MOTHER BAILEY HOUSE AND TAVERN

CAPITAL NEEDS ASSESSMENT

Prepared for
THE CITY OF GROTON

CME Associates, Inc.
and
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Mother Bailey House and Tavern
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Mother Bailey House and Tavern
EXECUTIVE SUMMARY
EXECUTIVE SUMMARY

Listed on the State Register and the National Register of Historic Places as a contributing property to the Groton Bank Historic District, the Mother Bailey House and Tavern is a significant cultural resource worthy of thoughtful stewardship. Believed to have been constructed in 1782 under the direction of Dr. Amos Prentice, the two story, center hall Colonial, has seen various uses over its two hundred and thirty year lifespan, including use as a private residence, an inn and tavern, as host to an early post office, and again as a single family residence. Now, under the ownership of the City of Groton, an appropriate use that honors the historic past while providing a useful present, is sought, and is the subject of this feasibility study and capital needs assessment. CME Associates, Inc. provided architectural and structural assessments and report preparation in conjunction with mechanical engineers Salamone & Associates, PC.

While there are a variety of potential uses for which the building may be adapted, character defining elements should be maintained in accordance with the Secretary of the Interior Standards for Treatment of Historic Properties. These features include the post and beam framework, the chimney stack and hearths, windows, moldings and paneling, staircases, brick nogging, site features such as the granite retaining walls and iron fencing, and historic exterior siding. As the house has undergone significant renovations over time in order to add modern conveniences including electricity and plumbing, much of the early interior fabric has been lost including plaster walls, the majority of nogging and some Victorian era trim. The second chimney stack above the first floor level on the south side of the building has also been removed although it is not clear when. Exterior siding and trim has also been replaced and modified resulting in detailing that is not consistent with the original historic fabric.

The Secretary of the Interior's Standards for the Treatment of Historic Properties should be consulted and a consistent treatment approach selected that will not only preserve the properties character defining features, but also allow the City of Groton to incorporate new elements that will serve new uses. The four treatment strategies outlined in the Standards are as follows:

- **Preservation**, places a high premium on the retention of all historic fabric through conservation, maintenance and repair. It reflects a building’s continuum over time, through successive occupancies, and the respectful changes and alterations that are made.

- **Rehabilitation**, the second treatment, emphasizes the retention and repair of historic materials, but more latitude is provided for replacement because it is assumed the property is more deteriorated prior to work. (Both Preservation and Rehabilitation standards focus attention on the preservation of those
materials, features, finishes, spaces, and spatial relationships that, together, give a property its historic character.

- **Restoration**, the third treatment, focuses on the retention of materials from the most significant time in a property’s history, while permitting the removal of materials from other periods.

- **Reconstruction**, the fourth treatment, establishes limited opportunities to re-create a non-surviving site, landscape, building, structure, or object in all new materials.\(^1\)

Based on the intended use of the building, it may be important to determine a period of significance. For instance, if the house is to become a house museum celebrating the life of Anna Warner Bailey, then the period of architectural significance would be during her residence from sometime after 1783 until her death in 1851. Restoration would be the selected treatment option that would allow for the removal of later additions and modifications, and the restoration of missing fabric from the period of significance. If the house were to be used as office space then Rehabilitation could be the selected method of treatment that would allow for modifications made over time to remain in place, describing the history of the house from 1782 to the present.

At present, the CT State Building Code, in accordance with the 2003 IBC Existing Building Code, allows that the building can be preserved as an historic structure without complete conformance to current building codes, due to its status as a recognized historic property. This is significant although any Change of Use (from Residential to Business) requires additional code compliance.

As noted in this report, potential uses could include continued residential use, business use as a house museum or office use. Other allowable uses, such as a restaurant, may have a detrimental impact on preservation of the historic fabric as significant modifications to the building may be required. If the City of Groton were to divest of the property, consideration should be made to adding a Preservation Easement to the deed which would require that significant features be maintained by future owners.

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HISTORY OF THE PROPERTY
HISTORY
The house presently known as the Mother Bailey House was built in 1782 by Dr. Amos Prentice, a physician, who moved to Groton Bank after his home in New London was burned along with much of New London and Groton by the British who sought to destroy the bounty of the privateers based on the Thames River. Dr. Prentice was the resident physician of the town of Groton during the massacre at Fort Griswold on September 6, 1781. He is credited as saving the lives of many of the wounded. Dr. Prentice relocated to Sayre, Pennsylvania around 1797 where he practiced medicine, taught school and opened the first drug store. He died in 1805 at the age of 57.

Probably crossing paths with Dr. Prentice during the Battle of Groton Heights was Anna Warner. A young girl living with her uncle, Edward Mills and his family on a farm three miles north of Groton, she traveled to Fort Griswold in search of her uncle after the battle as he had not returned to the farm. Finding him wounded in the Avery House, she honored his request to collect his wife, young son and infant child and reunite them with the dying man.

In 1783, Anna Warner married Elijah Bailey, veteran soldier and Groton postmaster. About 1800, the Baileys took residence in the home of Dr. Amos Prentice as he had settled in Pennsylvania before the turn of the century. Taking up inn keeping, the house at the corner of Broad Street and Thames Street also served as a tavern and the post office. Anna Bailey's lively personality and dislike of the British encouraged many patrons to the property.

Once again in 1813, during the War of 1812, the British threatened the port of New London and Groton when Decatur's Fleet sailed up the Thames. Fearing attack, the citizenry fled while the militia, led by Simeon Smith, prepared Fort Griswold for battle. Realizing that he was short of wadding for the guns, he sent a messenger to find materials. Anna Warner Bailey, when encountered with the need, surrendered her flannel petticoat, unthinkable at the time, and again became a heroine in American history.

In the following years, she was visited by presidents and foreign dignitaries including Monroe in 1817, Lafayette in 1824 and Andrew Jackson and Martin Van Buren in 1833. Anna Bailey's hospitality was known to include energetic song and dance as well as the retelling of her personal involvement in significant historic events.

Anna Warner Bailey's life ended on January 10, 1851 as she rested near the fireplace. Her clothes catching fire, she died within hours. Mother Bailey's memory lives on in many ways including the naming of the local Daughters of the American Revolution chapter in her honor.

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6 Ibid.
7 Ibid.

Mother Bailey House and Tavern
EXISTING CONDITIONS SURVEY
SITE
The property at 108 Thames Street, the “first parcel”, owned by the City of Groton, is a lot of about one sixth of an acre, situated on the corner of Thames Street and Broad Street in the City of Groton within the nationally recognized historic district of Groton Bank. Adjacent to the east, is the “second parcel” known as 0 Broad Street, also owned by the City of Groton, and included in this study for reuse of the Mother Bailey House and Tavern. The house overlooks Thames Street and New London Harbor to the west, from a first floor vantage point of about six feet above street level.

![Figure 1: Parcel Map, Town of Groton GIS](image)

Built into the hillside and bounded by a stone retaining wall on Thames Street, the house is accessible by an original granite stair from the Thames Street sidewalk to the front entry. Presently portions of an ornate historic cast iron fence, gifted to Mother Bailey by President Jackson in 1833, sit atop the stone retaining wall. Additionally, there is a stone service stair and path, commencing on Broad Street, which connects to the front entry and to the basement bulkhead. Access to the rear of the center hall is achieved via a level, at grade yard space that currently serves as a vehicular entrance to the site. Beyond the driveway to the east, the site is stepped via a brick retaining wall to a gently sloping open yard upon which is situated a contemporary gazebo structure. Beyond the property line of the first parcel lies the second parcel, a moderately sloping open lawn that abuts residential property to the east and south. Photographs from the early twentieth century show a structure on this lot, but it is unknown if it is a house or a barn. The second parcel, with a curb cut on Broad Street, could potentially serve as a parking area for facilities at the house, or as adjunct activity space supporting the house usage.
The character defining features of the site that should be preserved include the stone retaining wall on Thames Street which wraps around Broad Street, the cast iron fence, and granite steps and walkway on Thames and Broad Street. Areas immediately to the east of the house should be considered for archaeological study if future development is planned in this area, although there is evidence that these areas have been excavated over time. It appears from early photographs that the shed roof addition, which currently resides on the southeast side of the house, was moved from the northeast corner to accommodate vehicular storage adjacent to the curb cut on Broad Street, indicating excavation and loss of artifacts in that area.

Based on contemporary sources, it also appears that the brick retaining wall to the east of the structure, as well as the brick pathways to the contemporary gazebo, were constructed of materials called nogging which formerly served as insulation and wind barrier in the exterior walls of the house. Interior bricks were the softer brick, not as well fired, and as a result will deteriorate quickly in exterior conditions.

The cast iron fence gifted to Mother Bailey by President Jackson in 1833 in recognition of her heroism during the battle of Groton and during the War of 1812, requires repair and restoration. Remnants of the fence are stored in the basement. The fence and wall are partially built beyond the current property line on Broad Street and around the corner onto Thames Street.

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**Mother Bailey House and Tavern**
The house sits on a mortared stone foundation with dressed granite coursing above grade. The foundation is built into the hill providing a full basement for a majority of the house. Features of the basement include a stone chimney foundation to the south with a cold storage vault and a large stone fireplace and beehive oven at the north chimney stack. The floor of the basement is partially poured concrete and partially unlevel dirt and rock indicating ledge encountered when excavating the house on a hill.

The east side of the house has a crawl space accessible from the main basement.

A large stone fireplace and beehive oven comprise the base of the north chimney stack.
Similar in plan to that illustrated by J. Frederick Kelly in his book, *The Early Domestic Architecture of Connecticut*, the Mother Bailey House reflects a typical center hall colonial home in which spaciousness and formality superseded design economy and intimacy which prevailed until the mid-eighteenth century. Note the suggested location of the kitchen ell which corresponds to the location shown in early photographs of the house.

The fireplace between the Parlor and the Bedroom has been removed from the Mother Bailey House, probably during Victorian Era renovations when a gravity feed hot air heating system and floor grates were installed. The rooms on the right are now divided by a wide opening with large pocket doors. The opening was once surrounded by Victorian trimmed bookcases on either side, removed in 1984.

This framing diagram is similar to the Mother Bailey house except that two chimney girts frame between the exterior wall and the central hall where this diagram shows the summer beams.

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Fig. 8: J. Frederick Kelly’s sketch of a typical center hall Colonial plan closely resembles the Mother Bailey House.

Fig. 9: Post and beam frame for a central chimney house is similar to the central hall house.

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10 Ibid. p. 23
The house is a two story, 42 foot wide by 36 foot deep, circa 1782, center hall Colonial with two window bays flanking either side of the entrance portico. With the ridge parallel to the street, a single massive (4 foot x 4 foot) brick chimney remains on the right side, penetrating the roof at the center of the ridge line. There was once a matching chimney on the left.

The Georgian entrance porch dates from the early nineteenth century with fluted Ionic columns supporting an entablature with dentil molding beneath the cornice. The room above the entrance porch is a later addition, possibly late nineteenth century Victorian Era when major modifications were made to the house. As noted in Figure 4, a kitchen ell was a typical feature of the center hall house. Early photographs indicate that the ell was located on the opposite side of the rear of the house. It could possibly have been moved in 1946 when a carport structure was built and subsequently removed in that location.

Windows in the main body of the house are 6 over six wood double hung windows, 2’-8” wide by 5’-4” high. The attic windows are smaller and show evidence of mortise and peg construction indicating fabrication prior to 1880. The windows in the front porch addition are 2 over 2, adding further credence to the notion that the second floor room was added near the turn of the nineteenth century. At present, most windows have aluminum triple track screen/storm windows installed on the exterior.
The exterior sheathing consists of wood clapboard siding roughly 4” to weather. Clapboards on the Thames and Broad Street elevations have a beaded edge while the south side and rear elevations consist of plain sawn clapboard. It is not clear if the decorative clapboard sheathed the entire house and has been replaced with new, smooth clapboard, or if the original beaded siding was only installed on elevations visible to the public ways. Evidence of circular sawn weatherboard beneath the clapboard may be seen at the base of the attic stair, dating this component to at least 1840 when circular saws came into use.

Character defining trim includes the wide flat pilasters with simple crown molding on the front corners as well as those that frame the center entrance. The front door is a wide, 4 panel wood door with sidelights having a wood panel below three glass lights. A simple rectangular transom spans the width of the door and sidelights. Crown molding at the eave returns to the half width pilaster on the side elevations. Window trim is 4” flat casing that has been modified such that a newer sill and second layer of flat casing has been added to the side and rear elevations.

Evidence of the original window above the front porch has been lost with the addition of the second story porch room. It could have been a single window matching the other original windows, or it could have been a Palladian window typical of Georgian architecture at the time of the porch addition.

Fig. 13: Beaded clapboard exists on the Thames and Broad Street elevations.

Fig. 14: The porch pilaster engages the two story pilaster on either side of the front door.
HEATING, VENTILATION AND AIR CONDITIONING SYSTEM

An existing Temp-O-Matic oil fired furnace is located in the building’s basement. The furnace has a Williamson Company Burner and a Herrmidifier Company humidifier. The furnace appears to be beyond its serviceable life. The associated approximately 275 gallon oil storage tank is also located in the basement and appears to be at the end of its serviceable life.

Fig. 15

The furnace provides forced hot air to second floor spaces via a duct riser in the center of the building. The riser extends to the attic where air is distributed via flexible ducts to grilles installed in the second floor ceiling. Some of the existing grilles are currently missing however those installed appear in good condition. The attic ducts have been disconnected from the ceiling grilles, it appears, to allow architectural re-fit of the attic space.

Fig. 16

The furnace also provides forced hot air to the first floor spaces via basement run hard and flexible ducts feeding floor mounted grilles. The grilles appear in fair condition.

Fig. 17

Electric baseboard heating is installed in both first and second floor rooms and corridors. Heaters vary in size from approximately three feet to eight feet in length.

Most of the baseboard heaters appear to be in poor condition and at the end of their serviceable life.

Fig. 18

Domestic Hot Water System
Hot water is provided to first and second floors of the building via an existing General Electric 240/208 VAC, 38 gallon electric water heater located in the basement. The water heater is eight years old, at the end of its serviceable life.

**PLUMBING SYSTEM**

Domestic hot and cold water piping appears to be copper throughout the building. Each pipe is routed to the bathroom/kitchen plumbing fixtures located on the first and second floors. The piping appeared to be in good condition with no signs of deterioration.

**ELECTRICAL SYSTEM**

Existing plumbing fixtures and fittings installed throughout the building appear old and in poor condition. In many cases, lavatories and toilets are damaged and/or not functioning.
Electrical service is distributed throughout the building via 200 Amp main panel located in the basement area.

Fig. 23

A 100 Amp sub-panel is located in the second floor corridor. The sub panel is fed from the main building electrical panel and distributes power to the second floor spaces.

Fig. 24

A majority of the building’s electrical fixtures and fittings appear old and in poor condition. Many of these electrical items appear to be at the end of or past their serviceable life.

Fig. 25

**SECURITY SYSTEM**

An existing security system is installed in the building. The system consists of a central control panel located in the basement served by wall mounted motion sensors installed throughout the first floor spaces. The system is activated via a control panel located inside the building’s rear door. The system appears to have been installed recently and is in good condition.

Fig. 26
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CONDITIONS ASSESSMENT
**ROOFING**

Roofing materials are now asphalt shingles when they were most likely originally slate or wood shingles. According to permits on file in the building department, a new asphalt shingle roof and plywood roof sheathing was installed in 2007. These shingles are architectural in style but their quality is unknown. For planning purposes, the shingle roof should be replaced after 20 years.

**CHIMNEY**

The chimney to the south was removed sometime prior to the third quarter of the nineteenth century as evidenced by the Victorian trim (since removed)\(^{11}\) that surrounded the wide pocket door opening between the parlor and the bedroom as shown in Figure 3. The chimney to the north which serves the hall and current kitchen survives.

A view of the north chimney from the east shows the need for repointing.

![Fig. 27: The chimney and roof from the rear.](image1)

**SIDING**

Clapboard siding requires repair and replacement particularly on the south elevation. Damaged siding should be removed and replaced in kind.

![Fig. 28: Based on the use of wire cut nails, this siding is not original.](image2)

**TRIM**

Where necessary, damaged trim should be removed and either replaced in kind, or a consolidant used to repair original wood features such as window sills.

![Fig. 29: A window on the south side of the house exhibits damage to the sill and the window casing.](image3)

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\(^{11}\) *The Day. Dream House. March 19,1984*

**Mother Bailey House and Tavern**
EXTERIOR FEATURES
Cornice moldings should be scraped and painted and repaired or replaced in kind to eliminate water infiltration and further damage.

Fig. 30: The southeast corner of the cornice return requires repair.

The column bases, porch floor boards and door sill require consolidation where existing fabric can be saved, or replacement in kind where the fabric is too damaged to save.

Fig. 31: The northwest column base appears original while the porch floor boards are replacements.

The door sill is probably original and should be repaired using consolidant after preparing the surfaces. The porch foundation is poured concrete indicating that it was a replacement for an earlier stone foundation.

Fig. 32: The front door sill.
The southwest corner of the building has compressed as is evident in the condition of the clapboards and the opening of the joint between the pilaster and the clapboard. One theory regarding this condition relates to the fact that the brick nogging was removed from the entire house with the exception of the second floor room directly above this area of distress on the first floor. It has been estimated that the weight of the nogging is 400 pounds between the studs, exerting enormous weight on the framing below. Without invasive testing behind the sheetrock of the west front wall, it is not possible to determine the damage to the framing, however, it is suspected that the wall framing has been compromised in this area, contributing to the bowed wall and damage to exterior materials.

An oblique view of the west facing wall looking north shows the bow in the wall due to compromised framing within the wall. Interior finishes should be removed from the first floor front room and the condition of the structure documented and repaired. This condition is apparent in photographs from the mid-twentieth century. It should be noted that the condition of the sill was noted as uncompromised in this area as viewed from the interior however the sill is suspected of being deteriorated. Upon further investigation, the sill should be evaluated to verify its condition.

The southwest corner at the pilaster return exhibits the crushing effect of structural failure of the west wall posts. Joints have pulled apart inviting the deleterious effects of moisture. The sill is this area is also suspected of requiring repair or replacement.
The view from the second story porch room to the south shows the damaged soffit and cornice molding. A gutter and leader should be installed along this roof, matching the effect of the northern portion of this roofline.

Fig. 36: Damaged soffit and cornice molding should be repaired and a gutter added to this roofline.

The mortis and tenon construction of the attic windows indicates that they are early building fabric. The old growth heartwood is in good condition but the windows need to be re-glazed and finished to prolong their life. Other windows are in similar disrepair.

Fig. 37: North facing attic window as viewed from the interior.

The dressed granite block foundation above grade needs to be re-pointed in some areas. Otherwise, the stone is in good condition.

Fig. 38: West facing exposed granite foundation wall.
Earth should be graded away from the structure to enable positive water drainage. Lower levels of exterior siding will need to be removed to view the extent of damage to the structural sill that will require repair or replacement.

Fig. 39: The northeast corner of the ell requires sill replacement and probably replacement of the lower portion of the post as well as siding and trim.

An area at the rear of the building shows siding failure and deteriorated sill framing beyond, that will require replacement. Earth and debris should be kept clear of the sill and siding and gutters should be installed to shed water away from the building.

Fig. 40: Built up soil at the base of the building results in damage to sills.

There is some damage to the corner board at the northeast corner of the house. The rain leader could be extended to move water further from the foundation. Note that the siding kept clear of grade is in good condition.

Fig. 41: Typically, two hundred years of door yard debris build up against the house creating conditions that hasten deterioration.
INTERIOR CONDITIONS
Renovations in 1984 included replacement of all interior wall finishes as the plaster wall surfaces had been removed by previous owners. Brick nogging was removed from all exterior walls except the second floor southwest room which allowed for new insulation and electrical wiring to be installed throughout the house. Existing interior trim was left in place and is in good condition. New sheet rock wall finishes are also in good condition with minor exceptions, indicating that the house has not settled since at least 1984.

Floor boards are either original or at least historic. There are no contemporary infills although there is an area of the first floor entrance hall that requires repair with material in kind.

The central entrance hall viewed from the second floor looking down the staircase shows the new sheet rock walls and the second floor porch addition on the front of the building. The railing around the staircase, probably original is 30” high as opposed to current code compliant height of 36”, based on building usage.

A character defining feature of the house is the decorative staircase trim and paneling under the stair carriage. The materials are in excellent condition and should be preserved.
The front Parlor looking to the east through the opening where the southern fireplace had been. The floor is at its highest point between the two rooms due to the strength of the chimney girts. Note that the sheet rock ceiling has been removed in the east room due to water damage from plumbing above.

Fig. 45: Parlor looking east.

The Hall room to the north of the center hall is in very good condition including the flooring, wall finishes, wood work and exposed framing. The fireplace could use some repointing, but it is expected that it will not become operational.

Fig. 46: The Hall.

The fireplace and paneling in the present day kitchen is in good condition. The fireplace could be re-pointed, however it is expected that it will not be operational in the future.

Fig. 47: 4' high x 6' wide, the kitchen fireplace dominates the room.
The existing kitchen cabinetry is in poor condition and should be removed or replaced based on the intended use of the building.

The post cladding adjacent to the right side of the window shows evidence of water damage. The cladding should be removed so the condition of the post can be determined and repair initiatives taken.

Fig. 48: View to the east of the kitchen cabinetry.

Fig. 49: Post cladding adjacent to the widow is punky and should be replaced.
In the kitchen area, a connection to the main beam was observed to be near failure. Mortise and tenon connections of this period often failed at the connection due to the wood cut out to provide a resting shelf for the beam framing in. This connection can be strengthened with angles bolted into both beams to support the loads. In this way the beam in its entirety can remain in place and no additional framing members would be required. All of the connections should be verified to be in good condition.

The southeast first floor room requires a new sheet rock ceiling. Sheet rock under the window also needs repair. This room has a significant slope to the southeast and to the wall separating the two southern rooms. Baseboard conditions indicate that the sloping floor has been a long term feature.

The southeast room looking west shows the pocket doors that need some realignment. Note the patch in the floor where the south side fireplaces once existed.
A view of the ceiling framing shows new sistered framing adjacent to the original joists. The sistered framing extends over the top of the beam in an attempt to level the floor above. A steel plate has been bolted to the beam to provide additional carrying capacity.

“Marriage marks” (IX) on the roof rafter and collar tie indicate that the building was constructed by the Scribe Rule method of framing whereby the mortise and tenons of framing members were carefully scribed on the ground to fit perfectly in place when raised on the frame.

This dovetail joint exposed in the attic floor shows how the floor joists were framed into the beam, locking them in place without the use of pegs. Attic flooring has been removed to patch first and second floor finishes.
The condition of the foundation as visible from the basement is solid with joints well mortared and stone set securely. There is evidence of water infiltration which could be the result of a high water table, but installing gutters and diverting water away from the foundation will help to insure a dry basement.

The door to the exterior bulkhead shows the effects of water infiltration at the base of the door. The bulkhead was not accessible at the time of this assessment, but the condition of the exterior construction should be reviewed to insure stability of the structure and to insure effective drainage away from the door threshold.

Evidence of ponding adjacent to the bulkhead door should be investigated to insure that water is not collecting at the base of the bulkhead and infiltrating into the basement.
In the basement there were many newer additions of post supporting beams above. This is common practice today when a basement is not being used on a daily basis. The majority of the posts have likely been added over time to reduce “bounce” in the floors above. Figure 59 however is of a beam that has cracked thru and failed. There are posts on both sides of the crack as well as beneath it. This beam either needs to be replaced or the posts need to remain. If the basement is to be open to the public as part of a house museum, the basement beams should be evaluated on a case by case basis to determine whether the posts can be removed and whether an additional support beam should be added.

![Fig. 59: A grouping of new wood and steel columns under the beam on the south side of the central hall above.](image1)

The chimney girt joint framing into the south sill has failed as a result of the lower part of the sill failing. It appears that the sill on the south side of the house will need to be replaced.

Note the stress cracks as the joint is compressed.

![Fig. 60: The dovetail joint of the chimney girt and the south sill have failed.](image2)

The summer girt to the west of the chimney girt frames into the compromised south sill. It appears from the shoring below the beam that this condition is not new. The sill will need to be replaced and the connection to the beam modified.

![Fig. 61: Evidence of the sill failure is obvious on the exterior of the building where crushing failure can be seen in the siding.](image3)
Located in the Waterfront Business/Residence Zone, where the retention of historic character is emphasized both in the City of Groton Zoning Regulations and in the Plan of Conservation and Development, permitted uses include those allowed in the R-5.2 Residence Zone. These R-5.2 uses include the following. Uses that are not appropriate to the Mother Bailey House have been toned down.

1. One-family detached dwellings.
2. One-family semi-detached dwellings.
3. Two-family detached dwellings.
4. Parks and playgrounds.
5. Home occupations (subject to conditions).
6. Family day care homes.
7. Group daycare homes (with conditions).
8. Telecommunications antenna and facilities (with conditions)

R-5.2 Residence Zone Special Permit uses subject to site plan and special permit approval include the following:

1. Churches and places of religious worship.
2. Cemeteries.
3. Child daycare centers (with conditions).
4. Public or private schools.
5. Public buildings essential to safeguarding the Public health, safety and welfare of the neighborhood.
6. Public utility rights-of-way and structures necessary to serve the neighborhood.
7. Bed and Breakfast establishments.

Additional uses permitted subject to site plan approval include the following:

1. Retail businesses such as apparel stores, drug stores, grocery, meat and seafood stores, antique shops, music shops, sporting goods stores, hobby shops, gift shops, and book, stationery, magazine, candy and tobacco shops; but excluding the sale of alcoholic liquor, gasoline, motor vehicles, and heavy equipment.
2. Business services, such as banks, credit unions, loan companies, and other financial institutions, real estate and insurance agencies, utility offices, government, business and professional offices, and printers.
3. Personal services, such as barbershops, beauty salons, photographic studios, coin-operated Laundromats, tailor, dressmaking, millinery, and dry cleaning and laundry pickup stations where the processing is to be done elsewhere.
4. Repair services, such as radio, television, and electrical appliance shops, plumbing shops, carpenter shops, upholstery shops, and shoe repair shops, but excluding automotive repair or services.
5. Eating establishments.
6. On the premises drinking of alcoholic beverages when accessory to an eating establishment, provided that such establishment shall not be located within 800 feet in a direct line from any church, school, charitable institution, hospital, library, playground, park or beach nor located anywhere upon the premises where any of such buildings or uses are situated.
7. Retail sale or rental of boating, fishing, diving, and bathing supplies and equipment.
8. A sail loft or chandlery.
9. Telecommunication antenna and facilities (subject to conditions).

Special permit uses in the WBR Zone include the following subject to Special Permit and Site Plan approval:
1. Any Special Permit Use in the R-5.2 zone.
2. Hotels and motels on lots having a minimum area of 20,000 sq. ft. and a minimum width of 100 feet.
3. Mortuary and funeral homes.
4. Multi-family dwellings subject to the requirements of Section 2.58.
5. Yacht clubs and marinas.
6. Boat docks, slips, piers and wharves for yachts and pleasure boats or for boats for hire carrying passengers on excursions, pleasure, or fishing trips, or for vessels engaged in fishery or shell fishery.
7. A yard for building, storing, repairing, selling, or servicing boats which may include the following as an accessory use: office for the sale of marine equipment or products, dockside facilities for dispensing fuel, restroom and laundry facilities to serve overnight patrons. Furthermore, adequate lanes must be provided to allow access and egress throughout the yard for fire trucks.
8. Boat and marine engine sales and display, yacht broker, marine insurance broker.
9. The rental of boats.
10. Museums with nautical themes.
11. Principal or accessory buildings and facilities for the storage, distribution, and wholesale or retail sale of fresh seafood, subject to the requirements of Section 4.15.
12. Bed and Breakfast establishments, subject to the requirements of Section 4.18.

Section 3.15 states that “a building may contain a combination of permitted uses, however; if one of the uses is residential, then such residential use is limited to areas above the first floor. Recognition of parking requirements in the WBR Zone allows for required parking to be provided within 750 feet of the site, which in this case could allow for shared parking at private or public facilities, especially at times which are off peak of the principal use.

Parking requirements for the uses considered most advantageous for the Mother Bailey House and Tavern include the following:
1. Business services
   1 space for each 250 square feet of gross floor area (3,000 SF/250 = 12 spaces); or 2 spaces for each office or tenant, whichever is greater.

2. Museum
   TBD

The requirements for accessory buildings and uses should be reviewed once a final use for the building is determined, as should the requirements for fences and walls.

**BUILDING CODES**

**Referenced Codes:**

- 2003 International Building Code
- 2003 International Existing Building Code
- 2003 International Plumbing Code
- 2003 International Mechanical Code
- 2006 International Energy Conservation Code
- 2005 State Building Code
- 2005 NFPA 70 National Electrical Code of the National Fire Protection Association Inc.
- 2005 CT Supplement
- 2009 Amendment to the 2005 State Building Code
- 2009 Amendment to the 2005 Connecticut State Fire Safety Code
- 2011 CT Amendment to the 2009 International Energy Conservation Code
- ICC A117.1-3 Accessible and Usable Buildings and Facilities

Primary to a review of the building codes is the understanding that State Statutes trump the building code. A reading of Section 1103.2.15 of the 2003 International Building Code incorporating the 2005 State Building Code, references section 29-274 of the Connecticut General Statutes in which an exception for required accessibility to stories above the street floor that include the offices of municipal or state agencies is not allowed. Therefore, if the building is to house municipal offices, a lift must be provided to access the second floor and basement if it will be open to the public. An accessible toilet room will need to be provided on each floor if both floors are to be Business Use.

According to Section 102.2 of the 2009 Amendment to the 2005 CT State Building Code, “Existing buildings undergoing repair, movement, alterations or additions and change of occupancy shall be permitted to comply with the 2003 International Existing Building Code” or shall comply with the current CT State Building Code. For the purpose of this study, the 2003 International Existing Building Code will be referenced for building code compliance.

As discussed earlier in this report, there are several potential reuse scenarios for the Mother Bailey House. Each use triggers different requirements of the Existing Building Code either based on the level of modification proposed, or upon a change of occupancy. The code devotes Chapter 10 to Historic Buildings and how these buildings may be repaired or altered in a safe
way that allows for preservation of the building. The major points of this chapter include the following:

1. Section 1001.2: The code official shall determine if a report by a design professional is required to show that required safety features are in compliance with the intent of this code. This may entail a study of load paths through the building with regard to seismic design, and it may “demonstrate how the intent of these provisions is complied with in providing an equivalent level of safety.”

2. Special Occupancy exceptions – Museums is addressed in Section 1001.3 which is worth quoting here.
   “When a building in Group R-3 is also used for Group A, B or M purposes such as museum tours, exhibits and other public assembly activities, or for museums less than 3,000 square feet, the code official may determine that the occupancy is Group B when life-safety conditions can be demonstrated in accordance with Section 1001.2. Adequate means of egress in such buildings, which may include a means of maintaining doors in an open position to permit egress, a limit on building occupancy to an occupant load permitted by the means of egress capacity, a limit on occupancy of certain areas or floors, or supervision by a person knowledgeable in the emergency exiting procedures, shall be provided.”

3. Section 1001.4 Flood Hazard Areas: If the historic building will remain a historic building after the proposed work is completed, then the work is not considered “substantial” and the requirements for compliance with the International Building Code with regard to flood hazard protection do not apply.

4. Section 1002 Repairs: Repairs to any portion of a historic building or structure shall be permitted with original or like materials and original methods of construction, subject to certain provisions.

5. Section 1002.5 Replacement: Replacement of existing or missing features using original materials shall be permitted. Partial replacement for repairs that match the original in configuration, height, and size shall be permitted. Safety glazing is the exception which requires full compliance with the International Building Code.

6. Repairs: Repairs shall be done in a manner that maintains the level of fire protection, of protection provided for the means of egress, and the level of accessibility.
ENERGY

Exterior weatherboards are exposed at the base of the attic stair. Other than the weatherboard and clapboard, there is no insulation within this cavity wall. Maximum depth rigid insulation with a vapor barrier should be installed in the stud space prior to finishing the wall.

Fig. 62: Weatherboards on the east elevation.

Brick nogging installed in the stud spaces of exterior walls historically served as a wind barrier, reducing air infiltration. The insulative value is minimal, calculated at R-1 where a contemporary wall should have an R value of 19.

Fig. 63: The room on the southwest corner of the second floor retains the exposed brick nogging which was typical throughout the house at one time.

The ½” rigid polystyrene insulation in the attic peak should be removed. While it may serve to limit some air infiltration, it contributes nothing to the R-value of the space and is toxic when burned. Current codes require that it be encapsulated by sheetrock.

Fig. 64: Attic insulation should be removed until a plan is proposed for building reuse including heating, cooling and ventilation recommendations which will guide in the plans for insulation.
As the rear entrance to the Center Hall will be the most likely accessible entrance to the building due to the fact that it is adjacent to a flat parking area and is the entrance with the sill closest to grade. However, a smooth surface approach to the building will need to be designed that meets ICC A117.1-3 including a ramp to the door, a landing at the door, a door sill no greater than ½” in height. In addition, the existing door opening may need to be modified to provide 32” minimum clearance between the leaf of the open door and the door jamb. The door hardware will need to be modified to include a lever handle door knob.

The front entrance on Thames Street is not at all accessible to persons with disabilities although it will serve as a second means of egress as required by the building code. The sill at the front door, the wood steps of the porch and the granite steps all contribute to an inaccessible entrance.
**FIRE SAFETY**

The rear stair from the east end of the second floor central hall to the rear yard is less than 30” wide making it non-code-compliant as a means of egress from the second floor. The stair to the attic is framed above this staircase.

![Fig. 67: There is no landing at the base of the rear stair making it a safety hazard.](image)

The plank wall at the attic stair has been cut back along the line of the treads. This wall will need to be rebuilt in order to maintain separation of floor areas between the second floor and the attic.

![Fig. 68: Steep risers and narrow treads as well as a narrow width make this stair hazardous.](image)

Throughout the house, door sills present a barrier to total ADA compliance as they are higher than \( \frac{1}{2} “ \). Door widths vary on the first floor from between 2’-6” to 2’-10”. Depending on the building usage, some doorways may need to be widened.

![Fig. 69: This first floor doorway is typical with a high door sill and narrow opening width.](image)
USE RECOMMENDATIONS
The Mother Bailey House should be utilized in such a way that the existing historic fabric and character defining features of the building are preserved. The features include the massing of the building, the placement and size of openings, the relationship of the house to the site and the configuration of interior spaces. The historic fabric includes the materials of original construction such as the stone foundation, the timber frame, weatherboards, siding, chimney and fireplaces, floorboards, staircases, handrails, windows, doors and trim.

1. Maintaining the existing Residential use is the least restrictive as far as code compliance is concerned. Retaining this use may not meet the needs of the City of Groton unless the building were to be divested in which case a Preservation Easement placed on the property would ensure the preservation of the building and site in a manner consistent with goals established by the City.

2. Use of a residential building as a museum, if the floor area is under 3,000 square feet, may allow the building official to categorize it as Use Group B, Business which is much less restrictive than the Assembly Use wherein museums are typically categorized. Meeting basic requirements for structural safety and egress allows for this Business Use without requiring full compliance with the codes for Change of Occupancy.

3. Use of the building to house civic administration, a Business Use, is considered a Change of Occupancy and will require compliance with more stringent sections of the Existing Building Code.

Other uses allowed in the Waterfront Business/Residence Zone and the R-5.2 Residence Zone will tend to have a greater impact on the retention of historic features and fabric as these uses may require the incorporation of modern features such as commercial kitchens, additional means of egress and more intrusive heating, ventilating and air conditioning requirements.

HVAC systems for the house museum and civic administration utilize the same components as outlined in the following recommendations by Salamone & Associates, P.C.

1. Heating, Ventilation and Air Conditioning System:
Salamone & Associates has evaluated the existing HVAC system at the Mother Bailey House and Tavern. The majority of the components which provide the facility with heat appear to be beyond their useful life. Given the useful service life of this equipment and current condition, cost of service and replacement parts along with labor to maintain units could become cost prohibitive. Energy savings will be present with an introduction of proposed components that reflect current concern for cost savings and efficient operation. Salamone & Associates recommends completely removing all HVAC equipment and related systems.

Salamone & Associates recommends the following proposed HVAC system which is applicable to an Office or Museum:
Introduce propane gas service to the building and provide a High Efficiency Propane-Fired Condensing Furnace. The furnace will be located within the basement and will distribute conditioned air via sheet metal ductwork with fiberglass insulation. The ductwork will have two (2) zones; one (1) for the first floor and one (1) for the second floor. Exhaust and combustion air for the furnace will be provided through a new metal liner in the existing chimney. A humidifier would be mounted on the furnace to eliminate dry air distribution. The proposed air supply grilles will be equipped with a volume damper for air flow control.

Proposed cooling will be provided via an exterior high efficiency condensing unit with liquid gas and suction piping. The piping will be routed to an inline direct expansion coil located within the ductwork above the furnace.

Seven (7) day programmable digital thermostats will be provided for the first floor and second floor zones. Each thermostat will communicate with a zone control panel and the propane-fired furnace, thus eliminating excessive cycling and creating energy savings.

Energy star qualified exhaust fans will be introduced to all the bathrooms. Each fan will be inline with ductwork routed to the exterior. Wall caps with back draft dampers will be provided for each exterior termination.

2. Plumbing Systems:
Water service to the property has been shut off at the street. Before it is turned on again, a new shut off valve should be added inside the building as the current valve is broken and requires replacement.

Domestic Hot Water System
Salamone & Associates has evaluated the existing domestic hot water system conditions at the Mother Bailey House and Tavern. The majority of the components which provide the facility with hot water appear to be beyond their useful life. Energy savings will be present with the introduction of proposed components due to the concern for energy savings and operational efficiency.

Salamone & Associates recommends the following proposed Domestic Hot Water System:

Provide point of use water heaters at toilet room sinks and showers as necessary. Prior to distributing hot water to the various fixtures an inline mixing valve will be installed and set to the temperature selected by the local building official.

Plumbing Fixtures
Salamone & Associates has evaluated the existing plumbing fixture conditions at the Mother Bailey House and Tavern. The majority of the fixtures appear to be beyond their useful life and are residential consumption, non-ADA models. As time progresses, given the useful service life of these fixtures, and replacement parts along with labor to maintain units could become cost
prohibitive. Energy savings will be present with an introduction of proposed components due to the present concern for savings and operations. Salamone & Associates recommends the following proposed plumbing fixtures:

Low flow water closets and lavatory fixtures are to be ADA compliant with Water Conservation faucets with aerators. Exterior hose bibs shall be non-freeze wall hydrants with isolation valves.

Sanitary sewer systems
The sewer line connection to the street was updated in 1999 and is assumed to be in good condition.

3. Electrical System:
Salamone & Associates has evaluated the existing electrical system conditions at the Mother Bailey House and Tavern. The condition of the electrical distribution system varied from good to poor. Existing wiring utilizes nonmetallic sheathed cabling. This cabling is not installed properly for a non-residential building of this construction type and would be in violation of Building Code.

Overall the lighting was observed to be in poor condition, although a couple of light fixtures appeared to be in good condition. Switches and receptacles also varied in condition from good to poor with exposed/open outlet boxes observed both in the interior and on the exterior of the building.

Electrical Distribution:
Based upon preliminary load calculations for these use concepts, the existing 200 amp service size would appear to be adequate for this size building. However, should special systems or additional cooling be required above the norm, then the service may require upgrading. At present, the service enters the building in an area that experiences minor water infiltration. The panel should be relocated to a dry area within the basement and the service from the street should be relocated underground. The distribution system within the building should be removed and replaced with wiring installed per Code.

Lighting & Wiring Devices:
All interior and exterior lighting requires replacement with energy efficient lighting. New switches and receptacles should be installed with occupancy sensors located in appropriate rooms. GFCI receptacles would need to be installed were required by Code.

Building Code/Life Safety:
The building would require the installation of an emergency/egress lighting system, fire alarm system, carbon monoxide detection and a call-for-aid system (for handicapped restrooms).

In addition, consideration should be given to whether a CCTV system is warranted.
CAPITAL NEEDS
PRIORITIZED PRESERVATION PLAN

1. Structural stabilization
   • Replace sill beams on the south and southwest portions of the main building
   • Investigate and repair or replace posts at southeast and southwest corners
   • Investigate and repair bulge at first floor southeast windows
   • Investigate and repair or reinforce interior beam connections
   • Repair post on exterior wall adjacent to stair in the kitchen
   • Rebuild foundation and replace sills at ell

2. Exterior stabilization
   • Re-point chimney and investigate condition of flashing
   • Selectively repair wood cornice and soffit
   • Selectively repair or replace wood clapboard
   • Selectively repair or replace wood trim and window casings and window sills
   • Repair and re-glaze all wood windows. Replace storm/screen system
   • Repair doors and jambs and install weatherstripping
   • Repair and replace front porch floor boards, door sill and column base
   • Selectively re-point foundation
   • Re-grade the area up against the east side of the house to expose at least 6” of foundation. Repair foundation as necessary
   • Rebuild the bulkhead.
   • Install gutters and downspouts

3. Interior stabilization
   • Repair floor boards in-kind in area adjacent to stair in the center hall
   • Replace gypsum board ceiling in southeast room
   • Remove kitchen cabinetry and repair wall surfaces
   • Remove and replace all basement and attic insulation

4. Occupancy
   • Re-grade east yard to provide ramp access to rear door
   • Provide HC parking area at rear driveway
   • Repair and replace hardware as necessary for ADA compliance
   • Install ADA compliant lift to access second floor and basement
   • Install propane tank for heating
   • Install HVAC equipment
   • Install electrical distribution system (commercial) and lighting
   • Install ADA plumbing fixtures as appropriate to use group
   • Install emergency lighting, fire alarm, carbon monoxide detection system and call for aid system as required by use group
   • Install additional security systems as warranted by use group
   • Repaint interior and exterior
5. Cosmetic
   • Repair the cast iron fence and clean the granite retaining wall
   • Repair the brick retaining wall in the rear
   • Landscape as appropriate to connect to potential parking area on second lot
   • Landscape to obscure exterior AC equipment and propane tank
   • Install shutters as per historic photographs

COSTS ASSOCIATED WITH STABILIZATION AND OCCUPANCY

1. Structural Stabilization $50,000
2. Exterior Envelop Stabilization 36,000
3. Interior Stabilization 10,000
4. Occupancy
   a. HVAC, plumbing, electrical, fire alarms, etc. $85,500
   b. Accessibility features 10,000
   c. ADA lift $120,000
   d. Interior and Exterior painting 20,000
5. Cosmetic Repair 20,000
Total $351,500
SECRETARY OF THE INTERIORS STANDARDS FOR THE REHABILITATION

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.