

**A Comprehensive Investigation & Analysis of
Existing Conditions
at the
South Franklin Congregational Meeting House
762 Washington St
Franklin, MA**



Prepared for
The Town of Franklin, MA
by

CIVITECTS

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List of Drawings

Title Sheet:

T1.1 Title Sheet

Existing Conditions:

EX1.0 Existing Conditions Plan: Crawlspace
EX1.1 Existing Conditions Plan: Ground Floor
EX1.2 Existing Conditions Plan: Mezzanine

Alternative Option No. 1

D1.1 Option No.1 Demo Plan: Ground Floor
A1.1 Option No.1 Renovation Plan: Ground Floor

Alternative Option No. 2

D1.1 Option No. 2 Demo Plan: Ground Floor
A1.1 Option No. 2 Plan: Ground Floor

1. INTRODUCTION

South Franklin Congregational Meeting House

Constructed in 1861, the South Franklin Congregational Meeting House (SFCMH) also known as Union Evangelical Meeting House originally functioned as a Congregationalist church. The building is designed in the Greek revival style with 4 Doric columns along the north façade. The building is rectangular in footprint and is approximately 2 stories tall with an attic and bell tower. Located within what is currently designated as the greater South Franklin Area, the church was originally intended to provide the Congregationalists of South Franklin a place to commune when inclement weather or the harvest season made worshiping at the main Congregationalist church in the center of Franklin difficult. When religious services were not in session, the building also served as a debate hall for the South Franklin area. In 1972, the Federated Church deeded the building to the Town of Franklin. The building housed the Franklin Historical Museum from 1975 until 2007 when the museum relocated.

The typical exterior wall construction is wood framed with painted clapboard siding and corner boards on the exterior and painted lath and plaster on the interior.

Scope & Project History

The objective of this study is to evaluate the conditions of major building systems, including existing MEP systems; assess structural conditions; evaluate the condition of the building envelope; identify code concerns; review accessibility issues; and to recommend appropriate repairs and improvements with associated costs.

The Town of Franklin solicited Civitects, PC for a proposal to perform a comprehensive investigation of the existing conditions at the Meeting House. On December 16th, 2014, Civitects met with the Town's Building Commissioner/Zoning Officer, Gus Brown, to conduct the initial field survey. The Scope of work requested by the Town of Franklin included the following:

1. Provide a comprehensive field investigation of the existing conditions.
2. Review existing conditions with the Town's Building Commissioner and perform an assessment of the repairs needed.
3. Prepare a report with written description and analysis of the current conditions and issues. Make recommendations for remediation of the conditions/issues, including a prioritization for immediate and long-term action with cost estimates for repair/replacement of same, for review by the Town of Franklin.
4. Meet with Building Commissioner, Gus Brown and Town Administrator, Jeffrey Nutting as required, to present and discuss the report/recommendations.

Methodology

Civitects began a comprehensive field investigation of both the exterior and interior conditions, noting and photo-documenting observations on December 16, 2014. As part of the investigation, Civitects reviewed existing conditions with respect to the current editions of the International Building Code (IBC), the International Existing Building Code (IEBC) and Massachusetts State Building Code (MSBC – 8th Edition) and the requirements of the Massachusetts Architectural Access Board (MAAB). After the initial survey work, Civitects developed recommendations for short-term and long-term goals for repair and replacement of major building systems, including cost estimates. We have not included sampling and testing of potentially hazardous materials in our scope of work. It is understood that the Town will bear the responsibility for retaining the services of a qualified environmental engineering consultant to perform a thorough review of existing conditions to determine the quantities and locations of potentially hazardous materials prior to undertaking any work.

END OF SECTION

2. EXISTING CONDITIONS REPORT: ARCHITECTURAL

A. GENERAL

Designed in the Greek Revival style, the Meeting House is considered the town's oldest religious structure. Originally known as the Union Congregationalist Meeting House, the building is rectangular in massing and consists of a single story with a mezzanine storage space and bell tower. The overall design is relatively simple. The gabled roof extension along the north façade overhangs the open portico below. The roof extension is supported by five Doric columns.

First floor spaces include a vestibule at the north entrance with both male and female toilet rooms at the west end of the vestibule (Photo A.3). Electrical service is fed to a storage space at the east end of the vestibule where the electrical panel is located. To the southern of the vestibule is the meeting room with fixed pews and a raised platform at the south end of the space (Photos A.1 and A.2). Interior walls and ceiling finishes consist of painted plaster over wood lathe. The existing wood floor boards are painted. The building also contains a crawlspace with a dirt floor which is accessed by removing several floor boards in the north vestibule. A detailed structural assessment of the condition of existing 1st floor framing members was completed by structural engineering consultant DM Berg and is included herein.

Access to the mezzanine and bell tower is by way of an interior winding stair located within the women's toilet room at the northwest corner of the building.

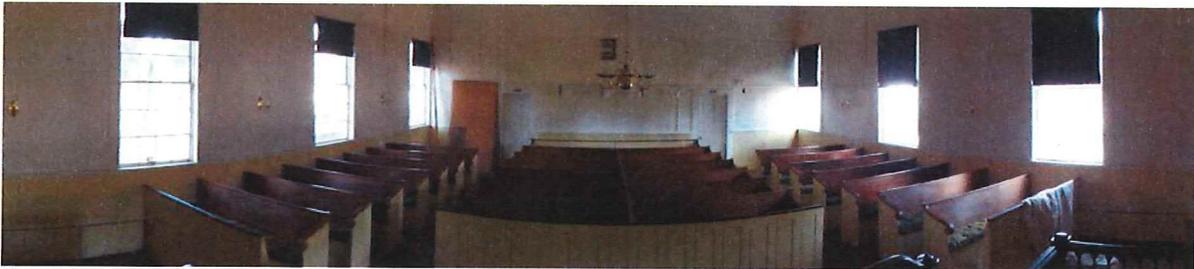


Photo A.1 – Meeting Room



Photo A.2 – Meeting Room Platform



Photo A.3 – North Vestibule

The structure is wood framed with wood clapboard exterior siding; the Construction Type is assumed to be VB. The building measures approximately 52'-4 feet long x 35 feet wide x approximately 33 feet high; the building footprint measured in gross square feet (GSF) is around 1,843 GSF.

The unofficial property record card for 2014 lists the total value of the property at \$281,000. The record card breaks the property value down as follows:

Building Value:	\$125,300
Extra Features Value:	\$ 3,100
<u>Land Value:</u>	<u>\$152,600</u>
Total Value:	\$281,000

B. SITE

The Meeting House is located in South Franklin at 762 Washington Street on approximately 0.655 acres at the intersection of Washington Street and Colt Road. The property is bounded by Colt Road to the east and Washington Street to the north. Situated in a residential neighborhood near the Franklin State Forest (Photo B.1), the Meeting House is surrounded by large pine trees with single family residences to the south and west of the structure. It was observed that Washington Street experiences heavy vehicular traffic throughout the day. Located on the property approximately 24 feet south of the Meeting House is an 18' x 14' booster station for the Town of Franklin Water Department.

The parking area and driveway appears to consist primarily of gravel (Photo B.2). Pine needles scattered around the perimeter of the building obscure much of the site; no impervious paved surfaces were noted. Parking spaces are not identified; there is no striping delineating either accessible or non-accessible parking spaces. There is no signage identifying accessible parking spaces.



Photo B.1 – Aerial photograph

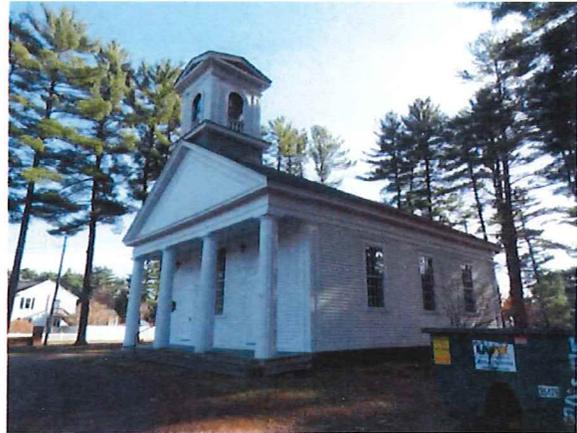


Photo B.2 – View from Washington Street

C. EXTERIOR ENVELOPE

Walls

Exterior walls consist of wood framing with white painted clapboard siding and corner boards at each of the building's four corners (Photo C.1). Both the wood framing and siding appear to be in good condition. The foundation wall is comprised of large granite slabs over stone rubble (Photo C.2). The joints between the granite slabs are not sealed and are open to the crawlspace below the first floor. The granite units themselves are in good condition with no visible cracks observed.

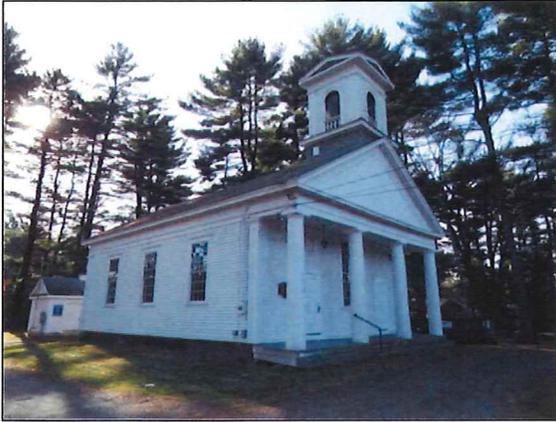


Photo C.1 – Building Exterior



Photo C.2 – Corner Board and Granite Foundation

Windows and Doors

There are a total of nine exterior windows; one window at the north elevation, three windows at both east and west elevations, and two windows at the south elevation. The window at the north elevation, located in the vestibule, is a 16 over 16 double hung wood window and is in good condition. The remaining windows, located in the Meeting Hall space, are 12 over 12 double-hung wood windows and are also in good condition (Photo C.3). Windows at the south façade are provided with exterior shutters. The existing windows are not energy efficient by current energy standards; glazing is single paned. The windows do not appear to be in immediate need of replacement or repair.

Exterior doors consist of two egress doors along the north elevation (Photo C.4). Both doors and frames are wood and assumed to be original to the building and are in fairly good condition. Existing door hardware does not meet accessibility regulations.

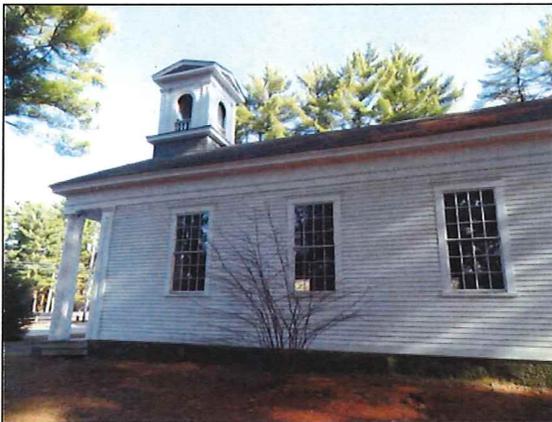


Photo C.3 – 12 over 12 windows at West Elevation



Photo C.4 – Portico at North Façade

Roof

The gable roof is comprised of asphalt shingles over wood board sheathing over sloped wood rafters. A wood-framed bell tower is located at the north end of the roof above the main entrance. In keeping with the Greek Revival style, the gabled roof extends over the north portico and is supported by four Doric columns. The asphalt roof shingles are in fair condition. It is not known when the roof shingles were installed, however they appear to be approaching the end of their lifespan. There are no gutters or downspouts.

Sampling and testing of existing building materials for hazardous materials are not part of this study. Any modifications to existing systems should include an evaluation of building materials such as mastic associated with the existing roof shingles. It is recommended that an inspection for hazardous materials be performed by the Town's licensed environmental consultant.

D. BUILDING INGRESS AND EGRESS

Stairs and ramps

The main entrance to the Meeting House is located along the north elevation. Access to the first floor is by way of a painted wood-framed portico and granite risers which span the full width of the north façade (Photos C.4 and D.1). First floor egress is limited to two single doors which exit from the north vestibule to the portico; there are no other egress doors servicing the first floor. The overall condition of the portico framing, wood floor boards, and granite risers is good (Photo D.1).



Photo D.1 – North portico

The building does not have an accessible entrance. The main entrance is not considered accessible as there is no accessible route from grade to the portico. Additionally, the level change from the portico to first floor represents an architectural barrier. The level change from grade to portico is approximately 15-1/2" and the differential between the portico and first floor vestibule is 9". Therefore, the total differential between grade and first floor is approximately 24-1/2".

Occupancy Load: Existing

The existing occupancy load calculation, including fixed seating located in the Meeting Room, is as follows (Table D.1):

Table D.1: Building Occupancy Load: Existing

Space	Max. Floor Area per Occupant	Calculation	Occupants
Vestibule (102)	N/A	N/A	N/A
Meeting Room (103)	1 Occ. per 18" (continuous fixed seating)	85.125" / 18" = 4.72 [4 occ.]x(14 Rows) = 56 84.125" / 18" = 4.66 [4 occ.]x(12 Rows) = 48 168.5" / 18" = 9.36 [9 occ.]x(1 Row) = 9 93.5" / 18" = 5.19 [5 occ.]x(1 Row) = 5	118
Platform / Altar (104)	1 Occ. per 15 NSF (stages + platforms)	149 NSF / 15 = 10	10
Standing Area (east of platform)	1 Occ. per 5 NSF (standing area)	75 NSF / 5 = 15	15
Standing Area (west of platform)	1 Occ. per 5 NSF (standing area)	65 NSF / 5 = 13	13
Electric Closet (Accessory Area)	N/A		0
Toilet Rooms (Accessory Area)	N/A		0
Mechanical Mezzanine (Accessory Area)	1 Occ. per 300 GSF	192 SF / 300 GSF = 1	1
Total			157 Existing Occupants

Occupancy Load: Allowable

It is understood that the existing fixed seating will be removed with any planned renovation. Therefore, for the following Occupancy Load calculation based on IBC Table 1004.1.1 (Table D.2 below), we have assumed an occupant load with no fixed seating and a continuation of the same use (A-3).

Table D.2: Building Occupancy Load: Proposed Allowable*

Space	Max. Floor Area per Occupant	Calculation	Occupants
Vestibule (102)	N/A	N/A	N/A
Meeting Room (103) <i>(excludes Vestibule 103A)</i>	1 Occ. per 5 NSF (standing area)	970 NSF / 5 = 194	194**
Platform / Altar (104)	1 Occ. per 15 NSF (stages + platforms)	149 NSF / 15 = 10	10
Electric Closet (Accessory Area)	N/A		0
Toilet Rooms (Accessory Area)	N/A		0
Mechanical Mezzanine (Accessory Area)	1 Occ. per 300 GSF	192 SF / 300 GSF = 1	1
Total			205 Proposed Allowable Occupants

Note:

*Allowable Occupancy Load Calculation is based on the assumption that the building's existing Use Group Classification of A-3 Assembly will remain unchanged and that there will be no fixed seating

** Proposed Allowable Occupancy Load is based on schematic design provided for Compliance Alternative Option No. 2

As a result of the removal of the existing fixed seating, the maximum allowable occupancy load will increase from 157 to 205.

Exits and Exit Access Doorways

Per IBC Table 1015.1, the maximum occupant load allowable for spaces with one exit or exit access doorway for an A Use Group is 49. Based on our code analysis which assumes a continuation of the same use (A-3), the occupant load will exceed 49. **Therefore, a second means of egress will be required.**

Two interior exit access doorways are located along the north wall of the Meeting Room leading to the north vestibule. An exit access doorway is defined as a door along the path of egress travel from an occupied room, area or space where the path of egress enters an intervening room. The existing pair of exit access doorways from the Meeting Room to the Vestibule does not meet the remoteness criteria indicated in the code (Table D.3 below). Per IBC 1015.2.1 exit access doorways must be placed a distance apart equal to not less than one-half of the length of the overall diagonal dimension of the building or area to be served measured in a straight line between exit doors or exit access doorways.

Table D.3: Remoteness analysis based on the existing non-sprinklered building as follows:

Space	Egress Component	Overall Diagonal Dimension (Existing)	1/2 Diagonal Dimension (Min. Required)	Actual	Determination
Meeting Room	Exit Access Doorway	49'-0" (+/-)	24'-6"	17'-0" (+/-)	Non-Compliant
Vestibule	Exit Door	22'-0" (+/-)	11'-0"	17'-0" (+/-)	Compliant

Code Ref.	Section	Issue	Potential Options
IBC	1015.2.1	Remoteness of Exit Access Doorway	<ol style="list-style-type: none"> 1. Sprinkler building throughout 2. Provide a 2nd means of egress along south elevation. 2nd means of egress could also be utilized as the accessible entrance for the building

To comply with the remoteness criteria indicated in IBC 1015.2.1, an option would be to install an automatic sprinkler system throughout the building. Per Exception No. 2 of this section, the separation distance for exit doors or exit access doorways is reduced to 1/3 of the length of the maximum overall diagonal dimension of the area served for buildings equipped throughout with an automatic sprinkler system in accordance with IBC 903.3.1.1 or 903.3.1.2 (Table D.4 below). However, as noted in the report prepared by RDK Engineers, a sprinkler system is not required based on the building size and where the occupancy load is less than 300.

Table D.4: Remoteness analysis based on a fully sprinklered building as follows:

Space	Egress Component	Overall Diagonal Dimension (Existing)	1/3 Diagonal Dimension (Min. Required)	Actual	Determination
Meeting Room	Exit Access Doorway	49'-0" (+/-)	16'-4"	17'-0" (+/-)	Compliant
Vestibule	Exit Door	22'-0" (+/-)	7'-4"	17'-0" (+/-)	Compliant

An alternative compliance option would be to provide a second means of egress per IBC 1015.2.1 Exception No. 1. Since a second means of egress will be required for the Meeting Hall as a result of the building's occupancy load exceeding 49, provisions for a second means of egress meeting the remoteness criteria would be a more cost-effective alternative to the installation of a sprinkler system. The required second means of egress could also function as the accessible entrance for the building (refer to Section F: Accessibility). We have provided two schematic designs which incorporate the addition of a second means of egress (Alternative Compliance Option Nos. 1 and 2).

The pair of existing exterior doors at the north façade swings in the direction of the path of travel and are approximately 34" wide each. Per IBC 1005, the total means of egress width shall be as follows:

Table D. 5: Egress Width per IBC 1005.1:

Occupant Load*	Factor	Total Egress Width Required
205	0.2	41 inches

**Note: Occupancy Load is based on the assumed continuation of the same Use Group (A-3 Assembly) and that there will be no fixed seating*

Existing door openings less than those specified in the code may be approved by the AHJ in accordance with IEBC 1103.3 if there is sufficient width and height for a person to pass through or traverse the means of egress.

E. INTERIOR

Stairs and Guards

Access to the mezzanine storage space is by way of a single winding stair at the west end of the north vestibule. From the mezzanine level another stair leads to the bell tower. Per IBC 505.3 - Exception No. 1, a single means of egress is permitted for mezzanines in accordance with Section 1015.1.

The stair is not enclosed and walls are not rated. The code criteria for a new stair connecting 3 stories or less require a 1-hour fire rated enclosure. However, for buildings which can be classified as historic in accordance with IEBC Ch. 11, the required 1-hr. rating need not be provided where the existing wall and ceiling finish is wood or metal lath and plaster (IEBC 1103.7). Additionally, existing handrails and guards at all stairs shall be permitted to remain in historic buildings provided they are not structurally dangerous (IEBC 1103.9).

Since the mezzanine is currently being underutilized as storage for non-essential items, it is recommended that this space be converted into a mechanical mezzanine to house the new air handling unit (AHU) proposed by RDK. Demolition of the existing stair to the mezzanine would allow for the construction of a new ship's ladder to provide access to the mezzanine.

As noted in IEBC 705.8.1 exit signs shall be provided in accordance with the requirements of the IBC. For buildings classified as historic, where exit signs marking location would damage the historic character of the building, alternative exit signs are permitted with the approval of the AHJ (IEBC 1103.11).

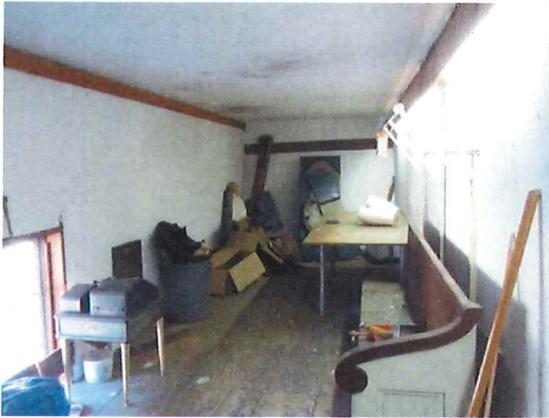


Photo E.1 – Mezzanine

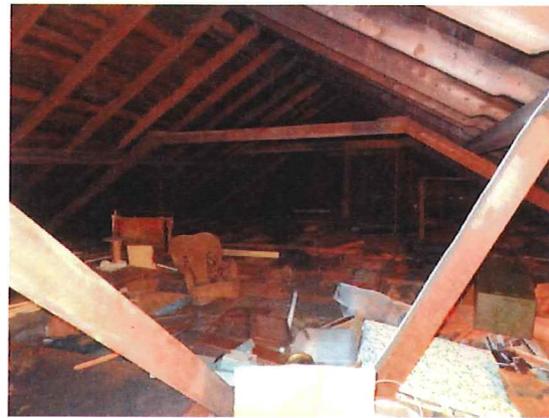


Photo E.2 – Attic above Meeting Room

Interior Finishes

The intent of this study is to focus on code compliance concerns and the evaluation of major building systems; interior finishes have not been addressed as part of this study.

F. ACCESSIBILITY / MAAB

Jurisdiction

Per MAAB Ch. 3.3.1.b, when the work being performed amounts to less than 30% of the full and fair cash value of the building and costs \$100,000 or more, then the work being performed is required to comply with 521 CMR. Additionally, an accessible public entrance and an accessible toilet room, telephone, drinking fountain (if toilets, telephones, and drinking fountains are provided) shall also be provided in compliance with 521 CMR).

Exception: Whether performed alone or in combination with each other, the following types of alterations are not subject to 521 CMR Section 3.3.1 unless the cost of the work exceeds \$500,000 within a thirty-six month period.

- i. Alteration work which is limited solely to electrical, mechanical, or plumbing systems; to the abatement of hazardous materials; or retrofit of automatic sprinklers and does not involve the alteration of any elements for spaces required to be accessible under 521 CMR. Where electrical outlets and controls are altered, they must comply with 521 CMR.
- ii. Roof repair or replacement, window repair or replacement, re-pointing and masonry repair work.

In the event that work performed, including exempted work, amounts to 30% or more of the full and fair cash value of the building, the entire building is required to comply with 521 CMR.

When the work performed on a building is divided into separate phases or projects, or is under separate building permits, the total cost of such work in any 36 month period shall be added together in applying 521 CMR 3.3, Existing Buildings to determine jurisdiction.

Accessible Route

For all spaces designated for public use, an accessible route shall be provided in accordance with MAAB 20.1: Accessible Route. An accessible route shall provide a continuous unobstructed path connecting accessible spaces and elements both inside and outside a facility. Based on our review of existing conditions, neither the interior nor exterior comply with the requirements of MAAB 20.1.

Accessible Route: Site

The existing driveway is gravel and there are no defined parking spaces on site. The number of accessible spaces will need to be determined in accordance with MAAB Section 23.2.1 based on the number of parking spaces that will be required for the building. Additionally, one van accessible space will be needed. A van accessible space shall be provided for one in every eight accessible spaces, but not less than one (MAAB 23.2.2).

Accessible parking spaces are presently not identified as there is no striping delineating parking spaces. It was also noted that there is no signage identifying accessible parking spaces.

Accessible Route: Building

The existing main entrance at the north façade is not considered accessible due to the elevation changes between the portico and first floor and the portico and grade. To meet MAAB requirements, the construction of either a ramp or vertical lift to provide access to the portico from grade would be needed. Additionally, in order to address the existing 9-1/2" (+/-) differential between the portico level and the 1st floor, the portico level would need to be raised to meet the level of the 1st floor. Raising the portico level is technically feasible; the existing portico framing and stair can be modified to comply. However, raising the portico level and the inclusion of a ramp leading to the front portico would arguably detract from the façade's historic aesthetics (refer to drawing A1.1 – Alternative Compliance Option No. 1).

Should the town decide to nominate the building for inclusion in the Massachusetts Register of Historic Places and the nomination is approved by the Massachusetts Historical Commission, the requirements of IEBC Ch. 11: Historic Buildings would apply. As such, alternative options for compliance with MAAB 20.1: Accessible Route may be considered. Per IEBC 1104.1.3 for historic buildings that undergo alterations (Level 1, 2, or 3), at least one main entrance is required to be accessible. However, per Exception No. 1 of this section, if a main entrance cannot be made accessible, an accessible non public entrance that is unlocked while the building is occupied shall be provided. Exception No. 2 offers an alternative to making the main entrance accessible by providing a locked accessible entrance with a notification system or remote monitoring (refer to drawing A1.1 – Alternative Compliance Option No. 2).

As noted in Section D, a second means of egress will be required as a result of the occupancy load exceeding 49. The addition of a second means of egress would allow an opportunity to meet the requirements of an accessible entrance as described in IEBC 1104.1.3.

For both Options 1 and 2, a ramp is included along the west elevation to minimize its visual impact from Colt Road and Washington Street. Per MAAB, a 1:12 slope (1" of rise for every 12" of run) is required. Due to an elevation differential of approximately 24" between grade and 1st Floor, a minimum horizontal length of 24'-0" will be required for both options in order to achieve a 1:12 slope. Signage identifying both accessible and inaccessible entrances would need to be provided in accordance with IBC 1110.

For alterations affecting an area containing a primary function, additional accessibility considerations should be considered. For the subject project, the Meeting Room would be considered the building's primary function area. Per IEBC 605.2, where an alteration affects the accessibility to a, or contains an area of, primary function, the route to the primary function area should be made accessible.

Exceptions to this include the following:

1. Exception No. 1: Costs of accessible route are more than 20% of the cost of the alterations of the prime function
2. Exception No. 2: the provisions does not apply to alterations limited solely to windows, hardware, operating controls elect outlets and signs.

3. Exception No. 3: alterations limited to mechanical, electrical, or fire projections systems or hazardous materials abatement
4. Exception No. 4: alterations for the primary purpose of increasing the accessibility of an existing building facility or element.

Door Hardware

Existing interior and exterior doors are not equipped with hardware that complies with accessibility regulations. MAAB stipulates that door latch sets must be operable with one hand without requiring tight grasping, tight pinching, or twisting of the wrist to operate, thus lever-type operation. The installation of MAAB-compliant hardware will be required for doors associated with the accessible entrance and toilet rooms. Installation of MAAB-compliant hardware for the remaining doors within the building is recommended for doors affected by future renovations.

Drinking Fountains

There are no accessible drinking fountains present. Future accessibility upgrades will need to ensure that drinking fountains meet the quantity and dimensional requirements of the MAAB.

Toilet Rooms

Existing toilet rooms consist of one male and one female toilet room comprised of one toilet and one sink each. Both toilet rooms are located at the west end of the 1st floor Vestibule; there are no toilet rooms present at the mezzanine. It is not clear when these toilet rooms were installed however, the locations of these toilet rooms are not considered acceptable per code. The male toilet room is underneath the stair to the mezzanine. Usable spaces under stairs require 1-hour fire-resistance-rated walls and soffits per IBC 1009.6.3; existing walls and soffits are not rated. The female toilet room is located at the bottom of the stairs; stair egress is through the female toilet room. IBC 1009.6.3 does not permit access to enclosed spaces within the stair enclosure.

Neither toilet room is code compliant and do not meet MAAB regulations; sinks controls consist of knobs; mounting heights are non-conforming and, in general, the rooms do not meet the dimensional requirements of the MAAB. As noted in RDK's report, the plumbing code requires both a male and female toilet room. The town may wish to explore the option of a unisex toilet room however, a variance requiring multiple approvals would be required.



Photo F.1 – Men's toilet room

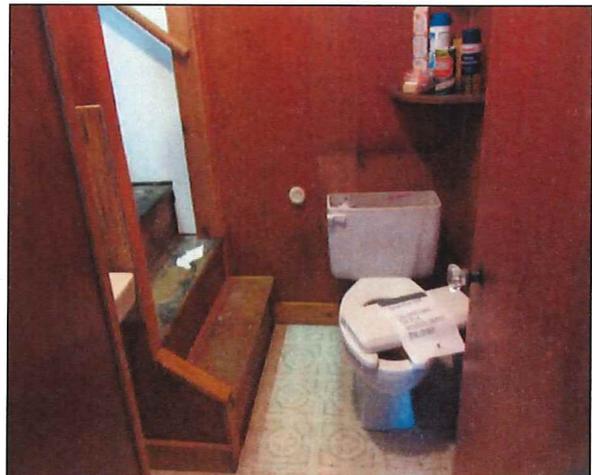


Photo F.2 – Women's toilet room

IEBC 1104.1.4 requires at least one accessible family or assisted-use toilet room complying with Section 1109.2.1 of the IBC shall be provided (*note: the Massachusetts amendments to the IBC delete section 1109.2.1 and instead requires conformance with the requirements of 521 CMR: Massachusetts Architectural Access Board*). Provisions for an accessible toilet room can be integrated into the required toilet room upgrades (Refer to A1.1 Options 1 and 2). Additionally, signage must be provided at accessible toilet rooms in accordance with IBC Section 1110.

END OF SECTION



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South Franklin Meeting House, Franklin, MA

MEP RECOMMENDATIONS –January 19, 2015

The proposed renovations to the South Franklin Meeting House located at 762 Washington Street, Franklin, MA include renovations to the plumbing, HVAC, and electrical systems.

The scope as outlined below is based upon Civitecs PC drawings A-1 and A-2 dated January 16, 2015 and our site meetings on December 16, 2014 with the Town of Franklin's Building Inspector.

HVAC:

Provide an air handling unit (AHU) with gas heating and electric cooling located in the mechanical mezzanine. This AHU will be ducted to both the main open space as well as the entry foyer and will have economizing capability. The outside air ductwork to be routed to existing louver within the bell tower to maintain the historical appearance of the building.

Use of localized electric heating within the foyer and restroom(s) will be installed to offset air infiltration and/or localized heating.

These systems will replace the existing electric cabinet unit heaters installed throughout the spaces.

Toilet exhaust fan to be provided for the 1st floor restroom(s) and be ducted up to an existing louver within the bell tower.

The temperature control system to provide demand ventilation based on carbon monoxide levels to minimize energy use as well as networked into the Town's building management system for remote control.

HVAC

- Air handling unit (1 @ 3,000 CFM, 7.5 tons with economizer).
- Ductwork supply, return, and exhaust distribution, diffusers and grilles for all areas.
- Miscellaneous electric cabinet unit heaters and baseboard for the foyer and restroom(s).

Electrical

The building is serviced by a 120/240V single phase, 4W service distributed through an Arrow Hart/Murray 200 amp panelboard with 40 pole spaces. It is anticipated that this service size is appropriate for the recommended requirements of the building and no revisions are recommended. Existing branch circuitry to be renovated as needed to suit the updated electrical plans.

Site lighting consists of exterior egress lighting on daylight sensors and time clock controlled. These fixtures do not appear to meet the required 0.3 to 0.4 ft/candles standard and are recommended to be replaced. The interior lighting fixtures do not meet current codes and are recommended to be replaced along with an updating of switching and occupancy lighting control. There are emergency battery back-up lighting units serving the large open space and entry foyer which appear to be beyond their useful life expectancy – we recommend that these units be replaced with new. The existing exit signage does not meet current code and we recommend these units be replaced with new.

The fire alarm system serving the building consists of localized smoke detectors connected to a security panel with an automatic dialer to a security company. Current code does not require a fire alarm system in A-3 Assemblies occupancies with an occupant load less than 300 persons. Good design practice is to retain the existing smoke detection and add CO monitoring (based upon the proposed upgrade to gas heating) and the addition of horn/strobe notification appliances throughout. It is assumed the existing security panel can accommodate the proposed upgrades.

Plumbing

The current building has a ½" cold water service and a 4" waste that is reported to discharge to a septic system but it was noted that public sewer is evident in the street. There are two restrooms that are not code compliant as they lack hot water, accessible space, and ventilation. There is no gas service to the building but again it was noted that gas service appears evident within the neighborhood.

We recommend that a new sanitary connection to the public system on Washington Street in front of the building be made. A separate site/civil consultant evaluation of the condition of the septic system be completed to determine whether it is viable for reuse however for purposes of this study it is assumed that the existing septic system is beyond its useful life expectancy.

A new gas service is recommended for efficient heating connect to the existing utility infrastructure underneath the adjacent streets.

Based on the proposed occupancy of Assembly (A-3) the plumbing code requires both a Men's and Women's restroom. We recommend that discussions be started with the local plumbing and building inspectional services to determine whether a variance request for an accessible unisex restroom is suitable given this study's goal of maintaining the current building size and historic character. A variance request will likely require multiple approvals from local jurisdictions, accessibility, and state plumbing board agencies.

- Natural gas piping and service.
- New Plumbing fixtures and services for restroom(s) including sanitary, vents, and piping.
 - New domestic electric point of use water heater for restroom(s) and cold water piping plus insulation for each. New cold water for restroom(s) to be connected to the existing service.
 - New toilet(s) and lavatory(s), all with fixture carriers, sanitary and vent piping connecting to the existing service.

Fire Protection

Per the Massachusetts General Laws Chapter 27 and state building code, chapter 9, table 903.2, based on the building size and occupancy (less than 300), the building is not required to have an automatic wet sprinkler system.



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January 19, 2015

Mr. Michael Keane
Civitects PC
245 Main Street
Wareham, MA 02571

**RE: OLD SOUTH MEETING HOUSE
FRANKLIN, MASSACHUSETTS**

**SUBJECT: STRUCTURAL EXISTING CONDITION STUDY AND STRUCTURAL FEASIBILITY
STUDY FOR RENOVATIONS AND ADDITIONS**

Dear Mike;

We have completed our structural existing condition study and the analysis of the existing building for the feasibility to renovate and construct an addition. We have based our study on field measured structural components and the structural requirements of Chapter 11, Historic Structures of the 2009 International Existing Building Code (IEBC). Additionally, we have attached the "Code Analysis Worksheet for the 2009 International Existing Building Code with the latest Massachusetts Amendments which summarizes the structural requirements required to comply with the code.

The building was constructed in 1856 and is a one-story, and is approximately 1500 sf +/-, with a partial 250 sf mezzanine above the front entry foyer. There is a no basement, only a crawl space below the first floor. The building is constructed of wood. The first floor is framed with 3 x 5 and 2x6 joists spaced at an average spacing of approximately 17 inches on center and running front to rear. The joists span from the exterior sill to four lines of an interior 7x7 wood girders running side to side. The girders are supported typically on four, 9-inch +/- diameter timber posts spaced along the girder. One girder was observed to be supported by three square 6x6 timber posts spaced along the beam. All interior timber posts are supported on single stones directly on the ground. The joists and girders are supported at the perimeter on a wood sill that bears on the foundation wall constructed of granite blocks supported on a mortared stone foundation. The exterior walls are wood framed and are bearing. The roof structure is constructed of sloped rafters supported at the ridge, at a mid-span purlin and at the top of the exterior wall. The mid-span purlin is supported by two queen rod trusses that span side to side of the over the assembly space and the front exterior bearing wall. Lateral wind and seismic loads have been and will be resisted by the exterior sheathed bearing walls.

During our existing condition site visit we made the following observations about the structure:

- We observed the first interior first floor girder line to have sections of girder with powder post beetle damage. We observed the beetle emergence holes along the girder as well as soft wood that could be pried loose with a screwdriver (Photos 1 and 2).
- We observed several timber posts to have powder post beetle damage. These posts seemed to be located towards the front of the building on the first interior girder line. We observed the beetle emergence holes on the entire length of the posts (Photos 3 and 4).



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**OLD SOUTH MEETING HOUSE
FRANKLIN, MASSACHUSETTS
STRUCTURAL EXISTING CONDITION STUDY AND STRUCTURAL FEASIBILITY STUDY FOR
RENOVATIONS AND ADDITIONS**

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- We observed the insect damaged timber posts to be crushing and splitting at the base (Photo 4).
- We observed the timber posts to be bearing on loose stones. There is no connection from the posts to stones (Photos 5 and 6). At one post we observed the post to be supported only on one corner of the post (Photo 7).
- At the square interior post we observed the base to rotted with split and soft wood (Photo 8).
- We observed the ceiling plaster and ceiling joists are support from the bottom chord of the queen rod truss (Photo 9).
- We observed the roof purlins to be supported at its end on a diagonal strut that bears on the front exterior bearing wall (Photo 10).

The following is a summary the structural requirements based on our IEBC Chapter 11 Historic Buildings code study and structural analysis and a Level 3 work defined in IEBC Chapter 4:

1. Massachusetts amendments dated 4/11/14 replace IEBC section 1101.1 in its entirety. There a sentence in Massachusetts amendments section 1101.1 that states, "There is no obligation for the owners of historic buildings to use the provisions of this chapter". We interpret this to mean it is the owner's choice to make structural upgrades to the building but unsafe structural elements identified will need to be repaired or replaced.
2. IEBC section 1102.2 Dangerous buildings, states "...no work shall be required except as necessary to correct identified unsafe conditions." Structurally this means that the insect and rotted wood joists, sills, girders and posts of the first floor framing will need to be replaced or strengthened.
3. IEBC section 1106 Structural, subsection 1106.1 requires the structural work to comply with structural provisions for the Level or work classified in IEBC Chapter 4. As we understand the building will undergo a complete restoration/renovation and as such the "Work Area" will exceed 50% of the building floor area, therefore, this will be defined as "Level 3 Work". Structurally it will be required to comply with the structural requirements contained in IEBC Chapters 6, 7 and 8. Based on our IEBC Code Summary Worksheet, the structural requirements for this project will be the following:
 - The existing exterior wall acts as the lateral load resisting system and shall not be altered such that the shear resistance of the walls are not weakened greater than 10 Percent. This means it is highly recommended that the renovations do not add new exterior wall openings.



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**OLD SOUTH MEETING HOUSE
FRANKLIN, MASSACHUSETTS
STRUCTURAL EXISTING CONDITION STUDY AND STRUCTURAL FEASIBILITY STUDY FOR
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- The structural elements of the building should be inspected and measured. All deteriorated structural elements replaced or reinforced. During our field visit we observed first floor framing to be insect and moisture damaged. Our inspection was limited due to access and time and as such there may additional structural elements throughout the building that will need to repaired and/or replaced.
 - We analyzed the floor framing we measured to determine the limiting live load capacity of the first floor. The first floor joists have a calculated live load capacity of 85 pounds per square foot (psf) and the first floor 7x7 girders have a calculated live load capacity of 75 psf. The current Massachusetts referenced IBC code requires buildings of public assembly to be designed for a live load of 100 psf. Both the existing floor joists and girders will need structurally upgraded in order to meet the 100 psf live load requirement. Alternately, under the exception listed in IEBC subsection 1106.1, the code official may allow the lower live load capacity to continue provided a floor live load control limit method is implemented.
4. IEBC section 1106.2 Unsafe Structural Elements, requires all identified unsafe structural components such as the observed insect damaged and rotted wood joists, sills, girders and posts of the first floor framing to be replaced or strengthened.

If you have any questions or comments, please do not hesitate to contact our office.

Sincerely,

DM BERG CONSULTANTS, P.C.

Thomas G. Heger P.E.
President

Mass Structural P.E. License #35084

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**OLD SOUTH MEETING HOUSE
FRANKLIN, MASSACHUSETTS
STRUCTURAL EXISTING CONDITION STUDY AND STRUCTURAL FEASIBILITY STUDY FOR
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Photo 1



Photo 2

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Photo 3



Photo 4

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Photo 5



Photo 6

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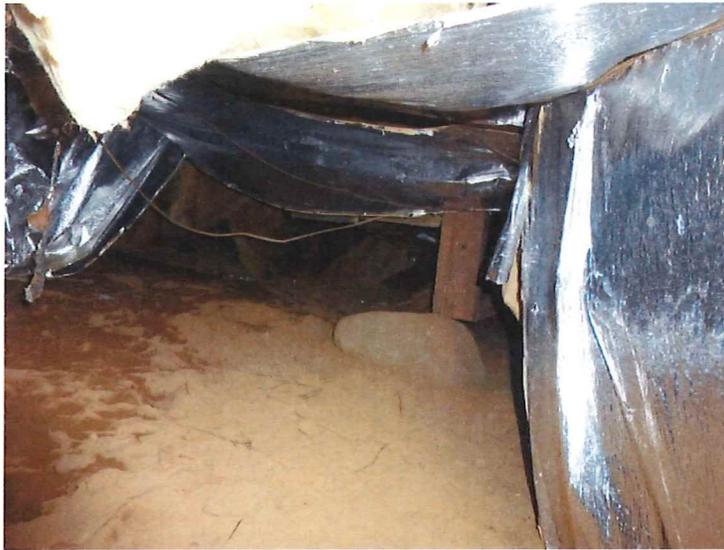


Photo 7

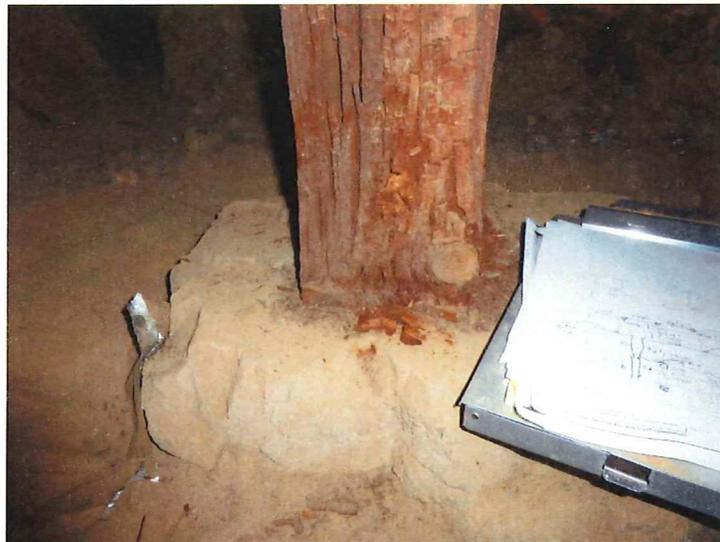


Photo 8

**OLD SOUTH MEETING HOUSE
FRANKLIN, MASSACHUSETTS
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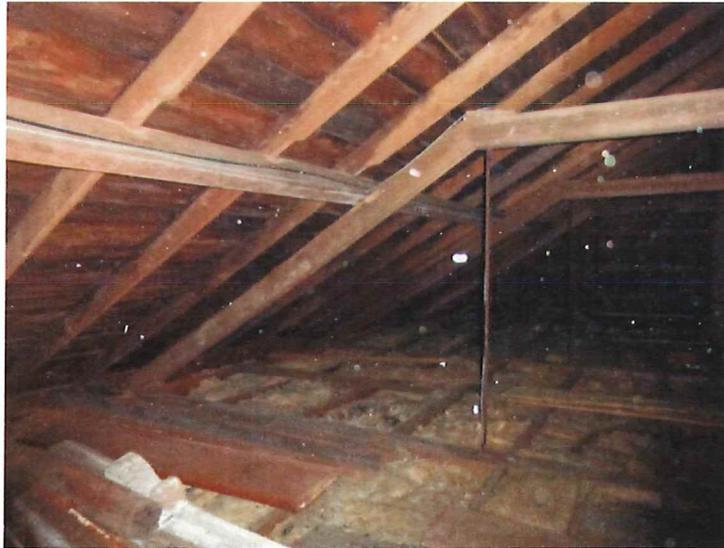


Photo 9



Photo 10



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***Code Analysis worksheet for the 2009
International Existing Building Code with 4/11/14
Massachusetts Amendments***

**OLD SOUTH MEETING HOUSE
FRANKLIN, MASSACHUSETTS**

Existing:

The building is approximately a 1500 sf +/-, 1 with a partial 250 sf +/- mezzanine above the entry foyer. There is a no basement only a crawl space below the first floor. The building is constructed entirely of wood. The lateral load resisting system is the wood sheathed exterior shear walls. This building was constructed circa 1856 and is considered historic. The foundation walls are constructed of granite blocks supported on a mortared stone foundation. The building was originally permitted as a church meeting house and is currently vacant,

Planned:

Planned alterations – complete restoration of the building to be used as a public use meeting hall. Restoration work will likely involve removal and replacement of all interior finishes, reroofing the building, new MEP systems. A horizontal addition may be added to the building. There will likely be no change of use from the original permitted building.

Summary

Work Area Compliance Method: This is the selected method for this code review.



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Chapter 1: Scope and Administration		
Section	Title	N/A and comments
101	GENERAL	
101.5.4.0	Mass amendment – Investigation and Evaluation. Subject to Mass amendment 107.6 to the IBC, a written report is required to be submitted to the Building Official.	Yes
101.9	Cumulative effects.	This building and the proposed restoration/renovation work does not included any planned structural work that would exceed the exception listed therefore 101.9 is not applicable.
101.9 Exceptions	<p>Cumulative effects must be considered except when <u>all</u>:</p> <ol style="list-style-type: none"> 1. Structural work does not involve more than 2% of the total tributary area of horizontal framing members of any existing framed floor or roof. 2. Structural work does not alter shear walls above the foundation. 3. Structural work does not alter columns or diagonal braces. 4. Structural work does not create an opening in any framed floor or roof that has an area more than 2% of the framed floor or roof. 5. Structural work does not alter any floor or roof diaphragm and its connections such that in-plane shear resistance is reduced by more than 5%. 6. Structural work does not remove or reconfigure lateral load resisting frames, or foundations supporting them. 	This building and the proposed restoration/renovation work does not included any planned structural work that would exceed the exception listed therefore 101.9 is not applicable.



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Chapter 4: Classification of Work (Work Area Compliance Method)		
Section	Title	N/A and comments
402	REPAIRS	
403	ALTERATIONS—LEVEL 1	Level 1 work applies for the proposed renovation/restoration project. Comply with structural requirements of IEBC Chapter 6.
404	ALTERATIONS—LEVEL 2	Level 2 work applies for the proposed renovation/restoration project. Comply with structural requirements of IEBC Chapters 6 and 7.
405	ALTERATIONS—LEVEL 3	Level 3 work applies for the proposed renovation/restoration project. Comply with structural requirements of IEBC Chapters 6, 7 and 8.
406	CHANGE OF OCCUPANCY	N/A no Change in occupancy
407	ADDITIONS	Any new additions will be structurally separated and will not impact the existing building.
408	HISTORIC BUILDINGS	Building is Historic. Comply with structural requirements of IEBC Chapter 11.
409	RELOCATED BUILDINGS	N/A



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Chapter 6: Alterations—Level 1 (Work Area Compliance Method)		
Section	Title	N/A and comments
601	GENERAL	
601.3	Flood hazard areas	
606	STRUCTURAL	
606.1	General	
606.2	Addition or replacement of roofing or replacement of equipment	Comply - replacement of existing roofing.
606.2 Exceptions	<ol style="list-style-type: none"> 1. Dead load increase $\leq 5\%$? 2. Conventional light-frame construction and dead load increase $\leq 5\%$? 3. Second layer of roofing ≤ 3 psf? 	<ol style="list-style-type: none"> 1. No dead load increase 2. N/A 3. N/A existing roofing will be stripped and replaced
606.2.1	Wall anchors for concrete and masonry buildings	N/A not a masonry building
606.3	Additional requirements for reroof permits	
606.3.1	Bracing for unreinforced masonry bearing wall parapets	N/A no unreinforced masonry parapets
606.3.2	Roof diaphragms resisting wind loads in high-wind regions <ol style="list-style-type: none"> 1. Basic wind speed greater than 115 mph and occupancy category type IV 	Occupancy Category II and Basic Wind Speed in Franklin is 105 mph. So the existing roof structure does not need to be checked for wind uplift and diaphragm shear connectors.



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Chapter 7: Alterations—Level 2 (Work Area Compliance Method)

Section	Title	N/A and comments
701	GENERAL	
701.2	Alteration Level 1 compliance (all Level 2 work must also comply with Level 1 requirements)	Will comply
701.3	Compliance (all new construction must comply with IBC)	Will comply
707	STRUCTURAL	
707.2	New structural members	Any new structural members added within the building will be design per the latest addition of IBC
707.3	Minimum design loads	Use minimum design loads applicable to the time the building was constructed to check existing structural elements.
707.4	Existing structural elements carrying gravity load	
707.4 Exceptions	1. Stress increase $\leq 5\%$? 2. Group R? Less than 6 units? And conventional light-frame construction?	Renovations/restoration will not add additional loads to the existing framing members therefore exception applies.
707.5	Existing structural elements resisting lateral load	Renovations/restoration to the lateral load resisting elements will not increase the demand-capacity greater than 10%, therefore compliance with this section is not required.
707.5.1	Irregularities	No irregularities
707.6	Voluntary lateral-force-resisting system alterations	N/A



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Chapter 8: Alterations—Level 3 (Work Area Compliance Method)

(Required Greater than 50% Work Area)

Section	Title	N/A and comments
801	GENERAL	
801.2	Compliance (all Level 3 work must also comply with Levels 1 and 2 requirements)	Will comply.
807	STRUCTURAL	
807.1	General	
807.2	New structural elements	Any new structural members added within the building will be design per the latest addition of IBC.
807.3	Existing structural elements carrying gravity load	Renovations/restoration will not add additional loads to the existing framing members therefore exception applies.
807.4	Structural alterations	
807.4 And 707.5 Exceptions	1. Group R? Less than 6 units? And conventional light-frame construction?	Renovations/restoration to the lateral load resisting elements will not increase the demand-capacity greater than 10%, section 707.5 was not triggered, therefore, compliance with this section is not required.
807.4.1	Evaluation and analysis	Current proposed structural work will be to repair and reinforce substandard and damaged structural framing. Alterations to the lateral load resisting system are not planned at this time.
807.4.2	Substantial structural alterations	Structural alterations will not exceed 30 percent of the total floor area. Compliance to this subsection is not required
807.4.3	Limited structural alteration	Use minimum design loads applicable to the time the building was constructed to check existing structural elements.
807.5 (MA Amendments)	Seismic Hazards (for concrete and masonry buildings only)	NA Building is not a concrete or masonry structure.

Chapter 9: Change of Occupancy (Work Area Compliance Method)

(N/A No Change in Occupancy)

Section	Title	N/A and comments
902	SPECIAL USE AND OCCUPANCY	
902.1	Compliance with the building code (changes to certain occupancies require full compliance with the IBC)	
902.2	Underground buildings	
907	STRUCTURAL	
907.1	Gravity loads	
907.1 Exception	Stress increase $\leq 5\%$?	
907.2	Snow or wind loads	
907.2 Exception	Is new occupancy with higher importance factor $\leq 10\%$ of the total floor area?	
907.3	Seismic loads	
907.3.1	Compliance with the IBC level seismic forces	
907.3.1 Exceptions	<ol style="list-style-type: none"> 1. Group M building to start with and is < six stories and in Seismic Design Category A, B, or C? 2. Equivalent level of performance and seismic safety approved by the building official? 3. Is occupancy with the higher hazard category $\leq 10\%$ of total building floor area and not classified as Occupancy Category IV? 4. Unreinforced masonry in Occupancy Category III and in Seismic Design Category A or B? If so may use Appendix A1. 	
907.3.2	Access to Occupancy Category IV	



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Chapter 10: Additions (Work Area Compliance Method)

(N/A Additions will be structurally seperated)

Section	Title	N/A and comments
1001	GENERAL	
1001.1	Scope (additions to comply with IBC; only that portion of existing building impacted by addition needs to comply with IEBC unless otherwise specified in IEBC)	
1003	STRUCTURAL	
1003.1	Compliance with the IBC	
1003.2	Additional gravity loads	
1003.2 Exceptions	1. Stress increase $\leq 5\%$? 2. Group R? Less than 6 units? And conventional light-frame construction?	
1003.3	Lateral force-resisting system.	
1003.3 Exceptions	1. Group R? Less than 6 units? And conventional light-frame construction? 2. Lateral-force story shear increase in any story $\leq 10\%$ cumulative	
1003.3.1	Vertical additions	
1003.3.2	Horizontal additions	
1003.3.3	Voluntary addition of structural elements to improve the lateral-force-resisting system	
1003.3.4	Irregularities	
1003.4	Snow drift loads	
1003.4 Exceptions	1. Element stress increase $\leq 5\%$? 2. Group R? Less than 6 units? And conventional light-frame construction?	



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Chapter 11: Historic Buildings (Work Area Compliance Method) (N/A Not a Historic Building)		
Section	Title	N/A and comments
1101	GENERAL	
1101.2	Report (report to building official required if necessary in the opinion of the code official)	Report will be submitted with this summary
1101.4	Flood hazard areas (historical buildings are exempt)	NA
1102	REPAIRS	
1102.1	General (repairs may be made with original or like materials subject to provisions of Ch. 11)	
1102.2	Dangerous Buildings	Correct all identified unsafe structural conditions.
1106	STRUCTURAL	
1106.1	General (must satisfy requirements for non-historical buildings, except code official may accept operational controls that limit live loads on floors that do not meet IBC LL requirements)	Floors will be structurally evaluated for the current Live Load capacity. The may require reinforcement to meet IBC LL requirements. As an option the code official may accept a lower LL and require a LL limit control method for the building.
1106.2	Unsafe Structural Elements	Repair and/or replace all identified unsafe structural conditions.

5. CODES & STANDARDS

This project falls under the jurisdiction of the Town of Franklin. Permitting and oversight for the renovations falls to the local inspectors. Relevant building codes and regulations are listed at the end of this section.

1. **Use Group:** (IBC 302.1, 303.1) A-3 Assembly (museum):
(Assumed Use Group based on previous occupancy)

2. **Construction Type:** (IBC 602.0) Type VB (assumed)

3. **Historic Buildings** (IEBC 202) (IEBC Ch. 11) The original building was constructed in 1861 (Massachusetts Historical Commission Form B dated March 2011.). The building is not currently listed on the Massachusetts Register of Historic Places. The town may consider nominating the building for inclusion on the register. Once listed, the building would comply with IEBC Ch. 11.

4. **Height and Area Limit:** (IEBC 1002) (IBC Table 503) Existing Conditions are as follows:
Height: 33 feet (assumed)
Area: 35'-0" x 52'-4" = 1,843 GSF (total building footprint)

Allowable (Assuming A-3 Assembly Use Group)
 Height: 1 story, 40 feet
 Area: 6,000

5. **Occupant Load:** (IBC 1004.0) (IBC Table 1004.1.1) (IBC 1004.7)

Building Occupancy Load: Existing

Space	Max. Floor Area per Occupant	Calculation	Occupants
Vestibule (102)	N/A	N/A	N/A
Meeting Room (103)	1 Occ. per 18" (continuous fixed seating)	85.125" / 18" = 4.72 [4] (14 Rows) = 56 84.125" / 18" = 4.66 [4] (12 Rows) = 48 168.5" / 18" = 9.36 [9] (1 Row) = 9 93.5" / 18" = 5.19 [5] (1 Row) = 5	118
Platform / Altar (104)	1 Occ. per 15 NSF (stages + platforms)	149 NSF / 15 = 10	10
Standing Area (east of platform)	1 Occ. per 5 NSF (standing area)	75 NSF / 5 = 15	15
Standing Area (west of platform)	1 Occ. per 5 NSF (standing area)	65 NSF / 5 = 13	13
Electric Closet (Accessory Area)	N/A		0
Toilet Rooms (Accessory Area)	N/A		0
Mechanical Mezzanine (Accessory Area)	1 Occ. per 300 GSF	192 SF / 300 GSF = 1	1
Total			157 Existing Occupants

Building Occupancy Load: Proposed Allowable*

Space	Max. Floor Area per Occupant	Calculation	Occupants
Vestibule (102)	N/A	N/A	N/A
Meeting Room (103) <i>(excludes Vestibule (103A))</i>	1 Occ. per 5 NSF (standing area)	970 NSF / 5 = 194	194**
Platform / Altar (104)	1 Occ. per 15 NSF (stages + platforms)	149 NSF / 15 = 10	10
Electric Closet (Accessory Area)	N/A		0
Toilet Rooms (Accessory Area)	N/A		0
Mechanical Mezzanine (Accessory Area)	1 Occ. per 300 GSF	192 SF / 300 GSF = 1	1
Total			205 Proposed Allowable Occupants

Note:

*Allowable Occupancy Load Calculation is based on the assumption that the building's existing Use Group Classification of A-3 Assembly will remain unchanged and that there will be no fixed seating

** Proposed Allowable Occupancy Load is based on schematic design provided for Compliance Alternative Option No. 2

6. **Hazardous Index Rating:** 3 (A-Assembly)
(IEBC Table 912.4)

7. **Egress:**
Required Egress Width per Occupant:
(IEBC 1301.6.11.1)
(IEBC Table 1301.6.11)
(IBC 1005.1)

.3 in stairs (non-sprinklered buildings)
.2 in doors (non-sprinklered buildings)

Existing:
157 occ. x 0.2= 31.4 inches
Proposed Allowable:
205 occ. x 0.2= 41 inches

8. **Exits or Exit Access Doorways from Spaces:**
(IBC Table 1015.1)

Required: the maximum occupant load allowable for spaces with one exit or exit access doorway for an A Use Group is 49.

Existing: The existing occupancy load (157 occupants) exceeds the maximum allowable.

Proposed: The proposed allowable occupancy load (205 occupants) exceeds the maximum allowable; therefore, a second means of egress will be required.

9. **Exit and Exit Access Doorway Arrangements:**
(IBC 1015.2.1)

Required: Exit access doorways must be placed a distance apart equal to not less than one-half of the length of the overall diagonal dimension of the building or area to be served measured in a straight line between exit doors or exit access doorways.

Existing: the existing pair of exit access doorways from the Meeting Room to the Vestibule does not meet the remoteness criteria.

Proposed: inclusion of a second means of egress (as required per 1015.1) will allow for compliance with remoteness criteria.

10. **Travel Distance:**
(IBC 1016 and
Table 1016.1)

Required: 200 feet (non-sprinklered buildings)

Existing: Building is less than 50 feet wide in either direction.

11. **Minimum Number of Exits:**
(IBC Table 1021.1)

Required: 2 exits for 1-500 occupants

Actual: 2 exits

12. **Stair Fire Resistance Rating:**
(IBC 1022.1)

1-hour (non-sprinklered buildings, connecting less than four stories)

(IEBC 1103.7)

For buildings which can be classified as historic in accordance with IEBC Ch. 11, the required 1-hr. rating need not be provided where the existing wall and ceiling finish is wood or metal lath and plaster.

13. **Minimum Guard Rail Height:**
(780 CMR 1012)

42" where open sided walkways, mezzanines, platforms, stairways, ramps and landings are located more than 30" above the floor or grade below

Existing:

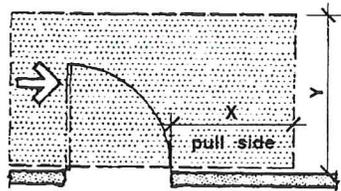
There are no existing guard rails.

The existing portico does not exceed 30"; proposed ramp would be approximately 24" above grade.

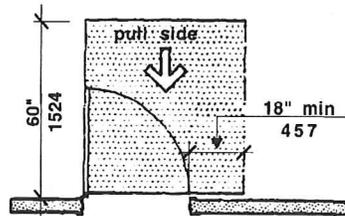
14. **Accessibility:**

a. **Push/Pull Clearances:**
(521 CMR 26.00)

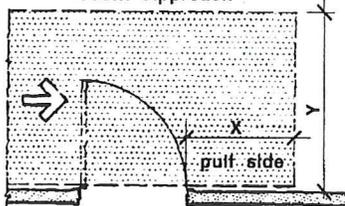
Push and Pull Side Clearance Diagrams from the current edition of 521 CMR



NOTE: X = 42" (1067 mm) min.
If Y = 54" to 59" (1372-1499 mm)

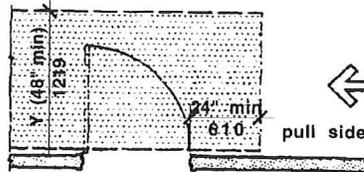


Front Approach



NOTE: X = 36" (914 mm) min.
If Y = 60" (1524 mm)

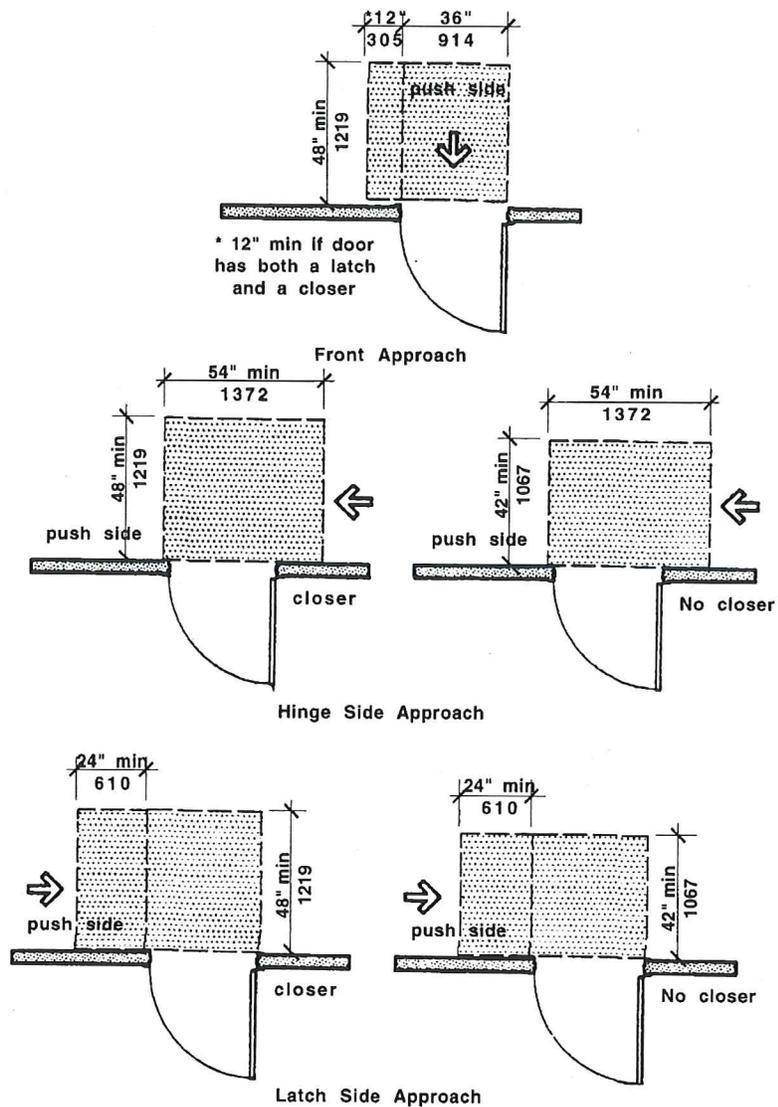
Hinge Side Approach



NOTE: Y = 54" (1372 mm) min.,
If door has closer.

Latch Side approach

Maneuvering Clearance at Doors (Pull Side)
Figure 26d



Maneuvering Clearance at Doors (Push Side)
Figure 26e

- b. Hardware:
(521 CMR 26.11)

Handles, Pulls, Latches, locks, and other operating devices on accessible doors shall have a shape that is easy to operate with one hand and that does not require tight grasping, tight pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs.

Existing:

Existing door hardware does not comply with current MAAB requirements.

- c. Ramps:
(521 CMR 24.2.1)

The maximum slope of a ramp shall be 1:12.

Existing:

There are no existing ramps.

Any new ramp construction shall comply with 521 CMR 24.2.1

- d. Toilet Rooms:
(521 CMR 30.1.a.)

In each adult toilet room, at least one water closet and one sink shall be accessible to persons in wheelchairs, or a separate accessible unisex toilet room shall be provided at each location.

Existing:

Existing first toilet rooms do not conform to current MAAB requirements and shall be made to comply.

RELEVANT CODES AND REGULATIONS

IBC	2009 International Building Code
IEBC	2009 International Existing Building Code
780 CMR	Massachusetts Amendments to the International Building Code, 8 th Edition
521 CMR	Massachusetts Architectural Access Board (MAAB) Rules and Regulations
IECC	2012 International Energy Conservation Code
ADAAG	Americans with Disabilities Act
527 CMR 12	2011 Massachusetts Electrical Code
NFPA 72	2010 National Fire Alarm Code
NFPA 101	Life/Safety Code
248 CMR	Massachusetts Fuel, Gas and Plumbing Code
IMC	2009 International Mechanical Code
ASHRAE Std 62	ASHRAE Standard 62
MGL	Massachusetts General Laws

END OF SECTION

6. RECOMMENDATIONS

Evaluation of Alternative Compliance Options

Early meetings with the town included discussions on the advantages and disadvantages of placing the building on the Massachusetts State Register of Historic Places. Initiating the process for placing the building on the state register would require the submission of an updated "Survey B" Form to the Massachusetts Historical Commission (MHC) for review and approval. A survey B form was completed in March 2011 but never submitted to the MHC (Appendix B).

An advantage of having the structure listed on the state register is that renovations would not require full compliance with the code for new construction. In accordance with IEBC Chapter 11: Historic Buildings, existing conditions would be maintained, at a minimum, to their current level of compliance, or conditions would be improved as required in accordance Chapter 11.

While the schematic designs presented for both Alternative Compliance Option Nos. 1 and 2 could be considered viable options for addressing existing code and life/safety issues, it was agreed with the town that Alternative Compliance Option No. 1 would have a greater impact on the overall historic appearance of the building. Unless a variance is obtained from the Massachusetts Architectural Access Board (MAAB), in order to meet MAAB requirements, the main entrance will need to be made accessible. This would require raising the level of the north portico to meet the 1st floor level. Additional stairs would be needed and the original Doric columns would be affected. A new ramp along the west elevation would provide an accessible route to the raised portico. A new second means of egress, including new door and exit stairs, would be constructed at the southeast corner of the building.

The schematic design for Option No. 2 assumes listing the building on the state's historic register. This scheme would allow for the second entrance to be used as the accessible entrance for the building which is allowable per IEBC 1104.1.3. In addition to bringing the building into compliance with code and life/safety requirements, Option No. 2 would be less costly than Option No. 1. During subsequent discussions with the town, the consensus was that placing the building on the state register may be an option to explore further. As such, it was agreed to have the cost estimate reflect Option No. 2 and to provide separate line items reflecting the added costs associated with Option No. 1.



South Franklin Meeting House Renovations

762 Washington Street, Franklin, MA

Schematic Design Cost Estimate

May 11, 2015

Architect: Civitects, PC

Prepared For: Town of Franklin

North Bay Company, Inc.
125 Church Street, Suite 90123
Pembroke, MA 02359

T 508-686-2781
F 508-686-2799
info@nbaycc.com
www.nbaycc.com





Project: South Franklin Congregational Church
Prime Architect/Engineer: Civitects, PC
Cost Estimator: North Bay Company, Inc., 125 Church St., Unit 90-123, Pembroke, MA
Date: May 11, 2015

STUDY PHASE COST ESTIMATE

INTRODUCTION

PROJECT DESCRIPTION:

Renovation to existing church/meeting house.

PROJECT PARTICULARS:

Schematic drawings dated March 9, 2015 prepared by Civitects, PC
Quantities are from direct takeoff of items, when possible, according to ASPE recommended Standard Estimating Practice

PROJECT ASSUMPTIONS:

Construction will be phased to allow each trade to perform their work with least amount of impact on other trades and occupants. The project will be publicly bid and performed by a Prime General Contractor certified by DCAM using prevailing wage rates. Costs are based on a competitive bid process in all trades and sub-trades. Unit costs and labor are based on current construction costs in Franklin, MA. General Requirements value covers bonding and insurances for the GC.

PROJECT EXCLUSIONS:

- Escalation beyond 1 year from now for completion of bid documents
- Design Fees and other soft costs
- Project Administration
- Site or existing conditions surveys
- Window replacement
- Roof replacement
- Geotechnical Engineering
- Hazardous materials survey, report and removal
- Police detail and street/sidewalk permits
- Printing and Advertising
- Testing and Inspections

Project: South Franklin Congregational Church

Date: May 11, 2015

STUDY PHASE COST ESTIMATE

GRAND SUMMARY

TOTAL DIRECT COSTS	\$ 330,134
GENERAL REQUIREMENTS (10%)	\$ 33,013
OVERHEAD AND PROFIT (15%)	\$ 54,472
TOTAL - DIRECT COST AND OH&P	\$ 417,620
CONTINGENCY (15%)	\$ 62,643
BOND & INSURANCE (1%)	\$ 4,803
ESCALATION (1 year to mid-point of construction) (5%)	\$ 24,253
TOTAL - SCHEMATIC DESIGN ESTIMATE	\$ 509,319
TOTAL \$/SF	\$ 350.77
ALLOWANCE PORTICO MODIFICATIONS	\$ 28,800.00

Project: South Franklin Congregational Church
 Date: May 11, 2015

STUDY PHASE COST ESTIMATE

MAIN SUMMARY

DIV.	ELEMENT	TOTAL SF	TOTAL COST	1,452.00 COST / SF
02	EXISTING CONDITIONS		\$ 23,145	\$ 15.94
03	CONCRETE		\$ 17,896	\$ 12.33
04	MASONRY		\$ -	\$ -
05	METALS		\$ 23,450	\$ 16.15
06	WOOD, PLASTICS AND COMPOSITES		\$ 14,653	\$ 10.09
07	THERMAL AND MOISTURE PROTECTION		\$ 9,138	\$ 6.29
5	OPENINGS		\$ 10,215	\$ 7.04
09	FINISHES		\$ 24,160	\$ 16.64
10	SPECIALTIES		\$ 1,600	\$ 1.10
11	EQUIPMENT		\$ -	\$ -
12	FURNISHINGS		\$ -	\$ -
14	CONVEYOR SYSTEMS		\$ -	\$ -
21	FIRE SUPPRESSION		\$ -	\$ -
22	PLUMBING		\$ 31,300	\$ 21.56
23	HVAC		\$ 39,906	\$ 27.48
26	ELECTRICAL		\$ 45,123	\$ 31.08
27	COMMUNICATIONS		\$ -	\$ -
28	ELECTRONIC SAFETY AND SECURITY		\$ 6,970	\$ 4.80
31	EARTHWORK		\$ 20,447	\$ 14.08
32	SITE IMPROVEMENTS		\$ 21,133	\$ 14.55
33	UTILITIES		\$ 41,000	\$ 28.24
TOTAL DIRECT COSTS			\$ 330,134	\$ 227.37
ALLOWANCE: PORTICO MODIFICATIONS			\$ 28,800.00	

Project: South Franklin Congregational Church

Date: May 11, 2015

STUDY PHASE COST ESTIMATE

DIRECT COST DETAIL

DIV.	ELEMENT	QTY	UNIT	UNIT COST	SUBTOTAL	TOTAL
02	EXISTING CONDITIONS					\$ 23,145
	Shoring and jacking	1	ls	\$ 8,000.00	\$8,000	
	Remove existing timber posts	15	ea	\$ 110.00	\$1,650	
	Remove existing deteriorated wood girder, 7x7	34	lf	\$ 35.00	\$1,190	
	CONTINGENCY (15%)	15	ea	\$ 400.00	\$6,000	
	Remove existing 1st floor insulation	1,452	sf	\$ 3.00	\$4,356	
	Remove existing window	1	ea	\$ 90.00	\$90	
	Demolish portion of exterior wall below window	12	sf	\$ 8.00	\$96	
	Partially demo existing plaster walls, assume 9'h	180	sf	\$ 5.00	\$900	
	Remove existing doors, frames, thresholds	2	ea	\$ 120.00	\$240	
	Remove existing panel doors	1	pr	\$ 70.00	\$70	
	Demolish existing wood staircase	1	flt	\$ 400.00	\$400	
	Remove existing exterior handrail	3.5	lf	\$ 8.00	\$28	
	Remove existing wood flooring	50.0	sf	\$ 2.50	\$125	
03	CONCRETE					\$ 17,896
03 30	Cast-In-Place Concrete					
	Concrete Footings at Replaced Posts, assume 2'x2'x1'					
	Form and strip	120	SFCA	\$ 12.00	\$ 1,440.00	
	Place and finish	18	CY	\$ 398.00	\$ 7,164.00	
	Concrete	18	CY	\$ 119.00	\$ 2,142.00	
	Rebar	1.6	TN	\$ 2,000.00	\$ 3,150.00	
	Pump	1.0	EA	\$ 1,500.00	\$ 1,500.00	
	Concrete footings at ramp	1.0	LS	\$ 2,500.00	\$ 2,500.00	

DIV.	ELEMENT	QTY	UNIT	UNIT COST	SUBTOTAL	TOTAL
04	MASONRY				\$	-
05	METALS				\$	23,450
05 12	Structural Steel Framing					
	6"x6"x1/4" Steel Tube Columns, approx 3' (assumed)	15.00	EA	\$ 980.00	\$14,700	
	Column base plates	15	EA	\$ 80.00	\$1,200	
	Column top plates/wood connectors	15	EA	\$ 250.00	\$3,750	
05 50	Miscellaneous Metals					
	Ships ladder	1	EA	\$ 3,800.00	\$3,800	
06	WOOD, PLASTICS AND COMPOSITES				\$	14,653
06 05	Rough Carpentry					
	Wood framed ramp	180	SF	\$ 36.00	\$6,480	
	Wood guardrail w/ handrail	41	LF	\$ 170.00	\$6,970	
	Wall mounted handrail	31	LF	\$ 36.00	\$1,116	
	Misc. blocking at walls (ALLOWANCE)	25	BF	\$ 3.46	\$87	
7	THERMAL AND MOISTURE PROTECTION				\$	9,138
07 21	Thermal Insulation					
	Fibergalss batt insulation, underside of 1st fl (difficult conditions)	1,452	SF	\$ 5.26	\$7,638	
07 52	Roofing and Flashing					
	New architectural asphalt shingles & flashing (ALLOWANCE)			N.I.C.		
	Roof repair at plumbing vents	1	ls	\$ 1,200.00	\$1,200	
07 84	Firestopping					
	ALLOWANCE	1	LS	\$ 300.00	\$300	
08	OPENINGS				\$	10,215
08 10	Doors and Frames					
	Interior wood door, frame & hardware, single 3'x6.5' w/ wood frame & hardware	2	EA	\$ 1,850.00	\$3,700	

DIV.	ELEMENT	QTY	UNIT	UNIT COST	SUBTOTAL	TOTAL
	Interior wood door, frame & hardware, double 2'x7'	1	EA	\$ 1,850.00	\$1,850	
	Exterior wood door, frame & hardware, single 3'x7' w/3'x4' transom	1	EA	\$ 2,105.00	\$2,105	
	Window replacement -- (ALLOWANCE)		N.I.C.			
	Access door at toilet rm floor	1	EA	\$ 2,560.00	\$2,560	
09	FINISHES				\$	24,160
09 21	Gypsum Wallboard Systems					
	3-5/8" LGMF with 1/2" GWB both sides	396	SF	\$ 8.00	\$3,168	
09 50	Gypsum Board Ceilings					
	GWB ceilings (assume at Toilet rooms & Vestibule)	310	SF	\$ 10.00	\$3,100	
09 60	Flooring					
	Carpet at Vestibule (minimum quantity)	200	SF	\$ 10.00	\$2,000	
	Ceramic tile with cove base, at Toilet Rm floors	110	SF	\$ 20.00	\$2,200	
09 65	Resilient Wall Base					
	Resilient wall base	20	LF	\$ 4.55	\$91	
09 91	Painting and Finishing					
	Paint steel columns	15	EA	\$ 150.00	\$2,250	
	Paint new GWB walls	792	SF	\$ 1.40	\$1,109	
	Paint new GWB ceilings & soffits	310	SF	\$ 1.60	\$496	
	Paint doors & frames	4	EA	\$ 90.00	\$360	
	Paint interior throughout - Allowance	1,500	SF	\$ 1.60	\$2,400	
	Paint ceilings, existing	2,210	SF	\$ 1.60	\$3,536	
	Paint existing flooring	1,150	SF	\$ 3.00	\$3,450	
	Paint exterior		N.I.C.			

DIV.	ELEMENT	QTY	UNIT	UNIT COST	SUBTOTAL	TOTAL
10	SPECIALTIES				\$	1,600
10 81	Toilet Accessories					
	Toilet accessories	2	EA	\$ 800.00	\$1,600	
11	EQUIPMENT				\$	-
12	FURNISHINGS				\$	-
14	CONVEYING EQUIPMENT				\$	-
21	FIRE SUPPRESSION				\$	-
22	PLUMBING				\$	31,300
	Demo existing water toilets	2	EA	\$ 300.00	\$600	
	Demo existing lavatories	2	EA	\$ 250.00	\$500	
	Distribution piping to new toilet rooms (allowance)	1	LS	\$ 7,500.00	\$7,500	
	Sanitary piping to new toilet rooms (allowance)	1	LS	\$ 4,800.00	\$4,800	
	Vent stacks to roof	70	LF	\$ 44.00	\$3,080	
	Water closet	2	EA	\$ 2,100.00	\$4,200	
	Lavatory	2	EA	\$ 1,350.00	\$2,700	
	Domestic electric point of use water heater	2	EA	\$ 2,200.00	\$4,400	
	Natural gas piping	80	LF	\$ 44.00	\$3,520	
23	HVAC				\$	39,906
	Remove existing electric cabinet unit heaters	1	LS	\$ 750.00	\$750	
	Air handling unit, gas heat, elec cooling, 3,000 CFM, 7.5 ton with economizer	1	EA	\$ 15,000.00	\$15,000	
	Condensing unit	1	EA	\$ 3,000.00	\$3,000	
	Refrigerant piping	100	LF	\$ 32.00	\$3,200	
	Electric baseboard heating (ALLOWANCE)	1	LS	\$ 2,500.00	\$2,500	
	Toilet exhaust fans, ducting and venting	2	EA	\$ 800.00	\$1,600	
	Temperature control system	1	LS	\$ 3,000.00	\$3,000	

DIV.	ELEMENT	QTY	UNIT	UNIT COST	SUBTOTAL	TOTAL
	Ductwork supply, return, exhaust distribution, diffusers and grilles	1,452	SF	\$ 3.00	\$4,356	
	Exhaust fan	1	EA	\$ 1,500.00	\$1,500	
	Controls	1	LS	\$ 5,000.00	\$5,000	
26	ELECTRICAL					\$ 45,123
26 01	Selective Electrical Demolition					
	Disconnect existing light fixtures, make safe for demo	2	EA	\$ 155.00	\$310	
26 07	Equipment Wiring, Motor Circuits					
	Mechanical equipment connections (Allowance)	1	LS	\$ 4,500.00	\$4,500	
26 24	Infrastructure and Panelboards					
	Existing to remain			\$ -	\$0	
26 33	Wiring & devices	1,575		\$ 10.00	\$15,750	
26 50	Lighting					
	Electrical lighting fixtures and branch wiring (Allowance)	1,575	SF	\$ 7.50	\$11,813	
	Emergency Battery Pack Lighting (Allowance)	2	EA	\$ 480.00	\$960	
	Exit Signs (Allowance)	5	EA	\$ 300.00	\$1,500	
	Site lighting	1	LS	\$ 5,000.00	\$5,000	
	Exterior building mounted lighting at ramp (Allowance)	1	EA	\$ 290.00	\$290	
	Lighting controls and switching	1	LS	\$ 5,000.00	\$5,000	
27	COMMUNICATIONS					\$ -
28	ELECTRONIC SAFETY AND SECURITY					\$ 6,970
28 31	Fire Detection and Alarm					
	Fire alarm and devices	1,452	SF	\$ 4.80	\$6,970	
31	EARTHWORK					\$ 20,447
	Excavate for footings (hand work, difficult conditions)	18	CY	\$ 500.00	\$8,889	

DIV.	ELEMENT	QTY	UNIT	UNIT COST	SUBTOTAL	TOTAL
	Structural fill	9	CY	\$ 600.00	\$5,333	
	Backfill and compaction	9	CY	\$ 625.00	\$5,625	
	Trucking & disposal	1	LS	\$ 600.00	\$600	
32	EXTERIOR IMPROVEMENTS				\$	21,133
	New asphalt paving -- Allowance	567	SY	\$ 32.00	\$18,133	
	New driveway at Colt Rd -- Allowance		NIC			
	Clear&Grub/Tree removal		NIC			
	Parking lot striping and signage allowance	1	LS	\$ 3,000.00	\$3,000	
	Fence around pump house w/ 6' of clearance		NIC			
33	UTILITIES				\$	41,000
	New natural gas service from street to building	1	LS	\$ 6,000.00	\$6,000	
	New gas meter		By Utility		\$0	
	Replace existing septic system	1	LS	\$ 35,000.00	\$35,000	
	TOTAL DIRECT COSTS				\$	330,134
	Alternate: Portico Modifications					
	Raise elevation of portico by replacing deck and adding riser (ALLOWANCE)	1	LS	\$ 15,000.00	\$15,000	
	Relocate granite step	35	LF	\$ 120.00	\$4,200	
	Wood framed stair at rear for 2nd means of egress, 4R, landing and railings	1	LS	\$ 9,600.00	\$9,600	
	Total Alternate:				\$28,800	

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No: FRN.325

Historic Name: Union Congregational Parish of South Franklin

Common Name: First Congregational Parish Church

Address: 762 Washington St

City/Town: Franklin

Village/Neighborhood: South Franklin - Wadsworth

Local No: 305; 322-050

Year Constructed:

Architect(s):

Architectural Style(s): Greek Revival

Use(s): Abandoned or Vacant; Church; Museum

Significance: Architecture; Community Planning; Education; Religion

Area(s): frn.e: South Franklin

Designation(s):

Building Materials(s): Roof: Asphalt Shingle
Wall: Wood Clapboard; Wood
Foundation: Stone, Uncut



The Massachusetts Historical Commission (MHC) has converted this paper record to digital format as part of ongoing projects to scan records of the Inventory of Historic Assets of the Commonwealth and National Register of Historic Places nominations for Massachusetts. Efforts are ongoing and not all inventory or National Register records related to this resource may be available in digital format at this time.

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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

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Monday, November 03, 2014 at 12:37 PM

FORM B – BUILDING

Assessor's Number USGS Quad Area(s) Form Number

322-050-000-000		E	FRN.325
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MASSACHUSETTS HISTORICAL COMMISSION
 MASSACHUSETTS ARCHIVES BUILDING
 220 MORRISSEY BOULEVARD
 BOSTON, MASSACHUSETTS 02125

Town/City: Franklin

Place: (*neighborhood or village*): South Franklin
a.k.a. Wadsworth

Address: 762 Washington Street

Historic Name: Union Congregational Parish of South Franklin / Old South Meeting House

Uses: Present: vacant, former town museum

Original: Congregationalist meeting house

Date of Construction: 1861

Source: Horace Mann Museum; Previously Union Evangelical Meeting House- Minutes of member.

Style/Form: Greek Revival

Architect/Builder: unknown

Exterior Material:

Foundation: stone

Wall/Trim: wood

Roof: asphalt shingles

Outbuildings/Secondary Structures: small unrelated structure houses water department apparatus

Major Alterations (*with dates*):
addition of running water and toilet, probably early 20th century

Condition: Excellent

Moved: no yes **Date:**

Acreeage: 0.769 acres

Setting: residential area

Photograph



Locus Map



Recorded by: Eamon McCarthy Earls, Associate Member

Organization: Franklin Historical Commission

Date (*month / year*): March 2011

RECEIVED
JUN 06 2011
MASS. HIST. COMM.

INVENTORY FORM B CONTINUATION SHEET

FRANKLIN

762 WASHINGTON ST

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

E

325

Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

A Greek revival, Congregationalist church, and the oldest church building in the Town of Franklin. The Union Evangelical Meeting House is part of an agrarian legacy left by the villagers of Wadsworth and the greater South Franklin area, and a substantially unchanged landmark in a city that has seen extensive growth and property development. The building is rectangular, approximately two-stories with a large attic and a bell tower. It is not ornate except for the five Doric columns at its front. There are no similar structures in the community.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Planned by the Congregationalist community of South Franklin in 1856, a committee prepared minutes in 1857 outlining the plan for a community meeting house and religious center. The new building would fill a niche. The devout Congregationalists of South Franklin were separated by several miles from the main Congregationalist church in the center of Franklin, and during inclement weather, or harvest seasons it could be difficult to attend far off church services.

The center of South Franklin was located less than a mile away from the planned meetinghouse, where a small village (usually referred to as Wadsworth, but also more broadly as South Franklin) had taken shape. The village took its name from the Wadsworth family, who moved from Milton, Massachusetts to Franklin in the early 1800s and soon established a small farming village, that later hosted a railroad station on New York, New Haven & Hartford Railroad's Midland Division, a post office, blacksmith shop, village store, and even a watch repair shop, owned by a member of the Wadsworth family who contracted poliomyelitis (rendering him partially paralyzed).

Wadsworth, and the Union Evangelical Meeting House were associated with the 'flowering of New England.' During the late 1850s, a one-room school house between Wadsworth and the Meeting House hosted a "Lycaemum" and debating society. George Wadsworth, a member of the Wadsworth family who lived from the 1830s until 1906 kept a detailed day-to-day journal of Franklin agricultural life and society between 1857, culminating shortly after the blizzard of 1888. Wadsworth describes farming practices, and gives a detailed portrait of the farm country of South Franklin and its religious life, as well the development of the village of Wadsworth.

The Union Evangelical Meeting House continued as a center of Franklin life far into the 20th century, and a site for lively debate. Debates were commonly held when religious services were not in session, and farmers are documented as having debated controversial topics such as national prohibition of alcohol, in the *Franklin Sentinel* (community newspaper, 1878-1978). The church was spared significant damage in the hurricane of 1938, although Franklin's main Congregationalist church became the Federated Church as the Baptist and Congregationalist communities were merged following the destruction of the Baptist church.

INVENTORY FORM B CONTINUATION SHEET

FRANKLIN

762 WASHINGTON ST

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

E

325

Citing the declining Congregationalist community in Franklin, and the costs of maintaining the Meeting House, the Franklin Federated Church began seeking new uses for its building in the early 1970s. Services continued at the Union Evangelical Meeting House until 1972, at which point the Federated Church, supervising the Meeting House, reached an agreement to deed the building to the Town of Franklin, on condition that it be used solely as a religious meeting center, or as a community museum. In the run up to the national and town bicentennials, the Franklin Historical Commission was formed and occupied the building, that was renamed the Horace Mann Museum. A wide of artifacts, documents, and photographs were preserved here and placed on display, and the museum opened to the public in 1975.

In 2007, the museum was closed to the public in preparation for an expected move to a more accessible location. After the former town hall (built 1842, rebuilt 1916), later senior center, was closed, the Franklin Historical Commission was allowed to use the new building to house its collection. Museum artifacts were moved in 2010. The Franklin Historical Commission continues to oversee the preservation of this building, and archive photographs, and written records of the Meeting House, including the complete Union Sunday School library collection. The Union Evangelical Meeting House has never been extensively remodeled, after the installation of electric lighting, heating and plumbing systems. Today, the Meeting House is the oldest church in Franklin, and still possesses all the functional elements of a Congregational church included pews, a bell, bell rope, and steeple.

BIBLIOGRAPHY and/or REFERENCES

Horace Mann Museum; Previously Union Evangelical Meeting House- Minutes of member meetings during planning and building, March 1857-April 1861. (manuscript photocopy)

Johnston, James C. *Odyssey in the Wilderness*. Medway: Wayside Press, 1978. Print.

Blake, Mortimer. *A History of the Town of Franklin, Mass. : From its Settlement to the Completion of its First Century*. Franklin: Committee of the Town. 1878. Print.

Lembo, Gail V., ed., *Diaries of George M. Wadsworth: 1857-1893*. Franklin, 1998. Print.

INVENTORY FORM B CONTINUATION SHEET

FRANKLIN

762 WASHINGTON ST

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

E	325
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National Register of Historic Places Criteria Statement Form

Check all that apply:

- Individually eligible Eligible **only** in a historic district
- Contributing to a potential historic district Potential historic district

Criteria: **A** **B** **C** **D**

Criteria Considerations: **A** **B** **C** **D** **E** **F** **G**

Statement of Significance by James McCarthy Earls
The criteria that are checked in the above sections must be justified here.

The Union Evangelical Meeting House, located in South Franklin, Massachusetts is an example of 1850s American Greek revival architecture. The Meeting House is a unique architectural reminder of the early agricultural and Congregationalist heritage of Franklin.

INVENTORY FORM B CONTINUATION SHEET

FRANKLIN

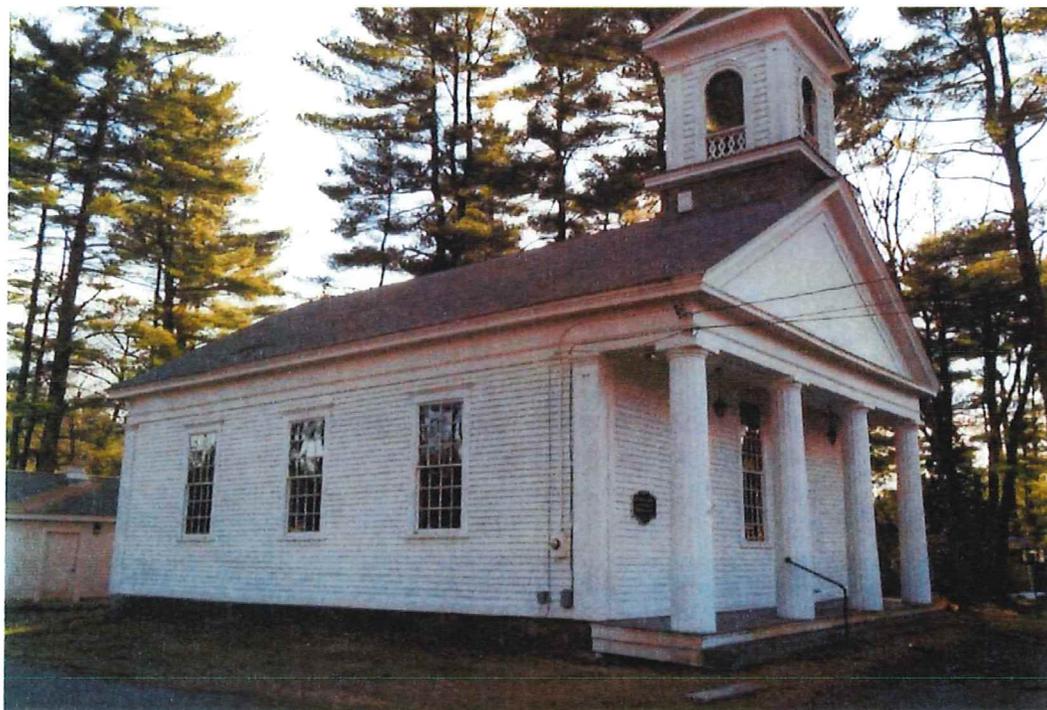
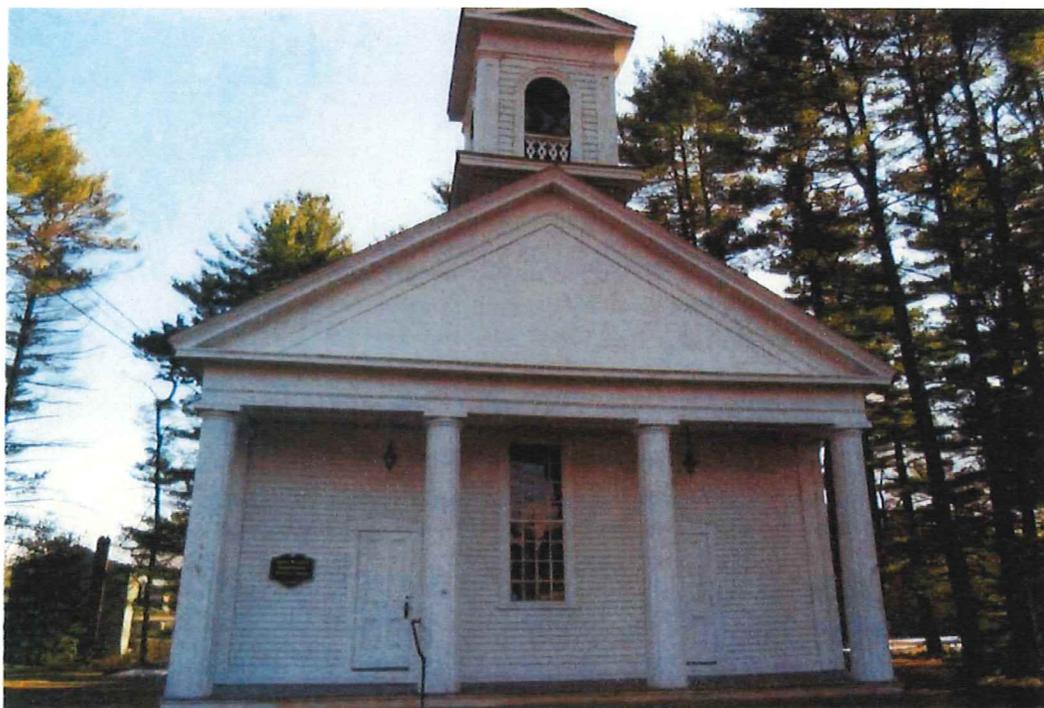
762 WASHINGTON ST

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220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

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Supplementary images



INVENTORY FORM B CONTINUATION SHEET

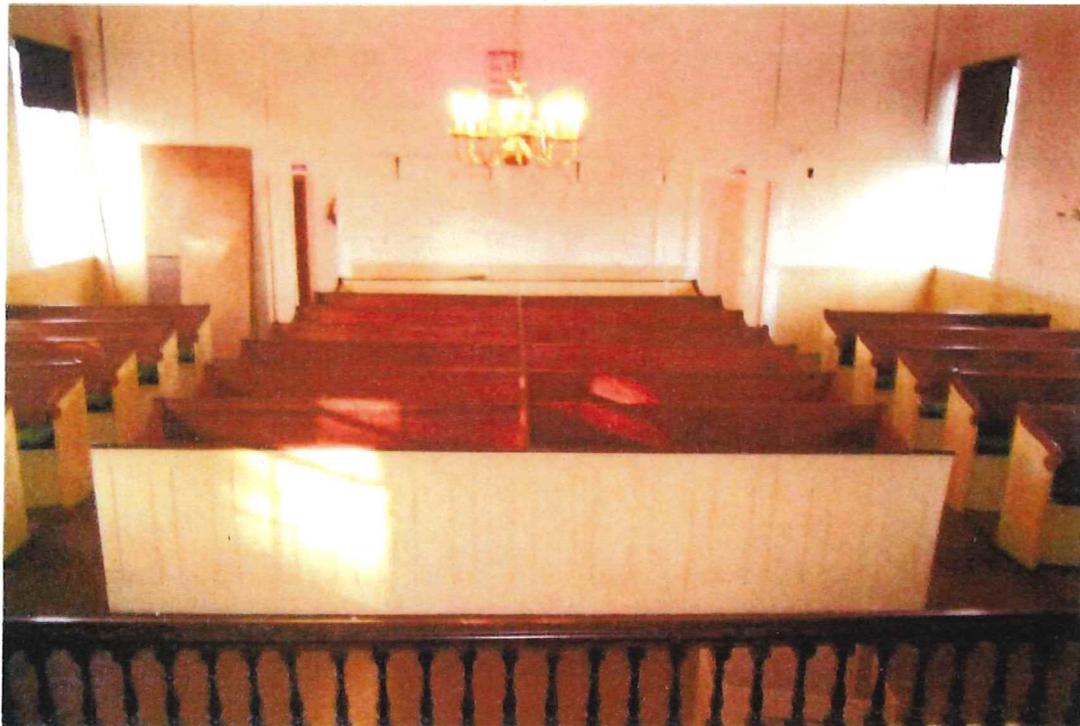
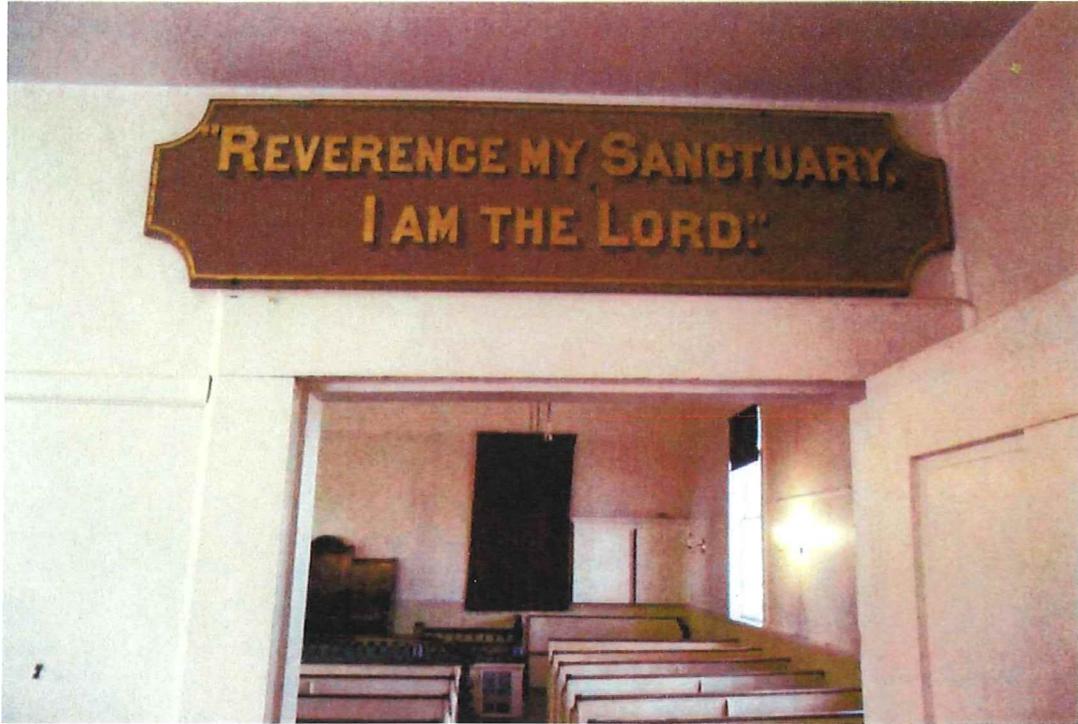
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Area(s) Form No.

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INVENTORY FORM B CONTINUATION SHEET

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762 WASHINGTON ST

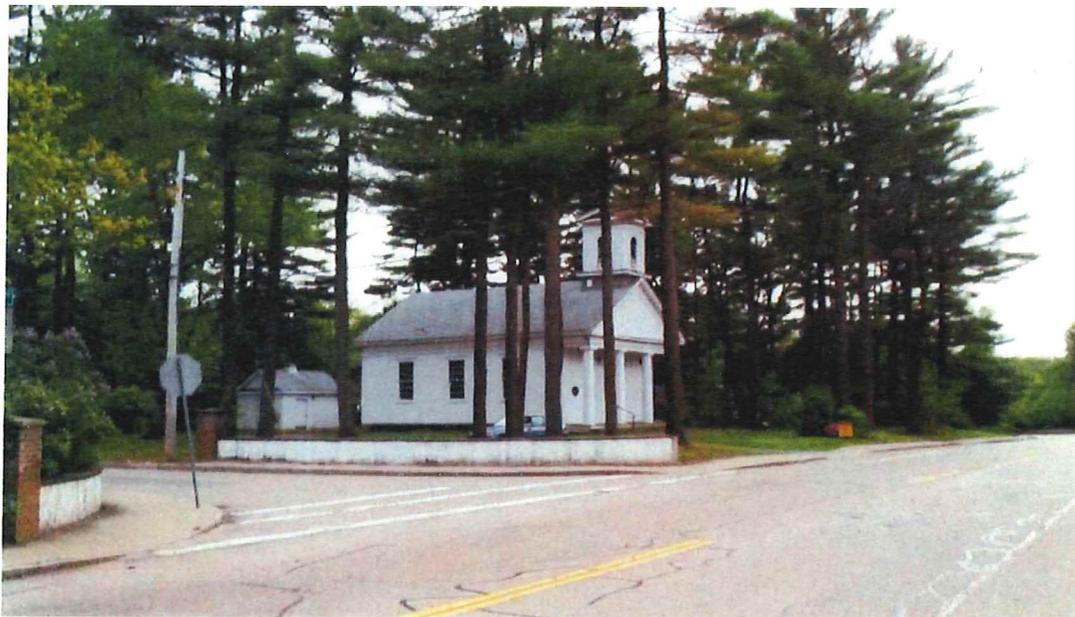
MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

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View of Old South Meeting House, Franklin from the northeast, across Washington St., with Colt Rd. intersection in foreground.



Same view as above, but closer ...

INVENTORY FORM B CONTINUATION SHEET

FRANKLIN

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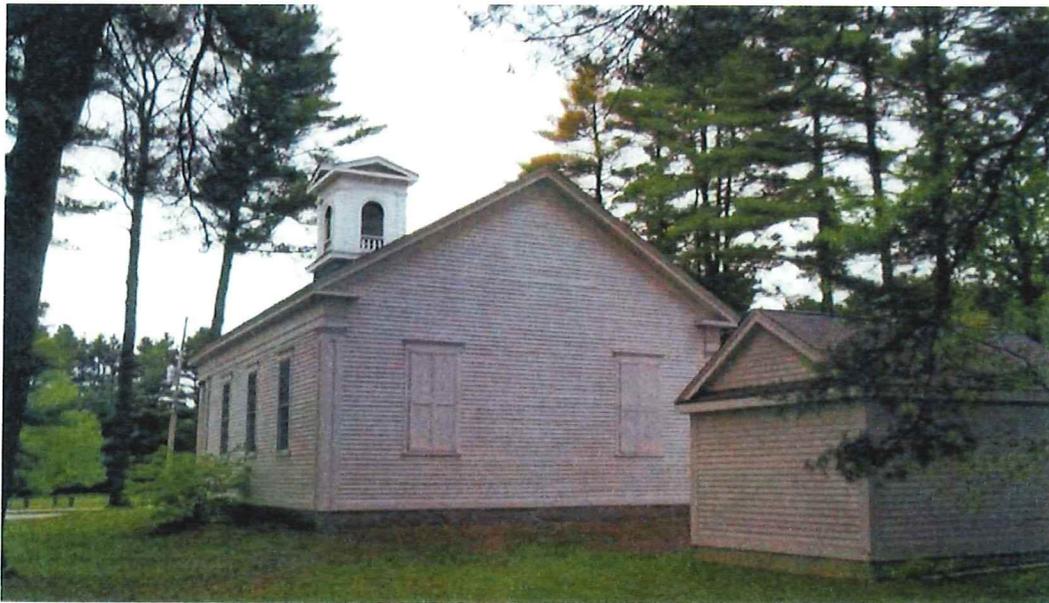
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View of Old South Meeting House from northwest, Washington St. in foreground.



View of rear of structure looking toward north. Recent outbuilding from late 1990s is to right.

INVENTORY FORM B CONTINUATION SHEET

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Close view of east side of Old South, looking toward Washington St and the north.

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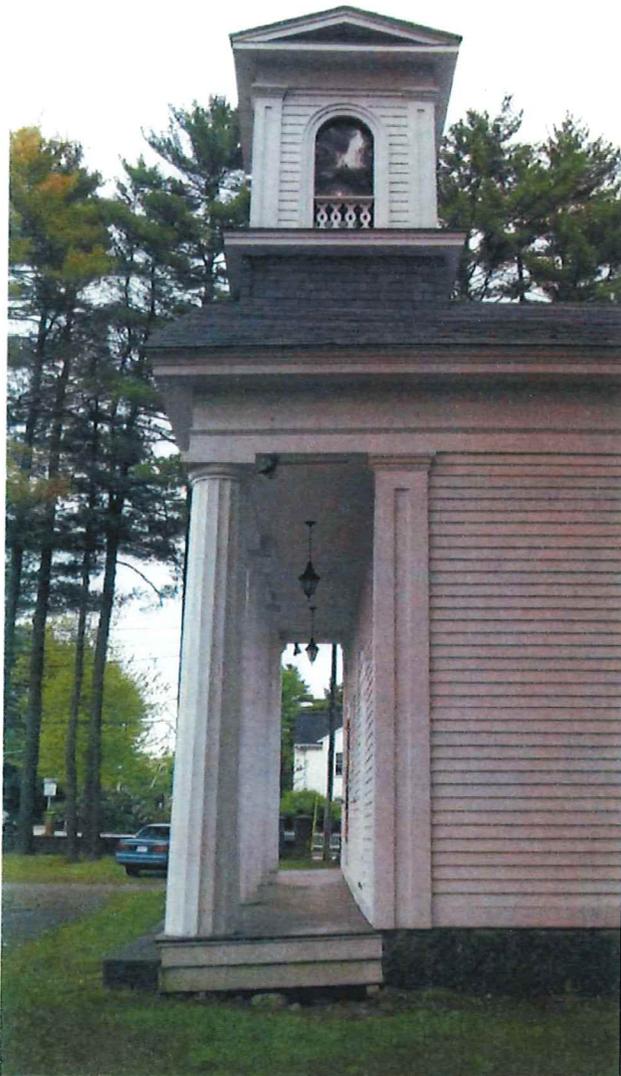
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Detail view of portico looking east



Detailed view of portico looking west

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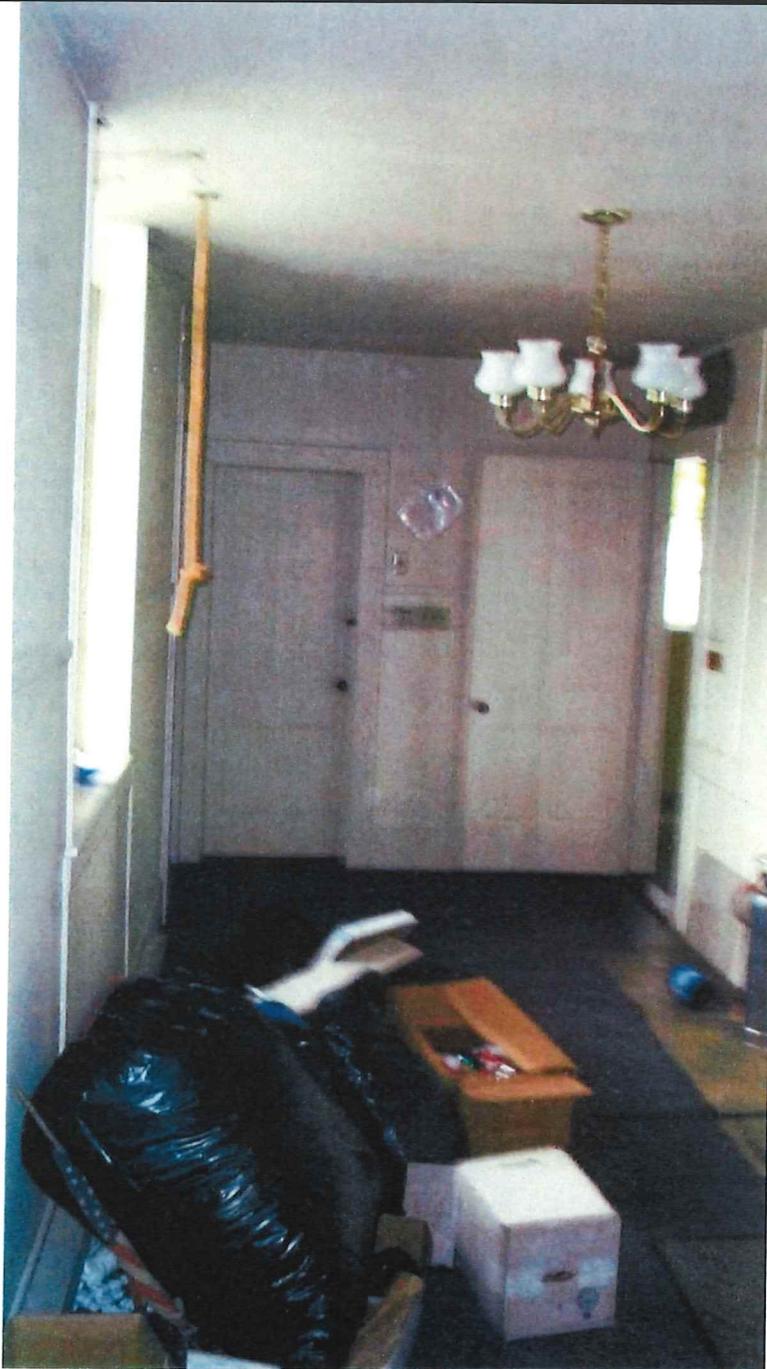
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Front foyer with bell rope at left

INVENTORY FORM B CONTINUATION SHEET

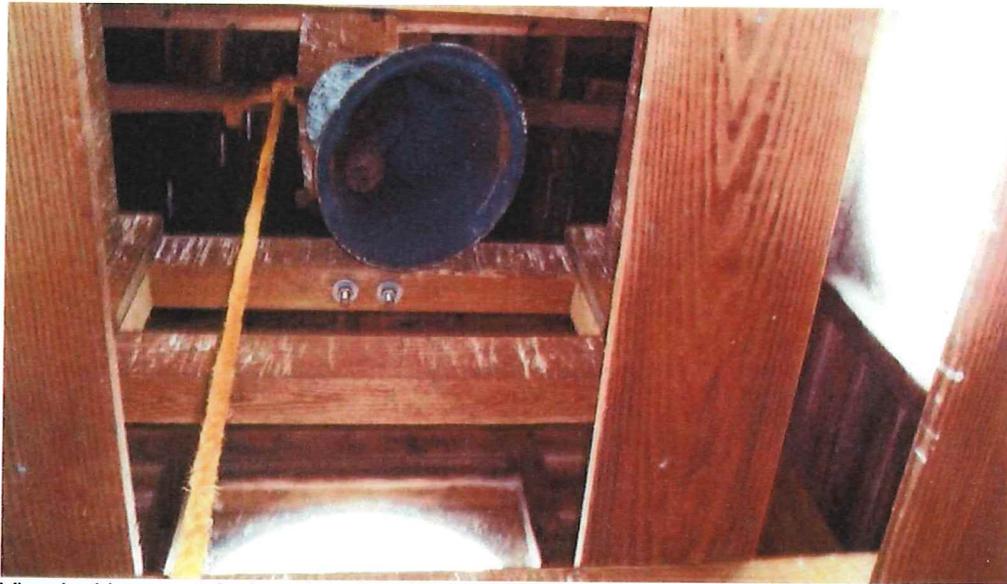
FRANKLIN

762 WASHINGTON ST

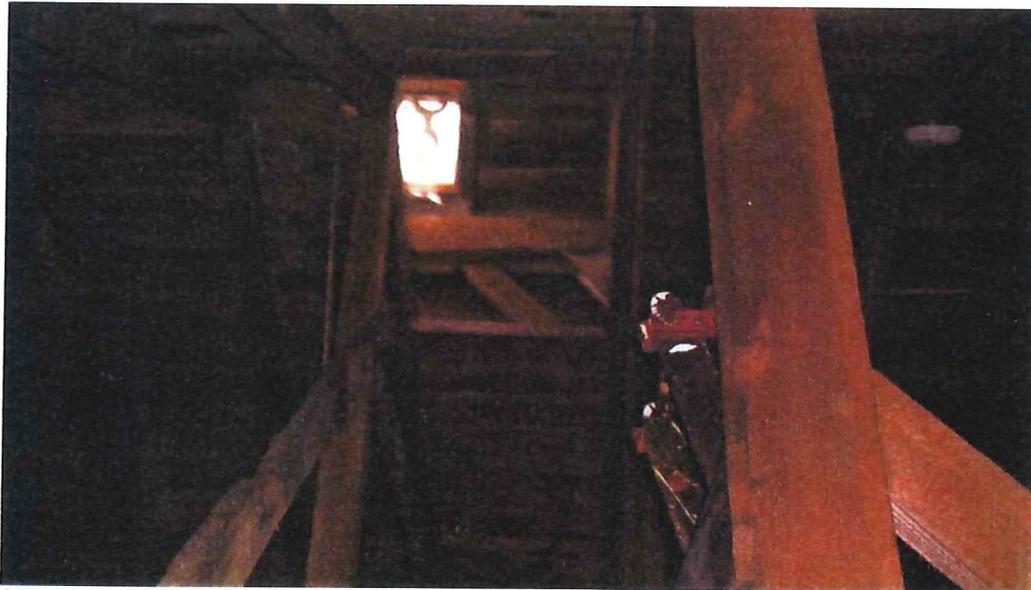
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View looking up stairs in attic at interior of steeple, bell and bell rope



Attic interior looking toward belfry.

FORM B - - BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
Office of the Secretary, State House, Boston

SECT A

PL-S, FRANK - WADG

In Area no.	Form no.
<u>3 E</u>	<u>305</u>

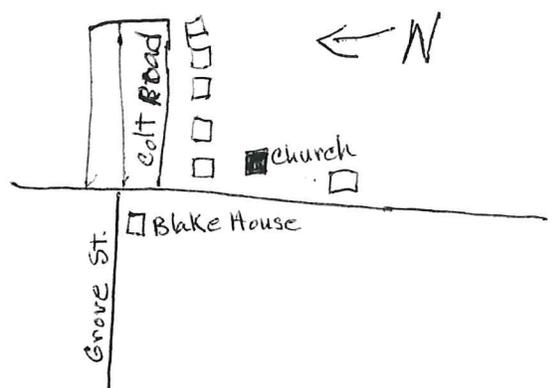
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1. Town Franklin
 Address Washington Street
 Name First Congregational Parish
 Present use Franklin Historical
Commission Property
 Present owner Franklin

3. Description:
 Date 1856
 Source Blake's History P. 97
 Style Country Greek Revival
 Architect _____
 Exterior wall fabric wood
 Outbuildings (describe) NONE
 Other features steeple

4. Map. Draw sketch of building location in relation to nearest cross streets and other buildings. Indicate north.



Altered _____ Date _____
 Moved no Date _____

5. Lot size:
 Less than one acre _____ Over one acre _____
 Approximate frontage _____
 Approximate distance of building from street
50 feet

6. Recorded by James C. Johnston Jr.
 Organization Franklin Historical Comm
 Date May 10, 1973

DO NOT WRITE IN THIS SPACE
 USGS Quadrant
Franklin (46)
 MHC Photo no. _____

(over)

JUN 28 1973

7. Original owner (if known) Council of The First Parish

Original use Church

Subsequent uses (if any) and dates Historical Commission

8. Themes (check as many as applicable)

Aboriginal	<input type="checkbox"/>	Conservation	<input type="checkbox"/>	Recreation	<input type="checkbox"/>
Agricultural	<input checked="" type="checkbox"/>	Education	<input checked="" type="checkbox"/>	Religion	<input checked="" type="checkbox"/>
Architectural	<input type="checkbox"/>	Exploration/ settlement	<input type="checkbox"/>	Science/ invention	<input type="checkbox"/>
The Arts	<input type="checkbox"/>	Industry	<input type="checkbox"/>	Social/ Humanitarian	<input checked="" type="checkbox"/>
Commerce	<input type="checkbox"/>	Military	<input type="checkbox"/>	Transportation	<input type="checkbox"/>
Communication	<input type="checkbox"/>	Political	<input type="checkbox"/>		
Community development	<input type="checkbox"/>				

9. Historical Significance (include explanation of themes checked above)

The Church was founded, because, travel of Three miles to the center of the town to the other church was too far for comfort of the citizens of South Franklin. It is a nice example of a country interpretation of Greek Revival, and reflects the Faith and Puritan Ethic intrinsic to the people who built it for their worship. It will hold a collection of historical objects connected with the history of the town and its relationship to commonwealth and nation thus serving both educational and humanitarian needs existing in the community.

10. Bibliography and/or references (such as local history early maps, etc.)

Blake, Mortimer. History



Original yellow form: Eligibility file

FRN.325

Copies: Inventory form

Town file(w/corresp.)

Macris

NR director _____

Community: Franklin

MHC OPINION: ELIGIBILITY FOR NATIONAL REGISTER

Date Received: 6 June 2011

Date Due:

Date Reviewed: 15 June 2011

Type: Individual

District (Attach map indicating boundaries)

Name: Union Evangelical Meeting House

Inventory Form: FRN.325

Address: 762 Washington St

Requested by: Eamon McC. Earls. LHC

Action: Honor

ITC

Grant

R & C

Other:

Agency:

Staff in charge of Review:

INDIVIDUAL PROPERTIES

Eligible

Eligible, also in district

Eligible only in district

Ineligible

More information needed

DISTRICTS

Eligible

Ineligible

More information needed

CRITERIA:

A

B

C

D

LEVEL:

Local

State

National

STATEMENT OF SIGNIFICANCE by Phil Bergen

Relatively preserved modest mid 19th century Congregational meetinghouse, reflecting the rural area in which it sat, the property was built as a relief for South Franklinites removed from the town center. Oldest church building in town. Rectangular, with preserved bell and steeple, it has four Doric columns on its front façade.

The church was closed in 1972, donated to the town, and used as museum until 2007. It is currently vacant.

Additional photos show the outside on all sides, attic and bell, and provide some more information, although outbuildings are not satisfactorily documented. Although vacant, building appears to be in good condition.

Original yellow form: Eligibility file
Copies: Inventory form
Town file(w/corresp.)
Macris
NR director _____

Community: Franklin

MHC OPINION: ELIGIBILITY FOR NATIONAL REGISTER

Date Received: 9 May 11

Date Reviewed: 18 May 11

Type: Individual

District (Attach map indicating boundaries)

Name: Union Evangelical Meeting House

Inventory Form: FRN.325

Address: 762 Washington Street

Requested by: Eamon Earls, LHC

Action: Honor

ITC

Grant

R & C

Other:

Agency:

Staff in charge of Review:

INDIVIDUAL PROPERTIES

DISTRICTS

Eligible

Eligible

Eligible, also in district

Ineligible

Eligible only in district

More information needed

Ineligible

More information needed

CRITERIA:

A

B

C

D

LEVEL:

Local

State

National

STATEMENT OF SIGNIFICANCE by Phil Bergen

A relatively preserved modest mid 19th-century Congregational meeting house, reflecting the rural area in which it sat, the property was built as a relief for South Franklinites removed from the town center. It is the oldest church building in the town. Rectangular, with preserved steeple and bell, it has four Doric columns on its front façade.

The church was closed in 1972, donated to the town, and was used as a town museum until 2007.

Questions arose about the outbuildings on site, the lack of substantial interior and exterior photos, and the surrounding area. The church appears to be in good condition, even though the building is currently vacant.