



BUTTERS-AVERY HOUSE

165 Chestnut Street

Wilmington, MA

An Historical Overview

The Butters-Avery House was likely constructed circa 1720 for William Butter II, and his wife, Rebeckah, using re-used framing members from the circa 1665 home of William's father, William Butters I. It is comprised of a 2 ½ story south facing main block, and a 1 ½ half-story ell attached to the main block, located on a half acre corner lot. The Massachusetts Historical Commission has designated this structure as a "First Period House of Massachusetts" with "interior framing details that reflect its First Period Construction."

The Butters family has long been associated with Wilmington, as members of the Butters family were among the area's earliest settlers. William Butters II was one of Wilmington's first selectmen, elected to that position shortly after the town was established in 1730. In acknowledgement of the family's early presence in the region, a local nearby street is named Butters Row.

The home was built in the late 17th or early 18th century. Major alterations occurred in the mid-19th century which likely included the removal of the original chimney and reconfiguration of the main and second floors. It is believed the home was owned by a Butters or Butters decendent throughout this time.

In 1907 Mr. Albert G. Snowman purchased the property and made additional alterations to the structure. Major cosmetic alterations were made again in the late 1960s and 1970s.

The structure still contains distinct features of the First Period construction including exposed framing members, and common rafters finished with the distinctive "bird's mouth" joint and projecting tail where they fit over the roof plate. Hand wrought nails are still visible and the original structural support remains mostly intact.

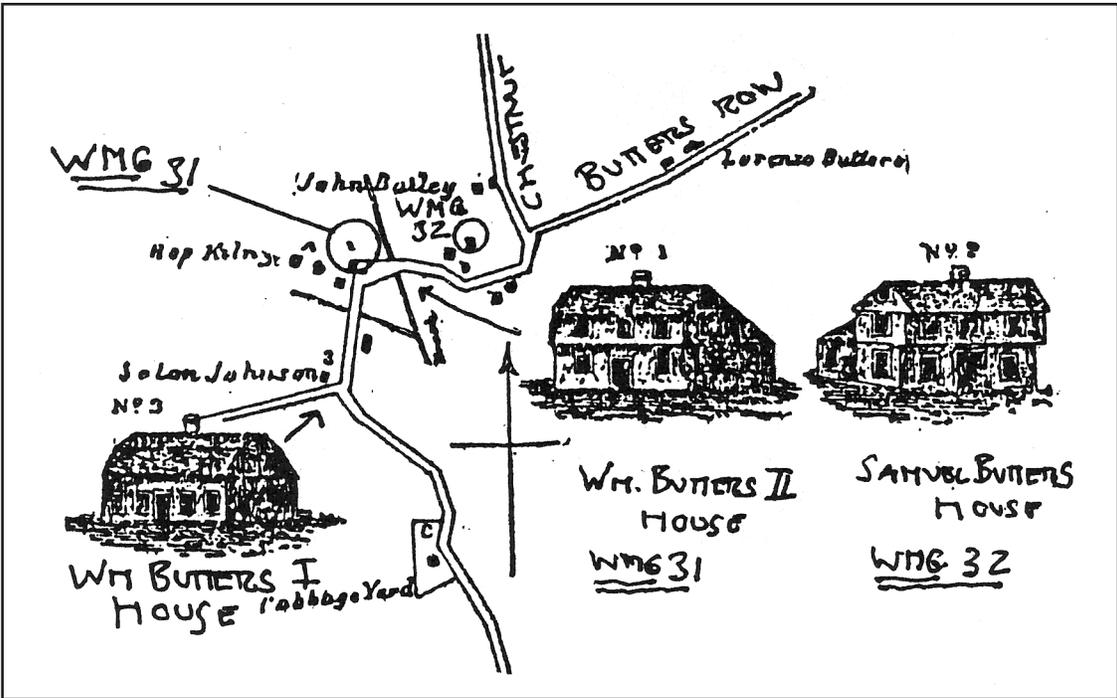
The house remained a private residential farm house for many years after it was sold out of the Butters family. When a real estate developer acquired the house in 2005 as part of a five acre real estate acquisition, the Wilmington Historical Commission expressed concern that the house would be demolished as part of the installation of a suburban subdivision. To prevent such a demolition, the town voted at Wilmington's 2006 Town Meeting to purchase the house on a half acre lot.

HISTORIC ARCHITECTURE ASSESSMENT REPORT

THE WILLIAM BUTTERS II HOUSE

WILMINGTON HISTORICAL COMMISSION

WILMINGTON, MASSACHUSETTS



Finch & Rose

PRESERVATION & DESIGN CONSULTANTS

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Contents

INTRODUCTION	1
EXECUTIVE SUMMARY	3
CONSTRUCTION HISTORY OVERVIEW	4
Period I - Original Construction	4
Period II - Mid-19th Century Alterations	7
Period III - Early 20th Century Alterations	8
Period VI - Late 20th Century Alterations	8
Ell	8
Renovation Options	9
EXTERIOR - EXISTING CONDITIONS	10
Roof Shingles and Gutters	10
Chimney	10
Exterior Cladding	11
Windows	11
Doors	12
Sills and Related Structure	12
Landscaping	13
Site Archeology	13
INTERIOR - EXISTING CONDITIONS AND HISTORIC FEATURES	14
Hazardous Materials	14
Insect Infestation	14
Room 101 - Parlor	14
Room 102 -Entry	17
Room 103 - Northeast Room	18
Room 104 - Leanto Room (1840s Kitchen)	19
Room 105-108 - Ell Kitchen, Bathroom, Entry, and Storage Rooms	22
Room 202 - Stairhall	23
Room 201 - Parlor Chamber	24
Room 203 -Northeast Chamber	26
Room 204 - Leanto Attic	27
Room 301 - Attic	28
Cellar	30
PHOTOGRAPHS (# 1-50)	32
PLAN AND ELEVATION DRAWINGS	Following Page 55
Annotated Drawings (6 Sheets)	A1-A6
Base Plans (4 Sheets)	EX1-EX4

**HISTORICAL ARCHITECTURE ASSESSMENT
THE WILLIAM BUTTERS II HOUSE
165 Chestnut Street
Wilmington, Massachusetts**

December 4, 2007

INTRODUCTION

The purpose of this assessment is to assist the Wilmington Historical Commission in planning for the rehabilitation and preservation of the William Butters II House located at 165 Chestnut Street in Wilmington, Massachusetts. The goals of the assessment are to first identify historical components that should be protected and preserved during the anticipated rehabilitation and reuse of the house, and secondly to review condition issues apparent in the visible architectural fabric of the house.

The assessment was carried out by William B. Finch of Finch&Rose starting with a series of site visits in October of 2007. Extensive digital photographs of the house were taken during the site visits to document the historic fabric and visible conditions. Documents reviewed for this assessment included Xerox copies of historic photographs and newspaper articles in the collections of the Wilmington historical Commission, material in the Archives of Historic New England (only postcards of the house were found), the National Register nomination prepared by Arther Krim which summarizes extensive deed research, and a brief report by Anne Grady. Unfortunately the few known historic photographs of the house are in newspaper articles and of very poor quality. The assessment has been carried out within a limited budget, and did not include paint analysis as a tool to date architectural fabric or identify historic colors.

Measurements of the house were made in order to prepare scaled floor plans as a base to communicate the locations of the surviving significant early elements and to note specific conditions. These floor plans should be considered schematic, and are not intended to serve as construction documents.

The level of investigation carried out for this assessment included only very limited removal of architectural finishes where minimal effort was required and the removal would not damage primary historic elements or compromise the weather tightness of the building. This level of investigation may not have revealed the full extent of both deterioration and significant early historic elements, especially where conditions are concealed behind wall, floor, and ceiling finishes.

The assessment did not include the evaluation of heating, electrical, plumbing systems, hazardous materials, and structural conditions.

The house has been through several episodes of major alterations during its long history, and in the absence of specific documentary evidence their dating has been based on a combination of architectural style, tool marks and the construction technology employed. As specific styles and technologies did not change overnight and were often used for many years, this type of analysis can only yield broad date ranges. The specific dates assigned to these episodes in this report should be understood as a range rather than absolute years. For instance, the alterations referred to as the 1840s in the text should be understood to have occurred between the 1830s

and the 1860s. Some technologies, such as the use of lime and hair plaster of circular sawn lath, were in use for a very long time (from the 1830s through the 1940s). Therefore, some of the plaster walls that have been dated to the 1840s could also have been installed in the later 19th or early twentieth century. Rehabilitation work will likely yield more physical evidence that may in some cases alter the dating of specific elements in this report as well as resolving questions regarding the original plan of the house.

The report is organized to first review the overall construction history of the main house and ell, and provide a brief discussion of renovation options relative to the historic interpretation of the house. This is followed by a description of exterior conditions by building component (i., roof, windows, etc.), and finally descriptions of conditions and historic fabric in the interior with preservation recommendations organized by room. The recommendations are printed in italic type. 50 annotated photographs documenting the historic fabric and conditions observed are attached at the end of this report, followed by 6 sheets of drawings with historic fabric and condition notes. The floor plans include the names and numbers for each room that are used in the report text. Each door is also given a reference number, and is described in a list on the drawing as to date and preservation treatment.

EXECUTIVE SUMMARY

Based on the detailing of its framing, William Butters House II house was originally constructed in the first third of the 18th century in the late First Period style with a framed overhang, casement windows, and a rear leanto. Whether it was originally of two room, center chimney plan with the easterly section later removed, or was originally of a one room, end chimney plan is not known, although the former is strongly suspected.

Its plan was substantially modified in the second third of the 19th century by the removal of the original chimney and the framed overhang, followed by the construction of a new smaller chimney along with reducing the size of the original parlor and parlor chamber to create an additional rooms in the space previously occupied by the chimney. If the house was originally of two room plan, the easterly room was removed either before or in conjunction with these alterations. At this time or later in the 19th century, the current ell was probably moved to join the house.

Additional, less substantial alterations were made in the early 20th century. The house was cosmetically updated during the 1960s and 70s including the current wood shingle siding and 1/1 vinyl windows.

Condition issues focus on the deteriorated wood shingle siding, fogged and historically inappropriate vinyl windows, and worn roofing along with chronic rear wall dampness with related sill and framing deterioration. Interior finishes are of cosmetic concern. Past insect infestations have damaged limited sections of the attic and cellar framing. The eastern third of the roof framing was reframed many years ago in an inadequate manner. Treatment should include installation of new clapboard siding (perhaps shingles on the rear), new historically appropriate 6/6 windows, new roofing with gutters, removal of encroaching landscaping and regrading to minimize dampness, replacement/repair of deteriorated sills and related framing, and adding framing to the eastern third of the roof. Additional condition issues will likely be revealed during rehabilitation.

The most significant historic fabric in the house is the original structural frame (which does not align with the current floor plan, but is substantially intact) and sub-flooring, most of which is currently concealed by the 19th century changes to the floor plans and finishes, or is only visible in secondary spaces such as the attic and leanto attic. These items are identified on the attached floor plans. The 19th century plan, plaster finishes and pine flooring, and chimney, along with reused 18th century board sheathing are of secondary significance, but also worthy of retaining and preserving. The 20th century finishes may be retained or replaced based on aesthetic and budget considerations.

Restoring the plan to its original configuration would be excessively conjectural as well as very expensive. Fully exposing the ceiling framing within the existing plan would also be impractical and difficult for most residents to live with. The recommended approach is to make significant sections of the framing visually accessible for interpretation by installing removable panels at several key locations in the ceilings and adjacent walls, and installing a door into the leanto attic from the parlor chamber.

CONSTRUCTION HISTORY OVERVIEW

The house has undergone major alterations at several periods during its long history that have obscured most of its early components. There appears to have been four major periods of construction activity as follows:

- Period I - Original Construction in the first third of the 18th century along with later 18th century changes
- Period II - Mid-19th century alterations, characterized as the 1840s in the report text.
- Period III - Early 20th century changes
- Period IV - Late 20th century changes, primarily in the 1970s and 80s.

Period I - Original Construction

Based on examination of the physical fabric along with the documentary research into deeds and probate records by Arthur Krim, the house appears to have been originally constructed in the first third of the 18th century in what is known as "First Period" style. This term refers to the style that characterized buildings constructed during the first century of colonial settlement up to about 1725. Many houses built in the early 18th century are described as late First Period due to specific features that distinguish them from typical 18th Georgian century construction. In rural areas some aspects of the style lingered on into the mid-18th century. The "First Period" style was derived from the post-medieval aesthetic of Elizabethan and Stuart England as it filtered down to vernacular buildings, and was fundamentally different from the formal classical aesthetic that characterizes the "second period" Georgian style that became predominant in the 18th century.

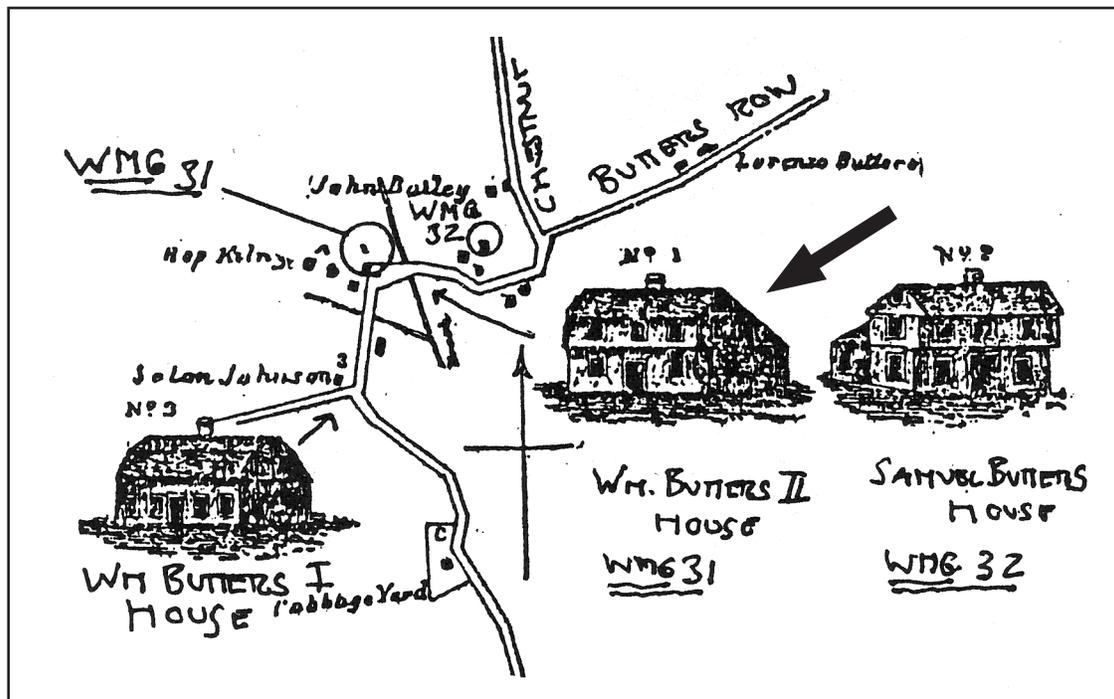
The construction date of c. 1720 suggested by Dr. Krim from the documentary research is certainly plausible from the construction details of the house. The distinctive original features that are characteristic of late First Period construction in the Butters House include:

- A framed overhang across the front facade (the second story projected about 18" over the front wall the first story).
- Framing elements that were fully exposed to view in the interior of the rooms (posts, beams, and floor joists).
- A molded bead worked on the visible edges of all the principal framing elements, and a thin chamfer on the exposed edges of the floor joists.
- A rear leanto that was built as a component of the original construction (the leanto gives the house its distinctive "saltbox" outline with a long rear roof sloping down to the top of the first floor).
- A single 36" wide window opening in the front wall of the principal rooms that was likely filled with paired casement sash.
- The cellar being present only under the principal front room.
- Common rafters finished with a distinctive "bird's mouth" joint and projecting tail where they fit over the roof plate.

Based on its current appearance the house appears to have been initially constructed with a one room end chimney plan commonly described as a half house. In that configuration the entry

and staircase would have been in approximately their current location, and the original chimney would have largely filled the room that is now behind the staircase. There is, however, strong evidence to suggest that the house was originally larger with a principal room on each side of the chimney.

The small illustration of the house in the 1856 map titled "Plan of Butters Row" by Cyrus Thompson shows the house with the chimney and entry door in the center of the front facade suggesting a two room center chimney plan instead of the current one room end chimney plan (The drawing is reproduced below with an arrow pointing to the house). The drawing accurately portrays the saltbox form of the roof, the framed overhang, and the location of a single window in the current west room rather than the current pair of windows. That the other two Butters houses shown on the plan are drawn with substantially different features suggests that the map portrays the actual houses rather than using the generic house images that are often seen on period maps.



If the map drawing is accurate, the house originally had an east room that was removed, probably when the original chimney was taken down and moved to its current location. The presence of empty mortises for former floor joists on the outer (east) side of the end wall girt at the east end of the attic also suggests that there was once another principal room. That most of the west side of this girt does not have mortises is consistent with the original chimney having been adjacent to the girt, and is evidence that the girt is not simply a reused beam from another building.

Several of the 18th century deed and probate documents refer to the west end of the house with a chamber and garret (Dr. Krim, MHC Inventory Form), suggesting there was also an east end with the house divided between multiple generations of the family.

The removal of small areas of modern finishes in the front entry hall and rear leanto room along with accurate measuring of the attic floor framing revealed the positions of the original perimeter beams (i.e., girts) that defined the principal front 1st and 2nd floor rooms before the original chimney was removed. The original first floor room was approximately 18' square rather than its current size of about 15 1/2' square. Its east wall was within the current front entry room about 2' beyond the east wall of the current living room, and its rear wall was about 4' to the rear of the current rear wall. The second floor room (i.e., chamber) had its east and rear walls in the same position as the first floor room, but measured about 18' wide by 19 1/2" feet deep because its front wall was 1 1/2' in front of the lower front wall as a result of the framed overhang.

The fireplace in both the lower and upper rooms would have been along the east wall, with the chimney occupying the front two thirds of the room that is currently behind the staircase (the northeast room). The rear third of the current northeast room along with its closet was part of the rear leanto room(s). Whether there was a large cooking fireplace opening into this portion of the rear leanto cannot be determined from the existing visible evidence. It was not uncommon for the rear leanto to be used primarily for the storage of food, cooking implements, and other service related items without a fireplace, cooking being done in one of the front rooms. In cases where the leanto was used for storage, a cooking fireplace facing into the leanto was often added some years after initial construction to the back of the chimney stack. In the Butters house, the rear leanto was only 8' wide.

The leanto attic (actually the second floor of the leanto) is currently unfinished space with a partial floor accessed only from the attic of the west ell. The currently remaining floorboards are nailed with hand wrought nails and have ship lapped joints, indicating the space was fully floored originally or a little later in the 18th century. The presence of an iron pintel in one the studs that framed the rear wall of the original front chamber indicates there was once a door leading from the front chamber into the leanto attic.

The main entry would have been in the same location as the current entry, with a winding stair located along the front wall of the chimney stack. The narrow recess currently in the cellar wall under the entry hall was likely the location of a stair down to the cellar that entered either from the entry hall or the now missing east room. Based on the location of the north (rear) side of this recess, the front face of the chimney (and hence the rear wall of the stair) was about 10" to the rear of the back wall of the current staircase. The front wall of the entry room likely was set back about 18" from the current front wall in line with the original front wall of the front room. Based on the location of the two existing mortise pockets in the west side of the current attic east end girt, the stair continued up to the attic, probably mirroring the plan of the main stair.

Other than the principal formerly exposed framing members, floor joists, and undersides of floor boards, there do not appear to be any original finishes surviving in their original locations.

The wall of vertical feather edged sheathing currently forming the rear wall of the main chamber closet and bathroom is 18th century material that was reused in its current location in the 19th or perhaps the early 20th century. It is fastened with cut rather than wrought nails to the front face of the rear roof beam, and does not rise fully up into the 19th century plaster ceiling (the current ceiling in the closet is early 20th century and several inches below the 19th century ceiling). The front faces of the original studs for this wall have nail holes from the original wall

sheathing, and a dark line on the underside of the roof beam indicates where that sheathing butted into the beam. Most likely the original sheathing was horizontal rather than vertical.

The current door to the cellar stair is a reused 18th century batten door using feather edged sheathing and may date to the original construction of the house. There are several other batten doors constructed with beaded sheathing that probably date to the early 19th century or perhaps the late 18th century. There also are several small areas of beaded horizontal sheathing on the west wall of the 2nd floor bathroom and the west closet in the leanto. This style of sheathing could date to the late 18th century and was also commonly used in the first third of the 19th century.

A reused rafter in the chimney bay of the rear attic roof pitch has a molded edge indicating it may have been an original window or door frame element that was reused when the original chimney was removed. Other fragments of original finish elements may have been reused as concealed nailers or blocking when the house was altered, and may come to light during upcoming renovations.

Period II - Mid-19th Century Alterations

The major alterations that removed the original chimney and altered the basic plan of the house to its current configuration most likely occurred during the second third of the 19th century. The key features that suggest this date range include the new chimney, particularly its base in the cellar, and the use of circular sawn lath in all the new walls. The new chimney with its base of two brick piers spanned by slabs of wood rather than a brick arch could date to earlier in the 19th century, but is unlikely to be later than the 1860s. The plaster lath could be as late as the early 20th century, but no earlier than the 1830s. Assuming both features were installed at the same time, the date of the alterations falls within the 2nd third of the 19th century.

If the theory that the house was constructed with a two room, center chimney plan is correct, the removal of the center chimney was likely generated by a major event that resulted in the removal of the east end of the house. This could have been a fire in the east room that did not affect the chimney bay (there is no visible evidence of a past fire in the chimney bay), or the east portion of the house belonging to a relative who moved it another location (the probate and deed history suggest the possibility of this).

Regardless of whether the house was reduced to an end chimney plan by some event or was built that way, the removal of the chimney was probably done to increase the number of functional rooms in the small house as well as to modernize the kitchen with a more efficient cooking fireplace and oven.

Most likely the first floor wall of the framed overhang was also removed at this time to enlarge the front room, and the early window locations changed to the current window locations. It is, however, also possible that the overhang was eliminated at some earlier time.

Whether further significant alterations were made during the late 19th century is not apparent from the physical evidence, but the frequent turnover of ownership during this period suggests major alterations were not likely to have occurred.

Period III - Early 20th Century

The purchase of the property in 1907 by a Mr. Albert G. Snowman and his long period of ownership is a more logical period for further alterations to have occurred. Arthur Krim believes that Snowman utilized the property as a country house, and therefore may have indulged in some Colonial Revival or antiquarian alterations such as the installation of reused antique feather edged sheathing at the back wall of the principal chamber. The current attic stair is enclosed with matched boarding having a triple bead, a building product that was in common use during the late 19th and early 20th century. The same product was used to form the ceiling in the kitchen ell, but is now covered by more recent sheet rock.

Period IV - Late 20th Century (1960s-80s)

Major cosmetic alterations were carried out by the most recent owner in the late 1960s and 70s. On the exterior these included the installation of the picture window on the east facade (this may have occurred earlier in the 20th century), installing wood shingles over the existing wood clapboards, and replacing all the existing wood windows (a mixture of 6/6 and 2/2 sash) with 1/1 vinyl replacement sash in the existing frames. The exterior casings and sills were clad with vinyl at the same time. On the interior many of the existing plaster walls and ceilings were covered with 3/8" thick sheet rock or fiberboard paneling (in some places the plaster was removed before installing the sheet rock. A new bathroom was installed on the second floor, and the kitchen and bathroom in the ell were refurbished.

Ell (Photos 12, 13)

The ell appears to be an outbuilding or part of a barn that was probably constructed during the first half of the 19th century, or possibly the late 18th century, and later moved to the side of the house to form an ell. The date is based on its framing, which employs hewn timbers with marriage marks on some of the joints (i.e., scribe rule layout). It is framed with horizontal girts, braces, and vertical sheathing which is typical for barn framing, rather than the studs and horizontal sheathing used in house framing (Photo 12).

The assumption that it was moved up to the house is based on its easternmost bent of posts and beams being located about 18" from the east side wall of the house, and the presence of a long diagonal rafter in the last full east bay instead of the purlins used in the other bays (Photo 13). The diagonal rafter was previously a hip rafter, either in this structure or an entirely different building. Whether it originally was a shed roofed structure or was a barn that was taken apart and reworked to form the ell is difficult to determine without considerably more investigation. It also may have been a shorter shed roofed structure on its current site but not connected to the house, with the bay with the hip rafter added later to join it to the house.

Based on the historic photographs, it was in its current location by about 1900, but it is not known when it was actually moved. In the historic photographs it had a wide door on its rear side between two windows. A wood ceiling of triple beaded matched boarding was installed to the underside of the beams sometime in the late 19th or early twentieth century when this type of matched boarding was in common usage. The installation of the ceiling probably coincides with its initial conversion to functional living space. Previous to the installation of the ceiling the ell was probably used for utilitarian functions such as a carriage shed, wood storage, etc. The wood ceiling is still present above the current wall board ceiling.

Renovation Options

If cost was not a consideration, one option would be to remove all the current interior walls and return the house to its first period plan with its original ceiling framing exposed on both the first and second floors, and restoring the framed overhang at the front facade. Taken to its logical conclusion, this would include the conjectural reconstruction of the original chimney and fireplaces along with conjectural wall finishes and the front stair. In a less extreme version, the existing chimney could be retained and all new walls would simply receive modern finishes to avoid conjectural interpretation. The original ceiling framing would be exposed to view. In the process of removing existing walls and finishes, some reused early material may be found to better guide the reconstruction, but the end result will still be largely conjectural.

A more realistic option is to retain the existing floor plan and wall configuration with renewal of existing finishes as appropriate to the budget, the intended residential use, and the preservation of significant remaining historic fabric including extant mid-19th and early 20th century elements. The exterior should be returned to its mid-19th century appearance, which would include traditional wood 6/6 windows in wood frames and wood clapboards on the front and side facades. The rear facade would be either wood shingles or clapboards, depending on the evidence uncovered when the existing shingles are removed. In this option, removable panels could be installed at several locations to enable the viewing of limited areas of the original ceiling framing and other significant framing details when the property is open to public viewing. Alternatively, some limited areas could be exposed and left open. More extensive exposure of the original ceiling framing without altering the floor plan is also an option, but would require careful detailing at the junction of existing walls to the ceiling along with re-routing wiring and plumbing that may be concealed above the current ceilings.

EXTERIOR - EXISTING CONDITIONS (Photos 1-11)

Roof Shingles and Gutters

The roof on both the main house and the ell is composition shingles that are clearly beyond their service life and need to be replaced. The ell shingles are visibly worse than the main house, but an active leak over the front stairhall was observed at one site visit that followed a heavy rain. While historically the house would have had wood singles (not shakes!), the cost of a new wood shingle roof will likely be out of reach given the other needs of the house.

The main attic roof sheathing between the chimney tie beam and the west wall retains a considerable amount of early sheathing that should be retained as much as possible. The sheathing over the leanto and the chimney bay has already had considerable replacement is therefore of less a concern to fully retain.

The ell roof exhibits considerable sagging due to structural problems along its rear wall (Photo 4). The span of the lower purlins in the east bay of the roof is excessively long and sagging in this area. These conditions should be corrected in conjunction with reroofing.

There are no gutters on the house. The lack of a gutter along the rear wall is a major factor in the extensive deterioration at the base of that wall.

Gutters should be included on both the front and particularly the back wall of the house. Old fashioned "V" shaped gutters constructed with wood boards would be the most visually appropriate, but may be too expensive.

Chimney (Photos 5, 49)

As previously discussed, the existing chimney likely dates to the 1840s alterations based on the construction of its base (Photo 49). Its size at the first floor is dictated by the dimension needed for a functional kitchen fireplace with separate bake oven, which is about 39" deep. The depth of both the kitchen and parlor fireplaces is relatively shallow which is normal for the mid-19th century. The chimney stack reduces in size to 40" x 26" deep at the level of the second floor. This dimension would fit two 14" x 18" flues, one for the parlor fireplace and the other for kitchen fireplace and bake oven (bake ovens were usually flues into the main kitchen flue a few feet above the fireplace). There was no room for any additional fireplaces, and any added stoves would have to have been connected to the existing two flues.

The condition of the flues was not examined, but it is obvious that the chimney needs to be rebuilt from the attic floor up, and its flashings need to be replaced with new copper or lead flashings. The existing brick should be cleaned and reused as much as possible. The brick should be laid in a high lime content mortar rather than modern cement mortar.

The cement block chimney at the intersection of the ell front wall to the west side of the main house is modern and was constructed to provide a flue for the furnace instead of altering the 1840s fireplaces. If the current oil fired furnace can be replaced with a power vented gas fired furnace, the chimney could probably be removed.

Exterior Cladding

The house is currently clad with wood shingles that were installed in 1975 on top of wood clapboards on the front and side facades, and over a previous generation of wood shingles on the rear facade. The shingles appear to have been left to weather with out any preservative treatments since their installation, and are now quite weathered with many of them curling and lifting. On the rear facade, many of the shingles are rotted and growing lichen due to being chronically damp from the lack of a gutter and encroaching vegetation.

A small area of shingles was removed under a first floor window on the front facade to evaluate the clapboard substrate (Photo 6). The clapboards revealed were severe weathered with very little paint. As they were nailed with cut nails and had butt end joints, they likely date to the second half of the 19th century or the early 20th century. The sheathing was not evaluated, as the clapboards were left in place.

On the rear facade a small area of shingles was removed at the base of the house to evaluate the substrate and the rear sill (Photo 7). The earlier layer of shingles was installed over building paper and therefore also dated to the late 19th or early 20th century. The sheathing boards under it were intact but had surface damage from past insect infestations.

The condition of both the shingles and the earlier clapboards beneath them is sufficiently deteriorated to justify their removal to facilitate other needed work to the house. As the 19th century cladding installed on the front and sides when the overhang was framed in was clearly clapboards, new wood clapboards should be installed on these facades as part of the renovation of the house. On the rear facade, examination of the sheathing boards for nailing patterns should be done after the existing siding is removed to determine if they were previously clapboarded. When the clapboards and shingles are removed, the sheathing should be carefully examined and documented with photographs for evidence of the original windows and other early features.

Windows

The existing windows are 1/1 double glazed vinyl replacement sash set in the previously existing wood window frames, with the exception of the picture window on the east facade. As the replacement sash is smaller than the previous wood sash, the openings were blocked down to fit the new sash. The existing window frames vary in age from the 1840s up to the mid-20th century. The exterior casings and sills were covered with vinyl in conjunction with replacing the sash.

The seals of the double glazing have failed in virtually of the replacement sash causing them to fog over in the cavity between the panes of glass (Photo 8). Historic preservation aside, this makes these sash useless because all the glazing would need to be replaced to make them functional. The vinyl cladding was pried away from the sill and lower casing on one of the first floor front windows. The casing was deeply weathered and the sill so rotted that it nearly fell off (Photo 9).

While the poor condition of the frame examined may not be universal to all the windows, it should be assumed that all the vinyl sash and their wood frames should be replaced unless further examination reveals that a significant number of window frames remain sound.

The replacement windows should match the size of the existing frames (not the size of the vinyl sash) and have wood sills matching the 2" thickness of the existing 1840s window sills. Based on the few available historic photographs, the configuration should be 6/6. Ideally they should be single glazed wood sash with storm windows, but energy considerations may dictate double glazing. In that case windows having fully three dimensional external muntins with a profile similar to traditional putty glazing should be used rather than the type with thin muntins between the glass or on the interior side only.

The label of one photo showing 6/6 sash referred to there being one early sash still in place, suggesting they may have had smaller panes and more lights. Careful measurement of the existing frame openings and laying out possible configurations using standard sizes of historic glass (i.e., 6"x8", 7"x9", 8"x10", etc.) should help determine the appropriate configuration.

Refer the section of the Room 103 for a discussion of options for the picture window in that room.

Doors

The main front door and sidelights are a stock entry unit installed in the 1970s to replace what was probably a mid-19th century entry of similar design (Photo 2). The pilasters and cornice above the entry were not replaced in the 1970s. They are of a simplified Greek Revival style design and may date to anytime the 1840s and the 1920s. The cornice woodwork currently shows substantial rot under its vinyl covering.

Unless better evidence of the 19th century appearance of the front entry is found, replacements should match the existing elements.

The two entry doors in the ell are generic horizontal paneled doors in simple door frames with flat stock trim. Doors of this type are still available, but were most commonly used in the second third of the 20th century. Although worn, these doors remain serviceable.

Sills and Related Structure

The rear walls of the leanto and ell have moved noticeably outward at their bases, which is usually caused by extensive rot and rotation of the sills. The lower courses of shingles are rotting and growing green algae from chronic dampness caused by a combination of the lack of gutters, dense plant growth against the house, and the high grade of the soil along the rear wall (Photo 7).

A small section of the rear wall was opened up behind the northeast corner of the kitchen to check the condition of the sill and rear leanto chimney post (Photo 10). The lower few inches of sheathing beneath the shingles was literally buried in the soil and had rotted away. The sill had completely disappeared and the remains of the chimney post was limited to some modern studs ending on a gravelly foundation. A section of both what appears to be the sill and the roof plate is visible where the small former rear entry meets the rear wall of the ell. Both the sill and roof plate were substantially rotted.

As discussed in the section below on the leanto kitchen, a modern stud wall has been constructed interior to the historic wall to make the wall appear plumb within the room (Photo 11). It is

not known whether this wall included a new sill under it with measures to tie the floor joists, the new sill and the old wall together, or if it was simply constructed on top of the existing floor. The latter seems most likely given the general quality of recent past renovation work.

As discussed in the section below on the leanto attic, the condition of the rear leanto wall has caused the leanto roof rafters to pull out of their joints at the main roof plate (Photos 31, 34). The similar conditions at the rear of the ell are likely responsible for the extensive visible sagging of the ell roof.

These conditions of deterioration appear to have been present for many years based on interior finishes from the 1970s that have been scribed to conform to the current deformations. As most of the 1970s interior finishes do not show obvious evidence of continued movement (the north-east corner of the leanto kitchen is an exception), the building seems to be stable despite the obvious chronic dampness in the rear wall.

The rear of the leanto and west ell will clearly require replacement of their sills and lower framing, and probably the rear roof plate at the ell in conjunction with regrading and replacement of the wall shingles. Raising the the height of the foundation along the back may be the most effective way to get the new sill sufficiently above the grade level to protect it from dampness and insects. The sills and lower framing around the rest of the house should be systematically checked and repaired as needed in conjunction with replacing the wall shingles with clapboards.

Landscaping

A number of moderate sized trees and shrubs have been allowed to encroach far to close to the house and are contributing significantly to the chronic dampness that is damaging the shingles and framing.

The site around the house is virtually flat which makes it difficult to get positive drainage away from the foundation as well as to keep the grade level sufficiently below the sills to avoid insect problems. However, past owners have exacerbated the situation by allowing the soil to mound up along the rear wall of the house and literally cover the base of the shingles and the rear leanto and ell sills.

All the trees and shrubs within 5'-10' of the house should be removed, and the soil around the foundation cut back as much as possible to get the grade below the level of the sills.

Site Archeology

Although most of the soil that needs to be removed to improve the grading around the foundation is probably modern fill, the Massachusetts Historical Commission will need to review any action that disturbs the ground on site including foundation repairs under the terms of the Preservation Restriction they hold as a result of the grant to acquire the property.

Archeology may be the best means to resolve the question of whether the house originally had a two room rather than a one room plan. Limited archeological testing would probably find evidence of a shallow foundation wall if the house originally had a two room plan without the intensive work that would be needed to expose the full plan of such a foundation.

INTERIOR - EXISTING CONDITIONS AND HISTORIC FEATURES

Hazardous Materials

Although the identification and treatment of hazardous materials is beyond the scope of this report, old and deteriorating pipe insulation that should be tested for the presence of hazardous materials by a hazardous materials professional was observed in the cellar both on pipes and on the floor, on the floor in the leanto attic, and sitting on top of the kitchen ceiling in the ell attic. Additional similar materials may be concealed within crawl spaces and wall cavities.

As some of the painted interior woodwork is well over 50 years old, the presence of lead paint should also be suspected.

Insect Infestation

Evidence of insect infestations were observed in a number of visible framing members in the main attic, the leanto attic and the cellar. In most cases the infestations appear to have been long past with sister elements added some time ago to compensate for the damage (Photo 41). However, the current conditions of dampness at the base of the building and defective chimney flashings invite further insect activity, and a few of the locations may be active. The most severe cases are identified in the sections on specific rooms and on the drawings.

Measures should be taken during rehabilitation work to improve past repairs to insect damaged members, identify any areas of current activity, and apply borates to all accessible framing members.

Room 101- Parlor (Photos 14-16)

This room is the original front west parlor as re-configured in the mid-19th century alterations.

Floor; Wide pine boards installed in c. 1840s over the original subfloor. They could be new in c.1840s, or the original finish boards reused. It is also possible that the original floor may have been only a single board thick with the current subfloor being the original finish boards. The pitches down rather abruptly adjacent to the front wall. This is likely due to past settlement of the sill and foundation that was added in the 1840s when the front wall was moved outwards to align with the second floor wall.

The existing subfloor and finish flooring should be retained and preserved.

Front (South) Wall; This wall was installed c. 1840s to eliminate the framed overhang and extend the length of the room to match the second floor above. Its current finish is 1/2" plaster wall board installed c. 1970s and covered with modern wallpaper. There appear to be some small areas of c. 1840s plaster under the windows, but the wallboard appears to have replaced the plaster over the rest of the wall.

West Side Wall; The current finish is 1/2" plaster wall board installed c. 1970s and covered with modern wallpaper. There does not appear to be any earlier plaster under the wallboard, but this was not confirmed by probing the wall. The original studs and other framing should be

present behind the wallboard. If exposed by the removal of the wallboard, nail patterns in the studs may yield some evidence of original interior finishes.

The internal wall framing should not be removed.

Rear (North) Wall; The current finish is 3/8" plaster wall board installed c. 1970s and covered with modern wallpaper. The wallboard appears to have been installed over a wall of vertical boards that date to the 1840s or possibly earlier. In a small section that was investigated adjacent to an electrical outlet, there were several layers of early-mid 20th century wallpaper on the boards.

The fireplace with its wood mantel and brick hearth appears to be intact and dates to the c. 1840s alterations. It should be retained as is. The wallpaper above the mantel is on wallboard applied over an unknown substrate.

The door frame to the leanto room is probably original to the 1840s except for its molded trim which was added in the 1970s. Its door is missing.

The modern plaster wallboard can be removed, but the board sheathing under it should be retained in place as significant historic fabric. Removal of the modern wallboard and any work to the wood substrate should be done with caution to avoid damage to the wood sheathing and any evidence of early finishes that may be on it. The door frame should be retained, but the 1970s molding can be removed. The fireplace, hearth and its mantel should be retained and preserved.

East Side Wall; The current finish is 3/8" plaster wall board installed c. 1970s and covered with modern wallpaper. It is probably installed over the c. 1840s plaster and studs.

The opening to the northeast room (Room 103) is finished with modern trim as a cased opening without a door. It may be altered as needed for reuse.

The doors and casings leading to the closet and front entry date to the 1840s alterations and should be retained.

Ceiling Plaster; The ceiling is 1/2" wallboard installed in the 1970s and is finished with a textured plaster skim coat. It is installed on 3/4" thick wood furring strips that have been nailed to the undersides of the original floor joists. It replaced the lath and plaster ceiling that had been installed in the 1840s when the room was re-configured.

The wallboard ceiling can be removed either to expose the original floor joists and subfloor as the finished ceiling, or to install a new plaster ceiling in the same plane.

Ceiling Framing; The original inner girt for the original front wall remains in place and is partially exposed below the wallboard ceiling (it also extends beyond the east wall into the current entry ceiling where it is currently covered by lath and plaster - Photos 14, 16)). The bottom inch or so has been removed from it, probably to facilitate enclosing it with wood casings in the 1840s renovation. The mortise pockets for the studs and braces framing the original front wall are visible in the underside of the girt. The pattern of these pockets also indicates the position

and width of the original window. There is a corresponding sill aligning with the girt under the floor (it is visible in cellar bulkhead window opening) that confirms that this girt is an original element rather than a reused beam.

The inner girt is an essential original element that defines the First Period character of the house. It should be retained, preserved, and remain visible.

The original upper girt that carries the second floor front wall is also present, but is concealed within the front wall.

The original west wall side girt remains in place and is partially exposed below the current wallboard ceiling at the top of the wallboard on the west wall. Its face and bottom appear to have been slightly cut back to facilitate the installation of casings in the 1840s. It extends beyond the rear wall of the parlor through the cellar stair area where it is fully intact and its original beaded edge is visible. The portion that extends forward of the inner wall girt to carry the upper girt is finished with a coved profile that was visible on the exterior of the building in the 18th century. The coved end of the girt is another essential original element that defines the First period character of the house. This detail is also present on the chimney girt in the entry hall where it can more readily be exposed to view.

The coved end of the west girt is another essential original element that defines the First period character of the house. The west wall girt should be retained in place and preserved.

The lower portion of the original 12" wide parlor summer beam is exposed below the current wallboard ceiling where it spans across the middle of the room (Photo 14). Its bottom has been slightly cut back to facilitate the 1840s casings (no longer present), but a portion of its beaded lower edges are still visible at its east end. Like the lower girt, it extends beyond the current east wall into the current rear room where it is hidden under the plaster ceiling.

The summer beam is an essential original element that defines the First period character of the house. It should be retained, preserved, and remain visible.

The original joists along with the original second floor subfloor boards remain intact above the current wallboard ceiling (Photo15). The joists are finished with a narrow chamfer on their bottom edges. Both the joists and the underside of the subfloor retain substantial amounts of their original whitewash finishes. Where the 1840s chimney stack penetrates the ceiling the original joists have been cut off and are presumably headed with stringer. Along the rest of the rear wall, the joists extend over the wall to frame into the original rear parlor girt above the ceiling of the current leanto room.

The floor joists and the underside of the second floor subfloor along with their early whitewash should be retained and preserved in place without any further alterations to facilitate the installation of utilities. It is not essential to expose them to view, but it would desirable to have a removable panel in the ceiling that could be removed periodically to expose a representative section of them to view.

Room 102- Entry (photos 15-16)

This room is the original front entry as re-configured in the mid-19th century alterations. Its west wall is currently located about 2' further west than the original entry west wall. Its front wall is currently located about 18" forward of the original front wall. Its rear wall is currently located about 10" forward of the original rear wall, which would have been the front face of the original chimney. The current stair is a straight run, whereas the original stair would have changed direction once or twice and may have included winding steps.

Floor; Wide pine board boards that likely date to the 1840s alterations. The floor sags abruptly at southeast corner suggesting there may be some past or current problems with the sill in this area. The limited area of the framing for the entry that can be seen from the cellar is a hodge-podge of rough joists sitting on a very shallow crawl space (Photo 48). The original sill appears to have been replaced, but the floor joists do not appear to be connected to the sill.

Front (South) Wall; This wall was installed c. 1840s to eliminate the framed overhang and extend the length of the room to align with the second floor above. It consists of 1970s 3/8" wall board installed over c. 1840s plaster, which still has a c. 1950s wallpaper on it. The exterior door, sidelights, and related interior casings are a "stock" entry installed in the 1970s to replace the c. 1840s entry that had a similar configuration. The exterior trim elements around the entry are older and may date to the 1840s.

East Side Wall; This wall consists of 1970s 3/8" wall board installed over c. 1840s lath and plaster. The interior of the wall may contain some early framing and/or finish elements, but was not opened up for inspection. If the theory is correct that the house originally had another room to the east of the entry, this wall would have been converted from an internal wall to an exterior wall in the 1840s.

Rear (North) Wall; This wall was installed c. 1840s to replace front face of the original chimney. Its finished surface is the c. 1840s lime and hair plaster on sawn wood lath. The plaster has a few small areas of loss, but is sound enough to patch and retain in place.

Ceiling; The current ceiling is modern fiberboard installed on wood strapping (or possibly on the 1840s wood lath) as an expedient replacement of the 1840s lath and plaster ceiling. The easterly 2' of the ceiling is about 4" lower than the rest of the ceiling to accommodate the depth of the chimney girt, which originally defined the wall between the entry and the west parlor, and the east end of the original lower front wall girt. The stout post that was originally under the junction of the wall and chimney girts was removed in the 1840s alterations, and is now marked by empty mortises (Photo 16). Similar to the lower wall girt and summer beam, the bottom inch of the chimney girt was shaved off during the 1840s alterations. The ceiling in this area was removed as part of this report to investigate the framing in this area.

The original framing revealed at this opening is highly significant and should be retained and preserved. This is also an ideal area to install a removable panel for future viewing of the original framing.

Stair; The stair is a straight run stair with a simple railing and square balusters set at a 45 degree angle from the face of the stairs. The newel post is a simple turning characteristic of utilitarian mid-late 19th century stairs. The stair has minimal space at its base.

It would be desirable but not critical to retain the stair as a relatively distinct feature of the c. 1840s alterations.

Room 103 - Northeast Room (Photos 17-18)

This room occupies the location of the original chimney stack and was created by removing the chimney in the mid-19th century alterations. Its west wall is currently located about 2' further west than the original west face of the chimney. The room including its rear closet extends to the back wall of the leanto. Patch lines in the floor indicate it may have initially been configured as two separate rooms in the 1840s alterations, and reconfigured to its current plan in the early 20th century. The ceiling and floor can be seen to slope steeply down towards the east end wall, However, there are no obvious indications of distress in the current finishes, suggesting the condition may have been stabilized (Photo 18).

Floor; Wide pine board boards that likely date to the 1840s alterations. The boards in the front two thirds of the room run north-south consistent with framing beneath them running east-west. The boards in the rear third run east-east, which is consistent with the direction of the floor framing in the rest of the leanto. A narrow strip between the two sections probably marks a former board partition between the two sections. A wood strip in the ceiling directly above this strip is further evidence of a former partition. A group of short boards at west side of the rear section may indicate a former closet.

Front (South) Wall; This wall was installed c. 1840s separate this room from the entry hall, and is about 10" forward (south) of the original south face of the chimney. It is currently faced with c. 1970s inexpensive grooved wood panel sheets that are probably installed directly over the c. 1840s plaster (the wall was not probed to verify that the plaster remains in place). The panel sheets are currently painted white.

West Side Wall; This wall is faced with the same c. 1970s wood panel sheets as the south wall, and aligns with the west wall of the entry. Its geometry jogs about 9" into the room to enclose the mass of the c. 1840s chimney, and then another 6" to enclose the major post at the junction of the leanto and the main house frame (this post is called the rear chimney post). There is a simple wood fireplace mantel installed on the wall section enclosing the chimney, but no hearth and no actual fireplace. As the 1840s bake oven and ash pit below it extend behind the mantel and are about 8" in from the face of the wall, there was never an open fireplace in this location. The mantel was probably installed in the early 20th century to look "colonial" when the partition was removed to create the current room.

Rear (North) Wall; This wall dates to the 1970s when it was installed to create the large closet at the back of this room. It is wall board over modern studs, and currently is finished with modern wallpaper. The door to the closer is a c. 1970s batten door.

East Side Wall; This wall is faced with the same c. 1970s wood panel sheets as the south wall, and presumably retains the c. 1840s lath and plaster under the sheets. There is a large 28 light wood picture window in the center of the wall flanked by conventional 1/1 windows that replaced c. 1840s 6/6 windows in the 1970s. The picture window was installed prior a photograph taken in 1968, and may date back to the 1920s or 30s. It replaced a 6/6 window in the

center of the wall. The interior casings for all three windows are identical, and probably date to the installation of the picture window.

There should be a substantial post in the wall between the center and the rear window corresponding to the west chimney post in the west wall. Given the thickness of the wall, it has been replaced or substantially shaved down to fit within the wall. The original east chimney girt survives behind board casings at the top of this wall, and is discussed in the following section on ceiling.

The picture window should either be retained as is, or replaced with a 6/6 window match the one it replaced. It should not be replaced with modern double glazed window having a different configuration of lights, as that would look visually inappropriate from the exterior.

Ceiling: The ceiling is c. 1840s plaster on wood lath. An 18" wide section adjacent to the west wall is dropped down about 4" to accommodate the depth of the west chimney girt and summer beam from the parlor, similar to the ceiling in the entry hall (Photo 17). Wood casing across the center of the ceiling accommodates a beam that appears to be relatively modern. A wood strip across the ceiling above the fireplace mantel reflects the position of a former board partition (Photo 18). The plaster ceiling north of this strip is about 1" higher than the rest of the ceiling.

The west chimney girt, summer beam and original parlor joists should be retained and preserved.

Wood casing at the junction of the east wall to the ceiling plaster encloses the lower portion of the original east chimney girt (now functioning as the east end wall girt). A small section of loose ceiling plaster was removed adjacent to the girt to get a minimal look at the ceiling framing. The current ceiling joists are set on a ledger nailed to the girt and do not appear to be framed into the girt. The ledger is a reused piece of finish woodwork with a bead on it. The ceiling has a number of cracks and potentially loose areas. It can be removed to inspect the ceiling framing, which also supports the floor above.

The east chimney girt and any remains of its post should be retained and preserved.

Rear Closet: This was created in the 1970s and is finished with the same wood panel sheets on the rear and side as the main room, except they are not painted. The south wall is wallboard over modern studs. The ceiling is fiberboard. the floor is a continuation of the pine board flooring in the adjacent room.

Room 104 - Leanto Room (1840s Kitchen) (Photos 11, 18-24)

This room functioned as the 1840s kitchen, as it is furnished with both an open fireplace and bake oven in the chimney stack that was installed in the 1840s. It was reconfigured in the 1840s alterations to be about 2' wider than the original leanto room and also to accommodate the stair to the cellar. Its original width is marked in the ceiling by the change in height that encloses the original parlor rear ceiling girt (Photos 19, 21).

Floor; The current finish floor is wall to wall carpeting that is in poor condition. Based on limited views under the floor from the cellar there is a wide board pine floor under the carpeting. The floor joists run north-south and literally sit on the dirt in a very shallow crawl space.

Front (South) Wall; This wall was installed c. 1840s to separate this room from the front parlor. At its east end it jogs towards the rear to enclose the c. 1840s chimney stack and kitchen fireplace (Photos 19, 20). The fireplace has a simple wood mantel of unknown age. The corners of the chimney mass are trimmed with beaded casings that probably date to the 1840s. The wall above the mantel is finished with modern wallpaper on an unknown substrate. The wall returns around the chimney mass to the entry to the front parlor, where it is finished with the same modern wallpaper on an unknown substrate over a 4' high wainscot of modern grooved wood panel sheets.

The fireplace and its 1840s trim should be retained and preserved. The modern paneling and wallpaper can be removed and discarded, but care should be taken to avoid damaging any old substrates that may reveal evidence of earlier finishes.

At its west half it forms the north wall of the narrow space enclosing the cellar stairs and is finished with modern wallpaper over a 4' high wainscot of modern grooved wood panel sheets installed over vertical wood boards dating to the 1840s. The wood boards are exposed on the cellar stair side of the partition. The door in the cellar stair partition is a reused early 18th century batten door of vertical feather edged sheathing (Photo 21). There is a small enclosed cupboard at the east end of the stairwell that is access by a small door adjacent to the parlor door. This cupboard and its wood lining appears to date to the early 20th century.

The door reused early 18th century batten door of vertical feather edged sheathing in the cellar stair partition should be retained and preserved.

West Side Wall; This has the door to the ell kitchen in its center. To the left (south) of the door the wall is extra thick to conceal the original post rising to the junction of the parlor west wall girt and the parlor rear girt. Based on a small section of plaster removed at the ceiling, this post appears to be fully intact complete with its edge bead (Photos 21, 22). More of the original construction of the west wall is fully visible at the end of the cellar stairwell if the cellar door is closed (Photo 23).

The post that is currently covered with its edge bead and is important to retain and preserve both for structural and historical reasons, and may be an appropriate location for a removable viewing panel. The original wall construction that is visible at the end of the cellar stairwell should be retained and kept visible.

The wall to the right (north) of the door is enclosed by a small closet, and has escaped the modern finishes that have been applied throughout this room. The west wall in the closet is clad with random width horizontal board sheathing. The boards appear to be hand planes and some have a small bead on one edge. Most likely they are from the first half of the 19th century, but they could be earlier. The adjacent north wall in the closet is finished with c. 1840s lath and plaster. The construction of the closet probably dates to the early 20th century. Its exterior is clad with the same modern wallpaper and sheet panels as the rest of the room.

The original beaded leanto west end girt is visible at the top of the wall both over the door to the ell kitchen and within the closet. The rear leanto roof plate and the casing over the rear corner post are also visible on the north wall of the closet (Photo 24). Like all the other principal original framing members, the rear plate has a bead on its edge.

The exposed girt and plate should be maintained as a visible feature. The board sheathing in the closet should be retained and preserved as one of the few surviving early finishes.

The door to the kitchen ell is a batten door using vertical beaded sheathing boards. It was probably made up in the early 20th century reusing early 19th century beaded sheathing boards.

North (Rear) Wall; The exterior portion of this wall slants outward to a noticeable degree due to past rotting of its sill (Photo 11). Its interior face has been furred out with modern framing in the 1970s to make the wall appear plumb, and as a consequence is much thicker than other exterior walls. The surface finishes of wallpaper above a wainscot of wood panel sheets matching the other walls are applied over modern wallboard. Fragments of an earlier plaster and wood lath wall are probably encapsulated behind this modern wall. Based on the section visible in the west wall closet, these fragments are probably from the 1840s alterations, but there also may be earlier finishes. The window casings date to the 1970s alterations. If the 1970s material is opened up or removed, care should be taken to look for evidence of early finishes behind the modern materials.

The rear roof plate should be retained and preserved, including where it is not currently visible.

East Side Wall; This consists of a cased opening to Room 103 with the cased chimney post and kitchen fireplace on the right, and about 6' of wall on its left (rear) side. The wall is finished with modern wallpaper and wood panel sheets matching the other walls. It was not probed to determine whether there is old plaster under these surfaces. The leanto chimney girt is visible at the top of this wall, and is currently covered with wood casing that probably dates to the 1840s or earlier. The line of the girt along the top of the wall and the floor at the bottom pitches substantially downwards towards the rear wall (Photo 11). Wrinkles in the wallpaper at the northeast corner indicate that the rear wall has continued to sink since the wallpaper was installed in the 1970. The base of the exterior wall behind this area was opened up to check the sill. It appeared to have rotted away completely, which explains the continued movement of this wall.

The leanto girt and chimney post should be maintained and preserved along with their casings.

Ceiling; The ceiling is at two levels with the lower level covering the original principal rear parlor girt along the junction of the original parlor to the leanto (Photo 21, 22). The lower section retains the 1840s lath and plaster. The higher section is modern fiberboard nailed directly to the underside of the leanto attic floor joists and was probably installed in the mid 20th century.

The parlor girt should be retained and preserved. All or part of the lowered ceiling could be removed to expose the original parlor girt and related joists, or a section adjacent to the west corner post could be made accessible with a removable panel.

Room 105 - Ell Kitchen

This room probably received its first interior finishes in the early 20th century based on the triple beaded matched boarding that is on the ceiling under the current modern wallboard. Prior to that the ell probably functioned as a woodshed and/or carriage barn with the its framing and sheathing exposed. Its current finishes all date to the 1970s and consist of wallboard on the walls and ceiling. The front wall is furred out to be completely cover the front wall timber framing. The interior window casings also are modern. The only exception is some early twentieth century plaster that is exposed at the back of the rear wall counter cabinets. The floor is covered with modern linoleum over an unknown substrate. The floor framing is probably over a very shallow and inaccessible crawl space, and its condition is unknown.

As first constructed as an attachment to the house sometime in the 19th century, the interior was open to the underside of the roof sheathing. When the matched board ceiling was installed long 2x4 joists were installed between the beams spanning from front to rear. When the wallboard was added in the 1970s, the carrying capacity of the joists was somewhat reinforced by adding 1x3 struts haphazardly tying the joists to the roof framing (Photo 12). While this system appears to have worked adequately in the past, it should be reviewed and improved as required in conjunction with other repairs to the ell roof.

None of these interior kitchen finishes are of concern from an historic preservation perspective, but care should be taken to avoid damaging the framing that is concealed by the current finishes. The framing in the ell attic above the kitchen should also be retained and preserved. Some repairs and/or replacement of the rear roof plate along with the rear sill and rear wall framing will likely be required to correct the current sags in the ell roof. The system of added struts to reinforce the ceiling should be reviewed and improved as required in conjunction with other repairs to the ell roof

Room 106 - Ell Bathroom

Like Room 104, this room has entirely modern finishes installed in the 1970s.

Room 107 - Ell Entry

This small room is clad with modern wood sheet paneling. The door to the exterior is a stock door probably dating to the mid-20th century. The doorways to Room 104 and 107 are modern.

Room 108 - Storage Room

This room is open to the leanto roof framing. The walls below the loft level girts are finished with rough sawn boards. Above the girts the spaces between framing members are filled in with plywood panels, and the roof framing is exposed. A modern beam has been added towards the rear to reinforce the roof framing. The floor is covered with indoor-outdoor carpeting over an unknown substrate. All of the finishes except the roof and framing members are modern and date to the 1970s. Based on the pintels in the exterior front wall this space previously functioned as a garage or carriage shed.

The girts and posts of the shed frame are partially exposed to view in this room and should be retained and preserved.

Room 202- Stairhall (Photos 25-28)

This room is the original 2nd floor stairhall as re-configured in the mid-19th century alterations. Its west wall is currently located about 44" further west than the original entry west wall. Its rear wall is currently located about 10" forward of the original rear wall, which would have been the front face of the original chimney. The lath and plaster on all the walls and ceiling dates to the 1840s alterations, and also has the same greek Revival style baseboard as the Parlor Chamber. Unlike the entry below, the plaster has not been covered with modern wallboard.

Floor; Wide pine finish floor boards that likely date to the 1840s alterations. The subfloor was not examined.

Front (South) Wall; This wall was reconfigured c. 1840s to conceal the portion of the original chamber south wall framing that extends into the current stairhall. As a result the westerly two feet of the wall is about 7" thicker than the rest of the wall (Photo 25).

Lath and plaster was removed from the bottom of the thickened wall to determine whether the original framing for the overhang and early wall finishes remained (Photo 26). The original chimney post was found intact with its base framed into the top of the upper 1st floor wall 6" x 6" girt. The girt sits on the floor joists with its about 5" above the level of the finished flooring. Curiously, the girt ended at the outer edge of the chimney post rather than continuing across to the east end wall. The original chamber wall studs remain in place, but no remaining traces of the original chamber wall finishes were present (Photo 27). An original diagonal brace was observed that ran from the post down to the girt rather than up to the roof plate (i.e., a falling brace). The wall cavity was filled with debris from generations of rodent nests. The thinner part of the front wall was not opened up. Based on the girt having been cut at the post, it was probably reframed in the 1840s.

The original framing members with their detailing for the framed overhang are historically important and should be retained and preserved. It is desirable, but not essential, to preserve the 1840s lath and plaster. A removable viewing panel could be installed at this location to show the original post and overhanging upper girt.

East Side Wall; The interior of the wall may contain some early framing but was not opened up for inspection. If the theory is correct that the house originally had another room to the east of the entry, this wall would have been converted from an internal wall to an exterior wall in the 1840s.

The steep stair rising up to the attic along this wall was likely constructed in the early 20th century based on triple beaded matched boarding that encloses it. The stair's stringer is applied on top of the east wall plaster, and has encapsulated the wallpaper that was then on the wall. A section of that paper had partially slipped out and was removed for further examination (Photo 28). It is a dramatic large scale architectural pattern that is block printed and probably dates to the 1840s or 50s, but could be earlier. It is quite unusual, as Richard Nylander, curator of Historic New England, had never seen a paper like it.

Any original framing members found in the wall should be retained and preserved.

Rear (North) Wall; This wall was installed c. 1840s to replace front face of the original chimney.

Its finished surface is the c. 1840s lime and hair plaster on sawn wood lath, and is continuous with the rear wall of the front entry below. The plaster has a few small areas of loss, but is sound enough to patch and retain in place. The door and door casings date to the 1840s alterations.

Ceiling; The current ceiling is lath and plaster dating to the 1840s alterations similar to the Parlor Chamber ceiling. It has some sagging from broken keys, but can probably be repaired with plaster buttons. At the time of one of the site visits that was after a heavy rain there was a damp water stain in the center of the ceiling from an active roof leak (Photo 25).

Room 201- Parlor Chamber (Photos 27, 29-31, 33, 41, 42)

This room is the original front west parlor chamber as re-configured in the mid-19th century alterations. Its current plan is similar to the parlor below except for the configuration of closets and a bathroom along its rear wall, and it is narrower due to its east wall being located about 18" west of the current parlor east wall.

Floor; Wide pine boards installed in c. 1840s over the original subfloor. They could be new in c.1840s, or the original finish boards reused. It is also possible that the original floor may have been only a single board thick with the current subfloor being the original finish boards. The hole cut into the floor was probably for a passive heating grate to allow warm air from the floor below to rise into the chamber.

The existing subfloor and finish flooring should be retained and preserved.

Front (South) Wall; This wall was furred out to a 10" thickness in the 1840s alterations to conceal the original wall framing. It is finished with the 1840s lath and plaster, and 1970s wallpaper applied over a mid-20th century wallpaper. The original framing members (posts, upper front girt at floor level, roof plate, studs and falling braces) are still present within the wall, and extend into the adjacent stair hall (Photo 27). The original plaster appears to have been removed during the 1840s alterations. The lower 2'-3' of the wall cavity is currently filled with shredded paper and other debris from years of rodent nests (The cavity is accessible to rodents from the attic). The window trim dates to the 1840s.

The original framing members with their detailing for the framed overhang are historically important and should be retained and preserved. It is desirable, but not essential, to preserve the 1840s lath and plaster. If the wall is opened the framing and sheathing should be carefully examined for any evidence of the original windows.

West Side Wall; This wall is currently about 6" thick and is finished with 1840s lath and plaster along with the same wallpaper as the front wall. A modern bathroom (Room 201B) and shallow linen closet (Room 201C) were partitioned off from the chamber along the rear portion of the west wall in the 1980s. The rear 3' of the west wall in the bathroom is finished with horizontal beaded sheathing that likely dates to the early 19th century (Photo 30). Whether it is reused sheathing installed in this position in the early 20th century, or has always been on this wall is not known. The plaster on the forward part of the west wall was not probed to determine if there is wood sheathing under the plaster, or the condition of the original framing behind the plaster. The original west end wall girt is present above the current plaster ceiling.

The original framing members within the wall should be retained and preserved. It is

desirable, but not essential, to preserve the 1840s lath and plaster. The beaded sheathing within the bathroom should be retained and preserved.

Rear (North) Wall; The current rear wall of the chamber is vertical board wall that is just forward of the current chimney stack, with a shallow closet (Room 201A) behind it (Photo 29). The wall is finished a 3/4" layer of lath and plaster on the side facing into the chamber along with the same wallpaper as the other walls. A simple wood mantel has been installed over the chimney stack, but there is clearly no fireplace behind it and no hearth on the floor. In the mid-19th century simple mantels were sometimes installed as a backdrop for cast iron wood stoves with a stove pipe cut into the chimney flue. In this case the mantel may simply be an early 20th century decorative treatment like the mantel in Room 103.

The original rear wall framing is located about 28" behind the current wall and runs behind the c. 1840s chimney stack. Based on nail holes and a door pintel in the chamber side (ie., south side) of the studs, the original rear wall of the chamber was horizontal board sheathing nailed directly to the studs, and with a door leading into the leanto attic. A straight, thin dark stain on the underside of the roof plate about 1" forward of the studs is further evidence for the placement of the original rear chamber wall (Photo 31). Reused 18th century feathered edged board sheathing has been nailed to the chamber face of the roof plate to form the back wall of the chamber closet and adjacent bathroom (Photo 30). As it was installed with cut nails and does not rise through the 1840s ceiling plaster, it was likely installed in the early 20th century, and may or may not have come from the house. It was once covered with wallpaper (a few remnants remain), and currently has a coat of clear varnish. The main west rear corner post haunch with a beaded edge is exposed in the bathroom.

The rear chamber wall framing is very important historically (Photo 33). The absence of any nail holes from exterior finishes in the rear (north) side of the studs, plate, and posts is proof that the leanto was constructed at the same time as the front rooms despite the fact that the leanto roof has been framed completely separate from the main rear roof.

The original rear wall framing members are historically important and should be retained and preserved. The reused feather edged sheathing should also be retained and preserved. Altering the sheathing to provide a door to the leanto attic would be acceptable if done with care to minimize damage to the vertical sheathing. It is desirable, but not essential, to preserve the 1840s lath and plaster, and the wood mantel.

East Side Wall; The wall was installed in the 1840s alterations to reduce the width of the original chamber by about 44", and is finished with 1840s lath and plaster along with the same wallpaper as the front wall. It also has a wood baseboard capped with a simple Greek Revival style molding that dates to the 1840s. This same baseboard may be present behind the modern baseboard heating on the front and west walls. The door and door casing leading into the stairhall also date to the 1840s alterations.

It is desirable, but not essential, to preserve the 1840s lath and plaster. The door should be retained.

Ceiling; The current ceiling is lath and plaster dating to the 1840s alterations. It is on wood furring hung with wood cleats from the sides of the original ceiling joists (Photo 41), and is located just below the underside of the end wall girt and center tie beam (i.e., summer tie beam). It is

in fair condition with a number of cracks and sagging from broken keys, but can probably be repaired with plaster buttons (Photo 29).

There are no nail holes or plaster stains on the joists to indicate there was an earlier plaster ceiling in the chamber. A few random pieces of leather fastened with 18th century wrought nails were observed on the side of the chimney girt, but they likely were for some other unknown function (Photo 42). There is no whitewash on any of the framing or the undersides of floor boards. Apparently the ceiling framing was exposed but never painted right up to the 1840s. The detailing of the framing is the same as the first floor ceiling with beads on the edges of the tie beams and roof plates (now partially shaved off), and narrow chamfers on the edges of the joists.

The original ceiling framing and attic floorboards are historically important and should be retained and preserved. It is desirable, but not essential, to preserve the 1840s lath and plaster ceiling.

Room 203 - Northeast Chamber

Like Room 103 below, this room is in the location of the original chimney stack and was created by removing the chimney in the mid-19th century alterations. Its west wall is currently located about 44" further west than the original west face of the chimney. The room's back wall aligns with front wall of the leanto. A small modern closet is present in the northwest corner of the room.

The front and side walls are c. 1840s lath and plaster cover with wallpaper that has been painted over. The rear wall is modern fiberboard or wallboard over earlier vertical wood sheathing.

Starting at the line of the original chimney girt in the framing below (i.e, about 44" east of the west wall), the floor can be seen to slope steeply down towards the east end wall. However, there are no obvious indications of distress in the current finishes, suggesting the condition may have been stabilized.

Floor; Wide pine board boards that likely date to the 1840s alterations are currently painted. The boards run east-west, which seems inconsistent with the framing below them that also runs east-west. Probably the sub-flooring runs north-south.

Front (South) Wall; This wall was installed c. 1840s separate this room from the entry hall, and is about 10" forward (south) of the original south face of the chimney. It is finished with paint over wallpaper.

West Side Wall; This aligns with the west wall of the stairhall, and was installed in the 1840s. It sits over the original ceiling joists for the parlor below about 44" west of the original chimney girt and about 18" west of the current wall between the parlor and Room 103. It is finished with paint over wallpaper.

Rear (North) Wall; The wallboard on this wall is from the 1970s, but the vertical wood sheathing behind it was installed in the 1840s or perhaps the early twentieth century, and is attached to makeshift framing of unknown date. As viewed from the leanto attic its back side looks similar

to the feather edged sheathing at the rear of the parlor chamber closet, and may be reused 18th century sheathing (Photo 36). A section of the modern wallboard would have to be pried off to confirm this.

If the sheathing proves to be reused early material, it should be retained and preserved.

The walls of the small closet in the northwest corner are modern fiberboard. The original rear chimney post is partially exposed in the closet. Its outer face appears to have been cut back about an inch at the top.

East Side Wall; If the theory is correct that the house originally had another room to the east of the entry, this wall would have been converted from an internal wall to an exterior wall in the 1840s. The interior of the wall may contain some early framing but was not opened up for inspection. What should be a substantial post in the northeast corner of the wall corresponding to the rear chimney post visible in the northwest closet is not present and has been replaced by a pair of old vertical studs that are visible in the leanto attic.

Ceiling; The ceiling is c. 1840s plaster on wood lath. A long north-south crack aligns with the edge of the chimney binding beam in the attic floor above. There are also other lineal cracks. These may relate to loading imposed on the attic floor from braces that have been inserted under the roof framing above this room.

Room 204 - Leanto Attic (Photos 31-36)

This unfinished space is not currently a functional room and can only be accessed from the ell attic (Photo 32). In the 18th century it was accessed by a door from the back of the parlor chamber and had a finished floor that was one board thick. Several of the floor boards are still in place and are nailed with 18th century wrought nails to the leanto kitchen ceiling joists. It was probably used for storage.

Its original roof rafters and south wall framing are intact from the east end wall to line of the original chimney girt (Photos 33, 34). The framing from the chimney girt to the east wall (i.e., the original chimney bay) is a hodge-podge of reused and later make-do framing installed when the original chimney was removed. The roof plate and floor girt of the leanto attic wall do not extend beyond the chimney post into the original chimney bay (Photo 36).

As discussed in the section on the Parlor Chamber rear wall, the framing visible in the leanto is very important historically. The absence of any nail holes from exterior finishes in the rear (north) side of the studs, plate, and posts is proof that the leanto was constructed at the same time as the front rooms despite the fact that the leanto roof has been framed completely separate from the main rear roof. The detailing at the junction of the leanto rafters and the rafters from the rear main roof on the roof plate is also historically of substantial interest (Photo 36). Usually when a rear leanto is part of the original construction the rear rafters run continuously from the roof peak the base of the leanto. The presence of separate leanto rafters usually indicates the leanto was added later. That the main rafters are framed to the plate using a bird's mouth with a projecting tail to support overhanging eaves also suggests that leanto was added later, or possibly that the rafters were reused from a previous building. That common rafters with bird's mouth joints and tails are found on some of the earliest surviving first period houses (i.e.,

the Piece House in Dorchester) and go out of use in much of Massachusetts Bay by the time the Butters house was built caused Anne Grady to suspect the rafters were reused from an earlier house.

Unlike Essex County where common purin roofs are the norm after about 1680, common rafter roofs are known to occur in other 18th century houses in Middlesex County, although the rafters are usually heavier and more widely spaced than at the Butters House. Most 17th century common rafter roofs have a principal purlin at the mid-span of the rafters and are a slightly steeper pitch than the Butters House. The reuse theory has problems because the rafters show no sign of reuse from such a roof other than one pair being placed out of sequence with the marriage marks at the ridge joint (# 8 was placed after #4).

In this case the absence of nail holes in the rear wall framing proves the leanto was part of the original construction. Perhaps the decision to construct the leanto was made during construction after the main rafters had already been cut. This would explain the projecting tails as well as the length of the rafters.

The past rotting of the leanto rear sill and consequential movement of the rear wall has caused the leanto rafters to pull out of their proper seats on the roof plate as much as 2" - 3" (Photo 31). Various make-do repairs have been done to re-secure the rafters to the plate. A section of the plate adjacent to the current chimney has substantial rot and insect damage to leaking at the chimney flashings (Photo 40). Smaller areas of insect damage occur at several other areas along the plate.

The original rear wall framing and roof members within the leanto attic are historically important and should be retained and preserved. Reintroducing a door from the parlor chamber into the leanto attic and replacing the missing floor boards would make the significant framing details more accessible to interested persons. Repairs to correct the current structural deficiencies in the leanto roof framing should be done with care to preserve as much of the original framing and detailing as possible.

Room 301 - Attic (Photos 37-46)

The attic is unfinished with the roof framing and undersides of the roof sheathing exposed and unpainted. The attic floor has a single layer of floor boards. There is no insulation.

The western two thirds of the attic (i.e., the portion over the original parlor chamber from the chimney girt to the west end wall) is largely unaltered from original construction. The floor boards are original and are nailed with 18th century wrought nails. The floor framing and roof plates are original in this section. As discussed in the previous section on the leanto attic, the rafters in this section are original and probably not reused from a previous house. The studs in the west gable wall are also original and unaltered except for one that was cut and moved a few inches to accommodate the current gable window.

This section of the roof is framed with 8 pairs of common 3" x 5" pine rafters spaced approximately 27" on centers (Photo 37). There is no ridge board. The rafters are joined at the ridge with tightly formed pegged half-lap joints. The rafter pairs have been numbered 1-8 with incised roman numeral marriage marks (i.e., assembly marks) at the ridge joints (Photo 38). They have been installed in consecutive order starting with the west end, except for pair #8 which is

installed after #4). The rear rafters are framed into the leanto plate with bird's mouth joints and projecting tails. The front rafters have had their original tails cut off.

The roof framing is unusual if not unique for a house of this period. 17th century common rafter roofs such as the Pierce House in Dorchester have principal rafters at the binding beams and principal purlins (horizontal members) supporting the common rafters at their mid span. 18th century common rafter roofs in Middlesex County usually have heavier rafters spaced more widely apart. Common rafter roofs do not usually occur in Essex County during the early 18th century.

The floor framing consists of 3" x 4" joists spaced approximately 19" on center spanning between the binding beams (Photo 41). The end wall tie beam (i.e., girt) and chimney tie beam (i.e., attic chimney girt) are about 6 1/2" x 9", while the center tie beam (i.e., summer tie beam) is 12" x 9".

A few of the floor boards were loose and were lifted to assess the floor framing to the extent it was visible. Substantial areas could not be examined because the boards were tightly nailed. Much of the front eaves plate was not accessed because the small cover boards were tightly nailed at the ends of the floor boards. With adequate time and care, additional boards could probably be lifted without bracing them to more fully assess the framing, particularly at the front eaves.

Substantial past deterioration was observed at the front (south) end of the chimney tie beam where the top 3+ inches had completely rotted off from past insect and water damage (Photo 39). The damage extended from the eaves in about 6'. As a consequence several floor joists had very minimal bearing on the west side of the beam, and on the east side were bearing on a ledger that had been nailed to the side of the beam. The base of the rafter was rotted off and was connected to the beam by a short sister stub. The plaster in the second floor below this area did not show signs of major distress indicating the sound lower 5" of the beam may be adequate to carry the imposed loads.

There was also substantial deterioration to the base of the rafter at the rear (north) end of the chimney tie beam. The rear roof plate has sizeable pockets of rot adjacent to the chimney from past leaks and smaller areas of rot at other scattered locations. The end of the rafter bearing on the end of the center tie beam has rotted off and has a sister rafter attached.

Both the roof and floor framing within the original chimney bay have been extensively reworked, probably in the 1840s alterations, and there is also a variety of more recent make shift repairs. The roof framing is a variety of reused early framing and added pieces of varying lengths and species (Photo 43). One of the short pieces in the rear pitch is oak with a small scratch molding worked into its edge suggesting it may be a reused early door or window frame (Photo 44). In some cases the rafter pairs do not meet at the roof, and in others the rafters are short pieces that have been crudely sisted to make up the proper length. Instead of a conventional plate at the junction with the leanto attic, there is a 2' x 10" ledger spanning from the chimney tie beam to the east end wall (Photo 36). Several rafters extend well over the ledger and terminate in the middle of the leanto roof. Supplementary braces have been added under both the front and back roof pitches, apparently to correct roof sags (Photo 43). These braces bear on the floor boards and joists which may become overloaded from the added roof load.

The roof sheathing is also a random assortment of board lengths and is not continuous with the sheathing to the west of the chimney tie beam. Normally when an early chimney has been removed the pattern of curt sheathing and interrupted roof framing makes the size and former location of the chimney apparent. In this case the entire chimney bay has been reworked.

The floor framing in this section has clearly been installed after the chimney was removed. Because the roof braces prevent key boards from being lifted, most of the framing in this section could not be looked at. The tie beam at the east wall has substantial pockets of rot under the east gable window due to past leaks at the window (Photo 46). This is a common defect in houses of this period. As this beam is 6" x 9" it may still have sufficient sound wood to function. There is more limited deterioration at the front end of this beam, along with some deterioration to the end of the end rafter.

The extent of damaged wood in the east end tie beam should be more fully determined, and sound wood scarfed in to replace the deteriorated section(s) if necessary. As much as possible of its sound wood and its mortise pockets should be retained and preserved.

As previously discussed, the east end tie beam has a number of unused pockets for former joists on its exterior (east) side, and only two pockets on the interior (west) side that are at the front end of the beam (Photos 45, 46). The limited number of pockets on the interior side is consistent with their having been a large chimney stack instead of a floor along with a stair along the front side of the chimney. The two joist pockets at the front would have been for the ceiling joists over the front of the second floor stairhall. The pockets on the outside make sense if there was originally another room on the east side of the chimney bay. Because of this evidence it is important that any repairs to this beam leave as much of it intact and in place as possible.

The roof framing between the west chimney girt and the west end wall is unusual if not unique for a house of this period and should be retained and preserved. The attic floor its framing in this section should be retained and preserved. The conditions of deterioration described above (including the leanto attic) should be more fully assessed by a structural engineer experienced with early house framing as part of the preparation of plans for carrying out repairs. Any repairs determined to be necessary should be designed to retain as much of the early framing as possible. Ideally, repairs to the chimney bay roof framing should be done by adding new rafters as needed to properly carry the roof without removing the existing ones, and should include the removal of the modern braces. If the braces need to be retained, the floor framing under them should be supplemented as needed to adequately carry any roof loads transferred to them.

Cellar (Photos 47-50)

Like most first period houses, the cellar does not extend under the entire house. In this case it is under the footprint of the original west parlor, with a narrow slot extending easterly under the front stairs (Photo 47). This slot originally housed a stair from either the front entry or, more likely, the former east room down to the cellar. Assuming a two room plan, the east room would have been the hall (i.e., kitchen) with the stairs leading from it to the cellar which would have been used for storing food. There is no cellar under what is now the northeast room because the

original chimney was located in this area. The north wall of the stair slot would have aligned with the front face of the chimney stack. The front wall of the cellar is about 3' from the current front wall of the house because originally the first floor front wall was set back about 18" behind the second floor. When the front wall was moved forward in the 1840s the foundation would also have been extended to come under it. Perhaps the extension of the foundation is very shallow, which could explain the pronounced sag in the first floor at the front of the house (along with deterioration of the added sill). The bulkhead entry to the cellar may be original. The leanto portion of the house is constructed over a very shallow crawl space, which is again normal for early construction. The added west ell is also built over a crawl space that is not accessible.

The framing for the floor of the parlor is visible in the cellar. It consists of a 12" wide transverse (front to back) summerbeam with 3" x 4" joists spanning east-west to the chimney girt on the east and the west wall sill on the west side (Photo 47). The summer beam was framed into the original front sill and the rear sill located under the rear wall between the original parlor and the leanto. Its joint to the front sill has been cut due to past rot and a cedar post placed under it. There has been extensive deterioration to many of the joists and the summer beam from insects and dampness over the years. As a consequence most of the original joists have been sistered, the summer beam has been boxed in below the joists and on its underside, and a number of supplemental posts have been added. While these repairs have been somewhat make-do, the parlor floor does not currently exhibit excessive deflection, and its uneven level seems mostly due to the sagging of the front wall over the added 1840s sill and foundation.

There is very little visual access to the framing over the crawl spaces. A small amount of the framing under the front entry floor can be seen from the former stair slot (Photo 48). It appears to be heavy joists running east-west that are primarily supported on random piles of stone. They do not appear to be framed into the east sill or the chimney girt. A very small portion of the leanto floor framing is visible where the rear cellar wall is penetrated by the waste pipe. It also has heavy joists that are framed into the sill under the parlor rear wall, and appear to be sitting in the dirt as they head towards the rear of the leanto. As the leanto rear sill seems to have rotted completely away in the one spot we checked it, the joists probably do not have a positive connection with the rear leanto wall.

As much as possible of the early wood framing and masonry in the cellar and crawl spaces should be retained and preserved. Wherever possible, repairs should be done by adding new members while leaving the early ones in place, or in some cases splicing on new wood to the sound portions of the early members.



Photo 1: Front (south) and west facades of main house with ell in foreground.



Photo 2: Front (south) facade of main house.



Photo 3: East facade of main house. This side exhibits the classic lines of an 18th century New England salt box (i.e., leanto) house.



Photo 4: Rear facade of main house and ell showing sag in ell roof and green algae growing on shingles from excessive chronic moisture.

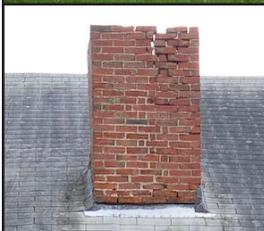


Photo 5: Chimney has many loose bricks and needs to be rebuilt from the attic floor up.



Photo 6: Detail of c. 1840s or later clapboards that remain under the shingles on the front and side facades. The clapboards are too weathered to retain after the shingles are removed. They should be replaced with new clapboards.



Photo 7: Detail of typical poor condition of shingles on the rear facade. The chronic moisture at the base of the building has caused the bottom courses to rot and grow moss. The grade is at or above the bottom course of shingles.



Photo 8: Typical condition of existing vinyl sash with moisture trapped between the panes of glass due to the failure of the seal of the insulated glass.



Photo 9: Detail front facade first floor window showing weathered condition of wood window trim under the vinyl cladding. The sill on this window was so loose it nearly fell off.



Photo 10: Detail of earlier wood shingles and sheathing uncovered at rear of main house behind the north-west corner of the leanto kitchen. The sheathing has old insect damage. There was no sill apparent behind the sheathing, and the top of the foundation was at grade.



Photo 11: Rear (north) wall of leanto kitchen showing where a new 1970s rear wall was shimmed out from the original wall to make it appear plumb. The extent that the base of the wall rotated out is apparent in the window jambs (A) where the sash are in the plane of the old exterior wall. Also note the downward slope of the ceiling and floor in relation to the level line of the wallpaper on the far wall. The wrinkling of the wallpaper in the corner (arrow) indicates the rear wall has continued to sink since the wallpaper was installed in the 1970s or 80s.



Photo 12: Ell attic above the ell kitchen showing framing on the front wall that is characteristic of barns rather than houses. Vertical struts (arrows) were added in the 1970s to prevent the added wallboard ceiling from sagging. Note cast off pipe insulation in the lower left corner that may contain hazardous materials and should be tested by a hazardous materials professional.

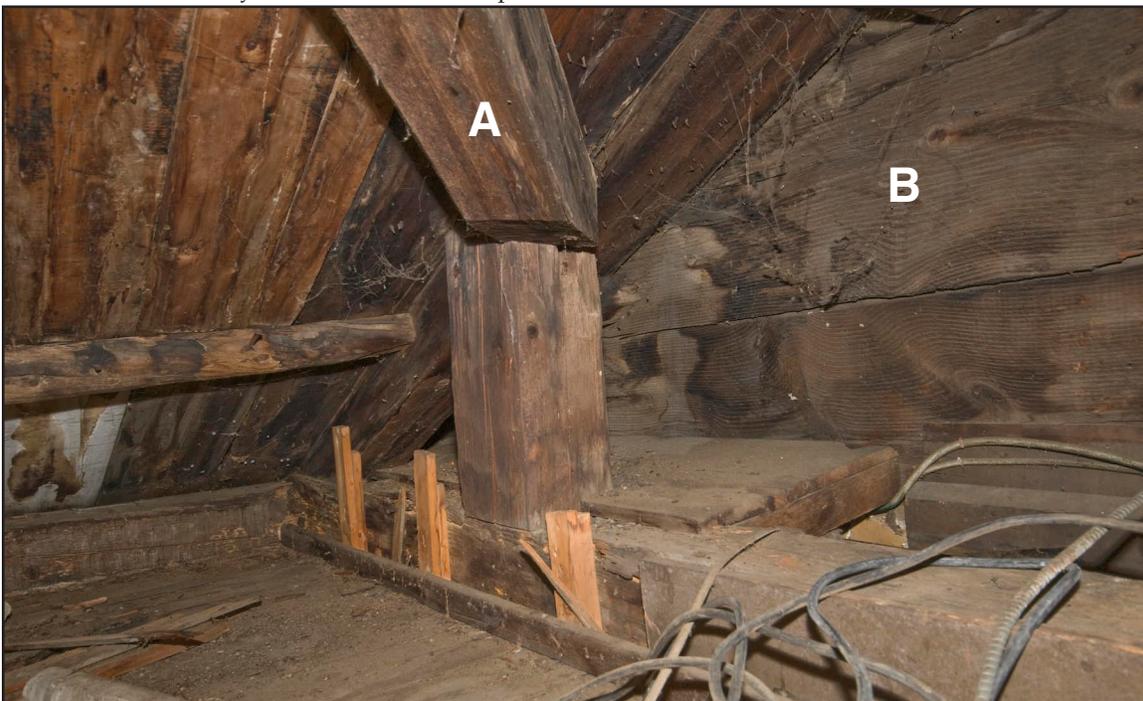


Photo 13: East end of ell showing the make-do manner in which the end of the diagonal rafter marked "A" is supported on a short post cut from a reused timber. Most likely the diagonal rafter is also reused. The sheathing boards marked "B" are on the west wall of the main house. They have a strongly weathered surface and do not appear to have ever been covered with clapboards or shingles. They are nailed to the original wall studs behind them with cut nails indicating they were installed in this position after c. 1800.



Photo 14: East wall of parlor (Room 101) with lower portions of the original summer beam (A) and the original lower front girt (B) exposed below the 1970s wallboard ceiling. The lower front girt marks the position of the original first floor front wall.



Photo 15: Original parlor framing and ceiling with remnants of its 18th century whitewash paint above the current ceiling in the front entry. "A" marks an original ceiling joist that is directly over the 1840s wall (arrow) between the current parlor and the front entry. "B" marks the underside of the original parlor chamber floor boards that also functioned as the parlor ceiling. "C" marks the lower front girt that was over the original exterior first floor front wall.



Photo 16: "A" marks the original lower front girt that formed the top of the front wall of the 1720 parlor, "B" marks the original west chimney girt that was above the west wall of the original parlor, "C" marks the ceiling that was within the original parlor, and "D" marks the underside of the second floor that projected beyond the first floor wall as a framed overhang. The black arrow points to the curve that ornamented the end of the girt that projected beyond the first floor wall to carry the overhanging second floor wall. The white arrows indicate the mortises that received the large post (removed in the 1840s) that originally supported these girts. It is not clear how the end of the chimney girt is currently supported. The underside of the girts has been shaved off. This is now in the entry hall and could be revealed by a removable panel.



Photo 17: South wall of the northeast room (Room 103). The ceiling at the arrow is lower to cover the west chimney girt. The beam at "A" dates to the 1840s or later. The original chimney occupied this space.



Photo 18: Northeast room (Room 103) looking north. The downward slope of the ceiling over the wallpaper shows how much the east exterior wall (right) has settled. That the wallpaper has not wrinkled in the corners suggests there has not been much movement since the 1970s or 80s. The arrow points to the location of a former c. 1840s partition. "A" marks casing over what may be the original east chimney girt. "B" marks casing over the original west rear chimney post. "C" marks a cosmetic mantel likely installed c. 1910.



Photo 19: C. 1840s fireplace, bake oven, and ashpit in the leanto kitchen. "A" marks c. 1840s casings over the original west rear chimney post, "B" marks the original leanto chimney girt. The woodwork at "C" also dates to the 1840s. The ceiling at "D" has been lowered to cover the rear parlor girt and floor joists. The fireplace, hearth, oven, and elements marked "A", "B", and "C" should be retained and preserved.



Photo 20: Interior of the c. 1840s bake oven. The left side of the oven is directly behind the mantel in room 103, making it impossible to have had a fireplace at that mantel.



Photo 21: Southwest corner of leanto kitchen. "A" marks c. 1720-50 batten door with feather edged boards reused as the door to the cellar stairwell installed c. 1840s. "B" marks the lowered ceiling that covers the original rear parlor girt. "C" is a board wall that covers the original rear west corner post. "D" marks the original rear leanto west end girt. The area at "B" and "C" would be a good location for a removable panel for viewing the original framing. Alternatively, the lowered plaster ceiling and adjacent board facing together with the boards over the post could fully removed to leave the original framing and floor joists exposed in this area. The girts and post appear to be fully intact with their beaded edges in this area.

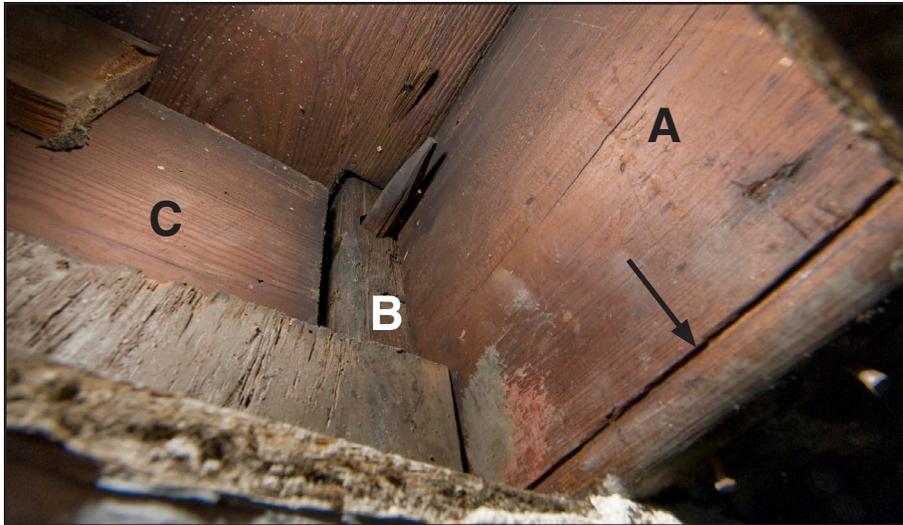


Photo 22: The joint between the rear parlor girt (A), the rear west corner post, and the west parlor girt (C) above the ceiling at "B" in Photo 21. The arrow points to the ornamental bead on the lower edge of the parlor girt.

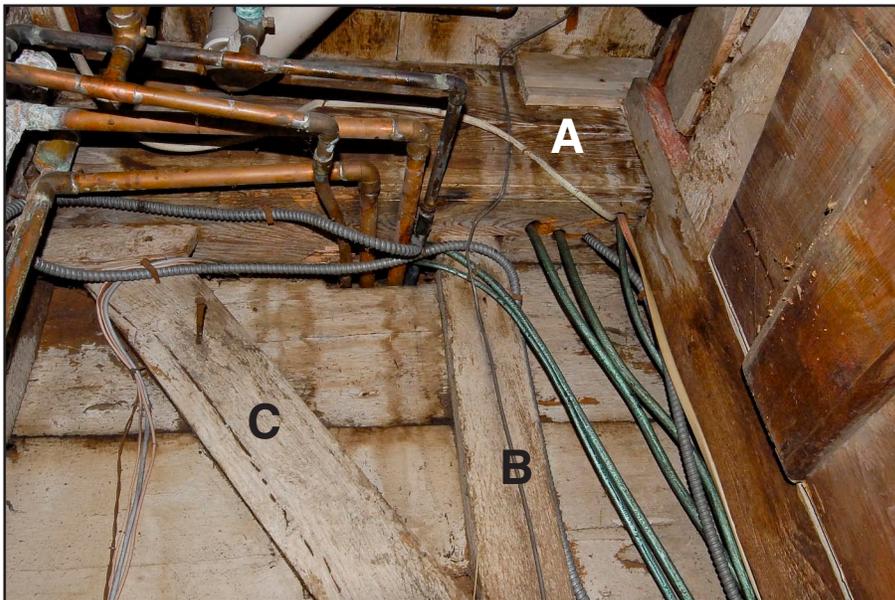


Photo 23: Original west wall parlor framing that remains visible in the cellar stairwell, unfortunately obscured by plumbing for the bathroom above (Room 201B). "A" marks the west parlor wall girt, "B" marks a wall stud, and "C" marks a rising diagonal brace, which were installed at each corner of the original frame.



Photo 24: The leanto west wall girt (A) with its original beaded edge as visible within the leanto kitchen closet (Room 104B). The presence of beads on the leanto girt and roof plate matching the beads on the beams in the main house is one of several indications that the leanto was built at the same time as the main house.



Photo 25: 2nd floor stairhall (Room202) looking towards parlor chamber. The front wall at "A" jogs out to cover the front chimney corner post and other original framing for the front wall of the original parlor chamber. The arrow points to a crack across the ceiling that reflects the position of the attic chimney tie beam that frames into the corner post above "A". The wall between original parlor chamber and the original stair-hall would have been under this tie beam. The dark spot on the ceiling in the upper right corner is a water stain from an active roof leak.



Photo 26: Hole cut in 1840s plaster in area marked "B" in Photo 25 above reveals the bottom of the original second floor front chimney post mortised into the top of the original overhanging upper girt marked "A". The top of the girt is about 5" above the level of the floor. The pile of debris was found in the wall and is from years of rodent nests. Similar debris fills the lower 2' of the rest of the front wall in the parlor chamber.



Photo 27: Front wall cavity photographed from the wall opening in Photo 26. "A" marks the exterior sheathing, "B" is an original diagonal corner brace (in this case a falling brace from the corner post to the front girt at the bottom of the wall), "C" is an original wall stud. "D" is a wall stud and "E" circular sawn plaster lath, both for the wall installed in the 1840s to conceal the original framing. Based on this photograph, the original interior room finishes that would have been installed on "B" and "C" were completely removed when the wall was furred out in the 1840s alterations.



Photo 28: Fragment of wallpaper that was removed from behind the staircase to the attic on the c. 1840s plaster wall. This is an architectural pattern wallpaper that probably dates to the mid-19th century.



Photo 29: Rear (north) wall of the current parlor chamber. The position of the original parlor chamber rear wall was at the back rear closet marked “A” where there is currently reused 18th century board sheathing. The original east wall was about 44” beyond the current east wall marked “B”. The mantel on the rear wall never had an open fireplace, but might have had a hole for a stove flue into the chimney behind it. The hole in the floor at the right was probably for a cast iron gate to allow warm air to rise from the below prior of the installation of central heating.



Photo 30: Early board sheathing on the back and west side walls of the bathroom (Room 201B). The sheathing marked “A” is a type known as feather edged sheathing and dates to the 18th century, but was reinstalled in its current position here and in the adjacent closet in the early 20th century or possibly the 1840s renovations. It may also be present behind the modern wall board on the rear wall of room 203. The horizontal boards marked “B” likely date to the late 18th or early 19th century. Whether they are reused or are in their original position has not been determined. Similar boards may be behind the plaster on the west wall of of the chamber. The element marked “C” is the shouldered haunch of the original west corner post. the rest of the post is behind the sheathing.

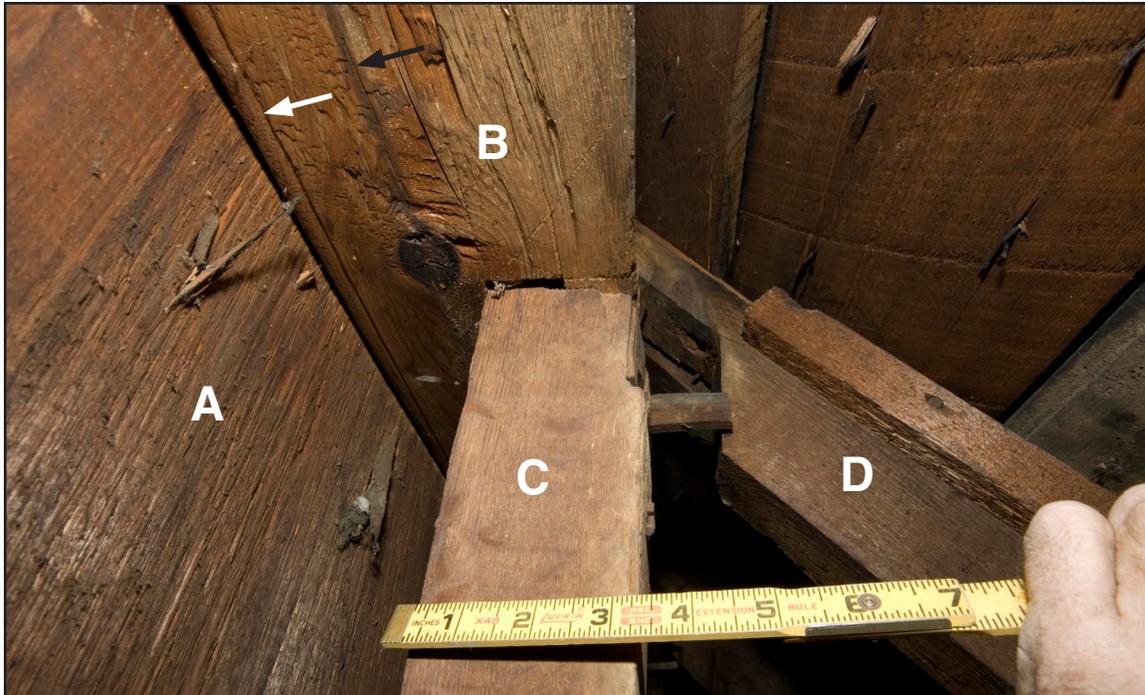


Photo 31: Framing in leanto attic behind feather edged sheathing shown in photo 30. "A" is the backside of the sheathing. "B" marks the rear parlor chamber girting (functions as a roof plate). The sheathing is nailed to its front face and covers the bead in its bottom edge (white arrow) that would have originally been exposed to view. The original chamber sheathing was likely horizontal boards nailed to stud "C". The dark line (black arrow) likely indicates where the face of original sheathing met the girting. "D" is an original leanto roof rafter that has slipped about 2" back from the girting due to the settlement of the leanto rear wall and sill.

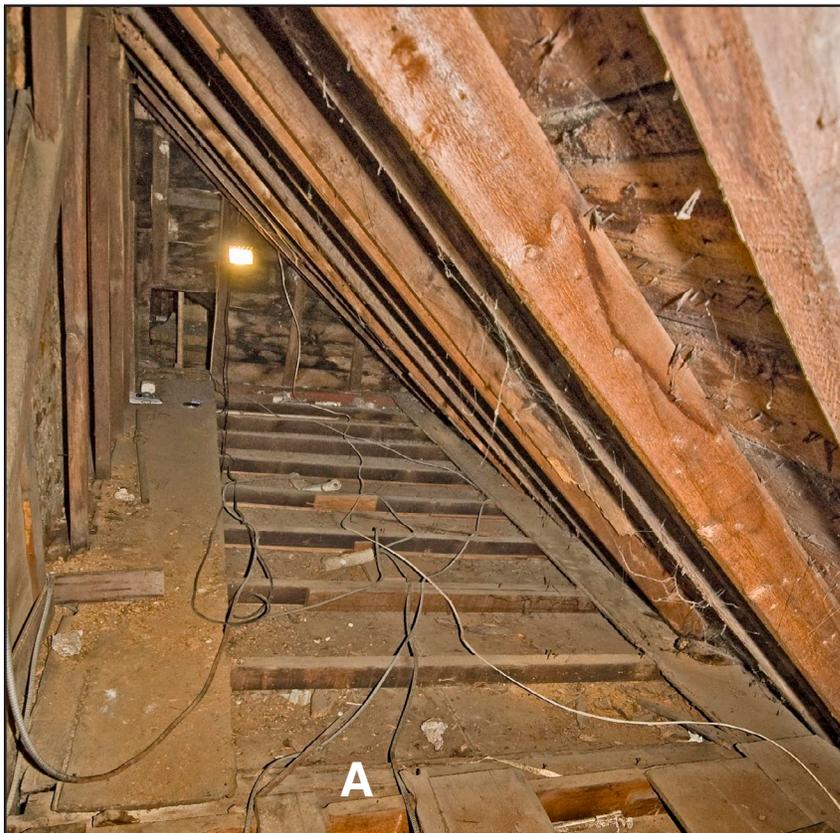


Photo 32: Leanto attic behind parlor chamber looking towards west wall. The remaining floorboards are nailed with 18th century wrought nails and are original along with the floor joists. The beam marked "A" is the leanto chimney girting. The current ceiling in the leanto kitchen is nailed directly to the underside of the floor joists. There was once a small door from the chamber into the leanto attic that would have facilitated its use for storage.

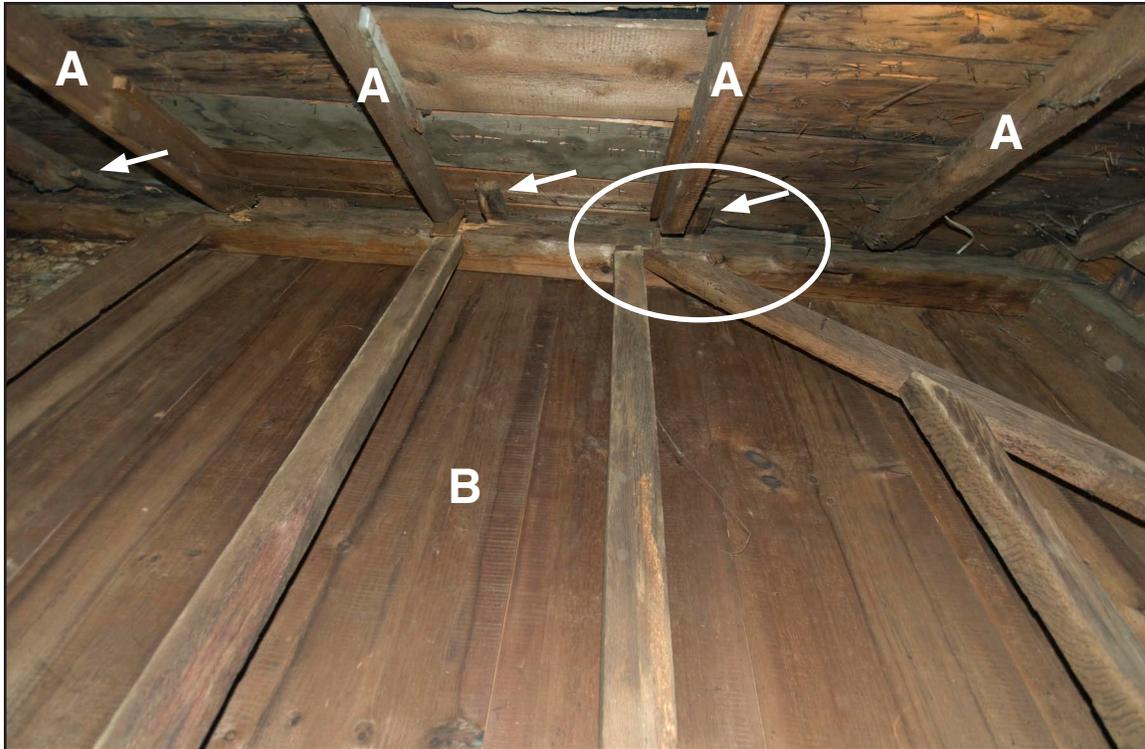


Photo 33: Framing of parlor chamber rear wall in leanto attic. The tails of the main roof rafters can be seen projecting over the top of the roof plate (arrows), with the separate leanto roof rafters (A) next to them. The absence of nail holes in the leanto side of the studs and plate indicates the leanto was built during the original construction of the house. The few random nails near the top of the framing were likely for hanging things. "B" marks the backside of the sheathing in the parlor closet (Room 201A).

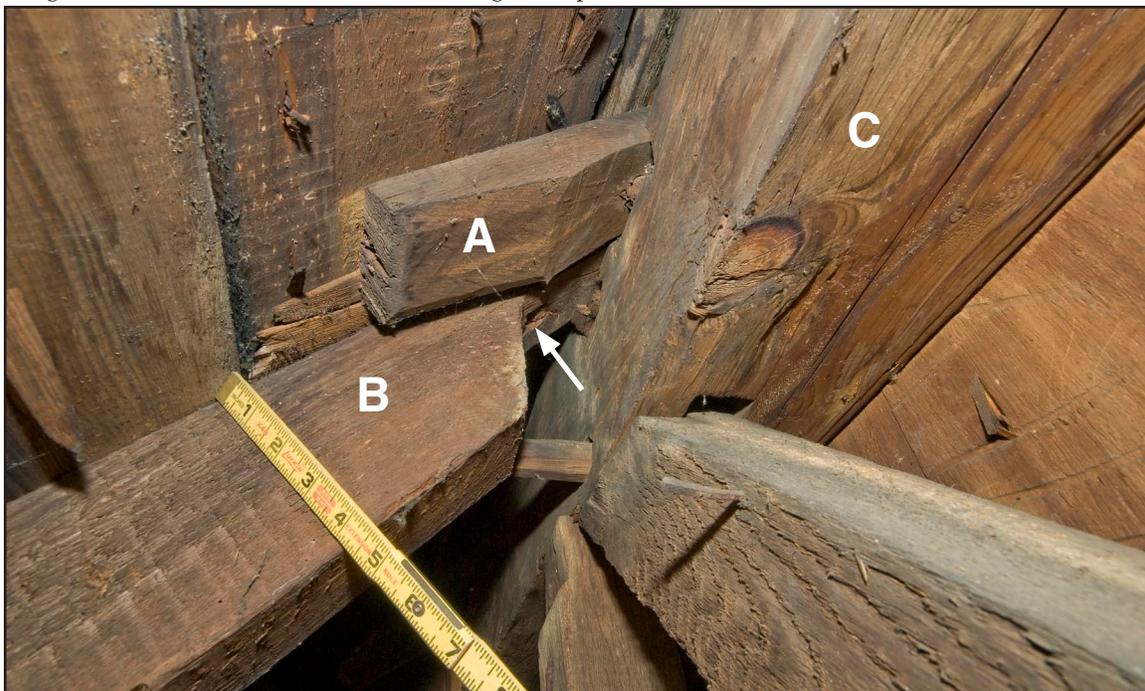


Photo 34: Area marked by the circle in Photo 33 showing details of the rafter joints. "A" marks the projecting tail of a main roof common rafter with bird's mouth joint. "B" marks a leanto rafter that has slipped about 2" back from its original position. Its projecting tenon still sits on the roof plate (C), but the peg securing it in place has sheared off. The arrow marks the hole in the rafter tenon for the peg.

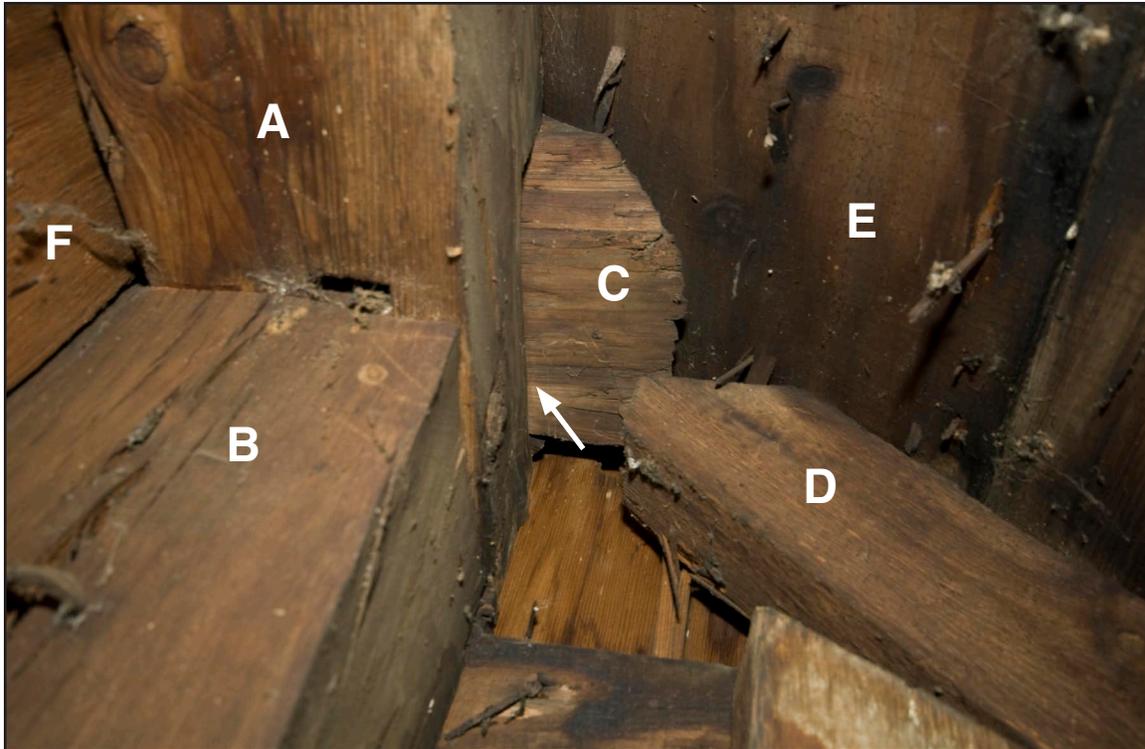


Photo 35: Northwest corner of parlor chamber framing from leanto attic. "A" is the roof plate, "B" is the west rear corner post (partially visible in the chamber bathroom - the post extends down to the first floor as shown in Photos 21 & 22). "C" marks the end of the west wall attic tie beam, "D" is a leanto rafter, "E" is the leanto roof sheathing, and "F" is the backside of the chamber bathroom feather edge sheathing (Photo 30).

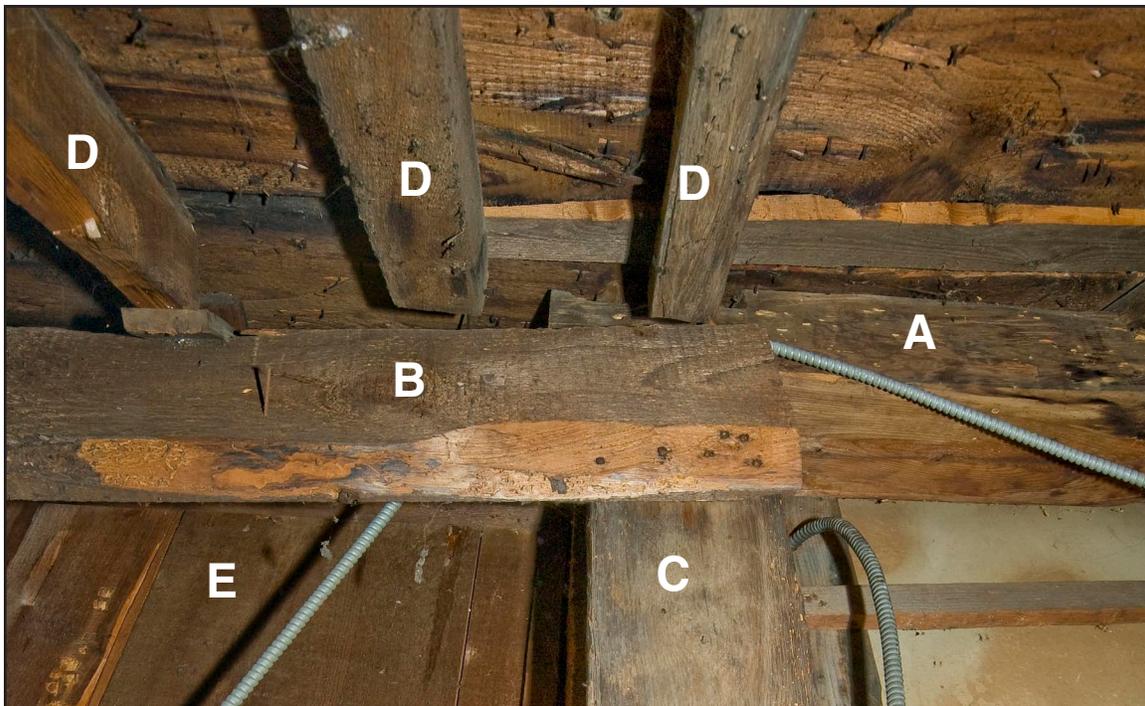


Photo 36: Attic leanto framing behind the northeast chamber (Room 203) at the junction of the original parlor chamber and the original chimney bay at the rear chimney post (C). "A" is the original leanto roof plate that ends just to the left of post "C". "B" is the ledger that was installed in the 1840s to carry the roof rafters in place of plate "A". Leanto rafters are marked "D". The boards "E" may be more feather edged sheathing, and are currently covered by wallboard at the rear wall of the northeast chamber.



Photo 37: Main attic above parlor chamber looking towards west wall showing original common rafters and original flooring. The studs on the west end wall are also all original except the one at the left side of the window which has been moved to accommodate the current window. The white boards on the floor (A) are 18th century feather edged sheathing that has been made into a door, presumably for somewhere within the house.



Photo 38: Original attic rafter pair at ridge showing numerical marriage marks "III". The tick on the right hand mark is to distinguish the right rafter from the left rafter. As discussed in the text, rafter pair # VIII has been installed out of sequence after # III, but all others are in sequence. This is probably a construction error rather than an indication of reuse from another building.

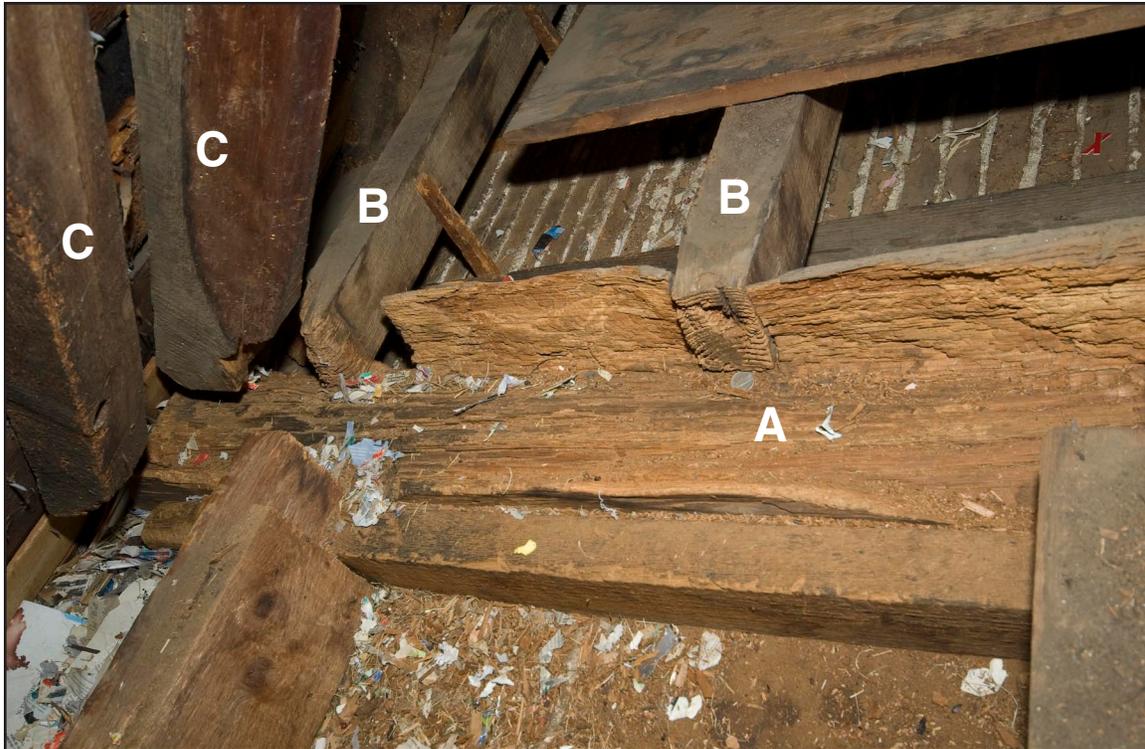


Photo 39: Original attic chimney tie beam (A) showing extensive past rot and insect damage at its south (front) end. The most extensively damaged material has been removed. As the beam is 9" deep, there is still 5" of sound wood left, and the floor loads on it are fairly small. However, the bearing for the floor joists on the far side (B) is minimal, and the roof rafters (C) are floating. The near side joists are supported on a ledger.

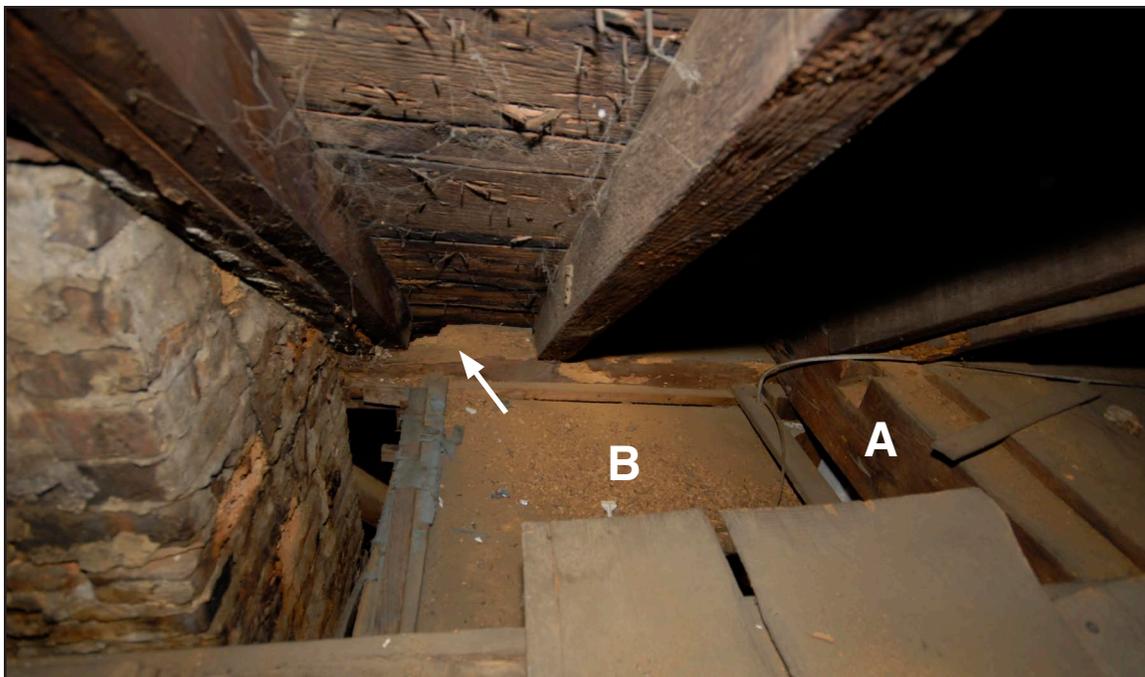


Photo 40: Leanto roof plate at north side of main attic showing rot and insect damage adjacent to the chimney (Arrow). "A" marks the north (rear) end of the attic chimney tie beam shown in photo 39 above. The base of the original rafter that sits on it has severe old insect damage and has reinforced with an added sister rafter. "B" marks the ceiling of closet 203A in the northeast chamber.

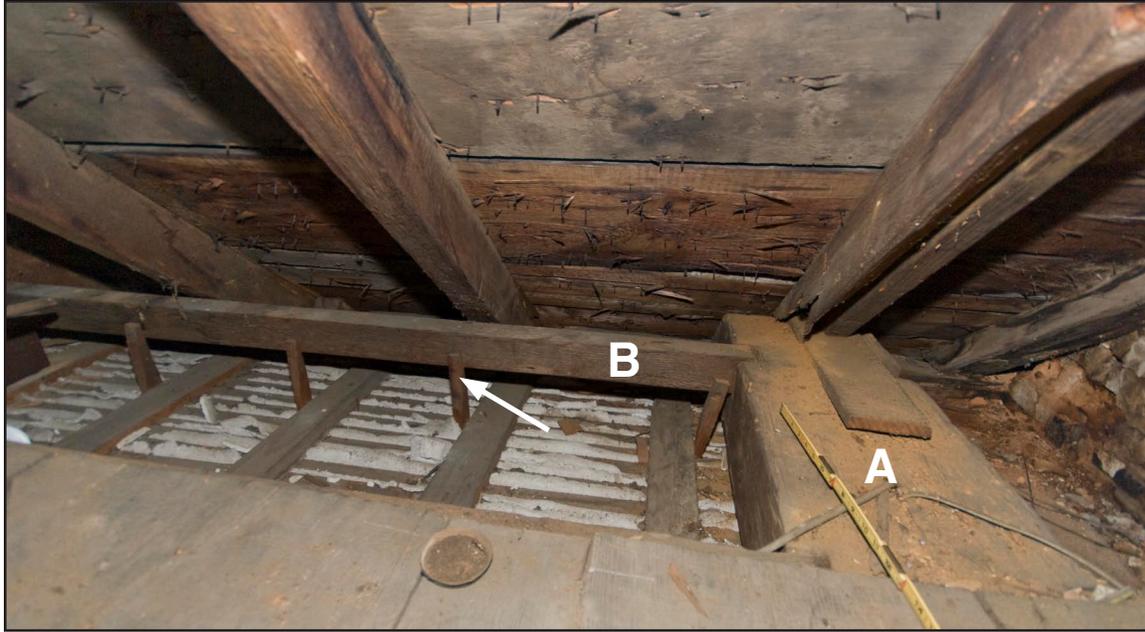


Photo 41: Rear of attic at parlor center tie beam (i.e., summer tie beam) marked "A" showing insect damage to rafter that sits on the beam, and a typical original joist (B) with wood hangers (arrow) added in the 1840s to carry the current c. 1840s parlor chamber ceiling. The floor framing appears to have originally been fully exposed and unpainted as the ceiling for the original parlor chamber.



Photo 42: Detail of piece of leather attached to attic tie beam with 18th century wrought nails. The function of this is not known. Several were observed, but not enough to suggest they were hangers for an 18th century ceiling in the parlor chamber.



Photo 43: Attic roof framing on north side over the northeast room (i.e., the original chimney bay) showing the shoring added in the 1970s to reinforce the roof framing. The feet of the braces bear directly on the floor boards and perhaps a floor joist, which may not have sufficient strength to carry added roof loads. The roof rafters in this section are a hodge-podge of reused and discontinuous timbers. New continuous roof rafters should be added and the shoring reworked to have proper bearing (if it is still needed). Similar shoring and discontinuous rafters are also present of the south side of the chimney bay.

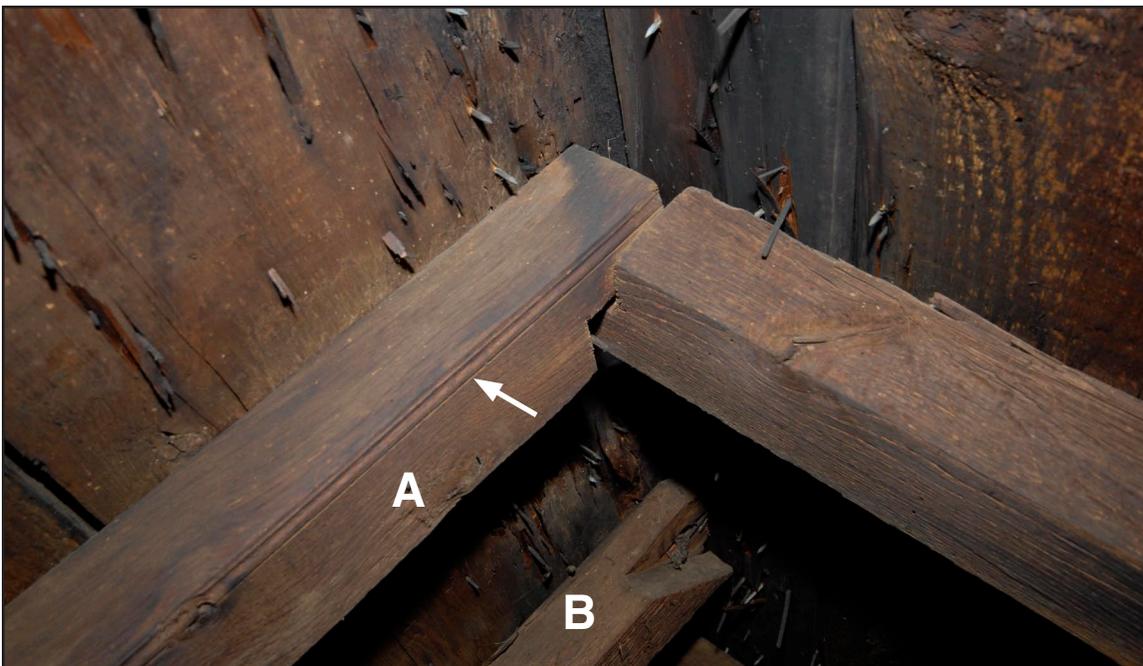


Photo 44: Ridge of attic at original chimney bay. "A" is a piece of dressed oak with a molded edge (arrow) suggesting it may be a piece of a first period door or window frame that was reused as a rafter in the 1840s alterations. It should be retained and preserved. The piece marked "B" is a former rafter with its half lap joint turned the wrong way.

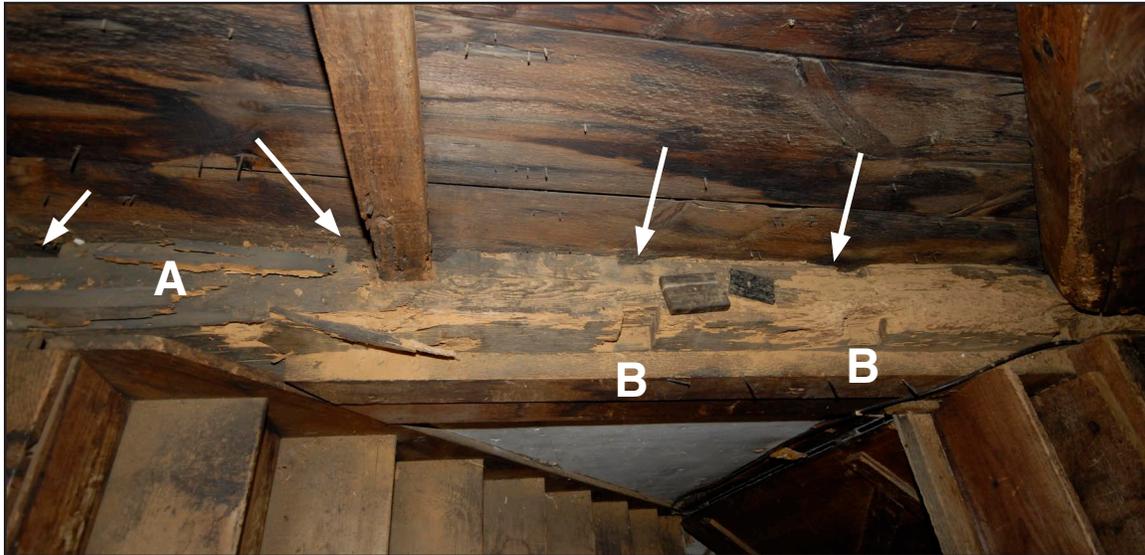


Photo 45: East end attic tie beam (A) that would have been the east chimney tie beam if the original house had a two room center chimney plan. The unused open mortises (arrows) on the far side of the beam are evidence that the house may have originally been of two room center chimney plan, as they would have housed the floor joists of the attic over the original east chamber. The two empty mortises on the near side (B) would have been for ceiling joists over the stairhall before the current attic stair was installed. The wall studs are nailed at their tops to the rafters with 18th century wrought nails, while they are housed in the tie beam in open gains rather than in mortises set back an 1 1/2" from the face of the beam as is normal in original construction. Gains are used when a stud is added later. This evidence suggests the sheathing on the east wall was added in the later 18th century well before the c. 1840s alterations. If the house was divided between family generations, perhaps the partition was installed to divide the attic.



Photo 46: The center of the east end attic tie beam (A) has extensive past rot from years of leaks from the attic window directly above it. Like the parlor chimney tie beam, this beam is probably 9" deep and may still have sufficient sound wood to carry the loads on it. However, it was not probed to determine the full extent of the damage, as the roof shoring made it impossible to lift the adjacent floor board for inspection. The unused open mortises on the far side of the beam are present in this section (Arrows).

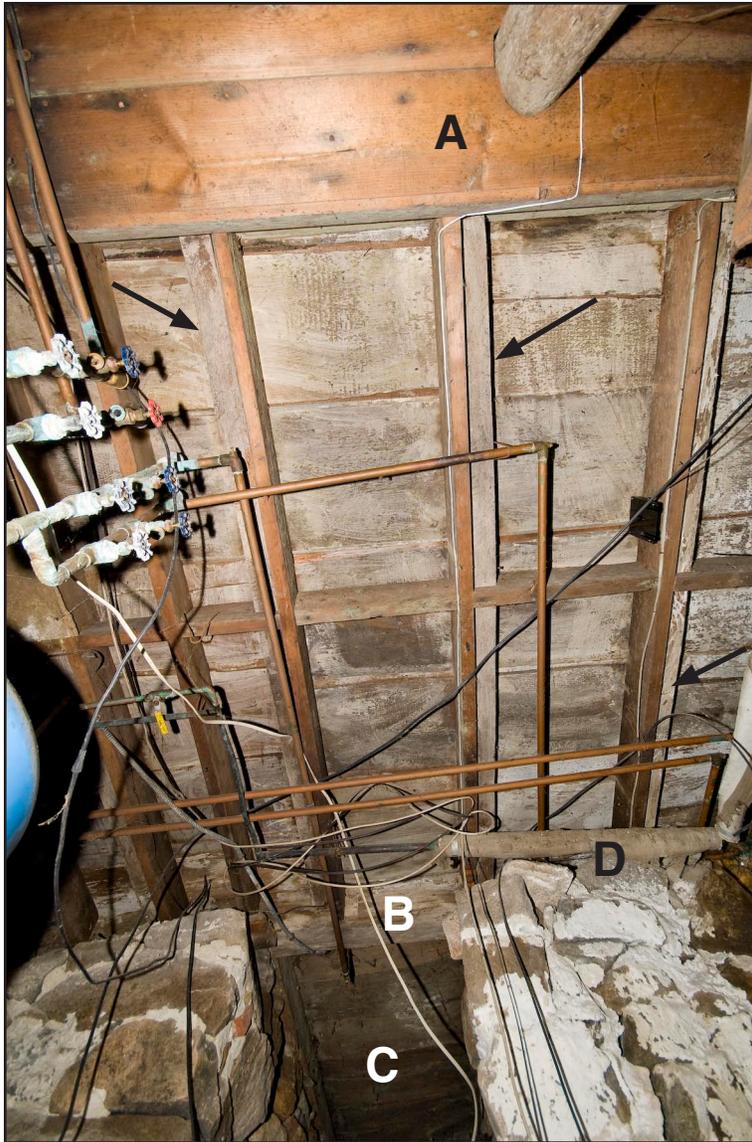


Photo 47: Cellar framing under the original parlor looking towards the east wall of the cellar. "A" marks the summer beam that has been enclosed with modern boards, "B" marks the chimney girt, and "C" indicates the opening in the foundation that originally held the stairs to the cellar. The arrows point to original parlor floor joists that have been sistered with modern 2x4s to reinforce the floor framing. "D" indicates some pipe insulation that should be tested for the presence of hazardous materials by a hazardous materials professional.

Photo 48: Shallow crawl space under the front entry hall as photographed from area "C" in photo 47. The joists are larger than the joists under the parlor. They are not continuous from the east sill to the chimney girt, and are supported on stones in the ground.





Photo 49: Base for the c. 1840s chimney consists of two brick piers (A) with half logs spanning across the top of the piers to carry the mass of the chimney above the cellar. This construction was often used in the first half of the 19th century instead of a more labor intensive brick arch. The partial arch at “B” is stabilized against the heavy beam “C” to carry the brick hearth in the floor above.



Photo 50: West sill at the cellar bulkhead showing a splice between the original sill on the right (A) and a replacement piece on the left (B). The replacement was probably added in the c. 1840s alterations when the front wall was moved forward 18”. That change would have required that the west sill be extended to meet the new front sill.