

BAYLY

Architectural Investigations // October 31, 2019 // Bayly Cabin Cambridge, Maryland



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Introduction

The building referred to as the Bayly “cabin” is a one-story, gable-roofed, frame outbuilding positioned near the middle of the lot at 207 High Street, in Cambridge, Maryland (Figures 1-2). The physical evidence reveals that the structure has undergone numerous significant alterations over the years, but the materials and methods of construction related to the intact portions of the frame indicate an 18C date. Addressing the question of the original and subsequent uses served by the outbuilding, and whether it is in its original location, was the catalyst for the recent investigations.¹ Close examination of the historic fabric has uncovered multiple construction phases, and indicates that the body of the building (excluding the roof frame) was transported, either from elsewhere on the property or from another site, and re-set on a new brick foundation. The physical evidence points to non-domestic uses after the structure was relocated to its current location, first as a storeroom and later a workshop, while the original function is less readily apparent. Based on the site context, the possibilities could include either as an office or as a kitchen/quarter.

The cabin is associated with a complex of domestic and utilitarian structures (both extant and no longer standing) that are related most closely to the prominent Caile and Bayly families, who, between them, owned the property for more than two centuries. The two-story, two-pile, side-gable-roofed main house fronts on High Street, and is composed of an earlier four-bay, frame portion, with a one-bay brick addition extending to the north. The addition matches the width of the main block and shares the same roofline and orientation paralleling the street. An ell (wing) is attached to the rear of the brick portion, and incorporates two structures -- a frame

kitchen and a squared-log smokehouse – that were originally detached and were joined by subsequent additions to form the contiguous wing. The outbuilding is roughly in line with the ell at a distance of less than 20 feet. The rooflines of the smokehouse and kitchen remain prominently visible, and, together with the house and the cabin, form a unified assemblage of aligned, sharply pitched gable roofs.

Dendrochronological testing has yielded felling dates for framing members sampled in four of the five structures, and two for the house: house roof, 1784, and the frame (sills and joists) for the floor on the first level, 1849; brick addition, 1864; kitchen, 1837; cabin, 1737. No dates could be derived for the smokehouse.² The numerous construction dates spanning well over a century reflect the complex nature of the development of the property leading to the current assemblage of building stock.³ Documentary evidence indicates that the site was occupied by the mid-18C, and that a number of domestic and utilitarian structures were erected there over the years.⁴ The 1730s dendro-date for the construction of the cabin is based on only one dateable stud out of the 10 samples that were analyzed, and there is some question whether the member is in its original location.⁵ Nevertheless, other physical evidence supports an 18C date of original construction.

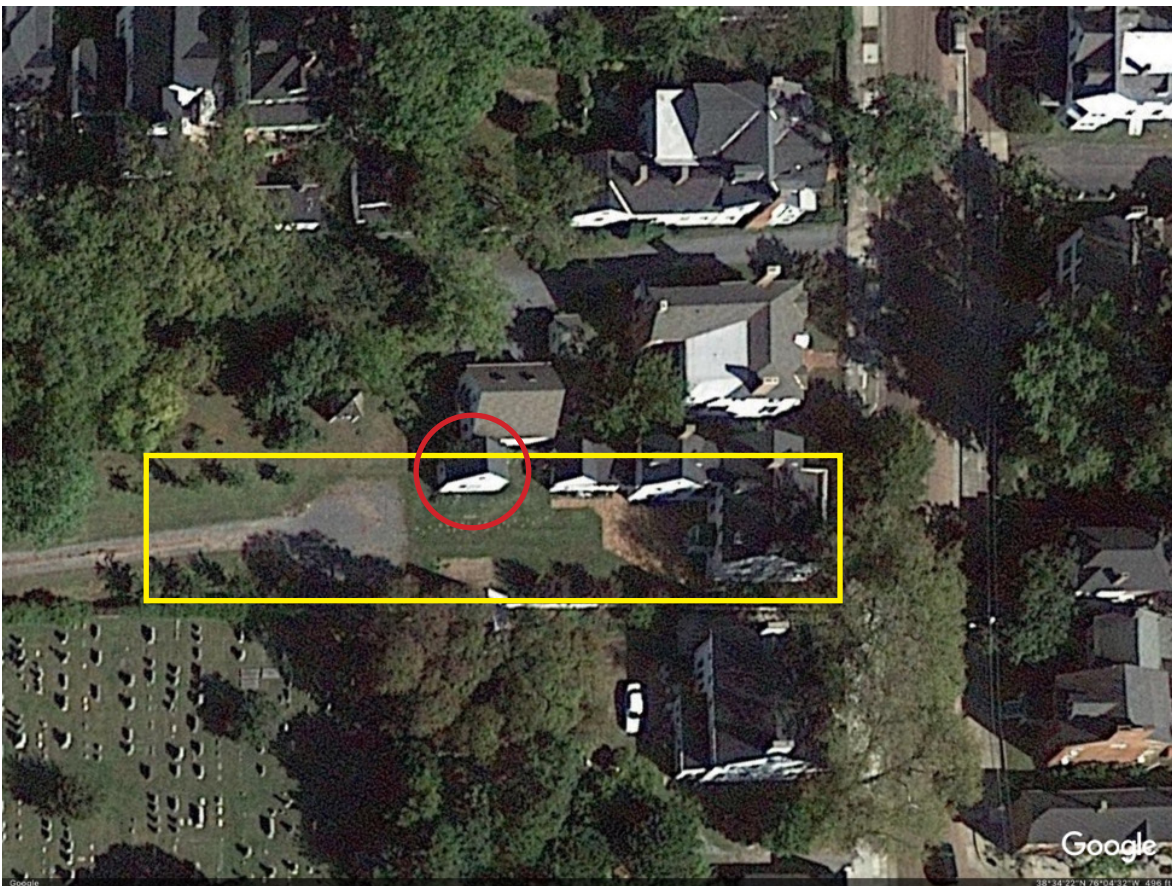


Figure 1. The “Caile-Bayly” property, 207 High Street, Cambridge, Maryland; the cabin is circled in red (grid north is at the top of the image; Google Maps, accessed December 2018).



Figure 2. South-facing façade of the Bayly outbuilding (2018); doorway and windows are later insertions.

Construction Chronology

The orientation and placement of the Bayly outbuilding on the High Street lot conforms to urban construction practices of the period. The structure is set against the property boundary and aligns with the ell attached to the rear of the main house. This arrangement was often preferred because it strengthened the barrier between the owner's property and his neighbor's. The ell is the product of several phases of construction, and likely achieved its current form when the brick addition was attached to the main house ca. 1864. The cabin is older than the structures comprising the ell, and was relocated to the current position in the mid-19C. Physical evidence also indicates that a fireplace was centered on the interior of the north wall of the cabin; placing fireplaces against longitudinal walls in service buildings was another practice that was relatively common in cities and towns that was highly unusual elsewhere.⁶ While evidence for a fireplace/chimney survives in the frame of the building, archaeological findings indicate that a fireplace never existed during the time when the cabin has been in the current location.

The fenestration is the result of multiple periods of intervention, with the doorway roughly centered on the south long wall, along with an adjacent window, and with single (barred) windows centered in each end wall and in both gables. As originally constructed, the doorway was positioned at the northern corner of the east end wall, and there was no more than one window opening. Narrow footprints and end-wall entries were a relatively standard design in urban contexts, where lots were constricted and street frontage was generally at a premium. A window set in the wall next to the doorway would have been a typical arrangement, but the alterations made to the frame have obscured any

clear evidence for another original opening. As well, the practice of building close to property lines often made windows in side walls moot. If arrayed as an office or a shop closely spaced in a series of similarly narrow structures making up a residential or mixed residential/commercial block, the Bayly outbuilding would have fit in without notice.⁷

While the placement of the Bayly outbuilding is not unusual, the dimensions and overall character of the structure are uncommon for a freestanding outbuilding. At only roughly 12 feet wide and 20 feet in length, the elongated footprint combines with the steeply pitched gable roof --- oriented toward the long side-walls -- to present a novel appearance in this context. The unusual orientation of the roof in relation to the width presumably relates to the intention for the attic to be a useable space; a more typical design with the roof gable aligned with the short axis, combined with the narrow span, would have severely restricted the attic headroom. Outbuildings found on urban lots that would ordinarily be heated commonly include kitchens, laundries, and slave quarters (often in combination); less frequently found are offices, shops, and stores.

The urban context and unusual original plan combine with the slightly upgraded level of interior finish to infer a possible original function for the building. Separate structures that were generally well-appointed but usually modest in dimension, often were erected to serve as business offices and/or as consulting rooms for lawyers, merchants, and physicians. Buildings of this type are known to survive at rural plantations, but they naturally were more common in towns and cities. A standard feature of offices was

a source of heat, which appears to have been the case at the Bayly outbuilding as well.⁸ Two members of the Caile family, who owned the High Street property during the 18C, were merchants, and a 1771 valuation of the Caile property by the Orphan's Court listed a building as an "Office house." During the Bayly family tenure in the 19C, Alexander H. Bayly was employed as a physician.⁹

A series of three plans of the city of Cambridge, prepared between 1885 and 1896 by the Sanborn fire insurance company, reveal the pattern of long telescoping wings attached to the rears of domestic structures, along with the presence of numerous small buildings identified as offices (Figure 3). While the term "office" was often used as a synonym for outbuilding throughout the 18C and 19Cs, it is clear from the context of the Orphan's Court listing and other documentary evidence that this was not the case when referring to the Caile-Bayly property. In addition, the several small structures – similar in size to the Bayly outbuilding – that are labelled on the Sanborn maps as offices, are most often oriented with their narrow dimension fronting on the street.¹⁰ Given the proximity of the county courthouse, it is likely that most of the structures in question were associated with lawyers. The ell shown at the Bayly property in 1885 closely matches with the current conditions.

Another possible function for the outbuilding may have been as a kitchen. A kitchen is also listed in the Orphan's Court Valuation, described as frame construction with a brick chimney. The current kitchen, which has been incorporated into the ell, was originally 22' by 15' in dimension, and it also has a fireplace centered on the rear longitudinal wall.¹¹ With the dating of the current kitchen to 1837, the timing would allow an earlier structure to have been relocated to make

way for the new iteration. The dimensions of the kitchen in 1771 are given as 20' by 16', however, which represents a significant departure from the 20' by 12' dimensions of the cabin. Although faulty recording of building dimensions in period documents is not uncommon, with reference to other primary sources, 20' by 12' would be an unusual footprint for a kitchen, even in an urban context.¹² The interior of the cabin also gives no evidence of having been darkened by soot, which is a quite common characteristic of early kitchens, and the lack of windows would be unusual as well. If the building was a kitchen, the attic could have served as a domestic space, albeit one that was unheated.

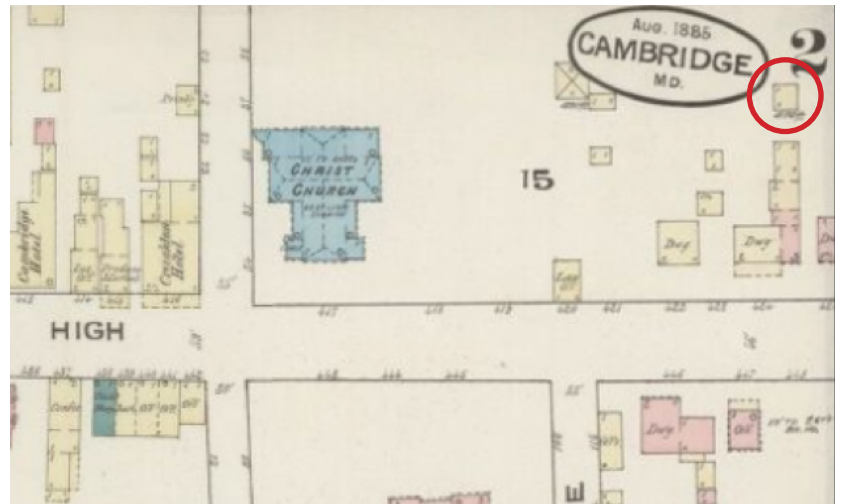


Figure 3. Detail of 1885 Sanborn map, with the Bayly outbuilding circled in red; numerous small, 1-story structures located along High Street and Court Lane are labelled as offices.



Figure 4. Southwest corner of the Bayly outbuilding, with the current pier resting on an earlier pier or partial foundation (2018).

Physical evidence points to the body of the Bayly cabin as having been moved from another location. The surviving original framing members for the four walls and the ceiling are consistent, with the same materials and methods of construction, and which point to an 18C date. The character of the brickwork in the foundation upon which the frame rests is considerably later in date, however. In addition, the roof frame is composed of materials (some of which appear to be re-used) and fasteners that are from the 19C, and the earliest surviving exterior weatherboards are attached with mid-19C cut nails. Thus, the body of the structure was relocated as a unit to the new site, likely in the mid-19C, where it was positioned on a new foundation, outfitted with a

roof frame, reoriented, and re-sided. The dendro-dates for constructing the kitchen (1837) and for alterations to the main house (1849), may, therefore, provide context for moving the outbuilding to the current location.

The frame rests on brick piers on three sides, and on a continuous foundation along the fourth (north) wall. Archaeological evidence suggests that the foundation was a hybrid, with substantially larger piers at the corners (Figure 4). The current piers are relatively late repairs.¹³ The bricks in the foundation are of a type that date to the mid-19C; the bricks in the piers are a mixture of similar bricks and machine-made units of an even later period, laid with Portland cement mortar.

The limited evidence provided by the types of nails used in the framing support an 18C date of construction. The methods of joining the studs to the plates (mortise and tenon joints on the south wall, lapped and nailed to the exterior of the plate on the north wall) reflect 18C practices. Unfortunately, few nails are visible in those locations, as any nail heads on the exterior of the north wall frame are currently inaccessible.¹⁴ Significantly, however, where studs are attached to the surviving corner braces, heads of wrought nails are clearly visible¹⁵ (Figure 5). Also supporting the 18C date is the character of the wood surfaces, which are either hand-planed, pitsawn, or a combination of pitsawn and hewn.

Many elements of the frame for the walls and ceiling are original. The southwest corner post survives, as do all of the studs and the plates on the north and south walls, and all of the corner braces. The east and west walls have been significantly altered, but the east girt survives, along with several studs on both walls. The losses are due to deterioration and replacement, and to accommodate removing the doorway on the east and installing



Figure 5. Northwest corner interior, showing the replacement corner post and sills (circular sawn), and two original down braces and two studs; studs are attached to the braces with wrought nails (2018).

windows centered on both walls. Along with three of the corner posts, the sills on all four sides have been replaced, as have the floor joists. A post and short joists anchored by a concrete pad were inserted at the southeast corner to compensate for the failed sill. The replacement floor joists are attached (toe-nailed) to the sills with wire nails. All of the floorboards on the lower level have been replaced with circular sawn units, but much of the flooring in the attic is original. Dimensional wood boards and blocks have been inserted throughout the building as needed to replace or shore up deteriorated members.

As built, the frame was intended to be visible on the interior. The lower corners on the surviving end girt, one surviving corner post, the two wall plates, and the four ceiling joists, are all chamfered with decorative stops. This stylistic feature represents a modest but conscious upgrade to the exposed frame, which would be obscured if a plastered ceiling and walls were installed. There is no evidence for a ceiling or wall covering (plaster or plank), and many layers of whitewash remain on the exposed surfaces of the post, braces, and studs, and on the joists, the girt, the plates, and the bottoms of the floorboards.

The current doorway in the south wall dates to the mid-19C, when the body of the building was moved to the current location. A post and header were installed to frame the opening and are fastened with mature cut nails. The door is made of six 1"-thick vertical planks, with three original battens fastened with clinched wrought nails. The leaf is currently suspended from hinges made from sheet metal, which replaced two wrought iron strap hinges anchored with driven pintles. The door likely is original to the location, even though currently it does not match with the opening.

The roof frame likely was erected at the time the structure was relocated to the

current site. It has been extensively altered due to major repairs necessitated by widespread water damage and structural failure. The frame originally consisted of six rafter pairs, which were joined at the peak with a saddle-notch and pegged. Each surviving pair has a substantial collar, joined to the rafters with a half-dovetail and fastened with cut nails. All of the rafters have been repaired or selectively replaced, and only one of the collars appears to be in its original position (Figure 6). The rafters are sashsawn or sashsawn and hewn; the collars are sashsawn. Open lap mortises found on several members indicate that at least some of the material was reused from another structure.



Figure 6. The roof frame has been substantially altered. One collar appears to be in its original location, attached to the rafters with a half-dovetail joint, and fastened with both cut and wire nails (2018).



Figure 7. East wall frame detail, with original girt (chamfered corners) and two mortises in the bottom face, for the original corner post (left) and the door post (right); the narrow stud was inserted after the doorway was relocated (2018).

Two mortises in the end girt indicate the location of the original doorway at the north corner of the east wall (Figure 7). A substantial mortise, with two surviving pegs, indicates the position of the original corner post, which has been replaced by a smaller member. Another large mortise, with one surviving peg, is spaced roughly three feet from the corner post, which would be an adequate space to accommodate the doorway. In addition, the down braces (two each) connected to both the original (southwest) and replacement posts survive on all the walls, except at the northeast corner. A doorway in that location would have interfered with a matching brace, and thus its absence is likely an original condition. Another mortise in the girt is positioned roughly two feet south of the presumed doorpost, which related to a stud that was removed to accommodate the later barred window. A narrow stud has been inserted in the bay between the current window and the corner post, where the opening for the doorway had been located.

Differences in the pattern of the layout of the studs found in the two end walls suggest that a window opening may have been incorporated into the east wall, but not on the west. What appear to be two original studs survive on the east wall to the south of the current window. They are unusually tightly spaced at only 1'3" on center, and they are likely lapped to the exterior of the girt. The use of mortises to attach vertical members at the north end of the wall, and laps for the studs elsewhere, presumably reflects the desire for greater structural support for the doorway at the corner of the building. The surviving studs on the west wall are more regularly spaced on either side of the later window opening. As the west wall girt has been replaced, evidence for any mortises or lap joints for studs are not available. Therefore, while it is not possible to confirm that a window had been an original feature of the east wall, the differences in the pattern of the studs between the walls is suggestive, and at least raises the possibility that an opening for a window had been incorporated into the east wall.



Figure 8. Detail of the frame along the north wall, east of the stairway, and the patch in the ceiling floor; the ends of the short joists are sistered with 1" planks (circled in red) (2018).

One of the most telling features of the building is the evidence for a gap in the ceiling frame, and for an associated opening in the floor (Figure 8). The first joist in from the north wall is discontinuous, with a gap of roughly 4'3" near the center. A patch in the ceiling floor corresponds to the east-west dimension of the gap, and spans from the north wall plate to the second joist. Planks to bridge the opening are fastened with cut nails to each side of the inner ends of the first joist. The chamfered lower corners of the planks match the joist. The boards for the patch covering the opening in the ceiling floor are distinct from the surviving original boards, and are attached with cut nails. Thus, the similarity in materials indicates that both spaces -- the gap in the joist and the opening in the floor -- were closed at the same time.

The most likely explanation for the opening in the ceiling is that it accommodated the brick chimney for a fireplace, a feature of the original construction that was abandoned at the time the building was repositioned. The almost exactly square opening (4'3" by 4'2½") seems unusually generous for a chimney in such a small building, but the joist spacing was a determining factor in the north-south dimension. Where a substantial opening of this type was incorporated into the frame of buildings, standard practice of the period called for inserting members (headers, trimmer boards) to finish the opening and provide support for the truncated joists as well as for the adjoining floorboards. There is no evidence (remnants of wood, nail holes, ghost marks) to indicate that supplemental framing had been installed.¹⁶ However, another method that was sometimes used in the specific instance of accommodating an interior chimney was to support the ends of the two short end joists by resting them directly on the face of the masonry base.¹⁷ An example of this strategy is visible at the 18C brick kitchen located at the Alms House site in Machipongo, in Northampton County, Virginia. At Machipongo, the ends of the joists for a 19C addition are cut at an angle to rest against the sloping sides of the shoulder of the chimney base (Figure 9). The ends of the short joists at the Bayly outbuilding are angled slightly in a similar manner. Therefore, the first joist, which has been sistered and now spans the length of the structure, consisted originally of two shorter individual members that rested against the chimney mass.

Recent archaeological excavations at the Bayly site failed to reveal evidence for the base of a fireplace beneath the wood floor.¹⁸ Therefore, the fireplace/chimney related to the opening in the ceiling was not re-erected when the structure was moved to the current location. Evidence found on some of the materials in the roof reveals that they were reused, and, togeth-

er with the cut nail fasteners, indicate that the frame was a later installation, most likely dating to moving the building in the mid-19C. While it would have been possible to infill the rafters and patch the roof, changing the function of the building and removing the chimney likely led to replacing the frame. A related factor may have been to raise the roof pitch to increase the useable capacity of the attic.

Even if the pitch was not altered, the unusually wide (for the size of the structure) span of the gable would have provided ample head room, and access to the space almost certainly was an original feature. Abundant evidence combines to indicate that the current stairway and its placement against the north wall is not original to the current building location. This is further supported by evidence found in the ceiling floor, as the ends of the boards that are attached to the joist forming the opening of the stair are roughly cut, as if they were trimmed in place. In addi-



Figure 9. The exterior of the chimney base of the Machipongo kitchen, incorporated within a 19C addition; in this instance, the end joists of the addition were cut on an angle to rest against the sloping shoulder of the earlier chimney base (2019).

tion, rectangular holes and remnants of nails likely related to attaching boards are visible in the top of the north wall plate. Therefore, it appears that at least some of the boards extended to the wall and were cut back to accommodate the current opening for the stairway.

The ceiling floor is composed of four distinct sections, each of which exhibit significantly different characteristics, and which reflect three or more periods of construction. The earliest and likely original portion of flooring covers the eastern third of the space, and consists of boards ranging from 7-10" in width, which have been hand-planed, gauged and undercut, and tightly butted together – all characteristic 18C practices. The other versions are unfinished on the bottom and lay flush with the joists. The original section has a heavier build-up of whitewash, and those boards are fastened with T-headed wrought nails.

Included within the expanse of the earliest floorboards are several short boards that span between the south wall plate and the first joist, forming what appears to be a patch that is roughly 4'9" by 2'3" in dimension. As the current stairway is not an early feature, this evidence may mark the location of the original access to the upper level. The boards comprising the patch match with the other floorboards that are inferred to be original, however, and they are fastened with identical wrought nails. Therefore, if the boards mark the original stair location, it would appear that the opening was closed at a relatively early date, possibly before the body of the building was relocated. Other than the current ladder stair, there is no evidence to indicate the location of another stairway.

The ceiling floorboards to the west extend roughly eight feet, and are wider (ranging from 11½" -15") and laid with a ship-lapped joint. The boards in this

section are also fastened with wrought, T-headed nails, but the whitewash covering their undersides is much thinner than is the case with the first section. Therefore, the two different types of flooring either were installed at the same time, but with boards that had different histories, or they were laid at different times but with almost identical nails. In either case, other evidence indicates that these events must have occurred before the structure was relocated to its current location. It was several of the ship-lapped boards that appear to have been trimmed to allow for the insertion of the current stairway against the north wall.

The character of the floorboards comprising the square patch roughly centered along the north wall affirm that it was installed considerably later than the first two sections of flooring. The boards are sash-sawn and closely butted together, attached with cut nails. Their undersides are covered with a relatively thin, well-preserved layer of whitewash.

The four boards covering the west end of the ceiling were laid in the 20C as a repair relating to the failure of the roof. These boards are circular sawn, butted together, and fastened with wire nails. There are differing thicknesses of whitewash and/or paint on the undersides, which suggests that the units are mis-matched and likely reused.

The shelves that were placed against the north and east walls provide crucial evidence to help sort out subsequent modifications to the structure. It is not entirely clear when and exactly where the stairway was first positioned against the north wall, but the current stairs must have been installed significantly after the structure was relocated. The current shelf extends across the gap in the ceiling marking the former location of the fireplace, and thus must have been installed after the chimney was removed and the floor was

patched (Figure 10). The west end of the board has been cut just east of the ladder stair, leaving a rough, vertical surface. This indicates that the shelf had extended farther to the west along the north wall before it was shortened to allow for the current stairway. Therefore, access to the attic could not have been in this location until after the shelf board was altered. The beveled opposite end of the north shelf indicates that it was attached to another shelf that ran along the east wall. As that unit would have conflicted with the original doorway, installing the shelf and relocating the doorway to the south wall likely occurred at roughly the same time. A third shelf may have also run along the west wall. The barred windows were installed after the shelves were removed from the east and (likely) the west walls.

The shelf board is sashsawn on the bottom and planed on the top, with a rounded front edge, and is supported by three brackets -- two originals and one replacement. Cut nails attach the shelf to the original brackets and to the wall studs (Figure 11). The shelf is 1'4" wide and currently runs from a point roughly 1'2" from the east wall, to just east of the current ladder stair. The east end of the shelf has a beveled edge (with two protruding cut nails) where it lapped over the previously adjoining board along the east wall; connecting boards in this way is a common feature of early shelf systems. The third bracket, consisting of a 1"x3" plank attached with cut nails, was inserted at the east end of the shelf to offer the necessary support after the companion shelf was removed.



Figure 10. Detail of the northwest section of the north wall, showing the relationship of the stairway and the shelf; the west end of the shelf has an uneven vertical cut, indicating that it was trimmed to allow sufficient space to install the ladder stair (2018).



Figure 11. The north wall interior of the Bayly outbuilding, showing original plate, studs, and northeast corner brace, and replaced post, sill, and joists; the end of the shelf is beveled to overlap the shelf board that ran along the east wall; end of shelf and inserted bracket circled in red (2018).

There is no direct evidence that a shelf was also installed against the west wall, but close examination of boards that were used to build a cabinet and counter positioned against the south wall points to its existence (Figure 12). The cabinet includes two boards that match the character of the surviving shelf (thickness, rounded edge, sashsawn and planed), and is attached to another similar board that serves as a counter. Thus, the cabinet/counter was likely assembled from material that was salvaged at the time the shelves were modified. Two of the three boards are 1'2" wide, which matches the distance between the east end of the existing shelf and the wall, and corresponds with the width of the absent shelf. The third board is 1'4", which matches the existing shelf, and thus is a remnant of shortening the board to accommodate the stairway. The two 1'2"-sections are 8' and 4'5" in length. As the north-south inside dimension of the cabin is only 12', combining the pieces would produce a unit that is longer than the available space. The 8' board, which makes up the counter, has a 1" bevel that extends 5" from one

end. The bevel is similar to the one found on the north shelf, and its shorter length is presumably a result of having been trimmed. The bevel in the counter board is oriented so that it could not have been joined to the east end of the north shelf, however. Therefore, the reused boards cannot be accounted for by the north and east shelves alone, and the beveled board must have been installed against the west wall.

If the shelf board on the north wall was attached to another unit along the west wall, this complicates the question of the position of the attic stairway. The patch in the ceiling floor just east of the current doorway is suggestive of a stair opening, but the boards filling the space and the wrought nails with which they are fastened suggest that if this was the location for the stair, it had been removed before the building was relocated. The intact original ceiling boards and the juncture of the shelves at the northwest and northeast corners, preclude a stairway having been in those areas. The only other candidate is at the southwest corner. The ceiling boards running along the west wall were replaced in the 20C, extending roughly 3'3" from the face of the girt. Therefore, it is possible that a relatively steep ladder stair could have been positioned in the corner, but, if so, no direct evidence for it has been found. When the cabinet and counter were installed along the south wall in the late 19C, it would have conflicted with a stairway in the southwest corner, which would have led to relocating access to the attic to the current position.

With a doorway centered on the south facade and shelves arranged against the other walls, the windowless, unheated structure would have had many of the characteristics of a store. Commercial stores in the 18C Chesapeake generally consisted of a room to stockpile and display merchandise, combined with an



Figure 12. South wall interior, west of the doorway (P2), with cabinet and counter (P3), work bench and window (P4); southwest corner post and braces are original (2018).

adjoining counting room, where business was transacted. In this arrangement, the counting room was heated and fitted out as an office, while the storage area was unfinished and generally unheated; merchandise lined the walls, arranged in cabinets and on shelves and counters.¹⁹ It is interesting, therefore, that the two iterations of the arrangement of the Bayly outbuilding seem to match with the two related functions, but in sequence rather than at the same time. Perhaps the proximity of other outbuildings and/or the main house made an adjoining counting room unnecessary.²⁰ On the other hand, as there is no basement in the main house, perhaps the outbuilding was converted in response to a lack of general domestic storage space, and thus was not commercial in nature.

Numerous modifications made to the structure circa the late 19C indicate that the function of the building changed once again. With the shelves removed from the east and west walls, the space was clear to install the current barred windows. The framing in both walls was altered to accommodate the windows, with studs shifted and/or inserted as needed. It is likely that the windows in each gable were added at the same time, as all four exhibit the same construction details. Four identical horizontal iron bars that are set into the frames secure each of the openings, and cut nails are evident throughout (Figure 13). Glass-paned sashes were installed on the interiors of the openings at a later date, and exterior wood shutters formerly existed. The first-floor sashes are hinged to swing inward; those in the attic windows also had been hinged but currently are fixed.

The characteristics of the ladder stair do not conflict with a late-19C date of construction. The carriage and treads are composed of sashsawn material joined with machine-headed cut nails. The upper ends of the stringers are butted to a wood header that spans the gap between

the plate and the second joist, and is positioned at the west end of the former opening in the ceiling floor. The sides of the header exhibit circular saw marks. While circular sawn boards were widely available in Maryland in the decades after the Civil War, sashsawn material continued to be used as well through the end of the century. Similarly, the use of wire-wound nails became common after ca. 1890, but cut nails remained in use into the first decades of the 20C.

Removing or altering the shelving along both walls, inserting the barred windows, adding the cabinet/counter, and possibly enlarging the stairway, suggest that the intention was to render the interior more amenable for human use rather than simply for storage. The addition of windows indicates that natural light and ventilation were more highly valued than before. The bars on the windows, on the other hand, indicate that securing the contents of the building remained a priority. The cabinet and counter may reflect a work station provided for someone acting as a clerk or registrar.



Figure 13. Window with hinged sash and iron bars, east elevation (2018).

The last substantive alterations to the structure that did not relate to maintenance or repairs likely occurred in the mid-20C, and further accommodated the needs of occupants. The window in the south wall just west of the doorway was installed directly in front of the counter. In addition, a second structure in the form of a bench was also added in this location, inserted to fit just below the bottom level of the counter and serving to widen the work surface. The window frame and the bench are made of circular sawn boards and are joined with wire nails. The window sashes may also have been installed at the barred windows at this time, which would have considerably improved the weather tightness of the spaces.

The inclusion of the bench and the nearby window may reflect yet another change in function. The additional light source would have improved visibility significantly when using the bench, and may

reflect a different and more frequent use, such as for a workshop. A horizontal bracket made of wood, penetrated from top to bottom by several drilled holes, is attached to the north wall opposite the bench. The configuration and the well-worn holes are suggestive of a tool rack. The rack was installed earlier than the bench, however, as it is attached with cut nails. A wood handle that bears resemblance to the rack is also attached with cut nails to the inner face of the exterior siding near the ladder, to assist in navigating the stairs (Figure 14). A small shelf, consisting of a horizontal board nailed to a vertical support, is attached to the face of the stair stringer and is similar in construction to the rack and handle; it is also attached with cut nails.

A number of later modifications were made to the building that primarily reflect repairs related to water penetration from the failure of the roof and the foundation. Along with adding the brick piers, all four of the sills and the floor joists were replaced, as well as three of the corner posts. The work of replacing the sills and the floor likely corresponded with building or repairing the brick piers. The replacement sills are standard dimensional lumber, while several of the joists were salvaged from elsewhere. The joists are a mixture of at least three different types, and at least two of the three were reused. Two of the joists are heavily charred on three sides, with ghost marks and remaining cut nails indicating where studs or other members had been attached before the fire. These joists are also substantially smaller in dimension than the others. Another joist is larger than the rest, and has a series of rectangular mortises (one with a peg) cut into one side. The dimensions and appearance of the remaining five joists match, and they may have been installed for the first time in this location (Figure 15).



Figure 14. Detail northwest corner interior, with wood tool rack attached to two wall studs and a wood handle attached to the back of the weatherboard siding (2018).

It appears that leaks in the roof caused significant water damage, especially at the west end of the building, which required considerable intervention. Portions of the roof frame and sheathing, the studs framing the gables, several square feet of the ceiling floor, and the west wall girt were all replaced. The west ends of three of the four ceiling joists were damaged as well, and each has been cut and sistered to reconnect to the west girt. All of the weatherboard siding on the gables, and large portions of it on the walls, have been replaced. On the east, the last floor joist is absent and the wall sill has completely failed. In addition to replacing the corner posts, a dimensional post was inserted in the east wall, and a concrete pad and supplemental joists were installed to shore up the southeast corner of the building.



Figure 15. Facing west, replacement floor joists; with two reused joists each with three charred faces, ghost marks for studs, and protruding cut nails (2018).

Summary of Chronology

Period

1.

One-story, possibly two-bay, side-gable-roofed, frame structure; likely functioned as an office or kitchen, or other non-domestic use; unknown location but urban context (mid-18C).

Features:

- Doorway in corner of east end wall;
- Possibly no windows or one window in east wall;
- Whitewashed ceiling/walls, with chamfered ceiling joists, plates, girts;
- Heat source consisted of fireplace and interior end chimney;
- Likely ladder stair access to attic along south wall.

Evidence:

North and south main wall frames above the sills relatively intact (totally replaced gables), except for insertion of doorway (P2) and window (P4) in south; east and west frames altered to remove doorway on east (P2) and install windows (P3) centered on each elevation. Post in southwest corner only original to survive, east wall girt survives.

Doorway located in northeast corner, east wall – two empty mortises, for doorpost (larger, pegged) and stud; no direct evidence for window openings.

Opening in ceiling floor centered on north wall related to the presence of a fireplace and chimney. Short joists with angled ends to rest on chimney shoulders.

Frame largely exposed, whitewashed – ceiling joists, plates, and girts with chamfered corners. North wall frame studs lapped to outside face of plate, studs set perpendicular; studs in south wall mortise and tenoned to plate, set parallel. Down braces survive at each corner, except along east wall on the north – omitted because of doorway in that location.

Two different early types of attic floor, both fastened with wrought nails; type one gauged and undercut, butted, heavy layers of whitewash; type two, lapped, less whitewash; “patch” along south wall, type one.

2.

Store (mid-19C); frame of building relocated to current location, doorway shifted to south wall, shelves inserted (heat source not included).

Modifications when relocated:

- Closing the opening in the ceiling and sistering the original short joists to span the length of the building;
- Relocating the doorway from the east to the south wall;
- Installing shelves running along at least two (north and east), and possibly three (the west wall as well), walls;
- Installing a new roof frame and foundation;
- Cladding with new weatherboards.

Evidence:

Much of frame 18C in date, new brick foundation, new roof frame partially composed of reused materials; new beaded siding.

Doorway in east wall closed off, new doorway inserted roughly centered on south elevation. Shelves installed along the north, east, and west walls. Opening in ceiling along north wall in-filled, gap in joist closed by sistering with members mimicking chamfered treatment of originals.

No direct evidence for location of stair.

Siding, roof frame, door post/header, sistered boards attached to ceiling joist, floor patch, and shelves all with cut nails.

Patch in attic floor along north wall using different boards and cut nails; “patch” along south wall type one boards and wrought nails.

3.

Store/shop (late 19C); modified to accommodate more uses other than storage.

Features:

- Barred windows in east and west walls and gables;
- Shelves along east and west walls removed; shelf along north wall truncated;
- Cabinet and counter against south wall;
- Stairway installed along north wall.

Evidence:

Barred windows installed in east and west walls and gables (dimensional lumber, cut nails); shelves along east and west walls removed to accommodate windows there; shelf on north wall shortened to accommodate stairway; shelf boards reused to construct cabinet and counter installed against south wall; ladder stair composed of sashsawn boards fastened with cut nails.

5.

Work shop/storage (20C)

Major Repairs:

- Replace western portion of attic floor;
- Rebuild roof frame, sister deteriorated west ends of three ceiling joists;
- Replace west girt, sills, floor joists and floorboards, three corner posts;
- Replace gable siding and selected elsewhere;
- Install bracing post at southeast corner;
- Repair/rebuild brick piers.

Evidence:

All wood repairs using circular sawn lumber and wire nails; piers a mixture of hand- and machine-made bricks; wire nails indicate ladder stair likely partially removed and reinstalled when flooring replaced.

4.

Work shop (20C)

Features:

- Work bench against south wall;
- Window installed in south wall.

Evidence:

Workbench composed of circular sawn boards and wire nails; window frame dimensional lumber and wire nails.

Possibly this period brick piers installed along perimeter except north wall.

Notes

1. Dennis Pogue and Doug Sanford conducted physical examination of the structure, either together or separately (9/14/18, 9/28-29/18, 10/21/18, 12/7/18); we appreciate the input of Paul Touart based on his own observations.
2. Dendrochronological testing was conducted by Michael J. Worthington and Jane I. Seiter, *The Tree-Ring Dating of the Bayly House and Outbuildings, Cambridge, Maryland* (Oxford Tree-Ring Laboratory, 2018). According to Paul Touart, wrought nails are visible in the frame of the smokehouse, which indicates either an 18C or a first-quarter-19C date.
3. This complexity is further demonstrated by the discovery made by archaeologists in 2018 of a small brick foundation that may relate to a privy; the foundation is positioned to the southeast of the outbuilding, on an axis quite different from the extant structures.
4. We are indebted to Paul Touart for sharing his notes on the documentary records related to the site, which will be incorporated eventually into a MHT Maryland Inventory of Historic Places data form. Touart has transcribed the Orphan's Court Valuation of the property from 1771, when it was owned by the Caile family. The listing indicates a substantial assemblage of buildings, divided according to two adjoining lots. One of the lots contained the dwelling, along with the kitchen, smokehouse, and the office; the other lot contained a heated storehouse, granary, and stable. According to the findings of the dendrochronological study, the cabin may have been one of the buildings listed; the smokehouse could not be dated, but physical evidence indicates a possible 18C date.
5. The dated sample was retrieved from one of only two framing pieces in the building that are oak (instead of pine); the oak studs are in the west wall frame, which has been significantly altered due to repairs and material replacement.
6. Edward A. Chappell, "Architecture of Urban Domestic Slavery in the Chesapeake and Jamaica," in *Slavery in the City: Architecture and Landscapes of Urban Slavery in North America*, edited by Clifton Ellis and Rebecca Ginsburg. (Charlottesville and London: University of Virginia Press, 2017), Pp. 19-51. There are a number of examples of fireplaces positioned against longitudinal walls in ells attached to residences in Alexandria. Pogue has studied the Fairfax-Montague-Moore house at 207 Prince Street, where the ca. 1785 main house had an original, two-story brick ell, with a fireplace in that position. The first-floor of the ell originally served as a kitchen, which was replaced before 1796 by an attached addition. The original kitchen space was converted to serve as a counting room for a subsequent owner, who operated as a merchant, with a store located in the main house and warehouses on the adjoining lot. The dimensions of the two-story counting house (original kitchen) were 29' by 14' – suggesting that it was divided into two rooms – the second kitchen was 16' by 16' and had one room on both the first and second floors. See Dennis J. Pogue, *Physical Investigation and Documentation of the Fairfax-Moore-Montague Kitchen* (November 2016).
7. Many side-gable-roofed, frame and brick, two-bay "row" houses dating from the late 18C-19C survive in Alexandria, Virginia, for example. All of these structures are two-stories in height; offices were more likely to be one-story rather than two. Ethelyn Cox, *Historic Alexandria, Virginia, Street by Street: A Survey of Existing Buildings* (Historic Alexandria Foundation, 1976).
8. For a brief survey of offices and a discussion of their role in the colonial Chesapeake, see Michael Olmert, *Kitchens, Smokehouses, and Privies: Outbuildings and the Architecture of Daily Life in the Eighteenth-Century Mid-Atlantic* (Cornell University Press, Ithaca: 2009), Pp. 147-172.
9. See Touart, MIHP notes.
10. Sanborn Fire Insurance Map(s) from Cambridge, Dorchester County, Maryland (1885, 1891, 1896), www.loc.gov (accessed March 12, 2019).
11. The dimensions of the original portion of the kitchen are thanks to Paul Touart.
12. Kitchens generally follow one of two forms: either relatively square (1:1, 4:3, or 5:4 ratio of length to width) and likely one room in plan, or rectangular (5:3 or 6:4 or 2:1) to accommodate at least two first-floor rooms. Roughly the same pattern applied to slave quarters. While the ratio of the length and width for the Bayly outbuilding is 5:3, the short dimension is much narrower than the norm in that relationship, and would disqualify it from having a standard two-room plan. For the dimensions of a sample of 33 kitchens dating

to the 18C from the Virginia Northern Neck, see Camille Wells, "The Planter's Prospect: Houses, Outbuildings, and Rural Landscapes in Eighteenth-Century Virginia," *Winterthur Portfolio* (1993) Vol. 18(1):16.

13. The archaeological excavations are being conducted under the direction of Julie Schablitzky of the Maryland State Highways Administration; the excavations are ongoing, and references to the results to date are based on personal communication.

14. The weatherboard siding on the north wall covers the lap joints and heads of nails used to attach the studs, and the neighboring landowner is thus far unwilling to allow access to the exterior of the building, which lies directly adjacent to the shared property line.

15. Four nails were recovered for further examination. Two specimens were used to attach boards comprising the small patch in the ceiling floor -- they are hand wrought, with hand-headed T-heads, of a type commonly in use throughout the 18C and into the first decades of the 19C. A nail retrieved from the north wall shelf is cut, with a square machined head exhibiting evidence that it was finished in a face-pinched clamp, and with a rounded tip; this nail type dates to the period after ca. 1830. A nail removed from the exterior weatherboard siding is cut, with a square, face-pinched head and blunt point, of a type that generally dates from the 1840s-80s. See Jay D. Edwards and Tom Wells, *Historic Louisiana Nails: Aids to the Dating of Old Buildings* (Louisiana State University: Baton Rouge, 1993).

16. Nor is there evidence for framing members to support a hearth in the attic floor, which would be required in association with a second fireplace.

17. The fact that the chimney was installed on the interior of such a small structure supports the interpretation that the building was originally erected in a relatively constricted location, such as along a property line.

18. The spacing of the first-floor joists also preclude the possibility of a fireplace -- although the joists were relatively late, likely 20C replacements -- and there is no evidence to indicate that a chimney pierced the current roof frame. There is also no evidence for a wood stove, as ceiling boards

that date from before the structure was relocated extend across the center of the building, where a stove would logically be located, and there is no indication of a hole to accommodate a flue pipe.

19. For examples of 18C stores from Virginia that match the two-room model, see Belle Grove in Frederick County and Marmion in King George County. The "store house" listed in the Orphan's Court valuation for the Caile/Bayly property was described as 26'-square, "with three apartments in it and one small bricked chimney one room above with plank floor." According to Camille Wells, "The eighteenth-Century Landscape of Virginia's Northern Neck," *Northern Neck of Virginia Historical Magazine* (December, 1987):5234, a "store" with the familiar dimensions of 20' by 12' was advertised for sale in the pages of the *Virginia Gazette* in 1752.

20. The listing of both an "office house" and a "store house" in the 1771 Orphan's Court Valuation indicates two separate buildings that may have served, in tandem, for the related functions of a counting room and a store. Although the presence of multiple rooms and a heat source in the store may indicate that it included an unnamed office/counting room.

Acknowledgments:

The authors would like to thank the following individuals: Catherine Morrison for allowing us access to study the fascinating buildings on her property; Julie Schablitzky for hiring us to do this work; Paul Touart for sharing his research and his insights; Jared Schmitz and Hassan Bin Tariq for rendering our field drawings in CAD; and Sara Baum for designing and laying out this report.

Framing and Material

North Wall

Member	Dims	Finish	Fastener	Period
Plate	4 x 8"	Hewn (H), Chamfered	Lapped over girts, Peg	1
Corner Post (2)	4 x 6"	Circular Sawn (CS)	Wire	4
Brace (NW)	3 ½ x 6"	H&Pitsawn (PS)	Wrought/Rose Head (RH)	1
Stud 1	3 x 3 ½"	H&PS	Lapped on plate (LOP)/nailed?/ RH	1
Stud 2	3 x 4"	H&PS	LOP/?/RH	1
Stud 3	3 x 4"	H&PS	LOP/?	1
Stud 4	2 ½ x 3 ½"	H&PS	LOP/?	1
Stud 5	4 x 4"	H&PS	LOP/?	1
Stud 6	2 ½ x 4"	H&PS	LOP/?	1
Stud 7	3 x 4"	H&PS	LOP/?/RH	1
Stud 8	3 x 4"	H&PS	LOP/?/RH	1
Brace (NE)	4 x 6 ½"	H&PS	RH	1
Sill	4 x 6"	CS	Wire	4

East Wall

Member	Dims	Finish	Fastener	Period
Girt	6 x 9"	H&PS, Cham- fered	Mortise & tenon (M&T), Peg	1
Corner Post (2)	4 x 6"	CS	Wire	4
Stud 1	2 x 3"	--	Cut	2
Stud 2	4 x 3"	--	Cut	3
Stud 3	4 x 3"	--	Cut	3
Stud 4	3 x 3"	H&PS	Lapped (?)	1
Post	5 x 6"	CS	Wire	5
Stud 5	3 x 3"	H&PS	Lapped (?)/RH	1
Brace (SE)	4 x 6"	Hewn	RH	1

South Wall

Member	Dims	Finish	Fastener	Period
Plate	4 x 8"	H&PS, Chamfered	Lapped over girts, Peg	1
Corner Post (SE)	4 x 6"	CS	Wire	4
Brace	3 ½ x 6"	H&PS	RH	1
Stud 1	3 x 2 ½"	H&PS	M&T/RH	1
Stud 2	4 x 2 ½"	H&PS	M&T	1
Door Post	4 ½ x 3"	H&PS	M&T	1
Stud 3	4 x 2 ½"	H&PS	M&T	1
Header	3 ½ x 3 ½"	SS	Cut	2
Door Post	5 x 3"	SS	Cut	2
Stud 4	4 x 2 ½"	H&PS	M&T	1
Stud 5	4 x 2 ½"	H&PS	M&T	1
Stud 6	4 x 2 ½"	H&PS	M&T/RH	1
Brace	3 ½ x 6"	H&PS	Lapped/RH	1
Corner Post (SW)	6 x 8"	H&PS	M&T/Peg	1

West Wall

Member	Dims	Finish	Fastener	Period
Girt	2 x 8" (2)	CS	Two members, bolted together	4
Corner Post (SW)	6 x 8"	H&PS	M&T/Peg	1
Brace	4 x 6"	H&PS	Lapped/RH	1
Stud 1	3 x 2 ½"	H&PS	RH	1
Stud 2	5 ½ x 3"	H&PS	RH	1
Stud 3	2 x 3"	--	Cut	3
Stud 4	2 x 3"	--	Cut	3
Stud 5	5 x 3"	H&PS	RH	1
Stud 6	3 x 2 ½"	H&PS	RH	1
Brace	3 ½ x 6"	H&PS	RH	1
Corner Post (NW)	4 x 6"	CS	Wire	4

Roof

Member	Dims	Finish	Fastener	Period
Rafter (6 pairs)	2 ¾ - 3 x 3 ½ - 4"	H&SS	Saddle notch/Peg	2/4
Collar	2 ¾ x 4"	SS	Half-dovetail/Cut	2/4

Floor

Member	Dims	Finish	Fastener	Period
Sills (3)	4 x 6"	CS	Wire	4
Joist 1	4 x 3 ½"	Charred	Wire/Cut	4
Joist 2	3 ¼ x 8 ¾"	H&PS	Wire	4
Joist 3	3 ¼ x 8 ½"	H&PS	Wire/Cut	4
Joist 4	4 x 3 ½"	Charred	Wire/Cut	4
Joist 5	7 ½ x 8"	H&PS [mortises]	Wire	4
Joist 6	3 3/8 x 7 ¾"	H&PS	Wire	4
Joist 7	3 x 7"	H&PS	Wire	4
Joist 8	3 ½ x 7 ½"	H&PS	Wire	4
Joist 9	--	--	--	4

Ceiling

Member	Dims	Finish	Fastener	Period
Plate (2)	4 x 8"	H&PS, Chamfered	Lapped over girt (LOG), Peg	1
Joist 1	4 x 7"	H&PS, Chamfered; sistered to span gap	LOG	1
Joist 2	3 ½ x 7"	H&PS, Chamfered; sistered to reach girt	LOG	1
Joist 3	4 x 7"	H&PS, Chamfered; sistered to reach girt	LOG	1
Joist 4	3 7/8 x 6 ¾"	H&PS, Chamfered; sistered to reach girt	LOG	1

Ceiling Boards

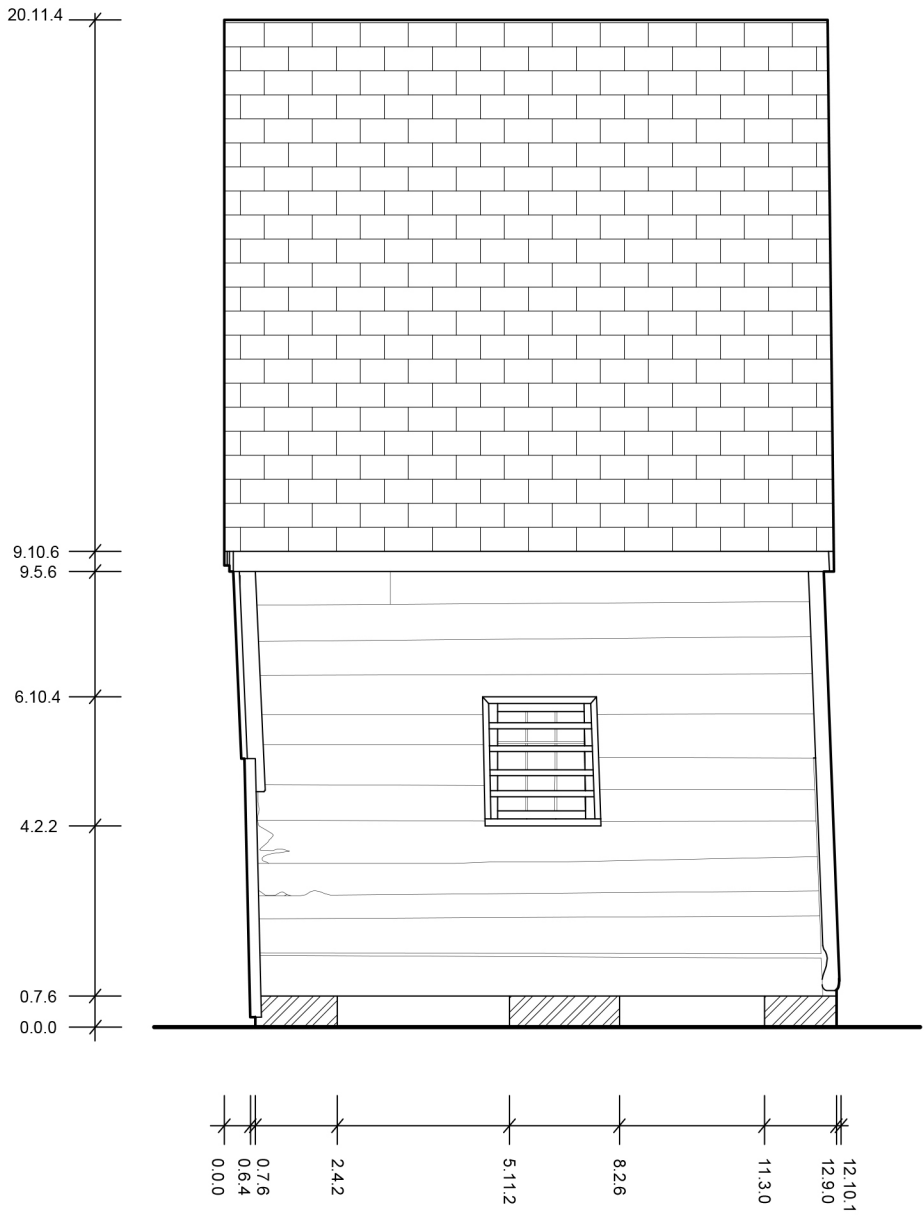
Period	Finish	Fastener	Joint
I	Sashsawn (SS)/Gauged & Undercut/Whitewash (WW)	Wrought-TH (TH)	Butted
I-A	SS/WW	TH	Ship-lapped
2	SS/WW	Cut	Butted
3	CS/WW	Wire	Butted

Measured Drawings

No 1: South Elevation



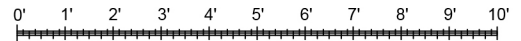
No 2: West Elevation



BAYLY CABIN 10-21-18 DJP / DWS

West Elevation

Scale:



 Brick

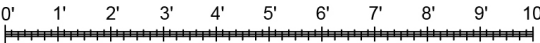
No 3: First Floor Plan

BAYLY CABIN 10-21-18 DJP / DWS

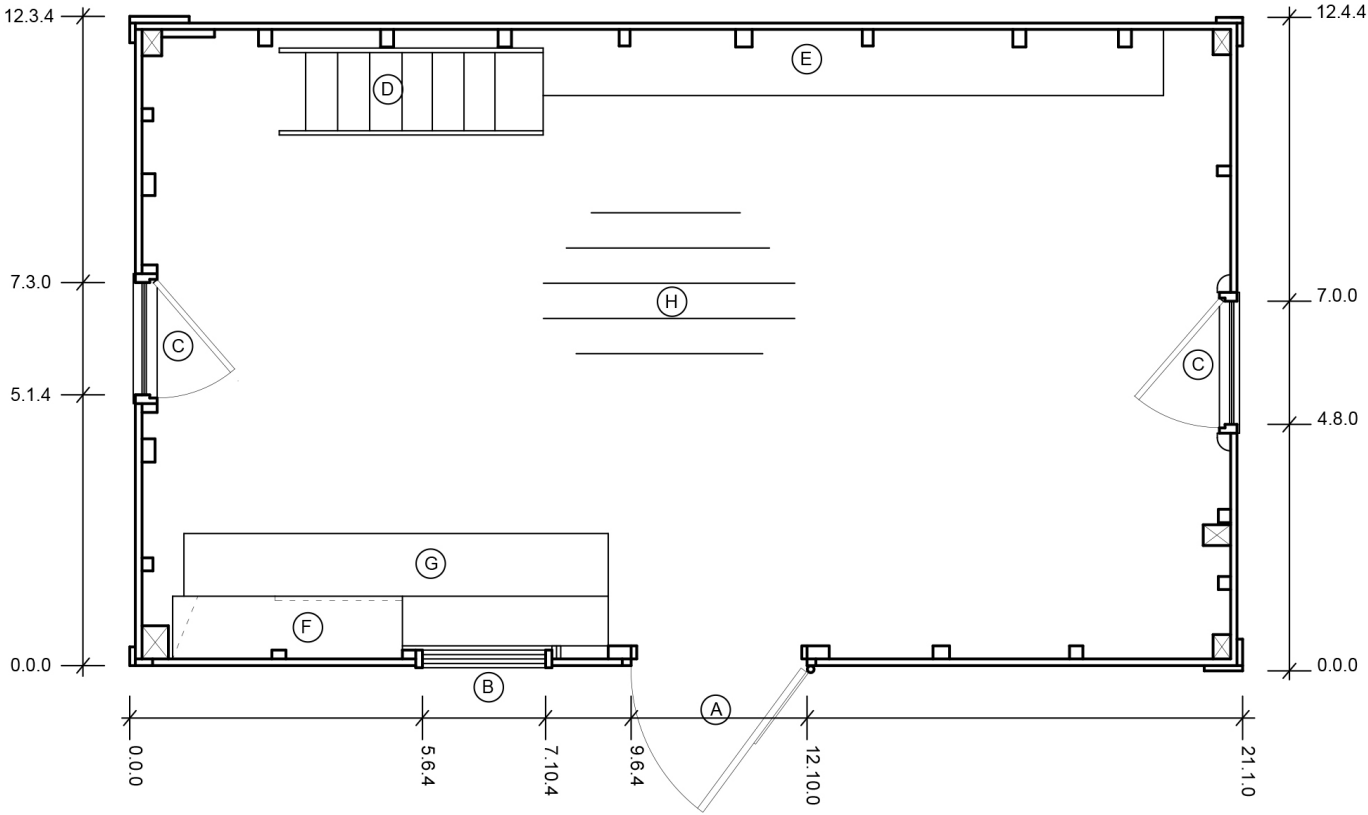
First Floor Plan



Scale:



- (A) Board and batten door
- (B) Sash window
- (C) Casement window
- (D) Stair
- (E) Shelf
- (F) Cabinet
- (G) Bench
- (H) Random-width floorboards



No 4: First Floor Framing Plan

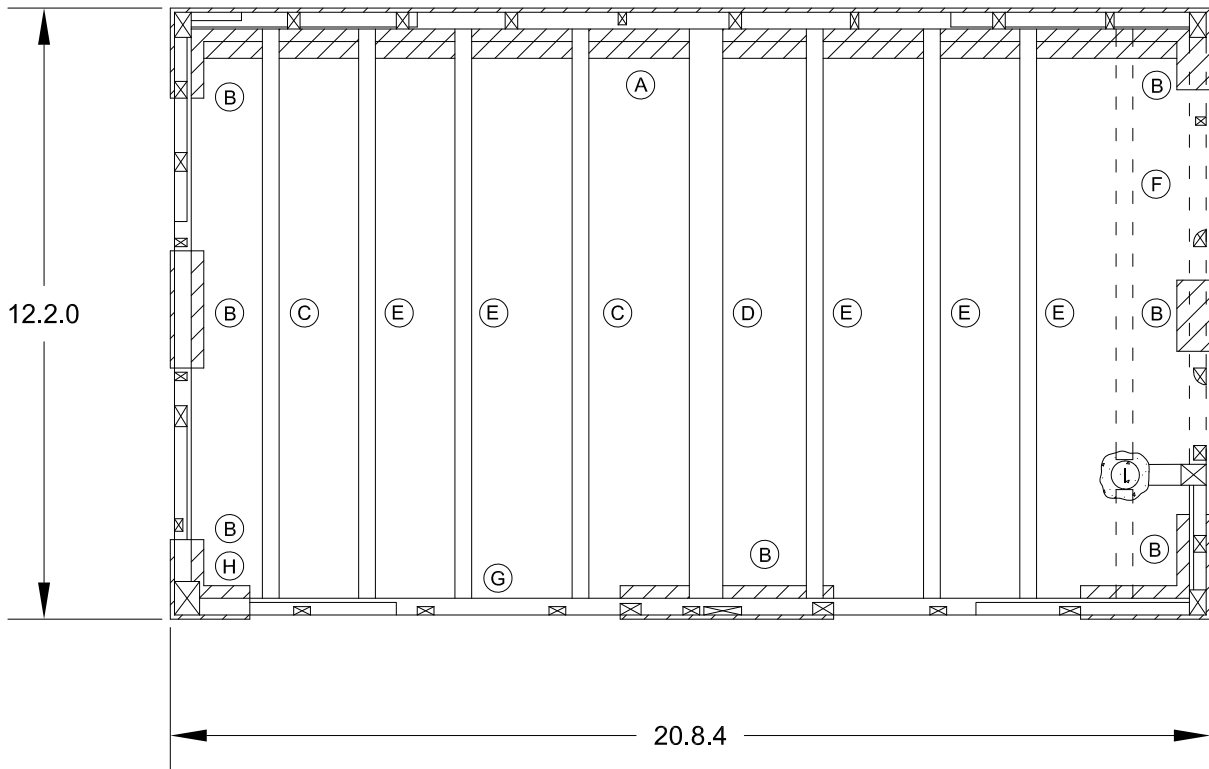
BAYLY CABIN 10-21-18 DJP / DWS

- (A) Continuous brick foundation, with step
- (B) Brick piers - repairs
- (C) Floor joists - burned, reused
- (D) Floor joist - empty mortises - reused
- (E) Floor joists - circular sawn
- (F) Missing joist and east sill
- (G) Replaced sills - all walls
- (H) Surviving original post
- (I) Concrete Pad

First Floor Framing Plan



Scale:

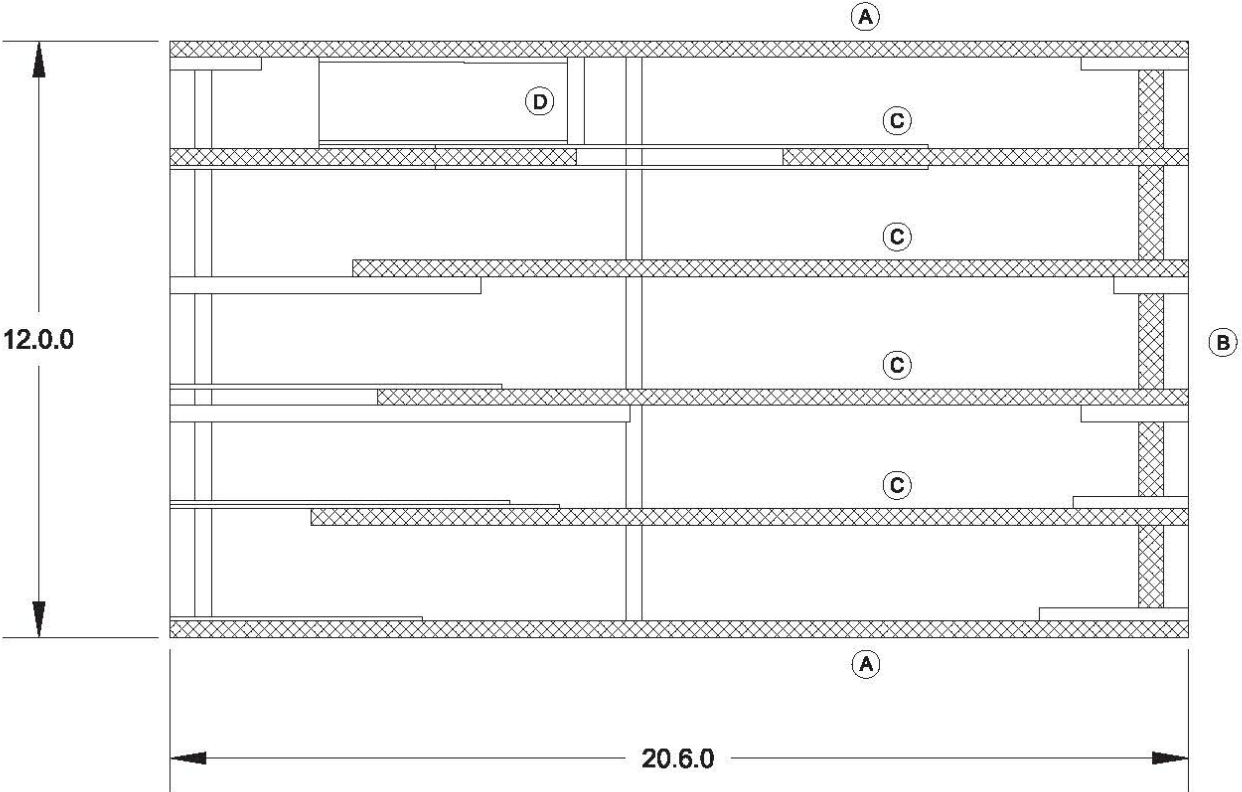


No 5: Ceiling Framing Plan

- (A) Plates (2) - original
- (B) East girt - original
- (C) Joists (4) - original
- (D) Header for stair, circular sawn
- Original structure

Bayly Cabin 9-29-18 DJP / DWS

Ceiling Framing Plan



No 6: Attic Floor Plan

- (A) Period 3: opening for stairway
- (B) Period 1: gauged, undercut, butted, wrought T-head nails, hand planed
- (C) Period 1: former stairway opening patch (same)
- (D) Period 1: shiplapped, flush, wrought T-head nails, hand planed
- (E) Period 2: flush, butted, mature cut nails, sash sawn
- (F) Period 5: flush, butted, wire nails, circular sawn

Bayly Cabin

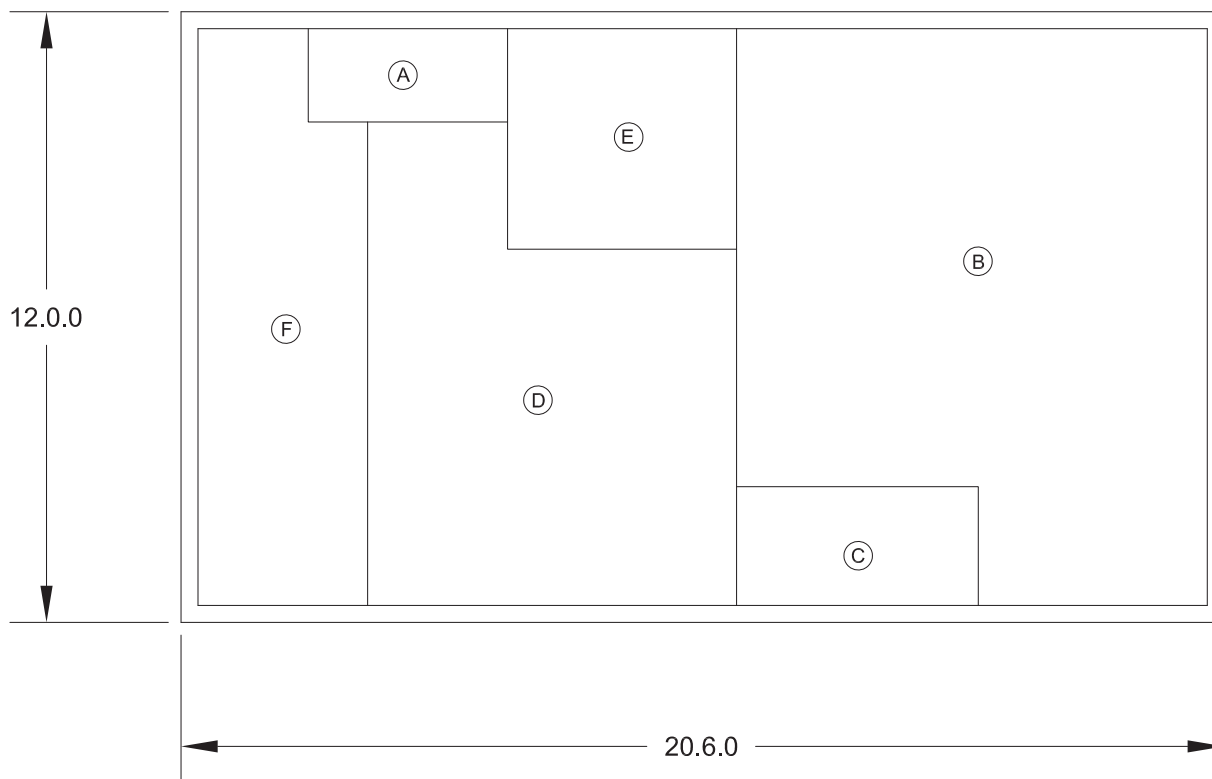
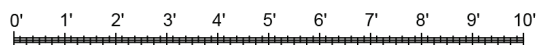
9-29-18

DJP / DWS

Attic Floor Plan



Scale:



No 7: North Wall Frame and Foundation Elevation

- (A) Continuous brick foundation
- (B) Gable frame all replaced

