (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION:
REPAIR/REPLACE MISSING/DAMAGED SHINGLE.

3. EAST ELEVATION, RIGHT GABLE WINDOW: LOWER STORM SASH MISSING, UPPER STORM SASH BROKEN, (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION:
INSTALL/REPAIR STORM SASH.
4A/B. NORTH ELEVATION GABLE WINDOWS NOT PROTECTED BY STORM WINDOWS, LOWER SASH RIGHT WINDOW APPEARS TO TILT INWARDS, (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION:
INSTALL STORM SASH.

5. TREES IN TOO CLOSE PROXIMITY TO THE BUILDING.
STABILIZATION RECOMMENDATION:
REMOVE BOTH TREES.

6. JOINT AT INTERSECTION OF RAKING & LEVEL FASCIA BOARDS IS OPEN TO THE INTERIOR OF THE ROOF FRAMING & MORE THAN LARGE ENOUGH TO PERMIT PEST/RODENT ACCESS, (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION:
REPAIR AS NEEDED.

7A. MISSING/DAMAGED CLAPBOARD(S), (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION:
REPLACE/REPAIR CLAPBOARD.

8. SIGNIFICANT AREAS OF PAINT LOSS/FAILURE ON BOTH THE EAST & NORTH ELEVATIONS, IN MANY CASES PAINT FAILURE HAS EXPOSED THE WOOD SUBSTRATE.
STABILIZATION RECOMMENDATION:
PAINT PRIME AREAS OF BARE WOOD WITH OIL BASED PRIMER.

9. DETERIORATED WOOD LATTICE SLATS SHOULD BE REMOVED OR REPLACED.
STABILIZATION RECOMMENDATION:
NO ACTION AT THIS TIME.

10. MISSING BALUSTRADE PARTS, REPLACE FOR POSSIBLE SAFETY ISSUES.
STABILIZATION RECOMMENDATION:
NO ACTION AT THIS TIME.

11. BULKHEAD/Cellar ACCESS OPEN TO THE WEATHER.
STABILIZATION RECOMMENDATION:
ENCLOSE BULKHEAD/Cellar ACCESS TO MAKE WEATHER TIGHT.
4A/B. NORTH ELEVATION GABLE WINDOWS NOT PROTECTED BY STORM WINDOWS. LOWER SASH RIGHT WINDOW APPEARS TO TILT INWARDS. (SEE DETAIL IMAGES). STABILIZATION RECOMMENDATION: INSTALL STORM SASH.

6. JOINT AT INTERSECTION OF RAKING & LEVEL FASCIA BOARDS IS OPEN TO THE INTERIOR OF THE ROOF FRAMING & MORE THAN LARGE ENOUGH TO PERMIT PEST/RODENT ACCESS. (SEE DETAIL IMAGE). STABILIZATION RECOMMENDATION: REPAIR AS NEEDED.

8. SIGNIFICANT AREAS OF PAINT LOSS/FAILURE ON BOTH THE EAST & NORTH ELEVATIONS, IN MANY CASES PAINT FAILURE HAS EXPOSED THE WOOD SUBSTRATE. STABILIZATION RECOMMENDATION: PAINT PRIME AREAS OF BARE WOOD WITH OIL BASED PRIMER.
1B. NORTH & WEST FACES OF CHIMNEY, MISSING MASONRY UNITS, CRACKING, MORTAR JOINT DETERIORATION, (SEE DETAIL IMAGES). NOTE: MOST DAMAGE OCCURS ABOVE LOWER DRIP/BELT COURSE. CHIMNEY STACK FLASHING/COUNTER FLASHING NEEDS INSPECTION.

STABILIZATION RECOMMENDATION: REMOVE CHIMNEY BRICKS TO THE DRIP COURSE LEVEL.

2C. MISSING/DAMAGED ROOF SHINGLE. (NOTE THIS APPEARS TO BE A QUICKLY/INADEQUATELY DONE REPAIR FOR A MISSING/DAMAGED SHINGLE.)

STABILIZATION RECOMMENDATION: REPAIR/REPLACE MISSING/DAMAGED SHINGLE.

4A/B. NORTH ELEVATION GABLE WINDOWS NOT PROTECTED BY STORM WINDOWS, LOWER SASH RIGHT WINDOW APPEARS TO TILT INWARDS, (SEE DETAIL IMAGES).

STABILIZATION RECOMMENDATION: INSTALL STORM SASH.

6. JOINT AT INTERSECTION OF RAKING & LEVEL FASCIA BOARDS IS OPEN TO THE INTERIOR OF THE ROOF FRAMING & MORE THAN LARGE ENOUGH TO PERMIT PEST/RODENT ACCESS, (SEE DETAIL IMAGE).

STABILIZATION RECOMMENDATION: REPAIR AS NEEDED.

8. SIGNIFICANT AREAS OF PAINT LOSS/Failure ON BOTH THE EAST & NORTH ELEVATIONS, IN MANY CASES PAINT FAILURE HAS EXPOSED THE WOOD SUBSTRATE.

STABILIZATION RECOMMENDATION: PAINT PRIME AREAS OF BARE WOOD WITH OIL BASED PRIMER.

12B. DOWNSPOUT MISSING LOWER END/DIVERTER.

STABILIZATION RECOMMENDATION: INSTALL LOWER END/DIVERTER & INSURE DISCHARGE WATER IS DIRECTED AWAY FROM THE BUILDING.

12C. GUTTER & DOWNSPOUT MISSING FROM THIS SECTION OF ROOF.

STABILIZATION RECOMMENDATION: INSTALL GUTTER & DOWNSPOUT & INSURE DISCHARGE WATER IS DIRECTED AWAY FROM THE BUILDING.
7C. DAMAGED/MISSING CLAPBOARD, (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION:
REPLACE/REPAIR CLAPBOARD.

8. SIGNIFICANT AREAS OF PAINT LOSS/FAILURE ON BOTH THE EAST & NORTH ELEVATIONS, IN MANY CASES PAINT FAILURE HAS EXPOSED THE WOOD SUBSTRATE.
STABILIZATION RECOMMENDATION:
PAINT PRIME AREAS OF BARE WOOD WITH OIL BASED PRIMER.

13. BEE/WASP/HORNET NEST.
STABILIZATION RECOMMENDATION:
REMOVE NEST.
WEATHER TIGHT ENVELOPE/EXTERIOR CONDITION ASSESSMENT

4C. SOUTH ELEVATION DORMER WINDOW HAS NO STORM WINDOW. STABILIZATION RECOMMENDATION: INSTALL STORM WINDOW.

7BC. DAMAGED/MISSING CLAPBOARD, (SEE DETAIL IMAGES). STABILIZATION RECOMMENDATION: REPLACE/REPAIR CLAPBOARD.

8. SIGNIFICANT AREAS OF PAINT LOSS/FAILURE ON BOTH THE EAST & NORTH ELEVATIONS. IN MANY CASES PAINT FAILURE HAS EXPOSED THE WOOD SUBSTRATE. STABILIZATION RECOMMENDATION: PAINT PRIME AREAS OF BARE WOOD WITH OIL BASED PRIMER.
1. SOUTH FACE OF CHIMNEY, MISSING MASONRY UNITS, CRACKING, MORTAR JOINT DETERIORATION. (SEE DETAIL IMAGES) NOTE: MOST DAMAGE OCCURS ABOVE LOWER DRIPSHED COURSE.

STABILIZATION RECOMMENDATION: REMOVE CHIMNEY BRICKS TO THE DRIP COURSE LEVEL.

8. SIGNIFICANT AREAS OF PAINT LOSS/FAILURE ON BOTH THE EAST & NORTH ELEVATIONS. IN MANY CASES PAINT FAILURE HAS EXPOSED THE WOOD SUBSTRATE.

STABILIZATION RECOMMENDATION: PAINT PRIME AREAS OF BARE WOOD WITH OIL BASED PRIMER.
2B. MISSING ROOF SHINGLE, (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION: REPAIR/REPLACE MISSING DAMAGED SHINGLE.

3. EAST ELEVATION GABLE WINDOWS: RIGHT WINDOW; LOWER STORM SASH MISSING, UPPER STORM SASH BROKEN, (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION: INSTALL/REPAIR STORM SASH.

5. TREES IN TOO CLOSE PROXIMITY TO THE BUILDING.
STABILIZATION RECOMMENDATION: REMOVE BOTH TREES.

8. SIGNIFICANT AREAS OF PAINT LOSS/Failure ON BOTH THE SOUTH & EAST ELEVATIONS, IN MANY CASES PAINT FAILURE HAS EXPOSED THE WOOD SUBSTRATE.
STABILIZATION RECOMMENDATION: PAINT PRIME AREAS OF BARE WOOD WITH OIL BASED PRIMER.

9. DETERIORATED WOOD LATTICE SLATS SHOULD BE REMOVED OR REPLACED.
STABILIZATION RECOMMENDATION: NO ACTION AT THIS TIME.

10. MISSING BALUSTRADE PARTS, REPLACE FOR POSSIBLE SAFETY ISSUES.
STABILIZATION RECOMMENDATION: NO ACTION AT THIS TIME.
WEATHER TIGHT ENVELOPE/EXTERIOR CONDITION ASSESSMENT

1A. EAST FACE OF CHIMNEY SHOWING MISSING MASONRY UNITS, CRACKING, MORTAR JOINT DETERIORATION. NOTE: MOST DAMAGE OCCURS ABOVE LOWER DRIPS/BELT COURSE.
STABILIZATION RECOMMENDATION: REMOVE CHIMNEY BRICKS TO THE DRIP COURSE LEVEL.

1B. NORTH & WEST FACES OF CHIMNEY SHOWING CONDITIONS AS IN 1A.
STABILIZATION RECOMMENDATION: REMOVE CHIMNEY BRICKS TO THE DRIP COURSE LEVEL.

2B. EAST ELEVATION, MISSING ROOF SHINGLE.
STABILIZATION RECOMMENDATION: REPAIR/REPLACE MISSING/DAMAGED SHINGLE.

3. EAST ELEVATION, RIGHT GABLE WINDOW: LOWER STORM SASH MISSING, UPPER STORM SASH BROKEN. (SEE DETAIL IMAGE).
STABILIZATION RECOMMENDATION: INSTALL/REPAIR STORM SASH.

7A. EAST ELEVATION, DAMAGED/MISSING CLAPBOARD(S).
STABILIZATION RECOMMENDATION: REPLACE/REPAIR CLAPBOARD.
4A/B. NORTH ELEVATION GABLE WINDOWS NOT PROTECTED BY STORM WINDOWS. LOWER SASH RIGHT WINDOW (4B) APPEARS TO TILT INWARDS.
STABILIZATION RECOMMENDATION: INSTALL STORM SASH.

6. NORTH ELEVATION, joint at intersection of raking & level fascia boards is open to the interior of the roof framing & more than large enough to permit pest/rodent access.
STABILIZATION RECOMMENDATION: REPAIR AS NEEDED.

7B/C. SOUTH ELEVATION, DAMAGED/MISSING CLAPBOARD(S).
STABILIZATION RECOMMENDATION: REPLACE/REPAIR CLAPBOARD.

7B. WEST ELEVATION, DAMAGED/MISSING CLAPBOARD(S).
STABILIZATION RECOMMENDATION: REPLACE/REPAIR CLAPBOARD.