

MEMO

To: Jason Illari, Historical Society of Carroll County
From: Preston Hull, Building Conservation Associates, Inc.
Dorothy Krotzer, Building Conservation Associates, Inc.
Date: March 2, 2026
Subject: Kimmey House: Interior Finishes Analysis

At the request of the Historical Society of Carroll County (HSCC), Building Conservation Associates, Inc. (BCA) performed a finishes analysis of one room on the interior of the Kimmey House in Westminster, Maryland. The Kimmey House is one of three adjacent historic houses in downtown Westminster that are owned and managed by the HSCC. According to documents provided by the HSCC, the original house was a three-story, three-bay side-hall structure dating to ca. 1800. An addition ca. 1810 created new rooms across the hall, essentially creating a center-hall plan. BCA's finishes analysis focused on the first-floor front room of the ca. 1810 addition.

According to background information provided by the HSCC, the addition may have been built to serve as a physician's office. Other documentation provided shows that the same space served as a merchant tailor's shop in the 1860s and '70s. As part of a new interpretive plan for the space, the HSCC plans to restore the front and rear halves of the room to two represent these two distinct periods of its history. The goal of BCA's analysis was to provide evidence of historic finishes for use in the restoration.

BCA also investigated the original finishes of a mantel and cupboard that were relocated from another historic home to the HSCC in the 1970s. These features are displayed in an auditorium at the rear of the Kimmey House.

The following memo summarizes BCA's methodology, followed by the findings of the analysis. When possible, recommendations for restoration finishes are provided for each feature at the end of the document.

Methodology

During the site visit, BCA performed in-situ field microscopy at each area of investigation. Using X-ACTO® blades and a Dermalite® magnifier for magnification, BCA made small "craters" to examine the existing paint layer sequencing. Field microscopy provides the conservator with a general sense of how many finish layers exist, their approximate colors, and the condition of the substrate. Various craters can then be quickly compared to each other to help determine whether an area has been overpainted, repaired and/or restored, whether early finishes may exist, how one area appears in relation to another, and which areas should be sampled for laboratory analysis. All sample locations are annotated on photographs in *Appendix A*.

In BCA's Philadelphia conservation laboratory, a portion of each sample was cross-sectioned and examined under a microscope to identify the earliest existing and subsequent finish layers. Photomicrographs of select cross sections are included in this memo as illustrations. Following identification of target layers, BCA then performed exposures of the remaining bulk samples to reveal

the earliest existing finishes and obtain color matches using the standardized Munsell Color System and the commercial Benjamin Moore palette.

Summary of Findings

First-Floor Front Room, ca. 1810 Addition

BCA's charge was to investigate the historic finishes of all painted features in the first-floor front room of the ca. 1810 addition, excluding features in an alcove at the rear (south) of the room. The room was historically accessed through one door from the center hall to the west (Figure 1).¹ A window is located roughly opposite on the east wall, and two similar windows open to the street to the north (Figure 2). A large opening in the rear (south) wall of the room creates an alcove that is not in the scope of this study. A plastered masonry chimney with an exposed brick hearth is present on the east wall between the alcove and the window (Figure 3). All walls are currently painted light green, while the ceiling and all wood features (doors, sash, shutters, and trim) are painted white. Clear textural evidence of previous wallpaper campaigns is also visible when the walls and ceiling are viewed in raking light (Figure 4).

Field microscopy identified locations of significant finishes evidence across all features examined. BCA removed 17 samples from individual features in the first-floor east front room:

- Nine plaster samples:
 - One sample from the plaster ceiling
 - Eight samples from the plaster walls, including the chimney breast
- Eight wood samples:
 - Two samples from the interior face of the hallway door: stile and panel
 - One sample from the trim around the hallway door
 - One sample from a north window sash
 - One sample from a north window shutter
 - One sample from trim around a north window
 - Two samples from the baseboard: base and surbase molding

Overall, BCA's laboratory analysis identified evidence of early or original finishes on most of the features sampled. However, limited correlation between features makes it impossible to state definitively whether many of these early finishes existed contemporaneously, or to assign approximate dates to individual campaigns.

¹ Although the façade of the Kimmey House is oriented to the northeast, this memo uses the entrance as "project north," which aligns with the Westminster street grid. Following that convention, the addition studied in this memo is to the east of the center hall.



Figure 1 The front room of the ca. 1810 addition to the Kimmey House, looking northwest toward the door to the center hall.



Figure 2 View looking northeast.



Figure 3 View looking southeast from the center hall door. The alcove at rear was not in scope.

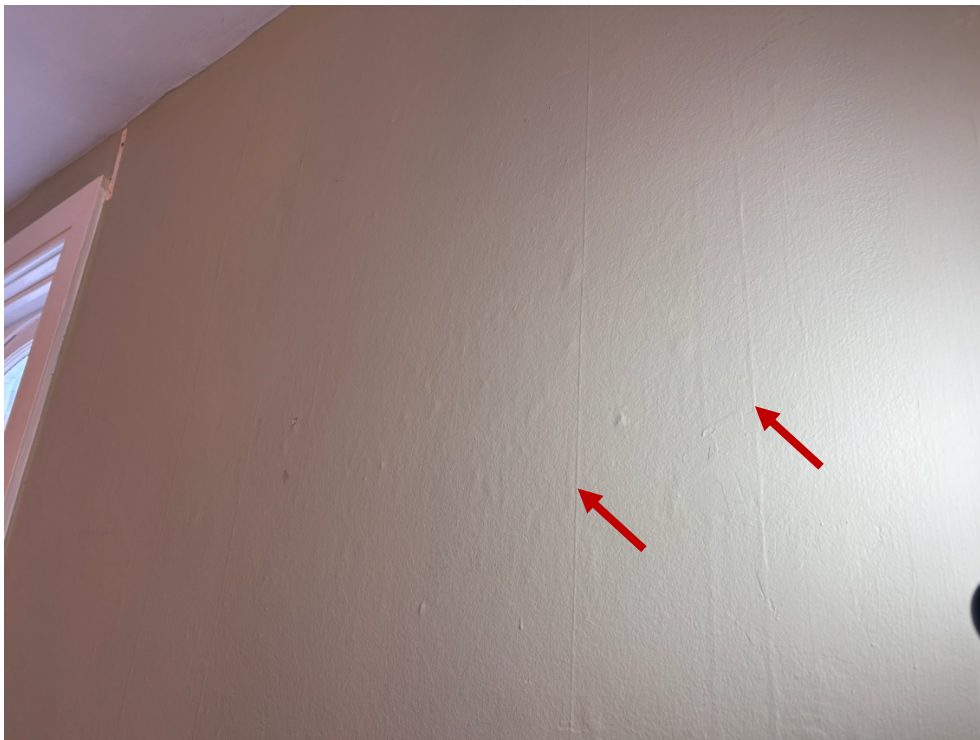


Figure 4 Textural evidence of wallpaper seams (arrows), viewed in raking light.

Plaster Features

The earliest evidence across the room's plaster features generally consists of wallpaper campaigns. However, earlier painted finishes are present on some samples.

Field microscopy indicated that different areas of the plaster ceiling exhibited similar or identical finish evidence. The sample removed from the plaster ceiling contains approximately four layers of paint on top of three layers of wallpaper (Figure 5). The paint layers consist of a light green followed by three layers in the range of cream to white; all are consistent in appearance with modern latex paints.² Two of these modern layers likely date to documented restorations of the Kimmey house in the 1960s and 1990s.

Field microscopy similarly indicated that different areas of the plaster walls exhibited similar or identical paint evidence across all elevations and wall heights. That is, no clear evidence of a two- or three-part wall treatment (i.e., with different schemes at the upper and lower wall) was observed on site. Samples removed from the plaster walls are generally consistent with one another, and similar to the evidence observed at the plaster ceiling: six to seven layers of modern latex paint on top of two to three layers of wallpaper (Figure 6). One of these layers of wallpaper is partially exposed at one location on the east wall of the room, revealing a striped pattern that is also visible in many of the wall samples (Figure 7). The stripes may represent a pattern in and of themselves or may represent a shading technique within a larger graphic.

Fragmentary evidence on three of the wall samples suggests that the plaster walls featured one or more paint finishes prior to the extant wallpaper. These samples featured traces of a light yellow finish directly on the plaster substrate (Figure 8). The finish is slightly translucent in cross section and is consistent in appearance with a water-based finish, such as a distemper. Water-based paints were common in the 19th century and were routinely removed during repainting campaigns, which would explain the limited evidence of such finishes throughout BCA's samples. BCA was able to isolate this finish in a bulk sample and obtain a color match. While the finish is early, it may or may not be original. However, it clearly pre-dates the existing wallpaper.

² Precise identification of paint composition is not possible without instrumental analysis that is outside the scope of this study. However, general visual characteristics of different paint technologies can sometimes be ascertained from cross sections.

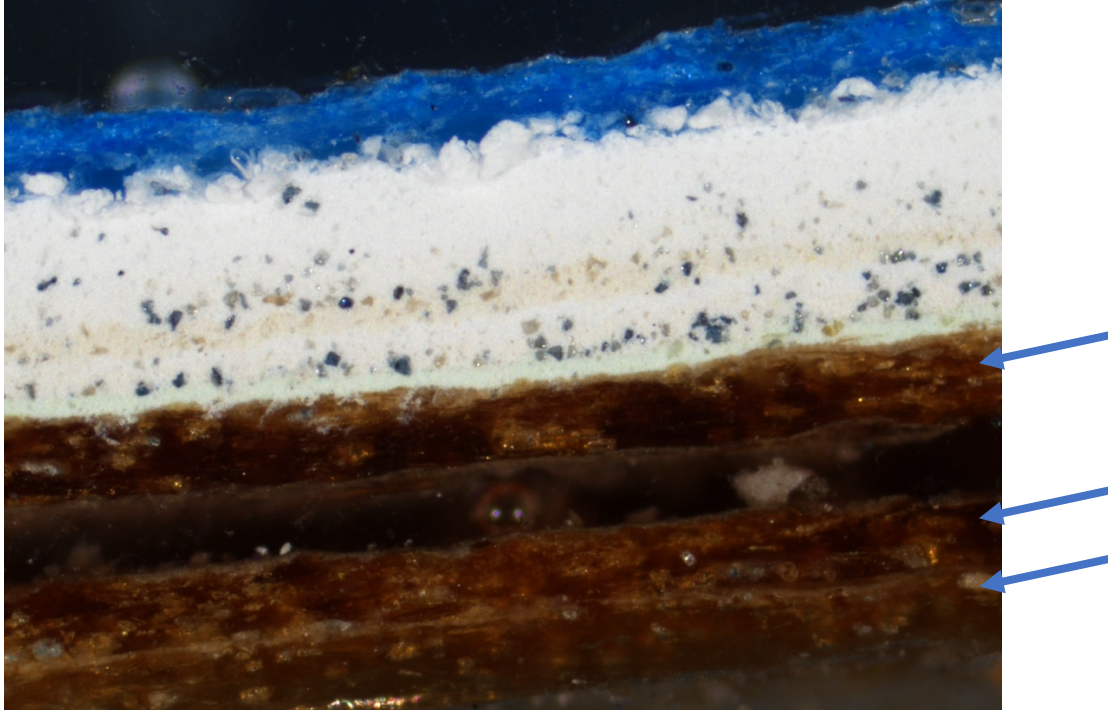


Figure 5 Photomicrograph of sample *KH.C*, removed from the ceiling. Note the three layers of wallpaper (arrows) prior to the first light green paint campaign, which is consistent in appearance with modern latex. (The bluish specks are residue from the polishing compound used in sample preparation and are not part of the finishes; the top blue layer is painter's tape used in sampling.) *Visible light, 40x.*



Figure 6 Photomicrograph of sample *KH.W8*, removed from high on the west wall over the door. Note the roughly six layers of modern paint above previous wallpaper; the other seven wall samples were virtually identical. Bottom of sample and earliest wallpaper layers not shown. *Visible light, 40x.*



Figure 7 Small area of wallpaper exposed on the east wall of the room. This striped pattern was visible in several of the samples removed for analysis and appears to be the middle of three layers of wallpaper.

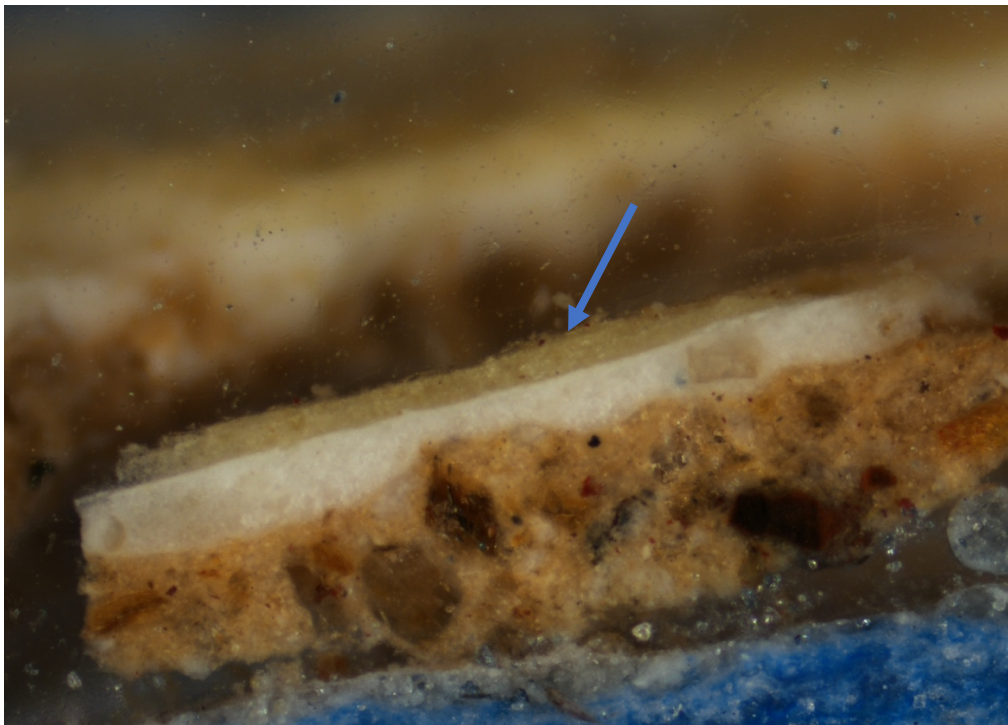


Figure 8 Lower segment of sample KH.WV6 (removed from the plaster wall), showing a coarse layer of pinkish plaster, followed by a white layer of smooth finish plaster, followed by a thin finish layer that appears translucent yellow in cross-section (arrow). The translucent appearance of the finish in cross-section is consistent with a distemper or similar water-soluble paint. This finish was observed on three of the wall samples. When viewed in the bulk sample, this layer is a matte light yellow. *Visible light, 40x.*

Wood Finishes

In general, the wood features throughout the room exhibit substantially more paint evidence than do the walls. Early or original finishes are present on several features and feature a range of colors.

The greatest number of paint finishes are present on the door to the hallway. No differences were noted between the samples removed from the stile and panel, indicating that the door was always painted monochromatically. The earliest finishes on the door samples are an off-white paint, likely intended to be a primer, followed by a grayish green, likely the earliest intended finish (Figure 9). There is no evidence of disruption of the wood substrate that would indicate that the door was ever stripped of its finishes. Approximately 13 later paint layers are generally in the range of cream to white, but also include red and blue.

The door trim sample exhibits a very similar stratigraphy to the door itself, but is missing three to four of the earliest layers present on the door sample (Figure 10). The earliest extant finishes are white or off-white. The window trim sample is identical. This evidence may suggest that the trim dates to a renovation, perhaps used to unify the room's window and door openings after later 19th-century modifications. Alternatively, it is possible that the trim was stripped of its earliest finishes at some point; the substrates of both samples are slightly irregular. The trim samples generally appear to have been painted to match the doors and window sash: primarily in white and cream colors, but including the red and blue campaigns.

The window sash sample features a similar stratigraphy to the trim samples, with fewer paint layers and white or off-white paint as the earliest finish (Figure 11). This evidence is consistent with the style of the window sash, which indicates a later date for the windows. Large single panes such as those used in these sash would not have been available ca. 1810. The sash may have been installed during an alterations campaign, similar to the trim. Exposure of the early paint on the bulk sample indicated that the earliest finish on the sash is similar to, but does not quite match, the earliest finish on the window and door trim. This evidence may indicate that the sash and trim were installed at different dates but were intended to be the same color; or it could illustrate that the same paint layer can age differently.

The wood interior shutters feature approximately four layers of modern paint above an original dark reddish-brown stain and clear coating (Figure 12). The style of the shutters, combined with this finish evidence, suggest that these features were later additions to the room.

The baseboard samples show that these features have been painted identically to the other wood features for many years: many campaigns in the range of white to cream, including the red and blue layers (Figure 13). However, the earliest layers of the baseboard samples are unique. The original finish of the baseboards is a thin resinous dark brown layer that somewhat resembles a stain or clear coating in cross section but is distinct from the original shutter finish. Because the layer does not penetrate the wood substrate and also appears to include pigment, the baseboard finish is more likely a paint of unknown composition. The second layer, also unique to the baseboard, is a purplish brown paint. It is likely, but not certain, that one or both of these layers coexisted with the original grayish-green door finish.

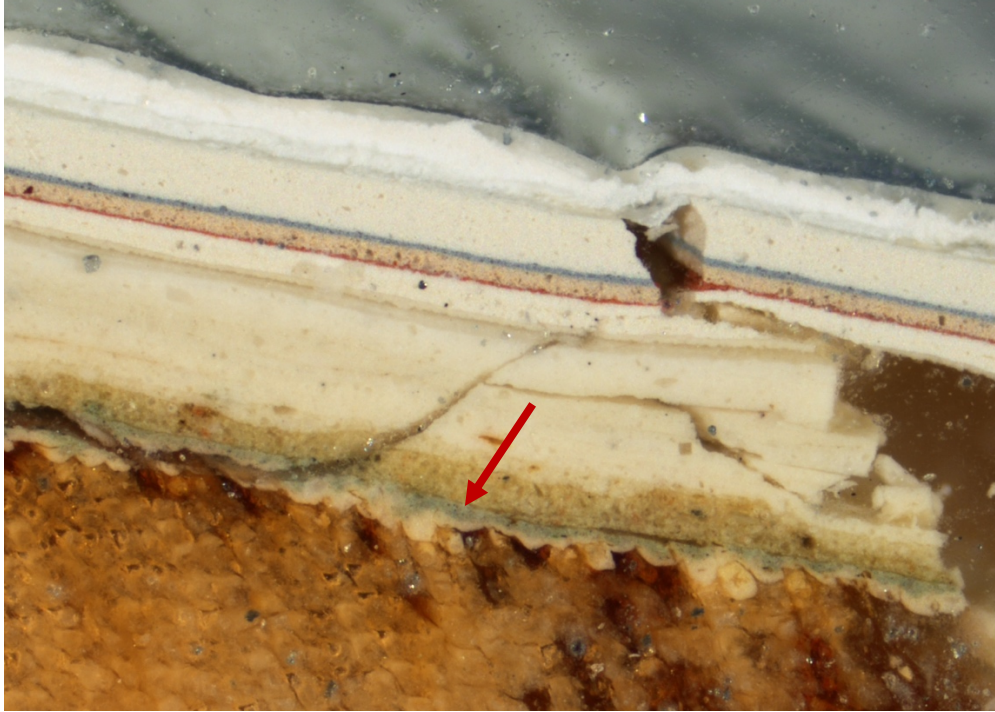


Figure 9 Photomicrograph of sample KH.D2, removed from a door panel. This sample features many layers of paint in the range of cream to white, but the earliest intended finish was likely a grayish green (arrow). *Visible light, 40x.*



Figure 10 Photomicrograph of sample KH.DT, removed from the door trim. Note the similarities to the door sample, but the absence of the earliest three to four layers, suggesting that the door trim is from a later date. (The blue layer at the top of the sample is painter's tape from sampling.) *Visible light, 40x.*

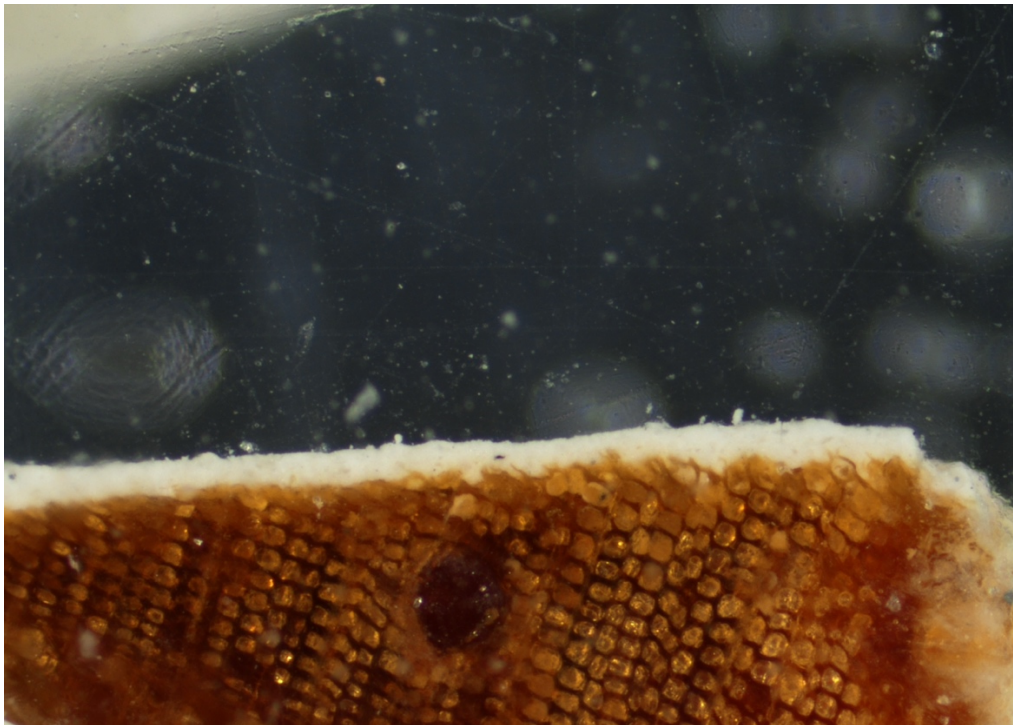
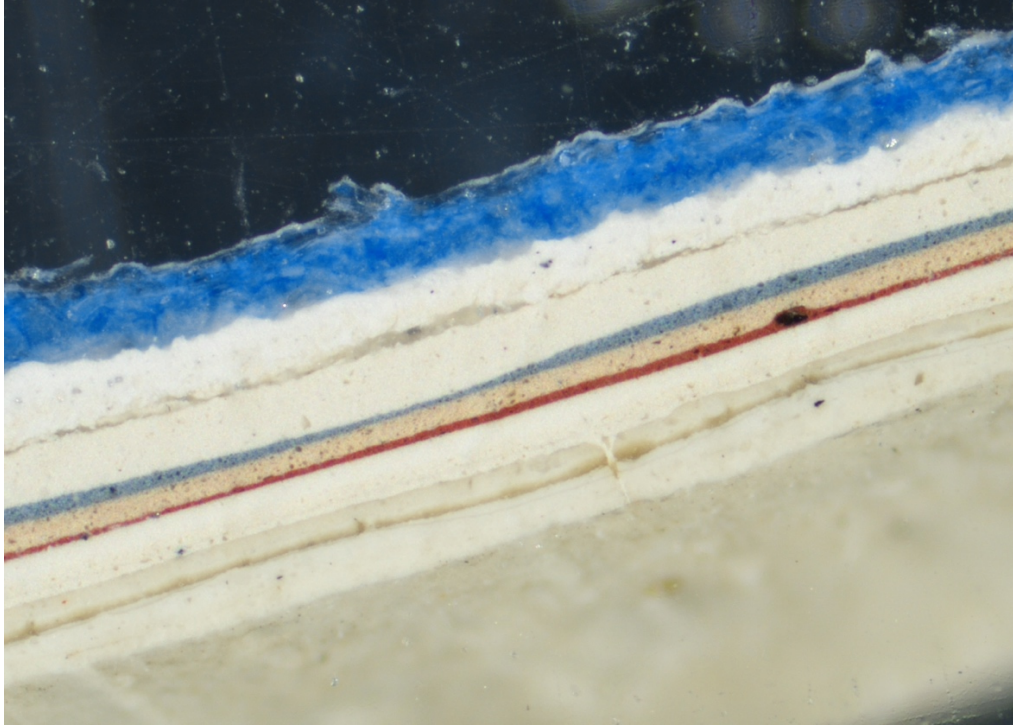


Figure 11 Two halves of sample *KH.WS*, removed from a window sash. The stratigraphy is virtually identical to that of the wood trim, but exposure of the bulk sample revealed that the earliest white layer is slightly different in color. *Visible light, 40x.*

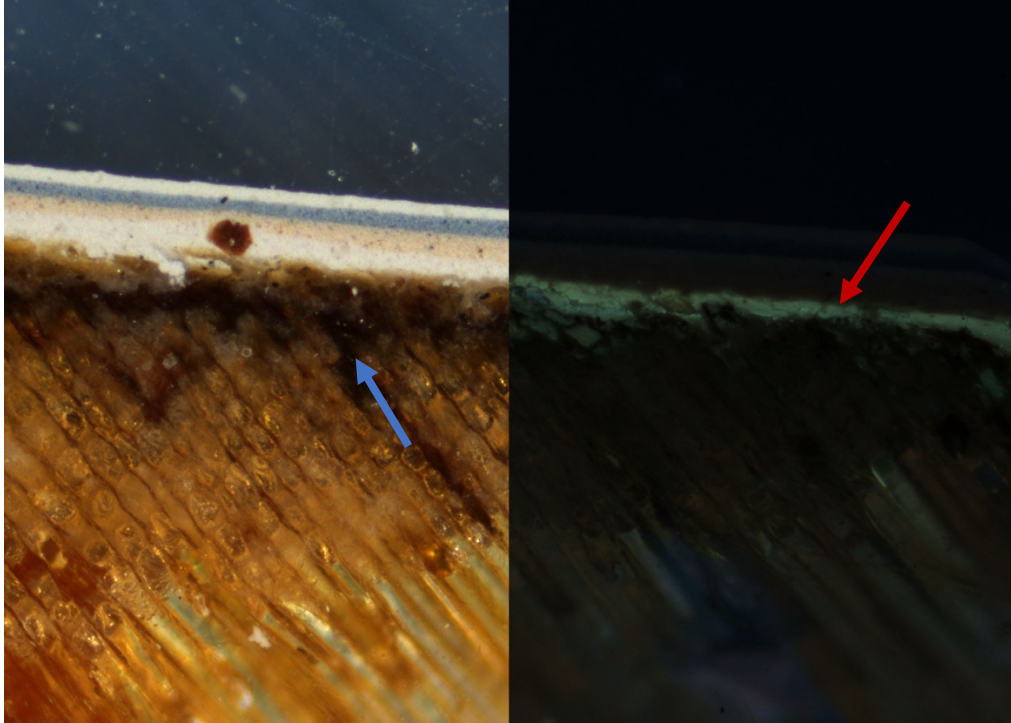


Figure 12 Photomicrograph of sample KH.WSh, removed from a shutter stile. The earliest finish is a reddish-brown stain, visible saturating the wood substrate at the blue arrow. In ultraviolet light, the corresponding clear coating autofluoresces (red arrow). Visible light (left) and ultraviolet light (right), 40x.

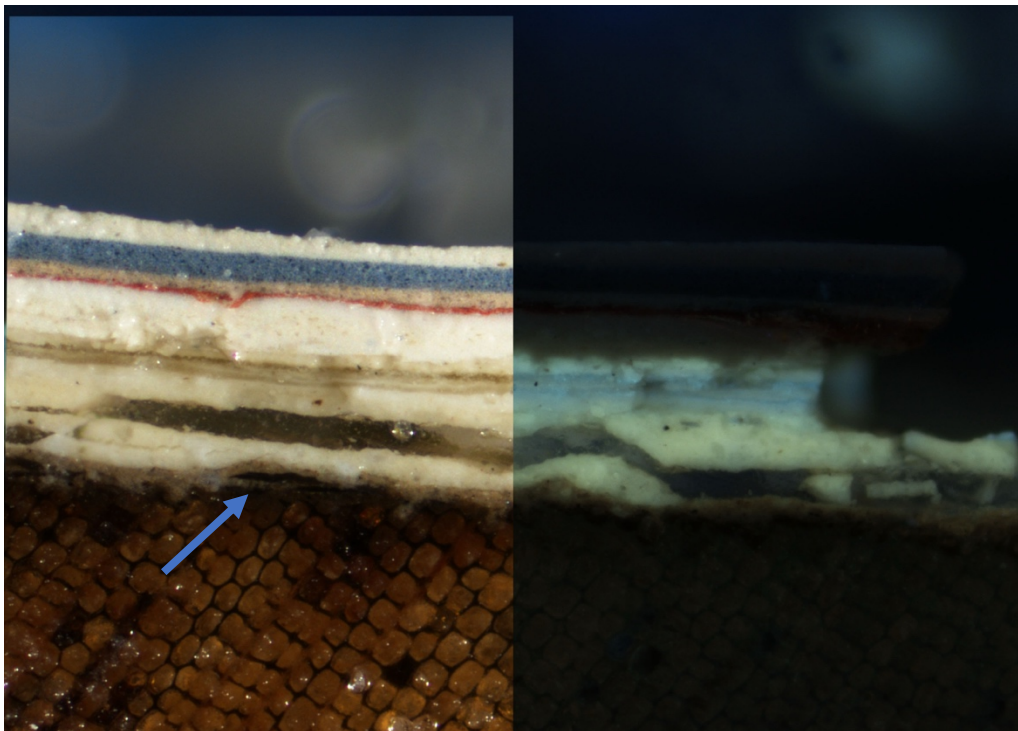


Figure 13 Photomicrograph of sample KH.BB1, removed from a baseboard on the west wall. While the later layers are similar to those of other wood features, the first two layers are brown colors that are unique to the baseboard samples. The initial dark brown layer (blue arrow) has a resinous appearance similar to a stain or clear coating, but neither penetrates the surface nor autofluoresces. Visible light (left) and ultraviolet light (right), 40x.

Mantel and Cupboard

The Kimmey House features a modern addition to the rear (south) of the ca. 1810 front room. The addition currently serves as an auditorium or event space. On the north wall of the room, a historic wood cupboard and mantel from another Carroll County house, built by the Yingling family, are installed. These elements were removed from the original house and moved to the HSCC in the 1970s. Both are currently painted pinkish white.

BCA observed that the profiled, ornamental features of the cupboard and mantel were quite well-defined and appeared to lack heavy paint build-up. Field microscopy confirmed that both elements typically feature only two layers of paint: a white initial layer or primer, and the current pinkish white. This evidence suggests that the cupboard and mantel were stripped of their earliest finishes. This may have occurred at the time of relocation, when the disassembled elements could be dipped in a chemical treatment for thorough removal. BCA removed small scrapings from isolated areas of apparent paint build-up in corners and crevices between wood members to determine whether evidence of earlier paint finishes was visible in cross section.

Among many small scrapings from both elements, only one removed from the cupboard retained clear, if incomplete, evidence of an early paint layer. The earliest layer appears dark brown in cross-section and was followed by off-white and yellow layers (Figure 16). Due to disruptions in the wood substrate and irregularities between the paint layers, these layers likely do not represent a complete early stratigraphy. However, it is possible that the brown paint represents an original finish that was preserved in a small recess in the wood.

Unfortunately, it was not possible to isolate these fragmentary layers in the bulk samples for more precise color matching. It is also not possible to state whether these finishes were shared by both the cupboard and the mantel. Due to the apparent extent of the previous paint stripping, BCA believes that there is a low likelihood that sufficient evidence survives to provide more definitive color information.



Figure 14 Photograph of the mantel and cupboard provided by the HSCC and showing the current paint finishes. The level of detail evident in the profiled ornament is evidence of the few extant paint layers.



Figure 15 Trace evidence of paint buildup and surface staining (arrow) is visible at some joints in the cupboard and mantel woodwork. However, only one scraping removed from either feature retained part of a stratigraphic sequence. See following figure.

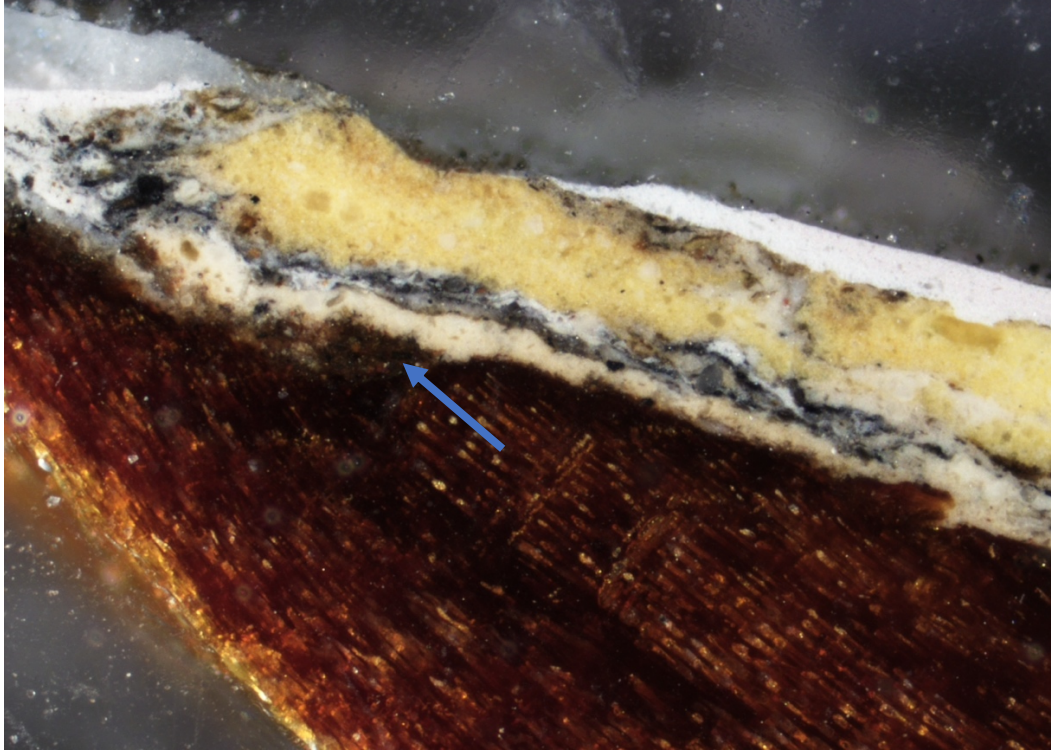


Figure 16 Photomicrograph of a scraping from the cupboard. Below disrupted yellow and cream layers is a preserved pocket of an earlier, and possibly original, brown finish (arrow). None of these layers could be identified in bulk samples. *Visible light, 40x.*

Conclusions and Recommendations

BCA's analysis identified original or early (19th-century) evidence at virtually all of the features sampled in the east front room of the Kimmey House. Unfortunately, due to limited correlation between early layers, it is not possible to state conclusively whether most of these finishes appeared simultaneously as part of one campaign, or to assign date ranges. However, it is likely that the earliest finishes on the doors and baseboards were contemporaneous and original to the room's construction. It is also possible that the earliest plaster wall finish is original, but this finding is less certain due to the manner in which water-soluble paints were commonly removed and reapplied.

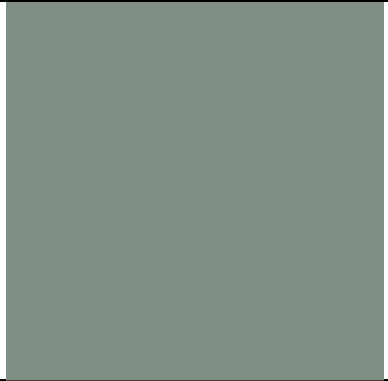
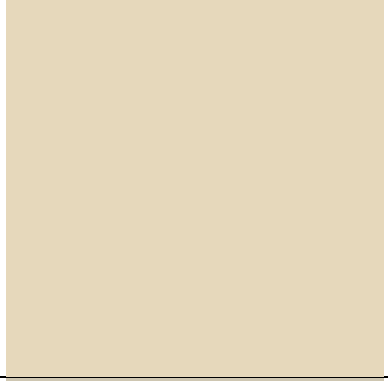
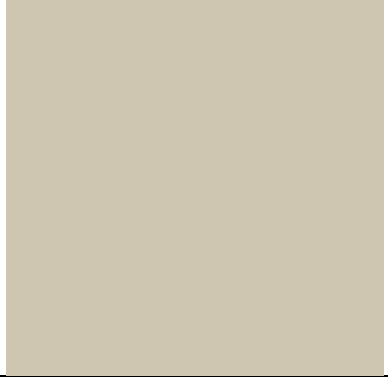
The following sets of tables illustrate the earliest finishes and second finishes, if applicable, documented for each feature or category of features. Note that the earliest and second finishes do not necessarily represent the same paint campaigns across various features; see comments in the tables. Color matches are provided using the standardized Munsell color system as well as the commercial Benjamin Moore color palette. Please note that the digital Benjamin Moore swatches included are for reference only; due to differences in monitors and printers, only physical color swatches should be used for final color selection.

Accurate replication of the original resinous finish on the baseboards may require special products or techniques. A larger, in-situ exposure of this finish is recommended if restoration to this appearance is desired.

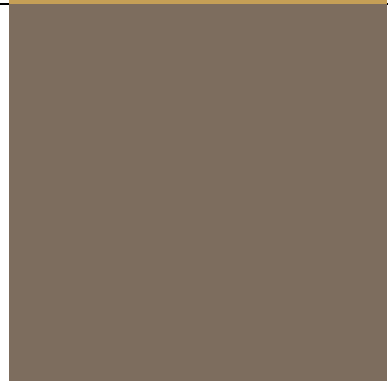
Similarly, in-situ exposures of the wallpaper on the walls and ceiling would be required to provide information about the patterns, which may also provide date information.

Because the oldest paint finishes may date to ca. 1810, wallpaper may provide a means for HSCC to provide a visual distinction between the two desired periods of interpretation for the room. While it cannot be stated with certainty which of the later paint finishes on the woodwork correspond to any wallpaper campaigns, the majority of the later historic wood finishes were in the range of cream to white.

Plaster Features—Earliest Finishes		
Ceiling	Unknown Possibly originally finished with the same water-soluble paint as the walls (see below).	N/A
Walls <i>Suspected distemper or other water-soluble paint; trace evidence below wallpaper.</i>	Munsell value: 2.5Y 9/4 Benjamin Moore: 2151-50 "Bronzed Beige"	

Wood Features—Earliest Finishes		
Door	Munsell value: 7.5G 5/2	
	Benjamin Moore: 699 “Garden Oasis”	
Baseboards <i>Resinous appearance; in-situ exposure may be required for accurate replication.</i>	Munsell value: 5YR 2/2	
	Benjamin Moore: 2115-10 “Appalachian Brown”	
Window and Door Trim <i>Likely added to the room after initial construction. Depending on sequencing, may represent an attempt to match the window sash.</i>	Munsell value: 5Y 8.5/2	
	Benjamin Moore: 2151-50 “Bronzed Beige”	
Sash <i>Likely added to the room after initial construction. Depending on sequencing, may represent an attempt to match the trim.</i>	Munsell value: 5Y 7/2	
	Benjamin Moore: HC-83 “Grant Beige”	
Shutters <i>Likely added to the room after initial construction.</i>	Stained and clear-coated.	In-situ exposure required for accurate replication.

Plaster Features—Second Finishes		
Ceiling	Wallpaper	In-situ exposure required for accurate replication.
Walls	Wallpaper	In-situ exposure required for accurate replication.

Wood Features—Second Finishes		
Door	Munsell value: Between 2.5Y 6/6 and 10YR 6/6	
	Benjamin Moore: 2152-30 “Autumn Gold”	
Baseboards	Munsell value: 7.5YR 5/2	
	Benjamin Moore: 994 “Fallen Timber”	
Window and Door Trim	Appears identical to first layer. See previous page.	
Sash	Appears identical to first layer. See previous page.	
Shutters	Second layer likely dates to 20 th century.	

Cupboard and Mantel—Earliest Finishes	
Cupboard	Brown Insufficient evidence for precise color matching.
Mantel	Insufficient evidence to identify early or original finishes.

Cupboard and Mantel—Second Finishes	
Cupboard	Cream/off-white Insufficient evidence for precise color matching.
Mantel	Insufficient evidence to identify early or original finishes.

**APPENDIX A:
KEY TO SAMPLE LOCATIONS**

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Kimmey House Finishes Analysis
Building Conservation Associates, Inc.
March 2026

