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Rehabilitation Study
Old Town Hall

Sterling, Massachusetts

2012

menders, torrey & spencer, inc.

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ACKNOWLEDGMENTS

Prepared for: Town of Sterling
Butterick Municipal Building
1 Park Street
Sterling, MA 01564

Terry Ackerman, Town Administrator

1835 Town Hall Committee
Kenneth W. Stidsen, Chair
Nancy Castagna
Joann Drown
Vernon Gaw
Ronald Pichierri
Cynthia Secord
Beth Stuerman

Prepared by: Menders, Torrey & Spencer, Inc. Architecture • Preservation
123 North Washington Street
Boston, MA 02114
617.227.1477
www.mendersarchitects.com

Lynne Spencer	Principal, Historic Preservation
Patrick Guthrie	Registered Architect
Thomas Burgess	Architectural Designer
Lynn Smiledge	Preservation Planner

Affiliated Consultants:

Structural Engineer:
Structures North Consulting Engineers
John Wathne
60 Washington Street, Suite 401
Salem, MA 01971
978.745.6817

Mechanical, Electrical, Plumbing & Fire Protection Engineer:
JRW Engineering
Jeffrey White
40 Town Farm Road
Brookfield, MA 01506
978.418.0057

Civil Engineers:
Whitman & Bingham Associates
James Rheault
510 Mechanic Street
Leominster, Massachusetts 01453
978.537.5296

David E. Ross Associates, Inc.
Jesse Johnson
111 Fitchburg Road
P.O. Box 368
Ayer, MA 01432
978,772.6232

Hazardous Materials Consultant:

Fuss & O'Neill EnviroScience
Robert May
50 Redfield Street, Suite 100
Boston, MA 02122
617.282.4675

Cost Estimator:

AM Fogarty & Associates
Peter Timothy
175 Derby Street, #5
Hingham, MA 02043
508.749.7272

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Vernon Gaw, 1835 Town Hall Committee
Terry Ackerman, Town Administrator

EXECUTIVE SUMMARY

It was a privilege to be selected to investigate and develop plans for rehabilitation and universal access for the Old Town Hall. This handsome Greek Revival building, a treasured presence in the historic town center for almost two centuries, will be renovated and made accessible to all members of the Sterling community. This study provides the stewards of the building with a description of its architectural significance, an understanding of its structure and fabric, and most importantly, a road map for it rehabilitation.

Part One of this study, Building History and Significance, provides a brief historical synopsis, a physical description of the building, a list of character defining features, and general guidelines for preservation and rehabilitation that are informed by *The Secretary of the Interior's Standards for the Treatment of Historic Properties.* The recommendations comply with the requirements of the preservation restriction placed on the Old Town Hall by the Massachusetts Historical Commission in 2005.

Part Two, Existing Conditions and Rehabilitation Plan, comprises an examination of the physical conditions at the Town Hall and treatment recommendations for preservation and restoration. The building is in good condition.....The most pressing near-term issue is .....

Plans for renovating the building begin with the established program of needs and a comprehensive regulatory analysis, both essential informants to the conceptual designs that follow. Schematic drawings, outline specifications and cost estimates for rehabilitation are included, as well as a cyclical maintenance plan that will help the building stewards anticipate and budget for routine maintenance activities.

Moving Forward

METHODOLOGY

The Rehabilitation Study represents a collaborative effort between Menders, Torrey & Spencer, Inc. (MTS) and the Town of Sterling. The Town was represented by Vernon Gaw of the 1835 Town Hall Committee who served as point of contact with MTS and facilitated access to local resources. The project team was assembled and coordinated by Lynne Spencer, principal preservationist at Menders, Torrey & Spencer, and Patrick Guthrie, RA, who together directed on-site investigations and prepared the rehabilitation study. They were assisted by Tom Burgess, architectural designer/preservation specialist, Nick Curtis, architectural designer, and Lynn Smiledge, preservation planner, who coordinated final assembly of the report.

The building investigation and documentation took place in the fall of 2011. The exploratory team performed the activities described below.

Existing conditions drawings of the plans and elevations were developed using building information modeling (BIM) software, which means that all drawings are a two dimensional representation of a three dimensional computer generated model. The "information" part of the model means that within each object of the model, information is stored that can be utilized to generate schedules of work for doors, windows, and room finishes. The model becomes a critical tool for coordinating building systems integration into the project during design development and construction documents. The information in the model is based upon previously completed architectural drawing sets as well as site verified dimensions and observations.

MTS produced outline plans and specifications for stabilization and restoration and schematic designs for rehabilitation that were informed by the recommendations made by Structures North Consulting Engineers, JRW Engineering, and Whitman & Bingham Engineering.

Structures North conducted the structural assessment of the building and prepared a report that commented on existing conditions and explained the actions required to bring the structure into compliance with building code requirements.

JRW Engineering surveyed the mechanical, electrical, plumbing and fire protection systems and prepared a report of recommendations to bring the building up to code.

Fuss & O'Neill Consultants surveyed hazardous materials and provided recommendations for remediation.

AM Fogarty developed cost estimates for stabilization, restoration and rehabilitation of the building based on the outline drawings, specifications, and the schematic drawings provided in the conditions assessment.

All photographs were taken by Menders, Torrey & Spencer, Inc. unless otherwise indicated. The final report is issued both as a printed document and in electronic format as a portable document format (.pdf). Hard copies were delivered along with a digital file (pdf) on compact disc.

BUILDING HISTORY & DESCRIPTION

Sterling's second Town Hall was constructed in 1835 on the site of the original town hall, which had fallen into disrepair and was relocated and remodelled as a residence. This classic Greek Revival building was designed by John Springer, a carpenter/builder born in Conway, New Hampshire who married Sterling resident Eliza Barnard. Springer was responsible for several fine Greek Revival buildings in Sterling, including the First Federated Church and the Holbrook and Sawyer Houses. The Doric columns at the portico of the Town Hall were built by local carpenter John Stevenson.

An extension was made adding two bays to the east end of the building in 1893. An article in the Worcester Daily Telegram reported that "the architecture was not changed... The interior was improved and frescoed; a gallery was built at the front end (2nd floor), and a furnace and other modern conveniences were added." In addition to serving as the seat of local government and the venue for town meetings, the town hall has historically hosted a variety of activities ranging from dinners, dancing classes and graduation ceremonies to musical performances and exhibitions of prizewinning produce.

The Greek Revival style was based on the architecture of classic Greek temples and was known as the "National Style" in America between 1830 and 1850 because of its nationwide predominance and popularity. Massachusetts architect-carpenter Benjamin Asher (1773–1845) is credited with disseminating the Greek Revival style through his influential house plan books.

Characteristic Greek Revival elements at the Old Town Hall include its front-gabled orientation; the full-height, full-width colonnaded porch, the wide band of trim below the cornice representing the classical entablature, and the pilasters at the building corners.

BUILDING DESCRIPTION

Exterior

The 1835 Town Hall Community Center is a rectangular, gable front building three bays wide and seven bays deep. The clapboard siding and all wood elements are painted white. The facade, which faces west across the town common, has a full-width, full-height portico with four fluted Doric columns supporting a deep entablature. "Sterling Town Hall" is lettered across the frieze. The single main entry has a transom and a single half-height sidelight (the matching sidelight was removed when the door was modified). A single rectangular window in the pediment gable replaced the original triangular louvered vent. This probably occurred in 1893 when the Assembly Room was expanded and the balcony added. Shutters have been removed from all elevations.

Facade (north elevation).

The portico has a slab concrete porch approached by granite steps. The windows throughout the building are original double-hung, 12-over-12 light sash at the first floor and Victorian era 2-over-2 light sash at the second floor. This change dated to the 1893 renovation, when New England thrift inspired the reuse of the 1835 12-over-12 windows while introducing the more "up-to-date" 2-over-2 windows in the expanded Assembly Room. The 1893 roof is light gray and variegated purple slate, which probably replaced original wood shingles.

The side elevations are symmetrical in original design, with 2-over-2 light sash on the second level and 12-over-12 light sash on the first level. The second level windows are flush with the cornice trim. The building rests on a rubble stone foundation faced with granite on the east elevation.

At the west elevation, two windows were replaced with egress doors at both levels where a fire escape was installed. The foundation on this side of the building is faced with brick. Note the increased building height gained due to the sloping site.

East elevation.

West elevation.

South elevation.

The south (rear) elevation, which is three bays wide, has a centered single entry with transom. The central window at the second floor, located behind the stage in the assembly room, was filled in. A concrete handicap access ramp with metal hand railings spans the width of the building.

Interior

The basement of the building is unfinished with spaces for storage and mechanicals.

Basement.

The north end of the first floor contains the main entry and vestibule, two offices, and two rest rooms. These spaces were renovated c. 1978 and most of the finishes are modern. The south end contains a large recreation room. There is a dropped ceiling and carpeting throughout. Also part of the 1978 work was the removal of the historic staircase to the second floor. A new, narrower stair was introduced along with a space for a future elevator, now used as storage.

The second floor is filled by the Assembly Room. It contains a wood stage at the east end and a balcony at the west end dating to the 1893 expansion of the building. The dropped ceiling obscures the balcony and the large attic space above. The floor is wood.

First floor: View South through the entry vestibule towards the recreation room doors. Offices and rest rooms flank the hallway.

First floor: View south toward exit door in Recreation Room. Note wood columns from the 1893 addition which help support the large Assembly Room, carpeting and dropped ceiling.

Second floor: Stage at south end of the Assembly Room. The rear window was blocked in when the stage was installed. The egress door at right was converted from a window when the fire escape was installed.

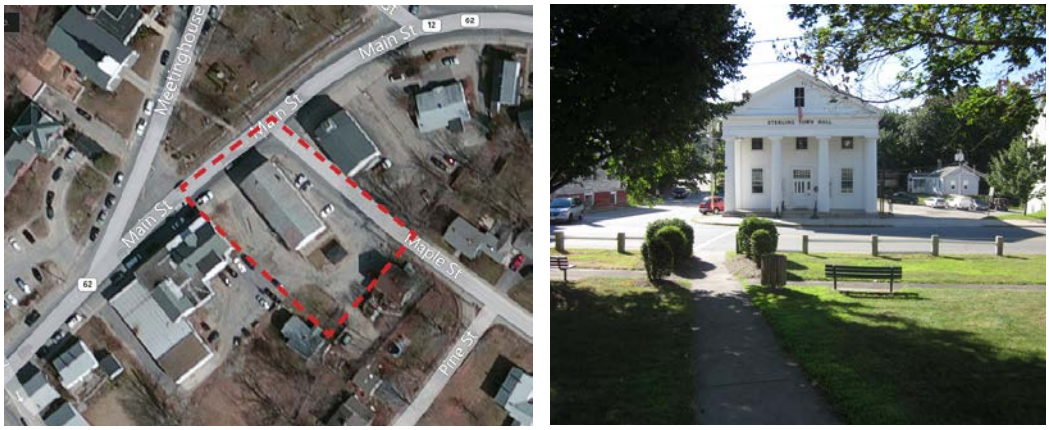
CHARACTER DEFINING FEATURES

Character defining features refer to the significant observable and experiential aspects of a building that define its architectural power and personality. They are critically important considerations whenever repairs or alterations are contemplated. Inappropriate changes to historic features can undermine the historical and architectural significance of the building, sometimes irreparably. Retaining a structure's integrity is essential to eligibility for National Register of Historic Places status and for preservation grants such as Save America's Treasures, the Massachusetts Preservation Projects Fund, and Community Preservation Act funds.

This survey considers the overall shape of the Town Hall and its materials, craftsmanship, decorative details, and various aspects of its site and environment – all elements that contribute to the building's unique character. **All features in the bulleted lists that follow should be retained to preserve the historic integrity and national significance of the Old Town Hall.** Because the building retains original detail and is virtually unaltered on its exterior, nearly all of the original elements are character-defining.

SITE AND ENVIRONMENT

- Facing west across the Common at the historic village center towards the 1841 First Church of Sterling and the 1885 Sterling Library. Sited south (across Maple Street) of the former Universalist Church and north of the adjacent 1850s Commercial Block.



Left: Town Hall (in red box). Right: View of Town Hall, north facade.


Left: Former Universalist Church at left, Town Hall at right. Right: View of Town Hall, north elevation.

SHAPE AND MASSING

- Rectangular plan with gable roof and pedimented entrance.

STYLISTIC FEATURES

Materials

- Wood
- Granite
- Brick
- Slate
- Plaster
- Glass

Decorative & Stylistic Details: Exterior

- Entrance portico with deep entablature, fluted Doric columns and corner pilasters
- STERLING TOWN HALL letters at the frieze
- Multi-light transom window over main door
- NOTE: The original double doors flanked by half-height sidelights were replaced by a wide single door with a sole sidelight.
- Wood windows with multi-light (12 over 12) configuration at the first level and 2 over 2 (Victorian era) configuration at the second level
- NOTE: The rectangular window in the pediment replaced the original triangular louvered vent, now stored in the attic. The


Top: Entrance portico with columns supporting an entablature. Left: Lettering at the frieze. Right: 12 over 12 sash at first level, 2 over 2 sash at second level.

original triangle-shaped trim is still visible at the tympanum.

- Paneled wood doors
- Colonial Revival sign frames flanking main door
- Brick and granite-faced foundation
- NOTE: original shutters were replaced with aluminum shutters, currently in storage
- Slate roof

Left: Fluted wood column resting on granite porch at portico.
Right: 12 over 12 sash configuration.

Decorative & Stylistic Details: Interior

- Volumetric space of Assembly Hall
- Stage and balcony in Assembly Hall
- Wood columns in recreation room
- Wood wainscot (beadboard and paneled) and paneled doors where original
- Original door trim in select locations

Above left: Stage, beadboard wainscot in second floor assembly hall.
Above right: Wood columns and paneled wainscot in first floor recreation room.
Lower right: Greek Revival door casing with characteristic channels and round corner medallions on the second floor. Note: modern wood trim has replaced original door casings on the first floor.

PRESERVATION GUIDELINES

This section of the report describes how work performed on historic buildings should be approached in order to respect and preserve those elements that define their historic and architectural character. The character defining features of the Old Town Hall identified in this report should be retained and preserved when possible.

Repairs, maintenance, and renovations at the Town Hall should be guided by the significance of the building and site as framed by the National Register of Historic Places and their character defining features. *The Secretary of the Interior's Standards for the Treatment of Historic Properties* should be used as a guide. The Standards provide advice on the preservation and protection of cultural resources and recognize four building treatments: Preservation, Rehabilitation, Restoration and Reconstruction. The first three are relevant to this project and are defined below.

PRESERVATION is defined "as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a Preservation project."

REHABILITATION is defined "as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural or architectural values."

RESTORATION is defined "as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project."

APPLICATION OF THE STANDARDS

Structural Systems: Minimal Intervention, Compatibility and Reversibility

Working with historic construction involves the careful balance of modern engineering principles and traditional construction methods to meet established preservation objectives. The principle of minimal intervention seeks to "do no harm" to the structure by over zealous efforts to upgrade structural systems to meet modern building code requirements. Stabilization and strengthening schemes should

address life safety imperatives without compromising the original historic fabric by minimizing changes to the structure's materials and appearance and retaining as much of the existing materials as possible.

Stabilization efforts must be physically and aesthetically compatible with the original building materials and design concept. New materials must be chosen for compatibility with existing materials to match physical and mechanical properties such as strength, stiffness, porosity, density, vapor transmission, thermal conductivity, etc. Materials compatibility will assure consistent performance and response to applied loads and environmental conditions.

When structural interventions are required to meet minimum life safety code requirements, they should be designed to be reversible. This means that they may be removed in the future without major compromise to the historic building fabric and do not interfere with or prevent future efforts to maintain the building.

Additions

Additions to a historic structure should be respectful and subordinate to the original building. Although the addition should possess similar mass, proportions and materials, and can feature complementary stylistic details, it should not replicate the original building.

Materials

When repairs are required, original building materials should be replaced in kind – granite for granite, brick for brick, wood for wood, slate for slate. When traditional replacement materials are not available or are economically unfeasible, substitute materials that mimic the look, feel, and workability of original materials may be considered. Care should be taken when deciding to use a synthetic material, however, since modern products may interface poorly with traditional building materials, offer limited longevity versus traditional materials, and often exhibit color shifts and other deteriorative changes.

Wood Windows, Doors & Trim

Wood windows and doors are character defining features and essential contributing elements to a historic building's distinctive appearance. Repairing and weatherizing existing wood doors and windows is always the preferred approach for historic buildings and provides energy efficiency comparable to replacement elements. When windows have exceeded their useful lives and retention is not practical or economically feasible, an approach that combines repairing old windows where possible and introducing new windows where necessary is recommended. Where original windows cannot be salvaged, historically appropriate, high quality wood windows with pane configurations matching the originals and true divided lights are acceptable.

Wood trim, both exterior and interior, should be similarly retained and preserved.

Masonry

Brick and stone elements should be replaced with matching material. For example, cast stone, which differs from natural stone in appearance, texture and workability, is not an appropriate substitute for natural material.

An appropriate mortar formula should be established and adopted for all repointing campaigns. Clear records of the mortar mix, proportions of tinting pigments and the application technique, including the final strike, should be documented in the building owner's maintenance records. Actual mortar samples should be retained with the records along with a sample panel on the building.

Slate Roofing

Modern roofing materials cannot rival the distinctive appearance, durability and longevity of slate. With careful maintenance, roofs constructed of particularly durable varieties of slate have life spans of more than a century. Like materials should be used whenever possible when repairs or replacement of slate roofs are required, and craftspersons skilled in the techniques needed to properly install historic slate roofs should be employed. The use of synthetic slate materials, which are aesthetically inferior and short-lived compared to true slate, is not recommended.

Paint Finishes

Original paint formulations and colors are character-defining elements that are often lost over time because the paint materials themselves are relatively short-lived. When repainting is necessary to preserve the integrity of the envelope, the colors chosen should be appropriate to the style and setting of the building. If the intent is to reproduce the original colors or those from a significant period in the building's history, they should be based on the results of a scientific paint analysis.

Traditional lead-based paints, which offer excellent longevity, durability and color stability, are no longer available in the United States. The highest quality latex-based paints available should be employed instead, after thorough surface preparation and priming. Permanent vinyl or ceramic liquid coating systems are damaging to wood siding and historically inappropriate.

Preservation Restriction

A preservation restriction held by the Massachusetts Historical Commission (MHC) was placed on the 1835 Old Town Hall in 2005 as a requirement of grant funding. This means that all changes to the building exterior must be reviewed and approved by MHC. The process for project notification, review and approval is described on the MHC website at http://www.sec.state.ma.us./mhc/mhcrevcom/revcomidx.htm.

APPLICATION OF THE STANDARDS AT THE OLD TOWN HALL

Preservation of the character defining features and architectural integrity of the building should be of paramount concern for the building's stewards.

Preservation of Exterior Character-Defining Features

Roofing

The original roof of the Town Hall was probably wood shingle, replaced at some point with more durable slate (a common practice for early public buildings). When next faced with the need for roof replacement, the building stewards may consider either wood shingle or slate as historically appropriate. Asphalt shingle roofing is an acceptable substitute for historic roofing material when an economical solution is desired. Simulated slate is not recommended as it is expensive and not long-lived.

Wood Siding, Windows, Doors and Trim

All wood materials should be retained and maintained. Replacement wood shutters, appropriately sized and configured, should be installed in place of the aluminum shutters currently in storage. The original triangular louvered vent in the tympanum at the facade should be restored and reinstated. The original double-leafed front doors, now in storage, should be restored.

Masonry

The stone and brick foundation walls and granite steps should be retained and repaired as needed. An appropriate mortar formula should be developed and documented for use in future repointing campaigns.

Preservation of the Interior Plan & Character-Defining Features

The second floor (the Assembly Room) should retain its plan and original spatial dimensions along with its trim, wainscot and doors. The dropped ceiling should be removed and the balcony revealed as an historic artifact. The first floor has been significantly redesigned and most of its original finishes have been removed, so it can be freely reinterpreted. Existing wood elements should be retained and restored, including restoring the original configuration of the staircase in the northwest corner. The building interior and its constituent materials should be carefully documented, both photographically and with a written narrative, prior to any interventions.