The Washington House at Ferry Farm: An Architectural Study

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INTRODUCTION

This report explains the facts, comparative data, and inferences underlying recent efforts to characterize George Washington's boyhood home. Understanding this house is a matter of importance--it was here that George Washington grew to adulthood, spending the most impressionable years of his early life. To know Ferry Farm more certainly is to know Washington more intimately—to see him we have never have before.

At the request of the George Washington Foundation, Mesick Cohen Wilson Baker, Architects, undertook in 2008 to assess the body of physical and documentary evidence about Ferry Farm assembled by the Foundation's research team--and on the basis of that information, to prepare drawings that showed what the exterior of the house may have looked like.[1] Based on these drawings, a color rendering was produced, summarizing what could be known or reasonably inferred about the outward appearance of George Washington's early home, based on information available at the time.

The next step was to assess all evidence bearing on the *interior* of the dwelling--and then to produce drawings of the *entire* house based on the findings. By this time the analysis of recovered artifacts had created a more detailed picture of the site, identifying previously ambiguous elements and thus clarifying the building's physical history. With this new information in hand, MCWB re-surveyed the archaeological collection and revisited previous suppositions about the building's external appearance and interior layout.

However rich the sources, one eventually comes to the end of what archaeology and even the best documents—written or graphic--can say about a vanished building. At that point, attention turns to the comparative study of other buildings—those which are relevant by virtue of their date, geography, scale, substance, or social context. Bound up in these buildings are the lost conventions of space and workmanship that guided Chesapeake builders in Augustine Washington's time. Through these surviving structures, the pre-1740 building traditions of the Chesapeake colonies are knowable in a general way, and that provides a basis for informed supposition about a host of detailed matters at Ferry Farm.

Having collected, reviewed, and assessed the available information, MCWB sought to characterize the Ferry Farm house through a series of drawings and by this explanatory report. We hope that the result is a plausible and compelling evocation of the place where George Washington lived during the early years of his life--an inducement to think in a more fruitful and informed way about what it means today.

With that goal in view, let's look at what we have learned, beginning with a brief review of the property's early chronology:

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[1] David Muraca, Paul Nasca, and Phil Levy, "Report on the Excavation of the Washington Farm: The 2006 and 2007 Field Seasons," Fredericksburg: George Washington Foundation, 2010).

CHRONOLOGY

1727-35

The Washington house at Ferry Farm is believed to have been constructed by attorney William Strother sometime following his acquisition of the property in two separate parcels, which transferred in 1727 and 1733. The house was surely complete by the time of Strother's death in 1735.

1738

In preparation for selling the plantation, King George County appraisers made a room-by-room accounting of William Strother's personal estate. The resulting document that relates well to the foundation uncovered by GWF archaeologists.

Prior to its sale, the property was advertised in the Virginia Gazette:

> To be Sold, for Cash, on the 25th of October next, by way of Auction, to the Highest Bidder, several Tracts of Land, belonging to the Estate of William Strother, late of King George County, Gent. deceas'd, pursuant to his Will, viz.
>
> One tract containing 100 Acres, lying about 2 miles below the Falls of Rappahannock, close on the River Side, with a handsome Dwelling house, 3 Store houses, several other convenient Out-houses, and a Ferry belonging to it, being the place where Mr. Strother liv'd; is a beautiful Situation, and very commodious for trade….[2]

Augustine Washington soon purchased the property and brought his family to live at Ferry Farm.

1740

The house was reportedly damaged by fire on Christmas Eve, an event that left burned sections of plaster in one of the root cellars.[3] The campaign of repair that followed seems have included the addition of a new space behind the Parlor.

1743

Shortly after Augustine Washington's death, King George County appraisers prepared a room-by-room inventory of his personal property, citing all the same spaces mentioned in the Strother inventory--and a "Back Room" besides. This was surely the room added after the 1740 fire.

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[2] *Virginia Gazette*, 21 April, 1738, p. 4.

[3] Muraca, *et al.,* p. 57.

Following Augustine's death, Ferry Farm passed to George Washington under the care of his mother, Mary Ball Washington,

1772

Mary Ball Washington leased Ferry Farm to William Fitzhugh and William Hunter.

1777

Ferry Farm was sold to Dr. Hugh Mercer in 1777. Mercer intended to establish a new town on the site, but his plans were interrupted by the Revolution. A tower appears to have been added to the west front of the house at this time. Foundations for this appendage were uncovered by GWF archaeologists.

PERIOD TO BE REPRESENTED BY THE HISTORIACL SIMUALTION

The most significant period for this property are the years between Augustine Washington's purchase of the property in 1738 and c. 1753, when Washington came to own the property, even while his attentions were turning elsewhere.

This embraces the entire period during which young George Washington lived on the property and also the campaign of expansion and repair carried out by his father following the 1740 fire. It was Augustine's enlarge house that shaped Washington's concept of the spaces constituted an acceptable house for persons of his station.

THE PLAN

Archaeological Footprint

The first step in understanding this house is to establish its footprint, working from the archaeological evidence. Surviving foundation walls and corners establish the structure's out-to-out dimensions, 53'-3" x 28'-10" (excluding the exterior chimneys), and also the interior depths for the land-front rooms and the rear shed--15'-8" and 12'-0," respectively, the latter fixed by a rear chimney base. The transverse walls in the land-front range are fixed by the corresponding walls of the cellar. The north gable-end wall is located by the massive chimney base at that end, and, less certainly, the south end is fixed by a root cellar[4] and by an aggregation of stones that seem to have been associated with a corner chimney. (See AP 1.0).

The greater depth of the river-front rooms strongly suggests that the house originally faced the Rappahannock River. The "rear" or land-side rooms stood on insubstantial foundations, almost certainly assuming the form of a shed framed

[4] Muraca, *et al*., p. 57.

against the rear of the main house--a common arrangement for 18th century houses in the region.

At the north end of the house, GWF archaeologists uncovered the remnant of a very large exterior chimney that once served the northwest, river-front room. Only the east jamb of this chimney remained. However, the opposite jamb is tentatively located by assuming that the chimney more or less centered on a large root cellar situated directly in front of the hearth. This root cellar was basically a pit in the crawlspace below the floor of the dwelling, used for the storage of foodstuffs--and perhaps personal items. The location of this pit, relative to the interior face of the chimney, also provides strong indications for the depth of the hearth.[5]

Near the north end of the house is the substantial foundation of a second exterior chimney, this one situated on the rear or east wall of the land-side room, serving that space. (As we shall see, this room and its chimney may have been a Washington-era addition). Initially, the small, rectangular foundation seemed to represent a rear porch or stoop, and thus an exterior doorway. However, the types of artifacts associated with it--and the distribution of refuse in the vicinity--strongly argue against placing a rear doorway here--this was a chimney.[6]

At the opposite end of the rear shed, the southeast room also seems to have had a large root cellar in front of the fireplace hearth. The canted orientation of this hole suggests two important things about the south chimney:

- The chimney breast and hearth could not have projected very far into the back room, since the pit comes very close to the outside wall.

- The canted angle of the root cellar suggests that it paralleled a similarly canted hearth, fireplace, and chimney.

Assuming that the root cellar followed the orientation of the fireplace (as it clearly did in the northwest room) and, assuming that the pit centered on the hearth and fireplace—one can infer the angle and thus the width of the chimney breast in the southeast (shed) room. If the chimney breast in the front room is set on the same angle, as was often the case in Rappahannock Valley dwellings, one can infer a width of the chimney breast in that space as well.[7] Together, the angles and widths of the two chimney breasts allow us to estimate the overall width of the

[5] Examples of surviving root cellars are still to be seen in the quarter at Brandon Plantation, Halifax County, Virginia and also in the remaining quarter at Prestwould, in Mecklenburg County.

[6] Dave Muraca, Paul Nasca and Phil Levy, Report on the Excavations of the Washington Farm: 2006 and 2007 Field Seasons, 2009.

[7] Other early Virginia examples include the Fairfax Arms, Colchester, in Fairfax County, the Wormley House, Urbanna, in Middlesex County, the Lumpkin House, in Essex County, and the Hatcher House in Chesterfield County.

chimney they shared. Ten to twelve feet would comport with existing examples—this one comes out at 11'-6". We cannot know the exterior projection of this chimney from archaeology. To judge from surviving examples, 4'-0" would be within a plausible range, allowing sufficient mass to contain the fireplaces. (See A1.2, Scheme A).

The resulting chimney would incorporate two corner fireplaces, each at a shallow angle to the other. This arrangement, with a deep projection on the exterior, was a characteristic form in the region. The Delia Forbes Smith House, formerly in Falmouth and thus quite proximate to Ferry Farm (Figure 1), is an early and proximate example. Another Rappahannock valley example of this arrangement is Linden Farm, in Richmond County (Figure 1a), where chimneys at both ends of the house exhibit adjoining corner fireplaces opposed at remarkably shallow angles. This example is particularly significant, being equally early (the earliest portion was dated by dendrochronology to 1760, though certain elements appear to be earlier still). In certain cases, the exterior mass of such chimneys was present as much for what it did externally for the house as for containing the corner fireplaces. The Moore House in Yorktown (Figure 2), is illustrative of this fact.

There can be no doubt that the south chimney at Ferry Farm was one of these external structures as well—i.e., the root cellar pushed the hearth and breast of the back room so far back and at such an angle that the mass available for an internal chimney would be insufficient to contain the fireplace.

One alternative to paired cornered chimneys would be to maintain the canted fireplace in the back room, (based on the root cellar) while squaring up the fireplace in the front, allowing the salient front corner of the chimney to protrude into the front room. A similar condition was recorded by Henry Chandlee Foreman at White Hall, an early house in Talbot Co, Maryland (Figure 3). A related solution having two chimneys, each with one salient corner, is to be seen at Williams' Conquest, in Somerset County, Maryland. These examples suggest the possibility of something similar at Ferry Farm (See A1.2B). A related alternative would be to close in the alcove beside the squared chimney to form a closet. (See A1.2C). An example of this arrangement, recreated from physical evidence, can be seen at the Ludwell-Paradise House in Williamsburg, built in 1752 (Figure 4), though chimney is entirely on the interior in this case.

All three arrangements are illustrated in the accompanying plans.

In addition to the chimney-related features described above, GWF archaeologists found substantial remains of a partial cellar measuring about 16'-6" x 10'-8" (outside dimensions), situated near the midpoint of the river-front range, spanning its entire depth. Originally, one entered this cellar by a doorway at the western (river-front) end. The stone jambs and sill of this opening were uncovered in the

archaeology (Figure 5), revealing sockets in the stonework that received tenons at each end of a wooden sill. This sill was part of a wooden door frame.[8]

Physical evidence for the exit was partly destroyed by a westward extension of the house later in the dwelling's history.[9] However, archaeology revealed that a level passage ran east-west below the west stoop, emerging on the river-front slope before the house. (Figure 6). The archaeological team reports that a tunnel-like feature issuing westward from this passage (shown on the archaeological plan) functioned as a closed drain, filled intentionally with loose material through which water could percolate in the manner of a French drain of drywell. Since the completion of the archaeological report, a detailed topographical survey of the site revealed the location of a path, hitherto unnoticed, that led down to this cellar entry from the north side of the dwelling.

The cellar stands slightly off the centerline of the house, suggesting that it aligned with (and supported) the walls of a central passage above--no other provision for supporting transverse partitions for an entry is evident in the archaeology.[10] The ground-floor entry of early Chesapeake houses often stood slightly off-center—a consequence of the front living spaces being slightly different sizes, according to their relative social importance. It is likely, then, that the cellar locates the ground-floor "Passage," mentioned in both inventories and thus offers clear indication of its size—about 15'-7" long x 9'-3" wide. The size and position of this cellar thus illuminates the original division of the dwelling's front range into three rooms.

Archaeology offers another critical insight about the footprint and internal divisions of the house. It seems that the northeast room (the rear space served by an independent rear chimney) was added soon after the house was complete. Sheet refuse containing some of the earliest ceramics on the site covered the ground below this room--but did not appear under the *rest* of the house. In other words, the ground below the northeast room was initially an exposed yard surface--and remained in this state until the northeast room and its rear exterior chimney were added, probably after a fire damaged the house in 1740.[11]

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[8] Muraca, *et al.,* p. 47.

[9] This cellar was expanded toward the river c. 1770 and evidently was covered by an enclosed porch or porch tower. Unfortunately, the excavation for this added structure destroyed all evidence for the earlier cellar steps. As for a passage under the stoop, similar arrangements were found archaeologically under the rear porch tower of the Peyton Randolph House, and also under a 1755 rear shed at the James Geddy House, both in Williamsburg.

[10] Passage walls were not inevitably supported by masonry foundations--those of the Mason House, in Northampton County, Virginia, were self-supporting, for example. However, it was common for at least one of the passage walls to rest on a masonry foundation. The interior wall of the partial cellar at Lynnhaven House is full height and thus supports the girder on which the interior first-floor partition stands. Other examples include the Everard house in Williamsburg, and Smith's Fort in Surry County.

[11] Muraca *et al.,* p. 65.

In addition to a new corner room, the extension may have embraced a new space behind the old central passage. Yet, no rear hallway distinct from the "Passage" appears in the inventory. Perhaps the space between the rear wings was nothing more than a covered rear porch, as at the Everard House, in Williamsburg (Figure 7). Indeed, that might account for the inventory's silence at this point.

Alternatively, it is possible that the physical arrangements were such that the front and rear passages were perceived as a single space, despite the presence of the stair. However, given the constriction of any doorway passing under the stair, it does not seem likely that the appraisers would have regarded the space beyond as an extension of the passage.

If the space were merely a porch—an unfurnished thoroughfare--then it is conceivable that it could have escaped mention in the inventory. On that basis, we have assumed that the space between the two back rooms resembled the covered porch reconstructed at the Thomas Everard House—a type for which Rockefeller's architects found clear evidence and for which physical evidence is also present at Kittiewan, in Charles City County. (See A1.2A).

Whatever the arrangements behind the old passage, the new space seems to have had a tight floor, since the deposition of materials there appears to have ceased after the rear addition was complete. However, continuing depositions of trash *behind* the enlarged house point to the persistence of a rear access in the new construction.[12]

Rooms – The 1738 Inventory

To characterize the rooms of the Ferry Farm house we must rely on two room-by-room estate inventories associated with the house--one for William Strother (1738) and another for Augustine Washington (1743). Let's consider the 1738 inventory first. In compiling this document, King George County appraisers mentioned the following spaces:

Hall room back
Hall
Passage
Parlour
up Stairs
Hall Chamber next the Gavel End
Kitchen Room[13]

[12] Personal communication with David Muraca, 2012.

[13] King George County Inventories, 1721-1744, pp. 237-243.

If we exclude the "Upstairs" and "Hall Chamber…" as belonging to the second floor, and the "Kitchen Room" as representing a separate building, it seems that the ground floor of Strother's house consisted of three heated spaces plus an unheated central hallway or "Passage." The naming of these spaces shows that two of the heated rooms—the "Hall" and "Hall Room Back," stood on the same side of the Passage, one behind the other. This pair must have been situated at the south end of the house, where, from the beginning, the building was two rooms deep, and where physical evidence, admittedly fragmentary, suggests that adjacent fireplaces shared a single chimney. (See discussion above). It follows that the remaining room, the "Parlour," stood alone on the opposite (north) side of the Passage. This deployment of the ground-floor would have produced an L-shaped plan, with the "Hall Back Room" situated in a rear ell behind the Hall. (See 1.2A). This supposition is supported by the ceramic distribution recorded in the archaeology.[14]

This is the house that existed *before* the arrival of Augustine Washington. L-shaped dwellings of this sort were common in the period—but the rear ell typically stood behind the *smaller* room—the "Parlour" in this case--*not* the Hall.[15] Further on, we will consider this anomaly in greater detail.

Upstairs, appraisers identified the "Hall Chamber" as being "next the Gavel [gable] End." Obviously, the latter phrase would have been redundant if there had been only two rooms between two gables. That implies the existence of a third space, probably situated over the north end of the hall--possibly a small passage with no furnishings—this would explain why the appraisers' failed to mention it. As we shall see, that conclusion has been an important factor in establishing the roofline of the house.

Rooms – The 1743 Inventory

Augustine Washington purchased Ferry Farm from William Strother's estate in 1738 and seems to have expanded the house sometime before his death in 1743. A fire on Christmas day of 1740 may have occasioned Washington's addition, though burned plaster recovered from the root cellar of the southeast room—the only context on the site yielding such material--suggests that the fire was relatively modest in its scope and intensity.[16] Leaving aside the plaster from a 19th-century appendage, all the earliest material--burned or unburned—is quite consistent throughout the house. This supports the archaeologists' belief that the rear (northeast) addition was quite early.

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[14] Muraca, *et al*., p. 65.

[15] Dell Upton, "Vernacular Domestic Architecture in Eighteenth-Century Virginia," Common Places: Readings in American Vernacular Architecture, (Athens GA: University of Georgia Press, 1986), pp. 323-330.

[16] See, for example, FF-12-0408-58

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A few years after the fire, Augustine Washington died, and King George County appraisers made a room-by-room listing of his personal property. This inventory, dating to 1743, mentioned the following ground-floor rooms:

- Hall
- Parlor
- Back Room
- Hall Back Room
- Passage[17]

The 1738 Strother inventory had not mentioned a "Back Room"—evidently, *this* was the space Washington added. We have seen that archeological evidence places this new room at the northeast corner of the house (behind the Parlor), and the anomalous position of the rear chimney supports that supposition. (See A1.2A).

The 1743 inventory also enumerated the upstairs rooms. In the region's early room-naming practice, second-floor bed chambers were typically denominated according to what was below—the room above the Hall was the "Hall Chamber," while that above the Dining Room was the "Dining Room Chamber," and, humorously, the room above the Chamber was occasionally the "Chamber Chamber." It comes as no surprise, then, that the 1743 inventory mentioned a "Hall Chamber" and "Parlor Chamber" above stairs. The mention of only two upstairs spaces, one of them over the Parlor, confirms our earlier assertion that the Parlor was a front room. As in 1738, it is possible that a small circulation space between the upstairs rooms was unfurnished, and thus unmentioned. (See 1.2A). On the other hand, it is also possible that a subdivision between the little passage and one of the other spaces had simply been removed, throwing the entire upstairs into just two rooms.

In cases where the upper floor embraced only two rooms, the stair tended to land in the larger upstairs space—the Hall Chamber—making it a busier, less desirable sleeping room than the Parlor Chamber. However, the enumerated contents of Washington's upper rooms suggest a reversal of that relationship--the usable furnishings over the Hall were appraised at £9.6; those over the Parlor were appraised at just £1.6.[18] This could mean that the stair landed on the Parlor side of the upper floor, but it seems more likely that a passage continued to divide the upper floor and that it contained little more than the stair. In that case, both rooms would have been equally shielded from traffic, making the larger space the more

[17] King George County Inventories, 1721-1744, pp. 283-291.

[18] This excludes items that were merely stored in the Parlor Chamber—6 rugs and 9 blankets.

desirable of the two—hence the superior furnishings of the Hall Chamber. Further on, we will consider the implications of this interpretation for the character of the south chimney.

Rooms –Deployment

The rooms enumerated in the 1738 inventory are what one would expect for a well-to-do household in the second quarter of the eighteenth century, but the supposed deployment of these spaces was atypical in one important respect—it reversed the usual relationship of the rear ell to the Hall and Parlor.

As noted earlier, it was typically the *Hall*--not the Parlor--that stood alone at one end of an L-shaped house, served by a single chimney. Consequently, the Parlor and Back Room (sometimes called "Dining Room" and "Chamber") most often stood together—the Back Room or Chamber forming a rear ell (Figure 8).

The reversal of this pattern evident in the Ferry Farm plan was unusual, but not unprecedented. Four-Mile-Tree, in Surry County, Virginia (Figure 9), was built for the Browne family early in the 1740s. The ground floor embraced three heated rooms and a central passage--*with the best sleeping space situated behind the Hall*. This heated rear space was the equivalent of Augustine Washington's "Hall Back Room." At the other end of the house, the smaller rear space—equivalent to Washington's "Back Room," was smaller--and unheated. Thus, the spatial hierarchy at Four-Mile-Tree was perfectly congruent to that of Augustine Washington's enlarged house.

A similar arrangement may have existed at the Towles House, an early dwelling in Lancaster County, Virginia (Figure 10). Now vanished, this remarkable house embraced three ground-floor fireplaces, one of them serving a shed room behind the Hall. As at Four-Mile Tree, the shed room behind the space corresponding with Washington's "Parlour" was unheated. (In this case, however, the heated back room was the smaller of the two rear spaces).

Admittedly, the proposed arrangement of Washington's house, inferred from documents and archaeology, is atypical, but such houses manifestly *did* exist. Consequently, the unusual character of the proposed plan is, by itself, no reason to doubt the archaeological evidence.

Stair – The Deployment

The location of the passage in this plan seems clear enough, but the position of the stair is another matter--it must be inferred from the slender information at hand, adding in comparative data from other Chesapeake houses of the period.

In early houses with central passages, the stair often began its ascent on the side of the passage opposite the best room. This freed the doorway of the best room to

center on the gable-end fireplace, optimizing the architectural effect of the fireplace wall as one entered the room. On the opposite side of the passage, the lower flight of the stair tended to push the doorway of the lesser room toward the front wall. The Keeling House, in Virginia Beach, (Figure 11), illustrates this tendency.

In the rare cases where fireplaces stood on the longitudinal walls, both doorways could move toward the front corners of their respective rooms, allowing all comers to see the fireplace wall to the best advantage. The Thomas Everard House in Williamsburg is an early example.

However, corner fireplaces seem to have had little effect on the placement of doorways. One would think that moving the doorway toward the front wall allowed the entering visitor to view the fireplace wall more nearly on axis than if the opening were centered. Since the door to the lesser front room must also stand near the front wall, this choice would leave the two interior doorways aligned, as at the Everard House.

But this would have been an unlikely choice for the Washington house, leaving no good way to fit the 1738 Passage furnishings--a small table, a large table, and a couch--into the resulting room. Seemingly, the *only* way to make the plan work is to center the doorway of the Hall. With this change, the furniture fits.[19] (See A1.2A).

For a house of Ferry Farm's scale and date, the Passage, measuring nearly ten feet wide, is unexpectedly broad. The practical requirements of ascending in such a space offer some idea of how the original stair might have worked. First, there had to be *risers sufficient* in the lower flight(s) to clear the rear doorway at the back wall. At the same time, however, there had to be *few enough risers* in the lower flight to maintain adequate head room as one ascended. For public safety reasons, winders are not a viable option. Consequently, getting over the rear doorway requires two intermediate landings with risers between, ascending along the back wall. This configuration occupies the full width of the Passage, maintains headroom above the lower flight, and clearance below the landings(s) sufficient for a rear doorway. It also allows the edge of the stair opening to move farther toward the back wall, where it can receive a shorter upper flight of steps.

Assuming that the stair began its ascent along the north wall—opposite the hall--that would have pushed the rear doorway to the southeast corner of the Passage, under a second landing. In such cases, it was common for front and rear doorways to stand on different axes, with the front doorway centered on the

[19] The furniture was drawn based on the dimensions of suitable pieces illustrated in Ron Hurst and John Prown's *Southern Furniture…*, (Williamsburg: Colonial Williamsburg Foundation, 1997), pp. 151, 206, and 212.

passage, even if that allowed to the stair to intrude slightly into the clear opening. (See A1.2A).

The passage/stair configuration proposed here closely resembles that of the Everard House, in Williamsburg. Indeed, the two passages are virtually the same size. Some questions remain concerning the date of the Everard stair finishes, but dendrochronology seems to indicate that timber for the framing was cut in 1719.[20]

GENERAL CHARACTER

The Washington House in Context

Having characterized the footprint and internal layout of Augustine Washington's house, the next step is to define the dwelling's general character above ground. To develop a clear idea of how modest or how elaborate this house was, we must understand where it stood in relation to other dwellings from the same time and place. The 1798 Direct Tax for Berkeley Parish, Spotsylvania County, is telling in this regard, despite its post-Revolutionary date. For every property owner in Berkeley Parish, the 1798 roll identified the occupant and enumerated the buildings he or she possessed, reporting on their function, size, and construction--even the number and type of windows in some cases.

These data are revealing. Three of the four largest dwellings were unfinished at the time of the survey--evidently, these commodious houses were a post-Revolutionary development. Among *completed* dwellings, the largest measured just 38 feet x 24 feet in plan and each was only one full story in height. Of the dwellings described as "old," the largest measured just 36 x 16 feet—compare this with the 53' x 29' footprint of Augustine Washington's House.

As late as 1798, a 28-foot-long house was still large enough to distinguish the occupant from his or her Berkeley Parish neighbors:

- 80% of the houses were 16 to 24 feet in length.
- 87 % of houses were 24 feet or *less* in length.
- Only 7% of houses were longer than 32 feet.
- Fewer than 4% of houses were longer than 36 feet.
- None was longer than 42 feet.
- None of the completed buildings was more than one full story in height.
- The two smallest houses were 12 x 12 feet in plan.

Half a century after Augustine Washington's death, his 53' x 28' dwelling was still "off the chart" relative those of Berkeley Parish, in the neighboring county. To be fair, historian Gary Stanton explains that Berkeley Parish was the "poor

[20] Jeffrey Klee, Department of Architectural Research, Colonial Williamsburg Foundation, Personal communication.

man's" half of Spotsylvania, situated well back from the river and the fertile bottom lands adjoining it.[21] Moreover, there are many surviving houses superior to the one we have described at Ferry Farm, including a number in Fredericksburg. But none of these survivors was built as early as Ferry Farm—indeed, most came a generation or more after. Dell Upton has argued that the overwhelming majority of surviving buildings in the Chesapeake region date from the period after 1750. In the thirty plus years since Upton made that bold assertion, dendrochronology has proven that he was correct--standing houses from the second quarter of the 18th century or before are relatively rare in Maryland and Virginia.

Among buildings that early, the large, iconic houses of elite families and governmental institutions come first to mind. But Upton points out that these structures were decidedly atypical, representing the top 2% of land owners in the colonial Virginia. These include:

Rosewell	Gloucester Co, VA	1725
Berkeley	Charles City Co, VA	1726
Nelson House	Yorktown, VA	1729
Stratford	Westmoreland Co, VA	1738
Sabine Hall	Richmond Co, VA	1739
Robert Carter House	Williamsburg, VA	1740s

Clearly, neither William Strother nor Augustine Washington belonged to the social stratum represented here, nor was their house comparable to these great mansions. More relevant to the question at hand are pre-1750 houses of one full story, whether of brick or wood. These include:

Nelson-Galt House	Williamsburg, VA	1694; 1718
Cedar Park	Anne Arundel Co, MD	1702
Timson House	Williamsburg, VA	1715
Sotterley	St. Mary's Co, MD	1715
Randolph House	Williamsburg, VA	1716
Everard House	Williamsburg, VA	1718
Levingston House	Williamsburg, VA	1718
Thoroughgood House	Princess Anne Co, VA	1719
Blair House	Williamsburg, VA	1722
Lynnhaven House	Princess Anne Co, VA	1724
Matt. Jones House	Warwick Co. VA	1727
Mason House	Accomac Co, VA	1729
Williams Conquest	Somerset Co, MD	1737
Sudley	Anne Arundel Co, MD	1720-30
Ocean Hall	Somerset Co, MD	1730?
Keeling House	Princess Anne Co, VA	1735
Rochester House	Westmoreland Co, VA	1740s

[21] Personal communication.

Pear Valley	Northampton Co, VA	1740s
Sweet Hall	King William Co, VA	2nd ¼?
Fox Hall	Norfolk, VA	2nd ¼?
304 Queen Street	Edenton, NC	2nd ¼?
Criss Cross	New Kent Co, VA	2nd ¼?
Ball-Sellers House	Arlington, VA	2nd ¼?
Linden Farm	Richmond Co, VA	2nd ¼?
Towles House	Lancaster Co, VA	2nd ¼?

Whatever the actual substance of Washington's house, it compared favorably in size and plan with this class of structures. Where did such buildings stand in relation to all housing stock in the Chesapeake region? Orphan's Court records for colonial Maryland enumerate the number, size and construction of buildings held by individual property owners in Augustine Washington's time. These data suggest that most Marylanders lived in houses having one or two ground-floor rooms, usually with one, or sometimes two, chimneys. This looks very much like the data for Berkeley Parish, Virginia, half a century later. Leaving aside families in the "stratosphere" of Chesapeake society—Carters, Byrds, Burwells, Randolphs, Pages, Lloyds, Ogles, Carrolls, and such, it seems that Augustine Washington and his family lived with more physical amplitude than nearly all of their contemporaries in Maryland and Virginia.[22] Their house was also more differentiated internally—passages like that recorded at Ferry Farm in 1738 and again in 1743 were very rare before 1750.[23]

In having a stone foundation, the Washington house was also built more substantially than many dwellings in the period. Cary Carson and others have shown that as late as the first quarter of the 18th century, many Chesapeake houses, including those of relatively prosperous residents, were of "earthfast" construction—i.e., built with some or all of their vertical timers set directly into the ground.[24]

Given the demonstrable facts of Ferry Farm's character, there can be no doubting its importance in Augustine Washington's time. It was a significant structure, built on an advanced, double-pile, central-passage plan. This structure reflected the prominent place Washington and his family occupied in the social, political,

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[22] Edward A. Chappell, "Housing A Nation: The Transformation of Living Standards in Early America," *Of Consuming Interests: The Style of Life in the Eighteenth Century*, Charlottesville: University Press of Virginia, 1994), pp. 167-182; Dell Upton, *Holy Things and Profane* (Cambridge: MIT Press, 1986), pp. 110-114.; Camille Wells, "The Eighteenth-Century Landscape of Virginia's Northern Neck," *The Northern Neck of Virginia Historical Magazine*, 37 (1987), pp. 4217-4255.

[23] Mark R. Wenger, "The Passage in Early Virginia: Evolution of an Eighteenth-Century Living Space," in *Perspectives in Vernacular Architecture - II*, Camille Wells, ed., pp. 137-149.

[24] Carson, Cary, Norman F. Barka, William M. Kelso, Garry Wheeler Stone, and Dell Upton. "Impermanent Architecture in the Southern American Colonies." In *Material Life in America, 1600-1860*, Robert Blair St. George, ed., (Boston: Northern University Press, 1988), pp.113-158.

and economic order of the region. In view of these facts, we could expect the house to have incorporated many of the household amenities available to genteel folk by 1728. The 1743 inventory suggests as much, listing a tea table, window hangings, looking glasses, a couch, and a set of leather-bottomed chairs among the furnishings.

It is this perspective on Augustine Washington's physical circumstances that informs our interpretation of the documentary, physical, and comparative evidence. Viewed through that prism, what does the complete body of data suggest about the above-ground character of Washington's house?

THE EXTERIOR

Foundations

Archeological remains of the dwelling foundation are slight, but intelligible. Stones associated with the main range appear to have been larger and more regular than those under the shed. Outwardly, this front foundation may have resembled the regular ashlar facing of the period I cellar walls. Remnants of finished stones were recovered from the house site, but not in quantities sufficient to represent the whole of the foundation. Perhaps the foundation and chimneys were robbed out to salvage these materials, leaving only fractured stones, broken bricks, and shattered remnants of plaster. In contrast to the foundation of the front rooms, the rear foundation appears to have been little more than a low pile of stone rubble, judging from the remains on the site.[25]

Chimneys

The presence of a stone foundation raises questions about the chimneys--were they stone, or brick--or both? Archaeology leaves no doubt that the *bases* of the chimneys were stone. Yet the quantity of brick recovered, while insufficient to build even one entire chimney, is great enough to suggest the existence of one or more significant features composed of that material. Elsewhere we have suggested that the smaller-than-expected quantity of recovered brick may reflect a salvage operation that removed all usable bricks—*not one* whole brick was present among the many examples retained and processed in the lab. It is difficult to account for the presence of so many bricks—all broken--unless they represent remnants from one or more chimneys, left behind after salvage was complete.

Assuming, then, that some portion of one or more chimneys was built of brick, how would those bricks have combined with the stone? The combination of these materials is still a common sight in Northern Virginia, and in the Piedmont region of the state. Often, the stone extends from grade up to the first sloped shoulder or "weathering," above which the chimney is built entirely of brick, having one or

[25] Muraca, *et al.,* pp. 41-47.

more pairs of corbelled brick weatherings. Alternatively, the brick is sometimes confined to the stack alone. Compelling as these configurations are visually, they tend to be associated with 19th-century structures.

Another approach is to stop the stone at or near finished floor level of the downstairs rooms. Two 18th-century examples--the Merchent House in Dumfries, Virginia, (Figure12), and the "The Chimneys" in Fredericksburg, (Figure 13)--are earlier and thus more relevant to Ferry Farm than the examples previously described. The Merchent House, now destroyed, was recorded by the Historic American Buildings Survey shortly before its demise. The date of this building cannot be determined with precision; however the sculptural treatment of the chimney, with a blind arch between flues and plaster necking at the cap, certainly suggests a pre-Revolutionary construction date. At the chimney, the coursed ashlar foundation extended a short distance above the FFL, but doesn't seem to have been visible on the fireplace interior—the jambs of the larger, earlier fireplace opening appear to have built entirely of brick.[26] In this case, the stone foundation of the chimney stepped in at the bottom of the wooden siding.

"The Chimneys," a late 18th-century framed house in nearby Fredericksburg, exhibits a related treatment, with the brick of the chimney starting at the bottom of the sill, several inches below FFL. As a result, the top of the stone nearly aligns with the bottom edge of the weatherboards. At the chimney base, the face of the stonework stands laid flush with the brick all the way to grade.

In view of their 18th-century dates, these two examples, both close by Ferry Farm, represent a plausible relationship of brick to stone in the Washington chimneys. Moreover, the character of the stonework in these examples is useful in thinking about the finish of the foundations at Ferry Farm.

With the assistance of restoration mason Ray Cannetti, MCWB surveyed early brick features in the town of Fredericksburg. This exercise revealed that the color and character of early brick masonry are very consistent throughout the town. The Fielding Lewis Store is but one of several buildings that provided a close match to bricks from the archaeological collection throughout the color range of recovered material. These materials ranged from a subdued, grayish orange to a darker purplish color, the most plentiful hue being a reddish brown. The glazed headers at 701 Caroline Street perfectly matches those recovered from the Washington site.

Above ground, the unusual depth of the Parlor (north) chimney foundation demands the identification of surviving or documented chimneys of comparable proportions. The Schurmerbern House, formerly in Glen Allen, Virginia (Figure 14), boasted two chimneys of the kind that the north foundation at Ferry Farm seems to represent. Assuming 9" stretchers and 4 ¼" headers, the chimney at the

[26] Another late 18th-century example where stone extends above the finished floor level is Viewmont, in Albemarle County, Virginia.

left of the photo would measure about 4'-10" deep—very nearly the same as the Ferry Farm foundation. Assuming a stepped chimney foundation like that at Merchant House, the breadth of the south chimney, as determined from the fragmentary foundation and the associated root cellar, was approximately 9'-4 ½" above the step, very nearly the same as the smaller exterior chimney at Lynnhaven House, which is also stepped. (Figure 15).

It was not unusual for second-floor rooms to remain unheated in this period; however the enormous mass of Augustine Washington's Parlor chimney, and the configuration of comparably scaled structures at the Schurmerberg and Lynnhaven houses, would seem to indicate the existence of second-floor fireplaces, as do several surviving buildings of the period, including the Everard House in Williamsburg, the Lynnhaven and Keeling Houses in Virginia Beach, and Sweet Hall, in King William County,[27] all second-quarter houses having second-floor fireplaces.

Some will argue that the absence of second-floor fireplace equipment in the inventories indicates that there was no heat upstairs. But fireplace tools were also absent from the Back Room and Parlor, where massive chimney remains show beyond all doubt that these ground-floor rooms were heated.

Reasoning thus, the Parlor chimney on the accompanying drawings is based on the Schurmerberg example, but with the upper weatherings carried around all three sides, just below the stack. This early detail serves to push the stack toward the gable--a desirable effect, given the chimney's great depth. The same detail appears at Eagle's Nest, a second-quarter house in Charles City County, Virginia (Figure 16), and also at the eastern end of John Blair House, in Williamsburg, dated by dendrochronology to 1722 (Figure 17). Since the room over the Parlor was to be heated, one could anticipate two flues from the large, first-floor fireplace and one from the second-floor fireplace. Three flues implies a T-plan stack, a form that serves to reduce further what would otherwise be a gaping space between the gable and the stack.

The south chimney, serving Hall Chamber above and also the Hall and the Hall Back Room below, presents problems of a different sort. We have seen that evidence suggests a single chimney in this location, serving two ground-floor fireplaces. Sharing a chimney between the Hall and Hall Back Room tends to shift the entire mass towards the rear, pushing the second-floor fireplace into the rear corner of the Hall Chamber--in under the slope of the roof. A similar arrangement survives at the George Jackson House, in Williamsburg, but this dwelling appears to be relatively late--and in any case, the arrangement is problematic in relation to the documentary evidence. The problem can be explained as follows:

[27] Examples of unheated second floors include The Matthew Jones House, at Ft. Eustis, and Linden Farm, in Richmond County, Virginia.

- The furnishings enumerated in the 1743 inventory suggest that Hall Chamber was the better of two upstairs rooms.

- If that evidence is to be respected, the fireplace of the larger, better-furnished Hall Chamber needs to be at least as large and convenient as that in the smaller, sparsely furnished Parlor Chamber.

- However the place the chimney below necessarily occupies would produce a small, asymmetrical fireplace for the Hall Chamber.

A possible solution is to align the upper fireplace on the forward extremity of the chimney mass below. This would eliminate the forward weathering of the chimney—giving it a "look" more typical of Maryland than Virginia. (Cedar Park, in Anne Arundle County, is an example). A compromise solution is to move the upper chimney enough to allow for a sloped weathering on the forward side of the chimney.

An alternative would be to interpose a cupboard or "buffet" between the front and rear fireplaces, pushing that in the Hall farther towards the front of the house. An example of this can now be seen at Pleasant Point in Surry County, recently dated by dendrochronology to the 1760s. Such cupboards were rare before 1750, but examples from the 1740s survive nearby at Four-mile Tree, and in 1728 Surry County appraisers mentioned a pair of cupboards, seemingly architectural, in Nathaniel Harrison's best room.[28]

Walls

It is clear that Augustine Washington's house was a framed structure. Numerous fragments of un-cataloged plaster were examined and sorted according to the type of substrate to which they had originally adhered. (All of this material was consistent with the earliest plaster in the lab collection from dated contexts). Among the substrates noted, wooden lathing predominated over all others (brick, stone, and indeterminate) by a ratio of 19 lbs. to 5 lbs. The lathed surfaces would have included walls and, presumably, ceilings (see discussion below). Our assumption is that the few pieces showing evidence of masonry were associated with chimneybreasts.

Wall Height

The 1699 legislation that created the city of Williamsburg stipulated that all houses on the main street be constructed "ten foot pitch"—that is to say, the main ground-floor rooms were to be at least 10 feet high, measured from finished floor to finished ceiling. This stipulation—clearly an effort to scale up the colony's

[28] Harrison of James River," *Virginia Magazine of History and Biography*, 31 (1923), pp, 361-308.

main street—suggests that many, even most, houses of the time were something less than "ten foot pitch." A survey of single-story Virginia houses from the first quarter of the 18th century yields the following floor-ceiling dimensions for the ground storey:

Building	Date	Location	Pitch (In).	Walls
304 Queen Street		Edenton	93	Frame
Towles House		Lancaster	94	Frame
Pear Valley	1745	Northampton	[96]	Frame
Mattissippi	[1740s]	Northampton	105	Brick
Timson House	1715	Williamsburg	112	Frame
Levingston House	1718	Williamsburg	115	Frame
John Blair House	1722	Williamsburg	117	Frame
Nelson-Galt House	1694	Williamsburg	118	Frame
Everard House	1718	Williamsburg	118	Frame
Keeling House	1735	Princ. Anne	120	Brick
Lynnhaven House	1724	Princ. Anne	127	Brick
Mason House	1729	Accomac	127	Brick

Three of every four houses in this short list--75%--are *less* than 120 inches pitch, measured floor to ceiling in the ground-floor rooms. Indeed, a height somewhere between 115 to 118 inches appears to have been the "sweet spot" for early Williamsburg houses of one full storey. But Ferry Farm was not situated on the main thoroughfare of the colonial capital, nor even in an urban setting. At the time of its construction, Fredericksburg was a small settlement on the opposite bank of the Rappahannock River, dotted with a handful of buildings.

On the other hand, the unusual width of Washington's passage implies that there were risers along on the back wall, and so more risers overall, and thus a higher floor-to-floor dimension. For this reason we passed over the lower-pitched rural dwellings, setting the interior height at approximately 112", based on the Timson House--the lowest and smallest of Williamsburg's colonial dwellings--and among the earliest, situated well back from the main street. As it turns out, this is an optimum height for keeping the lower flight of steps stair well *below* the "head-knocking" edge of the stair opening—while getting it *over* the rear doorway--and then landing after just a few more risers at the second floor.

Main Roof

Among thousands of plaster remnants recovered from the site are *two compound pieces*, each composed of a *sloping* finished face, joined to a *vertical* finished face from an adjacent wall. One of these fragments is in the cataloged lab collection; the other came from un-cataloged material stored separately. The latter piece was

particularly useful in establishing a slope for the main roof of the house. Although the context of this remnant was not recorded, its character is consistent in every way with that of the earliest plaster in the cataloged collection. As a result, there is no doubting its relevance to the question at hand.[29]

To understand the significance of this piece, it is important to note that virtually all lathing on the walls of early Virginia houses runs in the horizontal orientation. Thus, when the lathing impression on the *wall* component of the fragment stands level with the horizon, the *raking* section of finish plaster arguably stands at something like its original slope—about 50 degrees in this case. That's too steep to comport with an open stair sprawling around one end of a broad passage, even though a broad passage is precisely what the evidence suggests.

Instead of a sloping stair soffit, then, it seems likely that this plaster came from the upper floor, representing some point where sloping plaster on the underside of the rafters abutted one of the gables or an interior partition. An angle of 50 degrees is perfectly plausible for the pre-Revolutionary period, when roof slopes typically ranged from 45 to 52 degrees.

The 1848 Engraving

At this point the analytical process comes to a fork in the road. An early view of the Washington House, published in 1848, depicts the building with a rather *shallow* roof slope. The view first appeared in Benson Lossing's *Pictorial Field-Book of the Revolution* (Figure 18). Reportedly, it was based on an earlier sketch by John Gadsby Chapman, who reportedly visited the site in 1830.

The George Washington Foundation's archaeological team had previously questioned the veracity of this engraved view, based on their independent assessment of physical evidence and documentary evidence relating to the site.[30] Having considered the question of dormers, discussed further on, we came to the same conclusion--the engraved view and its later offspring are not to be relied on. Supporting this conclusion is the fact that the drawing resembles no early 18th-century house known to anyone on either team—archaeologists or architects.

The Shed Roof

As we have seen, physical and documentary evidence suggests that the northeast room came to exist some time between 1738 and 1743. Archaeology is also suggestive concerning the roof of that addition. Chimneys attached to the back

[29] One could argue that the fragment represents the point where the plastered slope of the roof met an adjoining plastered wall. However, the 7.75 to 9.75 slope does not comport well with roof slopes for the period—it is too shallow. However, if we reverse the proportion, the resulting slope approximates 52 degrees, a common slope on second-quarter building like Rochester House, in Westmoreland County.

[30] See Muraca, *et al*.

walls of rear sheds are not unknown among early houses, but they were never as common as gable-end examples.[31] One alternative to the shed addition shown in our drawing would be a perpendicular wing with a gabled roof, centering the chimney on a rear gable. This option is plausible within the reconstructed plan of the house—Augustine Washington could have extended the extant shed—the Hall Room Back--to meet a new, gable-roofed wing, resulting in a covered porch between the two rear spaces. Kittiewan, in Charles City County, Virginia (Figure 19), embodies a similar process of expansion, though the added shed is probably a 19th-century structure.

A gabled design for the added "Back Room" appears on sheet A1.3A. The problem it presents is that a gabled roof over the rear ell would have provided an added room upstairs--yet no such room seems to be present in the 1743 inventory. It's difficult to imagine how such a space could have been omitted from the compilation, unless it was empty--not likely for a room this size.

Based on the inventories, then, we believe that the added northeast room assumed the form of a rear shed. In that case, there could have been a cricket behind the chimney stack for diverting runoff to either side. Evidence for a 1760s cricket was found within the 1790s roof extension at Montpelier, and an early cricket survives at the Hynson-Ringgold House in Chestertown, Maryland, trapped under the roof of a later addition.[32]

Assuming a shed roof for the back rooms at Ferry Farm, that roof, whether original or added, was almost certainly framed over the rear slope of the main roof, the shed rafter attaching either at the ridge, or at some lower point along the backs of the main rafters. An example of the latter can be seen in Edenton, NC where remnants of an early shed survive behind a newly discovered house that probably dates to the second quarter of the 18th century. The shed rafters attach to the rear of the main roof 4'-6" above the eave, measured along the back of the main rafter. This places the ends of the added rafters over the tops of the knee wall studs or "ashlars," presumably for added the added support they could provide. In recent years the old shed rafters were tilted upward and lengthened. Consequently, they stand at a shallower pitch today than they did originally. It is clear, however, that the lower ends of these members once bore on a horizontal surface—probably on top of the rear wall plate (Figure 20). If correct, this supposition allows us to determine the original pitch of the shed roof, based on the present angle of the rafter's bearing surface. In any event, the tails of these

[31] The Matthew Jones House, in Newport News, Virginia, is an early example. Though the chimney stands on the interior of the shed, it is indisputably an original. There was no reason why this chimney couldn't have stood on the end of the shed, yet it clearly does not, and never has. It remains unclear whether this chimney had a cricket or other means of diverting water from the vulnerable joint on the uphill side of the stack.

[32] Michael Bourne, *Historic Houses of Kent County*, (Chestertown, Maryland.: Historical Society of Kent County, Inc., 1998), p. 141.

rafters were originally exposed and cut in an ornamental profile. (Apparently, the same was true of the shed rafters at Linden Farm, in Richmond County, Virginia).[33]

The early shed at Linden Farm (Figure 21) illustrates an alternative to the Edenton roof profile, having rafters that attached at the apex of the main roof. This created a large dead space above the ceilings of the shed rooms. Often such spaces served as storage areas or "cuddies." At "The Reward" in Kent County, Maryland (Figure 22), at Hungar's Glebe in Northampton County, Virginia (Figure 23), and at Belvidere, in Perquimans County, NC (Figure 24), these rooms are lit by small, gable-end windows. However, no leftover rooms or "cuddies" of this sort are identifiable in either of the Ferry Farm inventories. Consequently, we conclude that the shed was framed off the lower third of the main rafters—low enough to preclude their use as rooms, but high enough to preclude the use of dormers on the rear of the main roof. (See A2.1).

Dormer Windows

As explained earlier, the 1738 inventory *mentions* two rooms on the upper floor of the main range--and *implies* the existence of a third. Because it would have been impossible to light all three spaces from the gables, at least one—possibly all--of the upper rooms were illuminated by dormers.

At this early date, dormers would have been an opulent choice, but early examples do exist. In Williamsburg, those at the 1719 Everard House are believed to be part of the original construction, partly from physical evidence, and partly for the same reason cited at Ferry Farm—the upstairs passage is original and could not have been illuminated by the gable windows.

At the Lynnhaven House, there were never gable windows of any sort. So the present spacing of the exposed rafter ends, positioned to accommodate the dormers, must be original. That being the case, the original dormers would have dated to 1724, when the house was built.

Some houses *did* have gable-end windows, but often these were intended to light early closets and so would not have been available for illuminating the upstairs rooms. Sweet Hall and the Keeling House are two early examples.

Finally, at Ocean Hall in St. Mary's County, Maryland, turned lead dating from the 1730s was recovered from behind a sealed knee wall, suggesting that these fragments had come from early dormers of that date.

[33] The lower ends of the shed rafters, now hidden, bird-mouthed over a tilted false plate. See Carl Lounsbury and Camille Wells, "Linden Farm," The Early Architecture of Tidewater Virginia, (Williamsburg: Colonial Williamsburg Foundation, 2002), pp. 26-27.

All of this is very well, but here the 19th-century engraving raises another red flag. No dormers appear in the view, and in any case, dormers would have been problematic in conjunction with a roof as shallow as that depicted in the engraving. This failure to show dormers, despite their probable existence--inferred from the inventories and from the dwelling's size and importance—is one more reason to doubt the fidelity of the engraved view as an accurate representation of Augustine Washington's house.

As stated earlier, the Everard dormers (Figure 30) are believed to be early, and that early date may be expressed in the unconventional manner of covering them. Rather than running the cheek boards with the slope of the roof, the dormer sides were covered with horizontal sheathing, laid flush. A related treatment survives at Wetherburn's Tavern where the cheeks are covered with beaded weatherboards (Figure 31). In order to suggest an early construction date for the Washington house, the dormers should display a similar covering.

Ground-Floor Windows

The 1743 inventory offers slender, but important evidence concerning the number and location of ground-floor windows. In the "Hall Back Room", appraisers listed "2 Window Hangings" valued together at £0.8. Perhaps the southern end of the house had had two windows on the rear wall of the Hall Back Room, judging from the great length of that wall, and also from a tendency in early houses to leave end walls blank unless the presence of closets made it necessary to light the alcoves to either side of an interior chimney (Figure 25). Where there are exterior chimneys and thus no closets, there are often no end windows, especially in early house, where the chimneys are typically quite broad and thus occupy more of the building's gable end. Lynnhaven House, in Princess Anne County, Virginia and Linden Farm, in Richmond County, are two examples--one brick, the other frame. (See A1.2A). An alternative is where there were corner fireplaces, which seem to have been rare before the middle of the 18th century.

In the case of a squared-up chimney and no closet, the broader wall space made available by the smaller chimney configuration may have tempted the builder to include a conventional window beside it. (See A1.2B). In the case of the squared-up chimney and closet, the closet would probably have been lit by a small window. An example of such lighting is the Adam Keeling House.

Returning, then, to the number and placement of windows in the south rooms--granted two openings on the rear wall of the Hall Back Room, it seems likely there were two on the front wall of the Hall, as well, and perhaps one more on the gable end of the Hall. (See A 1.2C).

A customary inequality in the sizes of the front rooms often led to unequal numbers of windows on either side of the front doorway (Figure 26). This was especially common in houses built before the regularizing impulse of the classical

design fully established itself in the Chesapeake region. To cite just one example, John Blair's Williamsburg house was built in 1722 with a single front window in the Chamber and two front windows in the Hall--no end windows in either room. Perhaps, then, the Washington house had just one front window in the smaller room opposite the Hall. Significantly, Washington's appraisers found just "1 Sett Window Curtains" in that space--the "Parlour"-- valued at £0.2.6. (See A1.2A).

Granted the number and location of windows proposed above, where were the windows of the Back Room—the space behind the Parlor? In the case of a gable-ended wing, the fireplace wall seems an unlikely location for windows at this early date. At Kittiewan, the gable-ended rear ell has no windows on the fireplace wall (Figure 27).

In the case of a shed-roofed wing, the chimney makes it difficult to contemplate anything but the smallest sort of window in the rear wall, though small windows are what one would expect in a rear shed. A more likely scenario is that the window stood in the gable-end wall. An example is the 1740s window removed from the rear wall of Henry Wetherburn's Tavern in Williamsburg and re-used in the end wall of the 1760s shed addition (Figure 28). The important point here is not the reuse of the original rear window, but the idea that the end of the shed had a full-sized window. Based on that instance, and on the fact that the parlor seems to have had had just one window, we have shown a 4/4 window in the north (gable-end) wall of the Back Room. Because we suppose that room to have been added shortly after 1740, the window details in this space should differ slightly from those of other shed windows.

Further to the subject window details, the archaeological team recovered no turned lead from the site of Augustine Washington's house. However, the appearance of "3 Casements" in the 1738 Strother inventory may indicate that the house had been fitted with leaded glass windows originally--and that they had been removed prior to Washington's death in 1743. In any case, they could have been carried off, intact, once the estate was settled. That would explain the absence of turned lead or identifiable casement glass on the site.

All of this suggests that there were no leaded class windows in 1738, leaving shutters or conventional glazed sashes as the only other options. Shutters could be plausible for this period in a work building or a quarter, but not in a substantial gentry house. It is very likely then, that the house had glazed sashes of some sort by 1738.

It is *un*likely, on the other hand, that these sashes were counterweighted. William Byrd of Westover mentioned pulleys for counter-hung sashes as early as 1709, but the earliest surviving pulley known to the author is a remnant from Walthoe's Storehouse, c. 1749, (or perhaps from the later renovation of that structure c. 1766) salvaged during preparations for the building's reconstruction. More reliably, the single-hung windows in the east room of Wetherburn's Tavern date

from the construction of that wing around 1750. William Byrd's diary notwithstanding, counter-weighted sashes appear to have been rare before 1750, even in Virginia's capital. There is no reason, then, to suppose that Augustine Washington had counter-weighted sashes at Ferry Farm. On that basis, we suppose that there were fixed upper sashes on all windows of the Washington House, all seated in solid frames.

One of the earliest surviving sashes in Virginia is a single specimen at the Mason House, in Accomac County, Virginia, a brick dwelling dated by dendrochronology to 1729. Significantly, the sash was never counter-weighted. Here, as in most cases, the upper sash was fixed in place. In lieu of sash weights, a pivoting cleat was sometimes attached to the inner cheek of the window frame serving to hold the operable lower sash open. In Williamsburg, one of these cleats was among re-used elements recovered from the Armistead House, among the many elements salvaged from Walthoe's 1749 Storehouse. Identical cleats were subsequently incorporated into the reconstructed building (Figure 29). An early example of a similar fitting survived until recently at the Timson House, also in Williamsburg, but unfortunately this example has disappeared—evidently removed by some vandal.

So then, available information suggests that the house at Ferry Farm had glazed sashes with no counterweights during the time of the Washingtons' occupation. The upper sashes were almost certainly fixed; pivoting cleats would be the obvious way to hold the lower sashes open.

Exterior Finishes - Masonry

Among plaster remnants recovered from the site are several pieces of a material that seem to have been exterior stucco. The biggest fragment bears impressions of large stones on its interior face—the material is quite thick where it entered a large, irregular void between several adjacent cobbles. Embedded in this interior face of the stucco are small bits of stone and shell, all in different orientations. Clearly, these were randomly suspended in the lime matrix when the stucco was applied. On the exterior face, the mortar is somewhat weathered, exposing small, angular pieces of stone and shell. In contrast to the stone and shell on the inner face, all exterior aggregate lies in the same orientation as the exposed surface—as if pressed into the stucco with a wooden float while the stucco was still "green." This was probably done after the aggregate had been cast or "dashed" into the mortar, hence the English term, "pebbledash," to describe this finish. In early Virginia, the technique was called "roughcast," and as early as 17th century records contain occasional references to this finish and continue throughout the colonial period.[34]

[34] *An Illustrated Glossary of Southern Architecture and Landscape*, (Charlottesville: University Press of Virginia, 1994), "Roughcast."

The uneven thickness of the stucco, coupled with its flat exposed face, suggests that the material was originally applied to a rubble foundation, probably in association with the rear shed. That limited use might explain the small quantities of this material found—the processed artifacts in the lab included just three pieces.

Exterior Cladding – Walls and Roof

No evidence bearing directly on the exterior cladding of the frame walls was identified in archaeological collection. For the period of the 1740s, the likely choices would have been riven clapboards covered with tar, or planed and beaded weatherboards covered with paint.

Until the second quarter of the 18th century, riven clapboards had been a ubiquitous choice of Virginians and Marylanders for covering the roofs and exterior walls of virtually all framed buildings. However, the period after c.1730 witnessed a growing preference for the brilliance and smoothness of painted weatherboards over the drab roughness of tarred clapboards—though initially this better mode of covering was utilized only on the most important buildings.[35] The physical history of John Blair's Williamsburg house illustrates this change--and fixes it in time. His central–passage house, a conspicuous and innovative dwelling situated on the main street, was built in 1722 with a covering of riven clapboards. When the building was extended in 1737, he covered the entire structure--old and new construction—with planed, beaded, and painted weatherboards. In the fifteen-year period between the two construction campaigns, planed and beaded weatherboards had come to Duke of Gloucester Street.

If the substantial house of a Council member, situated on the main street of the colony, bore a covering of riven clapboards in 1722, it is likely that the same was true of a 1727 attorney's house, far removed from the seat of power. As in Blair's case, however, extending the house may have occasioned a renewal of the exterior covering--by the time of Augustine Washington's death in 1743, the Ferry Farm dwelling may well have been covered with weatherboards. We have assumed as much, showing a weatherboard covering with a broad, 7" exposure, replicating that of the Everard House—which is based on evidence found during the restoration of that structure. This broader exposure also serves to suggest the influence of Maryland, where exposures were often much larger than in Virginia.

We have assumed that this weatherboard cladding would have replaced an earlier clapboard exterior in 1738 when Augustine Washington acquired the house, or perhaps when he remodeled it following the 1740 fire.

Exterior Cladding – Roof

[35] Early tarred clapboards, once on an exterior exposure, are still visible at Linden Farm, trapped behind a later addition. See *The Early Architecture of Tidewater*…, pp. 26-27.

Given the substance and extent of this house and its sophisticated interior layout, the roof was surely covered with round-butt wooden shingles—a ubiquitous cladding for better buildings in the region at this time. Like the cladding of walls, shingles were sometimes covered with tar, though it was also common (in the case of houses) to paint them. In those instances, documents and actual survivals indicate that red lead, Spanish brown, and "sclate blue" were the usual choices. Among these, a tarred roof would seem the most likely, judging from the numerous references in records of the period.[36]

West (River-Front) Stoop

Archaeology provides the footprint of the front porch by way of a builder's trench that defined the structure's out-to-out dimensions. We also know from archaeology the material used for the porch foundation–stone. Archaeology also tells us that the cellar doorframe was made of wood and set into the cellar foundation. We have seen that archaeology on the river front of the house revealed an early, backfilled ditch that had functioned in the manner of a French drain. Beginning just beyond the porch, this ditch ran a short way down the slope. There it met an early north-south path descending from the north side of the house.[37]

In our original design for the porch and cellar entry, we assumed that a bulkhead or "cellar cap" with paired doors had enclosed a set of steps descending to the space below the porch and thus to the cellar doorway. However the nearly vertical orientation of the sloping doors was without precedent. The revised design takes full account of the archaeological evidence--and does not nothing to violate it.

Quite apart from these historical considerations, the new design offers better visual access to the cellar for visitors who descend the hill and look directly into the doorway. It is intended that this subset of visitors would be confined to special tours. All visits will be able to view the cellar from above, via a view port in the floor of the closet under the stair. Cellar lighting will be activated automatically whenever the door to this space is opened.

East (Rear) Porch

If we assume that the space behind the passage was a covered porch, the character of the porch roof, as seen from within, becomes a matter of some importance.

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36 *The Journal of John Harrower, an Indentured Servant in the Colony of Virginia 1773-1776*, Edward M. Riley, editor, (Williamsburg: Colonial Williamsburg, 1963), p. 38, May 13, 1774; Willie Graham and Mark Wenger, *Battersea: A Historical and Architectural Study*, (Petersburg: Historic Petersburg Foundation, 1988) pp. III-28-29; Agreement, 30 August 1798, between St. George Tucker and Jeremiah Satterwhite, Colonial Williamsburg Foundation.

[37] Muraca, *et al.*, p. 57.

Based on several early examples associated with genteel families, we believe that the underside of the shingles and framing would have shown on the porch interior. As noted earlier, covered rear porches at the Everard House and at Kittiewan were framed against one or both rear wings. (At Kittiewan, archaeologists reportedly have seen racking for the foundation of a second wing, suggesting an arrangement similar to the Everard house.) In both cases, it is clear that the underside of the porch roof bore no finish. At Marmion, in nearby King George County, Virginia, an early, full-length shed porch still stands on the back side of the house (Figure 32). This porch has no ceiling--the shingles, laths, and rafters are all visible from below, and none has ever been painted. Finally, the Williamsburg House of St. George Tucker offers a later instance of exposed framing and shingles under a roof. In this case, the plaster walls of the second-floor passage extended up into the attic and died against the underside of shingles of the main roof, leaving the unpainted shingles, laths, and framing wholly visible from the bottom of the stair, several flights down. On the basis of these examples, we suppose that the underside of the rear porch could have remained exposed—and also that the shingles of the main roof could have been encapsulated by the added porch.

ADA Access

Since the initial issuance of this report, the rear porch has become the means of providing ADA compliant access to the building. This will allow disabled persons to enter by the same doorway as all other visitors--without any necessity of manipulating or maintaining an operable, highly visible lift. To avoid long access ramps and railings beyond the porch, visitors would approach the porch on a grade of 1:20. Within the porch a fixed ramp would begin its ascent at the NE corner. Continuing along the south wall of the “Back Room” to a landing in the NW corner. Railings would be provided on the side of the building, and on the back of a bench positioned to separate the ramp from other traffic.

INTERPRETIVE ISSUES

How Much Do We Really Know?

For any historical simulation like the one described here, an important challenge is to help visitors distinguish clearly between what is truly known about the setting they encounter--and what is conjectural. In the first category are those elements which are directly supported by physical evidence, by documents, or by graphical sources. We believe this category should also embrace elements or attributes that can be reasonably and directly inferred from such sources.

At Ferry Farm we know a good deal about the building that the Washington family occupied. Known attributes and features include:

- Orientation.
- Plan dimensions.
- Existence of rear shed.
- Deployment of rooms and cellar.
- Width and detailing of cellar door frame.
- Existence and location of three chimneys.
- Base dimensions for two of these chimneys.
- Materials of chimneys.
- Slope and cladding of main roof.
- Existence of dormers.
- Wall construction.
- Existence and character of stone foundations in main range and rear shed.
- Number and placement of front windows.
- Location of river-front doorway and porch.
- Location and width of cellar doorway.
- Location of rear doorway.

But there are many things about which there is less certainty. Decisions about these are based on "conjecture"—that is, supposition informed by the study of applicable conditions in other buildings—survivors that are relevant by virtue of their date, location or function. For us, the term, "conjecture," also embraces suppositions drawn from the growing body of scholarship on early building practice in the Chesapeake region.[38] Externally, conjectural aspects of the building would include:

- Planed and beaded weatherboards.
- Existence and detailing of an exterior cornice.
- Existence and detailing of other exterior trim.
- Size and detailing of dormers.
- Size and detailing windows and shutters.
- Size and detailing of ground-floor exterior doorways and doors.
- Overall form and detailing masonry chimneys.
- Detailing of porches and trim.

In previous conversations, the NPS and SHPO have proposed that the distinction of these categories be accomplished through the use of color. Because color is recognized at a glance, and because it is an inherent property of every element--color provides a comprehensive, instantly intelligible way to communicate what we actually know about the Washington House when visitors first come upon it. The NPS has further indicated that these distinctions be confined to the exterior of the house.

[38] See, for example, Cary Carson and Carl Lounsbury, eds, *The Chesapeake House…,* (Chapel Hill, NC: University of North Carolina Press, 2013).

To that end, we propose that a reddish-brown color be used to identify all conjectural exterior elements. On siding and trim, this color would consist in an oil-bound, painted finish. On masonry, the color would consist in an applied lime wash of the same hue.

In some instances it will be difficult to distinguish among several attributes belonging to a single element--some known and some conjectural. Where such conflicts occur, we believe it makes sense to err on the side of conjecture—to avoid claiming too much for the historical basis of the setting.

The resulting scheme of color would allow interpreters to clarify, in a single statement, what visitors are about to see. That statement could stand on its own, to be interpreted as visitors wish—or, it could be a springboard for talking about how we "do" history--how historians weigh and prioritize evidence in their efforts to reach the truth.

INTERIOR FINISHES

Plaster

As noted earlier in this report, great quantities of plaster survived the destruction of Augustine Washington's house. Selected fragments from the lab collection and also a quantity of un-catalogued material stored nearby were surveyed for evidence that could help characterize the dwelling's interior. This plaster was of two general types:

Type I Plaster

Seemingly, this material represents the first and only plaster finish in the Washington House. It was made from burned oyster shells--remnants of shell are visible throughout all Type I samples. The resulting product has a buff-colored body, with aggregates varying widely in size, shape, and color. Some samples contained bits of burned brick, as well, but only one sample out of many dozens was found to contain animal hair.

On first inspection, the plaster appears homogenous through its entire thickness--as if it were the product of a single application. However, closer inspection frequently reveals definite "cleavage" planes, suggesting that the material was actually applied in two or even three coats, all identical in composition and consistency. In cases where a third coat is discernable, it is dimensionally similar to early white coat applications--about 1/8" to 3/16" thick. In most cases, though, it is virtually indistinguishable from the rest of the plaster. The finished surface is troweled relatively smooth in most locations, while in others, particularly at corners, it is surprisingly rough.

Many fragments exhibit at least three or four layers of limewash, usually white, though a later gray finish, possibly an oil-bound paint--is occasionally visible. The lime wash applications are quite thick, with prominent brush marks that typically run parallel or perpendicular to the lathing—they are almost never diagonal. Curiously, the direction often changed in successive coats. In this case at least, the evidence suggests a degree of thought and care in the application of lime-wash finishes.

In most cases, the wooden laths appear to have attached to the frame in an "in-out," "corduroy" configuration, using wooden slips as broad as 1 7/8". In cases where the slump of wet plaster keys was preserved, they indicate that the laths were applied in a horizontal orientation—so the framing was must have been composed of vertical studs.

The principal effect of this unusual lathing system is to make the keys nearly 2" high on the walls, *versus*, say, 3/8" thick in a conventional installation. Consequently, the resistance of the plaster to downward shear forces would have been substantial. This is great for walls, but terrible for ceilings--the resistance to normal forces directed away from the ceiling (i.e., gravity) would have been negligible. Conventional lathing would have been necessary in that context, and indeed, a few of the plaster fragments seem to have come off of conventional lathing installations.

Clearly, the anomalous lathing system for the walls offers a means by which to distinguish wall plaster from ceiling plaster. The prevalence of the corduroy lathing, relative to lathing of the conventional type, may reflect the proportion of walls to ceilings. Certain remnants of plaster, seemingly from the junctions of wall and ceiling, suggest that there were plaster ceilings in one or more of the ground-floor spaces. (See "Walls, Ceilings and Cornices," below).

Type II Plaster

This plaster has a very light chocolate-colored body with untempered clumps of lime distributed throughout.[39] The color and inclusions are typical of 19th-century plaster. The material seems to have been made from stone lime, as there is no oyster shell present in any of the samples examined. The finished surface is a very thin layer of white-coat plaster. The context from which this plaster was recovered (south root cellar), suggests that it was associated with a later wing or structure joined to or situated nearby the southern end of the Washington house. This plaster is manifestly later than the period to be portrayed and so had no bearing on our ruminations about the character of Augustine Washington's house.

Plaster Context

[39] FF-00443-2.

As noted in the earlier discussion of frame walls, most fragments recovered from the house site bear the impression of wooden lathing on the back. If it is true that all of the "corduroy" lathing was on walls, and that all of these laths ran horizontally, then it is possible to establish the original orientation of individual fragments and, in some cases, to identify their original context.

Walls, Ceilings, and Cornices

As noted above, several fragments of plaster seem to have come from the junction of a wall and ceiling.[40] Remembering that the wall laths were oriented horizontally, it seems that the walls were plastered first, leaving a small "bulb" of material at the top edge, where the plasterer's trowel or float did not reach all the way into the corner. Then, while the walls were still "green," the ceilings were plastered against the bulbous upper edge of the wall plaster, conforming to that curved shape. If this interpretation of the evidence is correct, there must have been no exposed joists in at least some rooms, since the plaster ceiling would necessarily have covered them. Obviously, there would be no cornice in such cases, since the finished plaster surface and the lime-wash finish appears to have transitioned from wall to ceiling without interruption. (In early installations, plaster most often stopped against the wooden trim, rather than running behind it).

Masonry – Brick and Stone

A modest number of the plaster fragments sampled from un-cataloged storage--6 of 62 samples--appear to have been applied to brick, although no impressions of mortar joints were found. We have assumed that this material represents the brick chimneybreasts—another reason to think that the stone bases of the chimneys stopped at or near the bottoms of the sills. Further to that point, it is clear that there were brick fireplaces at some point—one plaster fragment, heavily creosoted on its face by long exposure to multiple fires, has brick dust and brick chips embedded in its rear face.[41]

At least one sample of plaster does seem to have been applied to stone. It is composed of a buff, oyster-shell mortar, displaying many more untempered clumps of lime than other Type I samples—but these clumps are smaller and less numerous than in the 19th-century, Type II mortar. It is possible that this plaster represents a later 18th-century finish—perhaps from the stone cheek walls of the cellar stair or from the lower zone of the chimney (assuming the stone extended a short way above the FFL downstairs, as at the Merchent House, in Dumfries, Virginia).

Trim and Paint

[40] See, for example, FF-12-0408-61 and F-12-Bag 1 [#8]. Several additional examples were identified among the uncataloged materials.
[41] FF-12-0408-59.

Several plaster fragments in the cataloged lab collection show clear signs of having abutted planed wooden trim. One additional example was recovered from un-cataloged storage. Virtually all of these pieces bear several layers of limewash. Some exhibit an oil-bound paint as the final finish, probably post-dating the time of George Washington's residence. As for paint from the adjacent trim, there is no evident case of overpainting, drips, or spatters, even under magnification. It seems highly improbable that the wooden trim could have been painted so cleanly throughout the house over its entire lifespan. The inescapable conclusion is that the wooden trim remained unpainted--or that it was merely coated with limewash--throughout the time of George Washington's residence. Instances of both conditions have been noted, but neither is common today.[42]

If the choice is between these two possibilities, unpainted trim seems more plausible. By its very nature, unpainted trim invites a painted finish, so few interiors that were originally unadorned remain so today. As we have seen, the Washington interior was eventually painted--a light gray oil-bound paint was applied to the plaster late in the life of the house--perhaps it covered the trim, as well.[43]

The use of interior paints was well established by the second quarter of the 18th century, but not inevitable. Carl Lounsbury's research on public buildings suggests that the practice of painting architectural work as a matter of course emerged in public architecture during the 1720s and 1730s.[44]

In view of the physical evidence--and given the limited and uneven acceptance of painted surfaces at this early date--we believe that the interior wooden trim of this house remained unpainted throughout the time of George Washington's residence.

Ornamental Painting – Plaster

Several plaster samples from the cataloged collection bear a Siena-colored stripe over the lime-washed surface, about 5/8" wide, running a short way back from the straight edges—edges that manifestly abutted wooden trim. In every case, such edges seem to represent one of the original wall boundaries, showing that the idea was to outline each discreet section of plaster, holding the stripe about ½" back from the margin. This treatment extended to the junction of wall and ceiling. Since the sienna-colored paint lies over several coats of lime wash, it may well post-date the period of George Washington's residence.

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[42] For an example of lime washed wooden trim, see the second floor of Old Friendship, in Henry Chandlee Forman, *Old Buildings, Gardens and Furniture in Tidewater Maryland*, (Cambridge, Maryland: Tidewater Press, 1967), p. 217.

[43] See, for example, FF-12-0408-56 and FF-12-0408-64. In the latter case the paint is applied over a second-generation white coat.

[44] Carl Lounsbury, *An Illustrated Glossary of Southern Architecture and Landscape*, pp. 253.

Whatever the date of this plaster, two pieces seem to have stopped against sloping trim—both the plaster edge and the painted border slope relative to the orientation of the laths. Perhaps the pieces abutted the lower edge of a stair stringer—or the upper edge of a wooden skirting above the steps.[45]

Plaster Surface

One fragment from un-cataloged storage bears no lime wash and so may have been protected from painting by some architectural feature--perhaps this remnant came from some narrow space in a closet below the stair--or some other place of similar character. Whatever its original context, the body of this remnant resembles other Type I plaster. The surface is troweled very flat and very smooth.

Flooring

The second quarter of the 18th century witnessed a growing interest among Chesapeake residents in genteel aspects of building. During this period, architectural surfaces became a subject of special interest. Virginians and Marylanders began to approach their floors—and other interior finishes--with concern for presenting smooth, uniform surfaces with no visible fasteners. In the case of floors, this meant blind-nailed (rather than face-nailed) floor boards, specially sawn and selected to present a uniformly patterned surface of edge-grained heartwood. Blind-nailing required that the rear edge of each board be secured to the previous one by doweling or by means of a tongue-and-groove joint.

In Williamsburg, the Thomas Everard house seems to have been built in 1719 with face-nailed floors. However, in a subsequent remodeling, possibly in the early 1740s, the old floorboards were taken up and replaced by a doweled and blind-nailed floor of pine, leaving the old boards in place only under the carriages of the stair. If the scenario described here is correct, this may be the earliest doweled floor to survive in Virginia. According to one source, the Little Brice House, in Annapolis (c.1742), may be the earliest Maryland example.[46] After the 1740s, most houses continued to have faced-nailed flooring. This was true of the Robert Carter House, first completed in the 1740s, though here, the old surface was finally covered over by a doweled floor early in the 1760s.

These examples argue against the likelihood of a doweled floor in William Strother's 1720s house. Even if the interior were upgraded in a 1740s building campaign, a new doweled floor installed at that time would have been among the earliest instances of such. For that reason butted and face-nailed pine boards, mostly edge-grained, largely clear of knots, and entirely clear of sap, are the appropriate choice for flooring the best room of the Washington House.

[45] FF-12-Bag 1-[#5]; FF-12-Bag 2-61-1.
[46] Willie Graham, personal communication.

However, virtually all early houses exhibit a hierarchy in the quality of flooring, the largest and most public rooms having the best floors. Generally, narrower boards of consistent width are found in the better rooms, since narrower widths reflect the ripping down of boards to efforts exclude imperfections. A consistency of the widths was also desirable, enhancing the refined appearance of a finished floor surface.

In lesser rooms, the quality of the floors (expressed in the narrow, consistent widths of the boards, the density and orientation of their grain, and the absence of knots and sapwood) should diminish, according to the importance of reach room. Judging from the usual pecking order among such rooms, and also from the appraised furnishings of the rooms, the order of quality was likely thus:

1st Hall
2nd Passage
2nd Hall Back Room
3rd Parlour
4th Back Room
5th Hall Chamber
6th Parlor Chamber

INTERIOR ELEMENTS

The Stair

Having settled earlier on the trajectory of the stair, its ornamental character remains to be considered. The great divide in early stair-building practice was that between closed-string and open-string designs. Closed-string construction is typically associated with the earliest houses, though it persisted into the 19th century. Open-string stairs, on the other hand, were rare before 1740. All the earliest examples (assuming they are ancient as supposed) appear in Williamsburg and Yorktown--or in the homes of the super rich. The earliest datable example is the Nelson House in Yorktown. The present balustrade is a reconstruction but was based on a section of the original, recovered from the attic. Presumably this assembly was built soon after 1729, when the timbers for the house were cut, and before 1732, when William Hugh Grove reported seeing the completed structure. At the time, Nelson's house was one of the most opulent in Virginia, built for a patron with substantial resources and strong commercial ties to Britain.

Given the early date of Ferry Farm, we would not expect a prosperous attorney in King George County to be *au currant* in the degree that Nelson was—so, a closed-string stair would make sense at Ferry Farm. Early examples suitable for emulation include those at Belle Air, in Charles City County, at the Keeling and Lynnhaven Houses in Virginia Beach (Figures 33 and 34), at the Mason House, in Accomac County (Figure 35), at Linden Farm in Richmond County, and at the

Chiswell-Bucktrout House, in Williamsburg—all Virginia examples. In Annapolis Maryland, the Charles Carroll House also has an early closed-string stair, dating from the 1740s (Figure 36).

Framing – First Floor

The frame of this building was, quite possibly, one of its most conspicuous and important attributes. Prior to 1750, Chesapeake builders often employed a mode of construction in which the "bones" of the house were exposed—indeed, celebrated—with major framing components planed smooth and adorned with carefully-wrought moldings.

Dendrochronology has identified houses with exposed framing at both ends of the time interval under consideration--c. 1725 to c.1740—Lynnhaven House, begun in c. 1724, is a brick structure with exposed ceiling joists on both floors. Pear Valley, in Northampton County, Virginia (Figure 37), dated by dendrochronology to 1740, also has exposed framing on both floors. Situated between these on the time line is the Mason House in Accomac County, dating to 1729—it has exposed framing on the upper floor only. Below stairs, there was no exposed framing. Of course, the Lynnhaven and Mason Houses are brick dwellings, limiting their relevance to any discussion of a framed dwelling.

For framed structures the universe of possibilities is adequately defined by several survivors, which together show the varying extent to which the frame could be exposed. The early dwelling recently discovered in Edenton epitomizes the "all visible" approach, having once showed *everything*—even the perimeter studs. (Until the early decades of the 19th century, the interior finish featured faux wainscoting painted onto the backs of the weatherboards). At Pear Valley, plaster originally hid the studs but left everything else exposed. At Belle Air, in Charles City County, date unknown, both the joists and the studs were concealed, leaving only the major posts, the plates, and the end girts visible (Figure 38).

We have seen that plaster evidence at Ferry Farm points to the existence a plaster ceiling in one or more of the ground-floor rooms. This evidence consists of plaster edges that seem to have come from the tops of walls where they were abutted by ceilings of plaster. Clearly, the joists would have been hidden in such cases, but the possibility remains that the wall longitudinal plates and perhaps the major wall posts were exposed, while the ceilings turned down to merge with the wall plaster on the short ends of the room. This was possible only in cases where end joists (rather than large girts) could lie in plane with all the other joists. This condition seems to go with common-rafter roofs having no trusses or principal rafter pairs, and thus no heavy girts or bottom chords at the ends to hang down below the ceiling plane.

Belle Air and Pear Valley reflect two different approaches to exposing the major wall posts. At Pear Valley, a single intermediate wall post framed one side of the

off-center doorway, dividing the frame into two equal bays. This scheme favors structural logic over visual considerations, especially when we consider the small sizes of the riven studs. At Belle Air, on the other hand, major posts on the longitudinal walls frame both sides of every window opening, appearing also at the exterior corners, so that most exterior wall planes in the two front rooms are bounded by major framing. This scheme prioritizes visual considerations over structural, since multiple posts of this large size were manifestly unnecessary.

Given the relatively modest depth of the house at Ferry Farm, common-rafter construction seems most likely, and that implies the Pear Valley model--but with joists hidden.

While it is possible that at least some of the ceiling plaster recovered by GWF archaeologists came from the added room--built with concealed framing--it does appear that the Hall Back Room had a plaster ceiling at the time of the fire. A large remnant of ceiling plaster was among fire-related debris recovered the root cellar of that space.

In view of the dwelling's construction between 1725 and 1740, we propose that the wall plates and major wall posts be exposed, while the joists remained hidden by plaster ceilings--a plausible treatment for a second-quarter Virginia house of this importance—and one that comports with the physical evidence.

Framing - Second Floor

In a number of single-story houses pre-dating 1750, collar ties carrying the second-floor ceiling were originally exposed to view by laying a plank floor over them, rather than applying plaster to the undersides. Because this practice disappeared after mid-century, exposed collars are a characteristic aspect of the second-quarter "look" displayed by early Chesapeake interiors (Figure 39). The lower edges are typically treated in one of three ways—eased, beaded, or molded with a cyma. The molded edges are visually arresting, and more importantly, they make the point that exposed framing was regarded as a part of the interior adornment. Because the cyma had a characteristic "kick" in the early decades of the 18th century, this molding offers one more way to suggest that the house is earlier than the typical dwelling visitors are likely to have seen.

HOUSE	Date	County	Colony	Edge
Cloverfields	2nd Qtr.	Q. Anne's	Maryland	Cyma
Lynnhaven H	1724	Princ. Anne	Virginia	Eased
Mason House	1729	Accomac	Virginia	Beaded
Pear Valley	1745	Northampton	Virginia	Eased

Archaic or Modern?

Exposed framing versus hidden framing is a matter of "archaic" versus "modern." Understanding this opposition is central in any attempt to conceptualize the dwelling's interior--and thus central in the effort to identify appropriate architectural precedents for an historical simulation. In studies of other regions and time periods, scholars have noted that publicly visible parts of houses respond to architectural change sooner than "back-stage" areas that remain out of the public eye. Assuming that is true, we could expect the lower, publicly-accessible rooms at Ferry Farm to be "modern" in some respects--and the more remote rooms upstairs to be less so.[47]

Attribute/Feature	Private Archaic	Public Modern
Size		X
Plan		X
Roof		X
Wall Cladding		X
Dormers		X
Sash Windows		X
Chimneys		X
Exterior Paint		X
Stair		X
Room Names	X	X
Plank Partitions	X	
Exposed Framing	X	X
Partial Cellar	X	

In a house that seems to have shared old and new attributes, the upper floor and the cellar are clearly the best places to express fully the older, "second-quarter" character of the place, while the lower rooms and the exterior should embody the modernizing impulses that began to change buildings after 1720. In that case, the chart suggests that newfangled baseboards and surbases should appear only in the lower rooms. It also ratifies a decision made elsewhere on historical grounds, that the exterior finishes and elements should be up-to-date and genteel, reflecting a makeover associated with repairs after the 1740 fire. Along similar lines, we suggest exposed framing upstairs and in those parts of the ground floor unaffected by the 1740 facelift. The same is true of the chimneypieces—each partakes more or less of current fashion, according to its location. Although painted trim would seem to be one of those attributes properly associated with the public realm of the house, we found no clear evidence of it anywhere for Washington's period. It is proposed then, that the trim remained entirely unpainted throughout.

Partitions

[47] Edward A. Chappell, "Acculturation in the Shenandoah Valley: Rhenish Houses of the Massanutten Settlement," *Common Places: Readings in American Vernacular Architecture*, pp. pp. 36-42.

The prevalence of plaster bearing evidence of lathing suggests that most of the walls were framed. However, several early Chesapeake houses had plank partitions on the upper floors. Bound's Lott, a second-quarter dwelling in Wicomico County, Maryland (Figure 40), is an example. The method of constructing these partitions was for planks to be molded, alternately, as stiles and panels, each joining the one next to it in the manner of raised-panel joinery. Bloomfield, in Talbot County, Maryland, and the Powel House, in Somerset County, Maryland, exhibited doors made in the same manner.[48] A room from the latter house is now to be seen at the Museum of Early Southern Decorative Art.

Remnants of a somewhat different system were salvaged and re-used at the Bucktrout House, in Williamsburg. In this case, alternating planks were positioned in two different planes, each beaded on the exposed edges of the advanced face.

Paneling and Cornices

The earliest raised-panel elements—doors, wainscoting, and chimneypieces–have been noted to have three sorts of treatments. In the lower Tidewater, they tend to have raised panel fields with unadorned stiles and rails, as at the John Blair House (1722, 1737), the Keeling House (1735), and Robert Carter House (1740s). North of the Potomac, flat panels are sometimes raised within bolection moldings, as at Holly Hill, in Anne Arundel County, Maryland (1723 wing), and also at Prior's Cleve in Charles County, where the 1711 contract for construction of William Wilkinson's house called for "Windscutt" having a Large [b]olection wth raised panels [and a] Large Cornish all round the said Roome."[49]

The last element—the "Cornish"--is demonstrably absent in at least some rooms at Ferry Farm, which seems to rule out full-height paneling in those spaces. However, it is possible that some rooms and not others had cornices, or that a particular cornice adorned only one wall or only a portion of one wall in a given room. An example is the Keeling House, in Virginia Beach, where the fireplace wall is fully paneled, with a cornice, while the other walls are entirely plastered, without so much as a chair board to break the plaster between the ceiling the baseboard. The crown molding and the surbase on the wainscot run clear to the adjoining walls—without evidence of miters or coping—strongly suggesting that the naked treatment of those adjacent walls is an early condition. (Figure 41).

Given the rarity of bolection paneling--especially in Virginia--and the ubiquitous presence of conventional raised paneling in both colonies, it seems obvious that

[48] Henry Chandlee Foreman, *Old Buildings Gardens and Furniture in Tidewater Maryland*, (Cambridge, Maryland: Tidewater Publishers, 1967, pp. 181-186.; See also Foreman's *Early Manor and Plantation Houses of Maryland*, 2nd ed., (Baltimore: Bodine & Associates, 1982), p. 186.
[49] J. Richard Rivore, *Homeplaces: Traditional Domestic Architecture of Charles County, Maryland*, (La Platta, Maryland: Charles County Community College, 1990), p. 51.

the latter type is most likely to have been employed at Ferry Farm for doors, wainscoting, and chimneypieces.

SUMMARY

Physical and documentary evidence outlines the general character of Augustine Washington's Ferry Farm house with reasonable certainty:

- The house was a framed dwelling.
- It consisted of a main, river-front range with a shed appended to the rear.
- The main range of the house faced the Rappahannock River.
- Externally, the house measured about 52 by 28 feet.
- Internally, the front range of rooms was about 15'-7" deep.
- Internally, the rear shed was about 12'-0" deep.
- The northeast room was added between 1738 and 1743.
- The roof slope of the main range was approximately 50 degrees.
- The house stood on a stone foundation.
- Above that foundation, the chimneys were constructed of brick.
- All of these chimneys were external structures.
- The house stood over a partial, stone-lined cellar.
- This cellar was co-terminous with a central passage above.
- The cellar steps emerged from the sloping ground on the river-side of the house.
- A short passageway from these steps to the cellar passed under the front stoop.
- The ground-floor central passage measured about 9'-3" x 15'-7" internally.
- There was an exterior doorway at the rear of this passage.
- The use of this doorway persisted after the northeast room was added.
- The SW room, the "Hall," measured about 15'-7" x 24'-6" internally.
- The room behind, the "Hall Back Room," measured 12'-0" x 24'-6".
- The latter was heated by a corner fireplace with a root cellar before the hearth.
- The NW room, the "Parlour" measured about 15'-7" x 17'-6".
- The chimney serving this room measured about 10'-2" x 5'-4" at the base.
- Here too, a root cellar stood before the hearth.
- Behind the Parlor, the "Back Room," was approximately 12'-6" square.
- This space was heated by a rear chimney measuring 6'-0" x 3'-2" at the base.
- Above the main range were the "Hall Chamber" and "Parlor Chamber."
- Access to this upper floor was by a stair situated in the ground-floor passage.
- The Parlor had one window.
- The Hall Back Room had two windows.
- All rooms were lit by sash windows having no counterweights.
- The interior of the house was plastered throughout.
- The woodwork was initially unpainted, though all plaster was limewashed.

Other attributes are reasonably inferred from the evidence or from the conventions of Chesapeake building in the 1720s, when the house is believed to have been built:

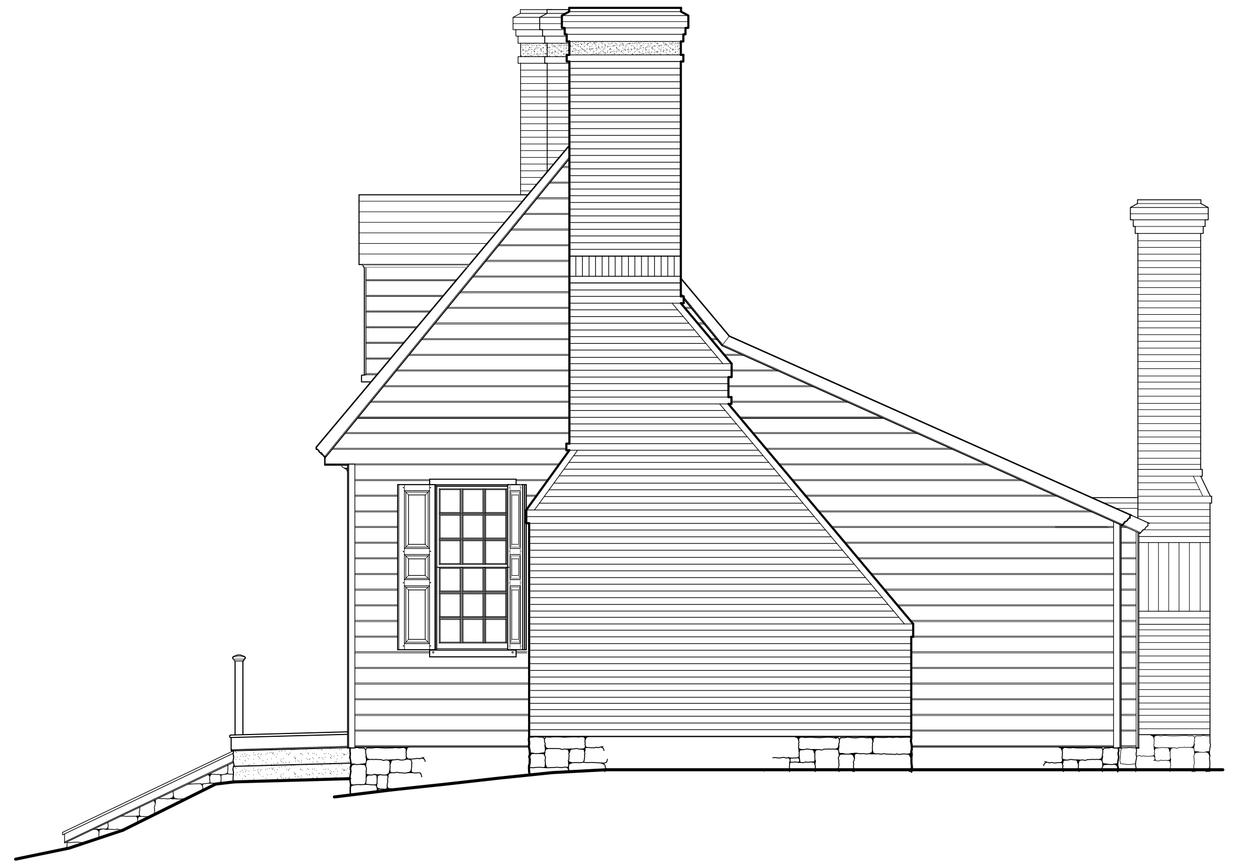
- The front range of the house was probably one full story in height.
- The front range was framed as an independent unit.
- Most framing ran in the transverse direction.
- The roof was framed with common rafters.
- The shed rafters probably attached near the lower ends of the main rafters.
- The Hall and Hall Back room fireplaces probably shared a single chimney mass.
- Adding the northeast room probably created a covered porch behind the passage.
- The closet mentioned in the 1743 inventory was probably situated under the stair.
- Thus, the cellar was accessible from the exterior only.
- If the closet mentioned was under the stair, there was probably no Hall closet.
- Thus, there was probably an end window next to the Hall chimney.
- The stair probably began its ascent on the north wall of the passage.
- Thus, the Parlor door probably stood near the front of the passage.
- The Hall door probably centered on the end of the room.
- The stair probably turned at two intermediate landings.
- The rear doorway probably stood under the upper intermediate landing.
- Upstairs, a passage probably separated the Hall Chamber and Parlor Chamber.
- These upper rooms were probably lit by dormer windows.

To a surprising degree, demonstrable facts—and the inferences that flow from them—allow us to characterize Augustine Washington's house. What we know of this house is detailed enough to describe George Washington's early physical surroundings for the first time. To the extent that Washington's earliest years count in the chronicle of his life and in the ultimate estimation of his character, the particulars of this house really do matter.

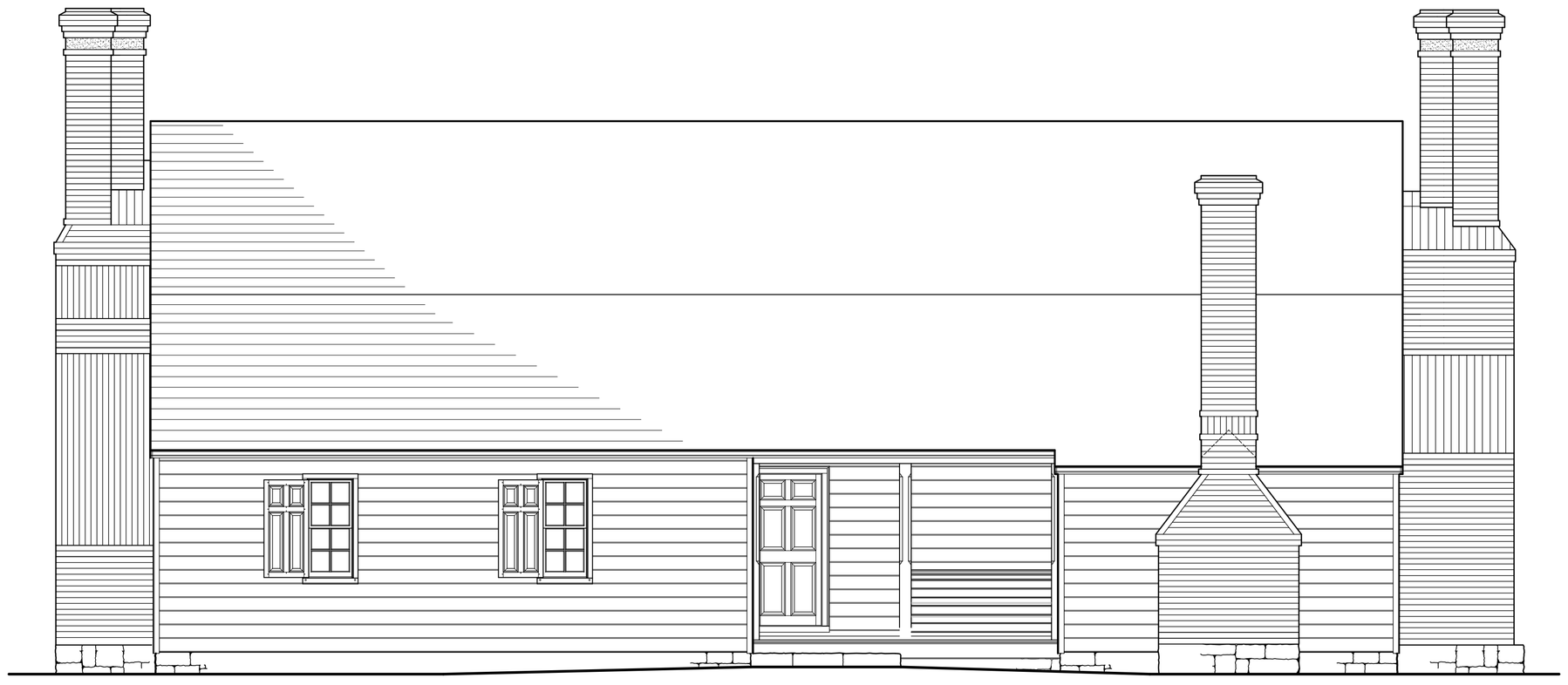
The most important questions about Washington's life are those which no one has yet thought to ask. The *process* of re-imagining and re-presenting Washington's house will raise many *new* questions about his early years, and in that way will refine our understanding of the man.

Drawings
APT 1.0 – A3.1

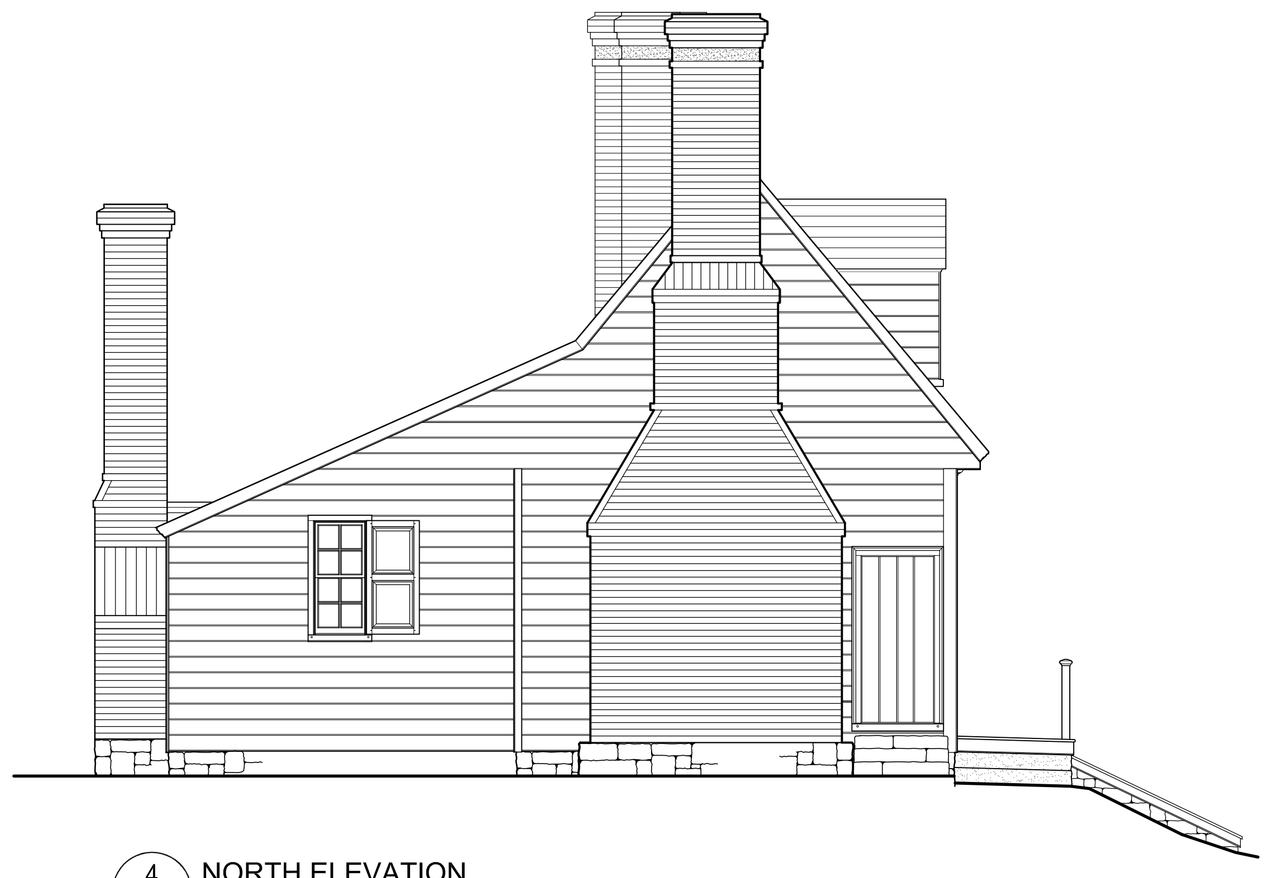
1 A1.1 WEST ELEVATION
SCALE: 1/4" = 1'-0"



2 A1.1 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



3 A1.1 EAST ELEVATION
SCALE: 1/4" = 1'-0"



4 A1.1 NORTH ELEVATION
SCALE: 1/4" = 1'-0"

0' 5' 10'

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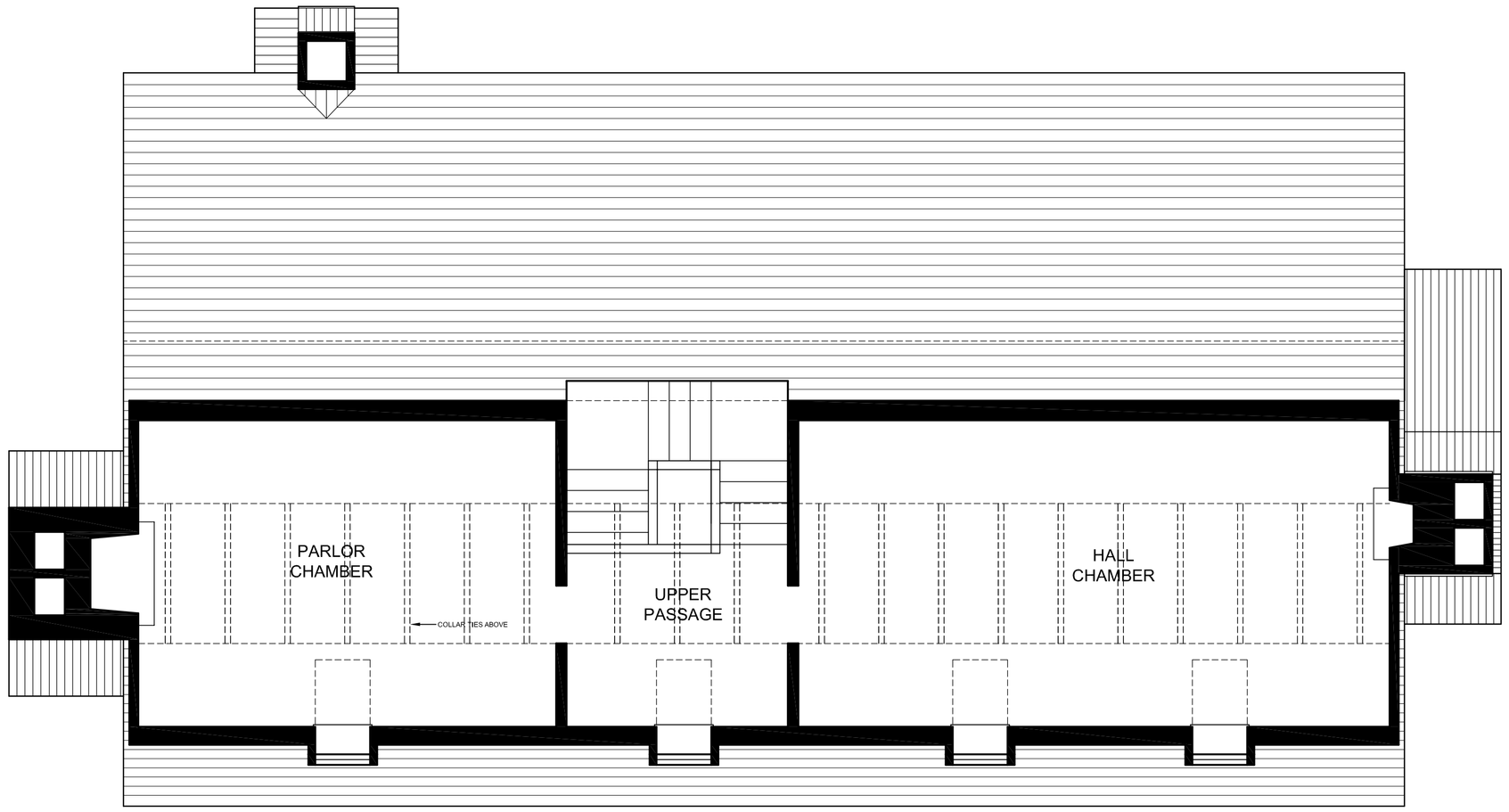
ELEVATIONS

GEORGE WASHINGTON'S FERRY FARM

FREDERICKSBURG, VIRGINIA

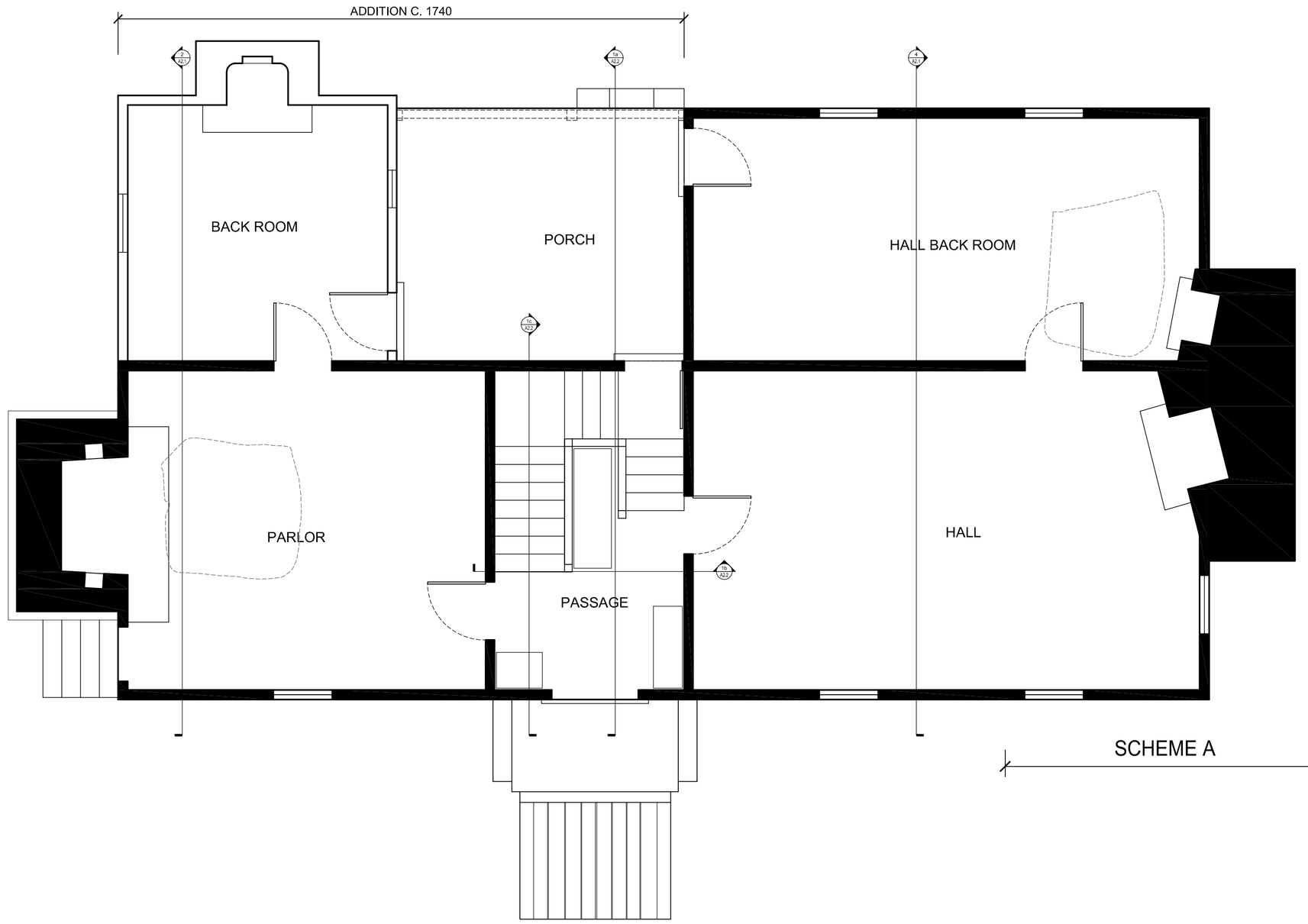
SCALE
AS NOTED
COMMISSION NO.
DRAWN BY
JNWG
DATE
OCTOBER 24, 2011
REVISED

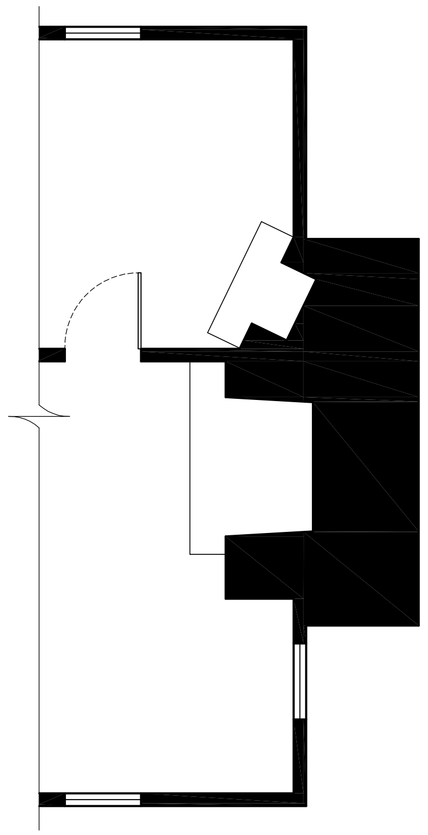
DRAWING NO.
A1.1



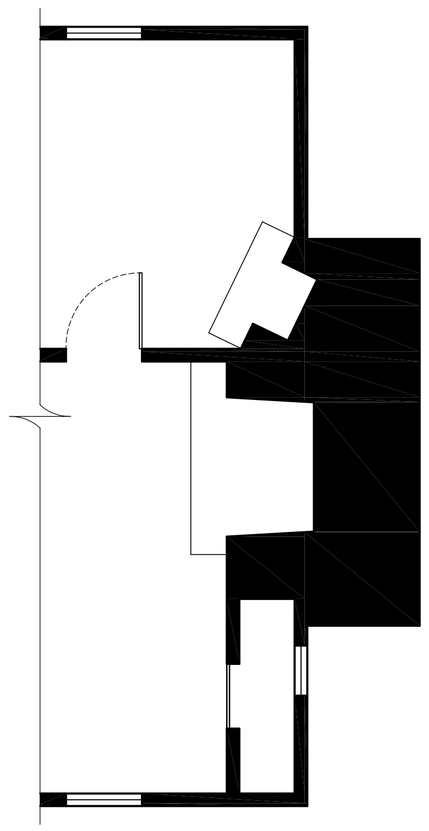
1 / A1.2 SECOND FLOOR PLAN

SCALE: 1/4" = 1'-0"





SCHEME B



SCHEME C

SCHEME A

2 / A1.2 FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"

0' 5' 10'

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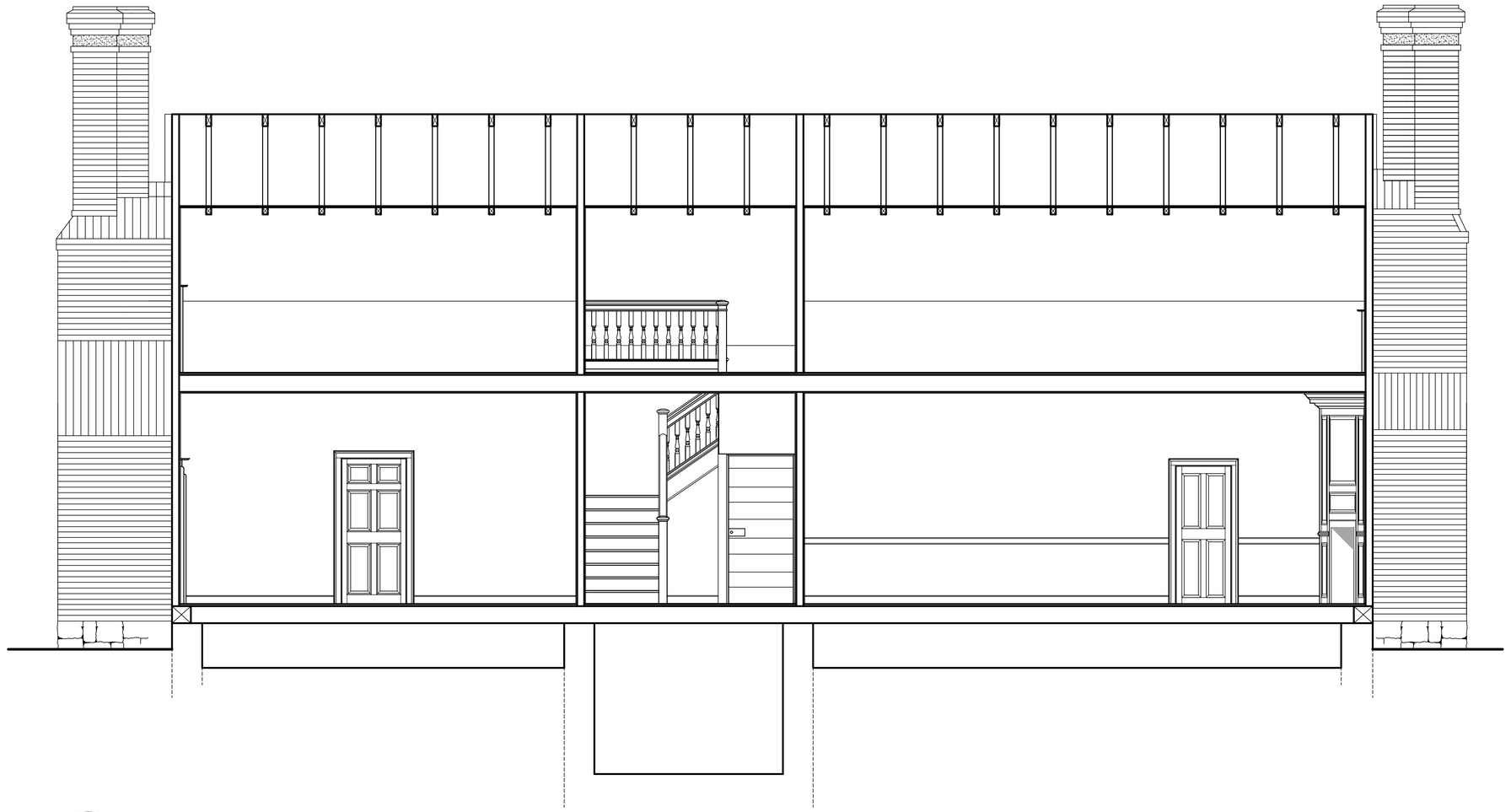
FIRST AND SECOND FLOOR PLANS

GEORGE WASHINGTON'S FERRY FARM

FREDERICKSBURG, VIRGINIA

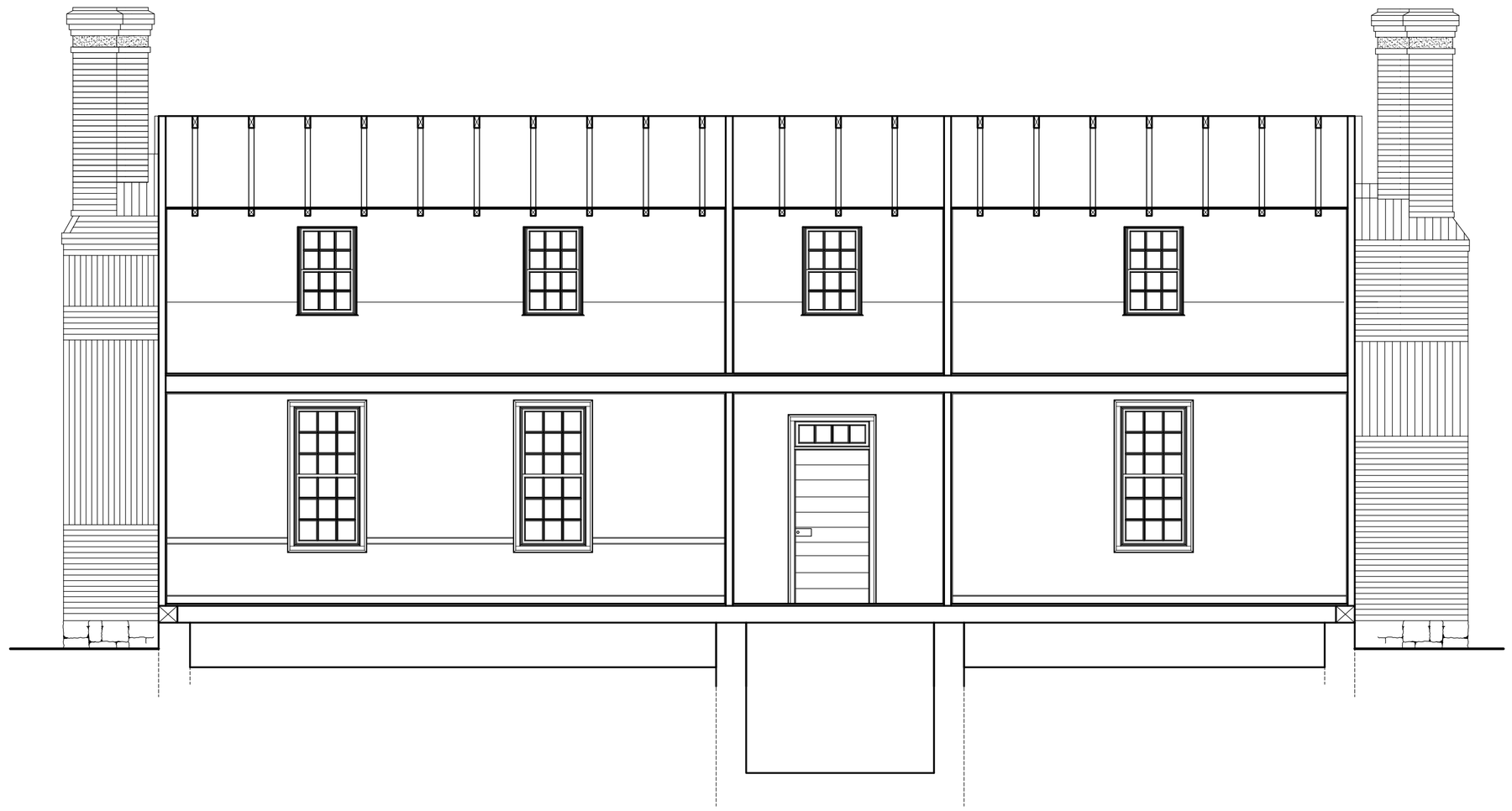
SCALE
AS NOTED
COMMISSION NO.
DRAWN BY
JNWG
DATE
OCTOBER 24, 2011
REVISED

DRAWING NO.
A1.2



1 A2.1 LONGITUDINAL SECTION LOOKING EAST
SCALE: 1/4" = 1'-0"

2 A2.1 TRANSVERSE SECTION THROUGH PARLOR - LOOKING NORTH
SCALE: 1/4" = 1'-0"



3 A2.1 LONGITUDINAL SECTION LOOKING WEST
SCALE: 1/4" = 1'-0"

4 A2.1 TRANSVERSE SECTION THROUGH THE HALL - LOOKING SOUTH
SCALE: 1/4" = 1'-0"

0' 5' 10'

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SECTIONS

GEORGE WASHINGTON'S FERRY FARM

FREDERICKSBURG, VIRGINIA

SCALE
AS NOTED

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MARCH 13, 2012

REVISED

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A2.1

Figures 1-41.

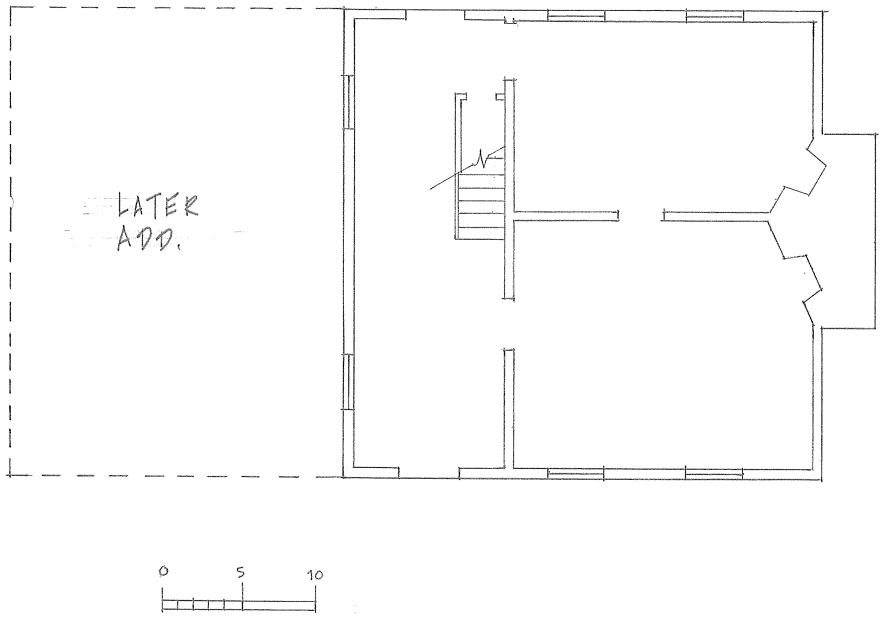
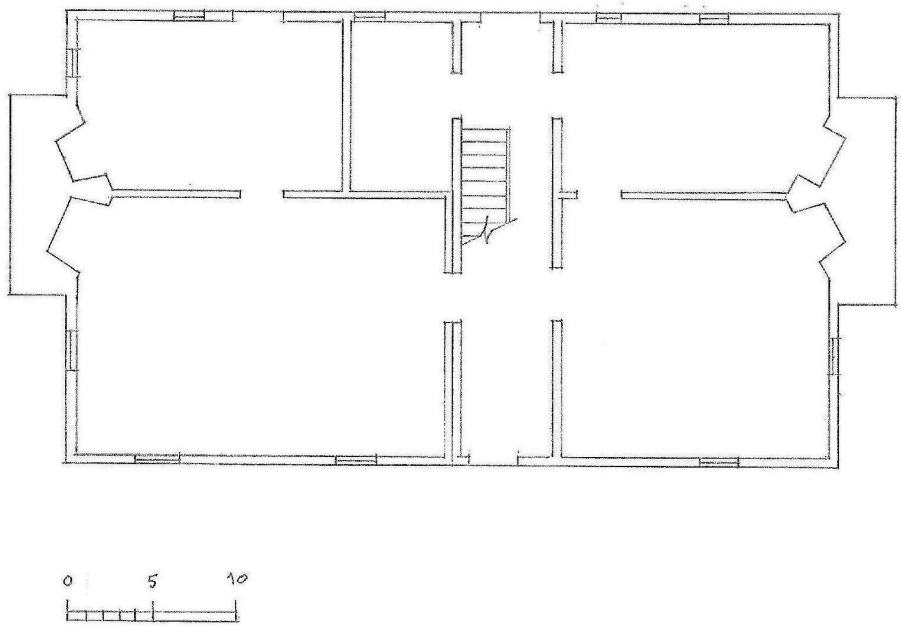


Figure 1. Delia Forbes Smith House. Falmouth, Virginia. *After Dell Upton (VHLC, 1976)*.



F**igure 1a.** Richmond County, Virginia. 1761; 1778; 1803.
After Dell Upton (VHLC, 1976).

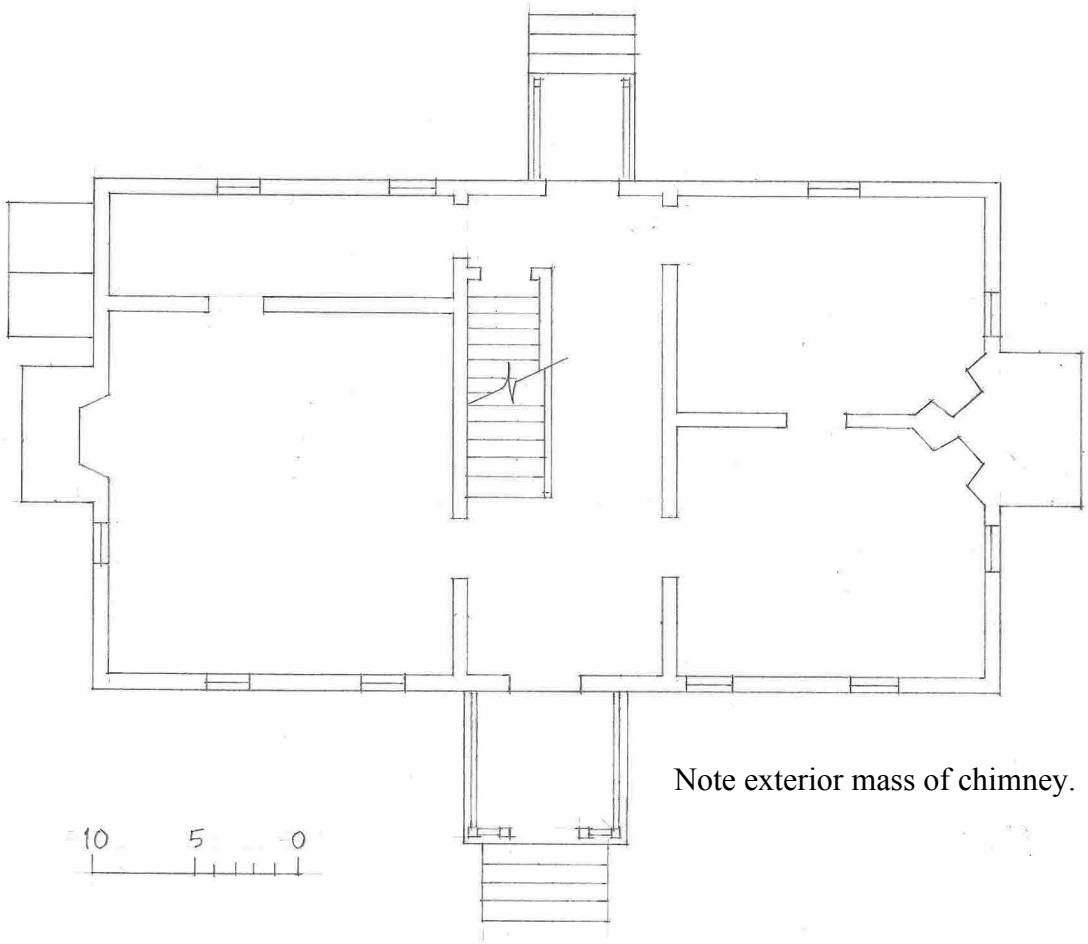


Figure 2. Moore House. Yorktown, Virginia. 2nd quarter 18th century.

After Dell Upton (VHLC, 1977)

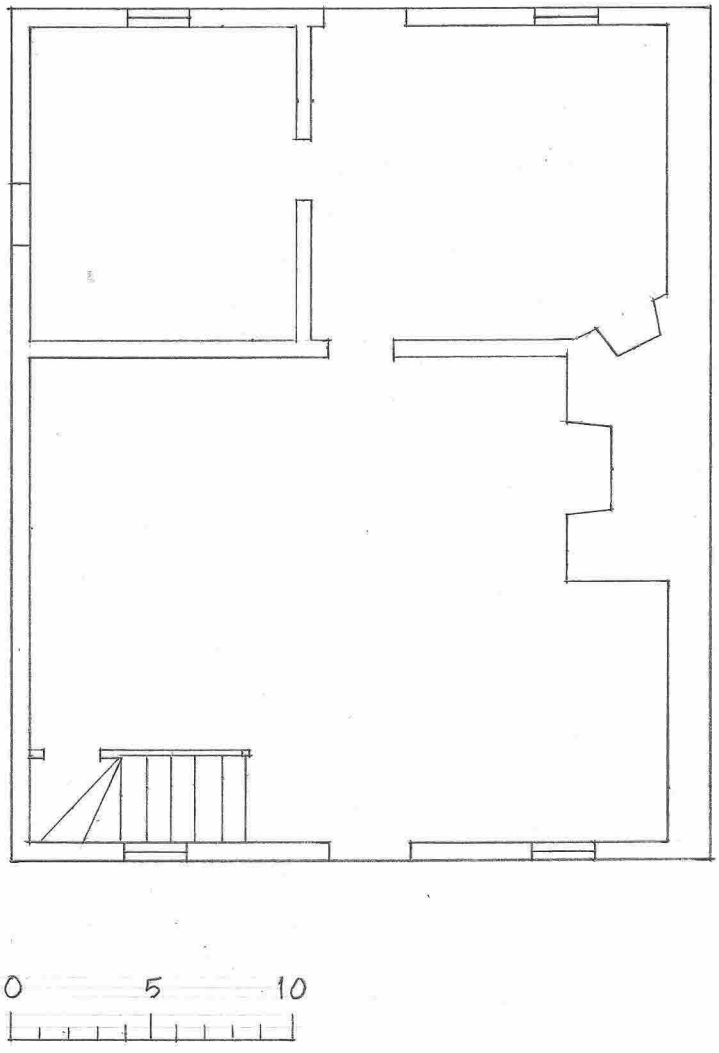


Figure 3. White Hall, Talbot County Maryland (c. 1725-1750).
After Henry C. Foreman (1967).

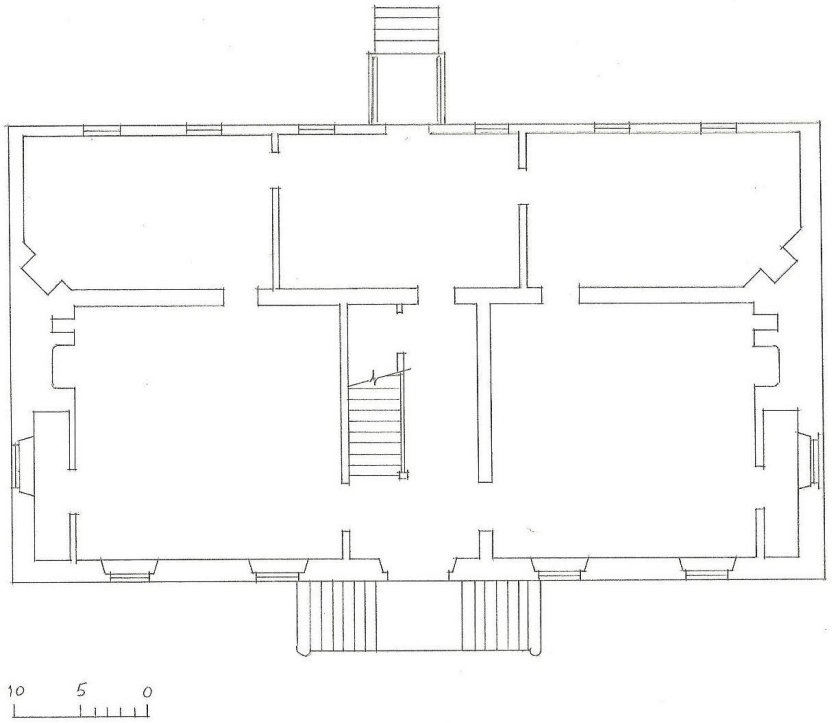


Figure 4. Ludwell-Paradise House. Williamsburg, Virginia.

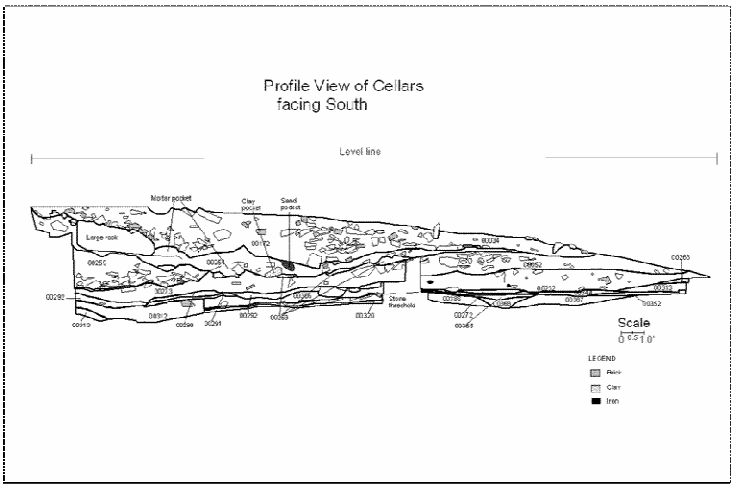


Figure 5. Profile through period I and II cellars, showing threshold of period I cellar doorway. Period I cellar at right. George Washington Foundation.

Figure 6. Archaeological Plan, Period II Cellar. Note west door of period I cellar shown at left. George Washington Foundation.

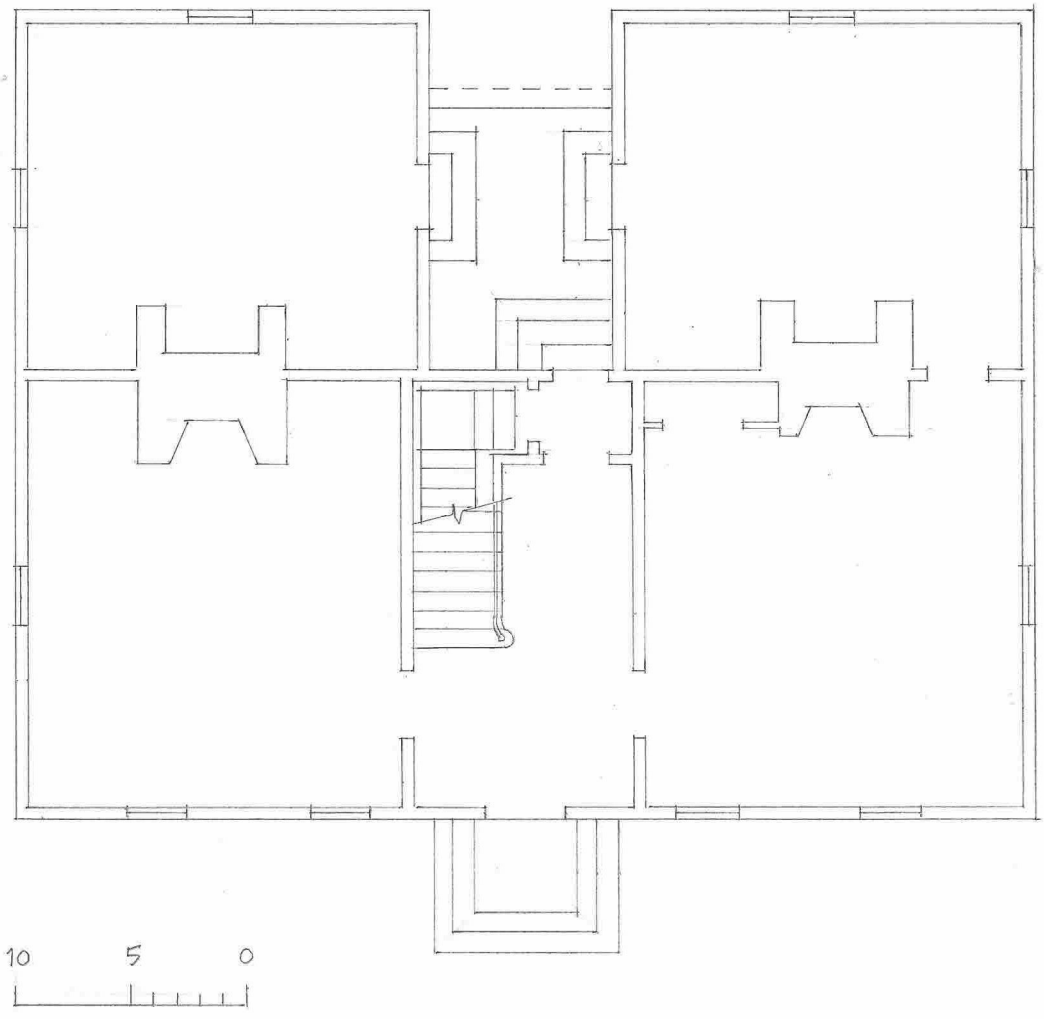


Figure 7. Everard House. Williamsburg, Virginia.

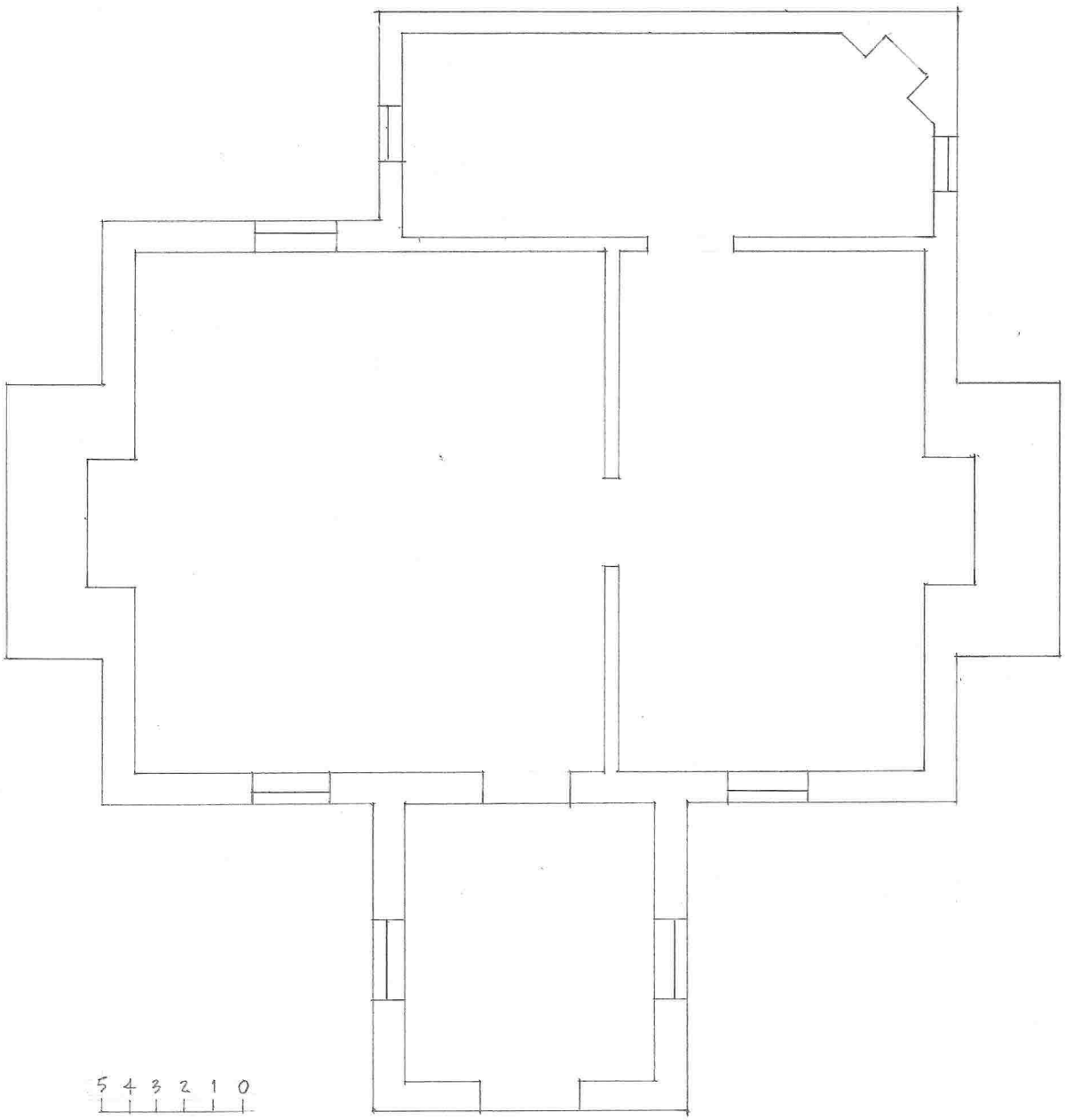


Figure 8. Matthew Jones House. Newport News, Virginia (c. 1720; 1727). *After Willie Graham (1991).*

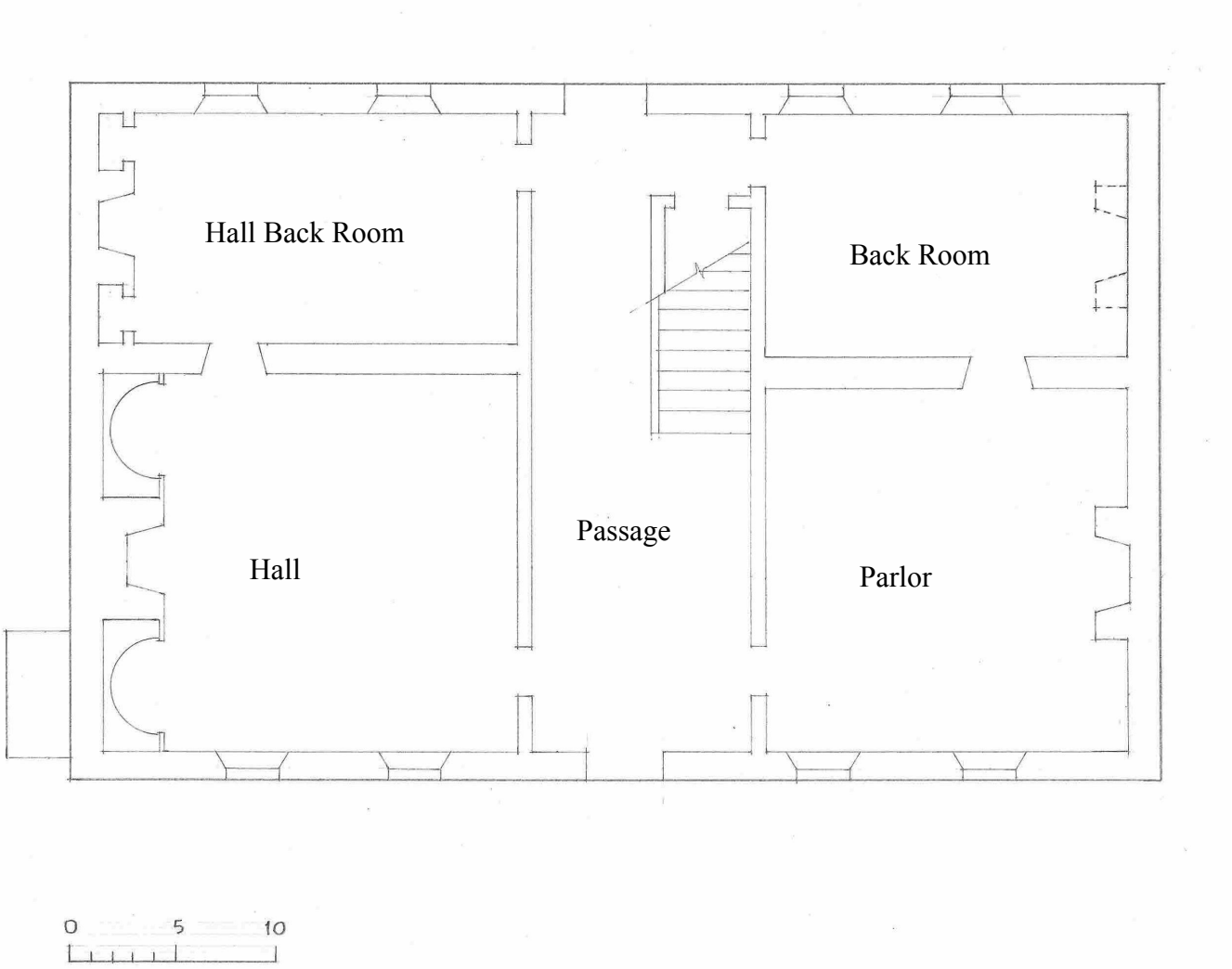


Figure 9. Four-Mile Tree. Surry County, Virginia. (1745).
After Dell Upton (VHLC, 1976).

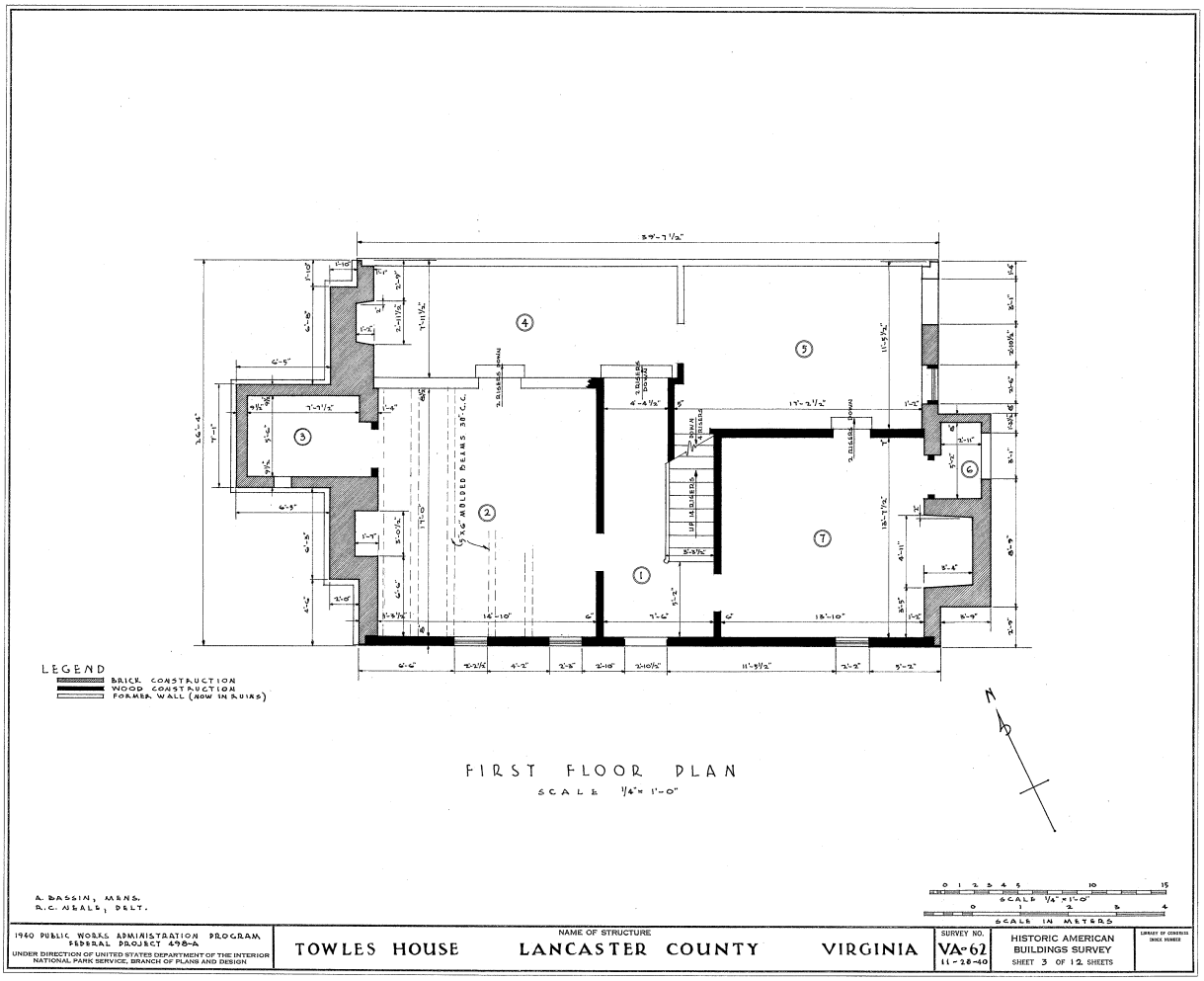


Figure 10. Towles House. Lancaster County, Virginia. (Early 18th century). *H.A.B.S. (Library of Congress, 1940).*

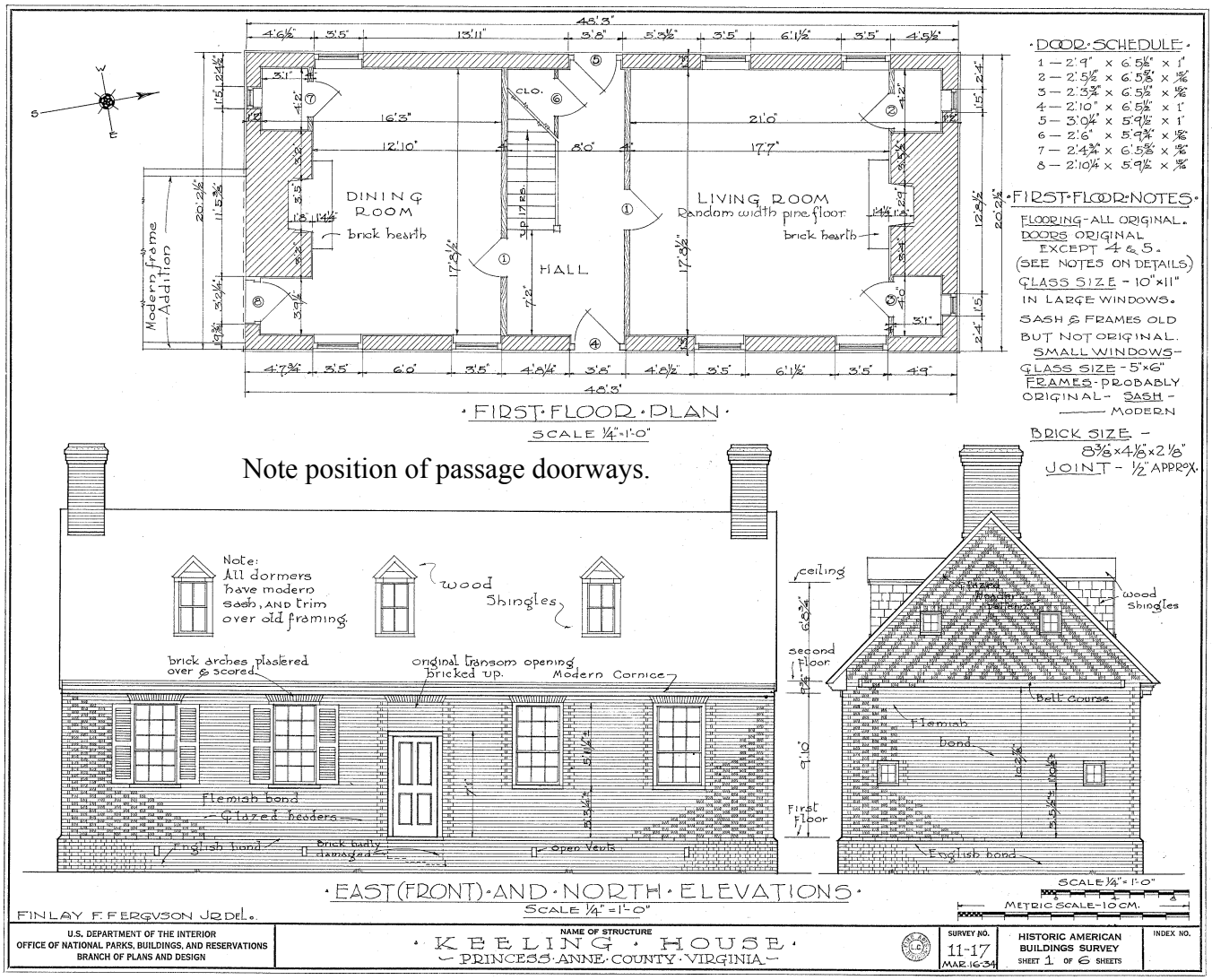


Figure 11. Keeling House. Virginia Beach, Virginia. *HABS, Library of Congress. (1934).*

Figure 12. Merchant House. Dumfries, Virginia. (Destroyed).
Stone foundation of chimney extends above finished floor.
HABS, Library of Congress. (1933).

Figure 13. "The Chimneys." Fredericksburg, Virginia.
Brick chimney borne on a stone foundation.
Jennifer Glass (2012).

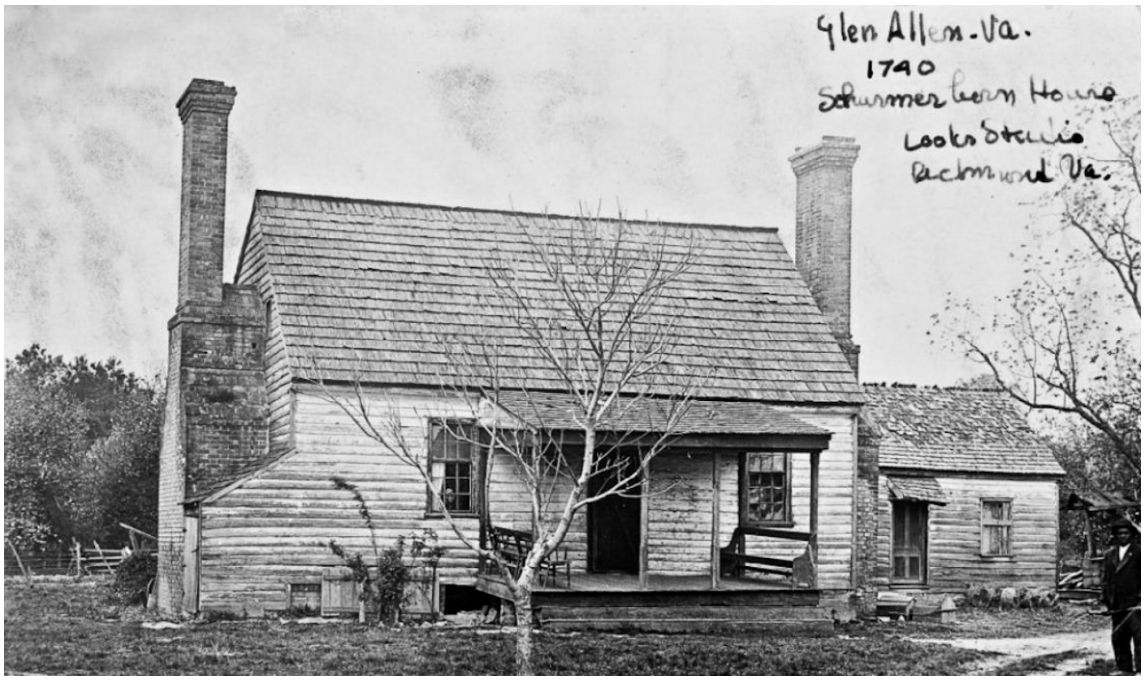


Figure 14. Schurmerberg House. Glen Allen, Virginia. (Destroyed).
Deep chimneys, with weatherings on three faces.
Valentine Museum. (Date unknown).

Figure 15. Lynnhaven (Wishart) House. Virginia Beach, Virginia.
Large chimney, with foundation stepped at grade.
National Register of Historic Places. (1969).

Figure 16. Eagle's Nest (Claybank). Charles City County, Virginia. Weatherings below stack on three sides. *DHR.*

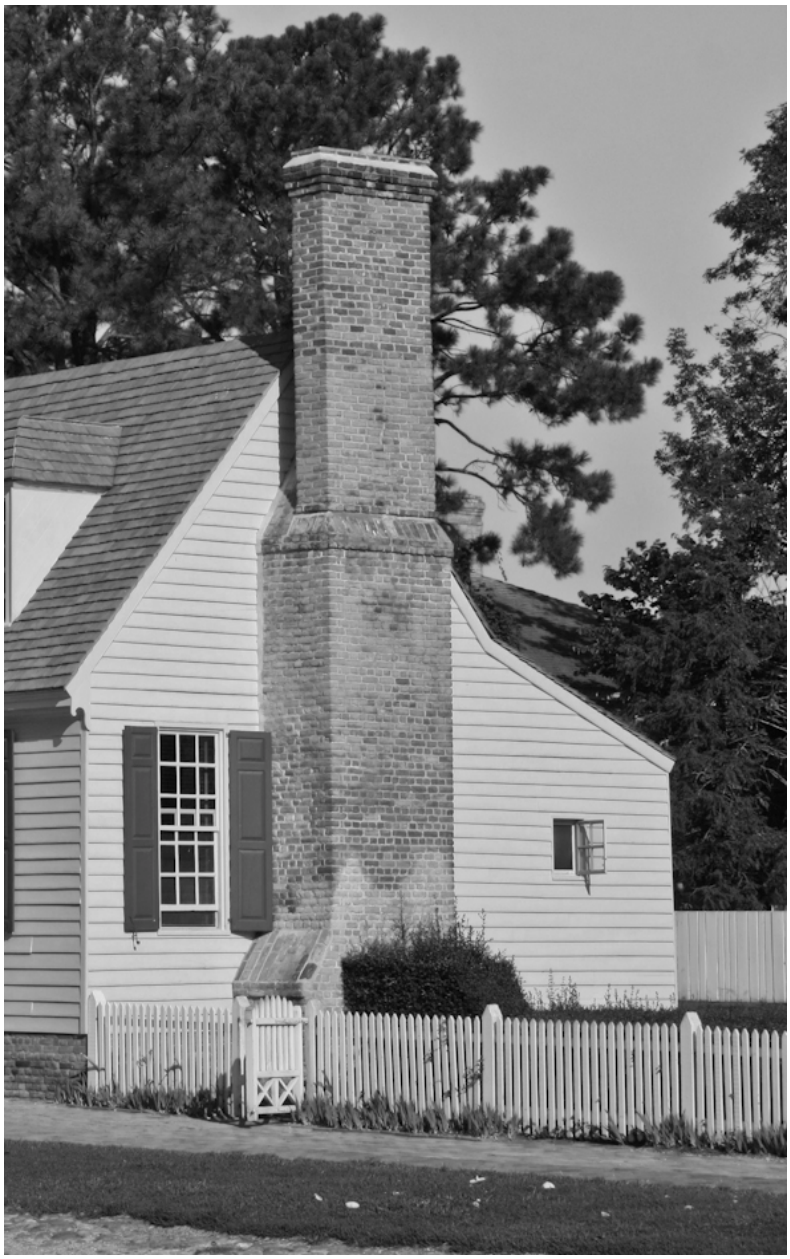


Figure 17. John Blair House. Williamsburg, Virginia. Chimney. *Jennifer Glass. (2012).*

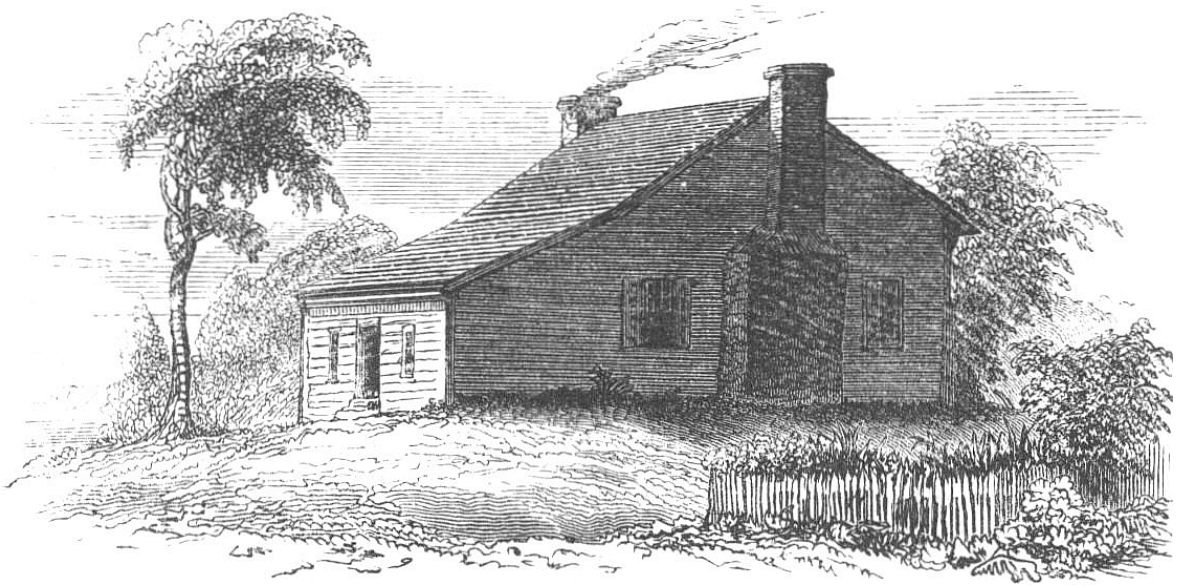


Figure 18. Ferry Farm. *Benson J. Lossing. The Pictorial Fieldbook of the Revolution, 1848.*

Figure 19. Kittiewan. Charles City County.
Added shed abuts rear ell. *(2007).*

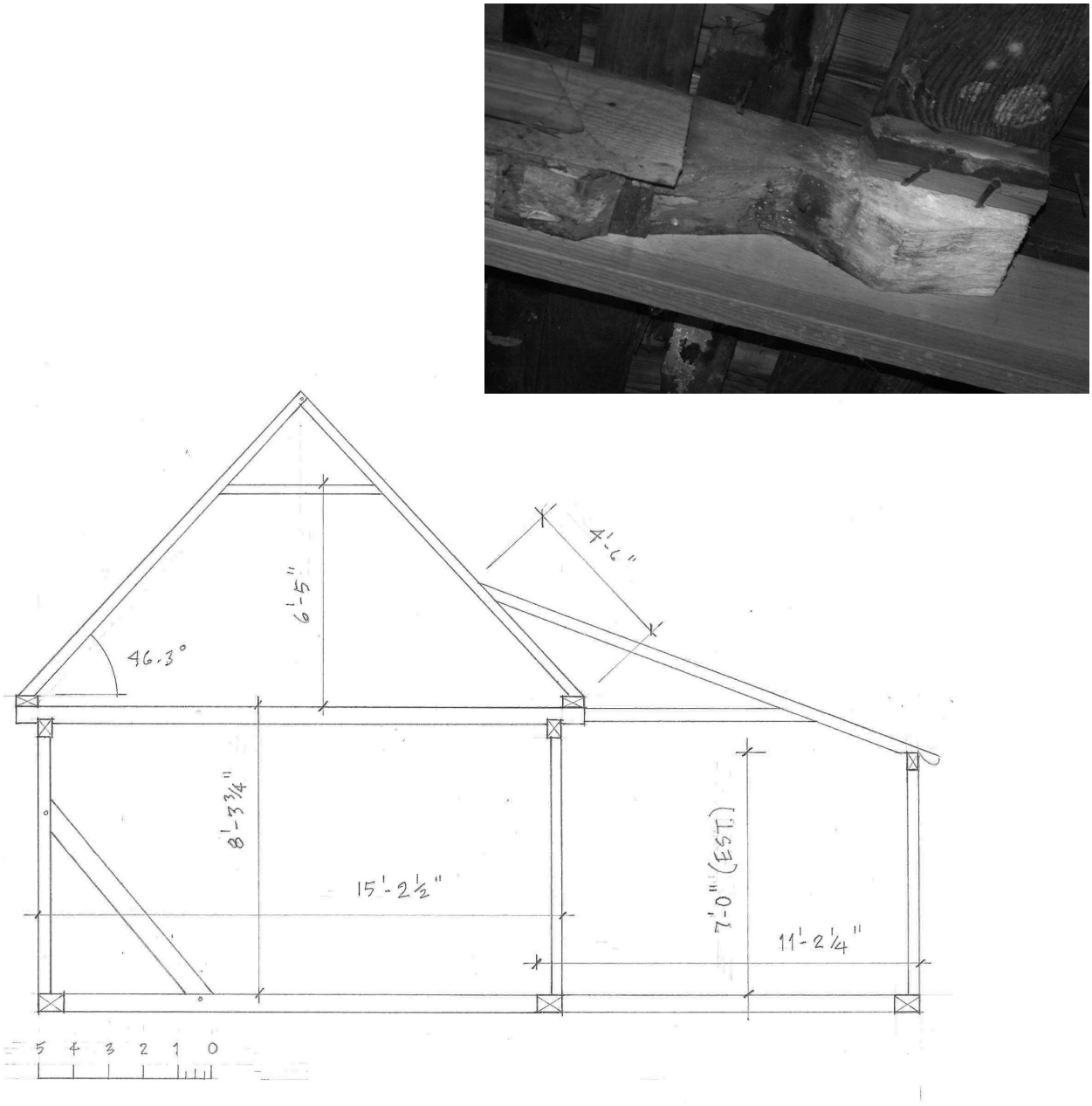


Figure 20. 304 Queen Street, Edenton, North Carolina.
Mark R. Wenger (2012).

Figure 21. Linden Farm. Richmond County, Virginia.
Side elevation shows shed rafters attaching at ridge of main roof.
National Register of Historic Places. (1976).

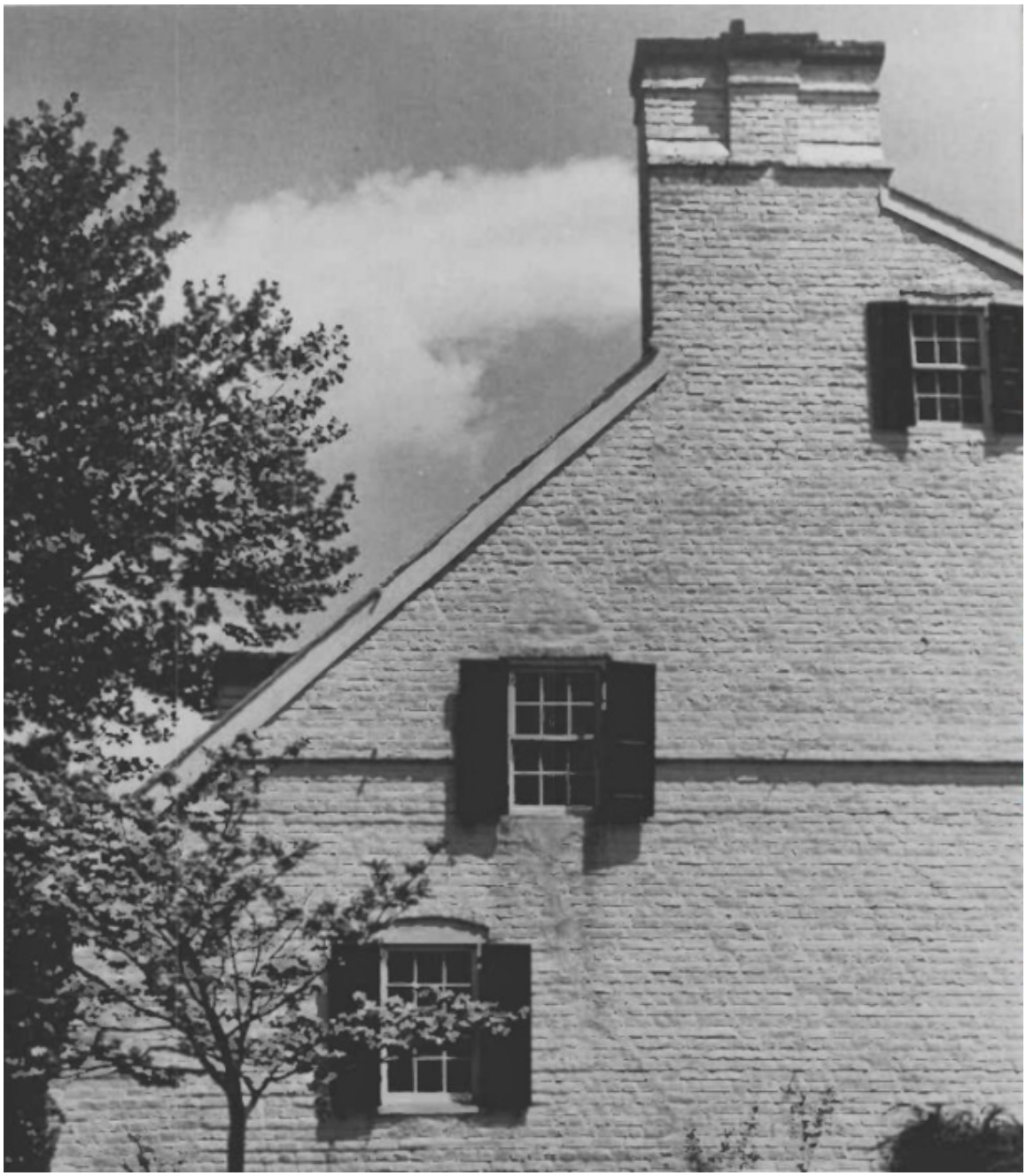


Figure 22. The Reward. Kent County, Maryland.
Gable end window above ceiling of rear shed.
National Register of Historic Places. (1977).

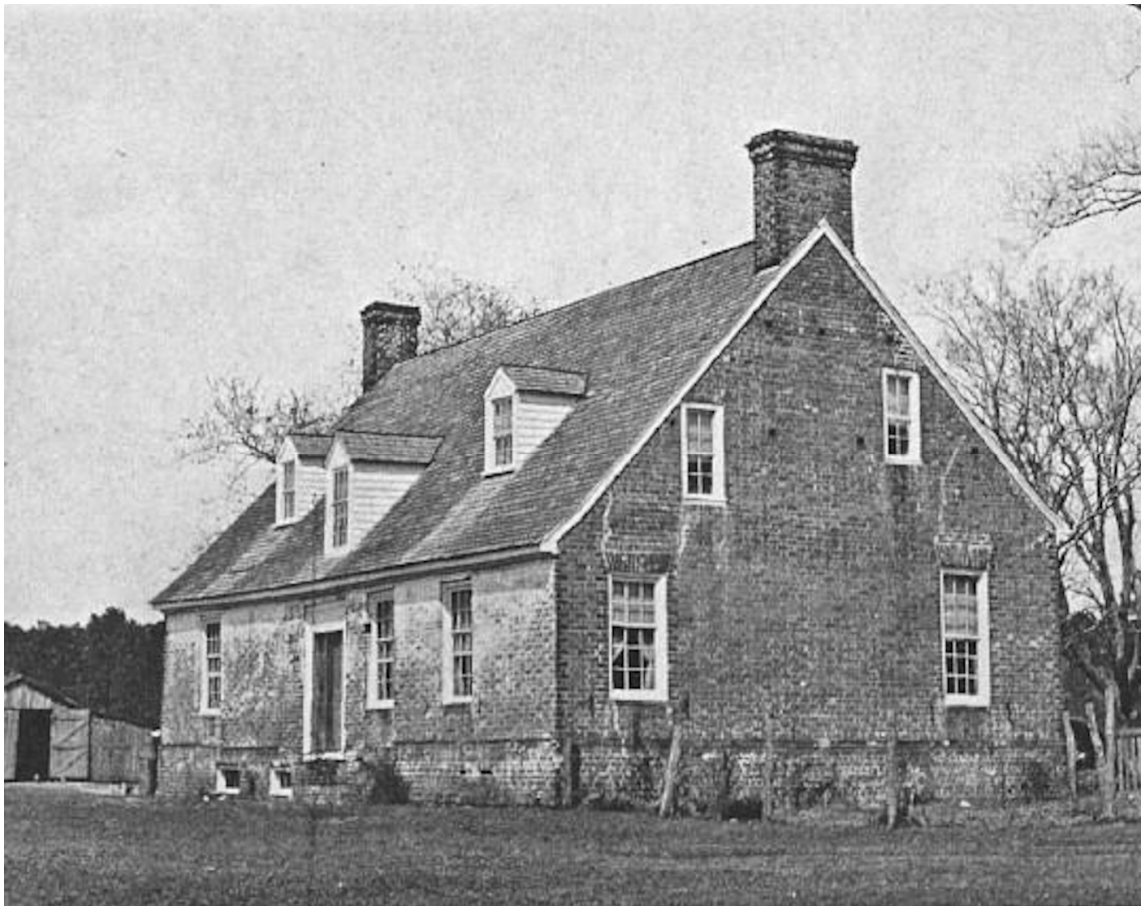


Figure 23. Hungar's Glebe. Northampton County, Virginia.
Gable-end window above ceiling of lower back rooms.
Colonial Churches of Tidewater, Virginia. (1945).

Figure 24. Belvidere, Perquimans County, North Carolina.
Gable-end window above shed ceiling.
Frances Benjamin Johnston, Library of Congress. (1936).

Figure 25. Keeling House. Virginia Beach, Virginia.
End windows lighting ground-floor closets.
HABS, Library of Congress. (1930).

Figure 26. John Blair House. Williamsburg, Virginia.
Period I house between chimneys. Note window arrangement.
Jennifer Glass. (2012).

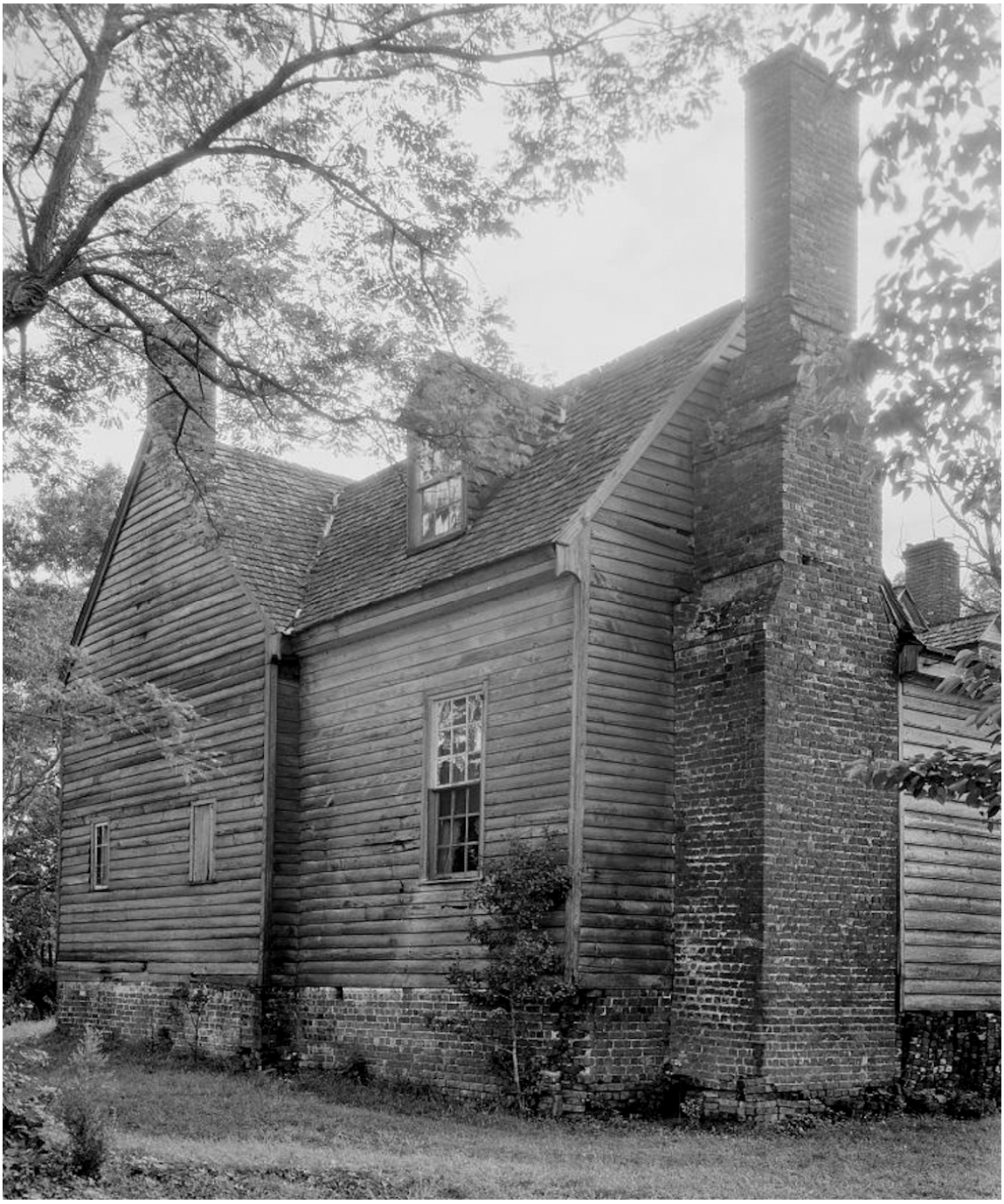


Figure 27. Kittiewan. Charles City County, Virginia.
Gable end of rear ell.
HABS, Library of Congress. (1930).

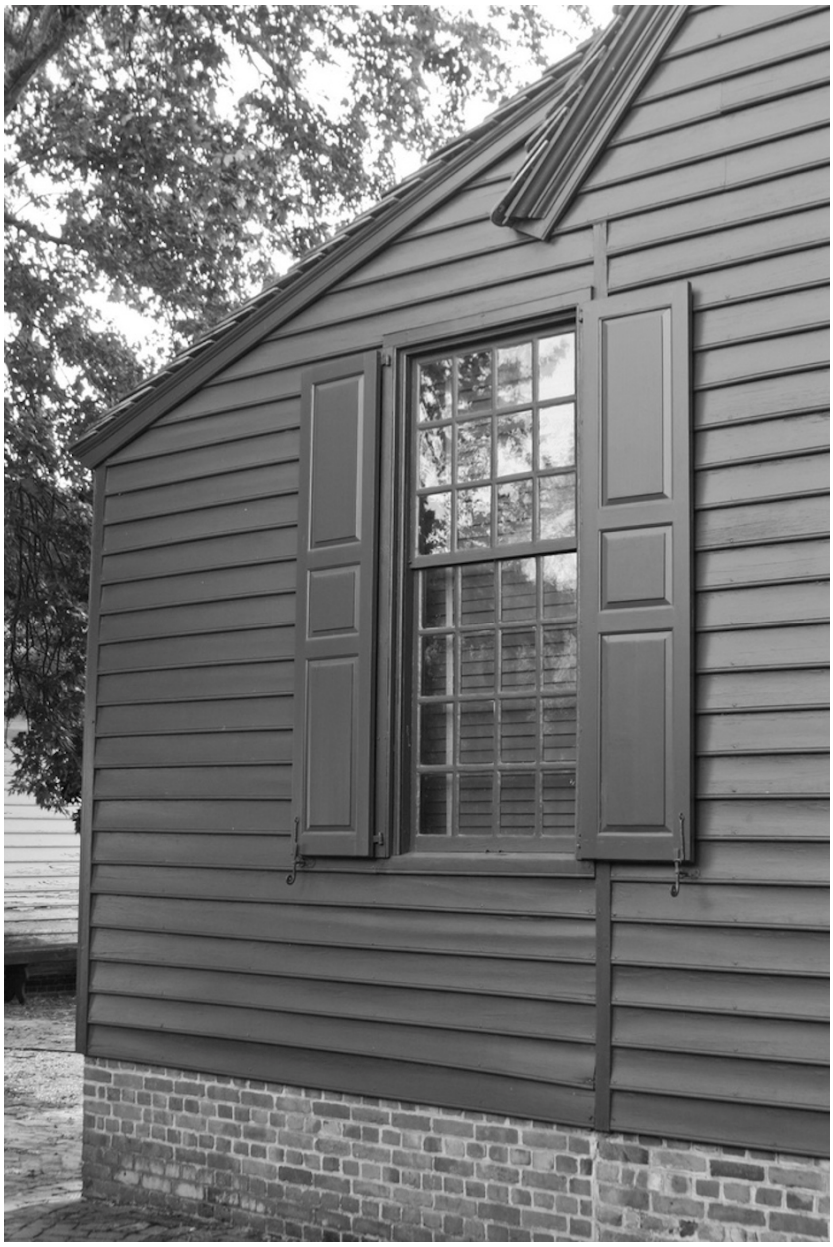


Figure 28. Wetherburn's Tavern. Williamsburg, Virginia. Window in end of rear shed.
Jennifer Glass. (2012).

Figure 29. Charlton's Coffeehouse. Williamsburg, Virginia. Pivoting cleat to hold lower sash open.
Jennifer Glass. (2012).

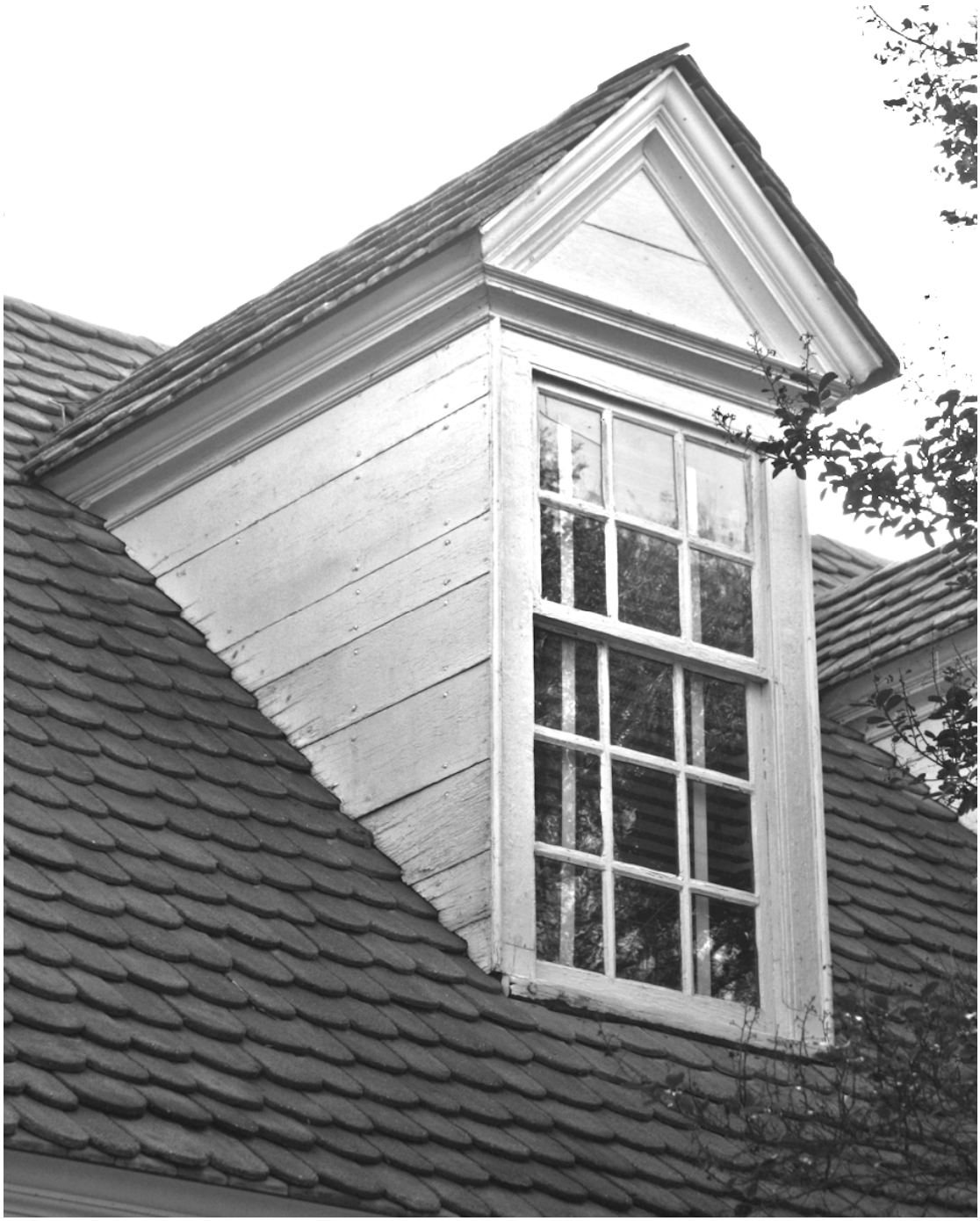


Figure 30. Everard House. Williamsburg, Virginia.
Horizontal sheathing on dormer cheeks.
Jennifer Glass. (2012).

Figure 31. Wetherburn's Tavern. Williamsburg, Virginia.
Beaded weatherboards on dormer cheeks.
Jennifer Glass. (2012).

Figure 32. Marmion. King George County, Virginia.
Early porch with rafters exposed under shingles.
Frances Benjamin Johnston, Library of Congress. (1935).

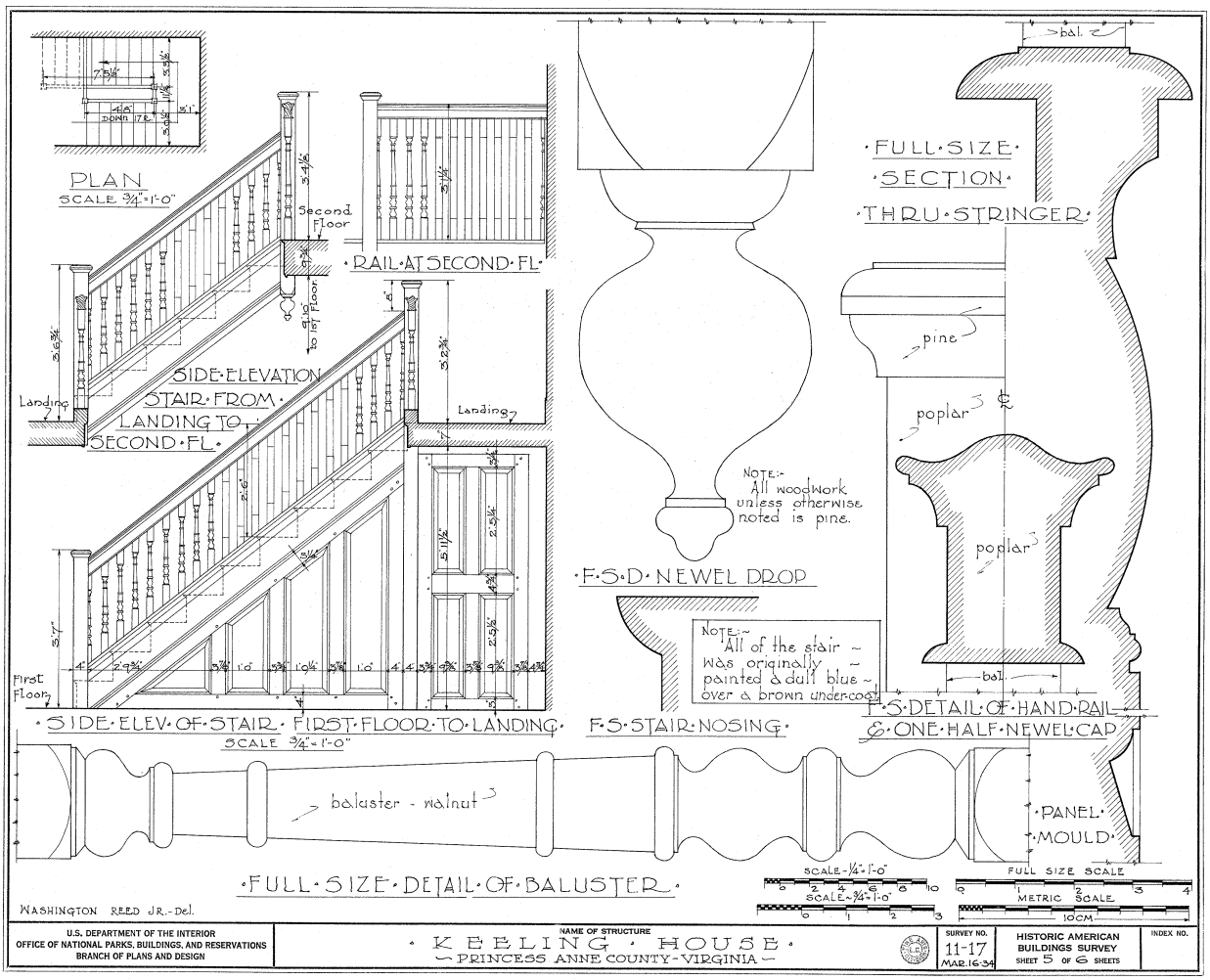


Figure 33. Keeling House. Virginia Beach, Virginia. Stair Details. *HABS, Library of Congress. (1934).*

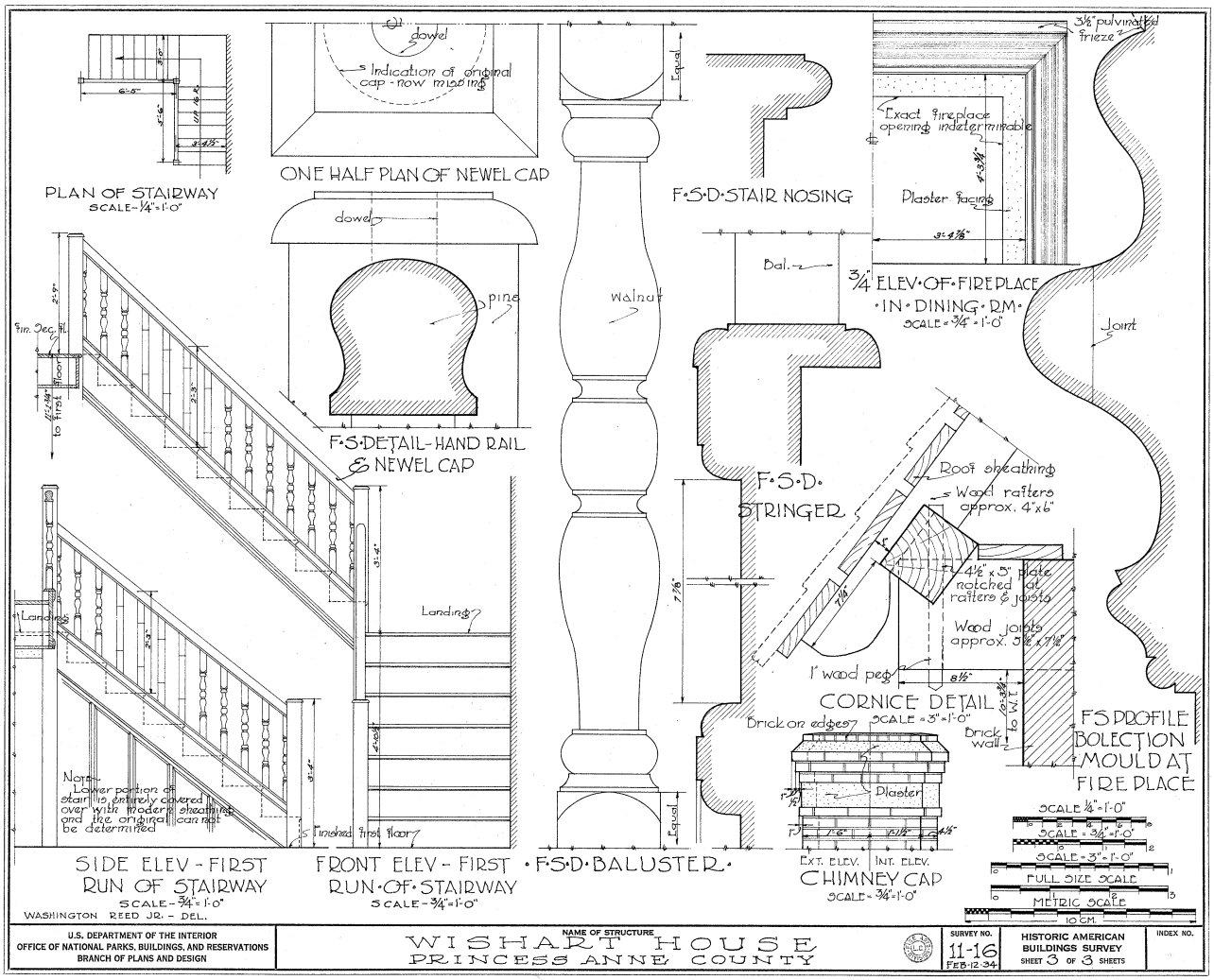


Figure 34. Lynnhaven (Wishart) House. Stair Details. *HABS, Library of Congress. (1934).*

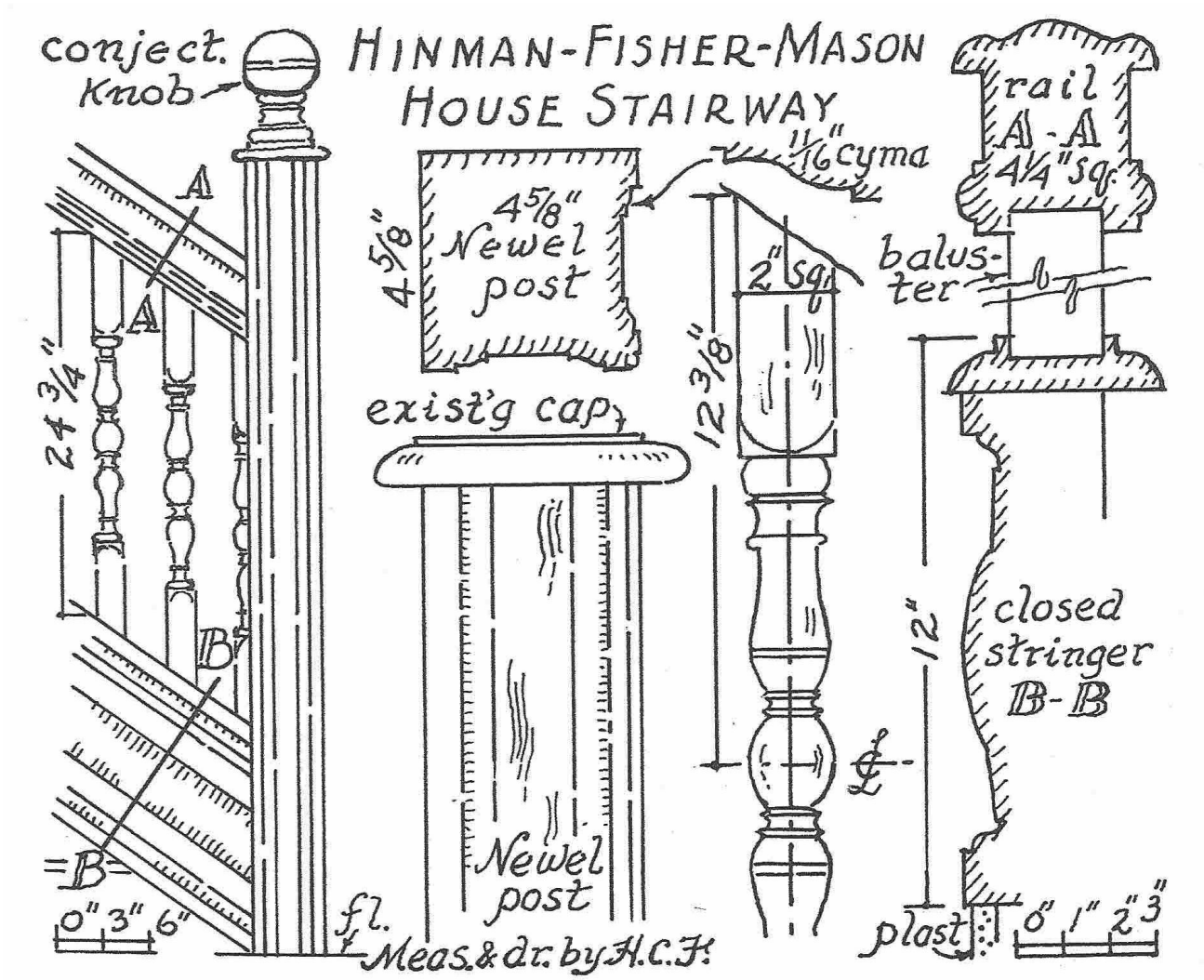


Figure 35. Mason House. Accomac County, Virginia. Stair Details. *Henry C. Foreman*. (1975).

Figure 36. Charles Carroll House. Annapolis, Maryland.
Closed-string stair, with cap details for raking and horizontal railings.
Willie Graham. (1997).

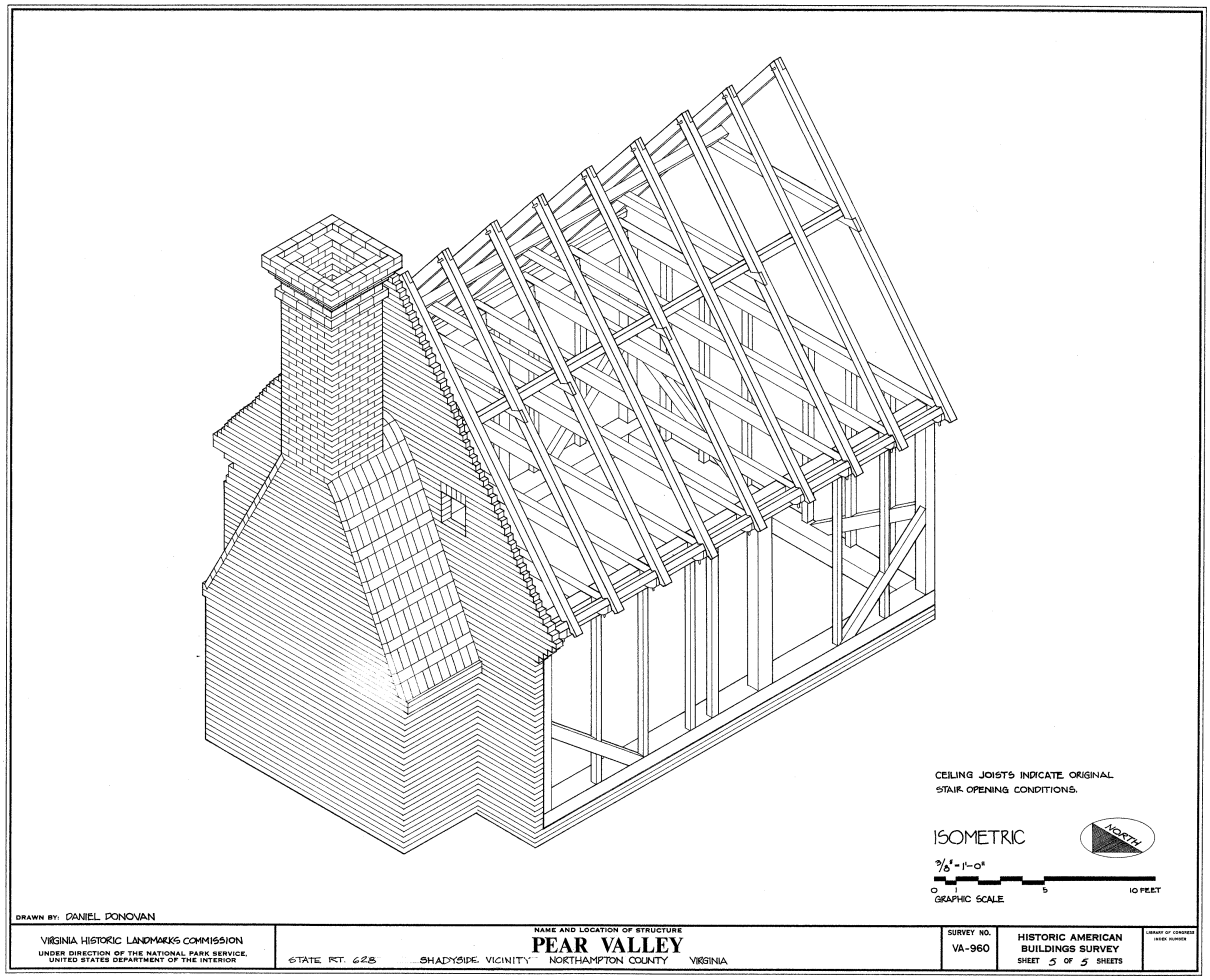


Figure 37. Pear Valley. Northampton County, Virginia. HABS, *Library of Congress. (n.d).*

Figure 38. Belle Air. Charles City County, Virginia. Exposed Framing.
Willie Graham.

Figure 39. Lynnhaven House – Virginia Beach, Virginia.
Exposed collar ties, eased edges.
Jennifer Glass. (2012).

Figure 40. Bound's Lott, Wicomico County, Maryland.
Plank wall, upper floor.
HABS, Library of Congress. (1976).

Figure 41. Keeling House. Hall Wainscot. *HABS, Library of Congress*. *(1934).*