US National Park Service
National Capital Parks - East

Document Number: 899 / 116820
NPS PMIS Reference: 136710

Final Submission
September 25, 2012

Harmony Hall

Fort Washington, Maryland



Historic Structure Report

HPTC

Beyer Blinder Belle
Architects & Planners LLC

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Part 1: Management Summary



Harmony Hall

Fort Washington, Maryland

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A. ADMINISTRATIVE DATA

Preferred Structure Name:	Harmony Hall
Other Historic Names Used:	Battersea, Battersee, Battersey, Broad Creek Farms
Property Location:	10511 Livingston Road State Road 224 Fort Washington, Maryland Prince George's County
Property Owner:	National Park Service Acquired by the National Park Service in 1966 under the Capper-Cramton Act of 1930
Park:	National Capital Parks - East (NACE)
Reservation Number:	404M
NPS Property Number:	3500-1240
Park Asset Number:	022A
List of Classified Structures ID Number:	012140
National Register Information:	Harmony Hall listed on National Register of Historic Places on June 6, 1980
National Register Reference Number:	Record Number 381158
Historic American Building Survey:	Drawings completed in 1934 Photographs taken in 1935 and c.1985
Other Documentation:	1924 Drawings and Documentation by Albert P. Erb maintained by the Library of Congress
Period of Significance:	1769-99
General Management Plan:	No
Current Use:	Vacant
Document Number:	899 / 116820
NPS Contract Number:	C2000092000
NPS Task Order Number:	P11PD72165
NPS PMIS Reference Number:	136710
NPS Requisition Reference Number:	R2724110122

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B. EXECUTIVE SUMMARY

In September 2011, the National Park Service Historic Preservation Training Center (HPTC) entered into a contract with Beyer Blinder Belle Architects & Planners LLP as Task Order P11PD72165 of an Indefinite Quantity Contract for Architectural & Engineering Services (IDIQ). This task order was to provide a Historic Structure Report (HSR) for Harmony Hall at 10511 Livingston Road, Fort Washington in Prince George's County, Maryland. The project team for the scope of work consisted of the following consultants:

- Architecture/Historic Preservation - Beyer Blinder Belle Architects & Planners LLP
- Civil Engineering – Wiles Mensch Corporation
- Structural Engineer – Robert Silman & Associates, PLLC
- Mechanical/ Electrical/ Plumbing/ Life Safety Engineer – Setty & Associates International, PLLC
- Material Conservation – Jablonski Building Conservation, Inc.
- Environmental Engineering – Froehling & Robertson, Inc.
- Cost Estimating – US Cost

Historical Background
Although some resources indicate that Harmony Hall was built in 1723, the developmental history presented in this HSR supports the construction date of 1769. The home was built in the Georgian colonial style typically seen in 18th century plantation homes. The house contains examples of both early and late Georgian architectural styles. Many of these stylistic elements for both the exterior and interior of the house still exist today and are in fair to poor condition.

Harmony Hall and its surrounding landscape have evolved and changed ownership many times over the past two and a half centuries. The original tract of land on which Harmony Hall now stands was first surveyed and recorded in 1662. The land was later patented as "Battersea" in 1668. It was first utilized for farming and agriculture by various colonial settlers of the late 17th century and early 18th century, after having been an area hunted for many generations by Native Americans.

As the colonial tobacco trade became more established in the Broad Creek area along the Potomac River, this land of Battersea and the area surrounding Broad Creek developed into a thriving trade port, later designated by the Maryland General Assembly as the port town Aire in 1706. The properties of Battersea, Want Water and other early patented tracts of land adjacent to Battersea along Broad Creek became integral in the tobacco trade and commerce of the port town of Aire. The home was first constructed in 1769 by Enoch Magruder although there is evidence to suggest there were earlier structures on the property that preceded it. In its early years, the plantation home was a focal point in a large tobacco plantation.

Throughout its history, Harmony Hall was owned and occupied by a variety of prominent families within Prince George's County, Maryland. Harmony Hall and Want Water, an estate on adjacent property, have been connected through history by many families and different owners and people who resided at Harmony Hall. In its more recent history, Harmony Hall was acquired by Charles Wallace Collins in 1929. Collins was most well remembered for his pro-segregation treatise titled *Whither solid South?: A study in politics and race relations* published in 1947 and his associations and influence in the establishment of Modern Conservatism and the Southern Democrat, or Dixiecrat "Revolt" of 1948. Collins and his wife invested greatly in the restoration of Harmony Hall and helped save this very important and valuable piece of history within Prince George's County.

Developmental History
The development of the house can be divided into six (6) distinct periods:

Period I: Tyler/ Marshall Era - 1709-1768
This period covers the ownership of Battersea from 1709 when William Tyler bought the property until 1769 when James Marshall sold the property to Enoch Magruder. During this time the property was primarily used as a tobacco plantation.

Period II: Magruder/ Lyles Era - 1769-1849 - PERIOD OF SIGNIFICANCE
This period begins when Enoch Magruder purchased the property in 1769 and extends to the sale of the property by the Magruder/Lyles family in 1850. During this time Magruder family members had married Lyles family members, Harmony Hall was constructed and was being used as a residence by the families and the property continued to be used as a tobacco plantation for most of that period.

Period III: Transition Years - 1850-1928
After the Magruder/ Lyles Era, Harmony Hall went through a transitional period with multiple owners. This period coincided with the decline of the Broad Creek area due to the impact of river transport being displaced by rail and the region's shift from an agrarian to an industrial economy. During this time, the property was periodically used for farming and the residence was rented, often having multiple occupants.

Period IV: Collins Restoration/Expansion Era - 1929-1940
Period IV begins when Charles Wallace Collins purchased the property and is defined by his restoration of Harmony Hall and construction of significant additions to the manor house. His additions included a Pantry Addition to the south of the Main Block of the House (referred to as the Central South Addition in this report), a kitchen, and a servants dining room. He also introduced modern plumbing and electricity to the building. He and his wife used the structure as their primary residence and the property as a functioning farm.

Period V: Collins Upgrades Era - 1941-1966
This period is defined by Charles Collins expanding the Central South Addition to enclose the basement entry along the south facade of the Main Block. During this Period he introduced heating and cooling to the house. It was also during this time period that the Colonial Dames provided a plaque commemorating what was considered to be the original date of construction of the house. Collins continued to use the house as a primary residence during this time. This period closes in 1966, following Charles Collins' death in 1964, when his widow, Sue Collins, sells the property to the National Park Service with a life tenancy agreement.

Period VI: 1967 to Present - National Park Service Stewardship
Period VI begins with the National Park Service (NPS) taking ownership of the property. Following the death of Sue Collins in 1983, the property was leased for a stretch of time as a residence and horse breeding farm, it served as a temporary residence for National Park Service staff, and for the remainder of the time, the house was vacant. During the leasing period the house was modified and another addition (referred to as the South Addition in this report) was added to the south facade of the Central South Addition. Several other outbuildings and structures were also built on the site. Additional systems modifications and plumbing were added during the leasing period as well.

The developmental history established and outlined within this report provides an overview of the historical development and significant changes to the original Battersea tract and the existing plantation home throughout the more than 300 years of its history. This developmental history assists in establishing the Period of Significance for the structure and an understanding of the structure as a background to the changes and evolutions in the surrounding community. For a complete list of all sources used to create this HSR, refer to the Appendix I: Bibliography and Inventory of Archival Research at the end of this document.

Work Recommendations

As a result of the home being vacant for the last twelve years, the consultant team determined that there are a significant number of urgent repairs and necessary preservation measures required. The work recommendations put forth were focused on the following:

- Making the building envelope weather tight
- Upgrading building systems to maintain a stable interior environment
- Upgrading the building systems to meet code
- Preventing any further deterioration of historic fabric on the interior and exterior
- Restoring interior finishes of the Main Block to a basic stable level
- Putting systems in place for fire protection and security so that the building is not at risk of fire or vandalism
- Removal of all identified hazardous materials

Additionally, portions of the structural framing will need to be reinforced and possibly repaired to assure stability and allow for different uses to be considered for the historic home. The site utilities and services will also need to be upgraded to comply with all applicable code and standards.

Ultimate Treatment and Preferred Use

The NPS scope of work for this HSR called for a selection of an Ultimate Treatment and Preferred Use for Harmony Hall as a final conclusion to the evaluation of the Treatment and Use Alternatives presented in Part 3 of this HSR. However, after reviewing the Treatment and Use Alternatives with the NPS representatives, they indicated that at this time they are not prepared to make a final selection of a treatment and use, as it will require further discussion and input. The document can continue to serve as a discussion point given the comprehensive treatment and use narratives and diagrams that have been provided as part of this Final Report.

Cost Estimate for Recommended Treatment and Preferred Use

Preliminary Class "C" Cost Estimate

A cost estimate was provided as a conclusion to the presentation of the Treatment and Use Alternatives. This estimate reflected as a stand alone document provides costs for the Baseline Work Recommendations that should be implemented regardless of what Treatment or Use Option is selected. These costs were broken down per building components (Main Block, Central South Addition, South Addition) so that the information can be matched with the Treatment and Use Options. In turn, each of the Treatment and Use Options have been priced. Given that an Ultimate Treatment and Preferred Use was not selected, the cost estimate, similar to the Part 3 narratives and diagrams, represents all Baseline Work Recommendations and Treatment and Use Options so that NPS has the information necessary to mix and match the various options to guide them to conclusion on future planning and protection of this facility.

The following represents the cost summaries of the various baseline work recommendations, treatment options and use alternatives:

Baseline Work Recommendations (Main Block, Central South Addition, and South Addition)	$3,537,155.00
Treatment Option #1 - Restoration -	
Use Option A: 18th Century House Museum	$2,891,104.00*
Treatment Option #2 - Rehabilitation -	
Use Option B: House Museum with Minimal Support Space	$3,389,933.00*
Treatment Option #3 - Rehabilitation -	
Use Option C1: House Museum with Maximum Support Space	$3,913,930.00*
Use Option C2: All Office Use	Same as above*
Use Option C3: Conference/Events	Same as above*
Treatment Option #4 - "Mothballing"	$ 666,109.00

* The costs established within the Baseline Work Recommendations for each portion of the building have been included within the Treatment Option costs as applicable, except for Treatment #4 - Mothballing. See Part 3: Treatment and Use Options of this report for a more detailed breakdown of the Class "C" Cost Estimate.

C. FURTHER RECOMMENDATIONS

The following are further recommendations for additional investigations or testing that would help to confirm observations and recommendations made within this report.

East Facade Pediment Investigative Probes:
Written documentation states that the east elevation brick pediment with oval "bullseye" window was added in the 1790's. Visual inspection of the brick on the exterior confirms that the brick is of a different color at this location than at other locations on the East Elevation, suggesting this pediment was constructed at a different time. Examination of the structural framing might provide additional physical evidence that this was a later addition.

East Dormer Structural Investigative Probes:
In addition to the east facade pediment, written documentation states that the two (2) east dormer windows were also a later addition. Preliminary investigations of the structural framing of these dormers and the modifications to the primary rafters suggest that these windows were a later addition. Further examination of the structural framing might provide additional physical evidence that these were a later addition.

West Dormer Structural Investigative Probes:
The 1924 documentation by Albert P. Erb depicts two (2) dormer windows on the west façade which do not currently exist and the 1934 Collins era HABS drawings do not show these dormers. Preliminary site investigations of the structural framing along the west side of the roof, as accessible through the third floor, does not provide evidence that these windows ever existed. Further examination of the structural framing in the west attic could confirm whether these two (2) west façade dormer windows existed or not.

Brick Foundation Investigative Probes:
Written documentation states that Charles Collins "rebuilt" the brick foundation of the structure. Further site probes could determine if this was a complete rebuilding of the foundations or simply a repair and re-pointing of the existing foundations (brick or stone to be determined through test pits).

Room 203 Plaster Probe to Confirm Split Chimney:
The 1924 documentation drawings by Albert P. Erb indicate that Room 203 - South Bedroom was divided into two chambers with a split chimney. Select removal of plaster finishes could reveal modifications to the underlying brick to confirm this assumption. BBB surveyed cracks in the plaster and a cut in the baseboard which could potentially locate the additional door adjacent to Door 203.

Room 103 Plaster Probe to Confirm Window Openings:
The 1924 documentation by Albert P. Erb indicates that there were the following:

- Two (2) windows flanking the north chimney in Room 102 - Living Room/ Parlor
- Two (2) windows flanking the north chimney in Room 202 - North Bedroom (The brick jack arches remain and can be seen on the exterior north facade.)
- Two (2) windows flanking either side of the south chimney of the Main Block in the Room 203 - South Bedroom

There is evidence today of the two (2) windows in Room 202 - North Bedroom as seen on the north façade where the brick jack arches remain and in the interior chair rail which has been patched and spliced together at these locations. The 1934 HABS drawings show a jack arch remaining in the south façade at the location of the existing cupboard in Room 103 - Dining Room. Select removal of interior plaster and/or gypsum drywall finishes could reveal modifications to the underlying brick to confirm these assumptions.

Room 104 Wall Probe to Confirm Window Opening:
The interior window trim details of Window 112 in Room 104 - Kitchen match the trim details on the kitchen side of Door 104. Door 104 was once an exterior entry door which became part of the interior enclosure when the Pantry Addition was added by Charles Collins around 1929-34 (Period IV). Therefore it is assumed that portions of the exterior walls of this Pantry Addition remained when the addition was expanded in 1941 (Period V) to complete the Central South Addition that is seen today. Select portions of the gypsum wallboard in the east wall of Room 104 - Kitchen and the west wall of the Room 108 - Restroom could be removed to see if the c.1929-34 exterior brick masonry bearing wall and window opening have been covered over by the interior sheetrock.

Room 105 Wall Probe to Confirm Window Opening:
It is possible that a window used to be located in place of the existing cupboard in Room 102 - Dining Room. It is unknown if the cupboard and the chimney breast)were designed together or if the cupboard was built at a later date to complement the existing chimney breast. However, the paint analysis conducted in conjunction with this HSR provides supporting documentation that these two elements date to a similar time period due to their similar paint chromochronologies and evidence of remaining finish layers (See Appendix B). Further on-site investigations are recommended to determine if the cupboard is original or if it is concealing evidence of an earlier window in this location. It is recommended that select areas of drywall be removed from the north wall of Room 105 - Corridor to uncover possible evidence along the south brick masonry wall of the Main Block. Possible evidence might include an extant brick jack arch above a former masonry opening for a window, or an area of patched and in-filled brick used following the removal of a window or other opening.

Confirmation of Hole in Dining Room Floor:
Although there was visual confirmation of patching in the floor of Room 103 - Dining Room that would confirm the Collins account of his predecessor having cut a hole in the floor of this room that led to a refuse collection in the basement, it would be worth removing some of the wood paneling at the ceiling of the Room 013 - Recreation Room, directly below the area where the patch was identified above, to confirm whether flooring and/or structure was patched.

Sanitary System Inspection:
Due to the age of the building, the sewer system should be inspected with a video auger to identify any blockages or cracks in the line. In addition to this, the system should be traced to verify pipe locations below slab and points of discharge.

Main Stair Support Probe:
The post supporting the main staircase bears on a floor joist that is potentially undersized. This floor joist is not visible at the basement level. A probe could not be taken during the HSR field investigations due to presence of asbestos. The asbestos should be abated and the probe performed so that the structural analysis of the stair can be fully completed.

Wood and Materials Testing:
The load analysis for the building, summarized in the Structural Assessment portion of Part 2C: Condition Assessment later in this report, is based on assumptions made about materials and their properties. Prior to advancing much further with options, it is worth having the materials tested to confirm wood species, loading capacity, etc., so that live load capacity calculations could be more accurate. Also, given the assumptions made in this report about the date of construction, it would be helpful to have wood testing performed on various wood components to confirm species, grade and age that might finalize the discussion on date of

construction of the house.

Mortar Analysis at Flat Arches:
It was noted that the mortar used at the flat arches above most of the Main Block windows (Window Types 2, 3a, 3b, 4 & 5) is of a different color than the remainder of the mortar leading one to conclude that these flat arches might have been repaired or replaced. It is recommended that an additional mortar sample or two be taken at these arches to be able to compare to the other mortar samples already taken to come to some conclusion.

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Part 2A: Developmental History



Harmony Hall

Fort Washington, Maryland

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A.1 HISTORICAL BACKGROUND & CONTEXT OF BROAD CREEK AND BATTERSEA

Introduction

In order to fully understand the developmental history of Harmony Hall, it is important to have an overview of the history of the region in which Harmony Hall is situated. An introduction to the establishment, history, and influence of the Broad Creek community is essential in understanding the significance of the historic structure. A contextual background places Harmony Hall as a central component to a much larger history of the early colonial settlement of Maryland and the growth and development of the tobacco trade during the 18th century. This part of the chapter will discuss a range of topics that set the stage for describing in more detail the Developmental History of Harmony Hall in Part 2A, Section A.2 - Developmental History of Harmony Hall. The history of early occupants, the history of the tract of land that the house is located on, and the development of the Broad Creek community that surrounds the property will be described in order to establish how Harmony Hall contributes to the region's history and how the region's history influenced Harmony Hall.

Other Historic Names Used for Region:
Battersea, Battersee, Battersey, Broad Creek Farms

Subdivision of the Land and Construction of Harmony Hall:
10511 Livingston Road
State Route 224
Fort Washington, Maryland
Prince George's County

- The property of Harmony Hall is bounded on the east by Livingston Road and on the west by the Broad Creek extension of the Potomac River. The north end of the site is bounded by the Washington Suburban Sanitary Commission (WSSC) pumping station and private property owners and to the south by the Harmony Hall Regional Center (formerly an elementary school operated by the Prince George's County Board of Education).
- The 65.7-acre property is located 11 miles south of Washington, DC and 4 miles north of Fort Washington Park, a property also maintained by the National Park Service (NPS).

Early Native American Settlement and Piscataway Indians

The area of Broad Creek, where Harmony Hall is situated, was inhabited by Native American populations for thousands of years before the arrival of European settlers. Broad Creek area, a coastal plain of the Potomac River basin, was the home and hunting grounds of the Piscataway Indians and other tribes of Native Americans through the early 17th century. When the European settlers arrived in the early 1600s, the land where the Piscataway Indians occupied was approximately four miles south of Broad Creek.[1]. No comprehensive archaeological investigations have been completed within the Broad Creek area, however a few test pits and surveys conducted by the National Park Service during a site investigation in 1985-87 revealed evidence of Native American occupation before the end of the 17th century. These site evaluations and archeological investigations are documented in the publication, *Archeology at Harmony Hall: Exploring the Late Seventeenth-Century Frontier of Maryland.*

The early settlement of Maryland by the English colonists began in 1634 at St. Mary's City located fifty miles south of Broad Creek. When the English settlers first arrived in the area they were unable to settle in the Broad Creek due to the inability to devise a treaty with the Piscataway Indians. However, as they moved north

1 BCHDPPS 2002: 7

during the late 17th and early 18th centuries, they began to settle areas of Broad Creek through land grants from Lord Baltimore. When Harmony Hall, Broad Creek Church (later known as St. John's Episcopal Church – Broad Creek), and other settlements and plantations were established, Broad Creek was the northernmost English settlement in Maryland. Georgetown, and Alexandria on the Virginia side of the Potomac River, would not be established until approximately a century later and Washington, DC was not established for another century and a half.

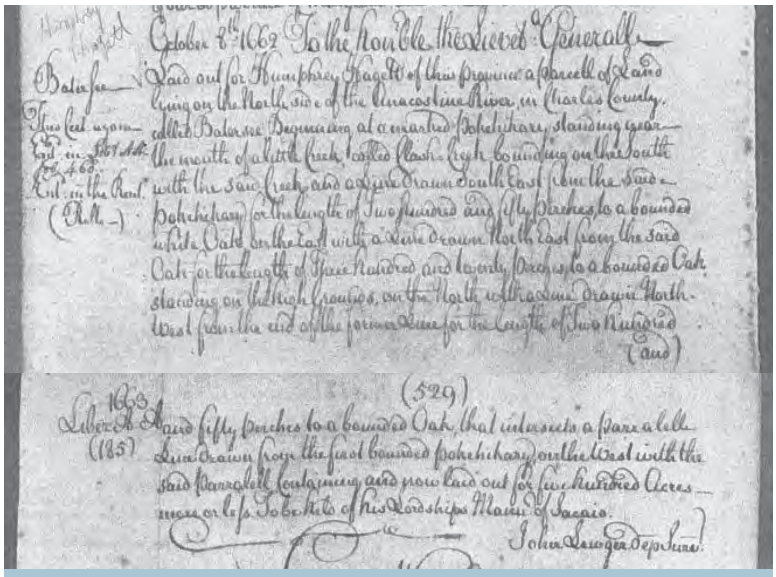


Figure 2A-001: Original Survey Record for Battersea for Humphrey Haggett, Maryland State Archives dated October 8, 1662

The British colonists and native Piscataway Indians traded and negotiated business in the Broad Creek area on many occasions during the end of the 17th century. However, due to the European colonists' resistance to continually being involved in the protection of the Piscataway Indians from the Susquehannock tribes to the north, the Piscataway Indians fled their hunting grounds surrounding Broad Creek and the Potomac River to settle in the mountains of Virginia. The increase in the land necessary for the expansion and growth of the tobacco trade impacted the displacement and relocation of the Piscataway Indians as well.[2] By 1697, most of the native Piscataway Indian population had fled the area, leaving Broad Creek to be developed primarily as a British port town and community.[3]

Survey and Patent of Battersea

The first surveyed and recorded documentation by the European colonists of the 500-acre Battersea tract on which Harmony Hall would eventually be built was made in February of 1662 (See Figure 2A-001 and 2A-002) and was officially recorded on October 8, 1662 for a lawyer named Humphrey Haggett.[4, 5] Over the next 25 years, many other smaller tracts of land in the area were patented, however it was around this first 500-acre tract that the Broad Creek community developed and grew during the second half of the 17th century.[6] The Battersea tract of land and the various subsequent adjacent land divisions were the location of what was to become the historic commercial shipping and trade port town of Aire. (See Figures 2A-004 and 2A-005) The area, known today as Broad Creek, was established around 1694.[7] This community developed into a thriving shipping port for tobacco. Broad Creek provided an advantage to the settlers due to its navigability and direct access to the Potomac River.[8]

2 Meringolo, "The Accokeek Foundation and Piscataway Park, CRM: The Journal of Heritage Stewardship, Volume 5, Number 1, Winter 2008, accessed online at http://crmjournal.cr.nps.gov; Potter: 220-221; HRS: 8
3 BCHDPPS 2002: 7
4 Prince George's County Patent Survey #6:226, 1662.
5 Humphrey Haggett's surname is spelled two different ways on these early land survey and patent documents. It is listed as both Haggett, Hagett, Hagget, and Haggate. For purposes of consistency, this document spells it Haggett.
6 BCHDPPS 2002: 7
7 Branch-Miles, Thomas and Woods, 49
8 University of Maryland, Collins' Papers

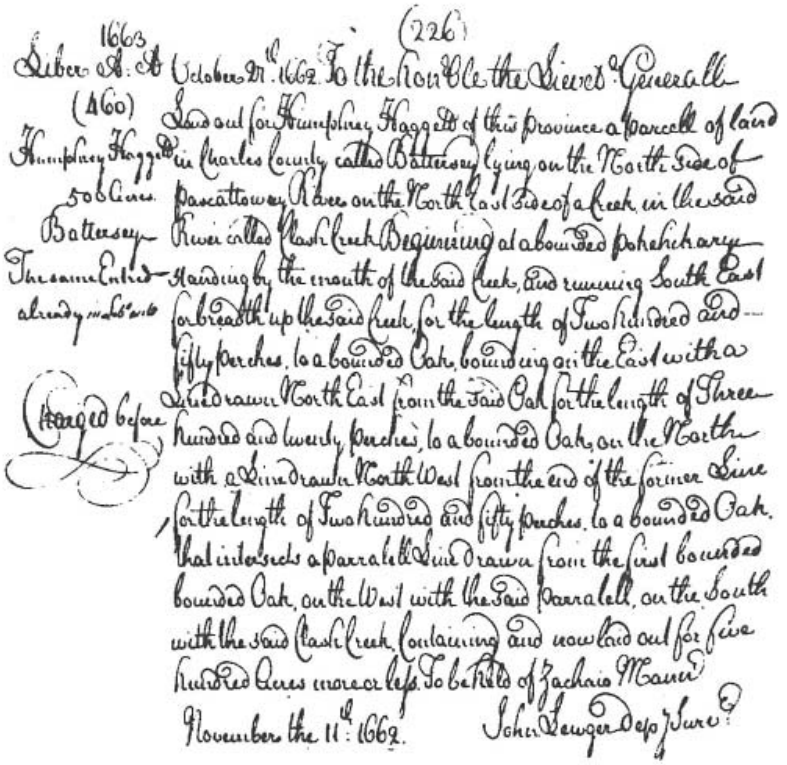


Figure 2A-002: Original Survey Record for Battersea for Humphrey Haggett, Maryland State Archives dated October 27, 1662

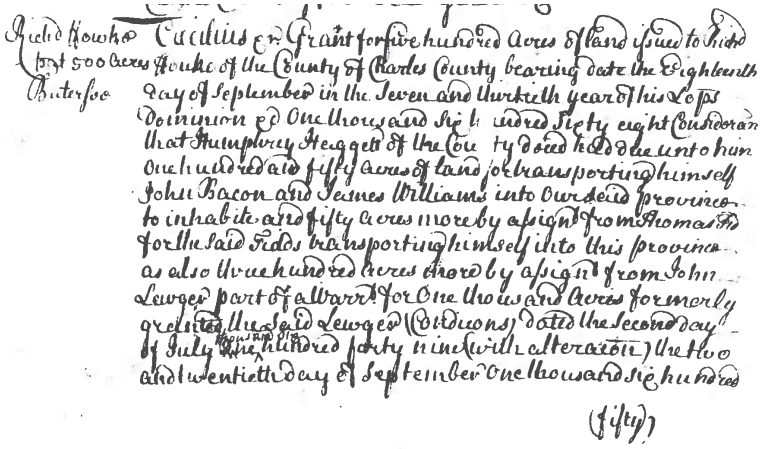


Figure 2A-003: Original Patent for Battersea, Maryland State Archives dated September 18, 1668

Harmony Hall is located on a 65-acre portion of the original 500-acre Battersea tract. The original 500-acre tract extended northeast along Broad Creek in a large rectangular pattern and included much of what is now considered the Broad Creek Historic District. On March 30, 1663, before the land patent was granted by Lord Baltimore, Humphrey Haggett died. His last will and testament was probated on July 30th, 1663, leaving his entire estate to his wife, Anne Haggett. By the time the patent was granted on September 18, 1668 by the English Kings Charles I and Charles II,[9] the owner was Richard Fowke, who had married Haggett's widow.[10, 11] (See Figure 2A-003) According to county records indicating that Haggett entered a brand for his livestock at the court of Charles County in 1661, he utilized the land prior to the patent being issued.[12] There is no documentation that he ever resided on the property however, there are also no records indicating he owned any other land within the province of Maryland. The court records do reflect that his profession was the practice of law.[13]

Similar to the circumstance with Haggett, there is no recorded evidence that Richard Fowke or his wife Anne (Haggett) Fowke ever lived on the land. Prior to Richard Fowke's death in 1677, the Battersea tract was purchased by Richard Iles and Philip Mason in two equal 250-acre parcels of land. Later in 1694, these two equal parcels were sold, one to William Thompson and the other to Thomas Lewis. In 1695 William Thompson sold his 250 acres to Richard Gambra.[14] Depositions, taken in 1745 for a land commission regarding the boundaries for Battersea, document recollections of early farmers in the area. They recount that between 1685-95, there was occupancy and farming of the Battersea land.[15] This deposition in conjunction with the re-survey of the property provides some information on the use and occupancy of the land during Thomas Lewis' ownership. It states that Lewis had a cornfield near the mouth of Slash Creek.[16,17]

9 National Capital Parks - East (NACE) Records
10 Patent #12:138, 1668; Sonderman and Virta 1993: 3
11 The estate of Humphrey Haggett was much involved and complicated and in a very brief time many law suits had developed. Many creditors gained control of Haggett's estate, but Battersea remained in the possession of his widow. (University of Maryland, Collins' Papers)
12 University of Maryland, Collins' Papers; History of a Tract of Land called Battersey, 1933: 5
13 Liber B. No. 1 Folio 19, 20, and 155
14 University of Maryland, Collins' Papers
15 National Capital Parks - East (NACE) Records, Marilyn Nickels
16 Sonderman and Virta, 1993: 10
17 Slash Creek is also referred to as Clash Creek in some historic documents.

St. John's Episcopal Church - Broad Creek

Approximately 30 years after the first indication of documentation and survey of the Battersea tract of land, the Church of England was established as the official church in the Maryland colony (1692). The Church of England sought to establish churches and chapels every ten miles through the "Act for the Service of Almighty God". There were two other churches within Piscataway (King George's) Parish but no church had yet been established in the Broad Creek area.[18] Colonel John Addison, who was a large land owner in England, was a leader in the establishment of a Protestant community in Broad Creek. In 1694, he was elected Foreman of the first Vestry of Piscataway Parish, and the parish purchased land for what was to become St. John's Episcopal Church - Broad Creek (St. John's), originally known as Broad Creek Church. This church is considered to be one of the earliest Episcopal churches in the surrounding Washington, D.C. area.[19]

There is a strong connection throughout history between the leadership of St. John's Episcopal Church and the owners of Harmony Hall. The founders of the community within the Broad Creek area were gentlemen by birth, born into privileged families, and were therefore very well educated and often land rich. They were also loyal to the church of England. Many of the prominent early families that were leaders of St. John's had a connection with the land of Battersea and with Harmony Hall.[20]

There have been four church buildings constructed on the site. The first church structure was erected in 1694 and was subsequently replaced in 1707. Early parish records of St. Johns Church (maintained and archived at the Washington National Cathedral) indicate that contracts were established on January 26, 1722 for John Lane to construct the brickwork for a new church to replace the one previously on the site, and John Bradford, a carpenter, to complete all of the woodwork for the new church including the roof, porch, windows, doors and all interior trim.[21] Local legend carries that the remaining bricks from the re-construction of St. John's Church in 1722-24 were used in the construction of Harmony Hall. The church was again rebuilt in 1764-67.

The first rector of St. John's was Reverend John Fraser who served the community from 1710 to 1741. Following the death of Rev. Fraser in 1742, Henry Addison, the son of Colonel John Addison, became the second rector. Addison, a loyalist, returned to England in 1775 in anticipation of the Revolutionary War. In 1781, following the departure of Addison, Joseph Messenger became rector and served in this position for twenty years. During the leadership of Rev. Messenger, Harmony Hall was used as the church parsonage from 1785-91.[22] Following Messenger, Walter Dulaney Addison was installed as the fourth rector. W. D. Addison (whose wife gave Battersea the name "Harmony Hall") was the great-nephew of Henry Addison, the second rector of St. John's. It is also recorded in the history of St. John's that W. D. Addison was one of the four clergy who participated in George Washington's funeral in December 1799.[23,24,25]

18 MHT Eligibility Review Form, 11; Broad Creek Historic District Preservation Planning Study, 2002: 10

19 University of Maryland, Collins' Papers; St. John's Episcopal Church-Broad Creek website: http://www.stjohnsbroadcreek.org/StJohnsHistory.htm

20 University of Maryland, Collins' Papers

21 University of Maryland, Collins' Papers

22 University of Maryland, Collins' Papers; Broad Creek Historic District National Register Nomination 2011: 12; Pearl:23; MHT Eligibility Review Form, 19

23 St. John's Episcopal Church-Broad Creek website: http://www.stjohnsbroadcreek.org/StJohnsHistory.htm

24 An article from a periodical found among the Charles Collins Papers at the University of Maryland attributes the use of Harmony Hall as rectory for St. John's Episcopal Church under the Rev. Joseph Messenger as probable evidence that George Washington would have visited Harmony Hall since General George Washington and his household were frequent worshippers at St. John's Episcopal Church. (The Maryland Club Woman, page 21)

25 George Washington was a member and vestryman at Christ Church in Alexandria, Virginia and at Pohick Church near his home of Mount Vernon. According to legends he also attended services at St. John's Episcopal Church, having made the trip across the Potomac River to Broad Creek on his multi-oared barge. (St. John's Episcopal Church-Broad Creek website: http://www.stjohnsbroadcreek.org/StJohnsHistory.htm)

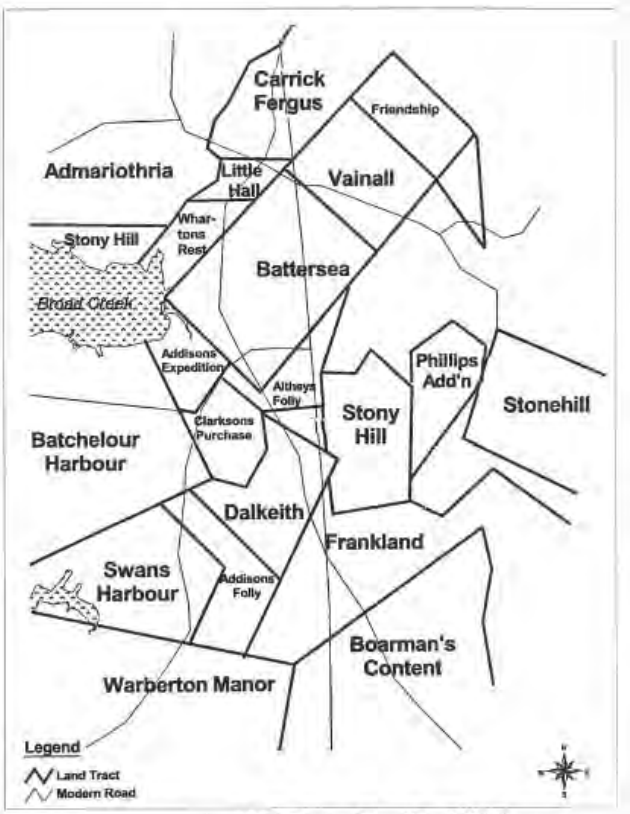


Figure 2A-004: Approximate Location of Early Tracts at Broad Creek (1696) (Source: Broad Creek Historic District Preservation Planning Study, 29)

Prince George's County

In 1696, just three years after the Church of England was established as the official church in the Maryland Colony, Prince George's County was founded as a result of the growing population and settlement in the area and the increasingly profitable tobacco trade. Portions of Calvert County and Charles County were merged to create Prince George's County. The western portion of this new county had been part of Charles County.

Want Water

Want Water refers to both a historic house and the property it sits on. This site and structure are directly adjacent to the Battersea tract and have an intertwined history with Battersea/ Harmony Hall. At times both properties were owned by the same family due to marriage or because individuals purchased both properties together. The earliest record of the property indicates that the Want Water tract was owned and patented by Colonel Thomas Addison, son of Colonel John Addison in 1706.[26] The house was constructed in 1708 with a combination of brick and wood framing.

In 1696, Richard Lewis inherited the southwestern 100-acres of Battersea from his father, Thomas Lewis. In 1709 Richard Lewis sold his 100 acres of the Battersea tract to William Tyler. William Tyler's daughter, Mary Tyler, married Humphrey Batts, a shipwright, in 1727.[27] Humphrey Batts purchased the 35-acre Want Water property from the Addison family in 1736.[28] It remained in the Tyler family for a few generations and eventually was sold. When Enoch Magruder purchased the Want Water property from Richard Barnes in 1761, the house was still extant. Sarah Magruder Lyles, daughter of Enoch Magruder and wife of Colonel William Lyles, inherited Want Water from her father at the time of his death and continued to live at Want Water with her husband Colonel William Lyles. In 1795, Colonel Lyles transferred the deed to his wife's property into his name. This included Want Water and part of the Battersea tract of land. Colonel William Lyles owned other extensive lands and plantations in southern Maryland and was a personal friend of George Washington.[29] During the 1800s, Want Water transitioned into the ownership of various families, and similar to previous history was at times also owned by the same owner as Harmony Hall.

In the 20th century, both properties were purchased by Charles Wallace Collins and later sold to the National Park Service (NPS). The Want Water property is currently maintained by the National Park Service, but the house is no longer intact. Only the brick gable end walls remain. The house was listed on the National Register of Historic Places with a construction date assumed to be 1708.

26 University of Maryland, Collins' Papers
27 MHT Eligibility Review Form, 18
28 In 1747 the general Assembly of the Maryland Colony passed the "Act for Amending the Staple of Tobacco" to establish tobacco inspection stations in various counties in an effort to control the quality and exporting of such a valuable trading commodity. One of the sites selected for an inspection station was in Prince George's County "at Broad Creek, on the Land of Humphrey Batts". (BCHDPPS 2002, 16; Archives of Maryland, XLIV, 595 ff; Prince George's County Records, Book HH:351)
29 University of Maryland, Collins' Papers



Figure 2A-005: Historic Land Patents in the Broad Creek Area (Source: Broad Creek Historic District Preservation Planning Study, 20)

Town of Aire/ Ayres

In April of 1706, provincial governor, John Seymour, enacted into law the establishment of a port town called Aire "in Prince George's County at Broad Creek in Potomac River at south side of Broad Creek at Thomas Lewis Landing".[30] The impetus for creating this town was the need for a tobacco inspection station due to the volume of tobacco trade that had developed in the area. The town, situated on the 500-acre Battersea tract of land, was established by the Maryland General Assembly by the Act for the Advancement of Trade, or town act, since this area surrounding Broad Creek had been operating as a site of commerce and trade since the 1690s. The five port towns designated by the Maryland General Assembly included Milltown, Nottingham and Queen Anne on the Patuxent River, Marlborough on the western branch of the Patuxent, and the new port town of Aire at Broad Creek on the Potomac.[31] Aire became a tobacco port town of consequence in the latter part of the 17th century with great tobacco warehouses and ship building and served as a significant trading port long before the establishment of Georgetown or Alexandria, VA. This port town consisted of 100 one-acre sites located between Slash Creek and the Broad Creek Landing. Throughout the 18th century the town developed into a successful and profitable center of trade. The settlement included taverns, a ship builder, a tobacco warehouse and international merchants.[32] Warehouses, taverns and docks were built throughout the thriving area. The landing at Broad Creek was still known as Thomas Lewis' landing at the turn of the 18th century.

There is little existing evidence remaining to describe the port town of Aire and for many years its exact location was difficult to determine. The Eligibility Review Form for the National Register prepared by the Maryland Historical Trust discusses the evidence of a description of a town in the deed for the purchase of Battersea by William Tyler from Richard Lewis in 1709. The metes and bounds of the town are outlined to be approximately 100-120 acres in the southwest corner of Battersea bordered on the northwest by the tract called Want Water and on the southeast by Slash Creek. A formal town plan, as suggested in the 1706 Assembly Act, has never been found.[33]

Silesia

Another layer of influence related both to Broad Creek and Harmony Hall is that of the Prussian immigrants. Robert Stein came to the United States from the Silesia region of Prussia in 1875 and purchased 320-acres in Broad Creek that included the Harmony Hall and Want Water properties in 1892. Stein, his brother and his friends were trying to encourage their families in Prussia to immigrate to the United States at the end of the 19th century.[34] In 1889, Stein successfully petitioned the court to rename the area Silesia in honor of the family ties in Prussia. Many immigrants continued to move into the area in the early part of the 20th century and many of their descendants still reside in the Broad Creek area today. As more and more immigrants joined Stein, they established a community of farmers, laborers and merchants. A post office and a one-room school opened in the

30 Session of General Assembly, April 2 to 19, 1706; Archives of Maryland XXVI, 636 ff
31 BCHDPPS 2002: 12
32 Reed, 7
33 MHT Eligibility Review Form, 16
34 MHT Eligibility Review Form, 21

early 1900s. The White Horse Tavern, an early 19th century landmark in the area, was demolished in 1903 and Robert Stein constructed a grocery and feed store. The small community of Silesia is located just south of the Broad Creek Historic District and contains a variety of buildings constructed from the 1920s to the 1980s. Silesia is not currently listed as a National Register Historic District nor is it listed as a Prince George's County Historic District.

Harmony Hall

As is evidenced from the brief history of Broad Creek, port Aire and Want Water, Harmony Hall's history is intertwined with the development of these local historic resources. There are discrepancies about the construction date of Harmony Hall. Some of the archeological evidence indicates there was a structure extant on the property prior to the early 1700s when William Tyler owned Battersea that could have been Harmony Hall. There are also links between William Tyler, Jr. and his involvement with the reconstruction of St. John's Church in 1723 that would support that Harmony Hall was built circa 1723 by the Tyler son. However, later records indicate that after William Tyler died in 1721, the house he lived in on the Battersea property burned. His wife remarried and records indicate she lived elsewhere. There are no records to support that his son, William Tyler Jr. lived on the Battersea property during his life and his mother continued to maintain ownership of the property even though she did not reside there. The son passed away in 1755 before his mother Elizabeth and therefore never became a legal owner of the property. John Tyler, son of William Tyler Jr., inherited the property upon the death of his mother and sold the 100 acres of Battersea in 1761 to James Marshall. In turn, James Marshall owned the property for seven years and sold it to Enoch Magruder in 1769. One could also conclude, from this documentation, that during Magruder's ownership of Battersea, he constructed Harmony Hall (1769-1786). Further research, presented in Part 2A, Section A.2 - Developmental History of Harmony Hall, gives far more detail about the transitions of ownership and the physical development of the house, however the construction date still requires further investigation.

Regardless of the conclusion on the construction date, Harmony Hall is considered one of the most significant architectural features of the Broad Creek Historic District in Prince George's County. It is one of the earliest extant colonial manor houses in the County. The development of early manor and plantation houses throughout Prince George's County was predominately Georgian in style. The typical characteristics included a symmetrical square or rectangular plan, hipped roof with brick gable ends and dormer windows.[35] Harmony Hall is of a flemish bond brick construction exemplifying this Georgian style. The design is a symmetrical rectangular plan one room deep organized around a central hall. Architectural details and features of the house include a central grand staircase with saddles in the rails, an oval "bullseye" window in the central third floor pediment along the east façade, foliated dormers, a decorative wood cornice and intricate interior molding details including ornate fireplace mantles. The water table and belt course are of molded brick. The third floor brick pediment, oval "bullseye" window, dormer windows and double entry door along the east façade were all additions to the house in the late 18th century.[36]

Broad Creek Historic District

Broad Creek, located along the western boundary of Prince George's County, is one of the primary tributaries of the Potomac River. It is a freshwater tidal estuary along the east bank of the Potomac River, halfway between Mount Vernon and Alexandria, Virginia on the opposite shore. The mouth of Broad Creek and its large estuary is a primary feature of the area and distinguishes the Broad Creek Historic District. (See Figure 2A-006)

35 Forman, 83
36 Forman, 92

On March 20, 1984, the Prince George's County Historic Preservation Commission voted to establish a Broad Creek Historic District. The decision was upheld and the Broad Creek Historic District was established by the Prince George's County Council on July 30, 1985. It was the first historic district formed under the Prince George's County Preservation Law. Harmony Hall and the tract of land it is situated on (Battersea) contribute to the Broad Creek Historic District.

This rural area surrounding Broad Creek is considered significant because of its historic buildings, pre-historic and historic archaeological sites, and the many natural landscapes and features. The area remains a quiet semi-rural enclave that serves as a reminder of the agricultural history of the County when tobacco and shipbuilding were the prominent industries of the time.[37] The historical significance of the area is derived from many factors and there are several significant and important 18th century historic structures and sites located within the boundaries of the Broad Creek Historic District, including:

- Archeological traces of early Native American settlements
- The original land grant of Battersea (1668)
- The port town of Aires/ Ayres, one of Prince George's County's first towns (c.1706)
- Ruins of Want Water (c.1709)
- A man-made waterway/ canal dating from the colonial era (1749)
- Piscataway House (c.1750, relocated in 1930s by Charles Collins to avoid demolition)
- St. John's Episcopal Church, one of the first Anglican Churches (now Episcopal) in the Washington DC area (originally constructed 1694, re-built in 1707, 1722-23 and 1764-67)
- Harmony Hall (c.1723 or c.1769)
- The community of Silesia (founded c.1900)

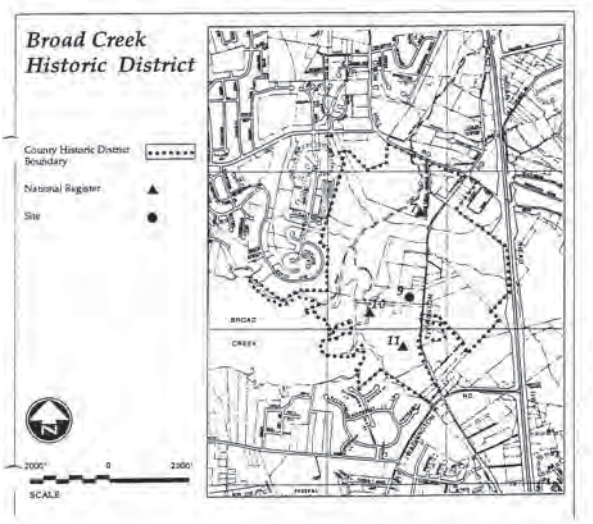


Figure 2A-006: Broad Creek Historic District (Source: Maryland Historical Trust, National Register Eligibility Review Form)

The official historical marker designating the area of Broad Creek Historic District contains the following description:

Broad Creek Historic District Marker
Prince George's County Maryland

The Broad Creek Historic District was established by the Prince George's County Council on July 30, 1985. The area surrounding Broad Creek, an estuary of the Potomac River, is considered a special place because of its historical significance, its important architectural and archeological resources, and its unspoiled natural features.

The Broad Creek area's historical significance is derived from several factors: It includes the original land grant of Battersea; the site of the town of Aire, one of six towns established by the Maryland General Assembly in 1706 as ports for the shipping of tobacco; and St. John's Episcopal Church, established in 1692, the present building dating from 1766. St. John's is considered to be the "mother church" of other Episcopal churches in the region.

The District also includes three early to mid-18th century landmark buildings: Harmony Hall (a Georgian manor dating from 1723); Piscataway House (a frame structure c.1750, which was moved to Broad Creek from Piscataway to avoid its demolition); and the ruins of Want Water (a frame and brick dwelling c.1710). The surroundings of these important buildings and sites have remained relatively unchanged for over two centuries.

37 Branch-Miles, Thomas and Woods, 49

A.2 DEVELOPMENTAL HISTORY OF HARMONY HALL

Introduction

As was established in the previous section reflecting the developmental history of Battersea, the land that Harmony Hall was constructed on played an integral role in local history and Harmony Hall's developmental history is directly tied to the history of the land. The actual date of construction of the manor house is still in dispute as historic documents provide evidence that could support either the suggested 1723 construction date or the 1769 construction date. The developmental history of the house will start with a more detailed outline of the ownership of the property, followed by a description of documented physical changes to the house and property from the 1920s forward to present day. There is very little documentation of the physical changes to the house until the late 1920s when Charles Wallace Collins purchased the property. Shortly thereafter the house was documented by Historic American Building Survey (HABS). Collins provided significant narrative about the changes he made to the house. This documentation is relied upon heavily in the developmental history as a source for understanding changes to the house as there are few sources prior to his papers and the HABS documentation that clearly describe physical changes to the historic fabric. Many of the assumptions of the original appearance of the house prior to Collins' ownership come from either his descriptions or his assumptions made from research on similar colonial Maryland plantation houses accompanied by field documentation and inspections carried out by the HSR team.

Battersea Ownership

The tract of land on which Harmony Hall is located was first surveyed in February of 1662 and recorded on October 8, 1662 with the name "Battersea" for Humphrey Haggett, a lawyer who practiced in the county court.[1] Records indicate a residence was located on the site at that time, but it was not the manor house now known as Harmony Hall. Local legend claims that the existing manor house was originally constructed on this site in 1723, the same year in which the nearby brick building of St. John's Episcopal Church was constructed. However, other theories suggest that the first structure on the site was an earthfast structure[2] and that the manor house which survives today was not constructed until 1769 or later.

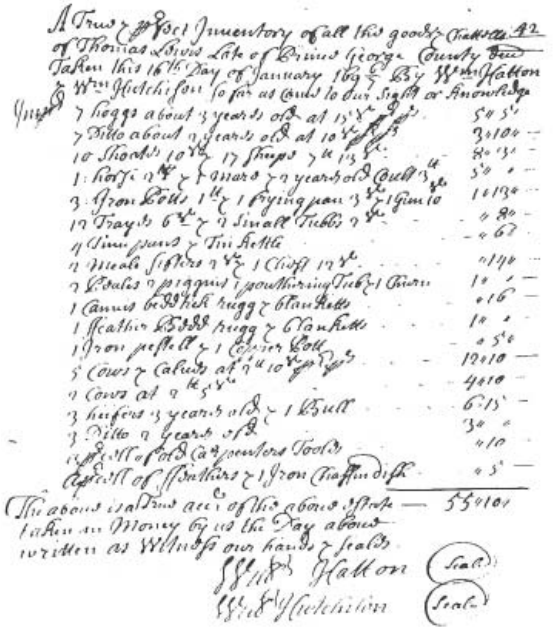


Figure 2A-007: Thomas Lewis Probate Inventory, Maryland State Archives

Haggett, who never lived on the land, later died in 1663. By the time the patent was granted in 1668, the owner was Richard Fowke, who had married Haggett's widow.[3] In 1688, Richard Fowke divided the property in half, selling one portion to Philip Mason and the other to Richard Iles.[4] The tract sold to Philip Mason (the western portion, which included the mouth

1 Patent Survey 6:226, 1662.

2 These sites are found throughout the territory occupied by the English in the seventeenth century, and represent occupations from the late 1620s to the second quarter of the eighteenth century. A method of construction in which the building structure is laid directly on the ground surface or set into the ground on posts, rather than resting on foundations. The technique was relatively simple and economical to construct.

3 Patent 12:138, 1668; Sonderman and Virta 1993: 3

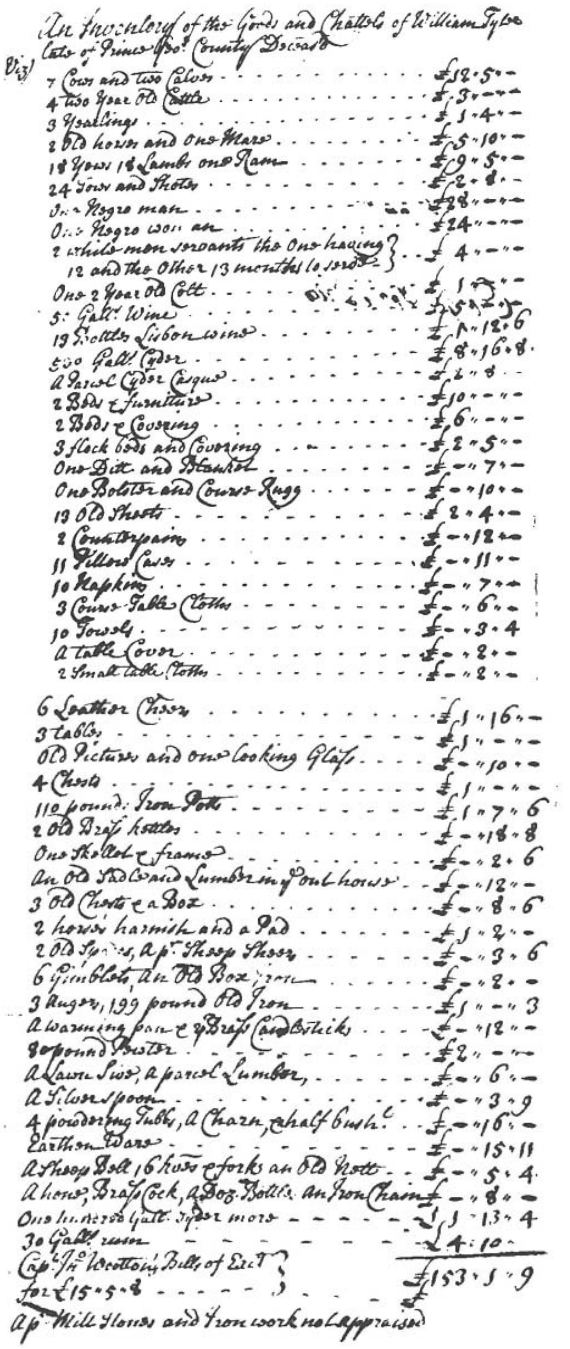
4 Deed P#1:32, 1688.

of Broad Creek) contained the land upon which the community of Broad Creek began to develop, and where Harmony Hall was constructed in the 18th century.

Philip Mason sold his 250-acre portion of the Battersea tract in 1692 to Thomas Lewis.[5] It is believed that the first structure was built on this parcel of land by the Lewis family; the archaeological investigations conducted by the National Park Service in 1985-87 on the property of Harmony Hall revealed evidence of an earthfast structure east of the existing historic manor house. This earthfast structure is thought to be possibly the oldest documented dwelling in the Washington metropolitan area.[6]

Thomas Lewis died in 1696 and through his will he bequeathed the southwestern 100-acres of Battersea to his son, Richard Lewis.[7, 8] According to Thomas Lewis' will, his widow (Richard's mother) was living on the property, which supports that there was a residence on the property at that time, and it could have been the earthfast home.[9] The National Park Service (NPS) archeological investigations revealed that this early earthfast home may have been destroyed by fire, but that it was determined to have been built between 1690 and 1710.

Wills can often indicate, via recording of possessions, the quality of life, wealth and status of an individual and in turn, by inference, the quality and scale of the dwelling they resided in. Thomas Lewis' will does include an inventory which provides some clues as to his wealth and possessions at the time of his death. (See Figure 2A-007) The documented evidence contained in his will indicates that there was a residence on the property at this time. The inventory of Thomas Lewis' estate was indicative of a man in the middle income bracket for that time


An Inventory of the Goods and Chattels of William Tyler late of Prince Geo: County Deceased

Viz:

7 Cows and two Calves	£12·5·-
4 two Year Old Cattle	£3·-·-
3 Yearlings	£1·4·-
2 Old horses and one Mare	£5·10·-
18 Yews 18 Lambs one Ram	£9·5·-
24 Sows and Shotes	£2·8·-
One Negro man	£28·-·-
One Negro woman	£24·-·-
2 white men servants the One having 12 and the Other 13 months to serve	£4·-·-
One 2 Year Old Colt	£1·-·-
5 Gall: Wine	£1·12·6
19 Bottles Lisbon wine	£8·16·8
500 Gall: Cyder	£2·-·-
A Parcel Cyder Casques	£10·-·-
2 Beds & Furniture	£6·-·-
3 Flock beds and Covering	£2·5·-
One Bitt and Blanket	£-·7·-
One Bolster and Coarse Rugg	£-·10·-
13 Old Sheets	£2·4·-
2 Counterpains	£-·12·-
11 Pillows Cases	£-·11·-
10 Napkins	£-·7·-
3 Course Table Cloths	£-·6·-
10 Towels	£-·3·4
A table Cover	£-·2·-
2 Small table Cloths	£-·2·-
6 Leather Chairs	£1·16·-
3 tables	£1·-·-
Old Pictures and one looking Glass	£-·10·-
4 Chests	£1·-·-
112 pound: Iron Pots	£1·7·6
2 Old Brass Kettles	£-·18·8
One Skillet & frame	£-·2·6
An Old Bed Board Lumber in ye out house	£-·12·-
3 Old Chests & a Box	£-·8·6
2 Hoes 1 harrow and a Pad	£1·2·-
2 Old Spades, A^p Sheep Shears	£-·3·6
6 Gimblets, an Old Box Iron	£-·2·-
3 Augers, 1 99 pound Old Iron	£1·-·3
A warming pan & Brass Candlesticks	£-·12·-
8 pound Pewter	£2·-·-
A Saw Saw, a parcel Lumber,	£-·6·-
A Silver Spoon	£-·3·9
4 powdering Tubs, A Churn, Half Bush^l	£-·16·-
Earthen Ware	£-·15·11
A Sheep Bell 16 Knives & forks an Old Knife	£-·5·4
A Horse, Brass Cock, A Doz: Bottles an Iron Chain	£-·8·-
One hundred Gall: Cyder more	£1·13·4
30 Gall: rum	£4·10·-
Capt Jno Wootton's Bill of Ex^t for £15·5·8	£153·1·9
A^p Mill Horses and Iron work not Appraised	

Figure 2A-008: William Tyler, Sr. Probate Inventory, Maryland State Archives

5 Deed S#1:48, 1692.
6 BCHDPPS 2002: 8
7 Will #7:150, 1696.
8 The other 150 acres of Thomas Lewis' Battersea property were conveyed in 1709 and 1711 to Thomas Stonestreet, who subsequently purchased the remaining eastern 250 acres of Battersea in 1726. Prior to 1769, undated rent roll indicated that Thomas Stonestreet owned 275 acres of Battersea and his son, Butler Stonestreet, owned 125 acres, comprising a total of 400 acres of the original Battersea tract of land. The Stonestreet family landholdings comprised much of what is today the northern section of the Broad Creek Historic District; see Prince George's County Deeds D:79, E:101; M:88. Interviews with Phyllis L. Cox, spring 2001.
9 Provincial Court inventory XIV:42

period, so one can assume the house was a reasonably comfortable one.[10]

The Tyler Family Ownership

In 1709, Richard Lewis sold the 100-acres of land, that included his parent's home, to a carpenter named William Tyler.[11] In the deed transferring "Battersea" from Richard Lewis to William Tyler is a description of the port town of Aire.[12] The deed of sale of Battersea to William Tyler indicates that the property included "tenements, dwelling houses, tobacco houses, barns, stables, out houses... orchards, gardens and fences", which confirms that there were structures on the property in 1709 at the point of sale.[13] No further description of what these structures looked like is available.

William Tyler is credited with supervising the construction of the second church to be built at the site of St. John's Episcopal Church in 1707. He was listed as a carpenter in several documents, including his will. It should be noted that during that time period a carpenter was known to be both an architect and a builder equally and it is possible William Tyler constructed his own home at Battersea, though probably not the brick structure that exists on the site today.[14] The church he supervised construction of is documented as being a wood frame construction, 50 feet by 25 feet, with a south porch. It is also recorded that he provided pews for the congregation in 1713.[15] Also, an unpublished history of St. John's Church documents that on February 18, 1713, a William Tyler agreed to provide seventeen pews for the new church. It is assumed that this is in reference to the same man who owned Battersea since St. John's Church was just north of Battersea along Livingston Road. This also implies that he was wealthy enough to be able to donate such a gift of his own construction to the church.[16] According to some local legend, Harmony Hall was constructed with bricks left following the re-construction of St. John's Church in 1722-23. What is possibly more plausible is that the donation of pews to the church by William Tyler was later construed to include construction of the stately plantation home in 1723 at the same time that the new brick church down the street was being built.[17]

When William Tyler died in 1721, his "dwelling plantation called Battersea" was willed to his wife Elizabeth and she in turn willed it to her son, William Tyler, Jr., upon her death.[18] It is during the time immediately following the death of William Tyler, around 1723, that some accounts state that the existing Georgian manor house was constructed. Although some architectural historians who have researched the property agree that 1723 could be the original date of construction, much speculation arises when one evaluates the inventory of William Tyler's will (See Figure 2A-008) The inventory of his personal property indicates only modest possessions and it implies that his son, William Tyler, Jr. would not have had the means to construct such a stately home immediately after inheriting the land from his father. However it should be noted that in the same will, William Tyler also left a mill at Broad Creek to his daughter Mary and another plantation called Clarkson Purchase to his daughter Elizabeth.[19] This is not only notable as evidence that there once was a mill on Broad Creek, but this would have been a considerable dowery for Mary Tyler to have when she married Humphrey Batts, a shipwright, in

10 Inventory 14:42, 1697; Sonderman and Virta 1993: 10
11 Deed E:5, 1709.
12 Maryland Historic Trust Eligibility Review Form
13 Marilyn Nickles Files, NACE; Pearl: 13
14 University of Maryland, Collin's Papers
15 Vestry minutes of Piscataway Parish, Volume I, pp 17-20; unpublished history of St. John's Church, Broad Creek, from the manuscript of the Reverend Ethan Allen, c. 1870
16 Sonderman and Virta 1993: 11
17 Cultural Landscape Inventory 2012: 21; Sonderman and Virta 1993: 11; A 1993 National Park Service, National Capital Region study of Harmony Hall suggests that a donation of pews by William Tyler in 1713 to the church, "transformed over time into a connection between the construction of the two brick buildings".
18 Prince George's County Will #1:117; Prince George's County inventory #7:151.
19 Sonderman and Virta 1993: 11

1727.[20] Humphrey Batts purchased the adjacent 35-acre Want Water property from the Addison family in 1736. The documentation in the will offers two very different images of how much wealth and property was left to the children of William Tyler. Some theories support the idea that the inventory of property of William Tyler upon his death in 1721 provides substantial evidence that William Tyler would have had the means to construct such a home, or have left enough wealth to his son, William Tyler, Jr., to provide the means to construct such a stately plantation home in 1723, despite the fact that the inventory of his personal belongings was not as substantial as might seem required.

To add to the uncertainty of the construction date of Harmony Hall, the county records establish that there was limited occupancy of the property subsequent to William Tyler's death. Elizabeth remarried in 1726 and it is documented that she lived in another location with her husband, Henry Massey. William Tyler Jr. never became legal owner of the property as he passed away in 1755, before his mother and therefore never inherited the property.[21] Records indicate that prior to his passing, he was not living at Battersea but in Pomonkey in Charles County. Based on the archeological investigation that indicated a fire destroyed the existing house or dwelling on the property shortly after William Tyler's death, it seems unlikely that William Tyler, Jr. would have built a new structure if neither he nor his mother were living on the property.[22] Upon the death of ElizabethTyler, she bequeathed the property to her grandson John Tyler, the son of William Tyler, Jr.

The Date of Construction Debate

It is worth noting, as the discussion of the Tyler ownership concludes, that establishing a definitive date for the original construction of the stately brick manor house that exists on the site has been much debated. There is limited evidence to support that William Tyler, or his son William Tyler, Jr., constructed the house in the 1720s. There seems to be more supporting evidence that the house was constructed under the later Magruder ownership in the 1770s, as will be documented in a following discussion. The report following the archeological investigation by the National Park Service, titled *Archeology at Harmony Hall*, explains both the evidence revealed and the unanswered questions (still unresolved) that the NPS archeologist encountered during those on-site studies.

> *The archeological evidence helps to tighten the date range for the possible construction of Harmony Hall. As Harmony Hall was built following the filling of the burrow pit (Feature 17) and over the remains of the probable earthfast structure (Features 41 and 41a), the date of construction for the manor house could be towards the end of the first quarter of the eighteenth century. Combining the documentary and archeological data, a possible date for the construction of Harmony Hall would be pre-1718, based on the evidence from the underlying strata and associated features and William Tyler's will.[23]*
>
> *The documentary record produced by the English immigrants to the American colonies, and by their descendants, is rich in material about the land which we now call Harmony Hall. Unfortunately, like most records of the seventeenth and eighteenth centuries in Maryland, it contains more information about land ownership than occupation and use. The record is not clear regarding the single most asked question about the property: who built the extant brick dwelling and in what year? Indeed, the interface of the archeological and historical data raises more questions than it answers. Simply put, if the brick house was not built until the*

20 MHT Eligibility Review Form, 18
21 Charles County Will AD #5:37; BCHDPPS 2002: 13
22 Sonderman et al, op.cit
23 Sonderman and Virta 1993: 55

late eighteenth century, circa 1770s (Ridout, 1992), then what explains the archeological discovery of brick fragments, possibly from the construction period of the house, in a soil layer just above artifacts from the late seventeenth to early eighteenth century, circa 1690 - 1720? What happened during the intervening forty to fifty years? The historical record does present a possible hiatus in occupation of the property from 1721 to 1769, but it is not clear whether the land was then without any dwelling, contained an older dwelling from the late seventeenth century or contained an empty, almost newly built brick structure now known as Harmony Hall. Reviewing the historical record will not answer these questions, but it may serve to explain why both archeologists and historians are still puzzled.[24]

Based on a review of the research available, one can conclude the following:

- Early deeds and wills provide reference to an early dwelling that existed while William Tyler and his wife, Elizabeth Tyler, owned and occupied Battersea.
- Archeological investigations by the National Park Service in 1985-1987 revealed evidence of an early earthfast structure which predated the existing Harmony Hall.
- Archeological research supports that a structure burned down around or shortly after the time of death of William Tyler. This was most likely the earthfast structure occupied by the Tyler family.
- Neither William Tyler's widow, or his son, William Tyler, Jr., lived on the properly following his death according to public records.
- Evidence from William Tyler's will indicated he had the wealth to build such a structure, but it is unlikely due to the fact that neither his widow or his son continued to live on the property.
- It is also unlikely that William Tyler, Jr. built the structure, because the records indicate that this was not his place of residence.

Based upon this evidence it seems most likely that the house was constructed under the Enoch Magruder ownership, which began in 1769.

Transitional Ownership

In 1761, James Marshall purchased 100 acres of the original Battersea tract from John Tyler, grandson of William Tyler and son of William Tyler Jr. However, according to rent rolls the property was held by William Eilbeck, a Magistrate of Charles County for two years between 1761-1763 due to a potential ownership dispute.[25] It is possible that the land, though sold to James Marshall, was held by the Magistrate until the property dispute was settled between Marshall and a man by the name of John Rogers.[26] A set of documents from the year 1763 (after the deaths of both Elizabeth and William Tyler) refer to the sale of Battersea by John Tyler to James Marshall. This deed between Tyler and Marshall refers to an earlier sale in 1761 to Marshall. The same deed also mentions a suit in the Chancery Court, which is separately documented, in which a John Rogers claims Battersea as an inheritance and sues James Marshall for return of the property.[27]

24 Sonderman and Virta 1993: 9
25 University of Maryland, Collins' Papers
26 John Tyler, son and grandson of the two William Tylers, sold his inherited 100-acres of Battersea to James Marshall in 1961. Marshall was sued in the Court of Chancery for the value of the land, and the case was settled in 1763. In 1769 Marshall sold these 100 acres of Battersea to Enoch Magruder. Prince George's County Deed AA#2:22; Provincial Court Deed DD #2:337; Prince George's County Judgements DD #4:18,489.
27 Judgement DD #4:18,489, 1763; Sonderman and Virta 1993: 13

The Magruder Family Ownership

Following the preceding series of different owners, none of whom appears to have used the property as their residence, Enoch Magruder purchased Battersea from James Marshall on September 6, 1769. Just before his purchase of Battersea, Enoch Magruder had also purchased Want Water just to the north of Battersea in 1761 from Richard Barnes.[28, 29]

Enoch Magruder was the great-grandson of the immigrant Alexander Magruder. Alexander Magruder was the founder of the family of Magruders or McGregor's of Scotland who owned land along the eastern side of Loch Lomond and immigrated to American in 1655. Harmony Hall is also considered an ancestral home of the Magruders.[30]

During the 1760s, Enoch Magruder established a significant ownership of property in the Broad Creek area. His properties included Want Water, Battersea, and other properties known as Norway and Mount Lubentia. It is unclear when Enoch Magruder resided at Battersea due to the large number of land holdings he had acquired and the significant number of slaves he maintained at each location. Mount Lubentia was constructed in 1761 and it is also believed that Enoch Magruder lived there until he purchased Battersea. It is plausible that Magruder constructed the manor house, known today as Harmony Hall, around c.1769 while living at Mount Lubentia in anticipation of a move closer to Broad Creek.

This date of construction would support another long accepted local legend that bricks remaining from the construction of St. John's Church were used in the construction of the brick Georgian manor house since Enoch Magruder was influential in that church and involved in the rebuilding of the church in 1767-68.[31] The church had two major construction campaigns using brick; one during the period from 1722-23 and one during 1767-68. It was stated earlier that brick from the 1720s construction might have contributed to the construction of Harmony Hall if it was built in the 1720s during William Tyler Jr.'s ownership. Another take on this legend is that the brick from the 1760s St. John's reconstruction was used for the Magruder construction of the manor house. Enoch Magruder was heavily involved in much of the planning and financing of reconstructed St. John's church which was completed in 1768.

The long term ownership of the Battersea property by the Magruder family and their ownership of Want Water contributed to the stability of the Broad Creek area up through the second half of the 18th century. When Enoch Magruder passed away in 1786, both Battersea and Want Water were willed to his daughter Sarah Magruder. Sarah Magruder had married Colonel William Lyles in 1776 and was living at Want Water at that time. On August 26, 1795 the titles for Harmony Hall and Want Water were perfected in Colonel William Lyles through a conveyance by Colonel Lyles and his wife Sarah to Dr. William Baker and back to Colonel William Lyles.[32] Harmony Hall remained in the Lyles family through the middle of the 19th century. Colonel William Lyles was owner of a large amount of land in Maryland and was one of the founders of the Farmers Bank of Alexandria. Colonel Lyles and his wife lived at Want Water until they moved to Alexandria and his son Thomas G. Lyles inherited the property.[33]

28 PG County Deed RR:142
29 William Tyler willed Want Water to his daughter Mary Tyler at the same time he willed Harmony Hall to William Tyler, Jr. upon the death of his wife (the mother of William Tyler, Jr). Mary Tyler later married Humphrey Batts a shipwright in 1727. Humphrey Batts later willed Want Water to his son-in-law Richard Barnes in 1757 (PG County Will, Book I:491)
30 University of Maryland, Collins' Papers
31 MHT Eligibility Review Form, 19
32 Liber JRM No. 4 Folio 96 and 99, Prince George's County, Maryland.
33 University of Maryland, Collins' Papers

Dennis Magruder, brother of Sarah Magruder Lyles and son of Enoch Magruder, lived at Harmony Hall and Mt. Lubentia. Dennis Magruder was born at Castel Magruder in Maryland on July 4, 1759. He resided at Harmony Hall for some time, despite the home being owned by his sister, Sarah Magruder Lyles. In the written records of Charles Collins, Dennis Magruder is described as being a man of great wealth, most of which he inherited from his father. He often indulged in quite an extravagant lifestyle and socialized with the elite society throughout the Washington, DC area and was well known throughout Prince George's County.[34, 35, 36]

The tract of land and the stately plantation home continued to be known as "Battersea" until 1793. The name Harmony Hall was given to the house by Mrs. Walter Dulany Addison. Mrs. Addison (Elizabeth Hesselius) was the daughter of the famous colonial portrait painter. As a bride she lived there with her husband for a year in 1792-1793, also along with her brother-in-law John Addison and his new wife. In 1792 John Addison had married Sarah Leitch, daughter of Major Leitch, aide to General Washington, who was killed in the battle of Harlem Plains. The two brothers rented the brick mansion for a year from Dennis Magruder while their own estates, Oxon Hill Manor and Gieseborough Manor, were rented out.[37,38] So harmonious was the experience of the two couples living together that Mrs. Addison named the place "Harmony Hall," and the name endured. The name found its way into legal records by 1850.[39,40]

Colonel William Lyles died in 1815 and left both Want Water and a portion of the Battersea property to his son, Thomas G. Lyles, upon the death of his wife, Sarah Magruder Lyles.[41] (Sarah Magruder Lyles died in 1820.[42]) One of his other sons, Dennis Magruder Lyles, inherited Harmony Hall and 40-acres of the Battersea tract. Dennis M. Lyles resided at Harmony Hall until his death in 1828. Harmony Hall was then bequeathed to his widow, Ariana Lyles. Both Harmony Hall and Want Water remained in the Lyles family until 1850. In 1850 Ariana Lyles, Thomas Marshall, and Sarah Marshall (descendants of Colonel William Lyles and Sarah Magruder Lyles) sold forty acres of land referred to as Harmony Hall to William Edelen.[43,44,45]

34 University of Maryland, Collins' Papers

35 Dennis Magruder was married four times and had twenty children. Dennis Magruder married Ann Contee on September 23, 1779; Eliza. G. Contee on May 29, 1803; Frances Fitzgerald on October 4, 1817; and Mary Ann Beard on October 21, 1820. (University of Maryland, Collins' Papers; Another document in the papers of Charles Collins indicates that Dennis Magruder marries a Miss. Rollins.)

36 The Contee family was well connected and close friends with George Washington and his family. Charles Collins' records indicate that historical documents at Mount Vernon include evidence suggesting that the Contee family visited quite frequently with the George Washington and his family. (University of Maryland, Collins' Papers)

37 Battersea, though managed by Dennis Magruder, son of Enoch Magruder, was still owned by Sarah Magruder Lyles.

38 At the outbreak of the Revolutionary War, many of the farmers in this part of southern Maryland were Loyalists and decided to returned to England. Loyalists were American colonists who remained loyal to the Kingdom of Great Britain and the British monarchy during the American Revolutionary War. As a consequence of their loyalty to the Crown, Maryland confiscated their estates. Following the war, the Maryland legislature permitted these people to return and reclaim not more than one estate. Among these loyalists were the two Addison brothers, John Addison and Walter Dulany Addison. They selected Oxon Hill Manor and Giesborough Manor respectively. However, when they returned they found that both of their estates were occupied by tenants. (University of Maryland, Collins' Papers)

39 University of Maryland, Collins' Papers

40 Walter Dulany Addison was the fourth generation of Addisons born in Maryland and was a direct descendant of Colonel John Addison who founded St. John's Episcopal Church in 1692

41 Will probated January 31, 1816 – Liber TT No. 1 Page 164-166 Prince George's County Wills

42 Liber TT No. 1 Page 282 Prince George's County Wills

43 University of Maryland, Collins' Papers

44 Deed JBB7:92, 1850.

45 Ariana Lyles was the widow of Dennis M. Lyles, the son of Colonel William Lyles and grandson of Enoch Magruder.

Late 18th Century Changes

Although the research of records, wills and deeds reflects transference of ownership during the 1700s and 1800s, it doesn't reflect physical changes that may have occurred to the manor house as ownerships changed. Limited sources do provide some indication of possible changes to the physical fabric. The book *Early Manor and Plantation Houses of Maryland* by Henry Chandlee Forman, indicates that there were early additions made to the manor house in the late 18th Century including the brick pediment along the east facade with an oval window at the attic level, foliated dormers at the attic level, the wood cornice detailing and the installation of double doors in the east facade entry.[46] The National Register of Historic Places inventory form indicates that the home was extensively remodeled in 1792 by brothers John Addison and Walter Dulany Addison, the two gentlemen who resided in the house for one year with their new wives.

Charles Wallace Collins, the owner of the house as of 1929, indicated in his extensive records that these renovations were completed in 1768. This claim only has merit if it can be proven that the house was originally constructed in 1723 by William Tyler, Jr., not in 1769 by Enoch Magruder. In Collins discussion of Harmony Hall he speculates that the architectural detailing of the home provides some evidence that would date its construction to the early part of the 18th century, but he believed that the dining room paneling was remodeled prior to the American Revolutionary War (1775-1783).[47] Included in Collins' documented claims of these renovations was the modification of the east entry door from a single six panel door into a taller, double door with two four paneled leaves. According to his records, the bricks used to re-construct this door opening and to build the brick pediment were hand-made, slightly smaller and of a different coloring than the original brick used to construct the house.

Also according to Collins records, the house originally had three windows along the north facade and four windows along the south facade. These masonry openings were likely enclosed during the time of the renovations in 1768. Collins notes that when he purchased the property partially buried foundations still remained indicating former additions to the house. It is thought that the central block of the house which still remains originally had side wings to the north and south.[48] This account and evidence of foundation remains would provide a reason for why the north and south façade windows were closed off at some time in the building's history.

Transitional Ownership and Broad Creek Decline

As the commercial activity moved away from river dependent transportation towards locomotives and roads, the agricultural communities along Broad Creek went into decline. This decline had direct impact on Harmony Hall and other manor and plantation houses along the Potomac River whose owners depended on agricultural trade and the river transport for their financial well being.

Although Broad Creek continued to operate as a shipping port it attracted fewer settlers in the early part of the 19th century. The area relied on the river as a means of transporting goods and developing business, and as the siltation of the Broad Creek tributary increased, Broad Creek become less of a viable and accessible port. Technological advancements in transportation also brought about more travel by land and the development of the railroad through southern Maryland led to communities developing further inland. These transitions drove the ultimate decline of the tobacco trade in the Broad Creek community.

46 It should be noted that H. Chandlee Forman, does not cite sources for the information presented in his book, Early Manor and Plantation Houses of Maryland. The primary source is for this information is unknown.
47 University of Maryland, Collins' Papers
48 National Register Nomination Form, 2; University of Maryland, Collins' Papers

The introduction of the railroad in southern Maryland not only displaced river transport but it also circumvented certain communities, leaving them off the main route of commerce. When the railroad extended into southern Maryland the shoreline along the Potomac contained so many tidewater estuaries that it was determined not fit for establishment of a line. As a result the whole area surrounding Broad Creek, being a large estuary along the east shore of the Potomac River just south of Washington, D.C., and not well served by a developed road system, became gradually isolated and cut off from the surrounding communities. Though this did help to preserve the very rural nature of this location, it also left certain areas in a state of decline well into the 19th Century. Many plantations and estates throughout the southern Maryland peninsula were abandoned or neglected. The deterioration of Harmony Hall during this time period is a direct result of this isolation and resulting neglect and decline.[49,50]

In addition to the decline of the Broad Creek area, the owners of Harmony Hall appeared to suffer a set of financial disasters which led to repeated sales of the property over the next twenty years. After William J. Edelen purchased the property from the Magruder/Lyles descendants in 1850, the following land transactions occurred:

- In 1867 it was sold at public auction to Elizabeth G. Kirby due to William Edelen's non-payment of taxes dating back to 1860-61[51]
- In 1876 the property was sold at public auction to Ignatius Wilson also due to non-payment of taxes in the years 1868-71[52]
- In 1877 the property was sold to George W. Wilson[53]
- In 1879 George W. Wilson and his wife sold the property to Nicholas C. Stephen and Joseph K. Roberts[54]
- In 1886 Joseph K. Roberts and the heirs of Nicholas C. Stephen sold the property to Dominico Christofani of Washington, D.C.[55]
- In 1892, Dominico Christofani sold the property to Robert Stein[56]

The series of many owners and repeated sales of the property offers little information and insight into the use of the land and of the occupancy of Harmony Hall. It does however convey a sense that the house was neglected and seldom used during the second half of the 19th century.



Figure 2A-009: Photo of East Elevation, c. 1929
Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated

49 University of Maryland, Collins' Papers
50 Remarks of Collins to Colonial Dames, October 1949
51 Deed 5FS:223, 1867.
52 Deed HB No.10:694, 1876.
53 Deed HB No.13:72, 1877.
54 Deed ATB No. 1:193, 1879.
55 Deed 7JWB:424, 1886
56 Deed 20:639, 1892

The Stein Ownership

Robert Stein acquired the Harmony Hall property from Dominico Christofani in 1892 and began using the 320 acres as a working farm. At this time, the property included Harmony Hall and Want Water and extended east across present-day Livingston Road and south to the future intersection of Livingston Road and Fort Washington Road. Stein was an immigrant from the Silesia region, then a province of Prussia, and arrived in the US in 1875. He first began studies at Georgetown University for the priesthood, but later decided to pursue a medical degree. Stein was a well-known translator, explorer and author and is also known for his employment with the National Geological Survey as a translator. He accompanied Admiral Perry on an expedition to Greenland and North Pole.[57] In the 1880s while he was studying at Georgetown, he decided to bring his family to the United States from Glatz, in the Prussian province of Silesia. Robert, his brother Richard and their good friend Joseph Adler tried to convince other Prussian families to move into the region. Near the end of the 19th century, many families from the Silesia region of Prussia immigrated to the United States and began to settle in the area just south of Broad Creek.

At some point, Robert Stein sold one-half of his interest in Harmony Hall to his brother Richard Stein.[58] Their friend Joseph Adler returned to Prussia in 1894, married Selma Stein (Robert and Richard Stein's sister) and returned to Harmony Hall. In 1895, Ann Stein Tilch, another sister of Robert and Richard Stein, immigrated with her family to the United States and moved into Harmony Hall. Richard Stein and Adler lived at Harmony Hall as well. In 1894, Richard Stein purchased the remaining half of Harmony Hall from his brother Robert and became the permanent owner of Harmony Hall for the next thirty-five years.[59] It was during the period of the Stein family ownership that Charles Collins indicated they used the Living Room/Parlor to dry fish and they stored meal and corn in the third floor.[60] Collins also indicated that they had cut a hole in the dining room floor to deposit trash in the basement because they used the Dining Room as a place to clean fresh vegetables. As per the Collins description, their use of the house was not entirely sensitive to the historic fabric. Robert Stein moved back to Washington, D.C. in 1895 and Richard held onto the property until 1929.

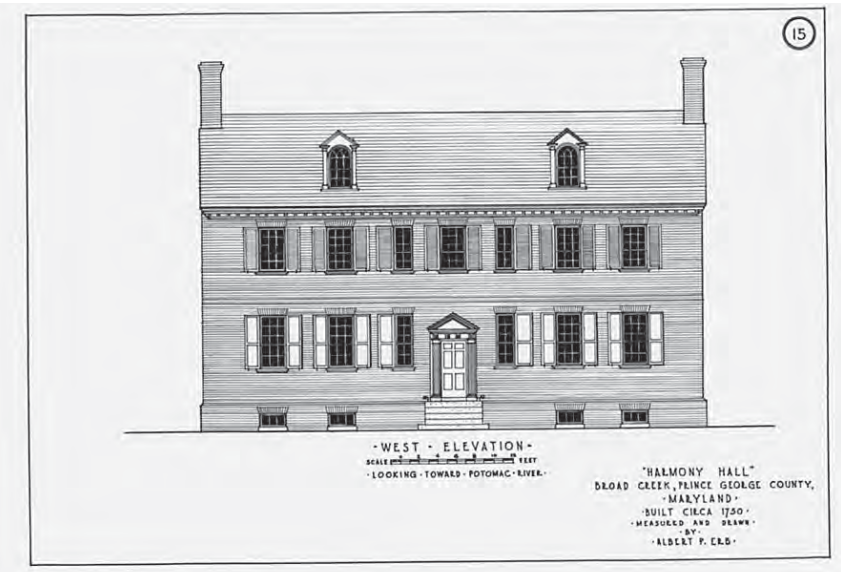


Figure 2A-010: West Elevation
Historic American Building Survey (HABS) 1924 Documentation by Albert P. Erb

Early Documentation of Harmony Hall

The first recorded survey and documentation of the architecture of Harmony Hall and its site were executed by Albert P. Erb in 1924. (See Figure 2A-010) These drawings are recorded as being part of a larger volume titled, *Measured drawings with full-size details of moulded sections of the early architecture of the District of Columbia, Maryland, & Virginia,* by Albert P. Erb, which were a later donation to the Historic American Building Survey (HABS). The Historic American Buildings Survey was established in 1933 an effort to document America's architectural heritage. Since this early documentation of Harmony Hall was

57 National Capital Parks - East (NACE) Records, historical account by Angela Tilch
58 Deed JWB No.21:493, 1892
59 Deed JNB No.28:46, 1894; Sonderman and Virta 1993: 19
60 Reed, 66

completed several years prior to HABS being established, it is considered a donation to the collection and does not necessarily guarantee that the same rigorous standards of accuracy required by HABS were followed in its creation.



Figure 2A-011: Photo of West Elevation, c. 1930
Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated

Charles Wallace Collins Ownership

In the 1929, Harmony Hall was purchased by Charles Wallace Collins from Richard Stein and Franz and Maria Walzel.[61] The Walzels had purchased an interest in the property from Richard Stein in 1914.[62] Charles Collins immediately began his own campaign to preserve and restore the then-deteriorated buildings. He also began to develop his vision of a plantation-like setting around Harmony Hall, which included demolishing some buildings and constructing additions and new outbuildings throughout the site.[63] Prior to moving forward with various demolition efforts on the property, he did prepare historical reports on Harmony Hall, Want Water and the surrounding Broad Creek area. Charles Wallace Collins is credited for writing the historical documentation and statement of historical significance of Harmony Hall for the 1934 Historic American Building Survey documentation. The primary source for much of the information regarding the original construction and early modifications to the structure is unknown. It should be noted that the research and restoration work completed by Charles Wallace Collins was significant and essential to establishing the historical significance of the structure while also saving it from deterioration by neglect or demolition.

Charles Wallace Collins Background

Charles Wallace Collins was born in 1879 in Alabama. He earned a Bachelor of Science in Agriculture in 1899 from Auburn University, spent two years reading law privately in Birmingham and was admitted to the Alabama bar in 1901.[64] He later attended Southern Baptist Theological Seminary and earned a Master of Arts in Archaeology from the University of Chicago in 1909.[65] Following completion of his degree at the University of Chicago he also completed courses in government and economics at Harvard University. In 1911 he established permanent residence in Washington, DC and began a long career in the area. Collins began working as a reference assistant in the Economic Section of Legislative Reference Service at the Library of Congress. He later went on to serve as the Director of Legislative Reference. Collins also served as a legal advisor for select committees of the House and Senate from 1919-20 while also drafting the Budget and Accounting Act of 1921. From 1920-21 he served as Librarian for the Supreme Court and Law Librarian for Congress. Following this he served as General Counsel for the Bureau of the Budget from 1921-23. From 1923-27 he was the General Counsel in the Office of the Comptroller of the Currency and served as the Deputy Comptroller of the Currency. In 1927 Collins retired from government service but continued practicing law in Washington DC, maintaining offices in the National Press Building. He also served as General Counsel for Bank of America and

61 Prince George's County Deed 326:375,376,1929
62 Deed 101:378, 1914; Sonderman and Virta 1993: 19
63 MHT Eligibility Review Form, 21
64 University of Maryland Archives
65 University of Maryland Archives

Transamerica, and in 1933 he served as Special Counsel for the American Bankers Association. Collins married Susan "Sue" Steele Spencer on June 22, 1933. Sue Spencer Collins was born on August 13, 1895 and was Collins' second wife. She was the daughter of William Micajah Spencer and Bertha Grace Steele of Hale County Alabama.

In 1947, following World War II, Collins retired from his law practice to focus on writing and politics. Collins was known as an economist, librarian, lawyer, farmer, linguist, author intellectual and historian. He focused his retirement years on becoming significantly involved in the southern Democratic, or Dixiecrat, "Revolt". He was an avid supporter of states' rights and a defender of the southern way of life during this time period. Collins believed that the radical liberalism of the Civil Rights Movement threatened American traditions of "state sovereignty, tradition of exclusion, and economic liberalism".[66] Shortly after the end of World War II, Collins published his book *Whither Solid South?: A study in politics and race relations* which contributed significantly to the Dixiecrat Movement and a southern revolt in the dominant Democratic Party. The book had a very limited printing, but it was quickly circulated through the southern political elite. Following its publication, it became "both manifesto and blueprint for the states' rights – soon nicknamed "Dixiecrat – Revolt" of 1948.[67] "As Collins sought to re-create a plantation reminiscent of the Old South at Harmony Hall, he envisioned a future for the New South that recalled the social and political order of the Antebellum South."[68]

Collins had a passion for historic homes and devoted himself to restoring and renovating two houses in Georgetown (3328 O Street and 1310 34th Street) during the 1920s.[69] Following his retirement from government service, he was in search of a larger estate to create his vision of a southern plantation home. He became interested in the eighteenth century colonial period in nearby Virginia and Maryland and in 1928 found Harmony Hall. Collins first saw Harmony Hall while driving down the Piscataway-Alexandria stage road.[70] "Collins fashioned himself a gentleman farmer, with the status, wealth, and manners of the great plantation owners of the Old South. His identity was profoundly invested in this self-image, and he renovated Harmony Hall to reflect it." [71,72]



Figure 2A-012: Photo of East Elevation, c. 1930
Charles Wallace Collins papers, Special Collections, University of Maryland Libraries; Series 7: Photographs, 1924-1985 and undated

20th Century Restoration

Collins believed that the building massing which existed in 1929 when he purchased the property appeared much the same way as it did in the second half of the 18th century. The major architectural and structural elements of the house remained

66 Reed, 80
67 Reed, 80
68 Reed, 78
69 Charles collins restored and lived at 3328 O Street and 1310 34th Street in the Georgetown neighborhood of Washington, DC. He considered himself "one of the pioneers of the restoration of Georgetown," "a decade before the influx into Georgetown in the thirties." Collins to Helen Duprey Bullock, National Trust for Historic Preservation, November 10, 1952, Charles Collins Papers.
70 Pearl, 33
71 Reed, 74
72 Reed, 74

intact except for the north and south wings.[73] Collins explains in his records that north and south wings were added to the home at an early date, but all that remained of these additions when he acquired the home in 1929 were portions of the stone foundations partially buried in the ground.[74] He provides reference to a north addition to Harmony Hall, which no longer stands today, but would be plausible explanation for the infill of the second floor windows of the North Bedroom along the north wall, flanking the chimney. Photographic evidence reveals that when Collins purchased Harmony Hall, the house had been painted white and a large front porch with a shed roof had been constructed on the east facade. The east entry doors included a double screen door on the outside.

Charles Collins' account of the condition of the house at the time he acquired it included the description of a basement entrance consisting of a large hole through the exterior wall. As was mentioned previously, the Steins made some rather insensitive modifications to the house such as the square hole cut in the dining room floor which allowed them to deposit food preparation refuse in to the basement. Despite the Stein disruption of the historic fabric of the dining room flooring, Collins did give credit to the them for maintaining much of what he determined was original historic fabric throughout the rest of house. Collins' records indicate that all of the original woodwork remained and that he spent approximately a year restoring the home before living there.[75] Collins saved and restored much of the woodwork throughout the house, including the floors, mantels, paneling, chair rails and the dining room cupboard. He notes that the central staircase required little to no restoration work.[76]



Figure 2A-013: Photo of West Elevation, c. 1930; Charles Wallace Collins papers, Special Collections, University of Maryland Libraries Series 7: Photographs, 1924-1985 and undated



Figure 2A-014: Photo of East Elevation Portico, c. 1930
Charles Wallace Collins papers, Special Collections, University of Maryland Libraries; Series 7: Photographs, 1924-1985 and undated

Extant Historic Fabric

Substantial changes and alterations had been made at Harmony Hall over the course of its history, however some fabric remains dating to the 1700s. The following represents identification of extant fabric or Collins altered fabric based on his documentation:

- *Floor Boards* - The floor boards are not of a tongue and groove construction, but have plain cut edges and are doweled together with black walnut pegs cut by hand. The floors throughout the house are of heart pine, an inch and one-eighth thick, running the full length of the rooms.

- *Chimneys* - The chimney breasts and jambs are paneled on all sides. This paneling which extends to the ceiling is simple in form.

- *East Entry Door and Dormer* - The east entry door was modified from a single six paneled door to a wider and taller opening with a pair of four paneled stile and rail doors. Charles Collins noted that the brick used in the modifications to the east entry door and in the construction of the east pediment with the oval window were

73 When Collins purchased Harmony Hall, only the stone foundations remained. Pearl, 33; Reed, 66; Charles Collins papers.
74 University of Maryland, Collins' Papers
75 University of Maryland, Collins' Papers
76 Pearl, 33; Charles Collins' Papers

handmade but were smaller in size and slightly more red in color than the original bricks used to construct the house giving evidence that they were changed at a later date than the construction of the Main Block.

- *Infilled Window Openings* - The central block of the house also had four windows on the north facade and four windows on the south façade, but these were probably infilled at the time of these other modifications. The reason for these windows being infilled could have been to allow for the construction of the north and south additions to the home. Collins explains that the cupboard along the south wall of the Dining Room, though constructed at an early date, does conceal an earlier window opening and extant jack arch in the south masonry wall. Charles Collins states that these additions and modifications to the home were made in 1768, the same year that St. John's Episcopal Church at Broad Creek was enlarged.[77]

- *Masonry and Mortar* - In Charles Collins' records he describes his ordeal to restore Harmony Hall. He attributed its decent condition and survival for over 200 years to the solid masonry construction. He noted that the mortar was made from white ground oyster shells and the original "grapevine" trowel markings from the mason still remained intact. The exterior walls were two feet thick from the basement to the first floor and eighteen inches the remaining height of the structure. The interior structural bearing walls dividing rooms within the basement and first floor were thirteen inches thick. He describes Harmony Hall as a "fortress".[78] He also describes the process he was forced to undertake to eliminate a rat infestation problem through the basement and the entire house. The rats burrowed underground below the foundation and cut their way through the soft brick. The two foot thick brick walls had outer and inner wythes of hard brick but in between were soft, salmon brick. It was necessary to cut out the four corners of the building and close off the access for the rats from below.[79]

- *Porches* - Collins removed the large front porch along the east facade of the Main Block and constructed a smaller portico and east entry steps. The screen doors were also removed. Following replacement of the east entry porch, he proceeded to remove all the paint from the exterior brick masonry facades. In 1930, Collins also constructed the west façade double stair.[80]

- *Modern Amenities* - Charles Collins and his wife introduced running water and electricity to Harmony Hall around 1930. This allowed the construction of the bathrooms in each second floor bedroom. From 1930 until the start of World War II, the house was heated by the original log fireplaces. Collins employed a fire boy to spend his time maintaining the fireplaces throughout the house. The demands of World War II left Collins without servants to assist in maintaining the fires so he installed a General Electric heating system. He explains that to run the ductwork throughout the house he had to channel out the brick walls and plaster over the ducts.

- *Doors and Windows* - Collins notes that most of the old hardware had been removed, and all doors and windows had to be replaced.

- *Chimneys* - One of the larger restoration projects undertaken by Collins included the restoration of the fireplaces and chimneys. The chimneys had been closed off, and the interior of each required rebuilding. This explains the area seen on the north façade along the entire height of the chimney (chimney #1) where the brick has been repaired and re-pointed. In the historical photographs one can also see evidence of a similar patched and repaired condition at the south chimney of the Main Block.[81]

- *South Addition* - Between 1929-30, Charles Collins and his wife constructed a one and one-half story pantry

77 University of Maryland, Collins' Papers
78 University of Maryland, Collins' Papers
79 Pearl, 33; Charles Collins' Papers
80 University of Maryland, Collins' Papers
81 University of Maryland, Collins' Papers

addition to the south facade. Harmony Hall was documented and measured again, and this addition by Charles Collins and his wife is documented in the 1934 Historic American Buildings Survey drawings (See Appendix E). The south facade of this addition was never finished with red brick to conceal the hollow clay tiles. This pantry wing was connected by a covered passage to a kitchen which was also constructed during this time period.

Mrs. Nancy Bruce, daughter of Manley Owen Collins and niece of Charles Wallace Collins, had visited Harmony Hall frequently during the time Charles Collins owned and the house. A telephone interview between Marilyn Nickels, NPS Historian, and Nancy Bruce on April 26, 1989, documented Nancy Bruce's recollections and perceptions. Nancy Bruce's memory recalls when the Pantry Addition, as seen in the 1934 HABS drawings, was only one story in height and was used for cooking until the larger kitchen outbuilding was constructed. She recalled that Charles Collins had replaced all the windows in the house "to make them more Georgian" in appearance and more in line with the historical period of the home. She did not provide any description of the windows that existed prior to Collins' replacement.

HABS Documentation

As previously stated, the Historic American Building Survey (HABS) was established in 1933 as a New Deal work program to employ out-of-work architects, historians and photographers. Charles Collins saw the establishment of HABS not only as an opportunity to document and legitimize the historical significance of his properties at both Harmony Hall and Want Water, but also as a means to increase the value of his properties. Following an ongoing effort to have Harmony Hall honored as a historically significant home, including unsuccessful attempts to attain recognition for both of the properties by the Maryland Tercentenary Commission, Collins did achieve recognition of both properties as historically significant through HABS.[82] The HABS teams documented both properties in 1934 in photographs and in drawings of floor plans, elevations and other architecturally significant details. Those documents are now part of the collection at the Prints and Photographs Division of the Library of Congress. Following the HABS documentation, Collins continued seeking additional recognition of the property via the Maryland State Roads Commission however the record does not indicate that he had success in obtaining a roadside marker. [83]

Collins Site Alterations

Though Collins' efforts did much to preserve the architectural integrity of Harmony Hall and restore fine interior details in the original Main Block, he also engaged in massive construction activities to alter the surrounding landscape. In his efforts to remove existing outbuildings, to build new structures on the site to create the southern plantation he desired, and to operate a farm, he made substantial changes to the landscape, which in effect destroyed much of the archeological record surrounding Harmony Hall and resulted in a loss of historical integrity. (See Figure 2A-015)

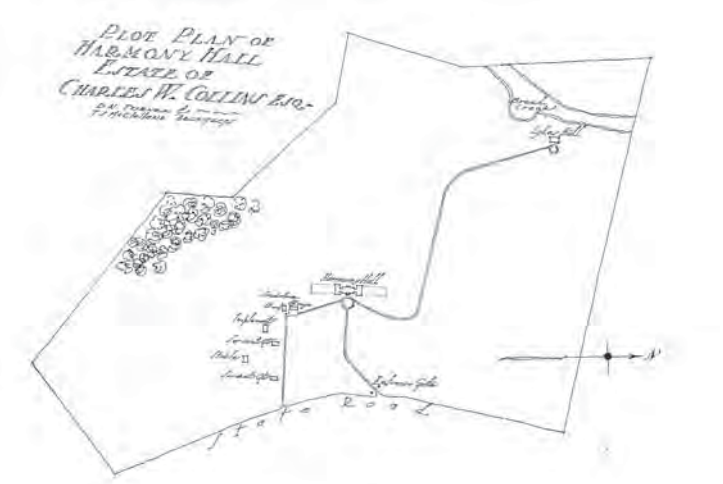


Figure 2A-015: Plot Plan of Harmony Hall - D.M. Turner and T.S. McClelland Architects (date unknown)
Credit: Charles Wallace Collins papers, Special Collections, University of Maryland Libraries

During his ownership and occupancy at

82 Collins to J. Alexis Shriver, Maryland Tercentenary Commission, November 24, 1933, Charles Collins papers.
83 Collins to J. Alexis Shriver, January 28, 1935, Charles Collins Papers; Reed 73



Figure 2A-016: Collins Site Alterations and Outbuildings, c.1930s
Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated

Harmony Hall, Collins reconsolidated a significant tract of the old Battersea land grant by acquiring adjacent parcels of property. From 1930 to 1932, Collins acquired three 13.3 acre plots from the Sellner family, one of which included Want Water.[84]

Charles Collins speculated that the foundation remains he discovered during his construction of the ha-ha, which runs north to south on the west side of the manor house halfway between the house and Broad Creek, were the remains of one of the structures that Haggett occupied.[85] Collins referenced this event in an address to the Clan Gregor Society on October 19, 1935.

"On September 7 while removing earth for grading the terrace on the river front of Harmony Hall there was discovered the remains of a small stone building about three feet below the ground level. It was 12 feet by 18 feet with a fireplace at the east end and the door facing the water. The walls were built of round cobblestone and mortar and the floor was laid with slabs of red sandstone each two feet square and four inches thick and perfectly squared and finished on the sides and top, the whole floor fitted perfectly together on a level without any cracks. The slabs were unfinished underneath and showed that they had been split off there being occasional chisel marks taking off the rougher parts. The floor was laid upon a native clay and gravel mixture which was very hard and solid. Twenty of the slabs were in perfect condition and the entire outline of the walls was intact but some of the slabs had disappeared." [86]

Charles Collins removed all remains of this structure to allow for the re-grading of the site for installation of a terrace.[87] Currently there are no known archeological remains or other documentation of this structure to verify its existence.

In Collins' notes, maintained by the University of Maryland, it states that parts of other 18th century dwellings were used in the restoration of Harmony Hall and Piscataway House (See Figures 2A-018 and 2A-019).[88] These properties included the following:

1. Frankland
2. Cherry Hill
3. Marshall House
4. Old Masonic Lodge
5. St. Mary's Old Schoolhouse
6. Piscataway House
7. old frame 18th century house in Piscataway

84 University of Maryland, Collins Papers; Pearl, 34; PG Deeds 279: 371, 334: 245 and 247, 381: 279. The original Want Water property had been subdivided into five lots in c. 1888
85 This structure was closer to the waterfront from the existing brick manor house and it is unknown if Haggett ever lived on the property since he passed away prior to obtaining the official patent for the land.
86 University of Maryland, Collins Papers
87 University of Maryland, Collins Papers
88 University of Maryland, Collins Papers



Figure 2A-017: Frankland, c. 1929-30
Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Figure 2A-018: Marshall House, c. 1929-30
Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated

Collins' notes indicate that he used brick from the Marshall House to make repairs to Harmony Hall and he replaced flooring at Harmony Hall with pine flooring from the Old Masonic Lodge.[89] (See Figures 2A-017 and 2A-018. See Appendix D.)

Correspondence exists from September and November of 1937 in which Charles Collins engaged the services of an architect to provide plans and sketches for improvements to Harmony Hall. Stuart Moffett Barnette, an architect from Alexandria, Virginia who also practiced in Fredericksburg, provided sketches for a basement entrance to Harmony Hall.[90] Though no sketches associated with this correspondence were found, it could be possible that these letters were in reference to the addition of the north covered entry into the basement.

The Charles Collins papers also contain plans and elevations indicating Collins' concept to relocate Want Water and reconstruct it as an addition to Harmony Hall.[91] This scheme was ultimately abandoned and Collins planned to restore Harmony Hall and Want Water independently.

At some point during his occupancy and master planning for Harmony Hall, Collins also employed the services of architects D.M. Turner and T.S. McClelland to develop a master site plan diagram. The University of Maryland records contain two site plans titled 'Plot Plan of Harmony Hall' and 'Plot Plan Restoration of Harmony Hall'.[92] (See Figure 2A-019) The 'Plot Plan of Harmony Hall' seems to document and locate existing outbuildings on the site as one approaches the house from Livingston Road. This plan includes north and south additions to Harmony Hall (this may be ruins only), a smoke house, garage, two servant quarters structures, stables and other outbuildings, including an entry gate off of Livingston Road. The 'Plot Plan Restoration of Harmony Hall' provides a more detailed proposed plan for additions and alterations to Harmony Hall, to include; extensive north and south additions, a formal layout of a central drive and circular court, flower and vegetable gardens, a service court with access to servants quarters, and a stable and garage. Though this master plan was never fully realized, it does present clear evidence of his intention to recreate a southern plantation.

Marilyn Nickels' documentation of the conversation with Mrs. Nancy Bruce (niece of Charles Wallace Collins) noted Bruce saying that "while Charles Collins wanted to replicate a Southern plantation of his youth at Harmony Hall, it was more a romanticized version than one he was familiar with personally... he lived somewhat in a dream world in this regard, setting up a life in the country at Harmony Hall almost out of another century".[93]

Colonial Dames Acknowledgement

In October 1949, the Maryland Chapter of the Colonial Dames of Maryland presented Charles Collins with a plaque commemorating the original date of construction for the Georgian plantation home. The University of

89 University of Maryland, Collins' Papers
90 University of Maryland, Collins Papers
91 University of Maryland, Collins Papers
92 University of Maryland, Collins Papers
93 Nancy Bruce telephone conversation with Marilyn Nickels on April 28, 1989, paraphrased by Marilyn Nickels

Maryland records include a letter of correspondence from the Colonial Dames to Charles Collins arranging a date and time for the official ceremonious placement of the plaque. In his presentation to the Colonial Dames, Charles Collins again attributes the original construction of the house to the "ninth year of the reign of George the First", or 1723.

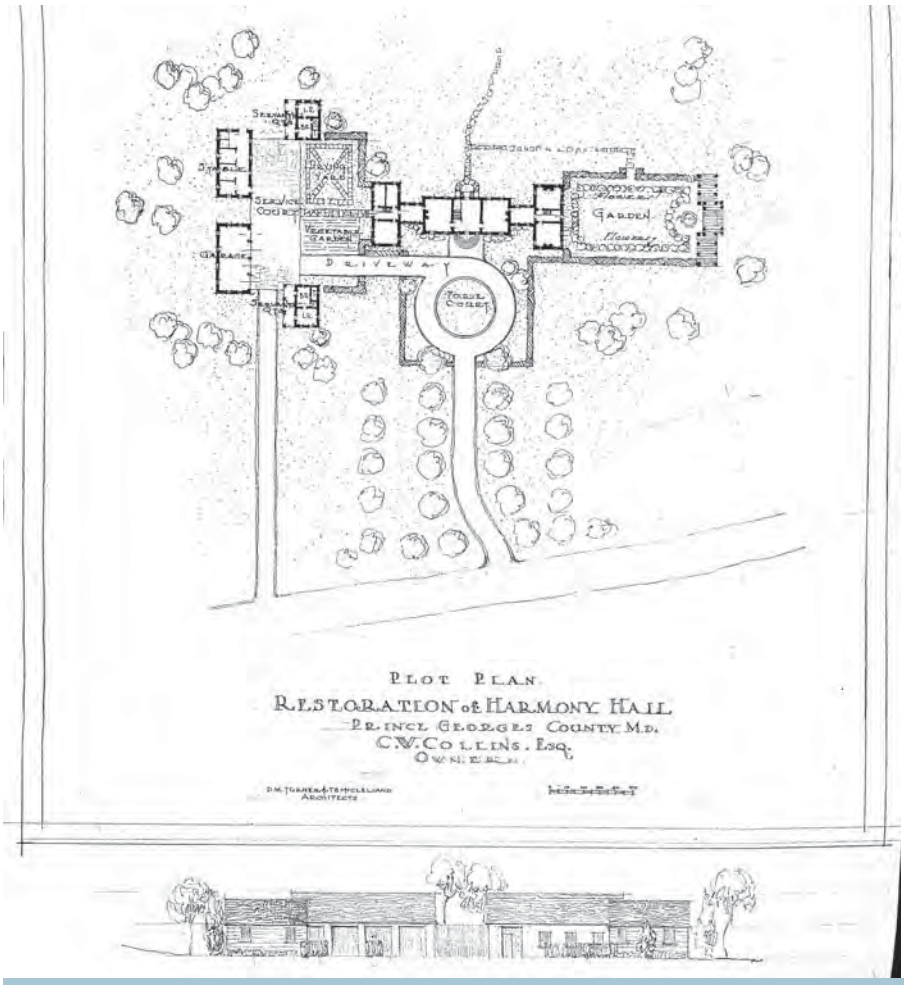


Figure 2A-019: Plot Plan Restoration of Harmony Hall - D.M. Turner and T.S. McClelland Architects (date unknown)
Credit: Charles Wallace Collins papers, Special Collections, University of Maryland Libraries

National Park Service Ownership

Charles and Sue Collins were the last private owners of Harmony Hall. Charles Wallace Collins died on December 14, 1964, at the age of eighty-five, leaving Harmony Hall to his widow Sue Spencer Collins. On November 4, 1966, Charles Collins' widow, Sue Spencer Collins, sold the house, outbuildings and 65.71 acres of property to the National Park Service retaining a life occupancy.[94]

The National Park Service acquired the property under the provisions of the Capper-Cramton Act of May 2, 1930 (46 Stat. 482). As a bit of background, in 1923, the National Capital Park and Planning Commission (NCPPC) was established by Congress to acquire land for and to plan the region's expanding park system.[95] The agency became the primary force behind the development of the George Washington Memorial Parkway. In 1930, Senator Louis C. Cramton of Michigan sponsored what became the Capper-Cramton Act (1930), which gave the NCPPC broad powers to acquire land and appropriated $7.5 million for the construction of a parkway along both sides of the Potomac. The Act provided for the acquisition, establishment, and development of the George Washington Memorial Parkway along the Potomac from Mount Vernon and Fort Washington to the Great Falls, and to provide for the acquisition of lands in the District of Columbia and the States of Maryland and Virginia requisite to the comprehensive park, parkway, and playground system of the National Capital. The first section of the parkway was constructed between 1929 and 1932 and extended between Arlington Memorial Bridge and Mount Vernon along the Virginia side of the Potomac River. The proposed Maryland parkway segment, renamed

94 Deed 3370:556, 1966
95 The National Capital Planning Commission was founded in 1924 and was originally called the National Capital Park Commission. It later became the the National Capital Park and Planning Commission.

the Clara Barton Parkway in 1989, was eventually constructed in Montgomery County, but it was never developed in Prince George's County which was very fortunate for the survival of Harmony Hall.

It is unclear how long Sue Spencer Collins remained in Maryland after her husband's death. She died in Birmingham, Alabama, on April 28, 1983, at the age of eighty-seven.[96] At the time of her death, the proposed plans for the extension of the George Washington Memorial Parkway were no longer being considered for construction and the National Park Service was left with the task of managing and maintaining the property.[97]



Figure 2A-020: Harmony Hall East Facade.
Servant's Quarters and Kitchen Outbuilding constructed by Charles W. Collins c. 1930 still stands in background.
(Photo: Michael F. Dwyer, 1973)

PG:80-11
Harmony Hall/ "Battersea"
Livingston Road, Oxon Hill, MD (Broad Creek)
NE Facade

On June 6, 1980, Harmony Hall was listed on the National Register of Historic Places. The nomination attributes the significance to the structure's architectural integrity and identifies the Period of Significance as the 18th century, corresponding to the construction and early years of occupancy of Harmony Hall as a primary contributing structure to the agricultural community and to the tobacco port town of Aire. It is also noted as a wonderfully intact example of 18th century Georgian plantation houses of Maryland.

The Battersea Company, Ltd Lease: 1985 – 1999

A year after the death of Sue Collins, the National Park Service decided to include Harmony Hall and the surrounding property in its Historic Leasing Program.[98] On October 18, 1985, a fifty-five year lease was signed with Frank L. Calhoun and Herman Carlton Huhn who operated the Battersea Company, Ltd. The lease agreement included use of the surrounding property as a Morgan horse breeding farm and carriage driving school. The lessees were required to provide restoration and preservation maintenance for Harmony Hall during their residence in compliance with standards set forth by the National Park Service and the Secretary of the Interior's Standards. The plans included construction of a new stable, paddocks and car park near the historic house.[99]

During the second year of the lease some of the on-grade structures, including the existing garage, smokehouse, and shed were to be demolished. Nine of the outbuildings on the property were determined to be modern additions and in various stages of deterioration. Under the terms of the lease agreement, the Battersea

96 University of Maryland, Digital Archives
97 National Capital Parks - East (NACE) Records
98 Harmony Hall, NPS Statement of Management, rev. 10/1989; Memorandum, Superintendent , National Capital Parks - East to Deputy Field Director, National Capital Area, September 28, 1996, National Capital Parks – East files
99 NACE Records

Company was granted permission to rehabilitate, remove or construct other temporary facilities at these locations, if they were in compliance with NPS policy and regulation.



Figure 2A-021: Photo of West Elevation, c. 1988
Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--20

The Battersea Company is responsible for the Collins era servant's dining room and kitchen demolition. In 1973, a photo taken by Michael F. Dwyer for the Maryland Historical Trust, National Register Inventory Information shows the 1934 servant's dining room and kitchen. This outbuilding originally appeared in the 1934 HABS drawings. The photographic evidence indicates that the structure and possibly others from Charles Collins' era remained until the most recent history of the property. In an interview on May 7, 2012 with Dave Turner, Chairman of the Historic Preservation Commission of Prince George's County, Maryland, Beyer Blinder Belle (BBB) confirmed that he witnessed the demolition of this structure by the Battersea Company during their occupation of the property in the 1980s and 1990s under the Historic Leasing Program of the National Park Service.

In order to restore the property and upgrade the facilities, the Battersea Company wanted to install new utility infrastructure, build new buildings and construct an addition to Harmony Hall. During the first five years (1985-1990) of the Battersea Company lease, the tenants proposed a second addition to the south wing of the house. (See Figure 2A-020) From 1985-87 archeologists with the National Park Service Regional Archeological Program (RAP) conducted archeological site investigations at Harmony Hall to comply with Section 106 of the 1966 National Historic Preservation Act (NHPA). The purpose of the investigations was to confirm that there was no objection or conflict with the proposed rehabilitation and utility upgrades to the house and grounds prior to construction. The project focused on areas of the site surrounding Harmony Hall which were slated for future construction and installation of utility lines. This investigation included areas south of the site where the South Addition and stables now stand. Their most important discovery during these investigations was the evidence of late 17th century occupation of the site. Other important discoveries made during these archeological investigations included the following:[100]

- Two refuse pits which help to reveal information about the wealth and lifestyle of people who settled and occupied areas of Broad Creek, Battersea and Harmony Hall
- A brick clamp, or kiln, which may have been used in the construction of Harmony Hall
- Evidence of late 17th century or early 18th century structure just east of Harmony Hall
- Evidence of a structure or wing constructed adjacent to the south wall of Harmony Hall

Following the construction of the South Addition to Harmony Hall, the Battersea Company completed a brick patio to the south of Harmony Hall. In addition to the patio, the tenants constructed: a cinder block stable south of the house, a fenced in horse corral just outside the east entrance to Harmony Hall, and brick pathways criss-

100 Reed: 96-97

crossing the circular lawn at the center of the driveway.[101] They also proposed: upgrades to the mechanical, electrical and plumbing systems throughout the house, construction of new fencing around the property, and construction of a new barn for their horses. The National Park Service documented that almost no funds were spent to restore and preserve the Main Block of the house. However, the major mechanical, electrical, and plumbing systems at Harmony Hall were upgraded during the time that the Battersea Company occupied the property.[102]

Maintenance Records provided by the National Park Service, National Capital Parks - East (NACE) indicate the following upgrades to Harmony Hall during the tenancy of the Battersea Company:

- *Covered Passageway* - The covered passageway between the old kitchen and main house was removed to allow for any necessary archeological investigations required prior to excavating for installation of new foundations. (This is referring to the covered passage as seen in the 1934 HABS drawings, as constructed by Charles Collins. This covered passage connected the Pantry addition to the Servant's Dining Room and Kitchen. Per the historic photograph from Maryland Historic Trust historic site inventory dated November 1973, this covered passage, servant's dining room and kitchen remained on site until 1985 (Photo Credit: Michael F. Dwyer).)
- *South Addition* - The South Addition was constructed c.1988, following the archeological investigations conducted from 1985-87.
- *Furnace* - The old furnace was replaced with an electric furnace, the old oil tank cleaned and the contract with the Southern Maryland Oil Company was terminated.
- *Water Heater* - The hot water heater was replaced with an electric model once the electric service was modified.
- *Electrical Service* - Electricity was routed underground from the PEPCO service pole to a new meter and main in the pump house, then to the main house and outbuildings.
- *Water Service* - The Battersea company proposed trenching below the 30" frost line from the old pump house to the present main house hook up for the water service. The documentation indicated the service would ultimately connect to the main in a utility room in the proposed addition.
- *Barn* - Calhoun and Huhn of the Battersea Company requested the approval to construct a barn at the site occupied by the collapsed wood barn to the south of the proposed stable.
- *Exterior Envelope* - In 1995, the National Park Service began emergency interventions in order to halt further deterioration of the roof, gutter, and windows.[103] The gutters and downspouts were ultimately replaced, but the details and installation did not meet NPS standards.[104]
- *Window Restoration* - Twelve windows on the first floor were removed and sent to window contractor's site for repairs (contractor: Tony Proto). Repairs included sanding and re-glazing prior to returning them for re-installation.[105] Window frames were treated with two coats of primer and two coats of outdoor latex paint.
- *Bullseye Window* - The oval window in the third floor/ attic pediment was replaced with a window in a design more characteristic of the time period of the house. The window is of better construction than the original and is seen as an improvement. The new "bullseye" design is to be finished with antique glazing.[106]
- *East Entry Door* - The east entry door was repaired and the contractor used wood putty for some repairs to the existing wood door frame.[107]

101 Cultural Landscape Inventory 2012: 17
102 NACE Records
103 NACE Records
104 NACE Records, F. Faragasso notes, 1996
105 NACE Records, F. Faragasso notes
106 NACE Records, F. Faragasso notes, 1996
107 NACE Records, F. Faragasso notes, 1996

- *Unapproved Alterations* - The Battersea Company made some repairs and alterations to the structure, which were not approved by the National Park Service. These modifications included a stone walkway from the fence to the house, a rose garden along the front drive from Livingston Road, and a courtyard and pond at the south yard just outside the new South Addition.[108]
- *East Porch* - The porch at the east entry of the Main Block was constructed except for the installation of the railings.[109]

National Park Service Repairs:

After the Battersea Company lease ended, the National Park Service continued to provide ongoing maintenance and repairs to the structure.[110]

- *Roof* - A new asphalt shingle roof over all three portions of the house, including the Main Block, Central South Addition and South Addition (date unknown)
- *Exterior Painting* - Painting of exterior woodwork (c. 2004-2005)
- *French Doors* - Replacement of french doors in South Addition (Doors 106B, 106C, 106D, or 106E)
- *West Entry* - Rebuilt Rear Entry along west facade of Main Block (date unknown)
- *Systems Repairs* - Minor repairs and maintenance to plumbing, electrical or HVAC issues

108 NACE Records, F. Faragasso notes, 1996
109 NACE Records, F. Faragasso notes, 1996
110 Communication to A/E in July 2012 from Harley Ricketts and DeWayne Perry, Chief of Facilities,National Capital Parks-East

A.3 CHRONOLOGY OF DEVELOPMENT AND USE

Overview

The development of Harmony Hall can be divided into six (6) periods during which the most significant changes of use and construction occurred. Each of these periods will be described sequentially, based upon the available research, data and on-site investigations. This description is intended to include all changes, both physical changes and changes in use or occupation of the structure.

Methodology

A narrative description of each Period of the home is provided in the following pages. Scaled floor plans, depicting the alterations of physical fabric and changes of use that occurred and three dimensional sketches showing how the massing of the structure changed accompany each narrative. As a conclusion to the establishment of the developmental history, the following six periods of occupancy, use and physical change have been identified:

Period I: Tyler/ Marshall Era - 1709-1768

This period covers the ownership of Battersea from 1709 when William Tyler bought the property until 1769 when James Marshall sold the property to Enoch Magruder. During this time the property was primarily used as a tobacco plantation.

Period II: Magruder/ Lyles Era - 1769-1849

This period begins when Enoch Magruder purchased the property in 1769 and extends to the sale of the property by the Magruder/ Lyles family in 1850. During this time Magruder family members had married Lyles family members, Harmony Hall was being used as a residence by the families, and the property continued to be used as a tobacco plantation for most of that period.

Period III: Transition Years - 1850-1928

After the Magruder/Lyles Era, Harmony Hall went through a transitional period with multiple owners. This period coincided with the decline of the Broad Creek area due to the impact of river transport being displaced by rail and the region's shift from an agrarian to an industrial economy. During this time, the property was periodically used for farming and the residence was rented, often having multiple occupants.

Period IV: Collins Restoration/ Expansion Era - 1929-1940

Period IV begins when Charles Wallace Collins purchased the property and is defined by his restoration of Harmony Hall and construction of significant additions to the manor house. His additions included a Pantry Addition to the south of the Main Block of the House (referred to as the Central South Addition in this report), a kitchen, and a servants dining room. He also introduced modern plumbing and electricity to the building. He and his wife used the structure as their primary residence and the property as a functioning farm.

Period V: Collins Upgrades Era - 1941-1966

This period is defined by Charles Collins expanding the Central South Addition to enclose the basement entry along the south facade of the Main Block. During this Period he introduced heating and cooling to the house. It was also during this time period that the Colonial Dames provided a plaque commemorating what was considered to be the original date of construction of the house. Collins continued to use the house as a primary residence during this time. This period closes in 1966, following Charles Collins' death in 1964, when his widow, Sue Collins, sells the property to the National Park Service with a life tenancy agreement.

Period VI: 1967 to Present - National Park Service Stewardship

Period VI begins with the NPS taking ownership of the property. Following the death of Sue Collins in 1983, the property was leased for a stretch of time as a residence and horse breeding farm, it served as a temporary residence for National Park Service staff, and for the remainder of the time, the house was vacant. During the leasing period the house was modified and another addition (referred to as the South Addition in this report) was added to the south facade of the Central South Addition. Several other outbuildings and structures were also built on the site. Additional systems modifications and plumbing were added during the leasing period as well.

Nomenclature

To be consistent throughout the report, a nomenclature has been assigned to each of the existing components of Harmony Hall. The masonry structure currently consists of a Main Block and two south additions. For the purposes of this report, the following references will be used:

Main Block - The Main Block refers to massing "A" below and is the oldest portion of the house (Period II: 1769-1849).

Central South Addition - The Central South Addition, massing "B" below, refers to the addition first constructed 1929-1934 (Periods IV: 1929-1940) and expanded in 1941 (Periods V: 1941-1966).

South Addition - The South Addition, massing "C" below, refers to the addition constructed in 1988 under the NPS stewardship when the property was leased to the Battersea Company (Period VI: 1967 to Present).

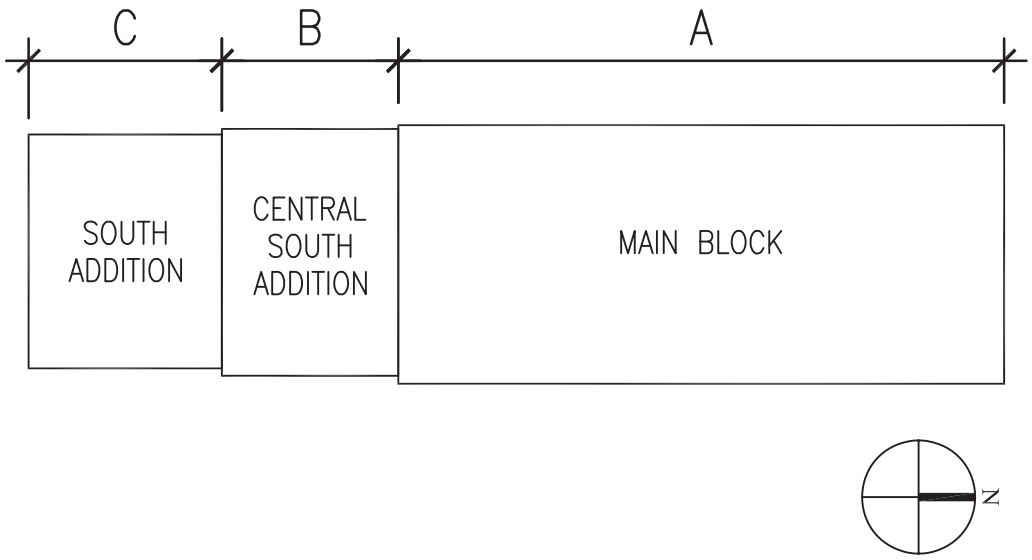


Figure 2A-022: Key Plan of Harmony Hall - Main Block, Central South Addition, and South Addition.

Period I: Tyler/Marshall Era - 1709-1768

Period I is associated with the establishment of Battersea and its beginnings as both an agricultural property and a tobacco plantation home during the colonial years of Maryland. It was during this time that the port town of Aire was thriving as was the tobacco trade. This Period begins with the purchase of the 100-acre tract of land in 1709 by William Tyler from Richard Lewis. Though little is known about the early use of the property and the first structures located on the site, the archeological reports indicate that there was an earthfast structure not far from the location of the existing plantation house that could have been the home of William Tyler.

Both William Tyler and William Tyler Jr. were carpenters and very influential in the development of St. John's Church, a short distance away on Livingston Road. With records indicating that after William Tyler's death in 1721, neither his wife nor his son lived on the property, it is unclear as to how the property was used or occupied for the next forty years, following which, in 1761, John Tyler, son of William Tyler, Jr., sold the property to James Marshall. Records do not indicate how Marshall used the property or whether he resided there, but in 1769 he sold the property to Enoch Magruder.

No diagrams regarding physical changes correspond with this period as it is assumed for this analysis that Harmony Hall was not constructed until Period II.

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Period II: Magruder/Lyles Era - 1769-1849

Period II is defined by long term ownership of the property by the Magruder and the Lyles families, who are linked by marriage. Enoch Magruder purchased the property in 1769. There is no documented evidence from records of purchase that there was a house on the property at the time of ownership transfer. However, as was previously stated, it seems unlikely that the Tyler's would have constructed such a grand structure as Harmony Hall when they did not live on the property for over 40 years during their ownership. Given the stability of the Magruder family, the wealth of Enoch Magruder, and their reference to this property as their ancestral home, it seems likely that the brick manor house was constructed by the Magruders within the first year of ownership, beginning in 1769.

There are no early documents of the first design and construction of Harmony Hall, but based on physical evidence it is understood that the Main Block of the house was the core of this ever-changing and evolving residence and plantation home.

It is plausible that Harmony Hall was first constructed as a single block without any north and south additions. At this time there could have been windows along the north and south facades and an additional exterior door along the south façade where door 104 exists today. The early documentation of Harmony Hall by Albert P. Erb in 1924 includes drawings indicating that there were windows on both the north and south facades of the Main Block. (See Figures 2A-023 and 2A-024)



Figure 2A-023: South Elevation - Main Block; 1924 Documentation by Albert P. Erb

If the original structure consisted of only the Main Block, at some time in the structure's history, prior to the first thorough architectural record of the house in 1924, north and south additions were added to the house and subsequently collapsed or were torn down. When Charles Collins purchased the property in 1929 his records indicate there was still evidence remaining of the foundations of these additions. Archeological investigations of remaining evidence of foundations by the National Park Service in 1985-1987 revealed some information and details regarding the location and condition of the south addition and of the original earthfast structure on the site. To date, no documentation regarding the north addition has been found.

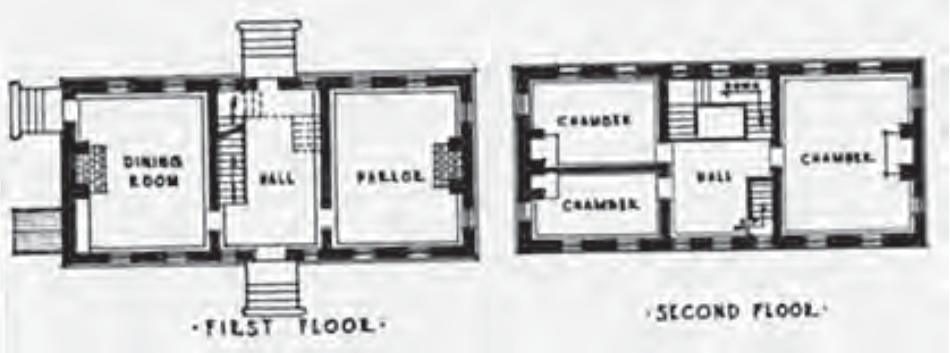


Figure 2A-024: First Floor and Second Floor Plans; 1924 Documentation by Albert P. Erb

The National Register of Historic Places Inventory form indicates that the home was extensively remodeled in 1792 by John and Walter Dulany Addison, the two gentlemen who resided in the house for one year with their new wives.

The following documentation represents items of research or

physical evidence that give clues as to the original appearance of Harmony Hall when constructed in 1769 and the changes that occurred during the years of 1769-1849. For purposes of clarity this information has been broken into Period II-A (1769-1791) and Period II-B (1792-1849) to delineate a few substantial changes that occurred after original construction but before the end of the period. The date of 1792 was chosen to demarcate Phase II-B as the National Register Nomination for Harmony Hall indicated that during that year substantial remodeling occurred which would also coincide with the rental of the property by the Addisons.

Physical Changes/Observations Associated With Period II-A - 1769-1791

Exterior:

Footprint of Archeological Remains Discovered by NPS - Changes from Previous Period/ Unknown Construction - This footprint represents the boundaries of foundation remains of a south wing discovered during archeological investigations conducted by the National Park Service in 1985-1987.

Door 104: Exterior Door in South Façade (Conjecture) - Significant wood paneling and architectural detailing around Door 104 suggests that this might have been an exterior entry door. The detailing and architectural layout of the door is similar to that seen in the primary entry doors of the Main Block along the east and west facades (Doors 101A and 101B). It is also noteworthy that the interior trim of Window 112 matches that of Door 104, but on what would have been on the exterior face of the door assembly. The interior trim of Window 115 and the door trim of Door 101C (basement stair side of the door) also match that of Door 104 and Window 112, suggesting that changes were made to these doors and windows during the same time period.

South Entry Steps at Door 104 (Conjecture) - Exterior entry steps would have been probable at this location to provide access to Door 104 from the exterior. It is also likely that an entrance such as this one would have been used by slaves and servants as access to Room 103 – Dining Room from an outbuilding containing the kitchen. The size and configuration of the stairs are all conjecture, however it is likely that access would have been provided to serve Door 104.

First Floor Window at Room 102 - Living Room/ Parlor (Conjecture) - The early documentation of Harmony Hall by Albert P. Erb in 1924 includes drawings indicating that there were north facing windows in the first floor Room 102 --Living Room/ Parlor. However there is no existing interior evidence to provide confirmation of these windows. If evaluated closely, there are areas of patch and repair to the existing brick masonry in the north façade of the Main Block in these locations. It should be noted that these windows are indicated in the first floor plan of the documentation by Albert P. Erb, but do not appear in the north wall elevations of Room 102 - Living Room/ Parlor in that same set of documents. (See Figures 2A-024 and 2A-025)



Figure 2A-025: North Elevation, Room 102 - Parlor/ Living Room; 1924 Documentation by Albert P. Erb

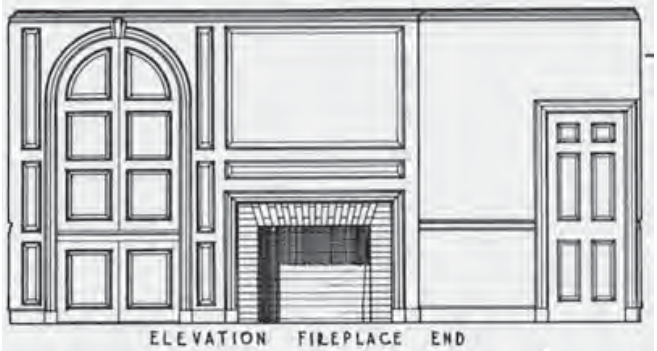


Figure 2A-026: South Elevation, Room 103 - Dining Room; 1924 Documentation by Albert P. Erb

First Floor Window at Dining Room (Conjecture) - It is also possible that a window used to be located in place of the existing cupboard in Room 102 – Dining Room. The HABS documentation from 1934 indicates a jack arch in this location suggesting that there was once a window or door, but the earlier 1924 documentation includes elevations for the existing wood cupboard, suggesting that this window would have been infilled prior to 1924. The architectural paneling and detailing of the cupboard relates to the chimney breast, typical of the Georgian style. It is unknown if these two components were designed together or if the cupboard was built at a later date to complement the existing chimney breast. The paint analysis conducted as part of this HSR notes that these two elements have similar paint chromochronologies and evidence of remaining finish layers. (See Figure 2A-026)

Second Floor Windows at Room 202 - North Bedroom (Conjecture) - There is strong evidence of the existence of two windows in the north wall of Room 202 – North Bedroom at some point in the developmental history of Harmony Hall. Clear evidence was documented in the presence of brick jack arches in the exterior north façade at these locations, flanking the north chimney (chimney #1). There is also evidence on the interior where the chair rail along the north wall was patched in these locations. These windows are documented in the 1924 documentation by Albert P. Erb. (See Figure 2A-027)

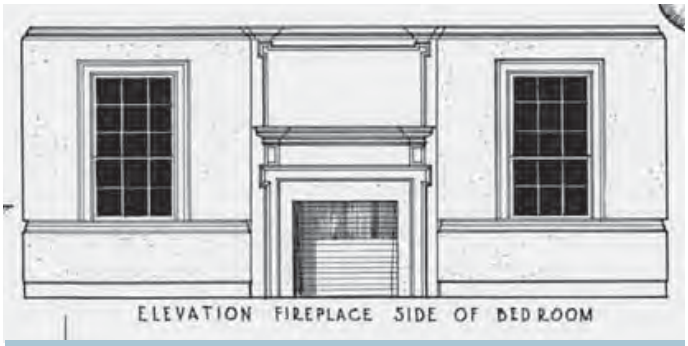


Figure 2A-027: North Elevation, Room 202 - North Bedroom; 1924 Documentation by Albert P. Erb

Second Floor Windows at Room 203 – South Bedroom (Conjecture) - Early documentation of Harmony Hall by Albert P. Erb in 1924 suggests that there were windows in the south wall of the second floor Room 203 - South Bedroom. However, no on-site investigations have revealed evidence of these windows. A bathroom and a closet have been installed within this bedroom possibly concealing evidence of these earlier windows.

Photos from Charles Collins' Papers maintained by the University of Maryland show this façade prior to the 1940s expansion of the Central South Addition. Close examination of these images does not reveal evidence of jack arches in the brick or areas of patch and repair as seen in the north façade. (See Figure 2A-028)

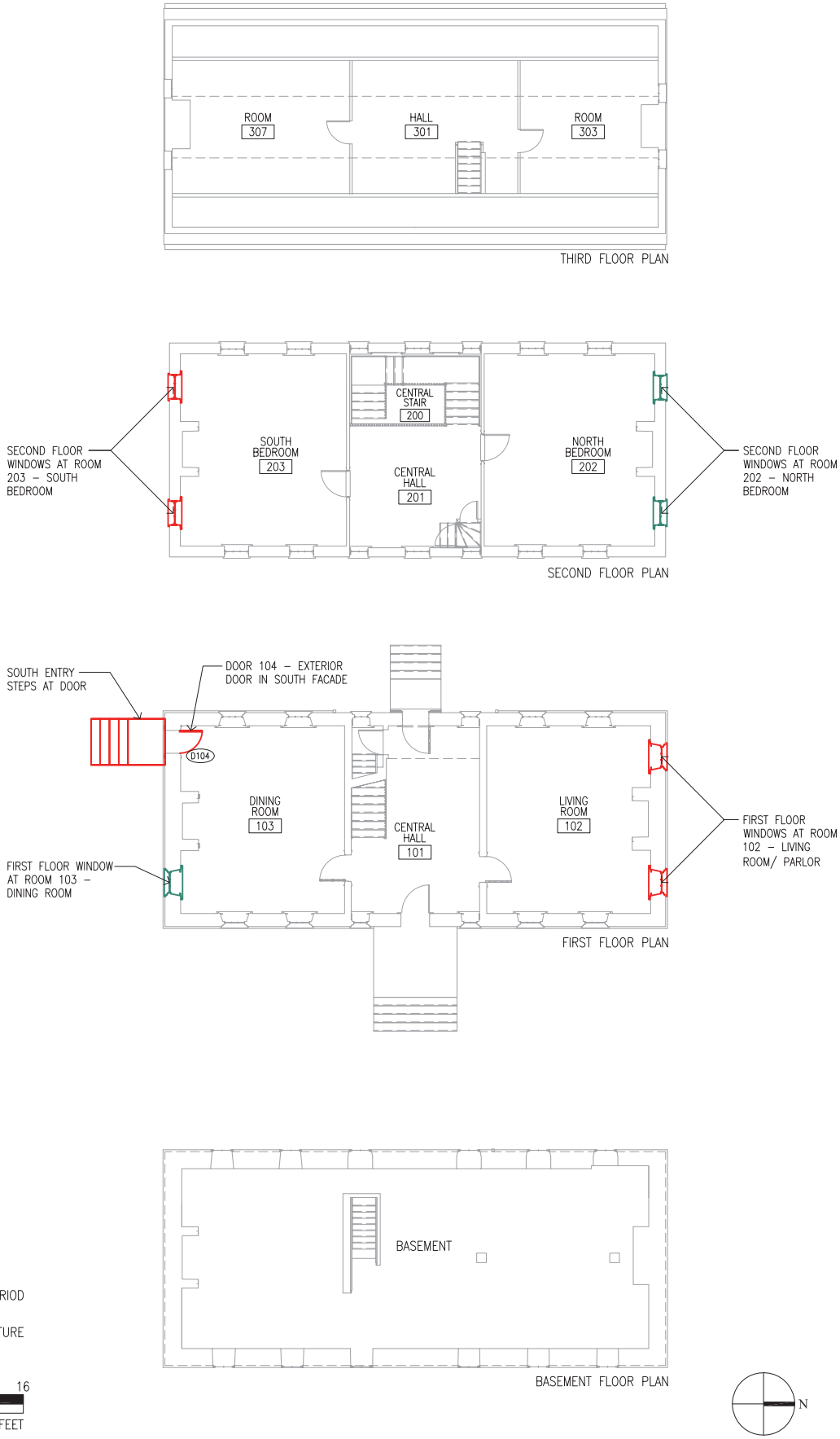


Figure 2A-028: Detail of photograph of South Facade of Main Block; Charles Wallace Collins' Papers, Special Collections, University of Maryland Libraries Series 7: Photographs, 1924-1985, undated.

Interior:

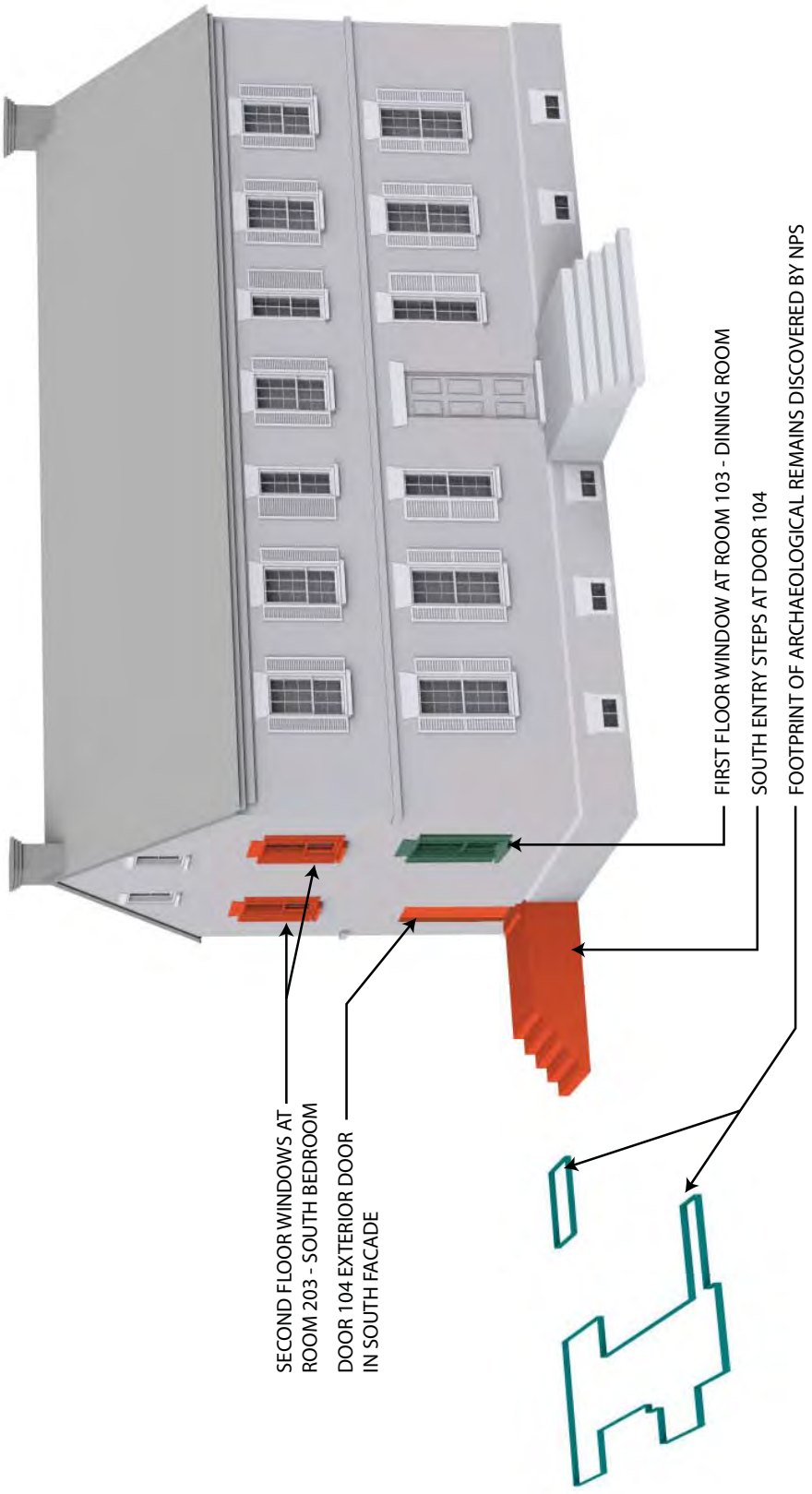
Interior Features - There are several original Georgian features in the interior of the main block which are assumed to date to Period II , including the central staircase, detailed fireplace mantles and surrounds and detailed woodwork and fretwork in all rooms of the Main Block first and second floors.

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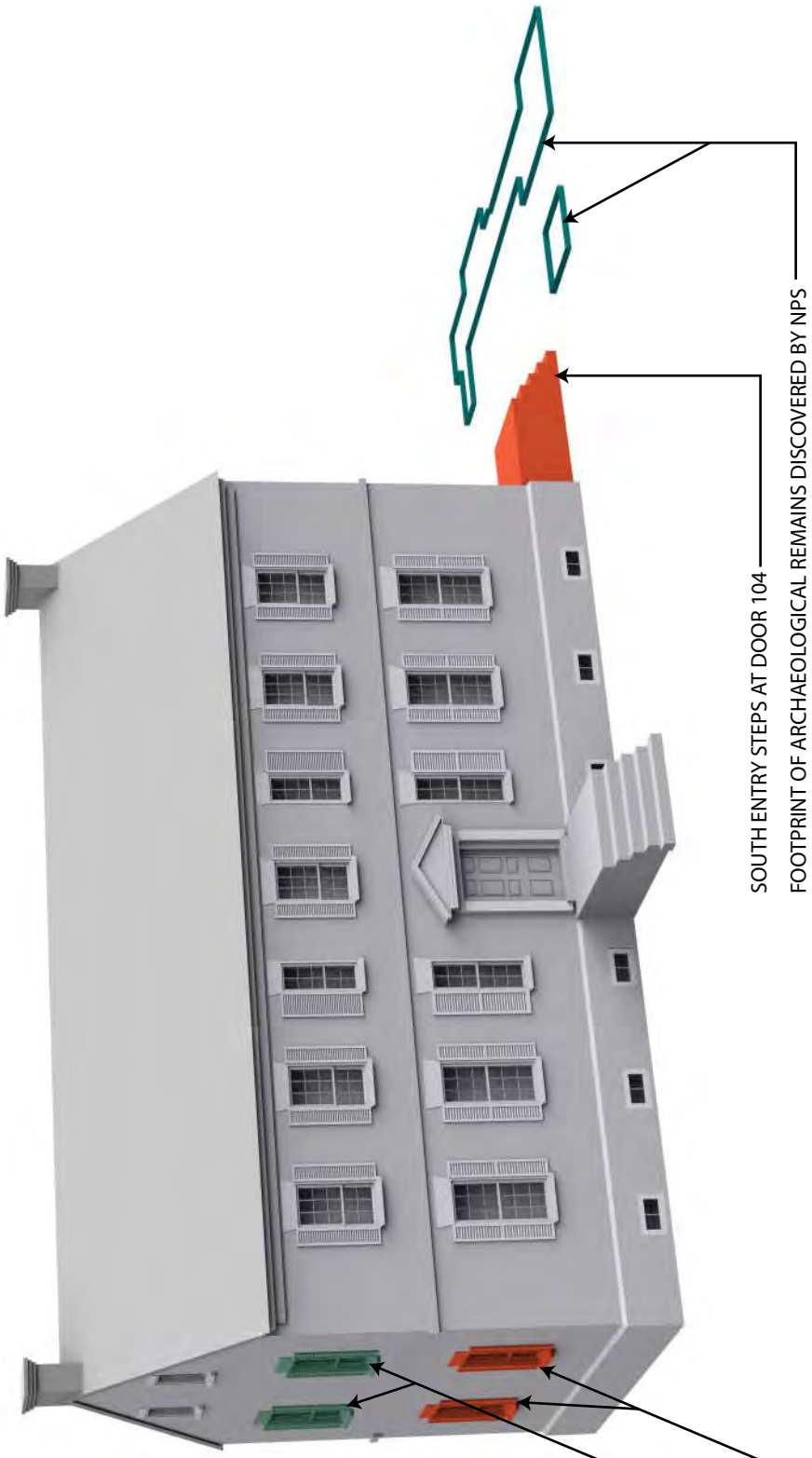
PERIOD II-A: 1769-1791

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Southeast View of Harmony Hall
Period II-A: 1769-1791

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Northwest View of Harmony Hall
Period II-A: 1769-1791

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Physical Changes/Observations Associated With Period II-B - 1792-1849

Early additions and modifications were made to the manor house in the late 18th century, potentially prior to the rental of the property by the Addisons: the brick pediment along the east facade with a "bullseye" window at the attic level, foliated dormers at the attic level, the wood cornice detailing, and the installation of double doors in the east facade entry. Charles Collins indicated in his records that these renovations were completed in 1768. His theory is only substantiated if it can be proven that the house was originally constructed in 1723 by William Tyler, Jr., not in 1769 by Enoch Magruder. It appears more likely that these changes were made in 1792, which is supported by the National Register Nomination.

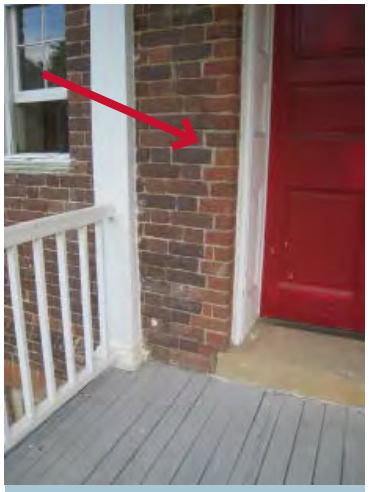


Figure 2A-029: East Entry Door 101A, Modifications to surrounding brick

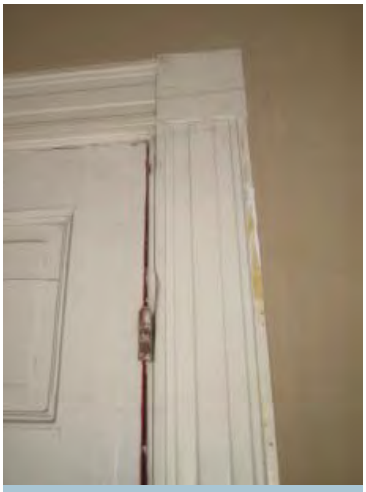


Figure 2A-030: East Entry Door 101A, Interior trim detail



Figure 2A-031: East Entry Door 101A, chair rail not engaged in door casing. (Photo: BBB, 2012)



Figure 2A-032: Door 102, Typical detail with chair rail engaged in door casing. (Photo: BBB, 2012)



Figure 2A-033: East Entry Door 101A, Differing Paneling Profile. (Photo: BBB, 2012)

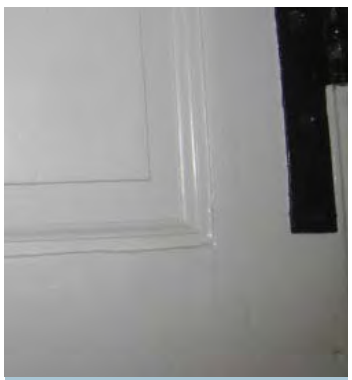


Figure 2A-034: West Entry Door 101B, Typical Paneling Profile. (Photo: BBB, 2012)

Modification of the East Entry Doors (Door 101A) - The Collins Papers indicate that the East Entry Door of the Main Block (Door 101A) was altered from an opening with a single six paneled stile and rail wood door into a larger and taller opening with a pair of four paneled stile and rail wood doors. This modification would have required the removal of the existing door and hinges as well as the modification of the masonry to the sides and at the head of the opening. There are several physical clues that exist today that confirm this alteration. Charles Collins claimed in his records that the bricks used to reconstruct this door opening and to build the brick pediment on the east facade were hand-made, slightly smaller and more red in color than the original brick used to construct the house. The HSR team was able to confirm that:

- The brick at the edges of this door opening are of a different color than the adjacent facade brick. (See Figure 2A-029)
- The molding profile of the door casing differs from the other casings in that space. (See Figure 2A-030)
- The door casing molding is not let into the chair rail molding as it is at all other interior doors in Room 101 - Central Hall. (See Figure 2A-031 and Figure 2A-032)
- The door paneling profile for Door 101A is different than the paneling profile of adjacent doors. (See Figure 2A-033 and Figure 2A-034)



Figure 2A-035: East Elevation Pediment - Different brick and mortar from remaining east facade. (Photo: BBB, 2012)



Figure 2A-036: East Elevation Pediment: Earlier oval window sash stored in basement. (Photo: BBB, 2012)

East Elevation Pediment Addition - The Charles Collins Papers indicated that the pediment on the East Elevation was constructed at a later date than the rest of this elevation, sometime in the late 18th century. The BBB team reviewed this condition in the field. The brick and the mortar at the pediment are very clearly a different color than the remainder of the brick and mortar used for the east elevation, suggesting that this pediment was installed at a different time period. (See Figure 2A-039) The brick at the pediment is slightly smaller and more red in color and very similar to the brick and mortar used for the widening of Door Opening 101A, supporting that these modifications were done at the same time. Also the brick pediment is stylistically identified with the late Georgian period which concluded at the end of the 1700s. It should be noted that the paint analysis, included in Appendix B of this HSR, reveals that the existing window frame could date to the 18th century and the existing window sash was a 1980s replacement. (See Figure 2A-035) However, another oval window sash is stored in the basement and the paint analysis determined that paint layers on this sash date to the late 19th century, suggesting that the "bullseye" window currently installed is at least the third sash to be located here. (See Figure 2A-036)

East Elevation Foliated Dormers - Similar to the east elevation pediment, the Charles Collins Papers indicate that the two dormer windows along the east elevation were added at the end of the 18th century. These windows are stylistically identified with the late Georgian period architecture of the home, which varies with some other elements of the structure that are more early Georgian in style. Adding the dormers would have required modifying the roof structure. BBB and the consultant team, including the structural engineer, reviewed the construction details of these windows on-site. Further study of the structural roof framing above the third floor confirmed that the roof rafters and framing were modified to accommodate the installation of these dormer windows which supports that they not part of the original construction and were added at a later date. (See Figure 2A-037)

First Floor Window at Dining Room (Conjecture) - There is evidence that there was a window on the south elevation of the Dining Room in Period II-A when the house was constructed. Given that the 1924 drawings documenting the building do not show a window or an infilled window opening in this location, it would indicate that the window was infilled during Period III. A flat arch is visible in this location today, so this window opening must have existed during Period II-A but was infilled by Period II-B. The paint analysis contradicts these conclusions slightly as all paint at the cupboard that covers over the wall where the window would have been dates to the



Figure 2A-037: East Elevation Foliated Dormer: Modifications to structural roof framing at third floor dormer windows. (Photo: BBB, 2012)

1770s which is during Period II-A. This particular window opening and the cupboard will require further analysis via materials testing. (See Figure 2A-038 of flat existing flat arch).

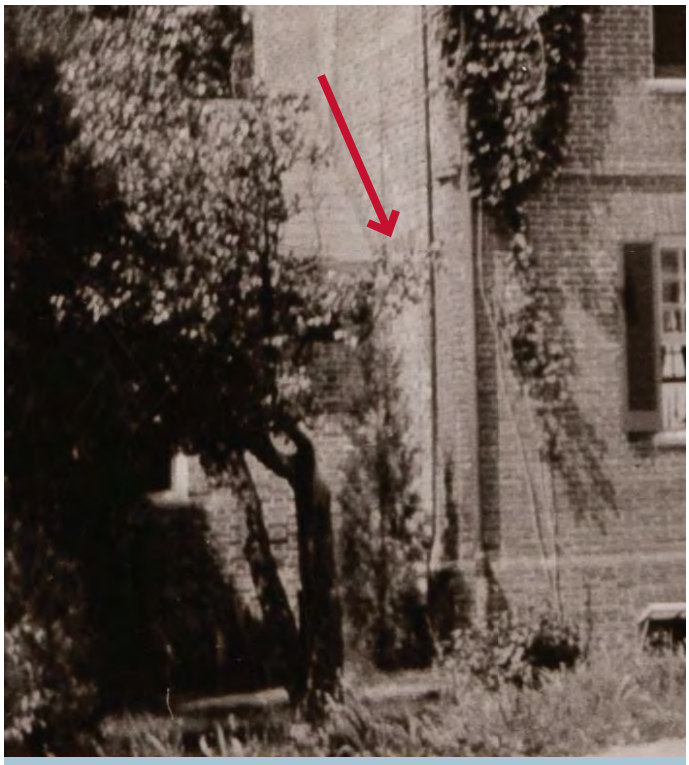
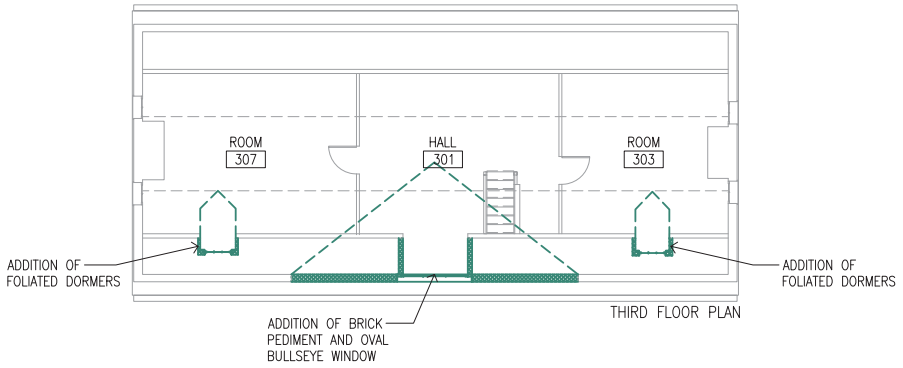
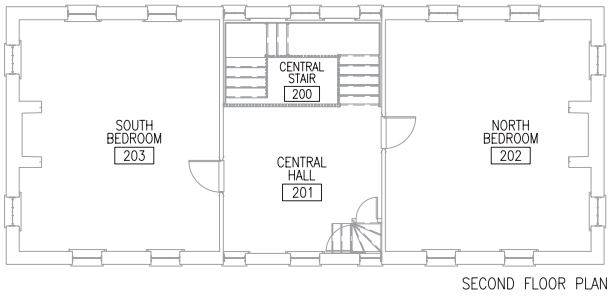
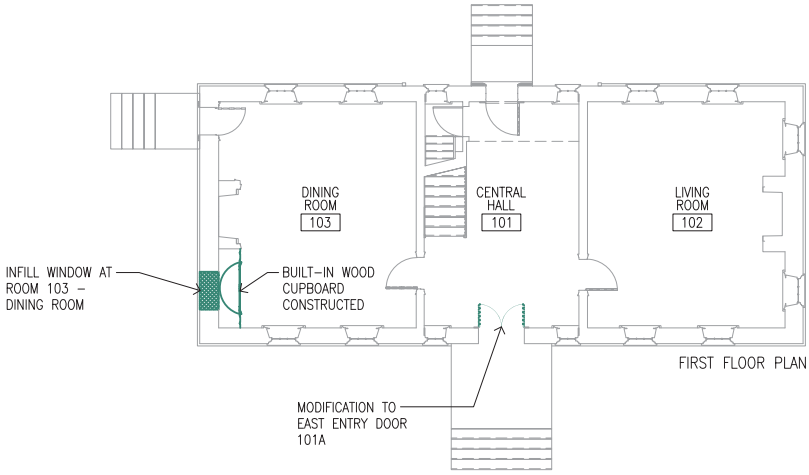


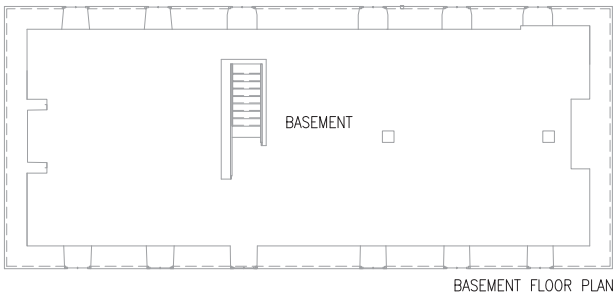
Figure 2A-038: First Floor Window at Dining Room Cupboard: Remaining flat jack arch above former window opening. (Photo: BBB, 2012)

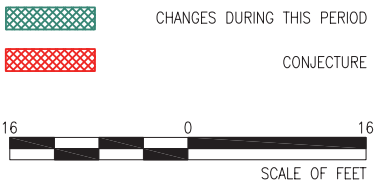
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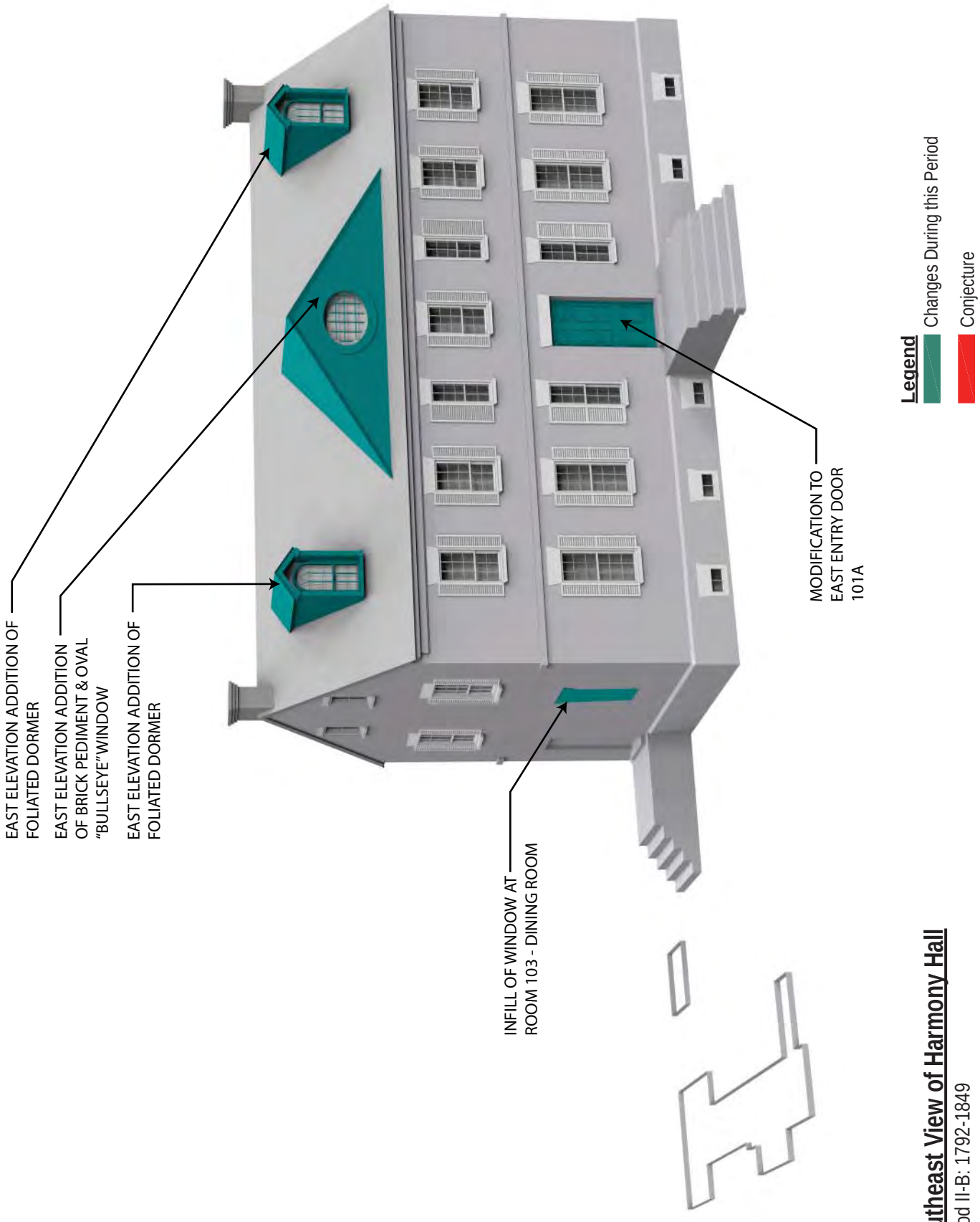






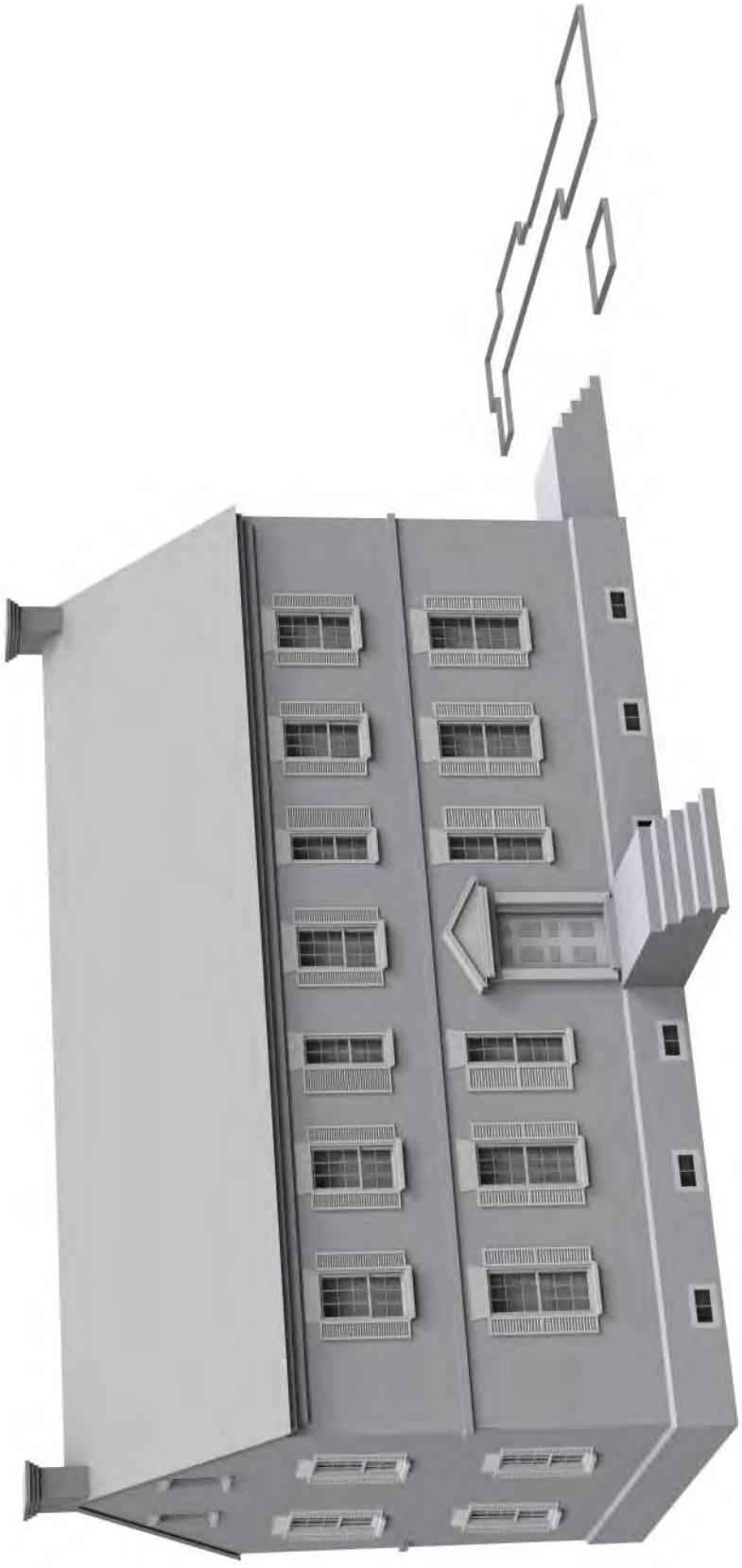
PERIOD II-B: 1792-1849

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Southeast View of Harmony Hall
Period II-B: 1792-1849

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NO CHANGES

Legend

Changes During this Period

Conjecture

Northwest View of Harmony Hall

Period II-B: 1792-1849

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Period III: Transition Years - 1850-1928

Period III marks a period of transition not just for Harmony Hall but for the Broad Creek area as well. This period begins in 1850 when the Magruder/Lyles descendants sell the property. The property passes through six owners in the next 42 years as a result of owners not paying taxes and having other financial issues. The Broad Creek area went through a decline as well due to the nation shifting from an agrarian economy to an industrial one resulting in the neglect of the stately plantation homes in the area. This period concludes with the ownership of the property by the Stein Family. Robert Stein purchased the property in 1892, and he and other members of his family occupied the house until his brother Richard, who bought Robert's share of the property in 1894, sold it in 1929. It was during this time that the house becomes used in a more utilitarian way, as the Steins stored corn feed in the attic, dried fish in the living room, and disposed of refuse through a hole cut into the floor in the dining room. The Steins owned the property for thirty-seven years, Robert, Richard and their sisters Selma and Ann all lived there at some point either together or separately. The transitional occupancy by the Steins in conjunction with the Collins description of the state of the house that he purchased makes one believe that the house was allowed to deteriorate during these transition years.

The first formal documentation of the structure occurred in 1924 by Albert P. Erb, in the very last years of the Stein ownership. That documentation in conjunction with the papers and photographic records from the University of Maryland serve as a major source for determining changes that occurred in Period III (1850-1928) and in turn the changes made in Period IV (1929-1940) after Collins purchased the home.

Physical Changes/Observations Associated With Period III - 1850-1928

Exterior:

Bullseye Window - A sash for the attic "bullseye" window was found in the basement. Paint samples from this sash were consistent the 19th century, indicating that the original sash from Period II-B was replaced in Period III.

Basement Entry Enclosure and Door (Change from Period II) - A brick entrance enclosure with a gable roof, is depicted in the 1924 Erb drawings. The enclosure shielded the southeast basement entry door similar to the north basement entry seen today. The doorway enclosed by the structure provided entry at grade to the basement below. This addition must have been constructed in Period III, since it would otherwise have conflicted with the window that existed in the southeast corner of the Dining Room on the first floor in Period II. This entrance would also support that the Steins used the basement for refuse collection in the late portion of Period III and they would have used this entry into the basement to remove the material.



Figure 2A-039: East Elevation with east entry porch and painted facade, c.1929
(Photo: Charles Wallace Collins' Papers, Special Collections, University of Maryland Libraries, Series 7: Photographs, 1924-1985 and undated)

Wood Porch Addition on East Facade (Change from Period II) - In early photographs of Harmony Hall contained within Charles Collins' Papers there is evidence of a wood framed porch existing along the east facade at entry Door 101A. (See Figure 2A-038). This porch does not show up in the 1924 Erb drawings but other photos of the restoration work Collins did reflects the removal of this porch in the early part of Period IV, so the porch is dated to Period III.

Facade Painted White (Change from Period II) - Also evident in the

early photographs of Collins' papers is the painting of the exterior brick facade of the Main Block of Harmony Hall. There is no definitive information as to when this was done, but it is was not typical of the Georgian style to paint the exterior brick, so this coating was most likely applied during Period III (See Figure 2A-039).

West Facade Dormer Windows - The 1924 Erb drawings indicate that there were dormers located on the west facade. These dormers no longer exist and field investigations did not support that the structure was modified to accommodate them, as was the case with the structural modifications to accommodate the dormers of the east facade. If they existed, the would have been installed and removed in Period III, as the early Period IV photographs do not show them nor does Collins mention that they existed.

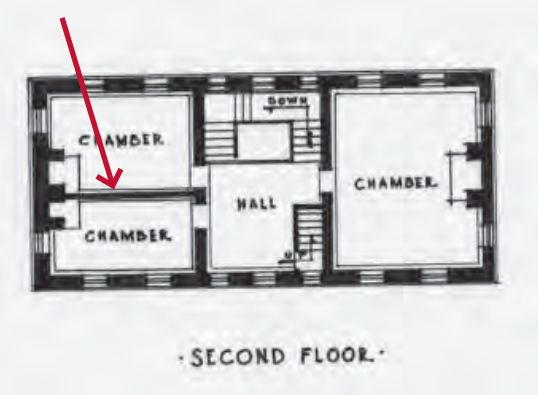


Figure 2A-040: Second Floor Plan, 1924 Documentation by Albert P. Erb; Floor plan indicates two bedroom chambers at the south side of the Main Block with a split fireplace.

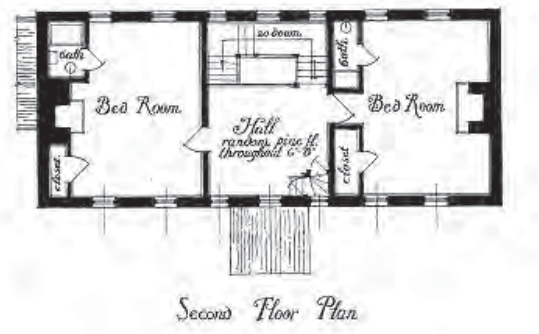


Figure 2A-041: Second Floor Plan, 1934 HABS Documentation Drawings; Floor plan depicts one bedroom at the south side of the Main Block as it exists today.

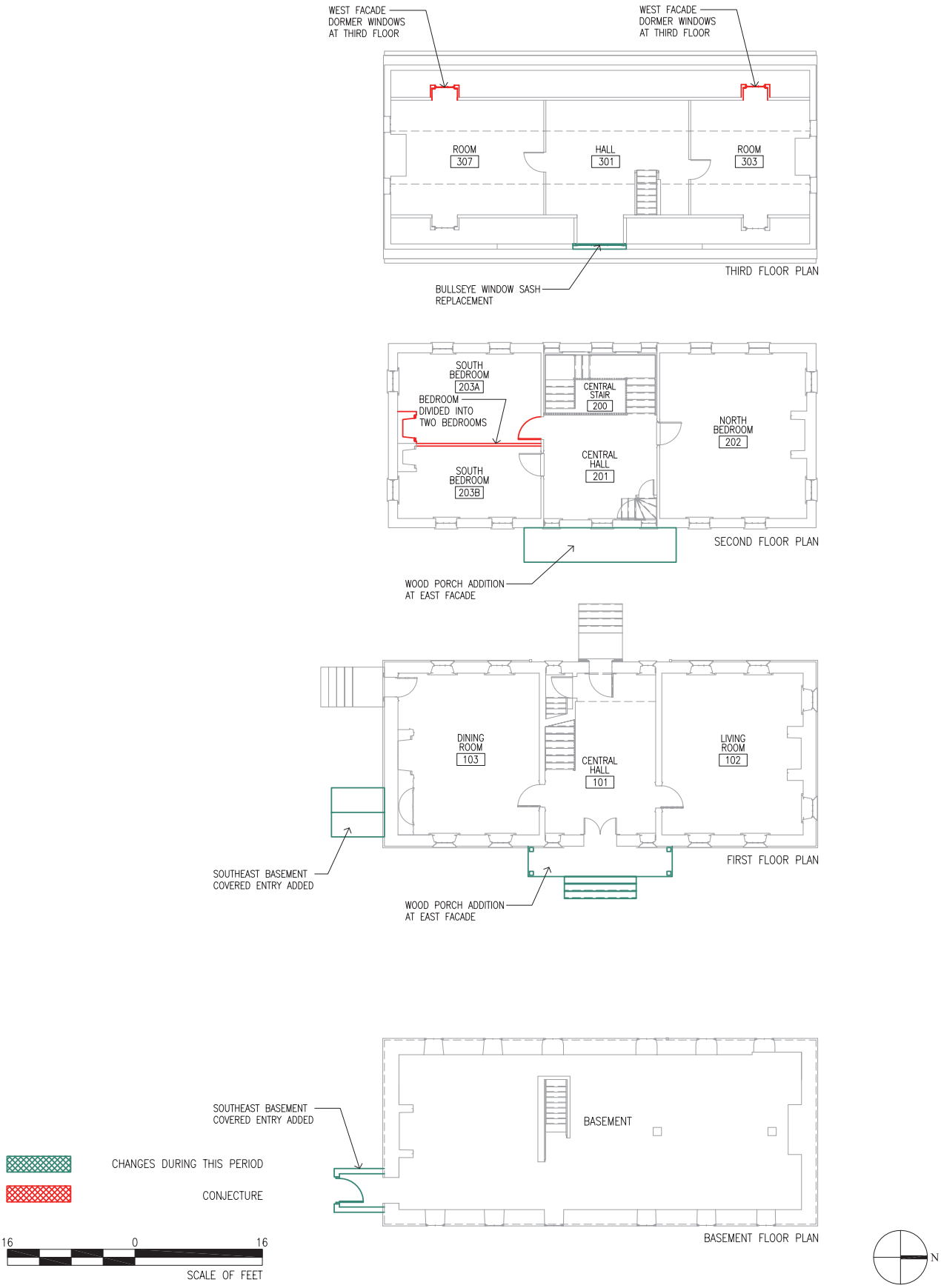
Interior:

Second Floor Bedroom - The second floor plan in the Albert P. Erb drawing set indicates that Room 203-South Bedroom was once divided into two bed chambers with a split chimney. No evidence was found on-site to verify this however the 1934 HABS drawings show this area to be one large room as it is today. (See Figures 2A-40 and 2A-41) If the Erb drawings are accurate, then this bedroom arrangement would date to Period III and would have been removed in Period IV.

Hole in Wood Flooring of Room 103-Dining Room - The inspection of existing fabric did reveal cuts in floor boards where patches were installed in the Dining Room floor that would confirm the Collins reference that the Steins had cut open the flooring to be able to toss refuse into the basement. The cut in the floor would date to Period III while the patch would date to Period IV (See Figure 2A-042) Further investigations should be made above the basement ceiling of Room 013-Recreation Room to confirm.

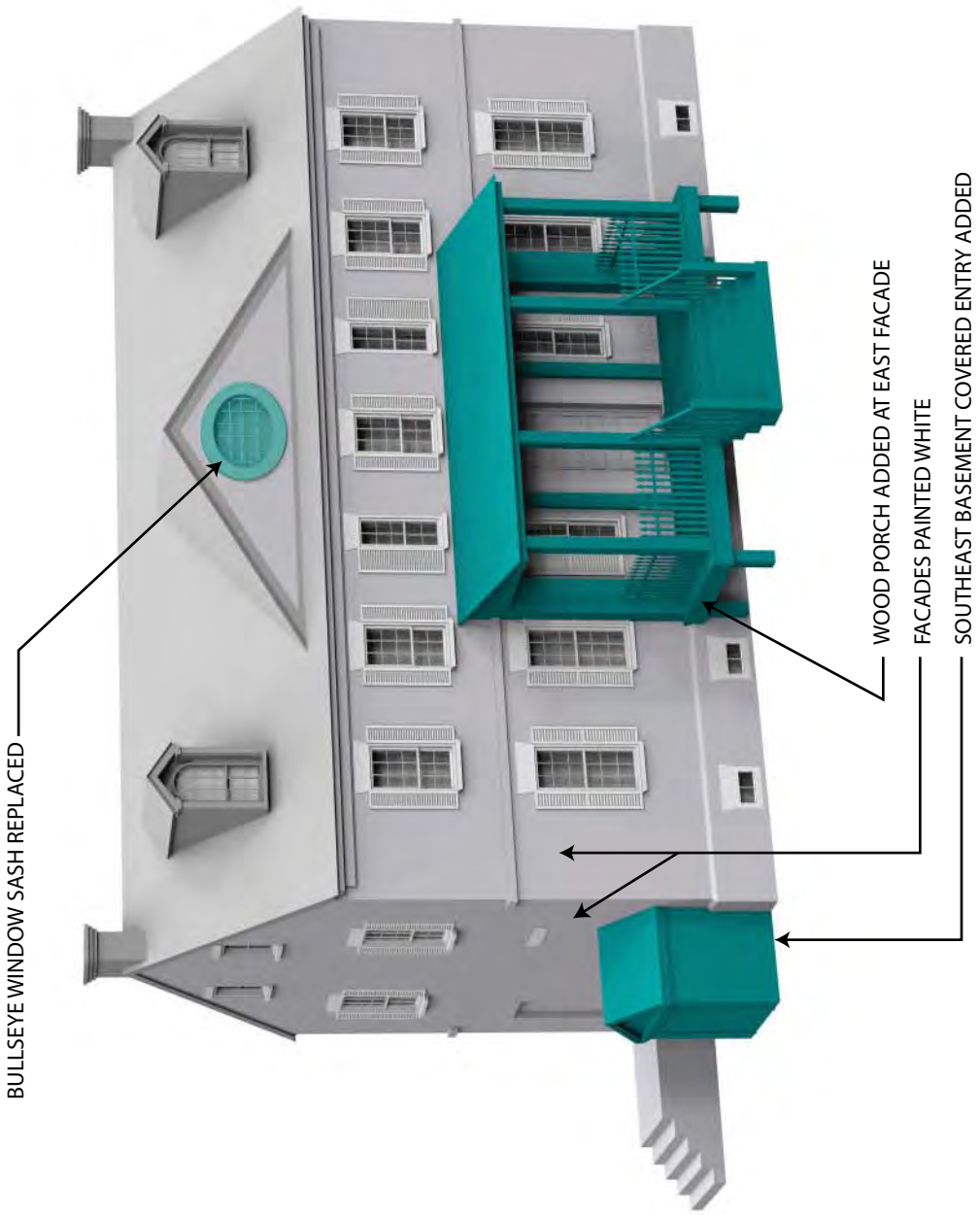


Figure 2A-042: Room 103-Dining Room, Patch and repaired wood flooring where flooring was previously removed to dispose of trash into the basement below.



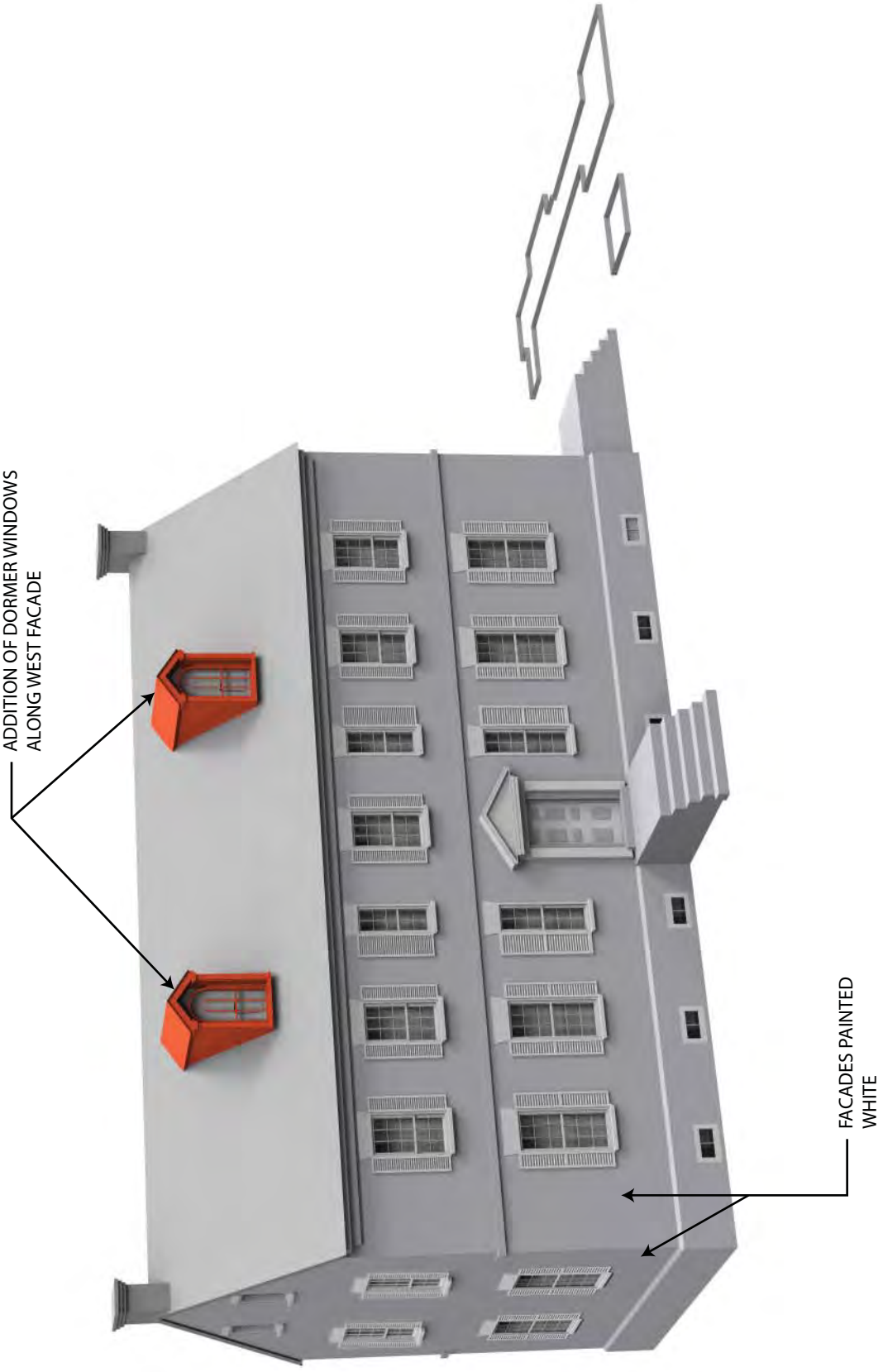
PERIOD III: 1850-1928

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Southeast View of Harmony Hall
Period III: 1850 – 1928

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Northwest View of Harmony Hall
Period III: 1850 – 1928

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Period IV: Collins Restoration/Expansion Era - 1929 – 1940

Period IV of the developmental history of Harmony Hall is defined by the ownership of the property by Charles Wallace Collins and his restoration and expansion efforts. A careful study of Albert P. Erb's 1924 documentation preceding the Collins purchase, the early photos in Collins' Papers, the 1934 documentation by the Historic American Building Survey (HABS), and later photos taken by HABS and the National Park Service, reveals clear evidence of changes made to the house and landscape between the time when Collins purchased the property in 1929 and when the HABS documentation was completed in 1934 after Collins had executed significant restoration efforts.

Though it is assumed that Charles Collins made several modifications or restorations to the property and some interior details may have been modified, the documentation provided as part of the scope of work for this project did not reveal much detailed information about the changes which were made. All documented modifications by Charles Collins contained in this Historic Structure Report were gathered through on-site survey and investigations or by study of the 1924 and 1934 drawing documentation.

Physical Changes/Observations Associated With Period IV - 1929-1940

Exterior:

Removal of East Porch & Construction of New East Entry Porch - As discussed in Period III, photographic evidence reveals that when Collins purchased Harmony Hall from Richard Stein (brother of Robert Stein) in 1929, there was large front porch with a shed roof on the east facade. The east entry doors included a double screen door on the outside. Collins removed both the front porch and the screen door. He constructed a new wood pedimented front porch more sympathetic to the Georgian colonial style, supported by two columns and flanked with two wood seats.

Basement Entry Modification - Per the 1934 drawings, the stair on the South elevation was no longer covered, indicating it was removed in Period IV. Photos from the Collins era show brick work had been modified in that area supporting that the enclosure was removed. (See Figure 2A-043)

Removal of White Paint from Exterior Brick Facade of Main Block - Photographic evidence also reveals that when Charles Wallace Collins purchased Harmony Hall from Richard Stein, the house had been painted white. Collins removed all paint from the exterior facade of Harmony Hall and restored the brick masonry.

North Basement Covered Entry - An entry into the basement at the northeast corner, which did not exist previously, is indicated in the 1934 HABS documentation, which places its installation in Period IV. It is depicted as an opening at grade with a hatch cover, not the full enclosure that is seen



Figure 2A-043: Southeast Basement Entrance, c.1929; Patch and repair evident where covered entry removed.
(Photo: Charles Wallace Collins' Papers, Special Collections, University of Maryland Libraries, Series 7: Photographs, 1924-1985 and undated)

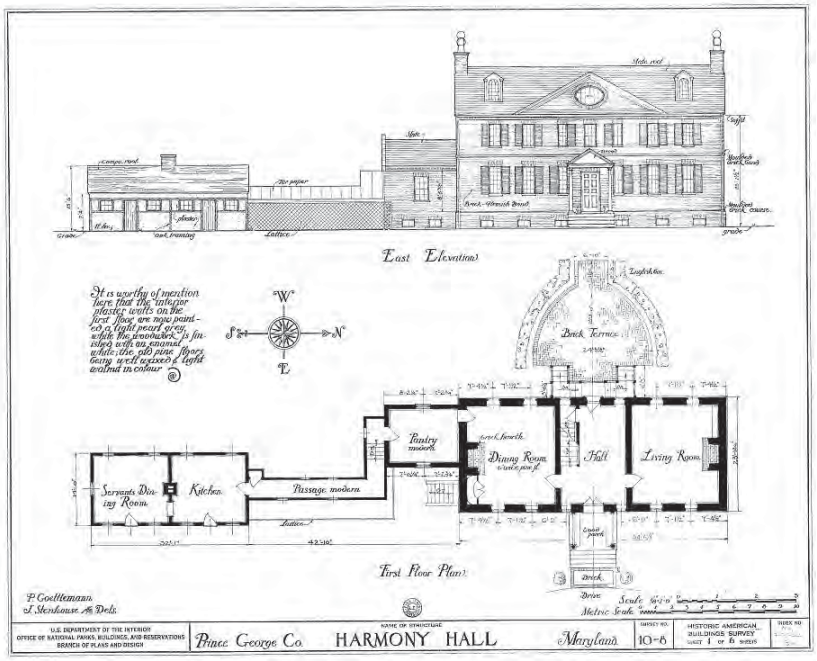


Figure 2A-044: Historic American Buidling Survey (HABS), 1934

today.

Construction of Pantry Addition (Portion of the Existing Central South Addition) - A one and one-half story pantry and kitchen wing was built in Period IV by Collins. (See Figure 2A-044)

Covered Walkway/ Passage to Servants' Quarters and Dining Room - A new covered walkway was added to the south of the Pantry Addition to connect the Pantry to the Servants Quarters. (See Figure 2A-044)

Servants' Quarters and Dining Room - In Period IV, Collins added a two room structure at the end of the covered walkway/passage to serve as a kitchen and servants dining room. (See Figure 2A-044 and 2A-45)

Construction of Double Entry Stairs to West Facade (Door 101B) - Collins also constructed the west double stair at the entrance facing the Potomac River to resemble what he imagined would have been there originally.



Figure 2A-045: Outbuilding Constructed by Collins; Servants Dining Room and Kitchen.
(Photo: Charles Wallace Collins' Papers, Special Collections, University of Maryland Libraries, Series 7: Photographs, 1924-1985 and undated)

Brick Terrace and Patio with Brick Piers and Decorative Iron Gate - Just at the base of the double stairs, Collins constructed a brick patio with a decorative iron gate. (See Figure 2A-046)



Figure 2A-046: Brick terrace and Patio constructed by Collins.
(Photo: Charles Wallace Collins' Papers, Special Collections, University of Maryland Libraries, Series 7: Photographs, 1924-1985 and undated)

Basement Awning Windows - The basement awning windows on the east and west elevations are depicted in the 1924 drawings with three lites per sash while the 1934 drawings indicated that they have two lites per sash. This coupled by the paint analysis dating the window frames to Period II and the sashes to Period VI would support that these sashes were replaced in Period IV and replaced again in Period VI.

First Floor Window Sashes - Main Block - Paint analysis revealed that the first floor window frames date to Period II, while the sashes date to either Period IV or Period VI. This supports the notion that Collins replaced the first floor window sashes during his renovation efforts. Those windows where paint dates to Period VI could have been replaced by the Battersea Company during their restoration efforts. Most windows have interior aluminum tracks to receive screens which were common in the 1930s and again supports the notion that Collins replaced sashes. Also, historic photos reveal that in Room 102-Living Room/ Parlor the sashes were of a two over two lite configuration in Period III and were then changed to a nine over nine lite configuration by Collins to match the other first floor window sashes. (See Figure 2A-47)



Figure 2A-047: Room 102 - Living Room/ Parlor two over two window sashes later replaced by Collins.
(Photo: Charles Wallace Collins' Papers, Special Collections, University of Maryland Libraries, Series 7: Photographs, 1924-1985 and undated)

South Elevation Masonry Arches - The south elevation shown in the 1924 HABS documentation depicts flat jack arches above the third floor casement windows. These jack arches are no longer intact if they ever existed, and they are not seen in historic photos of this façade during the early years of the Collins' ownership and occupancy. The 1934 HABS drawings do not include flat jack arches above either the north or south third floor casement windows.

East Facade Dormer Windows - The two dormer windows of the east façade are shown with six over six lites in the 1924 drawings. However, the 1934 HABS drawings indicate that these windows have the nine over six lites that exist today, suggesting that the sashes may have been changed in Period IV. However, the paint analysis dated the frames to Period II and the sashes to Period VI. It could be that Collins replaced them and they were subsequently stripped or restored in Period VI. However, early 1930s photos show the nine over six lite configuration in one dormer (Window 303) while the other dormer has a nine over two configuration (Window 301). In conclusion, it seems as though the 1924 drawings might not have been accurate in depicting these dormers and Collins replaced the bottom sash of the north dormer (Window 301) to match the existing south dormer configuration.

Infill of First and Second Floor Windows at North and South Facades - The 1924 drawings indicate that the first and second floor windows of the north facade and the windows on the second floor of the south facade were still intact. The 1934 HABS drawings indicate that all of these windows were infilled in during Period IV.

Shutters - The window shutters along the first floor shown in the 1924 drawings are two paneled and the second floor shutters are shown as louvered. However, the 1934 HABS drawings indicate louvered shutters along the east facade and no detail is provided for the shutters along the west facade. HABS photographs confirm that Collins installed wood continuous louvered shutters on the east and west elevations.

"Grapevine" Mortar Joints - The Collins Papers indicated that the original "grapevine" troweled mortar joints were still intact. Given the number of window openings that were infilled during Period IV to accommodate additions and the removal of the exterior coating, one can assume that Collins had undertaken significant re-pointing of the facade that required he match the existing "grapevine" mortar joints.



Figure 2A-048: Existing "grapevine" trowel marks in mortar.

Replacement of Roof - The roof construction was investigated through an access panel in the eave of the roof. In this space cut nails used on the roof rafters and sleepers, dating them to pre-1890s when machine nails started to be used. These roof rafters were in many cases dovetailed together without use of nails. The roofing underlayment was of a bead board construction, installed with machined nails and laid over sleepers that looked like they were salvaged or reused wood. It is likely that the bead-board was installed during Period IV

supporting the assumption that the roof was replaced. The 1935 HABS photographs indicated a slate roof was in place during this period. (See Figure 2A-049)

Interior:

Bathrooms - The 1934 HABS drawings confirm the Collins descriptions that bathrooms were added in the basement, Room 202 - North Bedroom , Room 203 - South Bedroom, and the third floor. Collins added running water to the Main Block for the first time.

Closets - Closets were added during Period IV to Rooms 202 - North Bedroom and Room 203 - South Bedroom. The 1924 drawings did not include an attic plan but it can be assumed that since the bathroom was installed in Period IV, the attic was re-configured to accommodate new closets.

Electricity/Lighting - Collins introduced electricity to the Main Block during Period IV. Electrical outlets and lighting were installed in all rooms.



Figure 2A-052: 1930s product advertisements for fiber insulating board.

Installation of Wood Paneling & Ceiling in Room 013 - Recreation Room - The 1934 HABS drawings contain a basement plan which indicated that the wood paneling in Room 013-Recreation Room was salvaged wood from an old church in Piscataway. This room was therefore completely remodeled during Period IV. (See Figure 2A-050

Interior Finishes Replacement - The Collins Papers indicate that much of the interior walls and ceiling plaster were replaced. While investigating the attic eaves, a label was discovered of the material used to construct the walls at these locations (See Figure 2A-051). Additional research shows the product was made in the 1930s and was advertised as a good insulating product for cladding interior walls and ceilings. (See Figure 2A-052) The manufacturing period of this product aligns with the Period IV and would confirm that Collins installed this product at the attic ceilings and walls when renovating. In the flooring of Room 303 - Bedroom, it was also observed that the ceiling of Room 202 - North



Figure 2A-049: Roof Rafters and Underlayment (Photo: BBB, 2012)



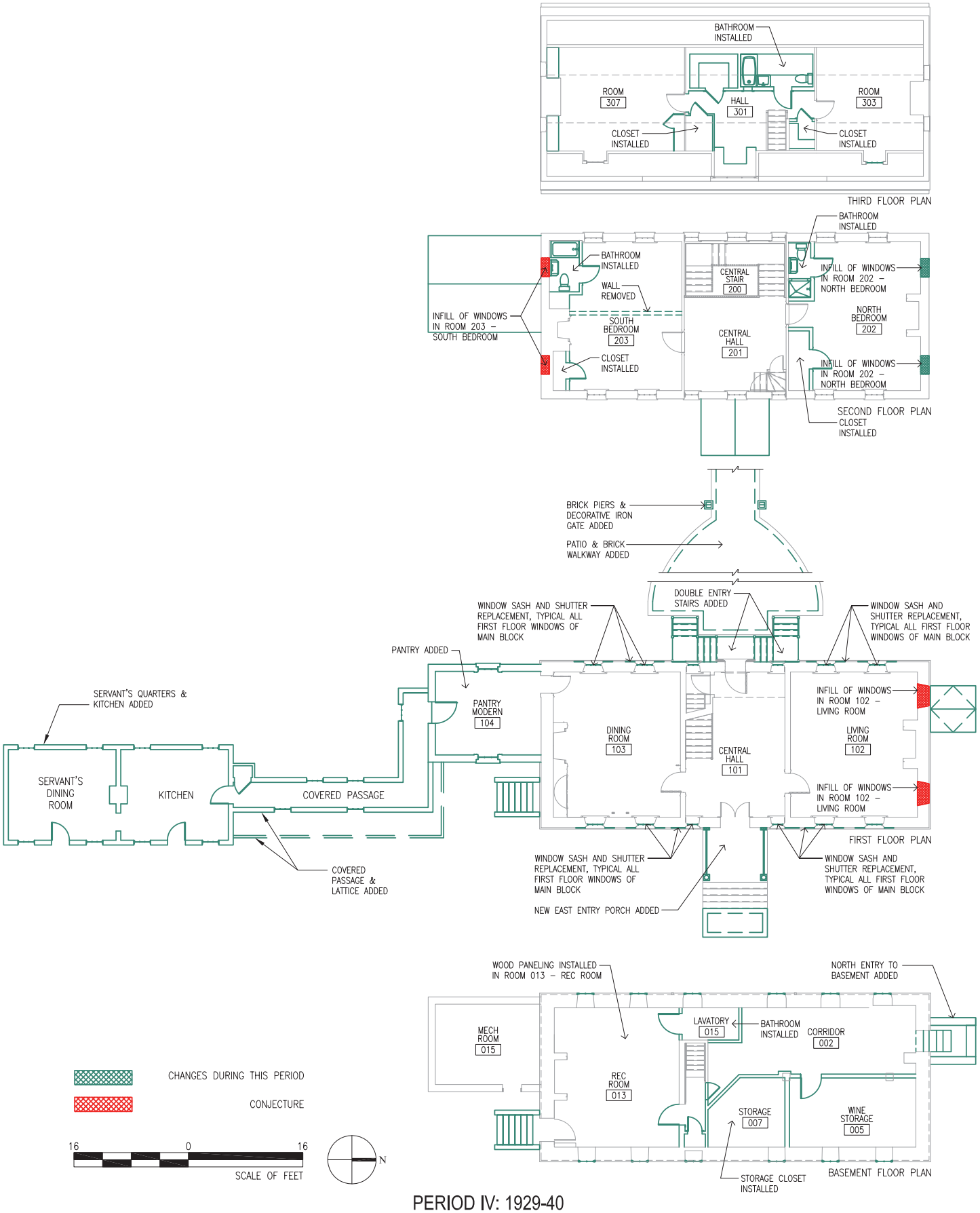
Figure 2A-050: Room 013 - Recreation Room; Wood paneling salvaged from old church in Piscataway. (Photo: BBB, 2012)



Figure 2A-051: Product information on back side of fiber insulating board.

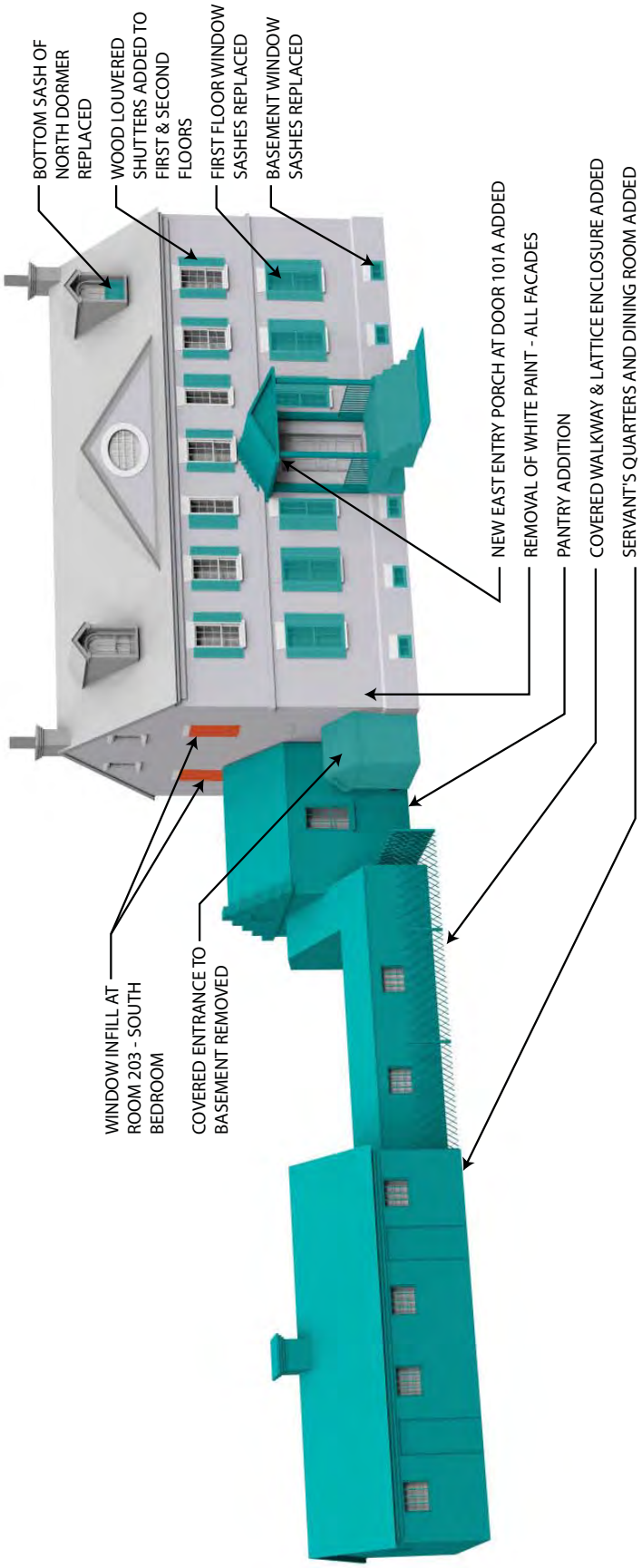
Bedroom has the same Johns-Manville product and it was nailed directly to the underside of the third floor framing. This observation confirms that when Collins renovated the property, wood lath and plaster at the ceilings and most interior walls were replaced with the Johns-Manville product.

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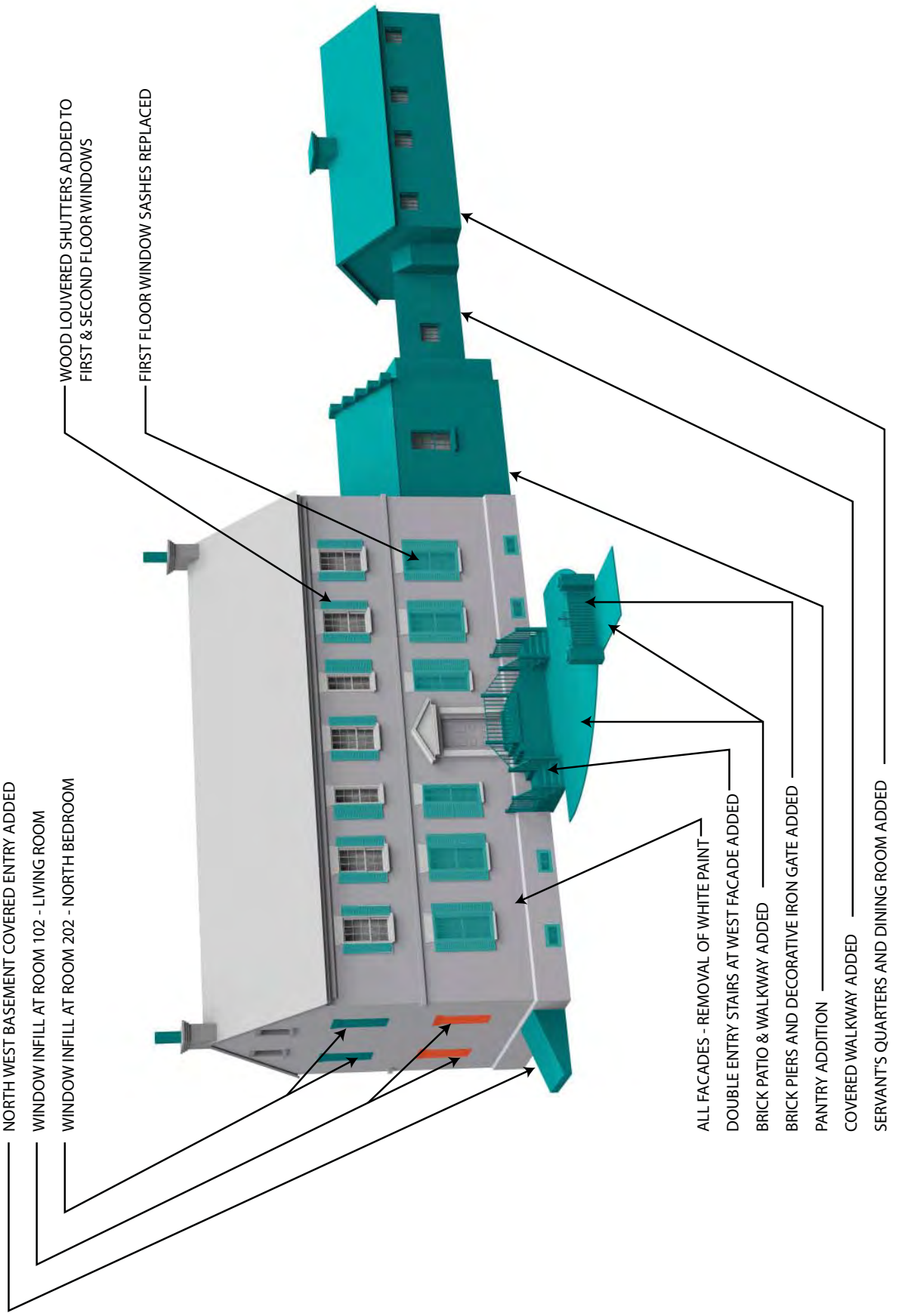
PERIOD IV: 1929-40

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Southeast View of Harmony Hall
Period IV: 1929-1940

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Northwest View of Harmony Hall
Period IV: 1929-1940

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Period V: Collins Upgrades Era - 1941 – 1966

Period V is still defined by the Collins ownership, but is further defined by another campaign to significantly modify Harmony Hall. In 1941, Collins decided to introduce modern heating and cooling into the structure which had significant impact on the Main Block. He indicated in his papers that he lost the services of his fire boy due to the war efforts, and therefore needed to install a mechanical system. He also chose to expand the Period IV pantry addition by making it two stories, significantly changing the massing of the house. This period concludes in 1966 with the transference of ownership of the house to the National Park Service by Charles Collins' widow.

Physical Changes/Observations Associated With Period V - 1941-1966

Exterior:

Central South Addition Expansion - During Period V, per confirmation by the Collins papers, the Central South Addition was expanded to accommodate a kitchen directly off the dining room, a first floor bathroom and another bedroom. (See Figure 2A-053) The east wall of the Central South Addition was brought out to meet the facade the Main Block. The east elevation of this addition was held back a few inches from the facade of the Main Block to give prominence to the main historic portion of the house. Details regarding the brickwork and windows closely matched the adjacent historic construction.



Figure 2A-053: Photo Credit: Michael F. Dwyer, November 1973, Maryland Historic Trust (MHT) website
PG:80-11
Harmony Hall, Prince Georges County, Maryland
Gary Scott, Photographer, 1977 National Capitol Region/ NPS
Road view, camera facing west

Interior:

Installation of Ductwork - The Collins' Papers also indicate that a central heating system with ductwork was installed in the 1940s. The site investigation confirmed that the masonry walls were chased out to accommodate vertical ductwork in the basement. (See Figure 2A-054) The Johns-Mansville wall material would have been removed and reinstalled (or replaced) in the attic and other locations to accommodate the installation. In order to install vertical ducts that feed the second and third floor rooms on the north side of the building, masonry was chased out on either side of the fireplaces in Room 102-Dining Room and Room 202-North Bedroom. This would also mean that the wood paneling was removed and reinstalled (and potentially altered) to allow for this work to occur. Supply and return air grilles were noted on either side of the fireplaces in these rooms and in Room 303-Bedroom, confirming that the ducts run on



Figure 2A-054: Masonry chase for ductwork.

either side of the fireplace and all the way to the third floor.

Basement Bathroom - The basement bathroom was relocated from the west side of the Recreation Room to the East as a result of the need for a mechanical room. (See Figure 2A-055 and 2A-056)

Mechanical Room - A mechanical room was added in the both the Main Block basement and the South Central Block basement to accommodate the new systems equipment. (See Figure 2A-055 and 2A-056)

Storage Rooms - Additional storage rooms were added in the north basement of the Main Block. (See Figure 2A-055 and 2A-056)

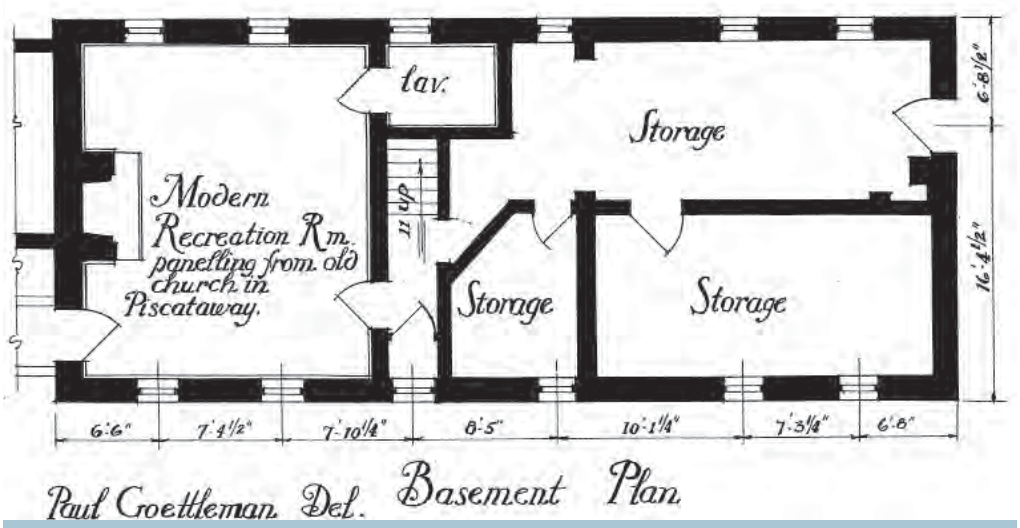


Figure 2A-055: 1934 HABS Documentation, Basement Floor Plan

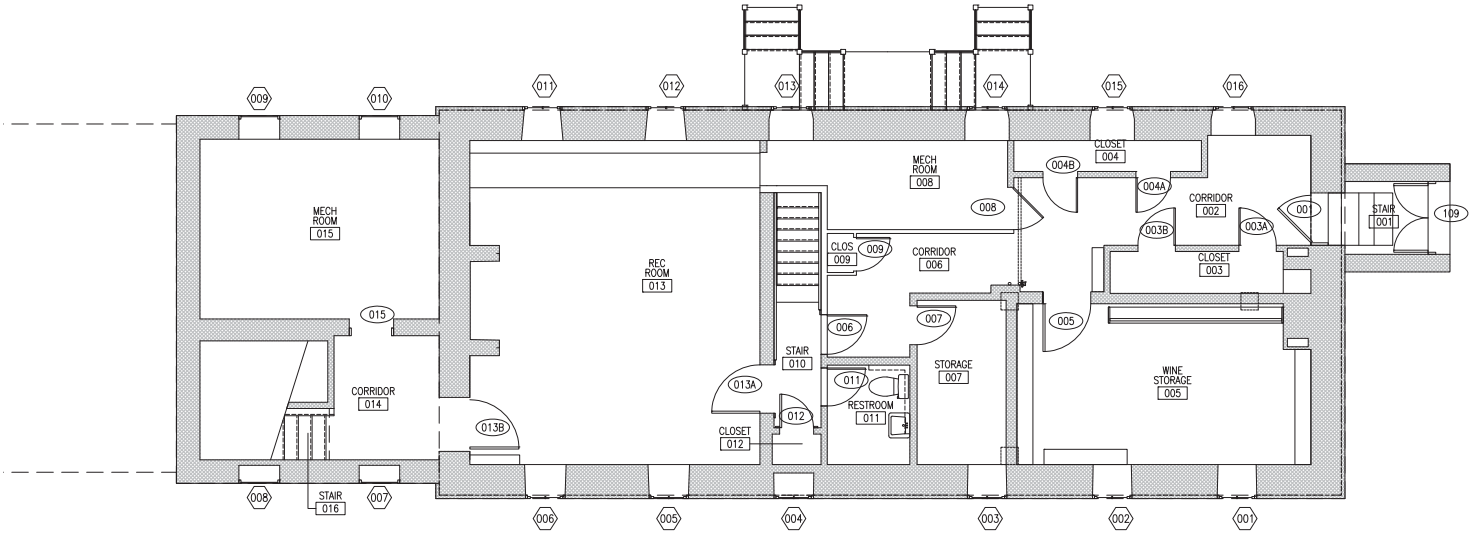
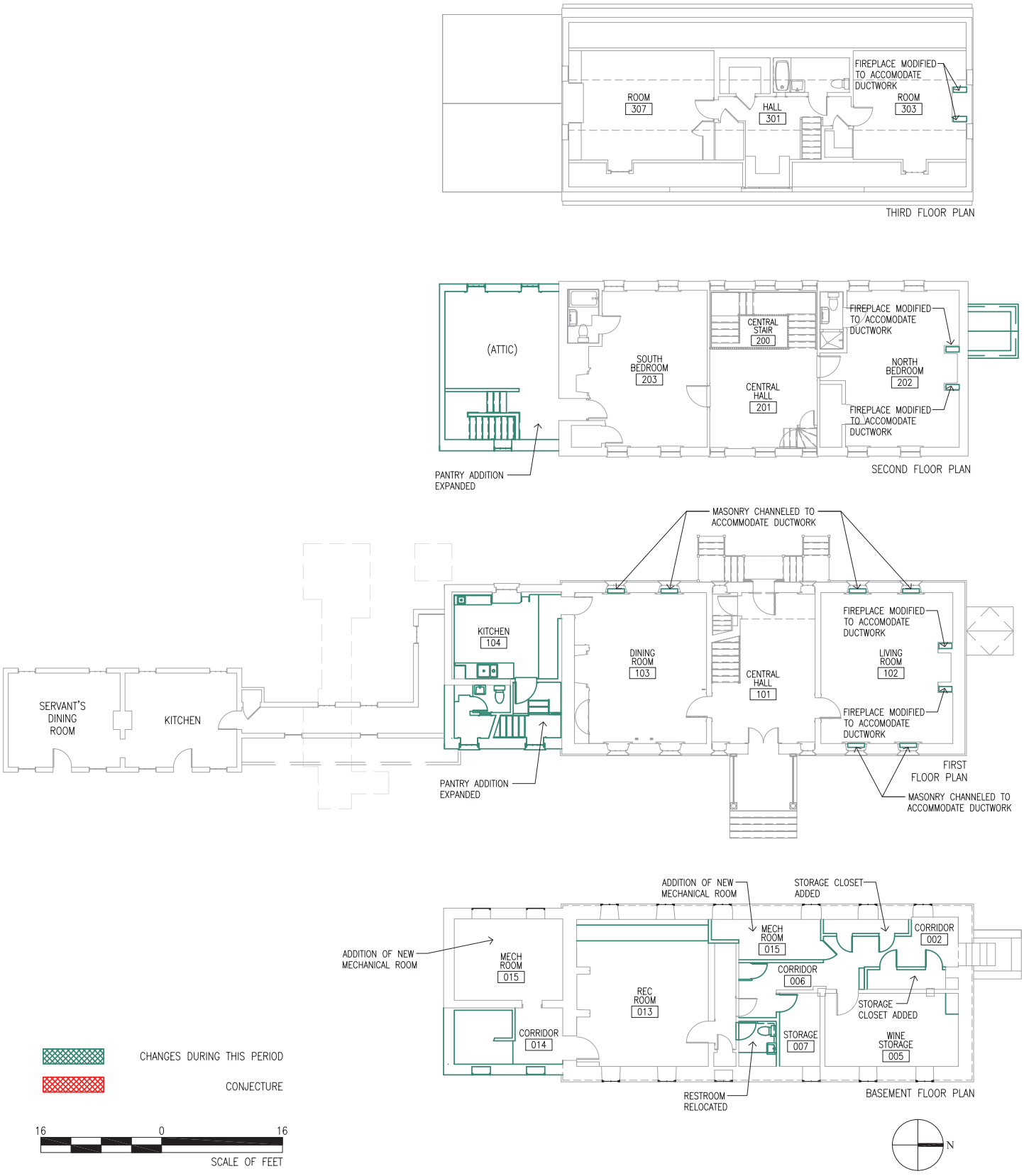
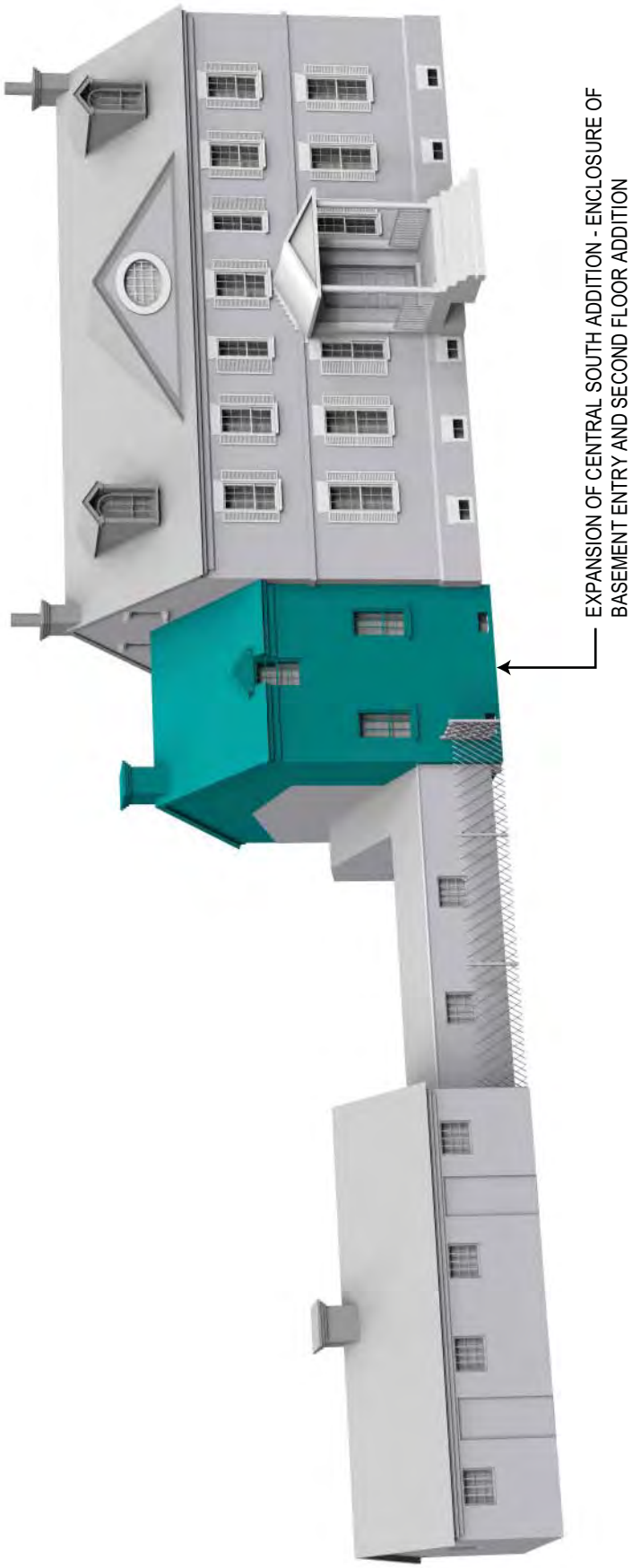


Figure 2A-056: Existing Conditions Basement Floor Plan (BBB, 2012)



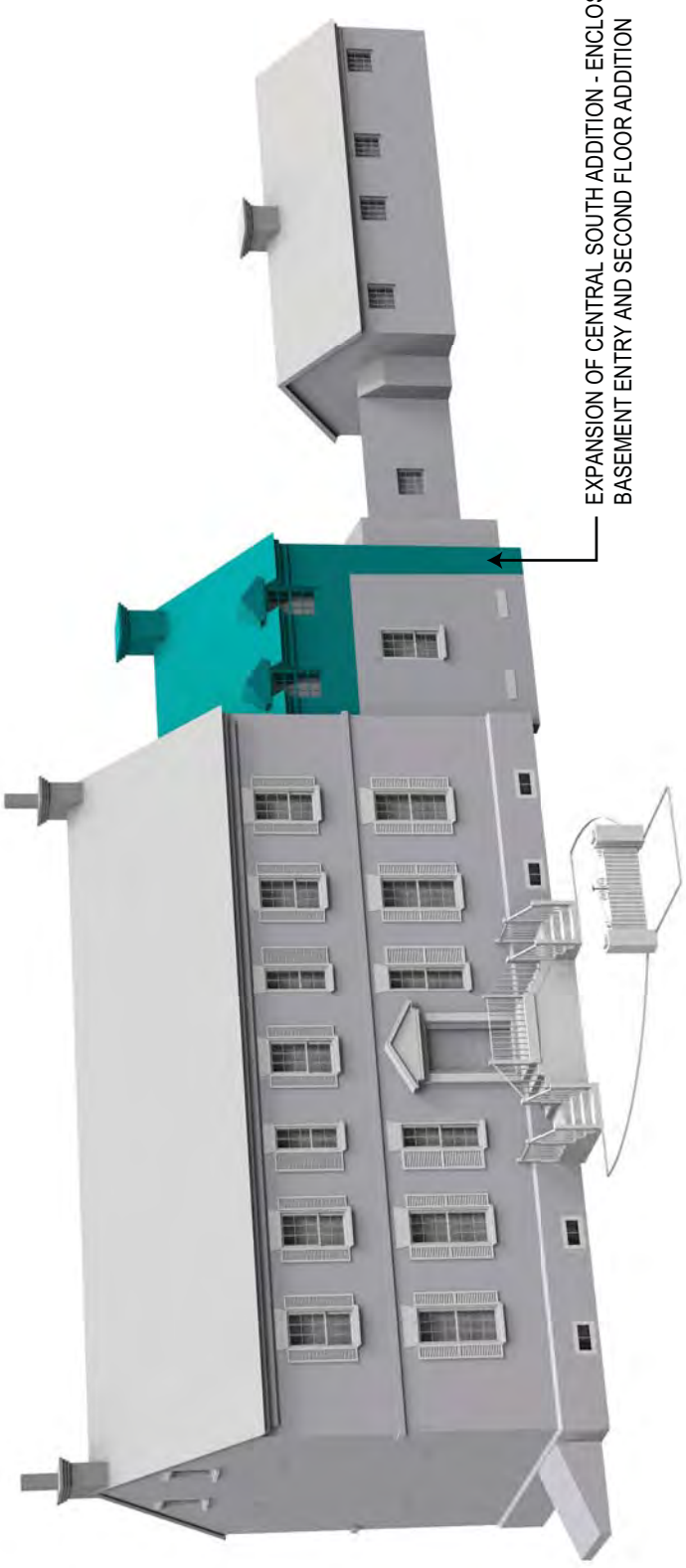
PERIOD V: 1941-66

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Southeast View of Harmony Hall
Period V: 1941 – 1966

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Legend
Changes During this Period
Conjecture

Northwest View of Harmony Hall
Period V: 1941 – 1966

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Period VI: National Park Service Stewardship - 1967 to Present

The final period of development, Period VI, is identified by the acquisition of Harmony Hall by the National Park Service and the subsequent years of life tenancy by the wife of Charles Collins, Sue Spencer Collins. Following the death of Sue Spencer Collins in 1983, the NPS leased the property to the Battersea Company from 1985-1999.

Following archeological investigations conducted by the National Park Service in 1985-87, a two story addition was constructed onto the existing south kitchen wing to provide for a Sun Room and a bedroom on the second floor. The documentation reviewed for this report did not provide details related to the addition so it is not known whether the bathroom above the Kitchen 104 was constructed in 1941 or as part of the later 1988 modifications, however per field inspection of the plumbing fixtures these do not date to Period V and were replaced in Period VI.

National Park Service Personnel have mentioned several repairs and changes that have been made to the house since NPS acquired the property but no written information or maintenance records have been provided to confirm and document these changes.

Physical Changes/Observations Associated With Period VI - 1967 to Present

Exterior:

West Double Stair Reconstruction - NPS personnel have mentioned that the west double stair was reconstructed following NPS acquisition of the property.

Brick Patio Disappears - It has been mentioned by NPS personnel that the brick patio presumably installed by Charles Collins and documented in the HABS drawings of 1934 still remains below grade between the west facade double stairs and the remaining brick piers and iron gate. (See Figure 2A-056)

Formal South Garden - The Battersea Company added a formal garden with fountain during Period VI.



Figure 2A-057: Location of Brick Terrace construction by Collins, c.1930. (Photo: BBB, 2012)

Removal of Collins Servants Quarters and Covered Walkway - The covered passageway between the old kitchen and Main Block was removed to allow for archaeological investigations during Period VI.

South Addition - The south addition was constructed in 1988 by the Battersea Company who were leasing the property. This addition included; an entry porch on the east elevation, a sun room, modifications to the existing first floor kitchen and bath, a second floor bathroom and bedroom. (See Photo 2A-057)

Building Services - The electrical service was placed underground and the water service was upgraded.

North Basement Entry Enclosure - The north basement entry stairs received a brick enclosure with roof.

Roof Gutters and Downspouts - NPS replaced the gutters and downspouts.

Roofing - A new asphalt shingle roof was installed during Period VI. The 1934 photographs indicate a slate roof existing during Period IV but it is unclear as to when this might have been removed and replaced with the first version of the asphalt shingle roof.

East Entry Doors - NPS has records indicating that the east entry doors were repaired.

Window Sash Modifications - NPS personnel have explained that some existing window sashes have been removed and all lead paint removed. Following removal of all lead based paint the windows were re-painted and re-installed throughout the house. Beyer Blinder Belle (BBB) has documented and noted metal brads with identification numbers which may have been used to inventory these windows when they were removed. At least one brad remains on a second story window sash.

Oval "Bullseye" Window - The early documentation by Albert P. Erb in 1924 and the HABS documentation from 1934 detail this oval window with an orthogonal grid of muntins. The extant window today has a radial pattern. There is a spare window sash in the basement with the orthogonal grid pattern of lites and the paint analysis dated this window to Period III. The paint analysis of the current window sash dated it to Period VI which means it was replaced by the Battersea Company restoration efforts.

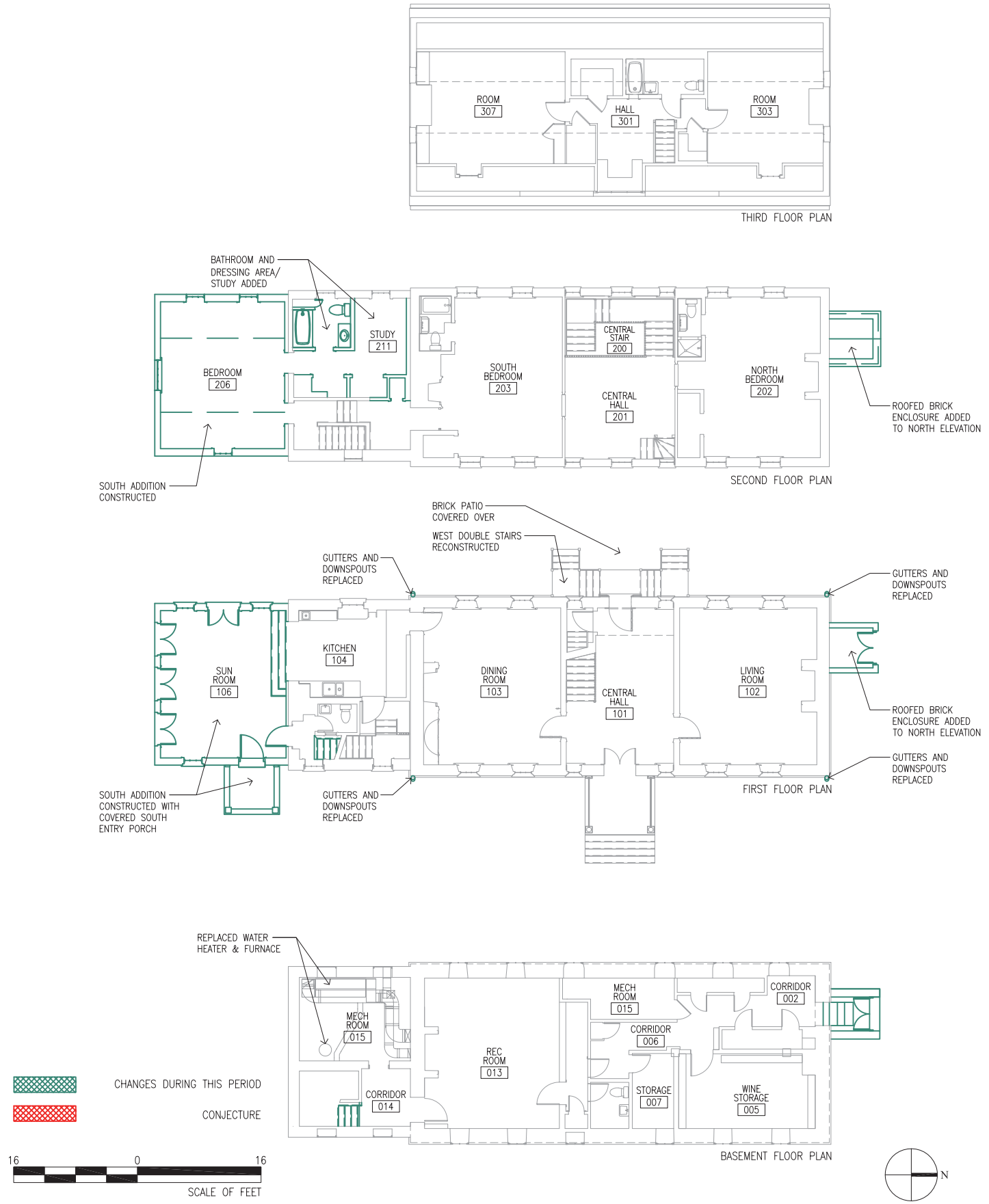
Interior:

Electrical System Upgrades - The drawings by architect Siegfried Ising, AIA completed for the construction of the South Addition by the Battersea Company indicate that the electrical systems were upgraded.

Mechanical Systems - The furnace and water heater were replaced with new.

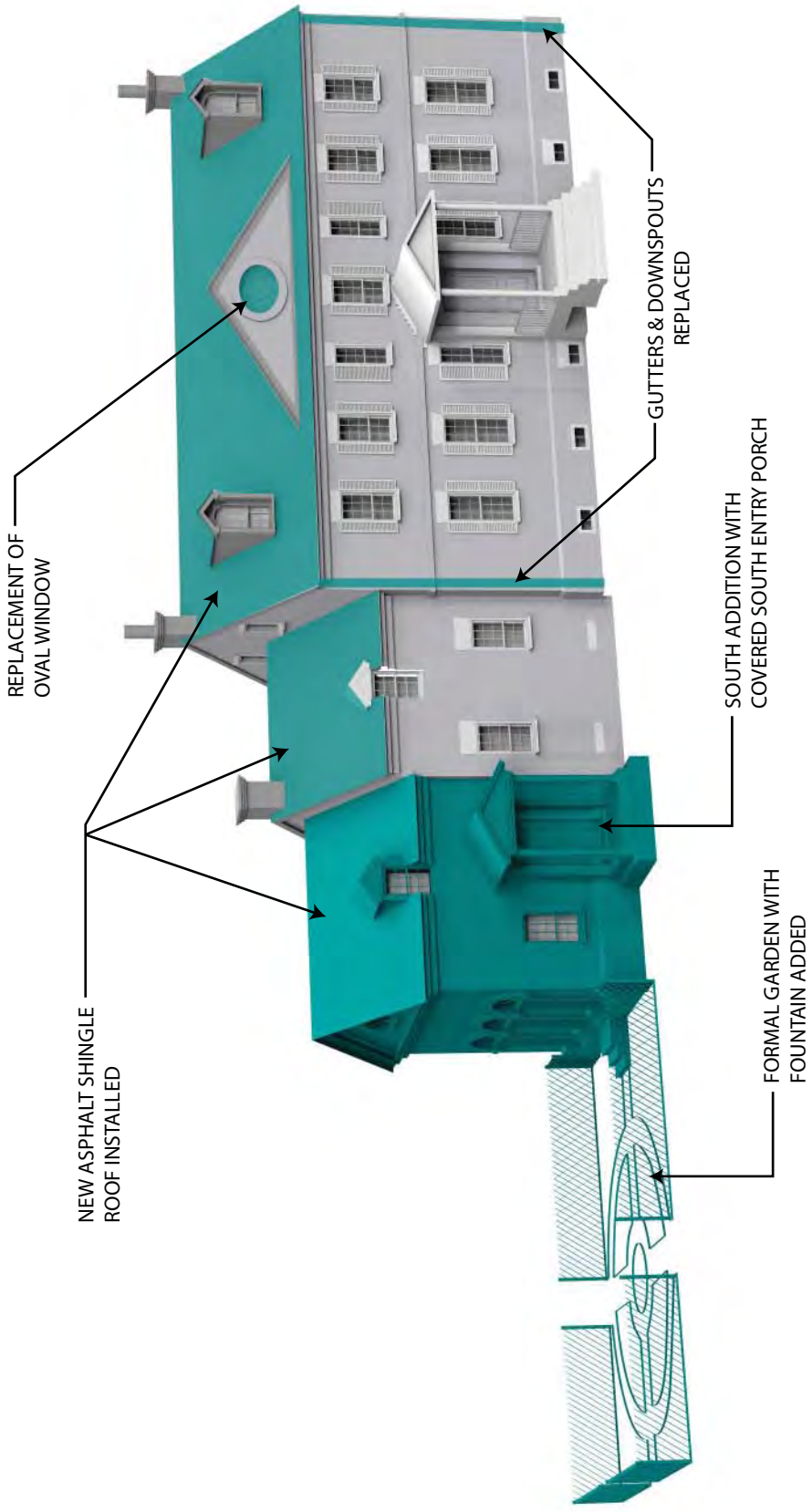


Figure 2A-058: South Entry Porch, South Addition constructed by the Battersea Company, c. 1988. (Photo: BBB, 2012)



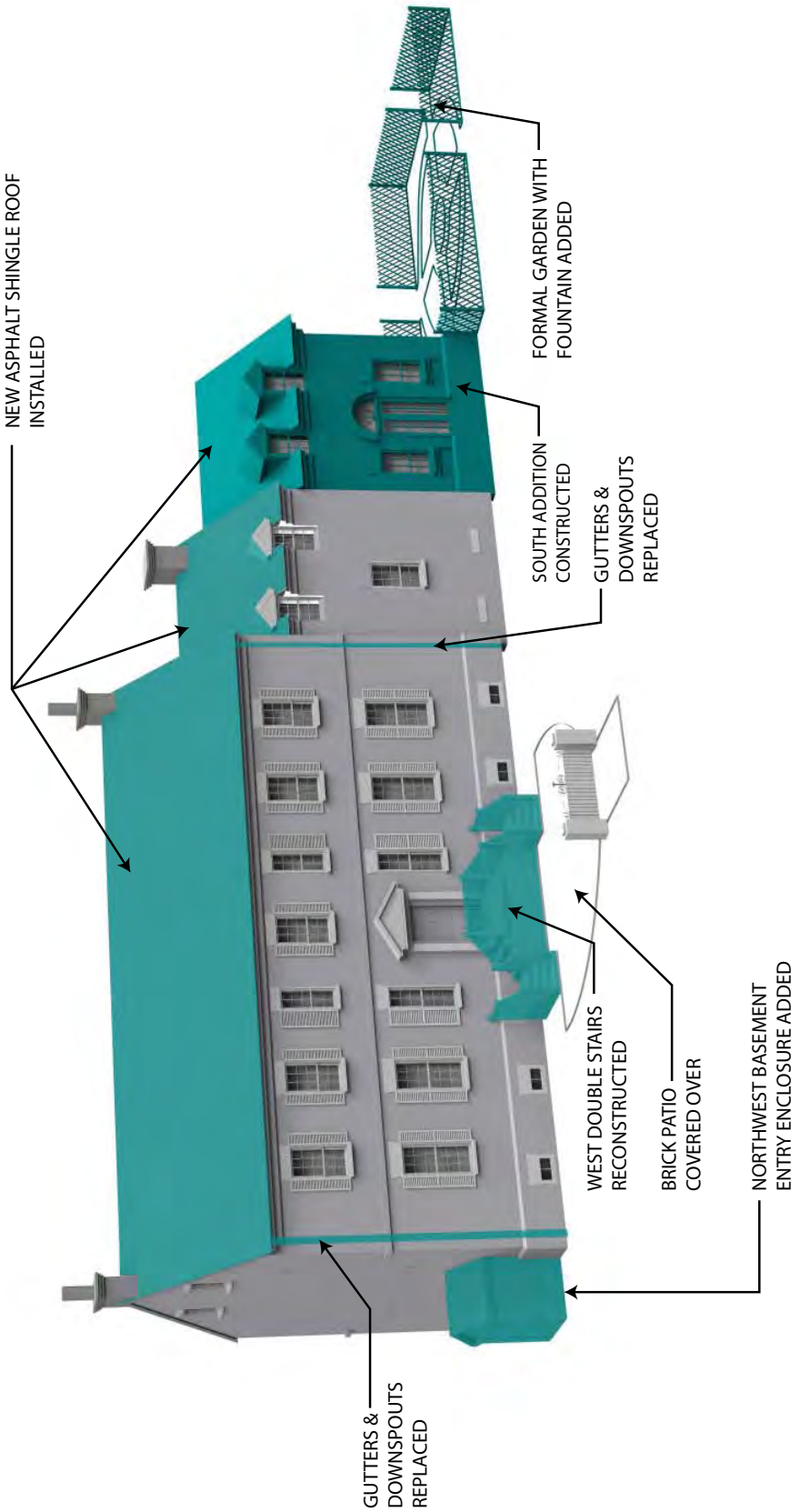
PERIOD VI: 1967-Present

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Southeast View of Harmony Hall
Period VI: 1967 - Present

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Northwest View of Harmony Hall
Period VI: 1967 - Present

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A.4 HISTORICAL TIMELINE

The following timeline was established based upon the developmental history of Harmony Hall as documented in this report. It highlights key dates of occupancy, ownership and major modifications to the structure. It is not an exhaustive timeline of all changes to the structure or the property, but it establishes an outline of the key periods of occupation and change.

Establishment of "Battersea"	
1662 February 27	**Tract of Land Surveyed:** The original 500-acre tract named Battersea, was first surveyed for a lawyer named Humphrey Haggett on February 27, 1662 (BCHDPPS 2002: 8; Sonderman and Virta 1993: 3).
1662 October 8	**Tract of Land Recorded:** The original 500-acre tract named Battersea, was recorded for Humphrey Haggett on October 8, 1662 (BCHDPPS 2002: 8; Sonderman and Virta 1993: 3). Haggett never lived on the land and he later died in 1668.
1668 September 18	**Patent on Tract Issued:** By the time the patent was granted six years later, the owner was Richard Fowke, who had married Haggett's widow. (Sonderman and Virta 1993: 3)
1688	Richard Fowke divided the property in half, selling one portion to Philip Mason and the other to Richard Iles. The tract sold to Mason (the western portion which included the mouth of Broad Creek) contained the land upon which Harmony Hall now stands. (BCHDPPS 2002: 8; Sonderman and Virta 1993: 3)
1692	Philip Mason sold the property with Harmony Hall (250-acres) to Thomas Lewis. (BCHDPPS 2002: 8)
1696	One-hundred acres of the southernmost corner of the 250-acres tract of Battersea land is willed by Thomas Lewis to his son, Richard Lewis. (BCHDPPS 2002: 10)
1706	The 35-acre tract of property later known as Want Water is surveyed and patented for Thomas Addison (BCHDPPS 2002: 12).
1708	Want Water is constructed (Battersea-Harmony Hall National Register Nomination, 1980:4; Broad Creek Historic District National Register Nomination, 2011: 6)
Period I: Tyler/ Marshall Era - 1709-1768	
1709	Richard Lewis sold the 100 acres of the Battersea tract of land including Harmony Hall to William Tyler (BCHDPPS 2002:13; Sonderman and Virta 1993: 11).
1721	William Tyler dies and his property ("with dwelling plantation") is willed to his son (William Tyler, Jr.) upon the death of his wife Elizabeth Tyler (Sonderman and Virta 1993: 11).
1723	One theory suggests that the house was built in 1723. St. John's Church at Broad Creek was also constructed in 1722-23. (As documented in the Historic American Buildings Survey (HABS) in 1934 and in the MHT Register Nomination Form. The "History of Harmony Hall" by Charles V. Reed indicates this construction date for the house was a myth propagated by Charles Wallace Collins.)
1755	William Tyler, Jr. passes away in 1755, before his mother. Therefore he never gained ownership of Battersea. Upon the death of his mother (Elizabeth Tyler) Battersea is willed to his son John Tyler.

Period II: Magruder/ Lyles Era - 1769-1849	
1761	After three generations of Tylers occupied the property, John Tyler (grandson of William Tyler) conveyed 100 acres of Battersea to James Marshall. (BCHDPPS 2002:13; Sonderman and Virta 1993: 13)
1769	The property was sold by James Marshall to a merchant named Enoch Magruder. (BCHDPPS 2002:19) Residence built c. 1769, probably by Enoch McGruder. (As documented in the "History of Harmony Hall" by Charles V. Reed.)
1786	Enoch Magruder dies. Harmony Hall was devised to his daughter, Sarah (Magruder) Lyles. Sarah (Magruder) Lyles married Colonel William Lyles (Sonderman and Virta 1993: 15)
1786 - 90	Enoch Magruder's wife remains at Harmony Hall until at least 1790. Enoch Magruder and his wife have at least two children, Sarah (Magruder) Lyles and Dennis Magruder)
1792	Harmony Hall rented to Walter Dulany Addison (and wife Elizabeth Hesselius) by Dennis Magruder.
	Walter A. Addison's brother, John Addison, and his wife live at Harmony Hall with Walter and Elizabeth for one year.
1793	Property renamed Harmony Hall as a result of the marital harmony that blossomed there when two young couples rented the property after their nuptials. (Walter Dulany Addison, his brother John Addison, and their brides rented the house briefly from Dennis Magruder.)
1795	Colonel William Lyles transferred his wife's property (Sarah Magruder Lyles) to himself. This included Want Water and part of the Battersea tract of land. (BCHDPPS 2002: 25)
1800s	The Magruder-Lyles family continued plantation-style production at Broad Creek and their other properties during the early 19th Century. Sarah Magruder Lyles raised her family in the house at Want Water, and the family may have simultaneously occupied Harmony Hall. (Reed, 49/ Pearl, 24)
1815	Colonel William Lyles dies and his son Thomas C. Lyles inherits Want Water and part of the Battersea tract of land. (BCHDPPS 2002: 25)
1815	Dennis Magruder Lyles inherits Harmony Hall and 40-acres of land upon the death of his father, Colonel William Lyles (d. 1815).
1828	After the deaths of Dennis Magruder Lyles (d. 1828) and Thomas C. Lyles (d. 1845) Harmony Hall and Want Water were occupied intermittently by sojourners and renters. (Reed, 47)
1833 - 34	Ariana Lyles, second wife and widow of Dennis Magruder Lyles rented Harmony Hall to Henry Fairfax Thorne, the local constable.
Period III: Transition Years - 1850-1928	
1850	Ariana Lyles sold Harmony Hall and 40-acres of land at Broad Creek to William J. Edelen. (BCHDPPS 2002: 25)
1860 - 66	Francis and Elizabeth Kerby rented Harmony Hall from William J. Edelen and farmed the land.
1867	Following a default on taxes by William J. Edelen (in 1860 and 1861), Harmony Hall was sold at auction. Francis and Elizabeth Kerby purchased Harmony Hall for $27.60. (BCHDPPS 2002: 27)
1876	Harmony Hall sold at auction. Ignatius S. Wilson, editor of the Marlboro Gazette, purchased Harmony Hall. Francis and Elizabeth Kerby continue to live at Harmony Hall. (BCHDPPS 2002: 29)
1877 - 79	George W. Wilson (brother of Ignatius S. Wilson) purchased Harmony Hall and then resold the property to Nicholas C. Stephens and Joseph K. Roberts in May 1879. (BCHDPPS 2002: 29) Francis and Elizabeth Kerby continue to live at Harmony Hall. (BCHDPPS 2002: 29)

1886	Domenico Cristofani (a shoemaker) purchased Harmony Hall and utilized the property as a workshop and residence. (BCHDPPS 2002: 30)
1892	Harmony Hall sold to Robert Stein (a young immigrant from the Prussian province of Silesia) for $800. The Stein family founded the nearby community of Silesia. (BCHDPPS 2002: 31; Sonderman and Virta 1993: 19)
1892 - 94	Robert Stein sells half of his interest in Harmony Hall to his brother, Richard Stein. By 1894 Robert Stein sold the remainder of the property to his brother. (Sonderman and Virta 1993: 19)
1924	First building documentation. The drawings by Albert P. Erb were later donated to HABS as part of a larger collection of drawings titled *Measured drawings with full-size details of moulded sections of the early architecture of the District of Columbia, Maryland, & Virginia*
Period IV: Collins Restoration/ Expansion - 1929-1940	
1929	Charles Wallace Collins purchased 41-acres of the Harmony Hall property. (BCHDPPS 2002: 33)
1929 - 32	Collins built outbuildings on-site and reconstructed the landscape in the Colonial Revival style as documented in photographs and the Historic American Building Survey completed in 1934.
	Charles Collins purchases a 13.3-acre lot, including Want Water, from the Sellner family. (BCHDPPS 2002: 34)
1934	Historic American Building Survey (HABS)
1936	Charles Collins purchases 140-acres of land, including a 107-acre farm next to Harmony Hall. (University of Maryland, Collins' Papers)
1937	Charles Collins has Slash (Clash) Creek dredged which subsequently added 11-acres to his property. (University of Maryland, Collins' Papers; BCHDPPS 2002: 33)
Period V: Collins Updates - 1941-1966	
1941	Central South Addition constructed. The original walls of the c.1929 Pantry Addition were maintained.
1964 December 14	Charles Wallace Collins dies and leaves the Harmony Hall estate to his wife.
1965	Sue Spencer Collins sells 10-acres of property to the south of Harmony Hall to the Prince's George's County Board of Education. (BCHDPPS 2002: 37) Sue Spencer Collins also sells approximately 4-acres to the north of Harmony Hall and a right-of-way to the Washington Suburban Sanitary Commission (WSSC). (BCHDPPS 2002: 37)
1966	Susan Collins, widow of Charles Wallace Collins sold the remaining property, Harmony Hall, Want Water and all outbuildings (totaling 65.7-acres) to the National Park Service (NPS) with a life tenancy. (BCHDPPS 2002: 37; NCR Land Record 0540) The National Park Service acquired the property under the provisions of the Capper-Cramton Act of May 2, 1930 (46 Stat. 482). The Act provided for the acquisition, establishment, and development of the George Washington Memorial Parkway along the Potomac from Mount Vernon and Fort Washington to the Great Falls, and to provide for the acquisition of lands in the District of Columbia and the States of Maryland and Virginia requisite to the comprehensive park, parkway, and playground system of the National Capital.

Period VI: National Park Service Stewardship - 1967 to Present	
1980 June 6	Harmony Hall listed on National Register of Historic Places.
1983 April 28	Mrs. Susan (Sue) Spencer Collins dies.
1983 April	National Park Service acquired full control of Harmony Hall, the property and the surrounding structures.
1985 October 18	Harmony Hall leased to a private interest (Battersea Company operated by Frank Calhoun and Herman Carlton Huhn) under the terms of the Historic Leasing Program for a period of fifty-five years (ending October 18, 2040). (Reed: 94)
1984 March 20	Prince George's County Historic Preservation Commission voted to establish the Broad Creek Historic District.
1985 July 30	City Council upheld decision by the Prince George's County Historic Preservation Commission to establish the Broad Creek Historic District.
1985 - 87	Archeological excavations and surveys conducted by the National Park Service, Regional Archeological Program (RAP) to ensure that new construction and utilities installations would not destroy any significant cultural resource. The excavations and archeological investigations are undertaken as part of the Section 106 process after it was determined by the Battersea Driving Company that it was necessary to install new utility infrastructures as part of the property's restoration and upgrade. (BCHDPPS 2002: 38)
1987 - 88	The Battersea Driving Company constructs the South Addition to Harmony Hall.
1999	The Battersea Driving Company vacates Harmony Hall due to disputes and disagreements with the National Park Service concerning terms of the lease agreement.
2011	Broad Creek Historic District in Fort Washington earned a spot on the U.S. Department of Interior's National Register of Historic Places. (The federal designation applies to only 350 acres of the approximately 850-acre historic district.)

Part 2B: Physical Description



Harmony Hall

Fort Washington, Maryland

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B.1 CHARACTER DEFINING FEATURES

Harmony Hall represents an intact interpretation of the Georgian style typical of plantation homes built towards during 18th century and features many characteristic elements of that style.

Harmony Hall is a late 18th century plantation house located on a 65-acre property on the banks of Broad Creek in Prince George's County, Maryland. A significant historic tobacco plantation, Harmony Hall was listed on the National Register of Historic Places in 1980, eligible for listing because of its architectural design, characteristic of the 18th century Maryland plantation houses. The National Register nomination established a period of significance for the property between 1700-99, consistent with its original construction. At the time of listing, the date of construction was believed to be in 1723, according to local tradition. Since then further studies have established a more likely construction date of 1769.

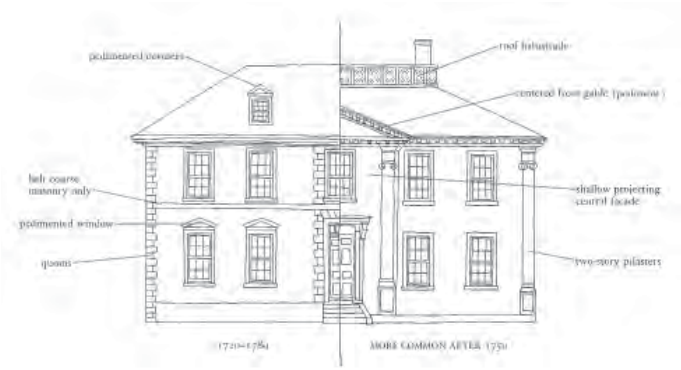


Figure 2B-001: Typical elaborations seen in Georgian plantation homes of the 18th Century.

As more information on the history and use of the property has come to light, a broader interpretation of its significance, and period of significance, can now be considered. The property, one of the oldest land patents in the region, is historically significant for its role in the exploration and settlement along the Potomac River in Prince George's County. Harmony Hall, an 18th century tobacco plantation, is significant for its association with the agricultural history of Prince George's County and the State of Maryland. The property is also significant for its association with the Magruder and Lyles families who inhabited the house in the 18th and early 19th centuries, the Stein family who was influential in the establishment of the community of Silesia, and Charles Wallace Collins, a lawyer born in 1879 and known for his writings on race relations in the 1930s and '40s. Collins purchased the property in 1929, restored the main building, constructed additions and outbuildings, and transformed the landscape and layout of buildings into an idealized Colonial Revival setting reminiscent of plantations of his native Alabama. Harmony Hall, though it has been altered, embodies distinctive characteristics of the Georgian period in American architecture and 18th century plantations of Prince George's County.



Figure 2B-002: One typical type of seventeenth-century house plan in Virginia (Philip White). Plan type very similar to plan of the Main Block of Harmony Hall.

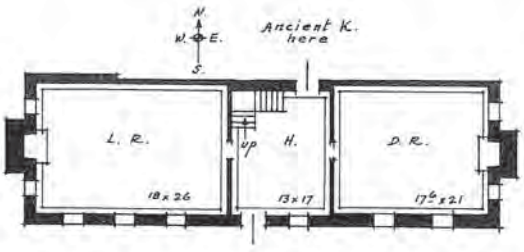


Figure 2B-003: Floor plan of Melwood Park, Prince George's County, Maryland (Image: Foreman, p. 91) Plan type very similar to plan of the Main Block of Harmony Hall.

Character Defining Features of 18th Century Georgian Colonial Architecture in Maryland

The Georgian style was transported from England, where 17th century architects including Christopher Wren, James Gibbs and Inigo Jones had embraced the Italian Renaissance and work of Andrea Palladio and his contemporaries. The style dominated the architecture of the British Colonies and the new republic America in the 18th century. Towards the end of the 17th century the first houses and public buildings exhibiting characteristics of the Georgian style were constructed in America,

including the Foster-Hutchison House in Boston (1690), the College of William and Mary (1695), Stoughton Hall at Harvard (1699), and government center of Williamsburg, VA (c.1706).

The Georgian style was used in a range of forms and contexts, from the bustling port cities of Boston, New York, Philadelphia, Baltimore and Charleston to small towns and villages, rural plantations and manor houses. Architectural pattern books and builders' handbooks were very influential to the growth and development of the Georgian style, particularly on the interior. The Georgian period is frequently divided in two general sub-periods – early Georgian and late Georgian, when, after 1750 more elaborations were seen. As the period progressed through the 18th century, exterior design adhered to a strict Palladianism, which at the turn of the 19th century coincided with the arrival of the Adam or Federal Style, a development and refinement of the Georgian style.

Georgian houses were typically simple two-story structures, square or rectangular in plan, with doors centered within strictly symmetrical façades. The center hall plan, derived from earlier 17th century colonial architecture, was common in Georgian period houses as well, including plantation houses in Maryland as illustrated in Early Manor and Plantation Houses of Maryland by H. Chandlee Forman.[1] (See Figures 2B-002 and 2B-003)



Figure 2B-004: Locust Grove, Louisville, Kentucky, c. 1790
(Photo: McAlester, p.144)

The linear plan with a side gabled roof is a typical Georgian architectural form. Side gabled roofs were widely used in the Georgian period: 40% of remaining Georgian houses in America feature side gabled roofs.[2] The slope of the roof in Georgian houses became more moderate than in the previous Colonial period, more typically a 30% slope rather than the steeper 45% slope that had characterized earlier structures. While most gabled roofs came to a peak, some were flat at the top and with balustrades. Hipped roofs were also common, mostly in the southern colonies. A subtype seen after 1750 in high style examples is the centered gable, an additional gable centered on the long side of a side gable house, often above a projecting bay below. This feature is also common in Federal Period houses of the early 19th century. (See Figure 2B-004 and Figure 2B-005)



Figure 2B-005: Hammond House, Annapolis, MD, 1774
(Photo: McAlester, p.150)

The Georgian house presented its formal front to the street, which was most commonly a long facade with the exception of the Charleston house, whose short end was turned to the street, often with a porch along the side. In rural manor and plantation houses the long side was typically oriented to the entrance drive or, if located on a river or body of water, addressed the water. This feature is clealy evident in Harmony Hall where the original principal entrance was from the river.

The side gabled form of Georgian houses featured chimneys centered on each end, typically rectangular in shape, capped with a corbelled cornice. In examples in Prince George's County,

1 H. Chandlee Forman, Early Manor and Plantation Houses of Maryland, Baltimore: Bodine & Associates, 1982, 83-95.
2 Virginia and Lee McAlester, A Field Guide to American Houses, New York: Alfred A. Knopf, 1997, 139



Figure 2B-006: Snow Hill, Prince George's County, Maryland (Photo: Forman, p. 93)

Maryland, houses from the beginning of the 18th century featured exterior chimneys, and after around 1750 the chimneys began to be incorporated within the building envelope. (See Figure 2B-006)

Georgian houses in the southern colonies were predominantly constructed of brick, typically laid in Flemish bond. In the northern colonies, wood frame construction with clapboards was more frequently found. Brick houses in the southern colonies featured band courses of molded brick emphasizing a horizontal expression and marking interior floor levels. A water table was typically expressed with molded brick above a slightly projecting level, often with small windows. (See Figure 2B-007) Belt courses are also typically found above the first floor, a feature which originated as the exterior expression of the position of floor joists for the second floor within.

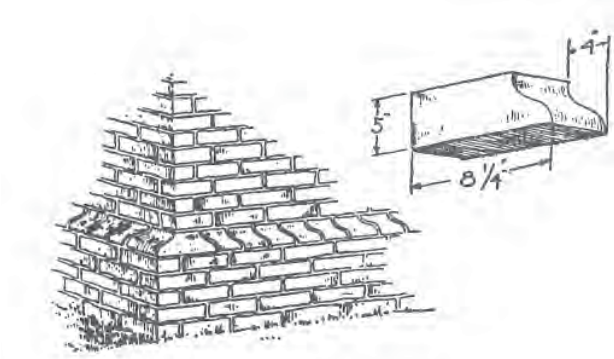


Figure 2B-007: Water table of molded bricks. (J. Fredrick Kelly, The Early Domestic Architecture of Connecticut, Yale University Press)

Georgian cornices featured shallow wood moldings. In the second half of the 18th century and increasingly in the early 19th century Federal Style refinements, cornices became more decorative and included dentils, modillions and other carved decorative elements. (See Figures 2B-008 and 2B-009)

Windows were composed of multi-lite double hung sashes, generally framed with an architrave, segmental arches, or flared lintels with keystones. In simpler versions they were expressed with brick soldier courses. Inside, windows typically featured paneled interior shutters which folded back into recessed shutter pockets. The size and configuration of window panes changed with the availability of larger panes of glass; the standard size of window panes was typically six by eight inches before the American Revolution, and



Figure 2B-008: Harmony Hall, west facade decorative wood cornice with modillions. (Photo: BBB, 2012)

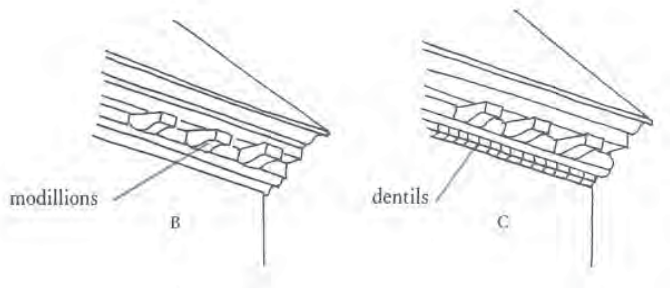


Figure 2B-009: Elaborate Georgian cornices featuring dentils, modillions and other carved decortaive elements typical of the Late Georgian Period.

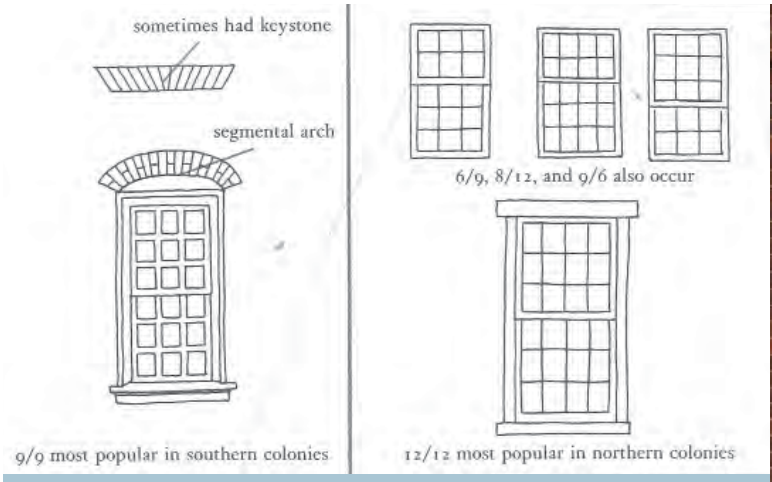


Figure 2B-010: Multi-lite double hung wood windows typical of the Early Georgian Period.



Figure 2B-011: Harmony Hall, double hung wood window with 9 over 9 lites. (Photo: BBB, 2012)

eight by twelve inches afterwards. In southern Georgian houses window panes were most commonly arranged nine over nine. In the early Georgian period muntins were typically 1 ¼ inches wide and shallow, in later Georgian houses they reduced to approximately an inch wide. By the 19th century and the Federal period, muntins were more likely to be deeper and narrower. (See Figures 2B-010 and 2B-011).



Figure 2B-012: Decroative dormer windows from the late Georgian Period or Federal Period. Read House, Newcastle, Delaware 1801, McAlester p. 161

Dormer windows and decorative quoins became common features in the Georgian style after 1750. The standard form was a narrow dormer with a gable roof, though hipped dormers were used in some southern houses. In the later Georgian period semi-circular headed dormers appeared.[3] Earlier versions of Georgian dormers featured simple, rectangular windows; in the later Georgian period and Federal Period the windows become more decorative, often arched with muntins arranged in a semi-circle. (See Figure 2B-012)



Figure 2B-013: Double stair at entrance; William Gibbes House, Charles, c.1779 (Wayne Johnston)

Georgian doors were almost universally paneled. In the later Georgian period glazing was introduced, typically as a row of lites at the top of the door beneath the architrave. There were a number of variants of Georgian doorways, including unpedimented versions with decorative entablatures and pedimented versions—most commonly triangular but also including arched or broken pediments –framed by columns or pilasters. In the second half of the 18th century, small projecting porticos began to be seen, though they did not become a common feature until the Federal period after 1800. (See Figures 2B-014 and 2B-015).

First floors of Georgian houses were typically raised above partially visible basements, and featured front steps. These were typically a single run of stairs, however in some more elaborate examples double runs to a single entry landing were seen in southern examples, for example at Drayton Hall and the Gibbes House (ca 1779) in Charleston,

3 Hugh Morrison, Early American Architecture: From the First Colonial Settlements to the National Period, New York: Dover Publications, 307

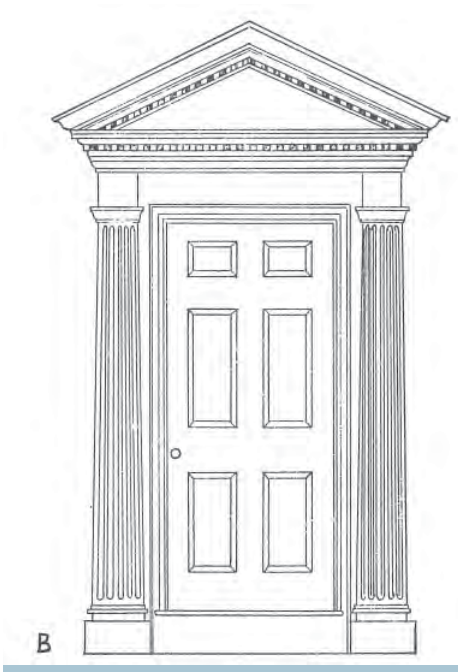


Figure 2B-014: Typical Georgian exterior doorway with pediment and fluted pilasters.



Figure 2B-015: Harmony Hall west entrance with pediment and fluted pilasters. (Photo: BBB, 2012)

SC. (See Figure 2B-013)

The exterior expression of Harmony Hall's original structure exhibits many intact character defining features of Maryland plantation houses of the Georgian period, including its symmetrical facades, side gable roof, molded wood cornice with modillions, pedimented entry door and multi-lite double hung sash windows with flared lintels. Harmony Hall's west elevation was originally its more formal façade, oriented towards the river. It features a typical Georgian doorway, with a triangular pediment framed by fluted pilasters. Harmony Hall's east façade is currently its more formal front, and features a centered gable with an elliptical window and two dormer windows. These features, believed to be later additions based on physical investigation of the roof structure, were probably added around the turn of the 19th century, consistent with the stylistic evolution of the late Georgian into the Federal period. The east entrance door with its projecting pedimented entry porch is also more typical of the later Georgian period and the Federal style.

Georgian Interiors



Figure 2B-016: Hammond House, Annapolis, MD, 1774 (Image: McAlester, pg. 150)

Interiors of Georgian houses typically featured symmetrical plans, often with a center hall and formal first floor rooms on either side. Georgian staircases provided a more gradual ascent than earlier Colonial houses. The center hall often contained a graceful stairway, consisting of a straight flight up one side of the hall with a landing across the end, doubling back a few steps to reach the upper hall, or three runs with two landings. The ends of the steps were ornamented with foliate or scroll moldings and walls beneath the stairs were typically paneled. Graceful wood handrails, often mahogany, were supported on turned wood newel posts, three to a step. In early Georgian houses the handrail ran directly into the newel post, at an awkward angle. In later Georgian houses, the bottom newel post was frequently set outboard of the steps and the handrail curved out 90-degrees to meet it,

terminating in a scroll.[4] (See Figure 2B-017)

Flooring in Georgian houses was generally narrow matched boards of finished hardwood. Walls in Georgian houses were typically formally composed and featured carved wood paneling, in a variety of compositions and arrangement. The amount and location of wood paneling depended both on the means of the family constructing the house and upon the period. In the early Georgian period, paneling was typically floor to ceiling, confined to the chimney wall or to two interior walls if a fully paneled room was not possible. In the later Georgian period after 1750, paneling was typically limited to the dado, between the skirting board and the dado rail. This accompanied the rise in use of wallpaper, above the dado.[5]



Figure 2B-017: Typical Georgian stair details and embellishments; Morrison, p. 308

Georgian fireplaces, with rectangular openings, were enframed with wood in a variety of decorative treatments. The early Georgian fireplaces were usually framed by molded architraves, without mantels. After 1750, fireplaces became more ornate, with large framed panel above projecting mantelpieces.[6] (See Figure 2B-018)

Walls and ceilings were typically flat plaster; after 1750 ornate ceiling moldings were found in more elegant Georgian houses. Cornices were usually carved wood, ranging from simple to highly decorative.

Character defining interior features of the Georgian period include wood paneled walls, dados and fireplaces, carved cornices and door and window surrounds, interior wood shutters, plaster walls and ceilings, and wood floors. Most of these elements exist within the interiors of Harmony Hall.

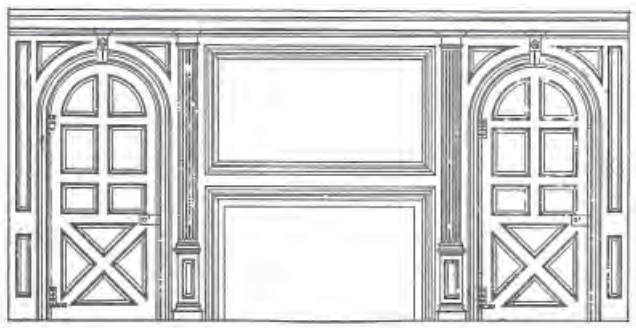


Figure 2B-018: Typical Georgian style wall paneling and chimney breast; , Morrison p. 311

Collins Era Changes to the Harmony Hall Landscape Reminiscent of Georgian Style

Charles Wallace Collins restored and added to Harmony Hall during his period of ownership, from 1929 to 1966. The changes he introduced to the property were aimed at creating an idealized Colonial Revival setting typical of southern plantations he had known in his childhood growing up in Alabama. He constructed a new wing south of the house, and new servants quarters, garage and stable, as well as a formal flower garden and a working vegetable garden. All of these components were similar in to Colonial period plantations in Maryland, as illustrated in the Maryland-National Capital Park and Planning Commission's 2009 publication, "Antebellum Plantations in Prince George's County, Maryland: A Historic Context and Research Guide." and were also reminiscent of antebellum plantations in Alabama. Typically clustered around the "big house" were a separate kitchen or "cook house", a smoke house, a well, stables and barns, a plantation office, and slave quarters.[7]

4 Morrison, Early American Architecture, 308.
5 Morrison, Early American Architecture, 310.
6 Morrison, Early American Architecture, 313.
7 Robert Gamble, Alabama Historical Commission, "Plantation Architecture in Alabama", Encyclopedia of Alabama, www.encyclopediaofalabama.org.

Character Defining Features of Harmony Hall in the Georgian Colonial Style

Harmony Hall features many elements characteristic of the Georgian style colonial houses of Maryland in the 18th Century. The following elements are considered to be contributing elements of Period I: Tyler/Marshall Era - 1709-1768 and the Period of Significance (Period II: 1769-1849). Although the exact date of construction of Harmony Hall continues to be debated, it is appropriate that the home displays characteristics of both general sub-periods as described in this report: early Georgian (1720-80) and late Georgian (after 1750).

Harmony Hall Character Defining Features of the Early Georgian Period (1720-80)

Exterior

- Rectangular plan two and one-half story construction
- Linear plan with a side gabled roof
- Symmetrical facade layout
- Double run of entry stairs on west facade
- First floor raised partially with visible basement
- Formal primary entrance facing the waterfront (river approach) and a secondary entrance facing the entrance drive (vehicular approach)
- Decorative entry door at West Elevation (Door 101B - primary entrance facing the waterfront) - triangular pediment over fluted pilasters
- Wood paneled entry doors at East and West Elevations (Doors 101A and 101B)
- Exterior brick construction laid in Flemish bond
- Molded water table in brick masonry
- Molded belt course in brick masonry
- Nine over nine lite double hung wood window sashes set in wood frames (Windows 101, 102, 105, 106, 113, 114, 117, 118)
- Nine over six lite double hung wood window sashes set in wood frames (Windows 201, 202, 204, 206, 207, 215, 216, 218, 220, 221)
- Jack Arches/ flared lintels over window masonry opening - All Windows

Interior

- Center hall formal main stair (Room 101 - Central Stair)
- Foliate moldings at formal main stair risers (Room 101 - Central Stair)
- Graceful handrails at formal main stair (Room 101 - Central Stair)
- Floor to ceiling paneling on chimney wall (Room 103 - Dining Room)
- Paneled interior shutters on first floor integral to window returns (Windows 101, 102, 103, 104, 105, 106, 113, 114, 116, 117, 118)
- Window benches integral wood paneled window returns (Windows 101, 102, 103, 104, 105, 106, 113, 114, 116, 117, 118)
- Ornate Chair Rail - Room 101 - Central Hall, Room 102 - Living Room, Room 103 - Dining Room, Room 201 - Central Hall
- Decorative Ceiling Moldings - Room 101 - Central Hall, Room 102 - Living Room, Room 103 - Dining Room, Room 201 - Central Hall, Room 202 - North Bedroom, Room 203 - South Bedroom.

Harmony Hall Character Defining Features of the Late Georgian Period (after 1750)

Exterior

- Centered front pedimented porch at East Facade (Door 101A)
- Paired end chimneys fully engaged in the end gable walls
- Dormers with gable roof and broken pediment at third floor (Windows 301, 302, 303)
- Decorative cornice along east and west facades featuring dentils, modillions and other carved decorative elements

Interior

- Ornate fireplace enclosure with projecting mantel (Room 102 - Living Room, Room 103 - Dining Room, Room 202 - North Bedroom)

B.2 SECRETARY OF INTERIOR'S STANDARDS TREATMENT ZONES

The following descriptions are provided to begin to identify treatment zones that can be used as a guide for the preservation/restoration efforts at Harmony Hall. Treatment zones have been designated to identify the level of intervention recommended to properly restore the building to its **Period of Significance, Period II: 1769-1849.** (The Period of Significance is further discussed in Part 3: Treatment and Use if this report.) These treatment zones integrate the assessment of character defining features, levels of historical and architectural significance, and the existence and condition of historic fabric and architectural features. Definitions of these treatment zones are based on the Secretary of the Interior's Standards, and are described below.

Preservation

Preservation focuses on the maintenance and repair of existing historic materials and the retention of a property's form as it has evolved over time. Treatment involves repair, protection and stabilization. Areas identified as preservation zones include intact original existing features or changes undertaken in the Period of Significance. It is important to note that this report supports the Period of Significance of this structure to be Period II: 1769-1849 and the recommendations for preservation treatments associated with this Period are listed below and deal only with the Main Block as that is the only portion of the existing structure that dates to Period II. However, during Periods IV & V when Charles W. Collins owned the house, significant modifications were made that should be acknowledged so that if certain treatment options are chosen that don't require removal of certain Period IV & V elements, they can be preserved. A list of these elements have also been provided as well, to serve as a record for planning.

Preservation - Period II: 1769-1849 (Period of Significance)

Features, spaces and elements of the house falling within the Preservation Zone, Period I: 1769-1849, include elements assessed as Contributing, which date to the original construction of the house, the Period of Significance or constructed as early additions or modifications. These generally include the following:

Exterior Elements of Main Block:

- Rectangular plan with Central Hall extending from east to west entrances
- Existing roof framing members with brick gable ends, dormer windows and side pediment along east facade
- Floor plan layout distinguishing the formal primary entrance facing the waterfront and a secondary entrance facing the entry
- Exterior brick construction laid in Flemish bond
- Molded water table in brick masonry
- Molded belt course in brick masonry
- Multi-lite double hung wood windows of Main Block (The form and size of the windows are original to the Period of Significance, but it should be noted that some elements, including the sashes have been repaired or replaced over time.)
- Jack Arches/ flared lintels over brick masonry window openings
- Wood paneled entry doors at East and West Elevations
- Decorative entry door at West Elevation (primary entrance facing the waterfront) - triangular pediment over fluted pilasters. (This is considered a non-contributing, but compatible addition.)
- Paired end chimneys fully engaged in the end gable walls
- Decorative cornice along east and west facades featuring dentils, modillions and other carved decorative elements
- Pedimented porch at East Facade (secondary entrance facing the vehicular entry) (This is considered a non-contributing, but compatible addition which was added in the 1980s.)

Interior Spaces of Main Block:

- Room 101 - Central Hall
- Room 102 - Parlor/ Living Room
- Room 103 - Dining Room
- Room 201 - Central Hall
- Room 202 - North Bedroom
- Room 203 - South Bedroom

Interior Elements of Main Block:

- Decorative Central Stair with raised scrolled molding detailing along exposed stringer, decorative turned wood newel post and balusters, carved wood handrail, and trim
- Decorative paneled chimney-breasts in Room 102 - Living Room 102, Room 103 - Dining Room and Room 202 - North Bedroom.
- Decorative wood baseboard, chair rail and crown molding in Room 101 - Central Hall, Room 102 - Living Room 102, Room 103 - Dining Room, Room 201 - Central Hall, Room 202 - North Bedroom and Room 203 - South Bedroom.
- Decorative wood wainscot in Room 101 - Central Hall and Room 102 - Living Room
- Paneled interior shutters at windows on first floor of Main Block (Room 102 - Living Room and Room 103 - Dining Room)
- Decorative wood cupboard in Room 103 - Dining Room
- Exposed wood roof rafters in Attic

Preservation - Period IV & V: 1929-1966

The Central South Addition was constructed by Charles Collins between 1929 and 1934, and later expanded by Collins in 1941. Though this portion of the building does not date to the Period of Significance (Period II: 1769-1849), it is considered to be a significant change to the building added during an important period of the building's history. These areas are identified to clarify what elements of this historic fabric remains and what elements should be considered for preservation if this addition of the building remains as part of the future selected treatment and use for the building.

Exterior Elements of the Central South Addition:

- East Facade including decorative wood cornice
- West Facade
- Basement Windows 007, 008, 009, and 010
- First Floor Windows 007, 008, and 112

Interior Elements of Central South Addition:

- Portions of the wall between Room 104 - Kitchen, Room 105 - Corridor, Room 108 - Restroom: Further on-site investigations could uncover the original masonry opening where a window was located within the original exterior bearing wall construction from 1929-34.

Restoration

Restoration is undertaken to depict a property at a particular period of time in its history, while removing other evidence of other periods. Charles Collins' ownership and occupancy of the house brought about many changes to both modernize the house and provide a livable space for him and his wife, Sue Spencer Collins. In the following spaces room dimensions, layouts, finishes, and architectural elements of the Main Block should be restored to the Period II: Period of Significance based on documentation and on site analysis.

Exterior Elements of Main Block:

- Windows at North Facade: Recreation of removed wood double hung windows on North Facade at Room 202 - North Bedroom and at Room 102 - Living Room
- Windows at South Facade: Recreation of removed wood double hung windows on South Facade at Room 203 - South Bedroom (This action is contingent on the removal of the Central South Addition)

Interior Elements: of Main Block:

- Room 202A - Bathroom - Remove bathroom to restore Room 202 - North Bedroom to original layout and configuration.
- Room 202B - Closet - Remove closet to restore Room 202 - North Bedroom to original layout and configuration.
- Room 203A - Bathroom - Remove bathroom to restore Room 203 - South Bedroom to original layout and configuration.
- Room 203B - Closet - Remove closet to restore Room 203 - South Bedroom to original layout and configuration.

Rehabilitation

Rehabilitation acknowledges the need to alter or add to a historic property to meet its continuing or changing use, while retaining the property's historic character. Rehabilitation generally recognizes and integrates changes over time, as well as invisible or unobtrusive contemporary interventions.

Rehabilitation zones include the following:

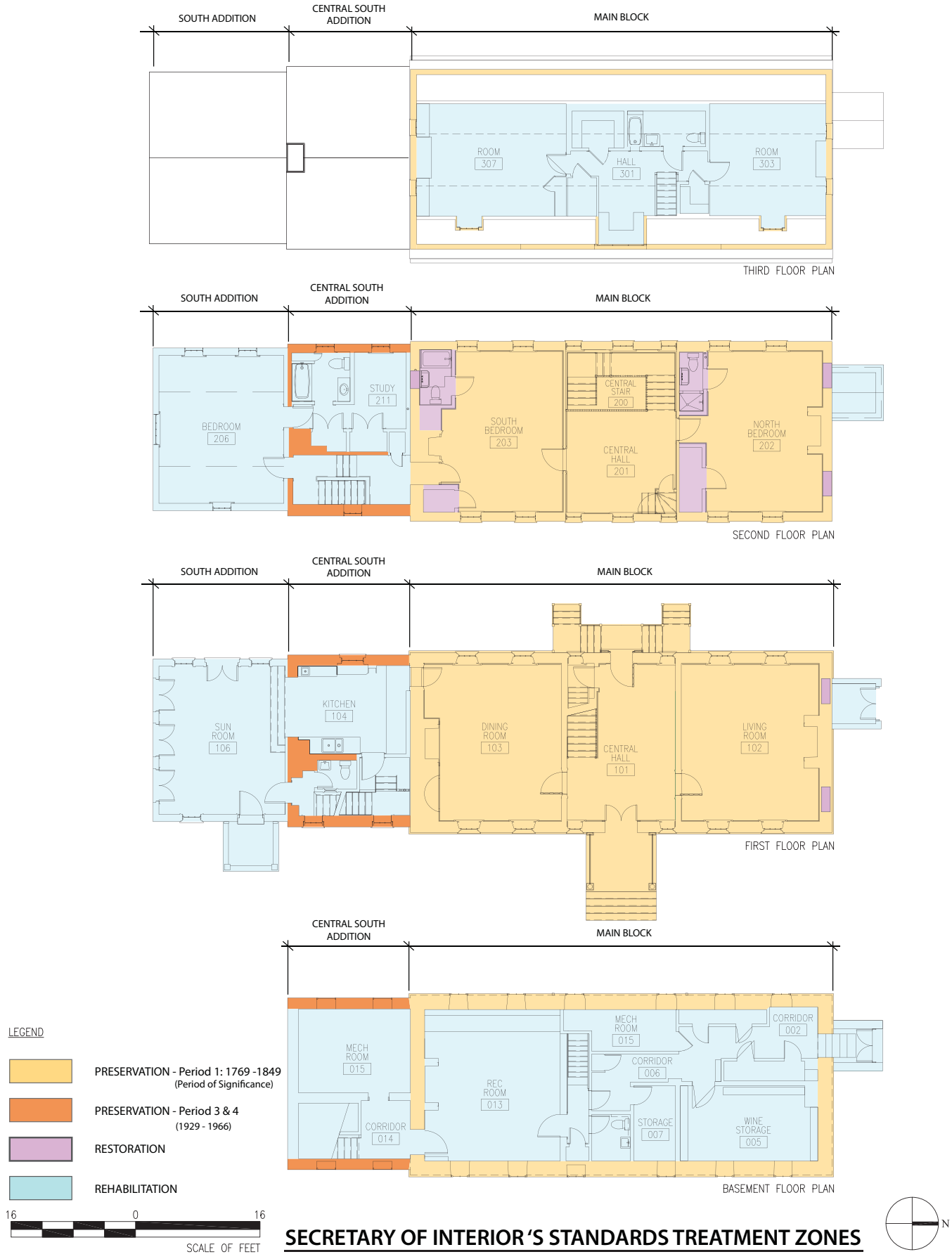
- Any non-contributing spaces within the Central South Addition and the South Addition to the house, which could be maintained for administrative uses under a new occupancy and/ or alternate use of use of the historic home.
- Central South and South Addition Interiors - With the exception of the walls noted in the Central South Addition related to Period IV & V, the interiors of the Central South and South Additions can be completely re-configured as there is no historic fabric that remains. These areas could be rehabilitated to include installation of restrooms per code to serve the occupants and/ or any visitors to Harmony Hall. Changes could also include modifications such as a ramp and/ or installation of an elevator and/ or lift to address accessibility requirements.
- Main Block Attic - The attic of the Main Block was completely modified when Collins restored the house and should be considered for complete rehabilitation with the exception of the exposed wood roof rafters.
- Main Block and Central South Basements - The basement has been modified many times over the course of the history of the house and very little remains that is historic in either the Main Block or the Central South Basements. This area could be considered for complete rehabilitation into a new use.

Secretary of Interior's Standards Treatment Zone Diagrams

The following diagrams graphically categorize the interior and exterior into the three treatment zones previously described.

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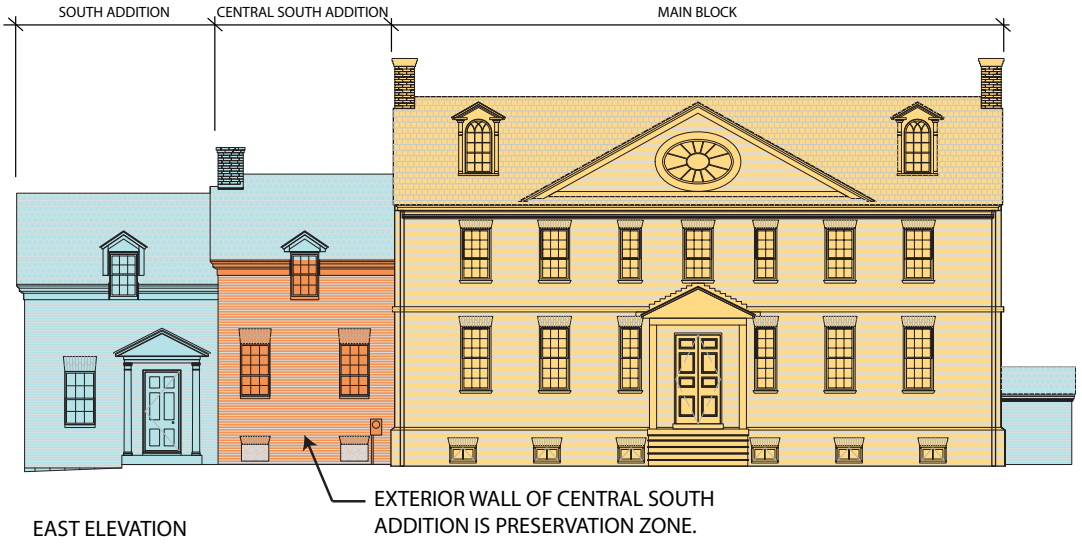
Figure 2B-019: Secretary of the Interior's Standards Treatment Zones



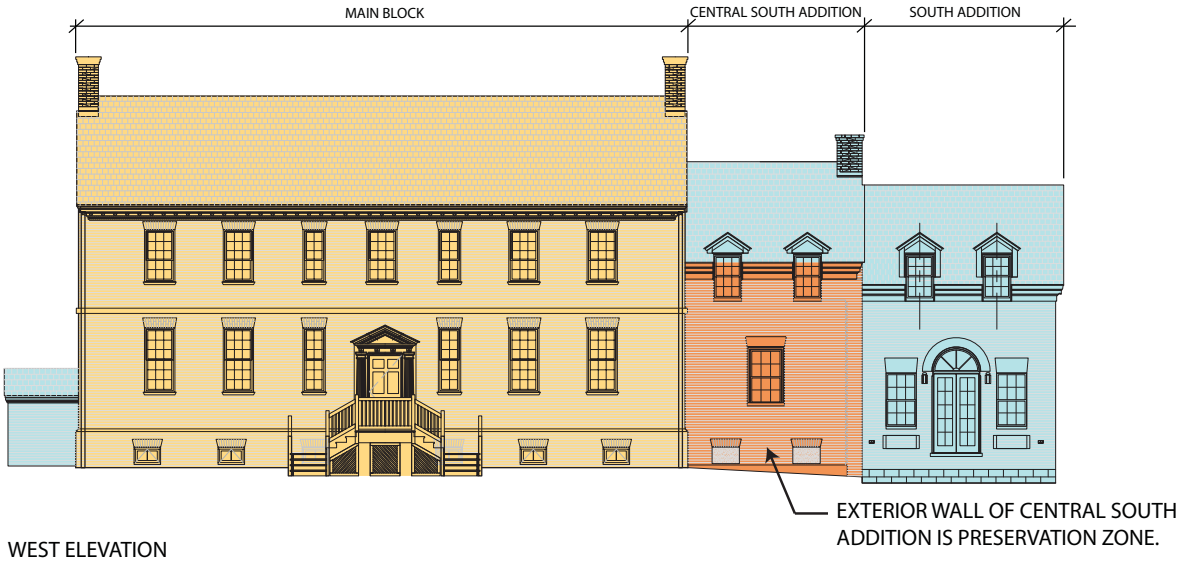
SECRETARY OF INTERIOR'S STANDARDS TREATMENT ZONES

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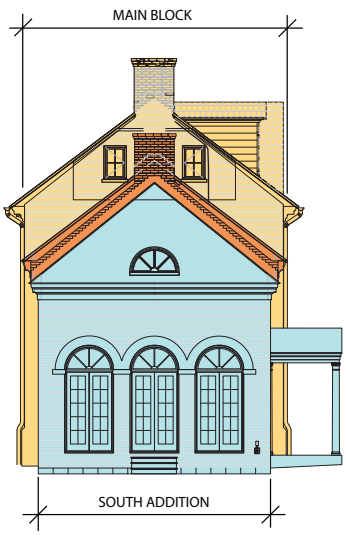
Figure 2B-020: Secretary of the Interior's Standards Treatment Zones



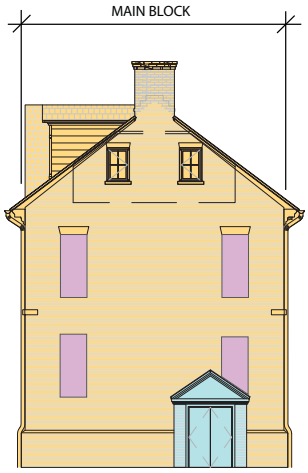
EAST ELEVATION



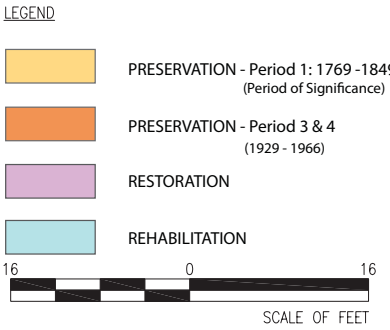
WEST ELEVATION



SOUTH ELEVATION



NORTH ELEVATION



SECRETARY OF INTERIOR 'S STANDARDS TREATMENT ZONES

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B.3 INTRODUCTION TO PHYSICAL DESCRIPTIONS

Prior to providing a detailed physical description of the exterior and interior of Harmony Hall, which will occur in Parts 2B.4 and 2B.5 of this report, it is important to explain the methodology by which the descriptions were developed and to define the terminology that will be used to categorize the interior and exterior historic features.

The architectural features are documented in detail in exterior and interior physical description components of this chapter. The descriptions include existing conditions drawings of exterior elevations and interior floor plans, detailed narratives describing each exterior elevation and each individual interior space, identifying their extant defining architectural features, and an inventory in a chart format for each exterior elevation and interior space within Harmony Hall. The inventory charts include the designation of approximate age and period of construction of each element in the house, including decorative features and structural elements, based on analysis of documentary research, materials testing, and on-site forensic investigation. In all applicable instances, data collected from the paint analysis contained in *Appendix B: Plaster, Mortar and Finish Investigations and Analysis* as well as all other applicable research or physical observations have been crossed referenced in these matrices to provide a basis of documentation for determining age of an element or feature.

For purposes of historical interpretation and preservation recommendations, the architectural features have been assigned a level of contribution to the significance of the house as character defining features of the **Period of Significance: Period II - Magruder/Lyles Era - 1769-1849.** Period II was established as the Period of Significance because the ownership records, as described in the developmental history portion of this report, support that this was the time period during which the house was constructed as a stylistic interpretation of Georgian Colonial Maryland plantation home. In addition, it was during this Period of colonial occupation when the property had its highest use as a tobacco plantation and served as an epicenter for trade in the Broad Creek area.

The levels of significance are defined as follows:

Contributing: Architectural features, spaces and elements of the house which are original, character defining features of early manor and plantation houses, or which date to and characterize the Period of Significance, Period II: 1769-1849. These architectural features, spaces and elements are to remain.

Non-Contributing, Compatible: Architectural features, spaces and elements of the house which post-date the Period of Significance - Period II. These elements, though not considered contributing or dating to the Period of Significance, are considered to be replacements or additions to the structure that are stylistically compatible to the Period of Significance - Period II.

Non-Contributing, Non-Compatible: Architectural features, spaces and elements of the house which post-date the Period of Significance - Period II. These elements were later additions to the structure which do not contribute stylistically to the historical fabric of the house and are consIdered non-compatible additions.

Missing Features or Elements: Features which once were part of the original design of the house or its appearance during the Period of Significance - Period II, but which have been removed.

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B.4 EXTERIOR PHYSICAL DESCRIPTION

Overview:
Although Harmony Hall has undergone some modifications and renovations on the interior, the exterior facades of the Main Block have undergone only a few stylistic changes over time. Many of the historic elements from Period II (1769-1849) appear to have remained intact or changes have been sympathetic or stylistically compatible. Many of the character defining features of the exterior facade of the Main Block that characterize the house as a Georgian Colonial plantation home of the mid- to late-18th century remain and are in fair condition.

Methodology:
Beyer Blinder Belle and the consultant team spent several days at the site documenting the exterior and interior conditions of the structure between the months of December 2011 and July 2012. The findings regarding physical description are described on the following pages. Initially a description is provided regarding the context in which the building sits and the massing of the structure. This narrative will be followed by a description of the features of the property accompanied by photographs and drawings. The descriptions will be organized by elevation and conclude with the roof. For each elevation and roof a matrix will be provided that identifies: the name of the building feature, a brief description, approximate age, assumed period of significance, reference to documentation that led to assumption of age, identification of contributing or non-contributing status.

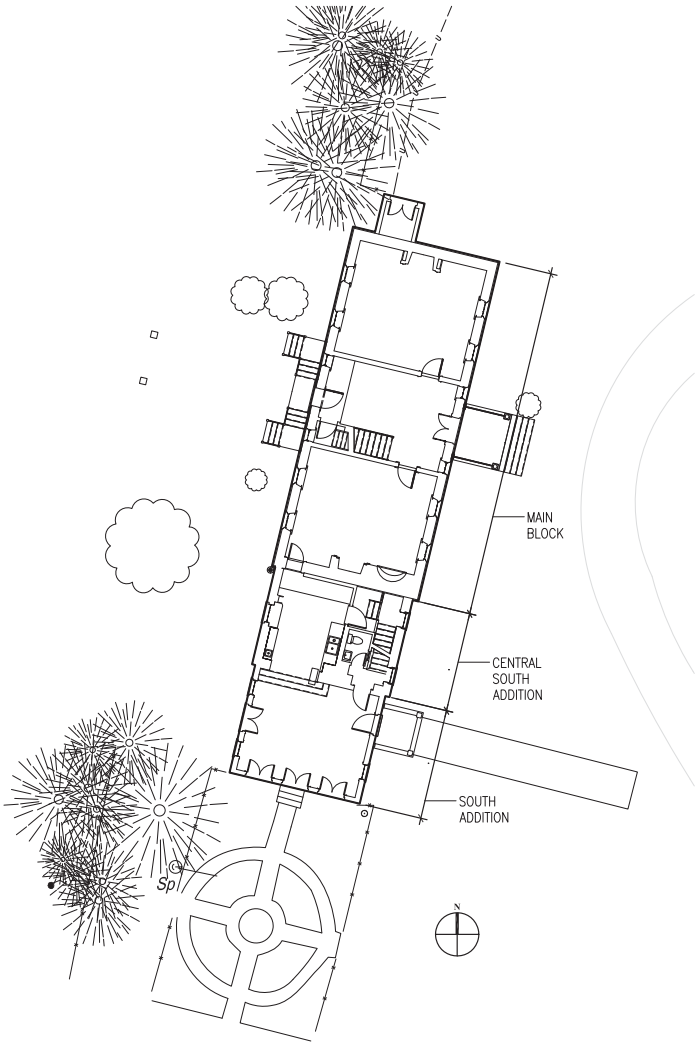


Figure 2B-021: Site Plan, Harmony Hall (NTS)

Exterior Physical Inventory:

Siting:
Harmony Hall is located along State Route 224, Prince George's County, Maryland at 10511 Livingston Road, Fort Washington, Maryland. The property is considered one of the most significant architectural features of the Broad Creek Historic District and is bounded on the east by Livingston Road and on the west by the Broad Creek extension of the Potomac River. The house is located in a north/south orientation with its long facades facing west towards Broad Creek and east towards an entrance drive. As has been described in the Part 2A - Developmental History, the house was placed on the site to have a prominent river approach from the west and a vehicular approach from the east. The structure is currently accessed via an entry gate off of Livingston road the curves around a fenced horse paddock and leads to a circular drive directly to the east of the house. There is a garden to the south of the structure that was added during Period VI. Although there are other ancillary structures on the site, such as a horse barn, they are not part of this HSR scope of services.

The Main Block sits a half story above grade, with a partially exposed basement as does the Central South Addition. The South addition sits on grade and has no basement.



Figure 2B-022: East Elevation, Harmony Hall (Photo: BBB, 2012)

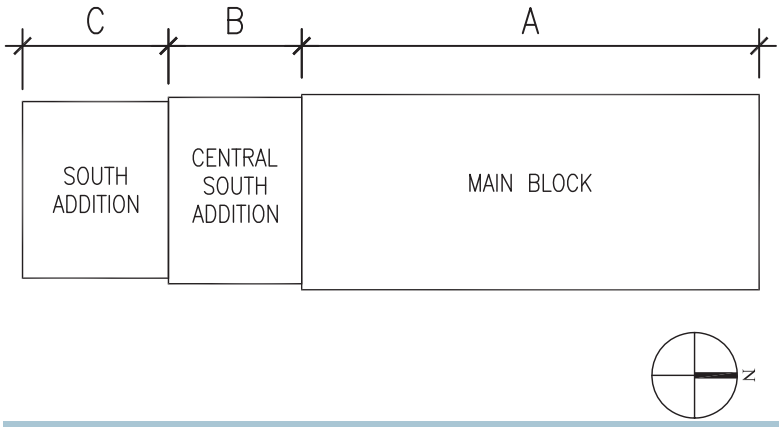


Figure 2B-023: Key Plan Diagram

Massing:

Harmony Hall is a brick masonry structure consisting of a Main Block and two south additions. For the purposes of this report the south additions have been designated the Central South Addition (constructed c. 1941) and the South Addition (constructed c. 1988). The Main Block is approximately 54'-2 1/2" wide, 23'-1 1/2" deep, and approximately 32'-6" tall (above grade). The Central South Addition is approximately 15'-9 1/2" wide, 22'-1" deep, and approximately 26'-6" tall (above grade) and the South Addition is approximately 17'-3 1/2" wide, 20'-11" deep, and approximately 25'-9" tall (above grade).

Exterior Door Type Inventory:
The following represents a survey of the various door types on the exterior of Harmony Hall.

Main Block – The Main Block of Harmony Hall has three exterior doors that give entrance to the most historic portion of the house.

Door Type EXT-1 - Door Type 1 (Door 101A) constitutes the primary entrance doors on the East Elevation. These doors date to Period 1. As is further described in Developmental History, this opening was widened in the later part of Period 1, and a single door was replaced by a pair of doors. These doors are four paneled stile and rail wood doors that have been painted. The doors frame has wood four paneled returns at the sides and a two paneled return at the header. The door has a limestone sill.

Door Type EXT-2 – Door Type 2 (Door 101B) serves as the primary entrance door on the West Elevation. This door dates to Period 1 and is a six paneled stile and rail wood door that has been painted. The door frame has two, three-paneled wood returns and a two paneled return at the header. The door sill is wood.

Door Type EXT-3 – Door Type 3 (Door 109) provides entry to the basement from the north elevation of the building. This door type is a pair of doors made from planks of wood. The wood doors and frame are painted.

South Addition – The doors at the South Addition all date to Period 6 and give entrance to the 1980's addition.

Door Type EXT-4 – Door Type 4 (Door 106A) serves as the primary entry to the South Addition. This door is a six-paneled wood stile and rail door. The door and frame are painted.

Door Type EXT-5 – Door Type 5 (Doors 106B, 106C, 106D and 106E) give entry to the Sun Room. These pairs of doors are of wood construction with 10 lites in each leaf and are capped by a semi-circular transom.

Central South Addition – The Central South Addition contains no doors.

Exterior Door Type Inventory

Door Type EXT-1	Door Type EXT-2	Door Type EXT-3
Door 101A	Door 101B	Door 109
		
Door Type EXT-4	**Door Type EXT-5**	
Door 106A	Door 106B, 106C, 106D, 106E	
		

Exterior Door Hardware Type Inventory

The following represents a survey of the various hardware types on the exterior doors of Harmony Hall.

Main Block - The hardware on the doors of the Main Block are a mixture of modern and historic hardware.

Hardware Type EXT-1 - This hardware corresponds with Door 101A. The brass knob rotates and corresponds with brass hardware on the interior. A modern deadbolt has been added in Period 6.

Hardware Type EXT-2 - This brass hardware also corresponds with Door 101A and serves as a door knocker. It shows up in photographs of the 1930's so it was in existence as early as Period 4 but may date earlier.

Hardware Type EXT-3 - Hardware Type 3 is a brass knob that corresponds to Door 101B and is visible in the 1930's photos so it dates to at least Period 4 or earlier.

South Addition - The door hardware at the South Addition all date to Period VI and corresponds to doors that give entrance to the 1980's addition.

Hardware Type EXT-4 – Corresponds to Door 106A. A brass knob corresponds with brass hardware on the interior and a deadbolt is provided. The knob does resemble those used on the historic doors.

Hardware Type EXT-5 – Corresponds with Door Type 5. The stainless steel deadbolts match SS knob hardware on the interior.

Central South Addition - The Central South Addition contains no doors.

Exterior Door Hardware Type Inventory

Door Hardware Type EXT-1	Door Hardware Type EXT-2	Door Hardware Type EXT-3
Door 101A	Door 101A	Door 101B
		
		

Exterior Door Hardware Type Inventory (continued)

Door Hardware Type EXT-4	Door Hardware Type EXT-5
Door 106A	Door 106C
	
	

Exterior Window Type Inventory

The following represents a survey of the various window types on the exterior of Harmony Hall. There are 14 window types in total.

Main Block – The eight window types at the Main Block vary in size and shape.

Window Type 1 – These basement windows have wood sashes with two lites and are set in wood frames. The windows are casement windows that swing out and have screens in several locations anchored to the inside. Window frames date to Period II with sashes dating to Period IV.

Window Type 2 – Window Type 2 appears on the east and west elevations at the first floor. It has double hung wood sashes with six over six lites set in a wood frame. The frame dates to Period II and the sash dates to Period IV. This window type and most others in the Main Block on the first and second floors were retrofitted to accommodate screens on the interior.

Window Type 3 – Window Type 3 appears on the east and west elevations at the first floor. It has double hung wood sashes with nine over nine lites set in a wood frame. The frame dates to Period II and the sash dates to Period IV.

Window Type 4 – Window Type 4 appears on the east and west elevations at the second floor. It has double hung wood sashes with six over four lites set in a wood frame. The frame dates to Period II sash dates to Period III.

Window Type 5 – Window Type 5 appears on the east and west elevations at the second floor. It has double hung wood sashes with nine over six lites set in a wood frame. The frame dates to Period II and the sash dates to Period III.

Window Type 6 – Window Type 6 appears on the east elevation at the third floor dormers. It has double hung sashes with nine over six lites set in a wood frame. The top sash is curved with a foliated pattern at the top.

Window Type 7 – Window Type 7 is located in the pediment of the east elevation and the sash is of an elliptical shape with 12 lites radiating out from a central elliptical lite. The frame dates to Period II and the sash has been replaced and dates to Period VI. There is an earlier sash located in the basement of the building.

Window Type 8 – This window type is located at the third floor on the north and south elevations, flanking the chimneys. These casement windows have sashes with two over two lites set in a wood frame. The Frame dates to Period II and the sash dates to Period II.

Central South Addition – There are four window types at the Central South Addition.

Window Type 9 – Window Type 9 is a close variation of the basement windows at the Main Block. A two lite casement sash is set in a wood frame and dates to Period VI.

Window Type 10 – Window Type 10 appears at the first floor of the east elevation and is a nine over six lite double hung wood window. The frame and sash date to Period VI.

Window Type 11 – This window type is a six over six double hung wood window and is located at the west elevation of the Central South Addition. There is also some conflicting information regarding the Period of the sash and frame that resulted from the paint analysis that needs to be further researched. Paint analysis indicates that the frame dates to Period III and the Sash dates to Period II/III but the addition wasn't constructed until Period IV. This window may have been reused from another portion of the house (a window that was infilled) or from another site.

Window Type 12 – Window Type 12 is a dormer window located on both the east and west elevations of the Central South Addition. The six over six double hung wood sashes are set in a wood frame and all date to Period VI.

South Addition – There are three window types at the South Addition.

Window Type 13 – This window type is located on the east and west elevations of the South Addition and has six over six lite double hung wood sashes set in a wood frame and all components date to Period VI.

Window Type 14 – This window type is very similar to Window Type 12 but had a slightly different proportion of lite.

Window Type 15 – Window Type 15 is a lunette window of wood construction with four segmented lights dating to Period 6.

Exterior Window Type Inventory

Window Type 1	Window Type 2	Window Type 3A & 3B
Windows 001, 002, 003, 004, 005, 006 011, 012, 013, 014, 015, 016	Windows 103, 104, 115, 116	Window Type 3A: 101, 102, 117, 118 Window Type 3B: 105, 106, 113, 114
		

Exterior Window Type Inventory (continued)

Window Type 4	Window Type 5	Window Type 6
Windows 201, 202, 204, 206, 207, 215, 216, 218, 220, 221	Window 203, 205, 217, 219	Window 301, 303
		
Window Type 7	**Window Type 8A & 8B**	**Window Type 9**
Window 302	Window Type 8A: 304, 305 Window Type 8B: 306, 307	Window 007, 008, 009, 010
 		

Exterior Window Type Inventory (continued)

Window Type 10	Window Type 11	Window Type 12
Window 107, 108	Window 112	Window 208, 213, 214
		
Window Type 13	**Window Type 14**	**Window Type 15**
Window 109, 110, 111	Window 209, 211, 212	Window 210
		

Exterior Light Fixture Type Inventory

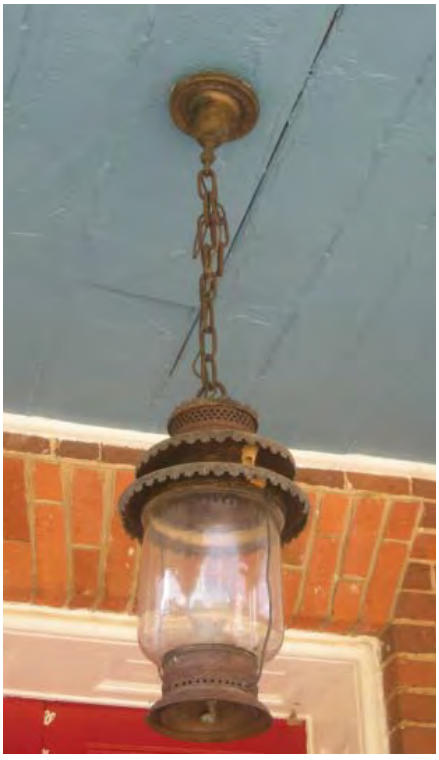
The following represents a survey of the various light fixture types on the exterior of Harmony Hall. There are 3 fixture types in total.

Fixture Type EXT-1 – This fixture is a metal pendant fixture painted black with a glass enclosure that resembles an old gas lamp. It hangs from a chain and is mounted to the underside of the Main Block entry porch on the East Elevation. The fixture does not appear in the Collins era photographs but does appear in the 1980's HABS photos, so it is assumed that it dates to Period 6.

Fixture Type EXT-2 – This fixture dates to Period 6 and is surface mounted fixture to the underside of the entry porch to the South Addition and has a incandescent bulb.

Fixture Type EXT-3 – This fixture type is a bronze wall mounted brass lantern-like fixture with an incandescent bulb and dates to Period 6. The fixture can be found on the west elevation of the South Addition.

Exterior Light Fixture Inventory

Light Fixture Type EXT-1	Light Fixture Type EXT-2	Light Fixture Type EXT-3
Fixture at Door 101A	Fixture at Door 106A	Fixture at Door 106E
		

Exterior Physical Inventory: East Elevation



Figure 2B-024: East Elevation (Photo Credit: BBB, 2012)

East Elevation

Harmony Hall is an excellent example of Georgian Colonial architecture seen throughout Maryland and other mid-Atlantic colonies during the 18th century and the early years of the 19th century. The Georgian Colonial style has two distinct sub-categories to distinguish elements that were prevalent in early plantation homes from 1720-80 and the features that began to emerge after 1750. Harmony Hall is an example that contains elements from both of these periods.

Main Block - The east elevation is broken into three distinct sections representing different additions and periods of construction. The original portion of the house is referred to as the Main Block. This Main Block may not represent all that was present during the Period of Significance (Period II: 1769-1849), but there is little remaining documentation of any possible earlier additions. What is seen today as the primary elevation, the east elevation, was not originally designed to be the prominent facade. When Harmony Hall was first constructed, transportation relied primarily on the river and it was custom for rural plantation homes such as this to address the river as the primary public and formal entry into the home. It was not until later in Period II (Period IIB - post 1791) that the roof was modified and the pediment and dormer windows were constructed.

As is typical of Georgian Colonial architecture, the east facade is constructed of brick masonry in a Flemish bond. The symmetrical plan of the Main Block consists of a central entrance flanked by double hung wood windows with multiple lites. Each masonry window opening is spanned by flat jack arches. The seven bay rectangular plan establishes an even and symmetrical layout of first and second floor windows. The third and fifth bays at the first and second floors contain more narrow windows than the ones in the other bays. Wood awning

windows with two lites are located at the basement level. The first floor double-hung wood windows consist of sashes with either 9/9 lite or 6/6 lite configurations. The second floor double-hung wood windows consist of sashes with 9/6 lite or 6/4 lite configurations. There are iron shutter dogs set into the masonry adjacent to all first and second floor windows of the east elevation. The east facade also features a molded brick water table between the first floor and basement and a projected brick belt course between the first and second floors. The central brick pediment with the oval window and the two dormers with foliated windows are consistent with the late Georgian Period and are speculated to have been added at a later date. There is structural evidence of roof framing modifications which support this theory that the brick pediment and the dormer windows were added at a date later than the original construction (refer to Part 2A - Developmental History for more detail).

The painted decorative wood cornice along the east facade of the Main Block was also a significant feature added during the late Colonial period according to the records left by Charles W. Collins. This decorative wood cornice is similar, but varies slightly in detail and is less ornate than the one along the west facade. Though some documentation of the early changes to the house indicate that the decorative wood cornices were added at a later date in the 18th century, the on-site investigations and paint analysis cannot confirm this. Paint analysis on the east facade decorative wood cornice dates portions of the cornice to either the first or second paint campaigns (c.1792 - 1820). Many of these later additions are considered character defining because they are distinguishable as elements typical of the later Georgian period.

The east pediment and extended entry porch were later additions by Charles W. Collins, but were constructed in a style consistent with the Colonial Revival Period of the 20th century. The photographic documentation of the porch that existed prior to this addition by Charles Collins reveals a prior porch construction which was not consistent with the Colonial Period. Also there was no documentation found of what originally existed along the east elevation of the Main Block during the 18th century. However, this wood framed porch constructed by Collins is considered compatible with the colonial style of the remaining house. The porch consists of a simple pedimented roof supported by simple wood doric columns. The porch flooring and steps are constructed of wood. A wood railing spans from the outside columns to the masonry wall and terminate in engaged doric rectangular columns.

An asphalt shingle roofing was installed at the main block as were painted metal gutters and downspouts. The two masonry chimneys are prominent features of the roof line of the Main Block at the east elevation.

There is a brick enclosed entrance to the basement that is visible on the north end of the east elevation. This enclosure is further described under the description for the North Elevation.

Central South Addition - The east elevation also features the Central South Addition and the South Addition. Both additions were constructed in a style and with architectural detailing fairly compatible with the Georgian Colonial style of the Main Block. The portion of the Central South Addition as seen in the east façade dates to 1941 and is not considered a contributing feature to the Georgian Colonial style of the house, but it is considered to be stylistically compatible. Similar to the Main Block, the Central South Addition has double-hung wood windows with 9/6 lite configurations on the first floor. Two basement windows have been infilled with plywood. A a single dormer is semi-engaged in the roof wood cornice line and has a wood double hung 6/6 lite window. The brick was installed to match the adjacent Main Block flemish bond pattern and the flack jack arches at masonry openings. The roof is of the same asphalt shingle material as the roof of the Main Block, but with no gutters or downspouts installed. The wood cornice is a simplified version of that at the Main Block. This addition has one chimney.

South Addition - The South Addition was constructed c.1988 and is less compatible but does mimic the brick

façade and dormer windows as seen in the earlier Central South Addition. Each of these southern additions was slightly smaller and included a slightly recessed facade to respect the prominence and historical significance of the Main Block. The South Addition has no basement windows. One first floor double-hung wood window is located to the left of an entrance door and has a 6/6 lite configuration. Similar to the Central South Addition, a single dormer with a double hung wood window with 6/6 lite configuration is semi-engaged in the roof cornice. This addition has a six paneled stile and rail wood entrance door covered by an entrance porch similar in stye to that at the Main Block entrance. This porch has a simplified pedimented roof with two ionic support columns and two rectangular ionic pilasters at the masonry wall. The porch flooring is brick.

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Figure2B-025: East Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
Main Block							
Brick Masonry							
1	**Brick Masonry** Brick 1	Brick masonry in flemish bond - Main Block	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769	(None)	C
2	**Brick Masonry** Brick 2	East facade pediment - brick masonry in flemish bond	late 18th century or early 19th century (date unknown)	2	On-site investigations of structural roof framing that led to the interpretation that the brick pediment was a later modification	(None)	C
3	**Brick Masonry** Water Table Brick 3	East facade molded brick water table between basement and first floor	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769	(None)	C
4	**Brick Masonry** Belt Course Brick 4	East facade projected brick belt course between first and second floor	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769	(None)	C
Wood Cornice							
5	**Wood Cornice:** Upper Molding	Solid wood cornice along Main Block under roof eave.	c.1792-1820	2	Paint Analysis, HHE-054 Campaign 2	(None)	C
6	**Wood Cornice:** Cornice Dentil Molding	Solid wood cornice along Main Block under roof eave.	c.1792	2	Paint Analysis, HHE-055 Campaign 1	(None)	C
Wood Entry Porch (Front Porch 101A)							
7	**East Pedimented Porch:** Pilaster	Wood frame pedimented porch at entry door 101A: flat wood pilasters	c.1929	4	Paint Analysis, HHE-005 Campaign 10	(None)	NC (Compatible)
8	**East Pedimented Porch:** Column	Wood frame pedimented porch at entry door 101A: round wood columns	c.1950-87	5 - 6	Paint Analysis, HHE-006 Campaign 30	(None)	NC (Compatible)
9	**East Pedimented Porch:** Baluster	Wood frame pedimented porch at entry door 101A: solid wood rectangular balusters	post 1988	6	Paint Analysis, HHE-007 Campaign 33	(None)	NC (Compatible)

Figure2B-025 (continued): East Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
10	**East Pedimented Porch:** Ceiling Beam	Wood frame pedimented porch at entry door 101A: wood boxed beam enclosure	c.1929	4	Paint Analysis, HHE-008 Campaign 10	(None)	NC (Compatible)
11	**East Pedimented Porch:** Ceiling	Wood frame pedimented porch at entry door 101A: Solid wood beadboard ceiling	c.1929	4	Paint Analysis, HHE-009 Campaign 4	(None)	NC (Compatible)
12	**East Pedimented Porch:** Floor	Wood frame pedimented porch at entry door 101A: Solid wood decking	post 1988	6	Paint Analysis, HHE-010 Campaign 36	Door Type EXT-1	NC (Compatible)
13	**Door 101A:** Door Field	Solid wood eight (8) raised panel exterior double door.	c.1792	2	Paint Analysis, HHE-011 Campaign 1	Door Type EXT-1 Hardware Types EXT- & EXT-2	C
14	**Door 101A:** Door Panel	Solid wood eight (8) raised panel exterior double door.	c.1792	2	Paint Analysis, HHE-012 Campaign 1	Door Type EXT-1 Hardware Types EXT- & EXT-2	C
15	**Door 101A:** Door Recess	Solid wood eight (8) raised panel exterior double door.	c.1792	2	Paint Analysis, HHE-013 Campaign 1	Door Type EXT-1 Hardware Types EXT- & EXT-2	C
16	**Door 101A:** Frame Return Field	Solid wood eight (8) raised panel exterior double door.	c.1792-1820	2	Paint Analysis, HHE-014 Campaign 2	Door Type EXT-1 Hardware Types EXT- & EXT-2	C
17	**Door 101A:** Frame Return Panel	Solid wood eight (8) raised panel exterior double door.	c.1792	2	Paint Analysis, HHE-015 Campaign 1	Door Type EXT-1 Hardware Types EXT- & EXT-2	C
18	**Door 101A:** Corner Molding	Solid wood eight (8) raised panel exterior double door.	c.1792	2	Paint Analysis, HHE-016 Campaign 1	Door Type EXT-1 Hardware Types EXT- & EXT-2	C
Windows							
19	**Shutter Dogs**	Iron shutter dogs at the base of each exterior window opening	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769	There are not shutters currently installed on the windows of the Main Block.	C

Figure2B-025 (continued): East Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
20	**Windows: 001, 002, 003, 004, 005, 006:** Masonry Opening	**Basement Window:** Window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-6" x 1'-6"	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769	Window Type 1	C
21	**Windows: 001, 002, 003, 004, 005, 006:** Window Frame	Solid wood window frame and trim.	c.1792	2	Paint Analysis, HHE-002 Campaign 1	Window Type 1 Paint analysis completed on window 006.	C
22	**Windows: 001, 002, 003, 004, 005, 006:** Window Sash	**Basement Window:** Solid wood single sash awning windows with single vertical muntin	c.1988	6	Paint Analysis, HHE-001 Campaign 32	Window Type 1 Paint analysis completed on window 006.	NC (Compatible)
23	**Windows: 101, 102, 105, 106:** Masonry Opening	**First Floor Window:** window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-8" x 6'-0"	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769	Window Type 3A & 3B	C
24	**Windows: 101, 102, 105, 106:** Window Frame	Solid wood window frame and trim.	c.1792	2	Paint Analysis, HHE-004 Campaign 1	Window Type 3A & 3B Paint analysis completed on window 105.	C
25	**Windows: 101, 102, 105, 106:** Window Sash	**First Floor Window:** Nine over nine pane double hung solid wood windows	post 1988	6	Paint Analysis, HHE-003 Campaign 33	Window Type 3A & 3B Paint analysis completed on window 105.	NC (Compatible)

Figure2B-025 (continued): East Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
26	**Windows: 103, 104:** Masonry Opening	**First Floor Window:** First floor window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-0" x 6'-0"	c.1769	2	Historic American Building Survey, 1934 Drawings and Photographs	Window Type 2 Sashed were replaced c.1930 by Charles Collins.	C
27	**Windows: 103, 104:** Window Frame	Solid wood window frame and trim.	c.1792-1820	2	Paint Analysis, HHE-026 Campaign 2	Window Type 2 Paint analysis completed on window 116.	C
28	**Windows: 103, 104:** Window Sash	**First Floor Window:** Six over six pane double hung solid wood windows	c.1929-1950	4 - 5	Paint Analysis, HHE-025 Campaign 14	Window Type 2 Paint analysis completed on window 116.	NC (Compatible)
29	**Windows: 201, 202, 204, 206, 207:** Masonry Opening	**Second Floor Window:** Seccond floor window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-8" x 5'-1"	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769	Window Type 4	C
30	**Windows: 201, 202, 204, 206, 207:** Window Frame	Solid wood window frame and trim.	c.1792-1820	2	Paint Analysis, HHE-028 Campaign 2	Window Type 4 Paint analysis completed on window 207.	C
31	**Windows: 201, 202, 204, 206, 207:** Window Sash	**Second Floor Window:** Nine over six pane double hung solid wood windows	c.1820-1892	3 - 4	Paint Analysis, HHE-027 Campaign 6	Window Type 4 Paint analysis completed on window 207.	NC (Compatible)
32	**Windows: 203, 205:** Masonry Opening	**Second Floor Window:** Second floor window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-0" x 5'-1"	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769	Window Type 5	C
33	**Windows: 203, 205:** Window Frame	Solid wood window frame and trim.	c.1792-1820	2	Paint Analysis, HHE-028 Campaign 2	Window Type 5 Paint analysis completed on window 207.	C

Figure2B-025 (continued): East Elevation - Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
34	**Windows: 203, 205:** Window Sash	**Second Floor Window:** Six over four pane double hung solid wood window	c.1820-1892	2 - 3	Paint Analysis, HHE-027 Campaign 6	Window Type 5 Paint analysis completed on window 207.	NC (Compatible)
35	**Windows: 301, 303:** Rough Opening	Third floor framed window openings in roof Rough opening approximate dimensions: 2'-5" x 4'-10"	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769	Window Type 6	C
36	**Windows: 301, 303:** Window Frame	Solid wood window frame and trim.	c.1792-1820	2	Paint Analysis, HHE-051 Campaign 2	Window Type 6 Paint analysis completed on window 303.	C
37	**Windows: 301, 303:** Window Sash	Third floor dormer windows with foliated upper sash: Nine over six pane double hung wood solid wood windows	c.1988	6	Paint Analysis, HHE-050 Campaign 32	Window Type 6 Paint analysis completed on window 303.	NC (Compatible)
38	**Windows: 301, 303:** Dormer Pilaster	Solid wood window trim.	c.1792-1820	12	Paint Analysis, HHE-052 Campaign 2	Window Type 6 Paint analysis completed on window 303.	C
39	**Windows: 301, 303:** Dormer Pediment	Solid wood window trim.	c.1792-1820	2	Paint Analysis, HHI-053 Campaign 2	Window Type 6 Paint analysis completed on window 303.	C
40	**Window: 302:** Masonry Opening	Third floor oval window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 6'-8" x 4'-0"	late 18th century or early 19th century (date unknown)	2	On-site investigations of structural roof framing that led to the interpretation that the brick pediment was a later modification	Window Type 7 Sash replaced in 1980s or 1990s by the Battersea Company	C
41	**Window: 302:** Window Frame	Solid wood window frame and trim.	c.1792-1820	2	Paint Analysis, HHE-049a Campaign 2	Window Type 7	C
42	**Window: 302:** Window Sash	Solid wood oval window sash with radial pattern of muntins	post 1988	6	Paint Analysis, HHE-048a Campaign 33	Window Type 7	NC (Compatible)

Figure2B-025 (continued): East Elevation - Features, Age, & Significance Matrix

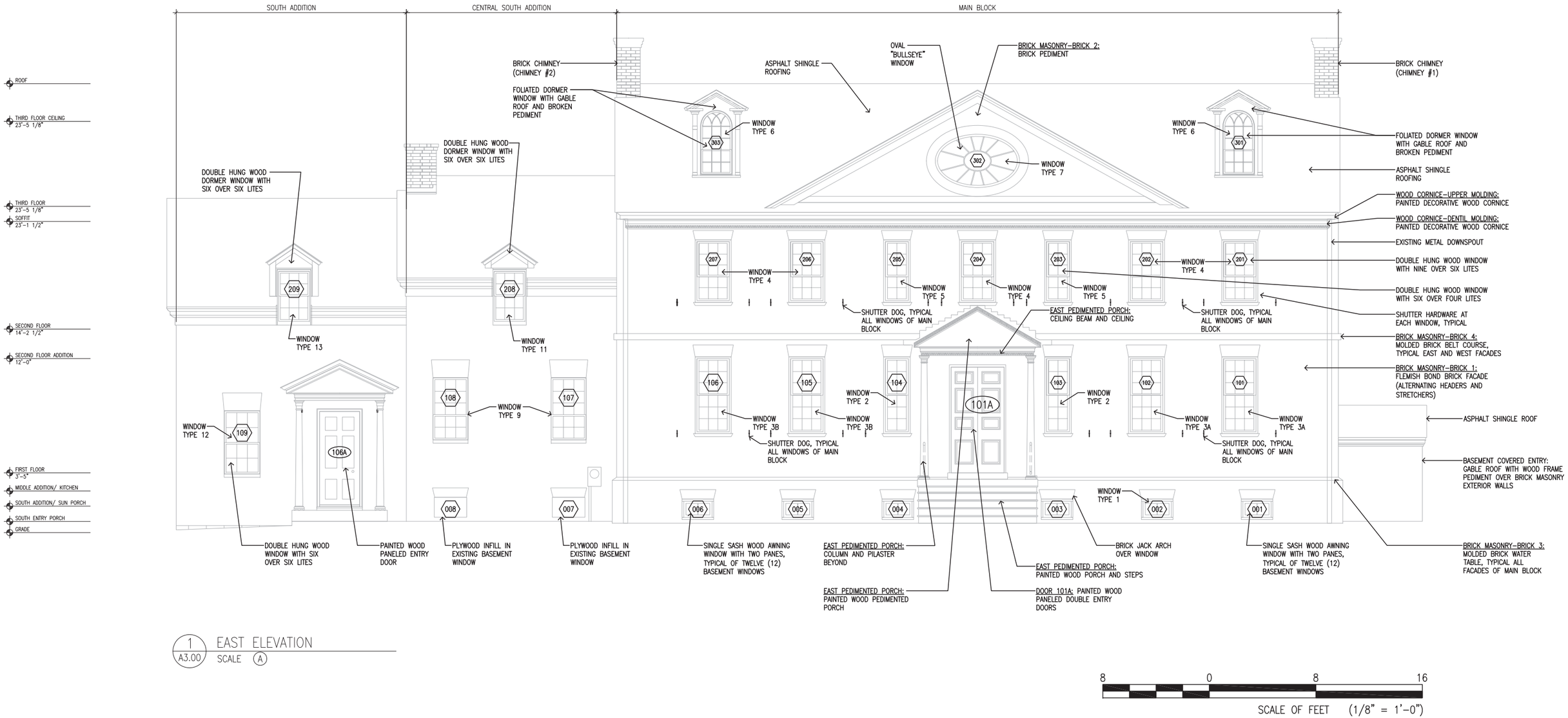
Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
43	**Window: 302:** Oval Sash in Basement, Sash	Solid wood oval window sash with orthogonal grid pattern of muntins	c.1892	3	Paint Analysis, HHE-049 Campaign 8	Window Type 7	NC (Compatible)
44	**Window: 302:** Oval Sash in Basement, Muntins	Solid wood oval window sash with orthogonal grid pattern of muntins	c.1892	3	Paint Analysis, HHE-048 Campaign 8	Window Type 7	NC (Compatible)
Central South Addition							
Brick Masonry							
45	**Brick Masonry:** Brick 5	Brick masonry in flemish bond – Central South Addition expansion, c.1941	c.1941	5	Charles Collins Papers, University of Maryland, Special Collections, Hornbake Library	(None)	NC (Compatible)
Wood Cornice							
46	**Lower Cornice**	Solid wood decorative cornice along Central South Addition.	c.1950-1987	5 - 6	Paint Analysis, HHE-058 Campaign 27	(None)	NC (Compatible)
47	**Upper Cornice**	Solid wood decorative cornice along Central South Addition.	c.1950-1987	5 - 6	Paint Analysis, HHE-059 Campaign 27	(None)	NC (Compatible)
Windows							
48	**Windows: 007, 008**	Basement Windows: Plywood infill in masonry opening	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Window Type 9	NC (Compatible)
49	**Windows: 107, 108:** Masonry Opening	First floor window openings in solid brick masonry exterior wall Rough opening approximate dimensions: 2'-8 1/2" x 4'-10 1/2"	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Window Type 10	NC (Compatible)
50	**Windows: 107, 108:** Window Frame	Solid wood window frame and trim.	c.1988	6	Paint Analysis, HHE-018 Campaign 32	Window Type 10 Paint analysis completed on window 107.	NC (Compatible)
51	**Windows: 107, 108:** Window Sash	First Floor Windows: Nine over six pane double hung solid wood windows	c.1988	6	Paint Analysis, HHE-017 Campaign 32	Window Type 10 Paint analysis completed on window 107.	NC (Compatible)

Figure2B-025 (continued): East Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
52	**Window: 208**	Second Floor Dormer Windows: Nine over six pane double hung solid wood windows Rough opening approximate dimensions: 2'-6" x 4'-3"	c.1941	5	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88. These construction drawings also indicate that Window 208 was relocated (elevated) to accommodate the changes to the interior of the Central South Addition.	Window Type 12 Modern window installation which matches Window 209.	NC (Compatible)
South Addition							
Brick Masonry							
53	**Brick Masonry** Brick 6	Brick masonry in flemish bond – South Addition, c. 1988	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Compatible)
Wood Cornice							
54	**Cornice Return**	Solid wood decorative cornice along South Addition.	c.1950-1987	6	Paint Analysis, HHE-056 Campaign 28	(None)	NC (Compatible)
55	**Cornice**	Solid wood decorative cornice along South Addition.	c.1988	6	Paint Analysis, HHE-057 Campaign 32	(None)	NC (Compatible)
Windows							
56	**Window: 109:** Masonry Opening	First floor window openings in solid brick masonry exterior wall Rough opening approximate dimensions: 2'-8 1/2" x 5'-0"	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Window Type 13	NC (Compatible)
57	**Window: 109:** Window Frame	Solid wood window frame and trim.	c.1988	6	Paint Analysis, HHE-020 Campaign 32	Window Type 13 Paint analysis completed on window 109.	NC (Compatible)
58	**Window: 109:** Window Sash	First Floor Window: Six over six pane double hung solid wood windows	c.1988	6	Paint Analysis,HHE-019 Campaign 32	Window Type 13 Paint analysis completed on window 109.	NC (Compatible)

Figure2B-025 (continued): East Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
59	**Window: 209**	Second Floor Dormer Window: Six over six pane double hung wood windows	1988 - Present	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Window Type 13	NC
Exterior Doors							
60	**Door: 106A**	Solid wood six (6) raised panel exterior entry door	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Door Type: EXT-4 Hardware Type: EXT-4	NC (Compatible)
Exterior Porches							
61	**South Entry Porch 106A**	West entry porch at South Addition.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Compatible)



1 A3.00 EAST ELEVATION
SCALE (A)

8 0 8 16
SCALE OF FEET (1/8" = 1'-0")

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Exterior Physical Inventory: West Elevation



Figure 2B-026: West Elevation (Photo Credit: BBB, 2012)

West Elevation

Similar to the east elevation, the west elevation is broken into three distinct sections representing different additions and periods of construction. The original portion of the house is referred to as the Main Block. Other additions may have been present during the Period of Significance, but there is little remaining documentation, and the Main Block is all that remains. What is seen today as the primary elevation, the east elevation, was not originally designed to be the prominent facade. Harmony Hall was first designed and constructed when transportation relied primarily on the river, and it was customary for rural plantation homes to address the river as the primary public and formal entry into the home. This design approach is still evident in the Main Block through the double staircase and decorative wood cornice.

Main Block - As is typical of Georgian Colonial architecture, the west facade is constructed of brick masonry in a Flemish bond. The symmetrical plan of the Main Block consists of a central entrance flanked by double hung wood windows with multiple lites. Each masonry window opening is spanned by flat jack arches. The seven bay rectangular plan establishes a symmetrical layout of first and second floor windows. The third and fifth bays at the first and second floors contain more narrow windows than the ones in the other bays. The first floor double hung wood window sashes are of either a 9 over 9 lite design or a 6 over 6 light pattern. The second floor double hung wood window sash design is of either a 9 over 6 lite design or a 6 over 4 lite configuration. There are iron

shutter dogs set into the masonry adjacent to all first and second floor windows on the west elevation. There are six basement windows with wood frames and awning sashes in a two-lite configuration. Some of these windows have been covered over with plywood.

The west brick facade also features a molded brick water table between the first floor and basement and a projected brick belt course between the first and second floors. The main entrance door detailing on this elevation, with the painted wood pediment and fluted pilasters, is very characteristic of the Georgian Colonial period. The double staircase addition was made by Charles Wallace Collins in the 1930s, but it mimics the architectural style of Georgian Colonial houses of the period. Similar stairs can be seen at the William Gibbs House in Charleston constructed c. 1779. Three risers on either side of the entry lead to a landing followed by five more risers which terminate at the central upper landing. This landing rests on brick piers. The railing is constructed of painted wood posts and rails with painted wood pickets. The stair partially covers two basement windows.

The painted decorative wood cornice along the west facade of the Main Block was also a significant feature added during the late Colonial period. This decorative wood cornice is more detailed than the one along the east façade, including modillions along the entire length of the façade. This is another feature that would have defined the west river façade as the more prominent façade as a visitor approach the house.

An asphalt shingle roofing was installed at the main block as were painted metal gutters and downspouts. The two masonry chimneys are prominent features of the roof line of the Main Block at the west elevation. Vent pipes are visible on the west elevation roof that correspond to bathrooms on the interior.

There is a brick enclosed entrance to the basement that is visible on the north end of the west elevation. This enclosure is further described under the description for the North Elevation.

Set out in the landscape to the west of this elevation are two brick piers and an iron gate that led to a brick entry terrace which has been consumed by the landscape.

Center South Addition - The west elevation also features the Central South Addition and the South Addition. Both additions were constructed in a style and with architectural detailing fairly compatible with the Georgian Colonial style of the Main Block. A portion of the existing west facade of the Central South Addition was part of an early addition to the home constructed between 1929 and 1934 by Charles W. Collins. This portion of the Central South Addition as seen in the west façade is not considered a contributing feature to the Georgian Colonial style of the house, but it is considered to be stylistically compatible. Similar to the Main Block, the Central South Addition has a double-hung wood window but with 6/6 lite configurations on the first floor. Two basement windows have been infilled with plywood. Two dormers are semi-engaged in the roof wood cornice line and have a wood double hung 6/6 lite windows. Some of the CMU foundation is exposed directly below these basement windows. The brick was installed to match the adjacent Main Block flemish bond pattern and the flack jack arches at masonry openings. The roof is of the same asphalt shingle material as the roof of the Main Block, but with no gutters or downspouts installed. The wood cornice is a simplified version of that at the Main Block. This addition has one chimney.

South Addition - The South Addition was constructed c.1988 and is less compatible but does mimic the brick façade, double hung wood windows, and dormer windows as seen in the earlier Central South Addition. Each of these southern additions was slightly smaller and included a slightly recessed facade to respect the prominence and historical significance of the Main Block. The South Addition has no basement windows and similar to the Central South Addition, some of the CMU foundation wall is exposed at grade. Two first floor double-hung

wood windows are located on either side of a pair of french doors and are of a 6/6 lite configuration. Below each window are recessed brick panels. The pair of wood french doors have 10 lites each and are capped with a semi-circular transom. Two dormers with double hung wood windows with 6/6 lite configurations are semi-engaged in the roof cornice.

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Figure2B-027: West Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
Main Block							
Brick Masonry							
1	**Brick Masonry** Brick 1	Brick masonry in flemish bond – Main Block	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c. 1769	(None)	C
2	**Brick Masonry** Water Table Brick 3	East facade molded brick water table between basement and first floor	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c. 1769	(None)	C
3	**Brick Masonry** Belt Course Brick 4	East facade molded brick belt course between first and second floor	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c. 1769	(None)	C
Wood Cornice							
4	**Cornice Bracket**	Solid wood cornice along Main Block under roof eave.	c.1792-1820	2	Paint Analysis, HHE-060 Campaign 2	(None)	C
5	**Cornice Dentil**	Solid wood cornice along Main Block under roof eave.	c.1792-1820	2	Paint Analysis, HHE-061 Campaign 2	(None)	C
Windows							
6	**Shutter Dogs**	Iron shutter dogs at the base of each exterior window opening	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c. 1769	There are not shutters currently installed on the windows of the Main Block.	C
7	**Windows: 011, 012, 013, 014, 015, 016:** Masonry Opening	**Basement Windows:** window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-6" x 1'-6"	c.1769	2	Documentation Research and on-site investigations that led to the interpretation that the house was constructed c. 1769	Window Type 1	C
8	**Windows: 011, 012, 013, 014, 015, 016:** Window Frame	Solid wood window frame and trim.	post 1988	6	Paint Analysis, HHE-030 Campaign 33	Paint analysis completed on window 016.	NC (Compatible)
9	**Windows: 011, 012, 013, 014, 015, 016:** Window Sash	**Basement Windows:** Solid wood single sash awning windows with single vertical muntins	c.1820-1892	3	Paint Analysis, HHE-029 Campaign 6	Paint analysis completed on window 016.	NC (Compatible)

Figure2B-027 (continued): West Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
10	**Windows: 113, 114, 117, 118:** Masonry Opening	**First Floor Windows:** window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-8" x 6'-0"	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c. 1769	Window Type 3A & 3B	C
11	**Windows: 113, 114, 117, 118:** Window Frame	Solid wood window frame and trim.	c.1792	2	Paint Analysis, HHE-004 Campaign 1	Window Type 3A & 3B Paint analysis completed on window 105.	C
12	**Windows: 113, 114, 117, 118:** Window Sash	**First Floor Windows:** Nine over nine pane double hung solid wood windows	post 1988	6	Paint Analysis, HHE-003 Campaign 33	Window Type 3A & 3B Paint analysis completed on window 105.	NC (Compatible)
13	**Windows: 115,116:** Masonry Opening	**First Floor Windows:** window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-0" x 6'-0"	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c. 1769	Window Type 2	C
14	**Windows: 115,116:** Window Frame	Solid wood window frame and trim.	c.1792-1820	2	Paint Analysis, HHE-026 Campaign 2	Window Type 2 Paint analysis completed on window 116.	C
15	**Windows: 115,116:** Window Sash	**First Floor Windows:** : Six over six pane double hung solid wood window	c.1929-1950	4 - 5	Paint Analysis, HHE-025 Campaign 14	Window Type 2 Paint analysis completed on window 116.	NC (Compatible)
16	**Windows: 215, 216, 218, 220,221:** Masonry Opening	**Second Floor Windows:** window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-8" x 5'-1"	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c. 1769	Window Type 4	C
17	**Windows: 215, 216, 218, 220,221:** Window Frame	Solid wood window frame and trim.	c.1792-1820	2	Paint Analysis, HHE-063 Campaign 2	Window Type 4 Paint analysis completed on window 221.	C

Figure2B-027 (continued): West Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
18	**Windows: 215, 216, 218, 220,221:** Window Sash	**Second Floor Windows:** Nine over six pane double hung solid wood windows	c.1892	3	Paint Analysis, HHE-062 Campaign 8	Window Type 4 Paint analysis completed on window 221.	NC (Compatible)
19	**Windows: 217,219:** Masonry Opening	**Second Floor Windows:** window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-0" x 5'-1"	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769	Window Type 5	C
20	**Windows: 217,219:** Window Frame	Solid wood window frame and trim.	c.1792-1820	2	Paint Analysis, HHE-063 Campaign 2	Window Type 5 Paint analysis completed on window 221.	C
21	**Windows: 217,219:** Window Sash	**Second Floor Windows:** Six over four pane double hung solid wood windows	c.1892	3	Paint Analysis, HHE-062 Campaign 8	Window Type 5 Paint analysis completed on window 221.	NC (Compatible)
Wood Doors							
22	**Door 101B: Door Surround:** Fluted Pilaster	Solid wood decorative pedimented door surround	c.1792	2	Paint Analysis, HHE-038 Campaign 1	(None)	C
23	**Door 101B: Door Surround:** Field	Solid wood decorative pedimented door surround	c.1792-1820	2	Paint Analysis, HHE-039 Campaign 2	(None)	C
24	**Door 101B: Door Surround:** Pediment	Solid wood decorative pedimented door surround	c.1792-1820	2	Paint Analysis, HHE-040 Campaign 2	(None)	C
25	**Door 101B: Door Surround:** Raised Panel	Solid wood decorative pedimented door surround	c.1792-1820	2	Paint Analysis, HHE-041 Campaign 2	(None)	C
26	**Door 101B: Door Surround:** Architrave	Solid wood decorative pedimented door surround	c.1792-1820	2	Paint Analysis, HHE-042 Campaign 2	(None)	C
27	**Door 101B: Door Surround:** Pediment Center	Solid wood decorative pedimented door surround	c.1792-1820	2	Paint Analysis, HHE-043 Campaign 2	(None)	C
28	**Door 101B: Door Surround:** Pediment Dentils	Solid wood decorative pedimented door surround	c.1792	2	Paint Analysis, HHE-044 Campaign 1	(None)	C

Figure2B-027 (continued): West Elevation - Features, Age, & Significance Matrix

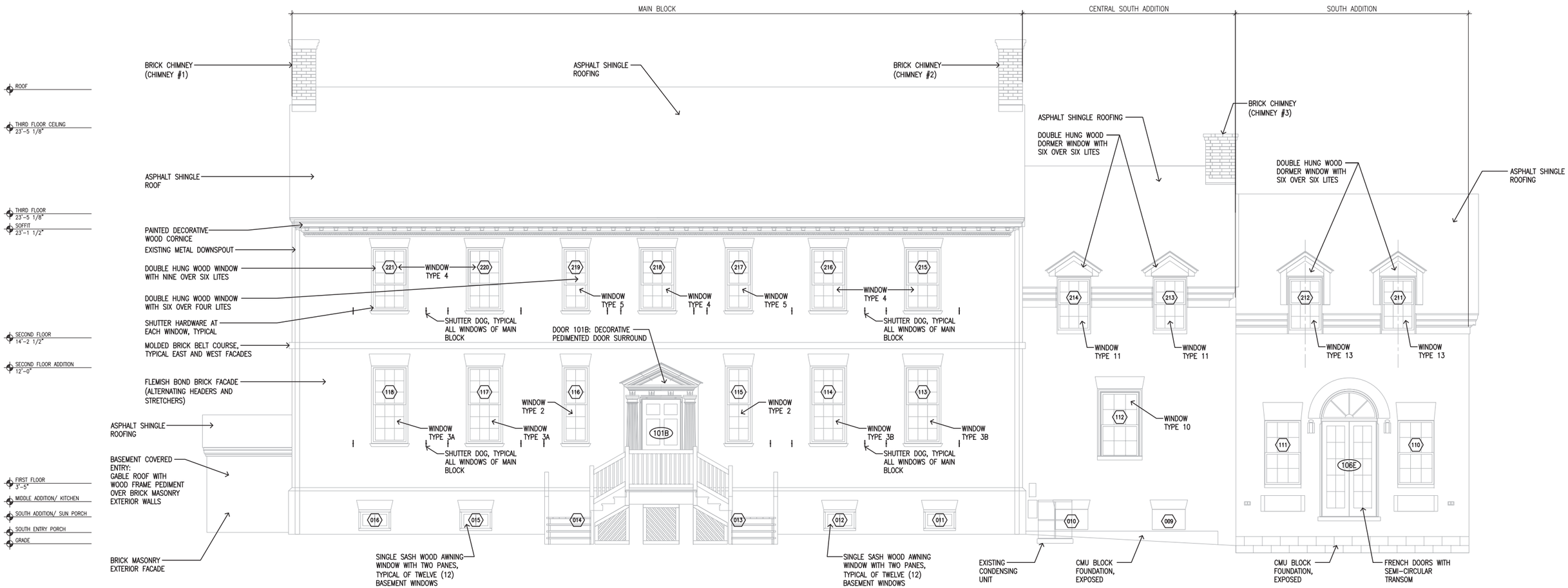
Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
29	**Door 101B: Door Surround:** Molding at Dentils	Solid wood decorative pedimented door surround	c.1792-1820	2	Paint Analysis, HHE-045 Campaign 2	(None)	C
30	**Door 101B: Door Surround:** Molding at Pediment	Solid wood decorative pedimented door surround	c.1792-1820	2	Paint Analysis, HHE-046 Campaign 2	(None)	C
31	**Door 101B: Door Surround:** Cornice at Pediment	Solid wood decorative pedimented door surround	c.1792-1820	2	Paint Analysis, HHE-047 Campaign 2	(None)	C
32	**Door 101B:** Field	Solid wood six (6) raised panel exterior door	post 1988	6	Paint Analysis, HHE-033 Campaign 33	Door Type: EXT-2 Door Hardware Type: EXT-3	NC (Compatible)
33	**Door 101B:** Raised Panel	Solid wood six (6) raised panel exterior door	post 1988	6	Paint Analysis, HHE-034 Campaign 34	Door Type: EXT-2 Door Hardware Type: EXT-3	NC (Compatible)
34	**Door 101B:** Return Field	Solid wood six (6) raised panel exterior door	post 1988	6	Paint Analysis, HHE-035 Campaign 33	Door Type: EXT-2 Door Hardware Type: EXT-3	NC (Compatible)
35	**Door 101B:** Return Raised Panel	Solid wood six (6) raised panel exterior door	c.1792	2	Paint Analysis, HHE-036 Campaign 1	Door Type: EXT-2 Door Hardware Type: EXT-3	C
36	**Door 101B:** Return Corner Molding	Solid wood six (6) raised panel exterior door	c.1792-1820	2	Paint Analysis, HHE-037 Campaign 3	Door Type: EXT-2 Door Hardware Type: EXT-3	C
Central South Addition							
Brick Masonry							
37	**Brick Masonry** Brick 5A	Brick masonry in flemish bond – Central South Addition expansion, c.1929; first floor portion of west facade of Central South Addition	c.1941	5	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Close examination of the exterior brick masonry reveals the areas where the west facade of the Central South Addition was modified and enlarged.	NC (Compatible)
38	**Brick Masonry** Brick 5B	Brick masonry in flemish bond – Central South Addition expansion, c.1941; second floor portion of Central South Addition	c.1929	4	Charles Collins Papers, University of Maryland, Special Collections, Hornbake Library and Historic American Building Survey, 1934 Drawings and Photographs	Close examination of the exterior brick masonry reveals the areas where the west facade of the Central South Addition was modified and enlarged.	NC (Compatible)

Figure2B-027 (continued): West Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
Windows							
38	**Windows: 009, 010** Masonry Opening	**Basement Windows:** Plywood infill in masonry opening Masonry rough opening approximate dimensions: 2'-6" x 1'-6"	c.1929	4	Charles Collins Papers, University of Maryland, Special Collections, Hornbake Library	Window Type 9	NC (Compatible)
39	**Window: 112:** Masonry Opening	**First Floor Windows:** window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 3'-4" x 5'-0"	c.1929	4	Charles Collins Papers, University of Maryland, Special Collections, Hornbake Library	Window Type 11	NC (Compatible)
40	**Window: 112:** Window Frame	Solid wood window frame and trim.	c.1893-1928	3	Paint Analysis, HHE-032 Campaign 9	Window Type 11 Paint analysis completed on window 112.	NC (Compatible)
41	**Window: 112:** Window Sash	**First Floor Window:** Six over six pane double hung solid wood window	c.1820-92	3	Paint Analysis, HHE-031 Campaign 6	Window Type 11 Paint analysis completed on window 112.	NC (Compatible)
42	**Windows: 213, 214**	**Second Floor Dormer Windows:** Six over six pane double hung wood windows Masonry rough opening approximate dimensions: 2'-6" x 4'-3"	c.1941	5	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88 These construction drawings also indicate that Window 208 was relocated (elevated) to accommodate the changes to the interior of the Central South Addition.	Window Type 12	NC (Compatible)

Figure2B-027 (continued): West Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
South Addition							
Brick Masonry							
43	**Brick Masonry** Brick 6	Brick masonry in flemish bond – South Addition, c. 1988	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Compatible)
Windows							
44	**Windows: 110, 111**	**First Floor Windows:** Six over six pane double hung wood window Masonry rough opening approximate dimensions: 2'-8 1/2" x 5'-0"	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Window Type 13	NC (Compatible)
45	**Windows: 211, 212**	**Second Floor Dormer Windows:** Six over six pane double hung wood windows Masonry rough opening approximate dimensions: 2'-9" x 4'-3"	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Window Type 14	NC (Compatible)
Exterior Doors							
46	**Doors: 106E:** Masonry Opening	French Doors with fan light transom	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987	(None)	NC (Compatible)
47	**Doors: 106E:** Door Frame	Solid wood window frame and trim.	c.1988	6	Paint Analysis, HHE-022 Campaign 32	Paint analysis completed on door 106B.	NC (Compatible)
48	**Door: 106E** Door	Pairs of solid wood doors with 10 lites in each leaf, capped by a semi-circular transom	c.1988	6	Paint Analysis, HHE-021 Campaign 32	Door Type: EXT-5 Hardware Type: EXT-5 Paint analysis completed on door 106B.	NC (Compatible)
Exterior Porch/ Stairs							
49	Rear Porch 101B	Double Stair at West Facade entry door	Double stair was rebuilt in kind by NPS in the 1990s	6	Charles Collins Papers, University of Maryland, Special Collections, Hornbake Library and Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Original west facade double stair built by Charles Collins in 1930.	NC (Compatible)



1 / A3.01 WEST ELEVATION
SCALE (A)

8 0 8 16
SCALE OF FEET (1/8" = 1'-0")

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Exterior Physical Inventory: North Elevation



Figure 2B-028: North Elevation (Photo Credit: BBB, 2012)

North Elevation

Similar to the east and west elevations, the north elevation is a continuation of the brick masonry construction in a Flemish bond which alternates header and stretcher bricks in each course. The solid brick gable wall anchors the north end of the Main Block. The molded brick water table seen along the east and west facades is continuous along the base of the north façade. The belt course wraps the corners from the east and west facades onto the north façade for approximately 12 inches at each side and terminates. A small addition at the northwest corner creates a covered entry into the basement. This brick addition with a gable roof contains wood double doors leading to steps down to the basement below. The covered entry into the basement was an addition by during Period VI: 1967 - Present. The third floor features two casement windows with a 4 lite configuration and flat jack arches above each masonry opening. These third floor windows also feature wood sills similar to those on the south facade of the Main Block. There are two remaining flat jack arches at the second floor where there used to be windows in the North Bedroom 202 flanking either side of the embedded chimney (Chimney #1). Just below these flat jack arches

it is evident that the brick façade was patched with infill brick. The mortar is an incompatible match from a visual perspective, which makes the areas of infill more evident. A more thorough mortar analysis would need to be conducted to determine if there are any material incompatibilities between the mortar and the brick at this location. There are also two zones of patched and repaired brick at the first floor. These areas are possibly the result of the removal of windows and the subsequent patching and repair of the brick masonry. However there are no extant flat jack arches in these locations, as evident on the second floor, to provide more concrete evidence of these windows being an original feature of this façade.

The chimney is fully incorporated into the north façade and the exterior portion of the chimney is flush with the rest of the façade. However there is an area of patching continuously along the façade at this chimney location. It is documented in Charles Collin's Papers maintained by the University of Maryland, that Collins made significant repairs to the chimneys in the early 1930s. There are a few photographs in this collection which document this repair.

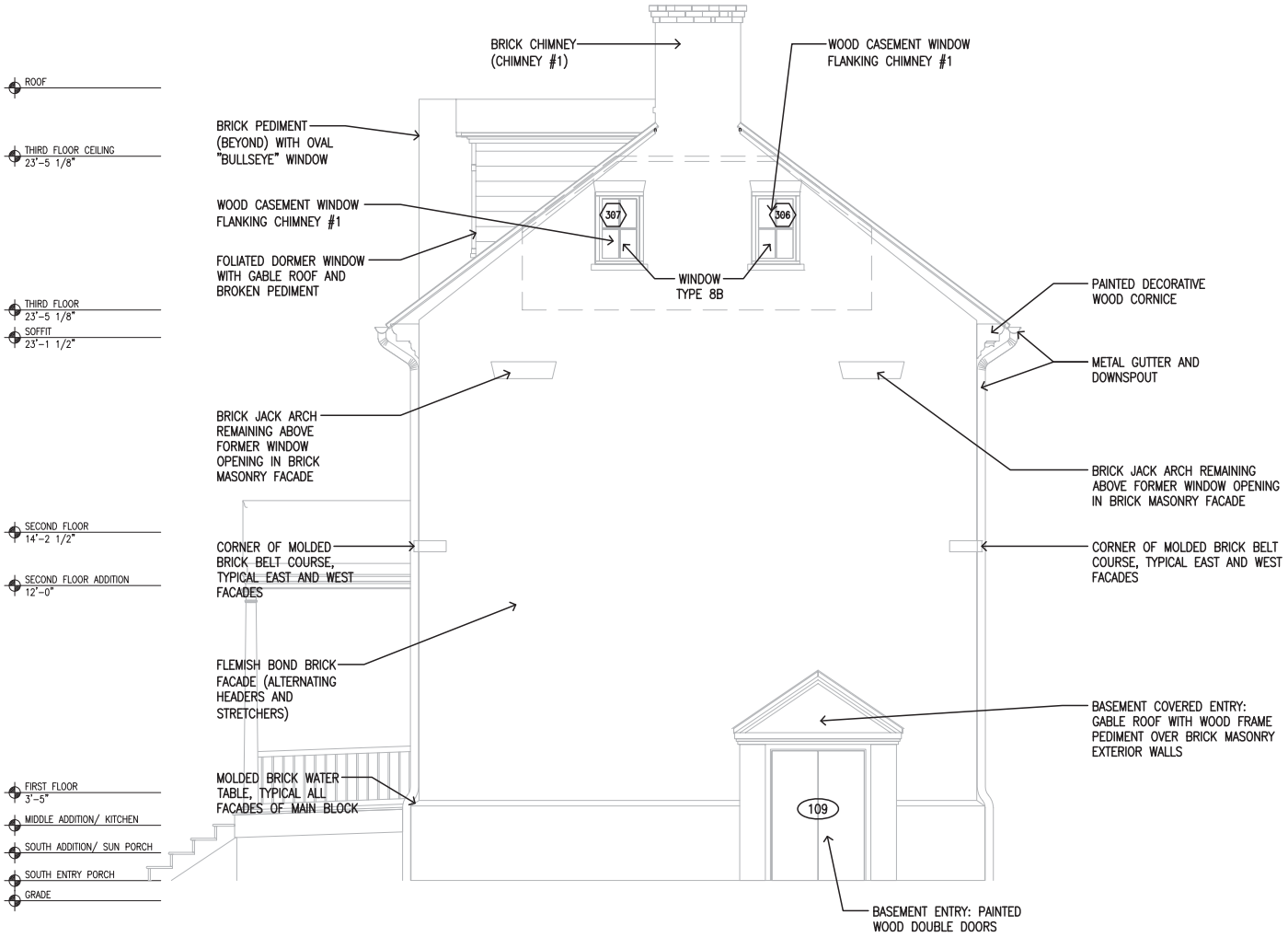
Metal gutters attached to the east and west facades are visible on the North Elevation as is a small painted wood cornice directly below the line of the pitched roof edge. The side of the dormer located on the east elevation is visible from the north elevation and is covered with painted wood clapboard siding. Similarly, the side of the east entry porch and west entry stairs are visible from the North Elevation - see descriptions of this elevations for more details on those elements.

Figure2B-029: North Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
Brick Masonry							
1	**Brick Masonry** Brick 1	Brick masonry in flemish bond – Main Block	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c. 1769	(None)	C
2	**Brick Masonry** Water Table Brick 3	North facade molded brick water table between basement and first floor	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c. 1769	(None)	C
3	**Brick Masonry** Water Table Brick 4	North facade projected brick belt course (corner edge from east and west facades) between first and second floors	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c. 1769	(None)	C
Windows							
4	**Window: 306, 307:** Masonry Opening	**Third Floor Windows:** Window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-0" x 3'-3"	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c. 1769	Window Type 8B	C
5	**Window: 306, 307:** Window Frame	Solid wood window frame and trim.	c.1792-1820	2	Paint Analysis, HHE-065 Campaign 2	Paint analysis completed on window 306. Window Type 8B	C
6	**Window: 306, 307:** Window Sash	**Third Floor Windows:** Solid wood casement windows, 4 lites	c.1815-1820	2	Paint Analysis, HHE-064 Campaign 4	Paint analysis completed on window 306. Window Type 8B	C
7	**Flat Jack Arches**	**Second Floor:** Former window openings, currently infilled with brick	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c. 1769	(None)	C

Figure2B-029 (continued): North Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
Basement Entry							
8	**Basement Covered Entrance**	Enclosed basement entrance from grade.	c. 1988	6	Study of photographic records and documentation by HABS in 1934 reveals that this basement entry was once covered by an on-grade hatch door. Later photographs taken following the c 1988 construction of the South Addition show the full brick enclosure with the gable roof	(None)	NC (Compatible)
9	**Door: 109**	Wood double door at entry to basement steps below	c. 1988	6	Study of photographic records and documentation by HABS in 1934 reveals that this basement entry was once covered by an on-grade hatch door. Later photographs taken following the c 1988 construction of the South Addition show the full brick enclosure with the gable roof	No door hardware present. Door Type: EXT-3	NC (Compatible)
Chimneys							
10	**North Chimney** (Chimney #1)	North Chimney, Main Block	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c. 1769. It is assumed this chimney was part of the original construction.	(None)	C



2 / A3.02 NORTH ELEVATION
SCALE A

8 0 8 16

SCALE OF FEET (1/8" = 1'-0")

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Exterior Physical Inventory: South Elevation



Figure 2B-030: South Elevation (Photo Credit: BBB, 2012)

South Elevation

The south elevation primarily consists of the south facade of the South Addition. This south façade features three sets of wood french doors with semi-circular transoms above. The french doors consist of pairs of wood doors with 10 lites each. The masonry openings for these doors emphasize the structural components of the brick arch resting on brick piers. The door sills of the french doors are about 3 feet above grade with a set of detached concrete steps at the center door. There are no basement windows, but the CMU foundation is visible at grade. The south façade of the South Addition has a wood frame gable end clad in painted wood siding with a semi-circular window at the second floor. The remaining portion of the south elevation consists of the portions of the Central South Addition and the Main Block that extend above the South Addition roof line. The south wall of the Main Block contains two casement windows with a 4 lite configuration similar to the North Elevation. The south faces of Chimney #2 and #3 are visible on this elevation.

This elevation also captures the sides of the dormers of the South Addition which are clad in painted wood siding. The side view of the entry porch to the South Addition included in the description of the East elevation is also visible as is the side view of the entry stair on the West Elevation.

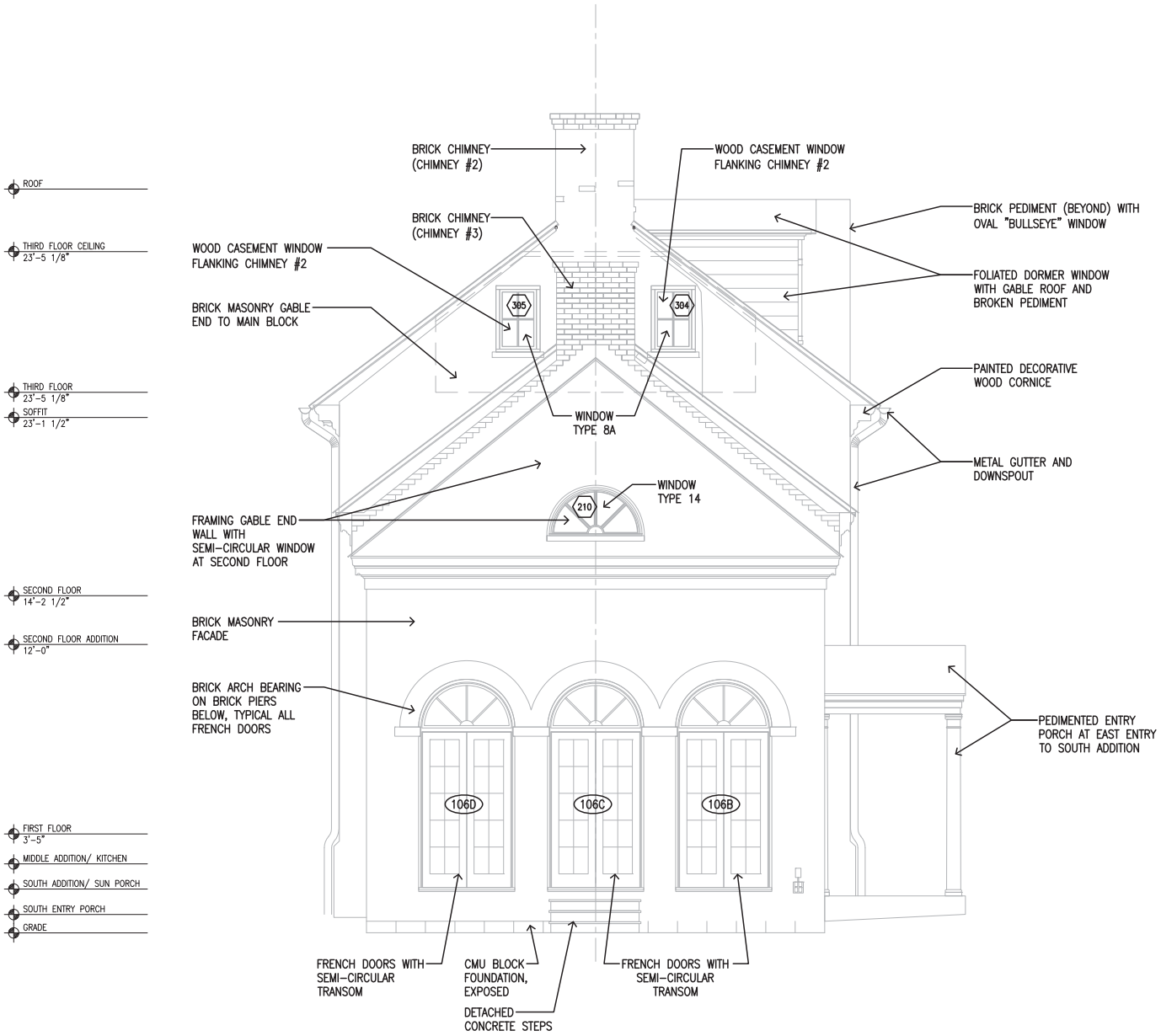
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Figure2B-031: South Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
Main Block							
Brick Masonry							
1	**Brick Masonry** Brick 1	Main Block	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c. 1769	(None)	C
Windows							
2	**Windows: 304, 305:** Masonry Opening	**Third Floor Windows:** Window openings in solid brick masonry exterior wall Masonry rough opening approximate dimensions: 2'-0" x 3'-3"	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c. 1769	Window Type 8A No flat jack arches existing above Windows 304 and 305, as seen above windows 306 and 307 on the North Facade.	C
3	**Windows: 304, 305:** Window Frame	Solid wood window frame and trim.	c.1792	2	Paint Analysis, HHE-024 Campaign 1	Window Type 8A Paint analysis completed on window 304.	C
4	**Windows: 304, 305:** Window Sash	**Third Floor Windows**: Solid wood casement windows, 4 lites	after 1815-1820	2	Paint Analysis, HHE-023 Campaign 5	Window Type 8A Paint analysis completed on window 304.	C
Chimneys							
5	**Central Chimney** (Chimney #2)	South Chimney, Main Block	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c. 1769. It is assumed this chimney was part of the original construction.	(None)	C
Central South Addition							
Brick Masonry							
6	**Brick Masonry** Brick 2	Central South Addition	c. 1941	5	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987	(None)	NC (Compatible)
Chimneys							
7	**North Chimney** (Chimney #3)	South Chimney, Central South Addition	c. 1941	5	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Compatible)

Figure2B-031 (continued): South Elevation - Features, Age, & Significance Matrix

Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
South Addition							
Brick Masonry							
8	**Brick Masonry** Brick 3	South Addition	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Compatible)
Wood Doors							
9	**Doors: 106B, 106C, 106D** Masonry Opening	French Doors with fan light transom	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
10	**Doors: 106B, 106C, 106D** Door Frame	Solid wood window frame and trim.	c.1988	6	Paint Analysis, HHE-022 Campaign 32	Paint analysis completed on door 106B.	NC (Incompatible)
11	**Doors: 106B, 106C, 106D** Door	Pairs of solid wood doors with 10 lites in each leaf, capped by a semi-circular transom	c.1988	6	Paint Analysis, HHE-021 Campaign 32	Door Type: EXT-5 Hardware Type: EXT-5 Paint analysis completed on door 106B.	NC (Incompatible)
Windows							
12	**Window: 210**	**Second Floor Windows:** Semi-circular wood frame “fan” window	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Window Type 15	NC (Incompatible)



1 / A3.02 SOUTH ELEVATION
SCALE (A)

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Exterior Physical Inventory: Roof



Figure 2B-032: Roof (Photo Credit: BBB, 2012)

Roof

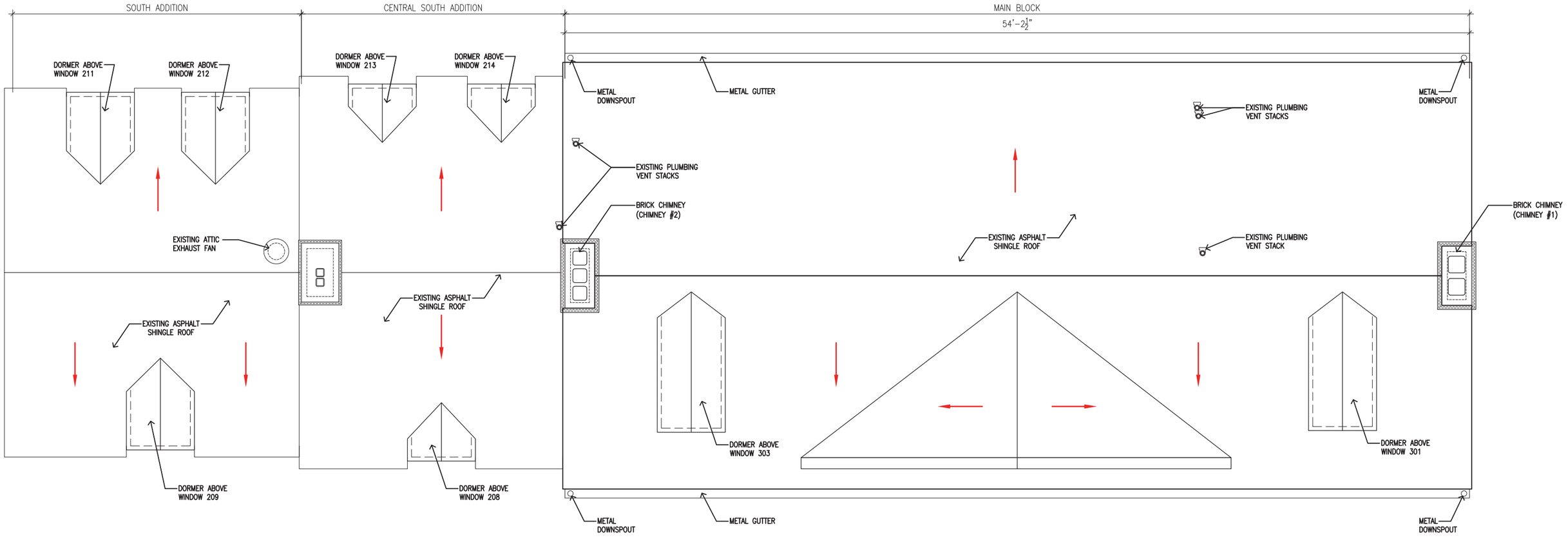
The roofing over the Main Block, Central South Addition and South Addition was replaced by the National Park Service during Period VI. The roofing on all the portions of the house is an asphalt shingle roofing system. During on-site investigating at the roof eave, the survey team found tongue and groove roof sheathing under the asphalt system. This roof sheathing over the wood framing was at some point replaced. The roof over the Main Block is bisected on the east facade by a pediment with a gable roof and two flanking dormer windows with gable roofs. The Central South Addition and the South Addition each have three dormer windows bisecting the gable roofs. Four of the dormers face the river or west facade and two of the dormers face the east approach. The metal gutter system is anchored to this roof sheathing underneath the asphalt system only at the Main Block. Gutter brackets and anchors remain from a previously installed gutter system. Several plumbing vent stacks penetrate the roofing assembly above restrooms and bathrooms in the house at all three building masses. Three chimneys penetrate the roof: Chimney #1 & #2 at the Main Block and Chimney #3 at the Central South Addition.

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Figure2B-033: Roof - Features, Age, & Significance Matrix

Number	Feature (including Designation is Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing or Non-Contributing
Brick Masonry							
1	**Chimney 1** (North Chimney)	Brick Chimney at north gable wall of Main Block	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c. 1769. It is assumed this chimney was part of the original construction.	(None)	C
2	**Chimney 2** (Central Chimney)	Brick Chimney at south gable wall of Main Block	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c. 1769. It is assumed this chimney was part of the original construction.	(None)	C
3	**Chimney 3** (South Chimney)	Brick chimney at south facade of Central South Addition; between Central South Addition and South Addition	c.1941	5	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987	(None)	NC (Compatible)
Miscellaneous Metals							
4	**Metal Gutter and Downspout**	Half round metal gutters and downspouts at east and west facades of Main Block	c.1988	6	Records and historical documents maintained by National Capital Parks East (NACE)	(None)	NC (Compatible)
Roofing							
5	**Asphalt Shingle Roofing**	Asphalt shingle roof recently installed to replace prior wood or slate shingle roofing	1988 - Present	6	Records and historical documents maintained by National Capital Parks East (NACE)	(None)	NC (Incompatible)

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1 / A1.03 ROOF PLAN
SCALE (A)

8 0 8 16
SCALE OF FEET (1/8" = 1'-0")

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B.5 INTERIOR PHYSICAL DESCRIPTION

OVERVIEW

As is explained in more detail in the Chronology of Development and Use, it can be seen that Harmony Hall has undergone many changes throughout the 250 years or more of its history. The property of Battersea and the historic plantation home has seen many owners and people occupying both the property and Harmony Hall, which has been altered and modified in various ways. Unfortunately, there is limited historical documentation regarding the physical characteristics and modifications to Harmony Hall until the 20th Century. Historical documents maintain a thorough record of property ownership and occupancy through deeds, wills and other legal documents. However, there is very little documentation regarding the structures constructed or demolished on the site.

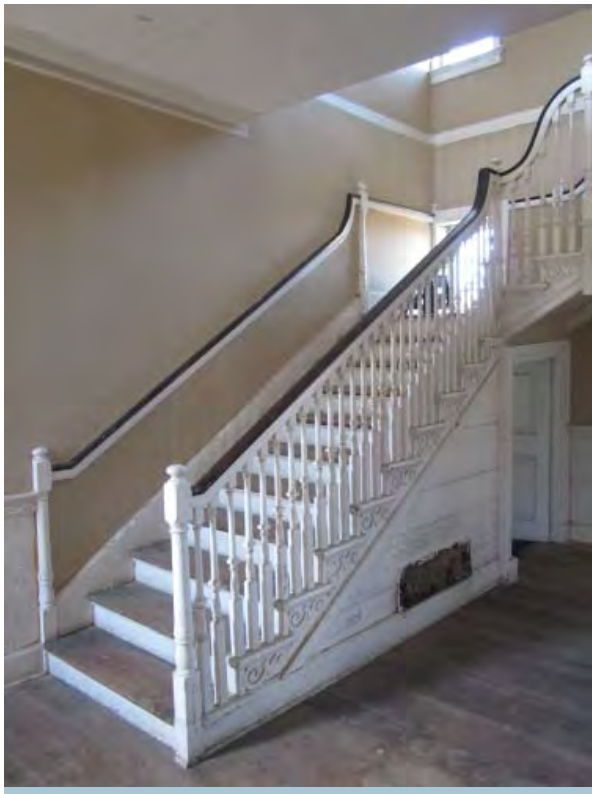


Figure 2B-034: Central Hall Room 101, Central Staircase (Photo Credit: BBB, 2012)

Through research and on-site investigations the design team was able to establish some basic assumptions and probable explanations regarding the property's evolution from the colonial period up through the National Park Service (NPS) ownership. A study of architectural styles and details typical from certain periods in history in conjunction with a more detailed analysis of physical evidence on site such as paint, plaster, and mortar analysis has assisted the design team in establishing a timeline and probable evolution of the physical aspects of the property.

Most of the original details in the primary historical spaces within the Main Block of the house remain or have been replaced with elements from other period homes in the Georgian Colonial style or have been replicated in a style very similar to the original. These historical character defining spaces include the following:

- Central Hall 101 (including the Central Staircase)
- Parlor/ Living Room 102
- Dining Room 103
- Central Hall 201
- North Bedroom 202
- South Bedroom 203

METHODOLOGY

The following section will initially describe the typical finishes and details that are common amongst the interior rooms. These descriptions will be followed by overall plans showing the floor by floor layout that give a sense of the entire building. A room by room physical inventory will be described in detail and will include: overall photographs of each space, a partial plan of the room described, a matrix indicating a systematic accounting of all features and materials according to age and significance, a narrative describing each element.

TYPICAL FINISHES AND DETAILS

Flooring:
The flooring throughout the historical spaces in the home is heart pine in random widths. It is known that some of the flooring was replaced by Charles Collins in the 1920s, but it is assumed that a majority of the flooring is original. A further assessment and wood testing, which was not included within the scope of work, could be done to determine more about the species and grade of all wood flooring and wood framing throughout the house. Modern additions to the home in the 1930s and 1940s include tile, hardwood flooring and vinyl sheet flooring.

Walls:
The walls are either painted plaster or gypsum wall board. The walls throughout the house vary in construction in the following manner:

- Plaster applied directly to brick
- Plaster applied to particleboard installed on wood stud partitions. In this case the particleboard provided the brown coat for the application of a scratch coat and finish coat for the plaster finishing. It is assumed that this assembly was a modern installation by Charles Collins in Period 4 (1929-40).
- Terra cotta tile (basement only)
- Wood paneling on brick masonry (Rec Room 013)
- Exposed wood studs

Doors:
The majority of the doors throughout Harmony Hall are of painted solid wood paneled construction. The doors in the more significant historic spaces throughout the house typically consist of 4 or 6 raised panels. It should be noted that Charles Collins noted in his records that he did replace doors in the house when he first acquired the property during Period 4 (1929-40) of the building's history. However, he does not specify any details regarding the location of these doors. Doors added in the 1930s by Charles Collins for the bathrooms and closets in the second floor North Bedroom are painted wood with only two vertical panels.

Ceilings:

The original historic ceilings in the Main Block of the house would have been plaster on wood lath and are considered character defining features. On-site investigations and probes revealed that the existing ceiling is a particleboard covered in plaster. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. In most locations throughout the house, this ceiling assembly is cracking along the joints between panels of particleboard substrate. The particleboard is secured directly to the floor framing above. In some locations wood lathing or shims remain from what was assumed to be an original plaster ceiling. It is assumed this particleboard ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins.



Figure 2B-035: Central Hall Room 201; Existing plaster skim coat on particleboard ceiling. (Photo: BBB, 2012)

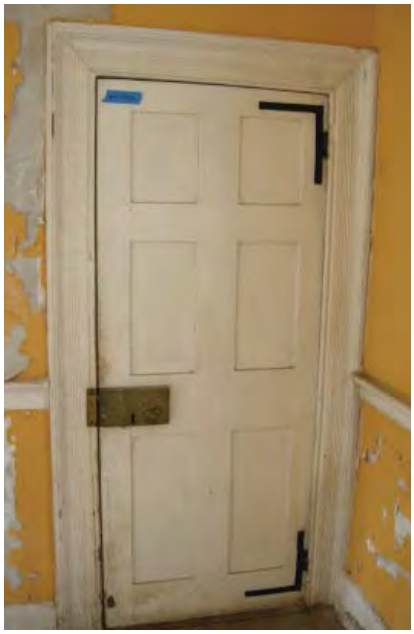
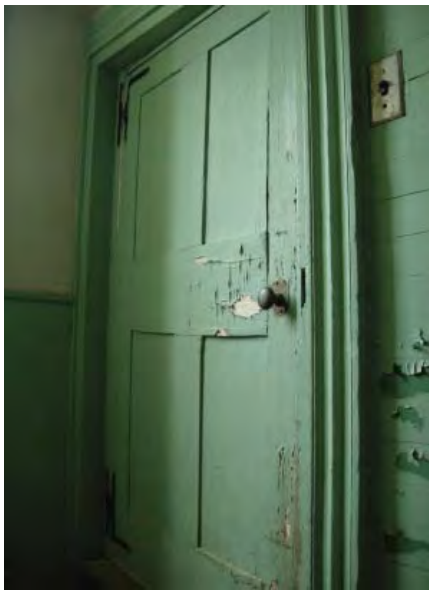
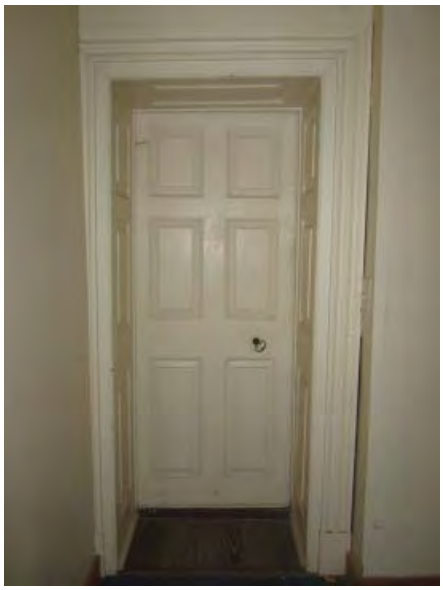
Fireplaces:

Four historic fireplaces are located in the Main Block of the house. Three of these in the character defining spaces are detailed with paneled chimney breasts in the Georgian Colonial architectural style. These fireplaces are located in Room 102 - Living Room/ Parlor, Room - Dining Room, and Room 202 - North Bedroom. The fourth fireplace in located in Room 203 - South Bedroom. The 1924 drawing documentation by Albert P. Erb indicated that the South Bedroom was at one point divided into two bed chambers with a split chimney. Though this has not been verified by other historical documents or field investigations, the fireplace in the South Bedroom is smaller than the others throughout the house.

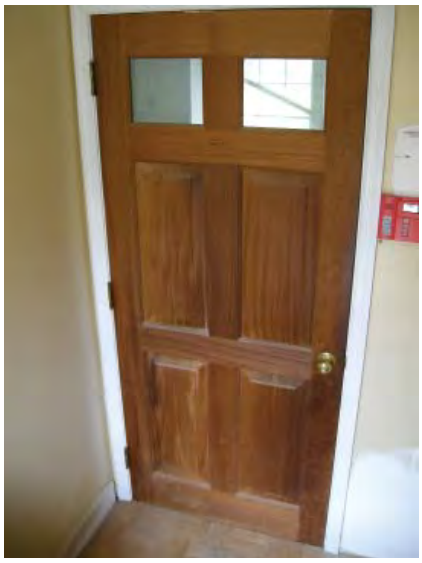
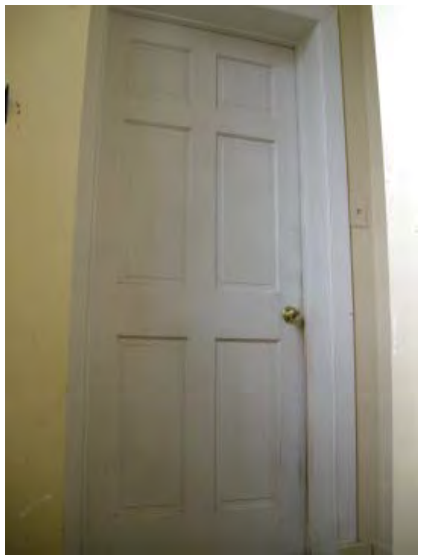
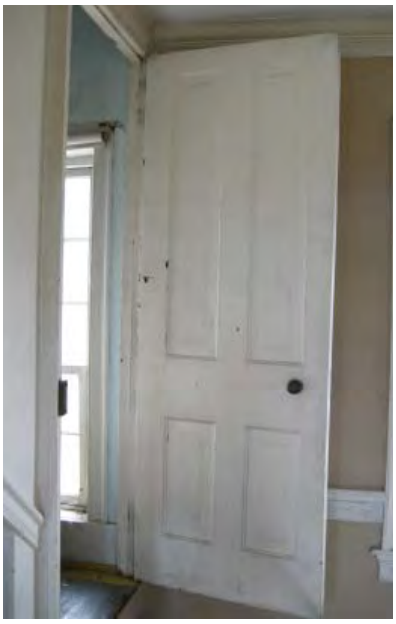
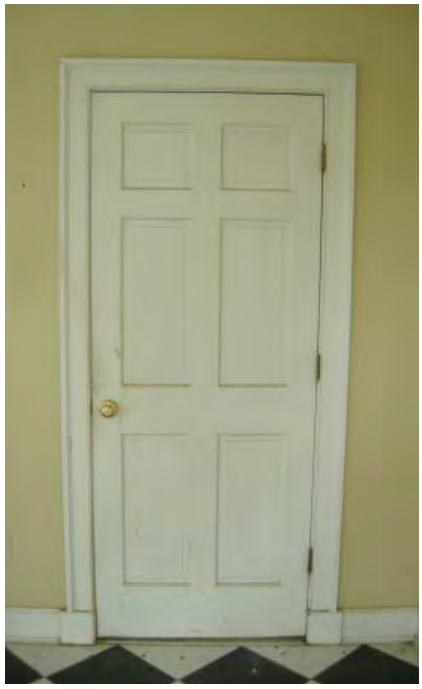
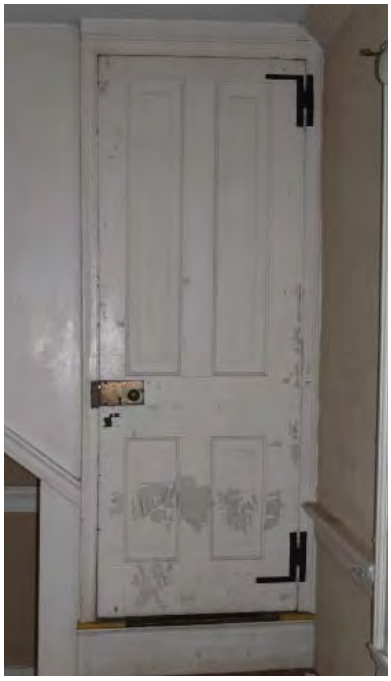
Fireplace Type Inventory

Fireplace Type 1	**Fireplace Type 2**
Room 102 - Living Room/ Parlor	Room 103 - Dining Room
	
Fireplace Type 3	**Fireplace Type 4**
Room 202 - North Bedroom	Room 203 - South Bedroom
	

Interior Door Type Inventory

Door Type INT-1	Door Type INT-2	Door Type INT-3
Door 101C - North Elevation	Door 102 - North Elevation	Door 104 - North Elevation
	(Doors 102 and 103)	
		
Door 101C - South Elevation	Door 102 - South Elevation	Door 104 - South Elevation
		

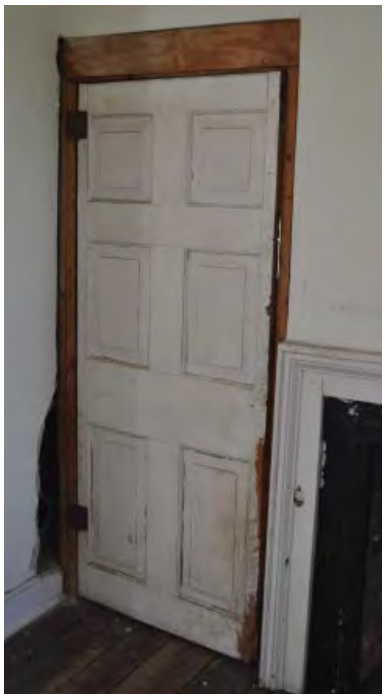
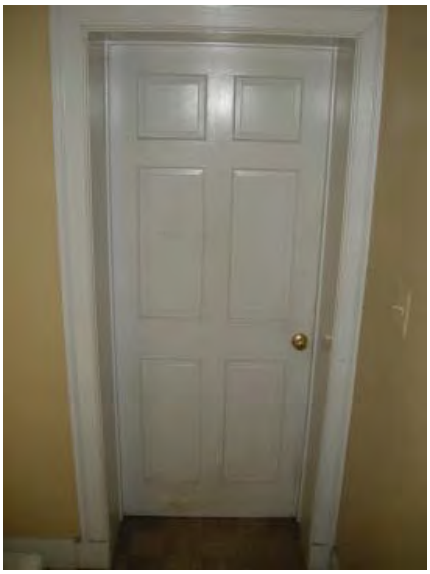
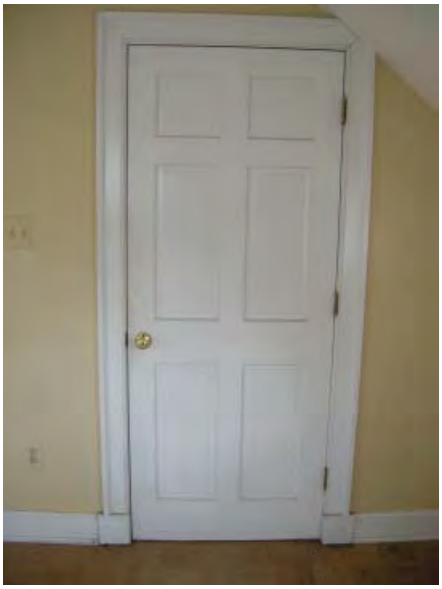
Interior Door Type Inventory (continued)

Door Type INT-4	Door Type INT-5	Door Type INT-6
Door 105 - East Elevation	Door 107 - North Elevation	Door 201A - North Elevation
	(Door 107, 108)	
		
Door 105 - West Elevation	Door 107 - South Elevation	Door 201A - South Elevation
		

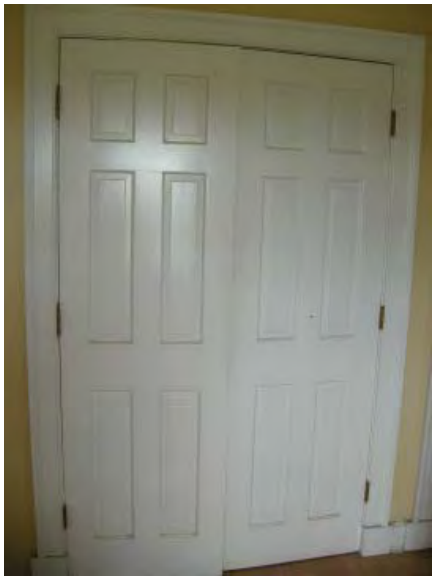
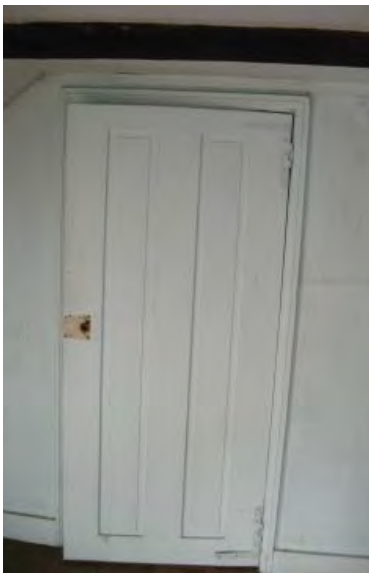
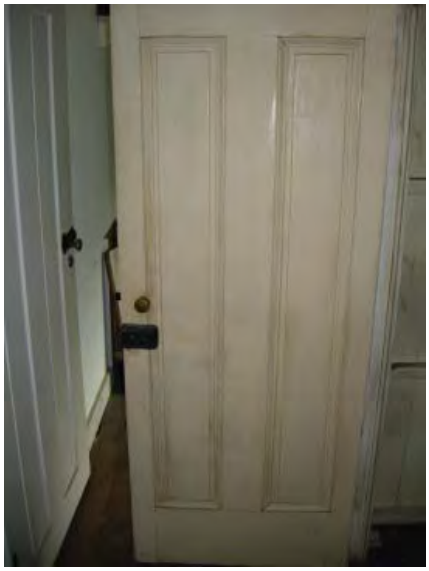
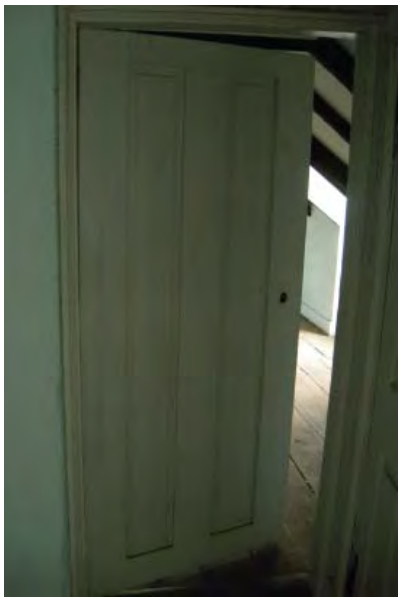
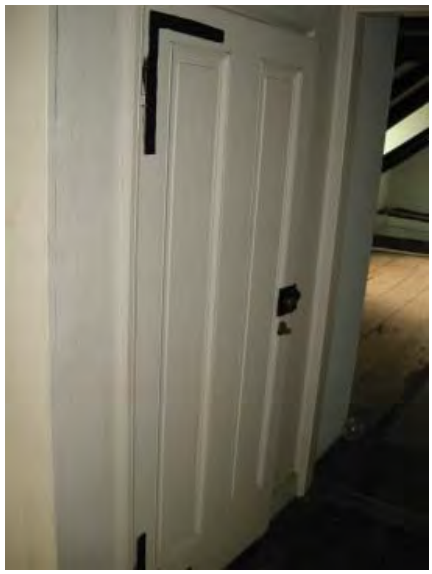
Interior Door Type Inventory (continued)

Door Type INT-7	Door Type INT-8	Door Type INT-9
Door 201B - East Elevation	Door 202 - North Elevation	Door 202A - North Elevation
	(Doors 202, 203A)	(Doors 202A, 202B, 302)
		
Door 201B - West Elevation	Door 202 - South Elevation	Door 202A - South Elevation
		

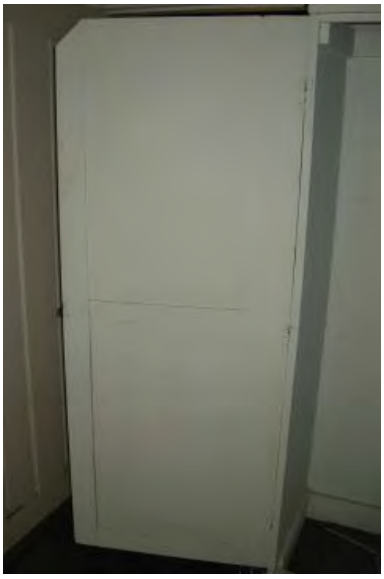
Interior Door Type Inventory (continued)

Door Type INT-10	Door Type INT-11	Door Type INT-12
Door 203 - North Elevation	Door 204 - North Elevation	Door 206 - North Elevation
(Doors 203, 203B)		(Doors 204A, 206, 207, 209)
		
Door 203 - South Elevation	Door 204 - South Elevation	Door 206 - South Elevation
		

Interior Door Type Inventory (continued)

Door Type INT-13	Door Type INT-14	Door Type INT-15
Door 210 - West Elevation	Door 303 - North Elevation	Door 305 - East Elevation
(Doors 208, 210)	(Doors 303, 304, 306, 307)	
		
	Door 303 - South Elevation	Door 305 - West Elevation
		

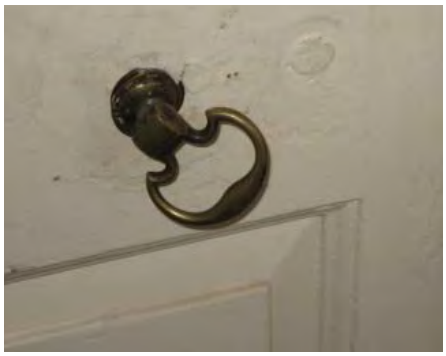
Interior Door Type Inventory (continued)

Door Type INT-16	Door Type INT-17	Door Type INT-18
Door 013B - North Elevation (Doors 001, 003A, 003B, 004A, 004B, 006, 007, 008, 009, 011, 012, 013A, 013B)	Door 005 - East Elevation	Door 308 - North Elevation
		
Door 013B - South Elevation	Door 005 - West Elevation	Door 308 - South Elevation
		

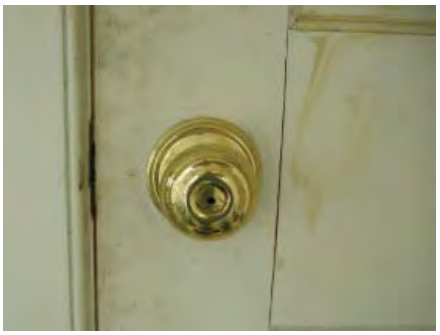
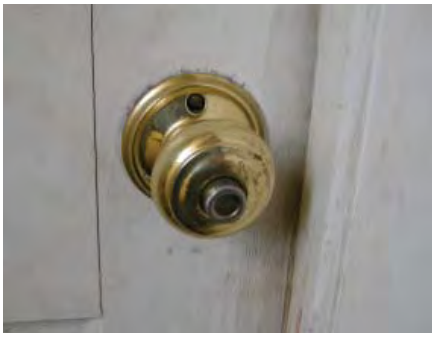
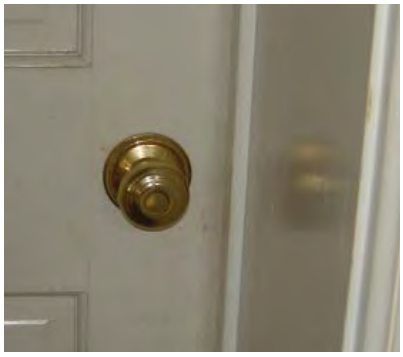
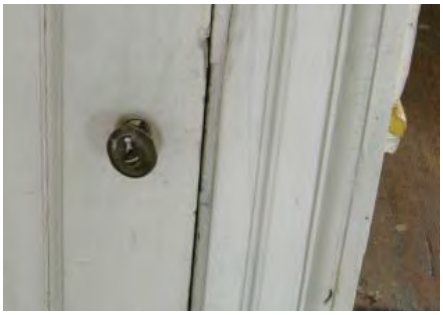
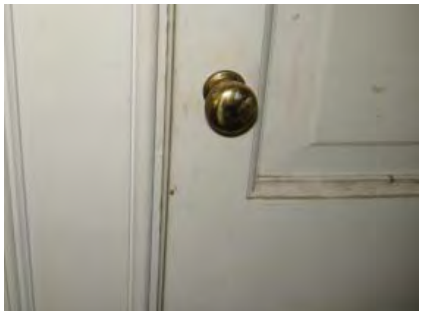
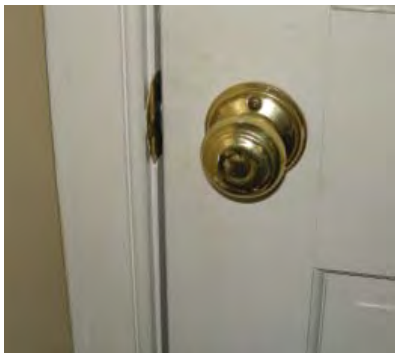
Interior Door Hardware:

The door hardware is not consistent from door to door. The following photos represent the range of door hardware that was documented. Further investigation of the hardware outside of this report will be required to be more conclusive about the exact date of manufacture.

Interior Door Hardware Type Inventory

Door Hardware Set Type INT-1	Door Hardware Set Type INT-2	Door Hardware Type INT-3
Door 102 Hardware	Door 202A Hardware	Door 203A Hardware
(Door 102, 103, 104, 202, 203)		
		
		

Interior Door Hardware Type Inventory (continued)

Door Hardware Set Type INT-4	Door Hardware Set Type INT-5	Door Hardware Type INT-6
Door 105 Hardware	Door 106B Hardware	Door 107 Hardware
	(Doors 106B, 106C, 106D, 106E)	(Doors 107, 108, 206, 209)
		
		
Door Hardware Set Type INT-7	**Door Hardware Set Type INT-8**	**Door Hardware Type INT-9**
Door 207 Hardware	Door 201B Hardware	Door 204A Hardware
		
		

Interior Door Hardware Type Inventory (continued)

Door Hardware Set Type INT-10	Door Hardware Set Type INT-11	Door Hardware Type INT-12
Door 007 Hardware	Door 004A Hardware	Door 001 Hardware
	(Doors 001, 003A, 003B, 004A, 004B, 007, 008, 009, 013B)	
		

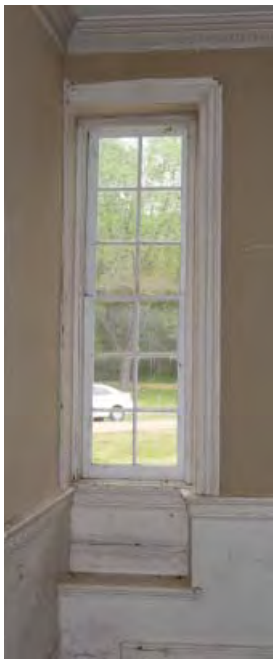
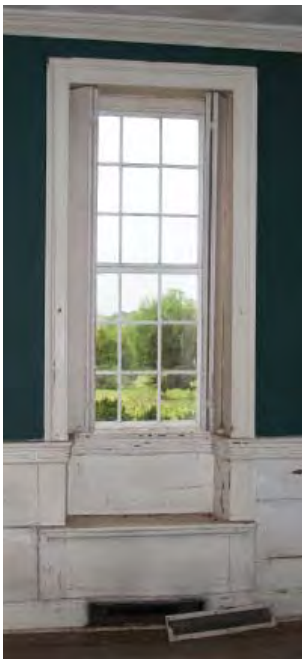
Door Hardware Set Type INT-13	Door Hardware Set Type INT-14
Door 005 Hardware	Door 005 Hardware
	

Interior Windows:

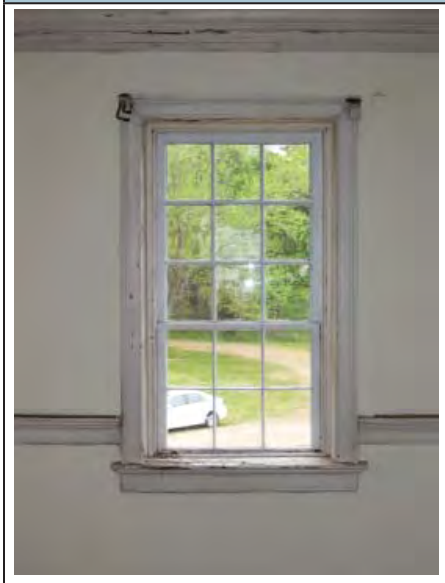
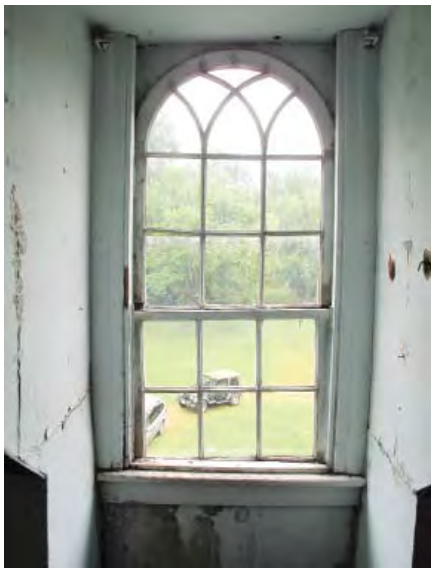
The symmetrical plan of the Main Block consists of a central entrance flanked by painted double-hung wood windows with multiple lites. Below the molded brick water table along the east and west façades there is a series of six awning windows at the basement level. These twelve basement awning windows have two lites. Each window opening is supported by flat jack arches above each window to support the masonry opening. The seven bay rectangular plan establishes a symmetrical layout of first and second floor windows. The third and fifth bays at the first and second floors contain more narrow windows than the ones in the other bays. The first floor double hung wood window constructed in a 9 over 9 lite pattern and a 6 over 6 light pattern. These first floor windows in the Central Hall 101, Parlor/ Dining Room 102 and the Dining room 103 are detailed with a wood paneled interior shutter and window sill at 20 inches above finish floor. The second floor double hung wood windows constructed in a 9 over 6 and 6 over 4 configuration. During window repairs completed in 1996, the National Park Service field observations noted that the window sashes in these historic windows were likely replaced in the 1930s by Charles Collins (Period IV: 1929-1940) but there was evidence that portions of the existing window frames are original to the house (Period II: 1769-1849).

The brick pediment with the oval window and the foliated dormer windows at the third floor are consistent with the late Georgian Period and are speculated to have been added at a later date. The third floor dormer windows have a 9/6 lite configuration. There are also 4 lite casement windows flanking the north and south chimneys of the Main Block in the third floor bedrooms. The double hung wood windows in the central South Addition and the South Addition are modern windows with insulated glazing in 6 over 6 lite pattern.

Interior Window Type Inventory

Window Type 1	Window Type 2	Window Type 3A/ 3B (similar)
Window 001, 002, 003, 004, 005, 006, 011,012, 013, 014, 015, 016	Window 103, 104, 115, 116	Window 3A: 101, 102, 117, 118 Window 3B: 105, 106, 113, 114
		

Interior Window Type Inventory (continued)

Window Type 4	Window Type 5	Window Type 6
Window 201, 202, 204, 206, 207, 215, 216, 218, 220, 221	Window 203, 205, 217, 219	Window 301, 303
		

Window Type 7	Window Type 8	Window Type 9
Window 302	Window 304, 305, 306, 307	Window 007, 008, 009, 010
 		

Interior Window Type Inventory (continued)

Window Type 10	**Window Type 11**	**Window Type 12**
Window 107, 108	Window 112	Window 208, 213, 214
		
Window Type 13	**Window Type 14**	**Window Type 15**
Window 109, 110, 111	Window 209, 211, 212	Window 210
		

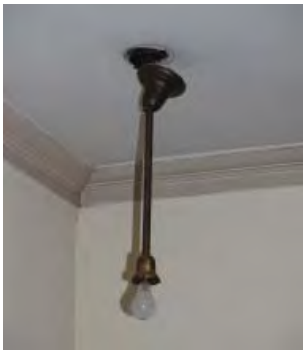
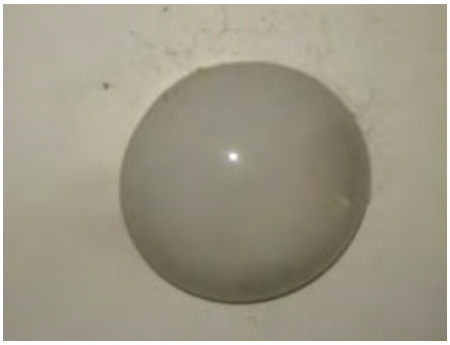
Interior Light Fixtures:

The light fixtures throughout the basement, first, second and third floors are either surface or stem mounted incandescent fixtures. Not all rooms have been equipped with electrical lighting and the fixture styles vary greatly. Historical documentation and archival research has indicated that electricity was first introduced to Harmony Hall by Charles Collins during Period IV (1929-1940). Select fixtures from this period remain in the Main Block of the home, while new fixtures have been installed throughout the Central South Addition and the South Addition during the 1980s renovations by the Battersea Company.

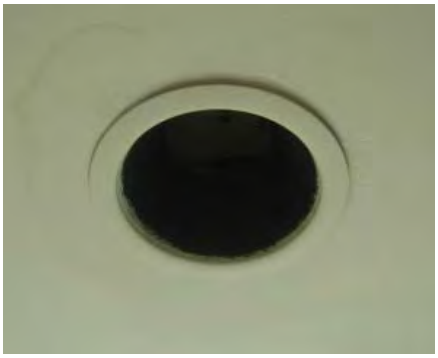
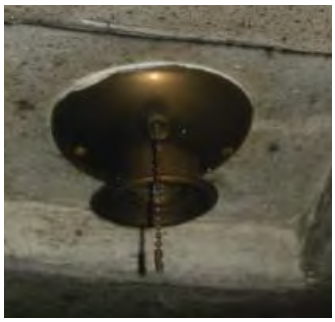
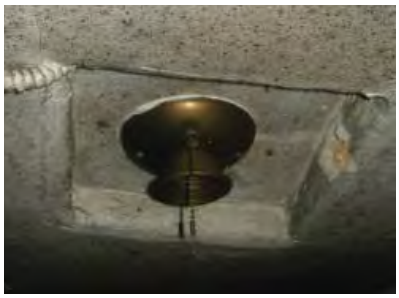
Interior Light Fixture Type Inventory

Light Fixture Type INT-1	**Light Fixture Type INT-2**	**Light Fixture Type INT-3**
Room 101	Room 103	Room 104
		
Light Fixture Type INT-4	**Light Fixture Type INT-5**	**Light Fixture Type INT-6**
Room 105	Room 106	Room 107
		

Interior Light Fixture Type Inventory (continued)

Light Fixture Type INT-7	Light Fixture Type INT-8	Light Fixture Type INT-9
Room 108	Room 201	Room 202
		
Light Fixture Type INT-10	**Light Fixture Type INT-11**	**Light Fixture Type INT-12**
Room 202A	Room 202B	Room 203
		
Light Fixture Type INT-13	**Light Fixture Type INT-14**	**Light Fixture Type INT-15**
Room 203A	Room 205	Room 206
		

Interior Light Fixture Type Inventory (continued)

Light Fixture Type INT-16	Light Fixture Type INT-17	Light Fixture Type INT-18
Room 207, 211	Room 209	Room 209, 211
		
Light Fixture Type INT-19	**Light Fixture Type INT-20**	**Light Fixture Type INT-21**
Room 302, 305	Room 304	Room 002
		
Light Fixture Type INT-22	**Light Fixture Type INT-23**	**Light Fixture Type INT-24**
Room 005	Room 006	Room 008
		

Interior Light Fixture Type Inventory (continued)

Light Fixture Type INT-25	Light Fixture Type INT-26	Light Fixture Type INT-27
Room 011	Room 010	Room 013
		

Light Fixture Type INT-28
Room 014, 015


BASEMENT

The basement of Harmony Hall is located below the Main Block and the Central South Addition. The South Addition was constructed with a slab-on-grade and has no basement. The finished floor of the basement is approximately 50 inches below grade. The northern half of the basement below the Main Block has an elevated concrete floor slab 7" higher than the remainder of the floor. It is assumed this floor level was modified to accommodate the installation of a restroom and all the associated piping during Period IV.

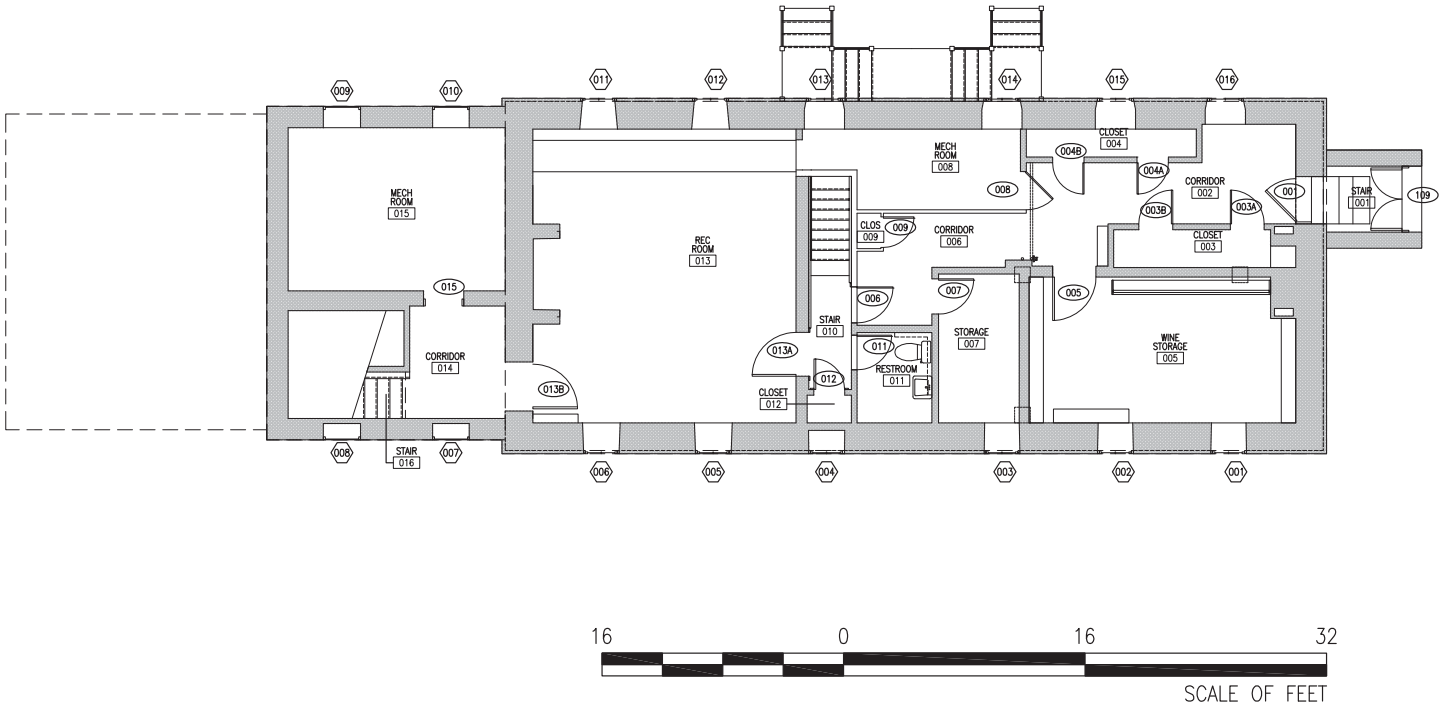
Based upon historical research it is assumed that the basement below the Main Block of the house is original to the house. The exterior walls are constructed of solid brick masonry approximately 24 inches thick. At the basement level of the Main Block there are a total of twelve (12) awning windows approximately 18 inches by 28 inches. Six of these windows are located along the east façade and the others are located along the west façade. The layout of the basement below the Main Block has been modified and the entrances into the basement have also been changed to correspond with the layout revisions. The northern portion of the basement below the Main Block has been used primarily for storage since the 1930s and has also been equipped with a secured wine storage room. The southern half of the basement below Room 103 – Dining Room in the Main Block was finished in wood paneling during the Period IV restoration by Charles Wallace Collins. The 1934 HABS documentation indicated that this wood paneling was relocated from an old church in Piscataway.

The basement located below the Central South Addition was first constructed as a crawl space below the Pantry Addition constructed during Period IV. The footprint of this Pantry Addition was smaller than the Central South Addition that exists today, but it was determined during on-site survey that the west wall of this first Pantry Addition remained when this addition was enlarged in 1941 (Period V). The original basement east foundation wall remains, but has been underpinned with concrete and concrete block. This wall currently divides Room 014 – Corridor and Room 015 – Mechanical Room. The basement crawl space below the 1930s Pantry Addition had a total of four (4) basement windows similar to those seen in the Main Block. The two (2) masonry window openings located in the west wall of this basement crawl space still remain along the west wall of Room 015 – Mechanical Room. The two basement masonry window openings located in the east wall of this basement crawl space below the Pantry Addition have been removed. One of the original brick jack arches above one of the east windows can be seen above the passage between Room 014 – Corridor and Room 015 – Mechanical Room. When the Pantry Addition was expanded in 1941 (Period V), the exterior east wall was relocated to align with the southeast corner of the Main Block. Charles Collins installed a General Electric heating system c. 1941 and expanded this portion of the basement to accommodate this equipment and provide an enclosed entry into the basement. In order to provide space for this mechanical equipment the basement below Room 104 – Kitchen was excavated to provide a full height mechanical room and the basement foundation walls were underpinned. This concrete underpinning can be seen in Room 015 – Mechanical Room. This east basement foundation wall has two (2) masonry window opening similar in size to the basement windows of the Main Block, but these window openings have been in-filled with painted plywood and are concealed from view from the interior of Room 014 – Corridor.

BASEMENT INVENTORY

The following matrices and room inventories catalog each space within the basement and describe all features including the floor, walls, ceiling, doors, windows, and other architectural elements and details. In addition to the architectural details and finishes, any light fixtures and equipment are also described. Each matrix establishes an estimated date of construction for each feature and provides the research or source documentation utilized to make this determination. To accompany each room inventory a floor plan of the space has been provided with selected photographs of the space to document all significant features.

BASEMENT FLOOR PLAN



ROOM 001 - STAIR

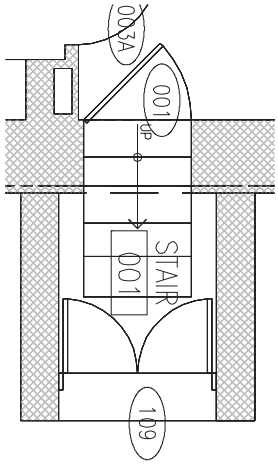


Figure 2B-036: Room 001-Stair Floor Plan



Figure 2B-037: Room 001-Stair (Photo: BBB, 2012)



Figure 2B-038: Room 001-Stair (Photo: BBB, 2012)

Figure2B-039: Room 001 - Stair - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular entry vestibule measuring 4'-4 1/2" in the east-west direction and 5'-0" in the north-south direction. The exterior footprint of this entrance addition measures 6'-6" in the east-west direction and 6'-3 3/4" in the north-south direction.	c. 1990s	6	Documentation of existing conditions in the drawings by Siegfried Ising, AIA in June 1987 for *Additions and Restoration to Harmony Hall* indicate only a hatch at grade level for this basement entry as seen in the prior 1934 HABS drawings. Therefore it was concluded that the existing brick enclosure to the basement entry was constructed after 1987.	(None)	NC (Compatible)

Figure2B-039 (continued): Room 001 - Stair - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
2	**Ceiling**	Wood planks	c.1988	6	This full above grade brick enclosure with gable roof and wood double doors is seen in the later HABS photographs taken after 1988.	The renovation drawings completed by Siegfried Ising in June 1987 only indicate the on-grade hatch door at this location, not the full gable roof brick enclosure that was documented during the survey for this report.	NC (Compatible)
3	**North Wall**	Exterior brick bearing wall.	c.1988	6	This full above grade brick enclosure with gable roof and wood double doors is seen in the later HABS photographs taken after 1988.	The renovation drawings completed by Siegfried Ising in June 1987 only indicate the on-grade hatch door at this location, not the full gable roof brick enclosure that was documented during the survey for this report.	NC (Compatible)
4	**East Wall**	Exterior brick bearing wall with wood double doors	c.1988	6	This full above grade brick enclosure with gable roof and wood double doors is seen in the later HABS photographs taken after 1988.	The renovation drawings completed by Siegfried Ising in June 1987 only indicate the on-grade hatch door at this location, not the full gable roof brick enclosure that was documented during the survey for this report.	NC (Compatible)
5	**South Wall**	Exterior brick bearing wall of Main Block	c.1769	2	Research and on-site investigations that led to the interpretation that the house was constructed c.1769. It is assumed this exterior brick masonry bearing wall was part of the original construction.	(None)	C
6	**West Wall**	Exterior brick bearing wall.	c.1988	6	This full above grade brick enclosure with gable roof and wood double doors is seen in the later HABS photographs taken after 1988.	The renovation drawings completed by Siegfried Ising in June 1987 only indicate the on-grade hatch door at this location, not the full gable roof brick enclosure that was documented during the survey for this report.	NC (Compatible)

Figure2B-039 (continued): Room 001 - Stair - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
7	**Concrete Steps**	Concrete steps from grade down to basement level; 5 risers	c. 1929	4	An entry into the basement at the northwest corner is indicated in the 1934 HABS documentation that did not previously exist dating its installation to Period IV. The concrete stairs are an early addition to the house, but the above grade enclosure and entry steps are a 20th century addition.	(None)	NC (Compatible)
8	**Door 001**	Wood batten style door measuring 2'-10" wide by 6'-0" tall. Door Type INT-16 Door Hardware Type INT-12	c. 1929	4	Research and on-site investigations that led to the interpretation that the interior door was constructed at this basement entry c. 1929.	(None)	NC (Compatible)
9	**Door 109**	Wood batten style door measuring 1'-11 3/4"" wide by 5'-5 1/4" tall. Door Type: EXT-3	c.1990	6	This full above grade brick enclosure with gable roof and wood double doors is seen in the later HABS photographs taken after 1988.	The renovation drawings completed by Siegfried Ising in June 1987 only indicate the on-grade hatch door at this location, not the full gable roof brick enclosure that was documented during the survey for this report. No hardware present on the exterior of the door.	NC (Compatible)

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ROOM 002 - CORRIDOR
(INCLUDING ROOM 003 - CLOSET 003 & ROOM 004 - CLOSET)

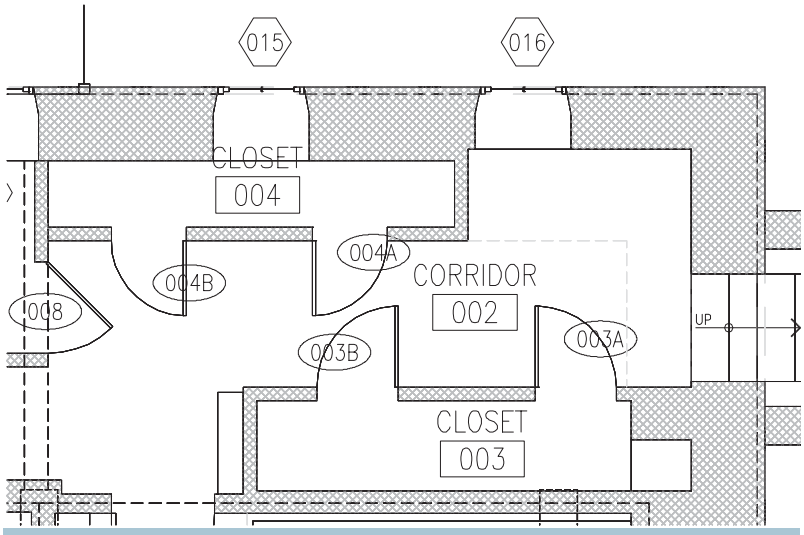


Figure 2B-040: Room 002-Corridor. Room 003-Closet & Room 004-Closet Floor Plan



Figure 2B-041: Room 002-Corridor. Room 003-Closet & Room 004-Closet (Photo: BBB, 2012)



Figure 2B-042: Room 002-Corridor. Room 003-Closet & Room 004-Closet (Photo: BBB, 2012)

Figure2B-043: Room 002 - Corridor, Room 003 - Closet, & Room 004 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular corridor at the northwest corner of the basement measuring 17'-10 1/4" in the north-south direction and 9'-7" in the east-west direction. Closet 003 and Closet 004 were built in the northeast corner and southwest corner respectively.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929. However, Room 003-Closet, Room 004-Closet were later additions, most likely constructed by Collins c. 1941.	(None)	NC (Incompatible)
2	**Flooring**	Concrete slab-on-grade	c.1941	5	Research and on-site investigations led to the interpretation that this space was constructed c. 1929. However, the floor slab is elevated in this portion of the basement, presumably due to the plumbing in Room 011-Restroom. This elevated floor slab was likely constructed by Collins c. 1941 when the restroom was relocated from the west side of the basement underneath the stair to its current location.	(None)	NC (Incompatible)
3	**Ceiling**	Wood fiber insulating board adhered directly to the wood first floor framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c.1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions and ceilings throughout Harmony Hall.	(None)	NC (Incompatible)
4	**North Wall**	Exterior brick bearing wall of Main Block.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this exterior brick masonry bearing wall was part of the original construction.	(None)	C

Figure2B-043 (continued): Room 002 - Corridor, Room 003 - Closet, & Room 004 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
5	**East Wall**	The east wall (behind Room 003-Closet) creates part of the enclosure around Room 005-Wine Storage. This wall is constructed of terra cotta block infill between two brick piers, from the floor slab to the underside of the wood floor framing above. The terra cotta block has been skim coated with a cementitious coating.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this terra block infill wall between the exterior brick masonry wall and the interior brick pier was constructed c. 1929.	(None)	NC (Incompatible)
6	**South Wall**	The south wall creates part of the enclosure around Mechanical Room 008. The wall is constructed of wood fiber insulating board installed on wood stud framing.	c.1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	(None)	NC (Incompatible)
7	**West Wall**	The west wall surrounding Windows 015 and 016 (beyond Room 004-Closet) is the original exposed brick masonry bearing wall below grade. Windows 015 and 016 are Window Type: 1	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this exterior brick masonry bearing wall (beyond Room 004-Closet) was part of the original construction.	(None)	NC (Incompatible)
8	**Closet 003**	Rectangular closet with two wood doors at the northeast corner of Corridor 002, measuring 12'-5 1/4" in the north-south direction and 2'-11 3/4" in the east-west direction. The wood base of the closet is built up approximately 4" above the finished concrete floor of the basement.	c.1941	5	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c.1929. However, Room 003-Closet, Room 004-Closet were later additions, most likely constructed by Collins c. 1941. The walls are constructed of wood fiber insulating board installed on wood stud framing. The wood fiber insulated board was determined to be a product manufactured in the 1930s.	The HABS documentation fro 1934 includes a basement floor plan which does not include Closet 003 or 004 within Corridor 002.	NC (Incompatible)

Figure2B-043 (continued): Room 002 - Corridor, Room 003 - Closet, & Room 004 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
9	**Closet 004**	Rectangular closet with two wood doors at the southwest corner of Corridor 002, measuring 11'-7 3/4" in the north-south direction and 2'-6 1/2" in the east-west direction. The wood base of the closet is built up approximately 4" above the finished concrete floor of the basement.	c.1941	5	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929. However, Room 003-Closet, Room 004-Closet were later additions, most likely constructed by Collins c. 1941. The walls are constructed of wood fiber insulating board installed on wood stud framing. The wood fiber insulated board was determined to be a product manufactured in the 1930s.	The HABS documentation fro 1934 includes a basement floor plan which does not include Closet 003 or 004 within Corridor 002. The later draiwngs for Additions and Renovations to Harmony Hall by architect Siegfried Ising, AIA indicates an existing condition for Closet 004. These documents do not include Closet 003.	NC (Incompatible)
10	**Door 003A**	Wood board and batten style door measuring 2'-3" wide by 5'-10 1/4" tall. Door threshold at approximately 4" above the basement concrete-slab-on-grade finished floor. Door Type INT-16 Door Hardware Type INT-10 & INT-11	c.1941	5	Research and on-site investigations led to the interpretation that this space was constructed c. 1929. However, Room 003-Closet, Room 004-Closet were later additions, most likely constructed by Collins c. 1941	The HABS documentation from 1934 includes a basement floor plan which does not include Closet 003 or 004 within Corridor 002.	NC (Incompatible)
11	**Door 003B**	Wood board and batten style door measuring 2'-3" wide by 5'-10 1/4" tall. Door threshold at approximately 4" above the basement concrete-slab-on-grade finished floor. Door Type INT-16 Door Hardware Type INT-10 & INT-11	c.1941	5	Research and on-site investigations led to the interpretation that this space was constructed c. 1929. However, Room 003-Closet, Room 004-Closet were later additions, most likely constructed by Collins c. 1941	The HABS documentation from 1934 includes a basement floor plan which does not include Closet 003 or 004 within Corridor 002.	NC (Incompatible)
12	**Light Fixture**	Surface mounted incandescent light fixture with exposed lamp and conduit. Light Fixture Type: INT-21	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity and plumbing into Harmony Hall c. 1929.	(None.)	NC (Incompatible)

Figure2B-043 (continued): Room 002 - Corridor, Room 003 - Closet, & Room 004 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
12	**Door 004A**	Wood board and batten style door measuring 2'-1" wide by 5'-8" tall. Door threshold at approximately 4" above the basement concrete-slab-on-grade finished floor. Door Type INT-16 Door Hardware Type INT-10 & INT-11	c.1941	5	Research and on-site investigations led to the interpretation that this space was constructed c. 1929. However, Room 003-Closet, Room 004-Closet were later additions, most likely constructed by Collins c. 1941	The HABS documentation from 1934 includes a basement floor plan which does not include Closet 003 or 004 within Corridor 002. The later drawings for Additions and Renovations to Harmony Hall by architect Siegfried Ising, AIA indicates an existing condition for Closet 004. These documents do not include Closet 003.	NC (Incompatible)
13	**Door 004B**	Wood board and batten style door measuring 2'-1" wide by 5'-8" tall. Door threshold at approximately 4" above the basement concrete-slab-on-grade finished floor. Door Type INT-16 Door Hardware Type INT-10 & INT-11	c.1941	5	Research and on-site investigations led to the interpretation that this space was constructed c. 1929. However, Room 003-Closet, Room 004-Closet were later additions, most likely constructed by Collins c. 1941	The HABS documentation from 1934 includes a basement floor plan which does not include Closet 003 or 004 within Corridor 002. The later drawings for Additions and Renovations to Harmony Hall by architect Siegfried Ising, AIA indicates an existing condition for Closet 004. These documents do not include Closet 003.	NC (Incompatible)

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ROOM 005 - WINE STORAGE

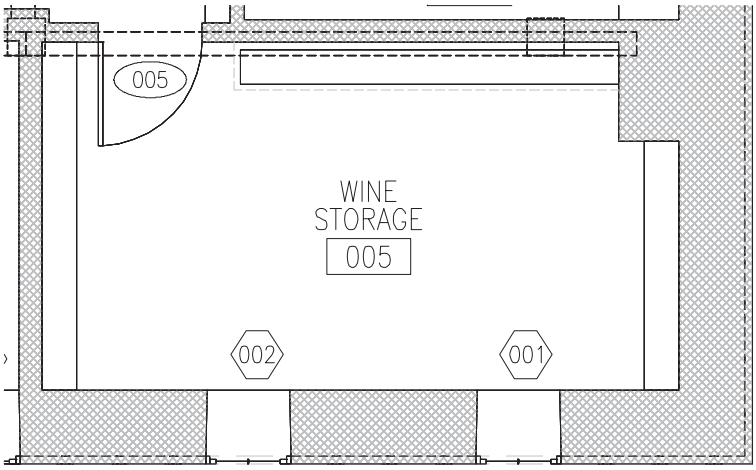


Figure 2B-044: Room 005-Wine Storage Floor Plan



Figure 2B-046: Room 005-Wine Storage;
(Photo: BBB, 2012)



Figure 2B-045: Room 005-Wine Storage
(Photo: BBB, 2012)



Figure 2B-047: Room 005-Wine Storage
(Photo: BBB, 2012)

Figure2B-048: Room 005 - Wine - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular storage space at the northeast corner of the basement measuring 17'-8" in the north-south direction and 9'-8" in the east-west direction.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929.	The HABS documentation from 1934 includes a basement plan which depicts a storage room in this location.	NC (Incompatible)
2	**Flooring**	Concrete slab-on-grade	c. 1941	5	Research and on-site investigations led to the interpretation that this space was constructed c. 1929. However, the floor slab is elevated in this portion of the basement, presumably due to the plumbing in Room 011-Restroom. This elevated floor slab was likely constructed by Collins c. 1941 when the restroom was relocated from the west side of the basement underneath the stair to its current location.	(None)	NC (Incompatible)
3	**Ceiling**	Wood fiber insulating board adhered directly to the wood first floor framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions and ceilings throughout Harmony Hall.	(None)	NC (Incompatible)
4	**North Wall**	The north wall is exposed brick masonry below grade.	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this exterior brick masonry bearing wall was part of the original construction.	(None)	C
5	**East Wall**	The east wall is exposed brick masonry below grade. Basement windows 001 and 002 are located along the east wall. Windows 001 and 002 are Window Type: 1	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this exterior brick masonry bearing wall was part of the original construction.	(None)	NC (Incompatible)

Figure2B-048 (continued): Room 005 - Wine - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
6	**South Wall**	Terra cotta block infill between the east exterior wall and a brick pier. The top portion of this terra cotta block infill is topped with a few courses of brick to meet the bottom edge of the wood beam above. The terra cotta block has been painted white.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this terra block infill wall between the exterior brick masonry wall and the interior brick pier was constructed c. 1929.	(None)	NC (Incompatible)
7	**West Wall**	The west wall is constructed of terra cotta block infill between two brick piers, from the floor slab to the underside of the wood floor framing above. The terra cotta block has been painted white.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this terra block infill wall between the exterior brick masonry wall and the interior brick pier was constructed c. 1929.	(None)	NC (Incompatible)
8	**Door 005**	Wood board and batten door with steel straps measuring 2'-10 1/2" wide by 6'-0" tall. Door Type INT-17 Door Hardware Type INT-13 & INT-14	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this door was installed c. 1929. by Charles Collins	(None)	NC (Incompatible)
9	**Light Fixture**	Surface mounted incandescent light fixture with exposed lamp and conduit. Light Fixture Type: INT-22	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity and plumbing into Harmony Hall c. 1929.	(None)	NC (Incompatible)

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ROOM 006 - CORRIDOR (INCLUDING ROOM 009 - CLOSET)

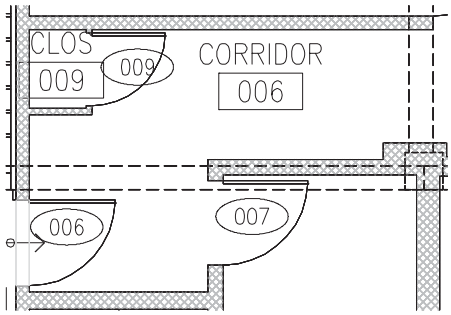


Figure 2B-049: Room 006-Corridor and Room 009-Closet Floor Plan



Figure 2B-050: Room 006-Corridor, Existing spigot, (Photo: BBB, 2012)



Figure 2B-051: Room 006-Corridor and Room 009-Closet (Photo: BBB, 2012)



Figure 2B-052: Room 006-Corridor and Room 009-Closet (Photo: BBB, 2012)



Figure 2B-053: Room 006-Corridor and Room 009-Closet (Photo: BBB, 2012)

Figure2B-054: Room 006 - Corridor and Room 009 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	The corridor is an L-shaped space at the center of the basement measuring 11'-2 1/2" in the north-south direction and 7'-3 3/8" in the east-west direction. Closet 009 was built in the southwest corner.	c. 1929	4	Research and on-site investigations led to the interpretation that this space was constructed c. 1929. However, the floor slab is elevated in this portion of the basement, presumably due to the plumbing in Room 011-Restroom. This elevated floor slab was likely constructed by Collins c. 1941.	(None)	NC (Incompatible)
2	**Flooring**	Concrete slab-on-grade	c. 1941	5	Research and on-site investigations led to the interpretation that this space was constructed c. 1929. However, the floor slab is elevated in this portion of the basement, presumably due to the plumbing in Room 011-Restroom. This elevated floor slab was likely constructed by Collins c. 1941 when the restroom was relocated from the west side of the basement underneath the stair to its current location.	(None)	NC (Incompatible)
3	**Ceiling**	Wood fiber insulating board adhered directly to the wood first floor framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall.	(None)	NC (Incompatible)
4	**North Wall**	Wood fiber insulating board installed on wood stud framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	(None)	NC (Incompatible)

Figure2B-054 (continued): Room 006 - Corridor and Room 009 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
5	**East Wall**	Wood fiber insulating board installed on wood stud framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	(None)	NC (Incompatible)
6	**South Wall**	Wood fiber insulating board installed on wood stud framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	(None)	NC (Incompatible)
7	**West Wall**	Wood fiber insulating board installed on wood stud framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	(None)	NC (Incompatible)
8	**Closet 009**	Wood fiber insulating board installed on wood stud framing is used to enclose Closet 004. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1941	5	This closet is not shown in the 1934 HABS documentation. This closet was likely added when the floor slab in the north portion of the basement was elevated in 1941.	Corrugated insulation within closet (above ceiling) tested positive for asbestos. See Appendix A: *Limited Hazardous Materials Survey Report* contained within this HSR.	NC (Incompatible)

Figure2B-054 (continued): Room 006 - Corridor and Room 009 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
9	**Door 009**	Wood board and batten style door measuring 2'-0 1/2" wide by 6'-0 1/2" tall. The wood base of the closet is built up approximately 3 1/2" above the finished concrete floor of the basement. Door Type: INT-16 Door Hardware Type: INT-10	c. 1941	5	This closet is not shown in the 1934 HABS documentation. This closet was likely added when the floor slab in the north portion of the basement was elevated in 1941.	(None)	NC (Incompatible)
10	**Light Fixture**	Exposed recessed light junction box and wiring. Fixture Type INT-23	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity into Harmony Hall c. 1929.	(None)	NC (Incompatible)
11	**Plumbing Fixture - Spigot**	Exposed interior spigot in Room 006-Corridor	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced plumbing into Harmony Hall c. 1929.	(None)	NC (Incompatible)

ROOM 007 - STORAGE

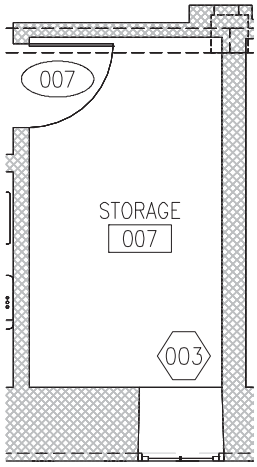


Figure 2B-055: Room 007-Storage Floor Plan



Figure 2B-056: Room 007-Storage (Photo: BBB, 2012)



Figure 2B-057: Room 007-Storage (Photo: BBB, 2012)



Figure 2B-058: Room 007-Storage (Photo: BBB, 2012)



Figure 2B-059: Room 007-Storage (Photo: BBB, 2012)

Figure2B-060: Room 007 - Storage - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular storage room measuring 5'-4 1/2" in the north-south direction and 9'-8" in the east-west direction.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. This closet was shown in the 1934 drawings, but in a larger configuration. The floor slab is elevated in this portion of the basement, presumably due to the plumbing in Room 011-Restroom. This closet was likely re-configured c. 1941 when the restroom was relocated.	The room configuration was slightly different in the 1934 HABS documentation.	NC (Incompatible)
2	**Flooring**	Concrete slab-on-grade.	c. 1941	5	The floor slab is elevated in this portion of the basement, presumably due to the plumbing in Room 011-Restroom. This elevated floor slab was likely constructed by Collins c. 1941.	(None)	NC (Incompatible)
3	**Ceiling**	Wood fiber insulating board adhered directly to the wood first floor framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall.	(None)	NC (Incompatible)
4	**North Wall**	Terra cotta block infill between the east exterior wall and a brick pier. The top portion of this terra cotta block infill is topped with a few courses of brick to meet the bottom edge of the wood beam above. The terra cotta block has been skim coated with a cementitious coating.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this terra block infill wall between the exterior brick masonry wall and the interior brick pier was constructed c. 1929.	(None)	NC (Incompatible)

Figure2B-060 (continued): Room 007 - Storage - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
5	**East Wall**	The east wall is exposed brick masonry bearing wall below grade. The brick masonry has been skim coated with a cementitious coating. Basement Window 003 is located along the east wall. Window 003 is Window Type: 1	c. 1929	4	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this exterior brick masonry bearing wall was part of the original construction.	(None)	NC (Incompatible)
6	**South Wall**	Exposed wood stud framing.	c. 1941	5	This closet was shown in the 1934 HABS drawings, but in a larger configuration. The floor slab is elevated in this portion of the basement, presumably due to the plumbing in Room 011-Restroom. This walls of this closet were likely re-configured c. 1941 when the restroom was relocated.	(None)	NC (Incompatible)
7	**West Wall**	Exposed wood stud framing.	c. 1941	5	This closet was shown in the 1934 HABS drawings, but in a larger configuration. The floor slab is elevated in this portion of the basement, presumably due to the plumbing in Room 011-Restroom. This walls of this closet were likely re-configured c. 1941 when the restroom was relocated.	(None)	NC (Incompatible)
8	**Door 007**	Wood board and batten style door measuring 2'-0 1/4" wide by 5'-11" tall. Door Type: INT-16 Door Hardware Type: INT-10	c. 1929	4	There is no basement plan included in the 1924 documentation by Albert P. Erb and it is assumed Room 007-Closet and Door 007 were first constructed during Period IV as depicted in the 1934 HABS drawings. The closet was re-configured and the door relocated during a later renovation, c. 1941.	(None)	NC (Incompatible)

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ROOM 008 - MECHANICAL ROOM

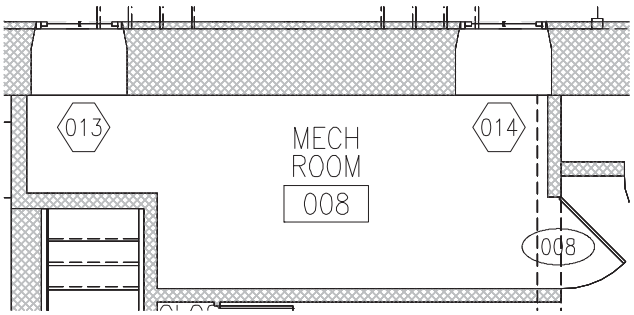


Figure 2B-061: Room 008-Mechanical Room Floor Plan



Figure 2B-062: Room 008-Mechanical Room
(Photo: BBB, 2012)



Figure 2B-063: Room 008-Mechanical Room
(Photo: BBB, 2012)

Figure2B-064: Room 008 - Mechanical - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	The mechanical room is an L-shaped space along the west wall of the basement measuring 11'-2 1/2" in the north-south direction and 7'-3 3/8" in the east-west direction. The southern end of the space is situated below the stair leading to the first floor.	c.1941	5	Research of archival documentation concluded that Charles Collins first introduced a General Electric heating system into Harmony Hall c. 1941.	According to the 1934 HABS documentation, a lavatory used to be located underneath Room 010-Stair where the existing Room 008-Mechancial Room is located. The lavatory must have been relocated to accommodate the installation of the new heating system and associated ductwork.	NC (Incompatible)
2	**Flooring**	Concrete-slab-on-grade	c. 1929	4	The floor slab is elevated in this portion of the basement, presumably due to the plumbing in Room 011-Restroom. This elevated floor slab was likely constructed by Collins c. 1941 when the restroom was relocated from the west side of the basement underneath the stair to its current location. The restroom was likely relocated to accommodate the installation of the heating system.	(None)	NC (Incompatible)
3	**Ceiling**	Exposed first floor structural wood framing above.	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c. 1929. It is assumed that most if not all of the exposed structural framing is original.	(None)	C
4	**North Wall**	Exposed wood stud framing.	c. 1941	5	This wall was constructed to accommodate the installation of a General Electric heating system.	(None)	NC (Incompatible)
5	**East Wall**	Exposed wood stud framing.	c. 1941	5	This wall was constructed to accommodate the installation of a General Electric heating system.	(None)	NC (Incompatible)

Figure2B-064 (continued): Room 008 - Mechanical - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
6	**South Wall**	Exposed wood stud framing and structural supports and framing for the staircase.	c. 1941	5	This wall was constructed to accommodate the installation of a General Electric heating system.	(None)	NC (Incompatible)
7	**West Wall**	The west wall is exposed brick masonry below grade. The brick masonry has been skim coated with a cementitious coating. Basement Windows 013 and 014 are located along the west wall within Room 008-Mechanical Room. Window 013 and 014 are Window Type: 1	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this exterior brick masonry bearing wall was part of the original construction.	(None)	C
8	**Door 008**	Wood board and batten style door measuring 2'-6 1/2" wide by 5'-2 1/2" tall. Door Type: INT-16 Door Hardware Type: INT-10 & INT-11	c. 1941	5	This door was installed as part of the construction to accommodate the installation of a General Electric heating system.	(None)	NC (Incompatible)
9	**Light Fixture**	Surface mounted incandescent light fixture with exposed lamp. Light Fixture Type: INT-24	c.1988	6	This exposed incandescent fixture is wired with flexible electrical conduit, likely installed during the c. 1988 renovation by the Battersea Company.	(None)	NC (Incompatible)

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ROOM 010 - STAIR (INCLUDING ROOM 012 - CLOSET)

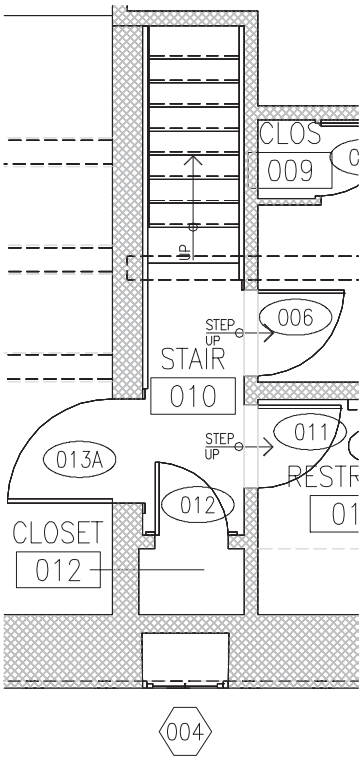


Figure 2B-065: Room 010-Stair and Room-Closet 012 Floor Plan



Figure 2B-066: Room 010-Stair (Photo: BBB, 2012)



Figure 2B-067: Room-Closet 012 (Photo: BBB, 2012)



Figure 2B-068: Room 010-Stair (Photo: BBB, 2012)



Figure 2B-069: Room-Closet 012 (Photo: BBB, 2012)

Figure2B-070: Room 010 - Stair and Room 012 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Narrow wood staircase with small storage closet at the end of the stairwell measuring 2'-10" in the north-south direction and 17'-3" in the east-west direction.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929.	(None)	NC (Incompatible)
2	**Flooring**	Concrete slab-on-grade	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929.	(None)	NC (Incompatible)
3	**Stairs**	Solid wood treads and risers. The last tread and riser are constructed of brick.	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this stair was part of the original construction.	(None)	C
4	**Ceiling**	Wood fiber insulating board adhered directly to the wood first floor framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall.	(None)	NC (Incompatible)
5	**North Wall**	Plaster applied directly onto brick masonry bearing wall.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929.	(None)	C
6	**East Wall**	The east wall (beyond Room 012-Closet) is an exterior brick masonry below grade bearing wall of the Main Block. Window 004 is located in this wall behind the closet. Window 004 is Window Type:1	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this exterior wall was part of the original construction.	(None)	NC (Incompatible)
7	**South Wall**	Plaster applied directly onto brick masonry bearing wall.	c1769	2	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929.	(None)	C

Figure2B-070 (continued): Room 010 - Stair and Room 012 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
8	**Closet 012**	Small storage closet at the end of the stairwell measuring 2'-11 1/4" in the north-south direction and 1'-10" in the east-west direction. The walls of this closet are constructed of wood fiber insulating board installed on wood stud framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board along the outside wall of the closet.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929. A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	(None)	NC (Incompatible)
9	**Door 012**	Wood batten style door measuring 2'-0 1/2" wide by 6'-0" tall. Door Type: INT-16 Door Hardware Type: INT-2 & INT-11	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929.	(None)	NC (Incompatible)
10	**Light Fixture**	Surface mounted incandescent light fixture with exposed lamp. Light Fixture Type: INT-26	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity and plumbing into Harmony Hall c. 1929.	(None)	NC (Incompatible)

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ROOM 011 - RESTROOM

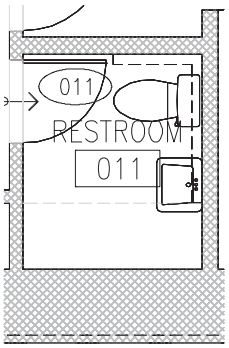


Figure 2B-071: Room 011-Restroom Floor Plan

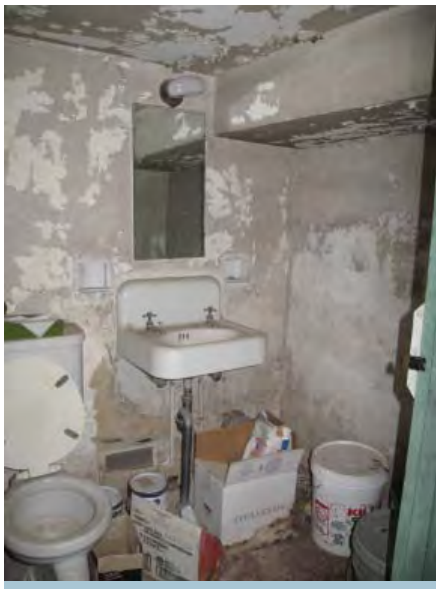


Figure 2B-072: Room 011-Restroom (Photo: BBB, 2012)

Figure2B-073: Room 011-Restroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	The restroom is rectangular in plan measuring 4'-11 1/2" in the north-south direction and 5'-11 3/4" in the east-west direction.	c. 1941	5	According to the 1934 HABS documentation, a lavatory used to be located underneath Room 010-Stair where the existing Room 008-Mechancial Room is located. The lavatory was likely relocated to accommodate the installation of the new heating system and associated ductwork, c. 1941.	(None)	NC (Incompatible)
2	**Flooring**	Concrete-slab-on-grade	c. 1941	5	The floor slab is elevated in this portion of the basement, presumably due to the plumbing in Room 011-Restroom. This elevated floor slab was likely constructed by Collins c. 1941.	(None)	NC (Incompatible)

Figure2B-073 (continued): Room 011 - Restroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
3	**Ceiling**	Wood fiber insulating board installed on wood stud framing. A finish coat of plaster has been applied to the finished surface of the wood fiber insulating board. It appears that the plaster consists of a scratch coat and finish coat. It is assumed this ceiling assembly was installed throughout the house during Period 4: 1929-40 by Charles Collins.	c. 1941	5	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall.	(None)	NC (Incompatible)
4	**North Wall**	Wood fiber insulating board installed on wood stud framing. A finish coat of plaster has been applied to the finished surface of the wood fiber insulating board. It appears that the plaster consists of a scratch coat and finish coat.	c. 1941	5	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	(None)	NC (Incompatible)
5	**East Wall**	Wood fiber insulating board installed on wood stud framing. A finish coat of plaster has been applied to the finished surface of the wood fiber insulating board. It appears that the plaster consists of a scratch coat and finish coat.	c. 1941	5	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	(None)	NC (Incompatible)
6	**South Wall**	Wood fiber insulating board installed on wood stud framing. A finish coat of plaster has been applied to the finished surface of the wood fiber insulating board. It appears that the plaster consists of a scratch coat and finish coat.	c. 1941	5	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	(None)	NC (Incompatible)

Figure2B-073 (continued): Room 011 - Restroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
7	**West Wall**	Wood fiber insulating board installed on wood stud framing. A finish coat of plaster has been applied to the finished surface of the wood fiber insulating board. It appears that the plaster consists of a scratch coat and finish coat.	c. 1941	5	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	(None)	NC (Incompatible)
8	**Plumbing Fixtures**	The restroom includes a floor mounted water closet and a wall mounted sink.	c. 1941	5	According to the 1934 HABS documentation, a lavatory used to be located underneath Stair 010 where the existing Room 008-Mechancial Room is located. The lavatory was likely relocated to accommodate the installation of the new heating system and associated ductwork, c. 1941.	(None)	NC (Incompatible)
9	**Door 011**	Wood batten style door measuring 2'-3 1/2" wide by 5'-11" tall. Door Type: INT-16 Door Hardware Type: INT-8	c. 1941	5	According to the 1934 HABS documentation, a lavatory used to be located underneath Stair 010 where the existing Room 008-Mechancial Room is located. The lavatory was likely relocated to accommodate the installation of the new heating system and associated ductwork, c. 1941.	(None)	NC (Incompatible)
10	**Light Fixture**	Wall mounted incandescent light fixture with frosted glass globe. Light Fixture Type: INT-25	c. 1941	5	The lavatory was likely relocated to accommodate the installation of the new heating system and associated ductwork, c. 1941.	(None)	NC (Incompatible)

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ROOM 013 - RECREATION ROOM

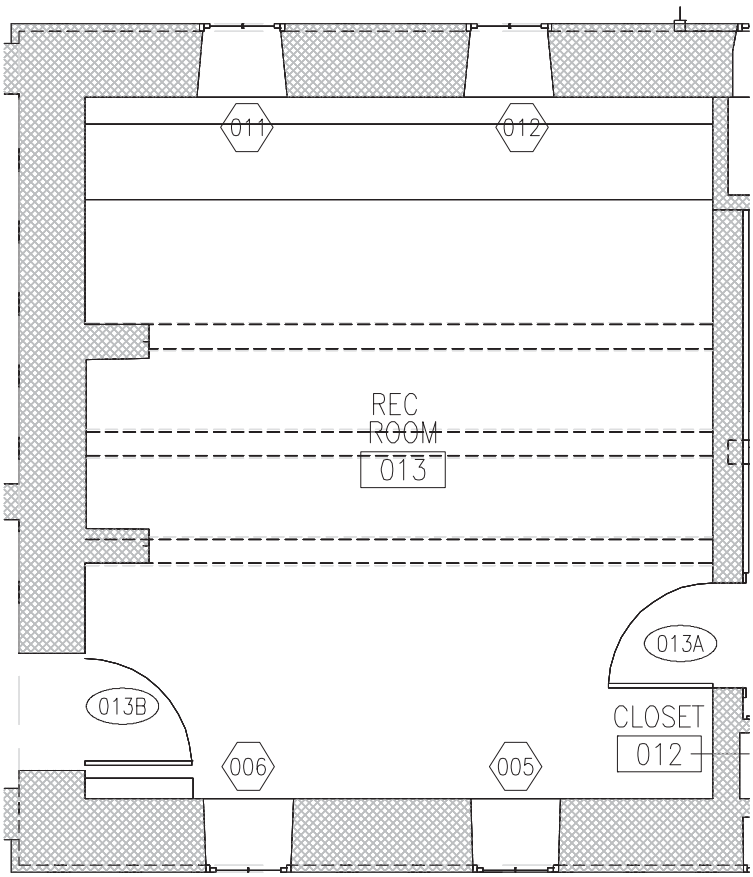


Figure 2B-074: Room 013-Recreation Room Floor Plan



Figure 2B-076: Room 013-Recreation Room
(Photo: BBB, 2012)



Figure 2B-077: Room 013-Recreation Room
(Photo: BBB, 2012)



Figure 2B-075: Room 013-Recreation Room
(Photo: BBB, 2012)



Figure 2B-078: Room 013-Recreation Room
(Photo: BBB, 2012)

Figure2B-079: Room 013 - Recreation Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	The restroom is rectangular in plan measuring 17'-5 1/8" in the north-south direction and 19'-5 5/8" in the east-west direction.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
2	**Flooring**	Concrete-slab-on-grade	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this floor was constructed c. 1929.	(None)	NC (Incompatible)
3	**Ceiling**	Wood paneling with wood beam enclosures spanning from north wall to south wall, centered on fireplace.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	The 1934 HABS drawings state that the wood panelling is "from old church in Piscataway"	NC (Incompatible)
4	**North Wall**	Floor to ceiling wood paneling	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	The 1934 HABS drawings state that the wood panelling is "from old church in Piscataway"	NC (Incompatible)
5	**East Wall**	Floor to ceiling wood paneling	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	The 1934 HABS drawings state that the wood panelling is "from old church in Piscataway"	NC (Incompatible)
6	**South Wall**	Floor to ceiling wood paneling	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	The 1934 HABS drawings state that the wood panelling is "from old church in Piscataway"	NC (Incompatible)
7	**West Wall**	Floor to ceiling wood paneling	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	The 1934 HABS drawings state that the wood panelling is "from old church in Piscataway"	NC (Incompatible)
8	**Door 013A**	Wood batten style door measuring 2'-11" wide by 6'-0" tall. Door Type: INT-16 Door Hardware Type: INT-3	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	The 1934 HABS drawings state that the wood panelling is "from old church in Piscataway"	NC (Incompatible)

Figure2B-079 (continued): Room 013 - Recreation Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
9	**Door 013B**	Wood batten style door measuring 2'-11 1/2" wide by 6'-2 3/4" tall. Door Type: INT-16 Door Hardware Type: INT-3 & INT-11	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	The 1934 HABS drawings state that the wood panelling is "from old church in Piscataway"	NC (Incompatible)
10	**Windows 005, 006, 011, 012:** Window Frames	Basement Windows: window openings in solid brick masonry exterior wall Solid wood window frame and trim.	c.1820-1892	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these basement awning windows were part of the original construction. Paint Analysis, HHE-029 Campaign 6	Paint analysis completed on window 016.	C
11	**Windows 005, 006, 011, 012:** Window Sash	Basement Windows: Solid wood single sash awning windows with single vertical muntins	c. 1988	6	Paint Analysis, HHE-030 Campaign 33	Paint analysis completed on window 016.	NC (Compatible)
12	**Fireplace**	Brick masonry fireplace clad in wood paneling from floor to ceiling.	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this brick masonry fireplace, directly underneath the fireplaces in Room 103 and 203, was part of the original construction.	(None)	C
13	**Built-in Seating**	Builting in wood panelled seating over HVAC ductwork.	c. 1941	5	The built-in seating was a later addition to conceal the ductwork of the General Electric heating system added in 1941.	Corrugated insulation surrounding the ductwork below this built-in seating tested positive for asbestos. See Appendix A: *Limited Hazardous Materials Survey Report* contained within this HSR.	NC (Incompatible)
14	**Electrical Panel Box**	Abandoned electrical panel box along the east wall, located adjacent to Door D013B.	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity and plumbing into Harmony Hall c. 1929.	(None)	NC (Incompatible)

Figure2B-079 (continued): Room 013 - Recreation Room - Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
15	**Light Fixture**	Brass wall mounted incandescent sconce. Light Fixture Type: INT-27	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity and plumbing into Harmony Hall c. 1929.	(None)	NC (Incompatible)

ROOM 014 - CORRIDOR

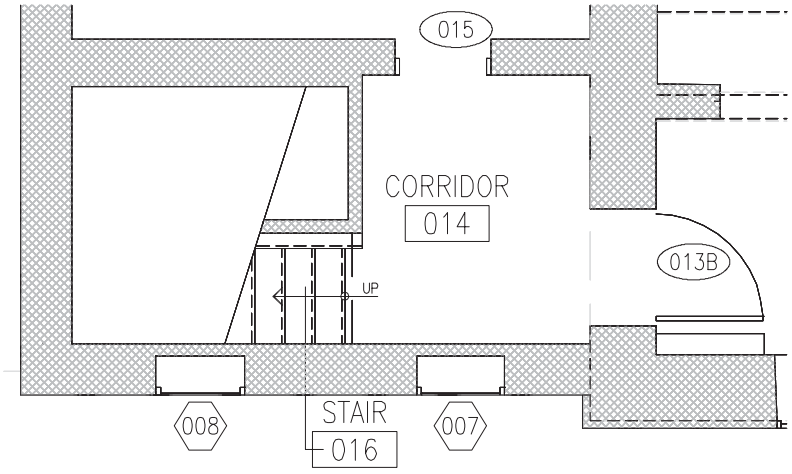


Figure 2B-080: Room 014-Corridor Floor Plan



Figure 2B-083: Room 014-Corridor
(Photo: BBB, 2012)



Figure 2B-081: Room 014-Corridor
(Photo: BBB, 2012)



Figure 2B-082: Room 014-Corridor
(Photo: BBB, 2012)



Figure 2B-084: Room 014-Corridor - Electrical Panel installed during the 1988 renovations by the Battersea Company.
(Photo: BBB, 2012)



Figure 2B-085: Room 014-Corridor
(Photo: BBB, 2012)

Figure2B-086: Room 014 - Corridor and Room 016 - Stair - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular corridor below the Central South Addition measures 17'-10 1/4" in the north-south direction and 9'-7" in the east-west direction.	c. 1941	5	This below grade vestibule into the basement of the Main Block was first constructed when Collins expanded the Central South Addition in 1941. Also, the construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88 indicate this area as an existing condition.	(None)	NC (Incompatible)
2	**Flooring**	Concrete-slab-on-grade	c. 1941	5	This below grade vestibule into the basement of the Main Block was first constructed when Collins expanded the Central South Addition in 1941. Also, the construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88 indicate this area as an existing condition.	(None)	NC (Incompatible)
3	**Ceiling**	Gypsum wallboard.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**North Wall**	Exposed brick masonry bearing wall of Main Block	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this exterior brick masonry bearing wall was part of the original construction.	(None)	C
5	**East Wall**	Gypsum wallboard on wood studs adhered to brick masonry foundation wall.	c. 1988	6	This is shown as an existing condition in the Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
6	**South Wall**	Gypsum wallboard on wood stud framing. A portion of the finish gypsum wallboard has been removed exposing the concrete block foundation wall beyond below the south wall of the Central South Addition.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

Figure2B-086 (continued): Room 014 - Corridor and Room 016 - Stair - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
7	**West Wall**	Exposed brick masonry bearing wall below the Central South Addition. The brick foundation wall has been underpinned with a concrete foundation.	c. 1941	5	This below grade vestibule, Room 014-Corridor, into the basement of the Main Block was first constructed when Collins expanded the Central South Addition in 1941. In order to excavate this area outside of the Main Block and expand the below grade condition underneath Room 104-Kitchen, the existing foundations of Room 104-Kitchen had to be underpinned. Also, the construction drawings from NACE Records completed by architect Siegfried Ising in June 1987 indicate this area as an existing condition. This portion of the brick foundation, seen in the west wall, was likely part of the original exterior brick wall from the Pantry Addition in Period IV. The extant brick arch was likely the arch over a basement window.	This west wall of the Corridor 014 was once the exterior bearing wall of the Pantry Addition built by Charles Wallace Collins in 1929 and documented in the 1934 HABS drawings.	NC (Incompatible)
8	**Stairs 016**	Wood frame stairs to the first floor. The stair consists of seven risers.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
9	**Electrical Panel**	The existing electrical panel serving the house is located along the east wall of Corridor 107	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
10	**Light Fixture**	Surface mounted incandescent light fixture with exposed lamp. Light Fixture Type: INT-28	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

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ROOM 015 - MECHANICAL ROOM

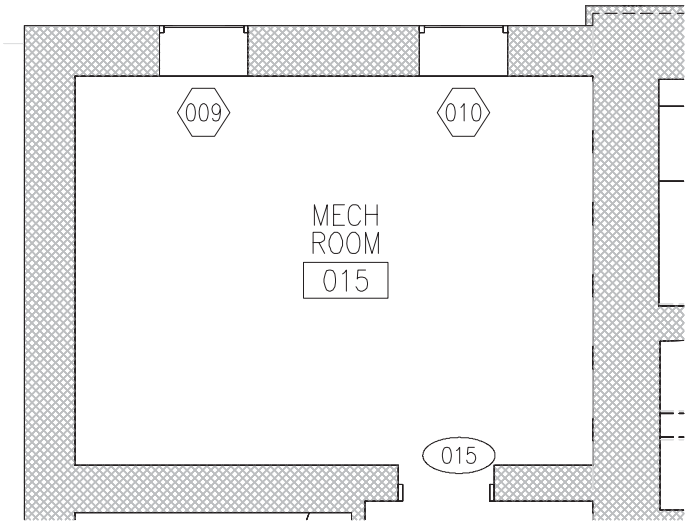


Figure 2B-087: Room 015-Mechanical Room Floor Plan



Figure 2B-088: Room 015-Mechanical Room - Oil Fired Furnace (Photo: BBB, 2012)



Figure 2B-089: Room 015-Mechanical Room - Hot Water Heater (Photo: BBB, 2012)

Figure2B-090: Room 015 - Mechanical Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular mechanical plan measuring 14'-4 1/2" in the north-south direction and 10'-9 5/8" in the east west direction.	c. 1941	5	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929 as a crawl space below Room 104-Kitchen. During renovations by Collins during the 1940s the exterior walls were underpinned in order to make this space a full height basement and to accommodate the installation of the mechanical systems.	(None)	NC (Incompatible)
2	**Flooring**	Concrete-slab-on-grade	c. 1941	5	During renovations by Collins during the 1940s the exterior walls were underpinned in order to make this space a full height basement and to accommodate the installation of the mechanical systems.	(None)	NC (Incompatible)
3	**Ceiling**	Exposed first floor framing members of Room 104-Kitchen	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs. Research and on-site investigations led to the interpretation that this space was constructed c. 1929.	(None)	NC (Incompatible)
4	**North Wall**	Exposed brick masonry bearing wall of Main Block	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this exterior brick masonry bearing wall was part of the original construction.	(None)	C
5	**East Wall**	The north portion of the east wall is an underpinned exposed brick masonry bearing wall and the southern portion is a concrete masonry unit (CMU) foundation wall.	c. 1941	5	During renovations by Collins during the 1940s the exterior walls were underpinned in order to make this space a full height basement and to accommodate the installation of the mechanical systems.	See the structural documents of existing conditions included in Part 4: Documentation.	NC (Incompatible)

Figure2B-090 (continued): Room 015 - Mechanical Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
6	**South Wall**	The south wall is primarily constructed of a concrete masonry unit (CMU) foundation wall. The west end transitions to a concrete underpinning below the c.1929 brick foundation wall.	c. 1941	5	During renovations by Collins during the 1940s the exterior walls were underpinned in order to make this space a full height basement and to accommodate the installation of the mechanical systems.	See the structural documents of existing conditions included in Part 4: Documentation.	NC (Incompatible)
7	**West Wall**	The west wall consists of a concrete underpinning below the c.1929 brick foundation wall.	c. 1941	5	During renovations by Collins during the 1940s the exterior walls were underpinned in order to make this space a full height basement and to accommodate the installation of the mechanical systems.	See the structural documents of existing conditions included in Part 4: Documentation.	NC (Incompatible)
8	**Mechanical Equipment:** Furnace	Oil operated Whirlpool furnace manufactured by Heil-Quaker Corporation, model NHOC200AH01	c.1941 or later	-	Product data information gathered on-site. Research of archival documentation concluded that Charles Collins first introduced a General Electric heating system into Harmony Hall c. 1941.	See evaluation of existing mechanical system in Part 2C: Condition Assessment	NC (Incompatible)
9	**Mechanical Equipment** Hot Water Heater	Hot water heater, 30 gallon capacity. 4.5 kW	1999	6	Product data information gathered on-site	See evaluation of existing plumbing system in Part 2C: Condition Assessment	NC (Incompatible)
10	**Light Fixture**	Surface mounted incandescent light fixture with exposed lamp. Light Fixture Type: INT-28	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

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FIRST FLOOR

The first floor of the Main Block contains three of the most historically significant spaces in Harmony Hall. The first floor plan is typical of 18th century plantation homes of the time with a symmetrical rectangular layout, a central hall and one room on either side of this central hall. The central hall features an ornate central staircase with architectural detailing typical of Georgian plantation homes of the 18th century in Maryland. There are also two exterior entrances into the central hall, one centered along the east façade and another centered along the west façade. Room 102- Living Room/ Parlor is located to the north of Room 101 - Central Hall and Room 103-Dining Room is located just to the south of Room 101 - Central Hall. Room 102-Living Room/ Parlor and Room 103-Dining Room are characterized by nine over nine lite double hung wood windows with interior paneled shutters and ornate trim and fretwork. Room 101 - Central Hall has similar double hung wood windows with a six over six lite pattern, but without interior wood shutters.

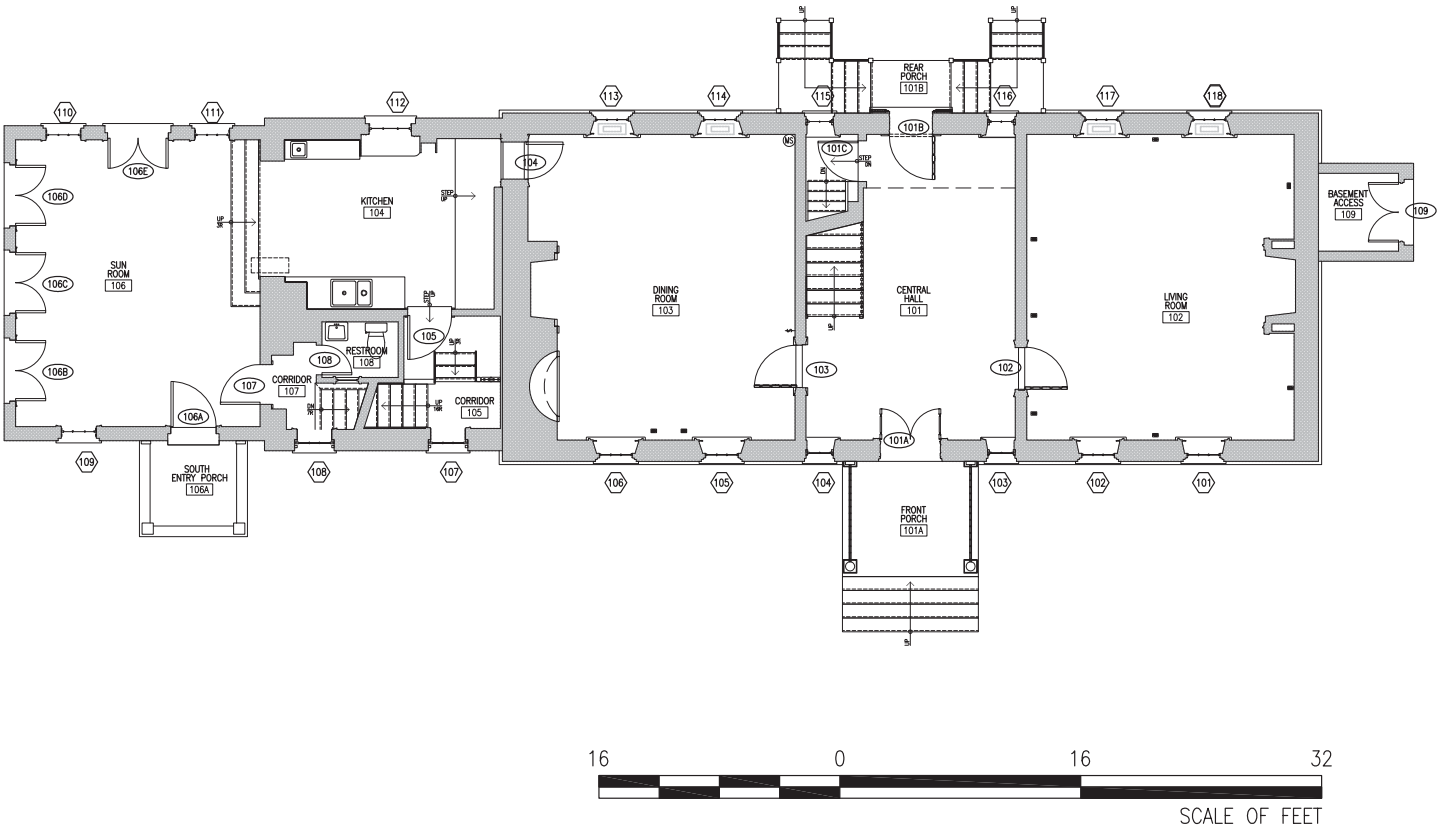
During Period IV Charles Collins constructed a Pantry Addition to the south side of Harmony Hall which was connected via a covered walkway to other outbuildings. A portion of this Pantry Addition remains today in part of the Central South Addition. This Pantry Addition was connected to the Main Block by the door located along the south wall of Room 103-Dining Room (Door 104). This addition to Harmony Hall was expanded in 1941 (Period V) by Charles Collins when the east exterior wall was relocated to align with the southeast corner of the Main Block. Today a kitchen and a staircase to the second floor are located on the first floor of the Central South Addition. The Central South Addition was later renovated in 1988 (Period VI) to install an upgraded kitchen. The finished floor of the Central South Addition is located approximately 6 inches below that of the first floor of the Main Block.

The South Addition to Harmony Hall was constructed in 1988 (Period VI) during which time the house and property were being leased by the Battersea Driving Company from the National Park Service (NPS). The finish floor of the South Addition is located approximately 30 inches below that of the first floor of the Main Block. The first floor of the South Addition encloses a Sun Room with four sets of French doors along the south and west walls leading to the exterior. There is also an exterior entrance to the house located along the east side of this space.

FIRST FLOOR INVENTORY

The following matrices and room inventories catalog each space within the basement and describe all features including the floor, walls, ceiling, doors, windows, and other architectural elements and details. In addition to the architectural details and finishes, any light fixtures and equipment are also described. Each matrix establishes an estimated date of construction for each feature and provides the research or source documentation utilized to make this determination. To accompany each room inventory a floor plan of the space has been provided with selected photographs of the space to document all significant features.

FIRST FLOOR PLAN



ROOM 101 - CENTRAL HALL

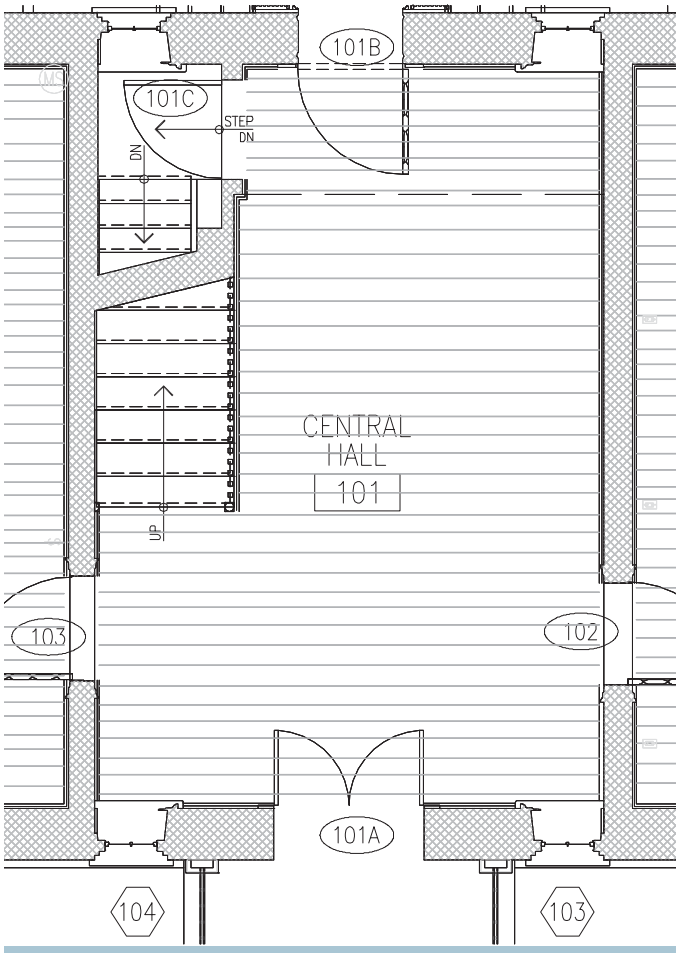


Figure 2B-091: Room 101-Central Hall Floor Plan



Figure 2B-092: Central Hall Room 101, North Elevation
(Photo: BBB, 2012)

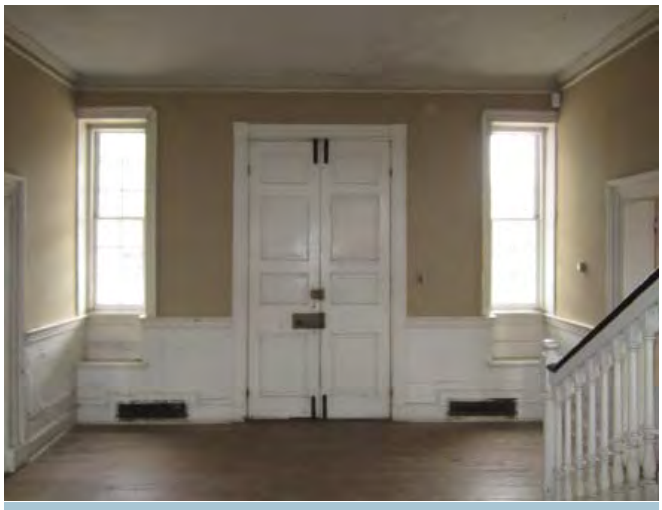


Figure 2B-093: Central Hall Room 101, East Elevation
(Photo: BBB, 2012)

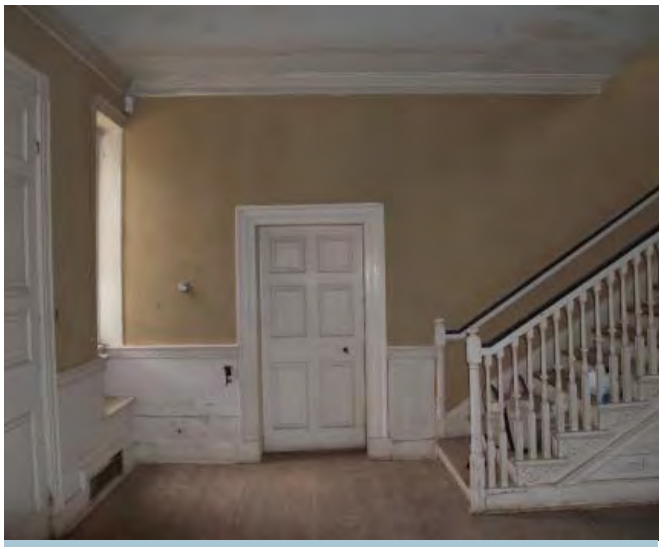


Figure 2B-094: Central Hall Room 101, South Elevation
(Photo: BBB, 2012)

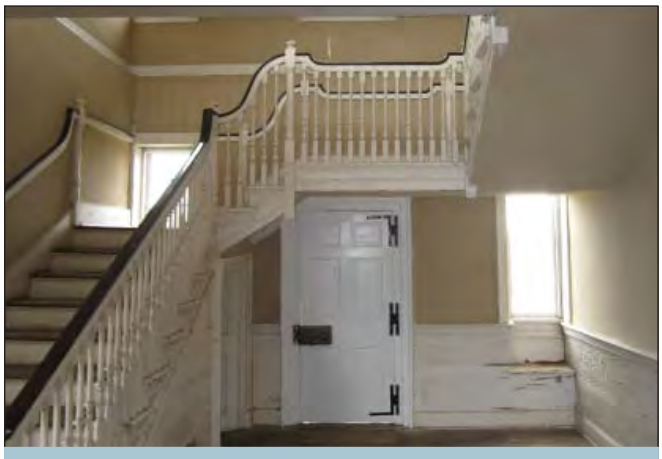


Figure 2B-095: Central Hall Room 101, West Elevation
(Photo: BBB, 2012)

Figure2B-096: Room 101 - Central Hall - Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room measuring 13'-11" in the north-south direction and 20'-4" in the east-west direction. The primary feature in the room is the decorative central staircase leading to the second floor.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this room was part of the original construction.	(None)	C
2	**Flooring**	The flooring in the Central Hall 101 is the original random width wide plank hardwood flooring.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wood flooring was part of the original construction.	Presence of both cut nails and machine nails suggests this flooring is original to the Period of Significance, but it has been patched and repaired in some areas.	C
3	**Ceiling:** Under Stairs	On-site investigations and probes revealed that the existing ceiling is a particleboard covered in plaster. It appears that the plaster consists of a scratch coat and finish coat. It is assumed this ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall. It is assumed this ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins. Paint Analysis, HHI-024 Campaign 12	(None)	NC (Compatible)
4	**Ceiling:** Flat	On-site investigations and probes revealed that the existing ceiling is a particleboard covered in plaster. It appears that the plaster consists of a scratch coat and finish coat.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall. It is assumed this ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins. Paint Analysis, HHI-025 Campaign 12	(None)	NC (Compatible)

Figure2B-096 (continued): Room 101 - Central Hall - Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
5	**Crown Molding:** Upper Trim	Solid wood crown molding with dentil detailing.	c. 1769	2	Paint Analysis, HHI-025a Campaign 1	The blackish-brown of finish 1 was not seen in paint sample analyzed. See paint assessment report for more details.	C
6	**Crown Molding:** Dentil Trim	Solid wood crown molding with dentil detailing.	c. 1769	2	Paint Analysis, HHI-025b Campaign 1	The blackish-brown of finish 1 was not seen in paint sample analyzed. See paint assessment report for more details.	C
7	**North Wall**	The north wall is plaster adhered directly to the masonry bearing wall partition between the Central Hall 101 and the Parlor/ Living Room 102. The north wall is detailed with crown molding, chair rail molding, and baseboards.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1950)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-019 (Plaster of North Wall adjacent to Window 116) Campaign 13	See Appendix B for more information regarding the plaster analysis.	NC (Compatible)
8	**East Wall**	The east wall is plaster adhered directly to the exterior masonry bearing. The east wall is detailed with crown molding, chair rail molding, and baseboards	c. 1769 - brick masonry wall construction (date/ age of plaster c.1995)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-018 (Plaster of East Wall adjacent to Window 104) Campaign 16	Wall plaster is a modern repair. See Appendix B for more information regarding the plaster analysis.	NC (Compatible)

Figure2B-096 (continued): Room 101 - Central Hall - Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
9	**South Wall**	The south wall is plaster adhered directly to the masonry bearing wall partition between the Central Hall 101 and the Dining Room 103. The south wall is detailed with crown molding, chair rail molding, and baseboards.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1950)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Date of plaster based upon analysis of paint on similar wall in Room 101.	See Appendix B for more information regarding the plaster analysis.	NC (Compatible)
10	**West Wall**	The west wall is plaster adhered directly to the exterior masonry bearing. The west wall is detailed with crown molding, chair rail molding, and baseboards.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1950)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Date of plaster based upon analysis of paint on similar wall in Room 101.	See Appendix B for more information regarding the plaster analysis.	NC (Compatible)
11	**Wainscot:** Upper Molding	Upper section of carved wood molding above the wainscot paneling.	c. 1769	2	Paint Analysis, HHI-010 Campaign 1	The upper molding of the wainscot has been stripped. Paint Campaigns 1-5 were found in trace amounts.	C
12	**Wainscot:** Raised Decoration	Raised carved wood decoration just below the upper molding.	c. 1769	2	Paint Analysis, HHI-011 Campaign 1	The raised decoration of the wainscot has been stripped. Paint Campaigns 1-5 were found in trace amounts.	C

Figure2B-096 (continued): Room 101 - Central Hall - Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
13	**Wainscot:** Field Behind Decoration	Recessed field behind the raised carved wood decoration.	c. 1769	2	Paint Analysis, HHI-012 Campaign 1	The field behind the raised decoration has been stripped. Paint Campaigns 1-5 were found in trace amounts.	C
14	**Wainscot:** Raised Molding below Decoration	Lower section of carved wood molding above the wainscot paneling.	c. 1769	2	Paint Analysis, HHI-013 Campaign 1	Earliest painted finish appears to be wood graining.	C
15	**Wainscot:** Horizontal Wood Panels North Wall	Horizontal wood paneling of the wainscot.	c. 1929	4	Paint Analysis, HHI-014 (North Wall) Campaign 12	Earliest painted finishes present are bubbled, indicating this element has been stripped. The wood could date to a period earlier than Painting Campaign 12, c. 1929.	NC (Compatible)
16	**Wainscot:** Horizontal Wood Panels East Wall	Horizontal wood paneling of the wainscot.	c. 1769	2	Paint Analysis, HHI-017 (East Wall, South of Door 101A) Campaign 1	The horizontal wood paneling of the wainscot has been stripped. Paint Campaigns 1 & 4 were found in trace amounts.	C
17	**Baseboard**	Solid wood baseboard.	c. 1769	2	Paint Analysis, HHI-020 Campaign 1	The blackish-brown of Campaign 1 was not seen in paint sample analyzed. See paint assessment report for more details.	C
18	**Baseboard:** Quarter Round	Quarter round trim at the bottom of the baseboard.	c. 1892	3	Paint Analysis, HHI-021 Campaign 9	(None)	NC (Compatible)

Figure2B-096 (continued): Room 101 - Central Hall - Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
19	**Windows 103, 104, 115, 116:** Opening in Masonry	Windows 103, 104, 115, and 116 are double hung wood windows with six over six lites. (NPS staff indicated the sashes were recently removed, stripped of all lead based paint and re-installed. BBB and the design team do not have documentation of this repair.) Window Type: 2	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction.	Windows were repaired in 1996 by the Battersea Company under the supervision of the NPS. Field observations noted that the window sashes in these historic windows were likely replaced in the 1930s by Charles Collins (Period IV: 1929-40) but there was evidence that portions of the existing window frames are original to the house (Period II: 1769-1849)	C
20	**Windows 103, 104, 115, 116:** Window Sash	Wood window sash	c. 1995	6	Paint Analysis, HHI-023 Campaign 16	Paint sample taken from Window W103.	NC (Compatible)
21	**Windows 103, 104, 115, 116:** Window Stop Trim	Wood window stop in frame	c. 1830	2	Paint Analysis, HHI-022a Campaign 6	Paint sample taken from Window W103.	NC (Compatible)
22	**Windows 103, 104, 115, 116:** Window Return/ Trim	Wood window interior trim along plaster wall	c. 1769	2	Paint Analysis, HHI-022 Campaign 1	Paint sample taken from Window W103.	C
23	**Windows 103, 104, 115, 116:** Window Bench Sill	Lower window sill or bench.	c. 1769	2	Paint Analysis, HHI-015 Campaign 1	Paint sample taken from Window W103. The wood element has been stripped. Paint Campaigns 1, 4 & 5 were found in trace amounts.	C
24	**Windows 103, 104, 115, 116:** Window Bench Back	Lower window sill or bench back paneling.	c. 1769	2	Paint Analysis, HHI-016 Campaign 1	Paint sample taken from Window W103. The wood element has been stripped. Paint Campaigns 1, 4 & 5 were found in trace amounts.	C

Figure2B-096 (continued): Room 101 - Central Hall - Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
25	**D101A:** Opening in Masonry	Masonry opening for Door 101A Painted solid wood paneled exterior double door; each leaf contains four (4) recessed panels Door Type: EXT-1 Door Hardware Type: EXT-1 & EXT-2	c.1792	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction. (See Defining Features, Age, & Significance Matrix for East Elevation for the more detailed information regarding the exterior paint analysis completed and date of construction for this door.)	Charles Collins noted in his records that this door was enlarged in the late 18th century to accommodate this wider and taller double door.	C
26	**D101A:** Raised Panel in Door	Raised panel in door.	c. 1792	2	Paint Analysis, HHI-003 Campaign 1	The wood element has been stripped. Paint Campaigns 1-4 were found in trace amounts.	C
27	**D101A:** Field of Door	Stile along edge of door with flat profile.	c. 1950	5	Paint Analysis, HHI-004 Campaign 13	Condition of substrate indicates that the wood element has been stripped of paint at some point.	C
28	**D101A:** Door Frame	Door frame and trim.	c. 1786	2	Paint Analysis, HHI-005 Campaign 2	The wood element has been stripped. Paint Campaigns 2-4 were found in trace amounts.	C
29	**D101B:** Opening in Masonry	Masonry opening for Door 101B Door Type: EXT-2 Door Hardware Type: EXT-3	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction. (See Defining Features, Age, & Significance Matrix for the West Elevation for more detailed information regarding the exterior paint analysis completed and date of construction for this door.)	(None)	C
30	**D101B:** Door	Painted solid wood paneled exterior door; contains six (6) recessed panels	c. 1769	2	Paint Analysis, HHI-008 Campaign 1	The wood element has been stripped. Paint Campaigns 1-3 were found in trace amounts.	C

Figure2B-096 (continued): Room 101 - Central Hall - Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
31	**D101B:** Door Frame	Door frame and trim.	c. 1769	2	Paint Analysis, HHI-009 Campaign 1	The wood element has been stripped. Paint Campaigns 1-4 were found in trace amounts.	C
32	**D101C:** Door	Painted solid wood paneled door; contains four (4) recessed panels Door Type: INT-1 Door Hardware Type: INT-2	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction. Paint Analysis, HHI-006 Campaign 1	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period IV (1929-40). However, the paint analysis conducted as part of this HSR does not support this claim and Collins does not specify any details regarding the replacement of these doors. The wood element has been stripped. Paint Campaigns 1-4 were found in trace amounts.	C
33	**Door 101C:** Door Frame	Door frame and trim.	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction. Paint Analysis, HHI-007 Campaign 1	Earliest finish appears to be wood graining.	C

Figure2B-096 (continued): Room 101 - Central Hall - Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
34	**Door 102:** Door	Painted solid wood paneled door; contains six (6) recessed panels Door Type: INT-2 Door Hardware Type: INT-1	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction. Paint Analysis, HHI-001 Campaign 1 (See Defining Features, Age, & Significance Matrix for Room 102 for more detailed information regarding Paint Analysis and date of construction of this door.)	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period IV (1929-40). However, the paint analysis conducted as part of this HSR does not support this claim and Collins does not specify any details regarding the replacement of these doors. The wood element has been stripped. Paint Campaigns 1-4 were found in trace amounts.	C
35	**Door 102:** Door Frame	Door frame and trim.	c. 1769	2	Paint Analysis, HHI-002 Campaign 1	Earliest finish appears to be wood graining.	C
36	**Door 103**	Painted solid wood paneled door; contains six (6) recessed panels Door Type: INT-2 Door Hardware Type: INT-1	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction. (See Defining Features, Age, & Significance Matrix for Room 103 for more detailed information regarding Paint Analysis and date of construction of this door.)	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period IV (1929-40). However, the paint analysis conducted as part of this HSR does not support this claim and Collins does not specify any details regarding the replacement of these doors.	C
37	**HVAC Grilles**	Painted metal supply or return air grille	c.1941	5	Research of archival documentation concluded that Charles Collins first introduced a General Electric heating system into Harmony Hall c. 1941.	(None)	NC (Incompatible)
38	**Light Fixture**	Pendant mounted incandescent light fixture. (The fixture is missing, but the escutcheon plate remains) Light Fixture Type: INT-1	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity into Harmony Hall c. 1929.	(None)	NC (Incompatible)

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ROOM 200 - CENTRAL STAIRCASE



Figure 2B-097: Central Hall Staircase (Photo Credit: BBB, 2012)



Figure 2B-098: Central Hall Staircase
(Photo Credit: BBB, 2012)



Figure 2B-099: Central Hall Room 101, Central Staircase detail (Photo Credit: BBB, 2012)

Figure2B-100: Room 200 - Central Staircase - Defining Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Newel Post:** Body	Carved wood newel post at base of Central Staircase	c. 1769	2	Paint Analysis, HHI-034 Campaign 1	(None)	C
2	**Newel Post:** Knob	Top knob of newel post at base of Central Staircase.	c. 1830	2	Paint Analysis, HHI-035 Campaign 6	Wood is different from other wood found in this room and no traces of earlier finishes were found, suggesting that this is a later addition, replacement or repair.	C

Figure2B-100 (continued): Room 200 - Central Staircase - Defining Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
3	**Stair Stringer:** Raised Decorative Scroll Bracket	Decorative outside detail to stair stringer along Central Staircase	c. 1769	2	Paint Analysis, HHI-026 Campaign 1	The blackish-brown of Campaign 1 was not seen in paint sample analyzed. See paint assessment report for more details.	C
4	**Stair Stringer:** Field behind Decoration	Solid wood paneling behind decorative scroll bracket.	c. 1769	2	Paint Analysis, HHI-027 Campaign 1	The blackish-brown of Campaign 1 was not seen in paint sample analyzed. See paint assessment report for more details.	C
5	**Stair Stringer:** Molding below Decoration	Carved wood molding below decorative scroll bracket.	c. 1769	2	Paint Analysis, HHI-028 Campaign 1	The blackish-brown of Campaign 1 was not seen in paint sample analyzed. See paint assessment report for more details.	C
6	**Wood Panel:** at Stair Enclosure	Solid wood paneling below Central Staircase	c. 1769	2	Paint Analysis, HHI-029 Campaign 1	The wood element has been stripped. Paint Campaigns 1-5 were found in trace amounts.	C
7	**Handrail:** Upper (1st Floor)	Wood cap along top of handrail	c. 1769	2	Paint Analysis, HHI-037 Campaign 1	(None)	C
8	**Handrail:** Lower (1st Floor)	Wood base of handrail	c. 1769	2	Paint Analysis, HHI-036 Campaign 1	(None)	C
9	**Stair Tread and Nosing**	Solid wood treads and nosing detail	c. 1769	2	Paint Analysis, HHI-030 Campaign 1	The blackish-brown of Campaign 1 was not seen in paint sample analyzed. See paint assessment report for more details.	C
10	**Stair Riser**	Solid wood stair risers.	c. 1810	2	Paint Analysis, HHI-047 Campaign 4	Element appears to have been a later replacement due to the paint analysis.	C
11	**Baluster:** Square Base	Square base of baluster	c. 1769	2	Paint Analysis, HHI-032 Campaign 3	Finishes 1 and 2 not seen on this element, this may be an early addition.	C
12	**Baluster:** Turned/ Carved Baluster	Decorative carved portion of baluster	c. 1769	2	Paint Analysis, HHI-033 Campaign 3	Finishes 1 and 2 not seen on this element, this may be an early addition.	C

Figure2B-100 (continued): Room 200 - Central Staircase - Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
13	**Dropped Pendant**	Wood pendant below stair landing at base of post	c. 1769	2	Paint Analysis, HHI-031 Campaign 1	The blackish-brown of Campaign 1 was not seen in paint sample analyzed. See paint assessment report for more details.	C
14	**Inside Stringer**	Inside stringer along stairs.	c. 1820	2	Paint Analysis, HHI-044 Campaign 5	(None)	C
15	**Handrail:** Upper (2nd Floor)	Wood cap along top of handrail	c. 1769	2	Paint Analysis, HHI-046 Campaign 1	(None)	C
16	**Handrail:** Lower (2nd Floor)	Wood base of handrail	c. 1769	2	Paint Analysis, HHI-045 Campaign 1	(None)	C

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ROOM 102 - PARLOR/ LIVING ROOM 102

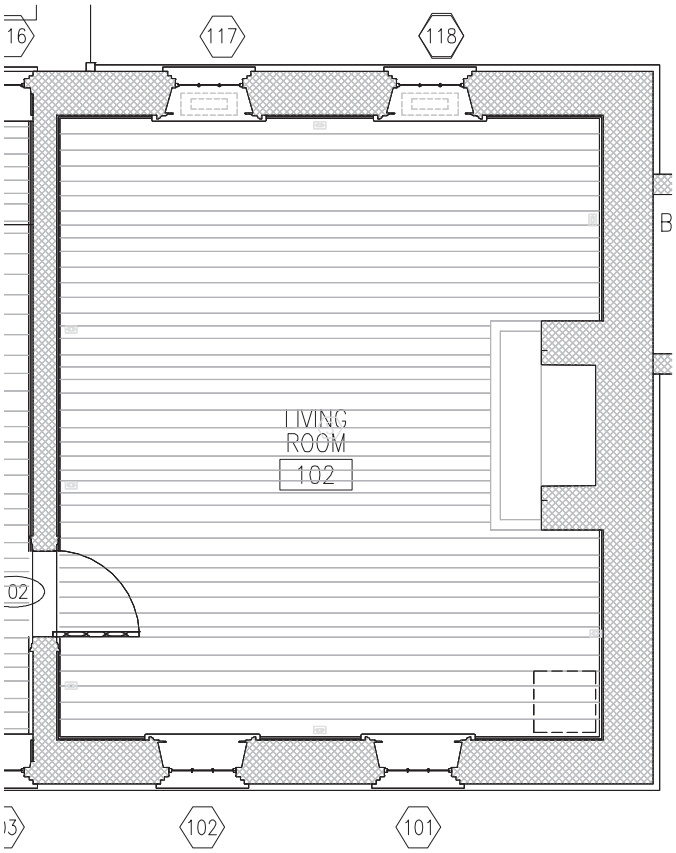


Figure 2B-101: Parlor/ Living Room 102 Floor Plan



Figure 2B-102: Parlor/ Living Room 102, North Elevation
(Photo: BBB, 2012)



Figure 2B-103: Parlor/ Living Room 102, South Elevation
(Photo: BBB, 2012)



Figure 2B-104: Parlor/ Living Room 102, East Elevation
(Photo: BBB, 2012)



Figure 2B-105: Parlor/ Living Room 102, East Elevation
(Photo: BBB, 2012)

Figure2B-106: Room 102 - Parlor/ Living Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room measuring 17'-9" in the north-south direction and 20'-4" in the east-west direction. The primary feature in the room is the fireplace and chimney breast along the north wall.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this space was part of the original construction.	(None)	C
2	**Flooring**	The flooring in Room 202-Living Room/ Parlor is the original random width wide plank hardwood flooring.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that the wood flooring was part of the original construction.	Presence of both cut nails and machine nails suggests this flooring is original to the Period of Significance, but it has been patched and repaired in some areas.	C
3	**Ceiling:** Flat	On-site investigations and probes revealed that the existing ceiling is a particleboard covered in plaster. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. The particleboard is secured directly to the second floor framing above.	c.1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall. Paint Analysis, HHI-103 Campaign 12	It is assumed this ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins.	NC (Compatible)
4	**Crown Molding:** Upper	Solid wood decorative crown molding.	c.1769	2	Paint Analysis, HHI-102 Campaign 1	(None)	C
5	**Crown Molding:** Middle	Solid wood decorative crown molding.	c.1769	2	Paint Analysis, HHI-101 Campaign 1	(None)	C
6	**Crown Molding:** Dentil	Solid wood decorative crown molding.	c.1769	2	Paint Analysis, HHI-100 Campaign 1	(None)	C

Figure2B-106 (continued): Room 102 - Parlor/ Living Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
7	**North Wall**	The north wall is plaster adhered directly to the exterior masonry bearing. The north wall is detailed with crown molding, chair rail molding, and baseboards.	c.1769 - brick masonry wall construction (date/ age of plaster c.1830s)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. It is assumed the plaster finish on the North Wall dates to the same period as the East Wall and South Wall, where paint samples were taken.	(None)	C
8	**East Wall**	The east wall is plaster adhered directly to the exterior masonry bearing. The east wall is detailed with crown molding, chair rail molding, and baseboards. Windows 101 and 102 are on the east wall.	c.1769 - brick masonry wall construction (date/ age of plaster c.1830s)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-098 Campaign 6	(None)	C
9	**South Wall**	The south wall is plaster adhered directly to the masonry bearing wall partition between the Central Hall 101 and the Parlor/ Living Room 102. The south wall is detailed with crown molding, chair rail molding, and baseboards.	c.1769 - brick masonry wall construction (date/ age of plaster c.1830s)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-097 Campaign 6	(None)	C

Figure2B-106 (continued): Room 102 - Parlor/ Living Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
10	**West Wall**	The west wall is plaster adhered directly to the exterior masonry bearing. The west wall is detailed with crown molding, chair rail molding, and baseboards. Windows 117 and 118 are on the west wall.	c.1769 - brick masonry wall construction (date/ age of plaster c.1998)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-099 Campaign 15	(None)	C
11	**Chair Rail:** Upper	Solid wood chair rail.	c.1769	2	Paint Analysis, HHI-104 Campaign 1	(None)	C
12	**Chair Rail:** Horizontal Raised Decoration	Solid wood chair rail.	c.1769	2	Paint Analysis, HHI-105 Campaign 1	(None)	C
13	**Chair Rail:** Diamond Decoration	Solid wood chair rail.	c.1769	2	Paint Analysis, HHI-106 Campaign 1	(None)	C
14	**Wainscot**	Solid wood wainscot throughout room.	c.1769	2	Paint Analysis, HHI-113 Campaign 1	Paint Samples taken from south wall wainscot.	C
15	**Baseboard**	Solid wood baseboard throughout room.	c.1769	2	Paint Analysis, HHI-114 Campaign 1	(None)	C
16	**Chimney Breast: Mantel:** Raised Panel	Solid wood paneling and trim surrounding fireplace and chimney.	c.1769	2	Paint Analysis, HHI-112 Campaign 1	(None)	C
17	**Chimney Breast: Mantel:** Shelf	Solid wood paneling and trim surrounding fireplace and chimney.	c.1769	2	Paint Analysis, HHI-110 Campaign 1	(None)	C
18	**Chimney Breast: Mantel:** Bracket	Solid wood paneling and trim surrounding fireplace and chimney.	c.1769	2	Paint Analysis, HHI-109 Campaign 1	(None)	C
19	**Chimney Breast:** Molding Under Shelf	Solid wood paneling and trim surrounding fireplace and chimney.	c.1769	2	Paint Analysis, HHI-111 Campaign 1	(None)	C
20	**Chimney Breast:** Raised Molding	Solid wood paneling and trim surrounding fireplace and chimney.	c.1769	2	Paint Analysis, HHI-108 Campaign 1	(None)	C
21	**Chimney Breast:** Field	Solid wood paneling and trim surrounding fireplace and chimney.	c.1769	2	Paint Analysis, HHI-107 Campaign 1	(None)	C

Figure2B-106 (continued): Room 102 - Parlor/ Living Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
22	**Windows 101, 102:** Masonry Opening	Windows 101, 102, 117, and 118 are double hung wood windows with nine over nine lites. Each window has interior wood shutters which fold into recessed pockets in the window jambs and a window seat approximately 20 inches above the finished wood flooring. Window Type:3A	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction.	Windows were repairs in 1996 by the Battersea Company under the supervision of the NPS. Field observations noted that the window sashes in these historic windows were likely replaced in the 1930s by Charles Collins (Period IV: 1929-40) but there was evidence that portions of the existing window frames are original to the house (Period 1: 1769-99)	C
23	**Windows 101, 102:** Frame	Solid wood window frame.	c.1769	2	Paint Analysis, HHI-096 Campaign 1	(None)	C
24	**Windows 101, 102:** Sash	Solid wood window sash.	c.1988	6	Paint Analysis, HHI-095 Campaign 15	(None)	C (Compatible)
25	**Windows 101, 102:** Shutter Inside	Solid wood interior window shutter.	c.1769	2	Paint Analysis, HHI-094 Campaign 1	(None)	C
26	**Windows 101, 102:** Shutter Outside	Solid wood interior window shutter.	c.1769	2	Paint Analysis, HHI-093 Campaign 1	(None)	C
27	**Windows 117, 118:** Masonry Opening	Windows 117 and 118 are double hung wood windows with nine over nine lites. Each window has interior wood shutters which fold into recessed pockets in the window jambs and a window seat approximately 20 inches above the finished wood flooring. Window Type:3A	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction.	Windows were repairs in 1996 by the Battersea Company under the supervision of the NPS. Field observations noted that the window sashes in these historic windows were likely replaced in the 1930s by Charles Collins (Period IV: 1929-40) but there was evidence that portions of the existing window frames are original to the house (Period 1: 1769-99)	
28	**Windows 117, 118:** Frame	Solid wood window frame.	c.1769	2	Paint Analysis, HHI-092 Campaign 1	(None)	C
29	**Windows 117, 118:** Sash	Solid wood window sash.	c.1988	2	Paint Analysis, HHI-091 Campaign 15	(None)	C

Figure2B-106 (continued): Room 102 - Parlor/ Living Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
30	**Door 102:** Door Frame Inner	Solid wood door frame and trim. Door Type: INT-2 Door Hardware Type: INT-1	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction. Paint Analysis, HHI-088 Campaign 1 (See Defining Features, Age, & Significance Matrix for Room 101 for more detailed information regarding Paint Analysis and date of construction of this door.)	(None)	C
31	**Door 102:** Door Frame Outer	Solid wood door frame and trim.	c.1769	2	Paint Analysis, HHI-087 Campaign 1	(None)	C
32	**Door 102:** Door Field	Solid wood raised panel door.	c.1830s	2	Paint Analysis, HHI-089 Campaign 6	(None)	C
33	**Door 102:** Door Recessed Panel	Solid wood raised panel door.	c.1830s	2	Paint Analysis, HHI-090 Campaign 6	(None)	C
34	**HVAC Grilles**	Painted metal supply or return air grille	c.1941	5	Research of archival documentation concluded that Charles Collins first introduced an electrical heating system into Harmony Hall c. 1941.	(None)	NC (Incompatible)

ROOM 103 - DINING ROOM

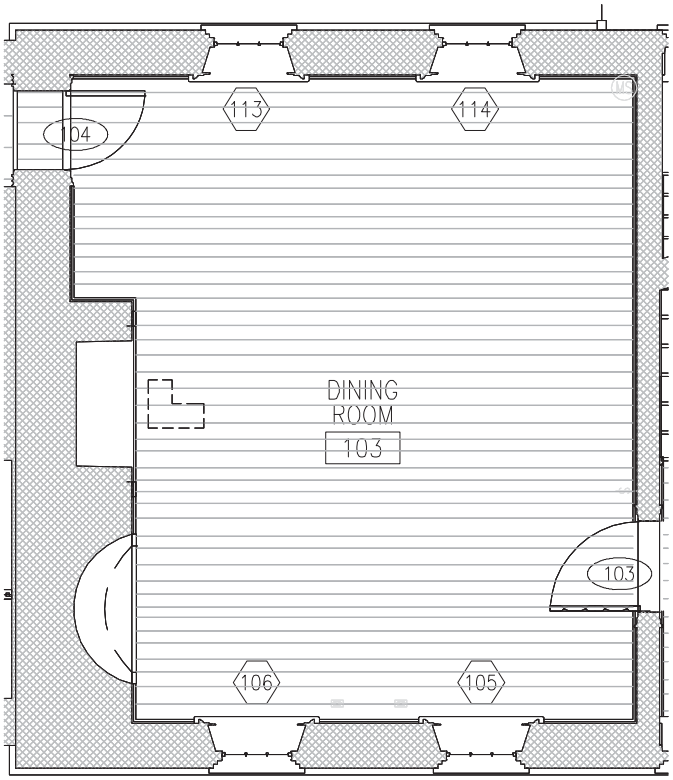


Figure 2B-107: Dining Room 103 Floor Plan



Figure 2B-108: Dining Room 103, South Elevation Fireplace
(Photo Credit: BBB, 2012)



Figure 2B-109: Room 103 - Dining Room, North Elevation
(Photo Credit: BBB, 2012)



Figure 2B-110: Room 103 - Dining Room, East Elevation
(Photo Credit: BBB, 2012)



Figure 2B-111: Room 103 - Dining Room, South Elevation
(Photo Credit: BBB, 2012)



Figure 2B-112: Room 103 - Dining Room, West Elevation
(Photo Credit: BBB, 2012)

Figure2B-113: Room 103 - Dining Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room measuring 17'-9" in the north-south direction and 20'-4" in the east-west direction. The primary feature in the room is the built in paneled cupboard and the fireplace and chimney breast along the south wall.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this space was part of the original construction.	(None)	C
2	**Flooring**	The flooring in the Dining Room 103 is the original random width wide plank hardwood flooring.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that the wood flooring was part of the original construction.	Presence of both cut nails and machine nails suggests this flooring is original to the Period of Significance, but it has been patched and repaired in some areas.	C
3	**Ceiling:** Flat	On-site investigations and probes revealed that the existing ceiling is a particleboard covered in plaster. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. The particleboard is secured directly to the second floor framing above. In some locations wood lathing or shims remain from what was assumes to be an original plaster ceiling.	c.1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall. Paint Analysis, HHI-085 Campaign 12	It is assumed this ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins.	C
4	**Crown Molding**	Solid wood decorative crown molding.	c.1929	4	Paint Analysis, HHI-084 Campaign 12	(None)	C
5	**North Wall**	The north wall is plaster adhered directly to the masonry bearing wall partition between the Central Hall 101 and the Dining Room 103. The north wall is detailed with crown molding, chair rail molding, and baseboards.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1830s)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-086 Campaign 6	(None)	NC (Compatible)

Figure2B-113 (continued): Room 103 - Dining Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
6	**East Wall**	The east wall is plaster adhered directly to the exterior masonry bearing. The east wall is detailed with crown molding, chair rail molding, and baseboards. Windows 105 and 106 are on the east wall.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1830s)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Date of plaster based upon analysis of paint on similar wall in Room 103.	(None)	C
7	**South Wall**	The south wall is plaster adhered directly to the exterior masonry bearing. The south wall is detailed with crown molding, chair rail molding, and baseboards.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1830s)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-086a Campaign 6	(None)	C
8	**West Wall**	The west wall is plaster adhered directly to the exterior masonry bearing. The west wall is detailed with crown molding, chair rail molding, and baseboards. Windows 113 and 114 are on the west wall.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1830s)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Date of plaster based upon analysis of paint on similar wall in Room 103.	(None)	C
9	**Chair Rail:** Upper	Solid wood chair rail throughout room.	c.1792	2	Paint Analysis, HHI-062 Campaign 3	(None)	C

Figure2B-113 (continued): Room 103 - Dining Room - Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
10	**Chair Rail:** Lower	Solid wood chair rail throughout room.	c.1769	2	Paint Analysis, HHI-063 Campaign 1	(None)	C
11	**Mantel:** Inner Molding	Solid wood mantelpiece above fireplace.	c.1769	2	Paint Analysis, HHI-074 Campaign 1	(None)	C
12	**Mantel:** Middle Molding	Solid wood mantelpiece above fireplace.	c.1769	2	Paint Analysis, HHI-075 Campaign 1	(None)	C
13	**Mantel:** Outer Molding	Solid wood mantelpiece above fireplace.	c.1792	2	Paint Analysis, HHI-076 Campaign 3	(None)	C
14	**Mantel:** Block	Solid wood mantelpiece above fireplace.	c.1769	2	Paint Analysis, HHI-082 Campaign 1	(None)	C
15	**Fireplace Paneling:** Large Panel Above	Solid wood paneling and trim surrounding fireplace and chimney.	c.1769	2	Paint Analysis, HHI-080 Campaign 1	(None)	C
16	**Fireplace Paneling:** Field	Solid wood paneling and trim surrounding fireplace and chimney.	c.1769	2	Paint Analysis, HHI-077 Campaign 1	(None)	C
17	**Fireplace Paneling:** Recessed Molding	Solid wood paneling and trim surrounding fireplace and chimney.	c.1830s	2	Paint Analysis, HHI-078 Campaign 6	(None)	NC (Compatible)
18	**Fireplace Paneling:** Raised Panel Narrow	Solid wood paneling and trim surrounding fireplace and chimney.	c.1769	2	Paint Analysis, HHI-079 Campaign 1	(None)	C
19	**Fireplace Paneling:** Surround	Solid wood paneling and trim surrounding fireplace and chimney.	c.1929	4	Paint Analysis, HHI-081 Campaign 12	(None)	NC (Compatible)
20	**Cupboard:** Keystone	Decorative solid wood built-in cupboard.	c.1769	2	Paint Analysis, HHI-083 Campaign 1	(None)	C
21	**Cupboard:** Frame Field	Decorative solid wood built-in cupboard.	c.1769	2	Paint Analysis, HHI-064 Campaign 1	(None)	C
22	**Cupboard:** Recessed Molding	Decorative solid wood built-in cupboard.	c.1769	2	Paint Analysis, HHI-065 Campaign 1	(None)	C
23	**Cupboard:** Raised Panel	Decorative solid wood built-in cupboard.	c.1769	2	Paint Analysis, HHI-066 Campaign 1	(None)	C
24	**Cupboard:** Arched Molding	Decorative solid wood built-in cupboard.	c.1769	2	Paint Analysis, HHI-067 Campaign 1	(None)	C
25	**Cupboard:** Door Field	Decorative solid wood built-in cupboard.	c.1769	2	Paint Analysis, HHI-068 Campaign 1	(None)	C
26	**Cupboard:** Door Panel	Decorative solid wood built-in cupboard.	c.1769	2	Paint Analysis, HHI-069 Campaign 1	(None)	C
27	**Inside Cupboard:** Inside Face of Door	Decorative solid wood built-in cupboard.	c.1792	2	Paint Analysis, HHI-070 Campaign 3	(None)	C

Figure2B-113 (continued): Room 103 - Dining Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
28	**Inside Cupboard:** Lower Shelf	Decorative solid wood built-in cupboard.	c.1810s	2	Paint Analysis, HHI-071 Campaign 4	(None)	NC (Compatible)
29	**Inside Cupboard:** Back Wall Lower	Decorative solid wood built-in cupboard.	c.1810s	2	Paint Analysis, HHI-072 Campaign 4	(None)	NC (Compatible)
30	**Inside Cupboard:** Domed Ceiling	Decorative solid wood built-in cupboard.	c.1820s	2	Paint Analysis, HHI-073 Campaign 5	(None)	NC (Compatible)
31	**Windows 105, 106, 113, 114:** Masonry Opening	Windows 105, 106, 113, and 114 are double hung wood windows with nine over nine lites. (NPS staff indicated the sashes were recently removed, stripped of all lead based paint and re-installed. BBB and the design team do not have documentation of this repair.) Window Type:3B	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction.	Windows were repairs in 1996 by the Battersea Company under the supervision of the NPS. Field observations noted that the window sashes in these historic windows were likely replaced in the 1930s by Charles Collins (Period IV: 1929-40) but there was evidence that portions of the existing window frames are original to the house (Period 1: 1769-99)	C
32	**Windows 105, 106, 113, 114:** Frame	Solid wood window frame.	c.1769	2	Paint Analysis, HHI-060 Campaign 1	Paint samples taken from window 106.	C
33	**Windows 105, 106, 113, 114:** Sash	Solid wood window sash.	c.1950	6	Paint Analysis, HHI-056 Campaign 13	Paint samples taken from window 106.	NC (Compatible)
34	**Windows 105, 106, 113, 114:** Shutter Recess	Solid wood interior window trim and shutter pocket.	c.1769	2	Paint Analysis, HHI-059 Campaign 1	Paint samples taken from window 106.	C
35	**Windows 105, 106, 113, 114:** Shutter Inside	Solid wood interior window shutters.	c.1792	2	Paint Analysis, HHI-057 Campaign 3	Paint samples taken from window 106.	C
36	**Windows 105, 106, 113, 114:** Shutter Outside	Solid wood interior window shutters.	c.1820s	2	Paint Analysis, HHI-058 Campaig 5	Paint samples taken from window 106.	NC (Compatible)

Figure2B-113 (continued): Room 103 - Dining Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
37	**Windows 105, 106, 113, 114:** Bench Back	Solid wood window trim.	c.1769	2	Paint Analysis, HHI-061 Campaign 1	Paint samples taken from window 106.	C
38	**Door 103:** Door Field	Painted solid wood paneled door; contains six (6) recessed panels Door Type: INT-2 Door Hardware Type: INT-1	c.1830s	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this door opening was part of the original construction. Paint Analysis, HHI-054 Campaign 6	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period IV (1929-40). Collins does not specify any details regarding the replacement of these doors.	NC (Compatible)
39	**Door 103:** Door Recessed Panel	Painted solid wood paneled door; contains six (6) recessed panels	c.1830s	2	Paint Analysis, HHI-055 Campaign 6	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period IV (1929-40). Collins does not specify any details regarding the replacement of these doors.	NC (Compatible)
40	**Door 103:** Frame	Solid wood door frame and trim.	c.1769	2	Paint Analysis, HHI-052 Campaign 1	(None)	C
41	**Door 104:** Door Field	Painted solid wood paneled door; contains six (6) recessed panels Door Type: INT-3 Door Hardware Type: INT-1	c.1830s	2	Paint Analysis, HHI-053a Campaign 6	(None)	NC (Compatible)
42	**Door 104:** Frame	Solid wood door frame and trim.	c.1792	2	Paint Analysis, HHI-053 Campaign 3	(None)	C
43	**HVAC Grilles**	Painted metal supply or return air grille	c.1941	5	Research of archival documentation concluded that Charles Collins first introduced a General Electric heating system into Harmony Hall c. 1941.	(None)	NC (Incompatible)
44	**Light Fixture**	Surface mounted incandescent light fixture with decorative globe. Light Fixture Type: INT-2	c.1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity into Harmony Hall c. 1929.	(None)	NC (Incompatible)

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ROOM 104 - KITCHEN

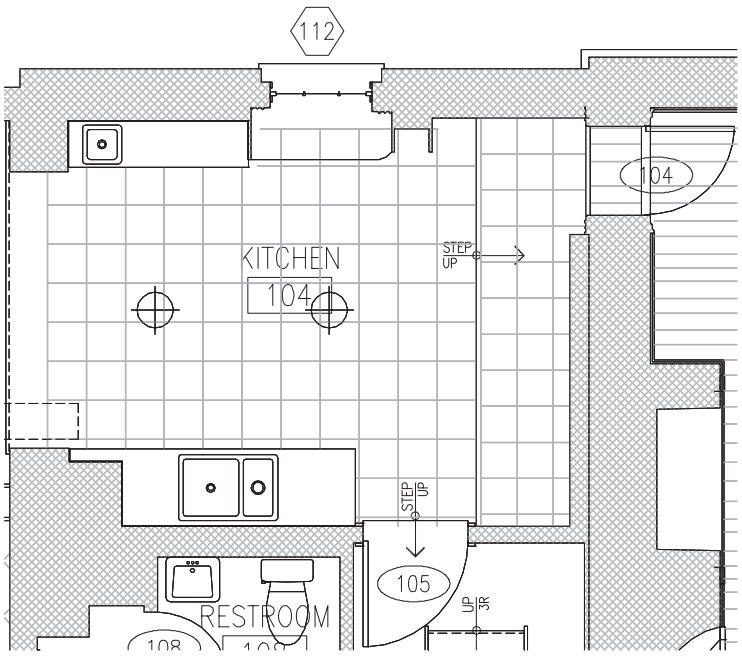


Figure 2B-114: Room 104-Kitchen 104 Floor Plan



Figure 2B-116: Room 104-Kitchen 104



Figure 2B-115: Room 104-Kitchen 104



Figure 2B-117: Room 104-Kitchen 104

Figure2B-118: Room 104 - Kitchen - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room measuring 15'-6 1/2" in the north-south direction and 11'-3" in the east west direction.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
2	**Flooring**	Ceramic tile floor and vinyl tile.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
3	**Ceiling**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**North Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
5	**East Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
6	**South Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
7	**West Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	Portion of west wall may date to Period IV: 1929-41. Paint analysis of window 112 dates the window sash and frame to the 19th century.	NC (Incompatible)
8	**Door 104**	Painted solid wood raised panel door with solid wood paneled jamb; door contains six (6) raised panels Door Type: INT-3 Door Hardware Type: INT-1	c.1830s	2	(See Defining Features, Age, & Significance Matrix for Room 103 for more detailed information regarding Paint Analysis and date of construction of this door.)	(None)	C
9	**Door 105**	Solid wood raised panel door; door contains four (4) raised panels and two lights at the top of the door Door Type: INT-4 Door Hardware Type: INT-4	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

Figure2B-118 (continued): Room 104 - Kitchen - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
10	**Window 112:** Frame	**First Floor Window:** Solid wood window frame and trim. Window Type:10	c.1893-1929	3	Paint Analysis, HHE-032 Campaign 9 (See Defining Features, Age, & Significance Matrix for West Facade, Central South Addition for more detailed information regarding Paint Analysis and date of construction of this window.)	It is possible this window was located on either the North or South Facade of the Main Block and Collins reused both the frame and sash when he constructed the Pantry Addition during Period IV (c. 1929).	NC (Compatible)
11	**Window 112:** Sash	First Floor Window: Six over six pane double hung wood window Window Type:10	c.1820-1892	3	Paint Analysis, HHE-031 Campaign 6 (See Defining Features, Age, & Significance Matrix for West Facade, Central South Addition for more detailed information regarding Paint Analysis and date of construction of this window.)	It is possible this window was located on either the North or South Facade of the Main Block and Collins reused both the frame and sash when he constructed the Pantry Addition during Period IV (c. 1929).	NC (Compatible)
12	**Cabinetry**	Metal base and wall cabinets	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
13	**Plumbing Fixtures**	Plumbing fixtures include: kitchen sink and bar sink	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
14	**Appliances**	Appliances include: trash compactor	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
15	**Light Fixture**	Surface mounted incandescent light fixture with glass globe. Light Fixture Type: INT-3	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

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ROOM 105 - CORRIDOR AND ROOM 107 - STAIR

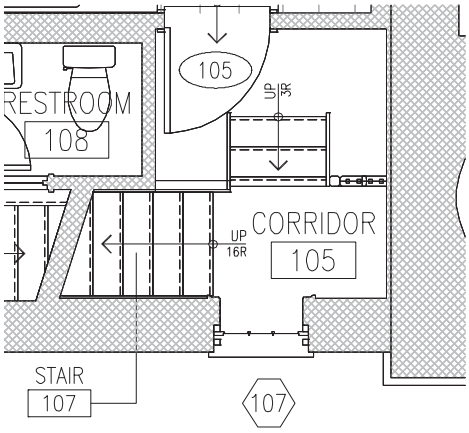


Figure 2B-119: Room 105-Corridor and Room 107-Stair Floor Plan



Figure 2B-120: Room 105-Corridor and Room 107-Stair



Figure 2B-121: Room 105-Corridor and Room 107-Stair

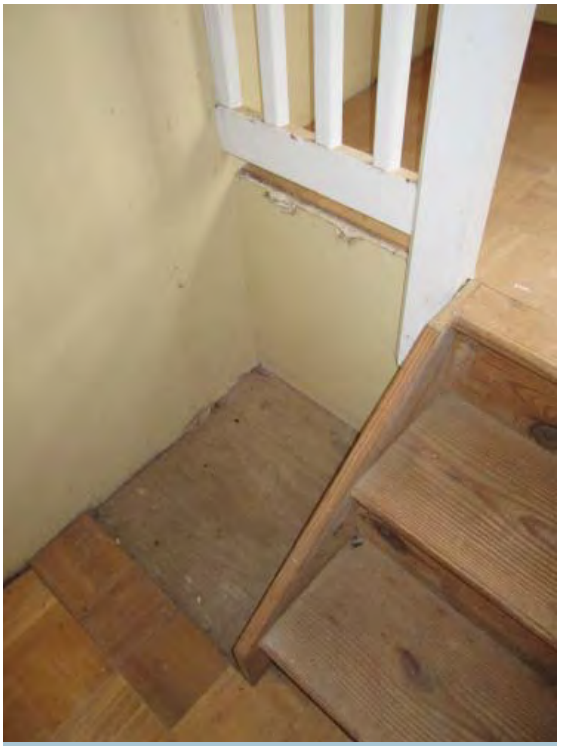


Figure 2B-122: Room 105-Corridor and Room 107-Stair

Figure2B-123: Room 105 - Corridor and Room 107 - Stair - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Stair corridor measuring 6'-5" in the north-south direction and 7'-5 1/2" in the east west direction. Room 107-Stair measures 36" clear.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
2	**Flooring**	Parquet wood flooring.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
3	**Ceiling**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**North Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
5	**East Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
6	**South Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
7	**West Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
8	**Door 105**	Solid wood raised panel door; door contains four (4) raised panels and two lights at the top of the door Door Type: INT-4 Door Hardware Type: INT-4	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
9	**Window 107:** Window Frame	Solid wood window frame and trim. Window Type: 10	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88 Paint Analysis, HHE-018 Campaign 32	(None)	NC (Incompatible)

Figure2B-123: Room 105 - Corridor and Room 107 - Stair - Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
10	**Window 107:** Window Sash	First Floor Windows: Nine over six pane double hung solid wood windows Window Type: 10	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
10	**Stair treads and risers**	Solid wood risers, tread and stringers	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
10	**Light Fixture**	Surface mounted incandescent light fixture with glass globe. Light Fixture Type: INT-4	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

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ROOM 106 - SUN ROOM

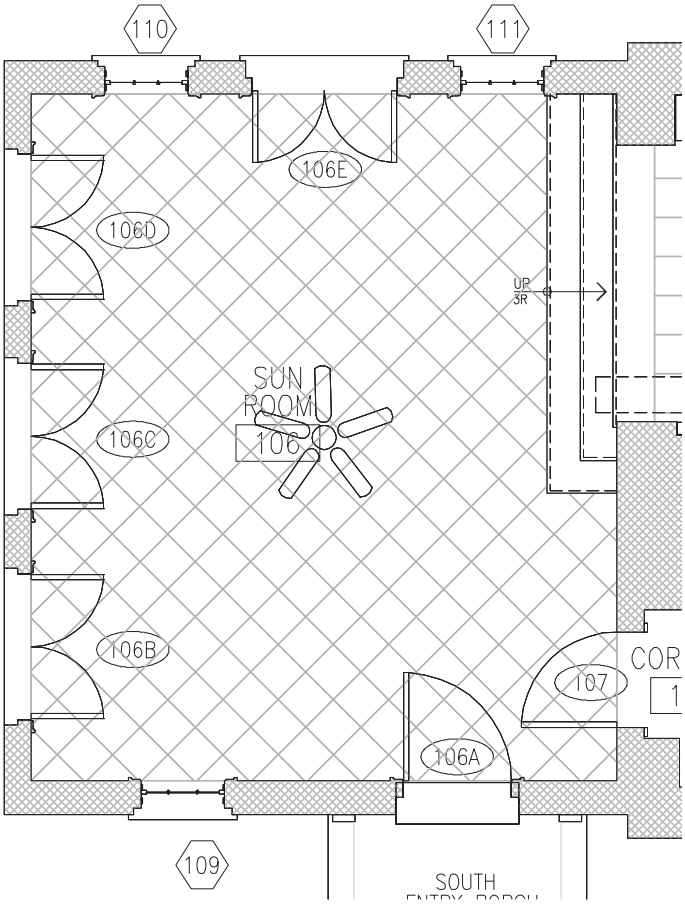


Figure 2B-124: Room 106-Sun Room Floor Plan



Figure 2B-125: Room 106-Sun Room



Figure 2B-126: Room 106-Sun Room



Figure 2B-127: Room 106-Sun Room

Figure2B-128: Room 106 - Sun Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular sun room measuring 16'-3" in the north-south direction and 19'-0 3/4" in the east west direction.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
2	**Flooring**	Ceramic tile flooring.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
3	**Ceiling**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**North Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
5	**East Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
6	**South Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
7	**West Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
8	**Stair treads and risers**	Solid wood risers, tread and stringers	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
9	**Door: 106A**	Solid wood raised panel exterior door. Door Type: EXT-4 Door Hardware Type: EXT-4	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

Figure2B-128 (continued): Room 106 - Sun Room - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
10	**Door: 106B, 106C, 106D, 106D:** Frame	Solid wood door frame and trim Door Type: EXT-5 Door Hardware Type: EXT-5	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88 Paint Analysis, HHI-022 Campaign 32	(None)	NC (Incompatible)
11	**Door: 106B, 106C, 106D, 106D:** Door	Solid wood french doors. Door Type: EXT-5 Door Hardware Type: EXT-5	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88 Paint Analysis, HHI-021 Campaign 32	(None)	NC (Incompatible)
12	**Windows 109, 110, 111:** Frame	Solid wood window frame. Window Type: 13	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88 Paint Analysis, HHI-020 Campaign 32	(None)	NC (Incompatible)
13	**Windows 109, 110, 111:** Sash	Solid wood window sash. Window Type: 13	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88 Paint Analysis, HHI-019 Campaign 32	(None)	NC (Incompatible)
14	**Light Fixture**	Ceiling mounted incandescent four (4) fixture light and ceiling fan Light Fixture Type: INT-5	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

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ROOM 108 - RESTROOM (INCLUDING ROOM 107 - CORRIDOR)

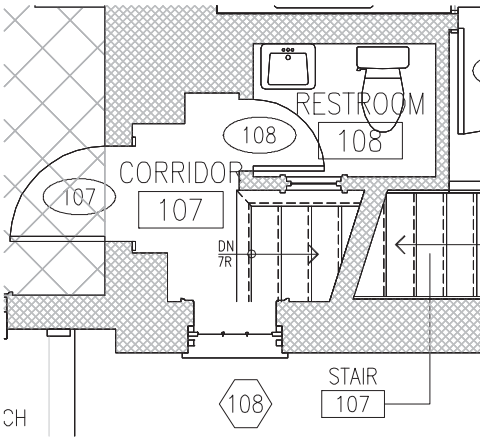


Figure 2B-129: Room 108-Restroom and Room 107-Corrdior Floor Plan



Figure 2B-130: Room 108-Restroom and Room 107-Corrdior

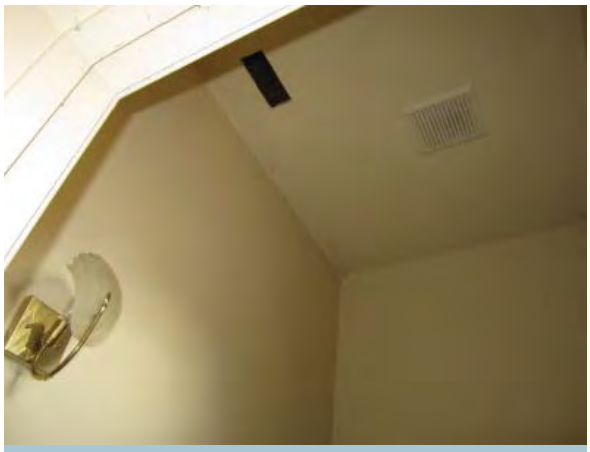


Figure 2B-131: Room 108-Restroom and Room 107-Corrdior

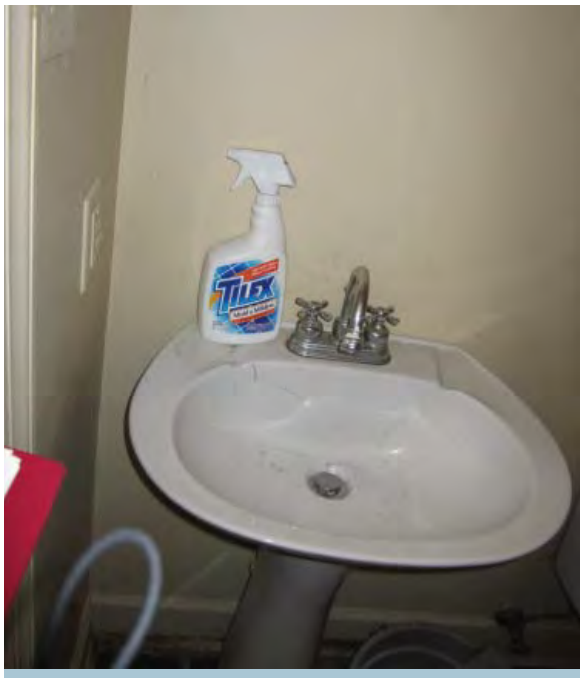


Figure 2B-132: Room 108-Restroom and Room 107-Corrdior

Figure2B-133: Room 108 - Restroom and Room 107 - Corridor - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular restroom (Room 108-Restroom) measuring 5'-0 3/4" in the north-south direction and 3'-8 1/4" in the east-west direction. The adjacent corridor (Room 107-Corridor) measured 2'-11 3/4" in the north-south direction and 5'-9 1/2" in the east-west direction.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
2	**Flooring**	Ceramic tile flooring.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
3	**Ceiling**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**North Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
5	**East Wall**	Gypsum wallboard on wood framing. There is a small round interior window in the east wall to allow light into Room 108-Restroom from Window 108.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
6	**South Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
7	**West Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
8	**Stair treads and risers**	Solid wood risers, tread and stringers leading from Room 107-Corridor to basement below.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
9	**Door: 108**	Solid wood raised panel exterior door. Door Type: INT-5 Door Hardware Type: INT-6	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

Figure2B-133 (continued): Room 108 - Restroom and Room 107 - Corridor - Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
10	**Light Fixture**	Wall mounted incandescent sconce. Light Fixture Type: INT-7	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

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SECOND FLOOR

The second floor of the Main Block contains three of the most historically significant spaces in Harmony Hall. The second floor plan, similar to the first floor of the Main Block, is typical of 18th century plantation homes of the time with a rectangular layout having a central hall and a symmetrical layout of one room on either side of that central hall. Room 201 – Central Hall features an ornate central staircase with architectural detailing typical of Georgian plantation homes of the 18th century in Maryland. Two bedrooms, Room 202 – North Bedroom and Room 203 – South Bedroom, are located on the second floor of the Main Block. The second floor of the Main Block has double hung wood windows with a nine over six lite pattern or a six over four lite pattern, but these windows do not have interior wood shutters.

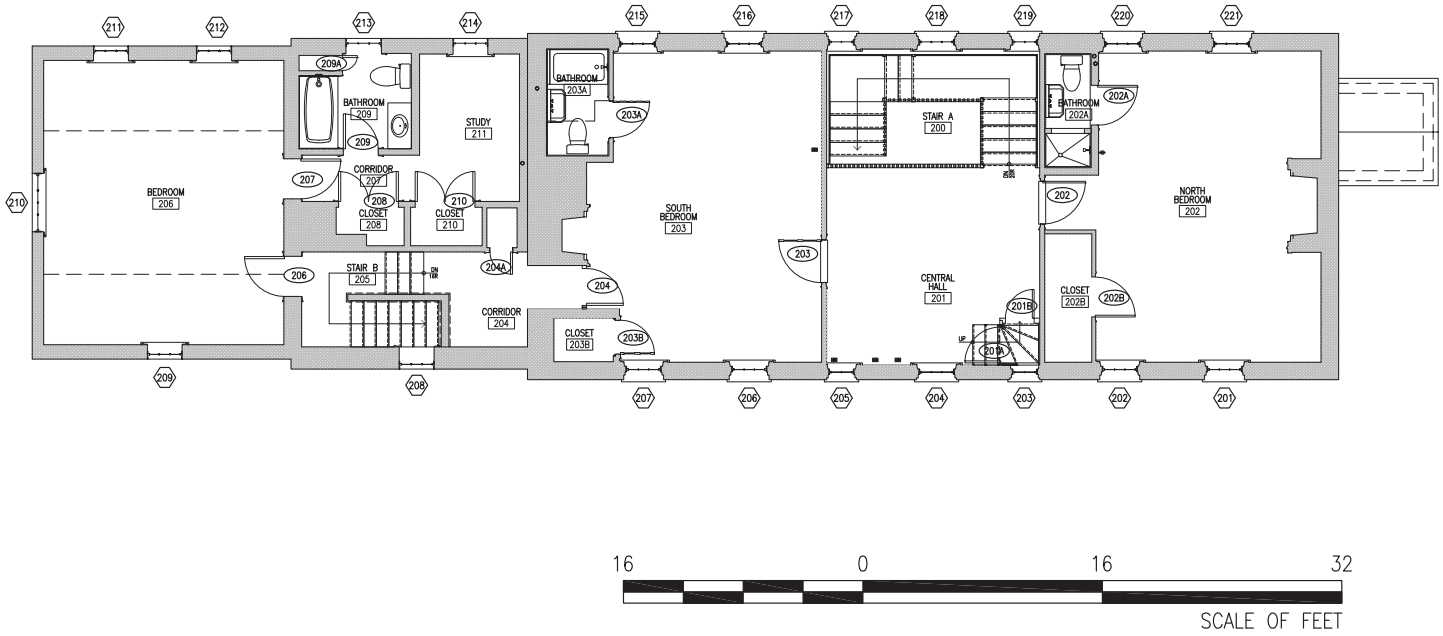
During a Period V expansion of the Central South Addition by Charles Collins the second floor of this central addition was expanded, however it is unclear if the second floor space was fully finished. The drawing documentation of the 1988 construction of the South Addition specifies that the second floor dormer windows in the Central South Addition had to be relocated and/ or elevated in order to accommodate the renovation of this space and the construction of a wood stair, bathroom, closets, and study/ dressing room. The second floor of the Central South Addition is connected to the Main Block through a doorway in the south wall of the Main Block, located in Room 203 – South Bedroom.

The South Addition to Harmony Hall was constructed during Period IV (1988) when the house and property were being leased by the National Park Service (NPS) to the Battersea Driving Company. The second floor of the South Addition is located approximately 26 inches below that of the second floor of the Main Block. The south stair located in the Central South Addition contains a landing which leads to Room 206 – Bedroom, located over Room 106 – Sun Room.

SECOND FLOOR INVENTORY

The following matrices and room inventories catalog each space on the second floor and describe all features including the floor, walls, ceiling, doors, windows, and other architectural elements and details. In addition to the architectural details and finishes, any light fixtures and equipment are also described. Each matrix establishes an estimated date of construction for each feature and provides the research or source documentation utilized to make this determination. To accompany each room inventory a floor plan of the space has been provided with selected photographs of the space to document all significant features.

SECOND FLOOR PLAN



ROOM 201 - CENTRAL HALL

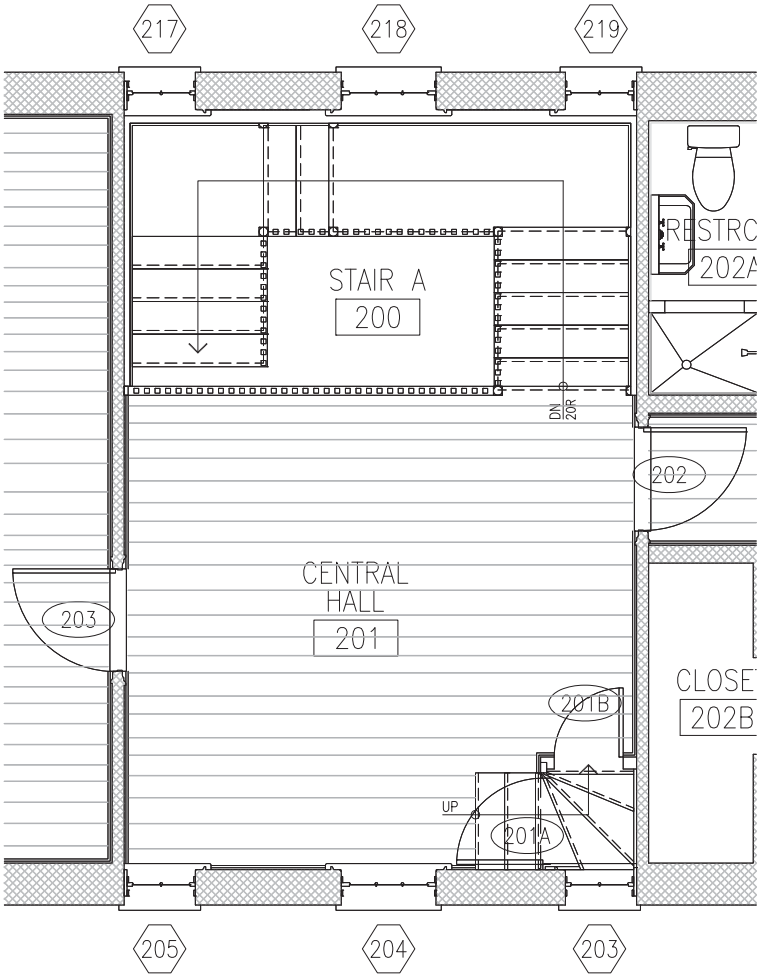


Figure 2B-134: Room 201-Central Hall Floor Plan

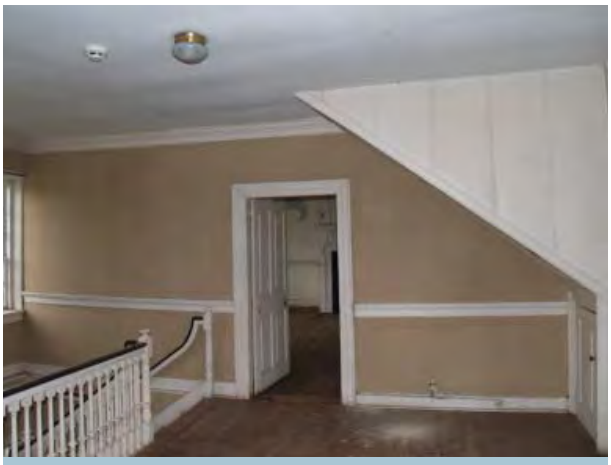


Figure 2B-135: Room 201-Central Hall, North Elevation (Photo Credit: BBB, 2012)



Figure 2B-136: Room 201-Central Hall, East Elevation (Photo Credit: BBB, 2012)



Figure 2B-137: Room 201-Central Hall, South Elevation (Photo Credit: BBB, 2012)

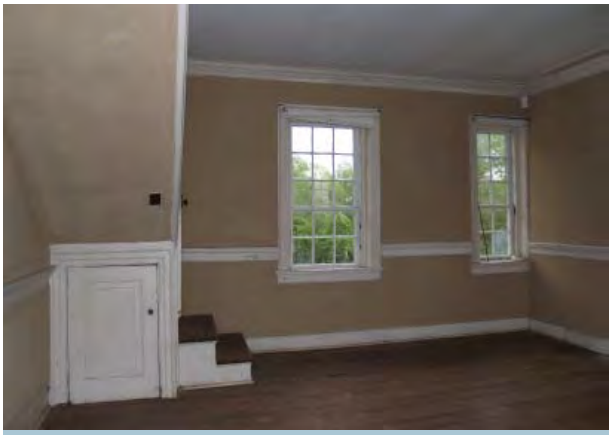


Figure 2B-138: Room 201-Central Hall, West Elevation (Photo Credit: BBB, 2012)

Figure2B-139: Room 201 - Central Hall - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room measuring 14'-3" in the north-south direction and 20'-10" in the east-west direction. The primary feature in the room is the decorative central staircase leading to the first floor.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this room was part of the original construction.	(None)	C
2	**Flooring**	The flooring in the Central Hall Room 201 is the original random width wide plank hardwood flooring. The existing flooring is in fair conditions with minimal areas of wear and/ or rot. Any area of rot or wear can be replaced per individual floor boards.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wood flooring was part of the original construction.	Presence of both cut nails and machine nails suggests this flooring is original to the Period of Significance, but it has been patched and repaired in some areas.	C
3	**Ceiling:** Flat	On-site investigations and probes revealed that the existing ceiling is a particleboard covered in plaster. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. The particleboard is secured directly to the second floor framing above.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall. Paint Analysis, HHI-048 Campaign 12	It is assumed this ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins.	NC (Compatible)
4	**Crown Molding**	Decorative wood crown molding.	c. 1792	2	Paint Analysis, HHI-049 Campaign 3	(None)	C
5	**North Wall:** Plaster above Chair Rail	On-site investigations and probes revealed that the existing north wall assembly is a particleboard covered in plaster on wood stud framing. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. The north wall is detailed with crown molding, chair rail molding, and baseboards.	c. 1769 - wood framed partition (date/ age of plaster c.1929)	2	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall. Paint Analysis, HHI-050 Campaign 12	It is assumed this wall finish assembly was installed in many locations throughout the house during Period IV: 1929-40 by Charles Collins.	NC (Compatible)

Figure2B-139 (continued): Room 201 - Central Hall - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
6	**North Wall:** Plaster above Chair Rail	On-site investigations and probes revealed that the existing north wall assembly is a particleboard covered in plaster on wood stud framing. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. The north wall is detailed with crown molding, chair rail molding, and baseboards.	c. 1769 - wood framed partition (date/ age of plaster c.1929)	2	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall. Paint Analysis, HHI-051 Campaign 12	It is assumed this wall finish assembly was installed in many locations throughout the house during Period IV: 1929-40 by Charles Collins	NC (Compatible)
7	**East Wall**	The east wall is plaster adhered directly to the exterior masonry bearing. The east wall is detailed with crown molding, chair rail molding, and baseboards. Windows 203, 204 and 205 are on the east wall.	c. 1769 - brick masonry wall construction (date/ age of plaster unknown)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced.	(None)	C
8	**South Wall**	On-site investigations and probes revealed that the existing south wall assembly is a particleboard covered in plaster on wood stud framing. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. The south wall is detailed with crown molding, chair rail molding, and baseboards.	c. 1769 - wood framed partition (date/ age of plaster c.1929)	2	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	It is assumed this wall finish assembly was installed in many locations throughout the house during Period IV: 1929-40 by Charles Collins. Date of plaster based upon results of paint analysis completed for the North Wall.	C

Figure2B-139 (continued): Room 201 - Central Hall - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
9	**West Wall: Plaster** (Above 2nd Floor Chair Rail) (Upper)	The west wall is plaster adhered directly to the exterior masonry bearing. The west wall is detailed with crown molding, chair rail molding, and baseboards. Windows 217, 218 and 219 are on the west wall.	c. 1769 - brick masonry wall construction (date/ age of plaster c. 1929)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-038 Campaign 12	Date of plaster based upon results of paint analysis.	NC (Compatible)
10	**West Wall: Middle Plaster** (Below 2nd Floor Chair Rail)	The west wall is plaster adhered directly to the exterior masonry bearing. The west wall is detailed with crown molding, chair rail molding, and baseboards. Windows 217, 218 and 219 are on the west wall.	c. 1769 - brick masonry wall construction (date/ age of plaster c. 1792)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-039 Campaign 3	Date of plaster based upon results of paint analysis.	C
11	**West Wall: Lower Plaster** (Below 2nd Floor Baseboard along Central Staircase Landing)	The west wall is plaster adhered directly to the exterior masonry bearing. The west wall is detailed with crown molding, chair rail molding, and baseboards.	c. 1769 - brick masonry wall construction (date/ age of plaster c. 1786)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-040 Campaign 2	Date of plaster based upon results of paint analysis.	C

Figure2B-139 (continued): Room 201 - Central Hall - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
12	**West Wall: Lower Plaster** (Below 2nd Floor Baseboard along Central Staircase Landing)	The west wall is plaster adhered directly to the exterior masonry bearing. The west wall is detailed with crown molding, chair rail molding, and baseboards.	c. 1769 - brick masonry wall construction (date/ age of plaster c. 1792)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-041 Campaign 3	Date of plaster based upon results of paint analysis.	C
13	**Windows 203, 205, 217, 219:** Masonry Openings	Windows 203, 205, 217, and 219 are double hung wood windows with six over four (6/4) lites. (NPS staff indicated the sashes were recently removed, stripped of all lead based paint and re-installed. BBB and the design team do not have documentation of this repair.) Window Type: 5	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction.	(None)	C
14	**Windows 203, 205, 217, 219:** Window Frames	Wood window frames	c. 1792-1820	2	Paint Analysis, HHI-028 Campaign 2	Paint sample taken from Window 207.	C
15	**Windows 203, 205, 217, 219:** Sashes	Wood window sashes.	c. 1820-1892	2	Paint Analysis, HHI-027 Campaign 6	Paint sample taken from Window 207.	NC (Compatible)
16	**Window 204, 218:** Masonry Openings	Windows 204 and 218 are double hung wood windows with nine over six (9/6) lites. (NPS staff indicated the sashes were recently removed, stripped of all lead based paint and re-installed. BBB and the design team do not have documentation of this repair.) Window Type: 4	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction.	(None)	C

Figure2B-139 (continued): Room 201 - Central Hall - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
17	**Window 204, 218:** Window Frames	Wood window frames	c. 1792-1820	2	Paint Analysis, HHI-028 Campaign 2	Paint sample taken from Window 207.	C
18	**Window 204, 218:** Sashes	Wood window sashes.	c. 1820-1892	2	Paint Analysis, HHI-027 Campaign 6	Paint sample taken from Window 207.	NC (Compatible)
19	**Chair Rail**	Solid wood carved chair rail throughout Room 201	c. 1792	2	Paint Analysis, HHI-042 Campaign 3	(None)	C
20	**Baseboard**	Solid wood baseboard throughout Room 201	c. 1792	2	Paint Analysis, HHI-043 Campaign 3	(None)	C
21	**Door 201A**	Painted solid wood paneled door; contains four (4) recessed panels Door Type: INT-6 Door Hardware Type: INT-1	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction.	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period IV: 1929-40. However, the paint analysis conducted as part of this HSR does not support this claim and Collins does not specify any details regarding the replacement of these doors.	C
22	**Door 201B**	Painted solid wood paneled door; contains One (1) recessed panels Door Type: INT-7 Door Hardware Type: INT-18	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction.	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period IV: 1929-40. However, the paint analysis conducted as part of this HSR does not support this claim and Collins does not specify any details regarding the replacement of these doors.	C
23	**Door 202**	Painted solid wood paneled door; contains four (4) recessed panels Door Type: INT-8 Door Hardware Type: INT-1	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction. (See Defining Features, Age, & Significance Matrix for Room 202 for the more detailed information regarding the exterior paint analysis completed and date of construction for this door.)	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period IV: 1929-40. However, the paint analysis conducted as part of this HSR does not support this claim and Collins does not specify any details regarding the replacement of these doors.	C

Figure2B-139 (continued): Room 201 - Central Hall - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
24	**Door 203**	Painted solid wood paneled door; contains four (4) recessed panels Door Type: INT-10 Door Hardware Type: INT-1	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction. (See Defining Features, Age, & Significance Matrix for Room 203 for the more detailed information regarding the exterior paint analysis completed and date of construction for this door.)	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period IV: 1929-40. However, the paint analysis conducted as part of this HSR does not support this claim and Collins does not specify any details regarding the replacement of these doors.	C
25	**Light Fixture**	Surface mounted incandescent light fixture with glass globe. Light Fixture Type: INT-8	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity into Harmony Hall c. 1929.	(None)	NC (Incompatible)

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ROOM 202 - NORTH BEDROOM

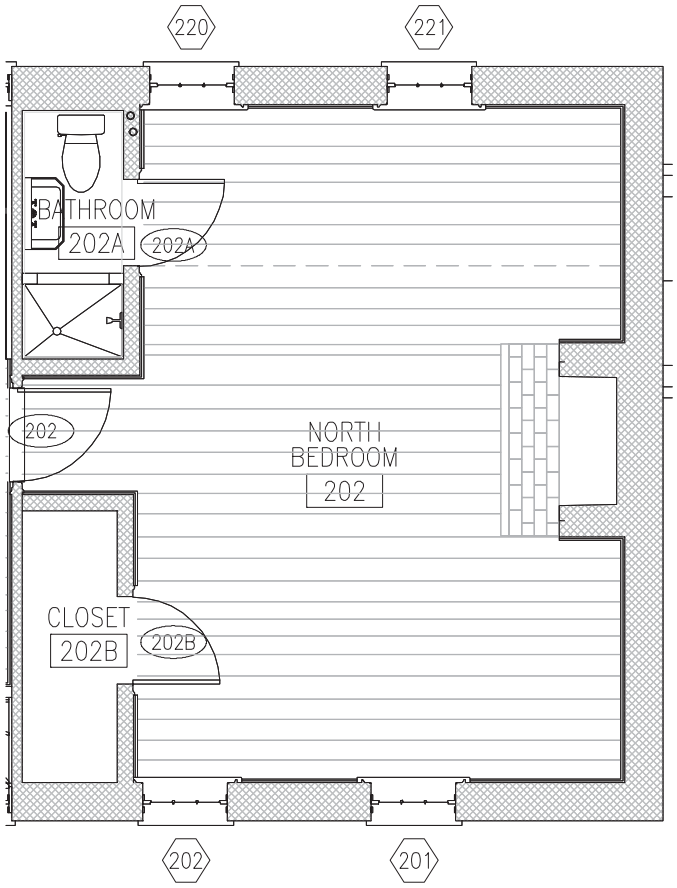


Figure 2B-140: Room 101 - North Bedroom Floor Plan



Figure 2B-141: Room 202-North Bedroom, North Elevation
(Photo Credit: BBB, 2012)



Figure 2B-142: Room 202-North Bedroom, South Elevation
(Photo Credit: BBB, 2012)



Figure 2B-143: Room 202-North Bedroom, East Elevation
(Photo Credit: BBB, 2012)



Figure 2B-144: Room 202-North Bedroom, West Elevation
(Photo Credit: BBB, 2012)

Figure2B-145: Room 202 - North Bedroom - Character Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room measuring 14'-10" in the north-south direction and 20'-10" in the east-west direction. The primary feature in the room is the fireplace and chimney breast along the north wall.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this room was part of the original construction.	(None)	C
2	**Flooring**	The flooring in the North Bedroom 202 is the original random width wide plank hardwood flooring. The existing flooring is in fair conditions with minimal areas of wear and/ or rot. Any area of rot or wear can be replaced per individual floor boards.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wood flooring was part of the original construction.	Presence of both cut nails and machine nails suggests this flooring is original to the Period of Significance, but it has been patched and repaired in some areas.	C
3	**Ceiling:** Flat	On-site investigations and probes revealed that the existing ceiling is a particleboard covered in plaster. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. The particleboard is secured directly to the second floor framing above.	c. 1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall. Paint Analysis, HHI-153, Paint Campaign 12	It is assumed this ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins.	NC (Compatible)
4	**Crown Molding at Fireplace**	Solid wood crown molding.	c. 1769	2	Paint Analysis, HHI-154, Paint Campaign 1	(None)	C
5	**North Wall**	The north wall is plaster adhered directly to the exterior masonry bearing. The north wall is detailed with crown molding, chair rail molding, and baseboards. Evidence in the exterior north façade (extant brick jack arches) and areas of replacement chair rail and baseboard moldings provide conclusive evidence that at some time in the developmental history of the house there were two windows in the north wall of this room flanking either side of the fireplace.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1892)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-142, Paint Campaign 9	Date of plaster based upon results of paint analysis completed for the North Wall.	NC (Compatible)

Figure2B-145 (continued): Room 202 - North Bedroom - Character Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
6	**East Wall**	The east wall is plaster adhered directly to the exterior masonry bearing. The east wall is detailed with crown molding, chair rail molding, and baseboards. Windows 201 and 202 are on the east wall.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1892)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced.	Date of plaster based upon results of paint analysis completed for the North Wall.	NC (Compatible)
7	**South Wall**	On-site investigations and probes revealed that the existing south wall assembly is a particleboard covered in plaster on wood stud framing. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. The south wall is detailed with crown molding, chair rail molding, and baseboards. Portions of the south wall also frame the Bathroom 202A and Closet 202B.	c.1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	It is assumed this wall finish assembly was installed in many locations throughout the house during Period IV: 1929-40 by Charles Collins.	NC (Compatible)
8	**West Wall**	The west wall is plaster adhered directly to the exterior masonry bearing. The west wall is detailed with crown molding, chair rail molding, and baseboards. Windows 220 and 221 are on the west wall.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1892)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-141, Paint Campaign 9	Date of plaster based upon results of paint analysis completed for the West Wall.	NC (Compatible)
9	**Chair Rail**	Solid wood chair rail throughout room.	c. 1769	2	Paint Analysis, HHI-143, Paint Campaign 1	(None)	C

Figure2B-145 (continued): Room 202 - North Bedroom - Character Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
10	**Chair Rail:** at Window Infill	Solid wood chair rail throughout room.	c. 1769	2	Paint Analysis, HHI-144, Paint Campaign 1	(None)	C
11	**Baseboard**	Solid wood baseboard throughout room.	c. 1769	2	Paint Analysis, HHI-151, Paint Campaign 1	(None)	C
12	**Mantel:** Upper Panel	Solid wood mantelpiece above fireplace.	c. 1769	2	Paint Analysis, HHI-149, Paint Campaign 1	(None)	C
13	**Mantel:** Outer Field	Solid wood mantelpiece above fireplace.	c. 1769	2	Paint Analysis, HHI-150, Paint Campaign 1	(None)	C
14	**Mantel:** Shelf Ledge	Solid wood mantelpiece above fireplace.	c. 1769	2	Paint Analysis, HHI-147, Paint Campaign 1	(None)	C
15	**Mantel:** Field Under Shelf	Solid wood mantelpiece above fireplace.	c. 1769	2	Paint Analysis, HHI-148, Paint Campaign 1	(None)	C
16	**Mantel:** Inner Field	Solid wood mantelpiece above fireplace.	c. 1769	2	Paint Analysis, HHI-145, Paint Campaign 1	(None)	C
17	**Mantel:** Raised Molding	Solid wood mantelpiece above fireplace.	c. 1769	2	Paint Analysis, HHI-146, Paint Campaign 1	(None)	C
18	**Window 201, 202:** Masonry Opening	Windows 201 and 202 are double hung wood windows with nine over six (9/6) lites. (NPS staff indicated the sashes were recently removed, stripped of all lead based paint and re-installed. BBB and the design team do not have documentation of this repair.) Window Type: 4	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction.	(None)	C
19	**Window 201, 202:** Frame	Solid wood window frame.	c. 1769	2	Paint Analysis, HHI-140, Paint Campaign 1	(None)	C
20	**Window 201, 202:** Sash	Solid wood window sash.	c. 1769	2	Paint Analysis, HHI-139, Paint Campaign 1	(None)	C
21	**Window 220, 221:** Masonry Opening	Windows 220 and 221 are double hung wood windows with nine over six (9/6) lites. (NPS staff indicated the sashes were recently removed, stripped of all lead based paint and re-installed. BBB and the design team do not have documentation of this repair.) Window Type: 4	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction.	(None)	C
22	**Window 220, 221:** Frame	Solid wood window frame.	c. 1769	2	Paint Analysis, HHI-138, Paint Campaign 1	(None)	C
23	**Window 220, 221:** Sash	Solid wood window sash.	c. 1769	2	Paint Analysis, HHI-137, Paint Campaign 1	(None)	C

Figure2B-145 (continued): Room 202 - North Bedroom - Character Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
24	**Door 202:** Door	Painted solid wood paneled door; contains four (4) recessed panels Door Type: INT-8 Door Hardware Type: INT-1	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction. Paint Analysis, HHI-134, Paint Campaign 1	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period 4 (1929-40). However, the paint analysis conducted as part of this HSR does not support this claim and Collins does not specify any details regarding the replacement of these doors.	C
25	**Door 202:** Frame	Solid wood frame and trim.	c. 1769	2	Paint Analysis, HHI-133, Paint Campaign 1	(None)	C
26	**Door 202A:** Door	Painted solid wood paneled door; contains two (2) recessed panels Door Type: INT-9 Door Hardware Type: INT-2	c. 1769	2	Historic American Building Survey, 1934 Drawings and Photographs Paint Analysis, HHI-136, Paint Campaign 1	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period 4 (1929-40). However, the paint analysis conducted as part of this HSR does not support this claim and Collins does not specify any details regarding the replacement of these doors.	C
27	**Door 202A:** Frame	Solid wood frame and trim.	c. 1892	2	Paint Analysis, HHI-135, Paint Campaign 9	(None)	NC (Compatible)
28	**Door 202B:** Door	Painted solid wood paneled door; contains two (2) recessed panels Door Type: INT-9 Door Hardware Type: INT-2	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	Research of archival documentation concluded that Charles Collins installed this closet in the North Bedroom c. 1929.	NC (Incompatible)
29	**Door 202B:** Frame	Solid wood frame and trim.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	Research of archival documentation concluded that Charles Collins installed this closet in the North Bedroom c. 1929.	NC (Incompatible)

Figure2B-145 (continued): Room 202 - North Bedroom - Character Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
30	**Closet 202B**	Storage Closet	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	Research of archival documentation concluded that Charles Collins installed this closet in the North Bedroom c. 1929.	NC (Incompatible)
31	**HVAC Grilles**	Painted metal supply or return air grille	c.1941	5	Research of archival documentation concluded that Charles Collins first introduced a General Electric heating system into Harmony Hall c. 1941.	(None)	NC (Incompatible)
32	**Light Fixtures**	Pendant mounted incandescent light fixture with shade. Light Fixture Type: INT-1	c.1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity into Harmony Hall c. 1929.	(None)	NC (Incompatible)

ROOM 202A - BATHROOM

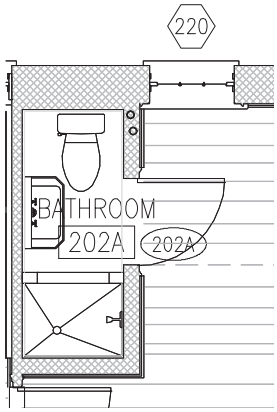


Figure 2B-146: Room 202A-Bathroom Floor Plan



Figure 2B-147: Room 202A-Bathroom



Figure 2B-148: Room 202A-Bathroom



Figure 2B-149: Room 202A-Bathroom



Figure 2B-150: Room 202A-Bathroom



Figure 2B-151: Room 202A-Bathroom

Figure2B-152: Room 202A - Bathroom - Character Defining Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular bathroom on the second floor measuring 3'-1 1/4" in the north-south direction and 7'-7 1/2" in the east-west direction.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	Research of archival documentation concluded that Charles Collins first introduced plumbing and electricity into Harmony Hall c. 1929.	NC (Incompatible)
2	**Flooring**	Hexagonal shaped ceramic tile.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
3	**Ceiling**	Wood fiber insulating board adhered directly to the wood framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	It is assumed this ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins.	NC (Incompatible)
4	**North Wall**	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
5	**East Wall**	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
6	**South Wall**	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
7	**West Wall**	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
8	**Door 202A**	Painted solid wood recessed paneled door; contains two (2) panels Door Type: INT-8 Door Hardware Type: INT-3	c.1769	2	Historic American Building Survey, 1934 Drawings and Photographs (See Defining Features, Age, & Significance Matrix for Room 202 for more detailed information regarding Paint Analysis and date of construction of this door.)	Research of archival documentation concluded that Charles Collins first introduced plumbing into Harmony Hall c. 1929. However, the paint analysis reveals this door dates to Period II: 1769-1849, therefore indicating it was relocated and reused from another location.	NC (Compatible)

Figure2B-152: Room 202A - Bathroom - Character Defining Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
9	**Plumbing Fixtures**	Water closet, lavatory and bathtub	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs Research of archival documentation concluded that Charles Collins first introduced plumbing into Harmony Hall c. 1929.	(None)	NC (Incompatible)
10	**Light Fixture**	Wall mounted incandescent light fixture with frosted glass globe. Light Fixture Type: INT-10	c.1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity into Harmony Hall c. 1929.	(None)	NC (Incompatible)
11	**Exhaust Grille**	Painted metal exhaust grille venting to the exterior	c.1929	4	Research of archival documentation concluded that Charles Collins first introduced plumbing, including Room 202A-Bathroom into Harmony Hall c. 1929.	(None)	NC (Incompatible)

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ROOM 203 - SOUTH BEDROOM

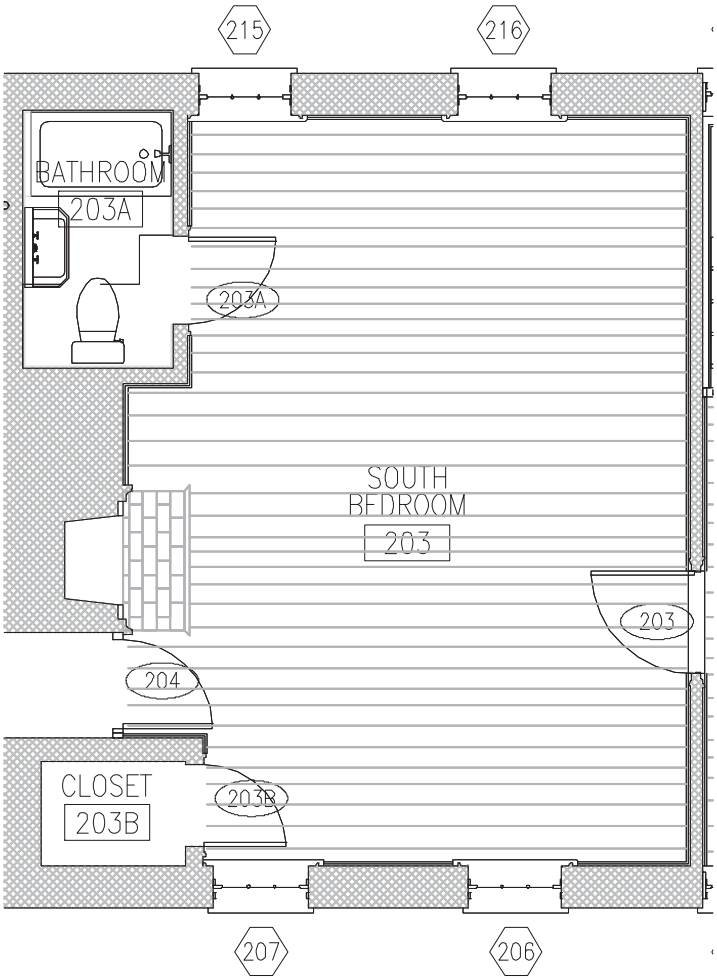


Figure 2B-153: South Bedroom 203 Floor Plan



Figure 2B-154: Room 203-South Bedroom, North Elevation (Photo Credit: BBB, 2012)



Figure 2B-155: Room 203-South Bedroom, South Elevation (Photo Credit: BBB, 2012)



Figure 2B-156: Room 203-South Bedroom, East Elevation (Photo Credit: BBB, 2012)



Figure 2B-157: Room 203-South Bedroom, West Elevation (Photo Credit: BBB, 2012)

Figure2B-158: Room 203 - South Bedroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room measuring 17'-9" in the north-south direction and 20'-4" in the east-west direction.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this room was part of the original construction.	(None)	C
2	**Flooring**	The flooring in the North Bedroom 202 is the original random width wide plank hardwood flooring. The existing flooring is in fair conditions with minimal areas of wear and/ or rot. Any area of rot or wear can be replaced per individual floor boards.	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wood flooring was part of the original construction.	Presence of both cut nails and machine nails suggests this flooring is original to the Period of Significance, but it has been patched and repaired in some areas.	C
3	**Ceiling:** Flat	On-site investigations and probes revealed that the existing ceiling is a particleboard covered in plaster. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. The particleboard is secured directly to the second floor framing above.	c.1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior ceilings throughout Harmony Hall. Paint Analysis, HHI-131, Paint Campaign 12	It is assumed this ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins.	NC (Compatible)
4	**Crown Molding**	Solid wood crown molding.	c.1892	2	Paint Analysis, HHI-132, Paint Campaign 9	(None)	NC (Compatible)
5	**North Wall**	On-site investigations and probes revealed that the existing north wall assembly is a particleboard covered in plaster on wood stud framing. It appears that the plaster consists of a scratch coat and finish coat. Hazardous materials testing confirmed that the finish coat of plaster did not contain asbestos. The south wall is detailed with crown molding, chair rail molding, and baseboards.	c.1929	4	A scrap piece of the insulating lumber used throughout the house displayed product information on the back face. Insulating lumber was first produced by Johns-Mansville during the 1930s and provided a substrate for the application of plaster in some interior partitions throughout Harmony Hall.	It is assumed this wall finish assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins.	NC (Compatible)

Figure2B-158 (continued): Room 203 - South Bedroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
6	**East Wall**	The east wall is plaster adhered directly to the exterior masonry bearing. The east wall is detailed with crown molding, chair rail molding, and baseboards. Windows 206 and 207 are on the east wall.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1892)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-123, Paint Campaign 9	Date of plaster based upon results of paint analysis completed for the East Wall	NC (Compatible)
7	**South Wall**	The south wall is plaster adhered directly to the exterior masonry bearing. The south wall is detailed with crown molding, chair rail molding, and baseboards. Portions of the south wall also frame the Bathroom 202A and Closet 202B.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1892)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced.	Date of plaster based upon results of paint analysis completed for the East Wall and West Wall	NC (Compatible)
8	**West Wall**	The west wall is plaster adhered directly to the exterior masonry bearing. The west wall is detailed with crown molding, chair rail molding, and baseboards. Windows W215 and W216 are on the west wall.	c. 1769 - brick masonry wall construction (date/ age of plaster c.1892)	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced. Paint Analysis, HHI-124, Paint Campaign 9	Date of plaster based upon results of paint analysis completed for the West Wall	NC (Compatible)
9	**Chair Rail:** West of Joint	Solid wood chair rail throughout room.	c. 1792	2	Paint Analysis, HHI-125, Paint Campaign 3	(None)	C
10	**Chair Rail:** East of Joint	Solid wood chair rail throughout room.	c. 1792	2	Paint Analysis, HHI-126, Paint Campaign 3	(None)	C

Figure2B-158 (continued): Room 203 - South Bedroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
11	**Baseboard:** North Wall	Solid wood baseboard throughout room.	c.1792	2	Paint Analysis, HHI-130, Paint Campaign 3	(None)	C
12	**Baseboard:** East Wall	Solid wood baseboard throughout room.	c.1769	2	Paint Analysis, HHI-129, Paint Campaign 1	(None)	C
12	**Mantel:** Inner Molding	Solid wood mantelpiece above fireplace.	c.1820s	2	Paint Analysis, HHI-128, Paint Campaign 5	(None)	NC (Compatible)
13	**Mantel:** Outer Molding	Solid wood mantelpiece above fireplace.	c.1892	2	Paint Analysis, HHI-127, Paint Campaign 9	(None)	NC (Compatible)
18	**Window 206, 207:** Masonry Opening	Windows 206 and 207 are double hung wood windows with nine over six (9/6) lites. (NPS staff indicated the sashes were recently removed, stripped of all lead based paint and re-installed. BBB and the design team do not have documentation of this repair.) Window Type: 4	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction.	(None)	C
19	**Window 206, 207:** Frame	Solid wood window frame.	c.1769	2	Paint Analysis, HHI-120, Paint Campaign 1	(None)	C
20	**Window 206, 207:** Sash	Solid wood window sash.	c.1769	2	Paint Analysis, HHI-119, Paint Campaign 1	(None)	C
21	**Window 215, 216:** Masonry Opening	Windows 215 and 216 are double hung wood windows with nine over six (9/6) lites. (NPS staff indicated the sashes were recently removed, stripped of all lead based paint and re-installed. BBB and the design team do not have documentation of this repair.) Window Type: 4	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these windows were part of the original construction.	(None)	C
22	**Window 215, 216:** Frame	Solid wood window frame.	c.1769	2	Paint Analysis, HHI-122, Paint Campaign 1	(None)	C
23	**Window 215, 216:** Sash	Solid wood window sash.	c.1769	2	Paint Analysis, HHI-121, Paint Campaign 1	(None)	C

Figure2B-158 (continued): Room 203 - South Bedroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
24	**Door 203:** Door	Painted solid wood paneled door; contains four (4) recessed panels	c.1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed that this door was part of the original construction. Paint Analysis, HHI-115, Paint Campaign 1	Charles Collins noted in his records that he replaced doors in the house when he first acquired the property during Period IV (1929-40). However, the paint analysis reveals this door dates to Period II: 1769-1849 and Collins does not specify any details regarding the replacement of these doors.	C
25	**Door 203:** Frame	Solid wood frame and trim.	c.1792	2	Paint Analysis, HHI-116, Paint Campaign 3	(None)	C
26	**Door 203A:** Door	Painted solid wood paneled door; contains two (2) recessed panels	c.1792	2	Paint Analysis, HHI-117, Paint Campaign 3	(None)	C
27	**Door 203A:** Frame	Solid wood frame and trim.	c.1892	3	Paint Analysis, HHI-118, Paint Campaign 9	(None)	NC (Compatible)
28	**Door 203B:** Door	Painted solid wood paneled door; contains two (2) recessed panels	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
29	**Door 203B:** Frame	Solid wood frame and trim.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
30	**Closet 203B**	Storage Closet	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
31	**HVAC Grilles**	Painted metal supply or retrun air grille	c.1941	5	Research of archival documentation concluded that Charles Collins first introduced a General Electric heating system into Harmony Hall c. 1941.	(None)	NC (Incompatible)
32	**Light Fixture**	Pendant mounted incandescent light fixture. Light Fixture Type: INT-12	c.1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity into Harmony Hall c. 1929.	(None)	NC (Incompatible)

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ROOM 203A - BATHROOM

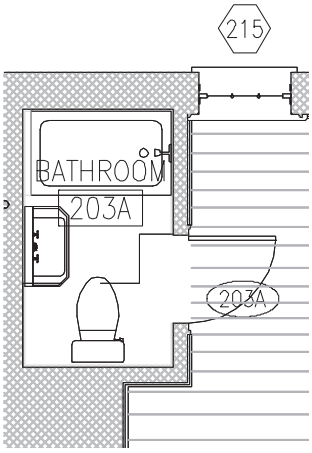


Figure 2B-159: Room 203A-Bathroom Floor Plan



Figure 2B-160: Room 203A-Bathroom

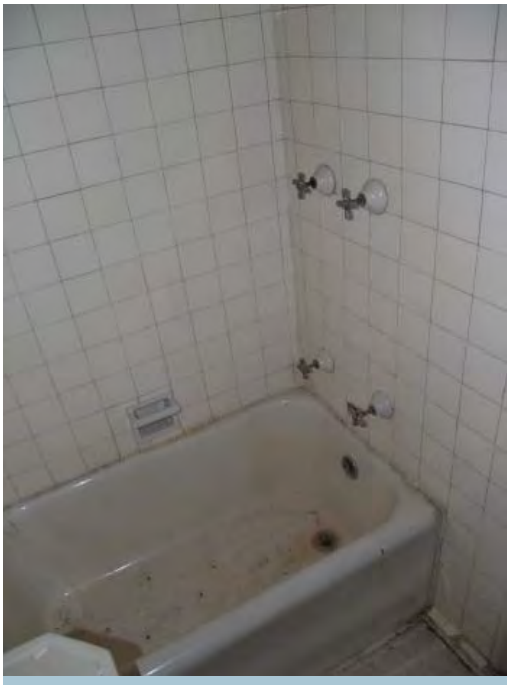


Figure 2B-162: Room 203A-Bathroom

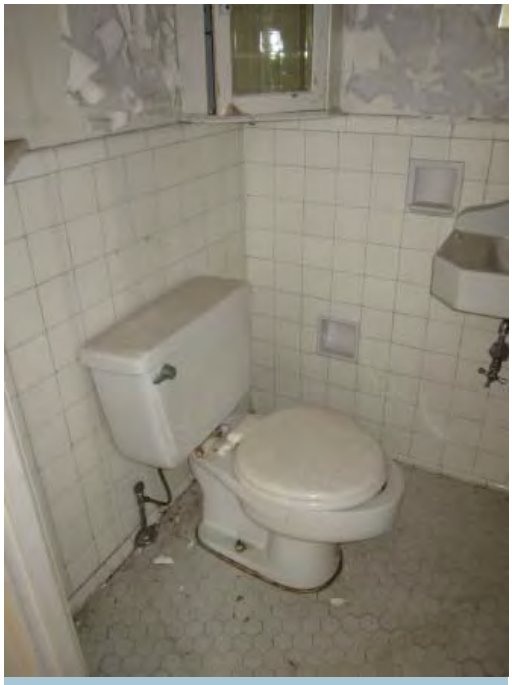


Figure 2B-161: Room 203A-Bathroom

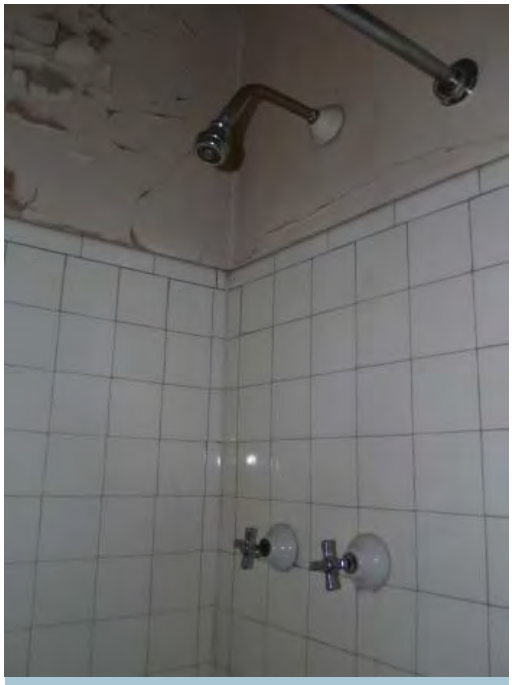


Figure 2B-163: Room 203A-Bathroom

Figure2B-164: Room 203A - Bathroom - Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	Room Plan	Rectangular bathroom on the second floor measuring 4'-2" in the north-south direction and 7'-2" in the east-west direction.	c.1929	4	Research of archival documentation concluded that Charles Collins first introduced plumbing and electricity into Harmony Hall c.1929. Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
2	Flooring	Hexagonal shaped ceramic tile.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
3	Ceiling	Wood fiber insulating board adhered directly to the wood framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	It is assumed this ceiling assembly was installed throughout the house during Period IV: 1929-40 by Charles Collins.	NC (Incompatible)
4	North Wall	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
5	East Wall	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
6	South Wall	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
7	West Wall	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
8	Door 203A	Painted solid wood recessed paneled door; contains two (2) panels	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Compatible)
9	Plumbing Fixtures	Water closet, lavatory and bathtub	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs Research of archival documentation concluded that Charles Collins first introduced plumbing into Harmony Hall c. 1929.	(None)	NC (Incompatible)

Figure2B-164: Room 203A - Bathroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
10	Light Fixture	Wall mounted incandescent light fixture with frosted glass globe. Light Fixture Type: INT-13	c.1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity into Harmony Hall c. 1929.	(None)	NC (Incompatible)
11	Exhaust Grille	Painted metal exhaust grille venting to the exterior	c.1929	4	Research of archival documentation concluded that Charles Collins first introduced plumbing, including Room 203A-Bathroom into Harmony Hall c. 1929.	(None)	NC (Incompatible)

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ROOM 204 - CORRIDOR AND ROOM 205 - STAIR (INCLUDING ROOM 204A - CLOSET)

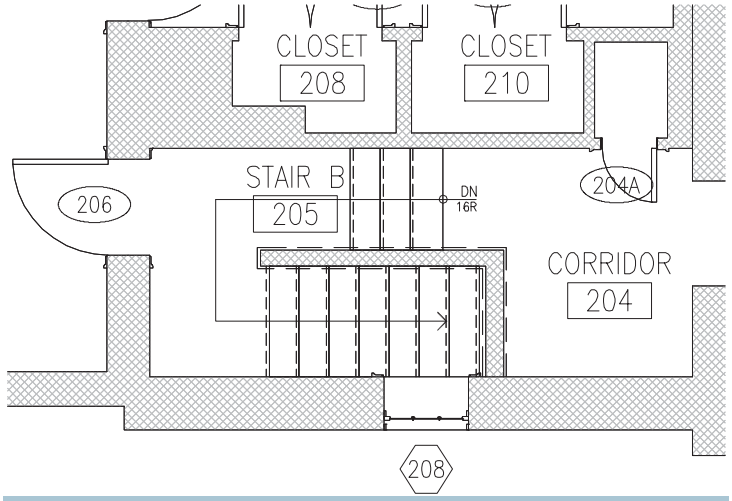


Figure 2B-165: Room 204-Corridor and Room 205-Stair Floor Plan

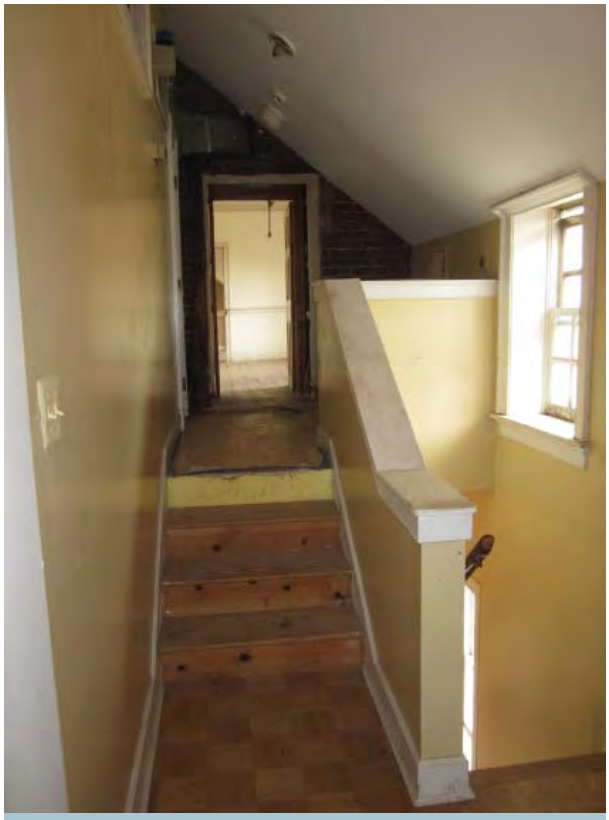


Figure 2B-166: Room 204-Corridor and Room 205-Stair - North Elevation (Photo: BBB, 2012)

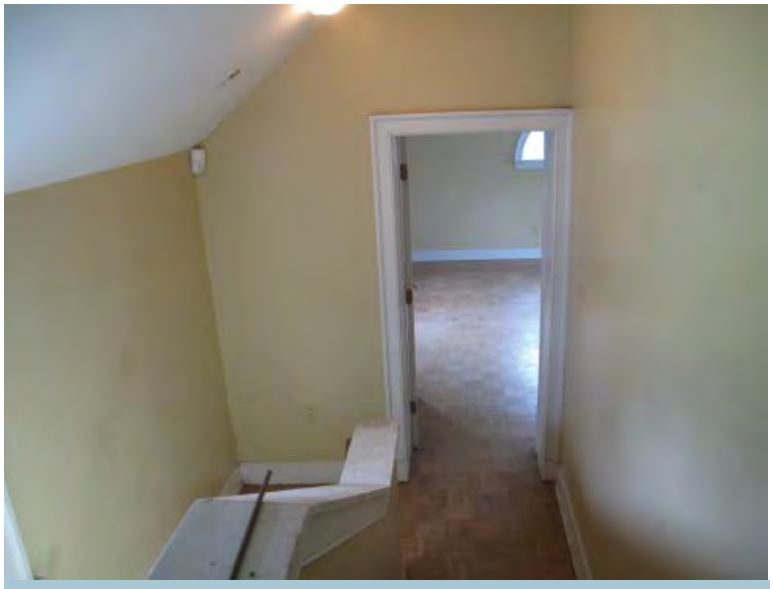


Figure 2B-167: Room 204-Corridor and Room 205-Stair - South Elevation (Photo: BBB, 2012)

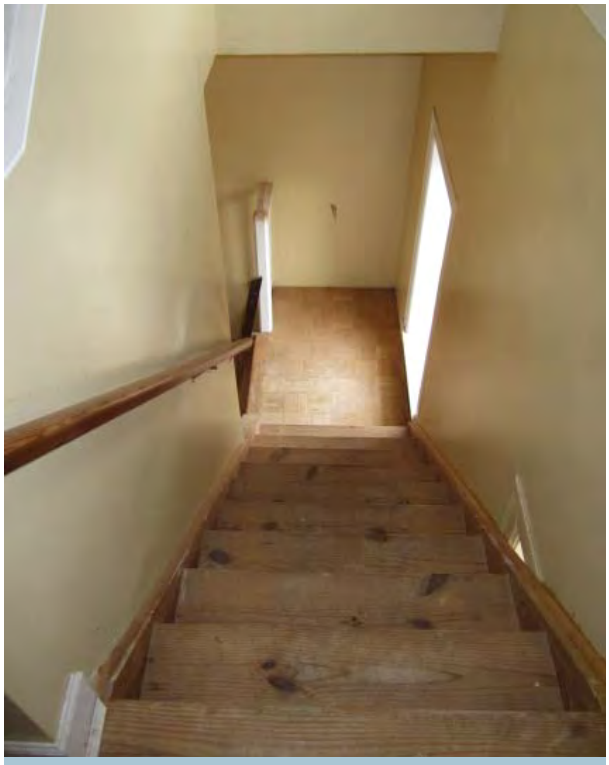


Figure 2B-168: Room 205-Stair (Photo: BBB, 2012)

Figure2B-169: Room 204 - Corridor and Room 205 - Stairs - Character Defining Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Stairwell and landing measuring 15'-1" in the north-south direction and 6'-4 1/8" in the east-west direction.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
2	**Flooring:** Corridor 204	Vinyl sheet flooring on plywood subfloor.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
3	**Flooring:** Stair 205	Wood parquet flooring.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**Flooring:** Treads and Risers	Solid wood risers, tread and stringers	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
3	**Ceiling**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**North Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
5	**East Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
6	**South Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
7	**West Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

Figure2B-169 (continued): Room 204 - Corridor and Room 205 - Stairs - Character Defining Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
8	**Windows 208**	Double hung style wood dormer window with six over six lites. and insulated glazing. Window Type: 12	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88 These construction drawings also indicate that Window 214 was relocated (elevated) to accommodate the changes to the interior of the Central South Addition.	(None)	NC (Incompatible)
10	**Door 204A**	Solid wood door with three panels Door Type: INT-12 Door Hardware Type: INT-9	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
11	**Light Fixture**	Ceiling mounted incandescent fixture with glass globe Light Fixture Type: INT-14	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

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ROOM 206 - BEDROOM

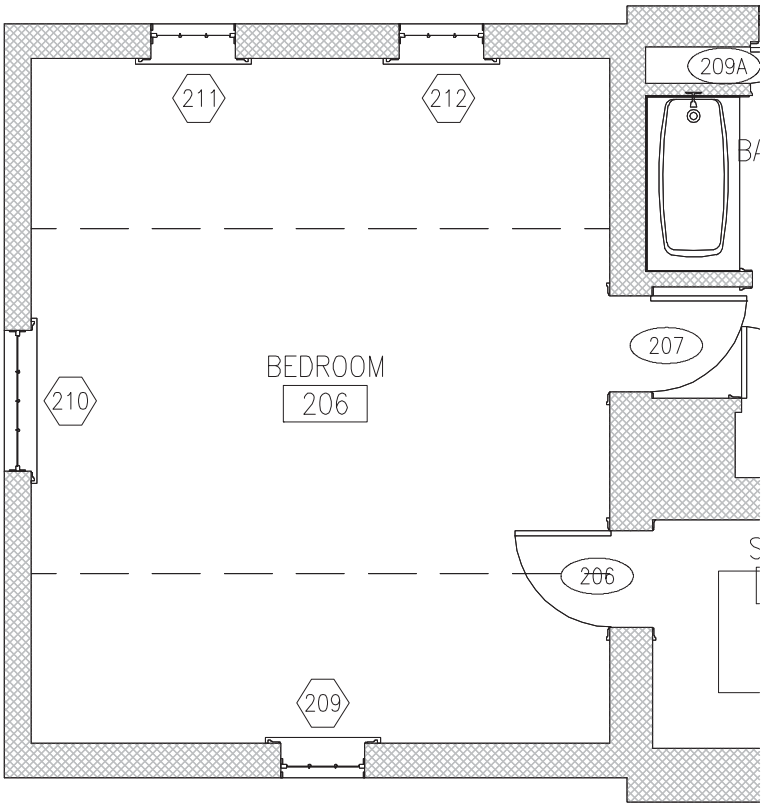


Figure 2B-170: Bedroom 206 Floor Plan
(Photo: BBB, 2012)

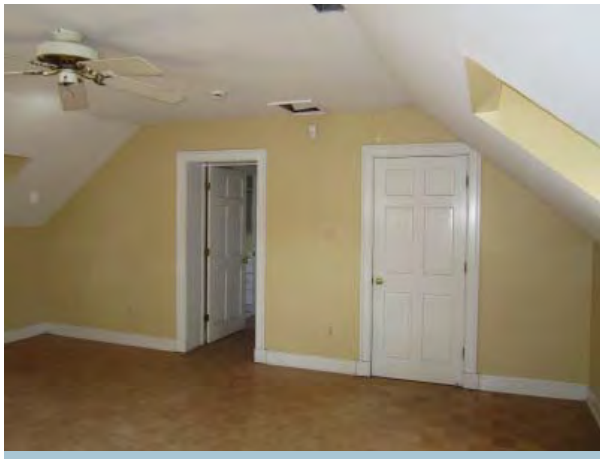


Figure 2B-171: Room 206-Bedroom - North Elevation
(Photo: BBB, 2012)



Figure 2B-172: Room 206-Bedroom - East Elevation
(Photo: BBB, 2012)

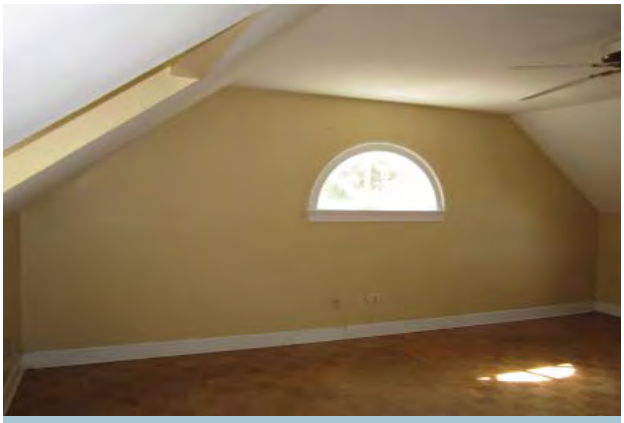


Figure 2B-173: Room 206-Bedroom - South Elevation
(Photo: BBB, 2012)



Figure 2B-174: Room 206-Bedroom - West Elevation
(Photo: BBB, 2012)

Figure2B-175: Room 206 - Bedroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular bedroom measuring 16'-0 3/4" in the north-south direction and 19'-0 1/8" in the east-west direction.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
2	**Flooring**	Wood parquet flooring	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
3	**Ceiling**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**North Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
5	**East Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
6	**South Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
7	**West Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
8	**Windows 209, 211, 212**	Double hung style wood dormer window with six over six lites. and insulated glazing. Window Type: 14	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
9	**Window 210**	Semi-circular fixed window Window Type: 15	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
10	**Door 206**	Solid wood raised panel door with six panels Door Type: INT-12 Door Hardware Type: INT-6	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

ROOM 207 - CORRIDOR (INCLUDING ROOM 208 - CLOSET AND ROOM 210 - CLOSET)

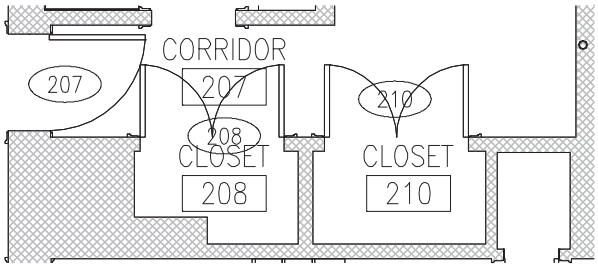


Figure 2B-176: Room 207-Corridor, Room 208-Closet, and Room 210-Closet Floor Plan



Figure 2B-177: Room 207-Corridor, Room 208-Closet, and Room 210-Closet

Figure2B-178: Room 207 - Corridor, Room 208 - Closet, & Room 210 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	Room Plan	Rectangular bedroom measuring 16'-0 3/4" in the north-south direction and 19'-0 1/8" in the east-west direction.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
2	Flooring	Wood parquet flooring	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

Figure2B-178 (continued): Room 207 - Corridor, Room 208 - Closet, & Room 210 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
3	**Ceiling**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**North Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
5	**East Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
6	**South Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
7	**West Wall**	Gypsum wallboard on wood framing.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
8	**Closet 208**	Rectangular storage closet measuring 4'-9 1/2" in the north-south direction and 2'-6 3/4" in the east-west direction.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
9	**Closet 210**	Rectangular storage closet measuring 4'-6 5/8" in the north-south direction and 2'-6 3/4" in the east-west direction.	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	The fire alarm control panel (FACP) is located in Closet 210.	NC (Incompatible)
10	**Door 207**	Solid wood raised panel door with six panels Door Type: INT-12 Door Type Hardware: INT-7	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
11	**Door 208**	Solid wood raised panel double door with six panels on each door leaf Door Type: INT-12	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	No door hardware has been installed on Door 208.	NC (Incompatible)
12	**Door 210**	Solid wood raised panel double door with six panels on each door leaf Door Type: INT-12	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	No door hardware has been installed on Door 208.	NC (Incompatible)

ROOM 209 - BATHROOM

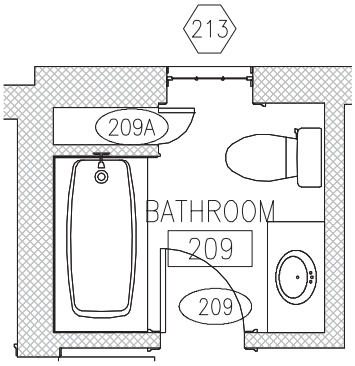


Figure 2B-179: Room 209-Bathroom Floor Plan

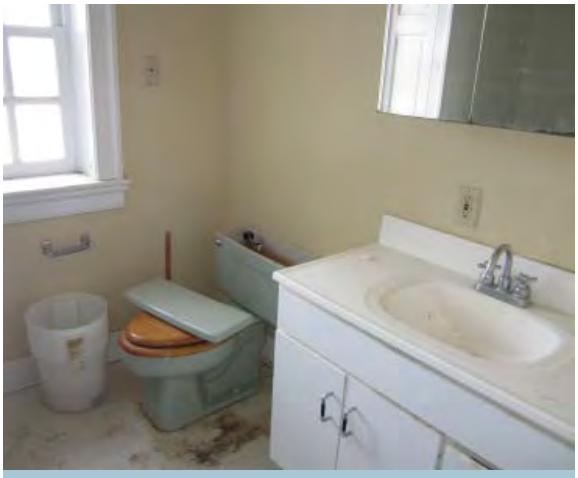


Figure 2B-180: Room 209-Bathroom (Photo: BBB, 2012)

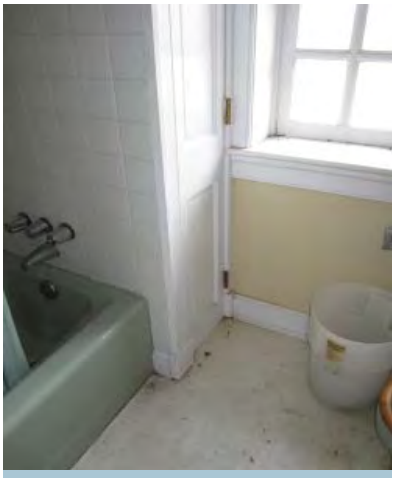


Figure 2B-181: Room 209-Bathroom (Photo: BBB, 2012)

Figure2B-182: Room 209 - Bathroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular bathroom measuring 7'-6 1/4" in the north-south direction and 6'-4 1/2" in the east-west direction.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
2	**Flooring**	Vinyl sheet flooring	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
3	**Ceiling**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**North Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
5	**East Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

Figure2B-182 (continued): Room 209 - Bathroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
6	**South Wall**	4" square ceramic tile.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
7	**West Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
10	**Door 209**	Solid wood raised panel door with six panels Door Type: 12 Door Hardware Type: 6	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
11	**Window 213**	Double hung style wood dormer window with six over six lites and insulated glazing. Window Type: 12	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88. These construction drawings also indicate that Window 213 was relocated (elevated) to accommodate the changes to the interior of the Central South Addition.	(None)	NC (Incompatible)
12	**Plumbing Fixtures**	Water closet, lavatory and bathtub/ shower	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
13	**Light Fixture**	Incandescent lights in wall mounted mirror and medicine cabinet; Six (6) lights are installed in the wall mounted medicine cabinet Light Fixture Type: INT-17	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
14	**Light Fixture**	Ceiling recessed incandescent light fixture Light Fixture Type: INT-18	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
15	**Exhaust Grille**	Exhaust vent	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

ROOM 211 - STUDY

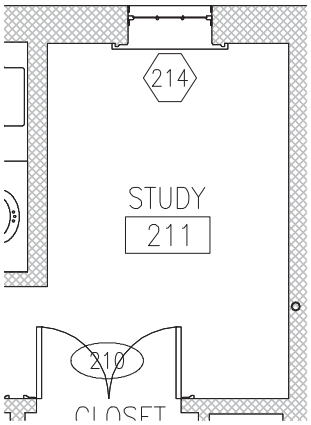


Figure 2B-183: Study 211 Floor Plan

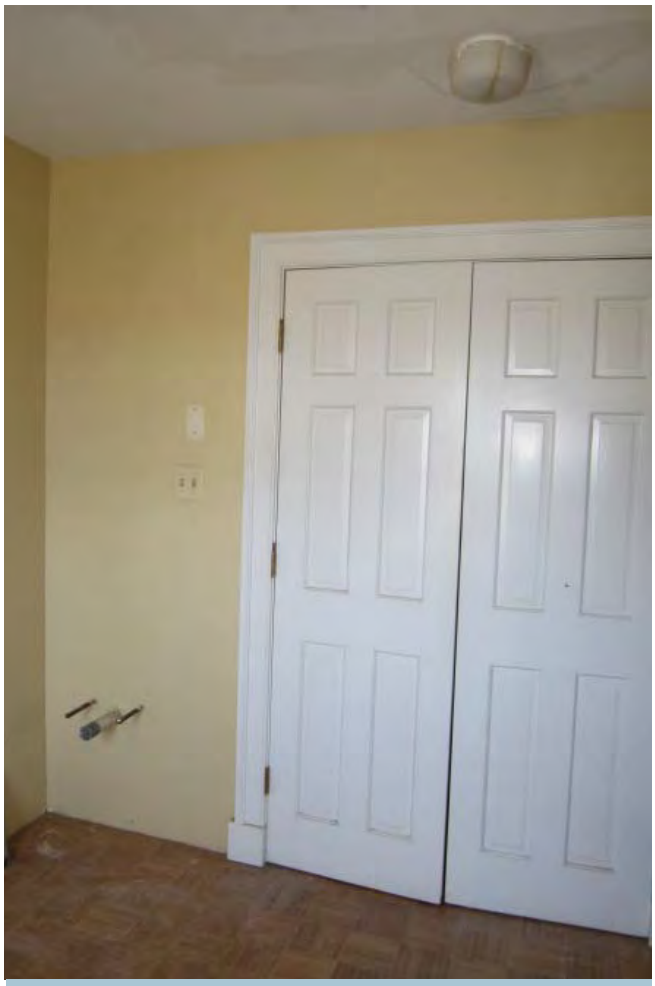


Figure 2B-184: Room 211 - Study (Photo: BBB, 2012)

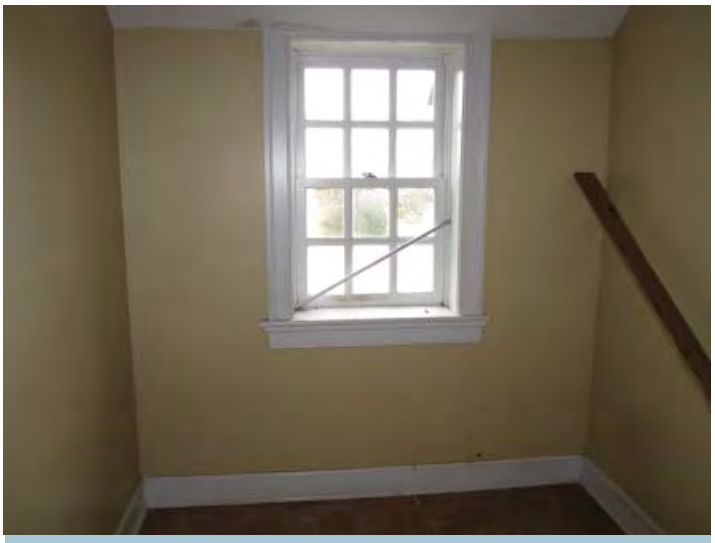


Figure 2B-185: Room 211 - Study (Photo: BBB, 2012)

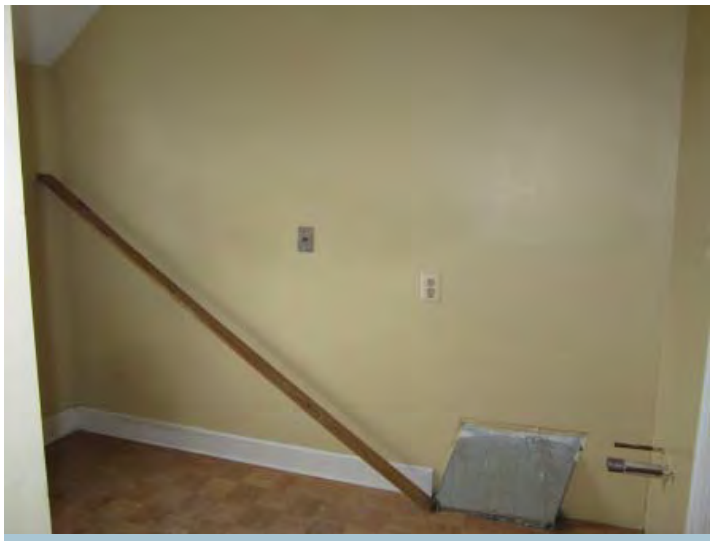


Figure 2B-186: Room 211 - Study (Photo: BBB, 2012)

Figure2B-187: Room 211 - Study - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room measuring 6'-8 1/4" in the north-south direction and 9'-10 1/4" in the east-west direction.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
2	**Flooring**	Wood parquet flooring	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
3	**Ceiling**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
4	**North Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
5	**East Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
6	**South Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
7	**West Wall**	Gypsum wallboard on wood framing.	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
8	**Window 214**	Double hung style wood dormer window with six over six lites and insulated glazing. Window Type: 12	c.1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88 These construction drawings also indicate that Window 214 was relocated (elevated) to accommodate the changes to the interior of the Central South Addition.	(None)	NC (Incompatible)

Figure2B-187 (continued): Room 211 - Study - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
9	**Light Fixture**	Ceiling recessed incandescent light fixture Light Fixture Type: INT-18	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)
10	**Light Fixture**	Surface mounted incandescent light fixture with glass globe. Light Fixture Type: INT-16	c. 1988	6	Construction drawings from NACE Records completed by architect Siegfried Ising in June 1987-88	(None)	NC (Incompatible)

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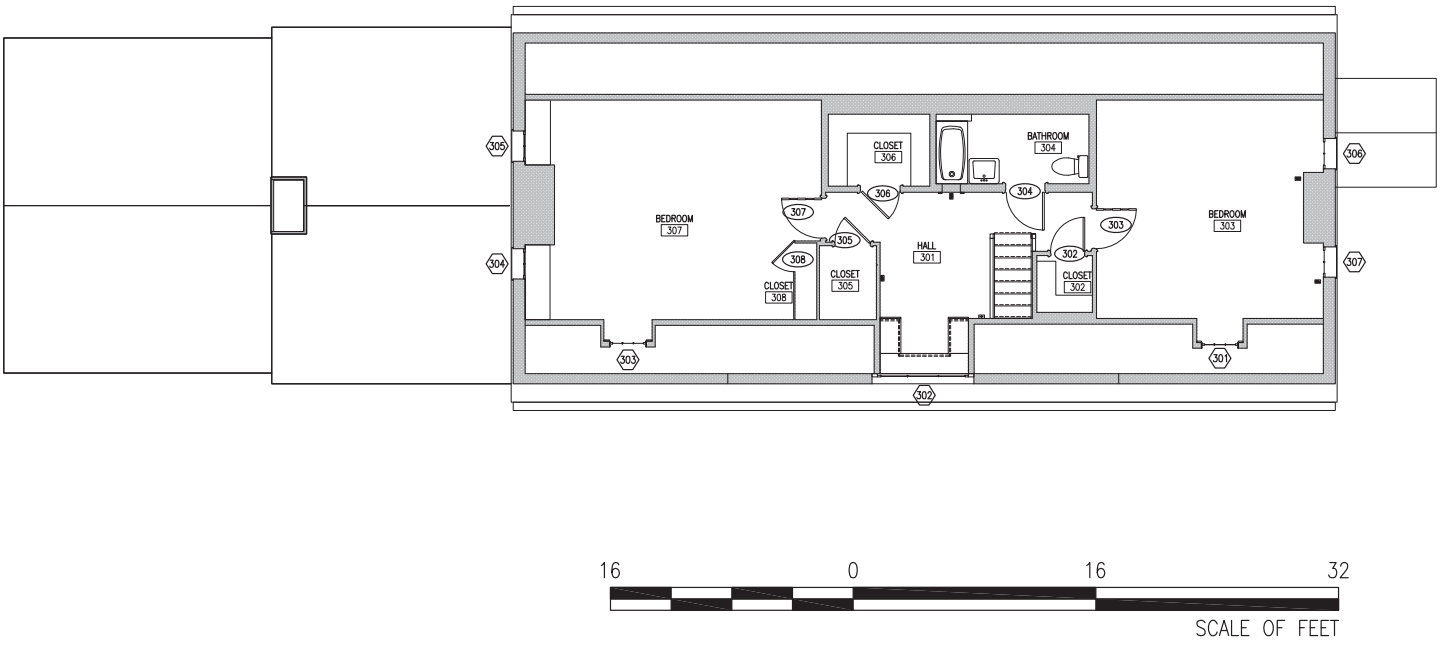
THIRD FLOOR

The third floor of Harmony Hall is located above the Main Block of the house only. The bedrooms, closets and bathroom located on the third floor were constructed as part of the renovations by Charles Collins during Period IV and modified to accommodate HVAC ductwork during Period V. The ceilings are low and partially expose the rafters and collar ties of the roof framing system above. As revealed through on-site survey and investigations the original roof framing was later modified to allow for the construction of the two east façade dormer windows in the north and south bedrooms and for the central brick pediment with the oval “bullseye” window. The interior walls are of wood frame construction clad in a wood fiber insulation board first manufactured in the 1930s (Period IV).

THIRD FLOOR INVENTORY

The following matrices and room inventories catalog each space on the third floor and describe all features including the floor, walls, ceiling, doors, windows, and other architectural elements and details. In addition to the architectural details and finishes, any light fixtures and equipment are also described. Each matrix establishes an estimated date of construction for each feature and provides the research or source documentation utilized to make this determination. To accompany each room inventory a floor plan of the space has been provided with selected photographs of the space to document all significant features.

THIRD FLOOR PLAN



ROOM 301 - HALL/ CORRIDOR (INCLUDING ROOM 302 - CLOSET & ROOM 305 - CLOSET)

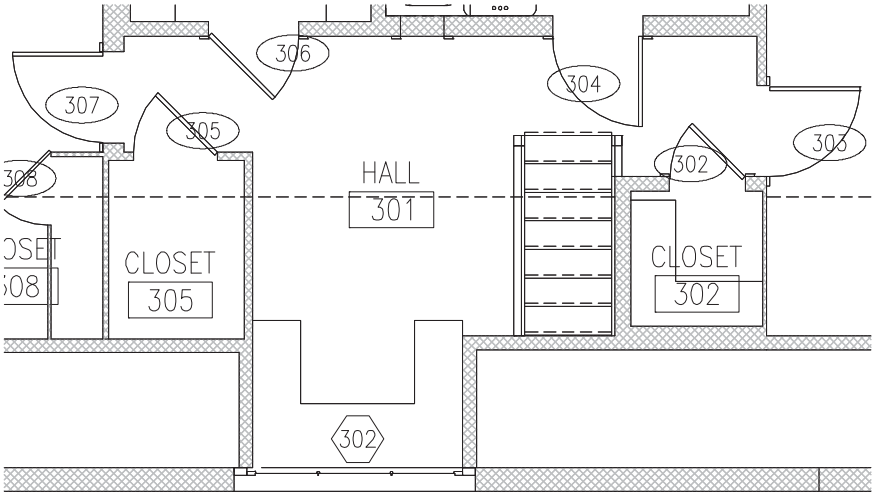


Figure 2B-188: Room 301 - Hall, Room 302 - Closet, & Room 305 - Closet Floor Plan



Figure 2B-189: Window 302, Window sash stored in basement (Photo: BBB, 2012)

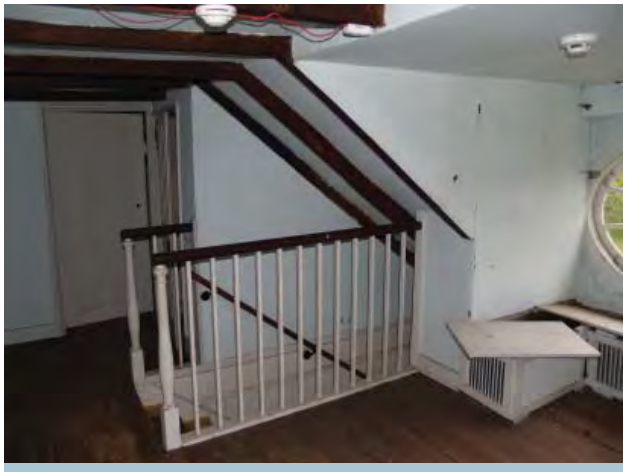


Figure 2B-190: Room 301 - Hall, Room 302 - Closet, & Room 305 - Closet - North Elevation



Figure 2B-191: Room 301 - Hall, Room 302 - Closet, & Room 305 - Closet - South Elevation



Figure 2B-192: Room 301 - Hall, Room 302 - Closet, & Room 305 - Closet - West Elevation

Figure2B-193: Room 301 - Hall (including Room 302 - Closet and Room 305 - Closet) - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Irregular shaped hall/ corridor located at the center of the third floor.	c.1929	4	Based upon historical research and on-site investigations is was determined that the attic was modified by Charles Collins c.1929. Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Compatible)
2	**Flooring**	Solid wood heart pine flooring.	c.1769	2	Presence of both cut nails and machine nails suggests this flooring is original to the Period of Significance, but it has been patched and repaired in some areas.	(None)	C
3	**Ceiling**	Wood fiber insulating board adhered directly to the wood framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board. The structural wood roof rafters and collar ties are partially exposed throughout the third floor ceiling.	c.1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	It is assumed the structural wood rafters are original to the Period of Significance (Period II: 1769-1849).	NC (Incompatible)
4	**North Wall**	Wood fiber insulating board adhered directly to the wood framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c.1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)
5	**East Wall**	Wood fiber insulating board adhered directly to the wood framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c.1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)
6	**South Wall**	Wood fiber insulating board adhered directly to the wood framing adjacent to Window 302. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c.1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)

Figure2B-193 (continued): Room 301 - Hall (including Room 302 - Closet and Room 305 - Closet) - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
7	**South Wall:** Wood Paneling	Wood paneling is located along the south wall in addition to the wood fiber insulating board. It appears that the wood paneling preceded the installation of the wood fiber insulation board and may have been installed prior to the modifications to construct the brick pediment along the east facade at the end of the 18th century.	unknown (possible late 18th century)	2	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Compatible)
8	**West Wall**	Wood fiber insulating board adhered directly to the wood framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c.1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)
9	**Oval Window: 302** Masonry Opening	Wood framed oval-shaped fixed window opening. Window Type: 7	c.1792	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. However, the third floor dormer windows were determined to be a later addition c.1792 based upon historical documentation and as assessment of existing structural conditions in the roof framing.	(None)	C
10	**Oval Window: 302** Frame	Wood framed oval-shaped fixed window frame	c.1792 - 1820	2	Paint Analysis, HHE-049a Campaign 2	Paint sample taken from Window 303.	C
11	**Oval Window: 302** Sash	Wood framed oval-shaped fixed window sash.	post c.1988	6	Paint Analysis, HHE-048a Campaign 33	Paint sample taken from Window 303.	NC (Compatible)
12	**Oval Window: 302 Sash Stored in Basement:** Sash	Oval wood window sash with orthogonal muntins	c.1892	3	Paint Analysis, HHE-049 Campaign 8	(None)	NC (Incompatible)
13	**Oval Window: 302 Sash Stored in Basement:** Mullions	Oval wood window sash with orthogonal muntins	c.1892	3	Paint Analysis, HHE-048 Campaign 8	(None)	NC (Incompatible)

Figure2B-193 (continued): Room 301 - Hall (including Room 302 - Closet and Room 305 - Closet) - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
14	**Closet 302**	Small storage closet measuring 3'-8" in the north-south direction and 3'-9" in the east-west direction.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
15	**Closet 305**	Small storage closet measuring 3'-9 1/2" in the north-south direction and 4'-11 1/2" in the east-west direction.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
16	**Door 302**	Painted solid wood recessed paneled door; contains four (4) panels Door Type: INT-9 Door Hardware Type: INT-2 & INT-11	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	Door hardware is broken and partially missing on Door 302.	NC (Compatible)
17	**Door 305**	Painted solid wood recessed paneled door; contains four (4) panels Door Type: INT-15 Door Hardware Type: INT-2 & INT-11	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Compatible)
18	**Light Fixtures: Room 302 & Room 205**	Surface mounted incandescent light fixture. Fixture Type: 19	c.1988	6	Research of archival documentation concluded that Charles Collins first introduced electricity into Harmony Hall c.1929. However, these fixtures are connected to flexible conduit suggesting they were a later addition.	(None)	NC (Compatible)

ROOM 303 - BEDROOM

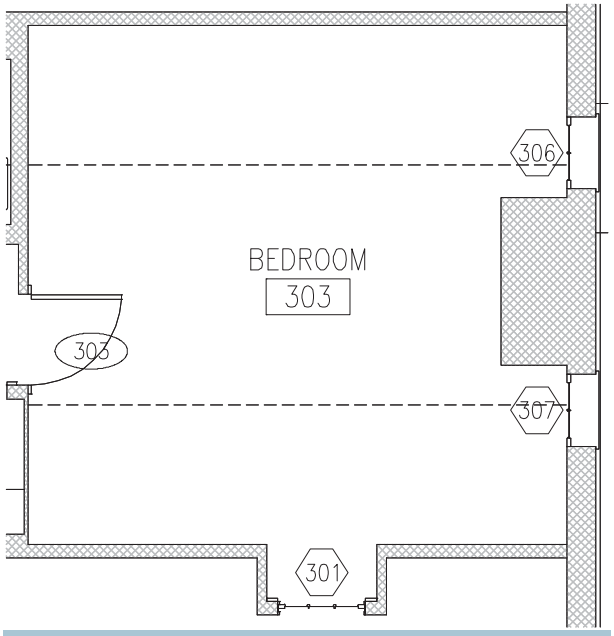


Figure 2B-194: Room 303 - Bedroom Floor Plan



Figure 2B-195: Room 303 - Bedroom - North Elevation



Figure 2B-196: Room 303 - Bedroom - South Elevation



Figure 2B-197: Room 303 - Bedroom - East Elevation



Figure 2B-198: Room 303 - Bedroom - West Elevation

Figure2B-199: Room 303 - Bedroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room in third floor/ attic space measuring 14'-11 1/2" in the north-south direction and 14'-5 3/4" in the east-west direction.	c.1930	4	Based upon historical research and on-site investigations is was determined that the attic was modified by Charles Collins c.1929. Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Compatible)
2	**Flooring**	Solid wood heart pine flooring.	c.1769	1	Presence of both cut nails and machine nails suggests this flooring is original to the Period of Significance, but it has been patched and repaired in some areas.	(None)	C
3	**Ceiling**	Wood fiber insulating board adhered directly to the wood framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board. The structural wood roof rafters and collar ties are partially exposed throughout the third floor ceiling.	c.1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)
4	**North Wall**	The north wall is plaster adhered directly to the exterior masonry bearing.	c.1929	4	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed this wall was part of the original construction. It is not known if the plaster finish is original or if it has been replaced. It can be assumed from plaster analysis in select areas of the house that the majority of the original plaster has been replaced.	(None)	NC (Incompatible)
5	**East Wall**	Wood fiber insulating board adhered directly to the wood framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c.1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)

Figure2B-199 (continued): Room 303 - Bedroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
6	**South Wall**	Wood fiber insulating board adhered directly to the wood framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c.1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)
7	**West Wall**	Wood fiber insulating board adhered directly to the wood framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c.1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)
8	**Dormer Window: 301:** Roof Dormer Framing	Wood framed dormer windows in east facade gable roof. Window Type: 6	c.1792	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. However, the third floor dormer windows were determined to be a later addition c. 1792 based upon historical documentation and as assessment of existing structural conditions in the roof framing.	(None)	C
9	**Dormer Window: 301:** Framing	Wood framed dormer window in east roof of Main Block	c.1792-1820	1	Paint Analysis, HHE-051 Campaign 2	Paint sample taken from Window 303.	C
10	**Dormer Window: 301:** Sash	Wood framed dormer window in east roof of Main Block	c.1988	6	Paint Analysis, HHE-050 Campaign 32	Paint sample taken from Window 303.	NC (Compatible)
11	**Casement Window: 306, 307:** Masonry Opening	Masonry opening in brick south facade Window Type: 8	c.1769	1	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these casement windows were part of the original construction.	(None)	C
12	**Casement Window: 306, 307:** Window: Frame	Wood framed casement window in south wall of Main Block	after c.1792	1	Paint Analysis, HHE-065 Campaign 2	Paint sample taken from Window 306.	C
13	**Casement Window: 306, 307:** Window: Sash	Wood framed casement window in south wall of Main Block	c.1815-20	2	Paint Analysis, HHE-064 Campaign 4	Paint sample taken from Window 306.	NC (Compatible)

Figure2B-199 (continued): Room 303 - Bedroom - Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	**Approximate Age**	Period	**Documentation for Determining Age**	**Comments**	**Contributing (C) or Non-Contributing (NC)**
14	**Door 303**	Painted solid wood recessed paneled door; contains two (2) panels	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Compatible)
15	**HVAC Grille**	Painted metal supply or return air grille	c.1929	4	Research of archival documentation concluded that Charles Collins first introduced a General Electric heating system into Harmony Hall c. 1941.	(None)	NC (Incompatible)

ROOM 304 - BATHROOM

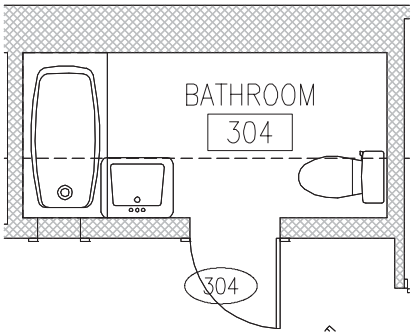


Figure 2B-200: Room 304 - Bathroom Floor Plan



Figure 2B-201: Room 304 - Bathroom



Figure 2B-202: Room 304 - Bathroom



Figure 2B-203: Room 304 - Bathroom



Figure 2B-204: Room 304 - Bathroom

Figure2B-205: Room 304 - Bathroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room in third floor/ attic space measuring 14'-11 1/2" in the north-south direction and 14'-5 3/4" in the east-west direction.	c.1929	4	Based upon historical research and on-site investigations is was determined that the attic was modified by Charles Collins c.1929. Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
2	**Flooring**	Hexagonal shaped ceramic tile.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
3	**Ceiling**	Wood fiber insulating board adhered directly to the wood framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board. The structural wood roof rafters and collar ties are partially exposed throughout the third floor ceiling.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
4	**North Wall**	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
5	**East Wall**	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
6	**South Wall**	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
7	**West Wall**	4" square ceramic tile adhered to plaster on metal lath.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
8	**Door 304**	Painted solid wood recessed paneled door; contains two (2) panels Door Type: INT-14 Hardware Type: INT-3	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Compatible)

Figure2B-205: Room 304 - Bathroom - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
9	**Plumbing Fixtures**	Water closet, lavatory and bathtub	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs Research of archival documentation concluded that Charles Collins first introduced plumbing into Harmony Hall c.1929.	(None)	NC (Incompatible)
10	**Light Fixture**	Surface mounted incandescent light fixture Light Fixture Type: 20	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced electricity into Harmony Hall c.1929.	(None)	NC (Incompatible)
11	**HVAC Grille**	Painted metal supply or return air grille	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced a General Electric heating system into Harmony Hall c. 1941.	(None)	NC (Incompatible)

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ROOM 306 - CLOSET

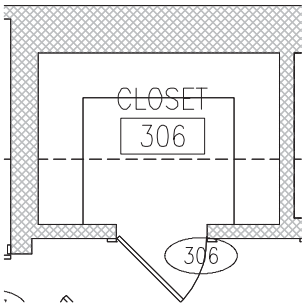


Figure 2B-206: Room 306 - Closet Floor Plan



Figure 2B-207: Room 306 - Closet



Figure 2B-208: Room 306 - Closet

Figure2B-209: Room 306 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Small storage closet measuring 3'-8" in the north-south direction and 3'-9" in the east-west direction.	c.1929	4	Based upon historical research and on-site investigations is was determined that the attic was modified by Charles Collins c.1929. Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
2	**Flooring**	Cedar planks.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)

Figure2B-209 (continued): Room 306 - Closet - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
3	**Ceiling**	Cedar planks. The structural wood roof rafters and collar ties are partially exposed throughout the third floor ceiling. In this closet the exposed rafters have been clad in cedar.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
4	**North Wall**	Cedar planks.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
5	**East Wall**	Cedar planks.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
6	**South Wall**	Cedar planks.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
7	**West Wall**	Cedar planks.	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)
8	**Door 306**	Painted solid wood recessed paneled door; contains two (2) panels Door Type: INT-14 Door Hardware Type: INT-3 & INT-11	c.1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Incompatible)

ROOM 307 - BEDROOM (INCLUDING ROOM 308 - CLOSET)

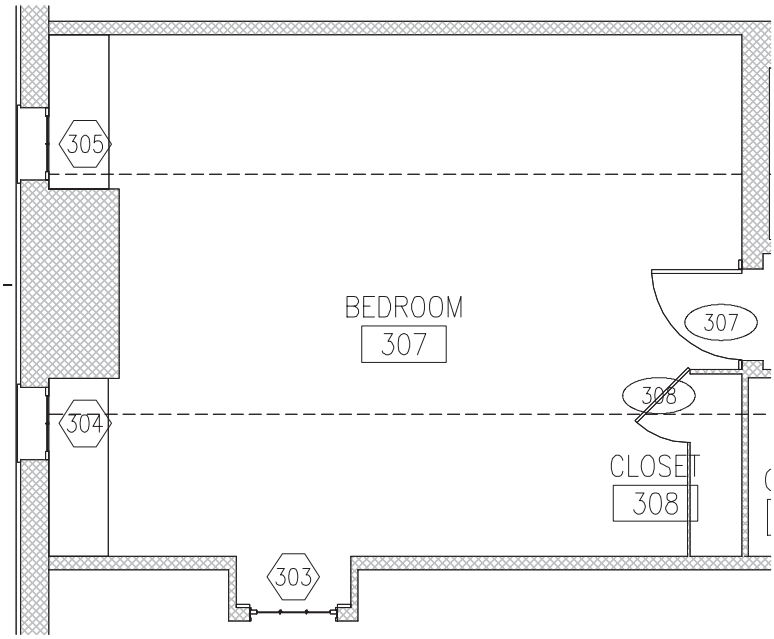


Figure 2B-210: Room 307 - Bedroom Floor Plan



Figure 2B-212: Room 307 - Bedroom



Figure 2B-213: Room 307 - Bedroom



Figure 2B-211: Room 307 - Bedroom



Figure 2B-214: Room 307 - Bedroom

Figure2B-215: Room 307 - Bedroom (including Room 308 - Closet) - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
1	**Room Plan**	Rectangular room in third floor/ attic space measuring 17'-3 1/2" in the north-south direction and 14'5 3/4" in the east-west direction.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	Based upon historical research and on-site investigations is was determined that the attic was modified by Charles Collins c.1929.	NC (Compatible)
2	**Flooring**	Solid wood heart pine flooring.	c. 1769	1	Presence of both cut nails and machine nails suggests this flooring is original to the Period of Significance, but it has been patched and repaired in some areas.	(None)	C
3	**Ceiling**	Wood fiber insulating board adhered directly to the wood framing above. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board. The structural wood roof rafters and collar ties are partially exposed throughout the third floor ceiling.	c. 1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	It is assumed the structural wood rafters are original to the Period of Significance (Period II: 1769-1849).	NC (Incompatible)
4	**North Wall**	Wood fiber insulating board adhered directly to the wood framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)
5	**East Wall**	Wood fiber insulating board adhered directly to the wood framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)
6	**South Wall**	Wood fiber insulating board adhered directly to the wood framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)
7	**West Wall**	Wood fiber insulating board adhered directly to the wood framing. A skim coat of plaster has been applied to the finished surface of the wood fiber insulating board.	c. 1929	4	Presence of the wood fiber insulating board used throughout the house. Paint analysis on select area has confirmed that this material dates to the 1930s renovations.	(None)	NC (Incompatible)

Figure2B-215 (continued): Room 307 - Bedroom (including Room 308 - Closet) - Features, Age, & Significance Matrix

Number	Feature (including Designation if Applicable)	Description	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
8	**Window 303 Dormer Window:** Roof Dormer Framing	Wood framed dormer windows in east facade gable roof.	c.1792	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. However, the third floor dormer windows were determined to be a later addition c. 1792 based upon historical documentation and as assessment of existing structural conditions in the roof framing.	(None)	C
9	**Window 303 Dormer Window:** Framing	Wood framed dormer window in east roof of Main Block Window Type: 6	c. 1792-1820	2	Paint Analysis, HHE-051 Campaign 2	Paint sample taken from Window 303.	C
10	**Window 303 Dormer Window:** Sash	Wood framed dormer window in east roof of Main Block	c. 1988	6	Paint Analysis, HHE-050 Campaign 32	Paint sample taken from Window 303.	NC (Compatible)
11	**Windows: 304, 305:** Casement Window: Masonry Opening	Masonry opening in brick south facade Window Type: 8	c. 1769	2	Research and on-site investigations led to the interpretation that the house was constructed c.1769. It is assumed these casement windows were part of the original construction.	(None)	C
12	**Window 304, 305 Casement:** Window: Frame	Wood framed casement window in south wall of Main Block	c. 1792	2	Paint Analysis, HHE-024 Campaign 1	Paint sample taken from Window 304.	C
13	**Window 304, 305 Casement:** Window: Sash	Wood framed casement window in south wall of Main Block	after c.1815-20	2	Paint Analysis, HHE-023 Campaign 5	Paint sample taken from Window 304.	NC (Compatible)
14	**Closet 208**	Rectangular closet measuring 1'-5 1/4" in the north-south direction and 5'-0 3/4" in the east-west direction.	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Compatible)
15	**Door 307**	Painted solid wood recessed paneled door; contains two (2) panels Door Type: INT-14 Door Hardware Type: N/A	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	Door hardware is missing from Door 307.	NC (Compatible)
16	**Door 308**	Painted solid wood recessed paneled door; contains two (2) panels Door Type: INT-18 Door Hardware Type: 2	c. 1929	4	Historic American Building Survey, 1934 Drawings and Photographs	(None)	NC (Compatible)

Figure2B-215 (continued): Room 307 - Bedroom (including Room 308 - Closet) - Features, Age, & Significance Matrix

Number	**Feature** (including Designation if Applicable)	**Description**	Approximate Age	Period	Documentation for Determining Age	Comments	Contributing (C) or Non-Contributing (NC)
17	**HVAC Grille**	Painted metal supply or return air grille	c. 1929	4	Research of archival documentation concluded that Charles Collins first introduced a General Electric heating system into Harmony Hall c.1941.	(None)	NC (Incompatible)

Part 2C: Condition Assessment



Harmony Hall

Fort Washington, Maryland

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C.1 ARCHITECTURAL

Overview

Overall, Harmony Hall is in poor condition. Due to the building being vacant for so many years and the constant infiltration of water because of a leaking roof, significant damage has occurred to the exterior envelope, the structure, and the interior finishes. The lack of heat and proper ventilation at the interior have only exacerbated the situation and have led to damage of the plaster walls, the decorative wood elements, and the wood flooring.

Methodology

Beyer Blinder Belle (BBB) and the design team made several site visits to closely inspect both the exterior and interior conditions. The follow is documentation of the conditions found. In order to describe the physical conditions of the various materials and systems, a condition assessment legend is provided for both the exterior and the interior. These matrices will identify symbols for each condition, example photographs of the condition taken at the site, the designated locations of the condition and probable causes for the noted deterioration. Following the matrices will be elevation and floor plan drawings that key in the locations of damage and deterioration that was defined in the matrices. These drawings will then be followed by a narrative describing the damage in more detail with accompanying photographs.

BRICK MASONRY	SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
	BIO-GR	Biological Growth	West Facade, corner between Main Block and the Central South Addition	
	DESCRIPTION		POTENTIAL CAUSES	
	Unwanted growth or infestation of fungi, algae, microbes or plants that may result in organic staining and bio-deterioration of the pore structure of the masonry. **Location of Photo:** West Facade, Corner at Main Block and Central South Addition		Biological growth is associated with excess moisture in protected areas and is related to fluctuations in temperatures. It often occurs where there is not adequate drainage of rain water. It also provides the perfect environment for insect and animal infestations, and may indicate elevated moisture levels within the substrate.	

BRICK MASONRY	SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
	TJC	Through Joint Crack	All facades.	
	DESCRIPTION		POTENTIAL CAUSES	
	A crack that follows the mortar joints of the brick and doesn't translate through the brick. In some cases these cracks result in brick displacement. **Location of Photo:** Central South Addition below Window 213.		Joints open due to weathering or differential stresses from movement within the building envelope. The mortar can be further damaged with salts and moisture migration.	

BRICK MASONRY

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
TBC	Through Brick Crack	All facades, brick jack arches.	

DESCRIPTION	POTENTIAL CAUSES
Movement and shifting of the brick has resulted in cracking both through the brick units and through adjacent mortar joints. **Location of Photo:** Window Jack Arch at Window 201	Joints open due to weathering or differential stress from movement within the building envelope.

BRICK MASONRY

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
OJ-B	Open Joints Brick	Chimneys and all facades at location of downspouts	

DESCRIPTION	POTENTIAL CAUSES
Complete or partial loss of pointing mortar. This condition allows moisture to migrate into the masonry substrate and may also result in potential structural instability. **Location of Photo:** South Side of Central Chimney (Chimney #2)	Dislocation of the brick units may be caused by differential movement within the masonry wall or deterioration of adjacent mortar caused by excessive penetration of moisture within the wall.

BRICK MASONRY

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
DIS-B	Dislocated Brick	Window jack arches and north elevation.	

DESCRIPTION	POTENTIAL CAUSES
Brick units that have shifted out of plumb or are not level. **Location of Photo:** Brick Jack Arch above Window 118	Dislocation of the brick units may be caused by differential movement within the masonry wall or deterioration of adjacent mortar caused by excessive penetration of moisture within the wall.

BRICK MASONRY

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
MIS-B	Missing Brick	Belt course at downspouts.	

DESCRIPTION	POTENTIAL CAUSES
Brick units that have dislodged completely from the masonry wall or that have been removed. **Location of Photo:** East Facade, corner between Main Block and Central South Addition	Caused by deterioration of mortar, allowing brick to shift in combination with differential movement resulting in brick fully dislodging from masonry arch or wall.

BRICK MASONRY

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
SP-B	Brick Spall	Water course at downspouts.	

DESCRIPTION	POTENTIAL CAUSES
Detachment of brick fragment from brick unit. **Location of Photo:** East Facade, northeast corner at water table.	Spalls may be caused by pressure within wall, expansion of embedded ferrous elements or from repair materials that are overly hard in comparison to the surrounding substrate.

BRICK MASONRY

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
ICP	Incompatible Patch	Main block, below windows.	

DESCRIPTION	POTENTIAL CAUSES
Previous repair of the masonry which is physically or aesthetically incompatible with the historic fabric. **Location of Photo:** East Facade between Windows 106 and 207	Previous penetrations through the brick which have been abandoned have required patching. The patching materials are not sympathetic to the historic fabric and may fail as a result of improper testing of the repair system or a misunderstanding of the long term effects of the repair from weathering.

BRICK MASONRY

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
PT-S	Masonry Staining due to Failing Paint	Main block, below window.	

DESCRIPTION	POTENTIAL CAUSES
Hazing or cloud-like white staining of the brick masonry below the painted wood window sill. **Location of Photo:** Below windows of Main Block, Window Types 2, 3A, 3B, 4 and 5.	Deterioration and breakdown of exterior paint due to environmental conditions and age of paint has resulted in a hazing cloud-like staining of the brick masonry below the window sill.

BRICK MASONRY

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
FMA	Ferrous Metal Anchors	Brick facade - Main Block and South Addition.	

DESCRIPTION	POTENTIAL CAUSES
Ferrous metal strips set into mortar joints to surface mount materials to the brick masonry. **Photo Location:** Brick facade at South Addition at Door 106E.	Prolonged exposed to water will cause ferrous metals to rust and deteriorate. The rusting and corrosion of the metal will cause motar loss and possible spall of the brick.

WOOD AND WINDOWS

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
PT-LW	Paint Loss on Wood	Exterior wood elements (doors, windows, cornices).	

DESCRIPTION	POTENTIAL CAUSES
Failure of paint coating, which acts as a protective sacrificial layer against weathering. The loss of paint exposes the wood substrate to moisture penetration, deterioration and eventually will lead to wood rot. **Location of Photo:** Pediment door trim @ door 101B.	Most paint coatings fail due to age and weathering. In some cases, when the substrate is not prepared correctly or is too wet, the coating cannot maintain a bond and will fail. Paint loss is most severe at areas of high weathering, such as window sills, base of frames, projecting elements and horizontal members.

WOOD AND WINDOWS

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
WD-R	Wood Rot	Windows - all facades.	

DESCRIPTION	POTENTIAL CAUSES
Decay of wood substrate, eventually leading to failure and loss of material. This process is accelerated by moisture, fluctuations in temperature and poor maintenance. **Location of Photo:** Window 303	Failure of protective paint coating and prolonged exposure to direct weathering.

WOOD AND WINDOWS

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
WD-TD	Wood: Termite Damage	Main Block - window sills and trim.	

DESCRIPTION	POTENTIAL CAUSES
Deterioration and loss of section of wood as a result of termite infestation. **Photo Location:** Room 103 - Dining Room at window 114.	Continuous water infiltration in combination with cool temperature and little air circulation provides an ideal environment for termites to thrive. The most significant termite damage has occurred in direct correspondence with areas below two primary roof leaks.

WOOD AND WINDOWS

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
WD-FF	Wood: Failed Floor Board	Various locations of failed floor boards in Main Block.	

DESCRIPTION	POTENTIAL CAUSES
Pine strip flooring has failed, resulting in unstable floor boards. **Photo Location:** Room 102 Living Room/ Parlor - Electric outlet along North wall.	Continuous exposure to moisture has resulted in wood rot and failing of select wood members.

WOOD AND WINDOWS

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
WD-SW	Wood: Significant Wear	Various locations.	

DESCRIPTION	POTENTIAL CAUSES
Significant wear of the wood surface resulting in exposed and pronounced grain. **Photo Location:** Room 203-South Bedroom	The pine plank flooring is a very soft flooring material that is susceptible to significant wear if not properly maintained. The finish coat of the wood flooring has been completely worn away resulting in significant wearing of the floor boards, resulting in splintering and gaps.

WOOD AND WINDOWS

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
MIS-W	Missing Element	Window sills at all facades.	

DESCRIPTION	POTENTIAL CAUSES
Missing component of wood members at window and door frames and trim. **Location of Photo:** Missing wood window sill at Window 209	Severe wood rot will eventually lead to disintegration of material and result in the loss of the element.

WOOD AND WINDOWS

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
DIS-W	Dislocated Wood Element	Window sills at all facades.	

DESCRIPTION	POTENTIAL CAUSES
Dislocated component of wood members at window and door frames and trim. **Location of Photo:** Exterior wood sill and trim at Window 108	Failure of anchoring devices to masonry. Deterioration of wood due to water damage and wood rot can result in detachment from substrate.

WOOD AND WINDOWS

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
MP	Missing Glazing Putty	Window of Main block and window 112.	
DESCRIPTION		**POTENTIAL CAUSES**	
The glazing putty that seals the edges of the existing glazing panes is cracked and missing in many locations. **Location of Photo:** Window 303		Continuous weathering leads to breakdown and drying out of the putty material, leaving these areas vulnerable to moisture penetration.	

WOOD AND WINDOWS

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
BR-P	Broken or Missing Window Pane	Windows 005, 112, 207, 304.	
DESCRIPTION		**POTENTIAL CAUSES**	
Broken or missing glazing in window lites. **Location of Photo:** Window 212		Impact from debris can result in broken glazing.	

PLASTER AND FINISHES

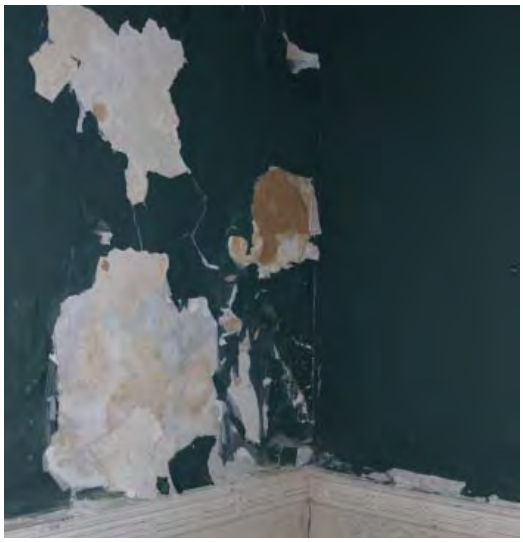
SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
PT-LP	Paint Loss/ Failure on Plaster or Gypsum Wallboard	Plaster on exterior walls.	
DESCRIPTION		**POTENTIAL CAUSES**	
Breakdown of paint coating. **Photo Location:** Room 202 - North Bedroom, north wall		This condition indicates that the walls are holding significant moisture, weakening the bond between the paint and the plaster substrate. The source of the moisture must be controlled before any repainting to ensure a new coating will last, and to prevent additional interior damage.	

PLASTER AND FINISHES

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
PL-L	Complete Loss of Plaster from Wood Lath or Masonry	Plaster on brick at exterior walls.	

DESCRIPTION	POTENTIAL CAUSES
Complete breakdown of bonding of scratch coat keys with wood lath or bonding of scratch coat with brick masonry resulting in loss of plaster. **Photo Location:** Room 103 - Dining Room, corner at fireplace.	Consistent water infiltration as a result of failing roof and open mortar joints along the exterior masonry walls results in plaster holding moisture causing a weakened bond between the plaster and the substrate, eventually resulting in failure.

PLASTER AND FINISHES

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
PL-S	Separation of Plaster from Wood Lath or Masonry	Interior plaster along exterior brick walls - NE corner of Main Block	

DESCRIPTION	POTENTIAL CAUSES
Partial breakdown of bonding of scratch coat keys with wood lath or bonding of scratch coat with brick masonry resulting in partial separation of plaster from substrate. **Photo Location:** Room 102 - Parlor/ Living Room Northwest corner.	Consistent water infiltration as a result of failing roof and open mortar joints along the exterior masonry walls results in plaster holding moisture causing a weakened bond between the plaster and the substrate, eventually resulting in separation.

PLASTER AND FINISHES

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
PL-HC	Hairline Crack on Plaster Wall	Plaster along interior walls.	

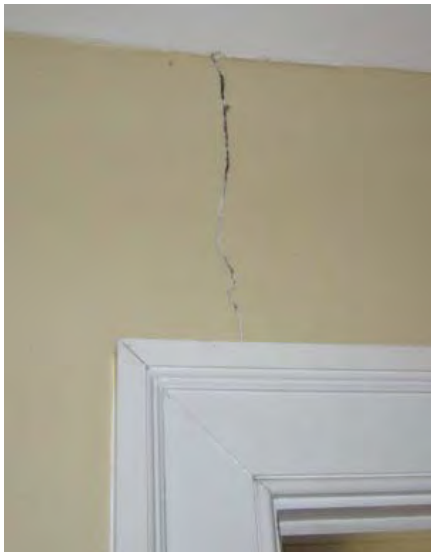
DESCRIPTION	POTENTIAL CAUSES
Crack through the surface of the plaster that does not extend into substrate. **Photo Location:** Room 102 - Parlor/ Living Room, above door 102.	Hairline cracks in plaster throughout the building are a result of continued settlement of structure, significant fluctuation in temperature and moisture levels.

PLASTER AND FINISHES

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
PL-MC	Major Crack in Plaster Wall	Plaster along interior walls.	

DESCRIPTION	POTENTIAL CAUSES
Crack through surface material that may extend into substrate. **Photo Location:** Room 202 - North Bedroom above Door 202A.	Cracks may open in plaster due to differential stresses from movement of the building envelope or substrate settlement. If element becomes unstable, it could lead to loss of material.

PLASTER AND FINISHES

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
GWB-MC	Gypsum Wallboard Major Crack	Gypsum wallboard in Central South Addition and South Addition	

DESCRIPTION	POTENTIAL CAUSES
Significant settlement crack through gypsum wallboard finish. **Photo Location:** Above Door 206, Room 206 - Bedroom	Differential settlement in building envelope.

PLASTER AND FINISHES

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
VT-CR	Crack in Vinyl Tile or Sheet Flooring	Central South Addition and South Addition	

DESCRIPTION	POTENTIAL CAUSES
Vinyl tile or sheet flooring that has become detached from the sub-floor. **Photo Location:** Room 204 - Corridor	General wear and tear and poor installation.

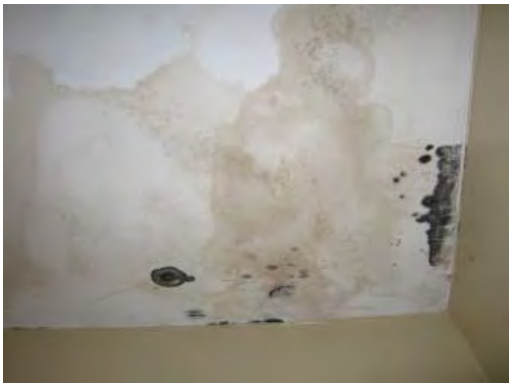
PLASTER AND FINISHES

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
CT-CR	Crack in Ceramic Tile Flooring	Room 104 - Kitchen	
DESCRIPTION		**POTENTIAL CAUSES**	
Cracked ceramic tile floor finish in Room 104 - Kitchen **Photo Location:** Room 104 - Kitchen		Differential settlement between floor tile and underlying substrate.	

PLASTER AND FINISHES

SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
INFES	Insect Infestation	Throughout Main Block, Central South Addition and South Addition	
DESCRIPTION		**POTENTIAL CAUSES**	
A vacant building without proper pest control and a sealed exterior envelope will become infested with insects and rodents. Inadequate seals at doors and windows and broken window panes allow insects to enter building. **Photo Location:** Door 013B		Openings in building envelope and inadequate pest control.	

PLASTER AND FINISHES

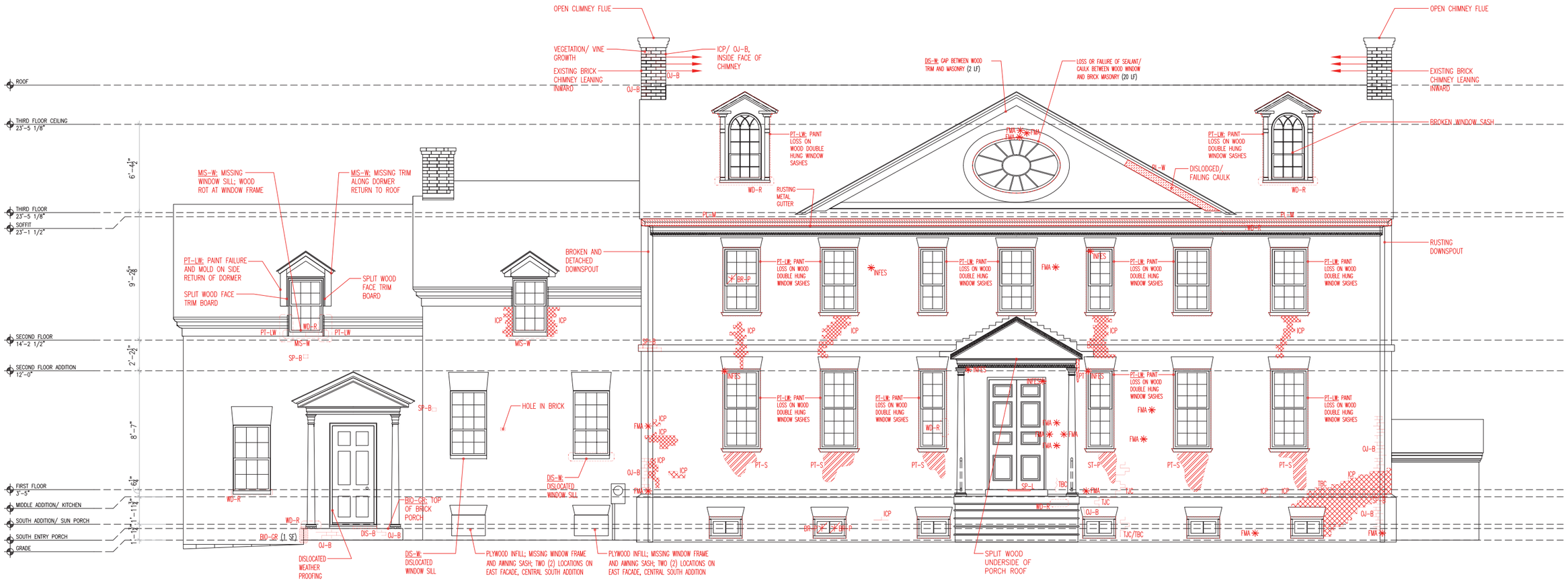
SYMBOL	CONDITION	LOCATION	EXAMPLE IMAGE
WT-D	Water Damage	Plaster ceilings.	
DESCRIPTION		**POTENTIAL CAUSES**	
The irreversible loss of scales, flakes, or layers from a surface. This may occur on interior plaster due to moisture penetration, deterioration from salts, or inherent properties in the material. **Photo Location:** Parlor/ Living Room 102 Ceiling		Severe water damage at walls is a sign of a serious water infiltration problem. Once the water infiltration begins, the plaster will retain the moisture and the problem will continue to spread.	

ASSESSMENT LEGEND

BRICK MASONRY					
BIO-GR	BIOLOGICAL GROWTH	DIS-B	DISLOCATED BRICK	PT-S	MASONRY STAINING DUE TO FAILING PAINT
TJC	THROUGH JOINT CRACK IN MASONRY	MIS-B	MISSING BRICK MASONRY UNIT	FMA	FERROUS METAL ANCHOR
TBC	THROUGH BRICK CRACK IN MASONRY	SP-B	SPALLED BRICK		
OJ-B	OPEN JOINTS IN BRICK	ICP	INCOMPATIBLE PATCH OR REPAIR TO BRICK MASONRY		

WOOD AND WINDOWS					
PT-LW	PAINT LOSS ON WOOD ELEMENT	WD-SW	WOOD: SIGNIFICANT WEAR	MP	MISSING/ FAILURE OF GLAZING PUTTY
WD-R	WOOD ROT	MIS-W	MISSING WOOD TRIM OR WOOD ELEMENT	BR-P	BROKEN OR MISSING WINDOW PANE
WD-TD	WOOD: TERMITE DAMAGE	DIS-W	DISLOCATED/ SEPARATED WOOD TRIM OR WOOD ELEMENT		
WD-FF	WOOD: FAILED FLOOR BOARD				

PLASTER AND FINISHES					
PT-LP	PAINT LOSS/ FAILURE ON FINISH PLASTER	PL-MC	MAJOR CRACK IN PLASTER WALL	INFES	INSECT INFESTATION
PL-L	PLASTER FAILURE/ LOSS FROM MASONRY OR OTHER SUBSTRATE	GWB-HC	HAIRLINE CRACK IN GYPSUM WALLBOARD	WT-D	WATER DAMAGE
PL-S	PLASTER SEPARATION FROM MASONRY OR OTHER SUBSTRATE	VT-CR	CRACK IN VINYL TILE		
PL-HC	HAIRLINE CRACK IN PLASTER WALL	CT-CR	CRACK IN CERAMIC TILE		



1 / A3.00 EAST ELEVATION CONDITIONS ASSESSMENT
SCALE (A)

N

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

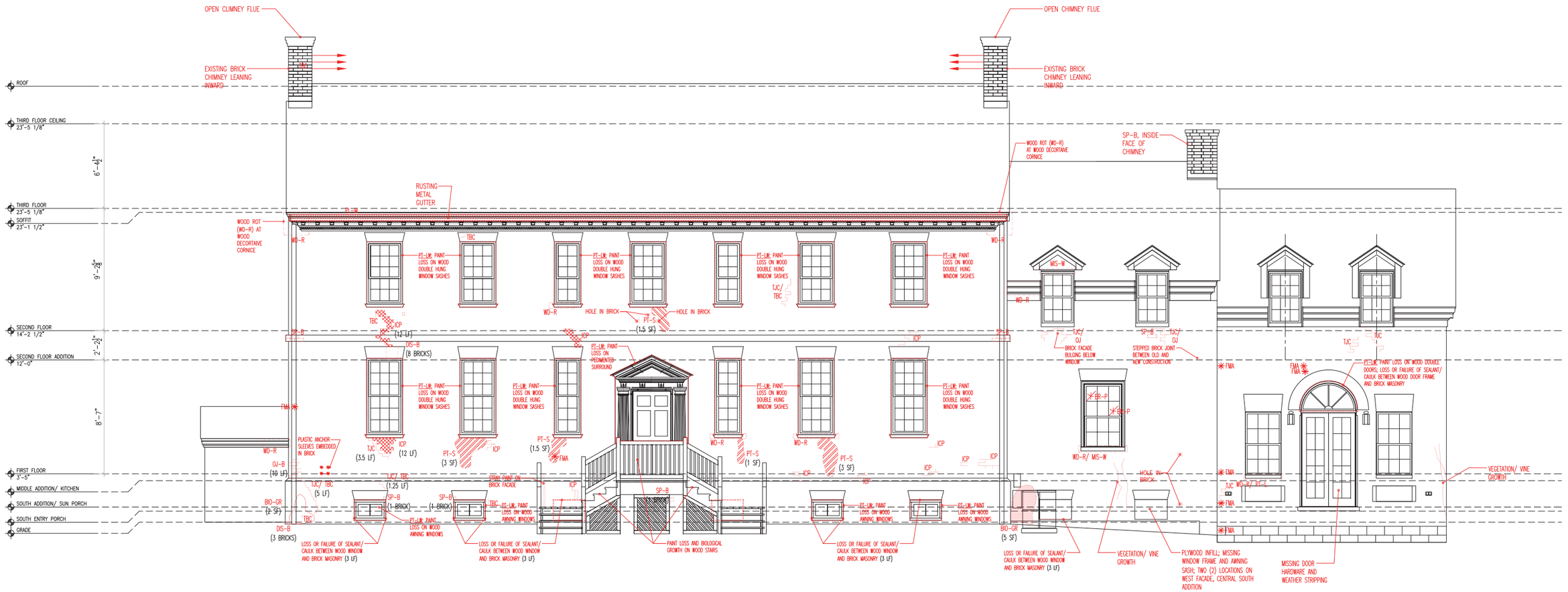
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ASSESSMENT LEGEND

BRICK MASONRY					
BIO–GR	BIOLOGICAL GROWTH	DIS–B	DISLOCATED BRICK	PT–S	MASONRY STAINING DUE TO FAILING PAINT
TJC	THROUGH JOINT CRACK IN MASONRY	MIS–B	MISSING BRICK MASONRY UNIT	FMA	FERROUS METAL ANCHOR
TBC	THROUGH BRICK CRACK IN MASONRY	SP–B	SPALLED BRICK		
OJ–B	OPEN JOINTS IN BRICK	ICP	INCOMPATIBLE PATCH OR REPAIR TO BRICK MASONRY		

WOOD AND WINDOWS					
PT–LW	PAINT LOSS ON WOOD ELEMENT	WD–SW	WOOD: SIGNIFICANT WEAR	MP	MISSING/ FAILURE OF GLAZING PUTTY
WD–R	WOOD ROT	MIS–W	MISSING WOOD TRIM OR WOOD ELEMENT	BR–P	BROKEN OR MISSING WINDOW PANE
WD–TD	WOOD: TERMITE DAMAGE	DIS–W	DISLOCATED/ SEPARATED WOOD TRIM OR WOOD ELEMENT		
WD–FF	WOOD: FAILED FLOOR BOARD				

PLASTER AND FINISHES					
PT–LP	PAINT LOSS/ FAILURE ON FINISH PLASTER	PL–MC	MAJOR CRACK IN PLASTER WALL	INFES	INSECT INFESTATION
PL–L	PLASTER FAILURE/ LOSS FROM MASONRY OR OTHER SUBSTRATE	GWB–HC	HAIRLINE CRACK IN GYPSUM WALLBOARD	WT–D	WATER DAMAGE
PL–S	PLASTER SEPARATION FROM MASONRY OR OTHER SUBSTRATE	VT–CR	CRACK IN VINYL TILE		
PL–HC	HAIRLINE CRACK IN PLASTER WALL	CT–CR	CRACK IN CERAMIC TILE		



1 / A3.01 WEST ELEVATION CONDITIONS ASSESSMENT
SCALE (A)

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SCALE OF FEET (1/4" = 1'–0")
SCALE (A)

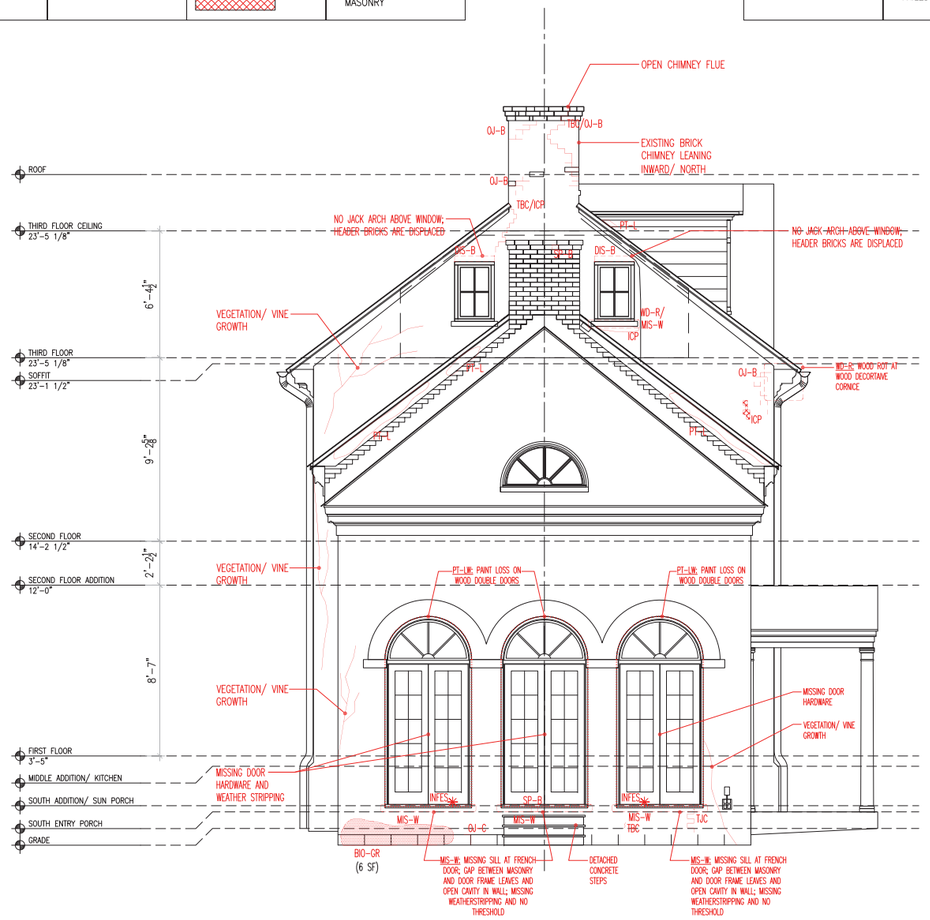
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ASSESSMENT LEGEND

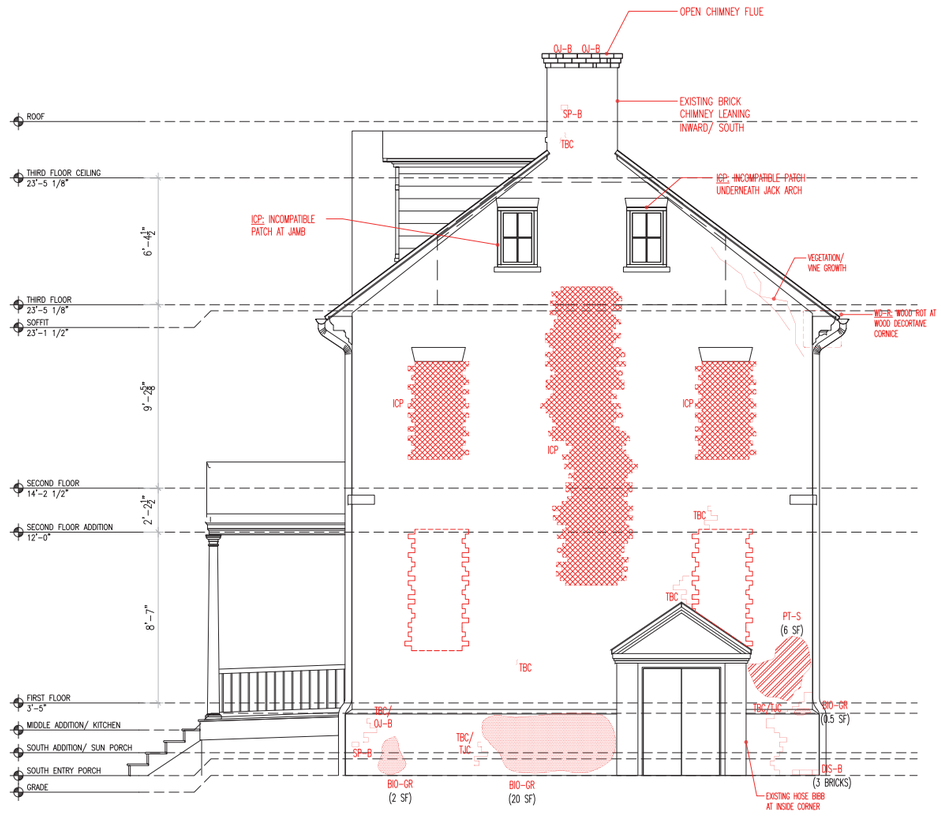
BRICK MASONRY					
BIO–GR	BIOLOGICAL GROWTH	DIS–B	DISLOCATED BRICK	PT–S	MASONRY STAINING DUE TO FAILING PAINT
TJC	THROUGH JOINT CRACK IN MASONRY	MIS–B	MISSING BRICK MASONRY UNIT	FMA	FERROUS METAL ANCHOR
TBC	THROUGH BRICK CRACK IN MASONRY	SP–B	SPALLED BRICK		
OJ–B	OPEN JOINTS IN BRICK	ICP	INCOMPATIBLE PATCH OR REPAIR TO BRICK MASONRY		

WOOD AND WINDOWS					
PT–LW	PAINT LOSS ON WOOD ELEMENT	WD–SW	WOOD: SIGNIFICANT WEAR	MP	MISSING/ FAILURE OF GLAZING PUTTY
WD–R	WOOD ROT	MIS–W	MISSING WOOD TRIM OR WOOD ELEMENT	BR–P	BROKEN OR MISSING WINDOW PANE
WD–TD	WOOD: TERMITE DAMAGE	DIS–W	DISLOCATED/ SEPARATED WOOD TRIM OR WOOD ELEMENT		
WD–FF	WOOD: FAILED FLOOR BOARD				

PLASTER AND FINISHES					
PT–LP	PAINT LOSS/ FAILURE ON FINISH PLASTER	PL–MC	MAJOR CRACK IN PLASTER WALL	INFES	INSECT INFESTATION
PL–L	PLASTER FAILURE/ LOSS FROM MASONRY OR OTHER SUBSTRATE	GWB–HC	HAIRLINE CRACK IN GYPSUM WALLBOARD	WT–D	WATER DAMAGE
PL–S	PLASTER SEPARATION FROM MASONRY OR OTHER SUBSTRATE	VT–CR	CRACK IN VINYL TILE		
PL–HC	HAIRLINE CRACK IN PLASTER WALL	CT–CR	CRACK IN CERAMIC TILE		



1 A3.02 SOUTH ELEVATION CONDITIONS ASSESSMENT
SCALE (A)



2 A3.02 NORTH ELEVATION CONDITIONS ASSESSMENT
SCALE (A)

N

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SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

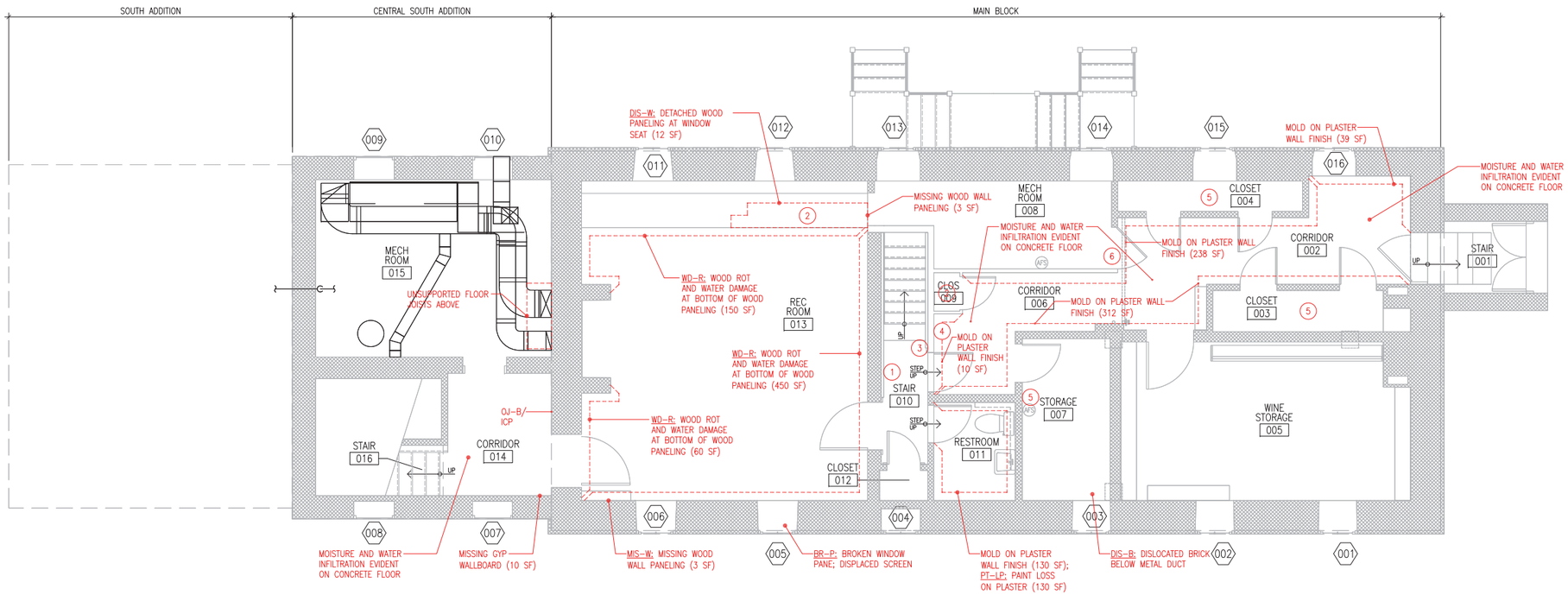
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ASSESSMENT LEGEND

BRICK MASONRY					
BIO–GR	BIOLOGICAL GROWTH	DIS–B	DISLOCATED BRICK	PT–S	MASONRY STAINING DUE TO FAILING PAINT
TJC	THROUGH JOINT CRACK IN MASONRY	MIS–B	MISSING BRICK MASONRY UNIT	FMA	FERROUS METAL ANCHOR
TBC	THROUGH BRICK CRACK IN MASONRY	SP–B	SPALLED BRICK		
OJ–B	OPEN JOINTS IN BRICK	ICP	INCOMPATIBLE PATCH OR REPAIR TO BRICK MASONRY		

WOOD AND WINDOWS					
PT–LW	PAINT LOSS ON WOOD ELEMENT	WD–SW	WOOD: SIGNIFICANT WEAR	MP	MISSING/ FAILURE OF GLAZING PUTTY
WD–R	WOOD ROT	MIS–W	MISSING WOOD TRIM OR WOOD ELEMENT	BR–P	BROKEN OR MISSING WINDOW PANE
WD–TD	WOOD: TERMITE DAMAGE	DIS–W	DISLOCATED/ SEPARATED WOOD TRIM OR WOOD ELEMENT		
WD–FF	WOOD: FAILED FLOOR BOARD				

PLASTER AND FINISHES					
PT–LP	PAINT LOSS/ FAILURE ON FINISH PLASTER	PL–MC	MAJOR CRACK IN PLASTER WALL	INFES	INSECT INFESTATION
PL–L	PLASTER FAILURE/ LOSS FROM MASONRY OR OTHER SUBSTRATE	GWB–HC	HAIRLINE CRACK IN GYPSUM WALLBOARD	WT–D	WATER DAMAGE
PL–S	PLASTER SEPARATION FROM MASONRY OR OTHER SUBSTRATE	VT–CR	CRACK IN VINYL TILE		
PL–HC	HAIRLINE CRACK IN PLASTER WALL	CT–CR	CRACK IN CERAMIC TILE		



KEY NOTES

1. WT–D: WATER DAMAGE AT PLASTER WALL AND WOOD WAINSCOT (25 SF)
2. ASBESTOS INSULATION PRESENT (SEE HAZARDOUS MATERIALS REPORT)
3. PL–MC: CRACK THROUGH PLASTER WALL (5 LF)
4. PT–LP: PAINT LOSS ALONG PLASTER WALL (16 SF)
5. WD–R: WOOD ROT, DETERIORATION AND COLLAPSE OF CLOSET ELEVATED FLOOR, CLOSETS 003 AND 004 (46 SF)
6. WD–R: WOOD ROT AND DETERIORATION OF WOOD HRESHOLD AT DOOR 008 (3 LF)

1 / A1.00 BASEMENT FLOOR PLAN CONDITIONS ASSESSMENT
SCALE (A)

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SCALE OF FEET (1/4" = 1'–0")
SCALE (A)

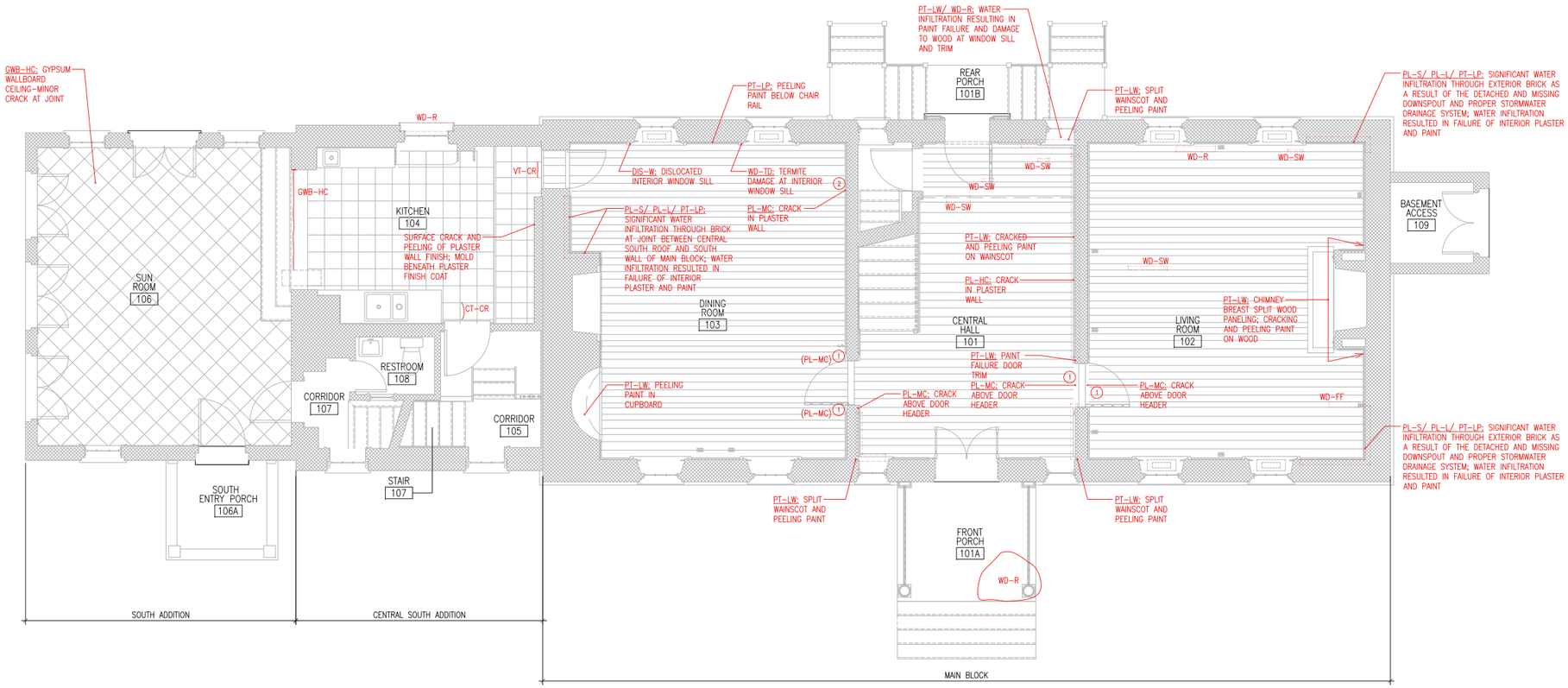
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ASSESSMENT LEGEND

BRICK MASONRY					
BIO-GR	BIOLOGICAL GROWTH	DIS-B	DISLOCATED BRICK	PT-S	MASONRY STAINING DUE TO FAILING PAINT
TJC	THROUGH JOINT CRACK IN MASONRY	MIS-B	MISSING BRICK MASONRY UNIT	FMA	FERROUS METAL ANCHOR
TBC	THROUGH BRICK CRACK IN MASONRY	SP-B	SPALLED BRICK		
OJ-B	OPEN JOINTS IN BRICK	ICP	INCOMPATIBLE PATCH OR REPAIR TO BRICK MASONRY		

WOOD AND WINDOWS					
PT-LW	PAINT LOSS ON WOOD ELEMENT	WD-SW	WOOD: SIGNIFICANT WEAR	MP	MISSING/ FAILURE OF GLAZING PUTTY
WD-R	WOOD ROT	MIS-W	MISSING WOOD TRIM OR WOOD ELEMENT	BR-P	BROKEN OR MISSING WINDOW PANE
WD-TD	WOOD: TERMITE DAMAGE	DIS-W	DISLOCATED/ SEPARATED WOOD TRIM OR WOOD ELEMENT		
WD-FF	WOOD: FAILED FLOOR BOARD				

PLASTER AND FINISHES					
PT-LP	PAINT LOSS/ FAILURE ON FINISH PLASTER	PL-MC	MAJOR CRACK IN PLASTER WALL	INFES	INSECT INFESTATION
PL-L	PLASTER FAILURE/ LOSS FROM MASONRY OR OTHER SUBSTRATE	GWB-HC	HAIRLINE CRACK IN GYPSUM WALLBOARD	WT-D	WATER DAMAGE
PL-S	PLASTER SEPARATION FROM MASONRY OR OTHER SUBSTRATE	VT-CR	CRACK IN VINYL TILE		
PL-HC	HAIRLINE CRACK IN PLASTER WALL	CT-CR	CRACK IN CERAMIC TILE		



KEY NOTES

1. PL-MC/ PL-HC: PLASTER CRACK ABOVE DOOR FRAME
2. PL-MC/ PL-HC: PLASTER CRACK IN WALL

1 / A1.01 FIRST FLOOR PLAN CONDITIONS ASSESSMENT
SCALE A

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SCALE OF FEET (1/4" = 1'-0")
SCALE A

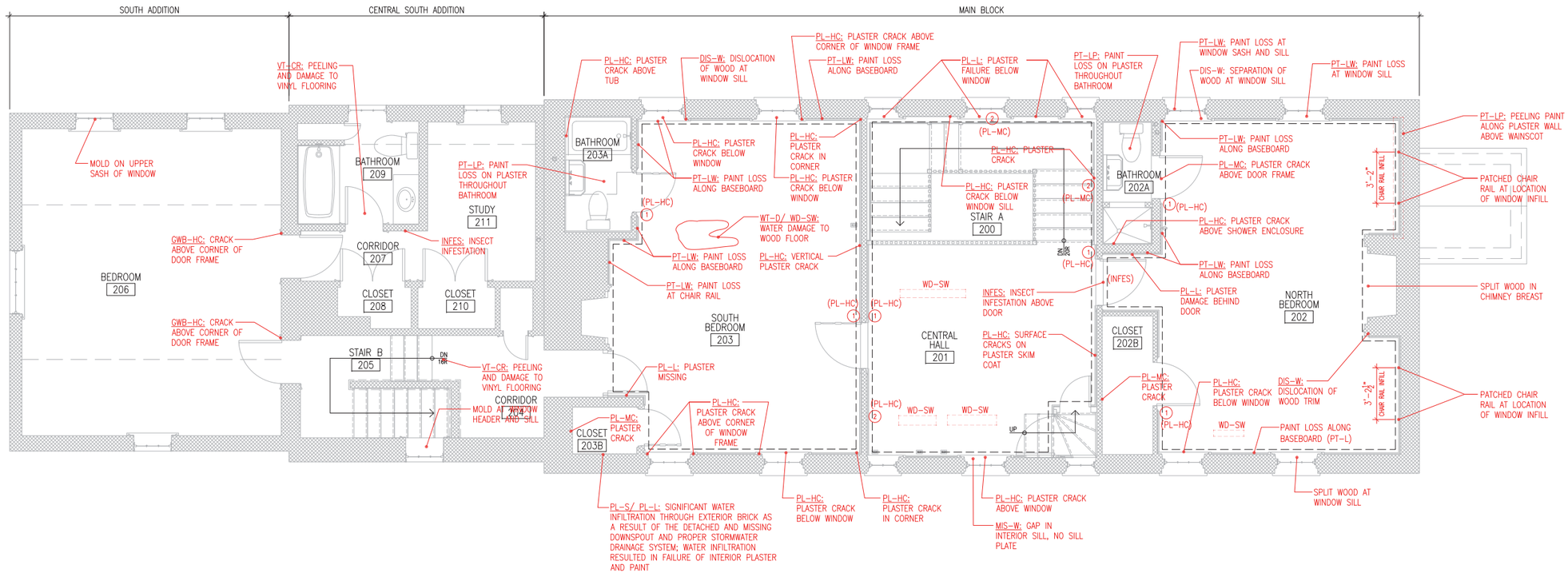
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ASSESSMENT LEGEND

BRICK MASONRY					
BIO–GR	BIOLOGICAL GROWTH	DIS–B	DISLOCATED BRICK	PT–S	MASONRY STAINING DUE TO FAILING PAINT
TJC	THROUGH JOINT CRACK IN MASONRY	MIS–B	MISSING BRICK MASONRY UNIT	FMA	FERROUS METAL ANCHOR
TBC	THROUGH BRICK CRACK IN MASONRY	SP–B	SPALLED BRICK		
OJ–B	OPEN JOINTS IN BRICK	ICP	INCOMPATIBLE PATCH OR REPAIR TO BRICK MASONRY		

WOOD AND WINDOWS					
PT–LW	PAINT LOSS ON WOOD ELEMENT	WD–SW	WOOD: SIGNIFICANT WEAR	MP	MISSING/ FAILURE OF GLAZING PUTTY
WD–R	WOOD ROT	MIS–W	MISSING WOOD TRIM OR WOOD ELEMENT	BR–P	BROKEN OR MISSING WINDOW PANE
WD–TD	WOOD: TERMITE DAMAGE	DIS–W	DISLOCATED/ SEPARATED WOOD TRIM OR WOOD ELEMENT		
WD–FF	WOOD: FAILED FLOOR BOARD				

PLASTER AND FINISHES					
PT–LP	PAINT LOSS/ FAILURE ON FINISH PLASTER	PL–MC	MAJOR CRACK IN PLASTER WALL	INFES	INSECT INFESTATION
PL–L	PLASTER FAILURE/ LOSS FROM MASONRY OR OTHER SUBSTRATE	GWB–HC	HAIRLINE CRACK IN GYPSUM WALLBOARD	WT–D	WATER DAMAGE
PL–S	PLASTER SEPARATION FROM MASONRY OR OTHER SUBSTRATE	VT–CR	CRACK IN VINYL TILE		
PL–HC	HAIRLINE CRACK IN PLASTER WALL	CT–CR	CRACK IN CERAMIC TILE		



KEY NOTES

1. PL–MC/ PL–HC: PLASTER CRACK ABOVE DOOR FRAME
2. PL–MC/ PL–HC: PLASTER CRACK IN WALL

1 / A1.02 SECOND FLOOR PLAN CONDITIONS ASSESSMENT
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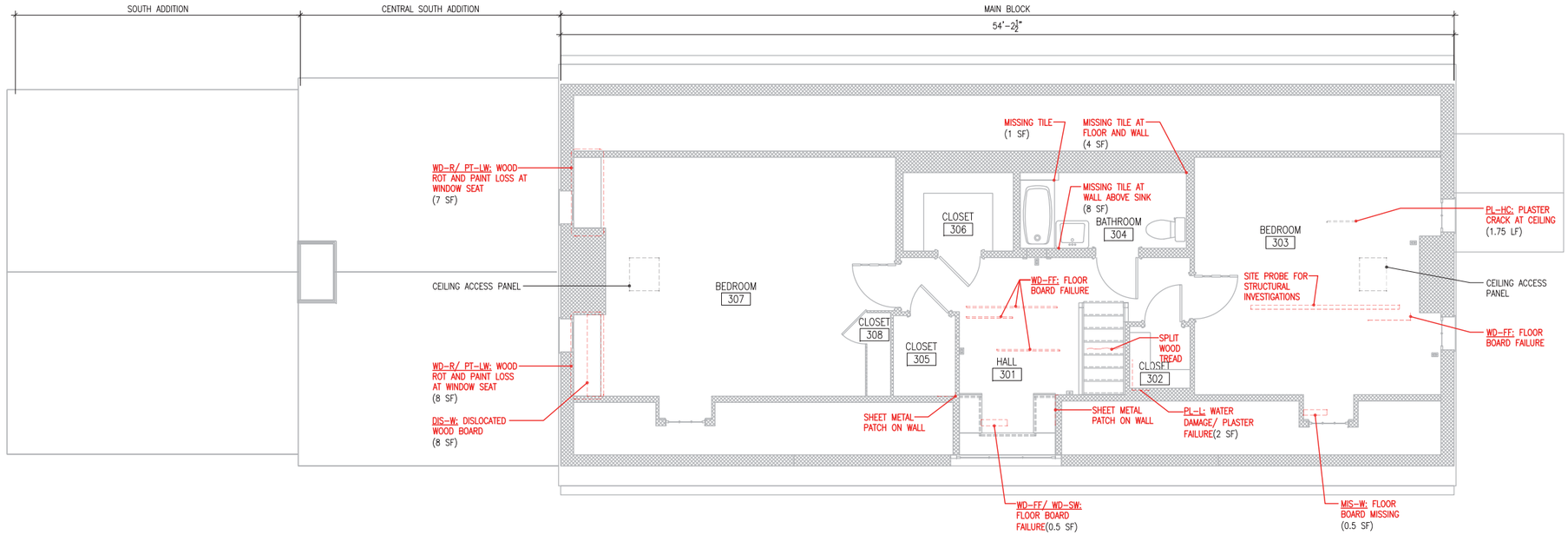
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ASSESSMENT LEGEND

BRICK MASONRY					
BIO–GR	BIOLOGICAL GROWTH	DIS–B	DISLOCATED BRICK	PT–S	MASONRY STAINING DUE TO FAILING PAINT
TJC	THROUGH JOINT CRACK IN MASONRY	MIS–B	MISSING BRICK MASONRY UNIT	FMA	FERROUS METAL ANCHOR
TBC	THROUGH BRICK CRACK IN MASONRY	SP–B	SPALLED BRICK		
OJ–B	OPEN JOINTS IN BRICK	ICP	INCOMPATIBLE PATCH OR REPAIR TO BRICK MASONRY		

WOOD AND WINDOWS					
PT–LW	PAINT LOSS ON WOOD ELEMENT	WD–SW	WOOD: SIGNIFICANT WEAR	MP	MISSING/ FAILURE OF GLAZING PUTTY
WD–R	WOOD ROT	MIS–W	MISSING WOOD TRIM OR WOOD ELEMENT	BR–P	BROKEN OR MISSING WINDOW PANE
WD–TD	WOOD: TERMITE DAMAGE	DIS–W	DISLOCATED/ SEPARATED WOOD TRIM OR WOOD ELEMENT		
WD–FF	WOOD: FAILED FLOOR BOARD				

PLASTER AND FINISHES					
PT–LP	PAINT LOSS/ FAILURE ON FINISH PLASTER	PL–MC	MAJOR CRACK IN PLASTER WALL	INFES	INSECT INFESTATION
PL–L	PLASTER FAILURE/ LOSS FROM MASONRY OR OTHER SUBSTRATE	GWB–HC	HAIRLINE CRACK IN GYPSUM WALLBOARD	WT–D	WATER DAMAGE
PL–S	PLASTER SEPARATION FROM MASONRY OR OTHER SUBSTRATE	VT–CR	CRACK IN VINYL TILE		
PL–HC	HAIRLINE CRACK IN PLASTER WALL	CT–CR	CRACK IN CERAMIC TILE		



1 / A1.03 THIRD FLOOR PLAN CONDITIONS ASSESSMENT
SCALE (A)

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SCALE OF FEET (1/4" = 1'–0")
SCALE (A)

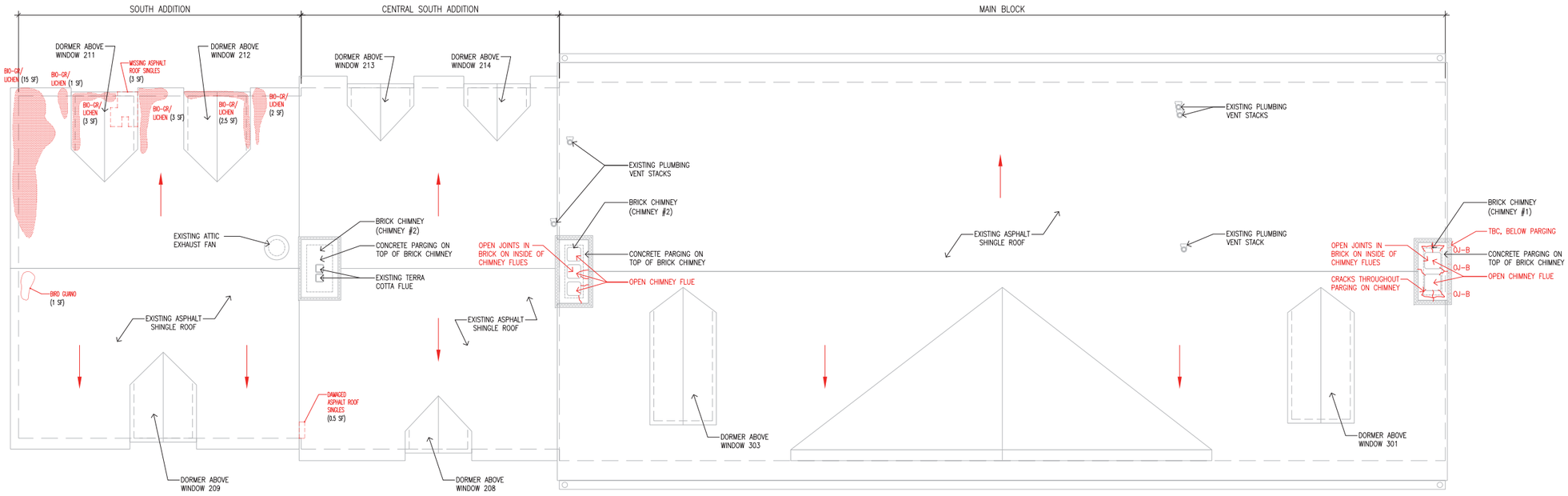
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ASSESSMENT LEGEND

BRICK MASONRY					
BIO–GR	BIOLOGICAL GROWTH	DIS–B	DISLOCATED BRICK	PT–S	MASONRY STAINING DUE TO FAILING PAINT
TJC	THROUGH JOINT CRACK IN MASONRY	MIS–B	MISSING BRICK MASONRY UNIT	FMA	FERROUS METAL ANCHOR
TBC	THROUGH BRICK CRACK IN MASONRY	SP–B	SPALLED BRICK		
OJ–B	OPEN JOINTS IN BRICK	ICP	INCOMPATIBLE PATCH OR REPAIR TO BRICK MASONRY		

WOOD AND WINDOWS					
PT–LW	PAINT LOSS ON WOOD ELEMENT	WD–SW	WOOD: SIGNIFICANT WEAR	MP	MISSING/ FAILURE OF GLAZING PUTTY
WD–R	WOOD ROT	MIS–W	MISSING WOOD TRIM OR WOOD ELEMENT	BR–P	BROKEN OR MISSING WINDOW PANE
WD–TD	WOOD: TERMITE DAMAGE	DIS–W	DISLOCATED/ SEPARATED WOOD TRIM OR WOOD ELEMENT		
WD–FF	WOOD: FAILED FLOOR BOARD				

PLASTER AND FINISHES					
PT–LP	PAINT LOSS/ FAILURE ON FINISH PLASTER	PL–MC	MAJOR CRACK IN PLASTER WALL	INFES	INSECT INFESTATION
PL–L	PLASTER FAILURE/ LOSS FROM MASONRY OR OTHER SUBSTRATE	GWB–HC	HAIRLINE CRACK IN GYPSUM WALLBOARD	WT–D	WATER DAMAGE
PL–S	PLASTER SEPARATION FROM MASONRY OR OTHER SUBSTRATE	VT–CR	CRACK IN VINYL TILE		
PL–HC	HAIRLINE CRACK IN PLASTER WALL	CT–CR	CRACK IN CERAMIC TILE		



1 / A1.04 ROOF PLAN CONDITIONS ASSESSMENT
SCALE (A)

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C.2 CODE REQUIREMENTS FOR ASSESSMENT

The following code analysis is based on Prince George's County, Maryland which incorporates the International Building Code (IBC) for the year 2006. It is assumed that jurisdiction is given to local code, any National Park Service recommended code, NFPA-500 Building Construction and Safety Code, NFPA-70 National Electric Code, ABA Architectural Barriers Act, UFAS Uniform Federal Accessibility Standards and ADA Accessibility Guidelines.

Occupancy and Construction

The application of specific code guidelines are based on the anticipated uses of the Harmony Hall. For this Historic Structure Report, it is assumed that the house could have any of a variety of uses. Some of the various uses include: museum, exhibition, event space, and office space. In all options the basement is used for storage and building services and the third floor is used for office space and storage. The first and second floor uses vary between museum, office, and event space. Depending on the option it is assumed that office space needed by the National Park Service to support the possible museum and exhibition portions of the program will be located on the third floor. The anticipated uses for Harmony Hall fall under IBC code categories A-3 – Assembly and B - Business.

The existing structure is a three-story building (with basement), with two (2), two-story additions to the south side of the house (the Central South Addition with full basement). The first addition was built ca. 1929 and the second addition was added ca. 1988.

The total area of all floors is approximately 6,500 gross square feet. If the individual spaces are calculated, the building is 4,945 net square feet. Building height is 33'-1" measured from the average ground line to the ridge of the roof of the Main Block.

Harmony Hall's exterior, including the two story addition, is constructed of masonry walls, and the interior wood framing is unprotected construction. Under IBC the fire-resistance rating type is III-B – Exterior Masonry Wall, Frame Unprotected (Table 601). Based on this construction class, the IBC allows for a maximum building height of 55 feet and a maximum area limitation of 9500 square feet per story on each of two stories (Table 503). Section 504.2 of IBC also states that a building protected throughout with an approved automatic sprinkler system is allowed to increase the values specified in Table 503 by an additional 20 feet in height and the maximum number of stories by one.

The structure is currently in compliance with the area, height and story limitations of the IBC for the anticipated uses although there is not a sprinkler system existing in the building. Despite this, incorporation of a full sprinkler system into the structure is recommended as further detailed under the Fire Protection and Life Safety article, later in this section.

Egress

If the maximum occupant load of the home does not exceed 50 persons, IBC allows for only one means of egress for museum and exhibit spaces. If the maximum occupancy load for the home is over 50 persons, two means of egress are required (Table 1004.1).

IBC states that stairways serving an occupant load of 50 or less shall have a width of not less than 36 inches. As the historic stair within the home measures less than 36 inches in width (33"), it cannot be used as a means of egress for the additional stories unless judged by the building official to not constitute a distinct life safety hazard. Such exceptions to code might be acceptable due to the historic

nature of the site. Currently there is an additional stair located in the Central South Addition that is generally 36" wide with one small portion (Room 105 corridor) needing to be expanded from 32" to 36". This stair could be used as additional egress if two doors (104 & 204) were expanded to at least 32" to create a compliant path to the stair. The existing stair for access to the third floor is unrated and does not comply with the egress width requirements. This stair is currently the only means of egress from the third floor and would either need to be widened, or a waiver would need to be granted.

From the first floor, occupants can exit through either the front door (Door 101A), with a clear width of 46 inches, which provides exit capacity for 230 persons (46"/0.2 inches per person), or through the rear door (Door 101B) with a clear width of 34 inches, which provides exit capacity for 170 persons (34"/0.2 inches per person). In any use options that do not include construction of additional egress stairs, building occupancy would need to be limited to 50 occupants or less.

Concerning exit access travel distance, the structure falls well within IBC's guidelines. The path of exit travel within the building may include unenclosed stairways or ramps and the distance of travel along stairs and ramps must also be included in the travel distance measurement (1016.1). Following IBC, the maximum travel distance for Assembly or Business occupancy is 200 feet (Table 1016.1) without a sprinkler system and, for Assembly, 250 feet with a sprinkler system and, for Business, 300 feet with a sprinkler system. The current travel distance from the third floor of the home to a first floor exit is 94'. This travel distance may increase in some of the proposed options for use, but all use options should still fall within the code acceptable limits.

Exits will need to be properly signed and illuminated in accordance with emergency systems and regulations, with access to the exits signed and kept open and clear.

Accessibility

The Architectural Barriers Act (ABA), Uniform Federal Accessibility Standards (UFAS) and The Americans with Disabilities Act (ADA) mandate access for the disabled and include highly specific and detailed provisions that are to be made to facilitate full access for all visitors to the public areas of buildings. These standards will guide the National Park Service in providing as complete access as is practical and consistent with the historic fabric of this historic site.

General architectural provisions required include:

- Clear path width of minimum 36" (except at doorways)
- Doorways measuring 32" clear
- Level walking surface, curb ramp at maximum slope 1:6 – no longer than 2' length; running slopes not exceeding 1:20
- Maximum ramp slope of 1:12, maximum rise for any run shall be 30"
- Thresholds at maximum ½" height
- Handrails on stairs 34-38" height measured from stair nosing
- Clear space between handrail and wall to measure 1 ½" (at least)
- Door Hardware with a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate, and mounted no higher than 48" above finished floor.

The following is an analysis of how these requirements compare to the actual existing conditions of Harmony Hall. While minor deficiencies could be corrected; in a majority of cases, the feature or element in violation is original to the house, and should not be altered, so alternate means for compliance will need to be found.

Access from Outside - Currently, the first floor of the building is approximately 3'-9" above the ground level at the Front Porch, with 7 steps extending down to the ground level. The second entrance at the front of the home is 1'-3" above the ground level at the South Entry Porch. In the rear of the building, the first floor is 4'-5" from the ground level. At least one of the Harmony Hall entrances must be handicapped accessible, which would include ramping to reach the first floor or adding a lift. In any case, a handicapped accessible route into the building will have to be provided.

Stair Width - The historic stair run to the second floor measures approximately 33" clear width between handrail and the wall at the narrowest point. Handrails are non-compliant on the wall side of the stair. Neither condition complies with accessibility requirements. The clearance and hand rail issues at the main stair must remain in order to not to alter the historic fabric, however a fully compliant stair could be provided in the additions to the south.

Door Widths – Door width clearance varies throughout the building.

- Door widths (clear) on the first floor range in measurement from 46" (front door) to 22" (restroom 108).
- Door widths (clear) on the second floor range from 26" to 33" (this smallest width is for the door to room 209).
- Door widths (clear) on the third floor range from 27" to 30"

Door Hardware – The existing door hardware is not historic but it may not be possible to find historically appropriate door hardware that is compliant with accessibility guidelines, however if the doors are left open for the visitor experience, such as in a museum setting, this should not be a problem.

Clear Path Widths – The clear path widths vary throughout the building.

- Clear path widths on the first floor range from 27.5" to 46"; this smallest width is at the door between Dining Room 103 and Kitchen 104.
- Clear path widths on the second floor range from 28" to 33" – this smallest dimension is the door between South Bedroom 203 and Corridor 204.
- Clear path widths on the third floor range from 27" to 30" – this smallest dimension is the stairwell from the second floor to the third floor.

Toilet Facilities - Toilet facilities on the Harmony Hall property are not ADA compliant. Toilet facilities for visitors and building occupants will need to be provided in the Southern Additions or in a separate auxiliary building and designed to be fully compliant.

Elevator - If more than one floor of the historic home is open to the public, an elevator or lift will have to be installed to provide universal access on all levels. Such an elevator or lift would have to be located in the Southern Additions if it is to access all levels and interfere as little as possible with the historic structure.

Part 3 Treatment and Use illustrates possible locations for an elevator. If it is not deemed possible or desirable to install a lift or elevator, alternate experiences for the visitor could be provided, such as audio/visual presentations that share the experience of viewing the upper floors, while not providing full accessibility.

Fire Protection and Life Safety

Currently, Harmony Hall has a fire alarm system, with its control panel located in Room 210 closet. The present system does not conform to current requirements for device locations and light levels or have components that can provide visual strobes and proper alarm volume levels.

If full sprinkler coverage is introduced into Harmony Hall, the building then can potentially be used on all three levels for museum and exhibition space. Installation of sprinklers will increase occupant life-safety and significantly increase the protection of the historic fabric in the event of fire. However, a portion of the historic fabric will have to be compromised and there will be visual intrusion.

Structural Analysis

The building structural components were analyzed to determine their live load capacities and to evaluate potential future uses for the spaces. The sizes of the framing analyzed are based on the measurements taken on site. The structural materials of the building were not tested under this scope and therefore material properties typical of similar constructions of the same time periods were assumed. Original wood framing was assumed to be Southern Pine #1 due to the prevalence of southern pine in the area at the time of construction. More recent framing was assumed to be Hem-Fir #2. Live load capacities were determined based on both strength (shear and bending moment capacities) and deflections. While the strength of a member determines its ability to carry a load, its stiffness, or resistance to deflection, affects its performance. Architectural finishes can crack or shift when the underlying structure moves and excessive deflections can also affect the physical comfort of the occupants of the space. Therefore, while relatively large deflections may not represent a safety concern, they may be considered unacceptable for reasons of serviceability.

Note that all framing analysis is based on the assumption of sound material. Some areas of framing were found to be unsound and it is possible that additional unsound materials may be uncovered when further structural members are exposed. Should that be the case, repairs will be required to achieve the load capacities noted. Structural conditions and repairs have been noted in the preceding assessment, the structural plans and the recommendations matrix.

Summary

Harmony Hall can be restored to its period of significance to accommodate the anticipated museum and exhibition uses on two levels, and on all three levels if a fully compliant sprinkler system is installed in the structure. To comply with accessibility requirements, a ramp or lift will have to be installed to allow entry to the building at ground level. If the National Park Service chooses to open more than the first floor of the historic home to the public, an elevator or lift will have to be installed in the southern addition to provide universal access to other levels of the structure. Toilet facilities that comply with accessibility requirements will have to be provided in the southern additions or elsewhere on the property.

Occupancy Calculations

Harmony Hall

	Room #	Room Name	Net Square Footage	Gross Square	Assembly Uses: Use Group	Assembly Uses: Occupany Factor	Assembly Uses: Occupancy	Office Uses: Use Group	Office Uses: Occupany Factor	Office Uses: Occupancy
BASEMENT	001	Stair	28		Accessory	300	0.09	Accessory	300	1.00
	002	Corridor	88.3		Accessory	300	0.29	Accessory	300	1.00
	003	Closet	14.25		Accessory	300	0.05	Accessory	300	1.00
	004	Closet	14.25		Accessory	300	0.05	Accessory	300	1.00
	005	Wine Storage	166.2		Accessory	300	0.55	Accessory	300	1.00
	006	Corridor	72.5		Accessory	300	0.24	Accessory	300	1.00
	007	Storage	51.8		Accessory	300	0.17	Accessory	300	1.00
	008	Mech. Room	69.6		Accessory	300	0.23	Accessory	300	1.00
	009	Closet	3.8		Accessory	300	0.01	Accessory	300	1.00
	010	Stair	39.9		Accessory	300	0.13	Accessory	300	1.00
	011	Restroom	30.2		Accessory	300	0.10	Accessory	300	1.00
	012	Closet	6.2		Accessory	300	0.02	Accessory	300	1.00
	013	Rec Room	345		Accessory	300	1.15	Accessory	300	1.00
	014	Corridor	47		Accessory	300	0.16	Accessory	300	1.00
	015	Mech. Room	158		Accessory	300	0.53	Accessory	300	1.00
	016	Stair	24.8		Accessory	300	0.08	Accessory	300	1.00
Basement Floor Total			**1159.8**	**1671.5**			**3.87**			**16.00**
FIRST FLOOR	101	Central Hall	227		Assembly	15	15.13	Office B	100	0.15
	102	Living Room	352		Assembly	15	23.47	Office B	100	0.15
	103	Dining Room	345		Assembly	15	23.00	Office B	100	0.15
	104	Kitchen	166.5		Assembly	15	11.10	Office B	100	0.15
	105	Corridor	44.3		Accessory	300	0.15	Accessory	300	1.00
	106	Sun room	309.8		Assembly	15	20.65	Office B	100	0.15
	107	Corridor	17		Accessory	300	0.06	Accessory	300	1.00
	108	Restroom	18.7		Accessory	300	0.06	Accessory	300	1.00
First Floor Total			**1480.3**	**2005.9**			**93.62**			**3.75**
SECOND FLOOR	200	Stair	94		Accessory	300	0.31	Accessory	300	1.00
	201	Central Hall	177.1		Assembly	15	11.81	Office B	100	0.15
	202	North Bedroom	320.7		Assembly	15	21.38	Office B	100	0.15
	202A	Bathroom	24.5		Accessory	300	0.08	Accessory	300	1.00
	202B	Closet	27.6		Accessory	300	0.09	Accessory	300	1.00
	203	South Bedroom	304.5		Assembly	15	20.30	Office B	100	0.15
	203A	Bathroom	30.6		Accessory	300	0.10	Accessory	300	1.00
	203B	Closet	12.7		Accessory	300	0.04	Accessory	300	1.00
	204	Corridor	48.5		Accessory	300	0.16	Accessory	300	1.00
	204A	Closet	5.8		Accessory	300	0.02	Accessory	300	1.00
	205	Stair B	56		Accessory	300	0.19	Accessory	300	1.00
	206	Bedroom	308.3		Assembly	15	20.55	Office B	100	0.15
	207	Corridor	24		Accessory	300	0.08	Accessory	300	1.00
	208	Closet	11.7		Accessory	300	0.04	Accessory	300	1.00
	209	Bathroom	46.7		Accessory	300	0.16	Accessory	300	1.00
	210	Closet	13.8		Accessory	300	0.05	Accessory	300	1.00
	211	Study	66.4		Assembly	15	4.43	Office B	100	0.15
Second Floor Total			**1572.9**	**1964.8**			**79.79**			**12.75**
THIRD FLOOR	301	Hall	131.65		Accessory	300	0.44	Accessory	300	1.00
	302	Closet	14.5		Accessory	300	0.05	Accessory	300	1.00
	303	Bedroom	215.4		Accessory	300	0.72	Accessory	300	1.00
	304	Bathroom	46.2		Office B	100	0.46	Office B	100	1.00
	305	Closet	19.2		Accessory	300	0.06	Accessory	300	1.00
	306	Closet	33		Accessory	300	0.11	Accessory	300	1.00
	307	Bedroom	270.2		Office B	100	2.70	Office B	100	1.00
	308	Closet	7.3		Accessory	300	0.02	Accessory	300	1.00
Third Floor Total			**737.45**	**862.4**			**4.57**			**8.00**
Building Total			**4950.45**	**6504.6**			**181.84**			**40.50**

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C.3 STRUCTURAL

Robert Silman Associates, PLLC (RSA) visited Harmony Hall on February 2, 2012 and March 20, 2012. Architectural drawings of floor plans and elevations from Beyer Blinder Belle (BBB) served as background drawings for field notes. The information contained herein is based on a review of documents provided to RSA and limited field observations / measurements where the structure was exposed. Prior to the March 20, 2012 site visit, probes were opened up at RSA's request to allow further investigation, specifically at areas where damage had been noted in finishes and in areas of unknown framing.

ASSESSMENT

The structure at Harmony Hall typically consists of exterior masonry bearing walls with wood framing running in the east-west direction. The residence has five main periods of construction (Period II-VI). These are discussed in further detail in Part 2A: Developmental History contained within this Historic Structure Report. For the purposes of the structural section of this report, the three periods of major changes to the structural include: the Main Block (Period II: 1769-1859), the Central South Addition (Period IV: 1929-1940 and Period V: 1941-1966) and the South Addition (Period VI: 1967-present).

The main block of the residence is the original manor house, which is believed to have been constructed in c. 1769. The main block is two stories tall with a full basement level and habitable attic. In the 1930s a pantry addition was built at the southwest corner of the original residence. The 1930s addition was one story tall with a basement below. In 1941 this addition was expanded to the east and enlarged to include a second floor above. In 1988 another addition was built to the south of the early addition. This addition is two stories tall with a slab on grade.

The following is an in-depth evaluation of the structure. At each elevation / floor level there is a description of the structure, followed by a condition assessment of the visible areas. At the end of the structural section there is an analysis of the capacity of the existing framing and discussion of how various uses of the space would affect the reinforcement required.

EXTERIOR ASSESSMENT

For the exterior survey the following was noted:

East Elevation - Structural Description

The east elevation is composed of brick masonry walls with jack arch lintels above openings in the masonry (See Figure 2C-001). The jack arches range from three to four courses tall depending on location and period of construction. At the original house two dormer windows project through the roof framing on either side of a large roof pediment. The roof pediment, which includes an oval window, is composed of brick masonry. The roof at both the addition and the original structure is covered with asphalt shingles.



Figure 2C-001: East Elevation of Harmony Hall (Photo RSA, 2012)

At the front entrance to the residence there is a small covered porch (See Figure 2C-002). The porch floor framing consists of 2x8 wood joists supported on masonry piers and wood beams. Where the porch abuts the residence the wood framing is pocketed into the masonry. There is a second



Figure 2C-002: Front porch frame. (Photo RSA, 2012)



Figure 2C-003: Floor boards missing. (Photo RSA, 2012)



Figure 2C-004: Minor cracking and a spalled brick in masonry of East and North Elevations. (Photo RSA, 2012)

entrance on south side of the east elevation, leading into the c.1988 South Addition. There is a small wood-framed porch resting on a brick pad in front of this south entrance. The masonry walls of the original structure and the addition do not appear to be tied together.

East Elevation - Structural Conditions Assessment

The wood framing at both porches appears to be in fair condition. While water staining was observed, decay appeared to be limited to the floor boards at the main porch. At the east end of the main porch several of the floor boards are missing (See Figure 2C-003). Some settlement was observed in the brick pier supporting the wood framing at the northeast corner of the porch.

At the north end of the east elevation there is significant mortar loss around the roof gutter downspout. Some minor cracking and spalling was noted in the surrounding masonry (See Figure 2C-004). It appears that moisture infiltration and freeze-thaw cycles are leading to deterioration of the masonry.

Damage was noted at the wood soffit framing around the eaves on the north end of the east elevation. Although observations were limited, the paint at the soffit is peeling and it appears there is wood decay (See Figure 2C-005). The damage is likely related to moisture infiltration from the roof gutter, which is adjacent to the observed condition.

Most of the lintels at the east elevation appear to have been replaced at some point in the past, possibly during the South Addition (See Figure 2C-006). The lintel replacement work was likely done to address damage or deflections above the openings. No new movement or damage is evident at the repaired lintels. Hairline vertical cracks are evident at the lintel above the door opening into the late addition (See Figure 2C-007). (Further site and materials investigations to confirm this have been recommended in Part 1.C of this HSR.)

At the original structure there are wrought iron window shutter anchors (shutter dogs) at the first and second floor windows. Although the shutters have since been removed the anchors are embedded into the mortar joints at the lower corners of the windows. At each anchor there is hairline cracking in the surrounding masonry. The damage may be the result of the rusting anchor displacing the surrounding masonry (See Figure 2C-008).



Figure 2C-005: Paint peeling and wood decay on eaves of north end of the East elevation. (Photo RSA, 2012)



Figure 2C-006: Lintels on east elevation appear to have been replaced. (Photo RSA, 2012)



Figure 2C-007: Hairline vertical cracks at the lintel above the door. (Photo RSA, 2012)



Figure 2C-008: Damage may be the result of the rusting anchor displacing the surrounding masonry. (Photo RSA, 2012)

Portions of the south end of the original house have been re-pointed with a white, portland cement based mortar (See Figure 2C-009). The mortar strength and color do not appear to be appropriate for the surrounding masonry.

At the additions there are three locations where the face of brick has spalled away (See Figure 2C-010). The damage may be related to a soft brick and/or hard mortar being used at the addition. When exposed to moisture the brick may spall if the mortar is stronger than the brick and does not allow for the expansion.

Also at the additions there are two dormer windows built in plane with the exterior wall. The windows extend from the roof down through the top of the masonry wall. At the north window the masonry surrounding the window frame appears to have been re-pointed as the mortar joints are much larger than in the surrounding masonry (See Figure 2C-011). It is possible that the masonry in this area was rebuilt and the windows were added at a later



Figure 2C-009: Inappropriate repointing mortar. (Photo RSA, 2012)



Figure 2C-010: Spalled brick. (Photo RSA, 2012)



Figure 2C-011: Repointing around window. (Photo RSA, 2012)



Figure 2C-012: Missing sill. (Photo RSA, 2012)

date. (The renovation and additions drawings by Siegfried Ising in 1987-88 also indicate that these windows were relocated at this location. See Part 2B: Physical Description for more information.) At the south window the wood sill appears to have deteriorated and is now missing (See Figure 2C-012).



Figure 2C-013: West Elevation. (Photo RSA, 2012)



Figure 2C-014: Between the 1920s and 1980s addition, the brick masonry has been toothed together. (Photo RSA, 2012)



Figure 2C-015: Mortar loss in 1920s addition. (Photo RSA, 2012)

West Elevation - Structural Description

The west elevation is composed of brick masonry walls with jack arch lintels above openings in the masonry (See Figure 2C-013). The jack arches range from three to four courses tall depending on location and period of construction. There is a second entrance on south side of the west elevation leading into the South Addition; however there are currently no steps up to the French door. A brick arch spans above the door and bears on 20 inch wide brick piers at each end. There is a concrete foundation wall visible at the base of the Central South Addition and concrete masonry visible at the base of the South Addition. At the interface between the two additions, the brick masonry has been toothed together (See Figure 2C-014).

West Elevation - Structural Conditions Assessment

Mortar loss is evident at much of the Central South Addition and is likely the result of weathering and plant growth (See Figure 2C-015). Although there are currently no plants on the wall, there is evidence of vines in the recent past. On this face, spalling was noted in a brick below the south dormer window.

Most of the lintels at the west elevation appear to have been replaced at some point in the past. The lone exceptions are two windows at the basement level, where the lintels may be part of the historic construction. The masonry at the remaining jack arch lintels appears to date from the same period as the South Addition, c.1988. (The renovation and additions drawings by Siegfried Ising in 1987-88 also indicate that these windows were relocated at this location. See Part 2B: Physical Description for more information.) It is likely that the lintel replacement work was done to address damage or deflections above the openings. At the first floor level, displacement was observed in the lintel at the north end of the original house. Several of the bricks on the right side of the jack arch have dropped about 1/2 inch vertically (See Figure 2C-016).



Figure 2C-016: Several of the bricks on the right side of the jack arch have vertically displaced about 1/2 inch. (Photo RSA, 2012)

At the south end of the Main Block there is a vertical crack running alongside one of the second floor windows. The damage may be related to rusting at the wrought iron window shutter dogs. As the presence of moisture leads to rusting of the embedded anchor, the products of corrosion displace the surrounding masonry through expansion



Figure 2C-017: Corrosion displaces the surrounding masonry. (Photo RSA, 2012)



Figure 2C-018: Cracks extend through several bricks. (Photo RSA, 2012)



Figure 2C-019: Several bricks near grade are loose and there is a diagonal crack 3' about grade. (Photo RSA, 2012)

(See Figure 2C-017). Cracking in the masonry around these embedded anchors did not appear to be as common on the west elevation as on the east elevation.

Step cracking was noted in the masonry between a first floor and basement window at the north end of the west elevation of the Main Block. The area had been re-pointed previously, but many of the cracks are reopening. The cracks, which are up to 1/4 inch wide, extend through several of the bricks (See Figure 2C-018). It is possible that the damage is caused by differential settlement at the northwest corner of the structure.

At the north end of the west elevation if the Main Block there is significant staining of the masonry and mortar loss below the broken downspout. The broken downspout is introducing moisture at the corner of the building, which is likely the cause of much of the observed damage. Several of the bricks near grade are loose and there is a hairline diagonal crack about three feet above grade (See Figure 2C-019).



Figure 2C-020: North Elevation. (Photo RSA, 2012)



Figure 2C-021: Significant mortar loss inside the flue of the chimney. (Photo RSA, 2012)



Figure 2C-022: 1/8 inch wide crack may be due to August 2011 Earthquake. (Photo RSA, 2012)

North Elevation - Structural Description

The north elevation is composed of a brick masonry gable end wall, which is part of the Main Block (See Figure 2C-020). At the west end of the elevation there are two masonry walls about 5 feet above grade, running perpendicular to the elevation down into the basement level. At the center of the elevation there is a chimney rising over three feet above the roof ridge (Chimney #1). Two windows are present at the third floor level on the north elevation. Above these windows there are jack arch lintels two courses tall. It is evident that at one time there were additional openings at the gable end wall, likely two at the first floor and two at the second floor. Over the lower three feet above grade there is a brick water table that protrudes an additional four inches beyond the wall above. The water table is typical around the perimeter of the Main Block of the house.

North Elevation - Structural Conditions Assessment

The chimney visible at the north elevation is in poor condition (Chimney #1). While mortar loss was noted at the top of the chimney, the most significant mortar loss was evident inside the flue. While the exterior has been re-pointed and maintained, the mortar at the interior appears to be very weak and sandy (See Figure 2C-021). The mortar loss is likely due to water infiltration and freeze-thaw cycles. At the top of the chimney there is a concrete cap with significant cracking, spalling, and signs of organic growth (See Figure 2C-022). There are small hairline cracks in the masonry throughout the chimney. On the east face there is a 1/8 inch-wide diagonal crack near the roof line. The crack may be related to the August 2011 earthquake (See Figure 2C-023).



Figure 2C-023: Top of chimney, concrete cap has significant damage. (Photo RSA, 2012)

Perhaps the most concerning issue at the north chimney is the visible lean of the masonry to the south, in towards the original structure. Based on visual observations from the ground, the rotation of the chimney appears to have resulted in a lateral displacement of over an inch at the top of the chimney relative to the chimney at the roof line.



Figure 2C-024: Effects of rotation in position of window frames and surrounding masonry. (Photo RSA, 2012)



Figure 2C-025: Entire area of masonry has been re-pointed with white mortar. (Photo RSA, 2012)



Figure 2C-026: Second floor level shows two jack arches, three courses tall, above filled in window openings. (Photo RSA, 2012)

The rotation of the chimney appears to have induced additional stresses in the wall below. The wall is bowing, causing out-of-plane rotation in the surrounding masonry. The rotation is especially evident when looking at the position of the upper window frames relative to the surrounding masonry (See Figure 2C-024). In addition, there is a segment of wall in line with the chimney that appears to have undergone extensive repairs in the past. (According to historical documentation, Charles Collins completed extensive repairs to the north and south chimneys of the Main Block. Refer to Part 2A for a more detailed description of his repairs and restoration to Harmony Hall.) Between the first and second floor levels there is an area of brick about 14 feet high where much of the masonry appears to have been removed and replaced. The entire area has been re-pointed with a white mortar that does not appear to be appropriate for the surrounding masonry (See Figure 2C-025).

Since wood floor framing at the interior of the residence runs parallel to this gable end wall there is very little connection between this masonry wall and the floor diaphragms. Without the wall being tied to the diaphragms it is susceptible to out-of-plane displacements under high lateral loads such as earthquakes and hurricanes.

At the second floor level there are two jack arches, three courses tall, above filled in window openings (See Figure 2C-026). Shadows in the masonry provide evidence of past openings at the first floor level as well. Based on the documentation provided to RSA there are two possible explanations for why the openings have been filled in. The first explanation is that the openings were closed to accommodate an addition on the north side of the original structure, which has subsequently been removed. While RSA did not observe any other evidence of this addition at the site, there is some in indication in previous reports that such an addition may have existed. The second explanation is that the openings were closed in order to stiffen the gable end wall. This explanation would seem to be supported by the existing condition of the wall and evidence of past repairs.



Figure 2C-027: Brick arches in place over each door, bearing on piers between doors (Photo RSA, 2012)



Figure 2C-028: Spalling was noted near the top of the chimney on both the south and west faces (Photo RSA, 2012)



Figure 2C-029: Mortor loss and brick deterioration on chimney. (Photo RSA, 2012)

South Elevation - Structural Description

The south elevation is composed primarily of the south face of the South Addition, as much of the façade of the original structure has now been enclosed. The addition consists of a brick masonry wall above a course of exposed concrete masonry. There are three French doors at the addition with semi-circular lites above. Brick arches are in place over each door, bearing on 16 inch wide piers between doors (See Figure 2C-027). Three concrete steps lead up to the center door, which is approximately two feet above grade. The top of the gable end wall is wood-framed and includes a small semi-circular window. Between the two additions there is a brick chimney rising approximately two feet above the high roof ridge (Chimney #3). The exposed portion of the Main Block is a brick masonry gable end wall with a chimney rising over three feet above the roof ridge (Chimney #2). On either side of the chimney there is a small window into the finished attic.

South Elevation - Structural Conditions Assessment

The south chimney (Chimney #3), which is part of the South Addition, appears to be in fair condition. Spalling was noted near the top of the chimney on both the south and west faces (See Figure 2C-028). Similar to the spalling at other areas of the addition, the damage appears to be related to a soft brick and/or hard mortar. When exposed to moisture the masonry may spall if the mortar is stronger than the brick and does not allow for expansion.

The center chimney (Chimney #2), which is located at the south end of the Main Block, is in poor condition. There are cracks in the masonry throughout, with damage especially prominent on the south face. The cracks, which are up to 1/4 inch wide, may be related to the August 2011 earthquake. In addition, there is significant mortar loss on all faces of the chimney. The mortar loss and brick deterioration is likely due to a combination of freeze-thaw effects and biological growth in masonry joints (See Figure 2C-029). At the concrete cap there are several cracks and areas where deterioration



Figure 2C-030: Rotation of chimney resulted in a relative lateral displacement. (Photo RSA, 2012)



Figure 2C-031: Crack in masonry approx 1/8 inch wide. (Photo RSA, 2012)



Figure 2C-032: Vertical deflection above windows. (Photo RSA, 2012)



Figure 2C-033: Mortar loss below each of the doors. (Photo RSA, 2012)

is evident. Perhaps the most concerning issue at the center chimney is the visible lean of the masonry to the north, in towards the original structure. Based on visual observations from the ground, the rotation of the chimney appears to have resulted in a relative lateral displacement of over an inch at the top of the chimney relative to the chimney just above the roof (See Figure 2C-030).

The rotation of the chimney appears to have induced additional stresses in the wall below. There is a vertical crack at the interface between the one wythe gable end wall and the chimney. The crack appears to have been re-pointed in the past; however it has reopened and is now approximately 1/8 inch wide (See Figure 2C-031).

At the windows on the Main Block there is a vertical deflection in the masonry above each of the two masonry openings for Windows 304 and 305 (See Figure 2C-032). Based on RSA's observations it appears that this deflection may be due to the inadequate or missing lintels above these windows.

Below each of the three French doors at the South Addition there is mortar loss in the surrounding masonry (See Figure 2C-033). At the east door there is a vertical crack about 1/8 inch wide that extends down to the foundation. The wood framing at the doors has lost a significant portion of the paint and appears to be in the early stages of decay.



Figure 2C-034: Exterior basement walls are primarily CMU with a concrete underpinning. (Photo RSA, 2012)



Figure 2C-035: Terra cotta partition walls at the west and south end of Wine Storage Room 005. (Photo RSA, 2012)

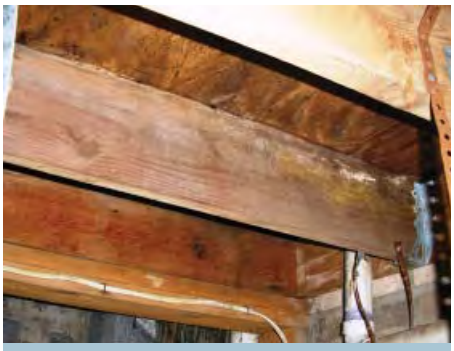


Figure 2C-036: The wood joists above corridor 015. (Photo RSA, 2012)



Figure 2C-037: Three low beams running in the north-south direction, bearing on masonry walls at each end of Rec Room 013. (Photo RSA, 2012)

INTERIOR ASSESSMENT

For the interior survey the following was noted:

Basement Level - Structural Description
(Includes First Floor Framing)

There is a full basement level below the original residence and the early addition. Portions of the first floor framing are exposed at the basement level; however, additional probes were required in some areas. Below the Central South Addition, the exterior basement walls are primarily CMU with exposed concrete underpinning at the west end (See Figure 2C-034). The basement walls at the main block are multi-wythe brick masonry. Interior partition walls throughout the basement appear to be wood stud construction. The exception is at Room 005 - Wine Storage where there are terra cotta partition walls at the west and south end (See Figure 2C-035). There are three stairs going down into the basement level: one concrete stair at the north end leading to the exterior, a wood-framed stair at the Central South Addition and a wood-framed stair at the Main Block leading from Room 101 - Central Block.

The first floor framing at the Central South Addition spans in the east-west direction. The joists bear on the exterior walls and a masonry wall dividing Room 014 - Corridor from Room 015 - Mechanical Room. Over the lower three feet of the dividing wall there is exposed concrete underpinning. The underpinning shows that sometime after the early addition was originally constructed the basement level floor was lowered, likely to accommodate mechanical equipment. The wood joists above the corridor are 2" x 8" at 16 inches on-center (See Figure 2C-036). The framing above Room 014 - Corridor is in good condition and has a plywood floor diaphragm above. The wood joists above Room 015 - Mechanical Room are 2" x 7-1/2" at 24 inches on-center. The framing above Room 015 - Mechanical Room is significantly older than the framing above Room 014 - Corridor and is in fair to poor condition. Diagonal 1x floor boards form the floor diaphragm above these joists. The ceiling is gypsum board above Room 014 - Corridor and unfinished at Room 015 - Mechanical Room.

The first floor framing at the main block spans in the east-west direction with an intermediate line of support between exterior walls. Above Room 013 - Recreation Room it appears that there are 8" x 8" wood joists spaced at 24" on-center. The joists are supported near the center of the room by three 7" x 9" low beams running in the north-south direction, bearing on masonry walls at each end (See Figure 2C-037). The floor framing at the rest of the main block appears to be 6-1/2" x 8" wood joists @ 21 inches on-center. The floor joists are supported near the center of the structure by beams running in the north-south direction. The wood beam below the central hall is 6" x 12" and is supported by an interior brick masonry wall on one end and a brick pier at the other end (See Figure 2C-038). The interior brick masonry wall is on the south side of the stair opening and in line with masonry wall above. The



Figure 2C-038: Wood beam. (Photo RSA, 2012).



Figure 2C-039: Brick pier in terra cotta tile wall. (Photo RSA, 2012)



Figure 2C-040: Deteriorated wood beam. (Photo RSA, 2012)



Figure 2C-041: Opening in masonry between Room 014 and Room 015. (Photo RSA, 2012)

wood beam at the north end of the structure is 8-1/2"x9" and is supported by an exterior masonry wall on one end and a brick pier at the other end. The brick pier is at the southwest corner of Room 005 - Wine Storage (See Figure 2C-039). Straight 1x floor boards form the floor diaphragm above the joists. In general, the wood framing at the original residence is in fair to poor condition. Based on RSA's observations it appears that over 50 percent of the first floor framing had some amount of deterioration due to either insects or moisture (See Figure 2C-040). The basement floors throughout the main block appear to be concrete slab on grade with evidence of grouted tile in some locations. The ceilings are typically a gypsum-like material, with wood paneling at Room 013 - Recreation Room.

Basement Level - Structural Conditions Assessment
(Includes First Floor Framing)

At the interior brick masonry wall an opening was made to allow for access between Room 014 - Corridor and Room 015 - Mechanical Room. The opening was made through the brick wall and the concrete underpinning below. An existing jack arch lintel in the masonry seems to indicate the opening was made at a previous basement level window (See Figure 2C-041). Since the new opening is wider than the window, the existing lintel is inadequate to support the load above. It is likely that the temporary door frame currently in place was installed when the South Addition was constructed.

At the mechanical room the existing framing is supported at the interior CMU wall by bearing on a loose brick positioned on a CMU ledge (See Figure 2C-042). The detail does not provide a positive connection between the joists and the wall, resulting in a potential safety hazard and collapse mechanism for the floor above. The framing in this area also shows signs of wood staining due to moisture infiltration and previous water damage.



Figure 2C-042: The existing framing in the Mechanical Room is supported at the interior CMU wall by bearing on a loose brick positioned on a CMU ledge. (Photo RSA, 2012)



Figure 2C-043: Split face of wood lintel. (Photo RSA, 2012)



Figure 2C-044: Crack in plaster at corner of window. (Photo RSA, 2012)



Figure 2C-045: Crack in plaster. (Photo RSA, 2012)



Figure 2C-046: Crack in plaster. (Photo RSA, 2012)

The wood lintels added to accommodate the opening between Room 013 Recreation Room and Room 014 - Corridor, have split along the exposed faces (See Figure 2C-043). Even with the split the lintels still appear adequate for their span as no damage was observed in the surrounding masonry. The brick masonry at the bearing end of the lintel appears to have been rebuilt when the opening was first made. The masonry and mortar do not appear to be compatible with the surrounding masonry.

At Room 007 - Storage, cracking was noted in the plaster at the bottom corner of the basement window. The 1/8 inch diagonal crack likely extends through the plaster and into the brick masonry (See Figure 2C-044). Additional horizontal cracking was noted in the plaster along the north wall in the storage room (See Figure 2C-045). It is possible that the cracks in this area also extend through the plaster to the non-structural terra cotta wall. In both cases the cause of the crack is unclear, but may be related to differential settlement at the foundation level.

Water infiltration and damage to the walls was noted throughout the building, but was most prominent at the northwest corner of the building. The plaster is blistering and cracking in areas around basement windows. The extent of damage to the masonry behind the plaster is unknown (See Figure 2C-046).

At Room 001 - Basement Stair) there is a vertical crack approximately 1/8 inch wide above the opening through the exterior wall. It appears that the wood lintel is inadequate to carry the masonry load above and that the deflection of the lintel has resulted in the observed cracking in the masonry (See Figure 2C-047.



Figure 2C-047: Cracks in masonry above lintel. (Photo RSA, 2012)



Figure 2C-048: Framing hidden by finishes at the First Floor and Second Floor. (Photo RSA, 2012)



Figure 2C-049: Bottom flange of steel beam. (Photo RSA, 2012)



Figure 2C-050: Wood joists above the Central Hall. (Photo RSA, 2012)



Figure 2C-051: Vertical cracks in plaster at east-west running walls; concentrated above door openings. (Photo RSA, 2012)

First Floor Level - Structural Description
(Includes Second Floor Framing)

At the first floor level much of the structure, including the second floor framing, was hidden by finishes. As a result, probes were required in order to observe the framing (See Figure 2C-048). The exterior walls at both the additions and the Main Block are composed of brick masonry, five wythes thick. At the Main Block the first floor is divided up into three separate spaces by two interior load bearing masonry walls running in the east-west direction. At the additions it appears that there are interior load bearing CMU walls between Room 104 - Kitchen and adjoining rooms.

Room 106 - Sun Room in the South Addition is slab on grade, but the rest of the first floor is framed. There are several elevation changes at the additions; between Room 106 - Sun Room and Room 104 - Kitchen, and again between Room 104 - Kitchen and Room 103 - Dining Room.

There are two stair openings through the second floor framing; one serving the Central South and South Additions and the other serving the Main Block of the residence. Both stairs are wood-framed and interior to the building. Ceramic and vinyl tile are typical throughout the additions and wood flooring was typical throughout the original residence.

The second floor framing above Room 106 - Sun Room spans in the north-south direction. The wood joists are 2x10s at 16 inches on-center bearing on masonry walls. At the opening between Room 104 - Kitchen and Room 106 - Sun Room there is a 9-1/2 inch deep steel beam above, supporting the floor joists (See Figure 2C-049). The second floor framing above Room 104 - Kitchen spans in the east-west direction. The wood joists appear to be 2-1/2" x 9" at 19 inches on-center bearing on masonry walls. The ceilings at the addition are composed of gypsum board. Plywood forms the floor diaphragm above the joists. Overall, the second floor framing at the addition generally appears to be in good condition.

The second floor framing at the main block spans in the east-west direction. The wood joists above Room 103 - Dining Room and Room 102 - Living Room/ Parlor appear to be 2-3/4" x 9" at 22 inches on-center bearing on the exterior masonry walls. Above Room 101 - Central Hall the wood joists are 2-3/4" x 8-1/2" at 24 inches on-center. The joists



Figure 2C-052: Vertical cracks in the plaster concentrated above door openings. (Photo RSA, 2012)

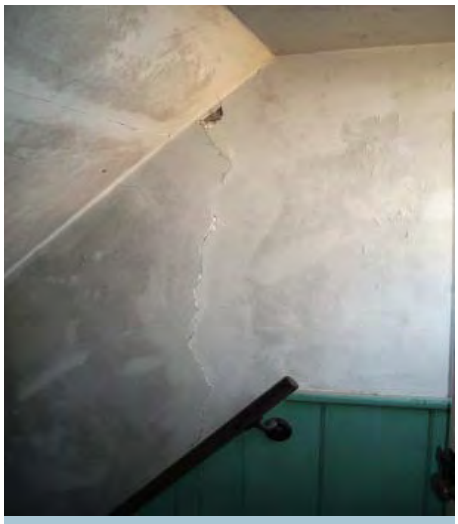


Figure 2C-053: Cracks and spalling in plaster of basement leading to basement. (Photo RSA, 2012)



Figure 2C-054: Up to an inch of vertical displacement at both first floor brick hearths, which rest on a bed of sand. (Photo RSA, 2012)

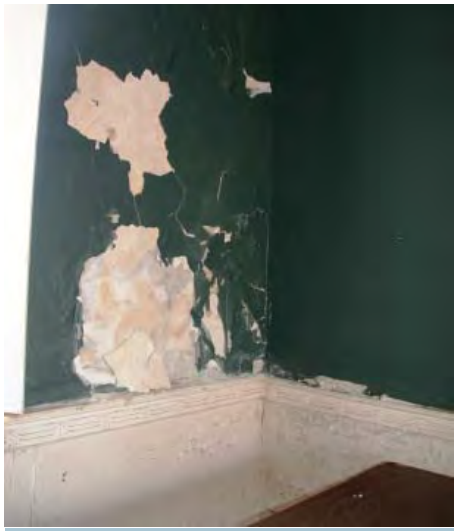


Figure 2C-055: Water damage at the northwest and northeast corners of the Living Room 102. (Photo RSA, 2012)

above the central hall are supported by a 3-1/2" x 8-1/2" wood beam at the stair opening (See Figure 2C-050). The wood beam bears on an interior masonry wall at each end. The ceilings at the original structure appear to be plaster over a wood panel sheathing. Straight 1x floor boards form the floor diaphragm above the joists. Overall, the second floor framing at the main block generally appears to be in fair condition.

First Floor Level - Structural Conditions Assessment
(Includes Second Floor Framing)

At the original residence vertical cracks were noted in the plaster at the east-west running walls. Many of the cracks, which are up to 1/8 inch wide, appeared to be concentrated above door openings (See Figure 2C-051 & Figure 2C-052). Several were evident on both sides of the wall. It is possible the cracks extend through the plaster and into the masonry. It appears that the cracking is related to movement of the interior masonry walls at the first floor. As portions of the interior walls are supported by wood beams at the basement level it may be that the deflection of the beams is leading to the observed cracks. Differential settlement of interior versus exterior footings may also be an explanation.

At the main staircase in the central hall there was a visible rotation of the framing down towards the east end of the room. The rotation is especially visible at Door 101C, the door opening leading to the basement stairs (See Figure 2C-056). The observed damage is likely the result of a vertical displacement of the support post at the northeast corner of the lower landing. This

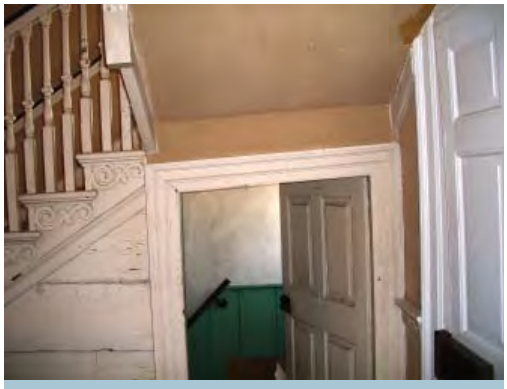


Figure 2C-056: Visible rotation of door frame at main staircase leading to the basement. (Photo RSA, 2012)

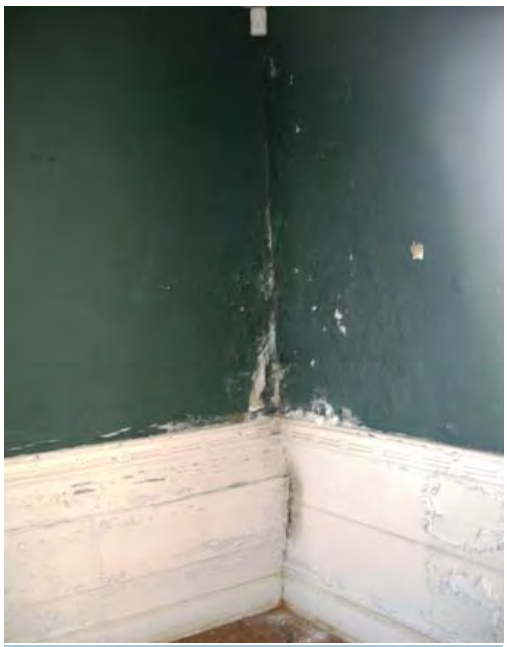


Figure 2C-057: Wood paneling at the lower half of the north wall if Living Room 102 has buckled out-of-plane by several inches. (Photo RSA, 2012)

post bears on a floor joist, which may be undersized for the given loads. The floor joist in question was not visible at the basement level. More probes could not be made in this area due to the presence of asbestos. The settlement of the main staircase is also evident at the underside of the stair where there are cracks and spalling in the plaster (See Figure 2C-053). (Further site and materials investigations to confirm this have been recommended in Part 1.C of this HSR.)

There is up to an inch of vertical displacement at both first floor brick hearths. It appears as though the bricks at the hearth rest on a bed of sand, instead of bearing directly on the first floor framing (See Figure 2C-054). As a result, the observed deflection is likely related to the loss of sand below the bricks, rather than a structural issue with the framing.

At the northwest and northeast corners of Room 102 - Living Room/ Parlor, there is significant water damage evident at the walls and ceiling. At both corners there is blistering/peeling of the paint and loss of the plaster (See Figure 2C-055). In addition, the wood paneling at the lower half of the north wall has buckled out-of-plane by several inches (See Figure 2C-057). At the northwest corner there is damage at the wood floor boards, which is related to moisture and/or insect infestation. The condition of the underlying brick masonry is unknown. The water damage is likely the result of moisture infiltration from the exterior as the interior damage is in the same general area where broken downspouts were observed at the exterior.



Figure 2C-058: Interior CMU wall between the south and south central additions. (Photo RSA, 2012)

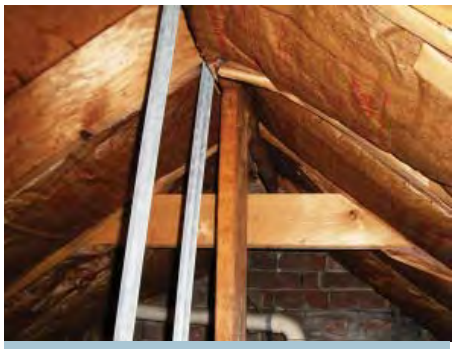


Figure 2C-059: Wood rafters in attic. (Photo RSA, 2012)



Figure 2C-060: Wood joists and wood floor boards above the Room 203, 201 and 202. (Photo RSA, 2012)



Figure 2C-061: Vertical displacement at both second floor brick hearths. (Photo RSA, 2012)

Second Floor Level - Structural Description
(Includes Third Floor Framing)

At the second floor level portions of the structure were visible; however probes were required to identify the third floor framing at the Main Block. The exterior bearing walls at both Central South Addition, South Addition, and the Main Block are composed of brick masonry. At the original residence the second floor is divided up into three separate spaces by two interior partition walls running in the east-west direction. There is an interior CMU wall between the additions (See Figure 2C-058). The wood-framed stair between the second and third floor of the Main Block is located at the northeast corner of Room 201 - Central Hall. There is wood parquet flooring throughout the additions and wood floor boards throughout the original residence. Room 202A - Bathroom and Room 203A Bathroom have hexagonal white tile installed c. 1929, and Room 209 - Bathroom has vinyl flooring.

The roof framing for both additions was accessible from the second floor level. The wood framing spans in the east-west direction and bears on the exterior masonry walls. The attic joists at the additions, which support a gypsum board ceiling, are 2 x 6s at 16 inches on center. The rafters are 2 x 8s at 16 inches on-center with 2 x 6 collar ties at every fifth rafter (See Figure 2C-059). The rafters are supported at the peak of the roof by a 2 x 10 ridge beam bearing on the masonry walls and king posts. It is unclear whether the attic joists are attached to the rafters. Plywood forms the roof diaphragm above the rafters. Overall, the roof framing at the addition appears to be in good condition.

The third floor framing at the main block spans in the east-west direction. The wood joists above the Room 203 - South Bedroom, Room 201 - Central Hall and Room 202 - North Bedroom appear to be 2-3/4" x 9" at 22 inches on-center and bear on the exterior masonry walls (See Figure 2C-060). The ceilings at the Main Block are plaster over a wood panel sheathing. Straight 1x floor boards form the floor diaphragm above the joists. Overall, the third floor framing at the main block generally appears to be in fair condition.



Figure 2C-062: Diagonal crack in closet plaster. (Photo RSA, 2012)

Second Floor Level - Structural Conditions Assessment
(Includes Third Floor Framing)

There is up to an inch of vertical displacement at both second floor brick hearths (See Figure 2C-061). It appears as though the bricks at the hearth



Figure 2C-063: Vertical cracks in the plaster finish near the corners of the opening between the South Bedroom and the Central Hall. (Photo RSA, 2012)



Figure 2C-064: Significant deflection in the wood lintel of opening between the South Bedroom and Corridor 204. (Photo RSA, 2012)



Figure 2C-065: Diagonal crack in the brick masonry out-of-plane displacement of some masonry at the opening of South Bedroom and Corridor 204. (Photo RSA, 2012)

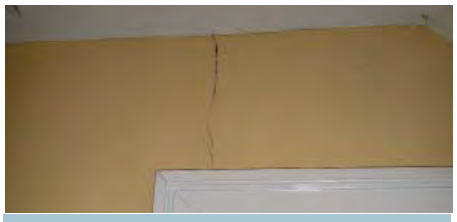


Figure 2C-066: Vertical crack in the plaster above the door opening of Bedroom 206. (Photo RSA, 2012)

rest on a bed of sand, instead of bearing directly on the second floor framing. As a result, the observed deflection is likely related to the loss of sand below the bricks, rather than any structural issue with the framing.

At the closet in Room 203 - South Bedroom (Room 203B - Closet) there is a diagonal crack near the bottom of the south wall (See Figure 2C-062). The crack, which is approximately 1/4 inch wide, possibly extends through the plaster into the brick masonry. The cause of the crack may be related to an opening created in the exterior wall to connect the addition with the original residence at the second floor level.

At the door between Room 203 - South Bedroom and Room 201 - Central Hall there are two vertical cracks in the plaster finish near the corners of the opening (See Figure 2C-063). The 1/8 inch wide cracks possibly extend through the plaster and into the masonry. It appears that the cracking is related to movement of the interior masonry walls. As portions of the interior walls are supported by wood beams at the basement level it may be that the deflection of the beams is leading to the observed cracks. Differential settlement of interior versus exterior footings may be an alternate explanation.

At the opening between Room 203 - South Bedroom and Room 204 - Corridor there is significant deflection at the wood lintel (See Figure 2C-064). In addition, there is a 1/4 inch diagonal crack in the brick masonry and 3/8 inch out-of-plane displacement of some masonry (See Figure 2C-065). The cracking may be related to the numerous penetrations that have been made in this south wall of the Main Block. The number of mechanical penetrations and door openings make it possible that the integrity of this south gable end wall has been partially compromised (See Figure 2C-066). The out-of-plane displacement of the chimney (Chimney #2) may also be contributing to some of the observed distress.

There are signs of moisture infiltration through the roof at the Central South Addition. Black mold and water staining were noted at Room 207 - Corridor and Room 211 - Study in the gypsum board at the ceilings (See Figure 2C-067). It appears that there is a leak in the roof above this area. At the northeast corner of Room 206 - Bedroom there is a vertical crack about



Figure 2C-067: Signs of moisture infiltration through the roof at the south central addition. (Photo RSA, 2012)



Figure 2C-068: Mechanical penetrations. (Photo RSA, 2012)

1/8 inch wide in the plaster above the door opening (See Figure 2C-068). It is possible that the crack extends into the underlying masonry at the wall.

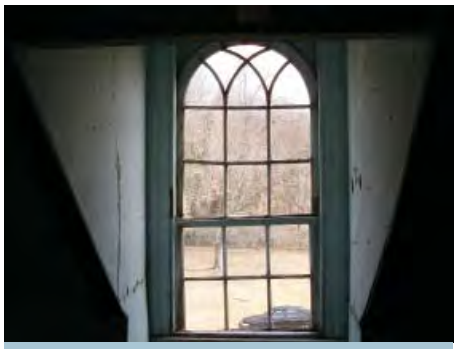


Figure 2C-069: Dormer windows located in the South 307and North 303 Bedrooms. (Photo RSA, 2012)

Third Floor Level - Structural Description
(Includes Roof Framing)

At the third floor level much of the roof framing of the original structure was accessible during RSA's site visit. Most of the walls at the third floor appear to be wood stud partitions. The exception is at the gable end walls, which are one wythe thick brick masonry. At the east end of the structure there are dormer windows at Room 307 - Bedroom and Room 303 - Bedroom (See Figure 2C-069).

The roof framing consists of 2-1/2" wide rafters at 24 inches on-center with 2-1/2"x4" collar ties (See Figure 2C-070). The rafters are tapered from a depth of about 5 inches near the eaves to a depth of about 3-1/2 inches near the ridge. The rafters are connected with a 3/4 inch diameter peg at the peak and appear to be connected to the third floor joists above the exterior brick masonry wall. At the rafters there are 1"x3" purlins with tongue and groove decking above (See Figure 2C-071).

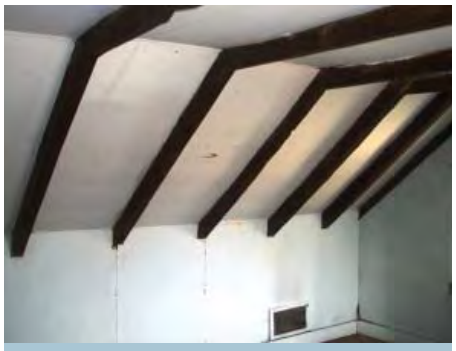


Figure 2C-070: Roof framing consists of 2'-1/2" wide tapered rafters at 24 inches on center (Photo RSA, 2012)

Third Floor Level - Structural Conditions Assessment
(Includes Roof Framing)

The framing at the roof is in fair to poor condition. Many of the wood members appear to have either insect or moisture deterioration. In addition, there is splitting at several of the knots in the hand hewn lumber (See Figure 2C-072).



Figure 2C-071: At the rafters there are 1"x3" purlins with tongue and groove decking above (Photo RSA, 2012)

The cut rafters around the dormer windows indicate that the windows were likely not part of the original construction, but added at a later date. Although there was documentation indicating dormers on the west side of the roof at one time, there was no visible indication that the original rafters had ever been cut and repaired. It is therefore unclear whether these dormers were ever in place.

A slope in the framing was noted throughout the third floor level. It is likely that this slope is related to the deflection of the wood attic joists.



Figure 2C-072: Roof framing rafters are in fair to poor condition. (Photo RSA, 2012)

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ANALYSIS

The building structural components were analyzed to determine their live load capacities and to evaluate potential future uses for the spaces. The sizes of the framing analyzed are based on the measurements taken on site. The structural materials of the building were not tested at this time; therefore material properties typical of similar construction of the same time period were assumed. (Further materials investigations and wood testing have been recommended in Part 1.C of this HSR.) Original wood framing was assumed to be Southern Pine #1 due to the prevalence of southern pine in the area at the time of construction. More recent framing was assumed to be Hem-Fir #2. Live load capacities were determined based on both strength (shear and bending moment capacities) and deflections. While the strength of a member determines its ability to carry a load, its stiffness, or resistance to deflection, affects its performance. Architectural finishes can crack or shift when the underlying structure moves and excessive deflections can also affect the physical comfort of the occupants of the space. Therefore, while relatively large deflections may not represent a safety concern, they may be considered unacceptable for reasons of serviceability.

Note that all framing analysis is based on the assumption of sound material. Some areas of framing were found to be unsound and it is possible that additional unsound material may be uncovered when further structural members are exposed. Should that be the case, repairs will be required to achieve the load capacities noted. Structural conditions and suggested repairs have been documented in Part 2C: Condition Assessment, Part 2D: Work Recommendations, and in the structural plans in Part 4: Documentation.

First Floor Framing

At the first floor level the live load capacity of the original structure is 20 psf at Room 103 - Dining room and Room 102 - Living Room/ Parlor, and 60 psf at Room 101 - Central Hall. In all cases the capacity is controlled by the beams running in the north-south direction. Based on International Building Code (2006 Edition) the existing framing below Room 102 and Room 103 does not meet the current live load requirements for residential, office or assembly occupancies. At Room 101 - Central Hall the existing framing meets the current live load requirement for residential or office occupancy, but not assembly occupancy. The work required to strengthen the first floor of the original structure would be more limited than at other parts of the residence. Reinforcement is only required at the north-south running beams in order to bring the floor capacity over 100 psf. While the existing framing does not appear to be in danger of failure, maximum occupancy in any one room should be limited to no more than 30 people until the floor is reinforced.

At the first floor addition the live load capacity at Room 104 - Kitchen is 30 psf, while the framing at Rooms 105, 107 and 108 (Corridors and Restroom) can support 100 psf. In order to meet current live load requirements, the floor of the kitchen will require reinforcement. Reinforcement would likely involve sistering or replacing the existing wood joists. The maximum occupancy at Room 104 - Kitchen should be limited to no more than 20 people until the floor is reinforced.

Second Floor Framing

At the second floor level the live load capacity at the original structure is approximately 10 psf at Room 201 - Central Hall, Room 202 - North Bedroom and Room 203 - South Bedroom. In order to bring the second floor up to current live load requirements, the existing floor joists would need to be reinforced at the bedrooms and the north-south running beam would need to be reinforced at the central hall. Until

the reinforcement is implemented the maximum occupancy should be limited to no more than 10 people in any one room.

At the addition the existing framing has a far greater live load capacity at the second floor when compared to the original structure. No reinforcement is likely to be required with the exception of Room 206 - Bedroom. If this room is to be used as an office or assembly area the existing floor joists will need to be reinforced.

Third Floor Framing

At the third floor level the live load capacity at original structure is approximately 10 psf throughout. In order to bring the third floor up to current live load requirements, the existing floor joists would need to be reinforced. Reinforcement would likely include sistering the existing joists. Until the reinforcement is implemented the maximum occupancy should be limited to no more than 10 people in any one room.

Roof Framing

The roof at the Main Block is adequate to carry the code-mandated live/snow load requirements. At both additions the roof structure appears to have very limited reserve capacity. In the event of a heavy snow there is a possibility that the roof framing members in this area would be overstressed. Reinforcement is required at the roof of the Central South and South Additions.

STRUCTURAL SUMMARY [1]

FLOOR	ROOM ID	LIVE LOAD CAPACITY (psf)[2]	MAX OCCUPANCY [3]	REQUIRED LIVE LOAD CAPACITY PER IBC CODE
1	101	60	70	Residential = 40 psf Office = 50 psf Assembly = 100 psf Light Storage = 125 psf
	102	20	30	
	103	20	30	
	104	30	20	
	105	100	20	
	107-108	100	20	
2	201	10	10	Residential = 40 psf Office = 50 psf Assembly = 100 psf Light Storage = 125 psf
	202	10	10	
	203	10	10	
	204-205	100	20	
	206	30	40	
	207-211	90	30	
3	301-302 304-306	10	10	Uninhabitable Attic Without Storage = 10 psf Uninhabitable Attic With Storage = 20 psf Habitable Attic = 30 psf
	303	10	10	
	307	10	10	
ROOF	Original	30	-	Roof = 20 psf
	Addition	0	-	

[1] Floor capacity based upon existing framing configuration with recommended repairs to address deterioration of wood framing.
[2] Capacity based on strength & serviceability.
[3] Number of people is based on a person weighing 200 lbs, the live load capacity and the room area. Number accounts for structural capacity; but other limitations such as occupancy, fire safety and egress may control and should be considered.

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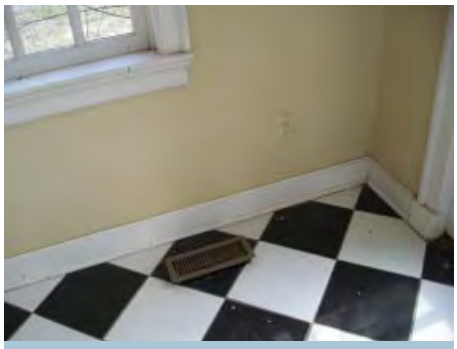


Figure 2C-073: Old floor grilles in room 106 (Sun Room). (Photo Setty, 2012)

C.4 MECHANICAL

The basement houses Room 015 - Mechanical Room, Room 013 - Recreation Room, and storage areas. The first floor includes Room 106 - Sun Room, Room 104 - Kitchen, Room 103 - Dining Room, and Room 102 - Parlor/ Living Room. All bedrooms are located on the second and third floors.

The following spaces are heated and cooled by a heat pump unit located in the attic above second floor in the Central South Addition. All other spaces are heated only, with heat provided by an old furnace located in the central mechanical room (See Mechanical Existing Condition Drawings contained in Part 4: Documentation.)

- Room 106 - Sun Room - The old floor grilles that are or were probably connected to the Furnace in the Basement are visible (See Figure 2C-073)
- Room 104 - Kitchen
- Room 203 - South Bedroom
- Room 206 - Bedroom
- Room 209 - Bathroom



Figure 2C-074: Whirlpool furnace located in the Room 015. (Photo Setty, 2012)



Figure 2C-075: Oil operated Whirlpool furnace - Used for Heating. (Photo Setty, 2012)



Figure 2C-076: Supply Grilles in Room 102 (Living Room). (Photo Setty, 2012)

- Room 211 - Study Room

The furnace (See Figure 2C-074) is located in Room 015 - Mechanical Room and is a Whirlpool unit, manufactured by Heil-Quaker Corporation, model NHOC200AH01. The furnace uses oil for heating (See Figure 2C-075), and is approximately 29" high. The footprint of the furnace is 80" x 29" as shown in the Mechanical Existing Condition Drawings. At the time of the survey, the furnace was not running, so it is not known if it is in proper working condition. Since it is old and rusted, it should be replaced to provide a more energy efficient system.



Figure 2C-077: Supply Grille in Room 101 (Central Hall). (Photo Setty, 2012)

The ductwork in the Basement is not insulated, while the ductwork from the first through the third floor is insulated and the insulation is in relatively good condition and the



Figure 2C-078: Supply Grille in Room 202. (Photo Setty, 2012)



Figure 2C-079: Supply Grille in Room 303. (Photo Setty, 2012)

ductwork could be reused. Ductwork in the first and second floors was not accessible for verification.

The supply, return, and exhaust grilles in the heated-only spaces (See Figure 2C-076) are in relatively good condition and may be reused, except for the grilles in the following spaces, which should be replaced since they are rusting and deteriorated:

- All supply and return grilles in the Basement.
- Supply grille in Room 101 - Central Hall (See Figure 2C-077).
- Supply grille in Room 202 - North Bedroom (See Figure 2C-078).
- Supply grille in Room 303 - Bedroom (See Figure 2C-079).
- Exhaust grille in Room 304 - Bathroom.

The heat pump in the second floor attic space (See Figure 2C-080) is a newer unit. This unit is connected to an outdoor condenser (Carrier make) located on the rear side of the building near Window 010 (See Figure 2C-081). The condenser unit has some rust on the top grille, but otherwise is in good condition. The heat pump is also in good condition.

The ductwork and the supply grilles and diffusers connected to the heat pump are also in good condition (See Figure 2C-082). The same prevails for the return duct of the heat pump (See Mechanical Existing Condition Drawings, Part 4: Documentation and Figure 2D-083).



Figure 2C-080: Heat Pump Located in Second Floor Attic. (Photo Setty, 2012)



Figure 2C-081: Condenser Unit for the Heat Pump. (Photo Setty, 2012)

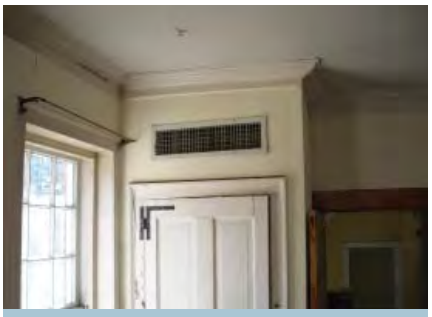


Figure 2C-082: Supply Grille in Room 203 (South Bedroom). (Photo Setty, 2012)

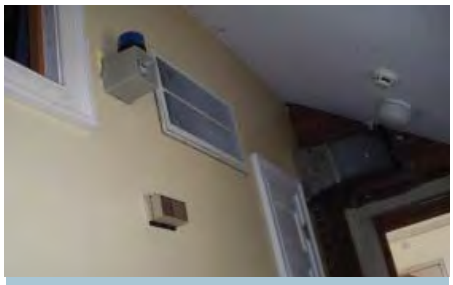


Figure 2C-083: Return Grille and Thermostat for the Heat Pump Unit. (Photo Setty, 2012)

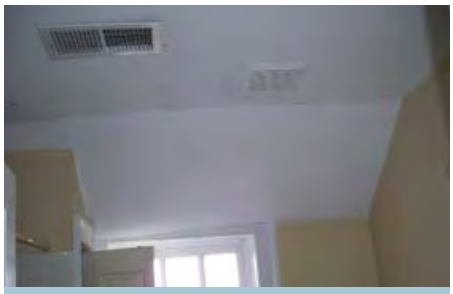


Figure 2C-084: Supply Diffuser and Exhaust Grille in Room 209 (Bathroom). (Photo Setty, 2012)



Figure 2C-085: Roof - Mounted Exhaust Fan for Room 209 (Bathroom). (Photo Setty, 2012)

The exhaust grille in Room 209 - Bathroom (Figure 2C-084) is connected to an exhaust fan located on the roof (Figure 2C-085). Both the exhaust fan and grille appear to be in good condition.

With regard to the building envelope's thermal conditions: (1) the structure is very old and the building envelope is not leak proof, (2) exterior windows are single pane, which are not thermally efficient. Consequently, there is potential for high heating and cooling loads, utility consumption and energy costs.

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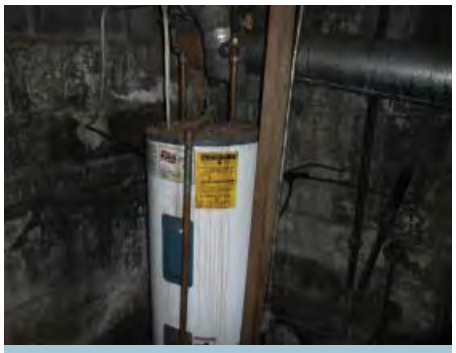


Figure 2C-086: Water Heater (Photo Setty, 2012)

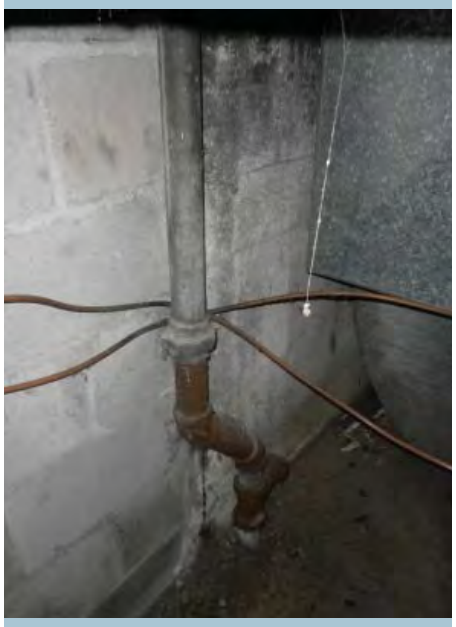


Figure 2C-087: Waste Plumbing (Photo Setty, 2012)



Figure 2C-088: Gutter System (Photo Setty, 2012)

C.5 PLUMBING

Domestic Water

Domestic service enters the building from the South (See Plumbing Existing Condition Drawings, Part 4: Documentation.) It is supplied by a 1-1/4" line which is in poor condition from point of entry to just downstream of the main shutoff valve. Pipe insulation was not found on domestic supply piping.

Coordination with the site utilities survey is needed to determine the origin of the domestic supply line serving the building and for locating the service meter. The existing 1-1/4" service is sized sufficiently for the plumbing fixtures already in place, although only about 10 additional Water Supply Fixture Units (WSFU) are available for any future plumbing additions.

Hot Water System

The existing water heater is outdated and in poor condition (See Figure 2C-086). The 30 gallon unit, rated at 4.5 KW, should be replaced with a new water heating system.

Below are three different system approaches for hot water generation.

1. Install a single tank type electric water heater sized to meet the hot water demand of all plumbing fixtures. A hot water return line would be implemented to circulate the hot water from remote fixtures back to the water heater in order to maintain the desired temperature in the system.

2. Provide local instantaneous water heaters at fixture groups. This scenario will require several units, which will need to be installed in each bathroom, or close to each of them, in order to supply fixtures with hot water. Depending on the number of fixtures connected to each heater, the sizes and electrical loads of the heaters will vary.

3. Install a single instantaneous hot water heater in the mechanical room with a small tank type heater adjacent. This system would include a return loop from the furthest fixture to circulate back to the small tank heater which would be used to reheat the loop. The instantaneous heater would operate only when one or more fixtures are used and create a large enough hot water demand.

Each option has pro and con features to consider. With storage type tank heaters, there is significant energy loss during periods of non-use. The necessary replacement of existing domestic piping along with insulation throughout the structure also makes a storage type system an expensive task, requiring new hot water return piping to be installed in enclosed walls and ceilings.

Instant heaters not only draw a lot of electricity to generate hot water, but along with their large power requirements the durability of the units can also

be an issue. Compatibility with existing fixtures also needs to be taken into account. Because most of the fixtures are old and do not have aerators or flow limiters installed, the flow rate through showers, sinks, and lavatories, is much higher than with modern fixtures. This condition will in turn result in increased use of hot water. The hot water system selected must be based on demand, the intended use of the building and future fixtures to be installed.



Figure 2C-089: Downspout (Photo Setty, 2012)

Sanitary System

There were some updates to the building sewer system observed, noted by installations of PVC piping. Due to the age of the structure, the building sewer system should be inspected with a video auger (See Figure 2C-087). Any blockages within the piping system should be cleared and any cracks within the system should be repaired. Along with pipe inspection, the system should be traced to verify pipe locations below slab and their point(s) of discharge.

Storm System

The storm system should be analyzed closely with a thorough inspection of the existing gutter system. There are several locations where gutters are rusted through, and downspouts are disconnected (See Figure 2C-088 and Figure 2C-089).

Natural Gas

The buildings gas supply is no longer in use. There is no gas meter at the site, although a cut connection (See Figure 2C-090) is visible outside the building.



Figure 2C-090: Gas Pipe (Photo Setty, 2012)



Figure 2C-091: Room 011 (Restroom) (Photo Setty, 2012)

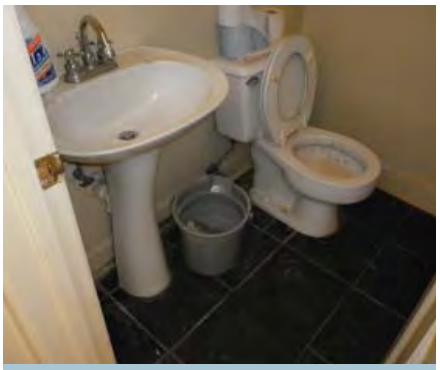


Figure 2C-092: Room 109 (Restroom) (Photo Setty, 2012)



Figure 2C-093: Kitchen Sink (Photo Setty, 2012)



Figure 2C-094: Kitchen Sink (Photo Setty, 2012)

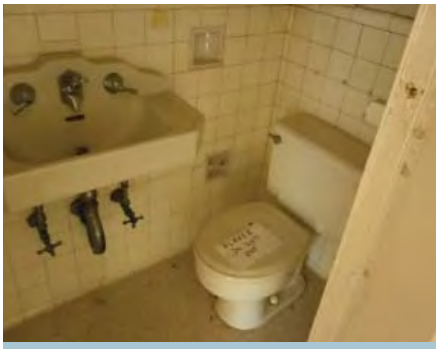


Figure 2C-095: Room 202A (Bathroom) (Photo Setty, 2012)

The building utilized a gas service at a previous time, which has been removed and the equipment converted to fuel oil or electric.

Plumbing Fixtures

The plumbing fixtures within the building vary in type and condition. Depending on owner request, certain antique fixtures could be refurbished and reused. While they do not offer any water saving technology, they do have aesthetic appeal. Refer to photos (See Figure 2C-092 thru 2C-99) for pictures of individual bathrooms showing the various types and conditions of the plumbing fixtures.

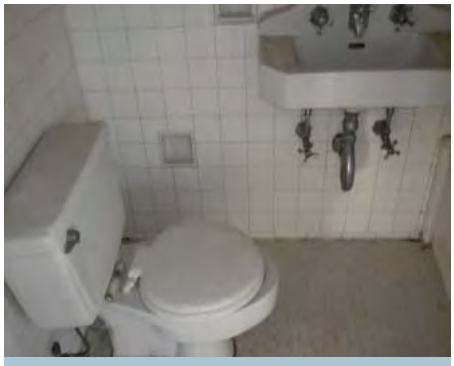


Figure 2C-096: Room 203A (Bathroom) (Photo Setty, 2012)

The basement fixtures need to be replaced due to age and condition (See Figure 2C-091). On the first floor there is a small restroom (Room 108 - Restroom) which has relatively new fixtures which can be reused (See Figure 2C-092). The kitchen fixtures (Room 104 - Kitchen) would need some work if they are to remain. The sinks are not connected to the plumbing piping. The plumbing fixtures within Room 209 - Bathroom are in fair condition (See Figure 2C-097). These fixtures were installed c.1988, and, if functional, could be used for an additional 10 to 20 years. Both bathrooms 202A and 203A (See Figure 2C-095 and 2C-096) are old, yet in good condition. These bathrooms date to the 1930s restoration of Harmony Hall by Charles Collins and may be refurbished for potential reuse. The third floor bathroom (Room 304 - Bathroom) is in poor condition with rust and damage to most fixtures (See Figure 2C-099). Since the water supply was not turned on during time of survey, the operation of the individual fixtures was could not be evaluated.

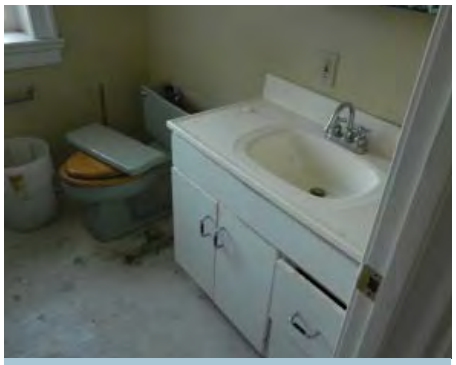


Figure 2C-097: Room 209 (Bathroom) (Photo Setty, 2012)

The potential reuse of existing fixtures needs to be coordinated with the future hot water system as older fixtures use a larger amount of water, thus requiring a larger hot water system and greater consumption of energy.

Fire Protection

There is no sprinkler system in place within the structure, but old glass fire extinguishers (also called fire grenades) were located in storage closets. These early methods of fire protection date back to the late 1800s (See Figure 2C-098). Typically these fire grenades were filled with salt water, while a carbon tetrachloride solution was also used in some cases. These items need to be inspected and the contents needs to be verified to assure they do not pose any health risks as they would if they happen to contain Carbon Tetrachloride. Carbon Tetrachloride can pose severe health risks and should be properly disposed of, if found.



Figure 2C-098: Fire Grenade (Photo Setty, 2012)

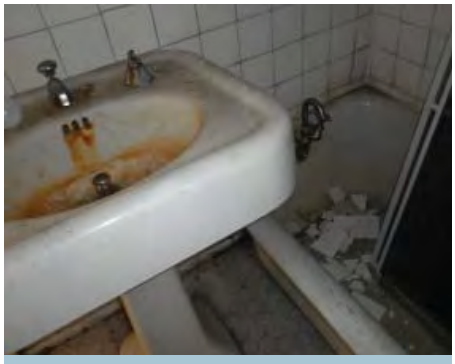


Figure 2C-099: Room 304 (Bathroom) (Photo Setty, 2012)

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Figure 2C-100: 25 kVA pole mounted transformer. (Photo Setty, 2012)

C.6 ELECTRICAL

Power

The building appears to be serviced by a 25 kVA pole mounted transformer (See Figure 2C-100). The pole is located a few feet south-east of the stables. The conduit enclosing the power cables from the secondary side extends from the transformer, down into the ground. A conduit resurfaces close to the utility meter mounted on the building itself.

The electrical utility meter is located on the exterior east elevation of the building, where the Central South Addition meets the Main Block. (See Figure 2C-102 and Figure 2C-103) From the utility meter, the service cables extend down in a 3-inch conduit and terminate at the Main Electrical Panelboard.

The service presently feeding the building is a 120/240 Volt, single phase, 3-Wire service terminating in the Main Electrical Panelboard located in Room 014 - Corridor. (See Figure 2C-101)

The Main Electrical Panelboard is rated at 200 Amp, 120/240 Volt, single



Figure 2C-101: Incoming Service. (Photo Setty, 2012)



Figure 2C-102: Utility Meter. (Photo Setty, 2012)



Figure 2C-103: Room 014 - Corridor, Main Electrical Panel. (Photo Setty, 2012)

phase, 3-Wire with a 200 Amp main circuit breaker. This is the only source of power for the building. This panel serves all the lighting fixtures, receptacles, miscellaneous motors and fans, water heater and miscellaneous loads located throughout the building. (See Figure 2C-103 and Figure 2C-104 for the Main Electrical Panelboard)

As can been seen in Figure 2C-103 and Figure 2C-104, the incoming service cables are exposed and are not in a secured enclosure, which is in a direct violation of NEC code 230.62.



Figure 2C-104: Main Electrical Panel. (Photo Setty, 2012)

The panel is a Crouse-Hind, Cooper Industries Type G model and is old and shows signs of considerable wear and tear, but is still functioning. The panel is located in a readily accessible location, and provides a single source (200 Amp main circuit breaker) to disconnect power to the entire building, thereby complying with NEC code 230.70.

Although the age of the panel is unknown, it appears to be in poor condition. Considering this factor, combined with the possibility of new loads, it is recommended that the existing panel be removed and replaced with a new main panel, adequately sized to serve not only existing loads, but also anticipated future loads and with spare capacity. In the event that the existing loads and the anticipated loads exceed the present utility service (200A), this would require a "heavy-up" - increasing the utility service amperage. The new panel should be provided with a single main breaker to serve the entire building. If needed, additional branch circuit panels should be provided.

Lighting

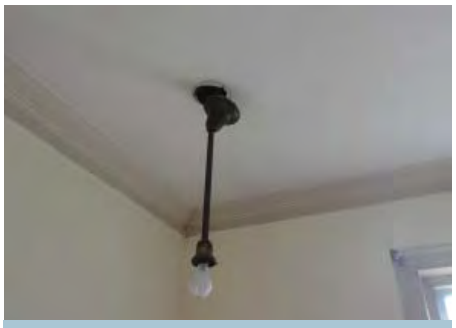


Figure 2C-105: Incandescent Fixture. (Photo Setty, 2012)

The first, second and third floors are illuminated with surface or stem mounted incandescent lighting fixtures. (See Part 2B: Physical Description for a complete inventory of all light fixture types.) The fixtures are in poor condition and do not provide adequate illumination in some areas. See Figure 2C-105 and Figure 2C-106 for the typical incandescent lighting fixtures on the first, second and third floors. Considering that incandescent fixtures consume more energy, require frequent maintenance (lamp replacement). and are being gradually phased out or production, these fixtures should be replaced with more energy efficient lighting fixtures and lamps. New energy efficient fixtures should be considered when planning

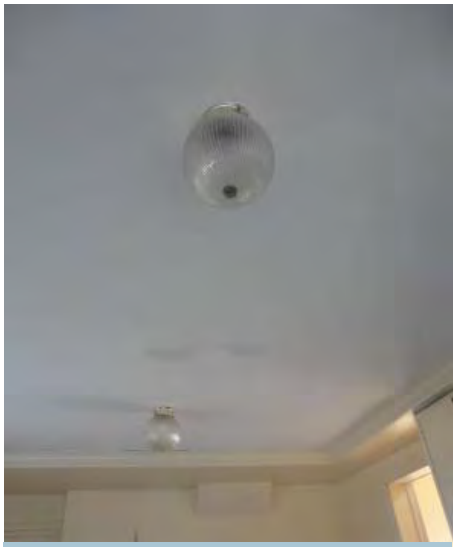


Figure 2C-106: Incandescent Fixture. (Photo Setty, 2012)



Figure 2C-107: Incandescent Fixture. (Photo Setty, 2012)



Figure 2C-108: Incandescent Fixture. (Photo Setty, 2012)



Figure 2C-109: Incandescent Fixture.
(Photo Setty, 2012)



Figure 2C-110: Incandescent Fixture.
(Photo Setty, 2012)

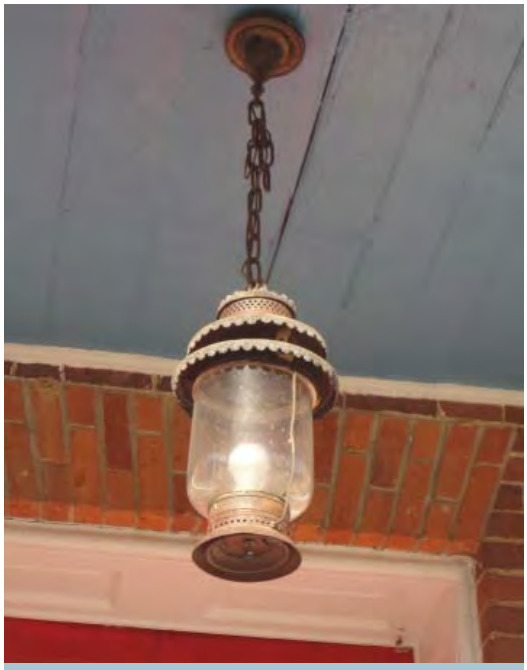


Figure 2C-111: Incandescent Fixture.
(Photo Setty, 2012)



Figure 2C-112: Incandescent Fixture.
(Photo Setty, 2012)

the implementation of the final treatment and use that are compatible with the historic stylistic features. Special consideration will need to be given to space being restored to Period II (1769-1849) as there would have been no electric lighting at that time.

The basement level is poorly illuminated with surface mounted incandescent lighting fixtures. Most of the spaces including Room 015 - Mechanical Room and Room 013 - Recreation Room do not have working fixtures or adequate lighting. (See Figure 2C-107 and Figure 2C-108).

The building does not have any exit lights, emergency lighting fixtures, or self contained battery packs to provide emergency lighting in case of a power failure. Of course, in residential structures, the electrical code does not require exit or emergency lighting, so there is no code violation. But in the event that the building is converted for commercial use, office use, or opened to the public, exit fixtures and emergency lighting that provide the required lighting levels will have to be added along all paths of

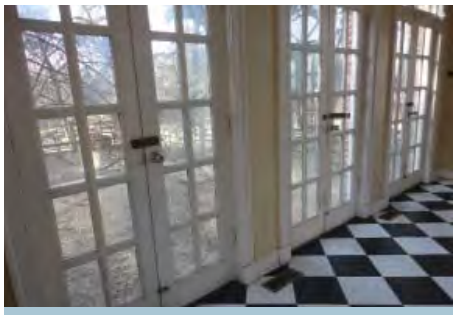


Figure 2C-113: Grounded Receptacle (Photo Setty, 2012)



Figure 2C-114: Grounded Receptacle (Photo Setty, 2012)



Figure 2C-115: Ungrounded Receptacle (Photo Setty, 2012)



Figure 2C-116: Ungrounded Receptacle (Photo Setty, 2012)

egress.

The building has surface mounted and suspended incandescent lighting fixtures at the South Entry Porch and the Front Porch respectively (outside of Doors 101A and 106A). (See Figure 2C-109 and Figure 2C-111).

Two wall mounted incandescent lighting fixtures are located at the Door 106E leading from Room 106 - Sun Room. (See Figure 2C-110 and Figure 2C-112).

In the event that the building is converted for commercial use, office use or opened to public, all fixtures located at egress doorways will also have to be part of an emergency lighting system.

Convenience Receptacles and Miscellaneous Power

Rooms at the south of the building on floors 1 and 2, such as Room 106 - Sun Room, Room 104 - Kitchen, Room 108 - Restroom, and Room 206 - Bedroom appear to have been recently upgraded. They are provided with sufficient number of wall mounted convenience receptacles that consist of duplex and sets of triple-duplex type receptacles that are evenly spaced along the walls. However, the kitchen does not have ground fault interrupter type receptacles on the kitchen counter and in the proximity of the sink as required by the code. (See Figure 2C-113 and Figure 2C-114)

Rooms in the Main Block, including Room 102 - Living Room/ Parlor, Room 202 - North Bedroom, 203 South Bedrooms, and the entire third floor have floor mounted, ungrounded receptacles. These are no longer used and are in violation of the current code requirements. (See Figure 2C-115 and Figure 2C-116)

Room 108 - Restroom and Room 209 - Bathroom have ground fault type receptacles, while older bathrooms (Room 202A - Bathroom and 203A - Bathrooms) only have ungrounded receptacles, which do not comply with the present code. (See Figure 2C-117, Figure 2C-118 and Figure 2C-119)

The exterior walls of the first floor has both duplex receptacles, and a double duplex receptacle. Most are receptacles are in weatherproof enclosures, but are not ground fault interrupter type or protected by a ground fault interrupter type breaker in accordance with current the code. (See Figure 2C-120 and Figure 2C-121)

Room 108 - Restroom and Room 209 - Bathroom have exhaust fans controlled by a wall switch. The kitchen has a non-working trash compactor.

In the event that the building is converted for commercial use, office space, or opened to public, all ungrounded receptacles should be replaced with code approved grounded receptacles. Countertop receptacles within two feet of a sink should be GFCI type, and outdoor receptacles should be GFCI

type and provided with weatherproof enclosures where these are missing or in poor condition.



Figure 2C-117: Restroom GFI Receptacle. (Photo Setty, 2012)

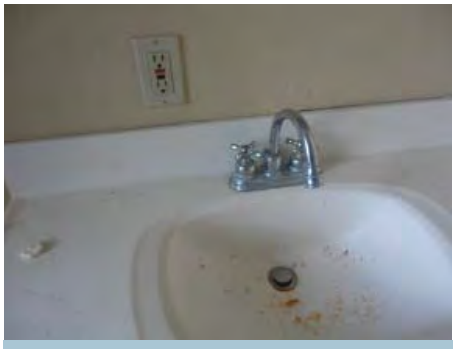


Figure 2C-118: Restroom GFI Receptacle. (Photo Setty, 2012)



Figure 2C-119: Restroom Receptacle. (Photo Setty, 2012)



Figure 2C-120: Exterior Receptacle. (Photo Setty, 2012)



Figure 2C-121: Exterior Receptacle. (Photo Setty, 2012)

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Figure 2C-122: Fire Alarm Control (Photo Setty, 2012)



Figure 2C-123: Fire Alarm Keypad. (Photo Setty, 2012)



Figure 2C-124: Fire Alarm Device. (Photo Setty, 2012)



Figure 2C-125: Smoke Detector Rec. (Photo Setty, 2012)

C.7 FIRE ALARM SYSTEM

General

The building is currently provided a with a fire alarm system. However, there is no sprinkler system in the building at the present time. The fire alarm system consists of a fire alarm control panel (FACP), an audio-visual device, remote keypad and several smoke detectors. (See Figure 2C-122, Figure 2C-123, and 2C-124)

The FACP is manufactured by Honeywell and is located in Room 210 - Closet. This panel/system is relatively new, but it is not known whether it is in proper working condition.

There are no manual pull stations in the building.

Smoke detectors are located in almost all rooms/spaces. It is not known if the smoke detectors are all tied together to operate in a synchronized manner and sound a common alarm in the building. The smoke detectors do appear to be in good condition. (See Figure 2C-125)

Observation

Overall, the existing fire alarm system appears to be in good condition and could be reused, provided it is found to be in proper working condition. The existing battery will require further evaluation to ensure it can support any future loads from new or added devices.

There is an existing security system in the building, which could be upgraded by the Owners, based on new space requirements. Since it is not included in this scope, the security system was neither surveyed nor evaluated.

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Part 2D: Work Recommendations



Harmony Hall

Fort Washington, Maryland

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2D. WORK RECOMMENDATIONS

OVERVIEW

Harmony Hall will require significant improvements in order to return it to a stable and usable facility. At the core of these improvements is the correction of the water infiltration issues which have caused the deterioration and failing of the building envelope and interior finishes. The exterior envelope, interior systems, structure and finishes were assessed as to their condition and the probable causes of deterioration identified in the previous section - Part 2C - Condition Assessment. As a conclusion to the assessment, this portion of the HSR provides recommendations; to address any code violations or failing equipment that impacts that safety, functionality and security of the structure, to manage interior environmental conditions, arrest further deterioration of historic fabric and provide basic systems upgrades that are common to all treatment and use options described in Part 3: Treatment and Use.

METHODOLOGY

In this section work recommendations will be described in brief narrative format and then outlined in a detailed matrix format that addresses all work that should be completed to result in a sound and water tight structure and to arrest any further deterioration to the historic fabric. Given that some treatment and use options recommend removal of the South Central and South Additions, some of the work recommendations (such as the roof replacement) have been broken into three components – Main Block, South Central Addition, South Addition. For example, if these additions are removed, then it would not be necessary to provide new roofing for them. This format allows for the matrix to be used as a worksheet to compliment the treatment and use options.



Figure 2D-001: West Elevation, Harmony Hall (Photo, BBB 2012).

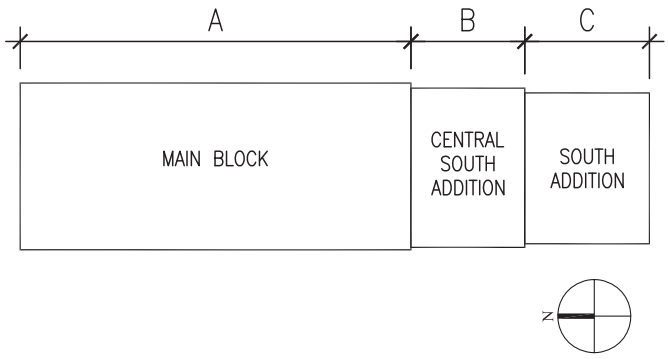


Figure 2D-002: Key Plan Diagram

BASELINE WORK RECOMMENDATIONS

Architectural Recommendations

Envelope Restoration

- Repair all cracks in brick masonry
- Clean all brick masonry of biological growth and soiling
- Replace/Reset all missing, spalled or dislocated brick
- Re-point all exterior masonry, especially at chimneys
- Install new chimney caps at three chimneys
- Provide lightning protection
- Repair all existing wood windows and repaint
- Repair existing wood cornice and repaint
- Repair existing wood elements at porches and entries and repaint
- Replace broken glass elements at all windows
- Replace roof at Main Block, Central South Addition and South Addition with more compatible slate roofing material for the typical of the colonial plantation era. Remove non-historic plumbing ventilation stacks from the roof of the Main Block of the structure.
- Replace gutters and downspouts at Main Block
- Remove existing incompatible metal inserts in masonry and patch

Interior Restoration:

- Repair plaster where damaged by water infiltration, restore all other plaster and repaint
- Repair wood/restore existing wood floor in Main Block first and second floors
- Remove all surface mounted conduit and modern systems from interior
- Repair, restore and repaint interior wood elements and trim in first and second floor rooms of Main Block including doors, casings, fire place surrounds, window shutters and window seats.
- Remove all existing sheetrock showing mold and replace with new

Code and Accessibility Compliance:
Provide select modifications to building layout and structure to comply with all applicable building codes and standards for life safety and egress. Where possible provide ADA accessibility and compliance. Additional modifications for compliance will be provided as components specific to various treatment and use recommendations.

Mechanical/ Plumbing/ Electrical:
Remove existing systems and provide modern interventions to provide electrical service, lighting, modern plumbing and HVAC throughout house to accommodate basic use of structure. Provide the best possible upgrades to maximize energy efficiency.

Fire Alarm Notification System:
Upgrade fire alarm notification devices and upgrade all smoke alarm devices throughout house. Utilize existing equipment where possible to bring the system up to code requirements and NPS standards.

Fire Protection:
The design team recommends that the NPS consider installation of a sprinkler system throughout the building to protect the historic fabric from damage due to fire and to improve egress travel distances.

Security System Upgrades:
Install complete security system monitoring throughout building to include motion sensor detection and video surveillance. This should also include basic security measures such as installing locks on all windows and doors.

Telecomm/ Data:
Remove existing telecommunications systems and provide internet and hard line telephone service throughout building.

Structural Enhancement:

- Provide upgrades to existing structure to allow for increased use and occupancy.
- Provide structural reinforcement of existing stair structure in Central Hall of Main Block
- Correct deflection of hearths in Main Block
- Correct deflections in masonry arches on south and west elevations of Main Block
- Correct deterioration and inadequate connections of existing floor joists

Hazardous Materials:
Abate all hazardous materials from the interior of the building including but not limiited to lead, asbestos and mold.

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Figure 2D-003: Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
D.1 - ARCHITECTURAL									
MASONRY									
A1	Biological Growth (BIO-GR)	North, South and East facades near grade	Unwanted growth or infestation of fungi, algae, microbes or plants that may result in organic staining and bio-deterioration of substrate.	Apply biocide to areas of biological growth at brick. Follow with general cleaning of area after other repairs and re-pointing are implemented.	See Assessment Drawings for Quantities	2	●	●	●
A2	Through Joint Crack (TJC)	Various locations throughout brick facade; See Conditions Assessment Drawings for complete locations.	A crack that follows the mortar joints of the brick and does not translate through the brick. In some cases these cracks result in brick displacement.	Re-point open joints in the building façade to limit water infiltration into the exterior masonry walls. Mortar must be appropriate to match the physical and aesthetic characteristics of the adjacent mortar and building materials. Complete mortar testing and analysis throughout the exterior building envelope to determine the appropriate replacement mortar mix to match both composition and color. See **Appendix B** for mortar testing and analysis completed within this HSR.	See Assessment Drawings for Quantities	1	●	●	●

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A3	Through Brick Crack (TBC)	Various locations throughout brick facade, especially in Chimneys; See Conditions Assessment Drawings for complete locations.	Movement and shifting of the brick has resulted in cracking both through the brick units and through adjacent mortar joints.	Re-point open joints in the building façade to limit water infiltration into the exterior masonry walls. Replace or reset brick where cracking has resulted in displacement. Mortar must be appropriate to match the physical and aesthetic characteristics of the adjacent mortar and building materials. Complete mortar testing and analysis throughout the exterior building envelope to determine the appropriate replacement mortar mix to match both composition and color. See **Appendix B** for mortar testing and analysis completed within this HSR.	See Assessment Drawings for Quantities	1	●	●	●

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A4	Open Joints in Brick (OJ-B)	Various locations throught brick facade. Especially in locations of failing or missing downspouts. See Conditions Assessment Drawings for complete locations.	Complete or partial loss of pointing mortar. This condition allows moisture to migrate into the masonry substrate and may also result in potential structural instability.	Re-point open joints in the building façade to limit water infiltration into the exterior masonry walls. Mortar must be appropriate to match the physical and aesthetic characteristics of the adjacent mortar and building materials. Complete mortar testing and analysis throughout the exterior building envelope to determine the appropriate replacement mortar mix to match both composition and color. See Appendix B for mortar testing and analysis completed within this HSR.	See Assessment Drawings for Quantities	1	●	●	●
A5	Dislocated Brick (DIS-B)	Jack arch above W118 Northeast corner of Main Block at base of water table	Brick units that have shifted out of plumb or are not level.	Remove and reset existing brick units. Shoring may be necessary due to extent of dislocated brick.	See Assessment Drawings for Quantities	1	●		
A6	Missing Brick (MIS-B)	At locations of downspout installations	Brick units that have dislodged completely from the masonry wall or that have been removed.	Replace missing brick units with brick to match original. Use mortar to re-point that matches adjacent mortar. In cases where missing brick is part of an arch, shoring and removal of adjacent crick will be required prior to installation of units.	See Assessment Drawings for Quantities	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A7	Spalled Brick (SP-B)	3-4 locations along East and West Facades	Detachment of brick fragment from brick unit.	Install replacement brick unit for brick with spall. Re-point around surrounding area and coordinate with façade re-pointing efforts.	See Assessment Drawings for Quantities	1	●		
A8	Incompatible Patch (ICP)	Various locations throught brick facade. Especially in locations of failing or missing downspouts, See Conditions Assessment Drawings for complete locations.	Previous repair of the masonry which is physically or aesthetically incompatible with the historic fabric.	Remove existing patch material down to brick substrate. Re-point open joints in the building façade. Mortar must be appropriate to match the physical and aesthetic characteristics of the adjacent mortar and building materials.	See Assessment Drawings for Quantities	2	●	●	●
A9	Masonry Staining due to Failing Paint (PT-S)	Underneath windows of Main Block	Hazing or cloud-like white staining of the brick masonry below the painted wood window sill.	Clean exterior brick masonry with emphasis on areas below window sills.	See Assessment Drawings for Quantities	2	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A10	Brick Chimneys – Open Mortar Joints (OJ-B)	North Chimney (Chimney #1) Central Chimney (Chimney #2) South Chimney (Chimney #3)	Complete or partial loss of pointing mortar. This condition allows moisture to migrate into the masonry substrate and may also result in potential structural instability.	Loose mortar should be removed. Re-point open joints in the chimneys to limit water infiltration into the exterior masonry walls. Mortar must be appropriate to match the physical and aesthetic characteristics of the adjacent mortar and building materials. Refer to structural recommendations for repairs and/ or rebuilding of the chimneys if required. Complete mortar testing and analysis throughout the exterior building envelope to determine the appropriate replacement mortar mix to match both composition and color. See Appendix B for mortar testing and analysis completed within this HSR.	See Assessment Drawings for Quantities	1	●	●	
A11	Brick Chimneys – Chimney Caps	North Chimney (Chimney #1) Central Chimney (Chimney #2) South Chimney (Chimney #3)	The existing brick chimneys are open to above and provide the opportunity for nesting birds to inhabit the flues and/ or rain to penetrate the building envelope.	Install chimneys caps on the three chimneys with integral bird deterrent and/ or bird screening.	See Assessment Drawings for Quantities	1	●	●	

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A12	Chimneys and Room - Lightning Rod Protection	Roof Ridge and 3 chimneys	There is not existing lightning rod protection system installed on the building.	Install a new lightning rod protection system along the roof ridge and chimneys.	One system to cover roof and 3 chimneys	1	●	●	●
				WOOD					
A13	Wood Rot (WD-R)	Window sills and wood decorative cornice along East and west facades	Some of the exterior wood sills and jambs are rotten and deteriorated due to water damage.	Install dutchman repairs in areas of rotten wood. Re-caulk and seal all joints between wood window frames and exterior brick masonry. Install weather stripping at the bottom of the lower sashes of all windows.	See Assessment Drawings for Quantities	1	●	●	●
A14	Missing Wood Element (MIS-E)	See Conditions Assessment Drawings for complete locations.	Missing component of wood members at window and doors frames and trim and at any wood cornice or trim detail.	Replace missing wood elements on all window, door and wood trim elements. Replace missing molding to match adjacent existing in profile. Install and finish to match adjacent construction.	See Assessment Drawings for Quantities	1	●	●	●
A15	Dislocated Wood Element (DIS-W)	See Conditions Assessment Drawings for complete locations.	Dislocated component of wood members at window and door frames and trim.	Wood elements need to be re-anchored to the masonry as well as the adjacent wood members.	See Assessment Drawings for Quantities	1	●	●	●

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A16	Paint Loss or Failure on Exterior Wood Elements (PT-LW)	Exterior Wood Windows and Frames Exterior Wood Doors and Frames	Failure or loss of paint coating which acts as a protective sacrificial layer against weathering. The loss of paint exposes the wood substrate to moisture penetration, deterioration, and eventually will lead to wood rot. The paint on the exterior woodwork and trim is deteriorated and is peeling in many locations. Cleaning and re-painting of the wood window components will extend the life of the window and help to eliminate the possibility of wood rot and deterioration of the underlying wood window frame and trim.	Exterior Wood Windows and Doors: The loose paint should be scraped back to solid substrate and edges feathered in preparation of priming and repainting. Lightly sand, clean and prepare surface for all patching, repair and repainting. All stray paint should be removed from the brick façade. Remove existing sealant and replace with new at all windows where window frame meets masonry.	See Assessment Drawings for Quantities	1	●	●	●
A17	Paint Loss or Failure on Interior Wood Elements (PT-LW)	Interior Wood Windows and Trim Interior Wood Doors and Trim Interior trim: baseboards, crown molding, chair rails and wainscoting.	Failure or loss of paint coating which acts as a protective sacrificial layer against wear and deterioration. The paint on the interior woodwork and trim is deteriorated and is peeling in many locations.	The loose paint should be scraped back to solid substrate and edges feathered in preparation of priming and repainting. Lightly sand, clean and prepare surface for all patching, repair and repainting.	See Assessment Drawings for Quantities	2	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A18	Wood Cornice – Paint Deterioration (PT-LW/ WD-R)	Painted Wood Cornice along roof line underneath gutters on East and West Facades	There is considerable peeling paint, water stains and isolated areas of wood rot and insect infestation.	The wood should be sanded, cleaned and repainted. Areas of wood rot and decay should be repaired and/ or replaced prior to final application of paint. Assume 25% repair and or replacement of wood elements of the cornice.	110 LF of decorative wood cornice at Main Block	1	●	●	●
A19	Wood Pediment and Pilasters – Paint Deterioration (PT-LW/ WD-R)	Wood pediment and pilaster detail at Door D101B along West Façade, Main Block	There is considerable peeling paint, water stains and isolated areas of wood rot.	The wood should be sanded, cleaned and repainted. Areas of wood rot and decay should be repaired and/ or replaced prior to final application of paint. Assume 15% repair and or replacement of wood elements of the pediment and pilasters.	See Assessment Drawings for Quantities	1	●		
A20	Double Hung Wood Windows - Gap between Window Sashes	Double hung wood windows in Main Block	The second floor windows typically have a gap up to 1/2 inch wide at the meeting rails between the top and bottom sashes that allows outside air and wind driven rain to enter into the interior of the building. Failure to address water penetration issues and repair the existing wood windows and sashes will lead to future wood rot and deterioration.	Repair or replace any damaged or missing window trim and stops to ensure secure installation and operability of window sashes. Install weather stripping at the meeting rails of all windows.	See Assessment Drawings for Quantities	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A21	Significant Wear to Wood Stair Treads and Risers	Central Stair and Attic Stair	Similar to the floors, the stair treads and risers show significant wear down to bear wood.	The wood treads and risers require cleaning and refinishing. The finish will require further analysis by a conservator to determine the most accurate recommended finish.	See Assessment Drawings for Quantities	2	●		
WINDOWS									
A22	Missing Glazing Putty (MIS-P)	Double hung, awning and casement wood windows in Main Block (Basement, First, Second and Third Floor windows in Main Block)	The glazing putty that seals the edges of the existing glazing panes is cracked and missing in many locations. Failure to replace missing or failing glazing putty will allow for further water infiltration into the interior of the building.	Glazing putty has aged and dried requiring complete replacement at all windows.	all windows in Main Block	1	●		
A23	Broken or Missing Window Pane (BR-P)	Window 005 (2 panes) Window 207 (1 pane) Window 112 (2 panes) Window 304 (4 panes)	Broken or missing glazing in window lites.	Replace broken glass panels with new to match existing.	5 panes	1	●	●	
ROOF									
A24a	Roof Replacement: Main Block	Asphalt shingle roofing over Main Block, Central Pediment and Dormer Windows 301 and 303	Recent installation of asphalt shingle roofing, flashing and trim.	Replace asphalt single roof with roofing material more compatible with the Period of Significance.	1900 square feet	2	●		
A24b	Roof Replacement: Central South Addition	Asphalt shingle roofing over Central South Addition and Dormer Windows 208, 213, and 214	Recent installation of asphalt shingle roofing, flashing and trim.	Replace asphalt single roof with roofing material more compatible with the Period of Significance.	500 square feet	2		●	
A24c	Roof Replacement: South Addition	Asphalt shingle roofing over South Addition and Dormer Windows 209, 211, and 212	Recent installation of asphalt shingle roofing, flashing and trim.	Replace asphalt single roof with roofing material more compatible with the Period of Significance.	550 square feet	2			●

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A24d	Failing Roof	Dormer roof over Window 211	Asphalt roof singles are missing. Failure to protect the roof properly will result in water infiltration into the interior of the house.	The existing roofing system should be replaced and repaired in this location.	3 SF asphalt shingles	1			●
A25	Biological Growth on Asphalt Roof Shingles	Roof over South Addition, west side	Biological growth and lichen have developed on the asphalt roofing shingles along the west facing side of the roof over the South Addition.	Replace areas of the roofing affected by the lichen growth. For longer term maintenance, implement a plan of regular landscaping control and trim back vegetation, allowing more direct sunlight to the southwest corner of the South Addition roofing. (Replacement of roof over the Central South Addition and South Addition outlined in Items A23b and A23c would negate this option.)	30 SF on asphalt shingle roof	1			●
A26	Gutters and Downspouts	Along roof line on East and West Facades	Galvanized metal gutters were installed in replacement of an older storm water system. The older gutter brackets remain just above the existing cornice. The existing gutters and downspouts are rusting and deteriorating and/or are completely detached or missing. This has resulted in poor management of storm water allowing water to penetrate the exterior brick masonry wall.	Replace existing gutters and downspouts with new copper gutter and downspouts. New system should be adequately designed and sized.	110 LF of gutter at Main Block and four (4) downspouts	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
MISCELLANEOUS METALS									
A27	Ferrous Metal Anchors or Elements (FMA)	Shutter dogs, shutter hinges, miscellaneous nails or fasteners in mortar joints	Ferrous metal anchors or supports set into mortar joints to surface mount materials to the brick masonry.	Remove anchors from mortar joints and re-point joints. The remaining shutter dogs should be cleaned and painted with rust inhibitive paint to arrest further corrosion. Shutter Dogs and Hinges: Treat shutter hinge anchors with a rust inhibitive paint to prevent further rusting on those anchors to remain. Historic hinges and shutter dogs should remain in place.	See Assessment Drawings for Quantities	1	●		
A28	Incompatible Metal Patch	Northeast corner of Cornice along East Facade	A galvanized metal sheet has been installed along the underside of the decorative wood cornice. It is assumed this was installed to protect the wood and prevent further wood rot.	The sheet metal should be removed. The wood cornice should be repaired to remove any areas of wood rot and decay. Replace wood cornice decorative elements in-kind. Prep and re-paint to match adjacent.	2 SF	2	●		
INTERIOR FINISHES									
A29	Paint Failure on Plaster or Gypsum Wallboard (PT-LW)	**Main Block:** Room 101: Central Hall 101 Room 102: Living Room Room 103: Dining Room Room 200: Central Stair Room 201: Central Hall Room 202: North Bedroom Room 203: South Bedroom	This condition indicates that the walls are holding significant moisture, weakening the bond between the paint and the plaster or gypsum substrate. The source of the moisture must be controlled before any repainting to ensure a new coating will last, and to prevent additional interior damage.	Sources of water penetration must be stopped as part of the exterior envelope repairs. It must be verified that all plaster and interior finishes have dried to a significant level before repair of plaster and application of new paint.	See Assessment Drawings for Quantities	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A30	Water Damage (WT-D)	**Main Block:** Room 101: Central Hall 101 Room 102: Living Room Room 103: Dining Room Room 200: Central Stair Room 201: Central Hall Room 202: North Bedroom Room 203: South Bedroom	The irreversible loss of scales, flakes, or layers from a surface. This may occur on interior plaster due to moisture penetration, deterioration from salts, or inherent properties in the material.	These areas require removal and replacement of plaster. Damaged or crumbling plaster should be removed back to solid or sound material, feathering the edges. The removal of layers should be feathered by layer; first and second brown coat layers should be feathered back each by an inch, finally tapering to the historic plaster up to one inch for each layer. The new plaster should then be installed with two layers of brown coat and a finish coat. This plaster should be feathered into the exposed edges of the historic plaster.	See Assessment Drawings for Quantities	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A31	Plaster Loss/ Failure from Masonry or Severe Water Damage to Plaster (PL-L)	**Main Block:** Room 101: Central Hall 101 Room 102: Living Room Room 103: Dining Room Room 200: Central Stair Room 201: Central Hall Room 202: North Bedroom Room 203: South Bedroom	Complete breakdown of bonding of scratch coat keys with wood lath or bonding of scratch coat with brick masonry resulting in loss of plaster.	These areas require removal and replacement of plaster. Damaged or crumbling plaster should be removed back to solid or sound material, feathering the edges. The removal of layers should be feathered by layer; first and second brown coat layers should be feathered back each by an inch, finally tapering to the historic plaster up to one inch for each layer. The new plaster should then be installed with two layers of brown coat and a finish coat. This plaster should be feathered into the exposed edges of the historic plaster.	See Assessment Drawings for Quantities	1	●		
A32	Hairline Crack in Plaster (PL-HC)	**Main Block:** Room 101: Central Hall 101 Room 102: Living Room Room 103: Dining Room Room 200: Central Stair Room 201: Central Hall Room 202: North Bedroom Room 203: South Bedroom	Crack through the surface of the plaster that does not extend into substrate.	For larger hairline cracks, apply fiber tape and follow with a skim coat. Smaller hairline cracks can be repaired with a simple skim coat.	See Assessment Drawings for Quantities	2	●		
A33	Major Crack in Plaster Wall (PL-MC)	**Main Block:** Room 101: Central Hall 101 Room 102: Living Room Room 103: Dining Room Room 200: Central Stair Room 201: Central Hall Room 202: North Bedroom Room 203: South Bedroom	Crack through the surface of the plaster that does not extend into substrate.	For major cracks, use flat head wood screws and washers to reattach plaster to substrate (either lath or masonry). Follow this procedure with application of fiber mesh and a skim coat.	See Assessment Drawings for Quantities	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A34	Plaster Separation from Masonry (PL-S)	**Main Block:** Room 101: Central Hall 101 Room 102: Parlor/ Living Room Room 103: Dining Room Room 200: Central Stair Room 201: Central Hall Room 202: North Bedroom Room 203: South Bedroom	Partial breakdown of bonding of scratch coat keys with wood lath or bonding of scratch coat with brick masonry resulting in partial separation of plaster from substrate.	For major cracks, use flat head wood screws and washers to reattach plaster to substrate (either lath or masonry). Follow this procedure with application of fiber mesh and a skim coat.	See Assessment Drawings for Quantities	1	●		
A35	Wood: Failure of Floor Board (WD-FF)	**Main Block:** Room 101: Central Hall 101 Room 102: Parlor/ Living Room Room 103: Dining Room Room 200: Central Stair Room 201: Central Hall Room 202: North Bedroom Room 203: South Bedroom	Pine strip flooring has failed, resulting in unstable floor boards.	Floor boards will require being removed. Structure below should be repaired if needed and a new board installed to match existing in size and grain. If possible, it would be advantageous to find aged boards that reflect similar grain and wear.	See Assessment Drawings for Quantities	1	●		
A36	Wood: Significant Wear and/ or Damage (WD-SW)	**Main Block:** Room 101: Central Hall 101 Room 102: Parlor/ Living Room Room 103: Dining Room Room 200: Central Stair Room 201: Central Hall	Significant wear of the wood surface resulting in exposed and pronounced grain.	All interior floor show significant wear. The floor finish has been completely worn off in most locations. The flooring should be cleaned and refinished. The finish will require further analysis by a conservator to determine the most accurate recommended finish.	See Assessment Drawings for Quantities	2	●		
A37	Wood: Termite Damage (WD-TD)	Room 103: Dining Room Window 114	Deterioration and loss of section of wood as a result of termite infestation.	Wood flooring or trim that has lost significant section due to termite damage should be removed and the floor boards should be replaced to match existing.	See Assessment Drawings for Quantities	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (Also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
A38	Mold in Gypsum Wallboard	Ceiling of Corridor 207 Walls and ceiling of basement below the Main Block and Central South Addition	Mold growth on gypsum wallboard ceiling above Corridor 207 and throughout basement	Selectively remove portions of ceilings and walls and replace after addressing humidity issues. Address any problems with mechanical equipment which resulted in the condensation.	10 square feet	1	●	●	
A39	Wood: Sagging or Deflecting Floor (WD-SW)	**Main Block:** Room 101: Central Hall 101 Room 102: Parlor/ Living Room Room 103: Dining Room Room 200: Central Stair Room 201: Central Hall Room 202: North Bedroom Room 203: South Bedroom	Floor structure is failing resulting in flooring sagging in discrete locations.	The sagging floor is a result of failing structure. In conjunction with the rebuilding of the masonry, the joists will have to be repaired to correct the sagging.	See Assessment Drawings for Quantities	1	●		
A40	Surface Mounted Electrical or Telephone Conduit or Junction Box (SM-EC)	**Main Block:** Room 101: Central Hall 101 Room 102: Parlor/ Living Room Room 103: Dining Room Room 200: Central Stair Room 201: Central Hall Room 202: North Bedroom Room 203: South Bedroom	Installation of surface mounted conduit or wiring throughout house for installation of modern electrical systems and components.	Remove all surface mounted wiring and install new code compliant electrical service and wiring.	See Assessment Drawings for Quantities	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
D.2 - STRUCTURAL									
S-1	Cracking, Spalling and Displacement at Chimney	South & North Elevations	Brick Masonry	Further investigation and analysis is recommended to assess the stability of the chimneys under seismic loads. Based on the extent of mortar loss and observed rotation of the chimneys a rebuild above the roof line may be required, especially at the two original chimneys. At a minimum, cracks in the mortar joints should be re-pointed and cracked bricks should be locally removed and replaced. Use of a compatible mortar is recommended.	2 or 3 Locations	1	●		
S-2	Cracking due to the Rusting of the Window Shutter Holders Embedded in the Masonry	East & West Elevations	Brick Masonry	The damaged masonry should be removed and replaced. The surface of the anchors should be cleaned and painted with a zinc-rich primer and exterior top coat. Rebuild sections of removed brick with anchors and re-point cracked mortar joints. Use of a mortar compatible to existing framing is recommended.	About 4 Locations	2	●		
S-3	Missing or Inadequate Lintel	South & West Elevation, Basement Level	Brick Masonry	Where significant deflections are observed above openings a structural engineer will be required to design and detail lintels above the openings. At the west elevation and at the basement level lintels may need to be rebuilt to address existing damage.	About 20 Locations	2	●		
S-4	Deflection of Hearths	First Floor & Second Floor Levels	Brick Masonry	The sand box supporting the brick masonry at the hearth should be repaired and the bricks should be reset in a level bed of sand.	About 4 Locations	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
S-5	Deterioration	East Elevation & All Floor Levels	Wood Framing	At areas where dry rot has led to the deterioration of the wood, the moisture infiltration issue should be addressed. If the member appears to have been previously painted, a new coat may be recommended. At areas of insect damage an expert should examine the affected area to determine if the infestation is active. In certain locations reinforcement and/or replacement of the wood may be required depending on the extent of damage.	Assume 25% of Framing	2	●		
S-6	Inadequate Connections	Basement Level	Wood Framing	An engineer will need to design new bearing end connections for the first floor framing below the kitchen (room 104). It is likely that additional framing connections will need to be reinforced and/or repaired.	Unknown	1		●	
S-7	Inadequate Members	Basement Level & First Floor Level	Wood Framing	Further investigation is recommended to understand the observed damage at the interior masonry walls and the main staircase. It should be assumed that repairs will include the reinforcement of undersized members.	Unknown	1	●		
S-8	Water Damage at Interior Ceilings/ Walls	Basement & First Floor Levels	Plaster	Further investigation of the underlying structure is recommended after the plaster has been removed. Repairs should address the moisture infiltration at the building envelope and include replacement of damaged plaster.	Assume 100 Square Feet	1	●		
S-9	Cracks at Interior Walls	First & Second Floor Levels	Plaster	Further investigation of the underlying structure is recommended after the plaster has been removed. At a minimum, repairs should be assumed to include replacement of damaged plaster and re-pointing underlying masonry. Upon investigation of the underlying structure additional repair work may be required.	Assume 100 Square Feet	2	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
D.3 - MECHANICAL									
M-1a	HVAC System - Old, rusted	Room 015: Mechanical Room	HVAC System	**Option 1:** Replace with a new air-source heat pump unit with electric or gas-fired furnace backup to handle ventilation and heating/ cooling loads.	1 heat pump	1			●
M-1b	HVAC System - Old, rusted	Room 015: Mechanical Room	HVAC System	**Option 2:** Replace with a new air-source heat pump unit with new ground-source heat pump.	1 heat pump	1			●
M-2	Supply and Return Air Grilles - Old, rusted	Basement (all grilles)	The supply and return air grilles are rusted and deteriorated. New supply and return air grilles should be installed with a new HVAC system.	Replace with new supply and return grilles	5 supply and return grilles	1	●		
M-3	Supply Grille - Rusted	Room 101: Central Hall	The supply air grilles are rusted and deteriorated. New supply air grilles should be installed with a new HVAC system.	Replace with new supply grille	1 supply grille	1	●		
M-4	Supply Grille - Shutter damper not operating	Room 202: Bedroom	The supply air grilles are rusted and deteriorated. New supply air grilles should be installed with a new HVAC system.	Replace with new supply grille	1 supply grille	1	●		
M-5	Supply Grille - Rusted	Room 303: Bedroom	The supply air grilles are rusted and deteriorated. New supply air grilles should be installed with a new HVAC system.	Replace with new supply grille	1 supply grille	1	●		
M-6	Exhaust Grille - Rusted	Room 304: Bathroom	The exhaust air grilles are rusted and deteriorated. New exhaust air grilles should be installed with a new HVAC system.	Replace with new exhaust grille	1 exhaust grille	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
M-7	Codes	Throughout Building	There are many deficiencies in the mechanical system with regard to code compliance.	Specific codes to be met are: • Maryland Mechanical Code (International Mechanical Code) • Maryland Energy Code (International Energy Conservation Code) Replacement of the furnace will help meet the ventilation requirements of the Mechanical Code. The new HVAC system will be installed according to requirements of the Energy Code.	N/A	1	●	●	●
D.4 - PLUMBING									
P-1	Water Heat: Old	Basement Mechanical Room	Water Heater	Replace with new hot water heater and install re-circulating system.	1	1	●		
P-2	Sanitary Waste System: Old, unknown condition	Throughout	Sanitary Waste	Perform video inspection of building sewer	-	1	●	●	●
P-3	Gutters and Downspouts: Old, rusted	Along roof	Storm Water Management	Repair and replace rusted components of the gutter/ downspout system	-	1	●		
P-4	Plumbing Fixtures: Old, inefficient	Throughout	Plumbing Fixtures	Inspect and test existing fixtures for functionality. Replace/repair fixtures as per owner's request	-	1	●		

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
P-5	Pipe Insulation: Old, worn or not there	Throughout	Pipe Insulation	Provide pipe insulation on all exposed domestic supply piping.	-	1	●	●	●
D.5 - ELECTRICAL									
E-1	Main Electrical Panelboard : Old, in poor condition, incapable of handling future loads, if any	Room 014: Corridor	Main Electrical Panelboard	Replace with new Panelboard, sized with spare capacity. In case the existing loads and the anticipated loads exceed the present utility service (200A), a "heavy-up" (increasing the utility service amperage) will be required.	1	1	●		
E-2	Sub-Electrical Panelboards	-	Sub Electrical Panelboards	Add (as required) new, correctly sized Sub Panelboard(s) based on new/ upgraded load(s), if any.	-	1	●	●	●
E-3	Light Fixtures: Old, energy inefficient, some not operating	Interior and Exterior of entire building	Light Fixtures	Replace with new, alternative energy efficient fixtures	-	1	●	●	●
E-4	Light Fixtures	Interior and Exterior of entire building	Light Fixtures	Add new, energy efficient fixtures to provide IES recommended light levels	-	1	●	●	●
E-5	Emergency Lighting		Interior of Entire Building	In the event that the building is converted for commercial use, open to public, and/or office use, exit fixtures and emergency lighting that provide the required lighting levels, will have to be added along all paths of egress.	-	1	●	●	●

Figure 2D-003 (continued): Work Recommendations Matrix

Item Number	Condition	Location (also refer to Condition Assessment Drawings for Exact Locations)	Description	Preservation Treatment Recommendation	Quantity	Priority 1 or 2	Main Block	Central South Addition	South Addition
E-6	Emergency Egress Lighting		At all egress doorways	In the event that the building is converted for commercial use, open to public, and/or office use, all fixtures located at egress doorways will have to be part of the emergency lighting system.	-	1	●	●	●
E-7	Convenience Receptacles: No Ground connection	All rooms in Original Structure	Convenience Receptacles	Replace with new, NEC compliant grounded receptacles	-	1	●	●	●
E-8	Convenience Receptacles: No Ground Fault Interruption	Room 104: Kitchen and Room 202A: Bathroom	Convenience Receptacles	Replace with new, NEC compliant GFI receptacle(s)	4	1		●	●
E-9	Convenience Receptacles: No Ground Fault Interruption Receptacle(s)	Room 203A: Restrooms and Room 304: Bathroom	Convenience Receptacles	Add new, NEC compliant GFI receptacle	2	1	●	●	
E-10	Convenience Receptacles: No Ground Fault Interruption	Exterior	Convenience Receptacles	Replace with new, NEC compliant weather proof, GFI receptacles	2	1	●	●	●
E-11	Fuse Box for AC Unit: Old, rusted, missing fuses	Exterior	Fuse Box for AC Unit	Replace with new, correctly sized NEC compliant weather proof Disconnect Switch	1	1			●
D.6 - FIRE PROTECTION									
FP-1	Fire Grenade: Potential Health Hazard	Storage Closets and Mechanical Rooms Room 007: Storage Room 302: Closet Room 305: Closet Room 306: Closet	Fire Grenade: Most of the existing fire grenades have been broken and are located in a box on the third floor. However the house shuld be inspected for any which may need to be disposed of properly.	Old fire grenades need to be inspected for hazardous contents. Fire grenades should be removed and returned to NPS/ NACE.	4+/-	1	●		
D.7 - SECURITY									
SEC-1	All first floor windows are unsecured	First Floor Windows	First Floor wood double-hung windows have no locking mechanisms leaving the security of the building compromised.	Install locking mechanisms on all first floor windows.	18	1	●	●	●

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Part 3: Treatment and Use



Harmony Hall

Fort Washington, Maryland

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A. PERIOD OF SIGNIFICANCE

In order to fully develop treatment and use options, it is important to establish the Period of Significance of Harmony Hall as that will serve to guide decisions regarding restoration, preservation and interpretation for recommended treatment and use options. As a conclusion to the developmental history presented in Part 2A, the Period of Significance for Harmony Hall has been established as Period II: Magruder/ Lyles Era - 1769-1849. The site takes on significance during Period I due to its associations with the development of the port town of Aires, its critical role in the development of the Broad Creek community and its contribution to the colonial success of agriculture in Prince George's County. However, given the research presented, it is not until 1769 that the manor house is assumed to be constructed thus making Period II the Period of Significance for: the importance of the construction of the manor house as a stylistic example of an 18th century Maryland Plantation House, its association with the Magruder/ Lyles family who built it, and its prominence as the center of a functioning tobacco plantation that contributed to the continued success of the surrounding Broad Creek community.

B. TREATMENT RECOMMENDATIONS

Outlined in the scope of work provided by the National Park Service for this Historic Structures Report of Harmony Hall, the design team was tasked with evaluating and presenting alternative treatments and uses for this historic plantation home. The recommendations place emphasis upon the preservation of the extant contributing features of the property per the established Period of Significance - Period II. In the consideration of various treatment recommendations, attention was paid to the preservation and restoration of elements to the Period of Significance, as defined above as Period II spanning from 1769-1849. Contributions made by Charles Wallace Collins during his ownership and occupancy of the structure are taken into account in so far as they contribute to the significant restoration of the structure to the Georgian Colonial plantation home. Each treatment option presented provides an alternate approach to the treatment of the non-contributing portions of the structure. The treatment options can be paired with one of the several use options described later in this section.

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B.1 Treatment #1: Restoration

General

- **Main Block Preservation/Restoration:** Preserve and restore Main Block to Period of Significance - Period II.

- **Remove Additions:** Remove Central South Addition and South Addition that post date Period II.

- **ADA Accessibility: Exterior Building Access:** Install reversible wood accessibility ramp at main entrance (east or west entry) to comply with code and accessibility requirements or provide lift and alternate entry through the south entry into the Dining Room (Door 104) Utilize adjacent structure, such as the existing barn to the south, to provide administrative offices, restroom and amenities to visitors.

Exterior

- **Main Block: East Façade Entry Porch:** Maintain and restore east façade entry porch with pediment as a significant feature from the Collins Era (1929-64) which is compatible to the Georgian Colonial architecture of the Period of Significance (Period 1: 1769-99). Collins' replacement porch is more compatible to this Georgian Colonial architectural style than the porch that existed when Charles Collins purchased the property from Richard Stein in 1929. This feature is considered to be a character defining feature from Period 4 (1929-40).

- **Main Block: West Façade Double Stair:** Maintain and restore west double stair leading to door 101B. This double stair is a reconstruction/ replacement of a stair by the National Park Service of a stair first constructed by Charles Collins in 1930. When Charles Collins purchased the property and plantation home, there was no existing stair at this location. What he constructed is compatible with the late Georgian Colonial architectural style and should be considered a character defining feature from Period 4 (1929-40).

- **Main Block: Oval "Birdseye" Window:** Maintain, restore and repaint existing oval "birdseye" window in east façade pediment. This window was replaced during Period VI when the National Park Service (NPS) leased the building to the Battersea Company, Ltd. It was documented in maintenance records that the National Park Service determined this design modification was compatible with the Georgian Colonial style of the plantation home and at that time NPS determined that it should remain. The prior window was a wood window with an orthogonal grid pattern of muntins that dates to Period III.

- **Main Block: North Basement Covered Entry:** Remove or replace existing north basement covered entry. This basement entrance is a source of continued water infiltration into the basement. Depending upon occupancy and egress requirements this entry could be removed entirely or repaired to provide a means of egress for the basement. If the north basement covered entry is to remain it should be made water tight to prevent further water infiltration into the basement. The entry was not in place during Period II.

- **Main Block: Missing Shutters:** Provide new shutters on east and west façades of the Main Block as they would have been features of Period II and existed in Period IV and V as well, but have since been removed.

- **Main Block: Door 204 Removal and Infill:** Remove existing door to Central South Addition at second floor and infill with brick to match adjacent historic and a double hung wood window.

- **Main Block: Door 013B Removal and Infill:** Remove existing door to Rec Room at basement level and infill with brick to match adjacent historic. Infill excavated area to be flush with grade after providing waterproofing.

- **Main Block: Restore Basement Windows:** Remove existing window infill at windows 013, 014 and 004 and provide new wood awning windows to match Window Type 1.

- **Main Block: Brick Restoration:** Repair and restore brick where South Additions have been removed

- **Main Block: Windows in Room 102 - Living Room:** Open up masonry on north elevation to accommodate return of windows flanking fireplace on first floor and install new 9/6 double hung windows.

- **Main Block: Windows in Room 202 & 203 - Bedrooms:** Open up masonry on north south elevations at the second floor to accommodate return of double hung wood windows flanking fireplaces.

Interior

- **Interior Walls:** Repaint all interior walls with a paint color appropriate to the Period II, guided by the paint analysis report.

- **Remove Basement Restroom:** Remove plumbing fixtures and enclosure at Room 011-Restroom.

- **Remove Basement Paneling:** Remove all existing basement paneling in Rec Room 013 as it was installed in Period IV. Provide a plaster finish on these walls appropriate to Period II.

- **Remove Second Floor Bathrooms & Closets:** Repair and/or replace wood flooring, plaster walls and plaster ceiling in locations of removed bathrooms and closets on second floor of Main Block (Bathroom 202A, Closet 202B, Bathroom 203A and Closet 203B) as they were installed in Period IV.

B.2 Treatment #2: Rehabilitation

General

- **Main Block Preservation/Restoration:** Preserve and restore Main Block to Period of Significance - Period II.
- **Addition Removals:** Remove South Addition only. Central South Addition to remain.
- **Central South Addition Rehabilitation:** Maintain and utilize Central South Addition to provide accessibility and amenities to visitors (restroom, etc.)
- **ADA Accessibility: Exterior Building Access:** Install reversible wood accessibility ramp at main entrance (east or west entry) to comply with code and accessibility requirements or provide lift or reversible wood accessibility ramp for alternate entry through the Central South Addition.
- **ADA Accessibility: Interior:** Install lift within Central South Addition to provide accessible entry to first floor of Main Block of house.
- **ADA Accessibility: Restroom:** Install ADA accessible restroom within Central South Addition to serve visitors and staff.
- **Adjacent Structures:** Utilize adjacent structure, such as the existing barn to the south, to provide administrative offices.

Exterior

- **Main Block: East Façade Entry Porch:** Maintain and restore east façade entry porch with pediment as a significant feature from the Collins Era (1929-64) which is compatible to the Georgian Colonial architecture of the Period of Significance (Period 1: 1769-99). Collins' replacement porch is more compatible to this Georgian Colonial architectural style than the porch that existed when Charles Collins purchased the property from Richard Stein in 1929. This feature is considered to be a character defining feature from Period 4 (1929-40).
- **Main Block: West Façade Double Stair:** Maintain and restore west double stair leading to Door 101B. This double stair is a reconstruction/ replacement of a stair by the National Park Service of a stair first constructed by Charles Collins c.1929. When Charles Collins purchased the property and plantation home, there was no existing stair at this location. What he constructed is compatible with the late Georgian Colonial architectural style and should be considered a character defining feature from Period 4 (1929-40).
- **Main Block: Oval "Birdseye" Window:** Maintain, restore and repaint existing oval "birdseye" window in east façade pediment. This window was replaced during the period that the National Park Service (NPS) leased the building to the Battersea Company, Ltd. It was documented in maintenance records that the National Park Service determined this design modification was compatible with the Georgian Colonial style of the plantation home and at that time NPS determined that it should remain. The prior window was a wood window with an orthogonal grid pattern of muntins.

- **Main Block: North Basement Covered Entry:** Remove or replace existing north basement covered entry. This basement entrance is a source of continued water infiltration into the basement. Depending upon occupancy and egress requirements this entry could be removed entirely or repaired to provide a means of egress for the basement. If the north basement covered entry is to remain it should be made water tight to prevent further water infiltration into the basement.

- **Main Block: Missing Shutters:** Provide new wood louvered shutters on east and west façades of the Main Block to match what was depicted in the Period IV photographs as they would have existed in Period II, and the Period IV shutters are typical of the colonial era.

- **Main Block: Restore Basement Windows:** Remove existing window infill at windows 013, 014 and 004 and provide new wood awning windows to match Window Type 1.

- **Main Block: Windows in Room 102-Living Room:** Open up masonry on north elevation to accommodate return of windows flanking fireplace on first floor and install new 9/6 double hung windows.

- **Main Block: Windows in Room 203-Bedroom:** Open up masonry on north south elevations at the second floor to accommodate return of double hung wood windows flanking fireplaces.

- **Central South Addition: Missing Basement Windows:** Replace the missing windows in the masonry opening currently infilled with plywood at window locations 007, 008, 009, and 010 to match the basement windows of the Main Block.

- **Central South Addition:** Masonry Infill: Provide masonry infill, windows and doors at first and second floor of Central South Addition where South Addition has been removed.

Interior

- **Interior Walls:** Repaint all interior walls with a paint color appropriate to the Period II, guided by the paint analysis report.

- **Remove Basement Restroom:** Remove plumbing fixtures and enclosure at Room 011-Restroom.

- **Remove Basement Paneling:** Remove all existing basement paneling in Rec Room 013 as it was installed in Period IV. Provide a plaster finish on these walls appropriate to Period II.

- **Remove Second Floor Bathrooms & Closets:** Repair and/or replace wood flooring, plaster walls and plaster ceiling in locations of removed bathrooms and closets on second floor of Main Block (Bathroom 202A, Closet 202B, Bathroom 203A and Closet 203B) as they were installed in Period IV.

B.3 Treatment #3: Rehabilitation

General

- **Main Block Preservation/Restoration:** Preserve and restore Main Block to Period of Significance - Period II.

- **South and Central South Addition Remain:** Maintain and utilized both South Addition and Central South Addition to provide accessibility and amenities to visitors (restroom, etc.) and to provide administrative offices for NPS staff.

- **ADA Accessibility: Exterior Building Access:** Install reversible wood accessibility ramp at main entrance (east or west entry) to comply with code and accessibility requirements or provide lift or reversible wood accessibility ramp for alternate entry through the Central South Addition.

- **ADA Accessibility: Interior:** Install accessible elevator within South Addition to provide accessible entry to first and second floors of Main Block of house

- **ADA Accessibility: Restroom:** Install ADA accessible restroom within Central South Addition to serve visitors and staff.

Exterior

- **Main Block: East Façade Entry Porch:** Maintain and restore east façade entry porch with pediment as a significant feature from the Collins Era (1929-64) which is compatible to the Georgian Colonial architecture of the Period of Significance (Period 1: 1769-99). Collins' replacement porch is more compatible to this Georgian Colonial architectural style than the porch that existed when Charles Collins purchased the property from Richard Stein in 1929. This feature is considered to be a character defining feature from Period 4 (1929-40).

- **Main Block: West Façade Double Stair:** Maintain and restore west double stair leading to door 101B. This double stair is a reconstruction/ replacement of a stair by the National Park Service of a stair first constructed by Charles Collins in 1930. When Charles Collins purchased the property and plantation home, there was no existing stair at this location. What he constructed is compatible with the late Georgian Colonial architectural style and should be considered a character defining feature from Period 4 (1929-40).

- **Main Block: Oval "Birdseye" Window:** Maintain, restore and repaint existing oval "birdseye" window in east façade pediment. This window was replaced during the period that the National Park Service (NPS) leased the building to the Battersea Company, Ltd. It was documented in maintenance records that the National Park Service determined this design modification was compatible with the Georgian Colonial style of the plantation home and at that time NPS determined that it should remain. The prior window was a wood window with an orthogonal grid pattern of muntins.

- **Main Block: North Basement Covered Entry:** Remove or replace existing north basement covered entry. This basement entrance is a source of continued water infiltration into the basement. Depending upon occupancy and egress requirements this entry could be removed entirely or repaired to provide a means of egress for the basement. If the north basement covered entry is to remain it should be made

water tight to prevent further water infiltration into the basement.

- **Main Block: Missing Shutters:** Provide new wood louvered shutters on east and west façades of the Main Block to match what was depicted in the Period IV photographs as they would have existed in Period II, and the Period IV shutters are typical of the colonial era.

- **Main Block: Restore Basement Windows:** Remove existing window infill at windows 013, 014 and 004 and provide new wood awning windows to match Window Type 1.

- **Main Block: Windows in Room 102 - Living Room:** Open up masonry on north elevation to accommodate return of windows flanking fireplace on first floor and install new 9/6 double hung windows.

- **Main Block: Windows in Room 203 - Bedroom:** Open up masonry on north south elevations at the second floor to accommodate return of double hung wood windows flanking fireplaces.

- **Central South Addition: Missing Basement Windows:** Replace the missing windows in the masonry opening currently infilled with plywood at window locations 007, 008, 009, and 010 to match the basement windows of the Main Block.

Interior

- **Interior Walls:** Repaint all interior walls with a paint color appropriate to the Period II, guided by the paint analysis report.

- **Remove Basement Restroom:** Remove plumbing fixtures and enclosure at Room 011-Restroom.

- **Remove Basement Paneling:** Remove all existing basement paneling in Rec Room 013 as it was installed in Period IV. Provide a plaster finish on these walls appropriate to Period II.

- **Remove Second Floor Bathrooms & Closets:** Repair and/or replace wood flooring, plaster walls and plaster ceiling in locations of removed bathrooms and closets on second floor of Main Block (Bathroom 202A, Closet 202B, Bathroom 203A and Closet 203B) as they were installed in Period IV.

B.4 Treatment #4: Preservation/ "Mothballing"

General

- **Mothballing:** Overall treatment of the structure would be to "mothball" and secure the building to prevent further deterioration or decay while the NPS determined the ultimate use of the house and property in the future. Preserve, stabilize and protect the Main Block, Central South Addition and South Addition and improve security.

- **Work Recommendations and Baseline Treatments:** Work Recommendations and Baseline Treatments would not be applicable for the mothballing with the exception of the installation of temporary fire alarm and security systems so that the structure can be monitored for risk of fire and break-in.

Exterior

- **Windows:** Clean, repair, repaint and seal all windows (including window sills and frames) at Main Block, Central South and South Addition. To prevent and deter future break-ins, secure the window sashes along the basement and first floors by screwing the wood window sashes together. This would include a total of twelve windows along the basement and first floor levels.

- **Temperature/Humidity Control:** Provide temporary heating/cooling system to mitigate extreme temperatures and building up of humidity. This system will also help reduce the risk of mold and reduce deterioration of interior plaster and finishes.

- **Main Block: Exterior Doors:** Provide secure locking mechanisms on all exterior doors including doors 101A, 101B, and 109. Cover over Door 101B exterior door frame with plywood enclosure to prevent further deterioration of wood.

- **South Addition: Exterior Doors:** Provide secure locking mechanisms on all exterior doors including doors 106A, 106B, 106C, 106D, and 106E.

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C. USE OPTIONS

The design team, after thorough discussion and review of possible Use Options for Harmony Hall, has concluded upon four (4) possible uses for the structure. As was mentioned previously, a set of Baseline Work Recommendations were established in Part 2D - Work Recommendations of this report that will be required, regardless of the Treatment and Use Options selected, to establish a stable, dry, and code compliant structure. The treatment options previously described in Part 3, Section 3B - Treatment Recommendations indicate specifically what items would need to be removed, restored, or reconstructed based on which preservation approach is selected based on the Secretary of the Interior's Standards. Recommendations have been made about which Treatment approach is appropriate for the four Use Options described. Treatment #4, "Mothballing" is a separate treatment approach which would not address the Baseline Work Recommendations, but instead serve as an immediate and short term solution to help prevent further deterioration to the structure during which time a Preferred Treatment and Use Option can be determined by the National Park Service.

All use options require some level of interpretation for which an exhibit story plan and installation design must be developed. The development of these items is not part of the scope of this Historic Structure Report.

Administrative offices, exhibit space, exhibit support space and visitor orientation are only generally represented in the diagrams that accompany each use option. The diagrams focus on general space use, egress, circulation and accessibility. Further programming will have to occur prior to advancing the design of how the space within the historic plantation house and adjacent outbuilding are to be used in more detail.

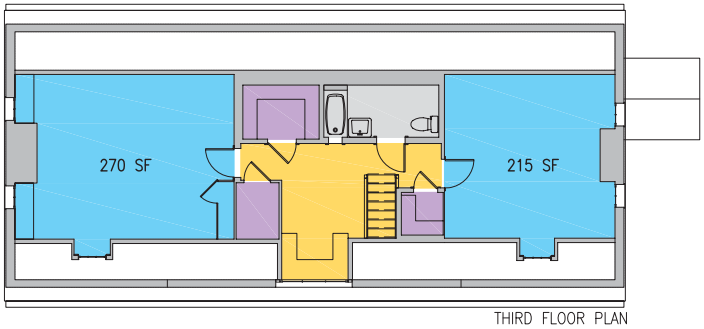
These use options do not address layout of furniture and furnishings that might have been located in the various rooms during the Period of Significance (Period II: 1769-1849). That exercise would need to be addressed as part of an interpretive exhibits exploration.

C.1 USE OPTION A – 18TH CENTURY HOUSE MUSEUM

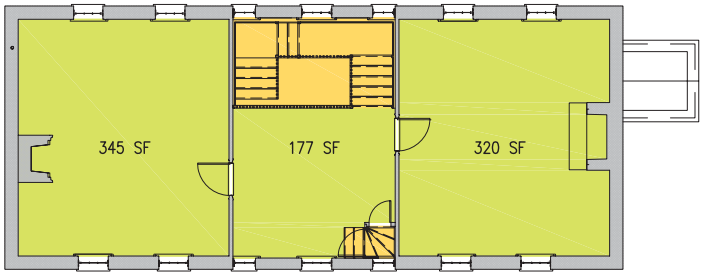
For Use Option A, Harmony Hall would function as an Interpretive House Museum to present an 18th Century Colonial Plantation House and the representative role it played within the historic tobacco port town if Aire or Broad Creek during Period II - The Magruder/ Lyles Era (1769-1849). The House Museum would be located primarily on the first and second floors where the most historic fabric is intact. The basement spaces would be used for storage and building systems support space. The attic rooms would be used for administrative offices.

Accessibility for this use would be addressed by providing a reversible stair/lift at the a first floor door opening on the south elevation. Visitors would enter the house through the formal east entrance. No lift to the second floor is provided so the second floor would have limited access by visitors.

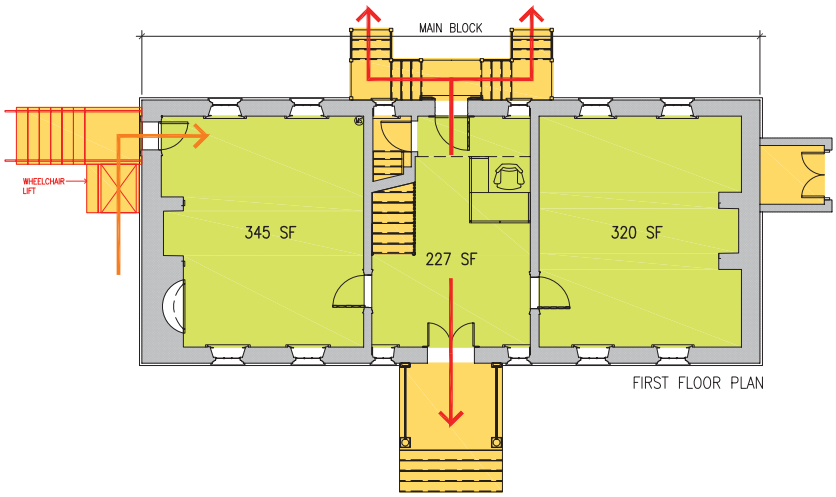
This use option corresponds to the implementation of the Treatment #1: Restoration.



THIRD FLOOR PLAN



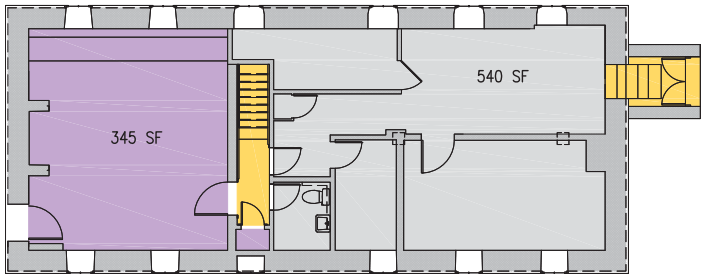
SECOND FLOOR PLAN



FIRST FLOOR PLAN

LEGEND

- POINTS OF EGRESS
- CIRCULATION
- ADA ENTRANCE
- 1,734 SF — HISTORIC HOUSE MUSEUM
- 485 SF — ADMINISTRATIVE OFFICES
- VISITOR ORIENTATION/ EDUCATION
- MEETING AND EVENT SPACE
- 586 SF — BUILDING SERVICE
- 404 SF — STORAGE/ NOT ACCESSIBLE TO PUBLIC
- CIRCULATION



BASEMENT FLOOR PLAN

16 0 16
SCALE OF FEET

USE OPTION A
18th CENTURY HOUSE MUSEUM

N

C.2 USE OPTION B – HOUSE MUSEUM WITH MINIMAL SUPPORT SPACE

Use Option B would focus on the creation of an Interpretive House Museum to serve as the backdrop to tell the layered history and evolution of the Broad Creek community and associated Broad Creek Historical District. This use would allow for the interpretive exhibits and multi-layered history of the house and landscape to be told from the Colonial period up through and beyond the occupancy of Charles Wallace Collins in the 20th century. The complex history of the structure includes many layers and overlapping stories that provide opportunity to interpret multiple time periods and the influences of the varied property owners.

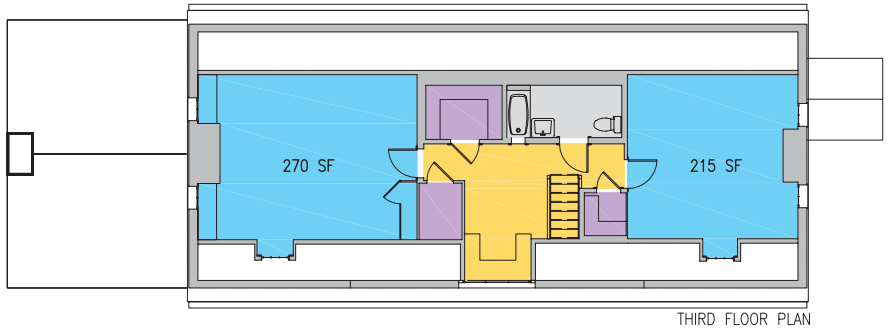
This broader historical narrative would include the time of Indian presence and use of the land for hunting and the arrival of European settlers in the 17th century in this area of Maryland and the surrounding colonies. The story would include the role of the historic plantation house, in particular Harmony Hall, and the surrounding property in the cultivation and trade of tobacco and the thriving port town of Aire. In some historical documents, wills and deeds, the structures of the port town of Aire were explicitly stated to convey with the property containing Harmony Hall. The land grant of Battersea survives today with this unique historical planation home and any existing archeological remains of the port town intact.

The story of the community of Broad Creek would also be developed in light of the development of the Church of England and the establishment of St. John's Church within the Piscataway Parish. It would also share the story of race relations throughout this area between the Native American Indians and the European white settlers and later the African slaves that were so vital to the success and profitability of the tobacco trade.

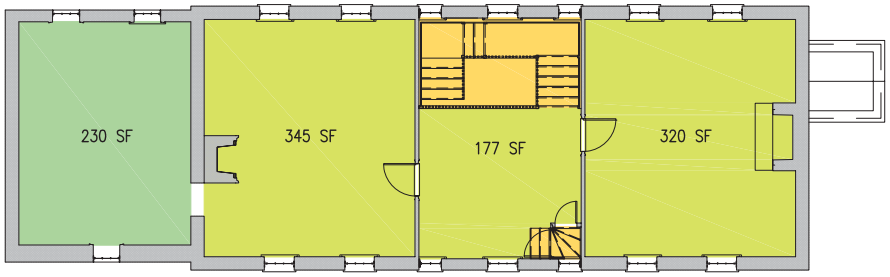
The first and second floors of the Main Block would be used as the primary area for visitor exhibits. The first and second floors of the Central South Addition would be used for visitor orientation and education. The basement would be used for building systems support and storage. The attic would be used for administrative offices.

To address accessibility, a ramp would be provided at the south elevation of the Central South Addition and a lift would be accommodated within this structure to give visitors full access to the first and second floors.

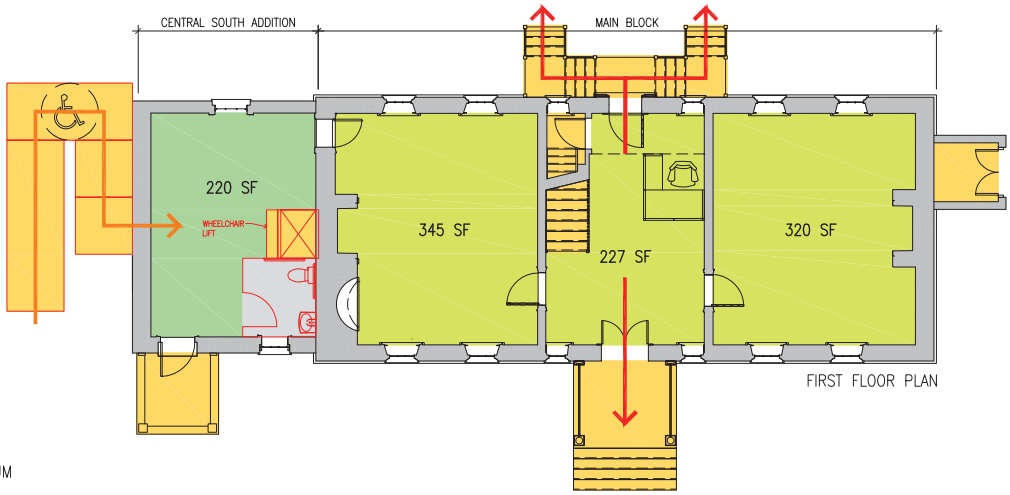
This use option corresponds to the implementation of the Treatment #2: Rehabilitation.



THIRD FLOOR PLAN



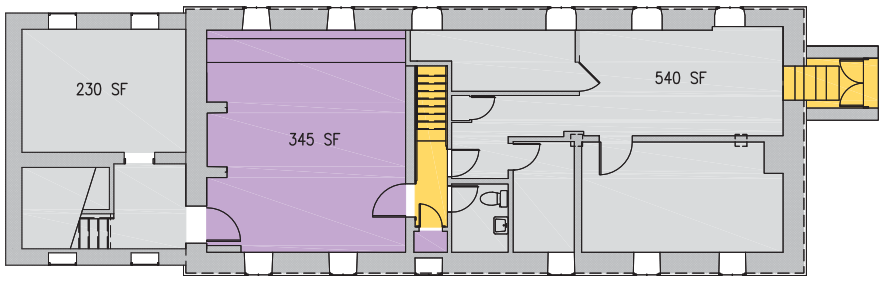
SECOND FLOOR PLAN



FIRST FLOOR PLAN

LEGEND

- POINTS OF EGRESS
- CIRCULATION
- ADA ENTRANCE
- 1,734 SF — HISTORIC HOUSE MUSEUM
- 485 SF — ADMINISTRATIVE OFFICES
- 450 SF — VISITOR ORIENTATION/ EDUCATION
- MEETING AND EVENT SPACE
- 826 SF — BUILDING SERVICE
- 404 SF — STORAGE/ NOT ACCESSIBLE TO PUBLIC
- CIRCULATION



BASEMENT FLOOR PLAN

16 0 16
SCALE OF FEET

USE OPTION B

HOUSE MUSEUM WITH MINIMUM SUPPORT SPACE

N

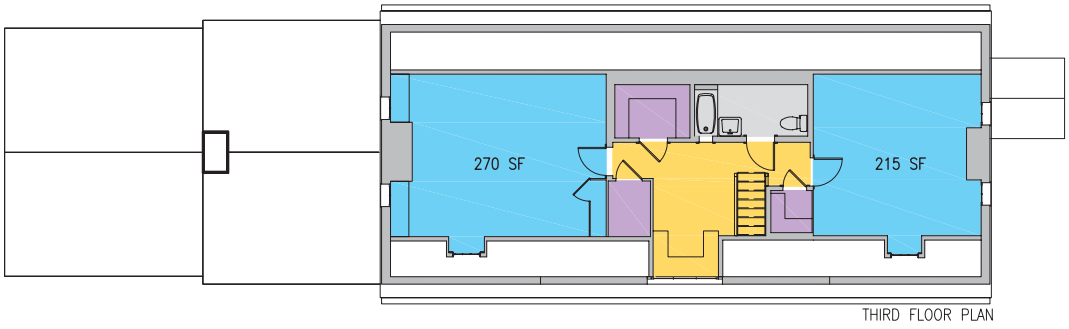
C.3 USE OPTION C-1 – HOUSE MUSEUM WITH MAXIMUM SUPPORT SPACE

Similar to Option B, Use Option C-1 would provide a House Museum that provides an interpretive experience that covers the range of history about the site, the structure and the community.

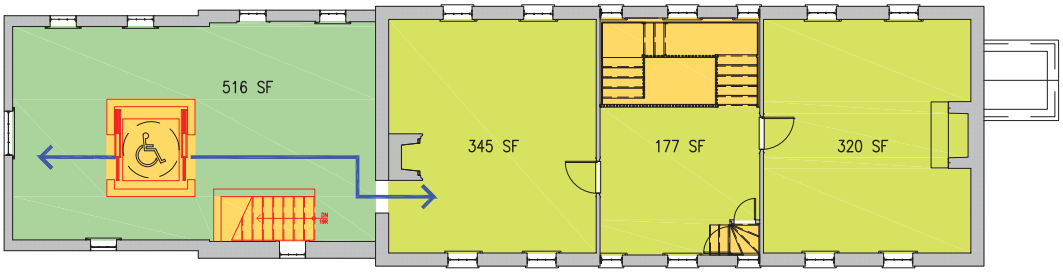
The historic plantation home would be preserved and portions restored to Period II - Period of Significance while introducing modern systems and components to make the structure a viable option for use as a Interpretive House Museum as outlined in Option B. This option would maintain the two south additions while also providing NPS with additional administrative office space and meeting space to accommodate the needs of a new museum exhibit.

All uses would be similar to Option B, however more flexibility is provided by keeping both south additions to better accommodate accessibility requirements and visitor experience needs.

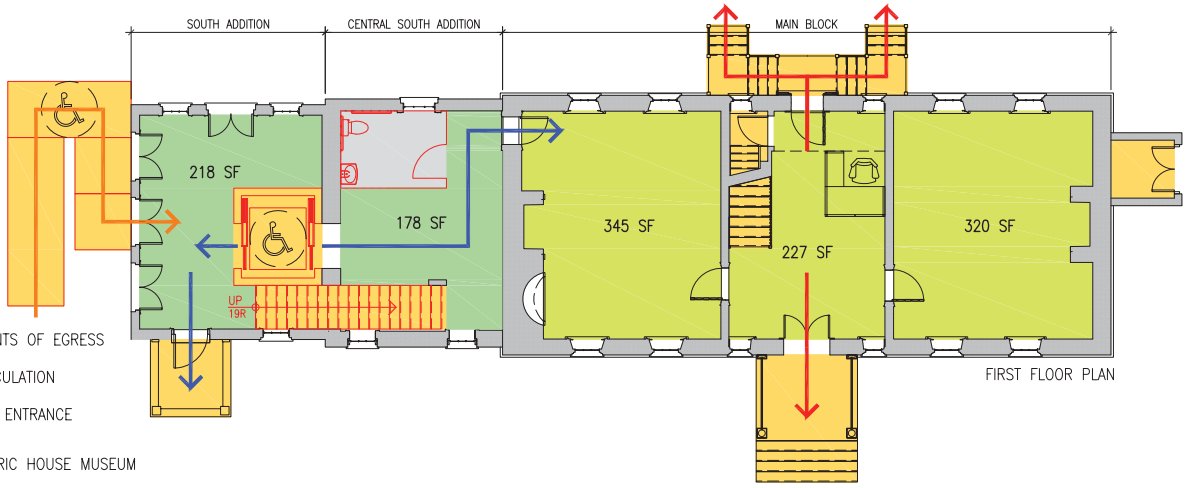
This use option corresponds to the implementation of the Treatment #3: Rehabilitation.



THIRD FLOOR PLAN



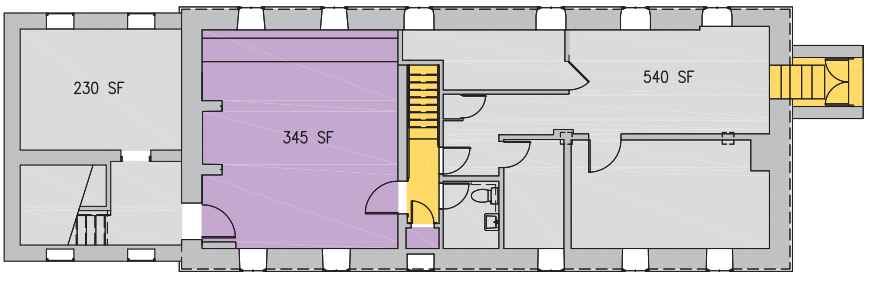
SECOND FLOOR PLAN



FIRST FLOOR PLAN

LEGEND

- POINTS OF EGRESS
- CIRCULATION
- ADA ENTRANCE
- 1,734 SF HISTORIC HOUSE MUSEUM
- 485 SF ADMINISTRATIVE OFFICES
- 912 SF VISITOR ORIENTATION/ EDUCATION
- MEETING AND EVENT SPACE
- 826 SF BUILDING SERVICE
- 404 SF STORAGE/ NOT ACCESSIBLE TO PUBLIC
- CIRCULATION



BASEMENT FLOOR PLAN

16 0 16
SCALE OF FEET

USE OPTION C1

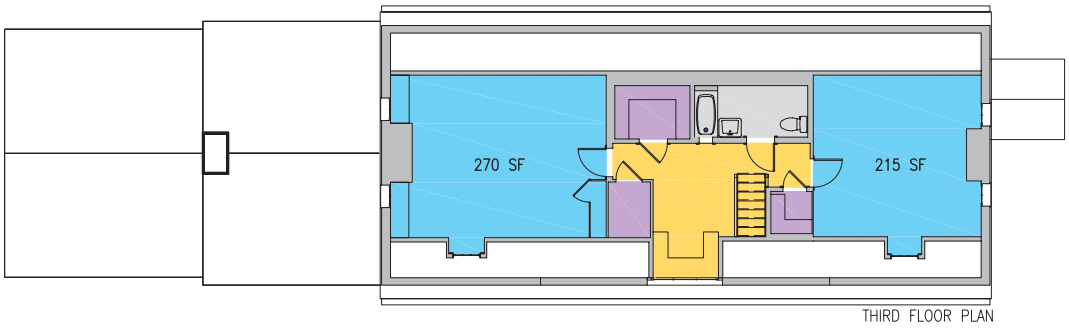
HOUSE MUSEUM WITH MAXIMUM SUPPORT SPACE

N

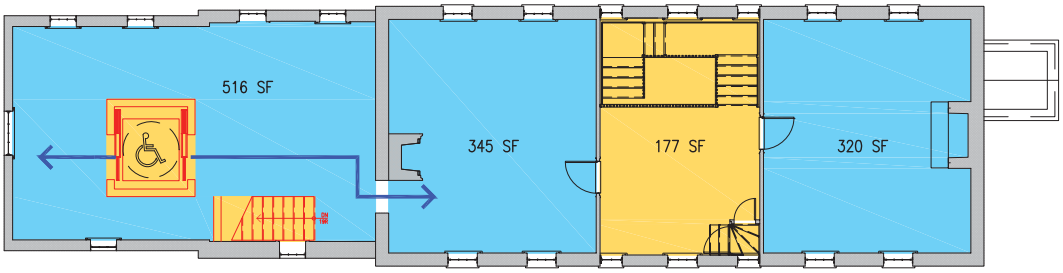
C.4 USE OPTION C-2 – ALL OFFICE USE

For Option C-2, the historic plantation home would be preserved and portions restored to the Period II - Period of Significance while introducing modern building systems and components to make the structure a viable option for use as administrative offices for the National Park Service Staff. The extra space gained by maintaining the south additions could be utilized for office support space such as a kitchen/ break room and a meeting/ conference room space.

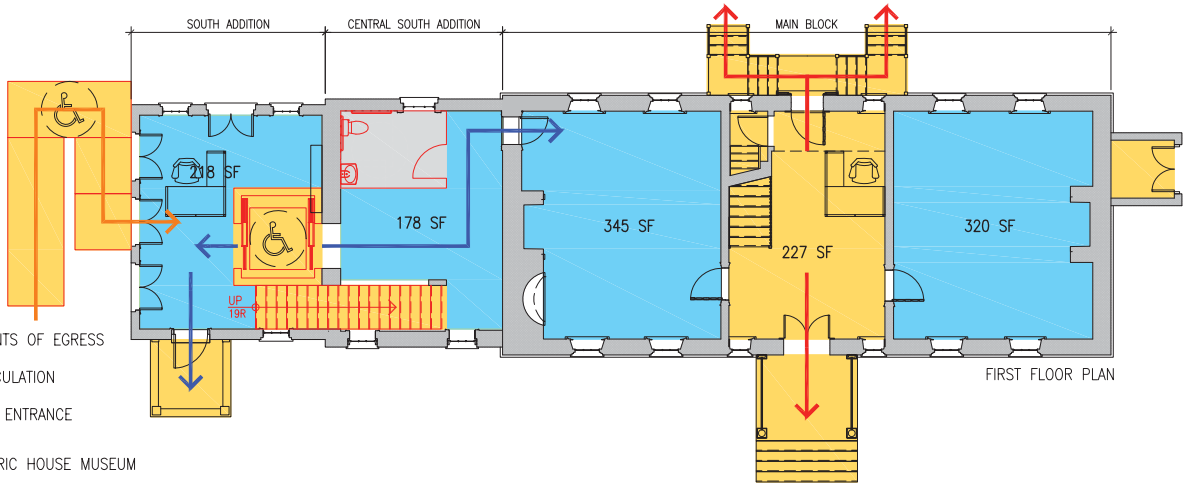
This use option corresponds to the implementation of the Treatment #3: Rehabilitation.



THIRD FLOOR PLAN



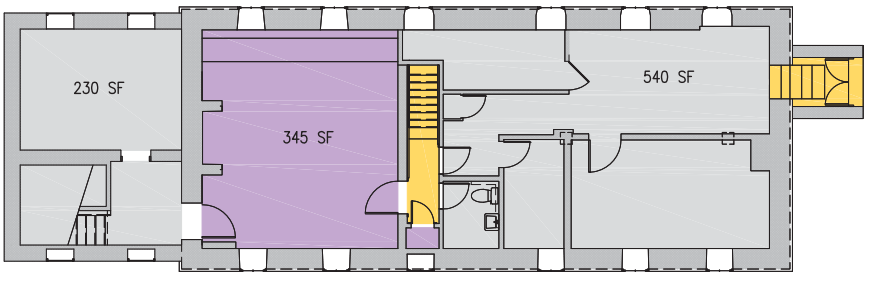
SECOND FLOOR PLAN



FIRST FLOOR PLAN

LEGEND

- POINTS OF EGRESS
- CIRCULATION
- ADA ENTRANCE
- HISTORIC HOUSE MUSEUM
- 2,727 SF — ADMINISTRATIVE OFFICES
- VISITOR ORIENTATION/ EDUCATION
- MEETING AND EVENT SPACE
- 826 SF — BUILDING SERVICE
- 404 SF — STORAGE/ NOT ACCESSIBLE TO PUBLIC
- 404 SF — CIRCULATION



BASEMENT FLOOR PLAN

16 0 16
SCALE OF FEET

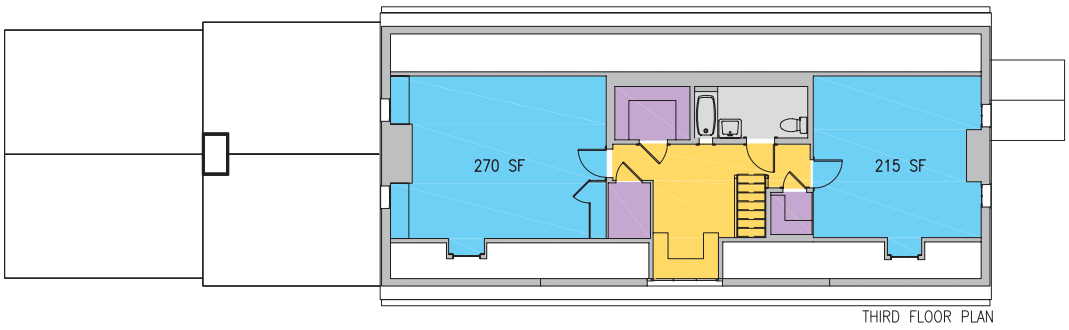
USE OPTION C2
ALL OFFICE USE

N

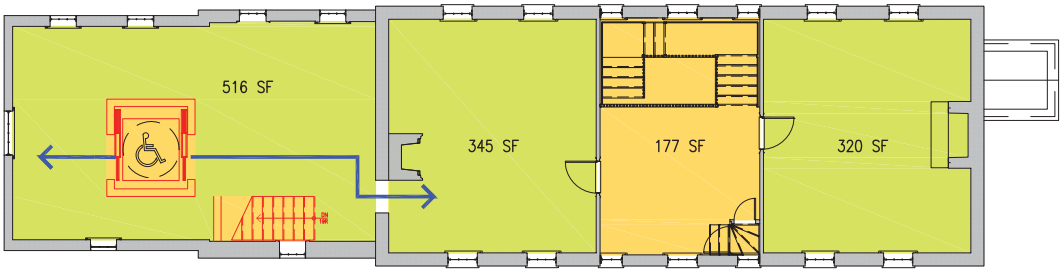
C.5 USE OPTION C-3 – CONFERENCE/EVENTS

Option C-3 offers the use of the Main Block first and second floors as a conference center and events space. The historic rooms would be restored to Period II appearance and provided with modern amenities. The rooms could serve as a backdrop for meetings, weddings and/or parties. The south additions could also provide addition meeting rooms and the attic would administrative offices to support the facility.

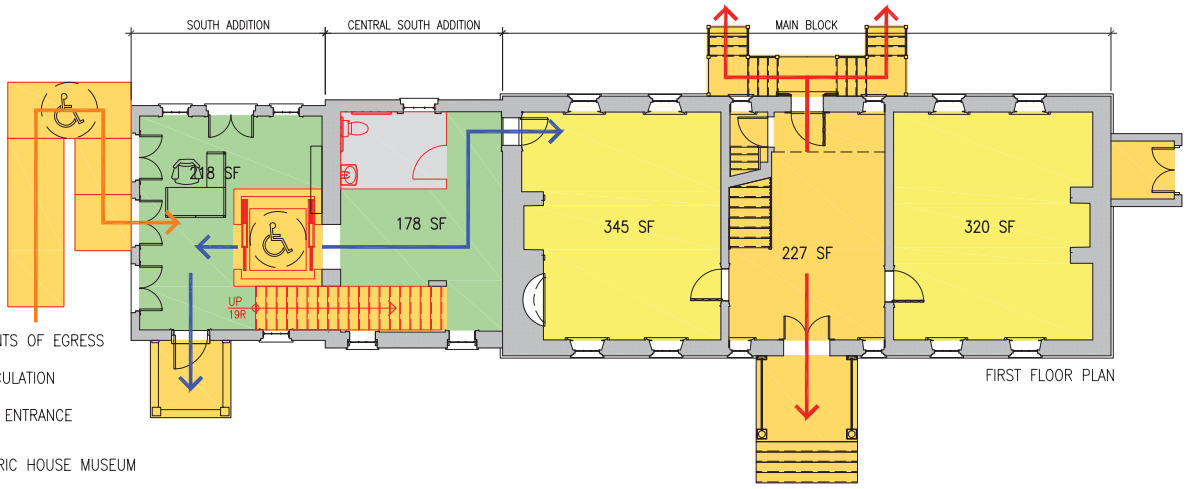
This use option corresponds with Treatment #3: Rehabilitation.



THIRD FLOOR PLAN



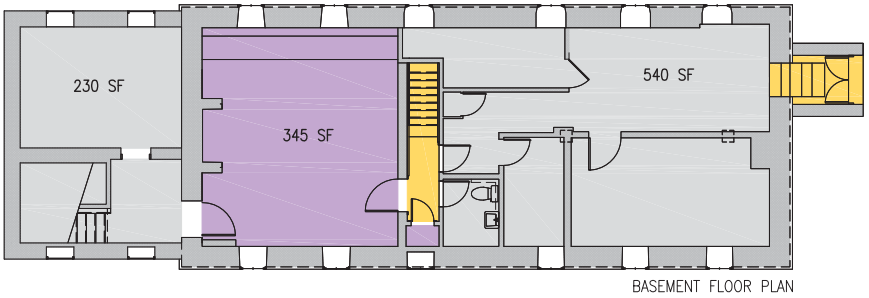
SECOND FLOOR PLAN



FIRST FLOOR PLAN

LEGEND

- POINTS OF EGRESS
- CIRCULATION
- ADA ENTRANCE
- 842 SF HISTORIC HOUSE MUSEUM
- 485 SF ADMINISTRATIVE OFFICES
- 912 SF VISITOR ORIENTATION/ EDUCATION
- 892 SF MEETING AND EVENT SPACE
- 826 SF BUILDING SERVICE
- 404 SF STORAGE/ NOT ACCESSIBLE TO PUBLIC
- CIRCULATION



BASEMENT FLOOR PLAN

16 0 16
SCALE OF FEET

USE OPTION C3

HOUSE MUSEUM / CONFERENCE CENTER / EVENTS

N

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D. CLASS “C” COST ESTIMATE

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

BASIS OF ESTIMATE

PROJECT INFORMATION

Project:	Harmony Hall - Historic Structure Report
Park:	National Capital Parks - East (NACE)
Park Alpha:	-
PMIS Number:	136710
Estimate Date:	9/7/2012
Prepared By:	Russell McElreath
Company:	US Cost, Inc.
Address:	201 12th Street; Suite 502
City, State Zip:	Arlington, VA
Phone:	214-540-2809

BACKGROUND SUPPORTING MATERIAL (Scope of Work):

US Cost was tasked to prepare a Class C Cost estimate utilizing the Historic Structure Report dated August 6 2012, as a guide, which was prepared by the A/E, BBB for the National Park Service on Harmony Hall at Fort Washington, Maryland. The estimate is broken into 5 different treatment recommendations outlined in **Part 2D: Work Recommendations** and **Part 3: Treatment and Use** of the Historic Structure Report.

SOURCE OF COST DATA:

Estimate utilizes published database and US Cost historical data pricing.

ESTIMATE ASSUMPTIONS:

This cost estimate has been priced for construction by a General Contractor utilizing subcontractors.
It is anticipated that this work will be performed in 8 hour shifts during the day, Monday through Friday for the duration of the project; therefore a labor premium has not been included.

MAJOR CHANGES FROM PREVIOUS ESTIMATE:

N/A

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

BASIS OF ESTIMATE

PROJECT INFORMATION

Project: Harmony Hall - Historic Structure Report

Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710
Estimate Date: 9/7/2012

DESCRIPTION OF MARK-UP & ADD-ONS:

Location Factor:	0.00%	Estimate utilizes local wage and material pricing no adjustment factors have been incl.
Remoteness Factor:	0.00%	Site is only 18 miles from published commercial center (Washington DC) tno adjustment factors have been incl.
Wage Rate Factor:	0.00%	Local published wage rates are included in the individual cost items no adjustment factors have been incl.
State & Local Taxes:	6.00%	Local sales tax have been included
Design Contingency:	20.00%	Documents used in preparation of this cost estimate were preliminary
Standard. General Conditions:	10.00%	Estimate assumes a general contractor will oversee the bulk of the work that will be preformed by subcontractors
Government General Conditions:	10.00%	Per NPS
Historic Preservation Factor:	10.00%	Per NPS
Contractor Overhead:	10.00%	General contractors offsite (Home) office support. (Per NPS)
Contractor Profit:	10.00%	Based on complexity and current market conditions
Bonds and Permits:	2.00%	Based on project complexity
Contracting Method Adjustment (8a):	20.00%	Based on construction contract awarded to 8A Contractor.
Annual Inflation Escalation Factor:	0.00%	Estimate is priced at current market value, therefore no escalation is included
Time Until Project Midpoint (Months)	0	Number of months from estimate (or data) date until the projects midpoint of construction.

OTHER COMMENTS:

N/A

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

PROJECT COST SUMMARY

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: _____
Date: _____

Executive Summary

Item No.	Description - Total Estimated Net Const. Cost	Quantity	Unit	Cost/Unit	Total	
	Baseline Work Recommendations - Main Block, Central South Addition, South Addition	1	LS		$3,537,155	
1	Treatment Option #1 Restoration, with Baseline Work Recommendations Cost	1	LS		$2,891,104	*
2	Treatment Option #2 Rehabilitation, with Baseline Work Recommendations Cost	1	LS		$3,389,933	*
3	Treatment Option #3 Rehabilitation, with Baseline Work Recommendations Cost	1	LS		$3,913,930	*
4	Treatment Option #4 "Mothballing", with Baseline Work Recommendations Cost	1	LS		$666,109	

* The costs established within the Baseline Work Recommendations for each portion of the building have been included within the Treatment Option costs as applicable, except for Treatment #4 - Mothballing. See Part 3: Treatment and Use Options of this report for a more detailed breakdown of the Class “C” Cost Estimate.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Estimate Summary

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: Reviewer
Date: Review Date

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Baseline Work Recommendation: Main Block	3,780	SF	$280	$1,057,805
2	Baseline Work Recommendation: Central South Addition	805	SF	$254	$204,164
3	Baseline Work Recommendation: South Addition	596	SF	$357	$213,055
	Subtotal Direct Construction Costs				**$1,475,024**
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnote)*				**$0**
	Direct Cost Subtotal without GFP				**$1,475,024**
	Published Location Factor	0.00%			$0
	Remoteness Factor	0.00%			$0
	Federal Wage Rate Factor	0.00%			$0
	State & Local Taxes	6.00%			$88,501
	Design Contingency	20.00%			$295,005
	Total Direct Construction Costs				**$1,858,530**
	Standard General Conditions	10.00%			$185,853
	Government General Conditions	10.00%			$185,853
	Historic Preservation Factor	10.00%			$185,853
	Subtotal NET Construction Cost				**$2,416,089**
	Overhead	10.00%			$241,609
	Profit	10.00%			$241,609
	Estimated NET Construction Cost				**$2,899,307**
	Bonds & Permits	2.00%			**$57,986**
	Contracting Method Adjustment	20.00%			$579,861
	Inflation Escalation	0	Months	0.00%	$0
	Total Estimated NET Cost of Construction				**$3,537,155**

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10		SUPERSTRUCTURE					
	B101002	Remove and replace wood framing due to deterioration	3780	SF	$ 22.93	$86,672	
	B101003	Replace/Repair Inadequate Structural Framing	1	LS	$ 29,963.00	$29,963	
	B101004	Repair Water Damage at interior Ceilings/Walls	100	SF	$ 48.84	$4,884	
	B101005	Repair Cracks at Interior Walls	100	SF	$ 71.41	$7,141	
	B101006	Repair Missing or Inadequate Lintel	20	Ea	$ 1,662.30	$33,246	
	B101007	Repair Rusting of Window Shutter Holders Embedded in the Masonry	4	Ea	$ 919.17	$3,677	
	B101008	Remove and replace brick on thick sand bed, 1" thick sand bed at hearth	108	SF	$ 11.56	$1,248	
	B101009	Rebuild Displaced Chimney	1	Ea	$ 16,595.00	$16,595	
		SUBTOTAL SUPESTRUCTURE	**3780**	**SF**	**$ 48.53**	**$183,426**	

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20		EXTERIOR CLOSURE					
	B201001	Scaffolding	3750	SF	$ 2.12	$7,950	
	B201002	Pressure Wash Exterior (A9)	3751	SF	$ 0.15	$563	
	B201003	Remove Bio Growth on Masonry (A1)	30	SF	$ 2.15	$65	
	B201004	Recaulk Wood Trim @ Masonry	44	LF	$ 8.06	$355	
	B201005	New Chimney Cap (A11)	2	Ea	$ 777.18	$1,554	
	B201006	Repair Dislocated Brick (A5)	90	SF	$ 18.00	$1,620	
	B201007	Ferrous Metal Anchors	12	Ea	$ 8.23	$99	
	B201008	Incompatable Patch (A8)	165	SF	$ 46.07	$7,602	
	B201009	Insect Infestation - Remove and provide treatment to prevent further insect infestation (Main Block, Central South Addition and South Addition)	1	LS	$ 13,525.79	$13,526	
	B201010	Repair Open Joints in Brick	32	SF	$ 13.56	$434	
	B201011	Patch Hole @ Missing Brick	3	Ea	$ 129.46	$388	
	B201012	Refinish Ext Wood Trim	360	SF	$ 29.99	$10,796	
	B201013	Refinish Ext. Stairs/Railings	2	Ea	$ 523.89	$1,048	
	B201014	Remove Vegetation	1	LS	$ 408.85	$409	
	B201015	Remove Plastic Embeds	4	Ea	$ 6.84	$27	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

	B201016	Replace Spalled Brick	10	SF	$ 78.44	$784	
	B201017	Replace Wood Porch Soffit	68	SF	$ 18.56	$1,262	
	B201018	Repair Through Brick Crack	50	SF	$ 66.13	$3,307	
	B201019	Repair Through Joint Crack	15	SF	$ 18.70	$281	
	B201020	Clean Masonry due to Failing Paint	58	SF	$ 2.15	$125	
	B201021	Copper Gutters & D.S.	205	LF	$ 23.28	$4,772	
	B201022	Replace Wood Rotted Trim	14	LF	$ 301.11	$4,216	
	B201023	Replace Wood Rotted Porch	23	SF	$ 40.59	$934	
	B202001	Replace Broken Window Panels	3	Ea	$ 355.56	$1,067	
	B202002	Replace Broken Window Sash	3	LF	$ 214.92	$645	
	B202003	Replace Missing Sills	3	LF	$ 231.80	$695	
	B202004	Replace Wood Rotted Sills	18	LF	$ 234.33	$4,218	
	B202005	Repaint Exterior Window Trim	43	Ea	$ 183.36	$7,884	
	B202006	Window Hardware	43	Ea	$ 264.30	$11,365	
	B203001	Repaint Existing Doors	4	Ea	$ 320.29	$1,281	
	B203002	Door Hardware	4	Ea	$ 1,083.45	$4,334	
		SUBTOTAL EXTERIOR CLOSURE	**1**	**VALUE**	**$ 93,603.75**	**$93,604**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B30		**ROOFING**					
	B301001	Replace Existing Roof	1900	SF	$ 11.62	$22,078	
	B301002	Misc Soffit Repair	168	SF	$ 3.99	$670	
		SUBTOTAL ROOFING	**3780**	**SF**	**$ 6.02**	**$22,748**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C10		**INTERIOR CONSTRUCTION**					
	C101001	Major Crack Repair in Plaster	3	Ea	$ 72.39	$217	
	C101002	Patch & Prep Existing Plaster Walls	8089	SF	$ 0.29	$2,346	
	C101003	Replace Plaster Walls	1553	SF	$ 4.92	$7,641	
	C101004	Refinish Interior Face of Window Trim	43	Ea	$ 204.11	$8,777	
	C102001	Refinish Existing Interior Single Doors	30	Ea	$ 243.88	$7,316	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

	C102002	Replace Threshold	1	Ea	$ 44.81	$45	
	C103001	Refinish Int. Wood Casework	34	LF	$ 20.74	$705	
	C103002	Refinish Fire Place	2	Ea	$ 296.99	$594	
	C103003	Replace Window Seat	9	LF	$ 132.98	$1,197	
	C103004	Refinish Window Seat	14	LF	$ 16.47	$231	
		SUBTOTAL INTERIOR CONSTRUCTION	**1**	**VALUE**	**$ 29,068.22**	**$29,068**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C20		**STAIRCASES**					
	C201001	Repair Broken Tread	1	Ea	$ 109.00	$109	
	C202001	Refinish Existing Stairs	128	SF	$ 13.40	$1,715	
	C202002	Refinish Stair Rail	25	LF	$ 18.01	$450	
		SUBTOTAL STAIRCASES	**1**	**VALUE**	**$ 2,274.45**	**$2,274**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**					
	C301001	Refinish Wall Tile	120	SF	$ 6.87	$824	
	C301002	Paint Walls	8089	SF	$ 0.67	$5,420	
	C301003	Refinish Int. Wood Trim	900	LF	$ 7.03	$6,327	
	C301004	Replace Wood Trim	11	LF	$ 40.18	$442	
	C301005	Replace Wood Paneling	15	SF	$ 192.90	$2,894	
	C301006	Replace Wainscot	231	SF	$ 161.48	$37,302	
	C301007	Refinish Wainscot	40	SF	$ 4.65	$186	
	C301008	Refinish Wood Paneling	527	SF	$ 4.65	$2,451	
	C302001	Replace Wood Floor	100	SF	$ 51.49	$5,149	
	C302002	Refinish Wood Floor	2426	SF	$ 4.15	$10,068	
	C302003	Refinish Floor Tile	43	SF	$ 6.87	$295	
	C302004	Replace Wood Floor Boards	55	SF	$ 47.72	$2,625	
	C302005	Refinish Baseboard Trim	1150	LF	$ 6.82	$7,843	
	C302006	Replace Baseboard Trim	65	LF	$ 40.18	$2,612	
	C302007	Refinish Basement Floor	827	SF	$ 4.15	$3,432	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

	C303001	Patch & Prep Existing Plaster Ceilings	2459	SF	$ 0.44	$1,082	
	C303002	Replace Plaster ceilings	250	SF	$ 4.89	$1,223	
	C303003	Paint Ceilings	3286	SF	$ 0.68	$2,234	
		SUBTOTAL INTERIOR FINISHES	**1**	**VALUE**	**$ 92,407.54**	**$92,408**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D20		**PLUMBING**					
	D2001	Provide modern code compliant Plumbing System within Main Block. Replace Existing Plumbing Fixtures, Waste, Water & Vent System, comply w with codes, modernize to current energy requirements.	3780	SF	$ 15.50	$58,593	
	D201001	**Plumbing Demolition:** Bathroom 202A and Bathroom 203A	1	LS	$ 7,087.27	$7,087	
		Renovate Basement Bathroom 304: Replace all fixtures with more water efficient fixtures.	3	Ea	$ 1,500.00	$4,500	
	D201002	**Replace Water Heater:** Replace existing hot water heater with new, re-circulating system.	1	Ea	$ 3,540.47	$3,540	
	D201003	**Sanitary Waste System:** Perform video inspection of building sewer.	380	LF	$ 5.67	$2,155	
	D201004	**Pipe Insulation:** Rehab Pipe Insulation	260	LF	$ 7.90	$2,054	
		SUBTOTAL PLUMBING	**3780**	**SF**	**$ 20.62**	**$77,930**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D30		**HVAC**					
	D3001	Provide modern code compliant Mechanical HVAC System within Main Block. Replace HVAC system, DX Cooling, Gas Heating, comply with code, modernize to current energy requirements, and demolished existing system. Work to include replacement of all rusted and deteriorated supply and return air grilles and dampers.	3780	SF	$ 36.38	$137,527	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

		Option 1: Replace with a new air-source heat pump unit with electric or gas-fired furnace backup to handle ventilation and heating/ cooling loads.	1	LS	$	33,943.00	$33,943	
		Option 2: replace with a new air-source heat pump unit with new ground-source heat pump.	1	LS	$	64,411.00	$64,411	
		SUBTOTAL HVAC	**3780**	**SF**	**$**	**62.40**	**$235,881**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
D40		**Fire Alarm and Fire Protection**						
	D4001	**Fire Protection:** Install Sprinkler System	3780	SF	$	11.53	$43,574	
	D4002	**Fire Alarm:** System Upgrades	3780	SF	$	3.00	$11,340	
	D4001	**Fire Grenade:** Potential Health Hazard-MB	8	Ea	$	93.26	$746	
		SUBTOTAL Fire Protection	**3780**	**SF**	**$**	**14.72**	**$55,660**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
D50		**ELECTRICAL**						
		Provide modern code compliant **Electrical System** within Main Block. Work to include replacement of main electrical panelboard, sub-electrical panelboards, removal of all exposed wiring and conduit and installation of concealed code compliant wiring, and replacement of all electrical convenience outlets and devices to comply with code requirements.	3780	SF	$	19.26	$72,819	
		Fuse Box for HVAC Unit: Replace existing with new, code compliant NEC compliant weather-proof disconnect switch.	1	LS	$	1,877.32	$1,877	
		Emergency Lighting: Provide exit fixtures and emergency lighting that provides the required lighting levels along pat of egress.	1	LS	$	27,798.65	$27,799	
	D5006	**Lighting:** Replace Lighting with new, alternate energy efficient fixtures to provide IES recommended light levels.	3780	SF	$	3.84	$14,515	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

		Telephone/Data: Modernize	3780	SF	$ 10.42	$39,395	
		Security System Upgrades	3780	SF	$ 14.70	$55,570	
		SUBTOTAL ELECTRICAL	**3780**	**SF**	**$ 56.08**	**$211,975**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		**SELECTIVE BUILDING DEMOLITION**					
		Demolition of Basement Restroom 011	38	SF	$ 12.00	$456	
	F202001	ACM Removal	3780	SF	$ 0.88	$3,323	
	Level 3 Code	Lead Paint Removal	3780	SF	$ 10.95	$41,391	
	Level 3 Code	Mold Removal	3780	SF	$ 2.03	$7,662	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**3780**	**SF**	**$ 13.98**	**$52,832**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Baseline Work Recommendation: Main Bloc**	**3780**	**SF**	**$ 279.84**	**$1,057,805**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Central South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 2: Baseline Work Recommendation: Central South Addition

Total Cost: $204,164

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20		EXTERIOR CLOSURE					
	B201001	Scaffolding	683	SF	$ 2.12	$1,448	
	B201002	Pressure Wash Exterior	683	SF	$ 0.15	$102	
	B201003	Remove Bio Growth on Masonry	8	SF	$ 2.15	$17	
	B201004	Recaulk Wood Trim @ Masonry	3	LF	$ 8.06	$24	
	B201005	New Chimney Cap	1	Ea	$ 777.18	$777	
	B201006	Incompatable Patch	5	SF	$ 46.07	$230	
	B201007	Patch Hole @ Missing Brick	3	Ea	$ 129.46	$388	
	B201008	Refinish Wood Trim	90	SF	$ 4.67	$420	
	B201009	Replace Spalled Brick	80	SF	$ 78.44	$6,275	
	B201010	Repair Through Brick Crack	2	SF	$ 66.13	$132	
	B201011	Repair Through Joint Crack	2	SF	$ 18.70	$37	
	B201012	Replace Wood Rotted Trim	3	LF	$ 203.51	$611	
	B201013	Infill Salv. Brick to Match Existing@ Door 104, 107, 206, 207	127	SF	$ 51.47	$6,537	
	B201014	Restore & Repair Brick to Match Existing @ Removal	456	SF	$ 27.85	$12,700	
	B202001	Replace Broken Window Panels	2	Ea	$ 952.22	$1,904	
	B202002	Replace Missing Windows	4	Ea	$ 1,209.47	$4,838	
	B202003	Repair Dislocated Sills	12	LF	$ 32.74	$393	
	B202004	Replace Missing Sills	4	LF	$ 231.80	$927	
	B202005	Replace Wood Rotted Sills	4	LF	$ 234.33	$937	
	B202006	Repaint Window Trim	10	Ea	$ 183.36	$1,834	
	B202007	Window Hardware	10	Ea	$ 264.30	$2,643	
		SUBTOTAL EXTERIOR CLOSURE	**1**	**VALUE**	**$ 43,176.00**	**$43,176**	

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B30		ROOFING					
	Level 3 Code	Replace Existing Roof	500	SF	$ 11.62	$5,810	
	Level 3 Code	Misc Soffit Repair	36	SF	$ 3.99	$144	
		SUBTOTAL ROOFING	**805**	**SF**	**$ 7.40**	**$5,954**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Central South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 2: Baseline Work Recommendation: Central South Addition

Total Cost: $204,164

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C10		INTERIOR CONSTRUCTION					
	C101001	Patch & Prep Existing GWB Walls	2050	SF	$ 0.29	$595	
	C101002	Replace GWB Walls	500	SF	$ 2.70	$1,350	
	C101003	Replace Window Sills	3	LF	$ 234.33	$703	
	C101004	Refinish Interior Face of Window Trim	10	Ea	$ 204.11	$2,041	
	C102001	Refinish Existing Single Doors	5	Ea	$ 243.88	$1,219	
	C102002	Refinish Existing Pair Doors	2	Ea	$ 487.75	$976	
	C103001	Refinish Int. Wood Casework	25	LF	$ 20.74	$519	
		SUBTOTAL INTERIOR CONSTRUCTION	1	VALUE	$ 7,401.99	$7,402	

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C20		STAIRCASES					
	C202001	Refinish Existing Stairs	77	SF	$ 4.88	$376	
		SUBTOTAL STAIRCASES	1	VALUE	$ 375.76	$376	

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C30		INTERIOR FINISHES					
	C301001	Paint Walls	2050	SF	$ 0.62	$1,271	
	C301002	Refinish Int. Wood Trim	168	LF	$ 7.03	$1,181	
	C301003	Replace Wood Trim	10	LF	$ 40.18	$402	
	C302001	Replace Wood Floor	20	SF	$ 51.49	$1,030	
	C302002	Refinish Wood Floor	62	SF	$ 4.15	$257	
	C302003	Refinish Floor Tile	167	SF	$ 17.03	$2,844	
	C302004	Replace Wood Floor Boards	10	SF	$ 47.72	$477	
	C302005	Refinish Baseboard Trim	642	LF	$ 6.82	$4,378	
	C302006	Replace Baseboard Trim	64	LF	$ 9.13	$584	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 2: Baseline Work Recommendation: Central South Addition

Total Cost: $204,164

	C302007	Clean & Patch Vinyl Tile	190	SF	$ 3.23	$614	
	C302008	Refinish Basement Floor	207	SF	$ 4.15	$859	
	C303001	Patch & Prep Existing GWB Ceilings	805	SF	$ 0.44	$354	
	C303002	Replace GWB ceilings	80	SF	$ 2.07	$166	
	C303003	Paint Ceilings	805	SF	$ 0.62	$499	
		SUBTOTAL INTERIOR FINISHES	**1**	**VALUE**	**$ 14,916.56**	**$14,917**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D20		**PLUMBING**					
	D2001	Provide modern code compliant Plumbing System within Main Block. Replace Existing Plumbing Fixtures, Waste, Water & Vent System, comply w with codes, modernize to current energy requirements.	805	SF	$ 21.36	$17,196	
	D2001	Sanitary Waste System: Perform video inspection of building sewer. (Pipe, internal inspection, CCTV with recorded video, up to 500 linear feet, Subcontract)	190	LF	$ 5.67	$1,077	
	D2002	Pipe Insulation: Rehab Pipe Insulation (Old, Worn or Not There-CSA)	110	LF	$ 7.82	$860	
		SUBTOTAL PLUMBING	**1**	**VALUE**	**$ 19,133.91**	**$19,134**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D30		**HVAC**					
	D3001	Provide modern code compliant Mechanical HVAC System within Main Block. Replace HVAC system, DX Cooling, Gas Heating, comply with code, modernize to current energy requirements, and demolished existing system. Work to include replacement of all rusted and deteriorated supply and return air grilles and dampers.	805	SF	$ 36.38	$29,288	
		Option 1: Replace with a new air-source heat pump unit with electric or gas-fired furnace backup to handle ventilation and heating/ cooling loads.	1	LS	$ 33,943.00	$33,943	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Central South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 2: Baseline Work Recommendation: Central South Addition

Total Cost: $204,164

		Option 2: replace with a new air-source heat pump unit with new ground-source heat pump.	1	LS	$ 64,411.00	$64,411	
		SUBTOTAL HVAC	**805**	**SF**	**$ 78.55**	**$63,231**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D40		**Fire Protection**					
	D4001	**Fire Protection:** Install Sprinkler System	805	SF	$ 6.93	$5,576	
	D4002	**Fire Alarm:** System Upgrades	805	SF	$ 3.00	$2,415	
	D4001	**Fire Grenade:** Potential Health Hazard-MB	3	Ea	$ 107.43	$322	
		SUBTOTAL Fire Protection	**805**	**SF**	**$ 10.33**	**$8,314**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D50		**ELECTRICAL**					
	D5002	Provide modern code compliant **Electrical System** within Main Block. Work to include replacement of main electrical panelboard, sub-electrical panelboards, removal of all exposed wiring and conduit and installation of concealed code compliant wiring, and replacement of all electrical convenience outlets and devices to comply with code requirements.	805	SF		$0	
	D5001	**Emergency Lighting:** Provide exit fixtures and emergency lighting that provides the required lighting levels along pat of egress.	805	SF			
	D5001	**Lighting:** Replace Lighting with new, alternate energy efficient fixtures to provide IES recommended light levels.	805	SF	$ 5.52	$4,444	
	Level 3 Code	**Telephone/Data:** Modernize	805	SF	$ 10.42	$8,390	
	Level 3 Code	**Security System Upgrades**	805	SF	$ 14.70	$11,834	
		SUBTOTAL ELECTRICAL	**805**	**SF**	**$ 30.64**	**$24,668**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Central South Addition

Project:	Harmony Hall - Historic Structure Report	**Estimate By:**	Russell McElreath
Park:	National Capital Parks - East (NACE)	**Date:**	09/07/12
Park Alpha:	-	**Reviewed By:**	Reviewer
PMIS Number:	136710	**Date:**	Review Date

Summary Item 2: Baseline Work Recommendation: Central South Addition

Total Cost: $204,164

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20		SELECTIVE BUILDING DEMOLITION					
	Level 3 Code	Lead Paint Removal	805	SF	$ 20.20	$16,261	
	Level 3 Code	Mold Removal	805	SF	$ 0.91	$733	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**805**	**SF**	**$ 21.11**	**$16,994**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Baseline Work Recommendation: Central S**	**805**	**SF**	**$ 253.62**	**$204,164**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 3: Baseline Work Recommendation: South Addition

Total Cost: $213,055

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20		**EXTERIOR CLOSURE**					
	B201001	Scaffolding	1087	SF	$ 2.12	$2,304	
	B201002	Pressure Wash Exterior	1087	SF	$ 0.15	$163	
	B201003	Remove Bio Growth on Masonry	60	SF	$ 2.15	$129	
	B201004	Repair Dislocated Brick	3	SF	$ 18.00	$54	
	B201005	Ferrous Metal Anchors	6	EA	$ 8.93	$54	
	B201006	INFES Removal	1	LS	$ 4,718.63	$4,719	
	B201007	Repair Open Joints in Brick	8	SF	$ 13.56	$108	
	B201008	Refinish Wood Trim	352	SF	$ 29.99	$10,556	
	B201009	Replace Wood Rotted Porch	42	SF	$ 40.59	$1,705	
	B201010	Remove Vegitation	1	LS	$ 408.85	$409	
	B201011	Repair Through Joint Crack	8	SF	$ 18.70	$150	
	B201012	Replace Wood Rotted Trim @ Porch	8	LF	$ 301.11	$2,409	
	B201013	Repair Concrete Step	1	EA	$ 1,819.31	$1,819	
	B202001	Replace Missing Sills	3	LF	$ 231.80	$695	
	B202002	Replace Wood Rotted Sills	9	LF	$ 234.33	$2,109	
	B202003	Repaint Window Trim	6	EA	$ 183.36	$1,100	
	B202004	Window Hardware	6	EA	$ 264.30	$1,586	
	B203001	Repaint Existing Doors	5	EA	$ 186.13	$931	
	B203002	Door Hardware	5	EA	$ 1,083.45	$5,417	
		SUBTOTAL EXTERIOR CLOSURE	**596**	**SF**	**$ 61.10**	**$36,417**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B30		**ROOFING**					
		Replace Existing Roof	550	SF	$ 11.62	$6,391	
		Misc Soffit Repair	60	SF	$ 3.99	$239	
		SUBTOTAL ROOFING	**596**	**SF**	**$ 11.12**	**$6,630**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C10		**INTERIOR CONSTRUCTION**					

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 3: Baseline Work Recommendation: South Addition

Total Cost: $213,055

	C101001	Patch & Prep Existing GWB Walls	1036	SF	$ 0.29	$300	
	C101002	Replace GWB Walls	10	SF	$ 2.70	$27	
	C101003	Replace Window Sills	3	LF	$ 234.33	$703	
	C101004	Refinish Interior Face of Window Trim	4	EA	$ 204.11	$816	
	C102001	Refinish Existing Single Doors	1	EA	$ 243.88	$244	
		SUBTOTAL INTERIOR CONSTRUCTION	**596**	**SF**	**$ 3.51**	**$2,091**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C20		STAIRCASES					
	C202001	Refinish Existing Stairs	21	SF	$ 4.88	$102	
		SUBTOTAL STAIRCASES	**596**	**SF**	**$ 0.17**	**$102**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		INTERIOR FINISHES					
	C301001	Paint Walls	1036	SF	$ 0.62	$642	
	C301002	Refinish Int. Wood Trim	130	LF	$ 7.03	$914	
	C301003	Replace Wood Trim	13	LF	$ 40.18	$522	
	C302001	Replace Wood Floor Boards	10	SF	$ 47.72	$477	
	C302002	Refinish Baseboard Trim	148	LF	$ 6.82	$1,009	
	C302003	Replace Baseboard Trim	15	LF	$ 40.18	$603	
	C302004	Clean & Patch Vinyl Tile	595	SF	$ 3.23	$1,922	
	C303001	Patch & Prep Existing GWB Ceilings	596	SF	$ 0.44	$262	
	C303002	Replace GWB ceilings	80	SF	$ 2.07	$166	
	C303003	Paint Ceilings	596	SF	$ 0.62	$370	
		SUBTOTAL INTERIOR FINISHES	**596**	**SF**	**$ 11.56**	**$6,887**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D20		PLUMBING					

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 3: Baseline Work Recommendation: South Addition

Total Cost: $213,055

	D2001	Provide modern code compliant Plumbing System within Main Block. Replace Existing Plumbing Fixtures, Waste, Water & Vent System, comply w with codes, modernize to current energy requirements.		SF	$ 21.36	$0	
	D2001	Sanitary Waste System: Perform video inspection of building sewer. (Pipe, internal inspection, CCTV with recorded video, up to 500 linear feet, Subcontract)	190	LF	$ 5.67	$1,077	
	D2002	Pipe Insulation: Rehab Pipe Insulation (Old, Worn or Not There-CSA)	370	LF	$ 7.82	$2,893	
		SUBTOTAL PLUMBING	**596**	**SF**	**$ 6.66**	**$3,971**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D30		**HVAC**					
	D3001	Provide modern code compliant Mechanical HVAC System within Main Block. Replace HVAC system, DX Cooling, Gas Heating, comply with code, modernize to current energy requirements, and demolished existing system. Work to include replacement of all rusted and deteriorated supply and return air grilles and dampers.	596	SF	$ 36.38	$21,684	
	D3001	**Option 1:** Replace with a new air-source heat pump unit with electric or gas-fired furnace backup to handle ventilation and heating/ cooling loads.	1	LS	$ 33,943.00	$33,943	
		Option 2: replace with a new air-source heat pump unit with new ground-source heat pump.	1	LS	$ 64,411.00	$64,411	
		SUBTOTAL HVAC	**596**	**SF**	**$ 201.41**	**$120,038**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D40		**Fire Protection**					
	D4001	**Fire Protection:** Install Sprinkler System	596	SF	$ 6.93	$4,128	
	D4002	**Fire Alarm:** System Upgrades	596	SF	$ 3.00	$1,788	
		SUBTOTAL Fire Protection	**596**	**SF**	**$ 9.93**	**$5,916**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 3: Baseline Work Recommendation: South Addition

Total Cost: $213,055

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50		ELECTRICAL					
	D5002	Provide modern code compliant **Electrical System** within Main Block. Work to include replacement of main electrical panelboard, sub-electrical panelboards, removal of all exposed wiring and conduit and installation of concealed code compliant wiring, and replacement of all electrical convenience outlets and devices to comply with code requirements.	596	SF		$0	
	D5001	**Emergency Lighting:** Provide exit fixtures and emergency lighting that provides the required lighting levels along pat of egress.	596				
	D5001	**Lighting:** Replace Lighting with new, alternate energy efficient fixtures to provide IES recommended light levels.	596	SF	$ 5.52	$3,290	
	Level 3 Code	**Telephone/Data:** Modernize	596	SF	$ 10.42	$6,212	
	Level 3 Code	**Security System Upgrades**	596	SF	$ 14.70	$8,762	
		SUBTOTAL ELECTRICAL	**596**	**SF**	**$ 30.64**	**$18,263**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		SELECTIVE BUILDING DEMOLITION					
		Lead Paint Removal	596	SF	$ 20.20	$12,039	
		Mold Removal	596	SF	$ 1.17	$699	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**596**	**SF**	**$ 21.37**	**$12,738**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Baseline Work Recommendation: South Ac**	**596**	**SF**	**$ 357.47**	**$213,055**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Treatment #1: Restoration
Estimate Summary

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: Reviewer
Date: Review Date

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Baseline Work Recommendation - Main Block	3,780	SF	$280	$1,057,805
2	Treatment #1 - Main Block	3,780	SF	$29	$110,405
3	Treatment #1 - Central South Addition	805	SF	$25	$20,359
4	Treatment #1 - South Addition	596	SF	$29	$17,045
	Subtotal Direct Construction Costs				**$1,205,615**
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnote)*				**$0**
	Direct Cost Subtotal without GFP				**$1,205,615**
	Published Location Factor	0.00%			$0
	Remoteness Factor	0.00%			$0
	Federal Wage Rate Factor	0.00%			$0
	State & Local Taxes	6.00%			$72,337
	Design Contingency	20.00%			$241,123
	Total Direct Construction Costs				**$1,519,075**
	Standard General Conditions	10.00%			$151,908
	Government General Conditions	10.00%			$151,908
	Historic Preservation Factor	10.00%			$151,908
	Subtotal NET Construction Cost				**$1,974,798**
	Overhead	10.00%			$197,480
	Profit	10.00%			$197,480
	Estimated NET Construction Cost				**$2,369,757**
	Bonds & Permits	2.00%			**$47,395**
	Contracting Method Adjustment	20.00%			$473,951
	Inflation Escalation	0	Months	0.00%	$0
	Total Estimated NET Cost of Construction				**$2,891,104**

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #1: Restoration
Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item Treatment #1 - Main Block **Total Cost:** $110,405

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A20		BASEMENT CONSTRUCTION					
	A2001	**Main Block: Basement Covered North Entry:** Rebuild Basement Enclosure at North Elevation	50	SF	$ 630.12	$31,506	
		SUBTOTAL BASEMENT CONSTRUCTION	**3780**	**SF**	**$ 8.33**	**$31,506**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B10		SUPERSTRUCTURE					
	B101001	ADA WD Ramp or Lift	1	Ea	$ 9,417.00	$9,417	
		SUBTOTAL SUPERSTRUCTURE	**3780**	**SF**	**$ 2.49**	**$9,417**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		EXTERIOR CLOSURE					
	B201024	**Install New Shutters:** Replace or reinstall missing shutters on east and west facades on Main Block	52	Ea	$ 287.50	$14,950	
	B201025	**Brick Infill:** Infill Salvaged Brick to Match Existing @ Door 013B, 204	40	SF	$ 51.47	$2,059	
	B201026	**Brick Restoration:** Restore & Repair Brick to Match Existing @ Removal of Central South Addition	456	SF	$ 61.08	$27,852	
		Restore/ Replace Missing First Floor Windows: Windows along north wall of Room 102 - Living Room	2	Ea	$ 3,000.00	$6,000	
		Restore/ Replace Missing Second Floor Windows: Windows along north wall of Room 202 - North Bedroom	2	Ea	$ 3,000.00	$6,000	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #1: Restoration
Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item **Treatment #1 - Main Block** **Total Cost:** $110,405

		Restore/ Replace Missing Second Floor Windows: Windows along south wall of Room 203 - South Bedroom	2	Ea	$ 3,000.00	$6,000	
		Restore/ Replace Missing Basement Windows: Window 004,013, and 014	3	Ea	$ 550.00	$1,650	
		SUBTOTAL EXTERIOR CLOSURE	**3780**	**SF**	**$ 17.07**	**$64,511**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**					
		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	2050	SF	$ 1.50	$3,075	
		SUBTOTAL INTERIOR FINISHES	**3780**	**SF**	**$ 0.81**	**$3,075**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		**SELECTIVE BUILDING DEMOLITION**					
		Demolition of Basement Restroom 011	38	SF	$ 12.00	$456	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing first floor windows: Windows along north wall of Room 102 - Living Room	30	SF	$ 16.00	$480	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing second floor windows: Windows along north wall of Room 202 - North Bedroom	30	SF	$ 16.00	$480	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing second floor windows: Windows along south wall of Room 203 - South Bedroom	30	SF	$ 16.00	$480	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**3780**	**SF**	**$ 0.50**	**$1,896**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #1: Restoration
Main Block

Project:	Harmony Hall - Historic Structure Report	**Estimate By:**	Russell McElreath
Park:	National Capital Parks - East (NACE)	**Date:**	09/07/12
Park Alpha:	-	**Reviewed By:**	Reviewer
PMIS Number:	136710	**Date:**	Review Date

Summary Item **Treatment #1 - Main Block** **Total Cost:** $110,405

Uniformat II WBS	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
TOTAL COST	Treatment #1 - Main Block	3780	SF	$ 29.21	$110,405	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #1: Restoration
Central South Addition

Project:	Harmony Hall - Historic Structure Report	**Estimate By:**	Russell McElreath
Park:	National Capital Parks - East (NACE)	**Date:**	09/07/12
Park Alpha:	-	**Reviewed By:**	Reviewer
PMIS Number:	136710	**Date:**	Review Date

Summary Item **Treatment #1 - Central South Addition** **Total Cost:** $20,359

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20		SELECTIVE BUILDING DEMOLITION					
		Mass Building Demo - Central South Addition	805	SF	$ 19.08	$15,359	
					$ -	$0	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	805	SF	$ 19.08	$15,359	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
G20		SITE IMPROVEMENTS					
		Reseed/Sod/ Landscape Demolished area	1	LS	$ 5,000.00	$5,000	
					$ -	$0	
		SUBTOTAL SITE IMPROVEMENTS	1	LS	$ 5,000.00	$5,000	
Uniformat II WBS Code		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		Treatment #1 - Central South Addition	805	SF	$ 25.29	$20,359	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #1: Restoration
South Addition

Project:	Harmony Hall - Historic Structure Report	**Estimate By:**	Russell McElreath
Park:	National Capital Parks - East (NACE)	**Date:**	09/07/12
Park Alpha:	-	**Reviewed By:**	Reviewer
PMIS Number:	136710	**Date:**	Review Date

Summary Item **Treatment #1 - South Addition** **Total Cost:** $17,045

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20		SELECTIVE BUILDING DEMOLITION					
		Mass Building Demo - South Addition	596	SF	$ 20.21	$12,045	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**596**	**SF**	**$ 20.21**	**$12,045**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
G20		SITE IMPROVEMENTS					
		Reseed/Sod/ Landscape Demolished area	1	LS	$ 5,000.00	$5,000	
		SUBTOTAL SITE IMPROVEMENTS	**1**	**LS**	**$ 5,000.00**	**$5,000**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Treatment #1 - South Addition**	**596**	**SF**	**$ 28.60**	**$17,045**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Treatment #2: Rehabilitation
Estimate Summary

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: _____
Date: _____

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Baseline Work Recommendation: Main Block	3,780	SF	$280	$1,057,805
2	Baseline Work Recommendation: Central South Ac	805	SF	$254	$204,164
3	Treatment #2 - Main Block	3,780	SF	$19	$73,656
4	Treatment #2 - Central South Addition	805	SF	$76	$60,961
5	Treatment #2 - South Addition	596	SF	$29	$17,045
	Subtotal Direct Construction Costs				**$1,413,631**
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnot				**$0**
				Direct Cost Subtotal without GFP	**$1,413,631**
	Published Location Factor	0.00%			$0
	Remoteness Factor	0.00%			$0
	Federal Wage Rate Factor	0.00%			$0
	State & Local Taxes	6.00%			$84,818
	Design Contingency	20.00%			$282,726
	Total Direct Construction Costs				**$1,781,175**
	Standard General Conditions	10.00%			$178,118
	Government General Conditions	10.00%			$178,118
	Historic Preservation Factor	10.00%			$178,118
	Subtotal NET Construction Cost				**$2,315,528**
	Overhead	10.00%			$231,553
	Profit	10.00%			$231,553
	Estimated NET Construction Cost				**$2,778,634**
	Bonds & Permits	2.00%			**$55,573**
	Contracting Method Adjustment	20.00%			$555,727
	Inflation Escalation	0	Months	0.00%	$0
	Total Estimated NET Cost of Construction				**$3,389,933**

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #2: Rehabilitation
Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By:
Date:

Summary Item Treatment #2 - Main Block **Total Cost:** $73,656

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A20		BASEMENT CONSTRUCTION					
	A2001	**Main Block: Basement Covered North Entry:** Rebuild Basement Enclosure at North Elevation	50	SF	$ 630.12	$31,506	
		SUBTOTAL BASEMENT CONSTRUCTION	**3780**	**SF**	**$ 8.33**	**$31,506**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		EXTERIOR CLOSURE					
	B201024	**Install New Shutters:** Replace or reinstall missing shutters on east and west facades on Main Block	52	Ea	$ 287.50	$14,950	
		Main Block: Restore Basement Windows: Remove existing window infill at windows 013, 014 and 004 and provide new wood awning windows to match Window Type 1.	3	Ea	$ 550.00	$1,650	
		Restore/ Replace Missing First Floor Windows: Windows along north wall of Room 102 - Living Room	2	Ea	$ 3,000.00	$6,000	
		Restore/ Replace Missing Second Floor Windows: Windows along north wall of Room 202 - North Bedroom	2	Ea	$ 3,000.00	$6,000	
		SUBTOTAL EXTERIOR CLOSURE	**3780**	**SF**	**$ 7.57**	**$28,600**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		INTERIOR FINISHES					
		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	8089	SF	$ 1.50	$12,134	
		SUBTOTAL INTERIOR FINISHES	**3780**	**SF**	**$ 3.21**	**$12,134**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		SELECTIVE BUILDING DEMOLITION					
		Demolition of Basement Restroom 011	38	SF	$ 12.00	$456	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #2: Rehabilitation
Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	
PMIS Number:	**136710**	**Date:**	

Summary Item **Treatment #2 - Main Block** **Total Cost:** $73,656

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing first floor windows: Windows along north wall of Room 102 - Living Room	30	SF	$ 16.00	$480	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing second floor windows: Windows along north wall of Room 202 - North Bedroom	30	SF	$ 16.00	$480	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**3780**	**SF**	**$ 0.37**	**$1,416**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST -		**Treatment #2 - Main Block**	**3780**	**SF**	**$ 19.49**	**$73,656**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #2: Rehabilitation
Central South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By:
Date:

Summary Item Treatment #2 - Central South Addition **Total Cost:** $60,961

Uniformat II		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10		SUPERSTRUCTURE					
	B101001	**ADA Accessibility: Exterior Building Access:** ADA WD Ramp or Mechanical Lift	1	Ea	$ 9,417.00	$9,417	
		ADA Accessibility: Interior: Install lift within Central South Addition to access Main Block	1	Ea	$ 9,417.00	$9,417	
		SUBTOTAL SUPERSTRUCTURE	**805**	**SF**	**$ 23.40**	**$18,834**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		EXTERIOR CLOSURE					
	B201026	**Brick Restoration:** Restore & Repair Brick to Match Existing @ Removal of South Addition	456	SF	$ 61.08	$27,852	
		Central South Addition: Missing Basement Windows: Replace the missing windows in the masonry opening currently infilled with plywood at window locations 007, 008, 009, and 010. Provide new wood awning windows to match Window Type 1.	4	EA	$ 550.00	$2,200	
		SUBTOTAL EXTERIOR CLOSURE	**805**	**SF**	**$ 37.33**	**$30,052**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		INTERIOR FINISHES					
		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	2050	SF	$ 1.50	$3,075	
		SUBTOTAL INTERIOR FINISHES	**805**	**SF**	**$ 3.82**	**$3,075**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D20		PLUMBING					
		ADA Accessibility: Restroom: Install ADA accessible restroom within Central South Addition	3	Ea	$ 3,000.00	$9,000	
		SUBTOTAL PLUMBING	**805**	**SF**	**$ 11.18**	**$9,000**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #2: Rehabilitation
Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	
PMIS Number:	**136710**	**Date:**	

Summary Item **Treatment #2 - Central South Addition** **Total Cost:** $60,961

Uniformat II	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
TOTAL COST -	Treatment #2 - Central South Addition	805	SF	$ 75.73	$60,961	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #2: Rehabilitation
South Addition

Project:	Harmony Hall - Historic Structure Report	**Estimate By:**	Russell McElreath
Park:	National Capital Parks - East (NACE)	**Date:**	09/07/12
Park Alpha:	-	**Reviewed By:**	
PMIS Number:	136710	**Date:**	
Summary Item	Treatment #2 - South Addition	**Total Cost:**	$17,045

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20		SELECTIVE BUILDING DEMOLITION					
		Mass Building Demo - South Addition Block	596	SF	$ 20.21	$12,045	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**596**	**SF**	**$ 20.21**	**$12,045**	
Uniformat II WBS Code		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
G20		SITE IMPROVEMENTS					
		Reseed/Sod/ Landscape Demolished area	1	LS	$ 5,000.00	$5,000	
		SUBTOTAL SITE IMPROVEMENTS	**1**	**LS**	**$ 5,000.00**	**$5,000**	
Uniformat II WBS Code		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST -		**Treatment #2 - South Addition**	**596**	**SF**	**$ 28.60**	**$17,045**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Treatment #3: Rehabilitation
Estimate Summary

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: Reviewer
Date: Review Date

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Baseline Work Recommendation: Main Block	3,780	SF	$280	$1,057,805
2	Baseline Work Recommendation: Central South Ad	805	SF	$254	$204,164
3	Baseline Work Recommendation: South Addition	596	SF	$357	$213,055
3	Treatment #3 - Main Block	3,780	SF	$20	$75,856
4	Treatment #3 - Central South Addition	805	SF	$29	$23,692
5	Treatment #3 - South Addition	596	SF	$97	$57,571
	Subtotal Direct Construction Costs				**$1,632,143**
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnot				**$0**
	Direct Cost Subtotal without GFP				**$1,632,143**
	Published Location Factor	0.00%			$0
	Remoteness Factor	0.00%			$0
	Federal Wage Rate Factor	0.00%			$0
	State & Local Taxes	6.00%			$97,929
	Design Contingency	20.00%			$326,429
	Total Direct Construction Costs				**$2,056,500**
	Standard General Conditions	10.00%			$205,650
	Government General Conditions	10.00%			$205,650
	Historic Preservation Factor	10.00%			$205,650
	Subtotal NET Construction Cost				**$2,673,450**
	Overhead	10.00%			$267,345
	Profit	10.00%			$267,345
	Estimated NET Construction Cost				**$3,208,140**
	Bonds & Permits	2.00%			**$64,163**
	Contracting Method Adjustment	20.00%			$641,628
	Inflation Escalation	0	Months	0.00%	$0
	Total Estimated NET Cost of Construction				**$3,913,930**

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #3: Rehabilitation
Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #3 - Main Block** **Total Cost:** $75,856

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A20		BASEMENT CONSTRUCTION					
	A2001	**Main Block: Basement Covered North Entry:** Rebuild Basement Enclosure at North Elevation	50	SF	$ 630.12	$31,506	
		SUBTOTAL BASEMENT CONSTRUCTION	**3780**	**SF**	**$ 8.33**	**$31,506**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		EXTERIOR CLOSURE					
	B201024	**Main Block: Install New Shutters:** Replace or reinstall missing shutters on east and west facades on Main Block	52	Ea	$ 287.50	$14,950	
		Main Block: Restore Basement Windows: Remove existing window infill at windows 013, 014 and 004 and provide new wood awning windows to match Window Type 1.	3	Ea	$ 550.00	$1,650	
		Central South Addition: Missing Basement Windows: Replace the missing windows in the masonry opening currently infilled with plywood at window locations 007, 008, 009, and 010. Provide new wood awning windows to match Window Type 1.	4	Ea	$ 550.00	$2,200	
		Restore/ Replace Missing First Floor Windows: Windows along north wall of Room 102 - Living Room	2	Ea	$ 3,000.00	$6,000	
		Restore/ Replace Missing Second Floor Windows: Windows along north wall of Room 202 - North Bedroom	2	Ea	$ 3,000.00	$6,000	
		SUBTOTAL EXTERIOR CLOSURE	**3780**	**SF**	**$ 8.15**	**$30,800**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		INTERIOR FINISHES				$30,800	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #3: Rehabilitation
Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #3 - Main Block** **Total Cost:** $75,856

		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	8089	SF	$ 1.50	$12,134	
		SUBTOTAL INTERIOR FINISHES	**3780**	**SF**	**$ 3.21**	**$12,134**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		**SELECTIVE BUILDING DEMOLITION**					
		Demolition: Remove basement Restroom 011	38	SF	$ 12.00	$456	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing first floor windows: Windows along north wall of Room 102 - Living Room	30	SF	$ 16.00	$480	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing second floor windows: Windows along north wall of Room 202 - North Bedroom	30	SF	$ 16.00	$480	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**3780**	**SF**	$ 0.37	**$1,416**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Treatment #3 - Main Block**	**3780**	**SF**	**$ 20.07**	**$75,856**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #3: Rehabilitation
Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #3 - Central South Addition** **Total Cost:** $23,692

Uniformat II		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10		**SUPERSTRUCTURE**					
		ADA Accessibility: Interior: Install lift within Central South Addition to access Main Block	1	Ea	$ 9,417.00	$ 9,417.00	
		SUBTOTAL SUPERSTRUCTURE	**805**	**SF**	**$ 11.70**	**$9,417**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		**EXTERIOR CLOSURE**					
		Central South Addition: Missing Basement Windows: Replace the missing windows in the masonry opening currently infilled with plywood at window locations 007, 008, 009, and 010. Provide new wood awning windows to match Window Type 1.	4	Ea	$ 550.00	$ 2,200.00	
		SUBTOTAL EXTERIOR CLOSURE	**805**	**SF**	**$ 2.73**	**$2,200**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**					
		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	2050	SF	$ 1.50	$3,075	
		SUBTOTAL INTERIOR FINISHES	**805**	**SF**	**$ 3.82**	**$3,075**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D20		**PLUMBING**					
		ADA Accessibility: Restroom: Install ADA accessible restroom within Central South Addition	3	FXT	$ 3,000.00	$9,000	
		SUBTOTAL PLUMBING	**1**	**LS**	**$ 9,000.00**	**$9,000**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #3: Rehabilitation
Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item	**Treatment #3 - Central South Addition**					**Total Cost:**	$23,692
TOTAL COST	**Treatment #3 - Central South Addition**	**805**	**SF**	**$**	**29.43**	**$23,692**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #3: Rehabilitation
South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #3 - South Addition** **Total Cost:** $57,571

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10		**SUPERSTRUCTURE**					
	B101001	**ADA Accessibility: Exterior Building Access:** ADA WD Ramp or Mechanical Lift	1	Ea	$ 9,417.00	$9,417	
		ADA Accessibility: Interior: Install accessible elevator within South Addition to provide accessible entry to first and second floors of Main Block of house	1	Ea	$ 46,600.00	$46,600	
		SUBTOTAL SUPERSTRUCTURE	**596**	**SF**	**$ 93.99**	**$56,017**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**					
		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	1036	SF	$ 1.50	$1,554	
		SUBTOTAL INTERIOR FINISHES	**596**	**SF**	**$ 2.61**	**$1,554**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST -		**Treatment #3 - South Addition**	**596**	**SF**	**$ 96.60**	**$57,571**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Treatment #4: "Mothballing"
Estimate Summary

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: Reviewer
Date: Review Date

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Treatment #4 "Mothballing" - Main Block	3,780	SF	$52	$197,611
2	Treatment #4 "Mothballing" - Central South Additio	805	SF	$55	$44,149
3	Treatment #4 "Mothballing" - South Addition	596	SF	$60	$36,013
	Subtotal Direct Construction Costs				**$277,773**
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnot				**$0**
	Direct Cost Subtotal without GFP				**$277,773**
	Published Location Factor	0.00%			$0
	Remoteness Factor	0.00%			$0
	Federal Wage Rate Factor	0.00%			$0
	State & Local Taxes	6.00%			$16,666
	Design Contingency	20.00%			$55,555
	Total Direct Construction Costs				**$349,994**
	Standard General Conditions	10.00%			$34,999
	Government General Conditions	10.00%			$34,999
	Historic Preservation Factor	10.00%			$34,999
	Subtotal NET Construction Cost				**$454,993**
	Overhead	10.00%			$45,499
	Profit	10.00%			$45,499
	Estimated NET Construction Cost				**$545,991**
	Bonds & Permits	2.00%			**$10,920**
	Contracting Method Adjustment	20.00%			$109,198
	Inflation Escalation	0	Months	0.00%	$0
	Total Estimated NET Cost of Construction				**$666,109**

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 1 Treatment #4 "Mothballing" - Main Block — **Total Cost:** $197,611

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50		ELECTRICAL					
	Level 3 Code	Security System Upgrades	3780	SF	$ 14.70	$55,566	
		SUBTOTAL ELECTRICAL	3780	SF	$ 14.70	$55,566	
Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20		SELECTIVE BUILDING DEMOLITION					
	F202001	ACM Removal	3780	SF	$ 0.88	$3,323	
	Level 3 Code	Lead Paint Removal	3780	SF	$ 10.95	$41,391	
	Level 3 Code	Mold Removal	3780	SF	$ 2.03	$7,662	
					$ -	$0	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	3780	SF	$ 13.86	$52,376	
Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
TOTAL COST -		Treatment #4 "Mothballing" - Main Block	3780	SF	$ 52.28	$197,611	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 2 **Treatment #4 "Mothballing" - Central South Addition** **Total Cost:** $44,149

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20		**EXTERIOR CLOSURE**					
	B202005	Clean, Repair, Repaint and seal all Exterior Wood Windows, window frames, sills, and trim	10	Ea	$ 183.36	$1,834	
	B202006	Secure (Screw) Windows - Basement and First Floor windows only	7	Ea	$ 5.00	$35	
		SUBTOTAL EXTERIOR CLOSURE	**805**	**SF**	**$ 2.32**	**$1,869**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D30		**HAVC**					
	D3001	Allow for temporary heating and cooling provisions for freeze and humidity protection.	1	LS	$ 11,038.31	$11,038	
		SUBTOTAL HVAC	**805**	**SF**	**$ 13.71**	**$11,038**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D40		**Fire Protection**					
	D4001	Fire Alarm Upgrades	805	SF	$ 3.00	$2,415	
		SUBTOTAL FIRE PROTECTION	**805**	**SF**	**$ 3.00**	**$2,415**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
Central South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 2 Treatment #4 "Mothballing" - Central South Addition **Total Cost:** $44,149

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50		ELECTRICAL					
		Security System Upgrades	805	SF	$ 14.70	$11,834	
		SUBTOTAL ELECTRICAL	**805**	**SF**	**$ 14.70**	**$11,834**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		SELECTIVE BUILDING DEMOLITION					
	Level 3 Code	Lead Paint Removal	805	SF	$ 20.20	$16,261	
	Level 3 Code	Mold Removal	805	SF	$ 0.91	$733	
		SUBTOTAL FIRE PROTECTION	**805**	**SF**	**$ 21.11**	**$16,994**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST -		**Treatment #4 "Mothballing" - Central South**	**805**	**SF**	**$ 54.84**	**$44,149**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 2 **Treatment #4 "Mothballing" - South Addition** **Total Cost:** $36,013

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20		**EXTERIOR CLOSURE**					
	B202005	Clean, Repair, Repaint and seal all Exterior Wood Windows, window frames, sills, and trim	7	EA	$ 183.36	$1,284	
	B202006	Secure (Screw) Windows - Basement and First Floor windows only	3	EA	$ 5.00	$15	
	B203003	Secure Doors (106A, 106B, 106C, 106D, 106E) - provide temporary, but secure locking mechanisms	5	Ea	$ 50.00	$250	
		SUBTOTAL EXTERIOR CLOSURE	**596**	**SF**	**$ 2.60**	**$1,549**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D30		**HVAC**					
	D3001	Allow for temporary heating and cooling provisions for freeze and humidity protection.	1	LS	$ 11,177.00	$11,177	
		SUBTOTAL HVAC	**596**	**SF**	**$ 18.75**	**$11,177**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D40		**Fire Protection**					
	D4001	Fire Alarm Upgrades	596	SF	$ 3.00	$1,788	
		SUBTOTAL Fire Protection	**596**	**SF**	**$ 3.00**	**$1,788**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
South Addition

Project:	Harmony Hall - Historic Structure Report	**Estimate By:**	Russell McElreath
Park:	National Capital Parks - East (NACE)	**Date:**	09/07/12
Park Alpha:	-	**Reviewed By:**	Reviewer
PMIS Number:	136710	**Date:**	Review Date

Summary Item 2 Treatment #4 "Mothballing" - South Addition — **Total Cost:** $36,013

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50		ELECTRICAL					
		Security System Upgrades	596	SF	$ 14.70	$8,761	
		SUBTOTAL ELECTRICAL	**596**	**SF**	**$ 14.70**	**$8,761**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		SELECTIVE BUILDING DEMOLITION					
		Lead Paint Removal	596	SF	$ 20.20	$12,039	
		Mold Removal	596	SF	$ 1.17	$699	
		SUBTOTAL BUILDING DEMOLITION	**596**	**SF**	**$ 21.37**	**$12,738**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST -		**Treatment #4 "Mothballing" - South Additio**	**596**	**SF**	**$ 60.42**	**$36,013**	

Part 4: Documentation

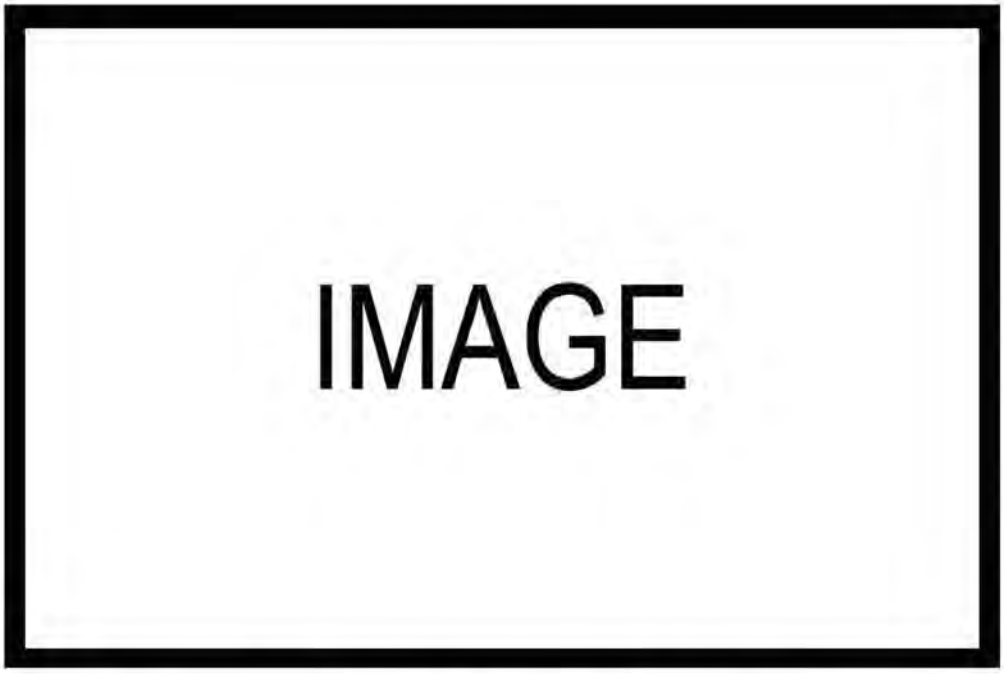


Harmony Hall

Fort Washington, Maryland

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DIGITAL SITE PHOTOGRAPHS



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Room number

Item

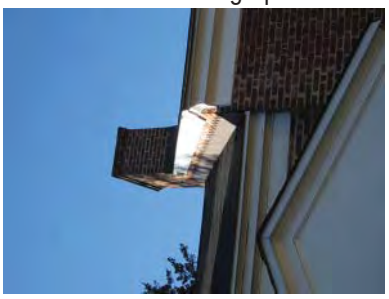
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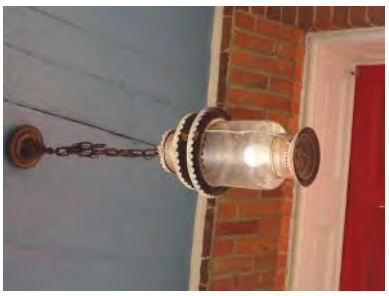

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Exterior - East (1) - 2011-12-20.jpg


Exterior - East (1) - 2012-07-31.JPG


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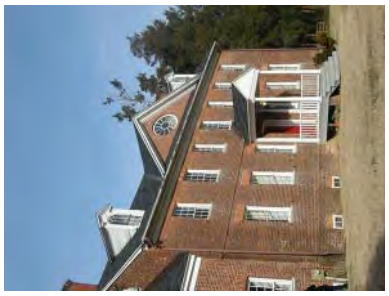

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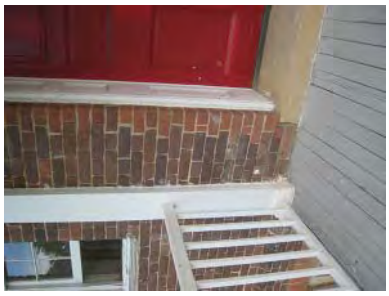

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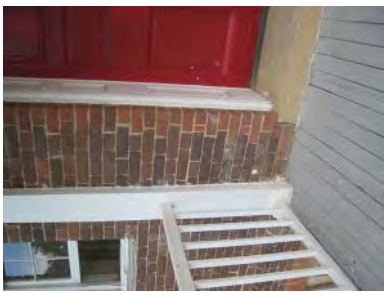

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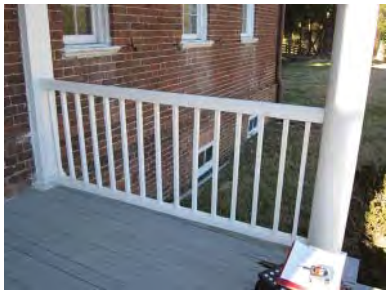

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Exterior - Gutter & Downspout Detail (1) - 2012-01-18.jpg


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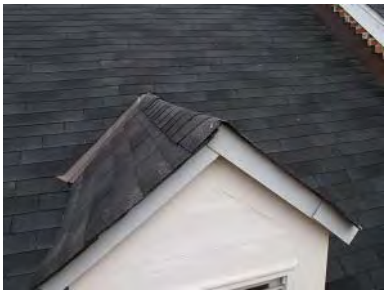

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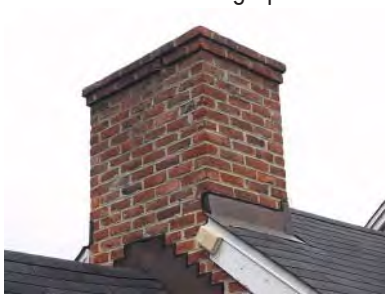

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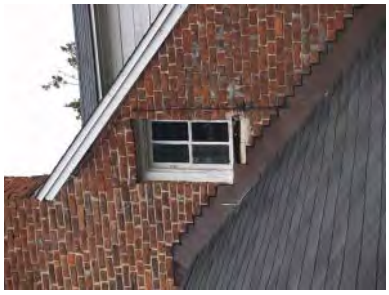

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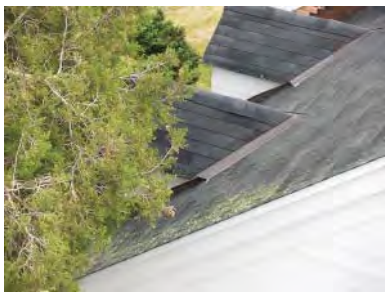

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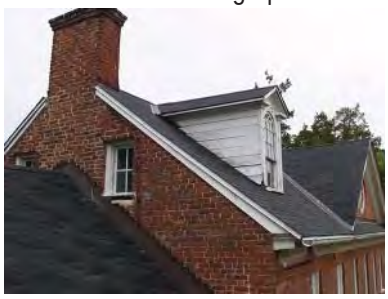

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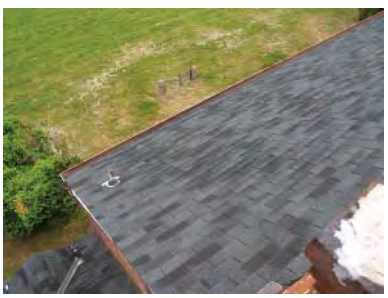

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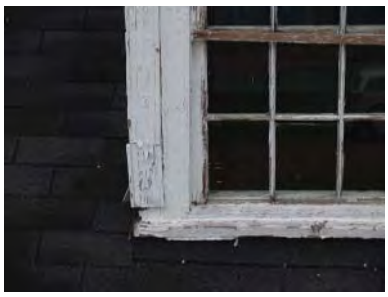

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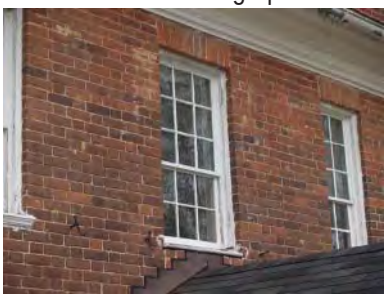

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Exterior - Roof Details (224) - 2012-04-18.JPG


Exterior - Roof Details (225) - 2012-04-18.JPG


Exterior - Roof Details (226) - 2012-04-18.JPG


Exterior - Roof Details (227) - 2012-04-18.JPG


Exterior - Roof Details (228) - 2012-04-18.JPG


Exterior - Roof Details (229) - 2012-04-18.JPG


Exterior - Roof Details (230) - 2012-04-18.JPG


Exterior - Roof Details (231) - 2012-04-18.JPG


Exterior - Roof Details (232) - 2012-04-18.JPG


Exterior - Roof Details (233) - 2012-04-18.JPG


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Exterior - Roof Details (235) - 2012-04-18.JPG


Exterior - Roof Details (236) - 2012-04-18.JPG


Exterior - Roof Details (237) - 2012-04-18.JPG


Exterior - Roof Details (238) - 2012-04-18.JPG


Exterior - Roof Details (239) - 2012-04-18.JPG


Exterior - Roof Details (240) - 2012-04-18.JPG


Exterior - Roof Details (241) - 2012-04-18.JPG


Exterior - Roof Details (242) - 2012-04-18.JPG


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Exterior - Roof Details (244) - 2012-04-18.JPG


Exterior - Roof Details (245) - 2012-04-18.JPG


Exterior - Roof Details (246) - 2012-04-18.JPG


Exterior - Roof Details (247) - 2012-04-18.JPG


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Exterior - Roof Details (250) - 2012-04-18.JPG


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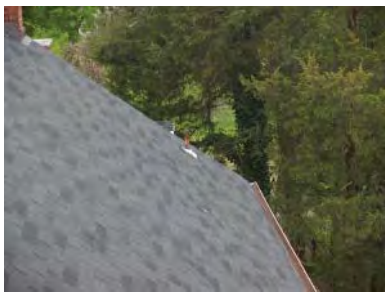

Exterior - Roof Details (256) - 2012-04-18.JPG


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Exterior - Roof Details (259) - 2012-04-18.JPG


Exterior - Roof Details (260) - 2012-04-18.JPG


Exterior - Roof Details (261) - 2012-04-18.JPG


Exterior - Roof Details (262) - 2012-04-18.JPG


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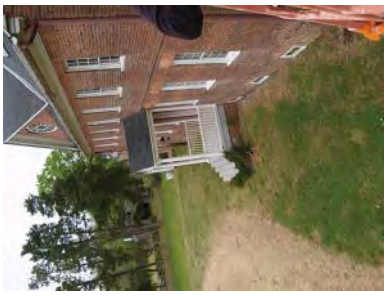

Exterior - Roof Details (266) - 2012-04-18.JPG


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Exterior - Roof Details (269) - 2012-04-18.JPG

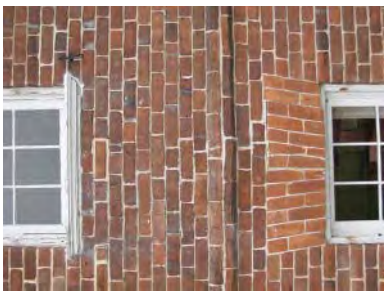

Exterior - Roof Details (270) - 2012-04-18.JPG


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Exterior - Roof Details (272) - 2012-04-18.JPG


Exterior - Roof Details (273) - 2012-04-18.JPG


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Exterior - Roof Details (292) - 2012-04-18.JPG


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Exterior - Roof Details (300) - 2012-04-18.JPG


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Exterior - Roof Details (307) - 2012-04-18.JPG


Exterior - Roof Details (308) - 2012-04-18.JPG


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Exterior - Roof Details (312) - 2012-04-18.JPG


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Exterior - Roof Details (315) - 2012-04-18.JPG

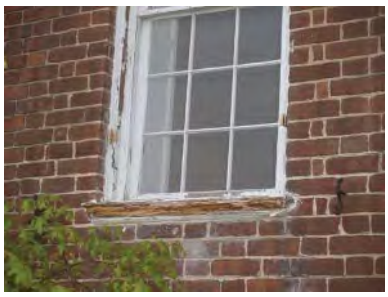

Exterior - Roof Details (316) - 2012-04-18.JPG


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Exterior - Roof Details (320) - 2012-04-18.JPG

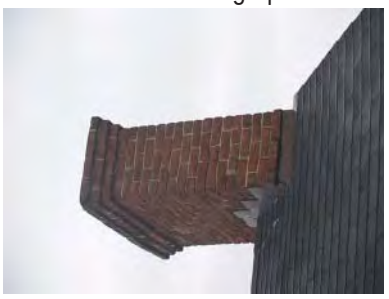

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Exterior - Roof Details (324) - 2012-04-18.JPG

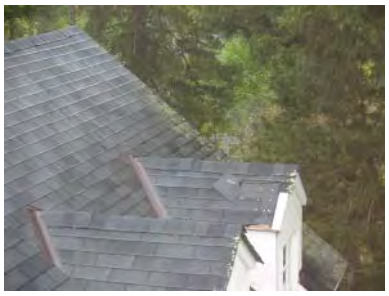

Exterior - Roof Details (325) - 2012-04-18.JPG


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Exterior - Roof Details (332) - 2012-04-18.JPG


Exterior - Roof Details (333) - 2012-04-18.JPG

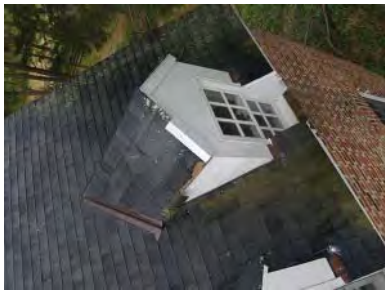

Exterior - Roof Details (334) - 2012-04-18.JPG


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Exterior - Roof Details (337) - 2012-04-18.JPG


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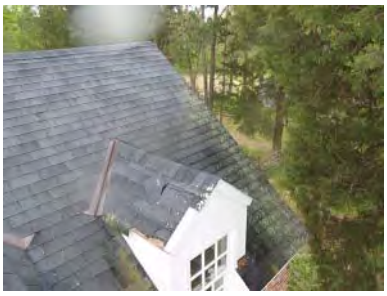

Exterior - Roof Details (339) - 2012-04-18.JPG


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Exterior - Roof Details (387) - 2012-04-18.JPG


Exterior - Roof Details (388) - 2012-04-18.JPG


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Exterior - Roof Details (393) - 2012-04-18.JPG

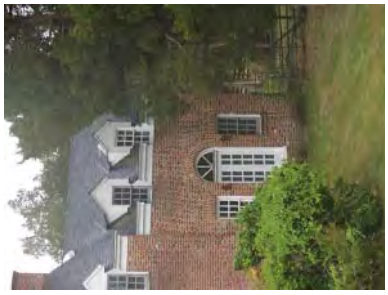

Exterior - Roof Details (394) - 2012-04-18.JPG


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Exterior - Roof Details (397) - 2012-04-18.JPG


Exterior - Roof Details (398) - 2012-04-18.JPG


Exterior - Roof Details (399) - 2012-04-18.JPG


Exterior - Roof Details (400) - 2012-04-18.JPG


Exterior - Roof Details (401) - 2012-04-18.JPG


Exterior - Roof Details (402) - 2012-04-18.JPG


Exterior - Roof Details (403) - 2012-04-18.JPG


Exterior - Roof Details (404) - 2012-04-18.JPG


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Exterior - Roof Details (406) - 2012-04-18.JPG


Exterior - Roof Details (407) - 2012-04-18.JPG

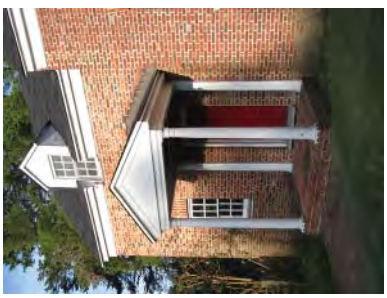

Exterior - Roof Details (408) - 2012-04-18.JPG


Exterior - Roof Details (409) - 2012-04-18.JPG


Exterior - Roof Details (410) - 2012-04-18.JPG


Exterior - Roof Details (411) - 2012-04-18.JPG


Exterior - South - 2007-06-29.JPG


Exterior - South - 2011-09-14.JPG


Exterior - South (1) - 2012-02-10.jpg


Exterior - South (2) - 2010-03-23.JPG


Exterior - South (2) - 2012-02-10.jpg


Exterior - South (3) - 2012-02-10.jpg


Exterior - South (3) - 2012-04-18.JPG


Exterior - South (4) - 2012-04-18.JPG


Exterior - South (4)- 2011-09-07.JPG


Exterior - South (5) - 2010-03-23.JPG


Exterior - South (5)- 2011-09-07.JPG


Exterior - South (6) - 2012-04-18.JPG


Exterior - South (6)- 2011-09-07.JPG


Exterior - South (7) - 2010-03-23.JPG


Exterior - South (8) - 2010-03-23.JPG


Exterior - South (9) - 2010-03-23.JPG


Exterior - South (10) - 2012-02-09.JPG


Exterior - South (11) - 2012-02-09.JPG


Exterior - South Porch - 2012-01-18.jpg


Exterior - Stables - 2012-02-11.JPG


Exterior - View From West - 2011-12-20.jpg


Exterior - West - 2012-02-09.JPG


Exterior - West (1) - 2010-03-23.JPG


Exterior - West (1) - 2012-02-11.JPG


Exterior - West (2) - 2010-03-23.JPG


Exterior - West (2) - 2012-02-11.JPG


Exterior - West (3) - 2010-03-23.JPG


Exterior - West (3) - 2012-02-11.JPG


Exterior - West (4) - 2010-03-23.JPG


Exterior - West (4) - 2012-02-11.JPG


Exterior - West (5) - 2010-03-23.JPG


Exterior - West (5) - 2012-02-11.JPG


Exterior - West (6) - 2010-03-23.JPG


Exterior - West (6) - 2012-02-11.JPG


Exterior - West (7) - 2010-03-23.JPG


Exterior - West (7) - 2012-02-11.JPG


Exterior - West (8) - 2010-03-23.JPG


Exterior - West (8) - 2012-02-11.JPG


Exterior - West (9) - 2010-03-23.JPG


Exterior - West (9) - 2011-12-20.jpg


Exterior - West (10) - 2011-12-20.jpg


Exterior - West (10) - 2012-02-09.JPG


Exterior - West (11) - 2011-12-20.jpg


Exterior - West (11) - 2012-02-09.JPG

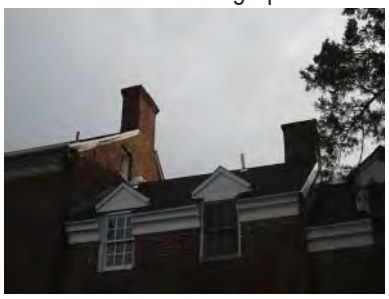

Exterior - West (12) - 2011-12-20.jpg


Exterior - West (12) - 2012-04-18.JPG


Exterior - West (13) - 2011-12-20.jpg


Exterior - West (14) - 2011-12-20.jpg


Exterior - West (15) - 2011-12-20.jpg


Exterior - West (16) - 2011-12-20.jpg


Exterior - West (17) - 2011-12-20.jpg


Exterior - West (18) - 2011-12-20.jpg


Exterior - West (19) - 2012-01-18.jpg


Exterior - West (20) - 2012-01-18.jpg


Exterior - West (21) - 2012-01-18.jpg


Exterior - West (22) - 2012-02-10.jpg


Exterior - West (23) - 2012-02-10.jpg


Exterior - West (24) - 2012-02-10.jpg


Exterior - West (25)- 2011-09-07.JPG


Exterior - West (26)- 2011-09-07.JPG


Exterior - West Detail - 2012-02-11.JPG


Exterior - West Fencing - 2012-02-11.JPG


Exterior - West Porch (1) - 2012-01-18.jpg


Exterior - West Porch (2) - 2012-01-18.jpg


Exterior - West Porch (3) - 2012-01-18.jpg


Exterior - West Porch (4) - 2012-01-18.jpg


Exterior - West Porch (5) - 2012-01-18.jpg


Exterior - West Porch (6) - 2012-01-18.jpg


Exterior - West Porch (7) - 2012-01-18.jpg


Exterior - West Porch (8) - 2012-01-18.jpg


Exterior - West Porch (9) - 2012-01-18.jpg


Exterior - West Porch (10) - 2012-01-18.jpg


Exterior - West Porch (11) - 2012-01-18.jpg


Exterior - West Porch (12) - 2012-01-18.jpg

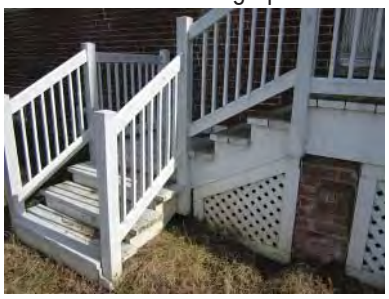

Exterior - West Porch (13) - 2012-01-18.jpg


Exterior - West Porch (14) - 2012-01-18.jpg


Exterior - West Porch (15) - 2012-01-18.jpg


Exterior - West Porch (16) - 2012-01-18.jpg


Exterior - West Porch (17) - 2012-01-18.jpg


Exterior - West Porch (18) - 2012-02-10.jpg


Exterior - West Porch (19) - 2012-02-10.jpg


Exterior - Window_001 - 2012-07-18.JPG


Exterior - Window_002 - 2012-07-18.JPG


Exterior - Window_003 - 2012-07-18.JPG


Exterior - Window_004 - 2012-07-18.JPG


Exterior - Window_005 - 2012-07-18.JPG


Exterior - Window_006 - 2012-07-18.JPG


Exterior - Window_007 - 2012-07-18.JPG


Exterior - Window_008 - 2012-07-18.JPG


Exterior - Window_009 - 2012-07-18.JPG


Exterior - Window_010 - 2012-07-18.JPG


Exterior - Window_012 - 2012-07-18.JPG


Exterior - Window_013 - 2012-07-18.JPG


Exterior - Window_015 - 2012-07-18.JPG


Exterior - Window_016 - 2012-07-18.JPG


Exterior - Window_101 - 2012-07-18.JPG


Exterior - Window_102 - 2012-07-18.JPG


Exterior - Window_103 - 2012-07-18.JPG


Exterior - Window_104 - 2012-07-18.JPG


Exterior - Window_105 - 2012-07-18.JPG


Exterior - Window_106 - 2012-07-18.JPG


Exterior - Window_107 - 2012-07-18.JPG


Exterior - Window_108 - 2012-07-18.JPG


Exterior - Window_109 - 2012-07-18.JPG


Exterior - Window_110 - 2012-07-18.JPG


Exterior - Window_111 - 2012-07-18.JPG


Exterior - Window_112 - 2012-07-18.JPG


Exterior - Window_113 - 2012-07-18.JPG


Exterior - Window_114 - 2012-07-18.JPG

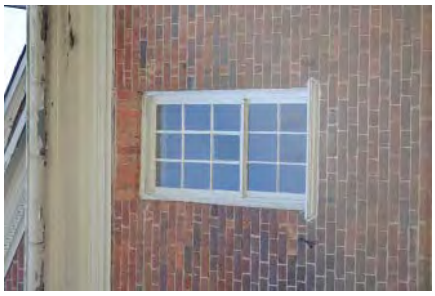

Exterior - Window_115 - 2012-07-18.JPG


Exterior - Window_116 - 2012-07-18.JPG


Exterior - Window_117 - 2012-07-18.JPG


Exterior - Window_118 - 2012-07-18.JPG


Exterior - Window_201 - 2012-07-18.JPG


Exterior - Window_202 - 2012-07-18.JPG


Exterior - Window_203 - 2012-07-18.JPG


Exterior - Window_204 - 1 - 2012-07-18.JPG


Exterior - Window_204 - 2 - 2012-07-18.JPG


Exterior - Window_205 - 2012-07-18.JPG


Exterior - Window_206 - 2012-07-18.JPG


Exterior - Window_207 - 2012-07-18.JPG


Exterior - Window_208 - 2012-07-18.JPG


Exterior - Window_209 - 2012-07-18.JPG


Exterior - Window_210 - 2 - 2012-07-18.JPG


Exterior - Window_210 -1 - 2012-07-18.JPG


Exterior - Window_211 - 1 - 2012-07-18.JPG


Exterior - Window_211 - 2 - 2012-07-18.JPG


Exterior - Window_212 - 2012-07-18.JPG


Exterior - Window_213 - 2012-07-18.JPG


Exterior - Window_214 - 2012-07-18.JPG


Exterior - Window_215 - 2012-07-18.JPG

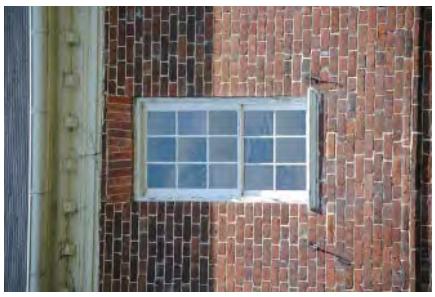

Exterior - Window_216 - 2012-07-18.JPG


Exterior - Window_217 - 2012-07-18.JPG


Exterior - Window_218 - 2012-07-18.JPG

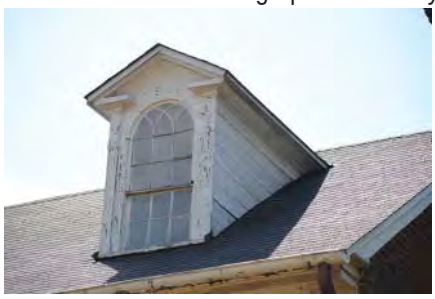

Exterior - Window_219 - 2012-07-18.JPG


Exterior - Window_220 - 2012-07-18.JPG


Exterior - Window_221 - 2012-07-18.JPG


Exterior - Window_301 - 1 - 2012-07-18.JPG


Exterior - Window_301 - 2 - 2012-07-18.JPG


Exterior - Window_301 - 3 - 2012-07-18.JPG


Exterior - Window_302 - 1 - 2012-07-18.JPG


Exterior - Window_302 - 2 - 2012-07-18.JPG


Exterior - Window_302 (Old) - 2011-09-14.JPG


Exterior - Window_303 - 1 - 2012-07-18.JPG


Exterior - Window_303 - 2 - 2012-07-18.JPG


Exterior - Window_303 - 3 - 2012-07-18.JPG


Exterior - Window_304 - 2012-07-18.JPG


Exterior - Window_306 - 2012-07-18.JPG


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Exterior-Central Chimey(No.1)-2012-04-18 01.JPG


Exterior-Central Chimey(No.1)-2012-04-18 02.JPG


Exterior-Central Chimey(No.1)-2012-04-18 03.JPG


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Exterior-Central Chimey(No.1)-2012-04-18 05.JPG


Exterior-Central Chimey(No.1)-2012-04-18 06.JPG


Exterior-Central Chimey(No.1)-2012-04-18 07.JPG


Exterior-Central Chimey(No.1)-2012-04-18 08.JPG


Exterior-Central Chimey(No.1)-2012-04-18 09.JPG


Exterior-Central Chimey(No.1)-2012-04-18 10.JPG


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Exterior-Central Chimey(No.1)-2012-04-18 12.JPG


Exterior-Central Chimey(No.1)-2012-04-18 13.JPG


Exterior-Central Chimey(No.1)-2012-04-18 14.JPG


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Exterior-Central Chimey(No.1)-2012-04-18 16.JPG


Exterior-Central Chimey(No.1)-2012-04-18 17.JPG


Exterior-Central Chimey(No.1)-2012-04-18 18.JPG


Exterior-Central Chimey(No.1)-2012-04-18 19.JPG


Exterior-Central Chimey(No.1)-2012-04-18 20.JPG


Exterior-Central Chimey(No.1)-2012-04-18 21.JPG


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Exterior-Central Chimey(No.2)-2012-04-18 01.JPG


Exterior-Central Chimey(No.2)-2012-04-18 02.JPG


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Exterior-Central Chimey(No.2)-2012-04-18 04.JPG


Exterior-Central Chimey(No.2)-2012-04-18 05.JPG


Exterior-Central Chimey(No.2)-2012-04-18 06.JPG


Exterior-Central Chimey(No.2)-2012-04-18 07.JPG


Exterior-Central Chimey(No.2)-2012-04-18 08.JPG


Exterior-Central Chimey(No.2)-2012-04-18 09.JPG


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Exterior-Central Chimey(No.2)-2012-04-18 11.JPG


Exterior-Central Chimey(No.2)-2012-04-18 12.JPG


Exterior-Central Chimey(No.2)-2012-04-18 13.JPG


Exterior-Central Chimey(No.2)-2012-04-18 14.JPG


Exterior-Central Chimey(No.2)-2012-04-18 15.JPG


Exterior-Central Chimey(No.2)-2012-04-18 16.JPG


Exterior-Central Chimey(No.2)-2012-04-18 17.JPG


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Exterior-Central Chimey(No.2)-2012-04-18 19.JPG


Exterior-Central Chimey(No.2)-2012-04-18 20.JPG


Exterior-Central Chimey(No.2)-2012-04-18 21.JPG


Exterior-Central Chimey(No.2)-2012-04-18 22.JPG


Exterior-Central Chimey(No.2)-2012-04-18 23.JPG


Exterior-Central Chimey(No.2)-2012-04-18 24.JPG

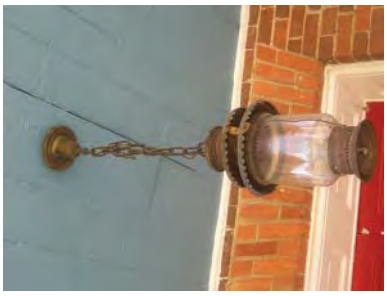

Exterior-Central Chimey(No.3)-2012-04-18 01.JPG


Exterior-Central Chimey(No.3)-2012-04-18 02.JPG


Exterior-Central Chimey(No.3)-2012-04-18 03.JPG

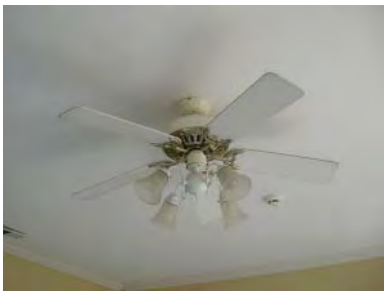

Exterior-Central Chimey(No.3)-2012-04-18 04.JPG


Exterior-Central Chimey(No.3)-2012-04-18 05.JPG


Fixture Ext 1-Door 101A-2012-07019.JPG


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Fixture Int 5-Room 101-2012-07-19.JPG


Fixture Int 6-Room 209-2012-07-19.JPG


Fixture Int 6-Room 211-2012-07-19.JPG

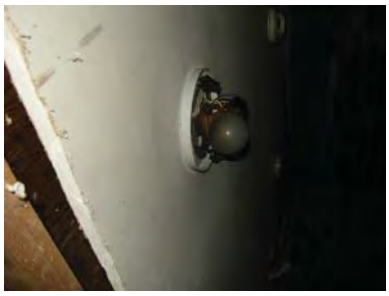

Fixture Int 7-Room 204-2012-07-19.JPG


Fixture Int 7-Room 207_2-2012-07-19.JPG


Fixture Int 7-Room 207-2012-07-19.JPG


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Fixture Int 11-Room 202_3-2012-07-19.JPG


Fixture Int 11-Room 202_4-2012-07-19.JPG


Fixture Int 11-Room 203_2-2012-07-19.JPG

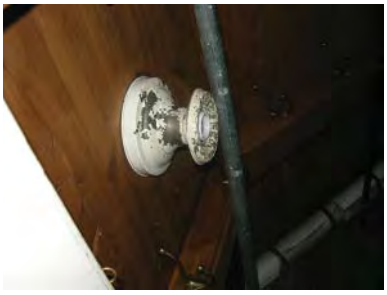

Fixture Int 11-Room 203-2012-07-19.JPG


Fixture Int 12-Room 203A-2012-07-19.JPG


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Fixture Int 14-Room 304_2-2012-07-19.JPG


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Fixture Int 18-Room 107-2012-07-19.JPG


Fixture Int 19-Room 108-2012-07-19.JPG


Fixture Int 20-Room 015-2012-07-19.JPG

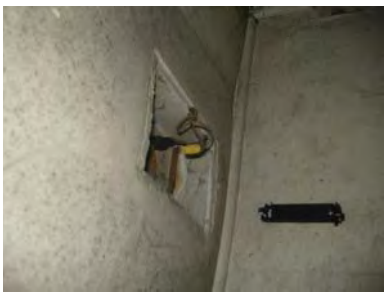

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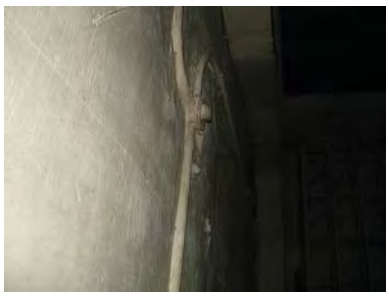

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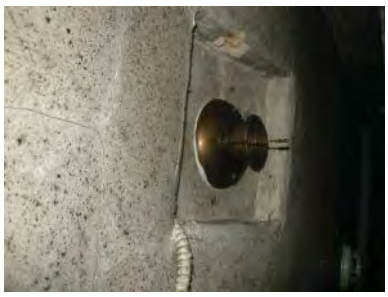

Fixture Int 22-Room 012-2012-07-19.JPG


Fixture Int 23-Room 011-2012-07-19.JPG


Fixture Int 24-Room 008-2012-07-19.JPG


Fixture Int 25-Room 006-2012-07-19.JPG


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Room - Central South Addition Attic - 2012-02-10 IMG_2333.jpg


Room - Central South Addition Attic - 2012-02-10 IMG_2334.jpg


Room - Central South Addition Attic - 2012-02-10 IMG_2335.jpg


Room - Central South Addition Attic - 2012-02-10 IMG_2336.jpg


Room - Central South Addition Attic - 2012-02-10 IMG_2337.jpg


Room - Central South Addition Attic - 2012-02-10 IMG_2338.jpg


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Room 007-Door_007_Side 1_Hardware-2012-07-19.JPG


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Room 008-Window_013-2012-07-19.JPG


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Room 013 - East - 2012-01-18.jpg


Room 013 - North (1) - 2011-09-07.JPG


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Room 013 - Light Fixture - 2012-02-10.jpg


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Room 013 - NorthWest - 2012-01-18.jpg


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Room 013 - Southwest - 2012-02-10.jpg


Room 013 - Southwest (2) - 2012-01-18.jpg


Room 013 - W005 - 2012-01-18.jpg

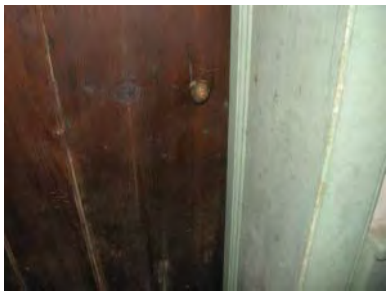

Room 013 - W012 and W013 - 2012-01-18.jpg


Room 013 - West - 2011-09-07.JPG


Room 013 - wood paneling - 2012-02-10.jpg


Room 013-Door_013A_Side 1_Hardware-2012-07-19.JPG


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Room 013-Door_013B_Side 1_Hardware-2012-07-19.JPG


Room 013-Door_013B_Side 1-2012-07-19.JPG


Room 013-Door_013B_Side 2_Hardware-2012-07-19.JPG


Room 013-Door_013B_Side 2-2012-07-19.JPG


Room 013-Window_005-2012-07-19.JPG


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Room 014 - Northwest - 2012-02-09.JPG


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Room 015 - D015 - 2011-09-07.JPG


Room 015 - Detail - 2012-02-10.JPG


Room 015 - South - 2012-02-10.jpg

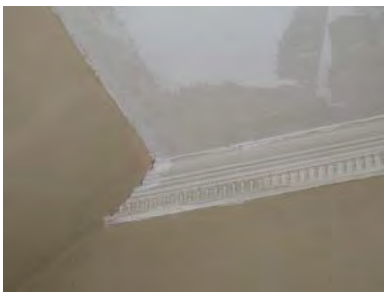

Room 015 - West - 2012-02-10.jpg


Room 101 - Base - 2012-01-18.jpg


Room 101 - Base (2) - 2012-01-18.jpg

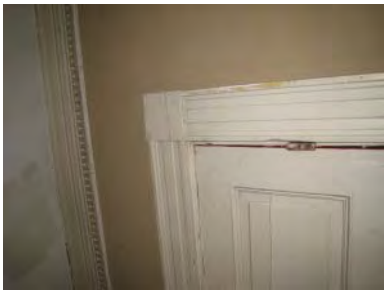

Room 101 - Crown Molding - 2012-01-18.jpg


Room 101 - Crown Molding (1) - 2012-01-18.jpg


Room 101 - Crown Molding (2) - 2012-01-18.jpg


Room 101 - Detail - 2007-06-29.JPG


Room 101 - Door 101A Profile - 2012-07-31.JPG

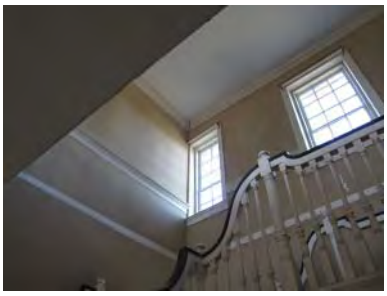

Room 101 - Door 101A trim - 2012-07-31.JPG


Room 101 - Door 101A trim and chair rail - 2012-07-31.JPG


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Room 101 - East - 2011-12-20.jpg


Room 101 - East (2) - 2012-01-18.jpg

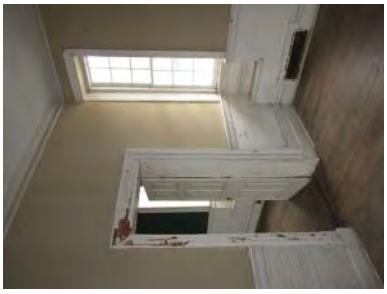

Room 101 - East (3) - 2012-04-18.JPG


Room 101 - Frame Detail - 2011-09-07.JPG


Room 101 - Key - 2011-12-20.jpg


Room 101 - Key (2) - 2012-04-18.JPG

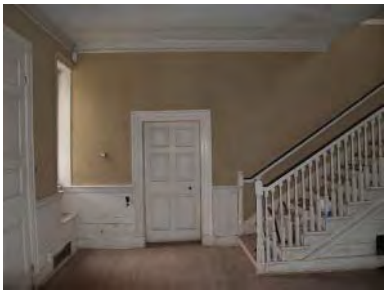

Room 101 - North - 2011-09-07.JPG


Room 101 - Northeast - 2011-12-20.jpg

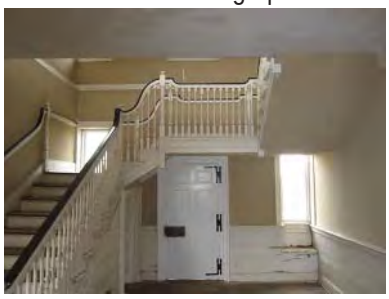

Room 101 - Room 101 - east elevation - 2012-04-18.JPG


Room 101 - Room 101 - north elevation (1) - 2012-04-18.JPG


Room 101 - Room 101 - north elevation (2) - 2012-04-18.JPG


Room 101 - Room 101 - south elevation - 2012-04-18.JPG


Room 101 - Room 101 - west elevation (1) - 2012-04-18.JPG

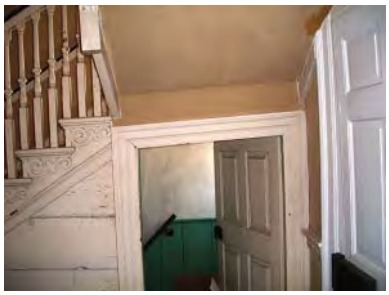

Room 101 - Room 101 - west elevation (2) - 2011-12-20.jpg


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Room 101 - Stair Details - 2011-12-20.jpg

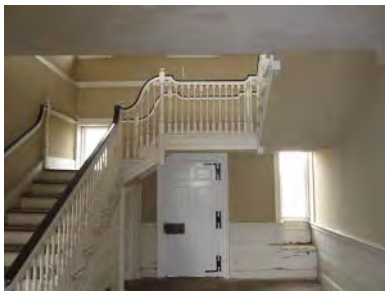

Room 101 - Vent - 2012-04-18.JPG


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Room 101-Door 101A-Paneling Profile-2012-0731.JPG


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Room 101-Door_101B_Exterior Hardware-2012-07-19.jpg.JPG


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Room 101-Door_101B_Interior_Hardware-2012-07-19.jpg.JPG


Room 101-Door_101B_Interior-2012-07-19.jpg.JPG

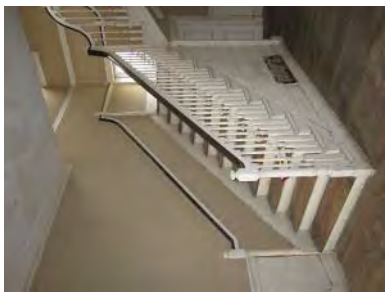

Room 101-Door_101C_Side 1_Hardware-2012-07-19.jpg.JPG


Room 101-Door_101C_Side 1-2012-07-19.jpg.JPG

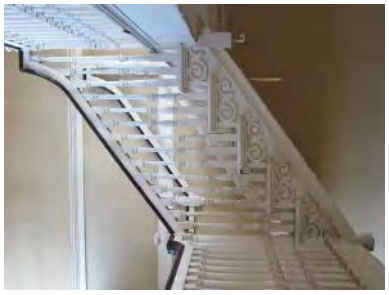

Room 101-Door_101C_Side 2_Hardware-2012-07-19.jpg.JPG


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Room 101-Stair_A- 2011-12-20 IMG_1964.jpg


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Room 101-Stair_A- 2012-01-18 IMG_2175.jpg


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Room 101-Stair_A- 2012-01-18 IMG_2207.jpg


Room 101-Stair_A- 2012-04-18 P4182114.JPG


Room 101-Stair_A- 2012-04-18 P4182220.JPG


Room 101-Window_103-2012-07-19.JPG


Room 101-Window_104-2012-07-19.JPG


Room 101-Window_116-2012-07-19.JPG


Room 102 - Base- 2011-12-20.jpg


Room 102 - Ceiling - 2012-03-20.JPG


Room 102 - Cord Behind Wall Cut Out - 2012-04-18.JPG

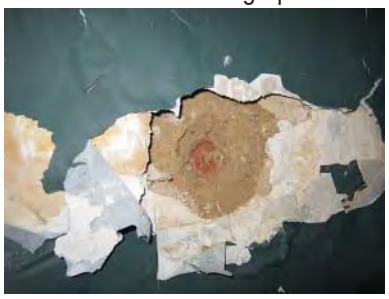

Room 102 - crown molding (1) - 2012-04-18.JPG


Room 102 - crown molding (2) - 2012-04-18.JPG


Room 102 - Damage Detail (1) - 2012-04-18.JPG


Room 102 - Damage Detail (2) - 2012-04-18.JPG


Room 102 - Damage Detail (3) - 2012-03-07.jpg


Room 102 - Damage Detail (4) - 2012-03-07.jpg

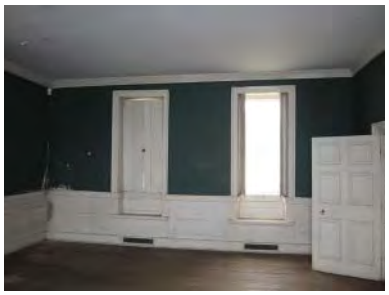

Room 102 - Details (1).JPG


Room 102 - Details (2).JPG


Room 102 - Details (3).JPG


Room 102 - East (2) - 2012-04-18.JPG


Room 102 - east elevation - 2012-04-18.JPG


Room 102 - East- 2011-12-20.jpg


Room 102 - Fireplace (1) - 2011-09-07.JPG


Room 102 - Fireplace (2) - 2012-03-07.jpg


Room 102 - fireplace (3) - 2012-04-18.JPG


Room 102 - Fireplace- 2011-12-20.jpg


Room 102 - Interior Window Closed - 2012-04-18.JPG


Room 102 - Interior Window Closed (2) - 2012-04-18.JPG


Room 102 - North (2)- 2011-12-20.jpg


Room 102 - north elevation - 2012-04-18.JPG


Room 102 - North- 2011-12-20.jpg


Room 102 - Northeast - 2011-09-07.JPG

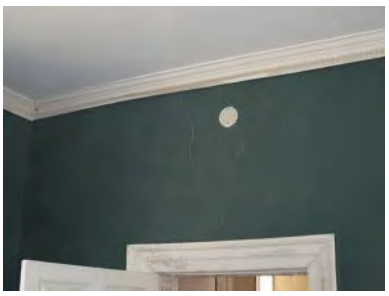

Room 102 - Northwest (2) - 2011-09-07.JPG


Room 102 - Northwest- 2011-12-20.jpg

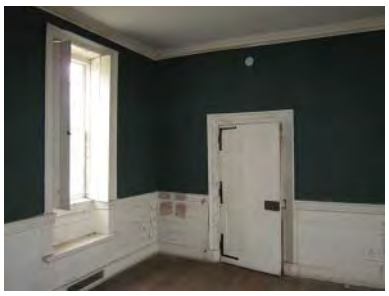

Room 102 - Sill Detail (2) - 2012-04-18.JPG


Room 102 - Sill Detail- 2011-12-20.jpg


Room 102 - south elevation - 2012-04-18.JPG


Room 102 - South Wall (Crack) (1) - 2012-03-07.jpg


Room 102 - South- 2011-12-20.jpg

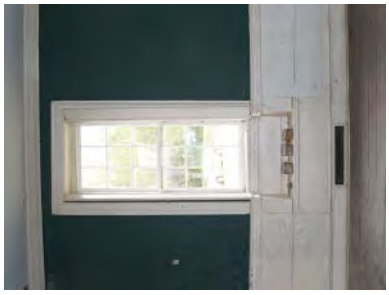

Room 102 - Southeast- 2011-12-20.jpg


Room 102 - Southwest (1) - 2012-04-18.JPG


Room 102 - Southwest (2) - 2012-04-18.JPG


Room 102 - Vent (1) - 2012-04-18.JPG


Room 102 - Vent (2) - 2012-04-18.JPG


Room 102 - W101 Interior - 2012-04-18.JPG


Room 102 - W102 Interior - 2012-04-18.JPG


Room 102 - W117 Interior - 2012-04-18.JPG


Room 102 - W118 Interior - 2012-04-18.JPG


Room 102 - wainscoting - 2012-04-18.JPG


Room 102 - wainscoting (2) - 2012-04-18.JPG


Room 102 - wainscoting (3) - 2012-04-18.JPG


Room 102 - West - 2007-06-29.JPG


Room 102 - West (2) - 2011-09-07.JPG


Room 102 - West (3) - 2011-09-07.JPG


Room 102 - west elevation - 2012-04-18.JPG


Room 102 - West- 2011-12-20 - 2012-04-18.jpg


Room 102-Door_102_Side 1_Hardware-2012-07-19.jpg.JPG


Room 102-Door_102_Side 1-2012-07-19.jpg.JPG


Room 102-Door_102_Side 2_Hardware-2012-07-19.jpg.JPG

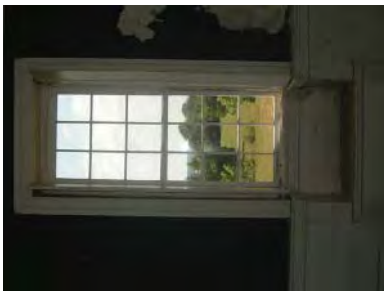

Room 102-Door_102_Side 2-2012-07-19.jpg.JPG


Room 102-Livingroom-Fireplace-2012-0719.JPG


Room 102-Window_101-2012-07-19.JPG


Room 102-Window_102-2012-07-19.JPG


Room 102-Window_116-2012-07-19.JPG


Room 102-Window_117-2012-07-19.JPG

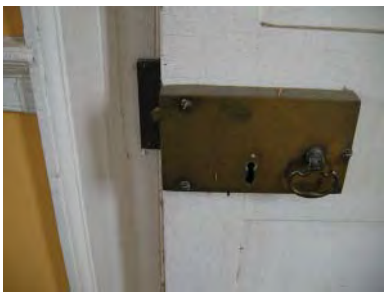

Room 103 - Fireplace Shelves - 2011-09-07.JPG


Room 103 - South - 2011-09-07.JPG


Room 103 - Vent - 2011-09-07.JPG


Room 103 - West - 2011-09-07.JPG

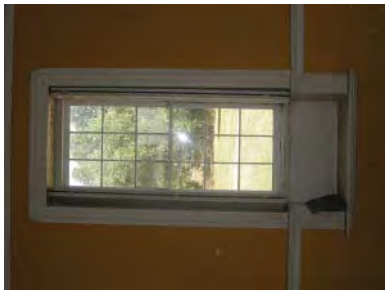

Room 103-DiningRoom-Wood Floor Patch-2012-0731.JPG


Room 103-Door_103_Side 1_Hardware-2012-07-19.jpg.JPG


Room 103-Door_103_Side 1-2012-07-19.jpg.JPG


Room 103-Door_103_Side 2_Hardware-2012-07-19.jpg.JPG


Room 103-Door_103_Side 2-2012-07-19.jpg.JPG

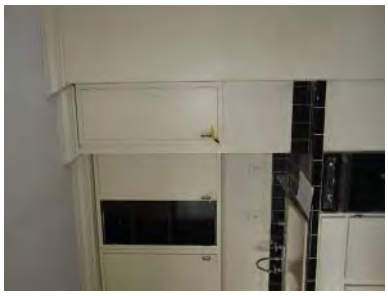

Room 103-Window_105-2012-07-19.JPG


Room 103-Window_106-2012-07-19.JPG


Room 103-Window_113-2012-07-19.JPG


Room 103-Window_114-2012-07-19.JPG


Room 104 - Cabinets - 2011-12-20.jpg


Room 104 - Cabinets (2) - 2011-12-20.jpg


Room 104 - Ceiling Vent - 2011-12-20.jpg


Room 104 - Compactor - 2011-12-20.jpg


Room 104 - East - 2012-03-07.jpg


Room 104 - East (2) - 2012-03-07.jpg


Room 104 - East A - 2011-12-20.jpg

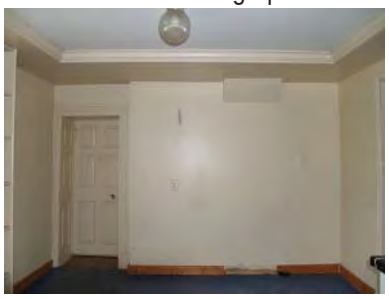

Room 104 - Kitchen Sink - 2012-02-10.JPG


Room 104 - Kitchen Sink (2) - 2012-02-10.JPG


Room 104 - North - 2011-09-07.JPG


Room 104 - North (a) - 2011-12-20.jpg


Room 104 - North (b) - 2012-01-18.jpg


Room 104 - North (c) - 2012-04-18.JPG


Room 104 - Northeast - 2011-12-20.jpg


Room 104 - Northwest - 2012-03-07.jpg


Room 104 - Sink - 2011-12-20.jpg


Room 104 - Sink (2) - 2011-12-20.jpg


Room 104 - Sink (3) - 2011-09-07.JPG


Room 104 - Trim Detail - 2012-01-18.jpg


Room 104 - W112 (1) - 2012-03-07.jpg

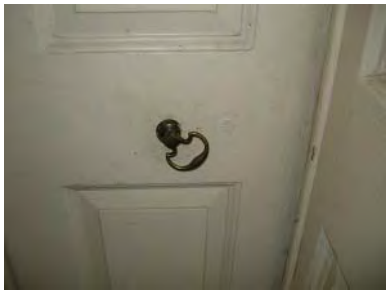

Room 104 - W112 (2) - 2011-12-20.jpg


Room 104 - W112 (3) - 2011-12-20.jpg


Room 104 - West - 2012-03-07.jpg


Room 104 - West A - 2012-03-07.jpg


Room 104 - West B - 2011-12-20.jpg

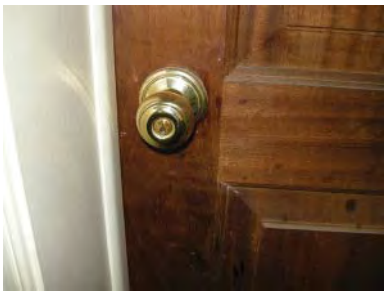

Room 104-Door_104_Side 1_Hardware-2012-07-19.jpg.JPG


Room 104-Door_104_Side 1-2012-07-19.jpg.JPG


Room 104-Door_104_Side 2_Hardware-2012-07-19.jpg.JPG


Room 104-Door_104_Side 2-2012-07-19.jpg.JPG


Room 104-Window_112-2012-07-19.JPG


Room 105-Door_105_Side 1_Hardware-2012-07-19.jpg.JPG

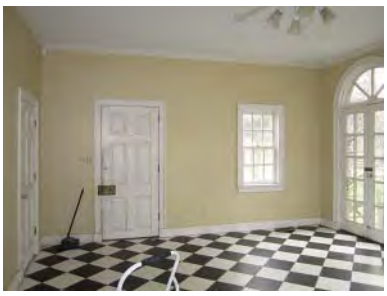

Room 105-Door_105_Side 1-2012-07-19.jpg.JPG

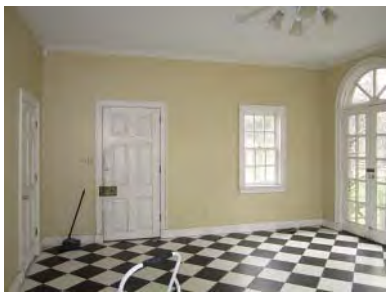

Room 105-Door_105_Side 2 Hardware-2012-07-19.jpg.JPG

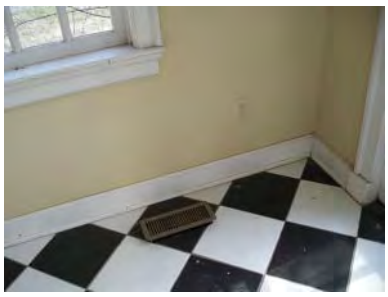

Room 105-Door_105_Side 2-2012-07-19.jpg.JPG

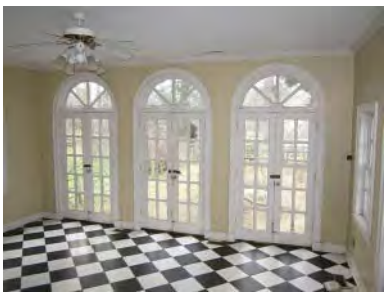

Room 105-Window_107-2012-07-19.JPG


Room 106 - Base - 2011-12-20.jpg


Room 106 - East - 2011-12-20.jpg

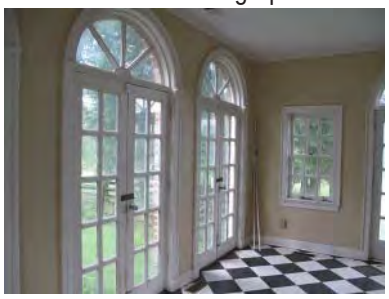

Room 106 - east (2) - 2011-12-20.jpg


Room 106 - Grille - 2007-06-29.JPG


Room 106 - South - 2011-12-20.jpg


Room 106 - South - 2012-02-09.JPG


Room 106 - South (2) - 2011-12-20.jpg


Room 106 - Southwest - 2011-09-07.JPG


Room 106 - Southwest - 2012-02-09.JPG


Room 106 - Stair - 2011-12-20.jpg


Room 106 - Stair Detail - 2011-12-20.jpg


Room 106 - West - 2011-12-20.jpg


Room 106 - West (2) - 2011-12-20.jpg


Room 106-Door_106A_Exterior Hardware-2012-07-19.jpg


Room 106-Door_106A_Exterior-2012-07-19.jpg


Room 106-Door_106A_Interior Hardware-2012-07-19.jpg


Room 106-Door_106A_Interior-2012-07-19.JPG


Room 106-Door_106B_Exterior-2012-07-19.jpg.JPG

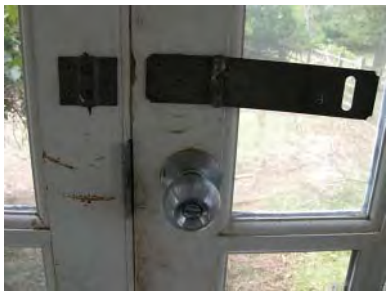

Room 106-Door_106B_ExteriorHardware-2012-07-19.jpg.JPG


Room 106-Door_106B_Interior Hardware-2012-07-19.jpg.JPG


Room 106-Door_106B_Interior-2012-07-19.jpg.JPG


Room 106-Door_106C_Exterior Hardware-2012-07-19.jpg.JPG


Room 106-Door_106C_Exterior-2012-07-19.jpg.JPG


Room 106-Door_106C_Interior Hardware-2012-07-19.jpg.JPG


Room 106-Door_106C_Interior-2012-07-19.jpg.JPG


Room 106-Door_106D_Exterior Hardware-2012-07-19.jpg.JPG


Room 106-Door_106D_Exterior-2012-07-19.jpg.JPG


Room 106-Door_106D_Interior Hardware-2012-07-19.jpg.JPG


Room 106-Door_106D_Interior-2012-07-19.jpg.JPG


Room 106-Door_106E_Exterior-2012-07-19.jpg.JPG

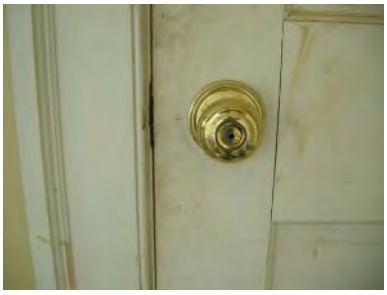

Room 106-Door_106E_Interior Hardware-2012-07-19.jpg.JPG


Room 106-Door_106E_Interior-2012-07-19.jpg.JPG


Room 106-Window_109-2012-07-19.JPG

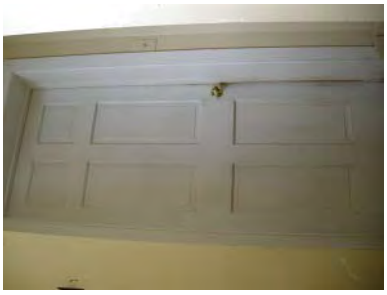

Room 106-Window_110-2012-07-19.JPG

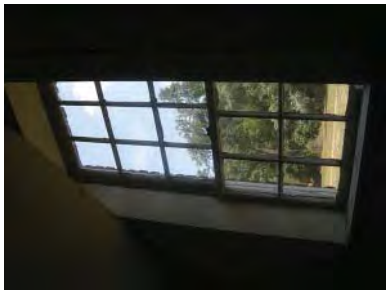

Room 106-Window_111-2012-07-19.JPG

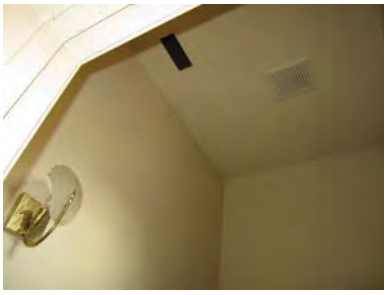

Room 107-Door_107_Side 1 Hardware-2012-07-19.jpg

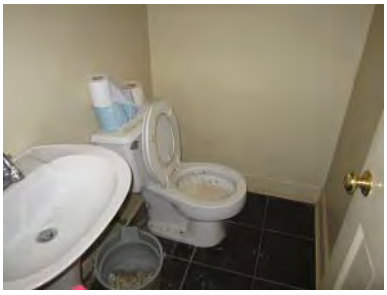

Room 107-Door_107_Side 1-2012-07-19.jpg


Room 107-Door_107_Side 2 Hardware-2012-07-19.jpg

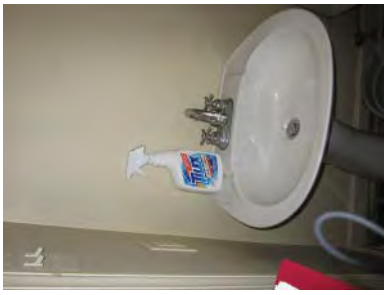

Room 107-Door_107_Side 2-2012-07-19.jpg


Room 107-Window_108-2012-07-19.JPG

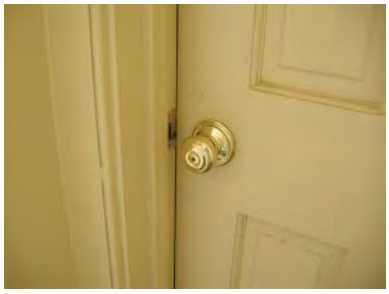

Room 108 - Hardware - 2012-01-18.jpg


Room 108 - North - 2012-01-18.jpg

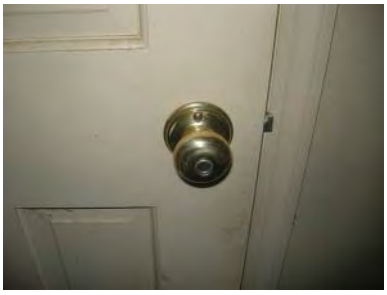

Room 108 - North A - 2012-01-18.jpg


Room 108 - Sink - 2012-01-18.jpg


Room 108 - West - 2012-02-10.JPG


Room 108-Door_108_Side 1_Hardware-2012-07-19.JPG


Room 108-Door_108_Side 1-2012-07-19.JPG


Room 108-Door_108_Side 2_Hardware-2012-07-19.JPG


Room 109-Door_109_Exterior-2012-07-19.jpg


Room 109-Door_109_Side 1_1-2012-07-19.JPG


Room 109-Door_109_Side 1_Hardware 1-2012-07-19.JPG


Room 109-Door_109_Side 1_Hardware 2-2012-07-19.JPG


Room 109-Door_109_Side 1_Hinge-2012-07-19.JPG


Room 109-Door_109_Side 1-2012-07-19.JPG


Room 200 - Details (1) - 2012-04-18.JPG


Room 200 - Details (2) - 2012-01-18.jpg


Room 200 - Details (3) - 2012-01-18.jpg


Room 200 - Details (4) - 2012-01-18.jpg


Room 200 - Details (5) - 2012-01-18.jpg


Room 200 - Details (6) - 2012-01-18.jpg

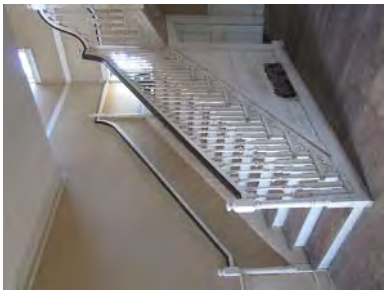

Room 200 - Details (7) - 2012-01-18.jpg


Room 200 - Details (8) - 2012-01-18.jpg

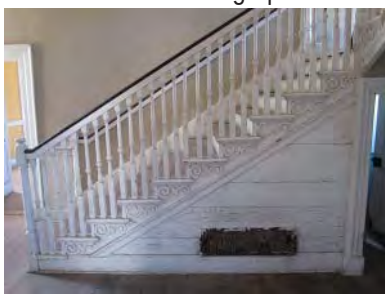

Room 200 - Details (9) - 2012-01-18.jpg


Room 200 - Details (10) - 2012-01-18.jpg


Room 200 - Details (11) - 2012-01-18.jpg


Room 200 - Details (12) - 2012-01-18.jpg


Room 200 - Details (13) - 2012-01-18.jpg

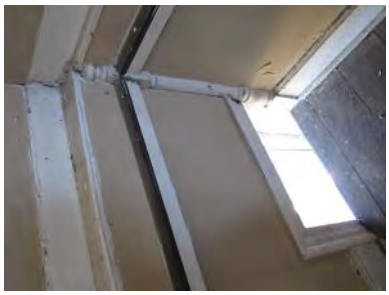

Room 200 - Details (14) - 2012-01-18.jpg


Room 200 - Details (15) - 2012-01-18.jpg


Room 200 - Details (16) - 2012-01-18.jpg


Room 200 - Details (17) - 2012-01-18.jpg


Room 200 - Details (18) - 2012-01-18.jpg

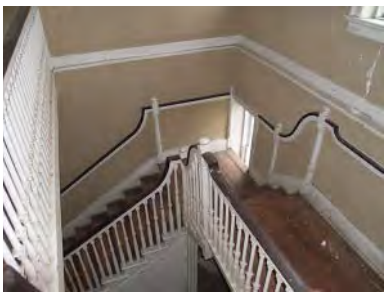

Room 200 - Details (19) - 2012-01-18.jpg

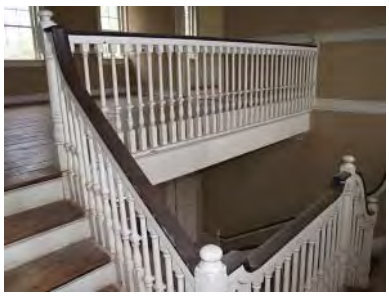

Room 200 - Details (20) - 2012-01-18.jpg


Room 200 - Details (21) - 2012-01-18.jpg


Room 200 - Details (22) - 2012-01-18.jpg


Room 200 - Details (23) - 2012-02-10.jpg


Room 200 - Details (24) - 2012-04-18.JPG


Room 200 - Details (25) - 2012-04-18.JPG


Room 200 - Details (26) - 2012-04-18.JPG


Room 200 - Details (27) - 2012-04-18.JPG


Room 200 - Details (28) - 2012-04-18.JPG


Room 200 - Details (29) - 2012-04-18.JPG

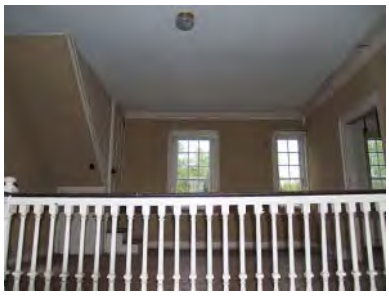

Room 201 - Room Baseboard - 2012-04-18.JPG


Room 201 - Room Chair Rail - 2012-04-18.JPG

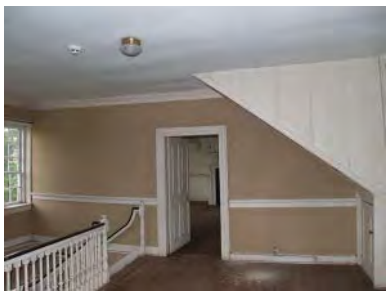

Room 201 - Detail - 2011-12-20.jpg

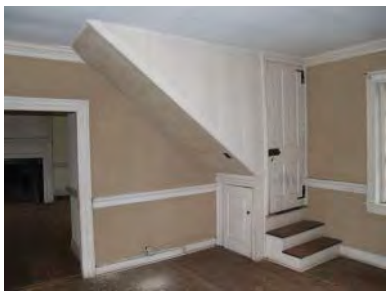

Room 201 - Detail (2) - 2011-09-07.JPG


Room 201 - east - 2012-04-18.JPG


Room 201 - East - 2012-04-18.JPG


Room 201 - East (2) - 2011-09-07.JPG


Room 201 - north (1) - 2012-04-18.JPG

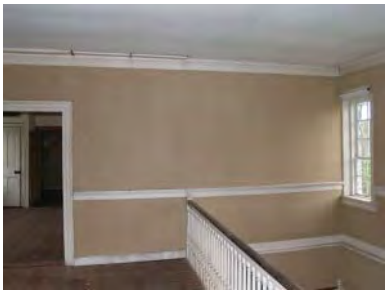

Room 201 - north (2) - 2012-04-18.JPG

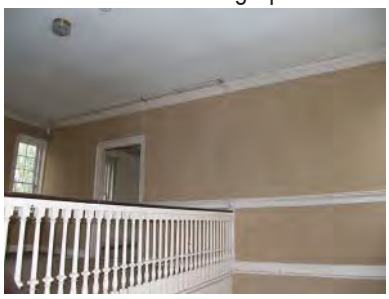

Room 201 - north s (1) - 2011-09-07.JPG


Room 201 - Northeast - 2011-12-20.jpg


Room 201 - Northeast (2) - 2011-12-20.jpg


Room 201 - south (1) - 2012-04-18.JPG


Room 201 - south (2) - 2012-04-18.JPG


Room 201 - South - 2012-04-18.JPG


Room 201 - Southwest - 2011-09-07.JPG


Room 201 - Stair A Details 1 - 2011-12-20.jpg


Room 201 - Stair A Details 2 - 2011-12-20.jpg


Room 201 - Stair A Details 3 - 2012-04-18.JPG

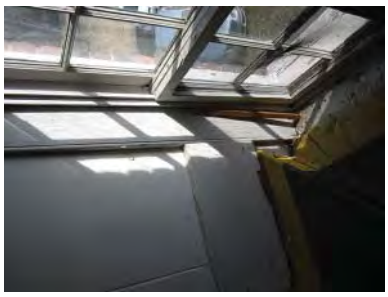

Room 201 - Stair A Details 4 - 2012-04-18.JPG


Room 201 - Stair A Details 5 - 2011-12-20.jpg

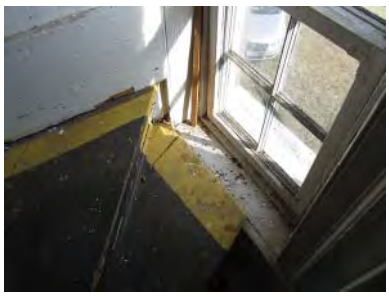

Room 201 - Stair A Details 6 - 2012-04-18.JPG


Room 201 - Stair A Details 7 - 2011-12-20.jpg

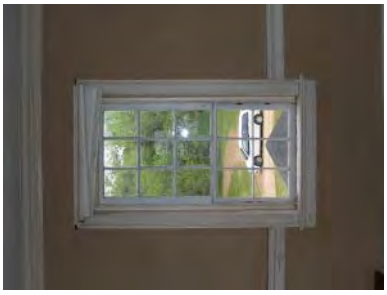

Room 201 - Stair A Details 8 - 2011-12-20.jpg


Room 201 - W203 - 2012-02-10.jpg


Room 201 - W203 Molding - 2012-02-10.jpg


Room 201 - W203-1 - 2012-02-10.jpg


Room 201 - W203-2 - 2011-09-07 - 2012-02-10.JPG

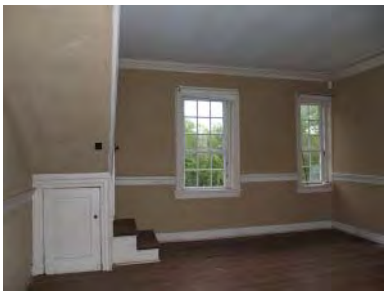

Room 201 - W204 Interior - 2012-04-18.JPG


Room 201 - W205 Interior - 2012-04-18.JPG


Room 201 - W217 Interior - 2012-04-18.JPG


Room 201 - W218 Interior - 2012-04-18.JPG

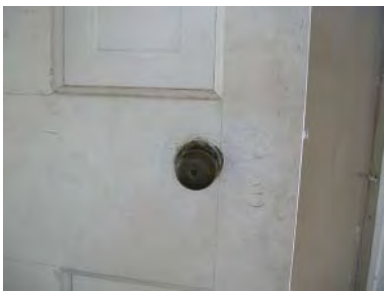

Room 201 - W219 Interior - 2012-04-18.JPG


Room 201 - west (1) - 2012-04-18.JPG

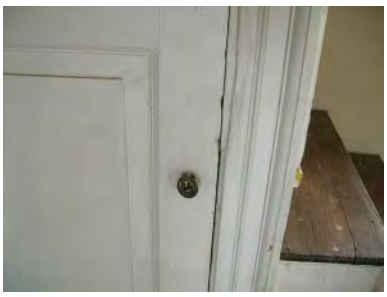

Room 201 - west (2) - 2011-09-07.JPG


Room 201-Door_201A_Side 1_Hardware-2012-07-19.jpg.JPG


Room 201-Door_201A_Side 1-2012-07-19.jpg.JPG


Room 201-Door_201A_Side 2_Hardware-2012-07-19.JPG


Room 201-Door_201A_Side 2-2012-07-19.JPG


Room 201-Door_201B_Side 1_Hardware-2012-07-19.jpg.JPG


Room 201-Door_201B_Side 1-2012-07-19.jpg.JPG


Room 201-Door_201B_Side 2-2012-07-19.JPG


Room 201-Window_203-2012-07-19.JPG


Room 201-Window_204-2012-07-19.JPG


Room 201-Window_205-2012-07-19.JPG


Room 201-Window_217-2012-07-19.JPG


Room 201-Window_218-2012-07-19.JPG


Room 201-Window_219-2012-07-19.JPG


Room 202 - east elevation (1) - 2012-04-18.JPG


Room 202 - Fireplace - 2012-03-23.jpg


Room 202 - north elevation (1) - 2011-09-07.JPG


Room 202 - south elevation (1) - 2012-04-18.JPG

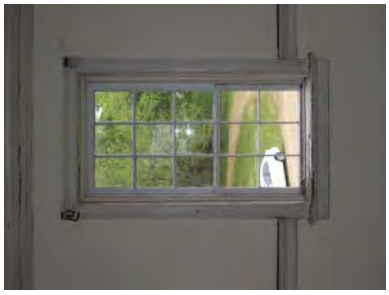

Room 202 - west elevation (1) - 2012-04-18.JPG


Room 202 - Frieplace - 2012-02-10.JPG


Room 202 - Grille - 2007-06-29.JPG


Room 202 - Light Fixture 1 - 2012-04-18.JPG

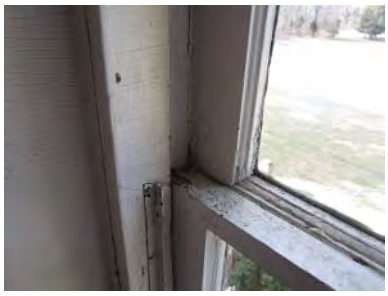

Room 202 - Light Fixture 2 - 2012-04-18.JPG


Room 202 - W201 Interior - 2012-04-18.JPG


Room 202 - W202 Interior - 2012-04-18.JPG


Room 202 - W219 (1) - 2012-01-18.jpg


Room 202 - W219 (2) - 2012-01-18.jpg


Room 202 - W219 (3) - 2012-01-18.jpg


Room 202 - W219 (4) - 2012-01-18.jpg


Room 202 - W220 Interior - 2012-04-18.JPG


Room 202 - W221 Interior - 2012-04-18.JPG


Room 202 - W221 Sill (1) - 2012-01-18.jpg


Room 202 - W221 Sill (2) - 2012-01-18.jpg


Room 202-Door_202_Side 1_Hardware-2012-07-19.JPG

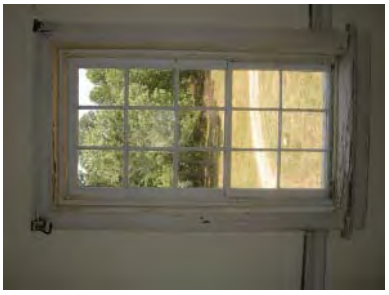

Room 202-Door_202_Side 1-2012-07-19.JPG


Room 202-Door_202_Side 2_Hardware 2-2012-07-19.JPG


Room 202-Door_202_Side 2_Hardware 3-2012-07-19.JPG

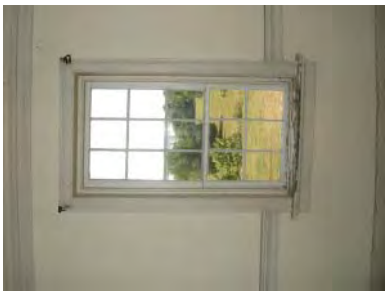

Room 202-Door_202_Side 2_Hardware-2012-07-19.JPG


Room 202-Door_202_Side 2-2012-07-19.JPG


Room 202-Window_201-2012-07-19.JPG


Room 202-Window_202-2012-07-19.JPG


Room 202-Window_220-2012-07-19.JPG


Room 202-Window_221-2012-07-19.JPG

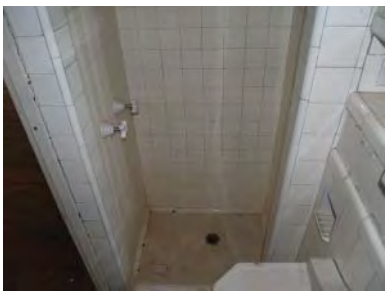

Room 202A - Bathroom Sink - 2012-04-18.JPG


Room 202A - cabinet - 2012-04-18.JPG

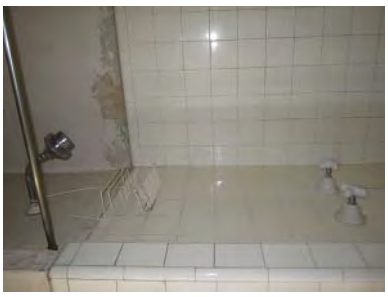

Room 202A - Cabinet (2) - 2011-12-20.jpg

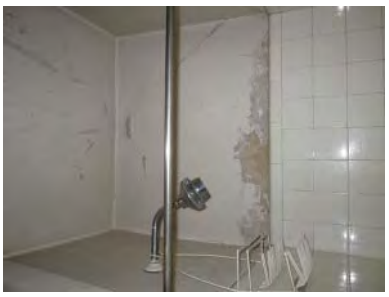

Room 202A - shelves - 2012-04-18.JPG


Room 202A - Shower - 2011-12-20.jpg


Room 202A - shower (1) - 2012-04-18.JPG


Room 202A - shower (2) - 2012-04-18.JPG


Room 202A - Shower (3) - 2012-01-18.jpg


Room 202A - Shower (4) - 2011-12-20.jpg


Room 202A - Sink - 2011-12-20.jpg


Room 202A - Sink (2) - 2012-01-18.jpg


Room 202A - Sink (3) - 2012-01-18.jpg


Room 202A - Sink (4) - 2011-09-07.JPG


Room 202A - Sink (5) - 2012-04-18.JPG


Room 202A - Southwest - 2012-02-10.JPG


Room 202A - toilet - 2012-04-18.JPG


Room 202A - Toilet (2) - 2012-01-18.jpg


Room 202A - Toilet (3) - 2011-12-20.jpg


Room 202A-Door_202A_Side 1_Hardware-2012-07-19.JPG


Room 202A-Door_202A_Side 1-2012-07-19.JPG


Room 202A-Door_202A_Side 2_Hardware-2012-07-19.JPG


Room 202A-Door_202A_Side 2-2012-07-19.JPG


Room 202B - East - 2012-04-18.JPG


Room 202B - West - 2012-04-18.JPG


Room 202B-Door_202B_Side 1_Hardware-2012-07-19.JPG


Room 202B-Door_202B_Side 1-2012-07-19.JPG


Room 202B-Door_202B_Side 2_Hardware-2012-07-19.JPG


Room 202B-Door_202B_Side 2-2012-07-19.JPG


Room 203 -2 - 2012-04-18.JPG


Room 203 - 1a - 2011-12-20.jpg


Room 203 - 3a - 2012-04-18.JPG


Room 203 - 4 - 2012-04-18.JPG


Room 203 - Access Panel - 2012-04-18.JPG

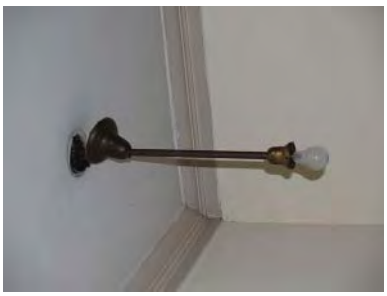

Room 203 - Access Panel (2) - 2012-04-18.JPG


Room 203 - Access Panel (3) - 2012-04-18.JPG


Room 203 - base - 2012-04-18.JPG

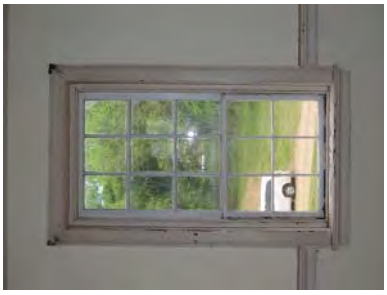

Room 203 - Chair rail - 2012-04-18.JPG


Room 203 - Fireplace - 2012-04-18.JPG


Room 203 - Light Fixture - 2012-04-18.JPG


Room 203 - Light Fixture (2) - 2012-04-18.JPG


Room 203 - W203 - 2011-12-20.jpg


Room 203 - W206 - 2012-04-18.JPG


Room 203 - W207 - 2012-04-18.JPG


Room 203 - W215 - 2012-04-18.JPG


Room 203 - W215 (2) - 2011-12-20.jpg


Room 203 - W216 - 2012-04-18.JPG


Room 203 -1 - 2012-04-18.JPG


Room 203 -3 - 2012-04-18.JPG


Room 203-Door_203_Side 1_Hardware-2012-07-19.jpg.JPG

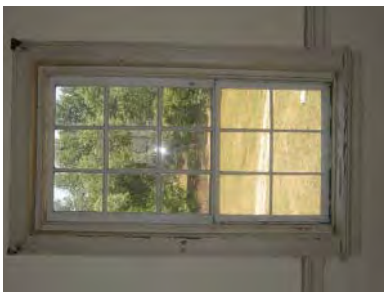

Room 203-Door_203_Side 1-2012-07-19.jpg.JPG


Room 203-Door_203_Side 2_Hardware-2012-07-19.jpg.JPG


Room 203-Door_203_Side 2-2012-07-19.jpg.JPG


Room 203-Door_203C_Hardware-2012-07-19.jpg.JPG


Room 203-Door_203C-2012-07-19.jpg.JPG


Room 203-Window_206-2012-07-19.JPG


Room 203-Window_207-2012-07-19.JPG


Room 203-Window_215-2012-07-19.JPG


Room 203-Window_216_Detail-2012-07-19.JPG


Room 203-Window_216-2012-07-19.JPG

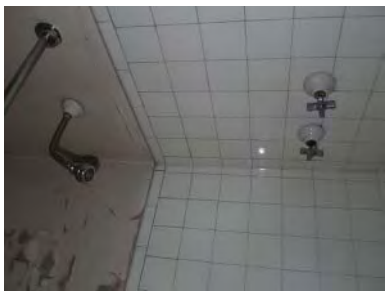

Room 203A - Detail (1) - 2011-12-20.jpg


Room 203A - Detail (2) - 2012-04-18.JPG


Room 203A - East - 2011-12-20.jpg

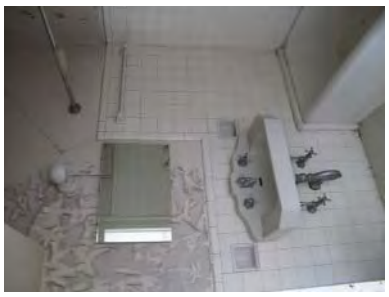

Room 203A - EastA - 2012-04-18.JPG

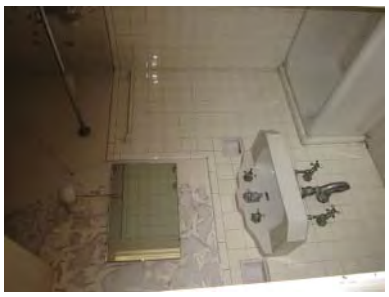

Room 203A - Light Fixture - 2012-04-18.JPG


Room 203A - North - 2012-04-18.JPG

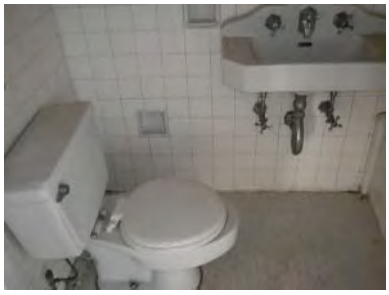

Room 203A - Sink (1) - 2012-04-18.JPG


Room 203A - Sink (2) - 2011-12-20.jpg


Room 203A - Sink (3) - 2011-09-07.JPG


Room 203A - South - 2011-12-20.jpg


Room 203A - SouthA - 2012-04-18.JPG


Room 203A - Southeast - 2012-02-10.JPG


Room 203A - Tub - 2011-12-20.jpg


Room 203A - West - 2012-04-18.JPG

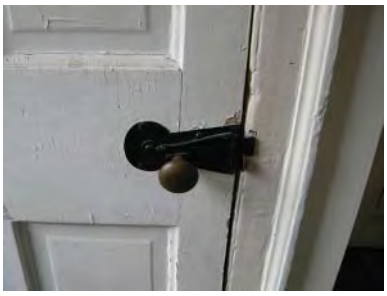

Room 203A-Door_203A_Side 1_Hardware-2012-07-19.jpg.JPG


Room 203A-Door_203A_Side 1-2012-07-19.jpg.JPG

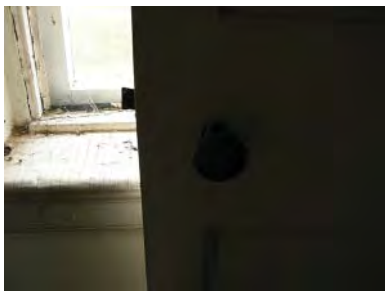

Room 203A-Door_203A_Side 2_Hardware-2012-07-19.jpg.JPG


Room 203A-Door_203A_Side 2-2012-07-19.jpg.JPG

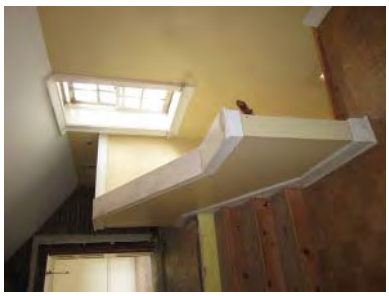

Room 203B - 2012-04-18.JPG


Room 203B-Door_203B_Side 1_Hardware-2012-07-19.jpg.JPG


Room 203B-Door_203B_Side 1-2012-07-19.jpg.JPG

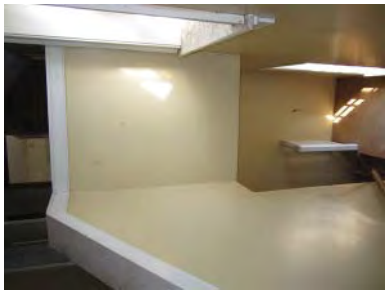

Room 203B-Door_203B_Side 2_Hardware-2012-07-19.jpg.JPG


Room 203B-Door_203B_Side 2-2012-07-19.jpg.JPG

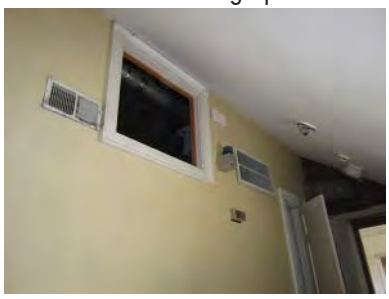

Room 204 - East - 2011-12-20.jpg


Room 204 - North - 2011-12-20.jpg


Room 204 - North A - 2011-12-20.jpg


Room 204 - North B - 2012-03-07.jpg


Room 204 - North C - 2011-12-20.jpg

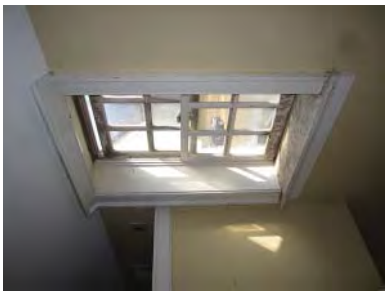

Room 204 - Attic Access - 2012-03-07.jpg

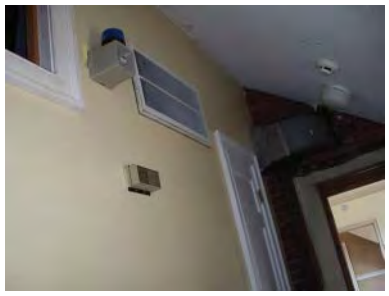

Room 204 - Duct - 2011-12-20.jpg


Room 204 - Duct - 2012-02-10.JPG


Room 204 - Duct (2) - 2011-09-07.JPG

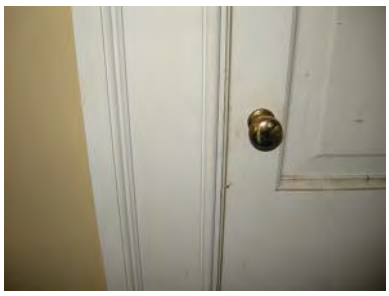

Room 204 - North D - 2011-12-20.jpg


Room 204 - W208 - 2012-03-07.jpg

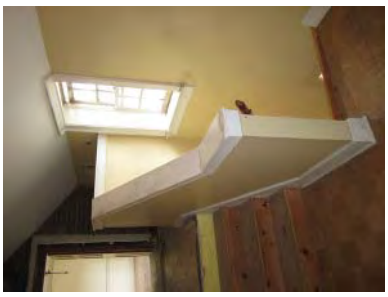

Room 204 - West - 2007-06-29.JPG


Room 204-Door_204_Side 1-2012-07-19.jpg.JPG


Room 204-Door_204_Side 2-2012-07-19.jpg.JPG

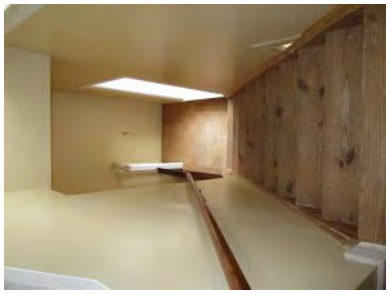

Room 204-Door_204A_Hardware-2012-07-19.jpg.JPG


Room 204-Door_204A-2012-07-19.jpg.JPG


Room 205 - East - 2011-09-07.jpg


Room 205 - East (2) - 2012-03-07.jpg

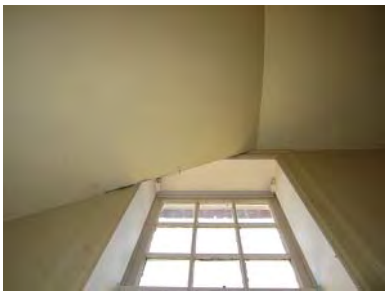

Room 205 - North - 2011-09-07.jpg

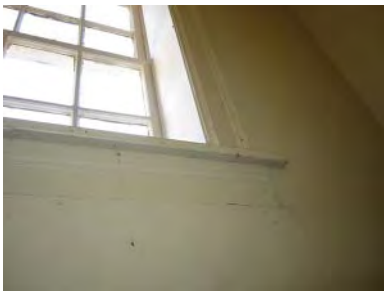

Room 205 - North A - 2011-09-07.jpg


Room 205 - South - 2011-09-07.jpg


Room 205 - South A - 2011-09-07.JPG

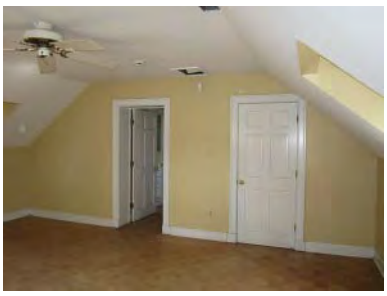

Room 205 - South West A - 2011-09-07.jpg

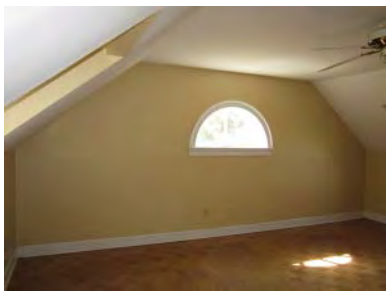

Room 205 -W208 - 2012-03-07.jpg


Room 205 -W208 (2) - 2012-03-07.jpg


Room 205-Window_208-2012-07-19.JPG

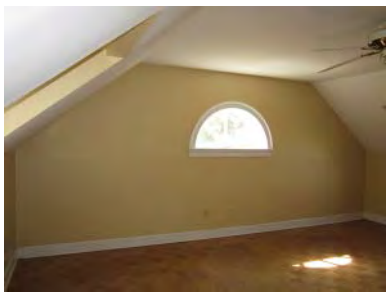

Room 206 - East - 2012-03-07.jpg


Room 206 - North - 2012-03-07.jpg


Room 206 - South - 2012-03-07.jpg

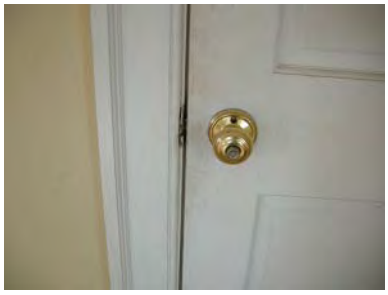

Room 206 - Southeast - 2011-09-07.JPG


Room 206 - W206 - 2012-03-07.jpg

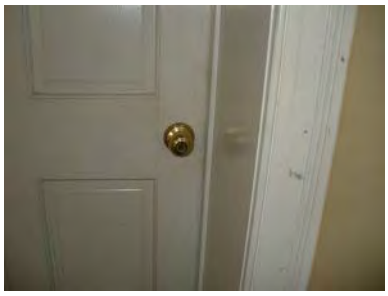

Room 206 - W210 - 2012-03-07.jpg


Room 206 - W211 and W212 - 2012-03-07.jpg


Room 206 - West - 2012-03-07.jpg


Room 206-Door_206_Side 1_Hardware-2012-07-19.jpg.JPG


Room 206-Door_206_Side 1-2012-07-19.jpg.JPG


Room 206-Door_206_Side 2_Hardware-2012-07-19.jpg.JPG


Room 206-Door_206_Side 2-2012-07-19.jpg.JPG


Room 206-Window_209-2012-07-19.JPG


Room 206-Window_210-2012-07-19.JPG

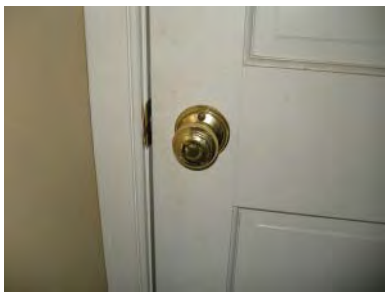

Room 206-Window_211-2012-07-19.JPG


Room 206-Window_212-2012-07-19.JPG

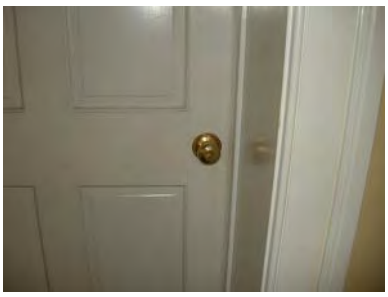

Room 207 - South - 2011-12-20.jpg


Room 207 - Suuth A - 2012-03-07.jpg


Room 207 - Water Damage - 2011-12-20.jpg

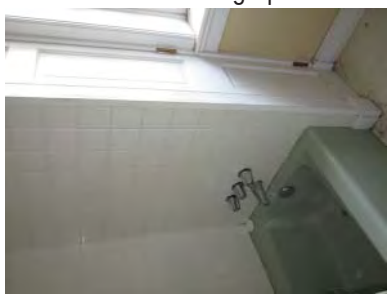

Room 207-Door_207_Side 1_Hardware-2012-07-19.jpg.JPG


Room 207-Door_207_Side 1-2012-07-19.jpg.JPG

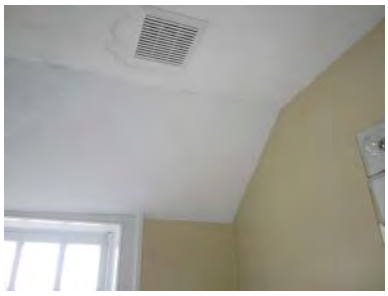

Room 207-Door_207_Side 2_Hardware-2012-07-19.jpg.JPG


Room 207-Door_207_Side 2-2012-07-19.jpg.JPG

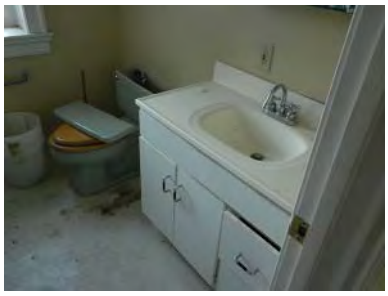

Room 208-Door_208-2012-07-19.jpg.JPG

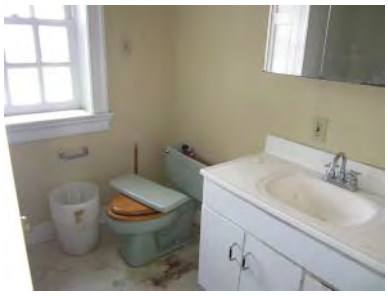

Room 209 - Bathtub - 2012-03-07.jpg


Room 209 - Ceiling - 2012-03-07.jpg


Room 209 - Ceiling 1 - 2012-03-07.jpg


Room 209 - Ceiling 2 - 2011-12-20.jpg


Room 209 - North - 2012-02-10.JPG

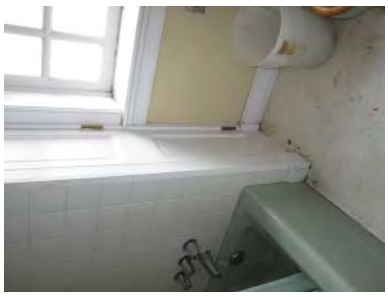

Room 209 - North - 2012-03-07.jpg

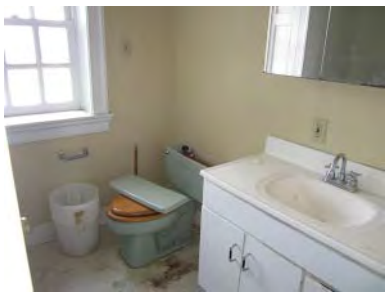

Room 209 - North A - 2012-03-07.jpg


Room 209 - Restroom Exhaust.JPG

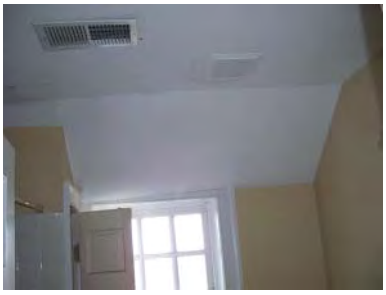

Room 209 - Shower Curtain - 2011-12-20.jpg

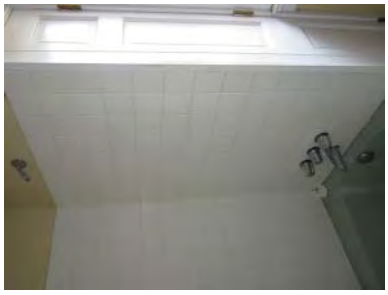

Room 209 - Sink - 2012-03-07.jpg


Room 209 - SouthWest - 2011-12-20.jpg

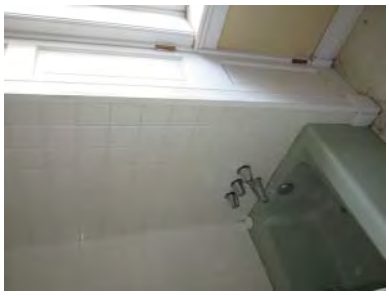

Room 209 - Toilet - 2012-03-07.jpg

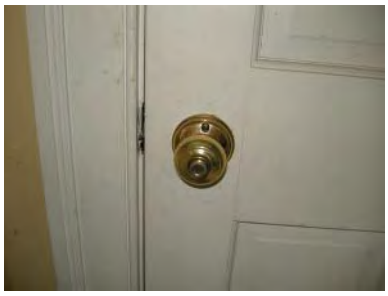

Room 209 - W213 - 2011-12-20.jpg


Room 209 - West - 2007-06-29.JPG

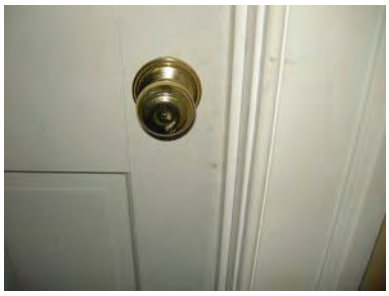

Room 209 - West - 2012-03-07.jpg


Room 209 - West (2) - 2011-12-20.jpg


Room 209 - West A - 2012-03-07.jpg


Room 209-Door_209_Side 1_Hardware-2012-07-19.jpg.JPG

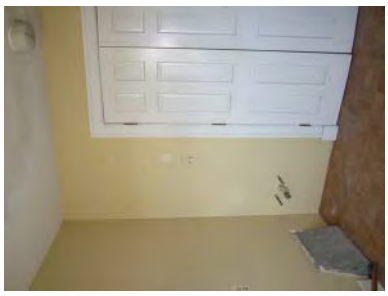

Room 209-Door_209_Side 1-2012-07-19.jpg.JPG

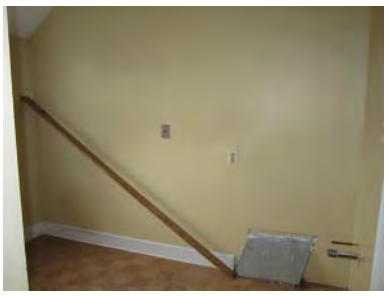

Room 209-Door_209_Side 2_Hardware-2012-07-19.jpg.JPG


Room 209-Door_209_Side 2-2012-07-19.jpg.JPG

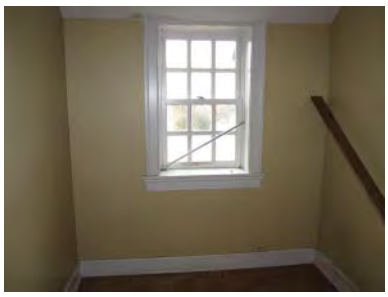

Room 209-Window_213-2012-07-19.JPG

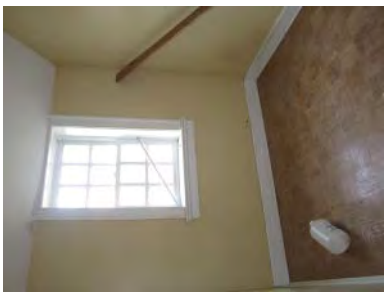

Room 210-Door_210-2012-07-19.jpg.JPG


Room 211 - East - 2012-03-07.jpg


Room 211 - North - 2011-12-20.jpg


Room 211 - South - 2012-03-07.jpg


Room 211 - W214 - 2011-12-20.jpg

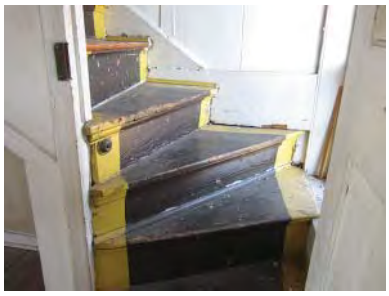

Room 211 - West - 2012-03-07.jpg


Room 211-Window_214-2012-07-19.JPG


Room 300 - Bottom Room 200 Level - 2012-01-18.jpg


Room 300 - Detail - 2012-02-10.jpg


Room 300 - East - 2011-12-20.jpg


Room 300 - North - 2012-01-18.jpg


Room 300 - North A - 2012-01-18.jpg


Room 300 - North B - 2011-12-20.jpg


Room 300 - West - 2011-12-20.jpg


Room 300 - Ceiling - 2012-02-10.jpg


Room 300 - Detail - 2012-02-10.jpg


Room 300 - Detail (2) - 2012-02-10.jpg


Room 300 - Detail (3) - 2012-04-18.JPG


Room 300 - East - 2012-02-10.jpg


Room 300 - West - 2011-12-20.jpg

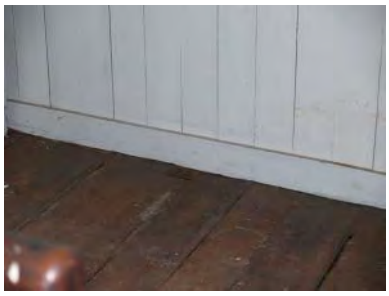

Room 300 - West (2) - 2012-02-10.jpg


Room 300 - West from above - 2012-04-18.JPG


Room 301 - East - 2012-04-18.JPG


Room 301 - East A - 2011-09-07.JPG


Room 301 - East B - 2011-12-20.jpg


Room 301 - Floor Outlet - 2012-04-18.JPG


Room 301 - modified structure.JPG

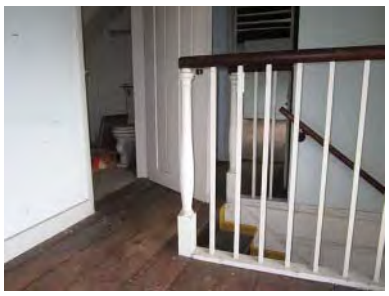

Room 301 - North - 2012-04-18.JPG


Room 301 - South - 2012-04-18.JPG


Room 301 - South A - 2012-04-18.JPG


Room 301 - South Looking Down Room - 2011-12-20.jpg


Room 301 - Stair Railing - 2012-04-18.JPG

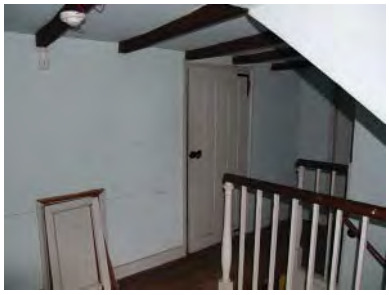

Room 301 - Stair Railing (2) - 2011-12-20.jpg

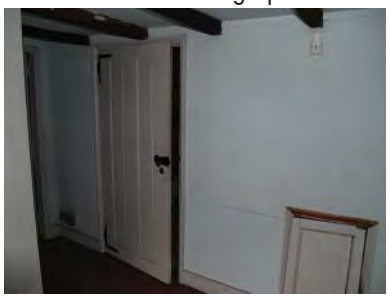

Room 301 - Stair Railing (3) - 2012-04-18.JPG


Room 301 - W302 - 2012-04-18.JPG


Room 301 - W302-1 - 2012-04-18.JPG


Room 301 - W302-2 - 2011-12-20.jpg


Room 301 - West A - 2012-04-18.JPG


Room 301 - West B - 2012-04-18.JPG


Room 301 - Window Seat - 2011-12-20.jpg


Room 301 - Window Seat (2) - 2012-02-10.jpg


Room 301 - Window Seat (3) - 2012-03-23.jpg


Room 301-Window_302-2012-07-19.JPG


Room 302 - East - 2012-04-18.JPG

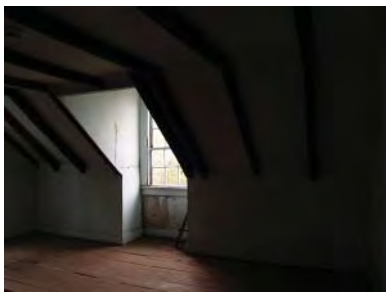

Room 302-Door_302_Side 1_Hardware-2012-07-19.JPG


Room 302-Door_302_Side 1-2012-07-19.JPG


Room 302-Door_302_Side 2_Hardware-2012-07-19.JPG


Room 302-Door_302_Side 2-2012-07-19.JPG


Room 302-North Bedroom-Fireplace-2012-0731.JPG


Room 303 - East - 2012-04-18.JPG


Room 303 - East (2) - 2011-12-20.jpg


Room 303 - Grille - 2007-06-29.JPG


Room 303 - North - 2011-09-07.jpg


Room 303 - North (2) - 2011-12-20.jpg


Room 303 - North (3) - 2011-09-07.JPG


Room 303 - North (4) - 2011-09-07.JPG


Room 303 - North (5) - 2012-04-18.JPG


Room 303 - North (6) - 2012-04-18.JPG


Room 303 - North (7) - 2012-04-18.JPG


Room 303 - South - 2012-04-18.JPG


Room 303 - Southwest - 2011-12-20.jpg

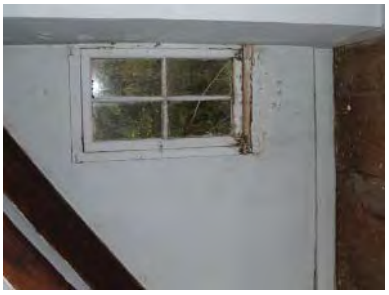

Room 303 - W301 - 2011-09-07.JPG


Room 303 - W301-1 - 2012-04-18.JPG


Room 303 - W301-2 - 2011-12-20.jpg


Room 303 - W301-3 - 2011-09-07.JPG


Room 303 - W306 - 2011-12-20.jpg


Room 303 - W306-1 - 2012-04-18.JPG


Room 303 - W307 - 2012-04-18.JPG

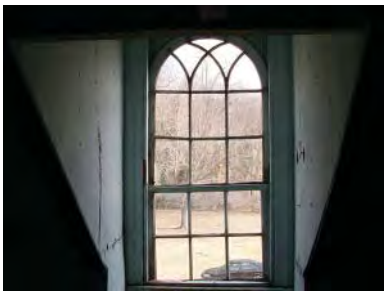

Room 303 - W307-1 - 2011-12-20.jpg


Room 303 - West - 2012-02-10.JPG


Room 303 - West - 2012-04-18.JPG


Room 303 - West (2) - 2011-12-20.jpg


Room 303 - West A - 2011-12-20.jpg


Room 303 - Window 301 - 2012-02-10.JPG


Room 303-Door_303_Back_Hardware- 2012-04-18.JPG


Room 303-Door_303_Front_Hardware- 2012-04-18.JPG


Room 303-Door_303_Side 1-2012-07-19.JPG


Room 303-Door_303_Side 2-2012-07-19.JPG


Room 303-Eave Crawl Space-2012-0719.JPG



Room 303-Johns Manville Label-2012-0719.JPG


Room 303-Roof Construction-2012-0719.JPG


Room 303-Roof Rafter-2012-0719.JPG


Room 303-Window_301-2012-07-19.JPG


Room 303-Window_306-2012-07-19.JPG


Room 303-Window_307-2012-07-19.JPG


Room 304 - Bathtub - 2012-04-18.JPG


Room 304 - Piping - 2012-04-18.JPG


Room 304 - Piping-2 - 2012-04-18.JPG


Room 304 - Sink - 2012-04-18.JPG


Room 304 - South - 2012-02-10.JPG


Room 304 -Ceiling - 2012-04-18.JPG


Room 304 -Ceiling (2) - 2012-04-18.JPG

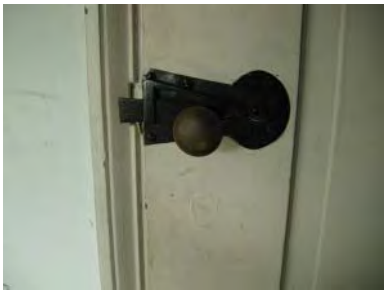

Room 304 -North - 2012-04-18.JPG


Room 304 -North (2) - 2011-12-20.jpg

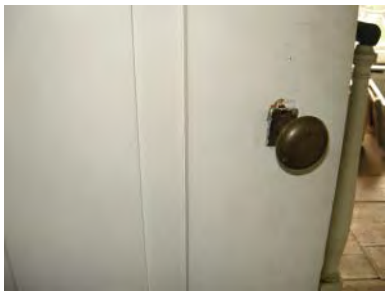

Room 304 -South - 2011-12-20.jpg


Room 304 -South West - 2011-12-20.jpg


Room 304 -West - 2012-04-18.JPG


Room 304-Door_304_Side 1_Hardware-2012-07-19.JPG


Room 304-Door_304_Side 1-2012-07-19.JPG


Room 304-Door_304_Side 2_Hardware-2012-07-19.JPG


Room 304-Door_304_Side 2_Trim-2012-07-19.JPG


Room 304-Door_304_Side 2-2012-07-19.JPG


Room 305 - Ceiling - 2012-04-18.JPG

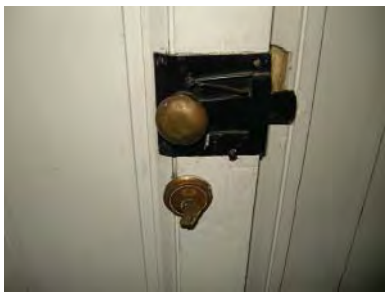

Room 305 - Fire Granade-2 - 2012-04-18.JPG


Room 305 - Fire Grenade-1 - 2012-04-18.JPG

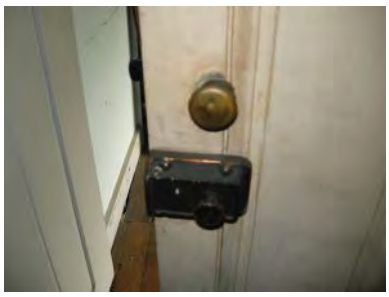

Room 305 - NorthWest - 2012-04-18.JPG


Room 305 - South - 2012-04-18.JPG


Room 305 - South North - 2011-12-20.jpg


Room 305-Door_305_Side 1_Hardware-2012-07-19.JPG


Room 305-Door_305_Side 1-2012-07-19.JPG

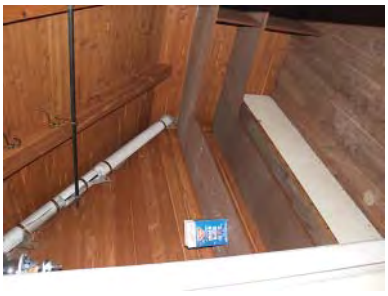

Room 305-Door_305_Side 2_Hardware-2012-07-19.JPG

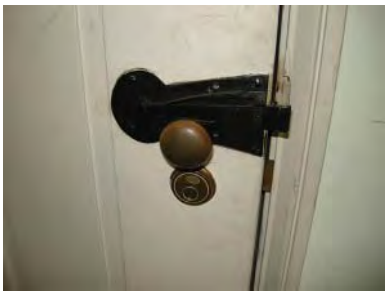

Room 305-Door_305_Side 2-2012-07-19.JPG


Room 306 - North 1 - 2012-12-20.jpg

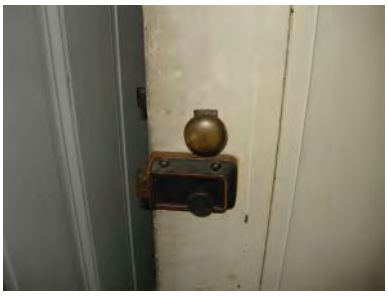

Room 306 - North 2 - 2011-04-18.JPG


Room 306 - Southwest - 2012-12-20.jpg


Room 306 - West - 2011-04-18.JPG


Room 306-Door_306_Side 1_Hardware-2012-07-19.JPG


Room 306-Door_306_Side 1-2012-07-19.JPG


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Room 306-Door_306_Side 2_Trim-2012-07-19.JPG


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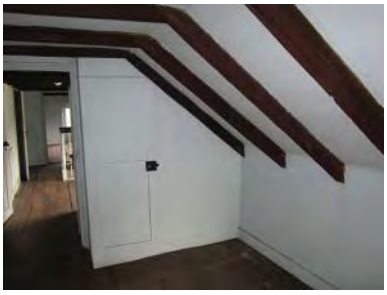

Room 307 - Details - 2011-09-07.JPG


Room 307 - East - 2011-12-20 IMG_2049.jpg


Room 307 - East A - 2011-12-20.jpg


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Room 307 - Northeast - 2011-12-20 IMG_2057.jpg


Room 307 - Northwest - 2011-09-07 IMG_6850.JPG


Room 307 - Northwest - 2011-12-20 IMG_2056.jpg

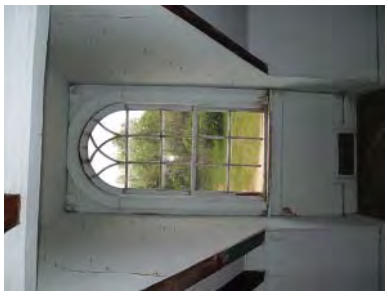

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Room 307 - Southeast - 2011-09-07 IMG_6849.JPG


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Room 307 - W303-2 - 2012-12-20.jpg


Room 307 - W303-3 - 2012-12-20.jpg


Room 307 - W303-4 - 2012-12-20.jpg

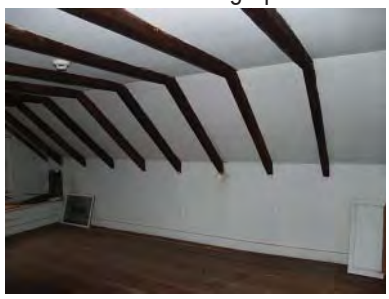

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UNITED STATES DEPARTMENT OF INTERIOR
NATIONAL PARK SERVICE

HISTORIC PRESERVATION TRAINING CENTER

HARMONY HALL -
HISTORIC STRUCTURE REPORT

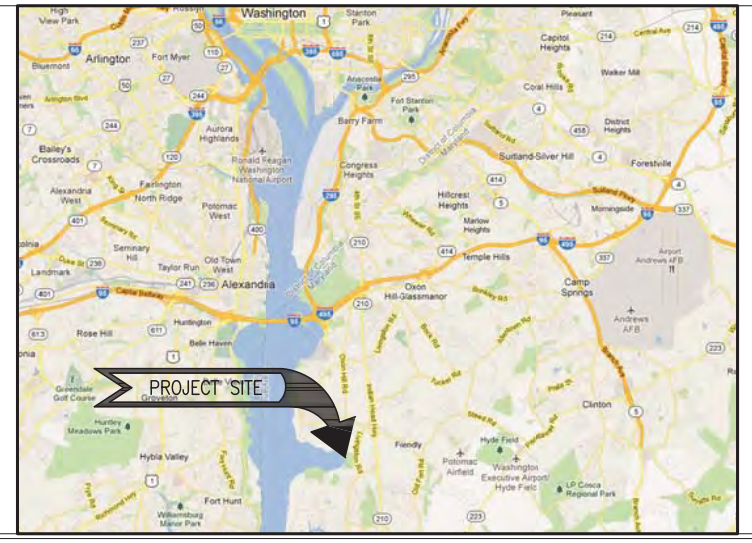
10511 LIVINGSTON ROAD
FORT WASHINGTON, MARYLAND
PRINCE GEORGE'S COUNTY

FINAL SUBMISSION

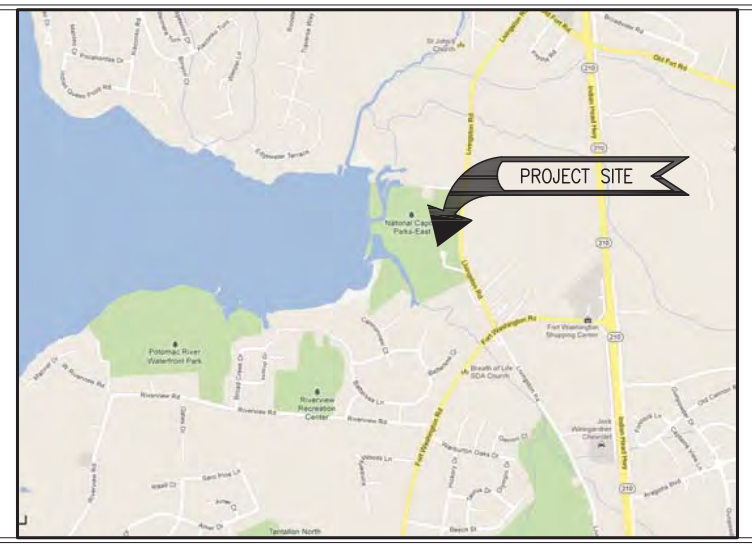
SEPTEMBER 25, 2012

Contract No. C2000092000
Order No. P11PD72165





VICINITY MAP



LOCATION MAP



SITE PLAN

PRIME/ ARCHITECTURE:	STRUCTURAL:
BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	ROBERT SILMAN ASSOCIATES PLLC WASHINGTON, DC
M/E/P ENGINEER:	COST ESTIMATING:
SETTY & ASSOCIATES INTERNATIONAL, PLLC FAIRFAX, VA	US COST. WASHINGTON, DC

Mark	Sheet	REVISION	Date	Initial

RECOMMENDED

Deputy Superintendent _____ Date _____

APPROVED

Superintendent, HPTC _____ Date _____

95% DRAFT SUBMISSION

UNITED STATES
DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
NATIONAL CAPITAL PARKS – EAST
HARMONY HALL

DESIGNED: JS
CADD: SJ
TECH REVIEW:
DATE: 9/25/12

TITLE OF DRAWING
TITLE SHEET
HISTORIC STRUCTURE REPORT
NATIONAL CAPITAL PARKS – EAST
HARMONY HALL
FORT WASHINGTON, MD

REGION: NACE
COUNTY: PRINCE GEORGE'S COUNTY
STATE: MD

DRAWING NO. 899 116834
PKG. NO.
SHEET 01 OF 115

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PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

DESIGNED:

CADD: SP

TECH REVIEW: SP

DATE: 9/25/12

SUB SHEET NO.: G0.01

TITLE OF SHEET: INDEX OF DRAWINGS

HARMONY HALL: HISTORIC STRUCTURE REPORT

DRAWING NO.: 899 / 116834

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ABBREVIATIONS

&	AND
@	AT
AB	ANCHOR BOLT (AB)
A/C	AIR CONDITIONING
AC	ACOUSTICAL
ACT	ACOUSTICAL TILE
ABAAS	ARCHITECTURAL BARRIERS ACT ACCESSIBILITY STANDARD
ADAAG	AMERICANS WITH DISABILITIES ACT AND ARCHITECTURAL BARRIERS ACT ACCESSIBILITY GUIDELINES
ADJ	ADJACENT/ ADJOINING
ADJUST	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
ALUM	ALUMINUM
AP	ACCESS PANEL
APPRX	APPROXIMATE
ARCH	ARCHITECTURAL
ANOD	ANODIZED
ASPH	ASPHALT
AUTO	AUTOMATIC
AVE	AVENUE
AVG	AVERAGE
BD	BOARD
BL	BLUESTONE
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BTW	BETWEEN
BITUM	BITUMINOUS
BRK	BRICK
BRZ	BRONZE
BUR	BUILT UP ROOFING
CAB	CABINET
CBB	CONCRETE BACKER BOARD
CBD	CHALK BOARD
CCTV	CLOSED CIRCUIT TELEVISION
CEM	CEMENT/ CEMENTITIOUS
CI	CAST IRON
CIP	CAST IN PLACE
CJ	CONTROL JOINT (SEE EXP JT)
CLG	CEILING
CL	CENTERLINE
CLR	CLEAR/ CLEARANCE
CM	CONSTRUCTION MANAGER
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMB	COMBINATION
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCT/ CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CP	COURTESY PHONE
CPT	CARPET
CT	CERAMIC TILE
CW	COLD WATER
CSK	COUNTERSUNK
CG	CORNER GUARD
CL	CENTERLINE
CLKG	CAULKING
CNTR	COUNTER
CS	CAST STONE
CV	COVE TILE
D	DEPTH
DBL	DOUBLE
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN (SEE EWC)
DH	DOUBLE HUNG
DIA	DIAMETER
DIM	DIMENSION
DIR	DIRECTORY
DIV	DIVISION
DL	DEAD LOAD
DN	DOWN
DR	DOOR
DT	DECORATIVE TILE
DTL	DETAIL
DW	DUMBWAITER
DWG	DRAWING
DWR	DRAWER
E	EAST
EA	EACH
EB	EXPANSION BOLT (SEE AB)
EJ	EXPANSION JOINT (SEE CJ)
EL	ELEVATION
ELEC	ELECTRICAL/ ELECTRIC
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE/ ENCLOSED
ENGR	ENGINEER
ENTR	ENTRANCE
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER (SEE DF)
EXG/ EXIST	EXISTING
EXH	EXHAUST
EXP	EXPANDED/ EXPANSION
EXT	EXTERIOR
EXT	EXTRUDED
FA	FIRE ALARM
FAB	FABRICATED
FCU	FAN COIL UNIT
FD	FLOOR DRAIN/ FIRE DAMPER
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET (WITH EXTINGUISHER)
FF	FACE TO FACE (CLEAR DISTANCE)
FHC	FIRE HOSE CABINET
FHS	FLAT HEAD SCREW
FIN	FINISH
FLR	FLOOR/ FLOORING
FLOUR	FLOURESCENT
FND	FOUNTAIN
F.O.	FACE OF
FOS	FACE OF STUD/ SLAB/ STRUCTURE
FOM	FACE OF MASONRY
FP	FIREPROOF
FPM	FEET PER MINUTE
FRT	(PRESSURE) FIRE RETARDANT TREATED
FS	FLOOR SINK
FT	FOOT/ FEET
FTG	FOOTING
FVO	FIELD VERIFY OPENING
FURR	FURRING
FVC	FIRE VALVE CABINET
FXTR	FIXTURE
GA	GAGE (GAUGE)
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERAL
GFRC	GLASS FIBER REINFORCED GYPSUM
GL	GLASS
GMT	GLASS MOSAIC TILE
GPM	GALLONS PER MINUTE
GRN	GRANITE
GRL	GRILLE
GYP	GYPSUM
GWB	GYPSUM WALL BOARD
H	HIGH
HB	HOSE BIB
HC	HOLLOW CORE/ HANICAP(PED)
HDW	HARDWARE
HGR	HANGER
HIST	HISTORIC
HK	HOUSEKEEPING
HM	HOLLOW METAL (STEEL)
HMF	HOLLOW METAL FRAME
HOR	HORIZONTAL
HP	HIGH POINT
HR	HOUR
HTG	HEATING
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HW	HOT WATER
HWD	HARDWOOD
ID	INSIDE DIAMETER
IN	INCH(ES)
INCL	INCLUDING/ INCLUDED
INSUL	INSULATE/ INSULATED/ INSULATION
INT	INTERIOR
INV	INVERTED/ INVERT
JB	JUNCTION BOX
JC	JANITORS CLOSET
JT	JOINT
JST	JOIST
KIT	KITCHEN
KO	KNOCKOUT
L	LONG/ LENGTH
LAM	LAMINATED
LAV	LAVATORY
LCC	LEAD COATED COPPER
LCKR	LOCKER
LB(S)	POUND(S)
LF	LINEAR FEET
LH	LEFT HANDED
LIN	LINOLEUM
LL	LIVE LOAD
LP	LOW POINT
LS	LIMESTONE
LT	LIGHT
LTG	LIGHTING
LVR	LOUVER
LWC	LIGHTWEIGHT CONCRETE
MACH	MACHINE
MAS	MASONRY
MANUF	MANUFACTURER
MAT	MATERIAL
MAX	MAXIMUM
MBD	MARKER BOARD
MBL	MARBLE
MECH	MECHANICAL
MED	MEDIUM
MEP	MECHANICAL ELECTRICAL PLUMBING
MIR	MIRROR
MTL	METAL
MEZZ	MEZZANINE
MFR	MANUFACTURE(R)
MFT	MOSAIC FLOOR TILE
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MR	MOISTURE RESISTANT
MTD	MOUNTED
MTG	MOUNTING
MULL	MULLION
MW	MICROWAVE
MLDG	MOLDING
N	NORTH
NIC	NOT IN CONTRACT
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TOP SCALE
NO	NUMBER
OA	OVERALL (OUTSIDE AIR)
OC	ON CENTER(S)
OD	OUTSIDE DIAMETER
O/O	OUT TO OUT
OPER	OPERABLE
OPG	OPENING
OPH	OPPOSITE HAND
OPP	OPPOSITE
ORN	ORNAMENTAL
OS	OTHER SIDE
OZ	OUNCE
PT	PAINT
PA	PUBLIC ADDRESS
PB	PULL BOX
PCF	POUNDS PER CUBIC FOOT
PC	PRECAST
PERF	PERFORATED
PFAB	PREFABRICATED
PL	PLATE/ PROPERTY LINE
PLAM	PLASTIC LAMINATE
PNL	PANEL
PLS	PLASTER
POL	POLISHED
PPT	PRESSURE PRESERVATIVE TREATED
PR	PAIR
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
PTD	PAINTED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PLYWD	PLYWOOD
PWT	PORCELAIN WALL TILE
PFT	PORCELAIN FLOOR TILE
QT	QUARRY TILE
QTY	QUANTITY
R	RISER
RA	RETURN
RAD/R	RADIUS
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REBAR	REINFORCING BAR
RECEP	RECEPTION
RECPT	RECEPTACLE
REF	REFERENCE/ REFER TO
REINF	REINFORCE/ REINFORCING
REQD	REQUIRED
REV	REVISION
RM	ROOM
RO	ROUGH OPENING
RUB	RUBBER
S	SOUTH
SA	SUPPLY AIR
SC	SOLID CORE
SCH	SCHEDULE
SCT	STRUCTURAL CLAY TILE
SD	STORM DRAIN/ SOAP DISPENSER
SEC	SECTION
SFT	STANDARD FIXTURE TYPE
SFE	SURFACE MOUNTED FIRE EXTINGUISHER
SFN	STANDARD FIXTURE NUMBER
SHT	SHEET
SHLVG	SHELVING
SIM	SIMILAR
SLT	SLATE TILE
SMD	SEE MECHANICAL DRAWINGS
SPEC	SPECIFICATION
SPKR	SPEAKER
SQ	SQUARE
SF	SQUARE FEET
SS	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
ST	STREET/ STONE
STAG	STAGGERED/ STAGGER
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STL DR	STEEL DOOR
STL FR	STEEL FRAME
STOR	STORAGE
STRUCT	STRUCTURAL
STS	SELF-TAPPING SCREW
SUSP	SUSPEND/ SUSPENDED
SYM	SYMMETRICAL
SYS	SYSTEM
TB	TOWEL BAR
TBD	TO BE DETERMINED
TKB	TACKBOARD
TC	TERRA COTTA
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TEL	TELEPHONE
TEMP	TEMPERATURE/ TEMPERED
TEMP GL	TEMPERED GLASS
THK	THICK/ THICKNESS
THRES	THRESHOLD
T.O.F.F.	TOP OF FINISHED FLOOR
TOC	TOP OF CONCRETE/ CURB
T.O.S.	TOP OF SLAB
T	TREAD/ TOP
TV	TELEVISION
TYP	TYPICAL
TYP O.S.	TYPICAL OTHER SIDE
TZFT	TERRAZZO FLOOR TILE
UR	URINAL
UC	UNDERCUT
UNFIN	UNFINISHED
UNGD	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
UL	UNDERWRITERS LABORATORIES
US	UNDER SIDE
UTIL	UTILITIES
VAR	VARIES
VLT	VOLT
V JT	VEE JOINT
VB	VINYL BASE/ VAPOR BARRIER
VBX	VALVE BOX
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VOL	VOLUME
VT	VINYL TILE
VWC	VINYL WALL COVERING
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WCV	WALL COVERING
WD	WOOD
WGL	WIRE GLASS
WL	WORK LINE
WP	WORKING POINT/ WATER PROOFING
WT	WEIGHT
WWF	WELDED WIRE FABRIC

ARCHITECTURAL SYMBOLS

BRICK

STONE

SAND/ GROUT/MORTAR

STEEL

ALUMINUM

WOOD FRAMING

WOOD BLOCKING

FINISH WOOD

GYPSUM BOARD

CONCRETE

PLYWOOD

BRICK (SECTION)

SHEET NUMBERING SYSTEM

A0.01

- DRAWING NUMBER
- TRADE:
  - A = ARCHITECTURAL
  - S = STRUCTURAL
  - M = MECHANICAL
  - P = PLUMBING
  - FP = FIRE PROTECTION
  - E = ELECTRICAL

XXX — DOOR NUMBER

XXX — WINDOW (NUMBER)/ LIGHT FIXTURE (LETTER)

1" — HORIZONTAL DIMENSION LINE

VERTICAL DIMENSION LINE

3 — REVISION KEY AND CLOUD

BASEMENT — FLOOR LEVEL

GRAPHIC SYMBOLS

1 / A01 — DETAIL NUMBER / SHEET NUMBER

WALL SECTION KEY

1 / A01 — DETAIL NUMBER / SHEET NUMBER — 1 / A01

BUILDING SECTION KEY

1 / A01 — DETAIL NUMBER / SHEET NUMBER

ELEVATION KEY

1 / AX.XX

VERTICAL/ HORIZONTAL DETAIL KEY

1 / A1.01 FIRST FLOOR PLAN 1/8"=1'-0"

DETAIL TITLE ON DRAWING SHEET

LOBBY 201

ROOM/ SPACE NAME AND NUMBER

NORTH ARROW

NEW CONSTRUCTION

EXISTING WALLS TO REMAIN

EXISTING WALLS (AND MISCELLANEOUS ARCHITECTURAL ELEMENTS) TO BE REMOVED

BREAKLINE

COLUMN LINE/ CENTERLINE

LOT LINE/ PROPERTY LINE

FEATURE ABOVE OR BEHIND

FEATURE HIDDEN BELOW OR IN FRONT

MATCHLINE

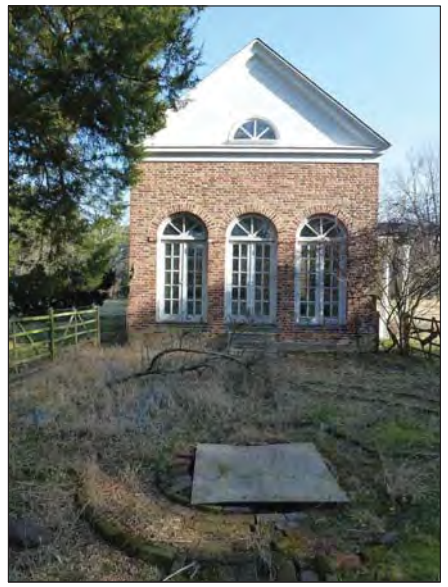
LEGEND

- DUPLEX RECEPTACLE
- QUAD RECEPTACLE
- GFCI DUPLEX RECEPTACLE
- TELEPHONE OUTLET
- DATA OUTLET
- FLOOR DUPLEX RECEPTACLE
- FLOOR TELEPHONE OUTLET
- FLOOR DATA OUTLET
- OC — OCCUPANCY SENSOR
- F — FIRE ALARM PULL STATION
- AV — FIRE STROBE AND HORN
- V — FIRE STROBE
- S — SMOKE/ HEAT DETECTOR
- MS — MOTION SENSOR SECURITY DEVICE
- EMERGENCY LIGHT
- T — THERMOSTAT
- C — CARBON DIOXIDE SENSOR
- SP — EXISTING CEILING MOUNTED FIRE SPRINKLER HEAD
- SP — EXISTING FIRE SPRINKLER HEAD, CONCEALED IN CEILING PLENUM
- SP — EXISTING WALL MOUNTED FIRE SPRINKLER HEAD
- LIGHT SWITCH
- M — DUAL FUNCTION MOTION DETECTOR & LIGHT SWITCH
- EXIT SIGN

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 116834
	CADD: SP		SYMBOLS AND ABBREVIATIONS	PKG. NO. — SHEET 03
	TECH REVIEW: SP	G0.02		OF 115
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	



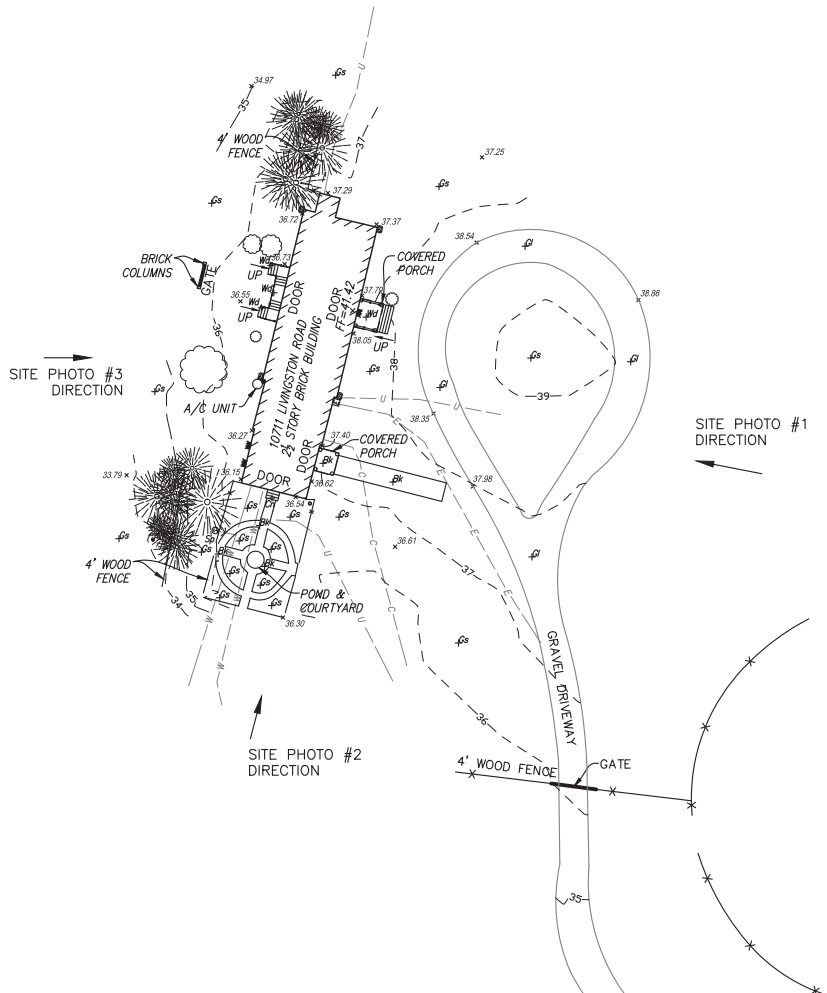
SITE PHOTO #1

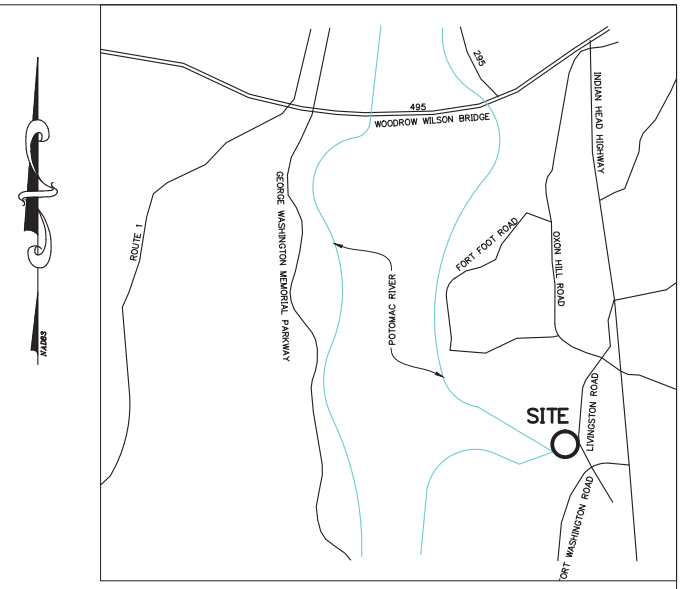


SITE PHOTO #2



SITE PHOTO #3





VICINITY MAP
1" = 5000'

LEGEND	
Bk	BRICK
	DECIDUOUS TREE
Cn	CONCRETE
	CONIFEROUS TREE
	BUSH
	WALL LIGHT
Wd	WOOD
E	ELECTRIC BOX
Gl	GRAVEL
DS	DOWN SPOUT
	VENT
Gs	GRASS
Sp	WATER SPIGOT
C	UNDERGROUND COMMUNICATION
E	UNDERGROUND ELECTRIC
U	UNDERGROUND UTILITY
W	UNDERGROUND WATER

GENERAL NOTES:
1) THE DATA ON THIS SURVEY ARE THE RESULT OF A FIELD SURVEY BY THIS FIRM, LAST DATE OF FIELD SURVEY MARCH 2, 2012.
2) CONTOUR ELEVATIONS SHOWN ARE REFERENCED TO NAVD88, MERIDIAN REFERENCED TO MARYLAND STATE GRID NORTH (NAD83).
3) VISIBLE ABOVE GROUND UTILITIES HAVE BEEN SHOWN. SUBSURFACE UTILITIES, WHERE SHOWN, FOLLOW ASCE 38-02 QUALITY LEVELS A-D. LINES ARE LABELED AS FOLLOWS: A: VISUALLY VERIFIED VIA TEST HOLES; B: DESIGNATED AND SURVEYED; C: RECORD INFORMATION CORRELATED WITH SURVEYED SURFACE FEATURES; D: RECORD INFORMATION ONLY. WHERE SUBSURFACE UTILITIES HAVE BEEN APPARENTLY DESIGNATED BY OTHERS ON SITE, THOSE LOCATIONS WILL BE SHOWN AS QUALITY LEVEL C. UTILITIES MAY EXIST THAT ARE NOT SHOWN. UNLESS OTHERWISE LABELED AS ABOVE, THIS SURVEY REPRESENTS QUALITY LEVEL B.
4) PROPERTY IS IDENTIFIED AS FLOOD ZONE C - AREAS OF MINIMAL FLOODING - AS IDENTIFIED ON FIRM COMMUNITY PANEL 2452080075D, EFFECTIVE DATE SEPTEMBER 6, 1996.

30' 15' 0 30' 60'
1" = 30'

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

CIVIL ENGINEERS:
WILES MENSCH CORPORATION
RESTON, VA

DESIGNED:
CADD:
TECH REVIEW:
DATE: 9/25/12

SUB SHEET NO.
C1.00

TITLE OF SHEET
TOPOGRAPHIC AND UTILITY SURVEY
HARMONY HALL: HISTORIC STRUCTURE REPORT

DRAWING NO.
899
116834

PKG. NO.

SHEET
04
OF 115



SITE PHOTO #1

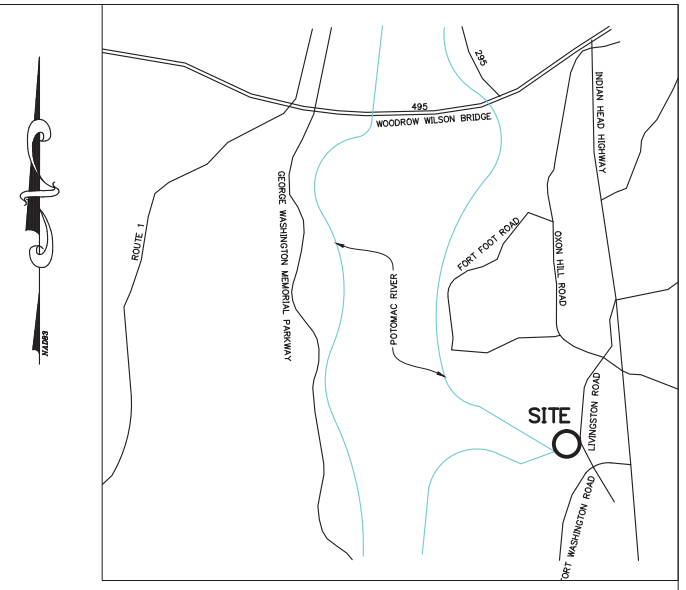


SITE PHOTO #2



SITE PHOTO #3





VICINITY MAP
1" = 5000'

LEGEND	
Bk	BRICK
	DECIDUOUS TREE
Cn	CONCRETE
	CONIFEROUS TREE
	BUSH
	WALL LIGHT
Wd	WOOD
E	ELECTRIC BOX
Gl	GRAVEL
DS	DOWN SPOUT
	VENT
Gs	GRASS
Sp	WATER SPIGOT
—c—c—	UNDERGROUND COMMUNICATION
—E—E—	UNDERGROUND ELECTRIC
—u—u—	UNDERGROUND UTILITY
—W—W—	UNDERGROUND WATER

10' 5' 0 10' 20'
1" = 10'

GENERAL NOTES:
1) THE DATA ON THIS SURVEY ARE THE RESULT OF A FIELD SURVEY BY THIS FIRM, LAST DATE OF FIELD SURVEY MARCH 2, 2012.
2) CONTOUR ELEVATIONS SHOWN ARE REFERENCED TO NAVD88, MERIDIAN REFERENCED TO MARYLAND STATE GRID NORTH (NAD83).
3) VISIBLE ABOVE GROUND UTILITIES HAVE BEEN SHOWN. SUBSURFACE UTILITIES, WHERE SHOWN, FOLLOW ASCE 38-02 QUALITY LEVELS A-D. LINES ARE LABELED AS FOLLOWS: A: VISUALLY VERIFIED VIA TEST HOLES; B: DESIGNATED AND SURVEYED; C: RECORD INFORMATION CORRELATED WITH SURVEYED SURFACE FEATURES; D: RECORD INFORMATION ONLY. WHERE SUBSURFACE UTILITIES HAVE BEEN APPARENTLY DESIGNATED BY OTHERS ON SITE, THOSE LOCATIONS WILL BE SHOWN AS QUALITY LEVEL C. UTILITIES MAY EXIST THAT ARE NOT SHOWN. UNLESS OTHERWISE LABELED AS ABOVE, THIS SURVEY REPRESENTS QUALITY LEVEL B.
4) PROPERTY IS IDENTIFIED AS FLOOD ZONE C – AREAS OF MINIMAL FLOODING – AS IDENTIFIED ON FIRM COMMUNITY PANEL 2452080075D, EFFECTIVE DATE SEPTEMBER 6, 1996.

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

CIVIL ENGINEERS:
WILES MENSCH CORPORATION
RESTON, VA

DESIGNED:
CADD:
TECH REVIEW:
DATE: 9/25/12

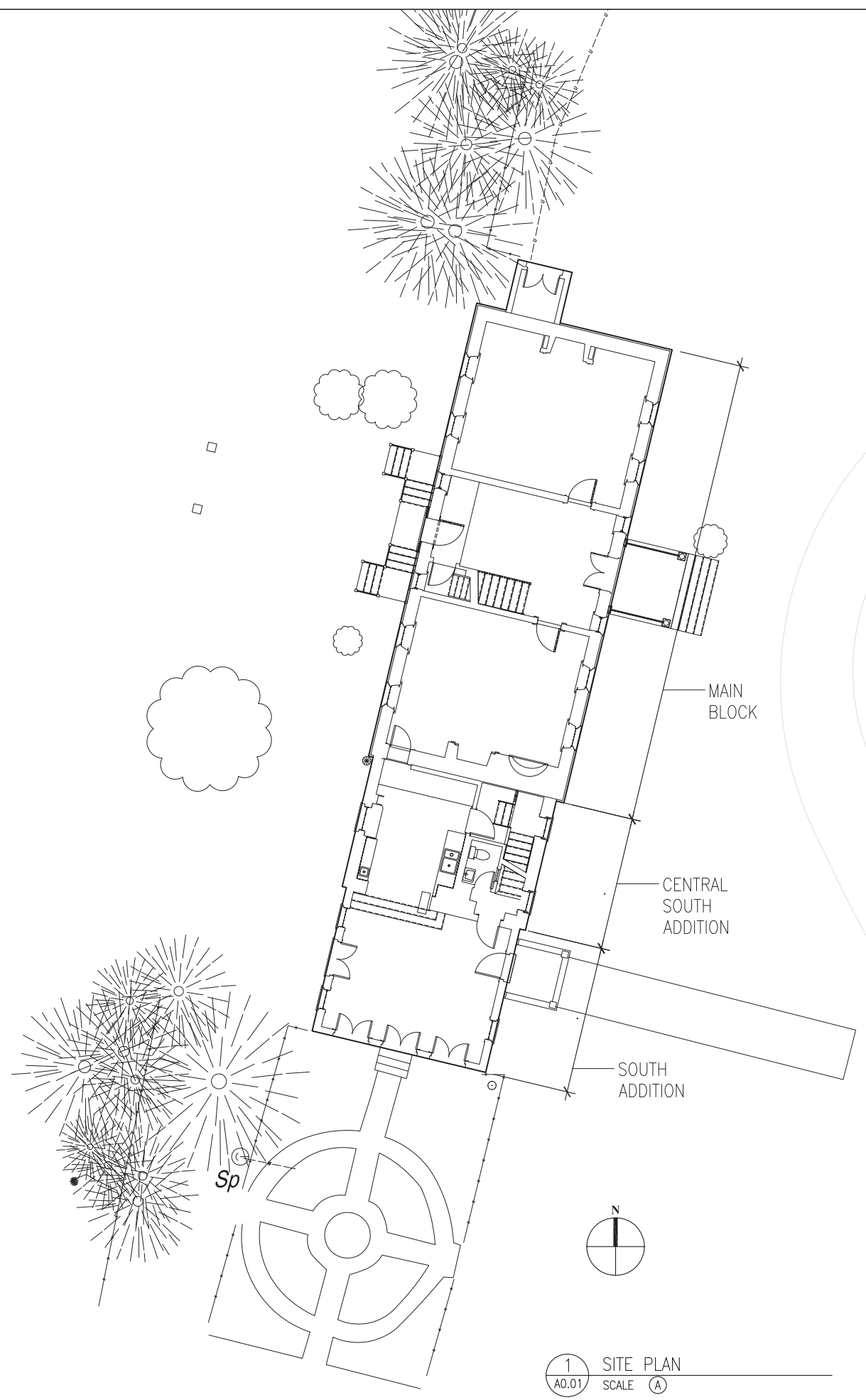
SUB SHEET NO.
C1.01

TITLE OF SHEET
TOPOGRAPHIC AND UTILITY SURVEY
HARMONY HALL: HISTORIC STRUCTURE REPORT

DRAWING NO.
899
116834

PKG. NO.

SHEET 05 OF 115

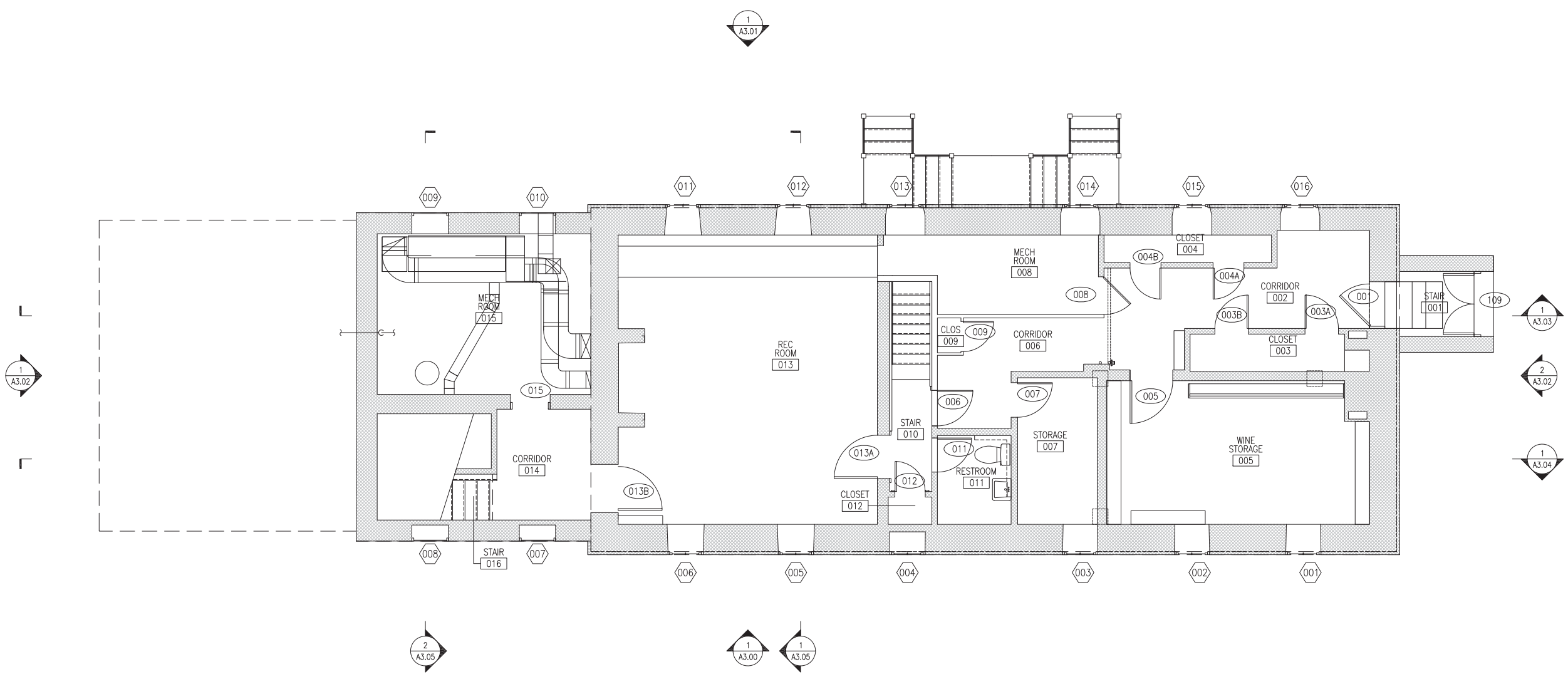


1 A0.01 SITE PLAN
SCALE (A)

N

8 0 8 16
SCALE OF FEET (1/8" = 1'-0")
SCALE (A)

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 / 116834
	CADD: SP	A0.01	SITE PLAN	PKG. NO. — / SHEET 06
	TECH REVIEW: SP			— / OF 115
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	— /

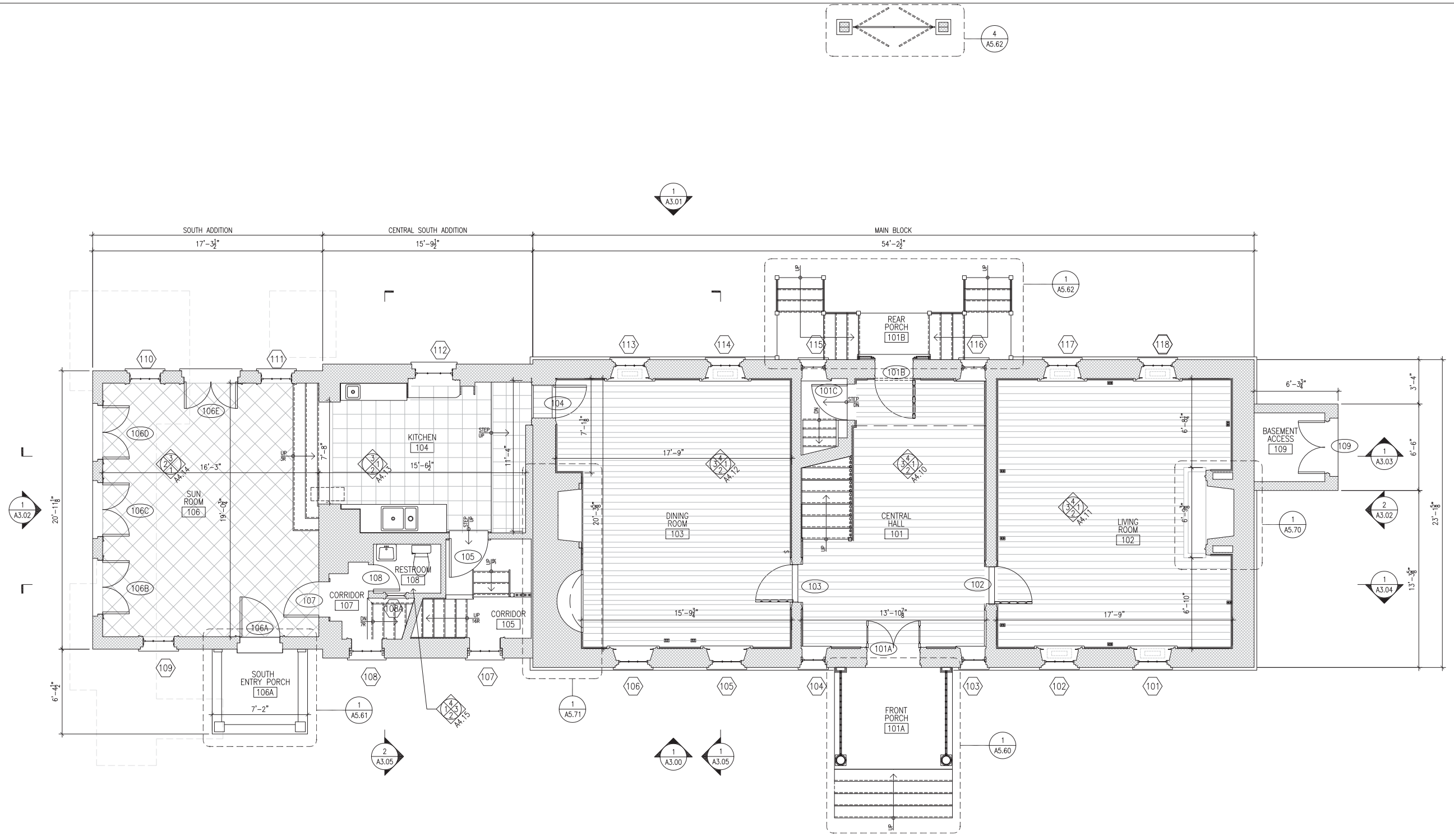


1 A1.00 BASEMENT FLOOR PLAN
SCALE (A)

N

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 116834
		CADD: SP	A1.00	BASEMENT FLOOR PLAN	PKG. NO. — — — SHEET 07 OF 115
		TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	
		DATE: 9/25/12			

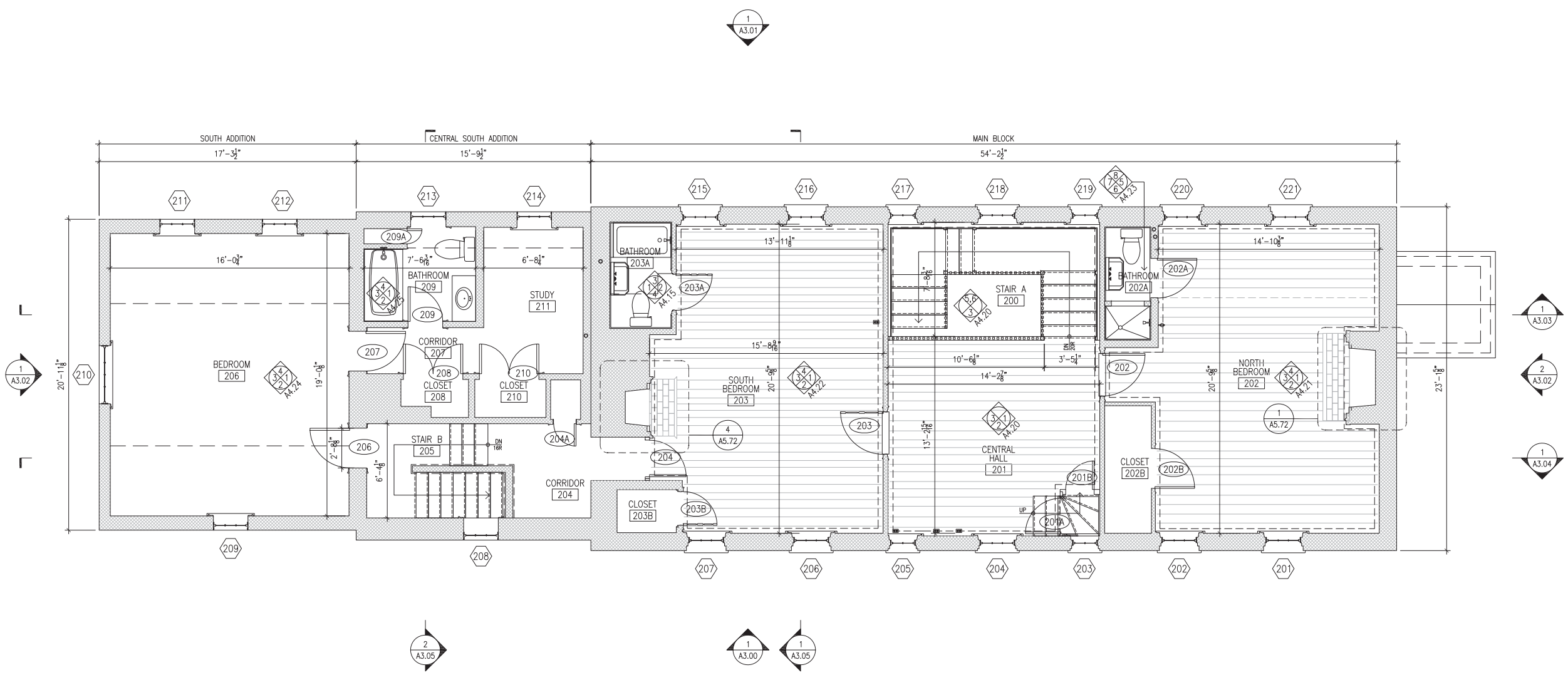


1 A1.01 FIRST FLOOR PLAN
SCALE (A)

N

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

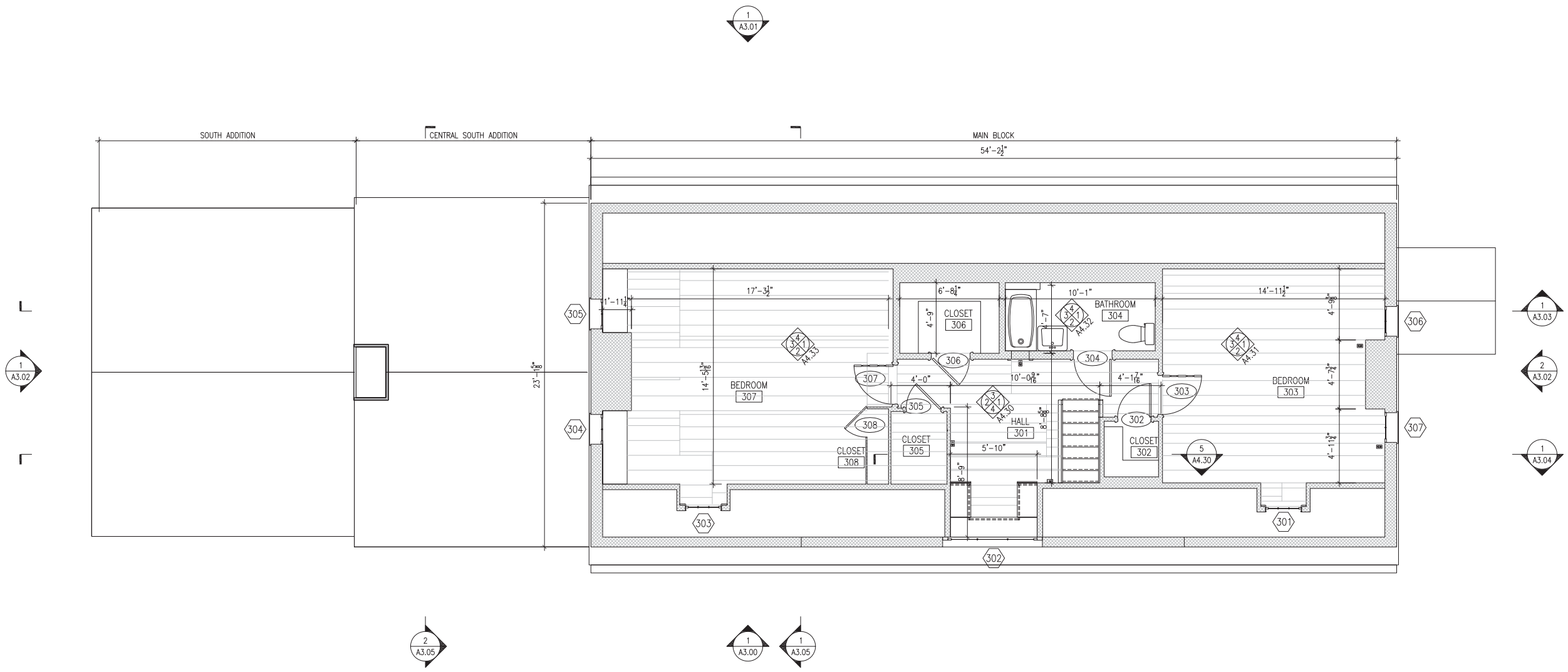
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		TECH REVIEW: SP			PKG. NO. — — — / SHEET 08
		DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115



1 SECOND FLOOR PLAN
A1.02 SCALE A

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE A

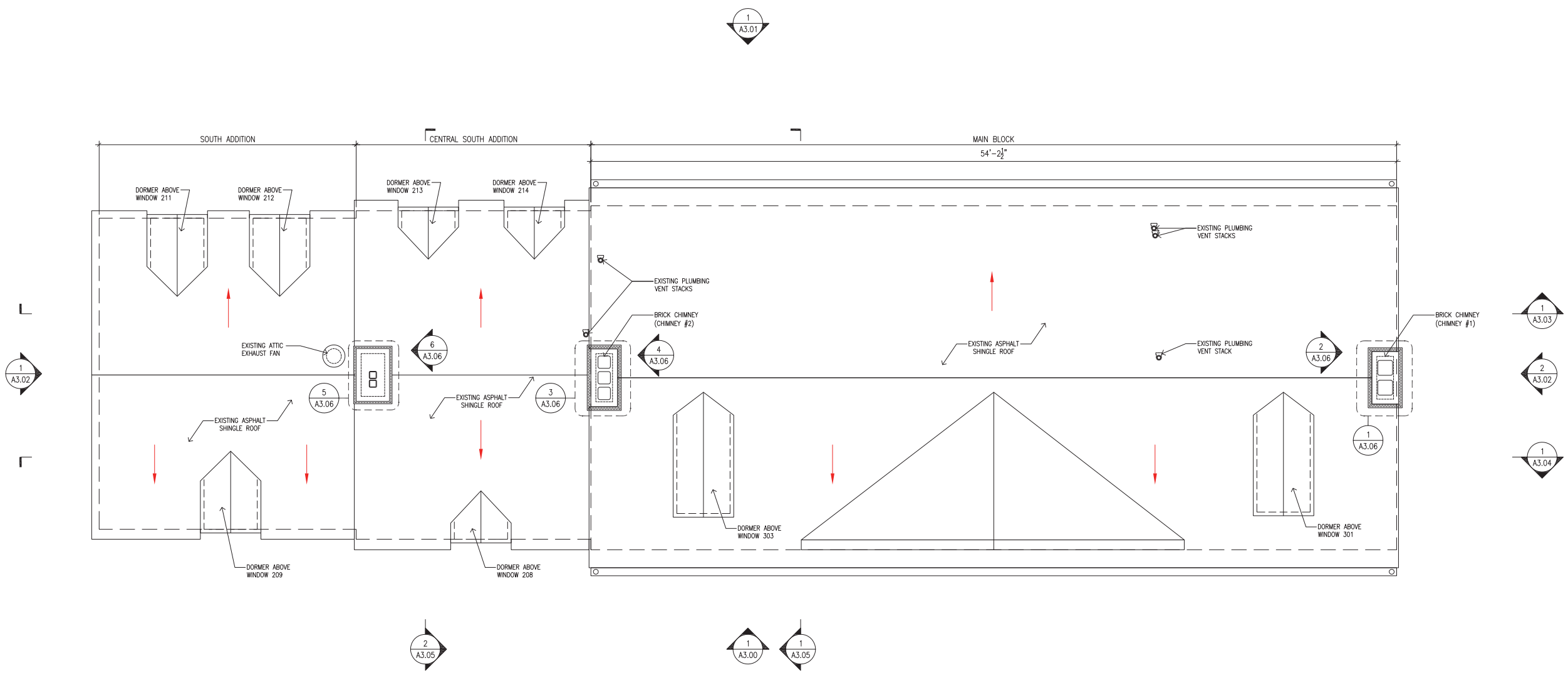
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	CADD: SP	A1.02	SECOND FLOOR PLAN	PKG. NO. —
	TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	SHEET 09 OF 115
	DATE: 9/25/12			



N

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 / 116834
		CADD: SP	A1.03	THIRD FLOOR PLAN	PKG. NO. — — —
		TECH REVIEW: SP			SHEET 10
		DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115

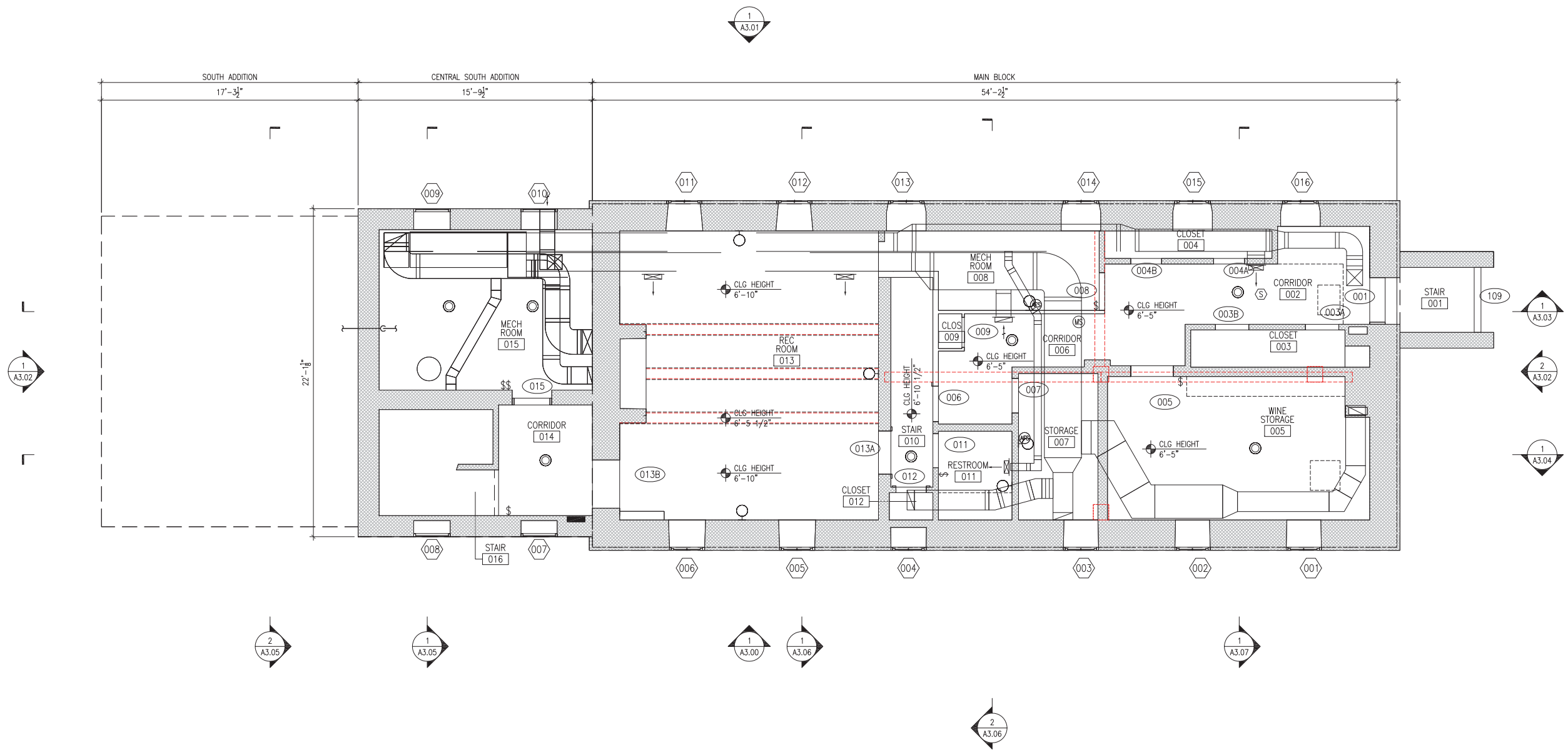


1 A1.03 ROOF PLAN
SCALE (A)

N

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

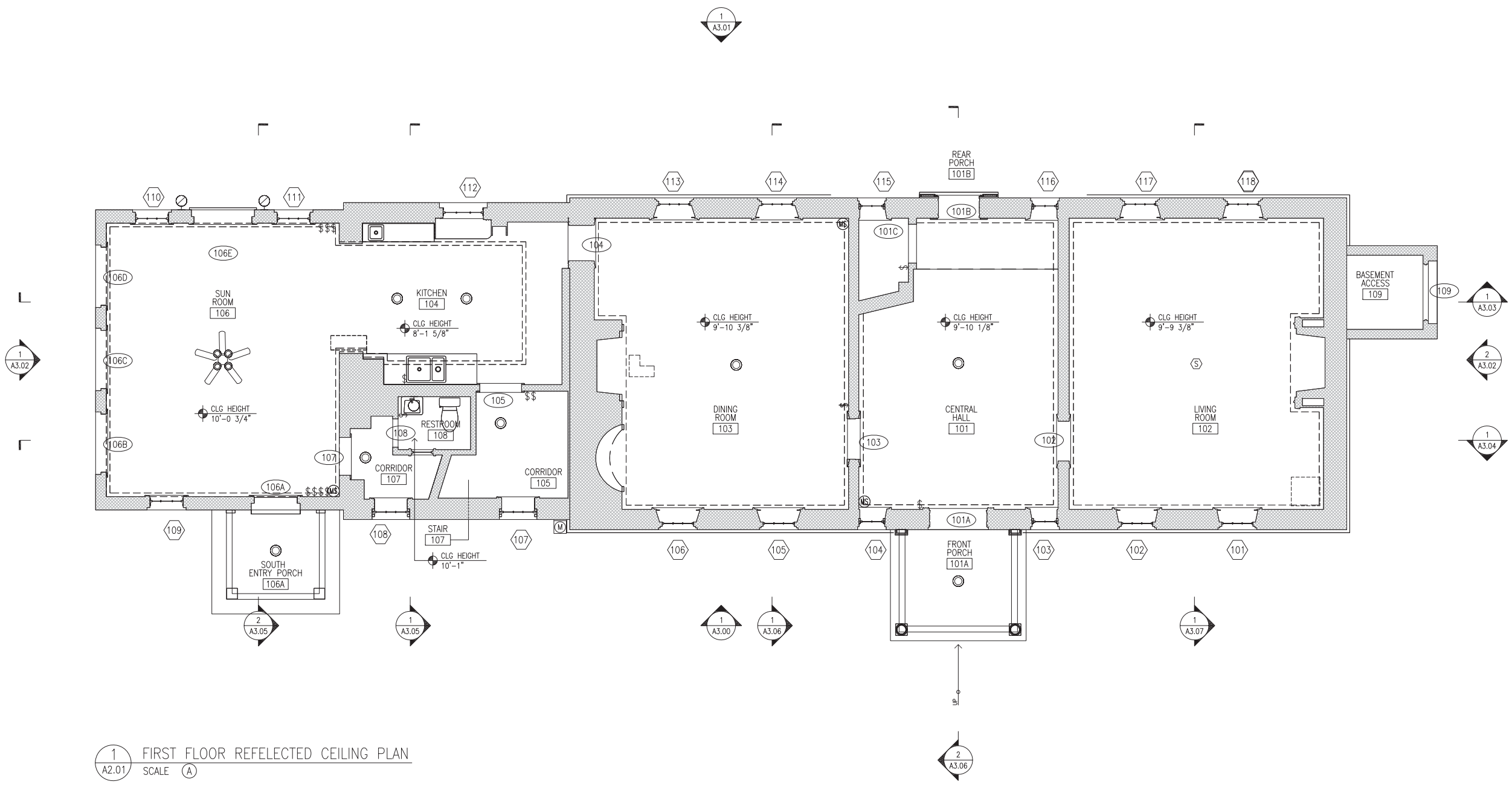
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1 A2.00 BASEMENT FLOOR PLAN
SCALE (A)

SCALE OF FEET 4 0 4 8 (1/4" = 1'-0")
SCALE (A)

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
		CADD: SP	A2.00	BASEMENT FLOOR REFLECTED CEILING PLAN	899 / 116834
		TECH REVIEW: SP			PKG. NO. — SHEET 12
		DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115

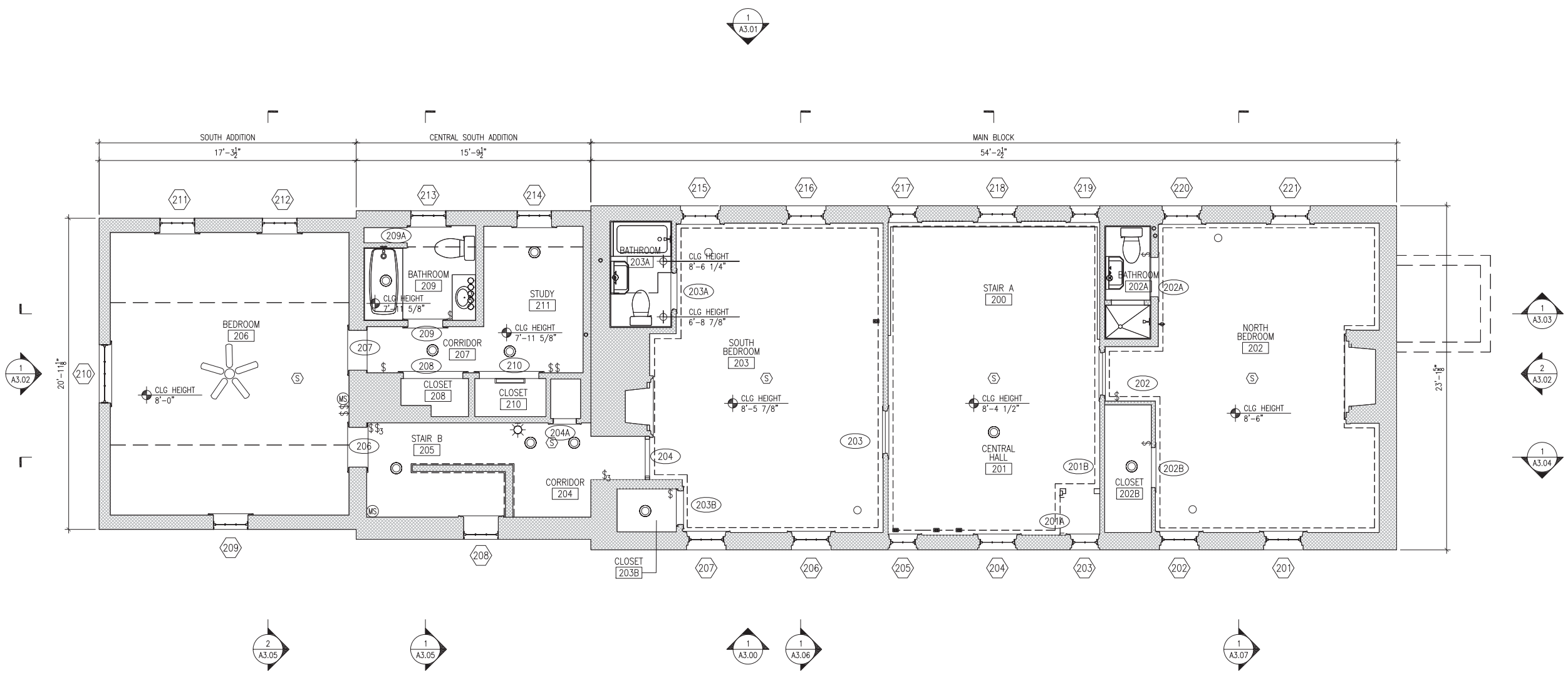


1 A2.01 FIRST FLOOR REFELECTED CEILING PLAN
SCALE (A)

N

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 / 116834
		CADD: SP	A2.01	FIRST FLOOR REFLECTED CEILING PLAN	PKG. NO. — — —
		TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	SHEET 13 OF 115
		DATE: 9/25/12			

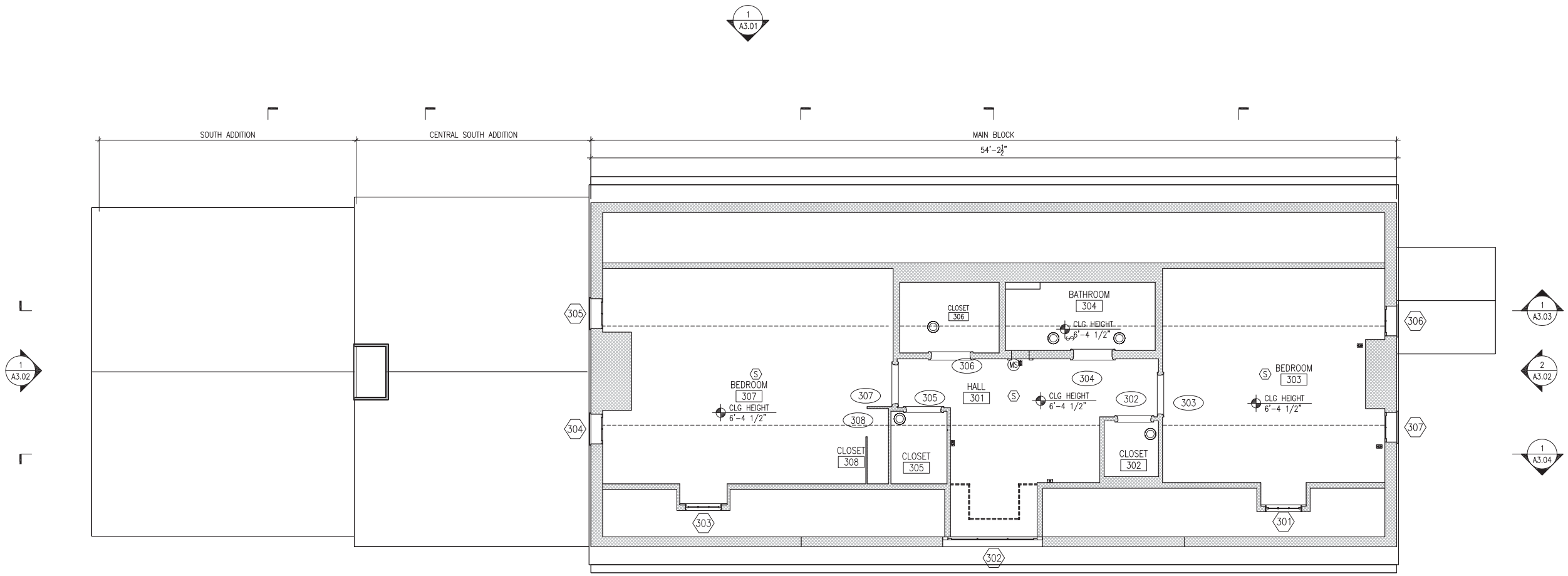


1 A2.02 SECOND FLOOR REFLECTED CEILING PLAN
SCALE (A)

N

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

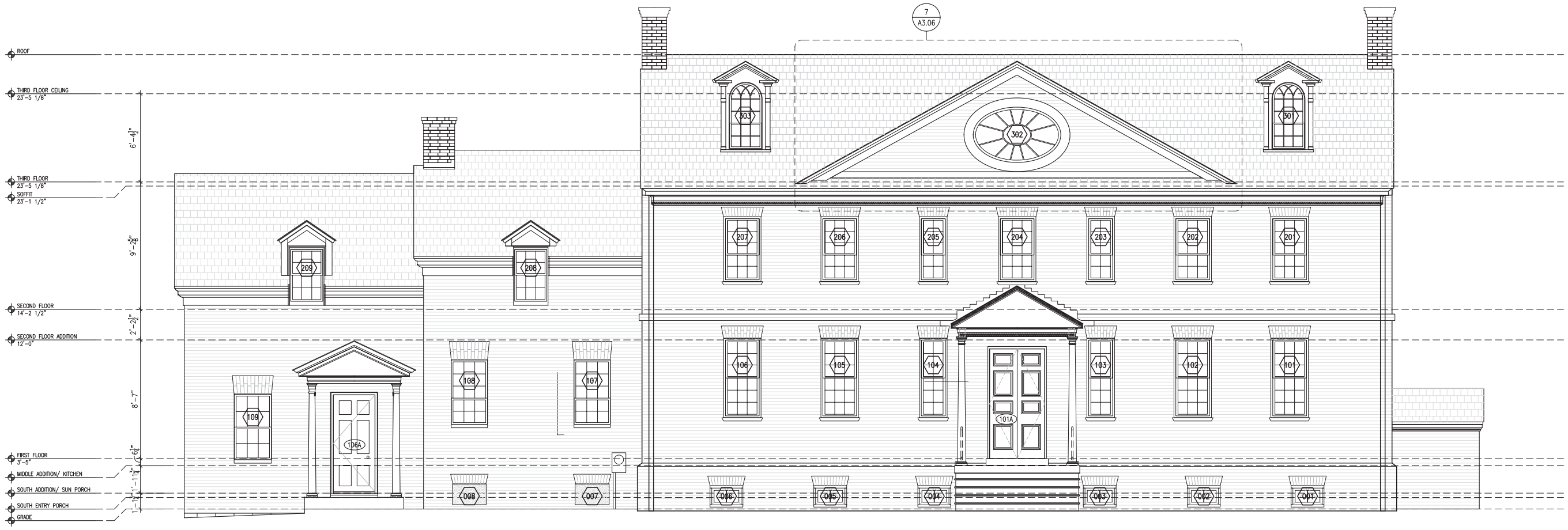
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		TECH REVIEW: SP			PKG. NO. — SHEET 14
		DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115



1 A2.03 THIRD FLOOR REFLECTED CEILING PLAN
SCALE (A)

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
		CADD: SP	A2.03	THIRD FLOOR REFLECTED CEILING PLAN	899 / 116834
		TECH REVIEW: SP			PKG. NO. — SHEET 15
		DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115



1 A3.00 EAST ELEVATION
SCALE (A)

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

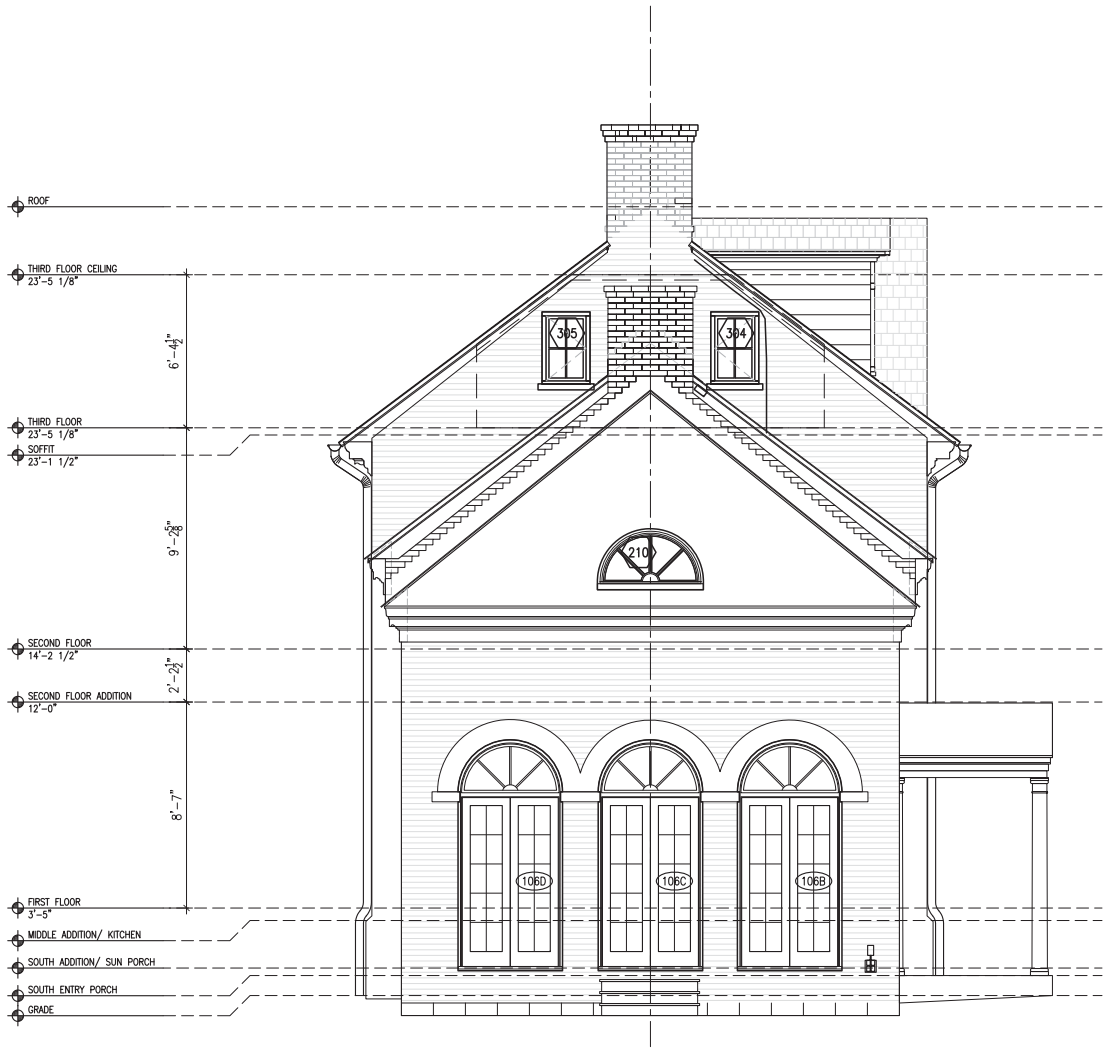
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		CADD: SP	A3.00	EAST ELEVATION	PKG. NO. — — — SHEET 16 OF 115
		TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	
		DATE: 9/25/12			



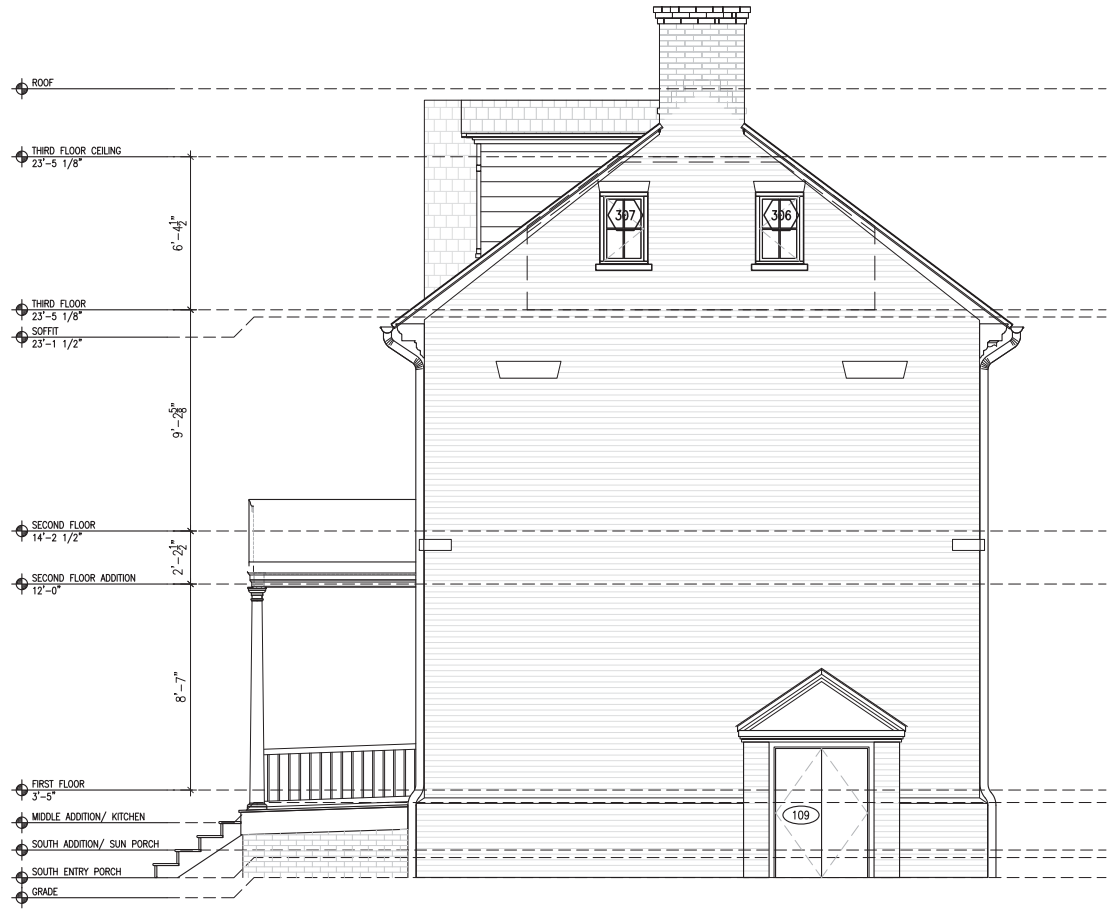
1 / A3.01 WEST ELEVATION
SCALE (A)

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 / 116834
	CADD: SP	A3.01	WEST ELEVATION	PKG. NO. — — — SHEET 17 OF 115
	TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	
	DATE: 9/25/12			



1 A3.02 SOUTH ELEVATION
SCALE (A)



2 A3.02 NORTH ELEVATION
SCALE (A)

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
	CADD: SP	A3.02	NORTH AND SOUTH ELEVATIONS	899 116834
	TECH REVIEW: SP			PKG. NO. — SHEET 18
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	— OF 115



1 / A3.03 WEST ELEVATION
SCALE (A)

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 / 116834
	CADD: SP	A3.03	BUILDING SECTION	PKG. NO. — SHEET 19
	TECH REVIEW: SP			— OF 115
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	



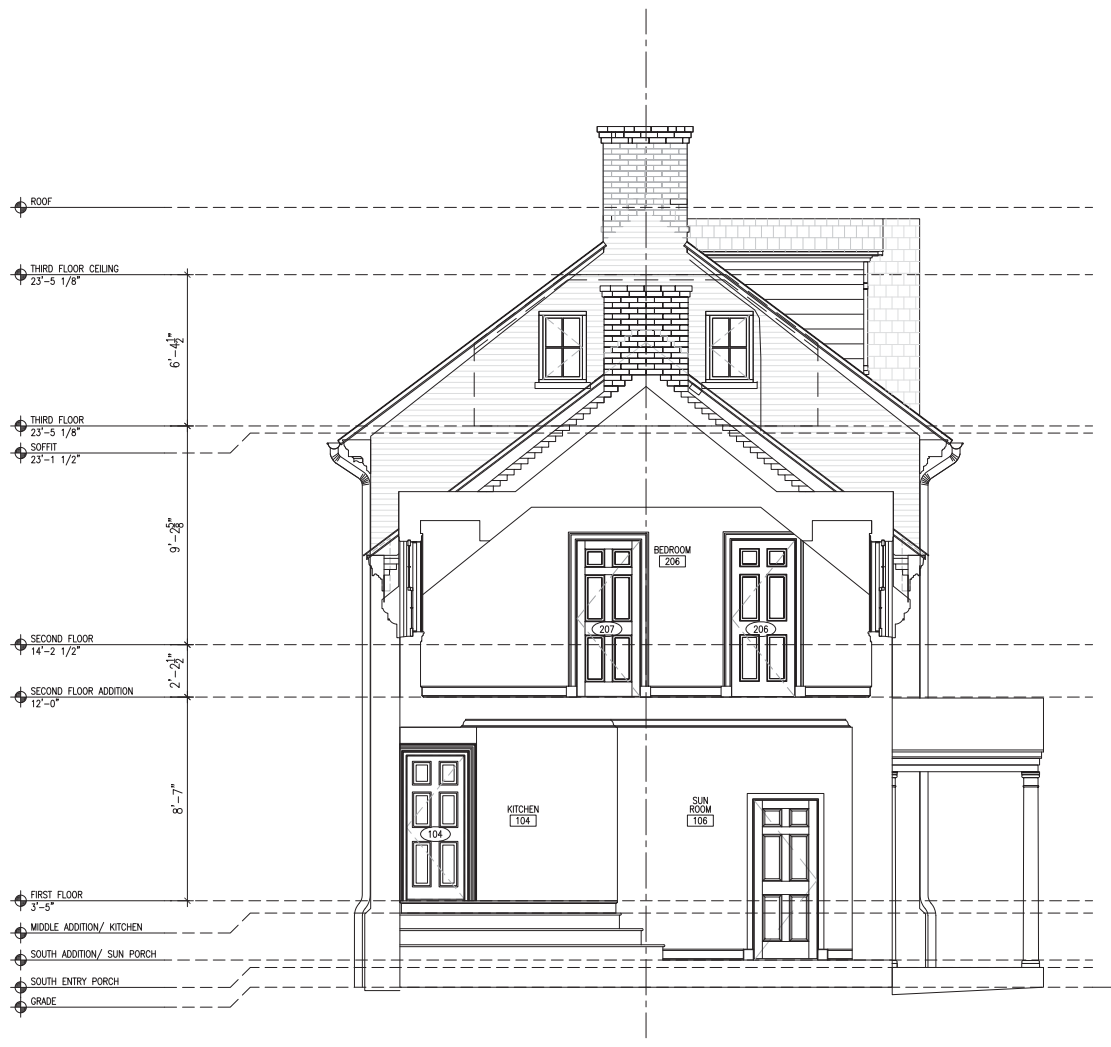
1 / A3.04 EAST ELEVATION
SCALE (A)

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 / 116834
	CADD: SP	A3.04	BUILDING SECTION	PKG. NO. —
	TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	SHEET 20 OF 115
	DATE: 9/25/12			



1 A3.05 SECTION
CENTRAL SOUTH ADDITION
SCALE (A)



2 A3.05 SECTION
SOUTH ADDITION
SCALE (A)

4 0 4 8
SCALE OF FEET (1/4" = 1'-0")
SCALE (A)

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

DESIGNED:
CADD: SP
TECH REVIEW: SP
DATE: 9/25/12

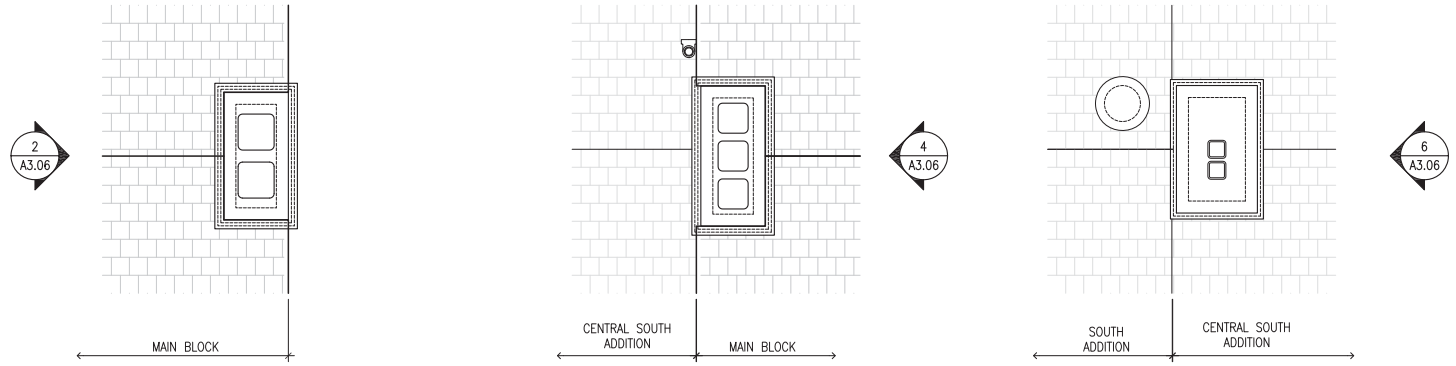
SUB SHEET NO.
A3.05

TITLE OF SHEET
BUILDING SECTION
HARMONY HALL: HISTORIC STRUCTURE REPORT

DRAWING NO.
899
116834

PKG. NO.

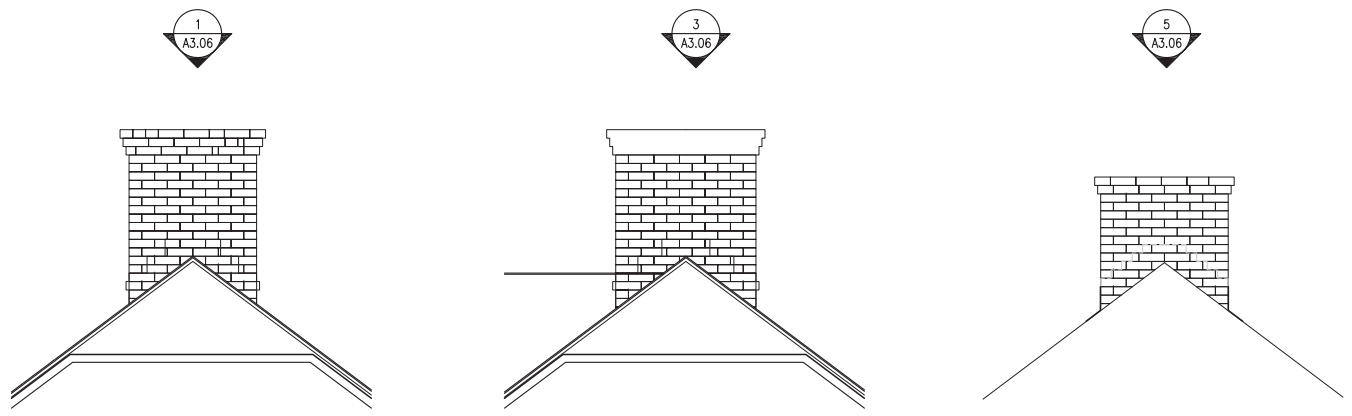
SHEET
21
OF 115



1 A3.06 ENLARGED PLAN CHIMNEY #1 SCALE (A)

3 A3.06 ENLARGED PLAN CHIMNEY #2 SCALE (A)

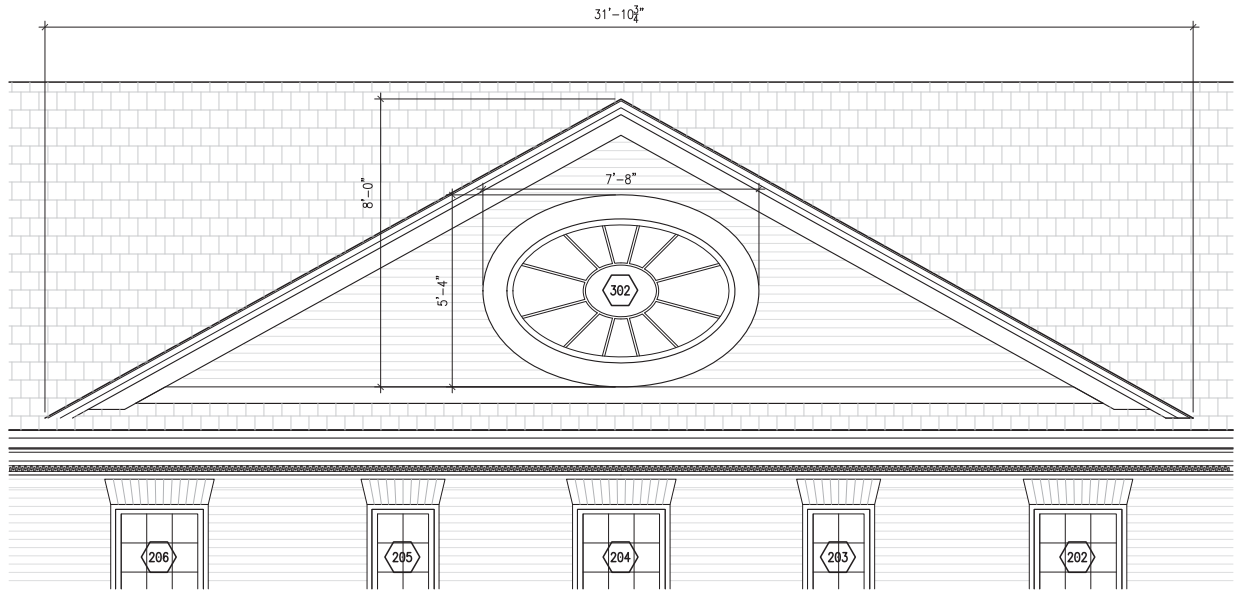
5 A3.06 ENLARGED PLAN CHIMNEY #3 SCALE (A)



2 A3.06 SOUTH ELEVATION CHIMNEY #1 SCALE (A)

4 A3.06 NORTH ELEVATION CHIMNEY #2 SCALE (A)

6 A3.06 NORTH ELEVATION CHIMNEY #3 SCALE (A)



7 A3.06 ENLARGED DETAIL EAST FACADE PEDIMENT SCALE (A)



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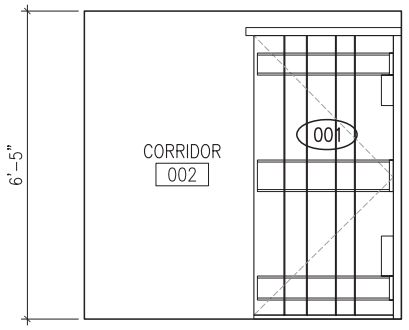
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A3.06

TITLE OF SHEET
ROOF DETAILS
HARMONY HALL: HISTORIC STRUCTURE REPORT

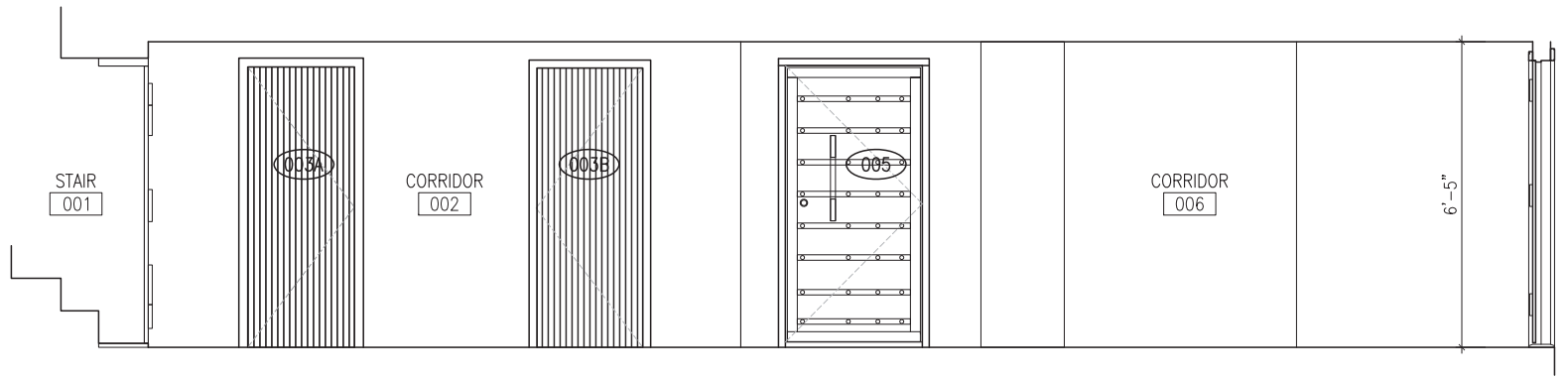
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899
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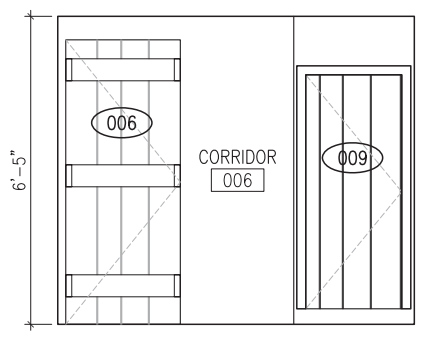
SHEET
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OF 115



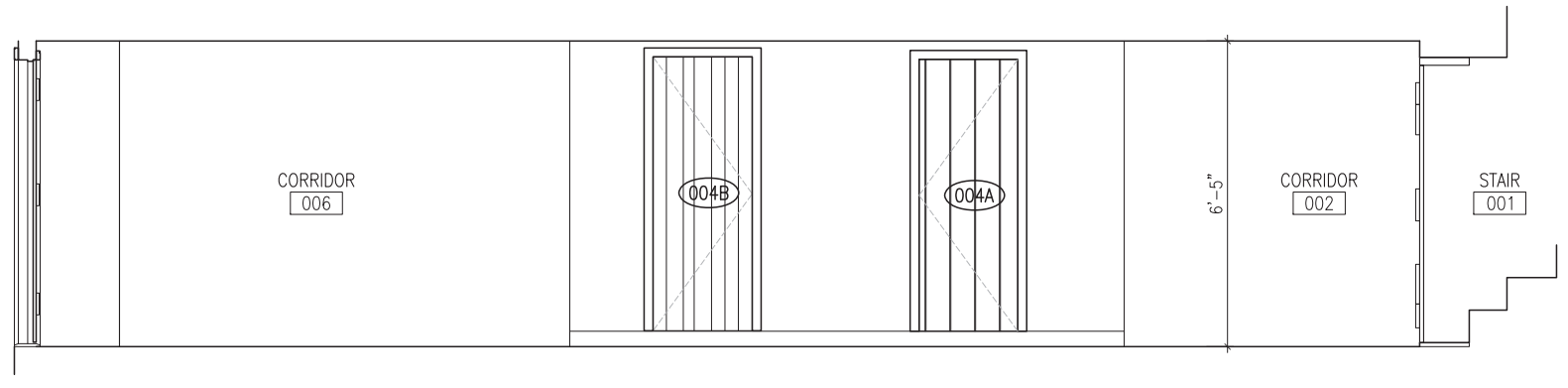
1 / A4.00 NORTH ELEVATION – BASEMENT
ROOM 002 & 006 – CORRIDORS
SCALE (A)



2 / A4.00 EAST ELEVATION – BASEMENT
ROOM 002 & 006 – CORRIDORS
SCALE (A)



3 / A4.00 SOUTH ELEVATION – BASEMENT
ROOM 002 & 006 – CORRIDORS
SCALE (A)



4 / A4.00 WEST ELEVATION – BASEMENT
ROOM 002 & 006 – CORRIDORS
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

PRIME/ ARCHITECTURE:
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A4.00

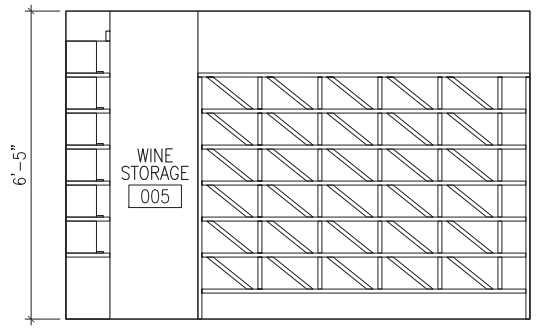
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INTERIOR ELEVATIONS
ROOM 002 & ROOM 006

HARMONY HALL: HISTORIC STRUCTURE REPORT

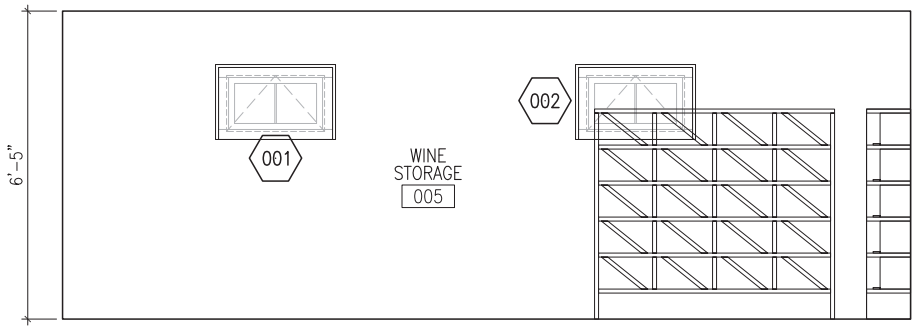
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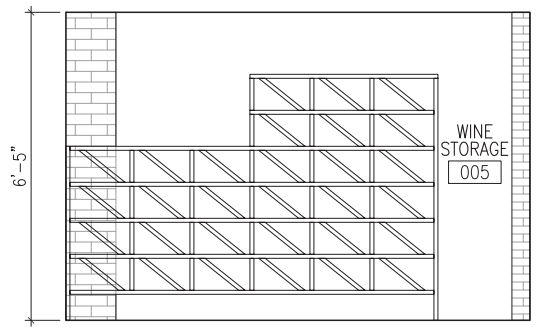
SHEET
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OF 115



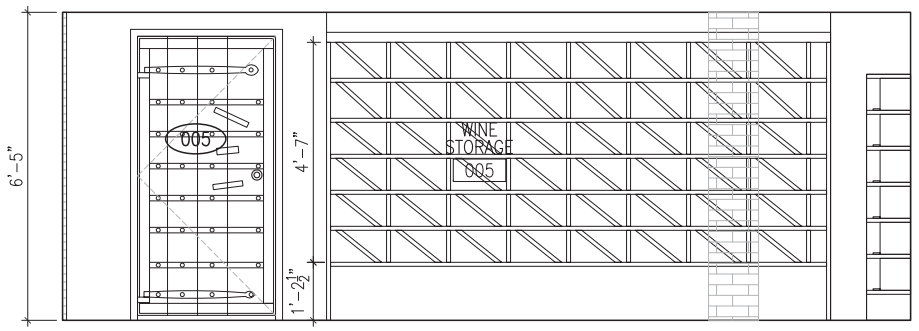
1 / A4.01 NORTH ELEVATION – BASEMENT
ROOM 005 – WINE STORAGE
SCALE (A)



2 / A4.01 EAST ELEVATION – BASEMENT
ROOM 005 – WINE STORAGE
SCALE (A)



3 / A4.01 SOUTH ELEVATION – BASEMENT
ROOM 005 – WINE STORAGE
SCALE (A)



4 / A4.01 WEST ELEVATION – BASEMENT
ROOM 005 – WINE STORAGE
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

PRIME/ ARCHITECTURE:
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A4.01

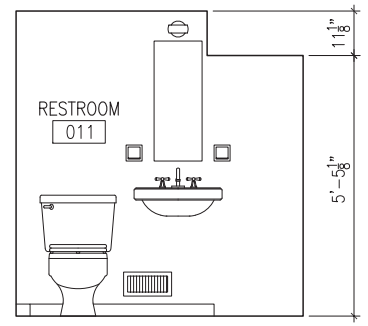
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 005

HARMONY HALL: HISTORIC STRUCTURE REPORT

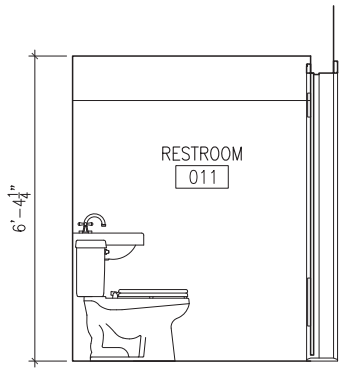
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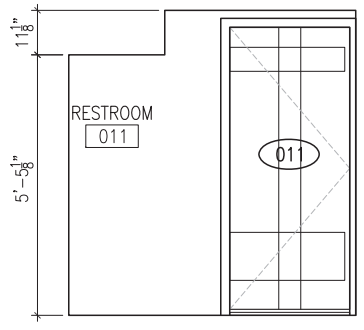
SHEET
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OF 115



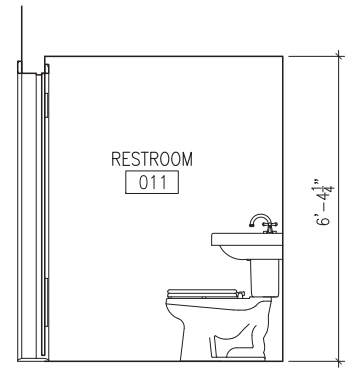
1 / A4.02 NORTH ELEVATION – BASEMENT ROOM 011 – RESTROOM
SCALE (A)



2 / A4.02 EAST ELEVATION – BASEMENT ROOM 011 – RESTROOM
SCALE (A)



3 / A4.02 SOUTH ELEVATION – BASEMENT ROOM 011 – RESTROOM
SCALE (A)



4 / A4.02 WEST ELEVATION – BASEMENT ROOM 011 – RESTROOM
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

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A4.02

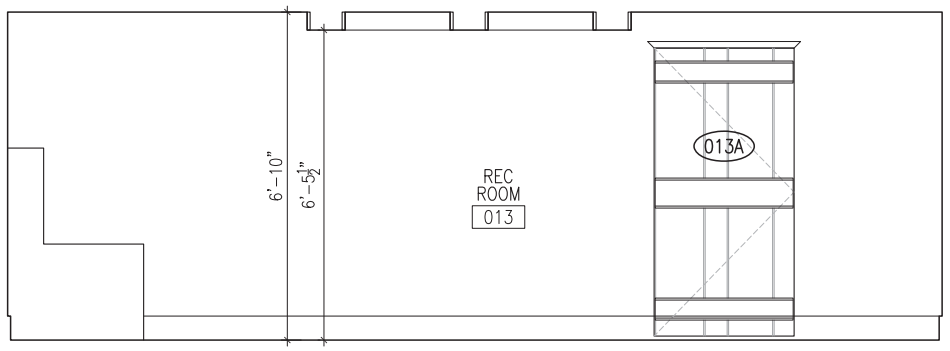
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 011

HARMONY HALL: HISTORIC STRUCTURE REPORT

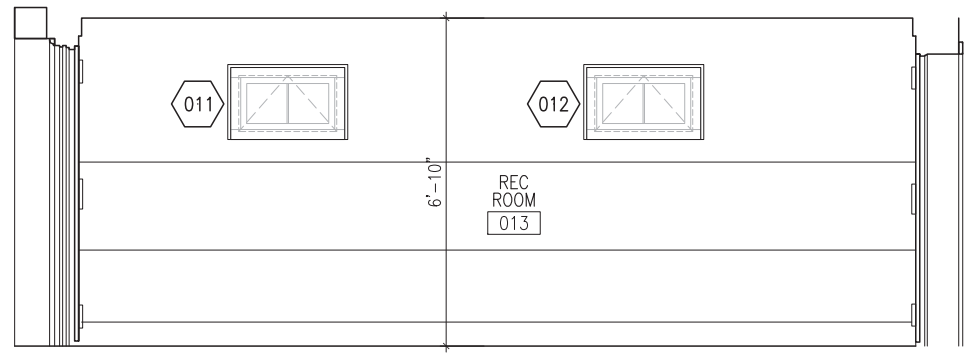
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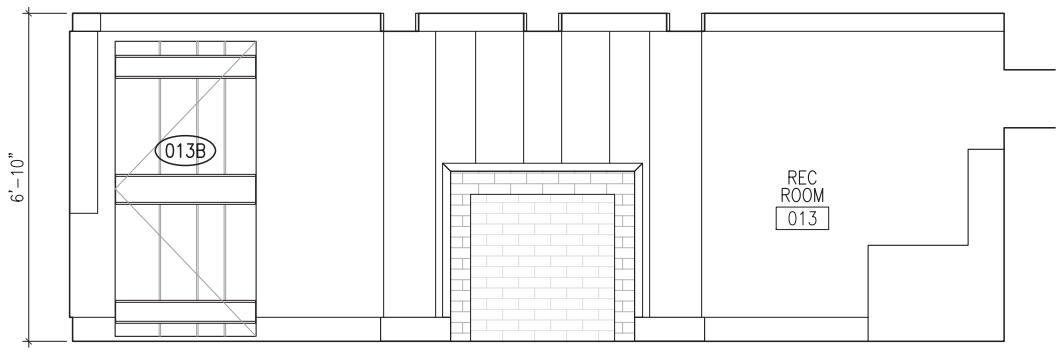
SHEET
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OF 115



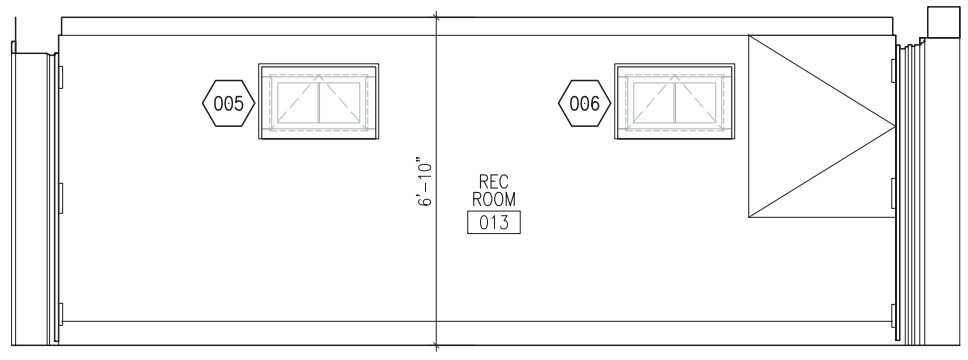
1 / A4.03 NORTH ELEVATION – BASEMENT
ROOM 013 – RECREATION ROOM
SCALE (A)



2 / A4.03 EAST ELEVATION – BASEMENT
ROOM 013 – RECREATION ROOM
SCALE (A)



3 / A4.03 SOUTH ELEVATION – BASEMENT
ROOM 013 – RECREATION ROOM
SCALE (A)



4 / A4.03 WEST ELEVATION – BASEMENT
ROOM 013 – RECREATION ROOM
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

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A4.03

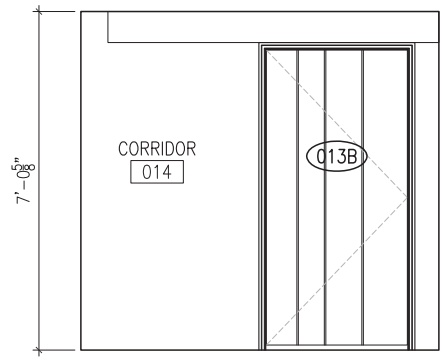
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 013

HARMONY HALL: HISTORIC STRUCTURE REPORT

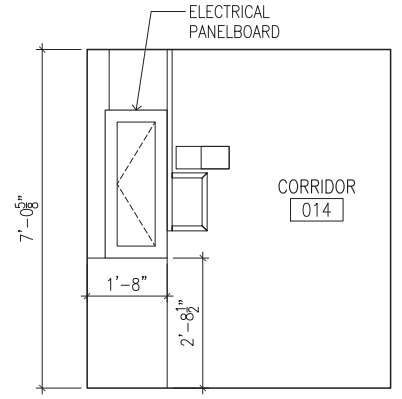
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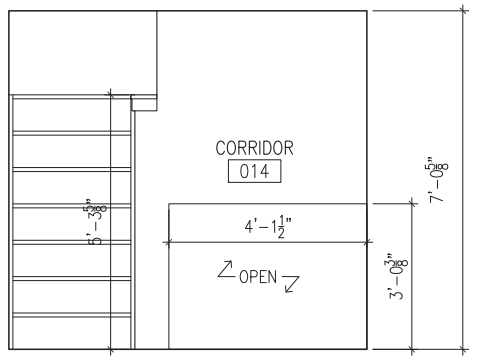
SHEET
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OF 115



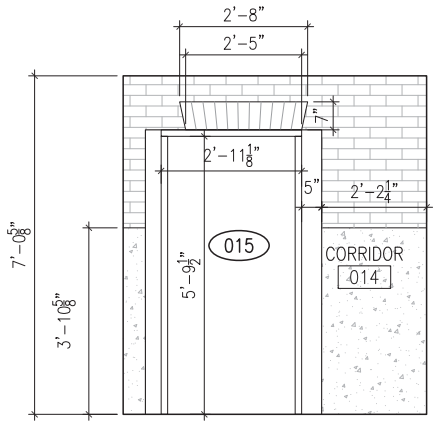
1 A4.04 NORTH ELEVATION – BASEMENT
ROOM 014 – CORRIDOR
SCALE (A)



2 A4.04 EAST ELEVATION – BASEMENT
ROOM 014 – CORRIDOR
SCALE (A)



3 A4.04 SOUTH ELEVATION – BASEMENT
ROOM 014 – CORRIDOR
SCALE (A)



4 A4.04 WEST ELEVATION – BASEMENT
ROOM 014 – CORRIDOR
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

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A4.04

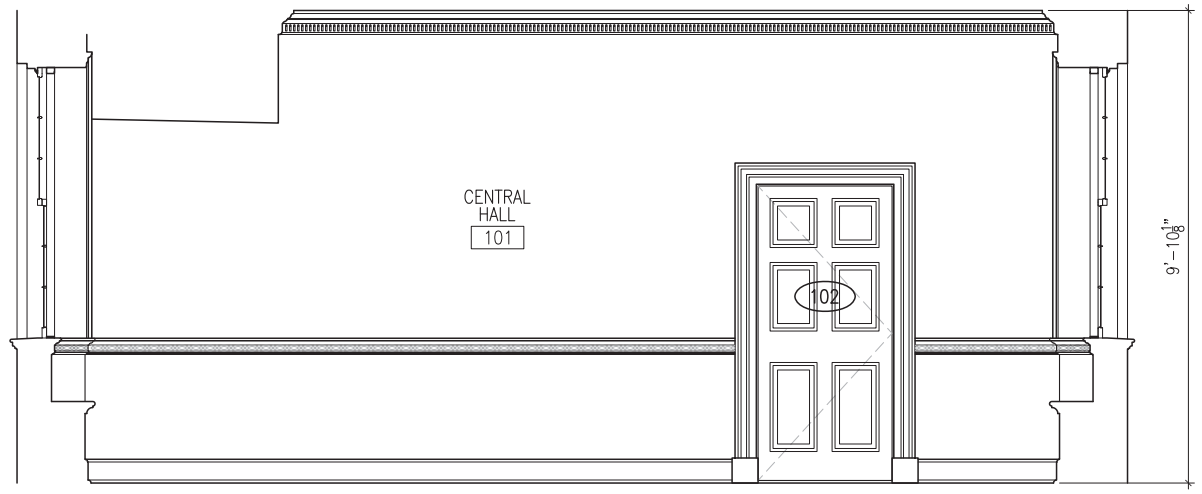
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 014

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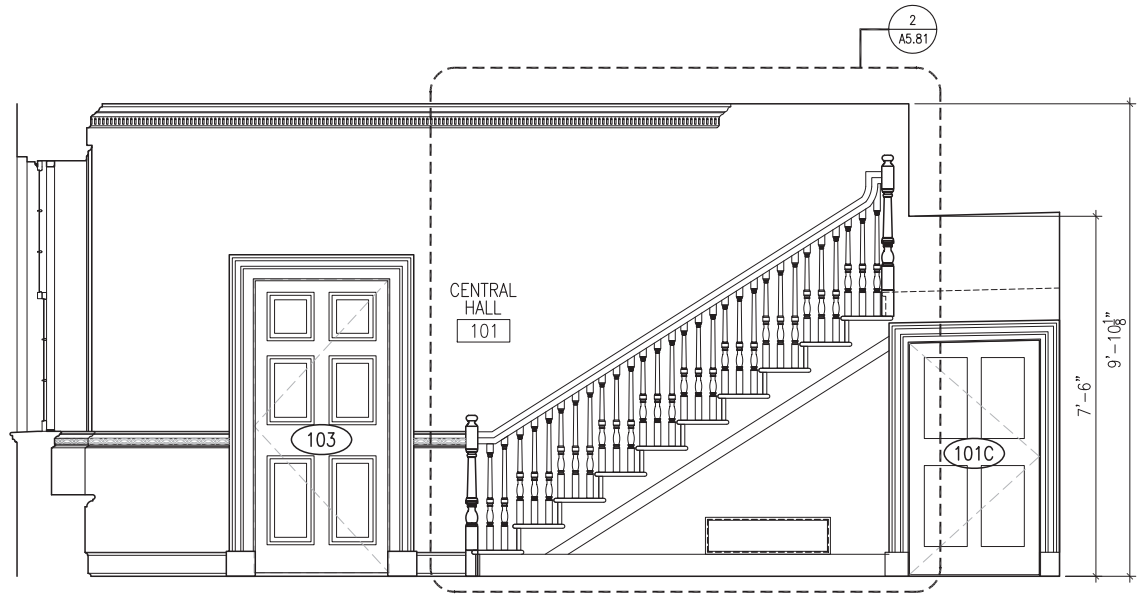
SHEET
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OF 115



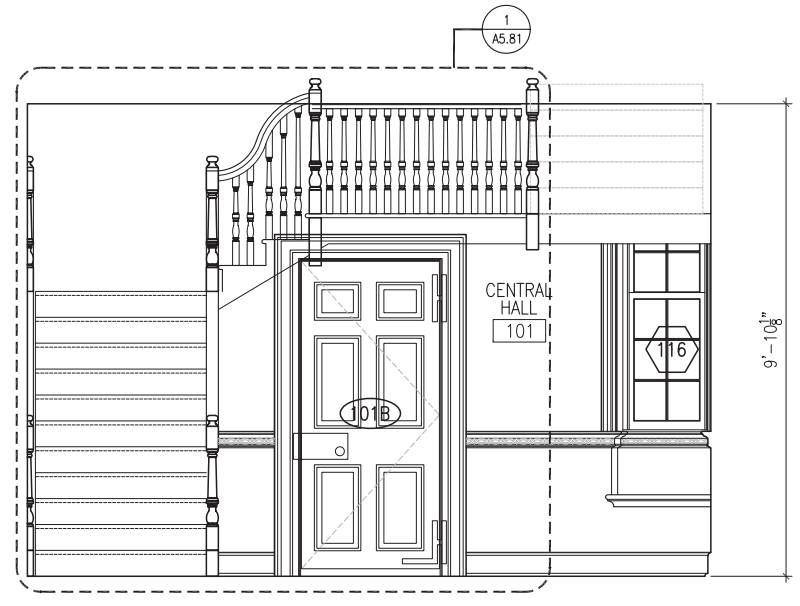
1 / A4.10 NORTH ELEVATION – FIRST FLOOR
ROOM 101 – CENTRAL HALL
SCALE (A)



2 / A4.10 EAST ELEVATION – FIRST FLOOR
ROOM 101 – CENTRAL HALL
SCALE (A)



3 / A4.10 SOUTH ELEVATION – FIRST FLOOR
ROOM 101 – CENTRAL HALL
SCALE (A)



4 / A4.10 WEST ELEVATION – FIRST FLOOR
ROOM 101 – CENTRAL HALL
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

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SUB SHEET NO.
A4.10

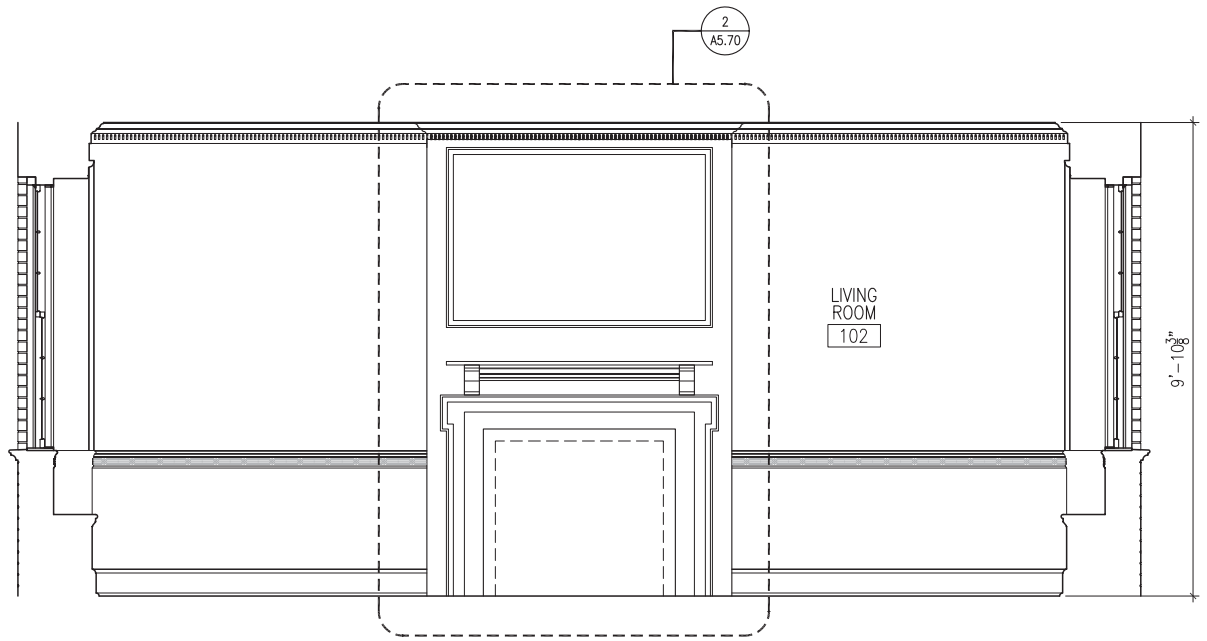
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 101

HARMONY HALL: HISTORIC STRUCTURE REPORT

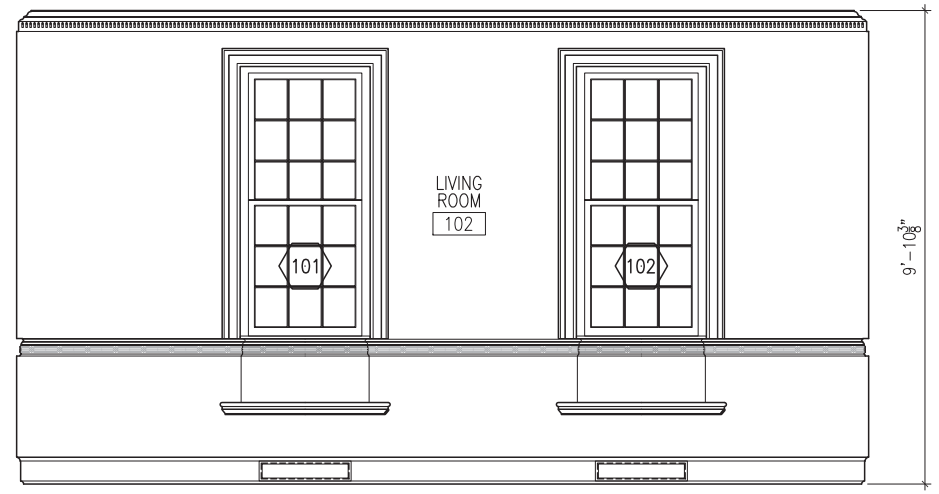
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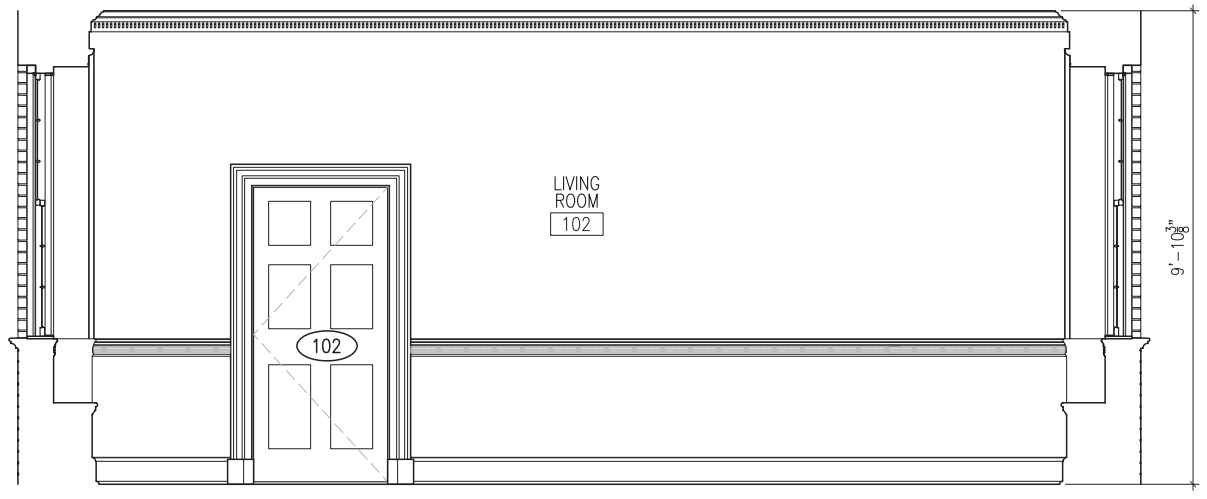
SHEET
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OF 115



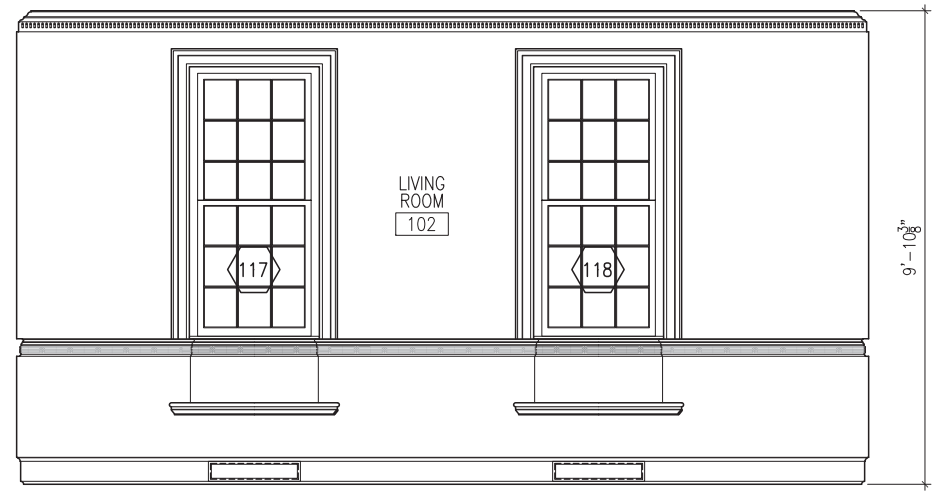
1 A4.11 NORTH ELEVATION – FIRST FLOOR
ROOM 102 – LIVING ROOM/ PARLOR
SCALE (A)



2 A4.11 EAST ELEVATION – FIRST FLOOR
ROOM 102 – LIVING ROOM/ PARLOR
SCALE (A)



3 A4.11 SOUTH ELEVATION – FIRST FLOOR
ROOM 102 – LIVING ROOM/ PARLOR
SCALE (A)



4 A4.11 WEST ELEVATION – FIRST FLOOR
ROOM 102 – LIVING ROOM/ PARLOR
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

PRIME/ ARCHITECTURE:
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SUB SHEET NO.
A4.11

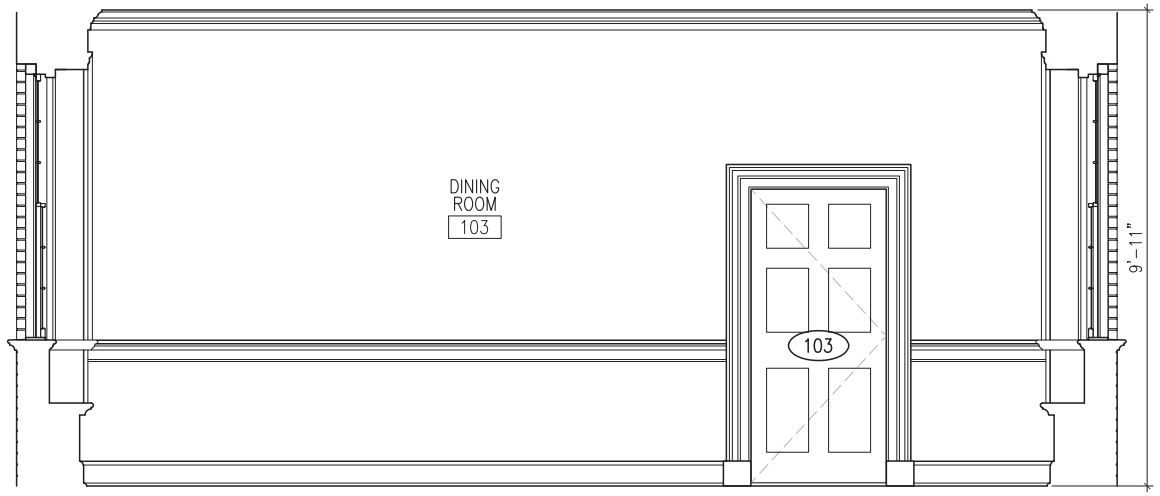
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 102

HARMONY HALL: HISTORIC STRUCTURE REPORT

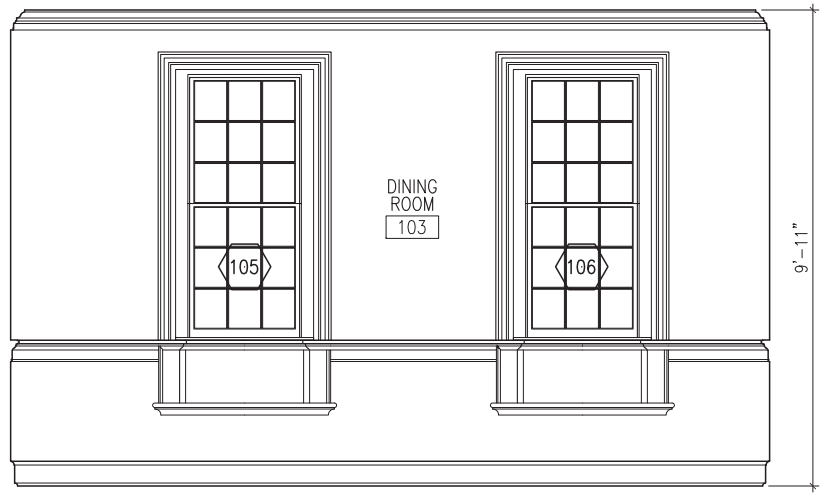
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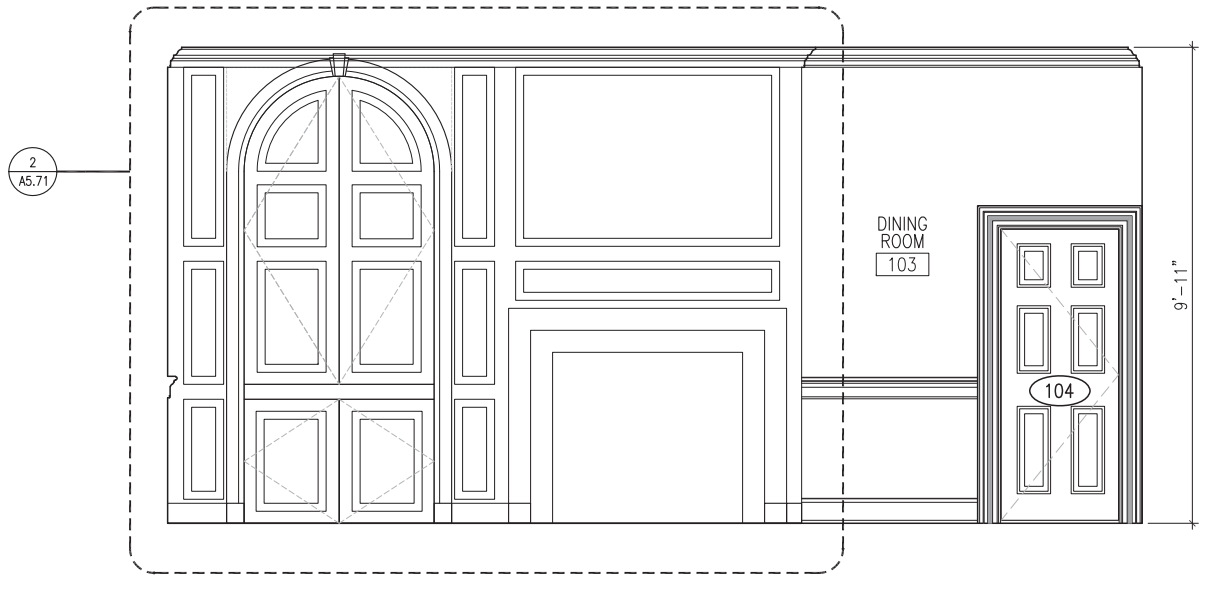
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1 / A4.12 NORTH ELEVATION – FIRST FLOOR
ROOM 103 – DINING ROOM
SCALE (A)



2 / A4.12 EAST ELEVATION – FIRST FLOOR
ROOM 103 – DINING ROOM
SCALE (A)



3 / A4.12 SOUTH ELEVATION – FIRST FLOOR
ROOM 103 – DINING ROOM
SCALE (A)



4 / A4.12 WEST ELEVATION – FIRST FLOOR
ROOM 103 – DINING ROOM
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
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SUB SHEET NO.
A4.12

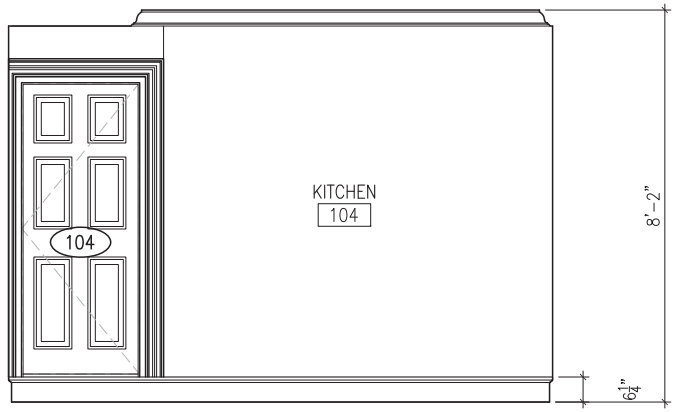
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 103

HARMONY HALL: HISTORIC STRUCTURE REPORT

DRAWING NO.
899
116834

PKG. NO.

SHEET
30
OF 115



1 A4.13 NORTH ELEVATION – FIRST FLOOR
ROOM 104 – KITCHEN
SCALE (A)



2 A4.13 EAST ELEVATION – FIRST FLOOR
ROOM 104 – KITCHEN
SCALE (A)



3 A4.13 WEST ELEVATION – FIRST FLOOR
ROOM 104 – KITCHEN
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

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CADD: SP
TECH REVIEW: SP
DATE: 9/25/12

SUB SHEET NO.
A4.13

TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 104

HARMONY HALL: HISTORIC STRUCTURE REPORT

DRAWING NO.
899
116834

PKG. NO.

SHEET
31
OF 115



1 / A4.14 EAST ELEVATION – FIRST FLOOR
ROOM 106 – SUN ROOM
SCALE (A)



2 / A4.14 SOUTH ELEVATION – FIRST FLOOR
ROOM 106 – SUN ROOM
SCALE (A)



3 / A4.14 WEST ELEVATION – FIRST FLOOR
ROOM 106 – SUN ROOM
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

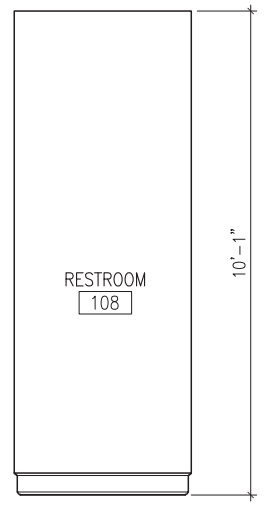
DESIGNED:
CADD: SP
TECH REVIEW: SP
DATE: 9/25/12

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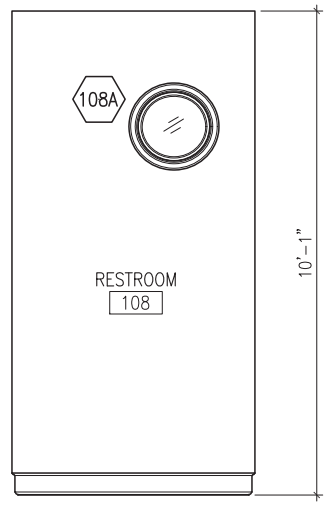
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INTERIOR ELEVATIONS
ROOM 106

HARMONY HALL: HISTORIC STRUCTURE REPORT

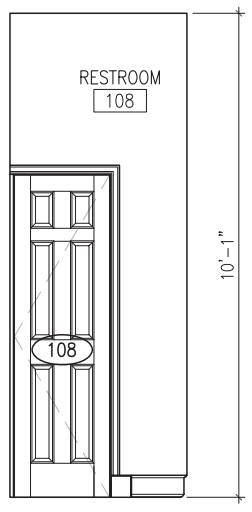
DRAWING NO. 899/116834
PKG. NO.
SHEET 32 OF 115



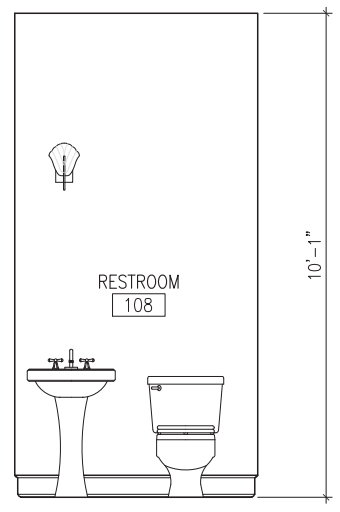
1 A4.15 NORTH ELEVATION
FIRST FLOOR RESTROOM 108
SCALE (A)



2 A4.15 EAST ELEVATION
FIRST FLOOR RESTROOM 108
SCALE (A)



3 A4.15 SOUTH ELEVATION
FIRST FLOOR RESTROOM 108
SCALE (A)



4 A4.15 WEST ELEVATION
FIRST FLOOR RESTROOM 108
SCALE (A)



NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

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BEYER BLINDER BELLE
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WASHINGTON, DC

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SUB SHEET NO.
A4.15

TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 108

HARMONY HALL: HISTORIC STRUCTURE REPORT

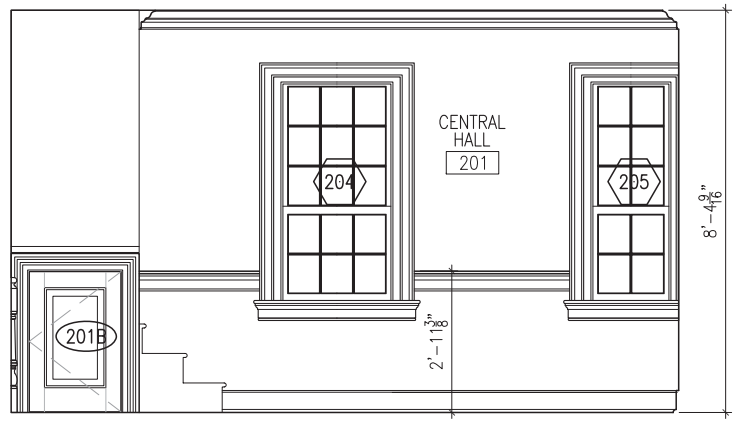
DRAWING NO.
899
116834

PKG. NO.

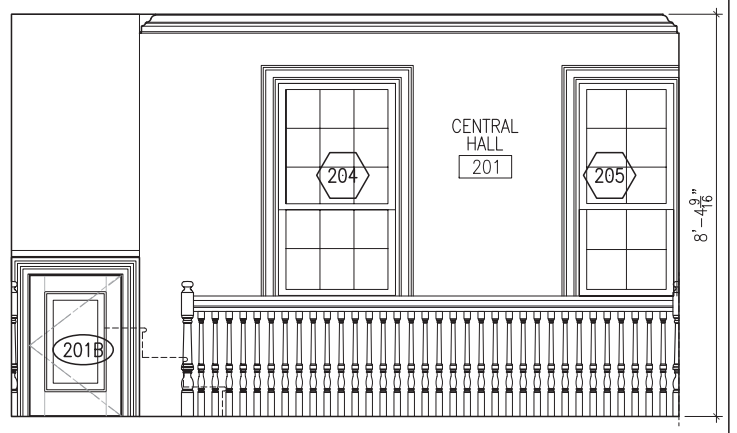
SHEET
33
OF 115



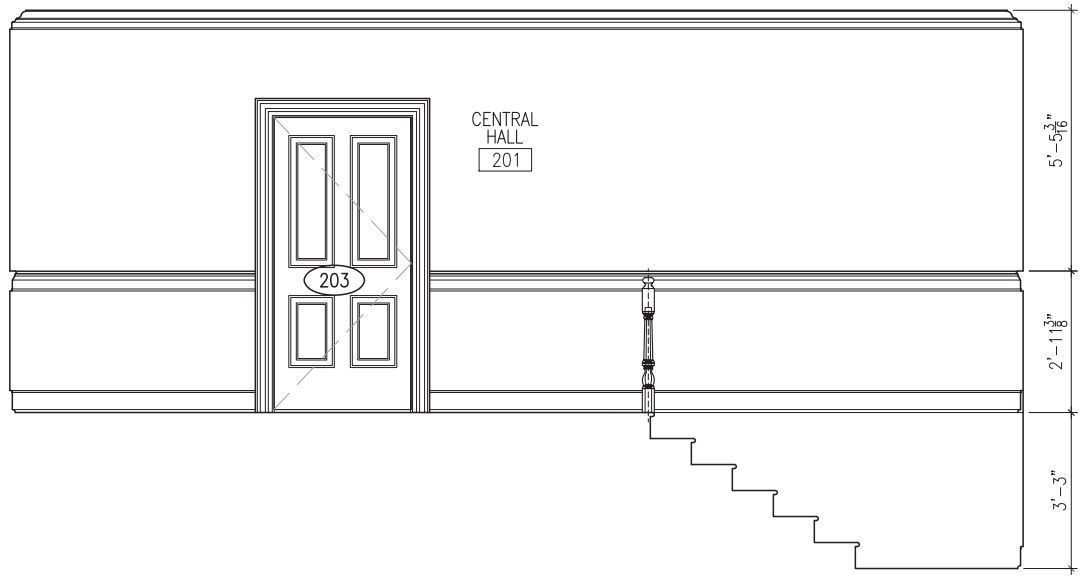
1 A4.20 NORTH ELEVATION – SECOND FLOOR
ROOM 201 – CENTRAL HALL
SCALE (A)



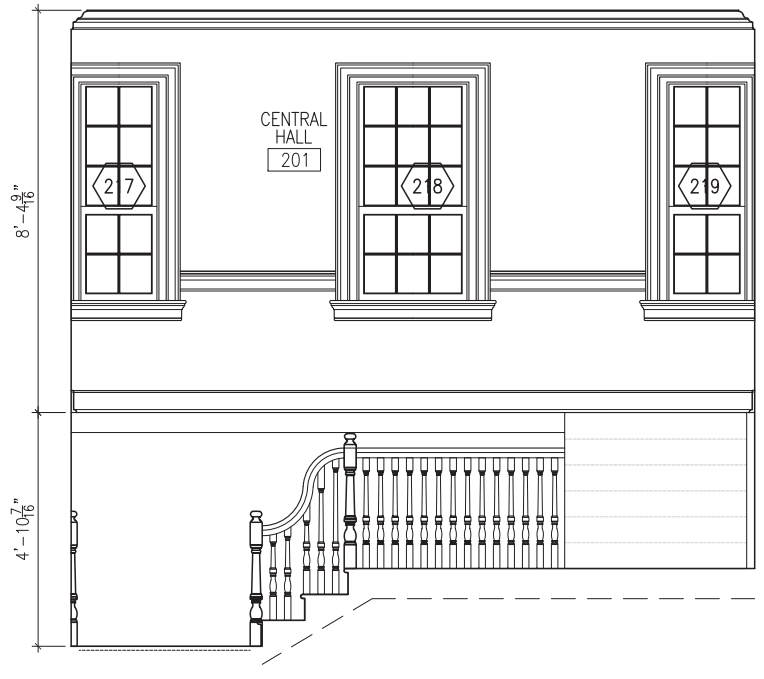
2 A4.20 EAST ELEVATION – SECOND FLOOR
ROOM 201 – CENTRAL HALL
SCALE (A)



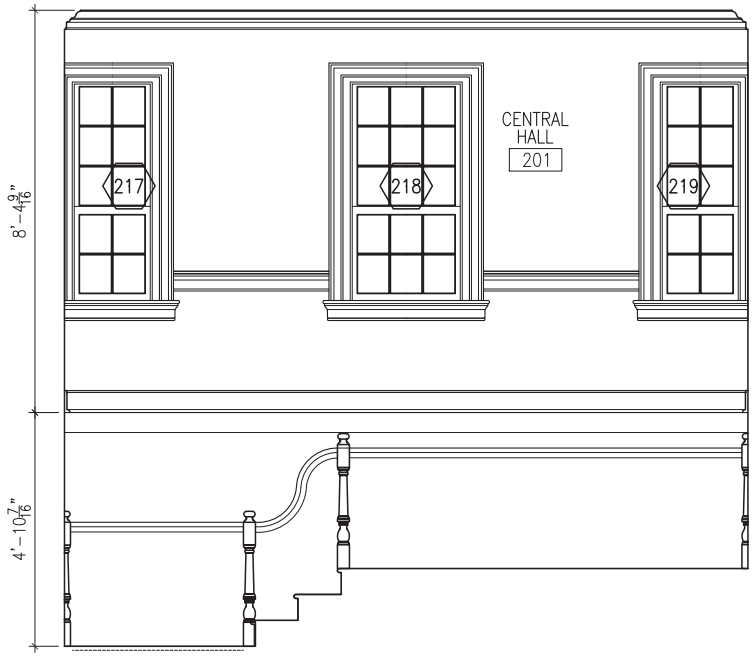
3 A4.20 EAST ELEVATION – SECOND FLOOR
ROOM 201 – CENTRAL HALL
SCALE (A)



4 A4.20 SOUTH ELEVATION – SECOND FLOOR
ROOM 201 – CENTRAL HALL
SCALE (A)



5 A4.20 WEST ELEVATION – SECOND FLOOR
ROOM 201 – CENTRAL HALL
SCALE (A)



6 A4.20 WEST ELEVATION – SECOND FLOOR
ROOM 201 – CENTRAL HALL
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

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A4.20

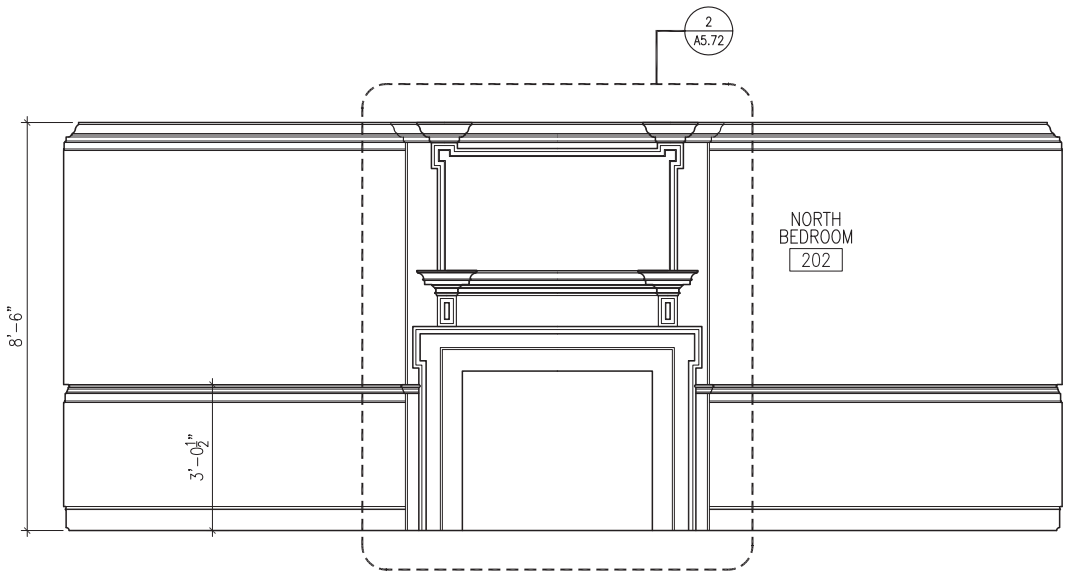
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 201

HARMONY HALL: HISTORIC STRUCTURE REPORT

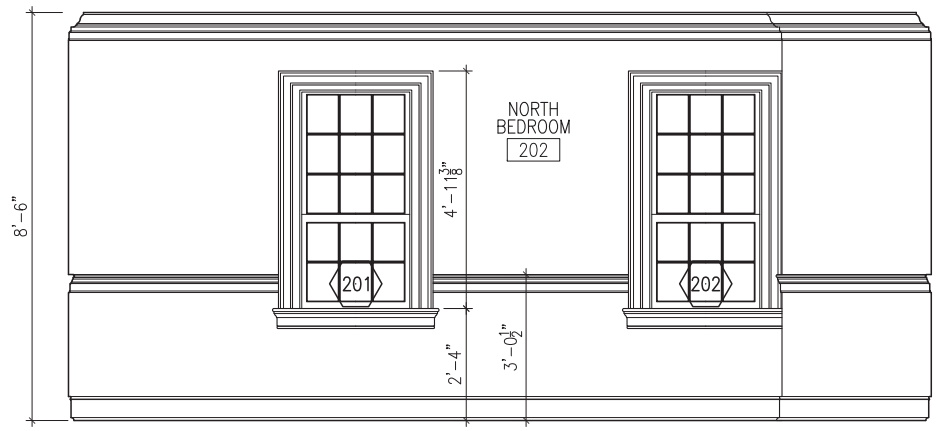
DRAWING NO.
899
116834

PKG. NO.

SHEET
34
OF 115



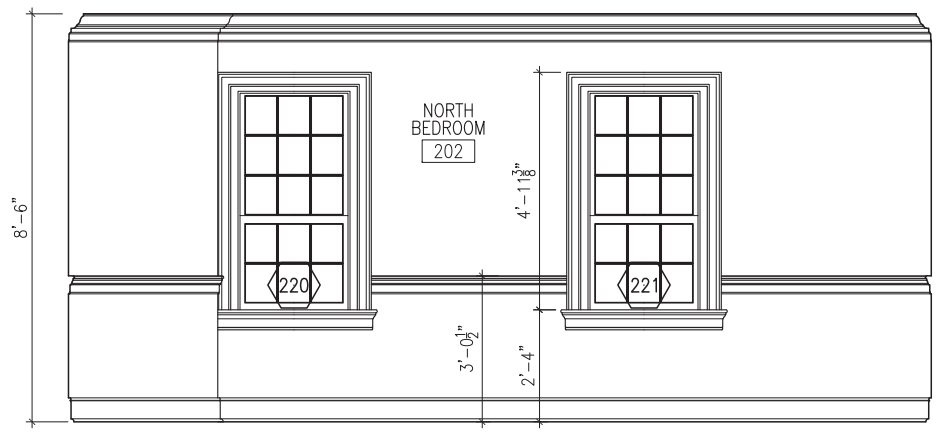
1 A4.21 NORTH ELEVATION – SECOND FLOOR
ROOM 202 – NORTH BEDROOM
SCALE (A)



2 A4.21 EAST ELEVATION – SECOND FLOOR
ROOM 202 – NORTH BEDROOM
SCALE (A)



3 A4.21 SOUTH ELEVATION – SECOND FLOOR
ROOM 202 – NORTH BEDROOM
SCALE (A)



4 A4.21 WEST ELEVATION – SECOND FLOOR
ROOM 202 – NORTH BEDROOM
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
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SUB SHEET NO.
A4.21

TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 201

HARMONY HALL: HISTORIC STRUCTURE REPORT

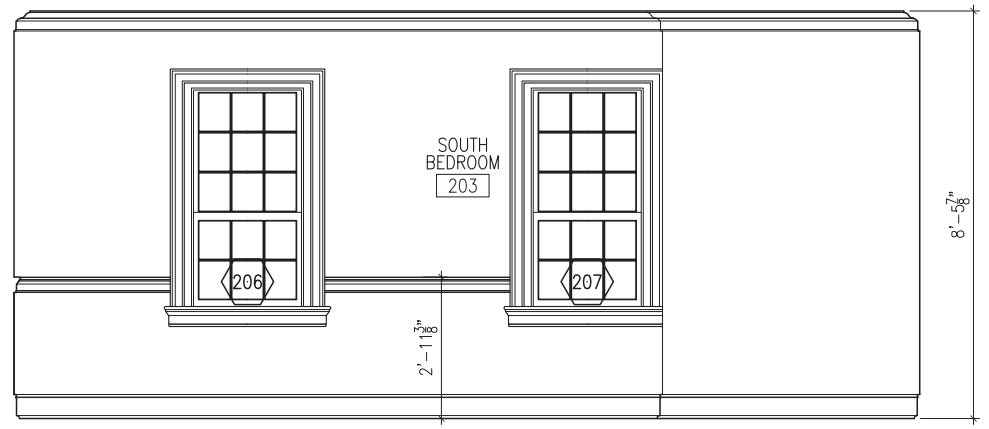
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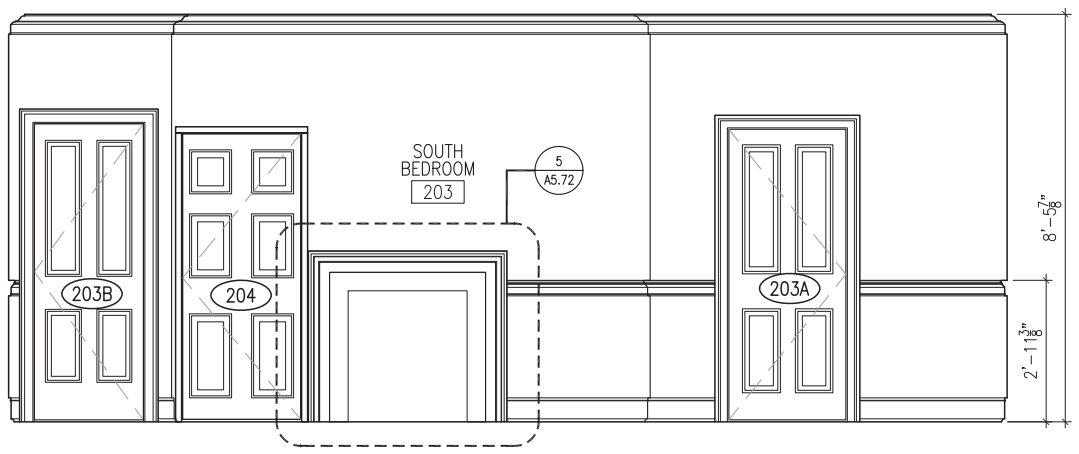
SHEET
35
OF 115



1 / A4.22 NORTH ELEVATION – SECOND FLOOR
ROOM 203 – SOUTH BEDROOM
SCALE (A)



2 / A4.22 EAST ELEVATION – SECOND FLOOR
ROOM 203 – SOUTH BEDROOM
SCALE (A)



3 / A4.22 SOUTH ELEVATION – SECOND FLOOR
ROOM 203 – SOUTH BEDROOM
SCALE (A)



4 / A4.22 WEST ELEVATION – SECOND FLOOR
ROOM 203 – SOUTH BEDROOM
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
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WASHINGTON, DC

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DATE: 9/25/12

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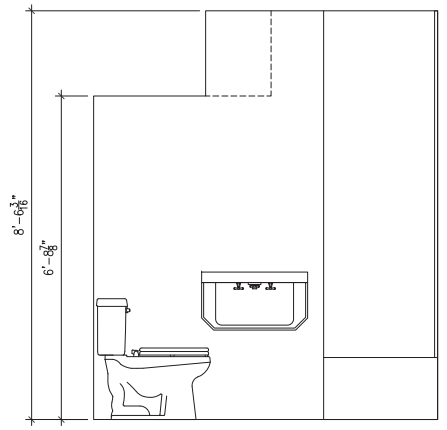
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 203

HARMONY HALL: HISTORIC STRUCTURE REPORT

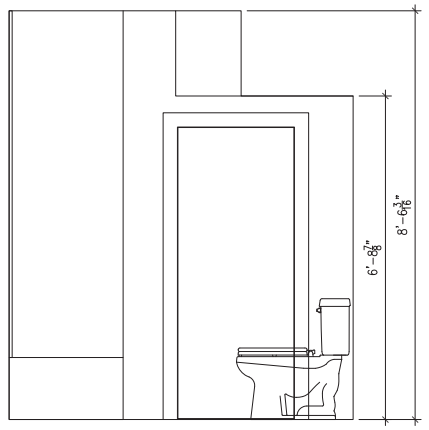
DRAWING NO.
899
116834

PKG. NO.

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36
OF 115



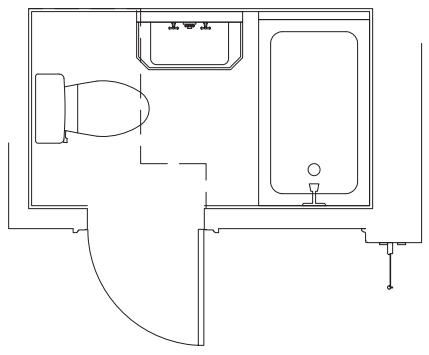
1 A4.23 NORTH ELEVATION – SECOND FLOOR ROOM 202A – BATHROOM
SCALE (A)



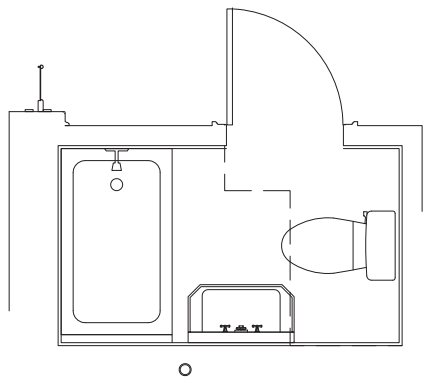
2 A4.23 EAST ELEVATION – SECOND FLOOR ROOM 202A – BATHROOM
SCALE (A)

5 A4.23 NORTH ELEVATION – SECOND FLOOR ROOM 203A – BATHROOM
SCALE (A)

6 A4.23 EAST ELEVATION – SECOND FLOOR ROOM 203A – BATHROOM
SCALE (A)



3 A4.23 SOUTH ELEVATION – SECOND FLOOR ROOM 202A – BATHROOM
SCALE (A)



4 A4.23 WEST ELEVATION – SECOND FLOOR ROOM 202A – BATHROOM
SCALE (A)

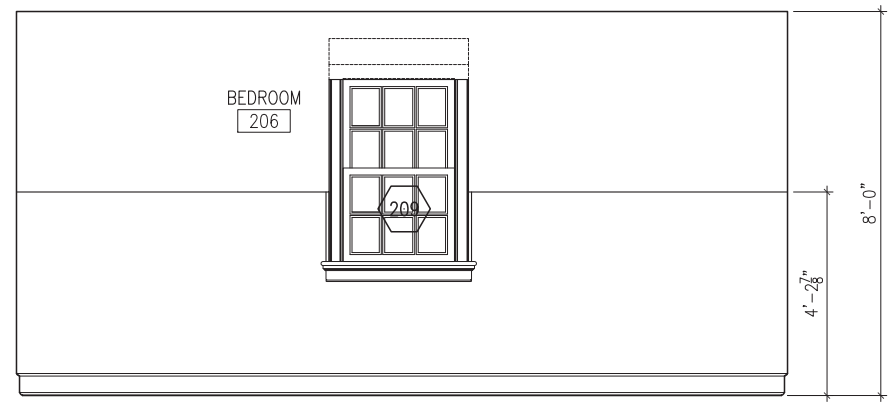
7 A4.23 SOUTH ELEVATION – SECOND FLOOR ROOM 203A – BATHROOM
SCALE (A)

8 A4.23 WEST ELEVATION – SECOND FLOOR ROOM 203A – BATHROOM
SCALE (A)

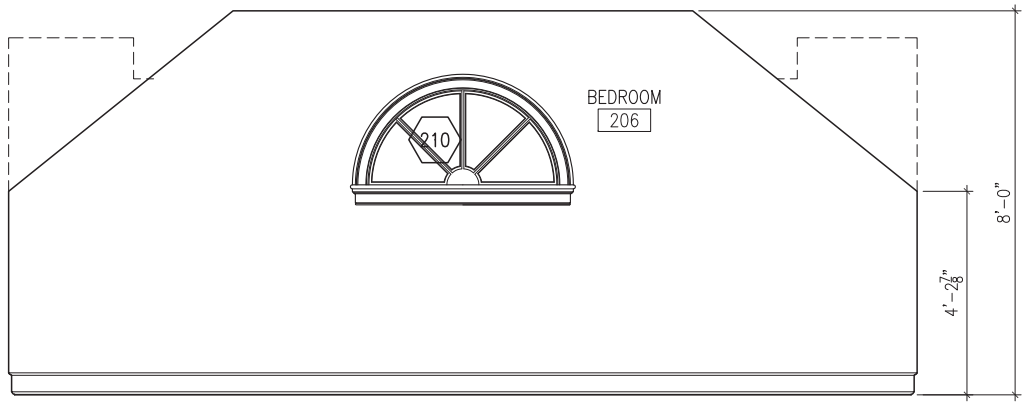
	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 / 116834
		CADD: SP	A4.23	INTERIOR ELEVATIONS	PKG. NO. — — —
		TECH REVIEW: SP			SHEET 37 OF 116
		DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	



1 / A4.24 NORTH ELEVATION – SECOND FLOOR
ROOM 206 – BEDROOM
SCALE (A)



2 / A4.24 EAST ELEVATION – SECOND FLOOR
ROOM 206 – BEDROOM
SCALE (A)



3 / A4.24 SOUTH ELEVATION – SECOND FLOOR
ROOM 206 – BEDROOM
SCALE (A)



4 / A4.24 WEST ELEVATION – SECOND FLOOR
ROOM 206 – BEDROOM
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

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DATE: 9/25/12

SUB SHEET NO.
A4.24

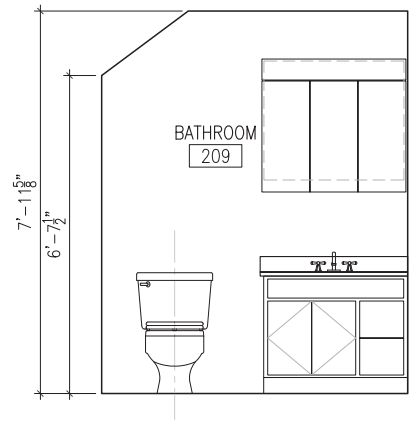
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 206

HARMONY HALL: HISTORIC STRUCTURE REPORT

DRAWING NO.
899
116834

PKG. NO.

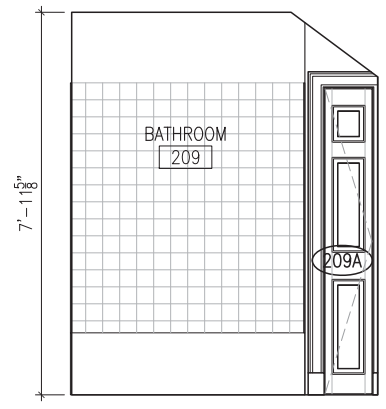
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OF 115



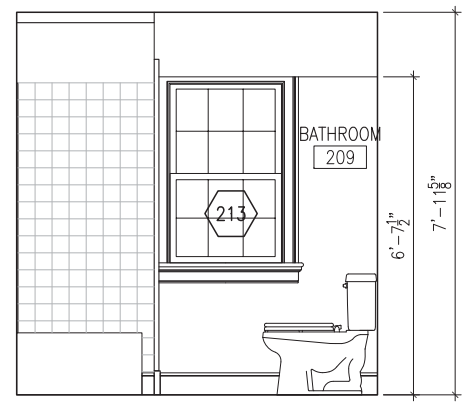
1 A4.25 NORTH ELEVATION – SECOND FLOOR ROOM 209 – BATHROOM
SCALE (A)



2 A4.25 EAST ELEVATION – SECOND FLOOR ROOM 209 – BATHROOM
SCALE (A)



3 A4.25 SOUTH ELEVATION – SECOND FLOOR ROOM 209 – BATHROOM
SCALE (A)



4 A4.25 WEST ELEVATION – SECOND FLOOR ROOM 209 – BATHROOM
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
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WASHINGTON, DC

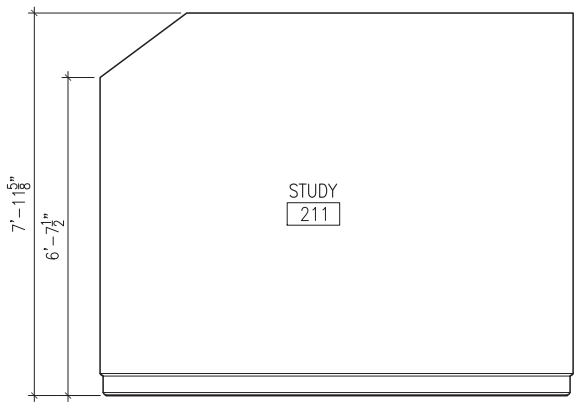
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DATE: 9/25/12

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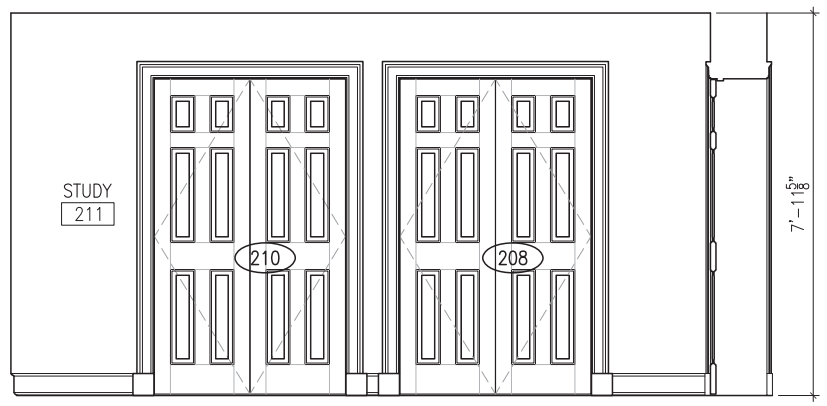
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 209

HARMONY HALL: HISTORIC STRUCTURE REPORT

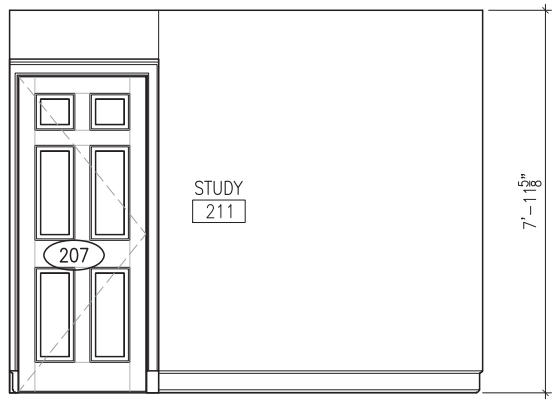
DRAWING NO. 899 / 116834
PKG. NO.
SHEET 39 OF 115



1 / A4.26 NORTH ELEVATION – SECOND FLOOR
ROOM 211 – STUDY
SCALE (A)



1 / A4.26 EAST ELEVATION – SECOND FLOOR
ROOM 211 – STUDY
SCALE (A)



1 / A4.26 SOUTH ELEVATION – SECOND FLOOR
ROOM 211 – STUDY
SCALE (A)



1 / A4.26 WEST ELEVATION – SECOND FLOOR
ROOM 211 – STUDY
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
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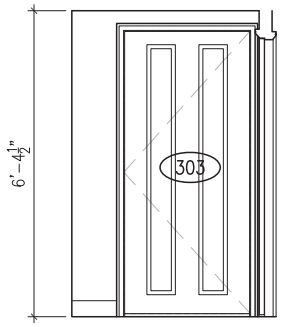
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DATE: 9/25/12

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A4.26

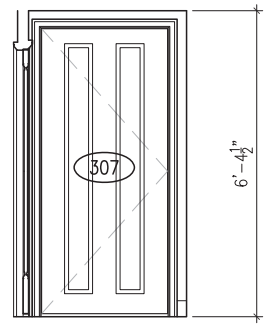
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 210

HARMONY HALL: HISTORIC STRUCTURE REPORT

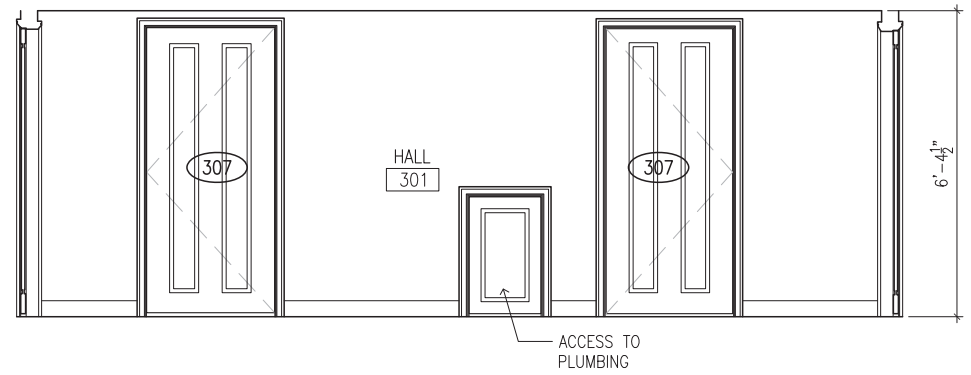
DRAWING NO. 899 / 116834
PKG. NO.
SHEET 40 OF 115



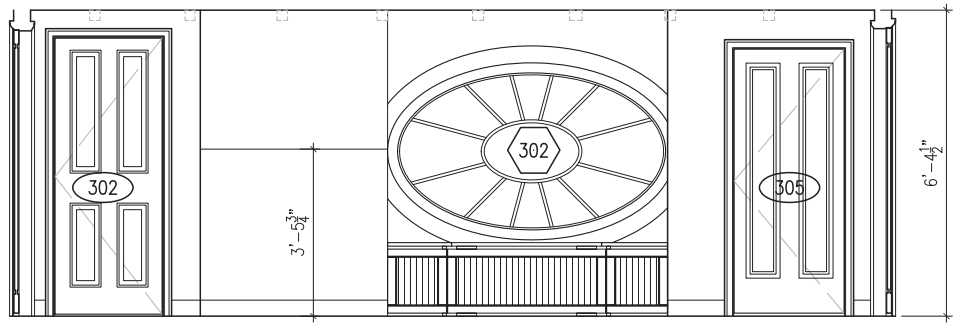
1 A4.30 NORTH ELEVATION – THIRD FLOOR
ROOM 301 – HALL
SCALE (A)



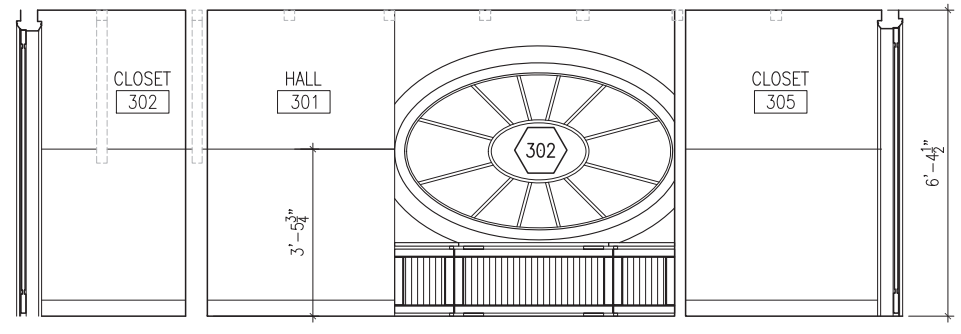
2 A4.30 NORTH ELEVATION – THIRD FLOOR
ROOM 301 – HALL
SCALE (A)



3 A4.30 EAST ELEVATION – THIRD FLOOR
ROOM 301 – HALL
SCALE (A)



4 A4.30 SOUTH ELEVATION – THIRD FLOOR
ROOM 301 – HALL
SCALE (A)



5 A4.30 WEST ELEVATION – THIRD FLOOR
ROOM 301 – HALL
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

PRIME/ ARCHITECTURE:
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WASHINGTON, DC

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SUB SHEET NO.
A4.30

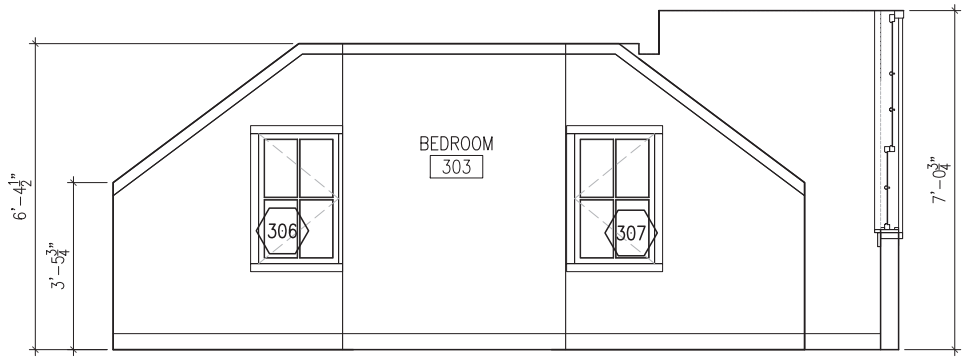
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 301

HARMONY HALL: HISTORIC STRUCTURE REPORT

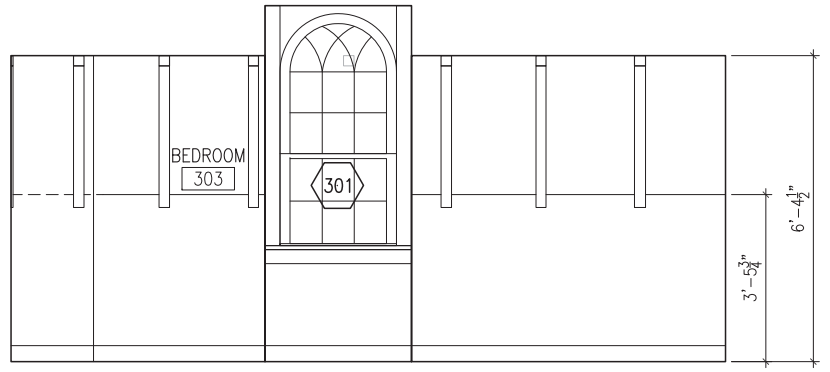
DRAWING NO.
899
116834

PKG. NO.

SHEET
41
OF 115



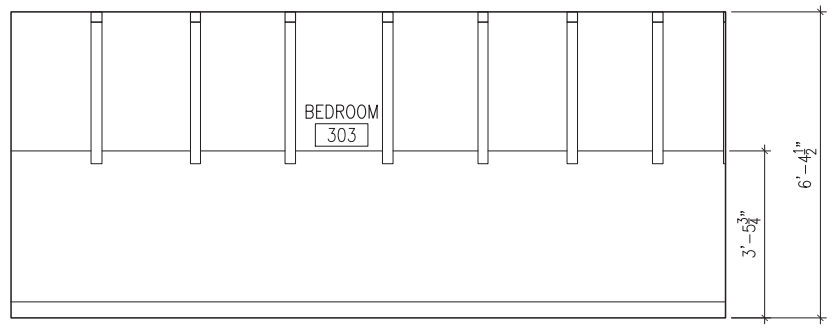
1 / A4.31 NORTH ELEVATION – THIRD FLOOR
ROOM 303 – BEDROOM
SCALE (A)



2 / A4.31 EAST ELEVATION – THIRD FLOOR
ROOM 303 – BEDROOM
SCALE (A)



3 / A4.31 SOUTH ELEVATION – THIRD FLOOR
ROOM 303 – BEDROOM
SCALE (A)



4 / A4.31 WEST ELEVATION – THIRD FLOOR
ROOM 303 – BEDROOM
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

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SUB SHEET NO.
A4.31

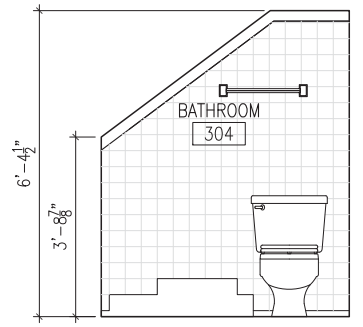
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 303

HARMONY HALL: HISTORIC STRUCTURE REPORT

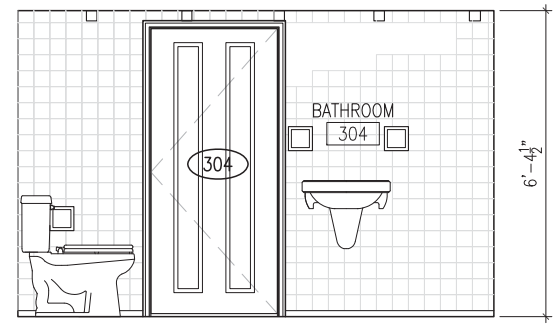
DRAWING NO.
899
116834

PKG. NO.

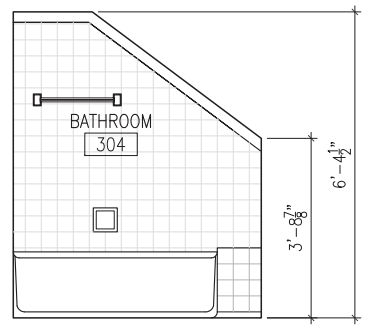
SHEET
42
OF 115



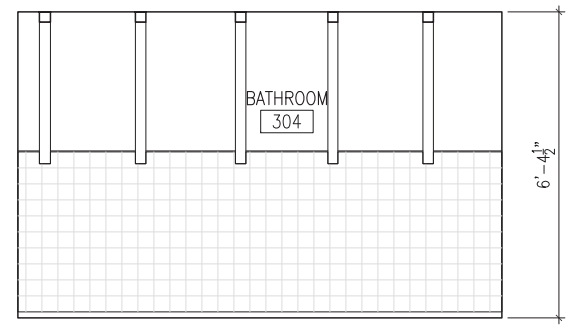
1 A4.32 NORTH ELEVATION – THIRD FLOOR ROOM 304 – BATHROOM
SCALE (A)



2 A4.32 EAST ELEVATION – THIRD FLOOR ROOM 304 – BATHROOM
SCALE (A)



3 A4.32 SOUTH ELEVATION – THIRD FLOOR ROOM 304 – BATHROOM
SCALE (A)



4 A4.32 WEST ELEVATION – THIRD FLOOR ROOM 304 – BATHROOM
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

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DATE: 9/25/12

SUB SHEET NO.
A4.32

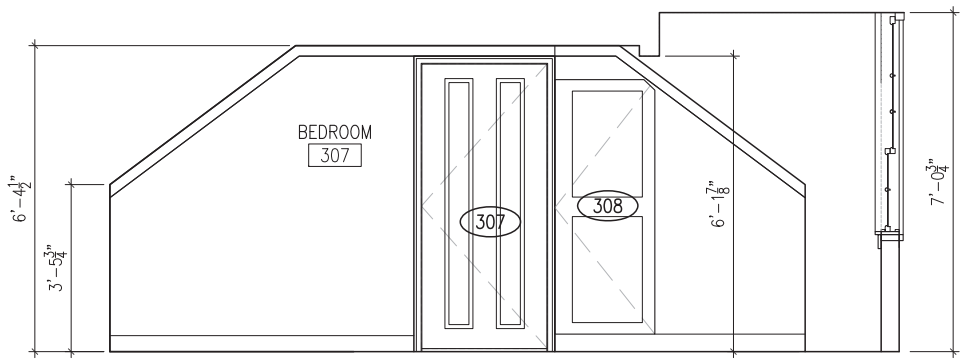
TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 304

HARMONY HALL: HISTORIC STRUCTURE REPORT

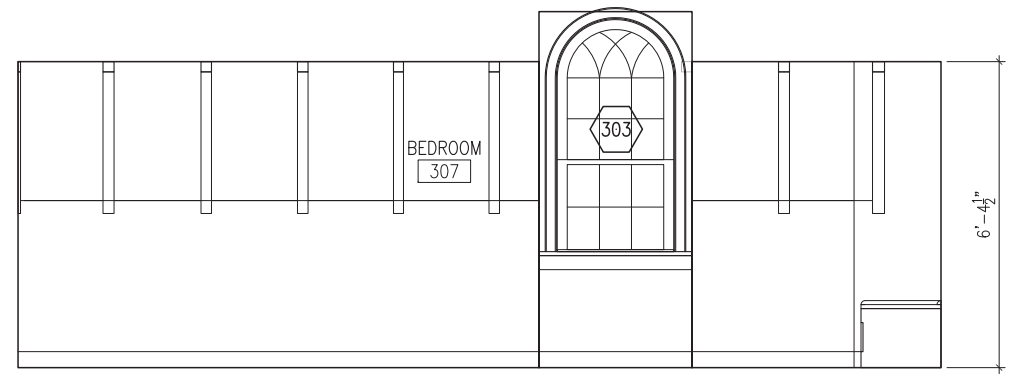
DRAWING NO.
899
116834

PKG. NO.

SHEET
43
OF 115



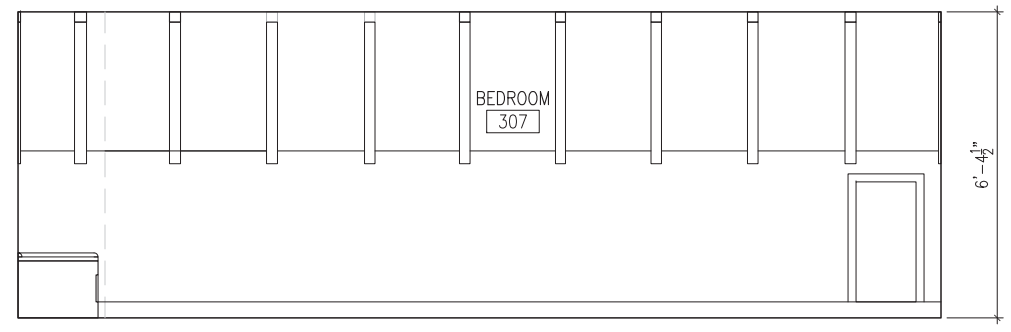
1 A4.33 NORTH ELEVATION – THIRD FLOOR
ROOM 307 – BEDROOM
SCALE (A)



2 A4.33 EAST ELEVATION – THIRD FLOOR
ROOM 307 – BEDROOM
SCALE (A)



3 A4.33 SOUTH ELEVATION – THIRD FLOOR
ROOM 307 – BEDROOM
SCALE (A)



4 A4.33 WEST ELEVATION – THIRD FLOOR
ROOM 307 – BEDROOM
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'–0")
SCALE (A)

NOTES:
1. SEE SHEETS A5.40–A5.48 FOR ALL WINDOW DETAILS.
2. SEE SHEETS A5.10–A5.16 FOR ALL FIRST FLOOR DOOR DETAILS.
3. SEE SHEETS A5.50–A5.52 FOR ALL CROWN MOLDING, CHAIRRAIL, AND BASEBOARD DETAILS.
4. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

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SUB SHEET NO.
A4.33

TITLE OF SHEET
INTERIOR ELEVATIONS
ROOM 307

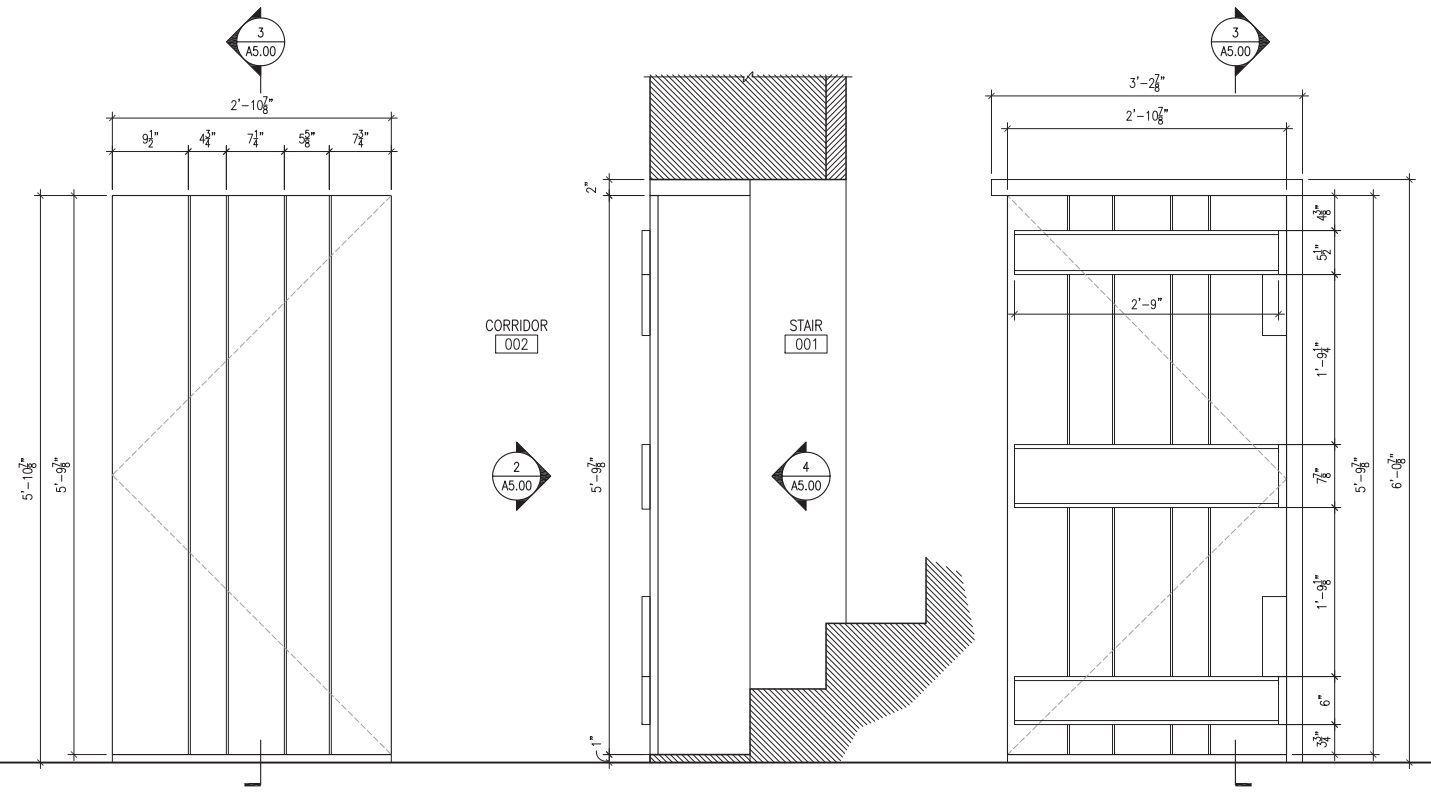
HARMONY HALL: HISTORIC STRUCTURE REPORT

DRAWING NO.
899
116834

PKG. NO.

SHEET
44
OF 115

DOOR 001

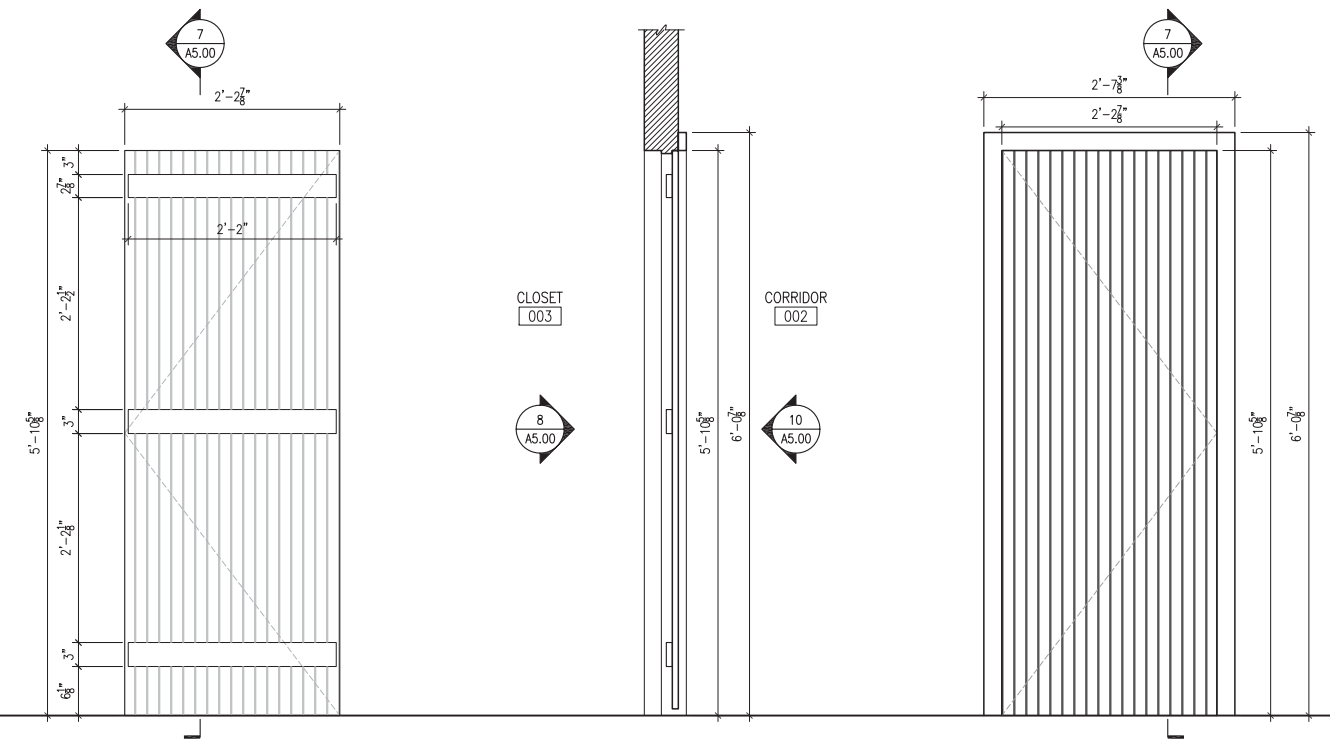


2 A5.00 NORTH ELEVATION DOOR 001 SCALE (A)

3 A5.00 SECTION DOOR 001 SCALE (A)

4 A5.00 SOUTH ELEVATION DOOR 001 SCALE (A)

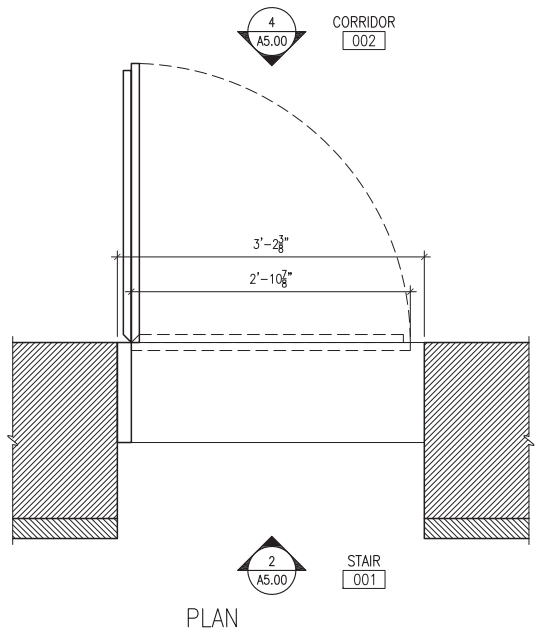
DOOR 003A



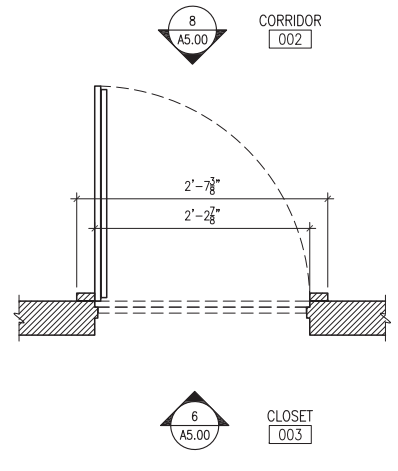
6 A5.00 EAST ELEVATION DOOR 003A SCALE (A)

7 A5.00 SECTION DOOR 003A SCALE (A)

8 A5.00 WEST ELEVATION DOOR 003A SCALE (A)



1 A5.00 PLAN DOOR 001 SCALE (A)

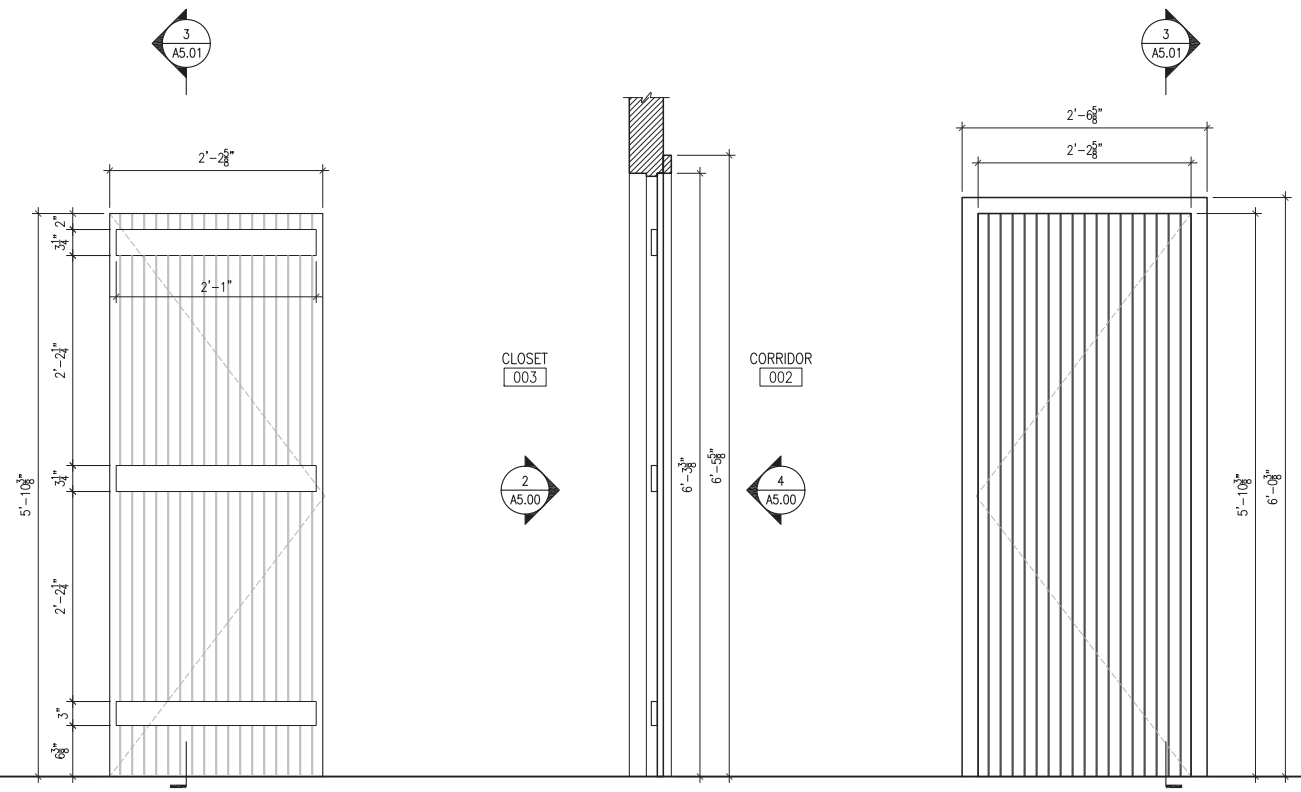


5 A5.00 PLAN DOOR 003A SCALE (A)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

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	CADD: SP	A5.00	BASEMENT DOOR DETAILS 001 & 003A	899 116834
	TECH REVIEW: SP			PKG. NO.
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	SHEET 45 OF 115

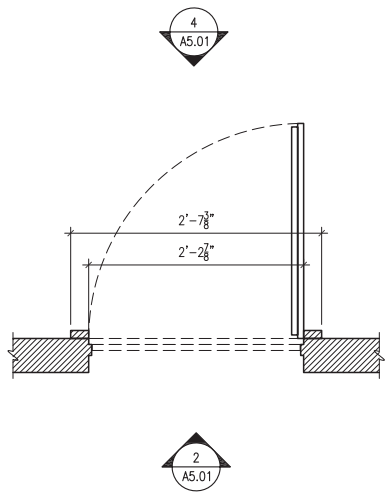
DOOR 003B



2 A5.01 EAST ELEVATION DOOR 003B SCALE A

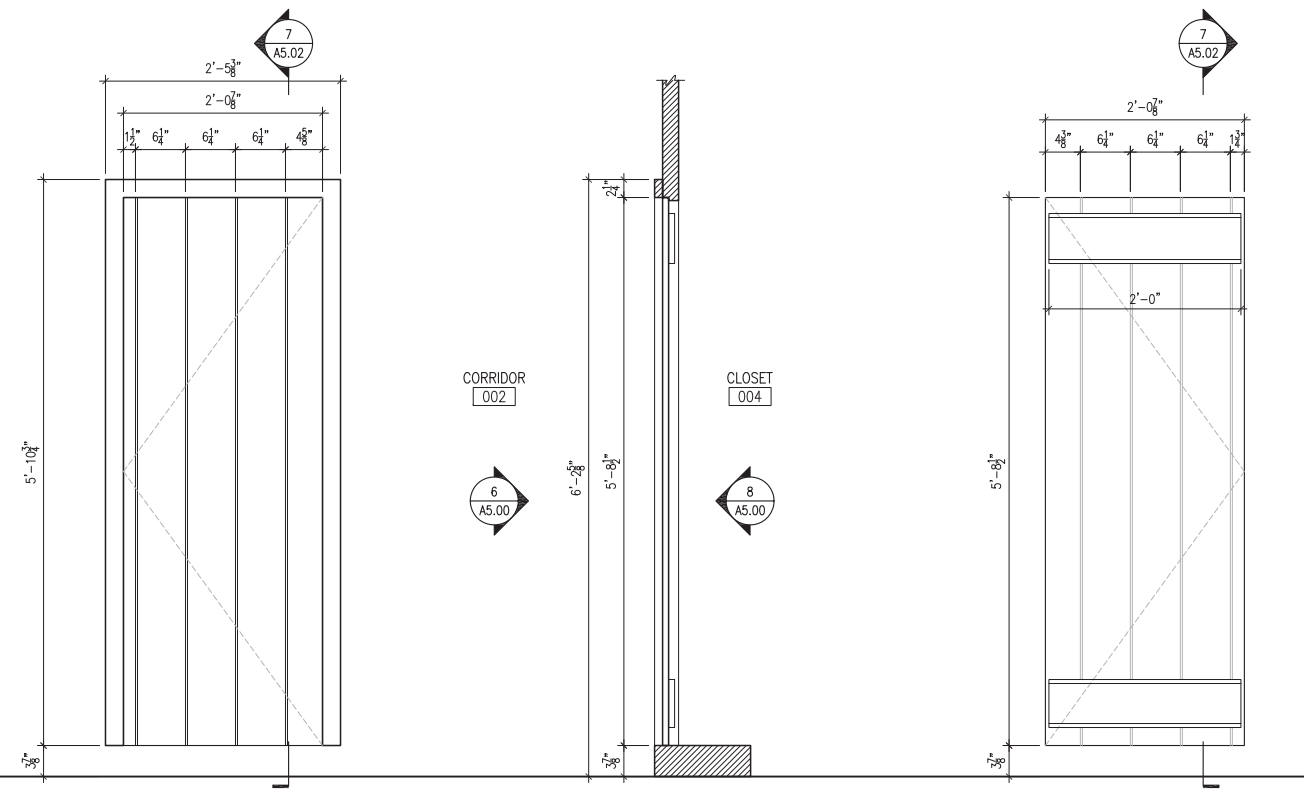
3 A5.01 SECTION DOOR 003B SCALE A

4 A5.01 WEST ELEVATION DOOR 003B SCALE A



1 A5.01 PLAN DOOR 003B SCALE A

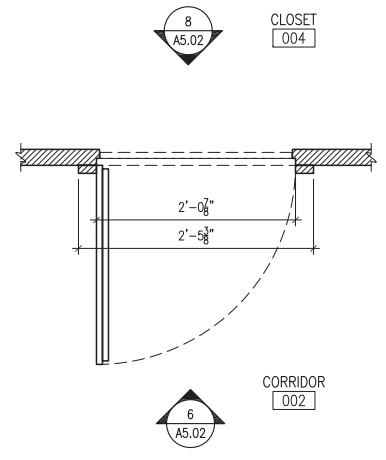
DOOR 004A



6 A5.01 EAST ELEVATION DOOR 004A SCALE A

7 A5.01 SECTION DOOR 004A SCALE A

8 A5.01 WEST ELEVATION DOOR 004A SCALE A

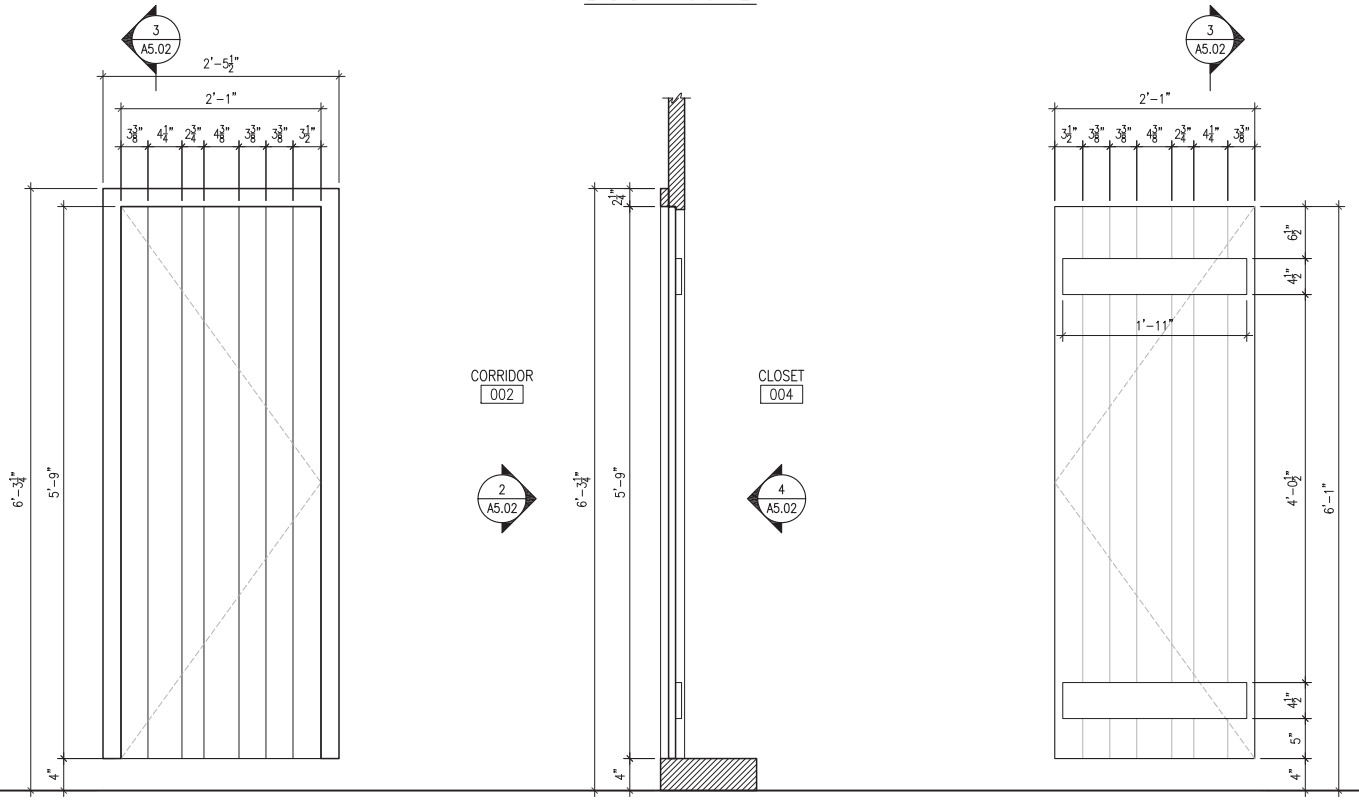


5 A5.01 PLAN DOOR 004A SCALE A

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE A

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO. A5.01	TITLE OF SHEET BASEMENT DOOR DETAILS 003B & 004A HARMONY HALL: HISTORIC STRUCTURE REPORT	DRAWING NO. 899 116834
		CADD: SP			PKG. NO.
		TECH REVIEW: SP			SHEET 46
		DATE: 9/25/12			OF 115

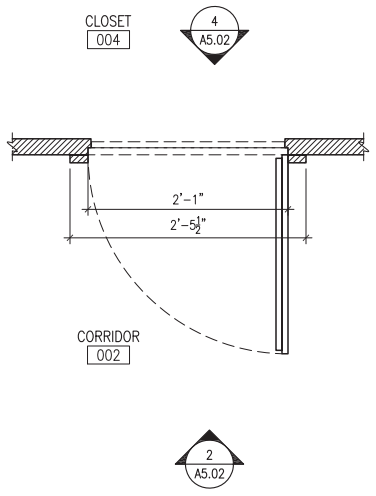
DOOR 004B



2 A5.02 EAST ELEVATION DOOR 004B SCALE (A)

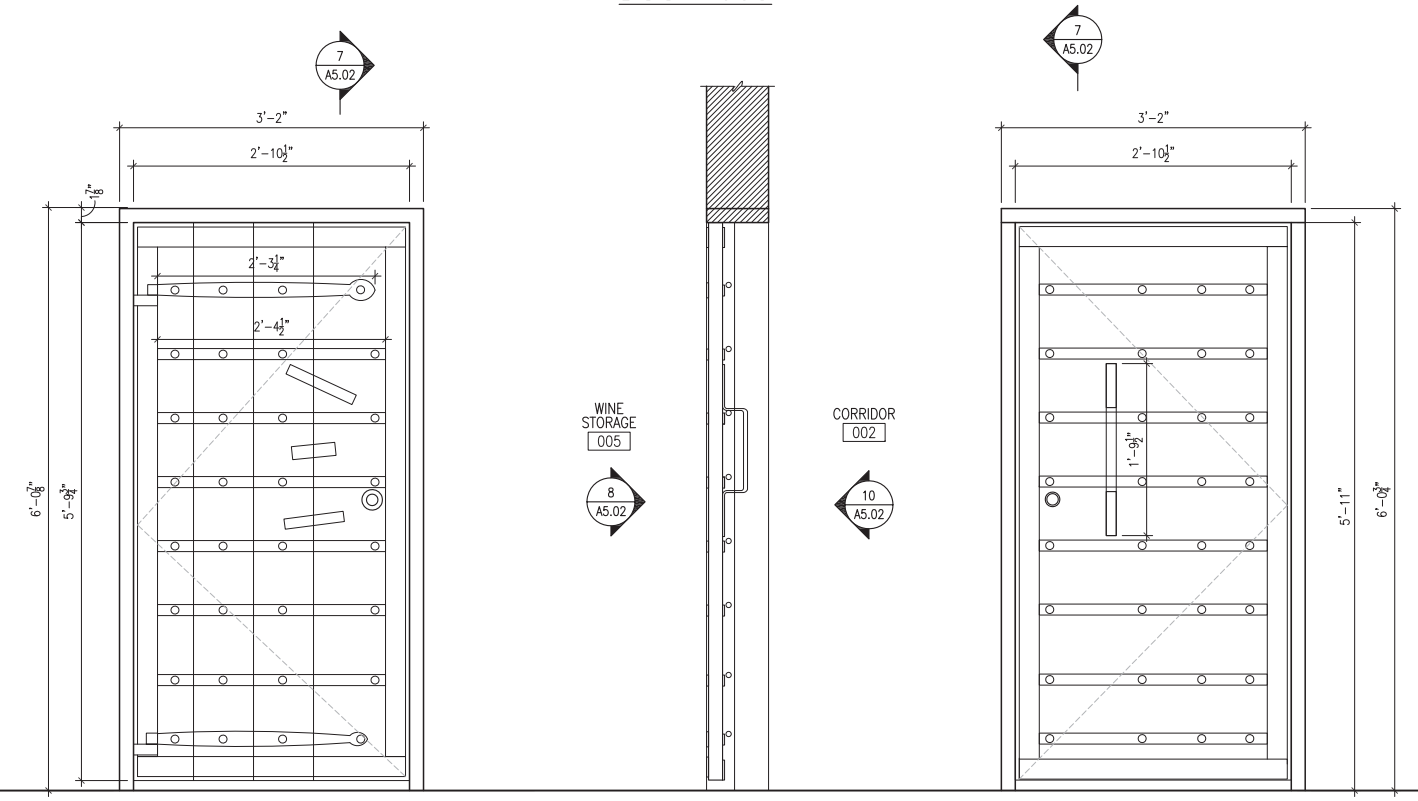
3 A5.02 SECTION DOOR 004B SCALE (A)

4 A5.02 WEST ELEVATION DOOR 004B SCALE (A)



1 A5.02 PLAN DOOR 004B SCALE (A)

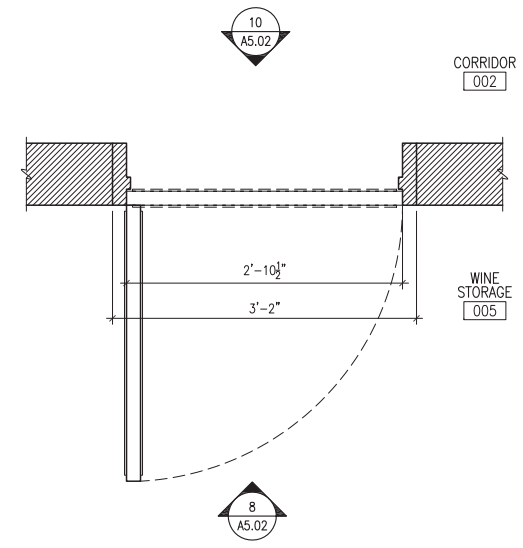
DOOR 005



6 A5.02 EAST ELEVATION DOOR 005 SCALE (A)

7 A5.02 SECTION DOOR 005 SCALE (A)

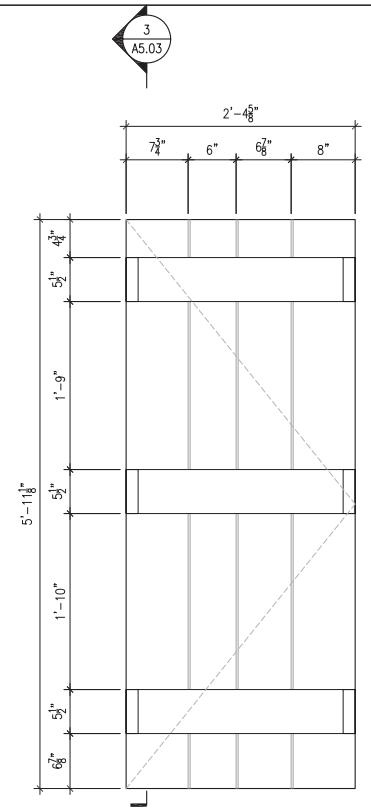
8 A5.02 WEST ELEVATION DOOR 005 SCALE (A)



5 A5.02 PLAN DOOR 005 SCALE (A)

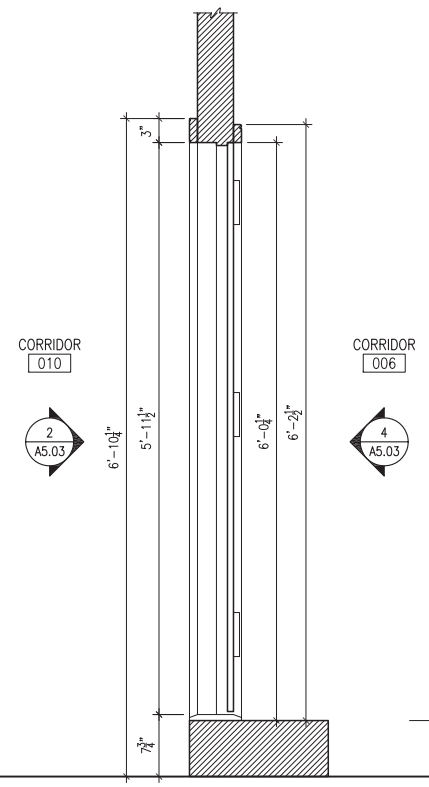
1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

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	CADD: SP	A5.02	BASEMENT DOOR DETAILS 004B & 005	899 / 116834
	TECH REVIEW: SP			PKG. NO. / SHEET 47
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115

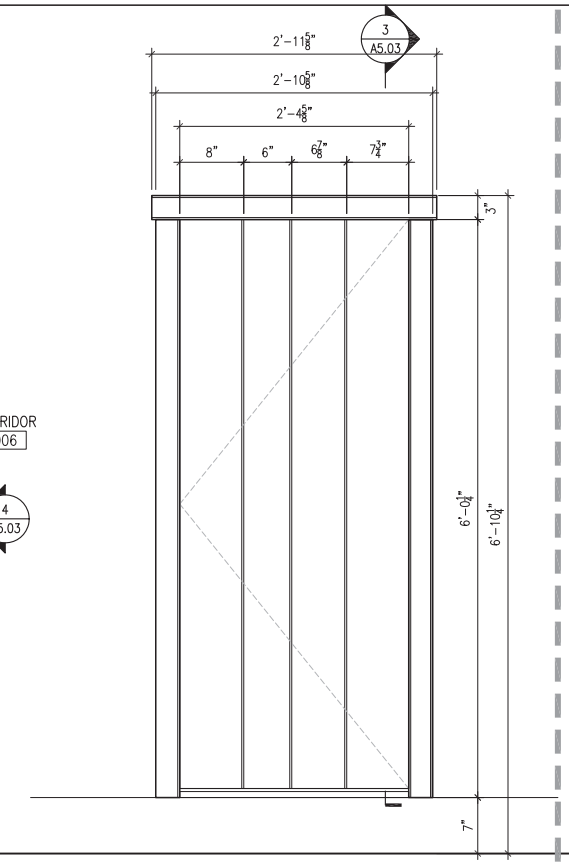


2 A5.03 NORTH ELEVATION DOOR 006
SCALE (A)

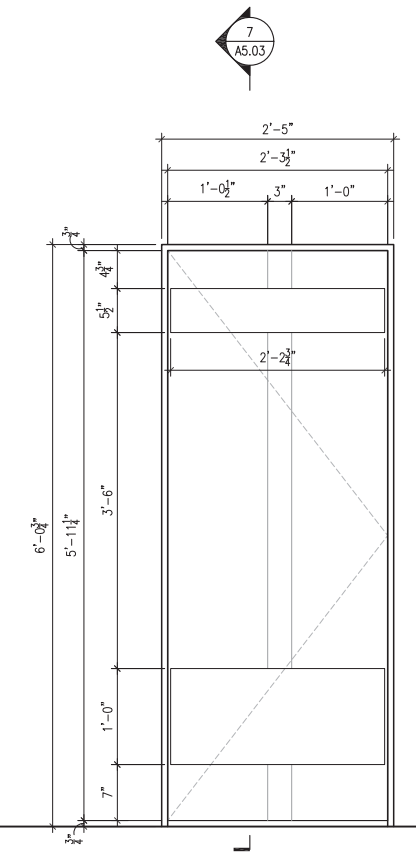
DOOR 006



3 A5.03 SECTION DOOR 006
SCALE (A)

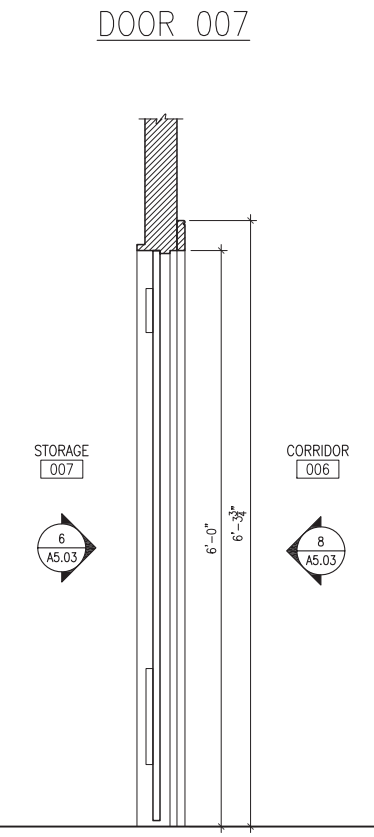


4 A5.03 SOUTH ELEVATION DOOR 006
SCALE (A)

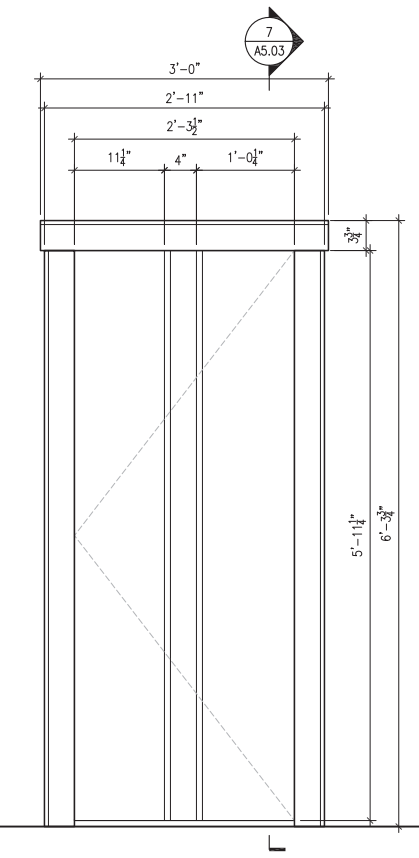


6 A5.03 NORTH ELEVATION DOOR 007
SCALE (A)

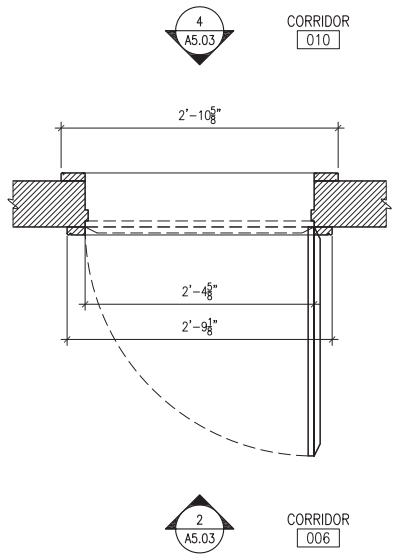
DOOR 007



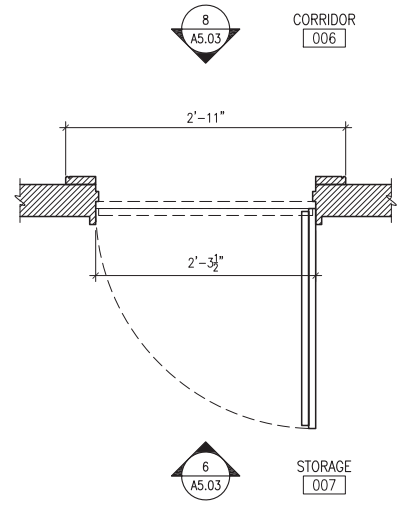
7 A5.03 SECTION DOOR 007
SCALE (A)



10 A5.03 SOUTH ELEVATION DOOR 007
SCALE (A)



1 A5.03 PLAN DOOR 006
SCALE (A)

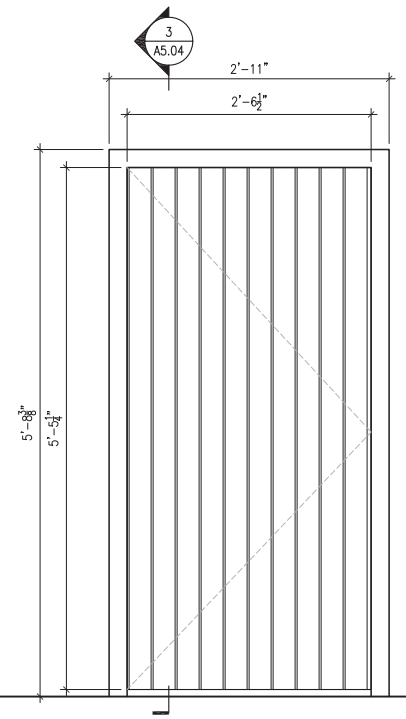


5 A5.03 PLAN DOOR 007
SCALE (A)

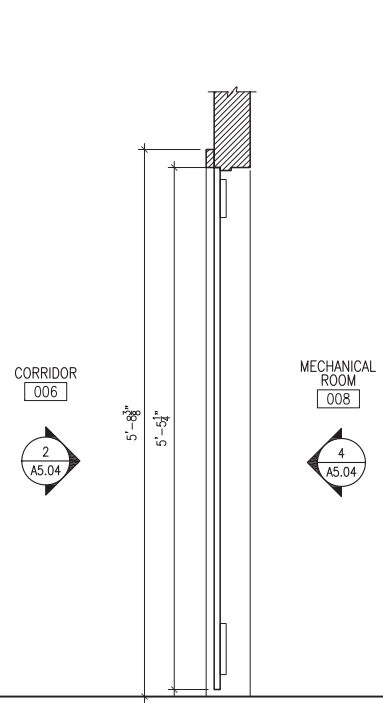
1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
	CADD: SP	A5.03	BASEMENT DOOR DETAILS 006 & 007	899 / 116834
	TECH REVIEW: SP			PKG. NO. ____
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	SHEET 48 OF 115

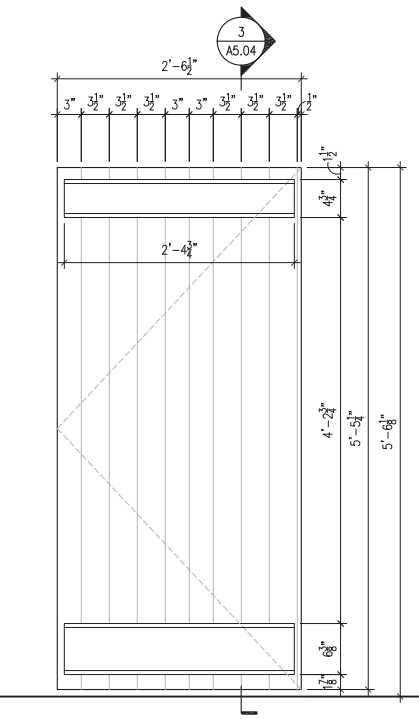
DOOR 008



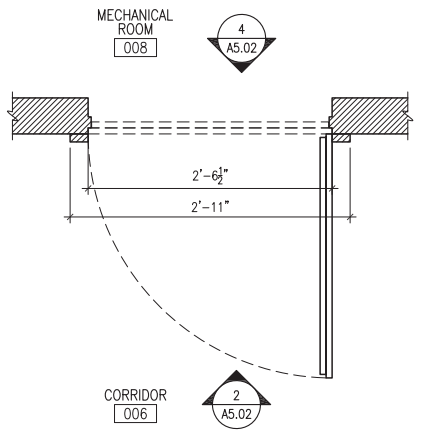
2 A5.04 NORTH ELEVATION DOOR 008
SCALE (A)



3 A5.04 SECTION DOOR 008
SCALE (A)

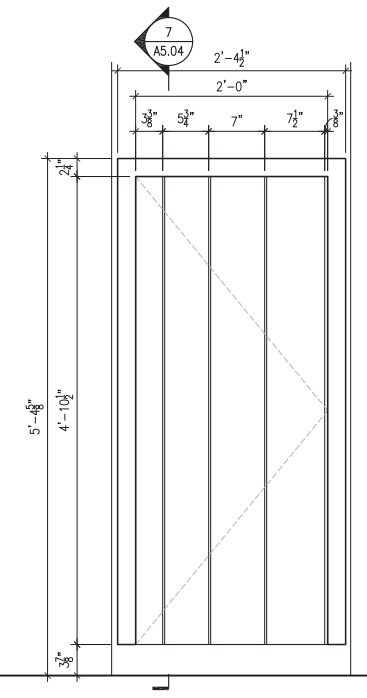


4 A5.04 SOUTH ELEVATION DOOR 008
SCALE (A)

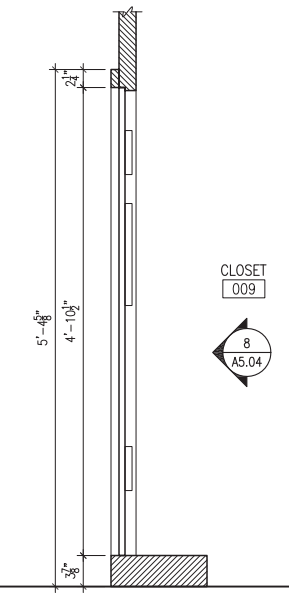


1 A5.04 PLAN DOOR 008
SCALE (A)

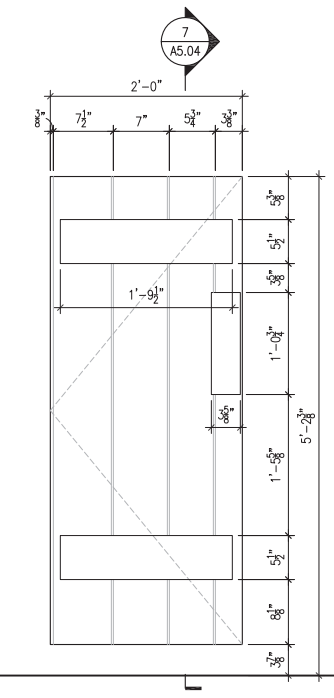
DOOR 009



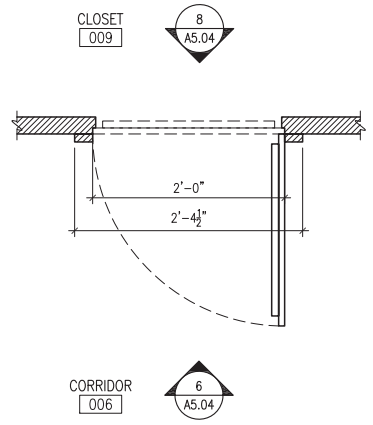
6 A5.04 NORTH ELEVATION DOOR 009
SCALE (A)



7 A5.04 SECTION DOOR 009
SCALE (A)



8 A5.04 SOUTH ELEVATION DOOR 009
SCALE (A)



5 A5.04 PLAN DOOR 009
SCALE (A)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

DESIGNED:
CADD: SP
TECH REVIEW: SP
DATE: 9/25/12

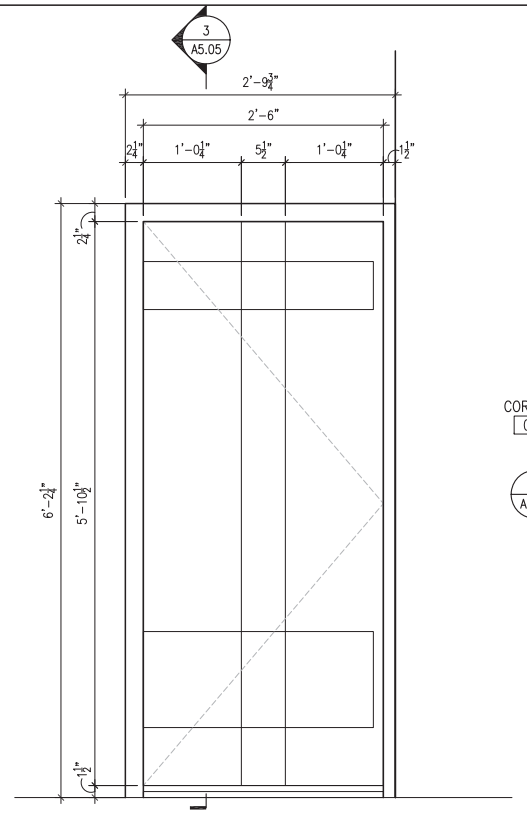
SUB SHEET NO.
A5.04

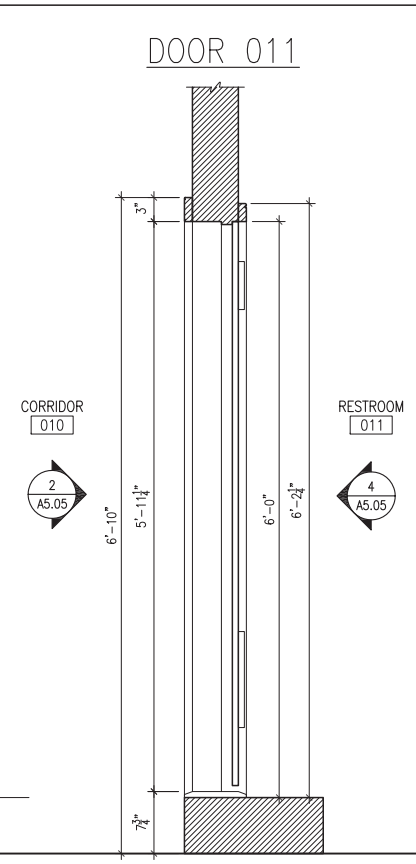
TITLE OF SHEET
BASEMENT DOOR DETAILS
008 & 009
HARMONY HALL: HISTORIC STRUCTURE REPORT

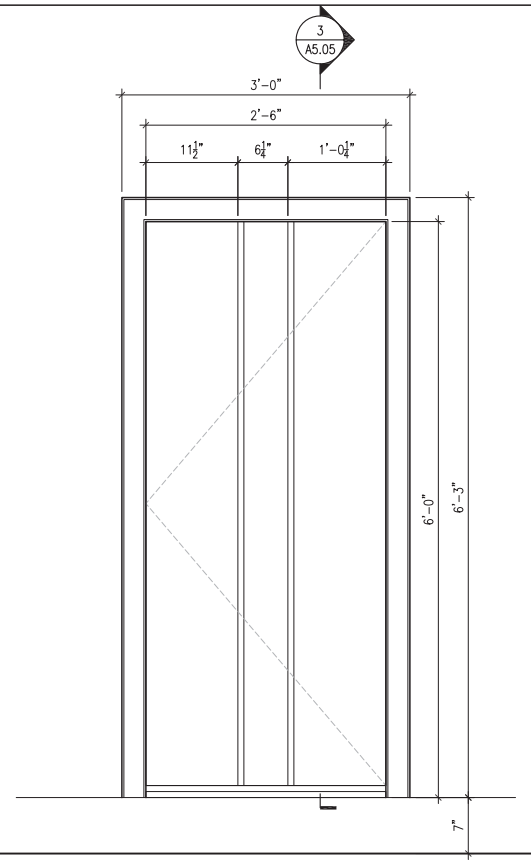
DRAWING NO.
899
116834

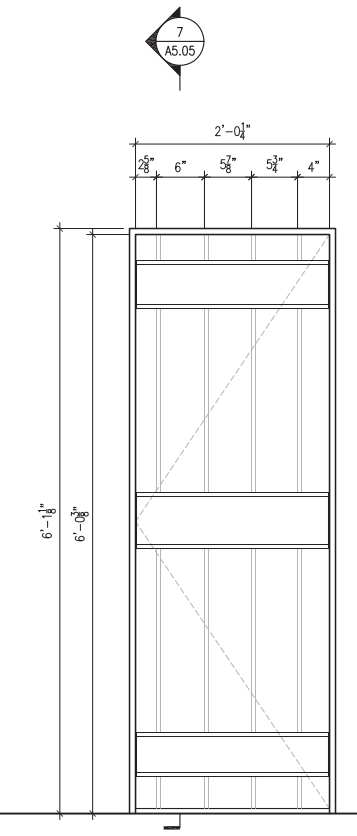
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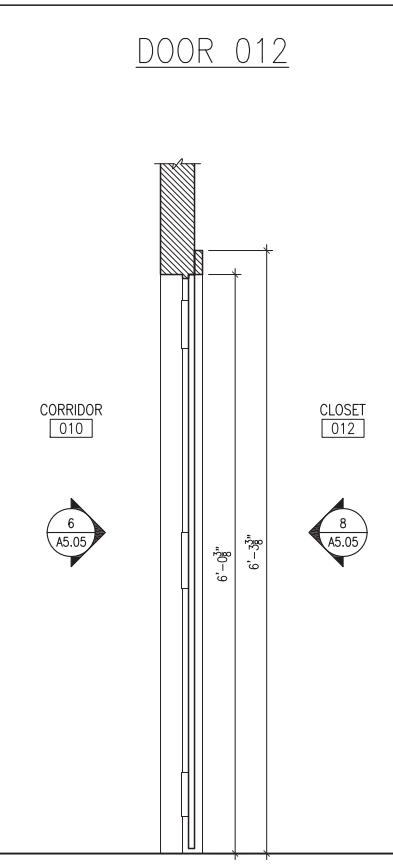
SHEET
49
OF 115

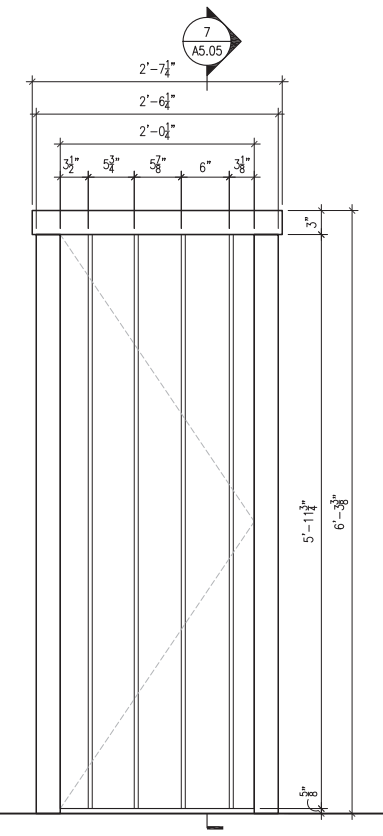












2 A5.05 NORTH ELEVATION DOOR 011
SCALE (A)

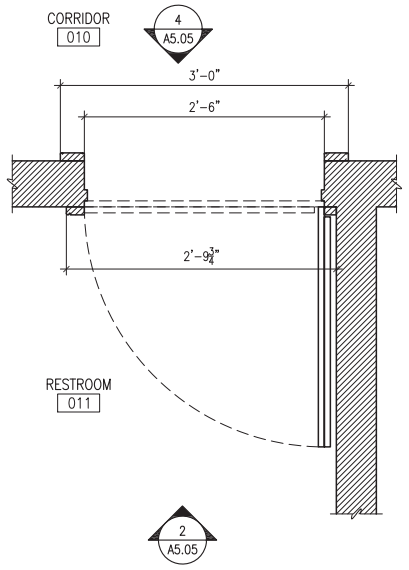
3 A5.05 SECTION DOOR 011
SCALE (A)

4 A5.05 SOUTH ELEVATION DOOR 011
SCALE (A)

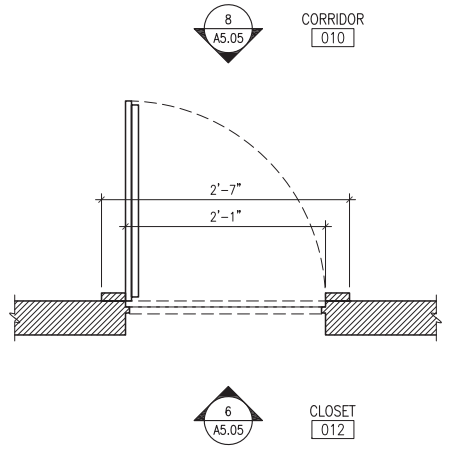
6 A5.05 ELEVATION DOOR 012
SCALE (A)

7 A5.05 SECTION DOOR 012
SCALE (A)

8 A5.05 ELEVATION DOOR 012
SCALE (A)



1 A5.05 PLAN DOOR 011
SCALE (A)

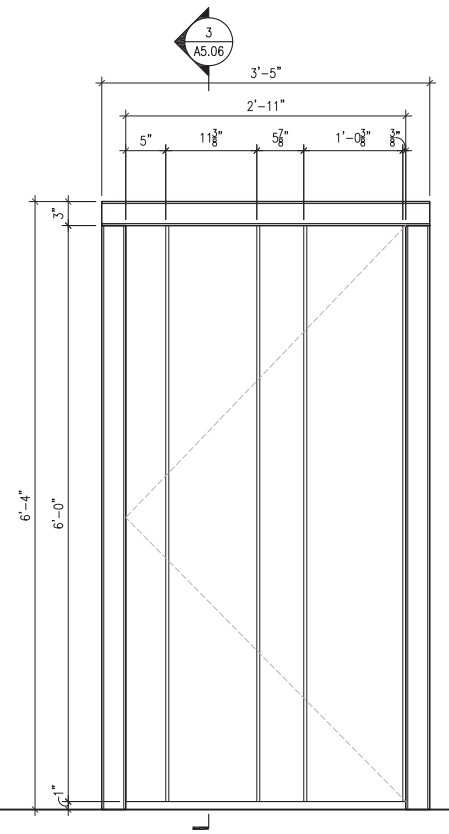


5 A5.05 PLAN DOOR 012
SCALE (A)

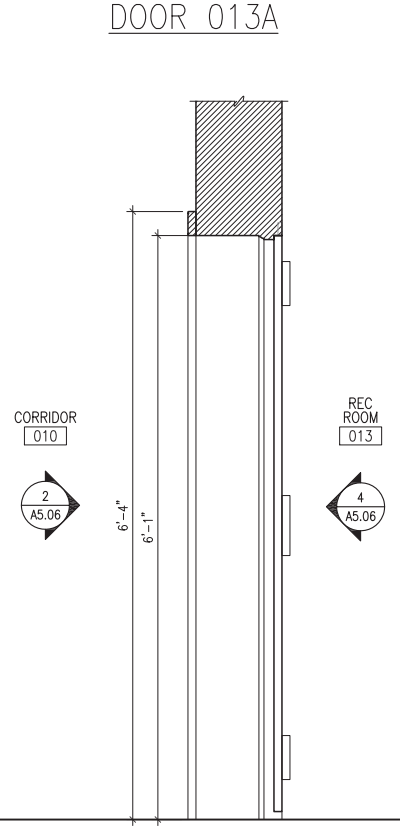
1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
	CADD: SP	A5.05	BASEMENT DOOR DETAILS 011 & 012	899 / 116834
	TECH REVIEW: SP			PKG. NO. — SHEET 50
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115

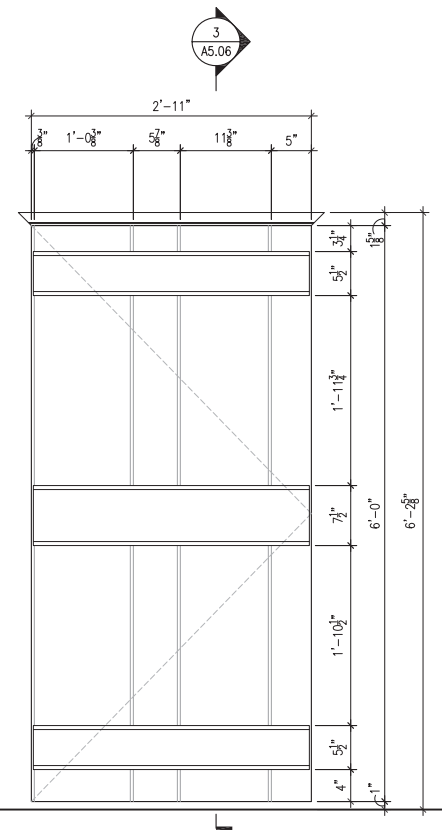
DOOR 013A



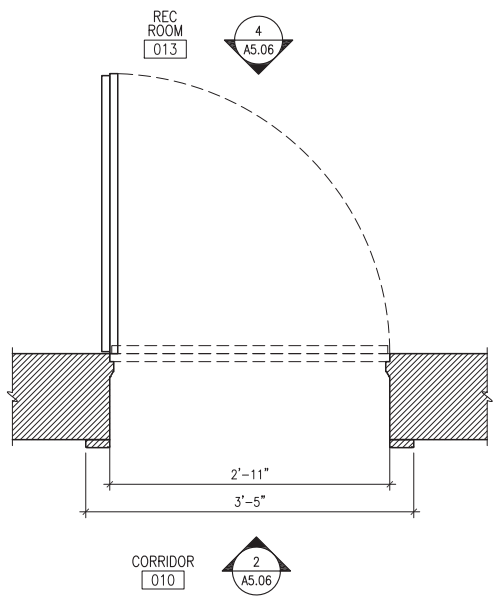
2 A5.06 NORTH ELEVATION DOOR 013A
SCALE (A)



3 A5.06 SECTION DOOR 013A
SCALE (A)

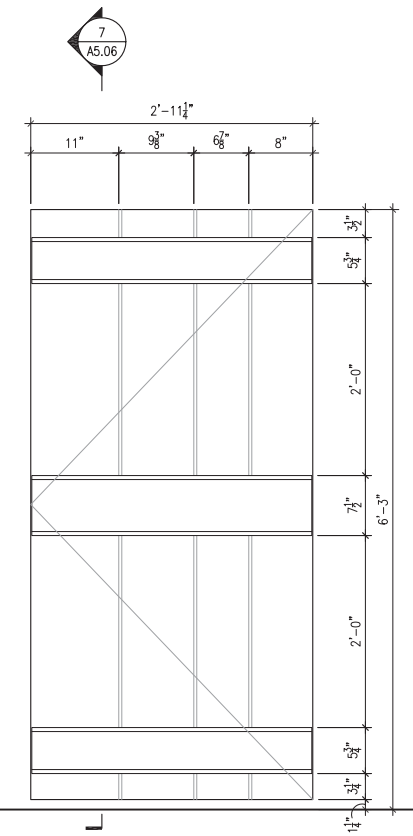


4 A5.06 SOUTH ELEVATION DOOR 013A
SCALE (A)

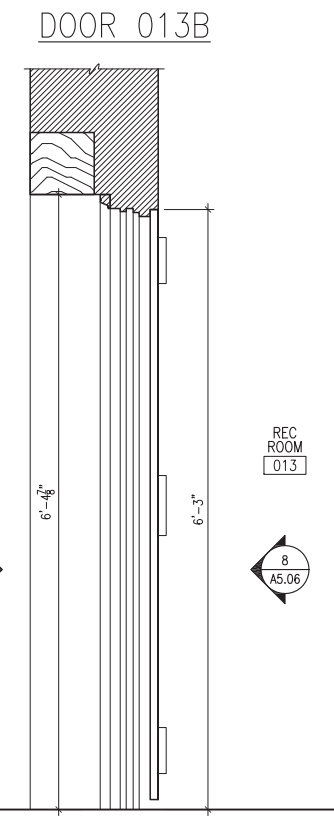


1 A5.06 PLAN DOOR 013A
SCALE (A)

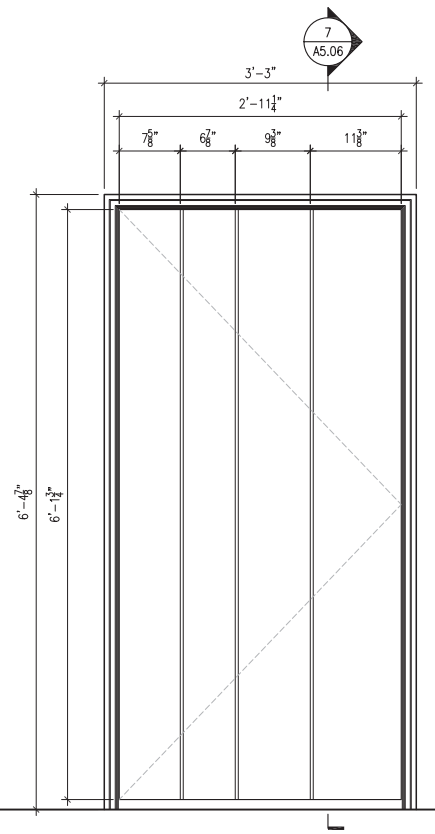
DOOR 013B



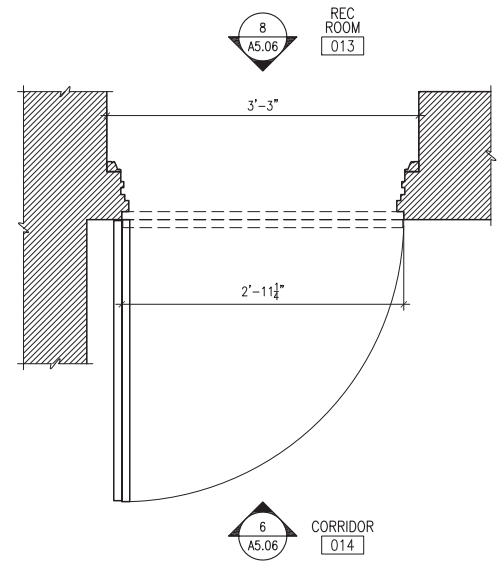
6 A5.06 NORTH ELEVATION DOOR 013B
SCALE (A)



7 A5.06 SECTION DOOR 013B
SCALE (A)



8 A5.06 SOUTH ELEVATION DOOR 013B
SCALE (A)

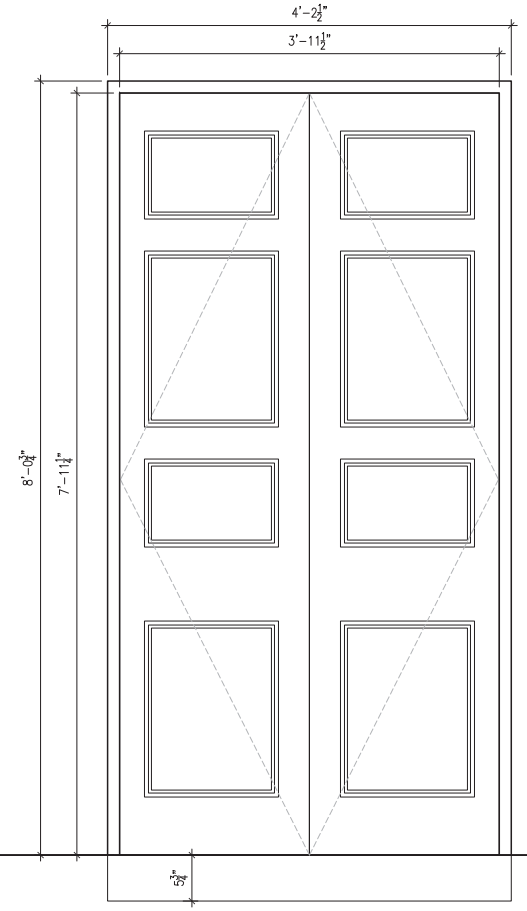


5 A5.06 PLAN DOOR 013B
SCALE (A)

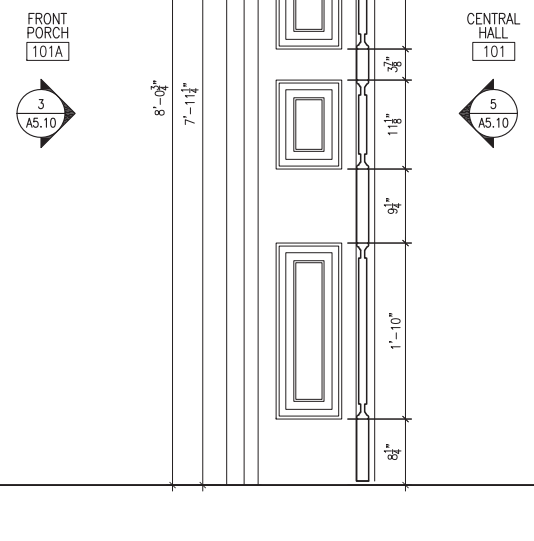
1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
	CADD: SP	A5.06	BASEMENT DOOR DETAILS 013A & 013B	899 116834
	TECH REVIEW: SP			PKG. NO.
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	SHEET 51 OF 115

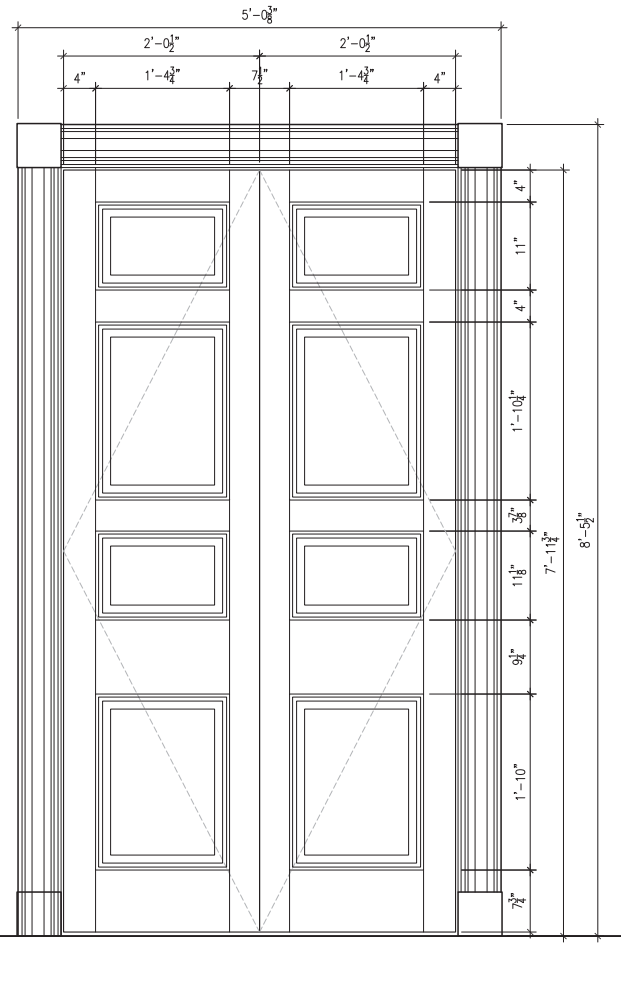
DOOR 101A



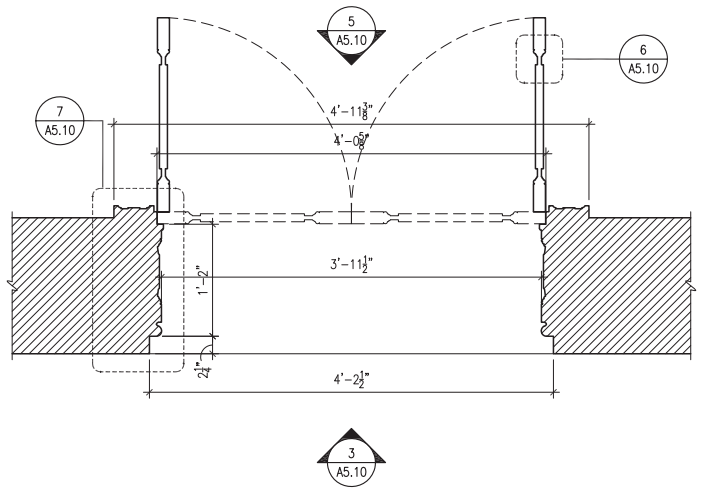
3 A5.10 EAST ELEVATION
DOOR 101A
SCALE (A)



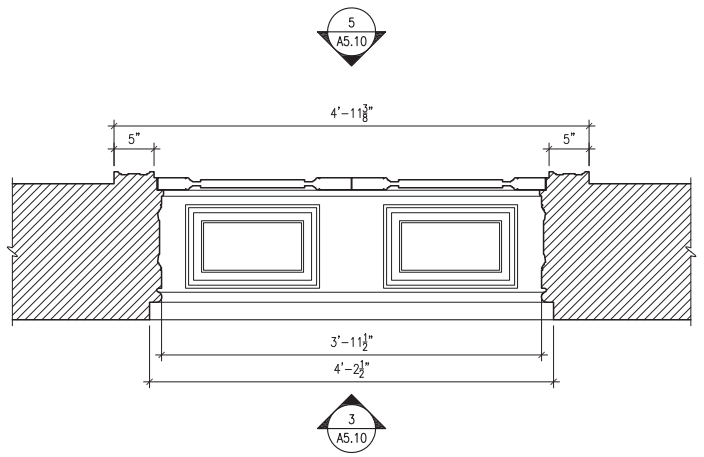
4 A5.10 SECTION
DOOR 101A
SCALE (A)



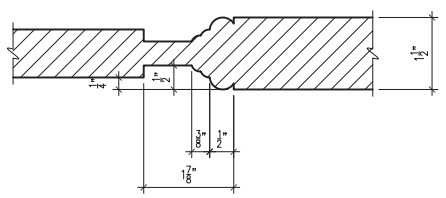
5 A5.10 WEST ELEVATION
DOOR 101A
SCALE (A)



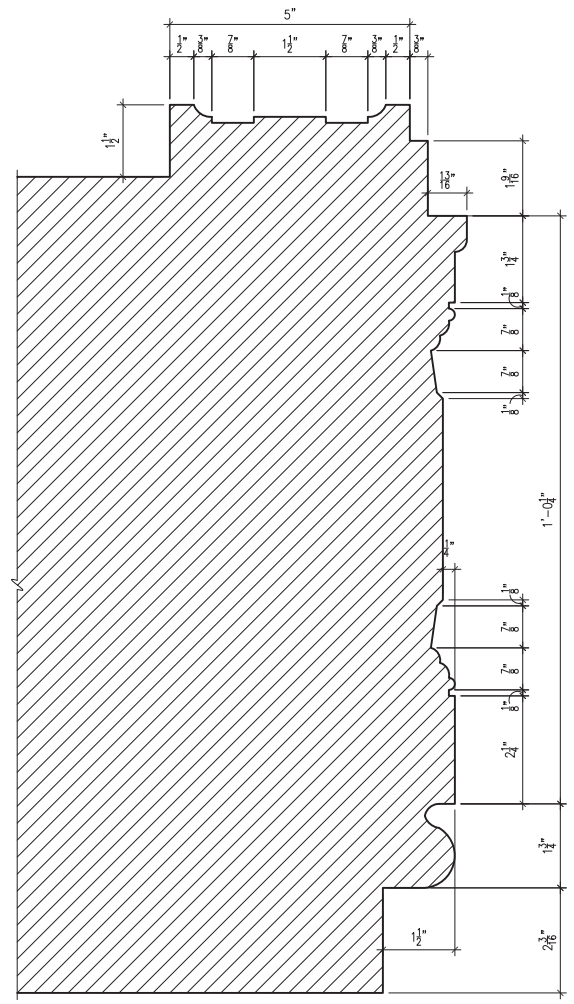
1 A5.10 PLAN
DOOR 101A
SCALE (A)



2 A5.10 REF. CLG. PLAN
DOOR 101A
SCALE (A)



6 A5.10 DOOR PROFILE: DOOR 101A
SCALE (B)



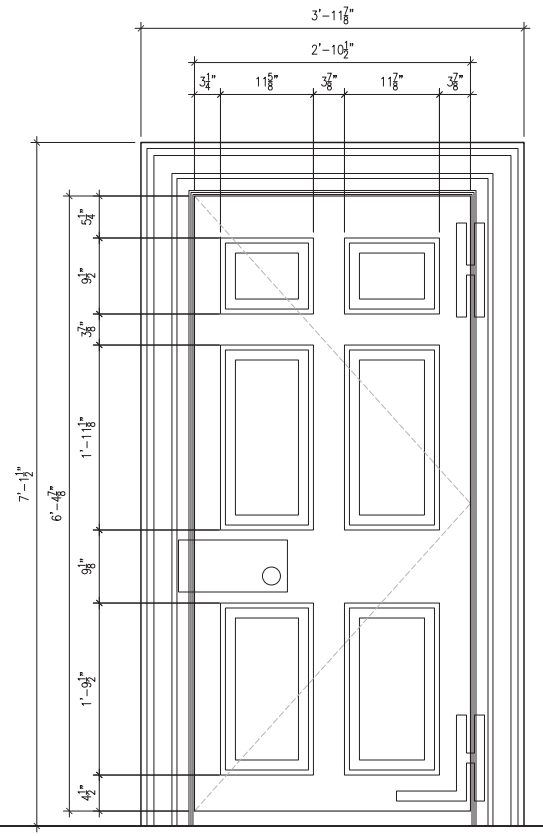
7 A5.10 DOOR TRIM: DOOR 101A
SCALE (B)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

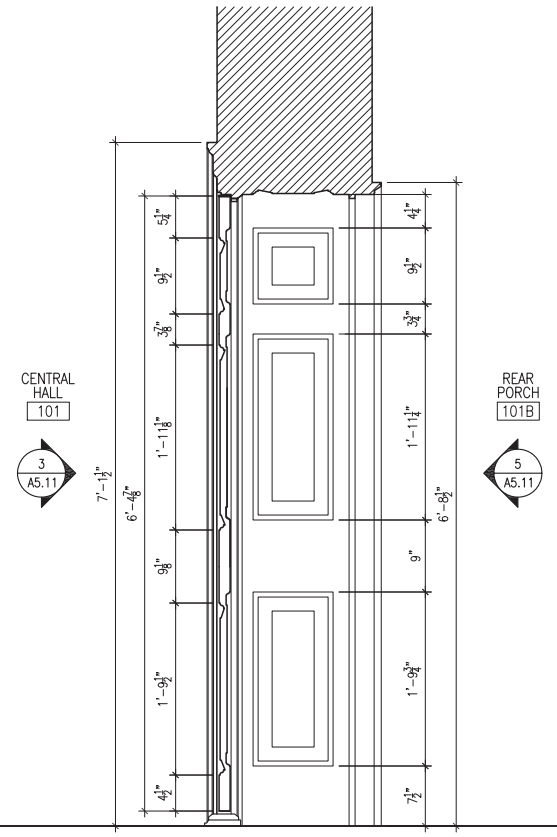
2 0 2 4
SCALE OF INCHES (6" = 1'-0")
SCALE (B)

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 / 116834
	CADD: SP	A5.10	FIRST FLOOR DOOR DETAILS 101A	PKG. NO. — SHEET 52
	TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115
	DATE: 9/25/12			

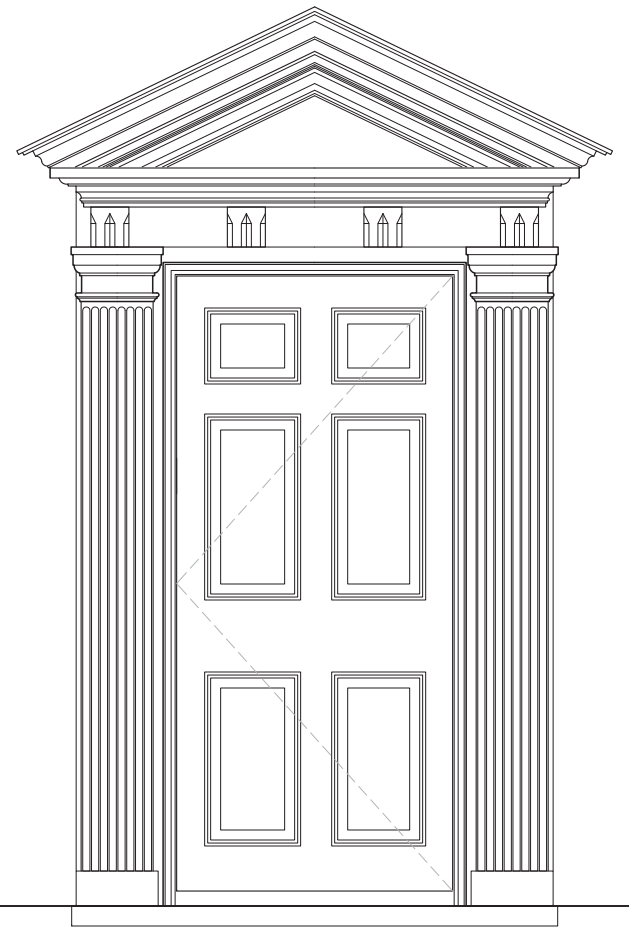
DOOR 101B



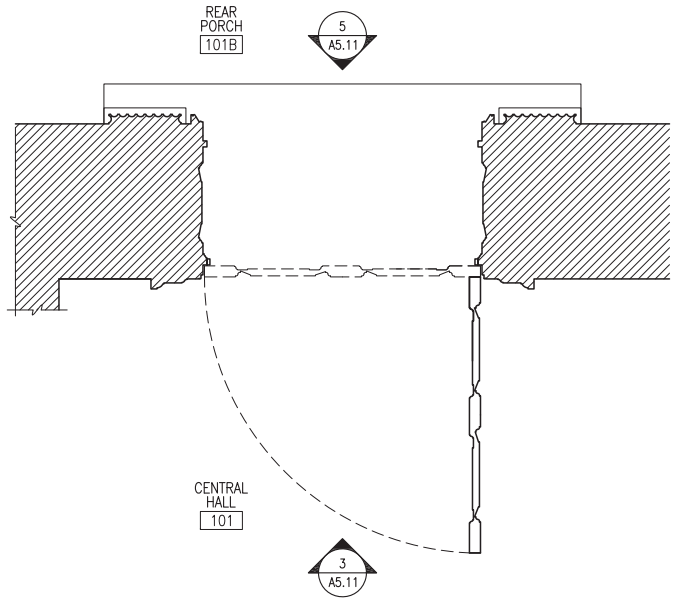
EAST ELEVATION
DOOR 101B
3 / A5.11 — SCALE (A)



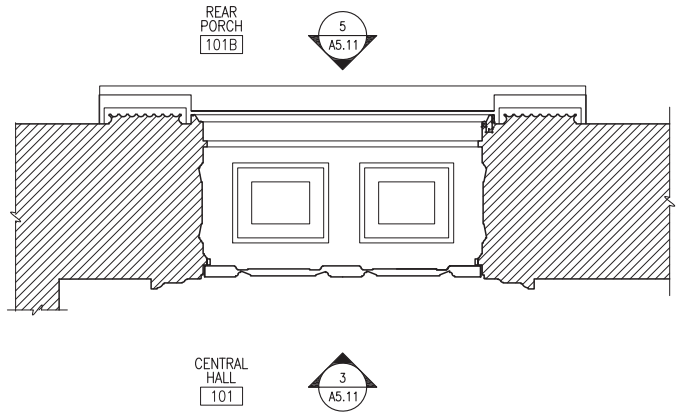
SECTION
DOOR 101B
4 / A5.11 — SCALE (A)



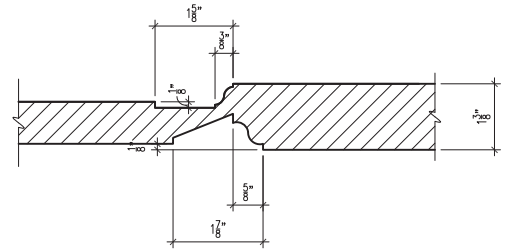
WEST ELEVATION
DOOR 101B
5 / A5.11 — SCALE (A)



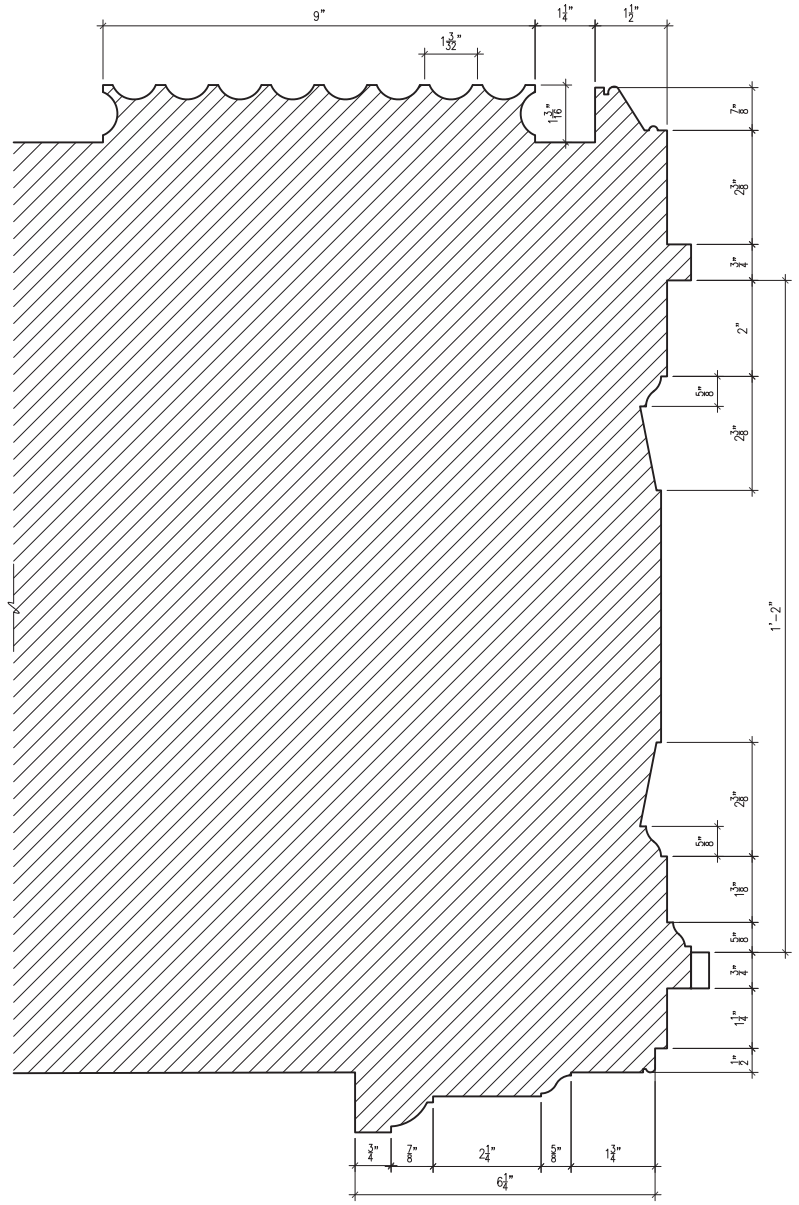
PLAN
DOOR 101B
1 / A5.11 — SCALE (A)



REF. CLG. PLAN
DOOR 101B
2 / A5.11 — SCALE (A)



DOOR PROFILE: DOOR 101B
11 / A5.11 — SCALE (B)



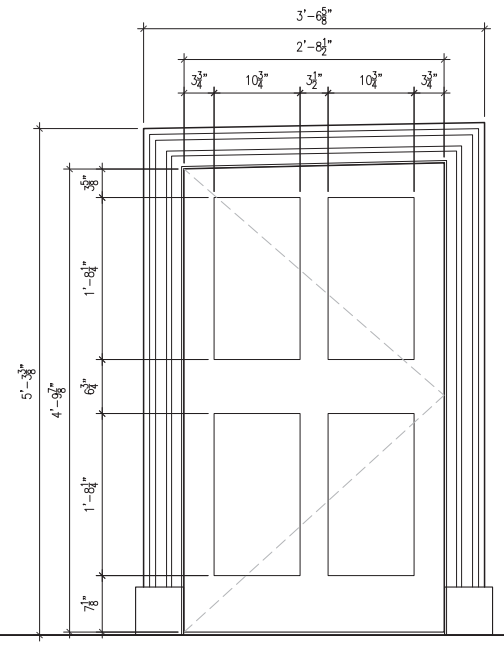
DOOR TRIM: DOOR 101B
12 / A5.11 — SCALE (B)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

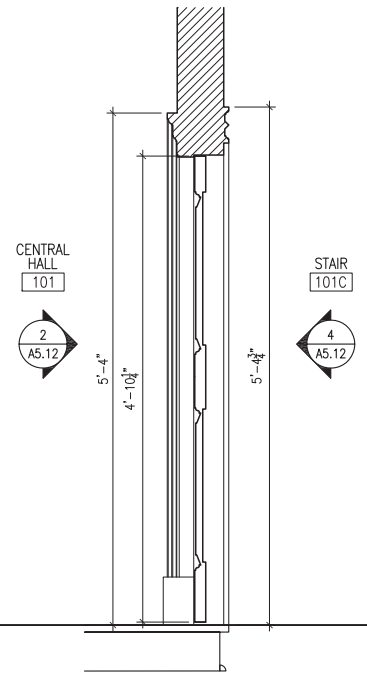
2 0 2 4
SCALE OF INCHES (6" = 1'-0")
SCALE (B)

PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
	CADD: SP	A5.11	FIRST FLOOR DOOR DETAILS 101B	899 / 116834
	TECH REVIEW: SP			PKG. NO. — SHEET 53
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115

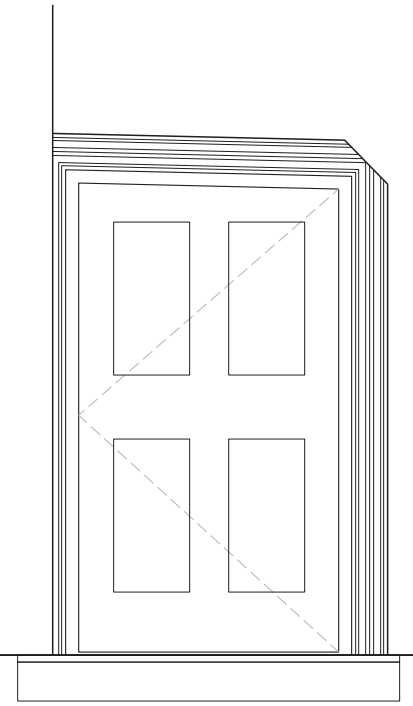
DOOR 101C



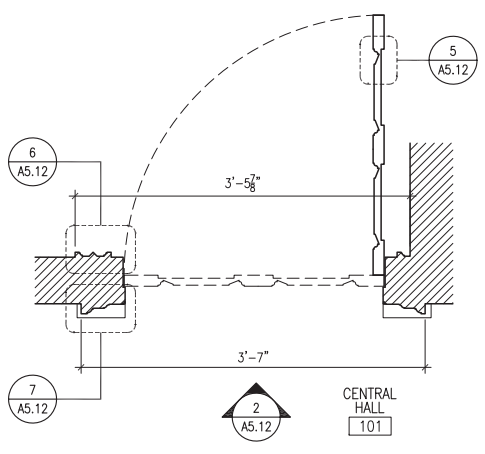
2 A5.12 NORTH ELEVATION DOOR 101C
SCALE (A)



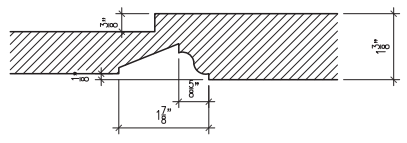
3 A5.12 SECTION DOOR 101C
SCALE (A)



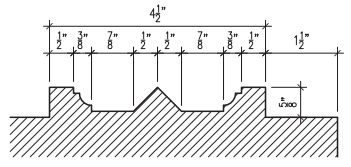
4 A5.12 SOUTH ELEVATION DOOR 101C
SCALE (A)



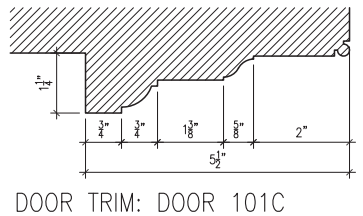
1 A5.12 PLAN DOOR 101C
SCALE (A)



5 A5.13 DOOR PROFILE: DOOR 101C
SCALE (B)

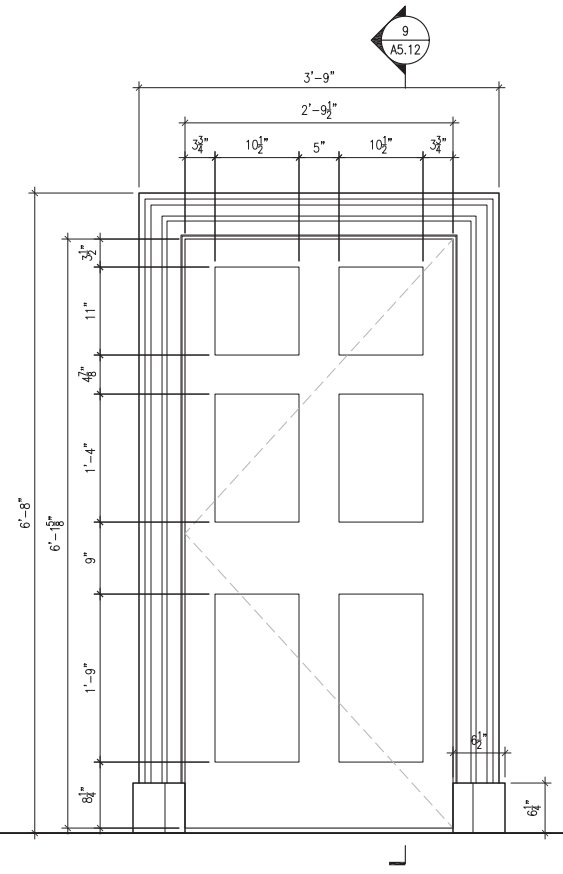


6 A5.13 DOOR TRIM: DOOR 101C CENTRAL HALL 101
SCALE (B)

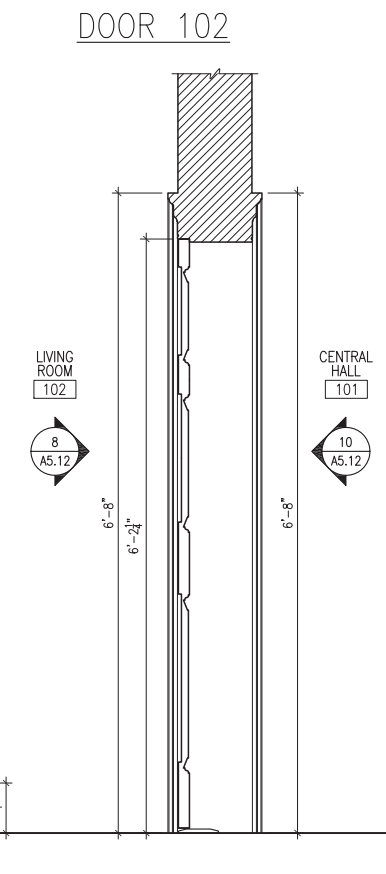


7 A5.13 DOOR TRIM: DOOR 101C CENTRAL HALL 101
SCALE (B)

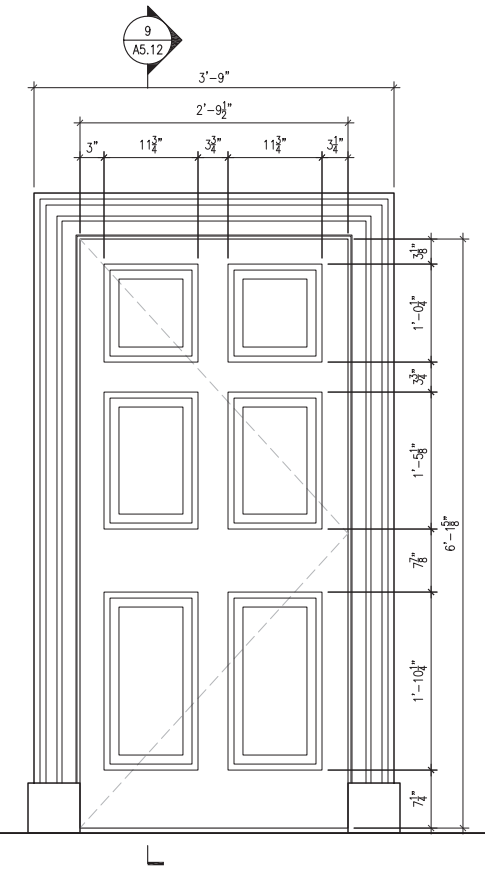
DOOR 102



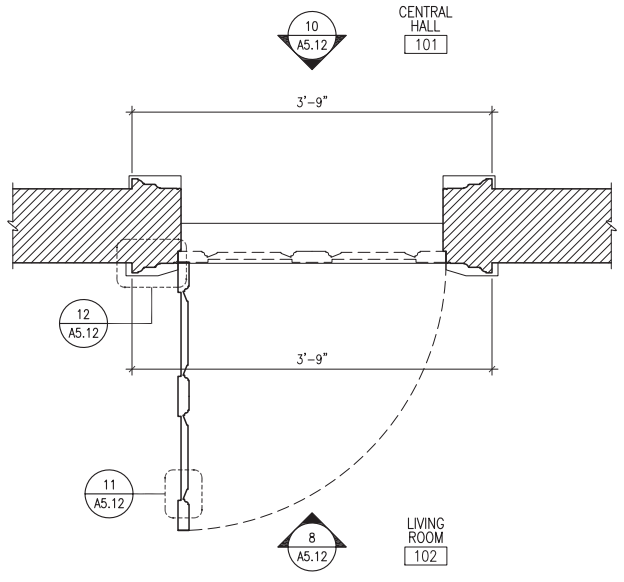
8 A5.12 NORTH ELEVATION DOOR 102
SCALE (A)



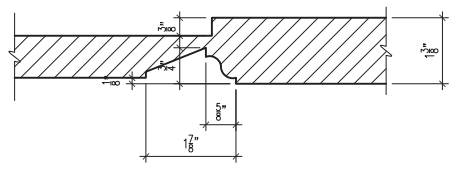
9 A5.12 SECTION DOOR 102
SCALE (A)



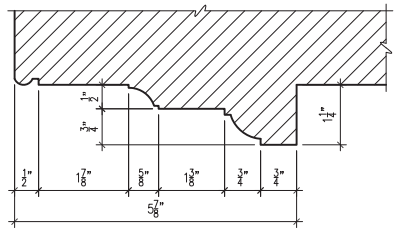
10 A5.12 SOUTH ELEVATION DOOR 102
SCALE (A)



7 A5.12 PLAN DOOR 204A
SCALE (A)



11 A5.12 DOOR PROFILE: DOOR 102
SCALE (B)



12 A5.12 DOOR TRIM: DOOR 102
SCALE (B)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

2 0 2 4
SCALE OF INCHES (6" = 1'-0")
SCALE (B)

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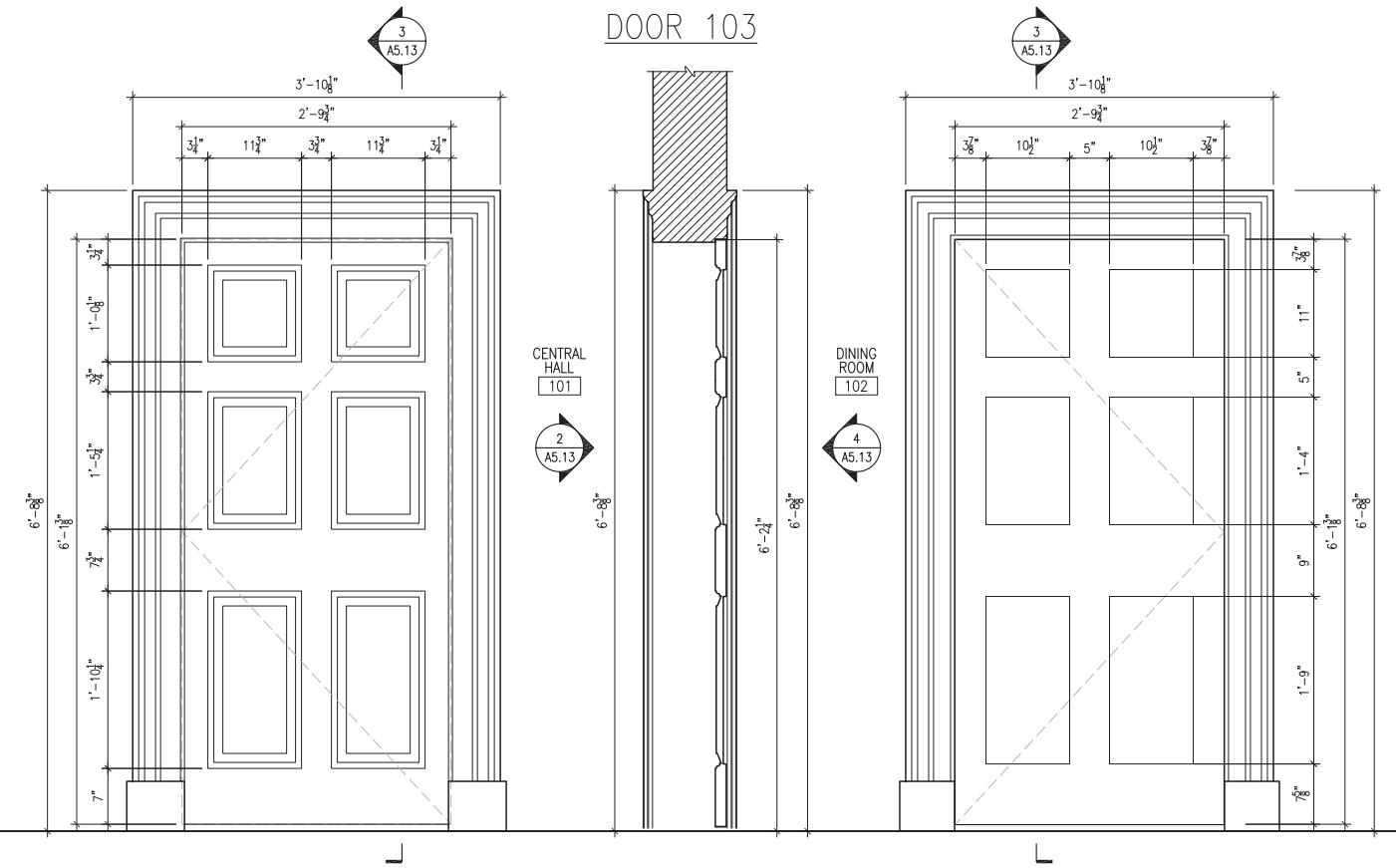
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FIRST FLOOR DOOR DETAILS
101C & 102

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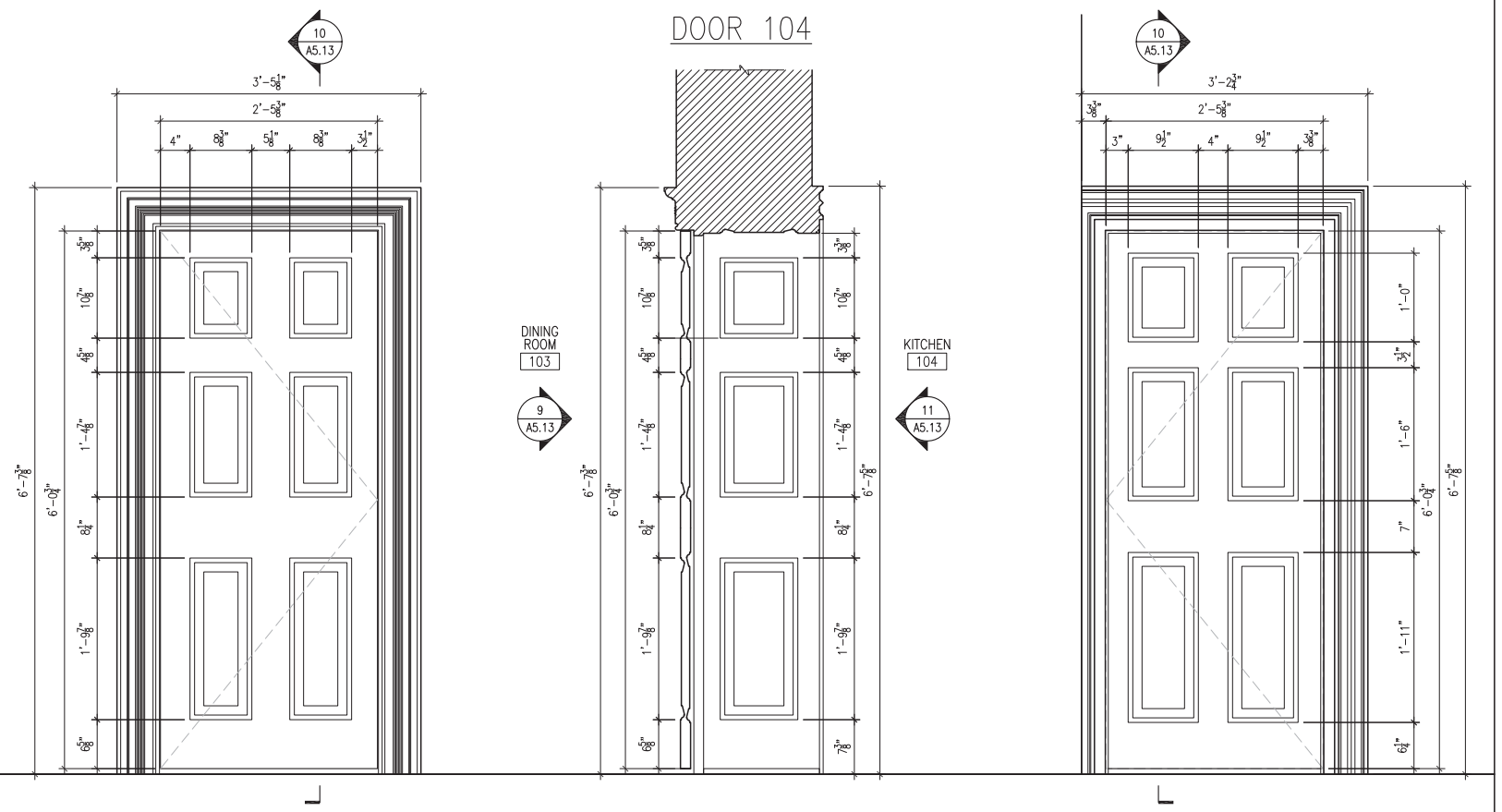
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2 A5.13 NORTH ELEVATION DOOR 103 SCALE (A)

3 A5.13 SECTION DOOR 103 SCALE (A)

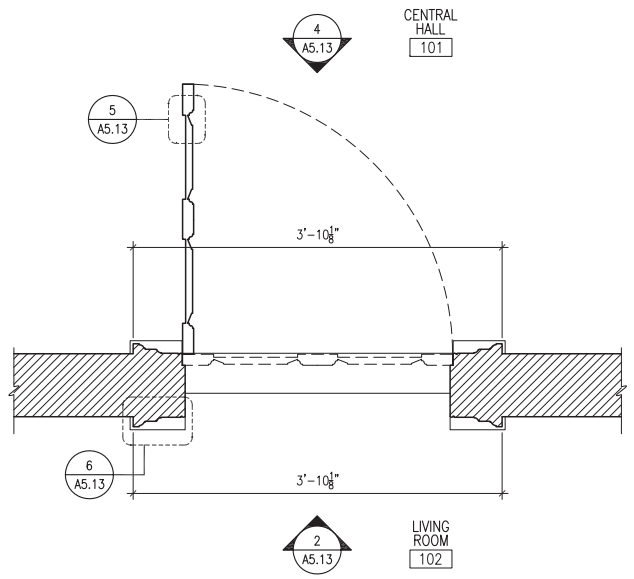
4 A5.13 SOUTH ELEVATION DOOR 103 SCALE (A)



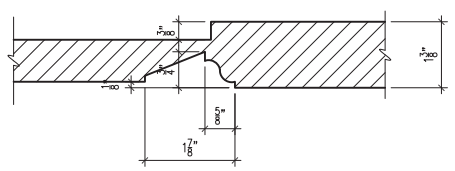
9 A5.13 NORTH ELEVATION DOOR 204 SCALE (A)

10 A5.13 SECTION DOOR 204 SCALE (A)

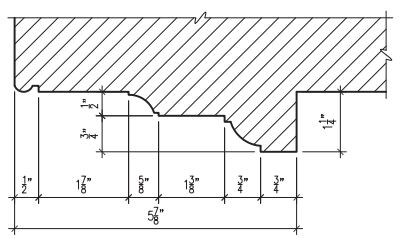
11 A5.13 SOUTH ELEVATION DOOR 204 SCALE (A)



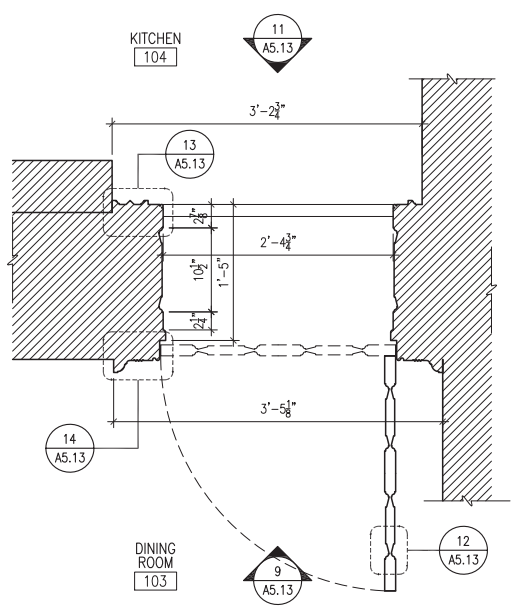
1 A5.13 PLAN DOOR 103 SCALE (A)



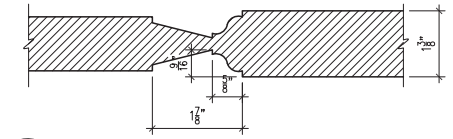
5 A5.13 DOOR PROFILE: DOOR 103 SCALE (B)



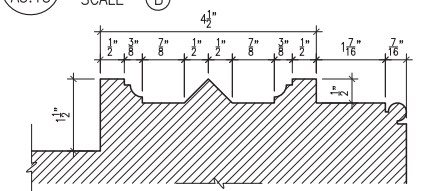
6 A5.13 DOOR TRIM: DOOR 103 SCALE (B)



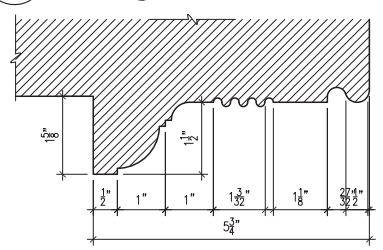
7 A5.13 PLAN DOOR 204 SCALE (A)



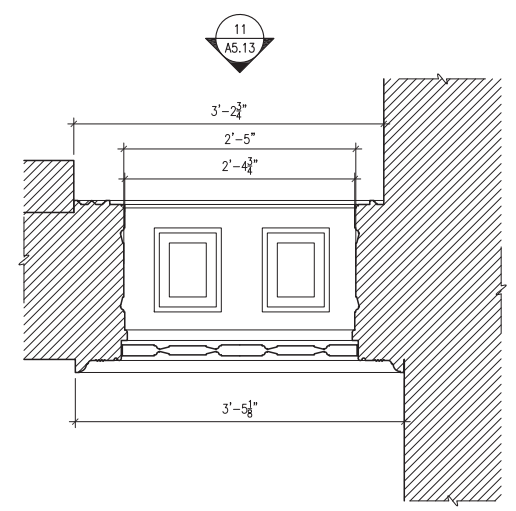
12 A5.13 DOOR PROFILE: DOOR 104 SCALE (B)



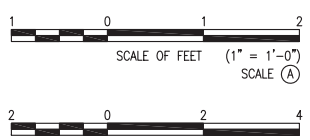
13 A5.13 DOOR TRIM: DOOR 104 KITCHEN 104 SCALE (B)



14 A5.13 DOOR TRIM: DOOR 104 DINING ROOM 103 SCALE (B)



8 A5.13 REF. CLG. PLAN DOOR 204 SCALE (A)



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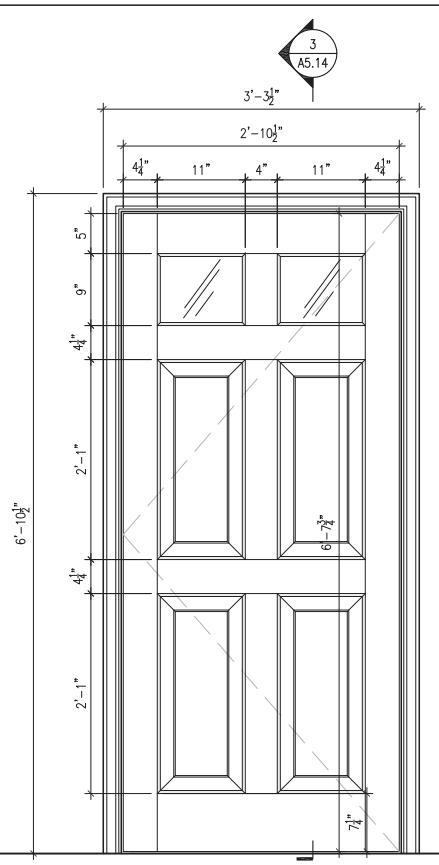
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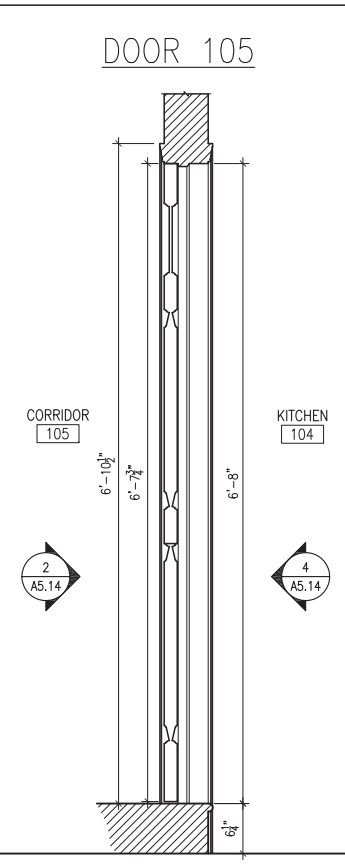
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PKG. NO.

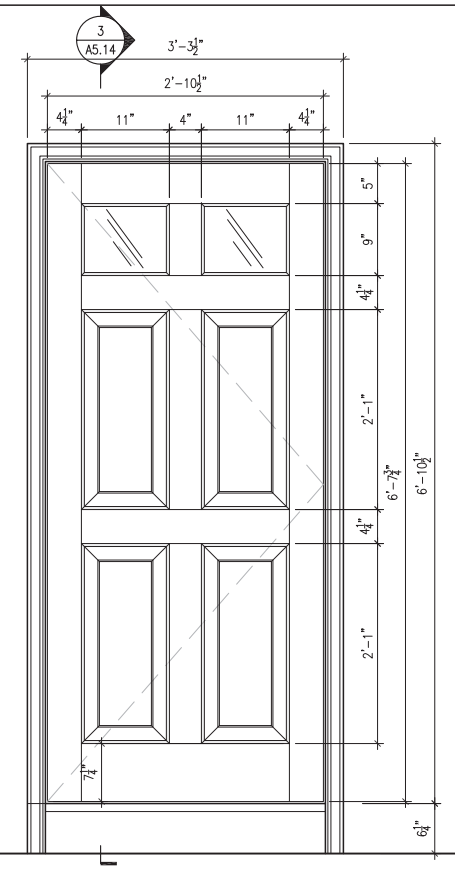
SHEET 55 OF 115



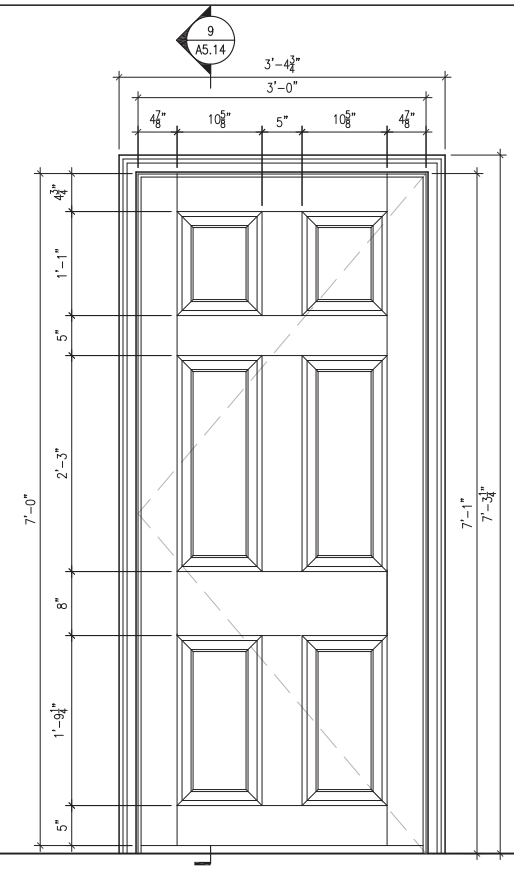
2 A5.14 ELEVATION DOOR 105
SCALE (A)



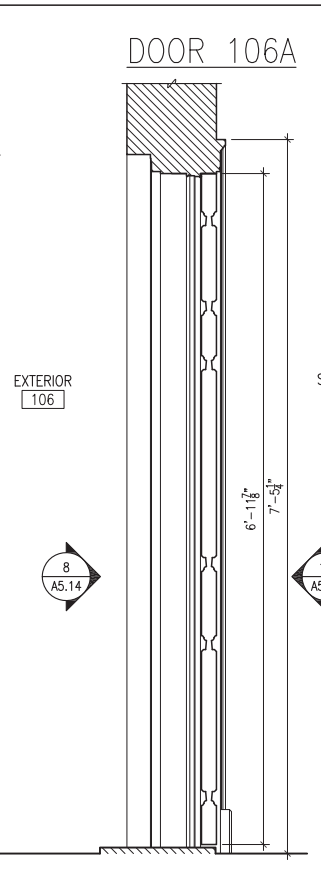
3 A5.14 SECTION DOOR 105
SCALE (A)



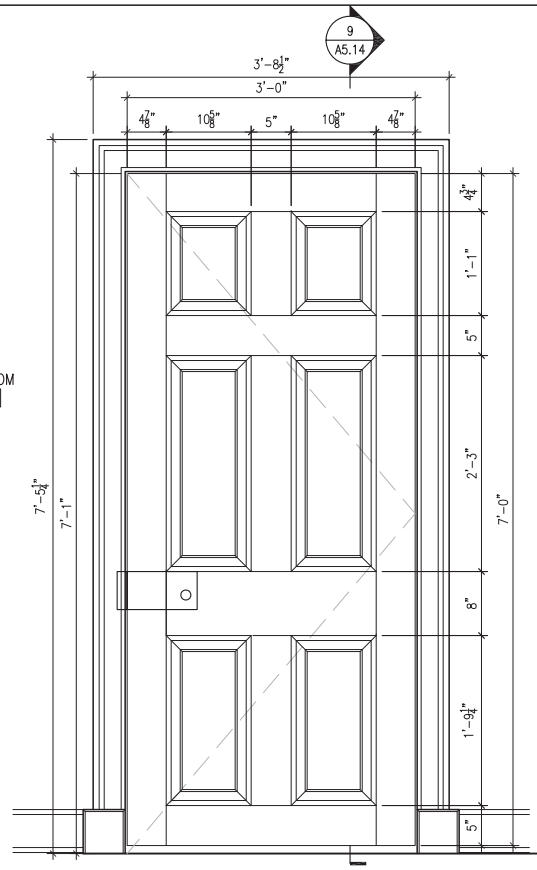
4 A5.14 ELEVATION DOOR 105
SCALE (A)



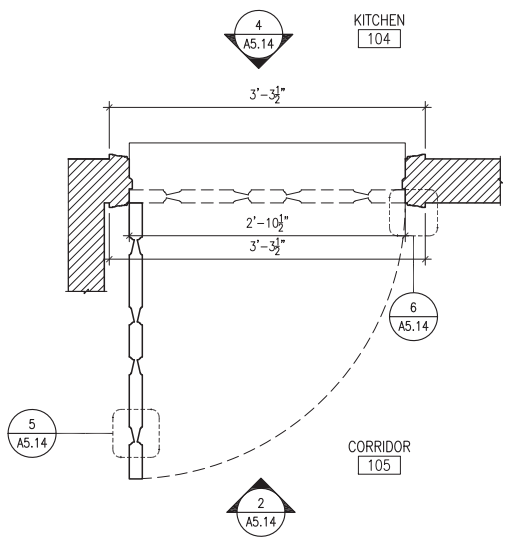
8 A5.14 ELEVATION DOOR 106A
SCALE (A)



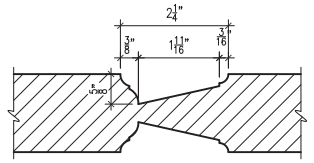
9 A5.14 SECTION DOOR 106A
SCALE (A)



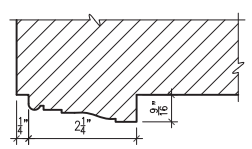
10 A5.14 ELEVATION DOOR 106A
SCALE (A)



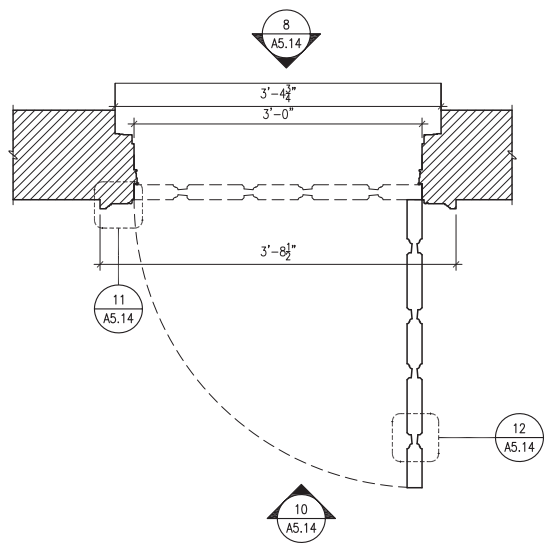
1 A5.14 PLAN DOOR 105
SCALE (A)



5 A5.14 DOOR PROFILE: DOOR 105
SCALE (B)

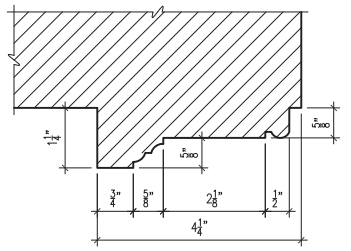


6 A5.14 DOOR TRIM: DOOR 105
SCALE (B)

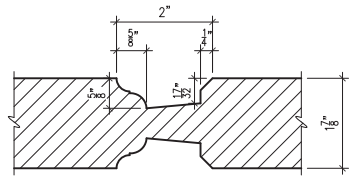


7 A5.15 PLAN DOOR 106A
SCALE (A)

9 A5.15



11 A5.14 DOOR TRIM: DOOR 106A
SCALE (B)



12 A5.14 DOOR PROFILE: DOOR 106A
SCALE (B)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

2 0 2 4
SCALE OF INCHES (6" = 1'-0")
SCALE (B)

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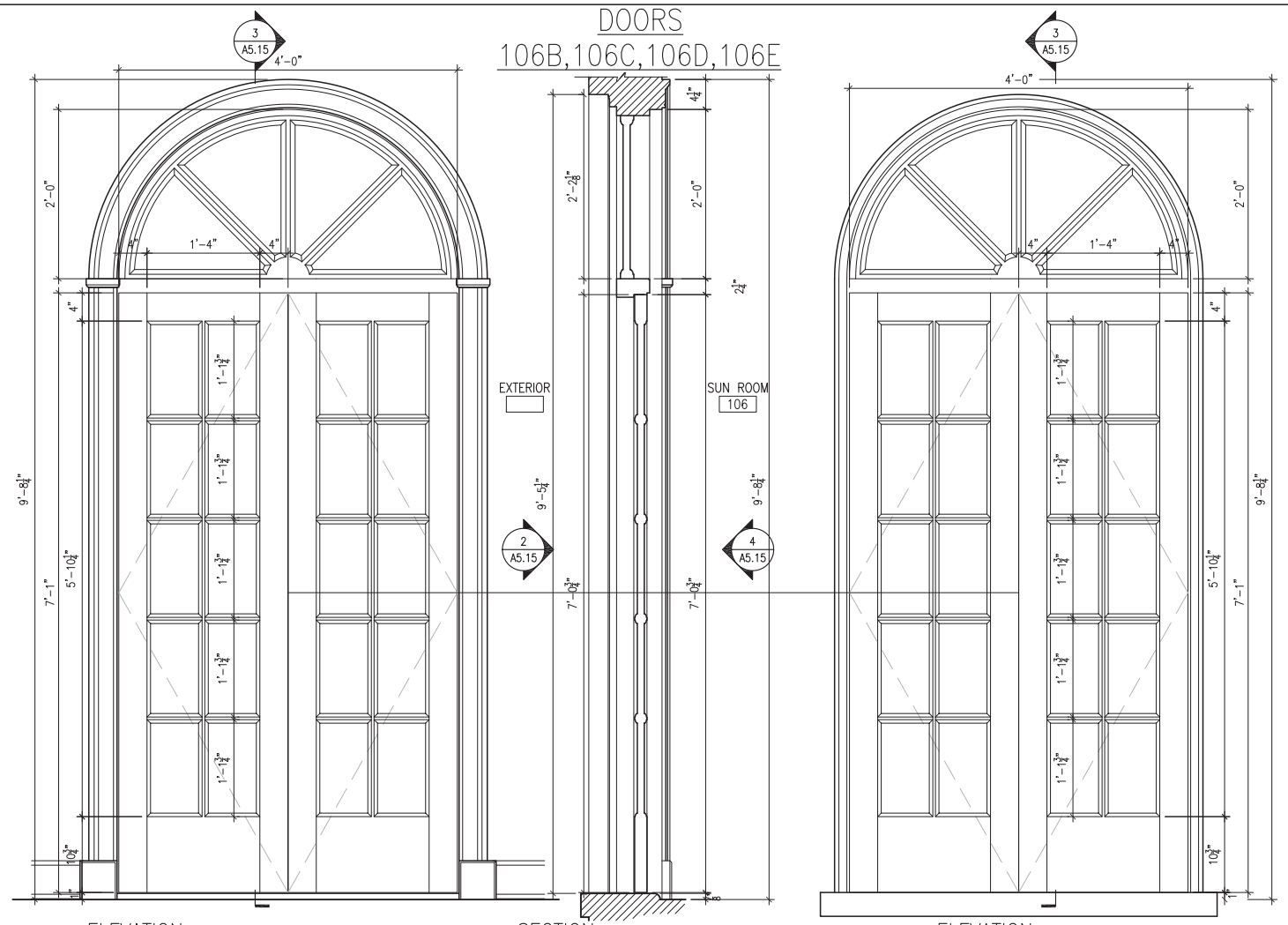
TITLE OF SHEET
FIRST FLOOR DOOR DETAILS
105 & 106A
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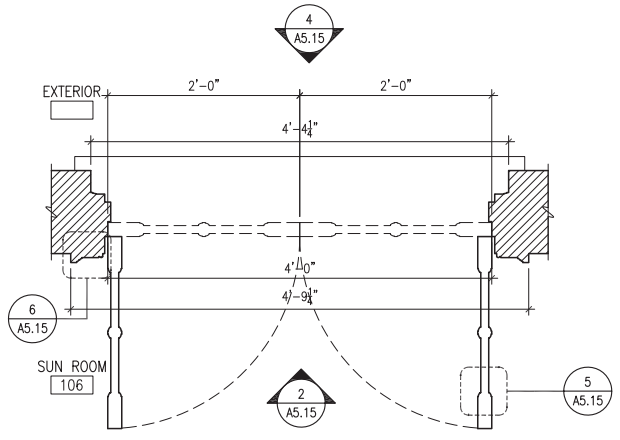
DOORS
106B,106C,106D,106E



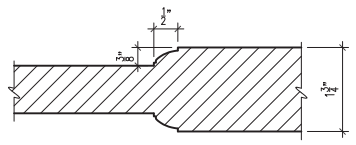
2 A5.15 ELEVATION
DOOR 106B, 106C, 106D, 106E
SCALE (A)

3 A5.15 SECTION
DOOR 106B, 106C, 106D, 106E
SCALE (A)

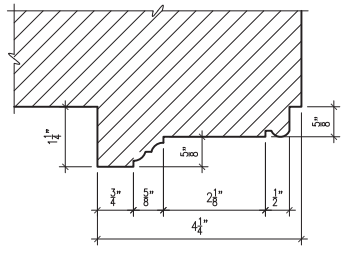
4 A5.15 ELEVATION
DOOR 106B, 106C, 106D, 106E
SCALE (A)



1 A5.15 PLAN
DOOR 106B, 106C, 106D, 106E
SCALE (A)

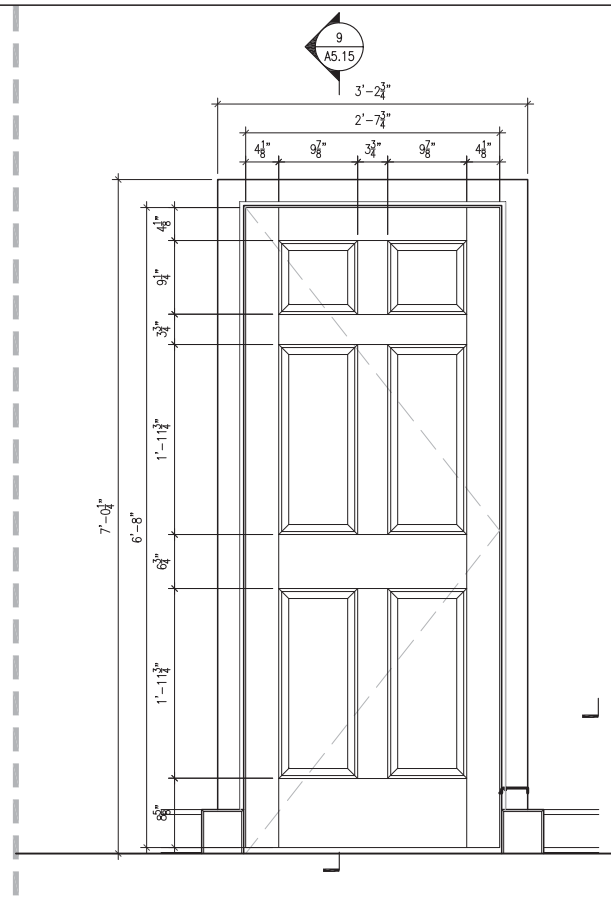


5 A5.15 DOOR PROFILE: DOOR 106B, 106C, 106D, 106E
SCALE (B)

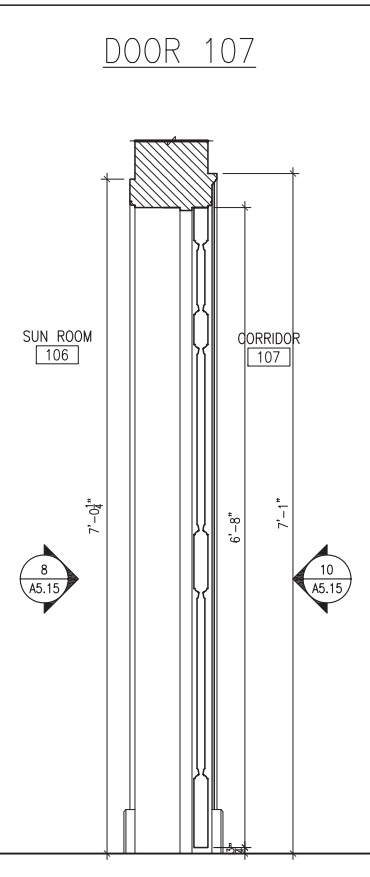


6 A5.15 DOOR TRIM: DOOR 106B, 106C, 106D, 106E
SCALE (B)

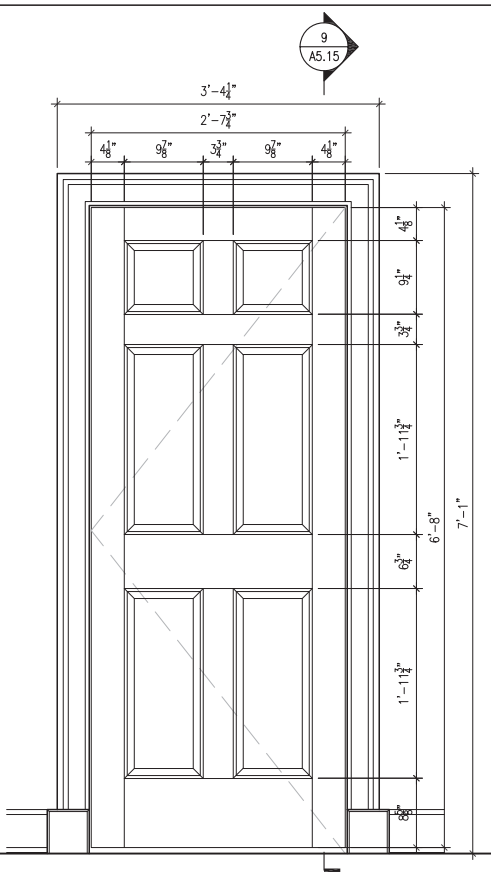
DOOR 107



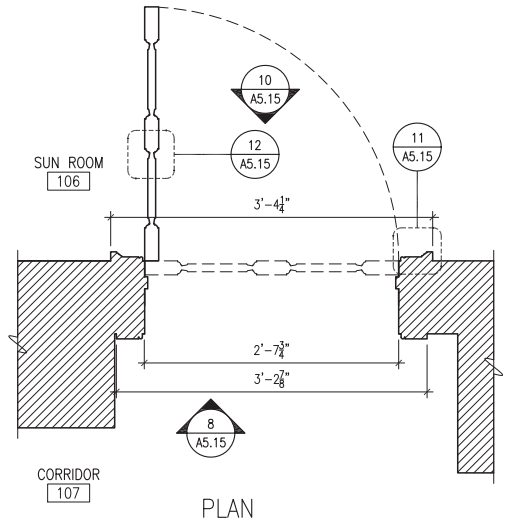
8 A5.15 ELEVATION
DOOR 107
SCALE (A)



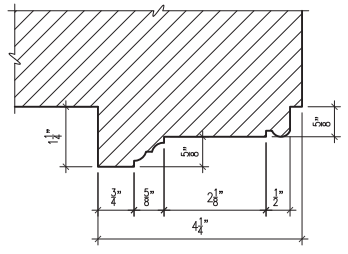
9 A5.15 ELEVATION
DOOR 107
SCALE (A)



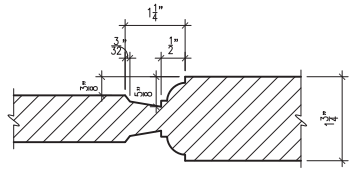
10 A5.15 ELEVATION
DOOR 107
SCALE (A)



7 A5.15 PLAN
DOOR 107
SCALE (A)



11 A5.15 DOOR TRIM: DOOR 107
SCALE (B)



12 A5.15 DOOR PROFILE: DOOR 107
SCALE (B)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

2 0 2 4
SCALE OF INCHES (6" = 1'-0")
SCALE (B)

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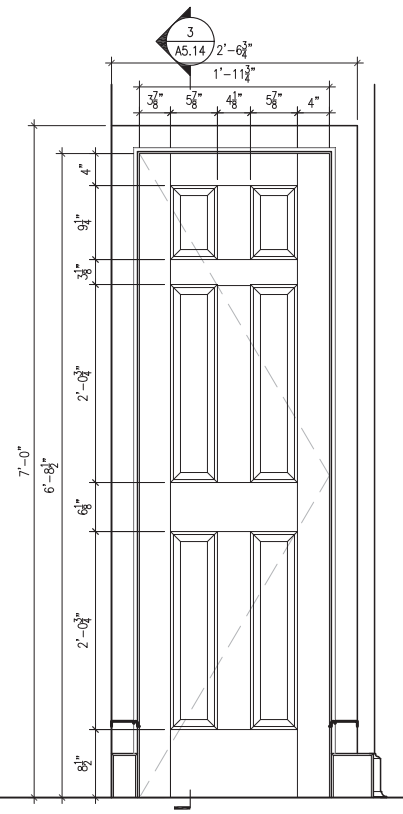
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FIRST FLOOR DOOR DETAILS
106B, 106C, 106D, 106E & 107
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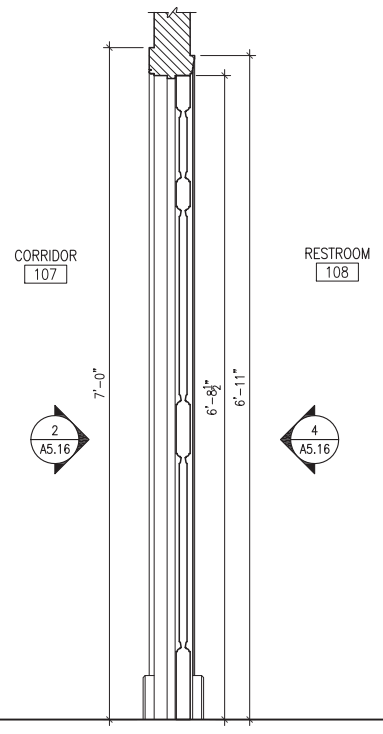
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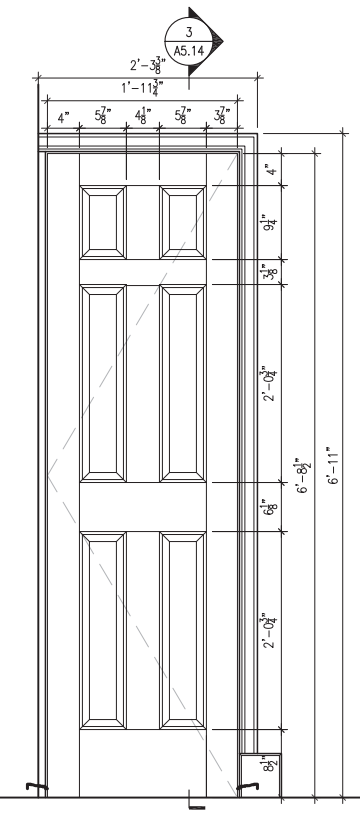
DOOR 108



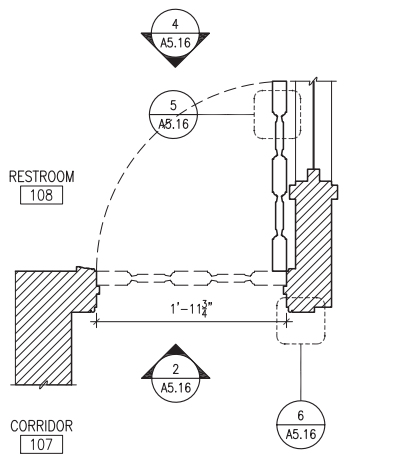
2 A5.16 ELEVATION DOOR 108
SCALE (A)



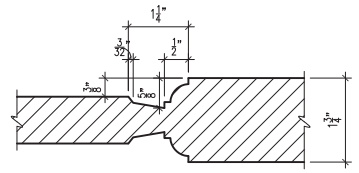
3 A5.16 SECTION DOOR 108
SCALE (A)



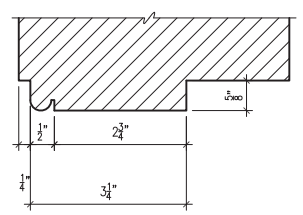
4 A5.16 ELEVATION DOOR 108
SCALE (A)



1 A5.16 PLAN DOOR 108
SCALE (A)

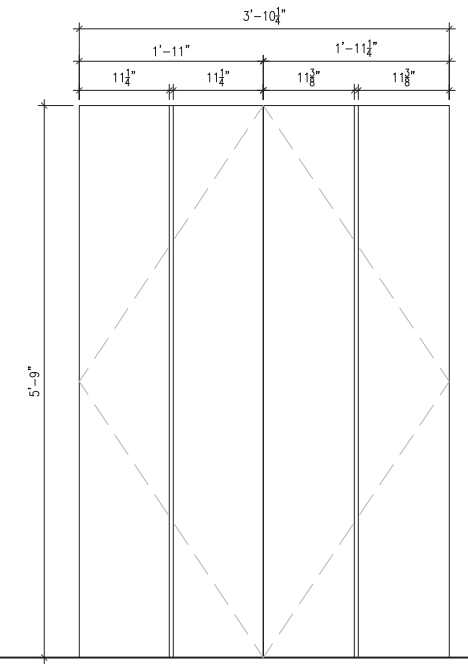


5 A5.16 DOOR PROFILE: DOOR 108
SCALE (B)



6 A5.16 DOOR TRIM: DOOR 108
SCALE (B)

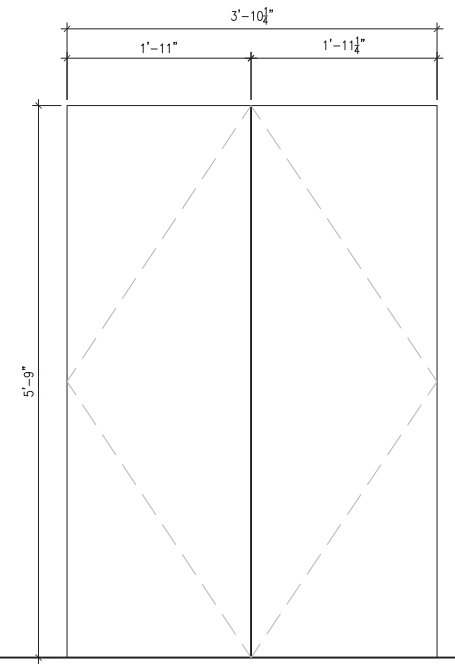
DOOR 109



8 A5.16 ELEVATION DOOR 109
SCALE (A)

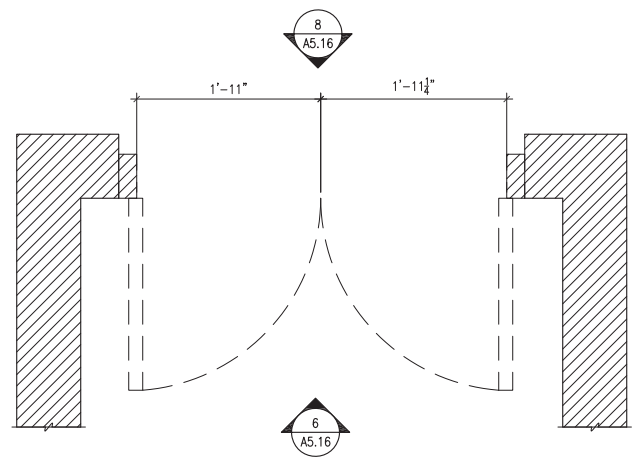
BASEMENT ACCESS 109

EXTERIOR 109



9 A5.16 SECTION DOOR 109
SCALE (A)

10 A5.16 ELEVATION DOOR 109
SCALE (A)



7 A5.16 PLAN DOOR 109
SCALE (A)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

2 0 2 4
SCALE OF INCHES (6" = 1'-0")
SCALE (B)

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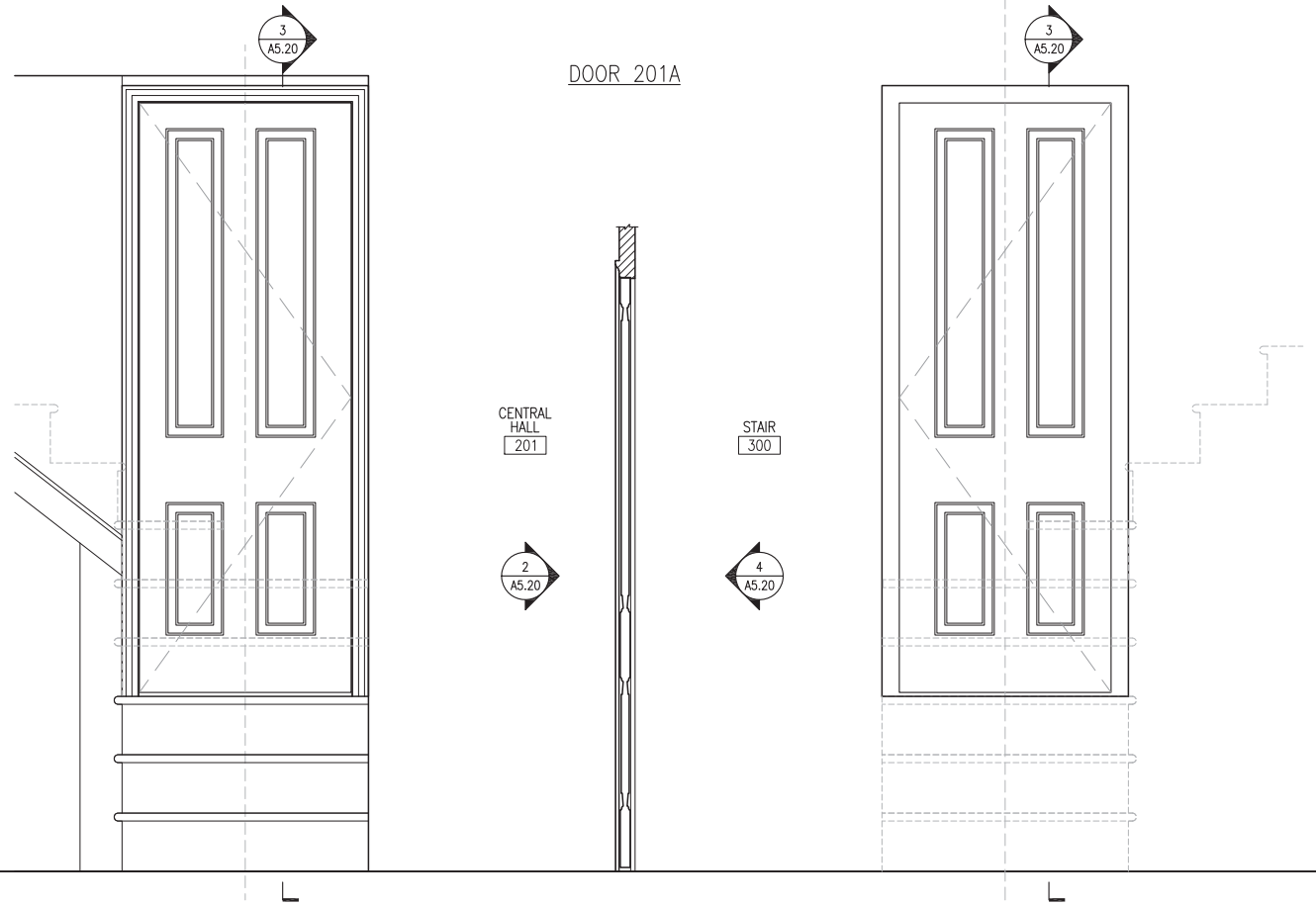
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FIRST FLOOR DOOR DETAILS
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DOOR 201A

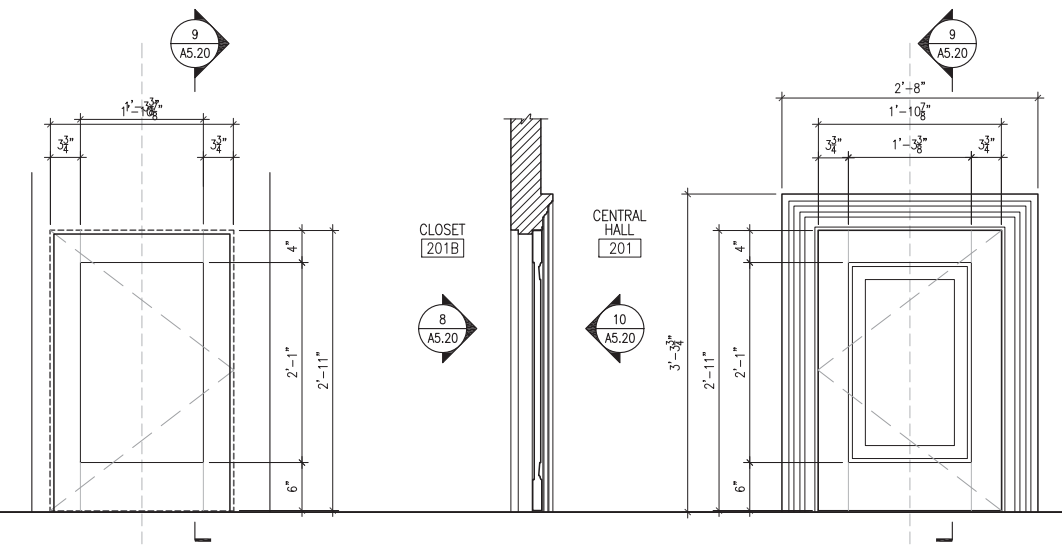


2 A5.20 NORTH ELEVATION DOOR 201A
SCALE (A)

3 A5.20 SECTION DOOR 201A
SCALE (A)

4 A5.20 SOUTH ELEVATION DOOR 201A
SCALE (A)

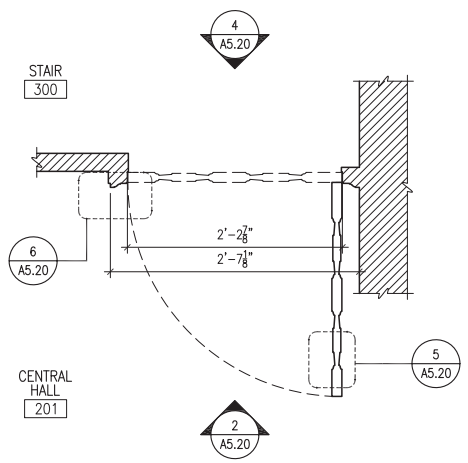
DOOR 201B



8 A5.20 EAST ELEVATION DOOR 201B
SCALE (A)

9 A5.20 SECTION DOOR 201B
SCALE (A)

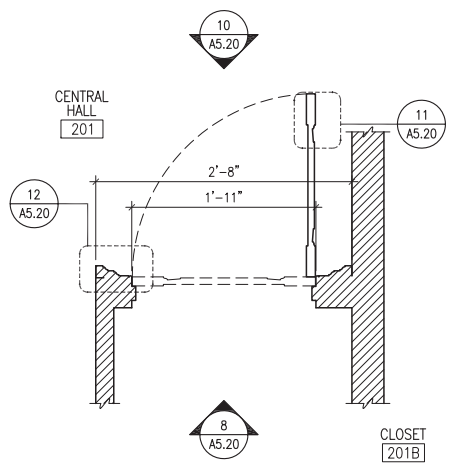
10 A5.20 WEST ELEVATION DOOR 201B
SCALE (A)



1 A5.20 PLAN DOOR 201A
SCALE (A)

5 A5.20 DOOR PROFILE: DOOR 201A
SCALE (B)

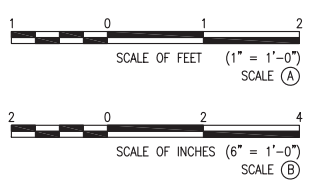
6 A5.20 DOOR TRIM: DOOR 201A
SCALE (B)



7 A5.20 PLAN DOOR 201B
SCALE (A)

11 A5.20 DOOR TRIM: DOOR 201B
SCALE (B)

12 A5.20 DOOR PROFILE: DOOR 201B
SCALE (B)



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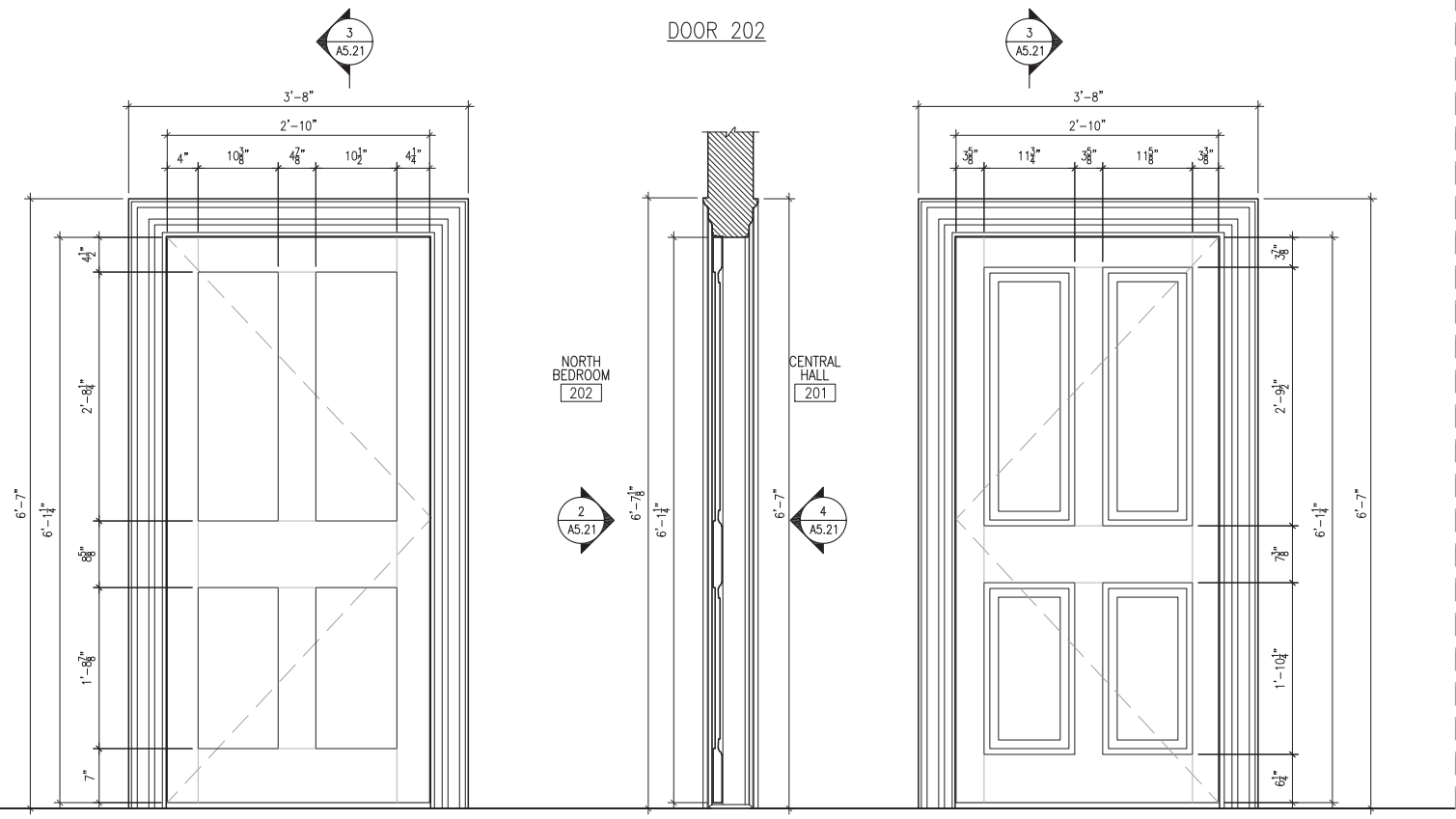
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HARMONY HALL: HISTORIC STRUCTURE REPORT

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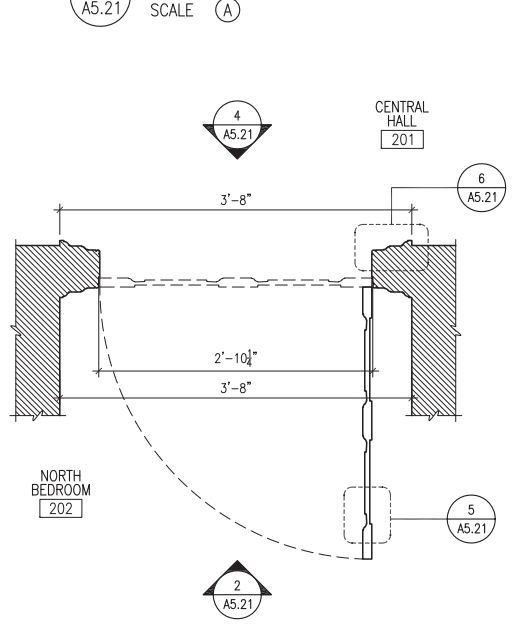


2 A5.21 NORTH ELEVATION
DOOR 202
SCALE (A)

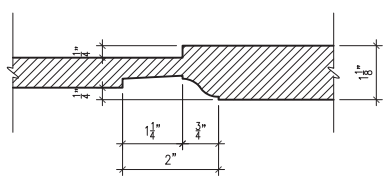
DOOR 202

3 A5.21 SECTION
DOOR 202
SCALE (A)

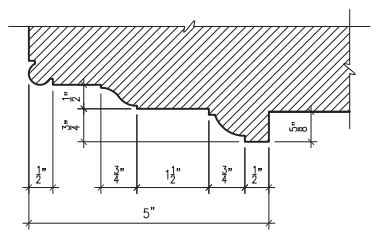
4 A5.21 SOUTH ELEVATION
DOOR 202
SCALE (A)



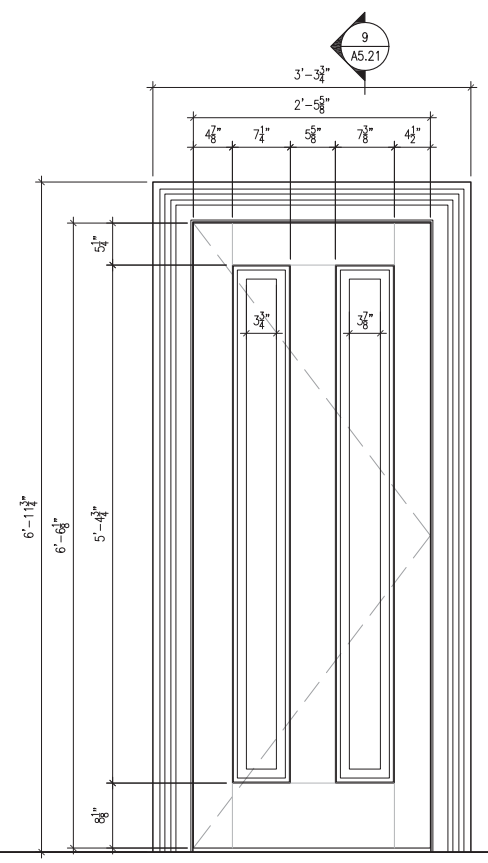
1 A5.21 PLAN
DOOR 202
SCALE (A)



5 A5.21 DOOR PROFILE: DOOR 202
SCALE (B)

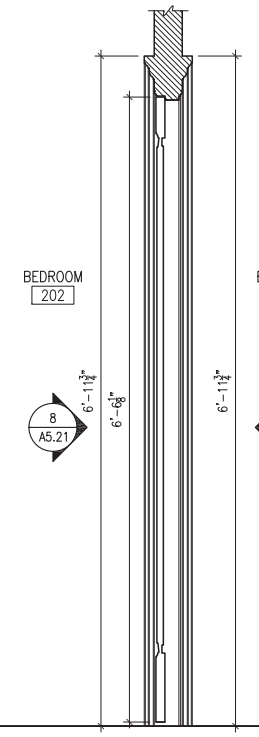


6 A5.21 DOOR TRIM: DOOR 202
CENTRAL HALL 201 AND NORTH BEDROOM 202
SCALE (B)

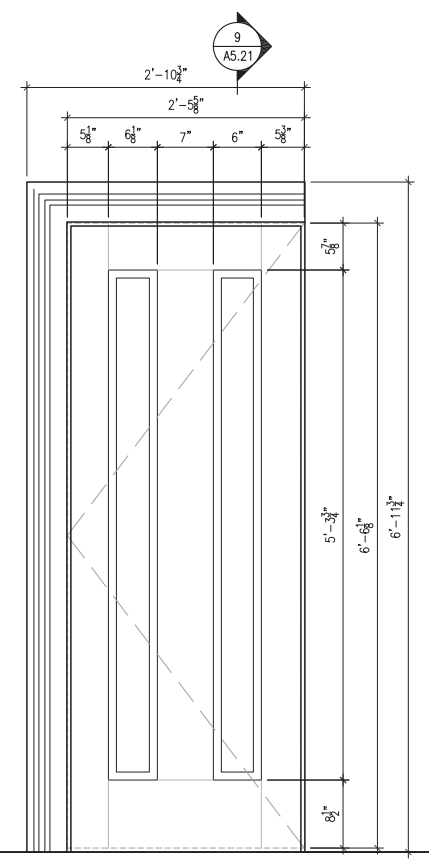


8 A5.21 NORTH ELEVATION
DOOR 202A
SCALE (A)

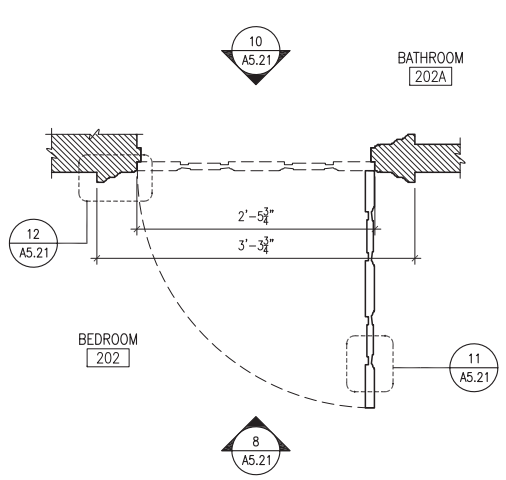
DOOR 202A



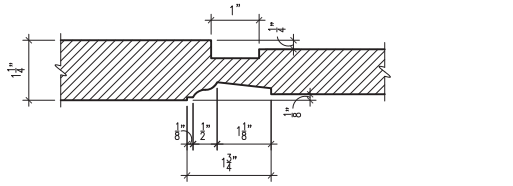
9 A5.21 SECTION
DOOR 202A
SCALE (A)



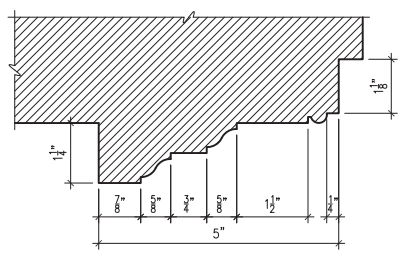
10 A5.21 SOUTH ELEVATION
DOOR 202A
SCALE (A)



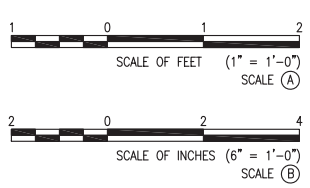
7 A5.21 PLAN
DOOR 202A
SCALE (A)



11 A5.21 DOOR PROFILE: DOOR 202A
SCALE (B)



12 A5.21 DOOR TRIM: DOOR 202A
BEDROOM 202 AND BATHROOM 202A
SCALE (B)



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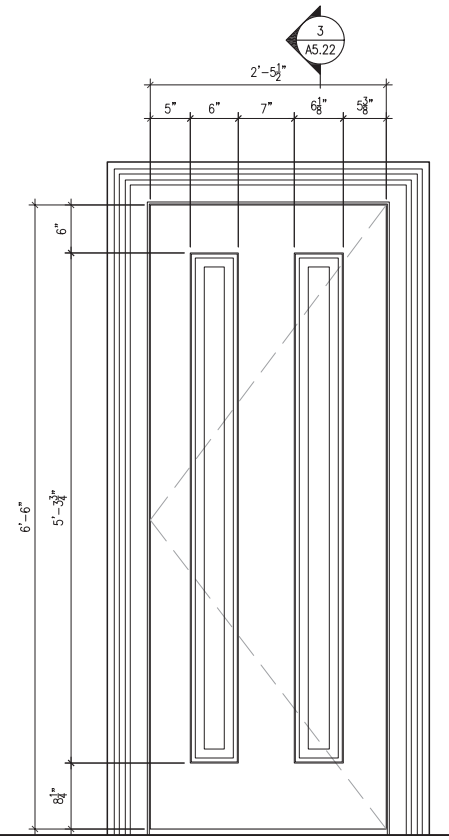
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SECOND FLOOR DOOR DETAILS 202 & 202A
HARMONY HALL: HISTORIC STRUCTURE REPORT

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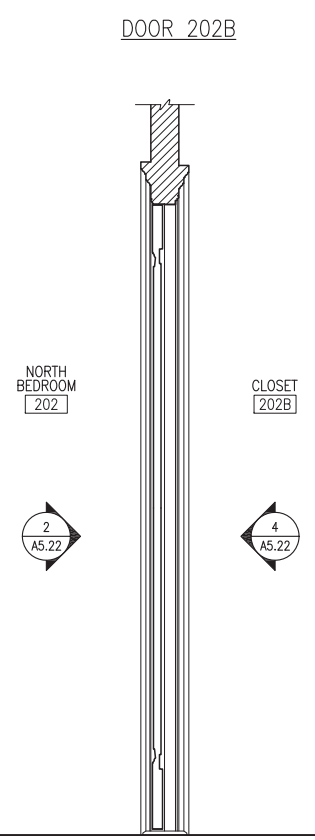
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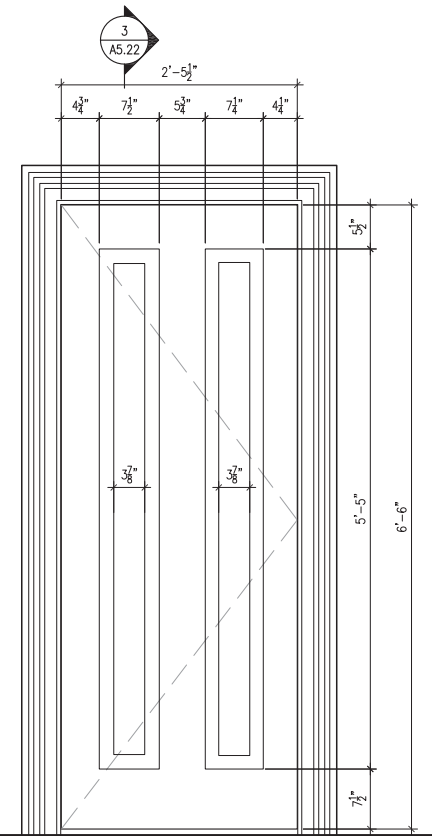
DOOR 202B



2 A5.22 NORTH ELEVATION DOOR 202B
SCALE (A)

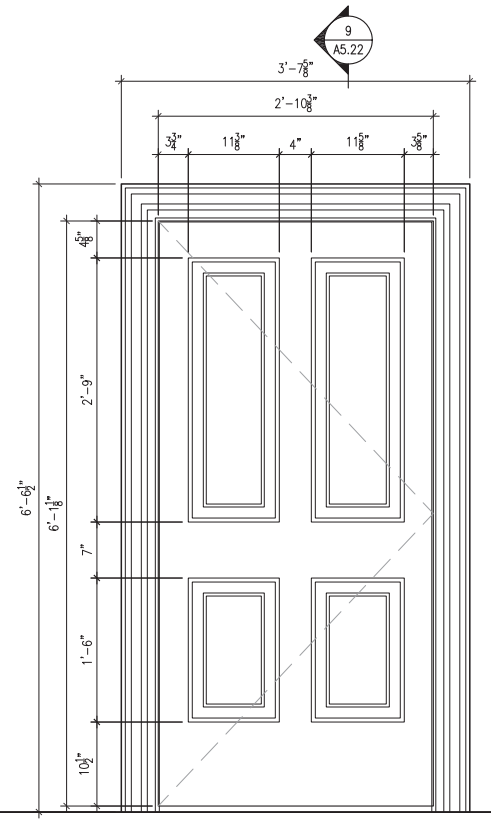


3 A5.22 SECTION DOOR 202B
SCALE (A)

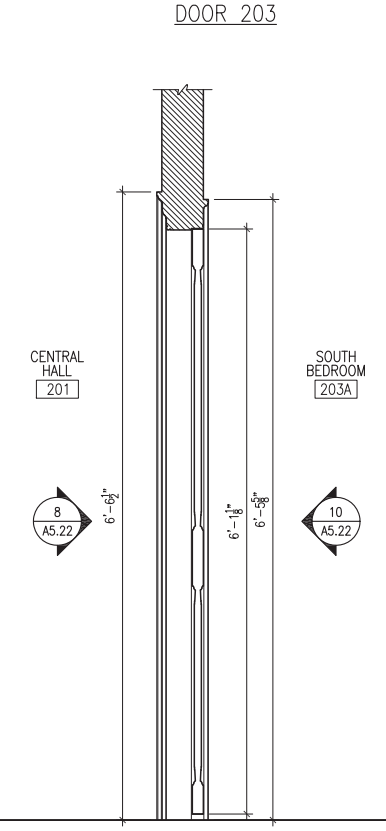


4 A5.22 SOUTH ELEVATION DOOR 202B
SCALE (A)

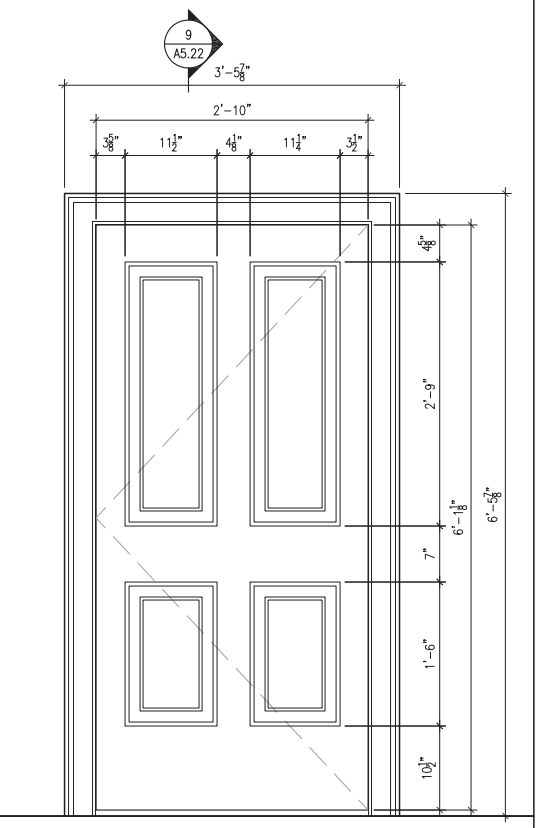
DOOR 203



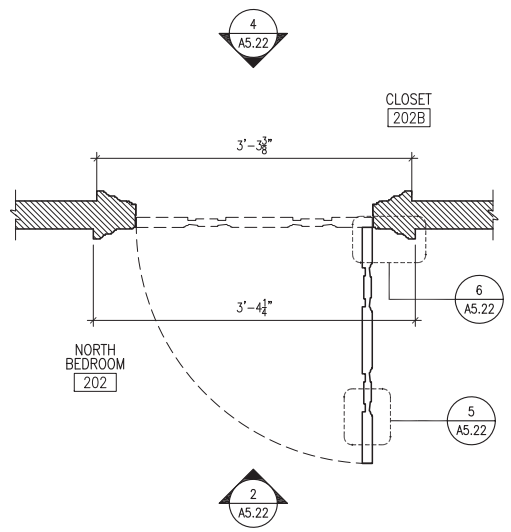
8 A5.22 NORTH ELEVATION DOOR 203
SCALE (A)



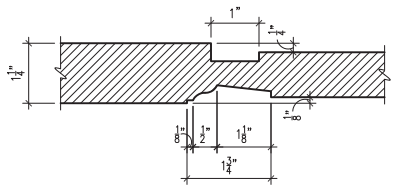
9 A5.22 SECTION DOOR 203
SCALE (A)



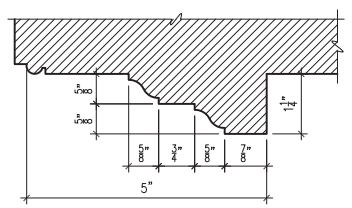
10 A5.22 SOUTH ELEVATION DOOR 203
SCALE (A)



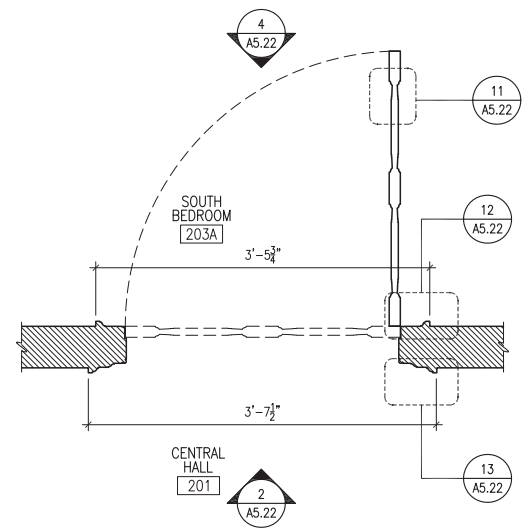
1 A5.22 PLAN DOOR 202B
SCALE (A)



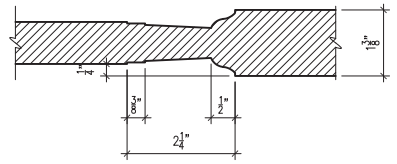
5 A5.22 DOOR PROFILE: DOOR 202B
SCALE (B)



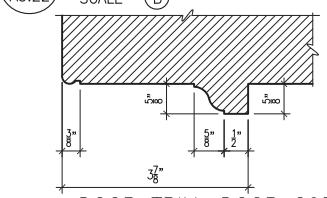
6 A5.22 DOOR TRIM: DOOR 202B
NORTH BEDROOM 202 & CLOSET 202B
SCALE (B)



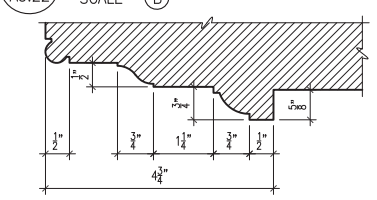
7 A5.22 PLAN DOOR 203
SCALE (A)



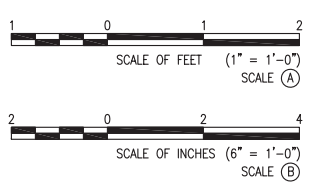
11 A5.22 DOOR PROFILE: DOOR 203
SCALE (B)



DOOR TRIM: DOOR 203
12 A5.22 SOUTH BEDROOM 203
SCALE (B)



DOOR TRIM: DOOR 203
13 A5.22 CENTRAL HALL 201
SCALE (B)



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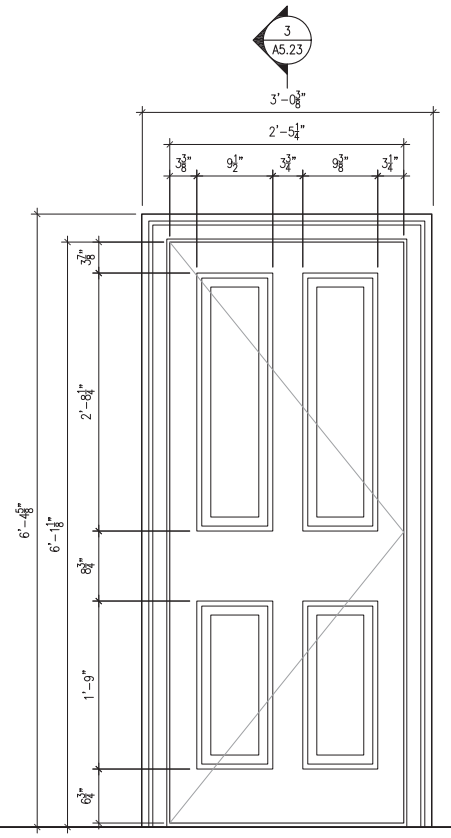
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SECOND FLOOR DOOR DETAILS
202B & 203
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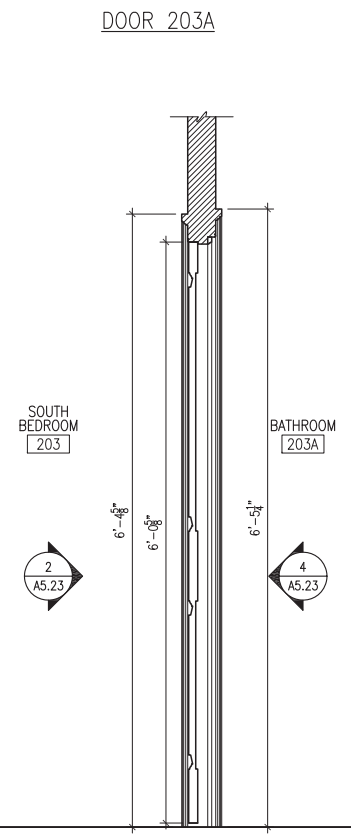
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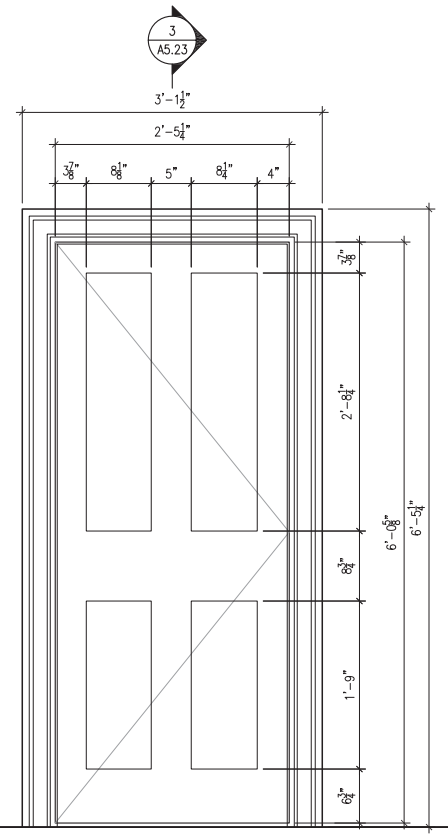
DOOR 203A



2 A5.23 NORTH ELEVATION
DOOR 203A
SCALE (A)

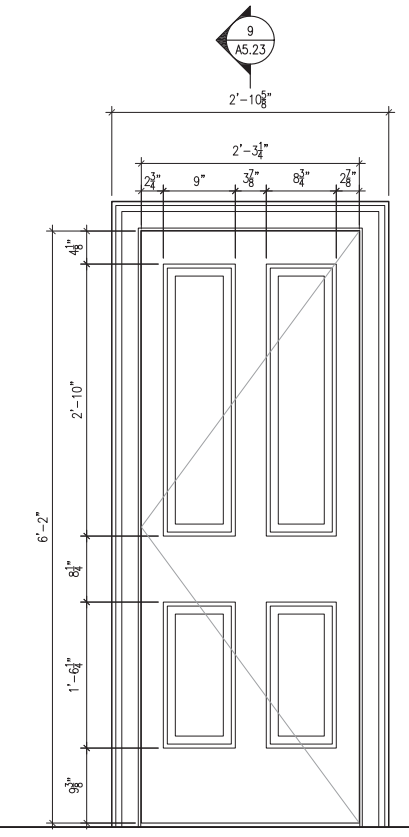


3 A5.23 SECTION
DOOR 203A
SCALE (A)

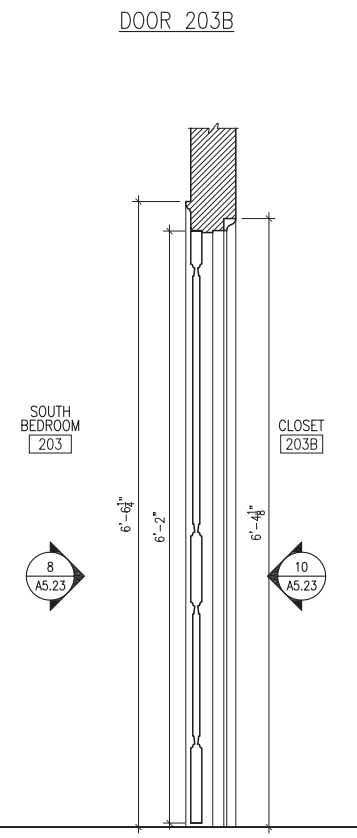


4 A5.23 SOUTH ELEVATION
DOOR 203A
SCALE (A)

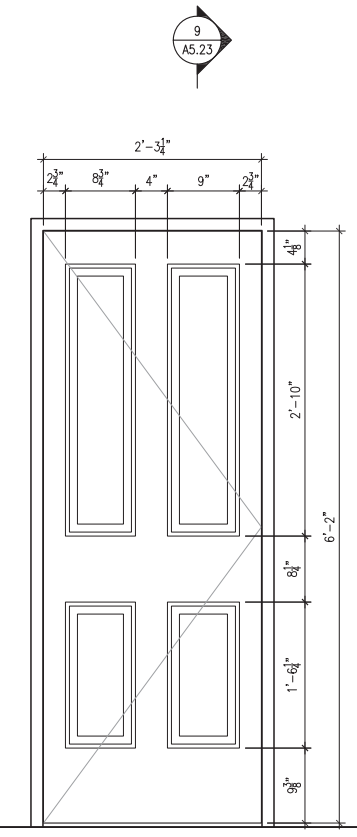
DOOR 203B



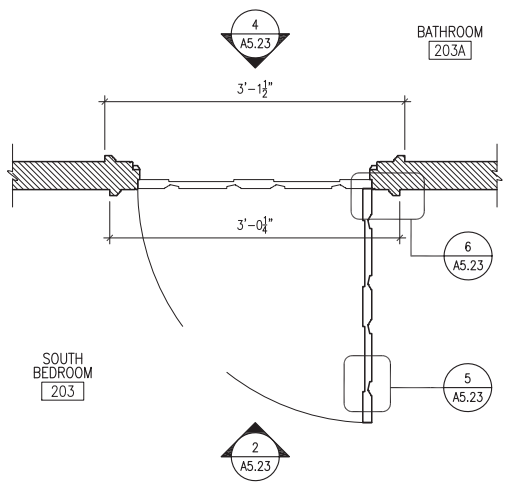
8 A5.23 NORTH ELEVATION
DOOR 203B
SCALE (A)



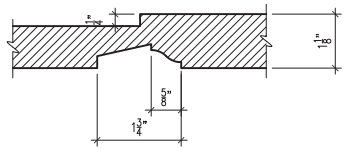
9 A5.23 SECTION
DOOR 203B
SCALE (A)



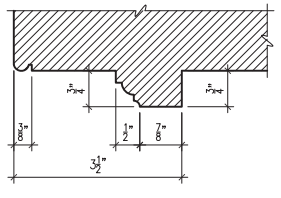
10 A5.23 SOUTH ELEVATION
DOOR 203B
SCALE (A)



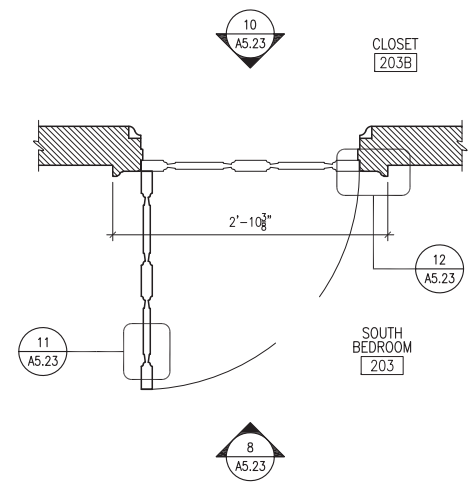
1 A5.23 PLAN
DOOR 203A
SCALE (A)



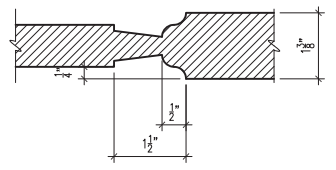
5 A5.23 DOOR PROFILE: DOOR 203A
SCALE (B)



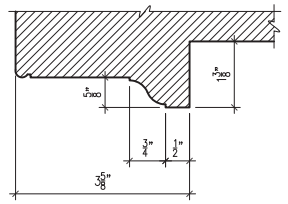
6 A5.23 DOOR TRIM: DOOR 203A
SOUTH BEDROOM 203 & BATHROOM 203A
SCALE (B)



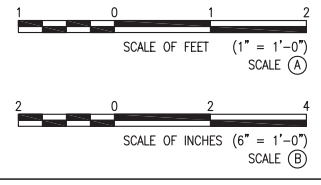
7 A5.23 PLAN
DOOR 203B
SCALE (A)



11 A5.23 DOOR PROFILE: DOOR 203B
SCALE (B)



12 A5.23 DOOR TRIM: DOOR 203B
SOUTH BEDROOM 203
SCALE (B)



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SECOND FLOOR DOOR DETAILS
203A & 203B

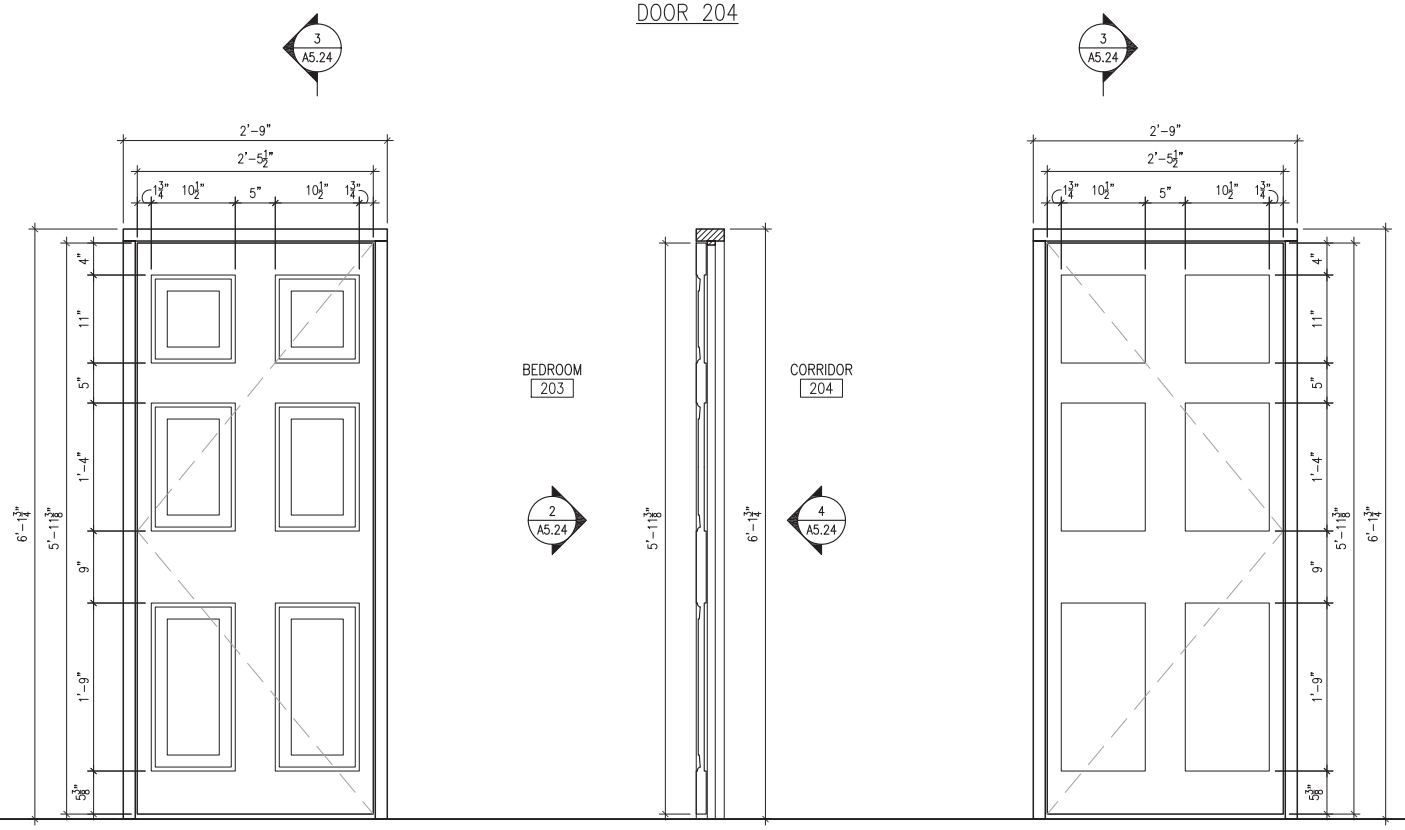
HARMONY HALL: HISTORIC STRUCTURE REPORT

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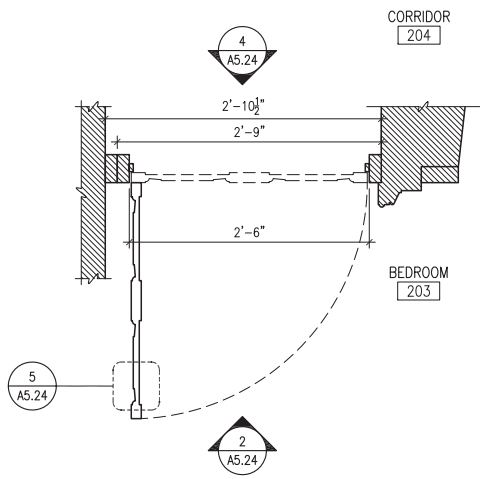
DOOR 204



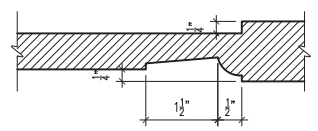
2 A5.24 NORTH ELEVATION DOOR 204
SCALE (A)

3 A5.24 SECTION DOOR 204
SCALE (A)

4 A5.24 SOUTH ELEVATION DOOR 204
SCALE (A)

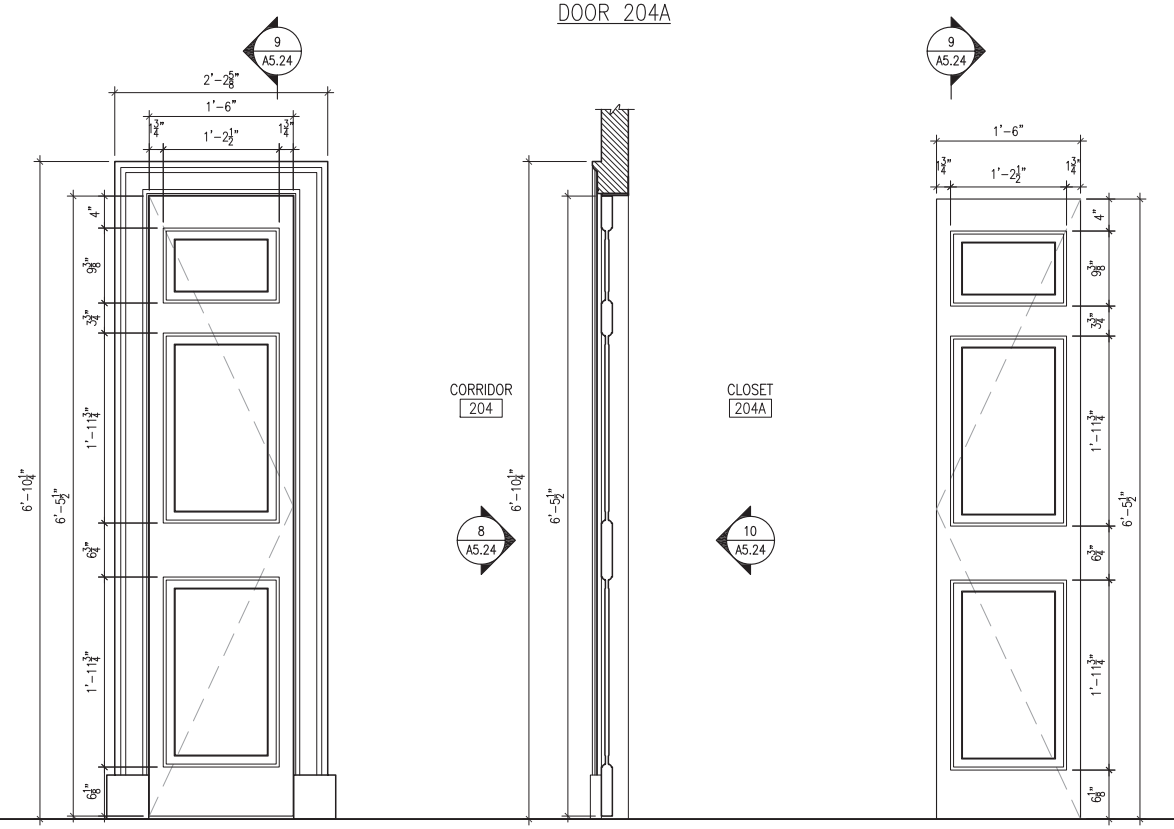


1 A5.24 PLAN DOOR 204
SCALE (A)



5 A5.24 DOOR PROFILE: DOOR 204
SCALE (B)

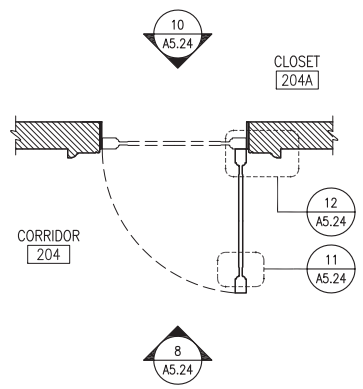
DOOR 204A



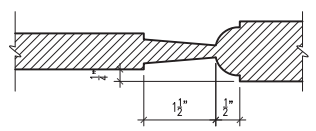
8 A5.24 EAST ELEVATION DOOR 204A
SCALE (A)

9 A5.24 SECTION DOOR 204A
SCALE (A)

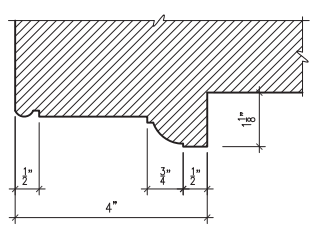
10 A5.24 WEST ELEVATION DOOR 204A
SCALE (A)



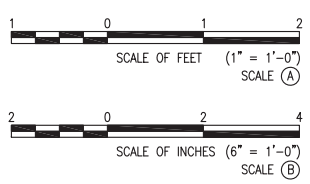
7 A5.24 PLAN DOOR 204A
SCALE (A)



11 A5.24 DOOR PROFILE: DOOR 204A
SCALE (B)

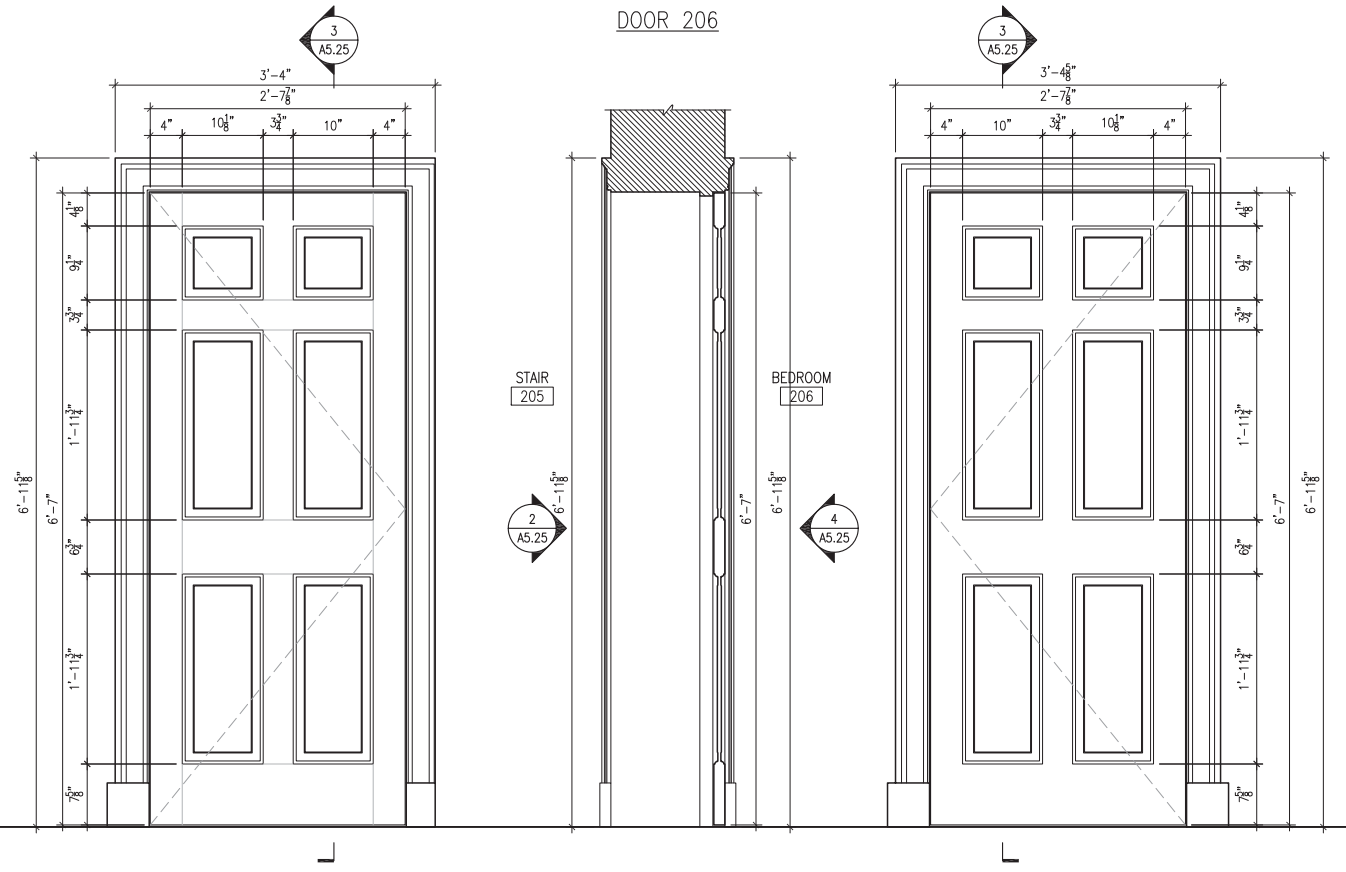


12 A5.24 DOOR TRIM: DOOR 204A CORRIDOR 204
SCALE (B)



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		CADD: SP	A5.24	SECOND FLOOR DOOR DETAILS 204 & 204A	PKG. NO. — SHEET 63
		TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115
		DATE: 9/25/12			

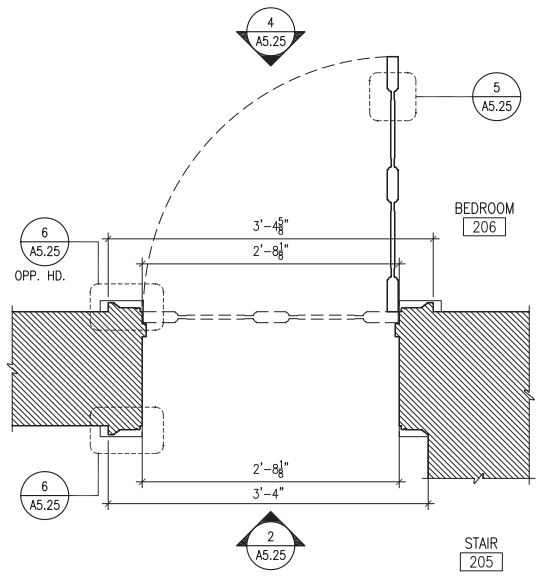
DOOR 206



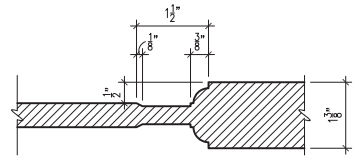
2 A5.25 NORTH ELEVATION DOOR 206 SCALE (A)

3 A5.25 SECTION DOOR 206 SCALE (A)

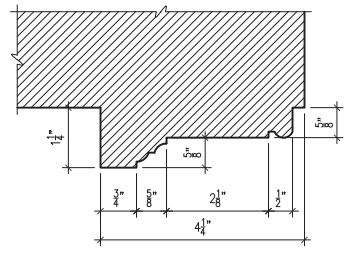
4 A5.25 SOUTH ELEVATION DOOR 206 SCALE (A)



1 A5.25 PLAN DOOR 206 SCALE (A)

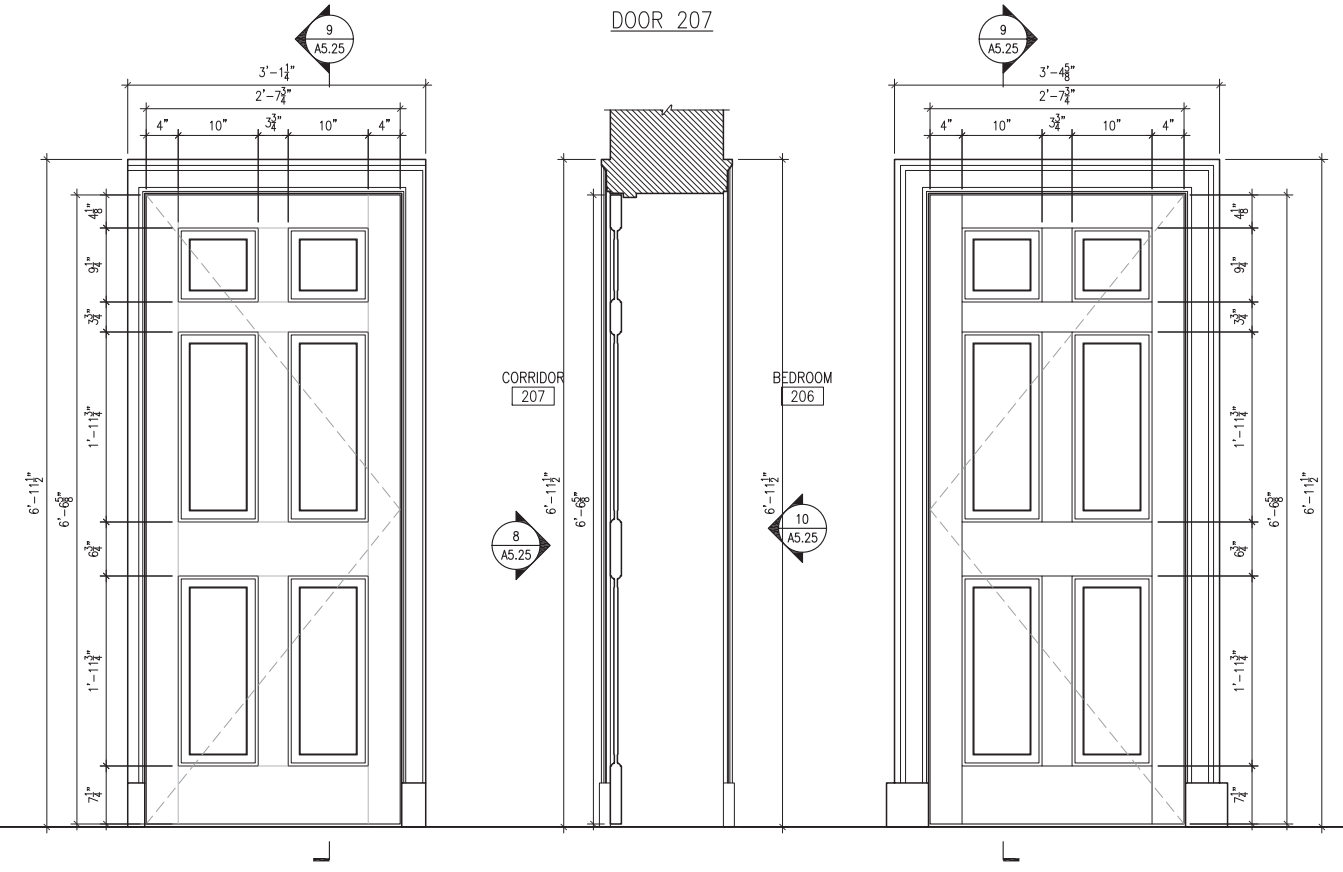


5 A5.25 DOOR PROFILE: DOOR 206 SCALE (B)



6 A5.25 DOOR TRIM: DOOR 206 STAIR 205 & BEDROOM 206 SCALE (B)

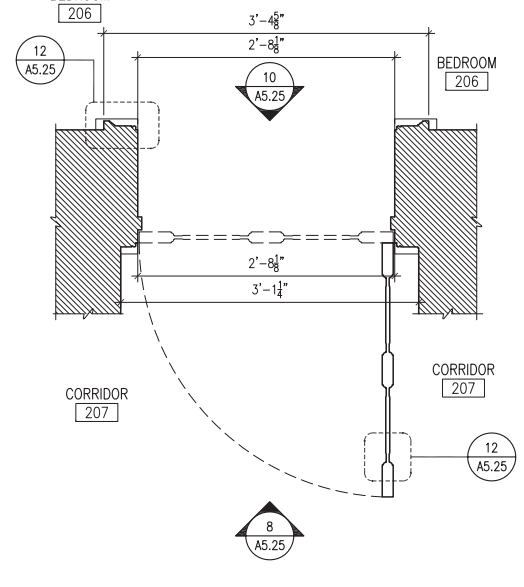
DOOR 207



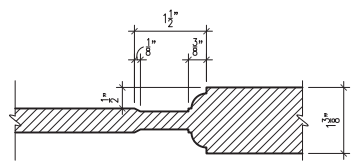
8 A5.25 NORTH ELEVATION DOOR 207 SCALE (A)

9 A5.25 SECTION DOOR 207 SCALE (A)

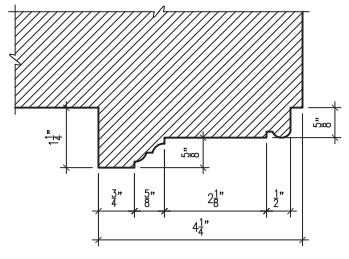
10 A5.25 SOUTH ELEVATION DOOR 207 SCALE (A)



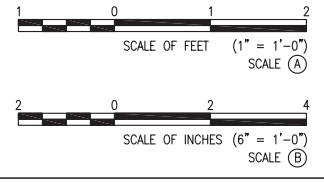
7 A5.25 PLAN DOOR 207 SCALE (A)



11 A5.25 DOOR PROFILE: DOOR 207 SCALE (B)



12 A5.25 DOOR TRIM: DOOR 207 BEDROOM 206 & CORRIDOR 207 SCALE (B)



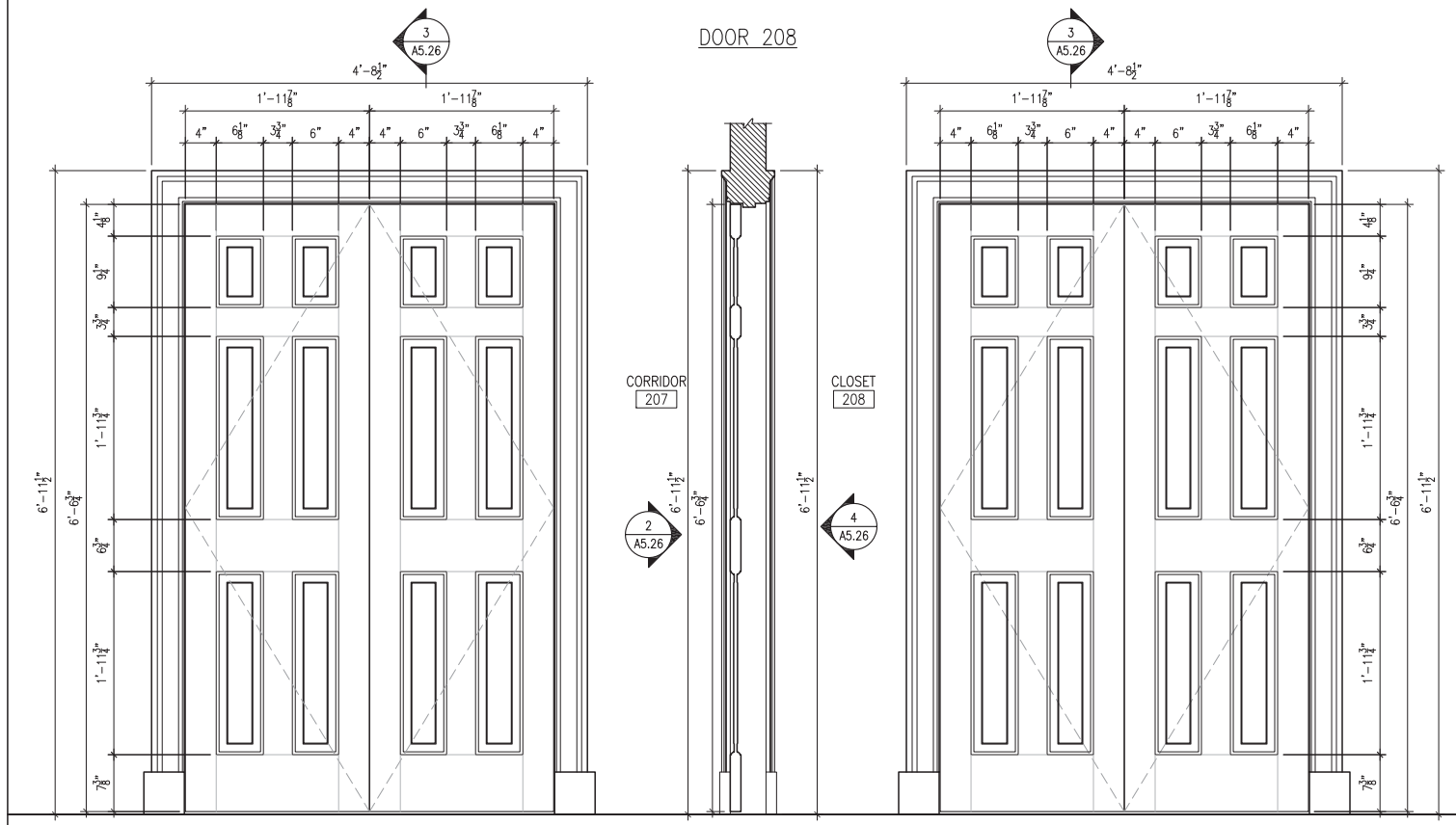
PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

DESIGNED:
CADD: SP
TECH REVIEW: SP
DATE: 9/25/12

SUB SHEET NO.
A5.25

TITLE OF SHEET
SECOND FLOOR FOOR DETAILS 206 & 207
HARMONY HALL: HISTORIC STRUCTURE REPORT

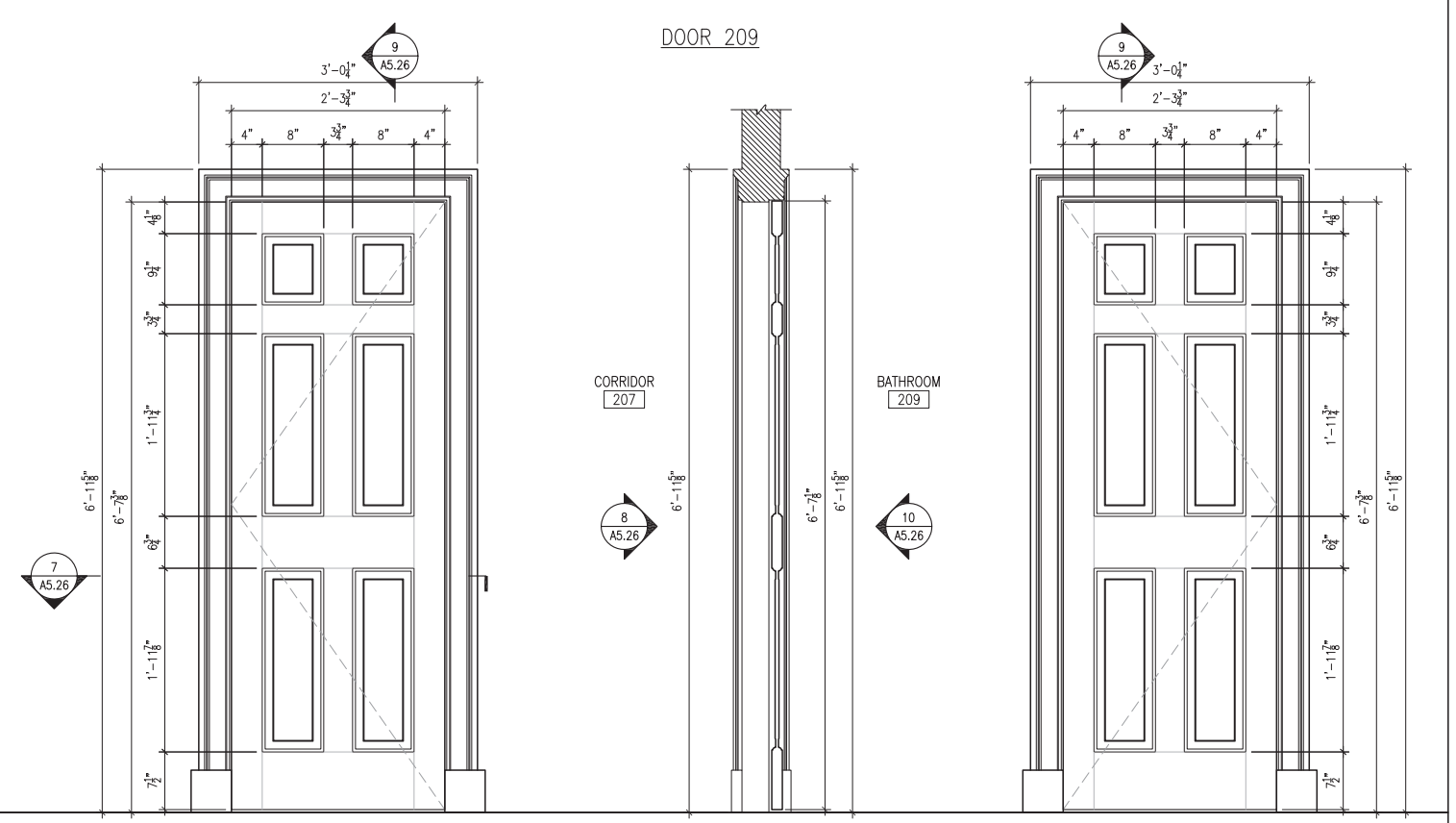
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2 A5.26 EAST ELEVATION DOOR 208 SCALE (A)

3 A5.26 SECTION DOOR 208 SCALE (A)

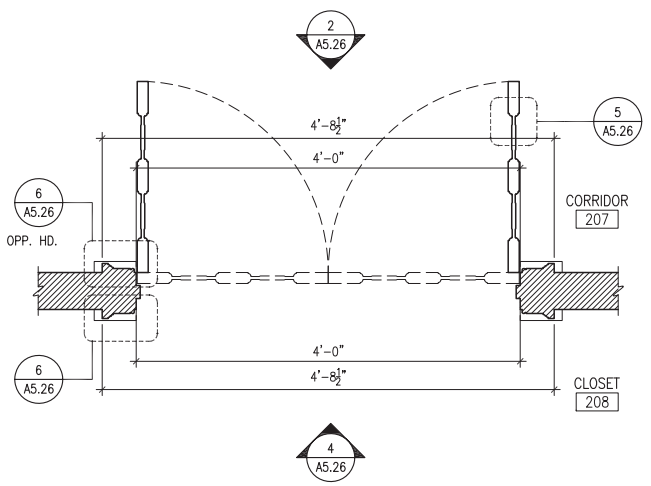
4 A5.26 WEST ELEVATION DOOR 208 SCALE (A)



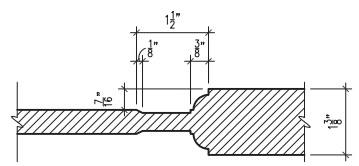
8 A5.26 EAST ELEVATION DOOR 209 SCALE (A)

9 A5.26 SECTION DOOR 209 SCALE (A)

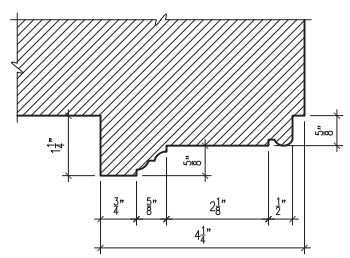
10 A5.26 WEST ELEVATION DOOR 209 SCALE (A)



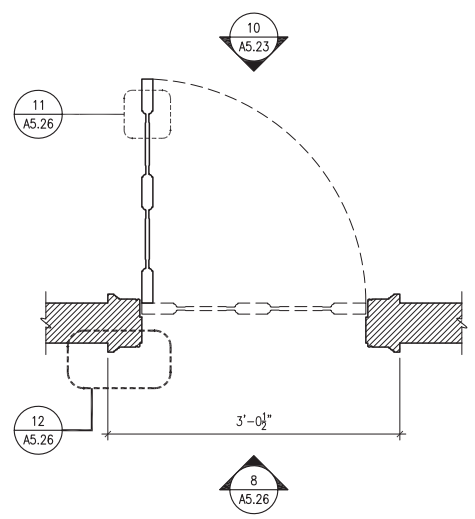
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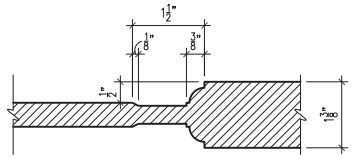
5 A5.26 DOOR PROFILE: DOOR 208 SCALE (B)



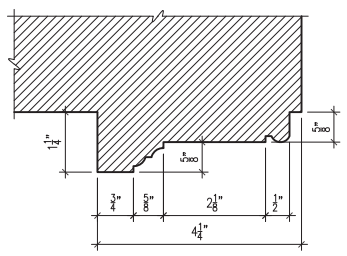
6 A5.26 DOOR TRIM: DOOR 208 CORRIDOR 207 & CLOSET 208 SCALE (B)



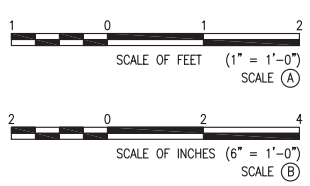
7 A5.26 PLAN DOOR 209 SCALE (A)



11 A5.26 DOOR PROFILE: DOOR 207 SCALE (B)



12 A5.26 DOOR TRIM: DOOR 207 BEDROOM 206 & CORRIDOR 207 SCALE (B)



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WASHINGTON, DC

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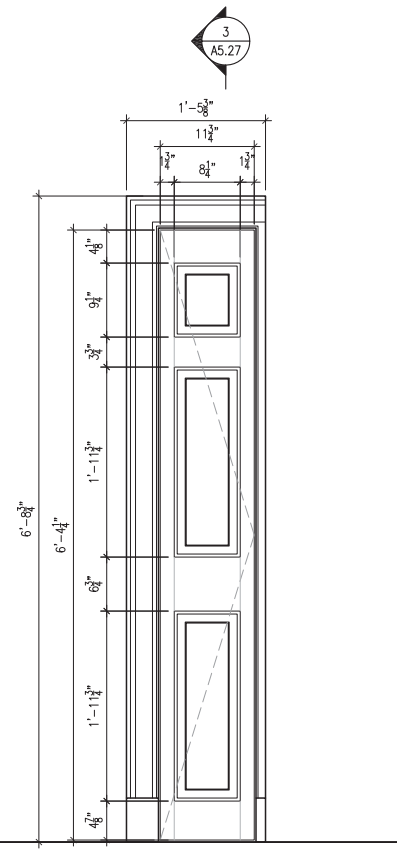
SUB SHEET NO.
A5.26

TITLE OF SHEET
SECOND FLOOR DOOR DETAILS 208 & 209
HARMONY HALL: HISTORIC STRUCTURE REPORT

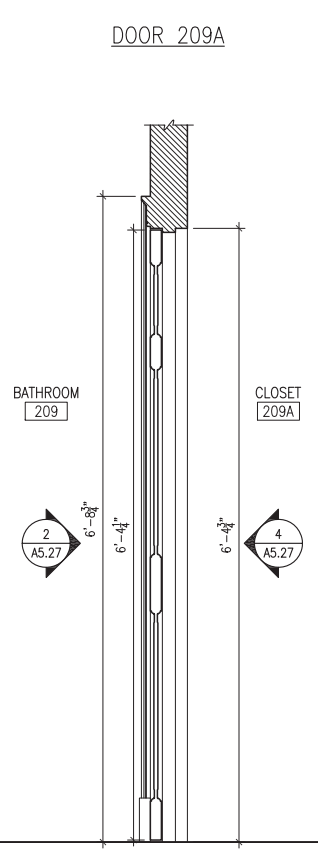
DRAWING NO.
899
116834

PKG. NO.

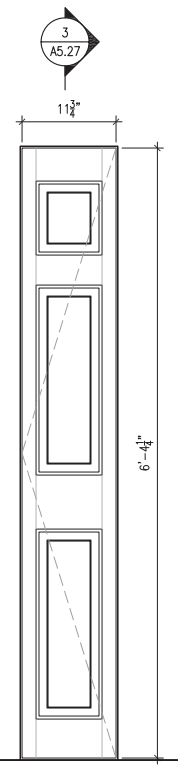
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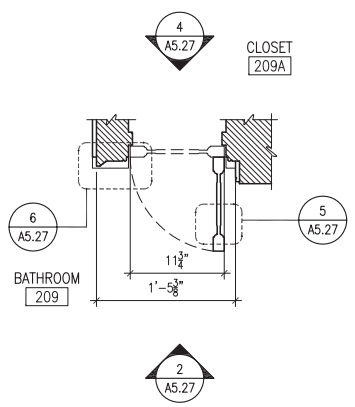
NORTH ELEVATION
DOOR 209A
2 A5.27 SCALE (A)



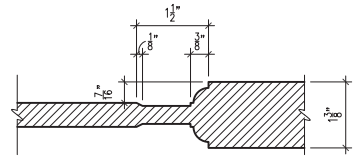
SECTION
DOOR 209A
3 A5.27 SCALE (A)



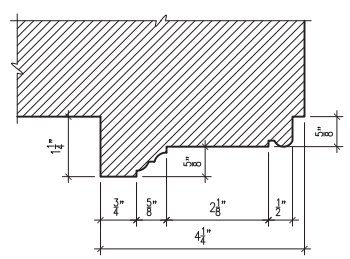
SOUTH ELEVATION
DOOR 209A
4 A5.27 SCALE (A)



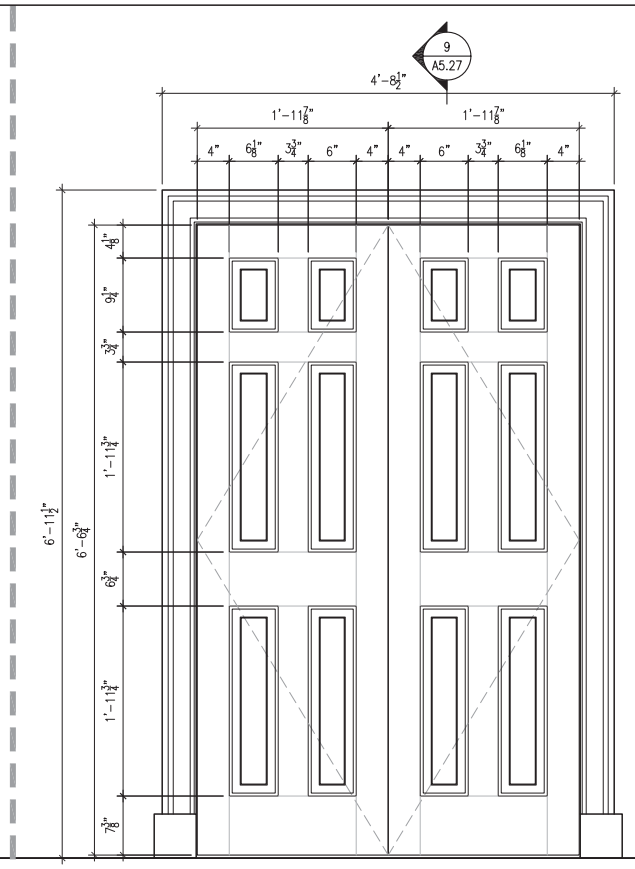
PLAN
DOOR 209A
1 A5.27 SCALE (A)



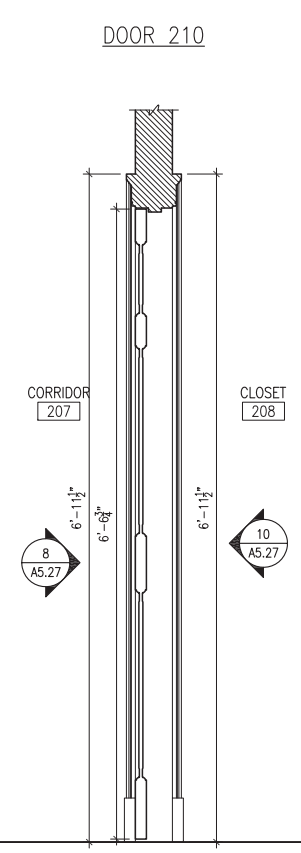
DOOR PROFILE: DOOR 209A
5 A5.27 SCALE (B)



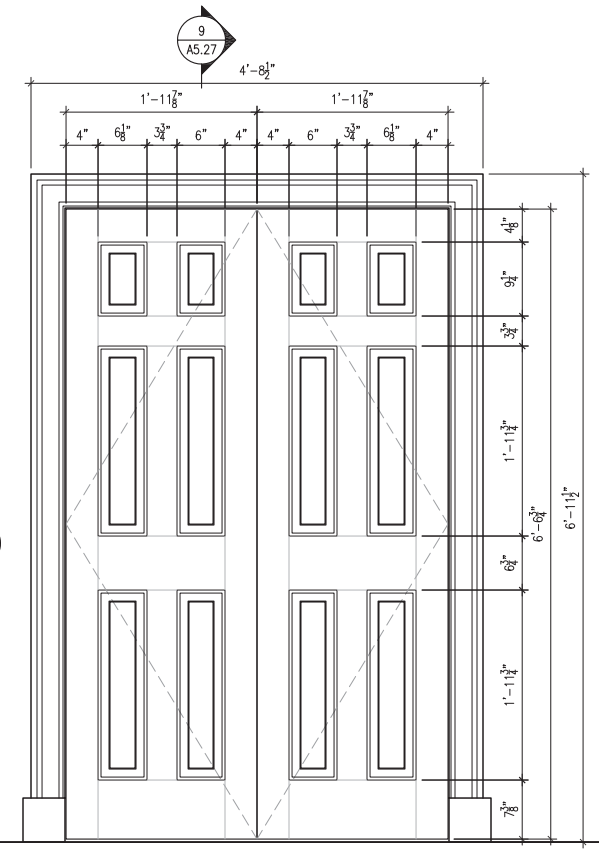
DOOR TRIM: DOOR 209A
BATHROOM 209
6 A5.27 SCALE (B)



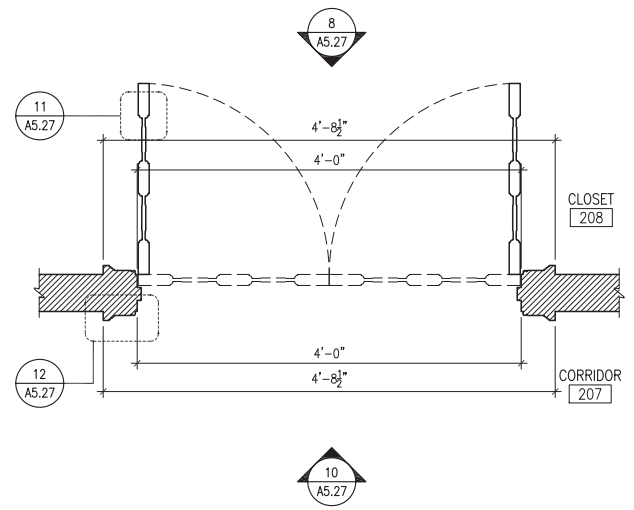
EAST ELEVATION
DOOR 208
8 A5.27 SCALE (A)



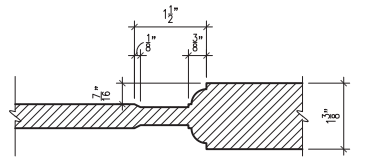
SECTION
DOOR 208
9 A5.27 SCALE (A)



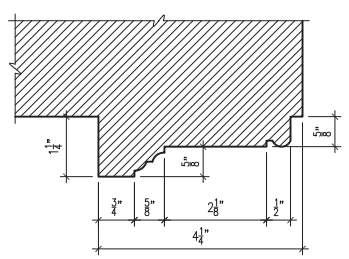
WEST ELEVATION
DOOR 208
10 A5.27 SCALE (A)



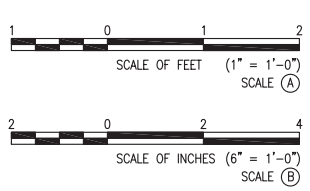
PLAN
DOOR 208
7 A5.27 SCALE (A)



DOOR PROFILE: DOOR 210
11 A5.27 SCALE (B)

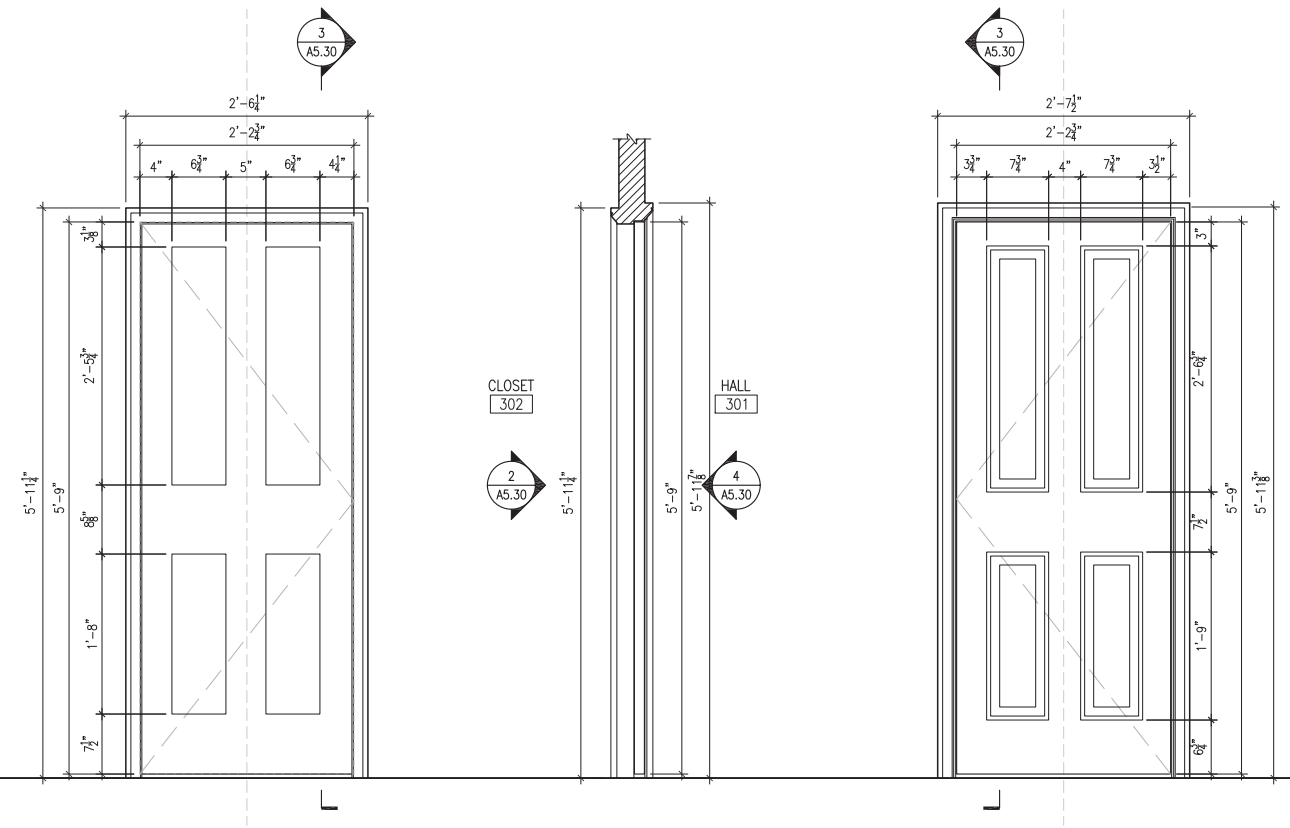


DOOR TRIM: DOOR 210
CORRIDOR 207 & CLOSET 210
12 A5.27 SCALE (B)



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		CADD: SP	A5.27	SECOND FLOOR DOOR DETAILS 209A & 208	PKG. NO. — SHEET 66
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		DATE: 9/25/12			

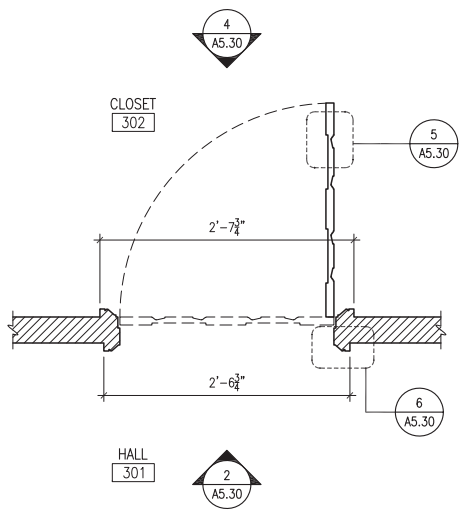
DOOR 302



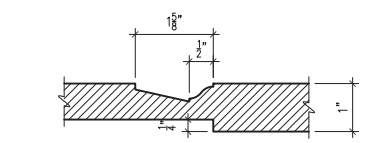
2 A5.30 EAST ELEVATION DOOR 302 SCALE (A)

3 A5.30 SECTION DOOR 302 SCALE (A)

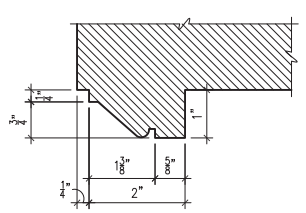
4 A5.30 WEST ELEVATION DOOR 302 SCALE (A)



1 A5.30 PLAN DOOR 302 SCALE (A)

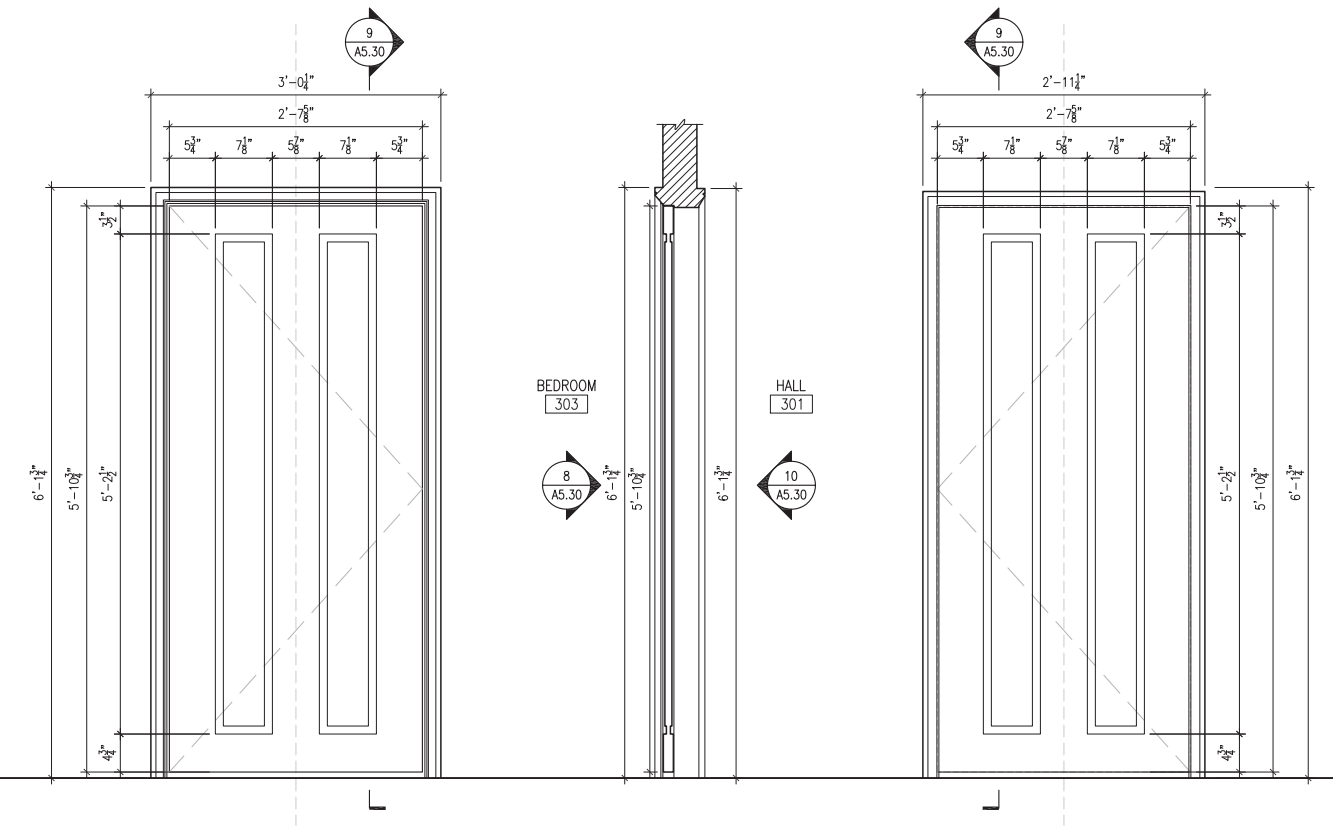


5 A5.30 DOOR PROFILE SCALE (B)



6 A5.30 DOOR TRIM SCALE (B)

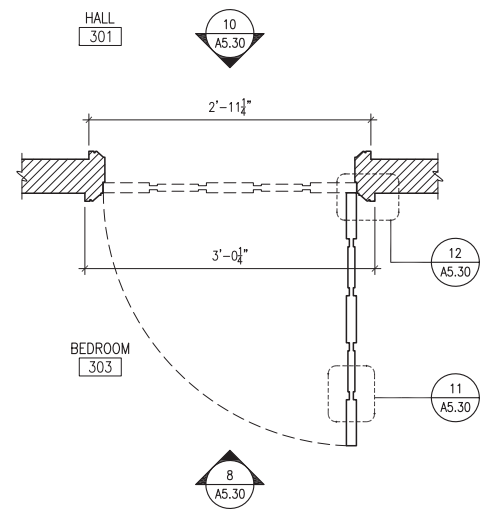
DOOR 303



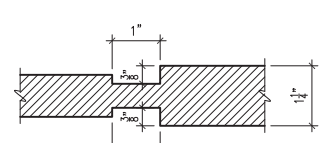
8 A5.30 NORTH ELEVATION DOOR 303 SCALE (A)

9 A5.30 SECTION DOOR 303 SCALE (A)

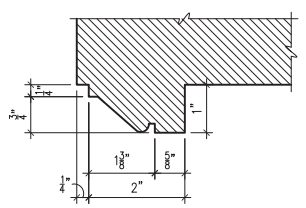
10 A5.30 SOUTH ELEVATION DOOR 303 SCALE (A)



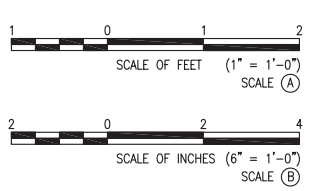
7 A5.30 PLAN DOOR 303 SCALE (A)



11 A5.30 DOOR PROFILE SCALE (B)



12 A5.30 DOOR TRIM SCALE (B)



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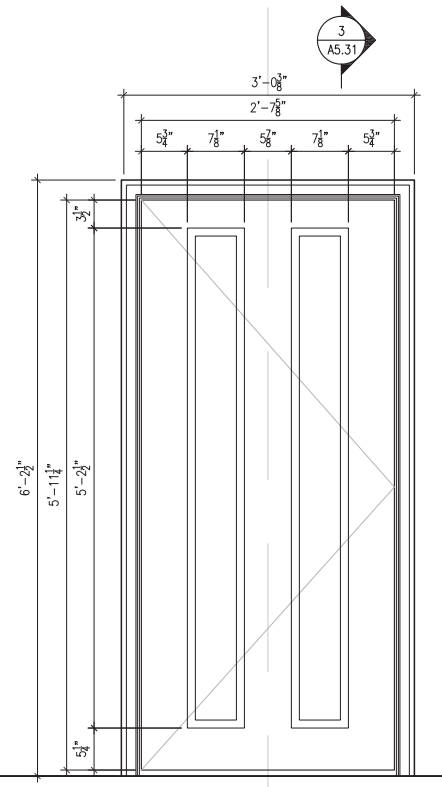
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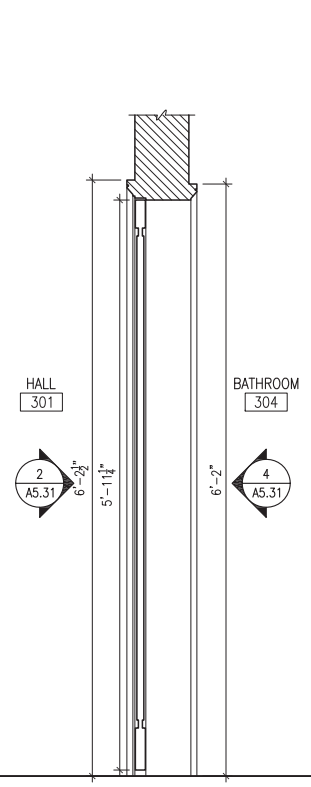
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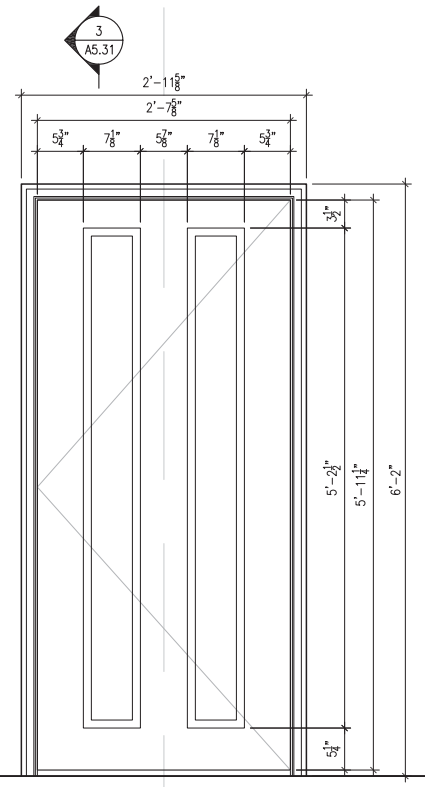
DOOR 304



2 A5.31 EAST ELEVATION DOOR 304 SCALE (A)

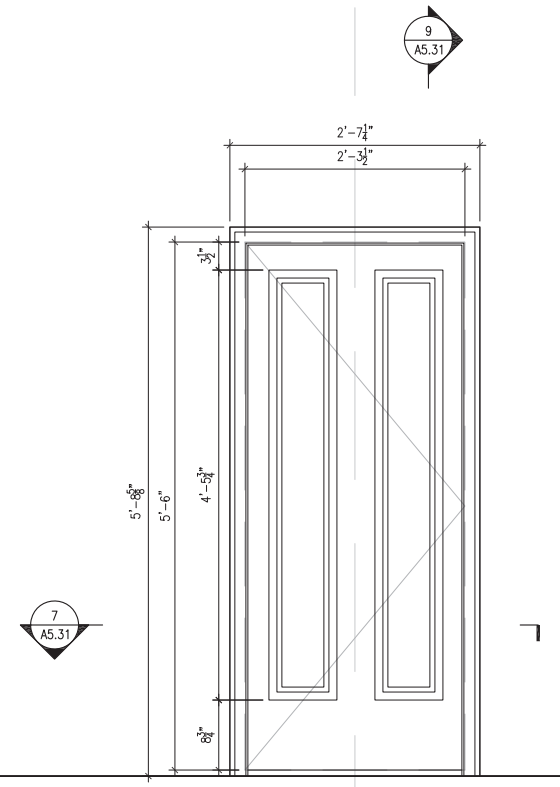


3 A5.31 SECTION DOOR 304 SCALE (A)

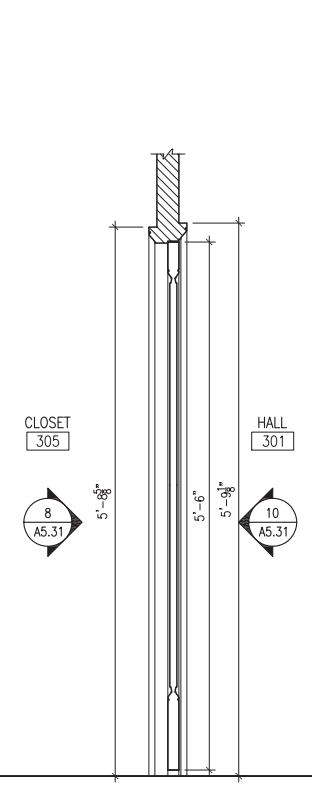


4 A5.31 WEST ELEVATION DOOR 304 SCALE (A)

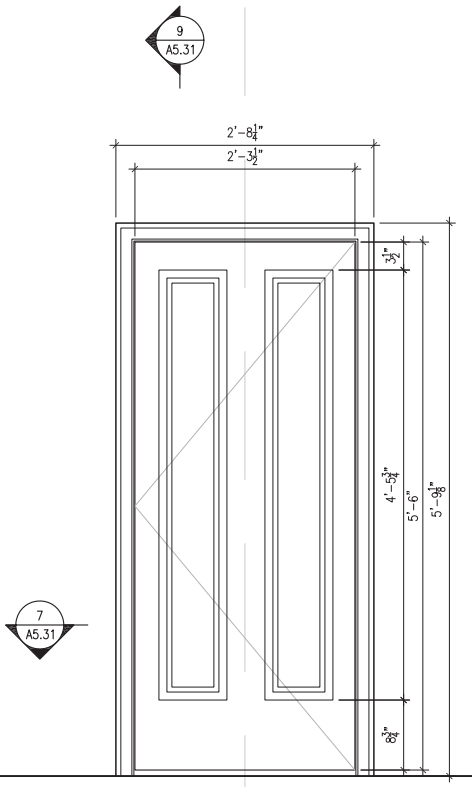
DOOR 305



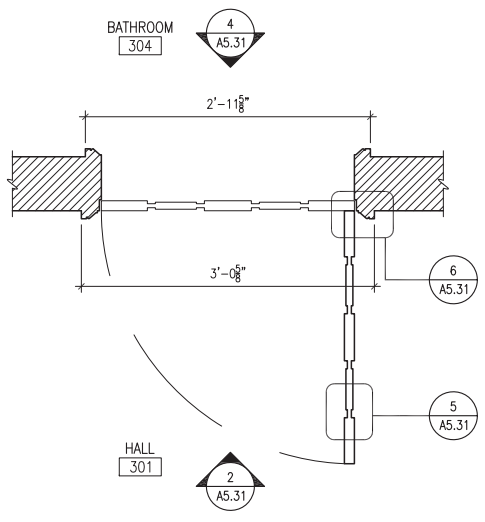
8 A5.31 EAST ELEVATION DOOR 305 SCALE (A)



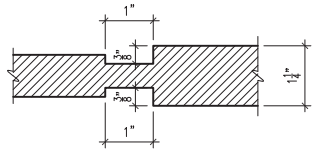
9 A5.31 SECTION DOOR 305 SCALE (A)



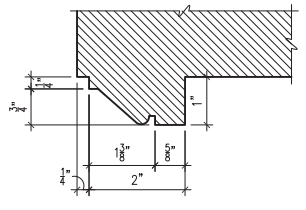
10 A5.31 WEST ELEVATION DOOR 305 SCALE (A)



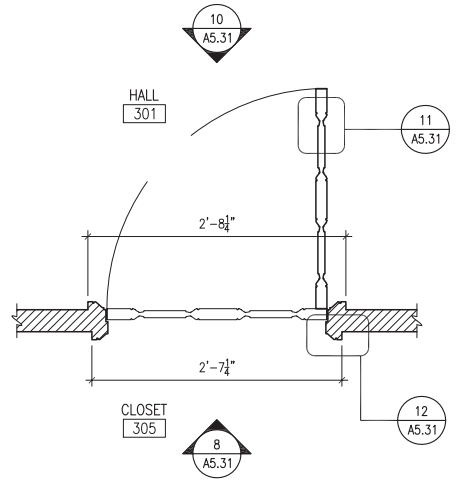
1 A5.31 PLAN DOOR 304 SCALE (A)



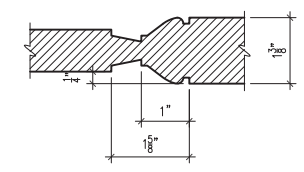
5 A5.31 DOOR PROFILE SCALE (B)



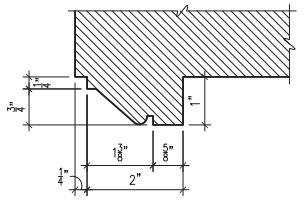
6 A5.31 DOOR TRIM SCALE (B)



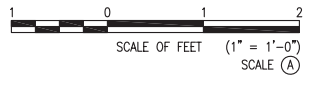
7 A5.31 PLAN DOOR 305 SCALE (A)



11 A5.31 DOOR PROFILE SCALE (B)



12 A5.31 DOOR TRIM SCALE (B)



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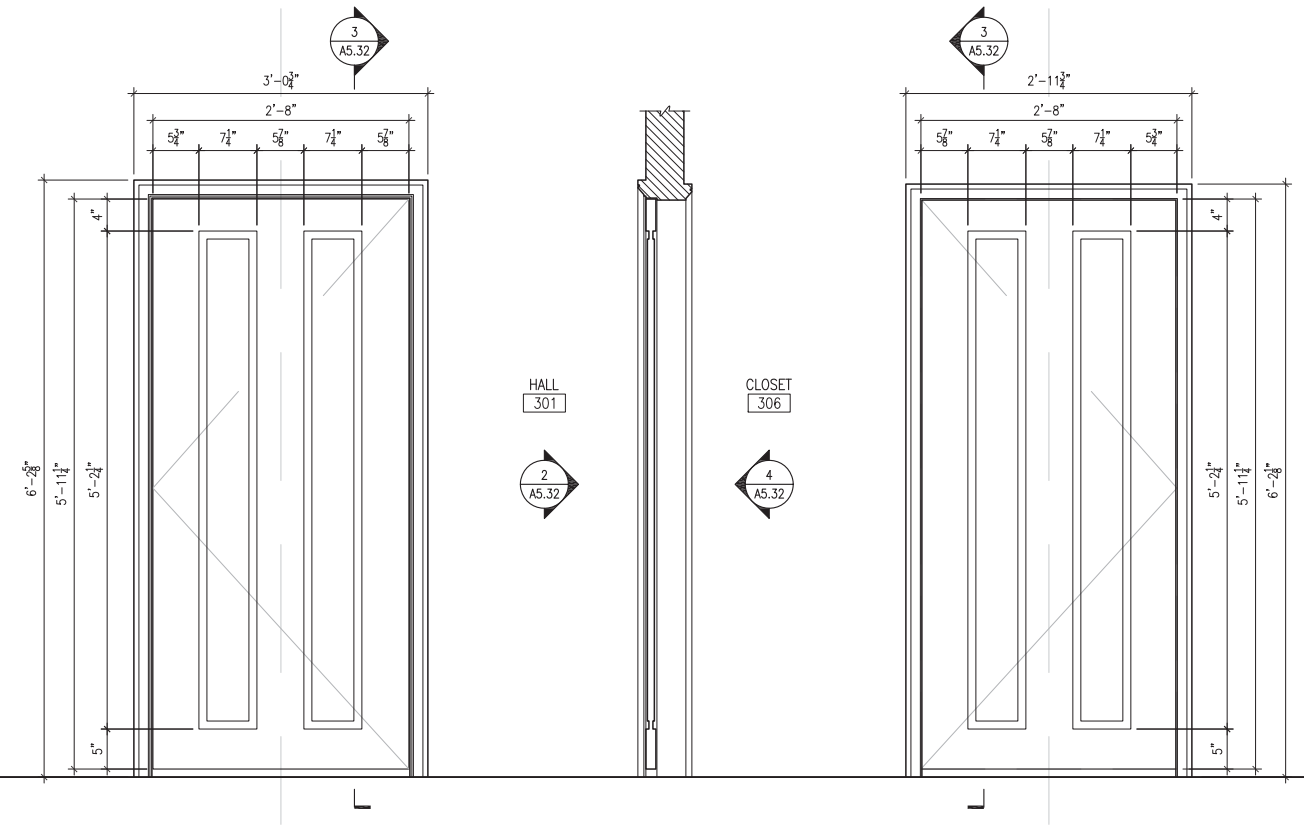
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DOOR 306

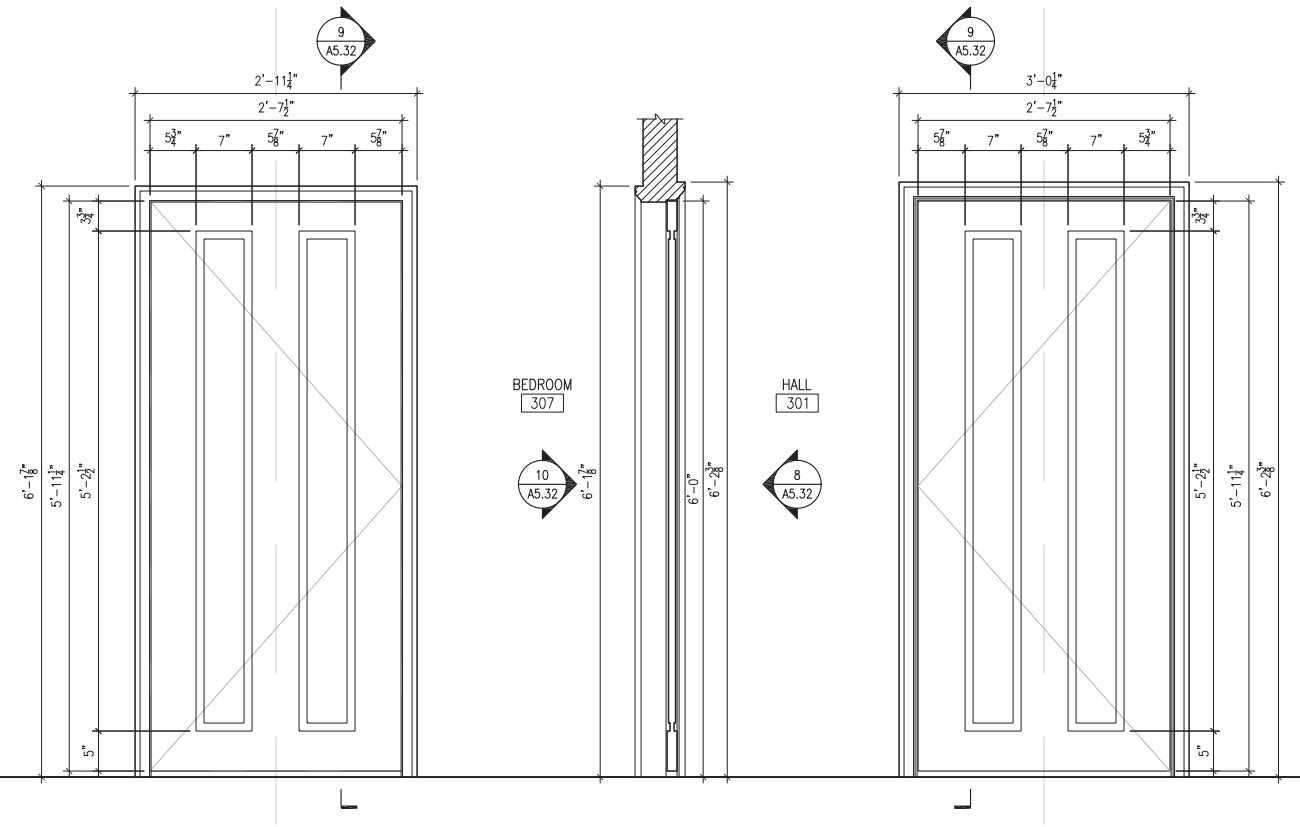


2 A5.32 EAST ELEVATION DOOR 306 SCALE (A)

3 A5.32 SECTION DOOR 306 SCALE (A)

4 A5.32 WEST ELEVATION DOOR 306 SCALE (A)

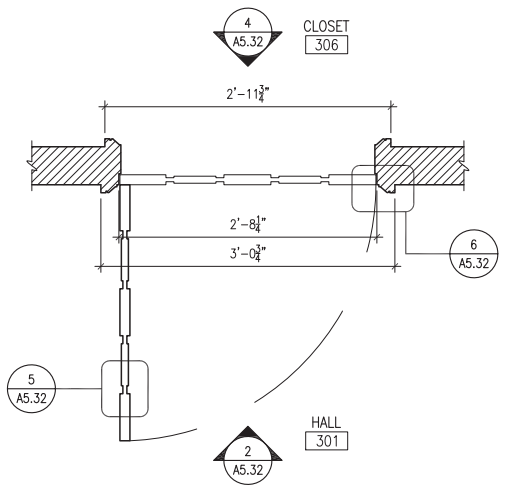
DOOR 307



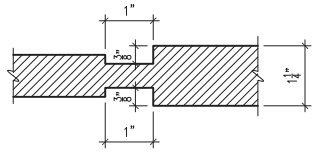
8 A5.32 NORTH ELEVATION DOOR 307 SCALE (A)

9 A5.32 SECTION DOOR 307 SCALE (A)

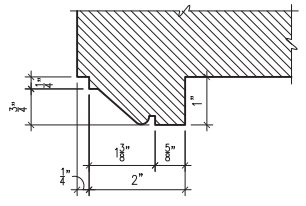
10 A5.32 SOUTH ELEVATION DOOR 307 SCALE (A)



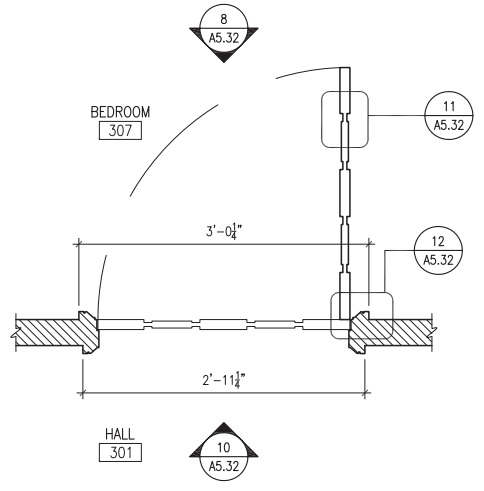
1 A5.32 PLAN DOOR 306 SCALE (A)



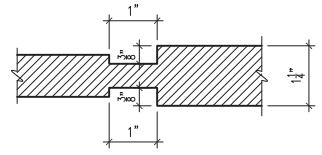
5 A5.32 DOOR PROFILE SCALE (B)



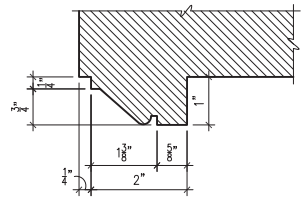
6 A5.32 DOOR TRIM SCALE (B)



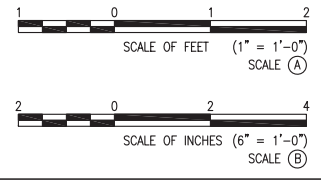
7 A5.32 PLAN DOOR 307 SCALE (A)



11 A5.32 DOOR PROFILE SCALE (B)



12 A5.32 DOOR TRIM SCALE (B)



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THIRD FLOOR DOOR DETAILS
306 & 307

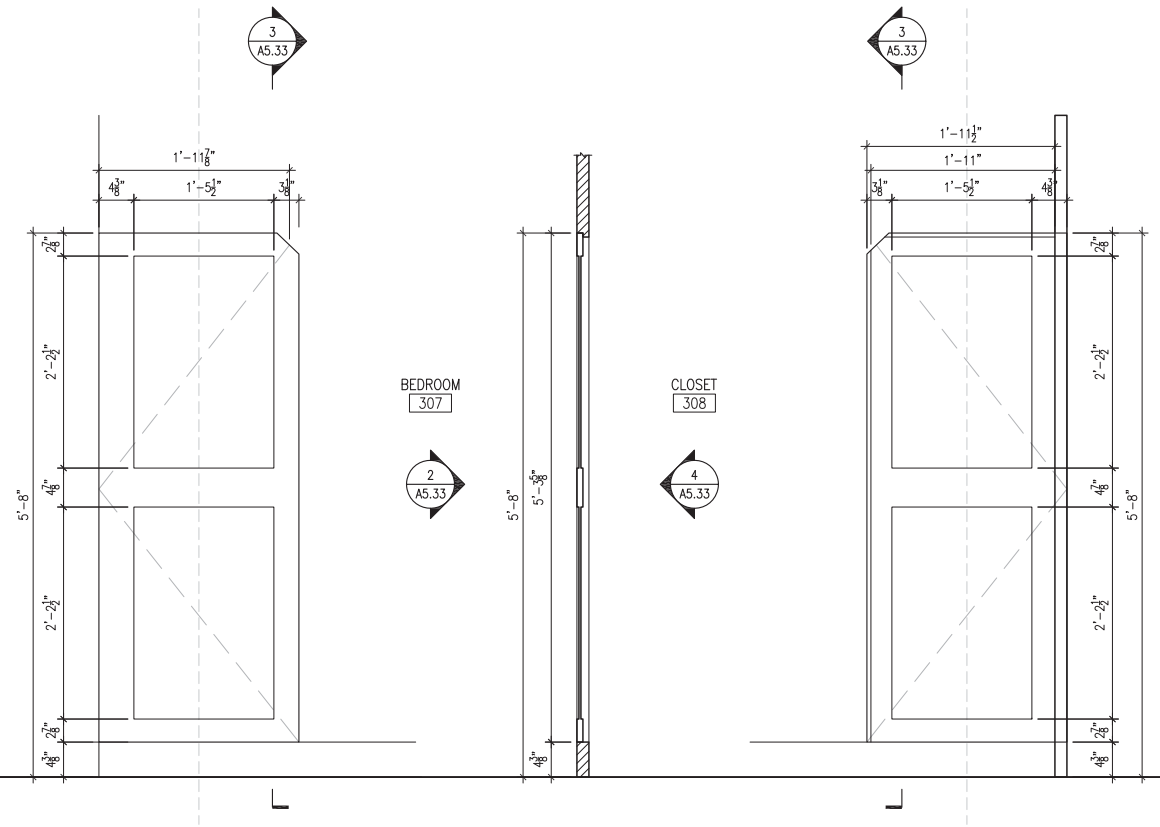
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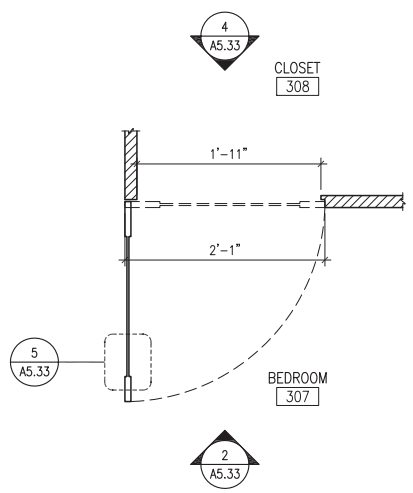
DOOR 308



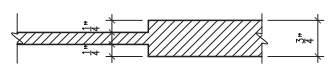
2 A5.33 SOUTH ELEVATION
DOOR 308
SCALE (A)

3 A5.33 SECTION
DOOR 308
SCALE (A)

4 A5.33 NORTH ELEVATION
DOOR 308
SCALE (A)



1 A5.33 PLAN
DOOR 308
SCALE (A)



5 A5.32 DOOR PROFILE
SCALE (B)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

2 0 2 4
SCALE OF INCHES (6" = 1'-0")
SCALE (B)

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TITLE OF SHEET
THIRD FLOOR DOOR DETAILS
308
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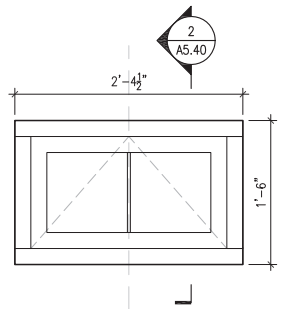
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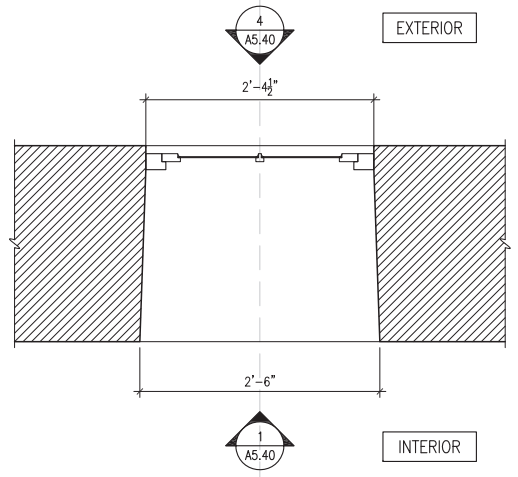
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WINDOW TYPE 1:
001, 002, 003, 004, 005, 006
011, 012, 013, 014, 015, 016

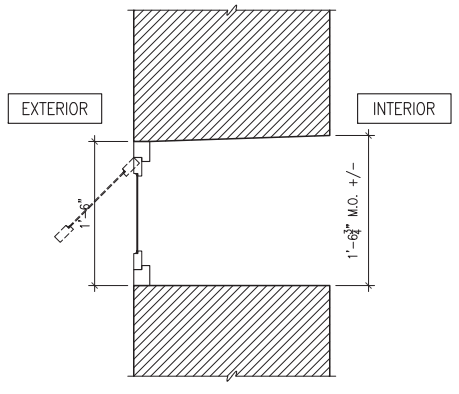
WINDOW TYPE 9:
007, 008, 009, 010
(SIMILAR TO WINDOW TYPE: 1 WITH PLYWOOD INFILL IN PLACE OF AWNING WINDOW SASH)



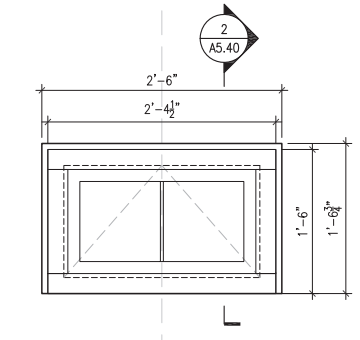
4 A5.40 EXTERIOR ELEVATION WINDOW TYPE 1 SCALE (A)



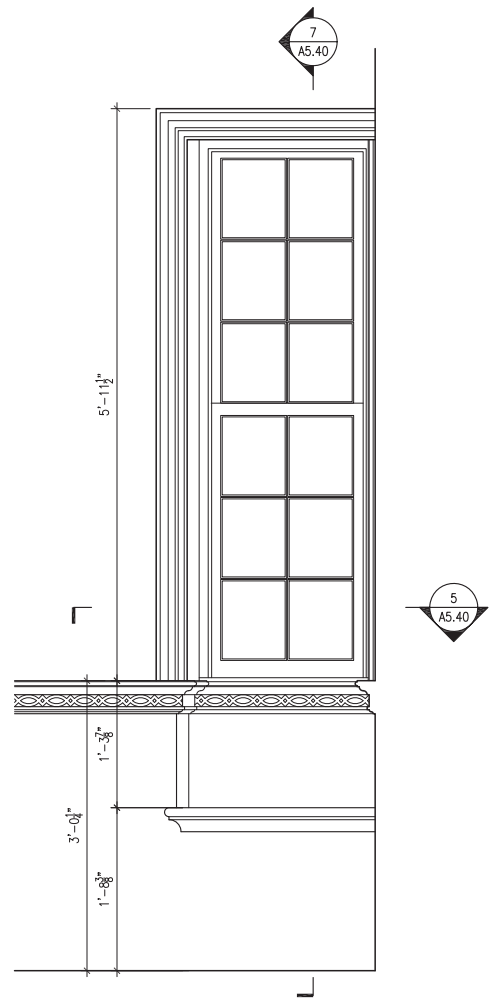
3 A5.40 PLAN WINDOW TYPE 1 SCALE (A)



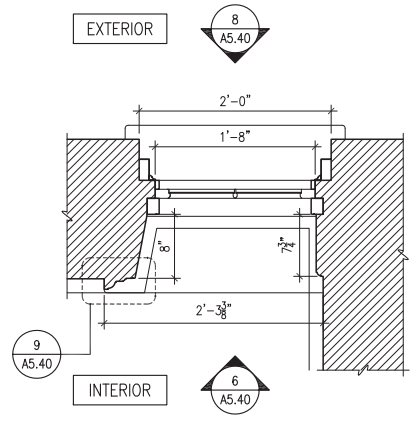
2 A5.40 SECTION WINDOW TYPE 1 SCALE (A)



1 A5.40 INTERIOR ELEVATION WINDOW TYPE 1 SCALE (A)

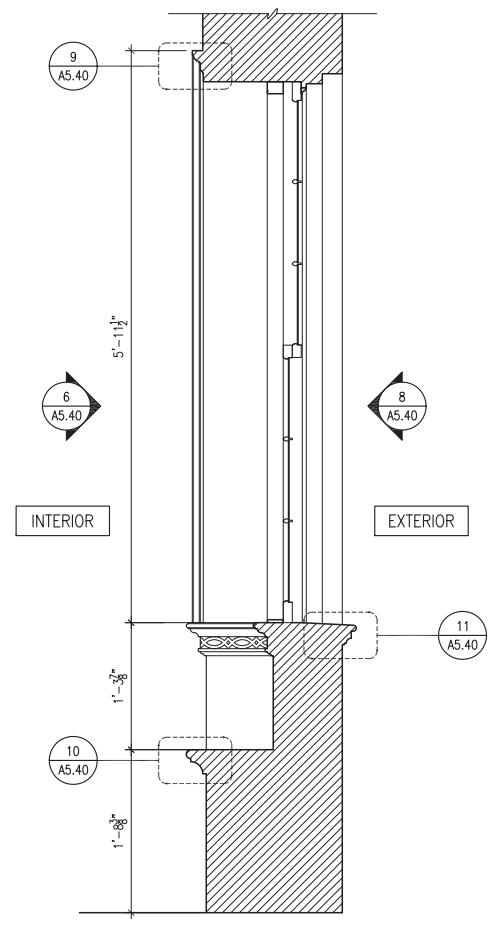


6 A5.40 INTERIOR ELEVATION WINDOW TYPE 2 SCALE (A)

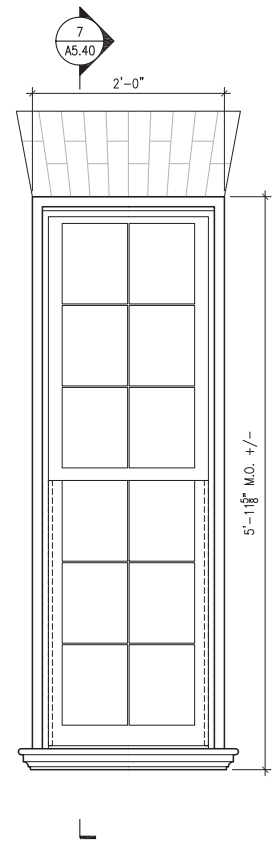


5 A5.40 PLAN WINDOW TYPE 2 SCALE (A)

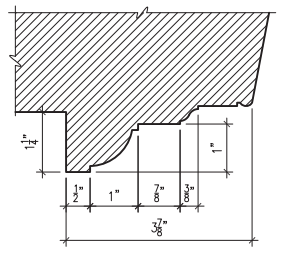
WINDOW TYPE 2:
103, 104, 115, 116



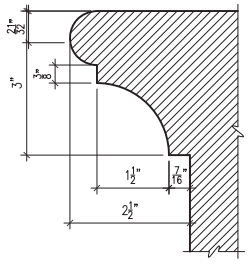
7 A5.40 SECTION WINDOW TYPE 2 SCALE (A)



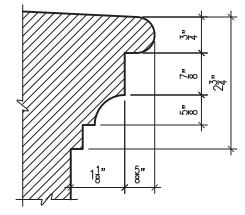
8 A5.40 EXTERIOR ELEVATION WINDOW TYPE 2 SCALE (A)



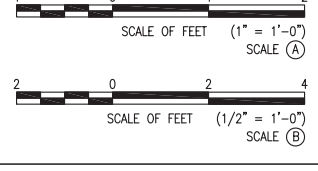
9 A5.40 WINDOW TRIM SCALE (B)



10 A5.40 INTERIOR SILL WINDOW SEAT SCALE (B)



11 A5.40 EXTERIOR WINDOW SILL SCALE (B)



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TYPE 1 & TYPE 2

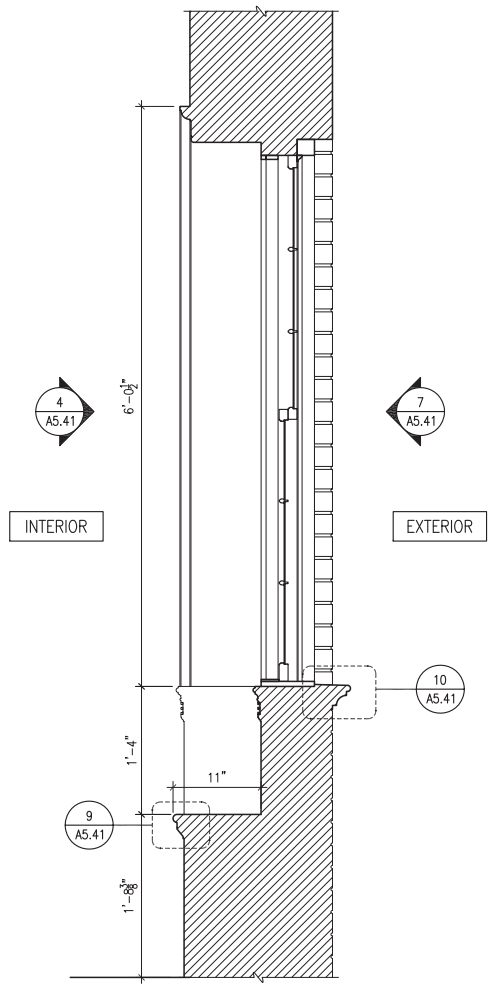
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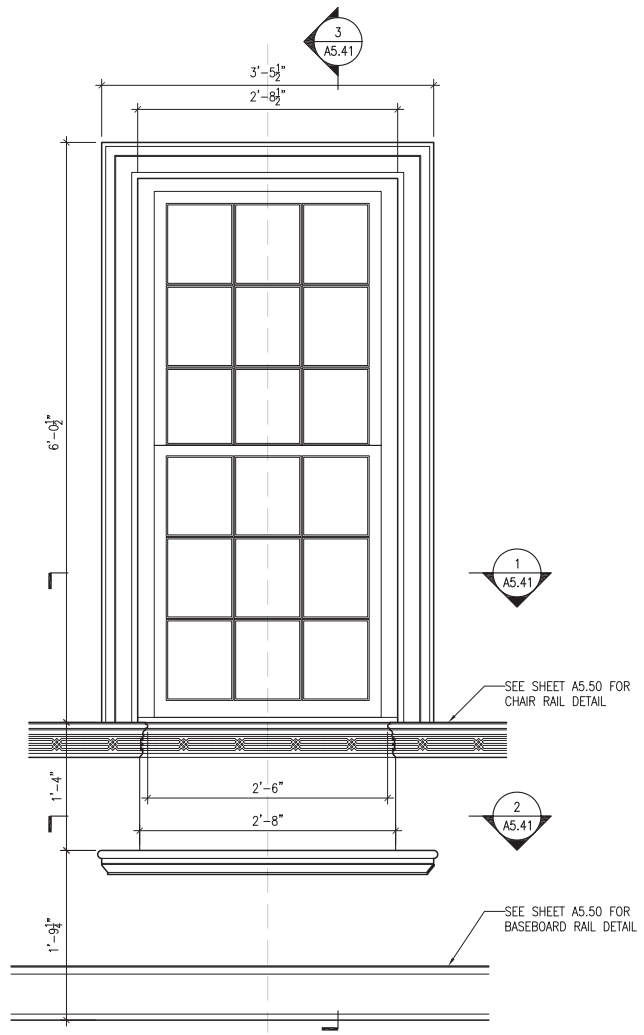
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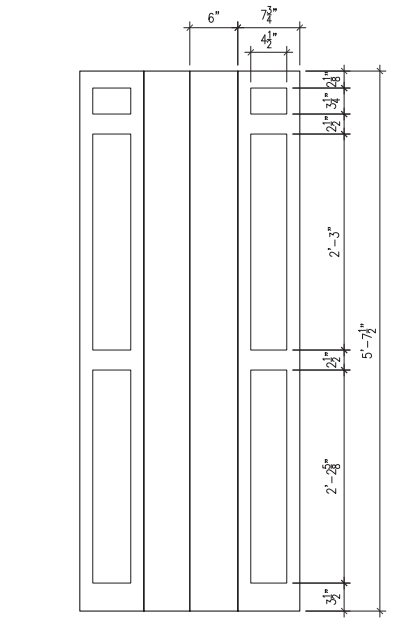
WINDOW TYPE 3A:
LIVING ROOM/ PARLOR
101, 102, 117, 118



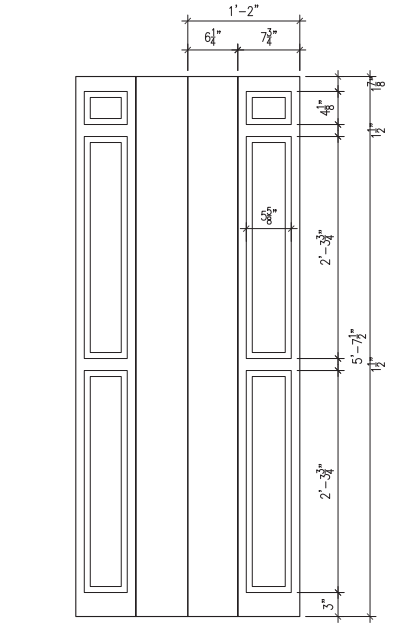
SECTION
3 A5.41 — WINDOW TYPE 3A
SCALE (A)



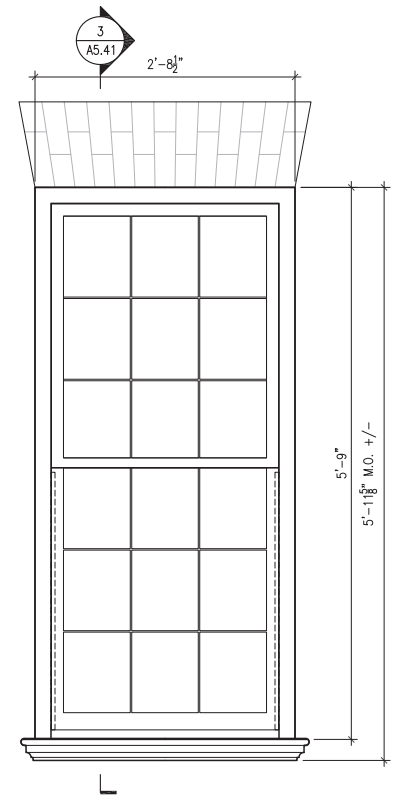
INTERIOR ELEVATION
4 A5.41 — WINDOW TYPE 3A
SCALE (A)



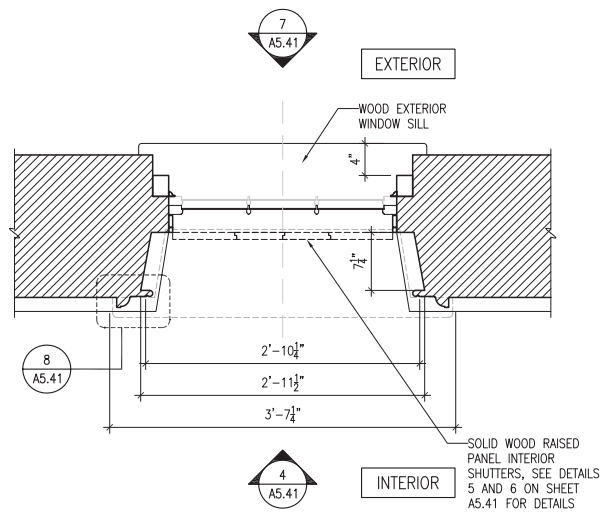
INTERIOR ELEVATION
INTERIOR WINDOW SHUTTERS
5 A5.41 — SCALE (A)



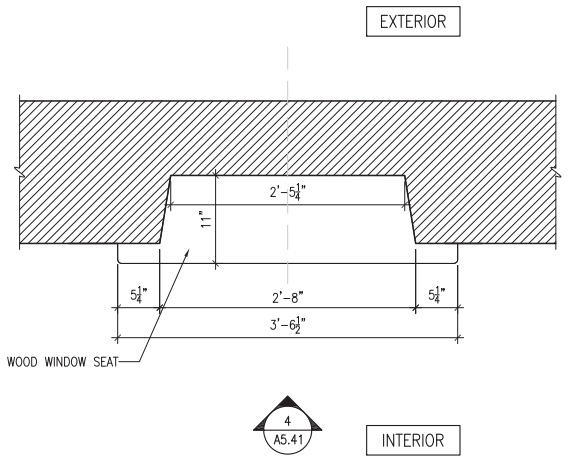
EXTERIOR ELEVATION
INTERIOR WINDOW SHUTTERS
6 A5.41 — SCALE (A)



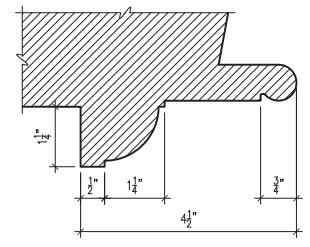
EXTERIOR ELEVATION
WINDOW TYPE 3A
7 A5.41 — SCALE (A)



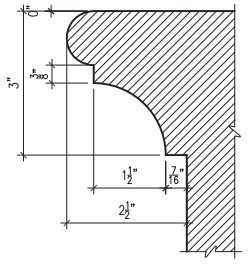
PLAN
1 A5.41 — WINDOW TYPE 3A
SCALE (A)



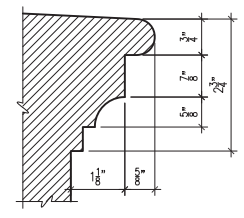
PLAN
2 A5.41 — WINDOW TYPE 3A
SCALE (A)



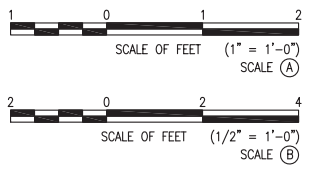
WINDOW TRIM
8 A5.41 — SCALE (B)



INTERIOR SILL
WINDOW SEAT
9 A5.41 — SCALE (B)

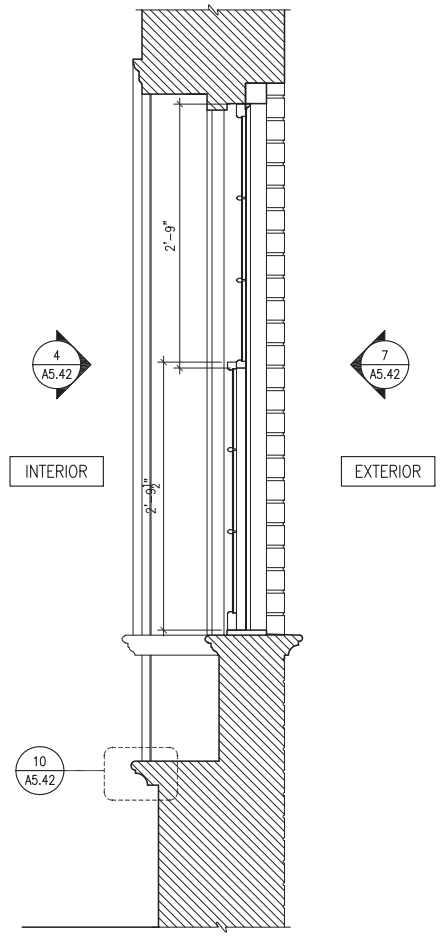


EXTERIOR
WINDOW SILL
10 A5.41 — SCALE (B)

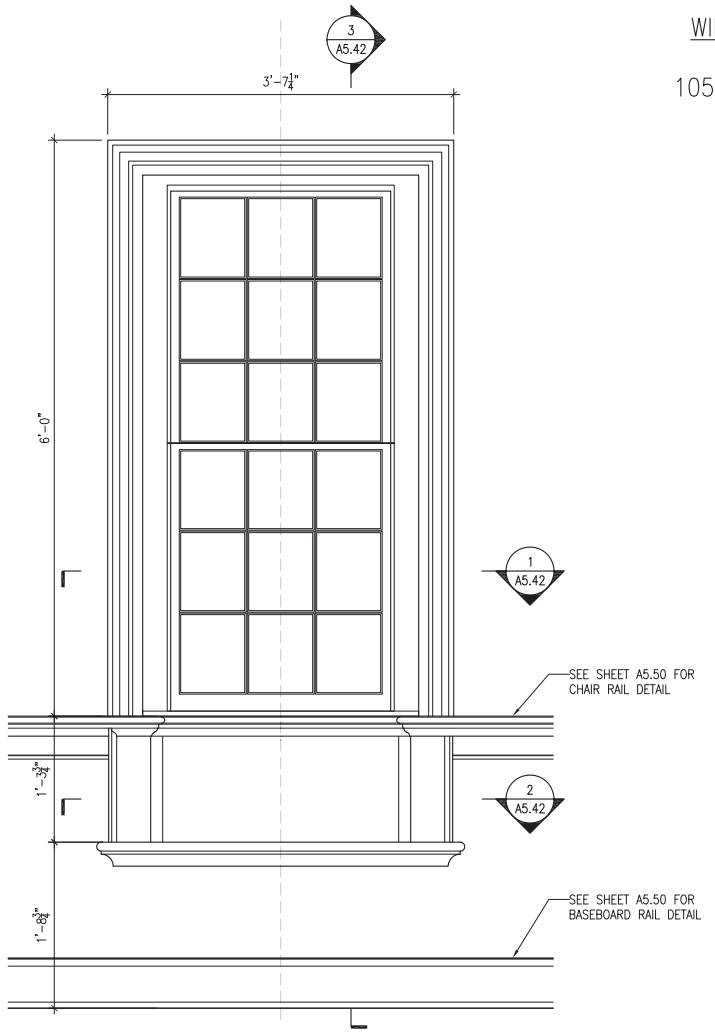


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	CADD: SP	A5.41	WINDOW DETAILS TYPE 3A	PKG. NO. — SHEET 72
	TECH REVIEW: SP			OF 115
	DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	

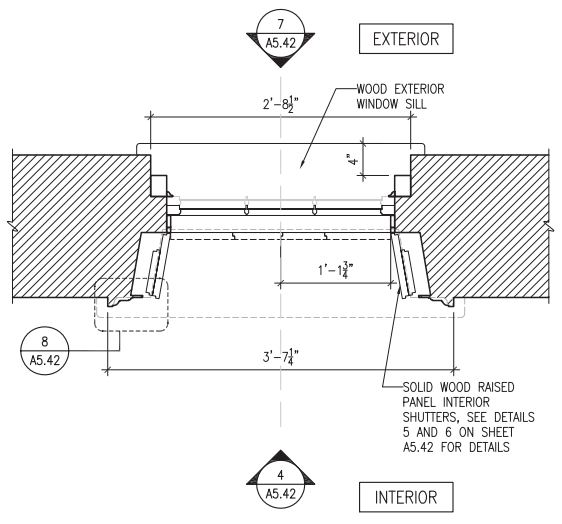
WINDOW TYPE 3B:
DINING ROOM
105, 106, 113, 114



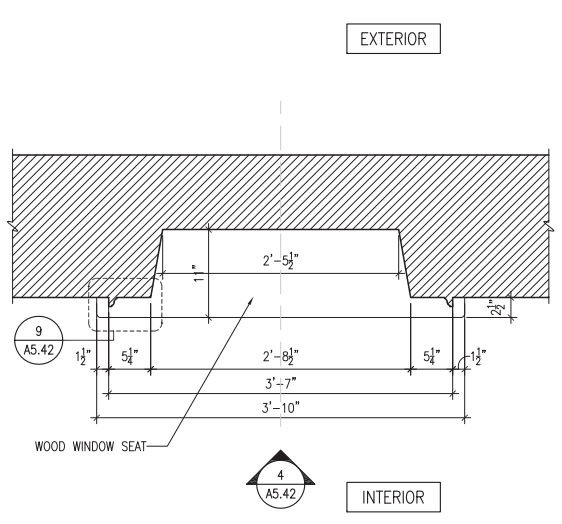
SECTION
WINDOW TYPE 3B
3 / A5.42 — SCALE (A)



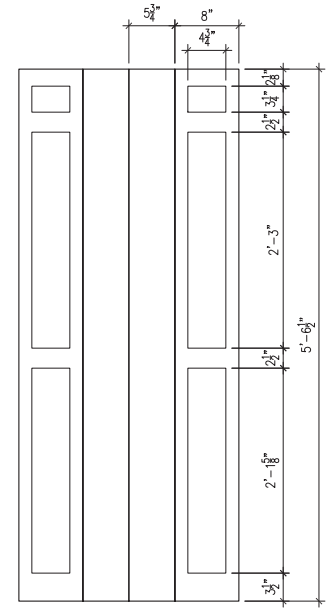
INTERIOR ELEVATION
WINDOW TYPE 3B
4 / A5.42 — SCALE (A)



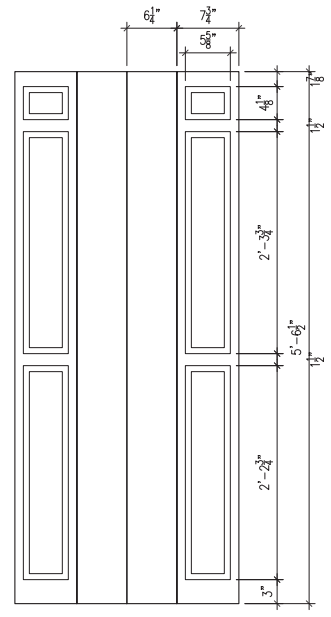
PLAN
WINDOW TYPE 3B
1 / A5.42 — SCALE (A)



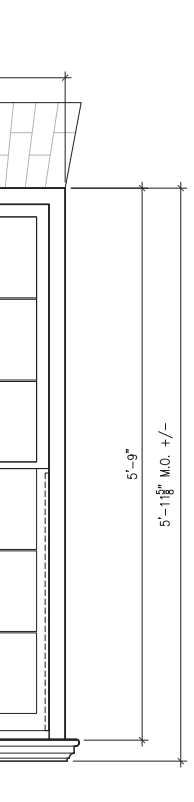
PLAN
WINDOW TYPE 3B
2 / A5.42 — SCALE (A)



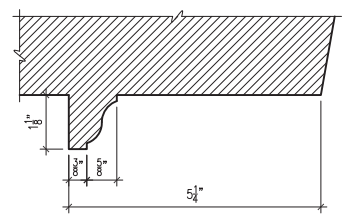
INTERIOR ELEVATION
INTERIOR WINDOW SHUTTERS
5 / A5.42 — SCALE (A)



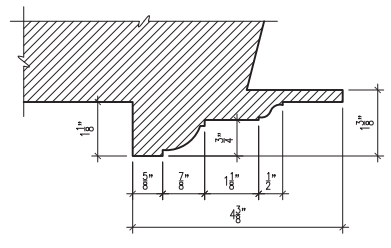
EXTERIOR ELEVATION
INTERIOR WINDOW SHUTTERS
6 / A5.42 — SCALE (A)



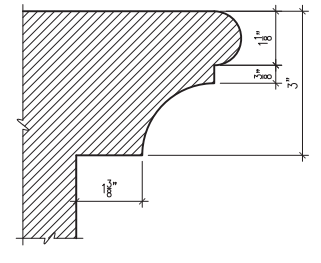
EXTERIOR ELEVATION
WINDOW TYPE 3B
7 / A5.42 — SCALE (A)



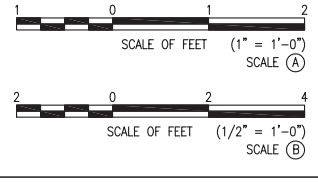
TRIM @ WINDOW SEAT
9 / A5.42 — SCALE B



WINDOW TRIM @ SHUTTERS
8 / A5.42 — SCALE B

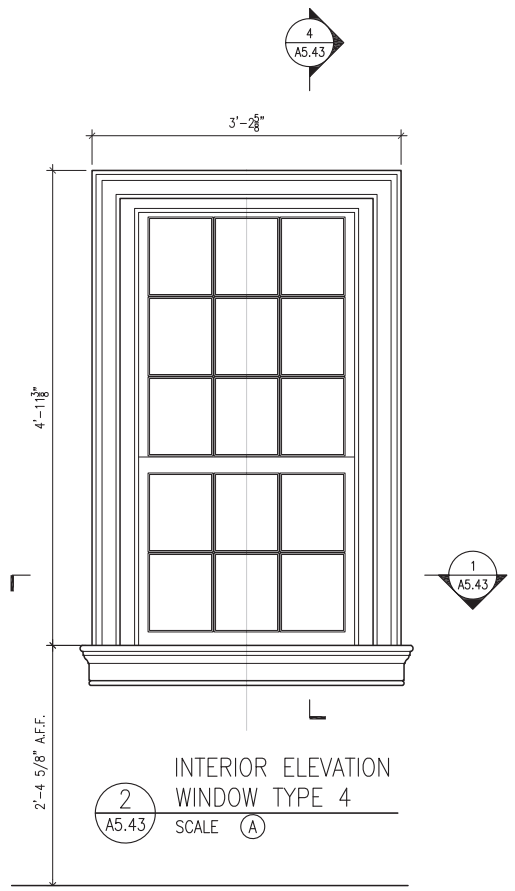


TRIM @ WINDOW SEAT
10 / A5.42 — SCALE B

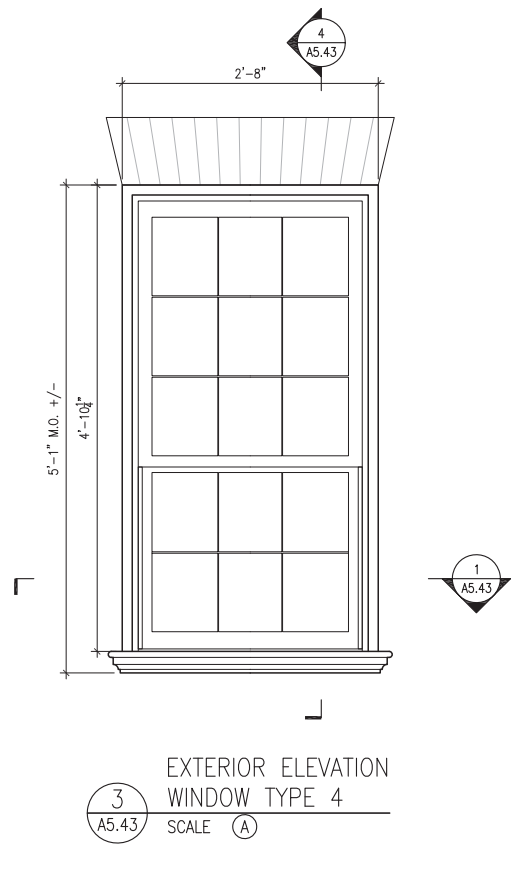


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	CADD: SP	A5.42	WINDOW DETAILS TYPE 3B	PKG. NO. — SHEET 73
	TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115
	DATE: 9/25/12			

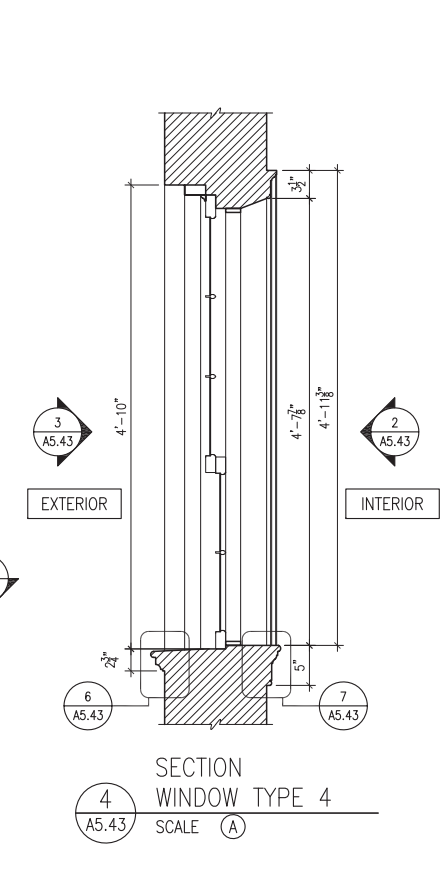
WINDOW TYPE 4:
201, 202, 204, 206, 207
215, 216, 218, 220, 221



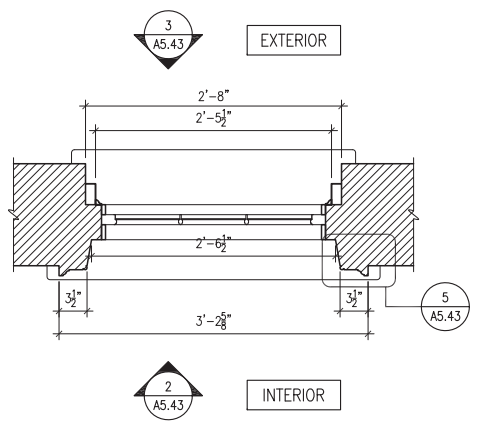
2 A5.43 INTERIOR ELEVATION WINDOW TYPE 4
SCALE (A)



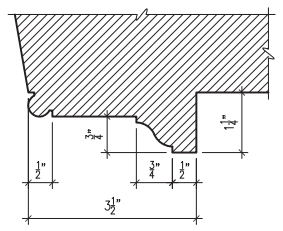
3 A5.43 EXTERIOR ELEVATION WINDOW TYPE 4
SCALE (A)



4 A5.43 SECTION WINDOW TYPE 4
SCALE (A)



1 A5.43 PLAN WINDOW TYPE 4
SCALE (A)

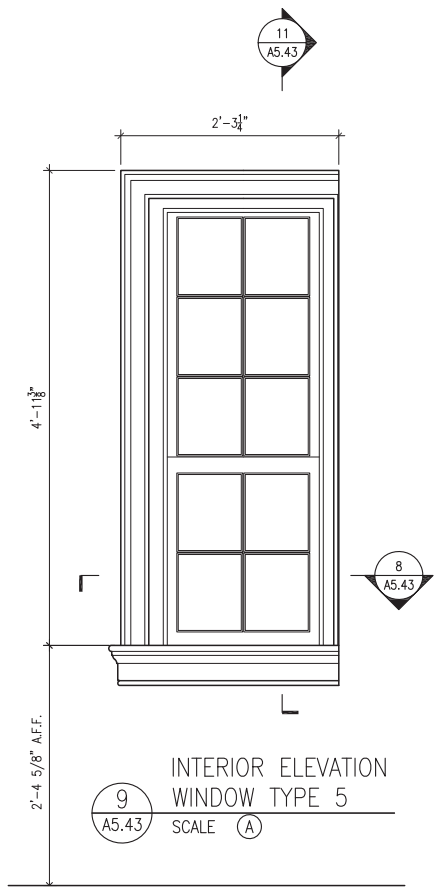


6 A5.43 EXTERIOR WINDOW SILL
SCALE (B)

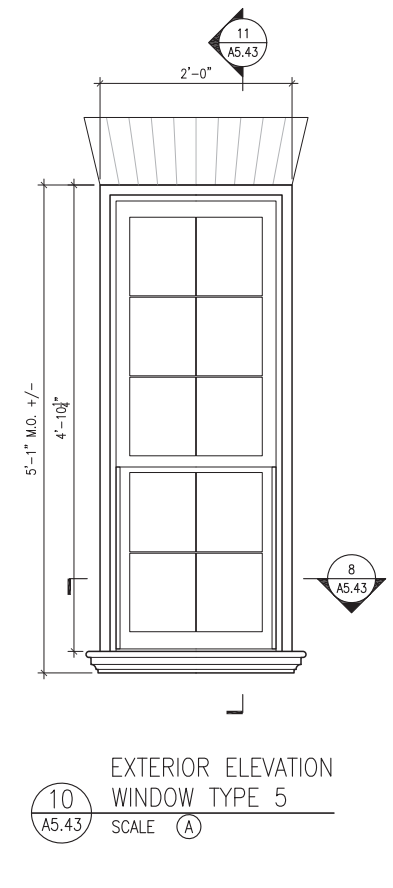
7 A5.43 INTERIOR WINDOW SILL
SCALE (B)

5 A5.43 WINDOW TRIM
SCALE (B)

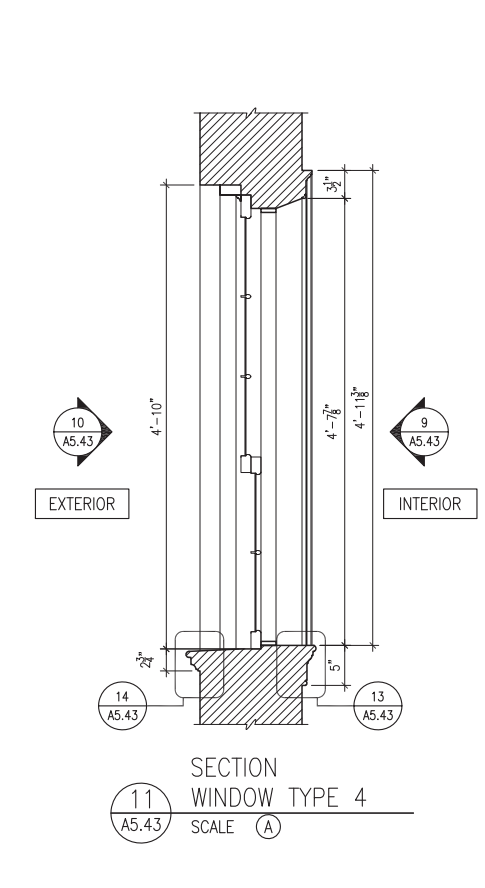
WINDOW TYPE 5:
203, 205, 217, 219



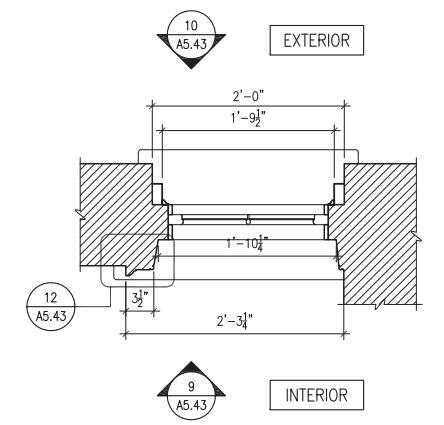
9 A5.43 INTERIOR ELEVATION WINDOW TYPE 5
SCALE (A)



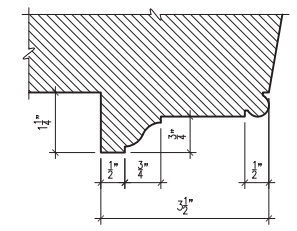
10 A5.43 EXTERIOR ELEVATION WINDOW TYPE 5
SCALE (A)



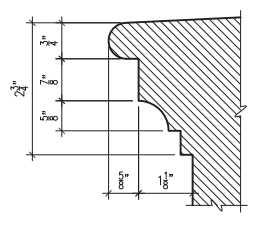
11 A5.43 SECTION WINDOW TYPE 4
SCALE (A)



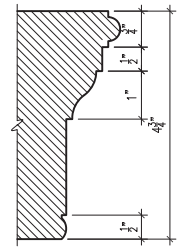
8 A5.43 PLAN WINDOW TYPE 5
SCALE (A)



12 A5.43 WINDOW TRIM
SCALE (B)



14 A5.43 EXTERIOR WINDOW SILL
SCALE (B)

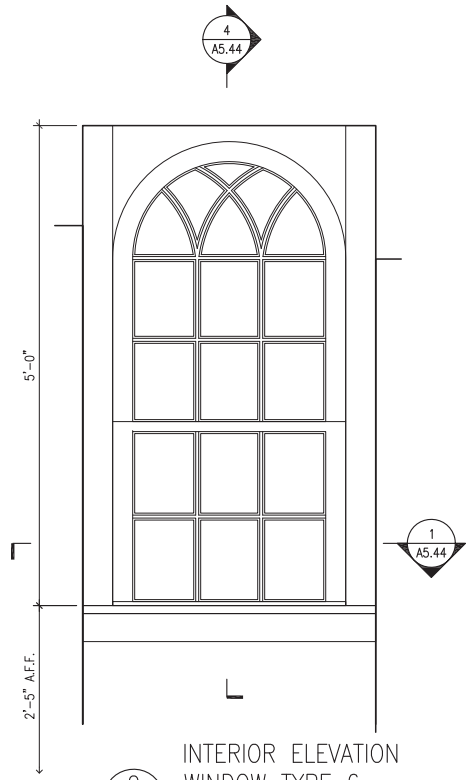


13 A5.43 INTERIOR WINDOW SILL
SCALE (B)

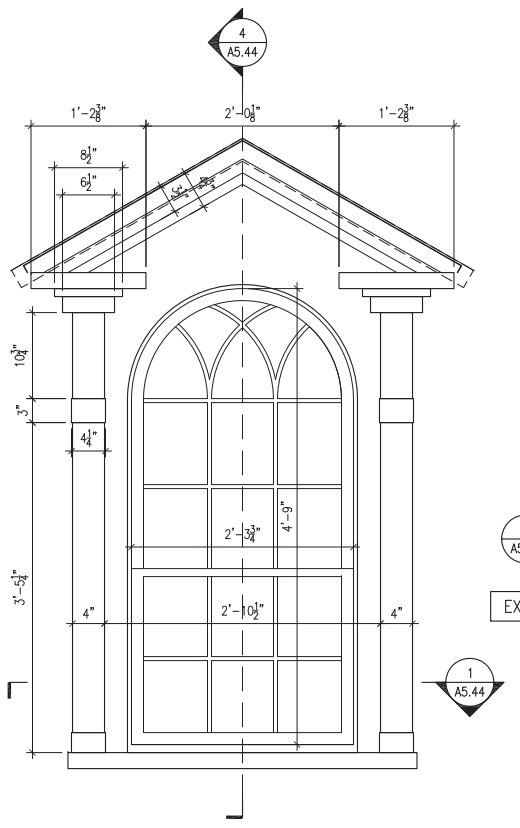


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	CADD: SP	A5.43	WINDOW DETAILS TYPE 4 & TYPE 5	PKG. NO. — SHEET 74
	TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115
	DATE: 9/25/12			

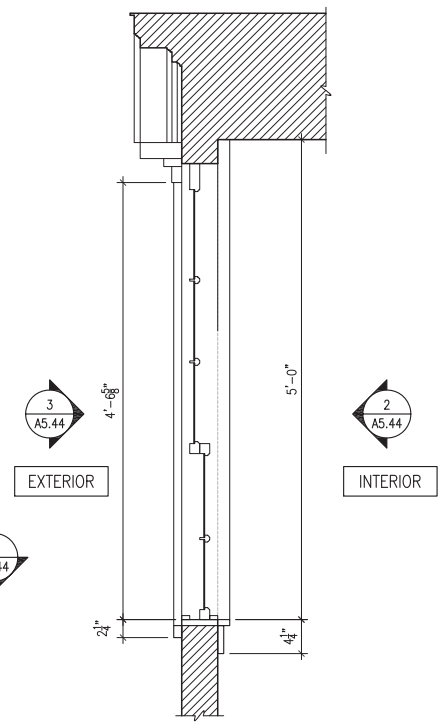
WINDOW TYPE 6:
301, 303



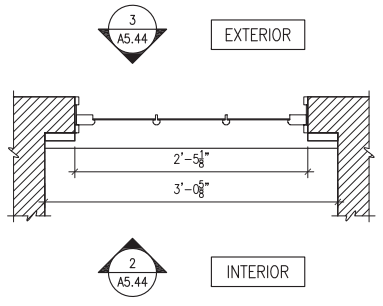
2 A5.44 — INTERIOR ELEVATION WINDOW TYPE 6
SCALE (A)



3 A5.44 — EXTERIOR ELEVATION WINDOW TYPE 6
SCALE (A)

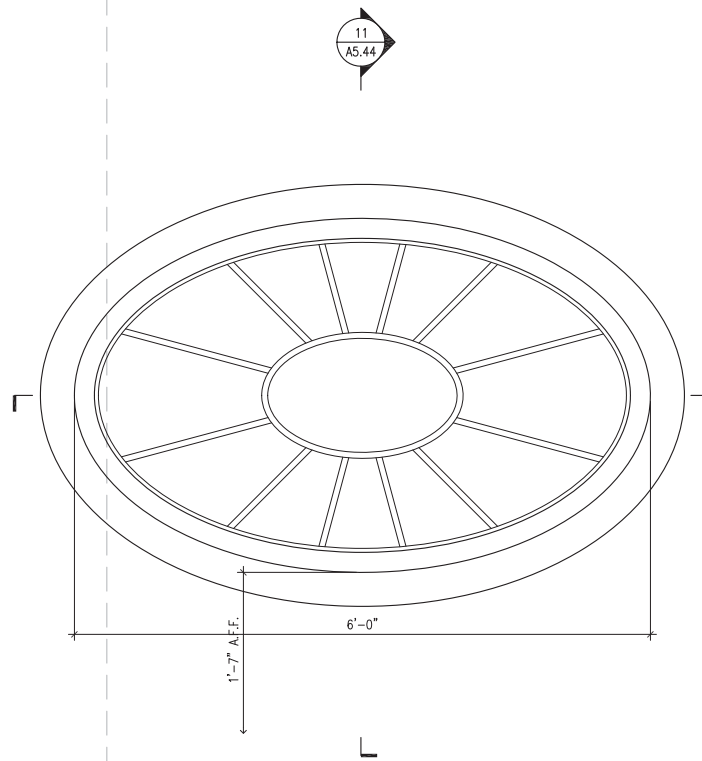


4 A5.44 — SECTION WINDOW TYPE 6
SCALE (A)

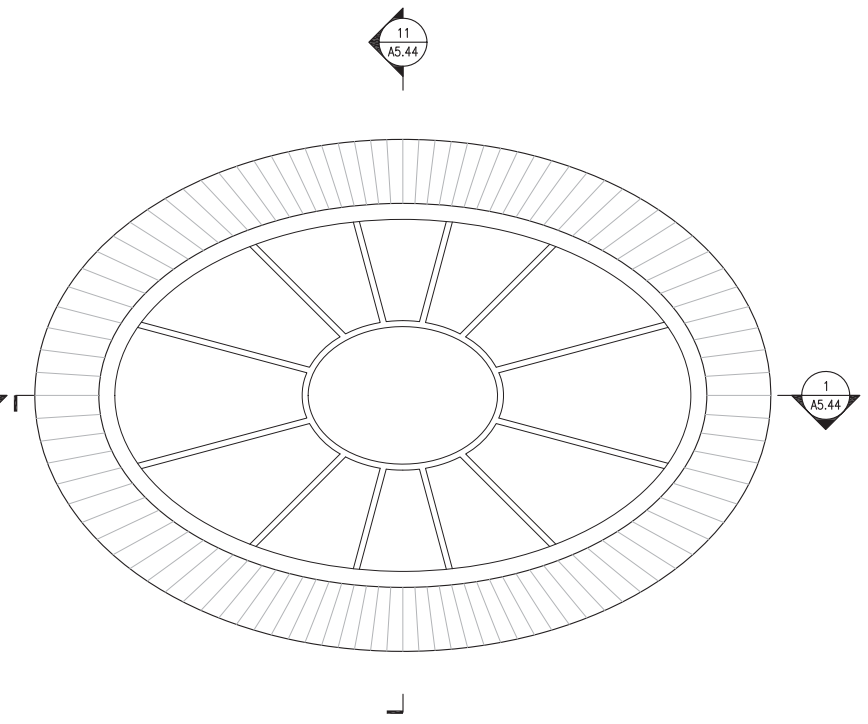


1 A5.44 — PLAN WINDOW TYPE 6
SCALE (A)

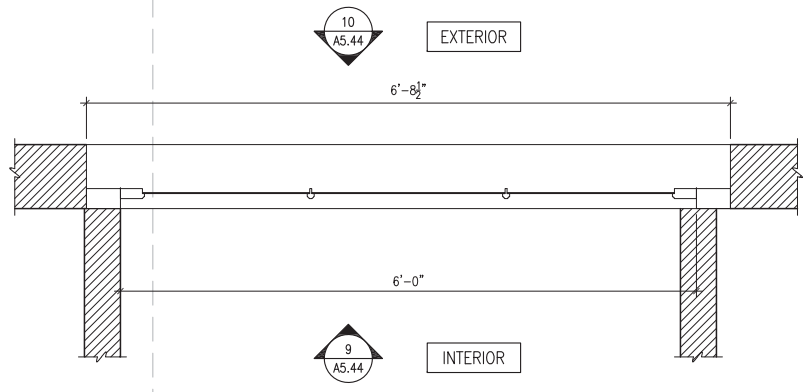
WINDOW TYPE 7:
302



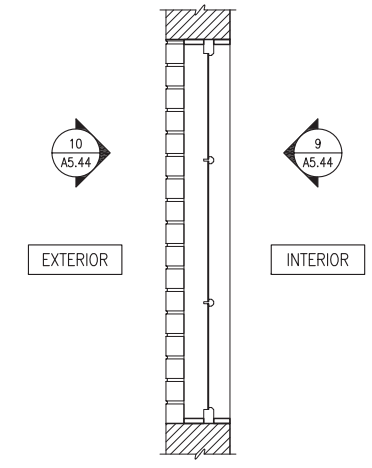
9 A5.44 — INTERIOR ELEVATION WINDOW TYPE 7
SCALE (A)



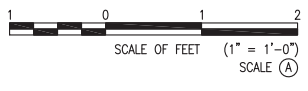
10 A5.44 — EXTERIOR ELEVATION WINDOW TYPE 7
SCALE (A)



8 A5.44 — PLAN WINDOW TYPE 7
SCALE (A)



11 A5.44 — SECTION WINDOW TYPE 7
SCALE (A)



PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

DESIGNED:
CADD: SP
TECH REVIEW: SP
DATE: 9/25/12

SUB SHEET NO.
A5.44

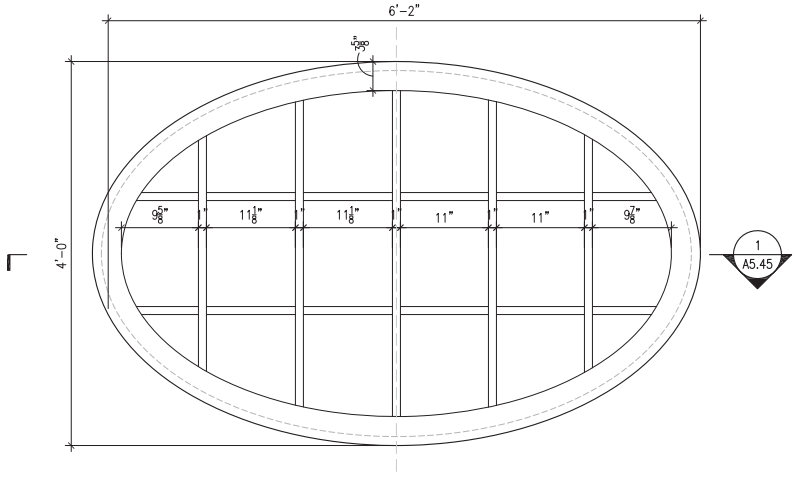
TITLE OF SHEET
WINDOW DETAILS
TYPE 6 & TYPE 7
HARMONY HALL: HISTORIC STRUCTURE REPORT

DRAWING NO.
899
116834

PKG. NO.

SHEET
75
OF 115

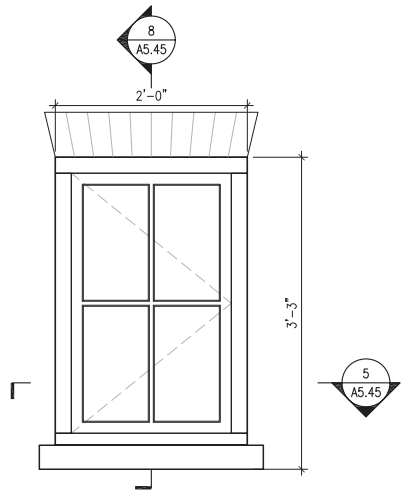
WINDOW TYPE 7A:
302
(PREVIOUS WINDOW SASH, STORED IN BASEMENT, ROOM 002–CORRIDOR)



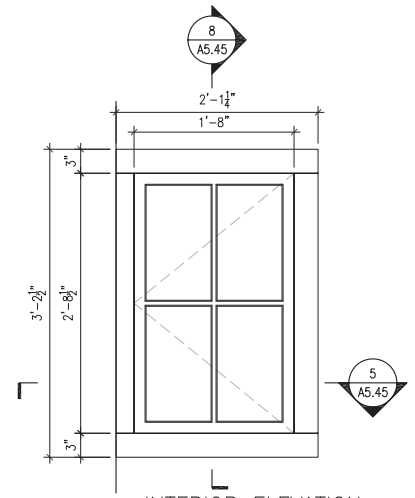
2 A5.45 INTERIOR ELEVATION WINDOW TYPE 7A
SCALE (A)

1 A5.45 PLAN WINDOW TYPE 7A
SCALE (A)

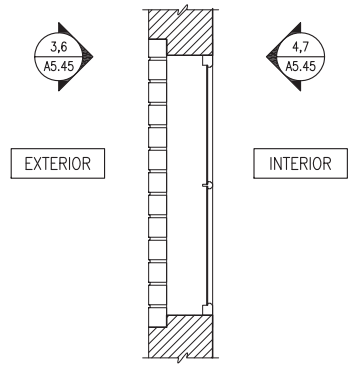
WINDOW TYPE 8:
304 & 305 OPP.HD.



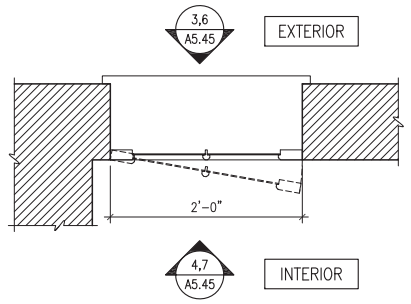
6 A5.45 EXTERIOR ELEVATION WINDOW TYPE 8
SCALE (A)



7 A5.45 INTERIOR ELEVATION WINDOW TYPE 8
SCALE (A)

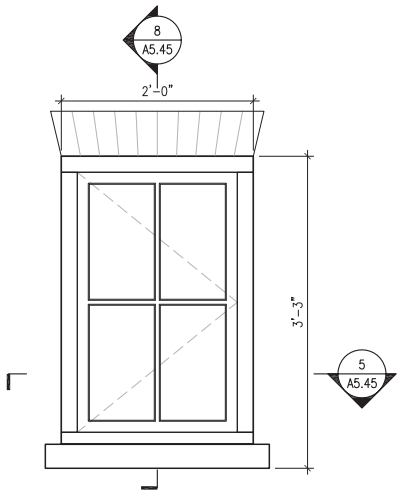


8 A5.45 SECTION WINDOW TYPE 8
SCALE (A)

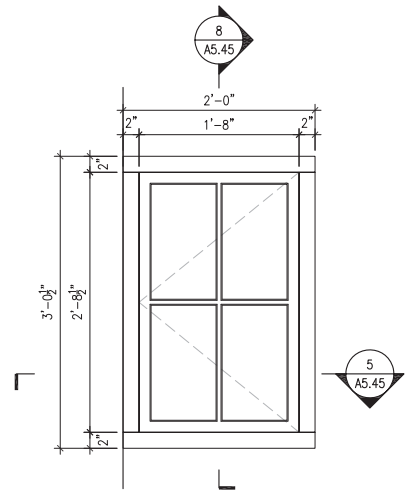


5 A5.45 PLAN WINDOW TYPE 8
SCALE (A)

WINDOW TYPE 8A:
306 OPP.HD. & 307



3 A5.45 EXTERIOR ELEVATION WINDOW TYPE 8
SCALE (A)



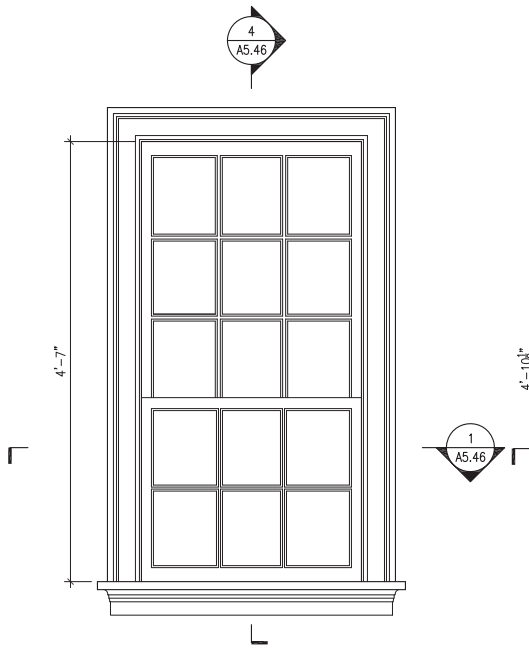
4 A5.45 INTERIOR ELEVATION WINDOW TYPE 8
SCALE (A)



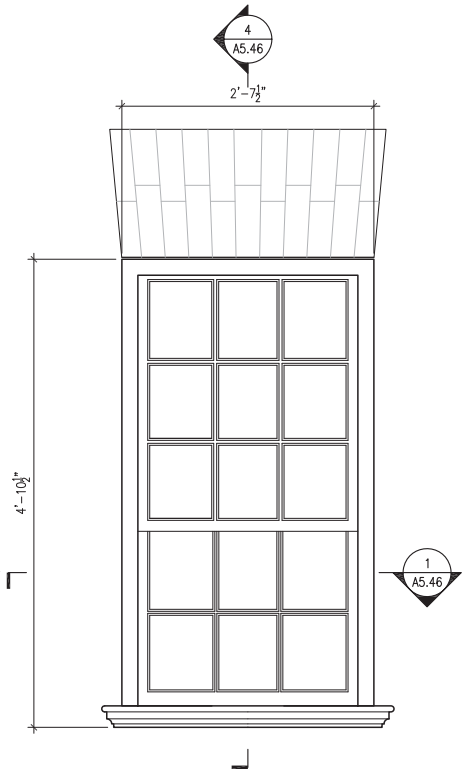
SCALE OF FEET (1" = 1'-0")
SCALE (A)

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		CADD: SP			PKG. NO.
		TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	SHEET 76
		DATE: 9/25/12			OF 115

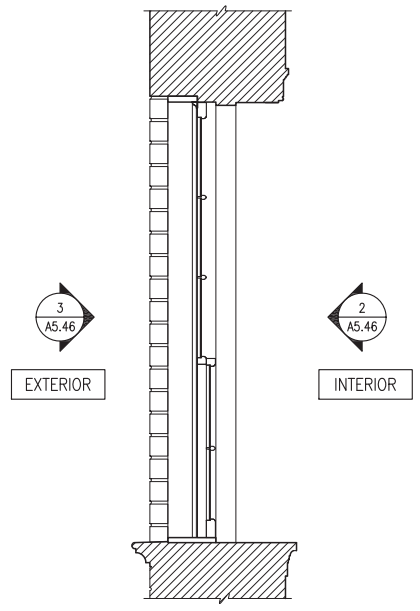
WINDOW TYPE 10:
107, 108



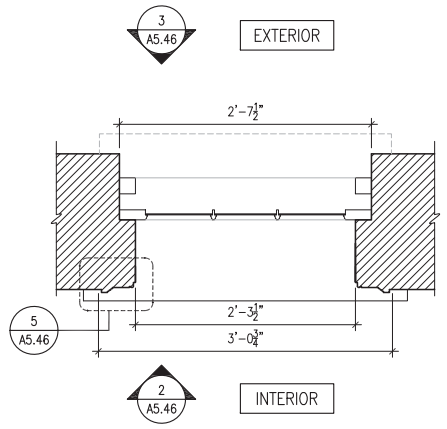
2 A5.46 INTERIOR ELEVATION WINDOW TYPE 10
SCALE (A)



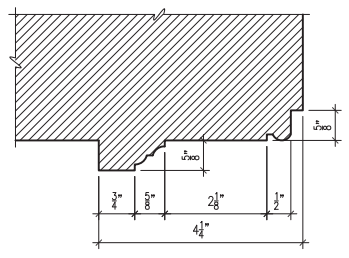
3 A5.46 EXTERIOR ELEVATION WINDOW TYPE 10
SCALE (A)



4 A5.46 SECTION WINDOW TYPE 10
SCALE (A)

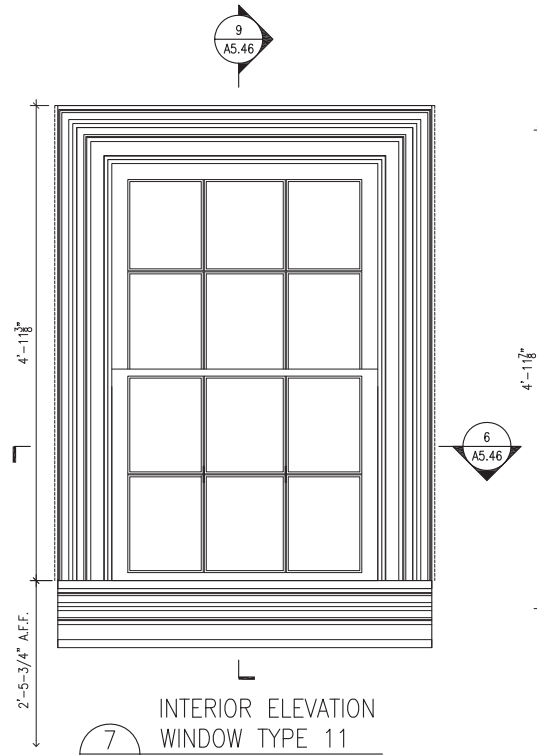


1 A5.46 PLAN WINDOW TYPE 10
SCALE (A)

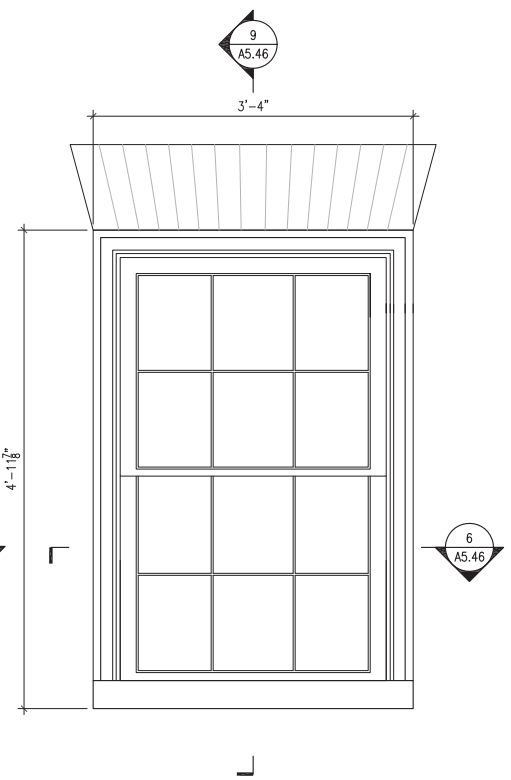


5 A5.15 WINDOW TRIM
SCALE (B)

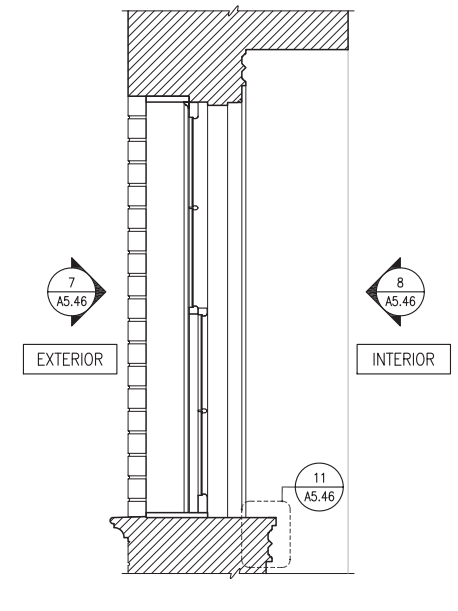
WINDOW TYPE 11:
112



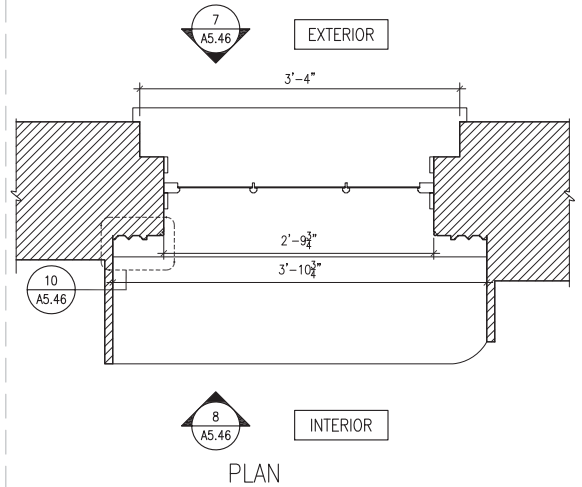
7 A5.46 INTERIOR ELEVATION WINDOW TYPE 11
SCALE (A)



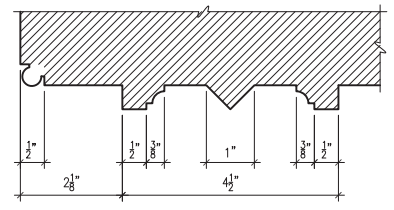
8 A5.46 EXTERIOR ELEVATION WINDOW TYPE 11
SCALE (A)



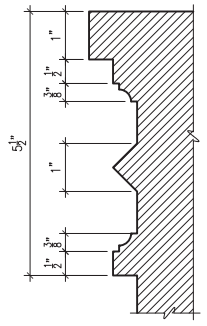
9 A5.46 SECTION WINDOW TYPE 11
SCALE (A)



6 A5.46 PLAN WINDOW TYPE 11
SCALE (A)



10 A5.46 WINDOW TRIM
SCALE (B)



11 A5.46 WINDOW SILL
SCALE (B)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (B)

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TITLE OF SHEET
WINDOW DETAILS
TYPE 10 & TYPE 11

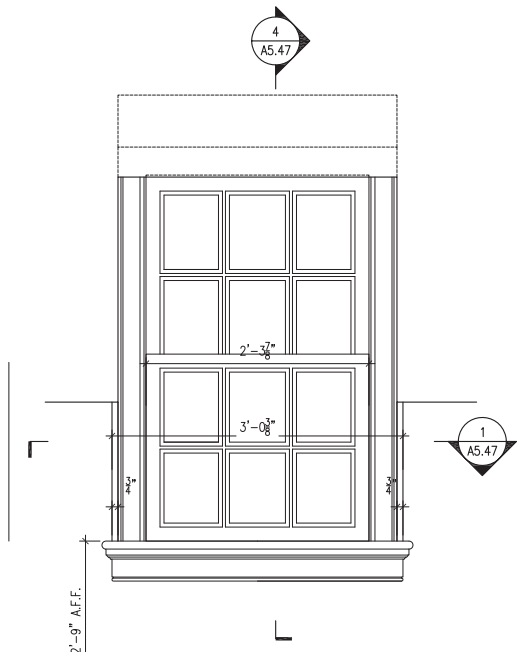
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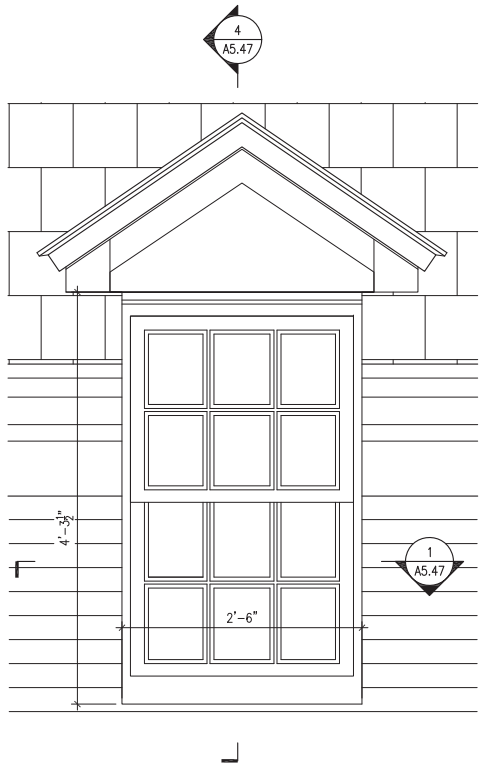
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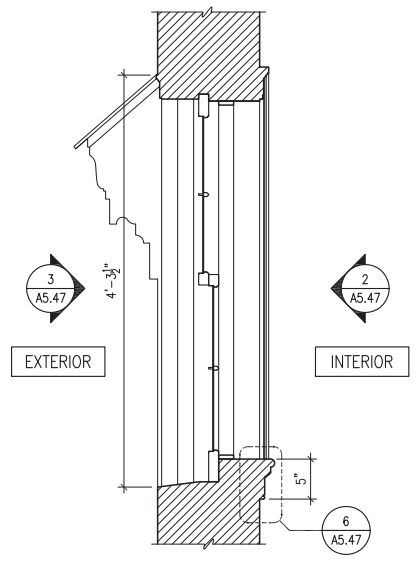
WINDOW TYPE 12:
208, 213, 214



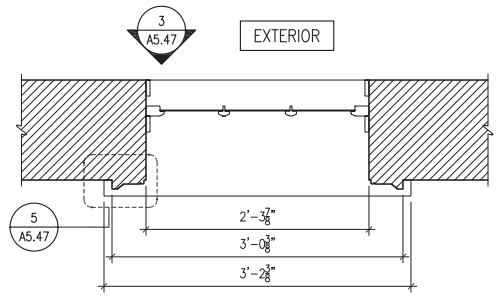
2 A5.47 INTERIOR ELEVATION WINDOW TYPE 12
SCALE (A)



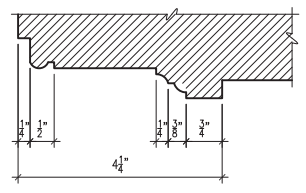
3 A5.47 EXTERIOR ELEVATION WINDOW TYPE 12
SCALE (A)



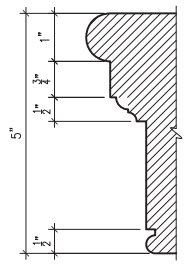
4 A5.47 SECTION WINDOW TYPE 12
SCALE (A)



1 A5.47 PLAN WINDOW TYPE 12
SCALE (A)

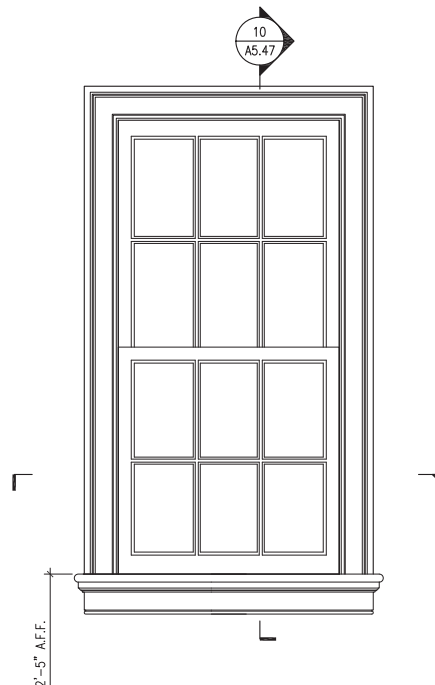


5 A5.47 WINDOW TRIM
SCALE (B)

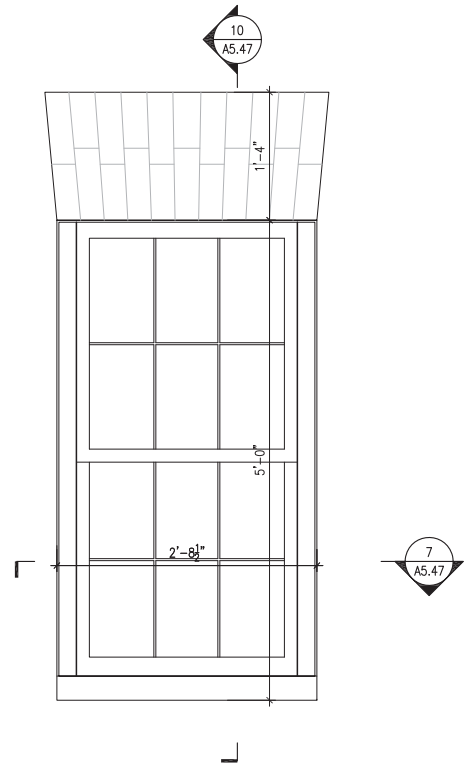


6 A5.47 WINDOW SILL
SCALE (B)

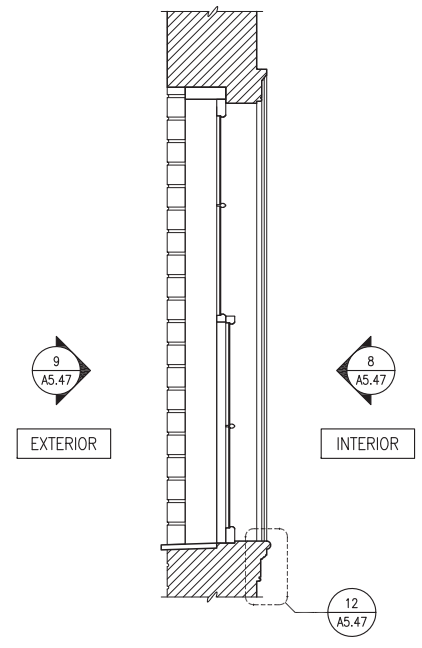
WINDOW TYPE 13:
109, 110, 111



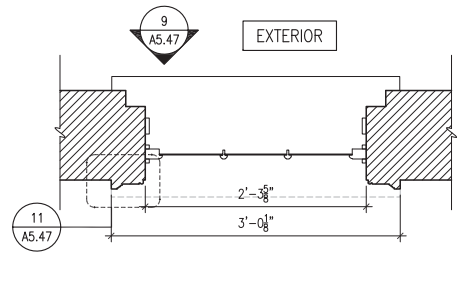
8 A5.47 INTERIOR ELEVATION WINDOW TYPE 13
SCALE (A)



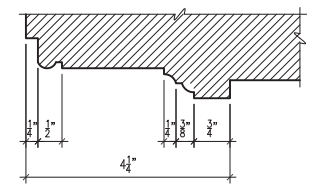
9 A5.47 EXTERIOR ELEVATION WINDOW TYPE 13
SCALE (A)



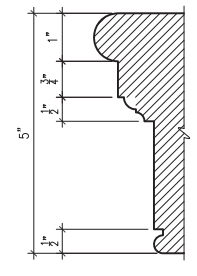
10 A5.47 SECTION WINDOW TYPE 13
SCALE (A)



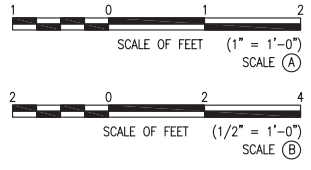
7 A5.47 PLAN WINDOW TYPE 13
SCALE (A)



11 A5.47 WINDOW TRIM
SCALE (B)



12 A5.47 WINDOW SILL
SCALE (B)



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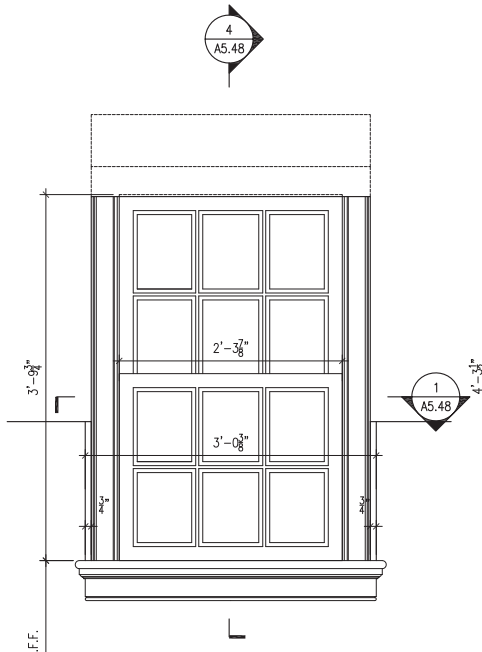
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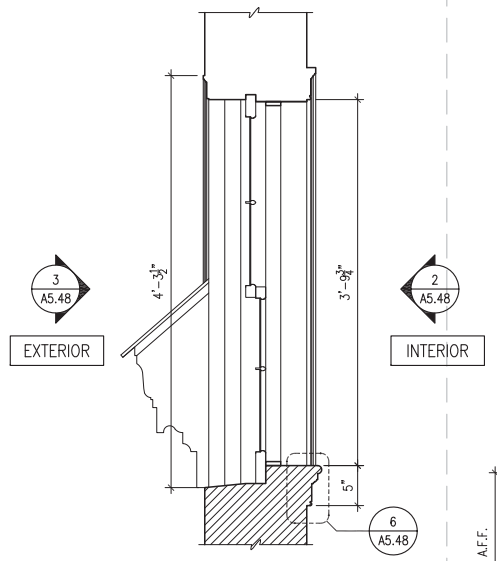
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WINDOW TYPE 14:
209, 211, 212

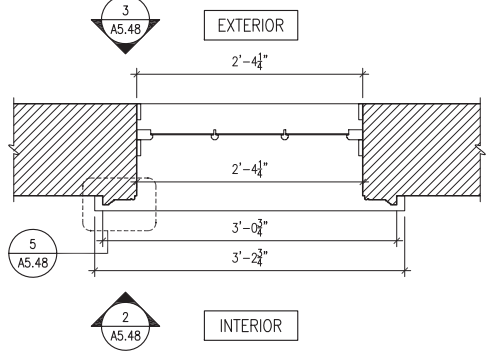


2 A5.48 INTERIOR ELEVATION WINDOW TYPE 14 SCALE (A)

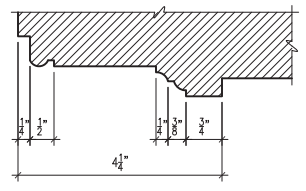
3 A5.48 EXTERIOR ELEVATION WINDOW TYPE 14 SCALE (A)



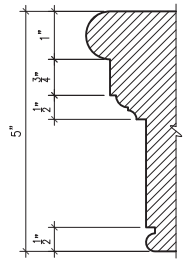
4 A5.48 SECTION WINDOW TYPE 14 SCALE (A)



1 A5.48 PLAN WINDOW TYPE 14 SCALE (A)

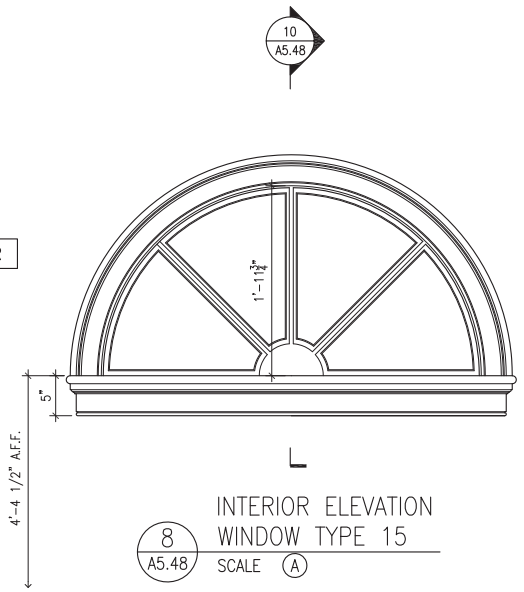


5 A5.48 WINDOW TRIM SCALE (B)

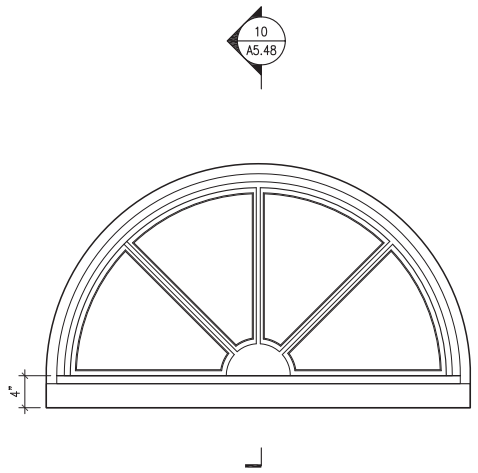


6 A5.48 WINDOW SILL SCALE (B)

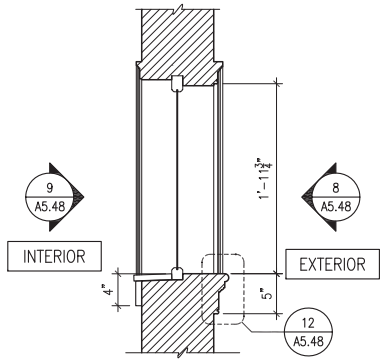
WINDOW TYPE 15:
210



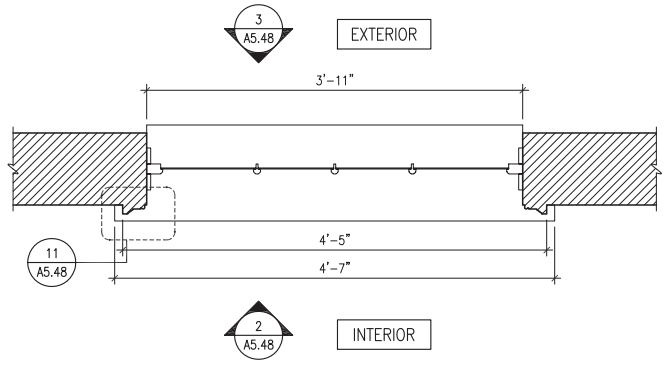
8 A5.48 INTERIOR ELEVATION WINDOW TYPE 15 SCALE (A)



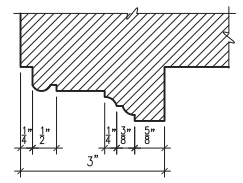
9 A5.48 EXTERIOR ELEVATION WINDOW TYPE 15 SCALE (A)



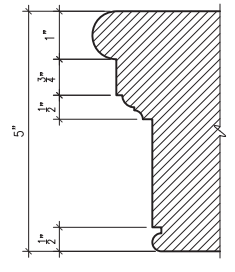
10 A5.48 EXTERIOR ELEVATION WINDOW TYPE 15 SCALE (A)



7 A5.48 PLAN WINDOW TYPE 15 SCALE (A)



11 A5.48 WINDOW TRIM SCALE (B)



12 A5.48 WINDOW SILL SCALE (B)



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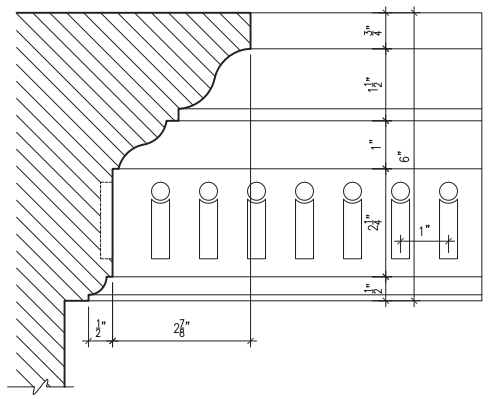
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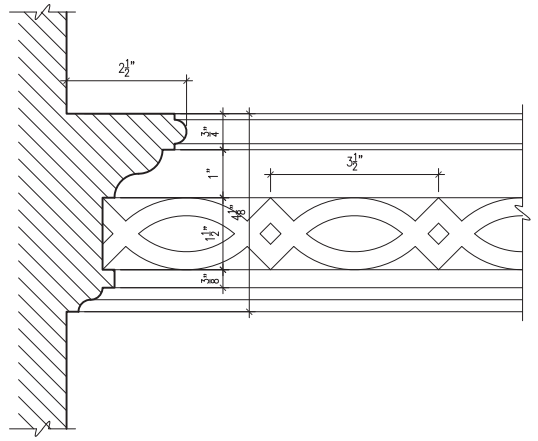
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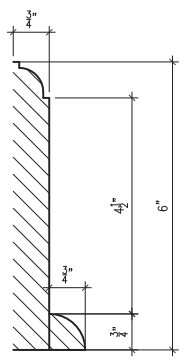
CENTRAL HALL 101



1 / A5.50 CENTRAL HALL 101 CROWN MOLDING
SCALE A

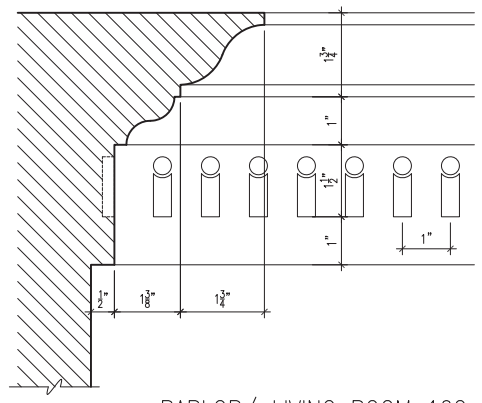


2 / A5.50 CENTRAL HALL 101 CHAIR RAIL
SCALE A

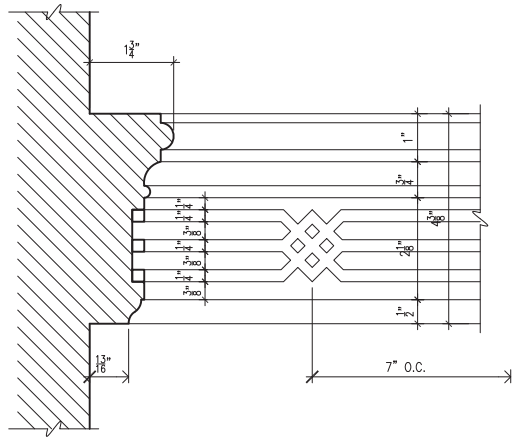


3 / A5.50 CENTRAL HALL 101 BASEBOARD
SCALE A

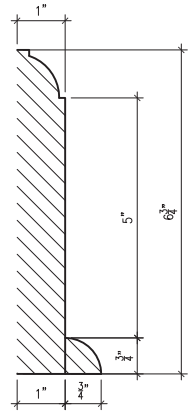
PARLOR/ LIVING ROOM 102



4 / A5.50 PARLOR/ LIVING ROOM 102 CROWN MOLDING
SCALE A

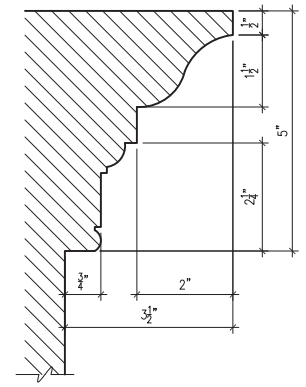


5 / A5.50 PARLOR/ LIVING ROOM 102 CHAIR RAIL
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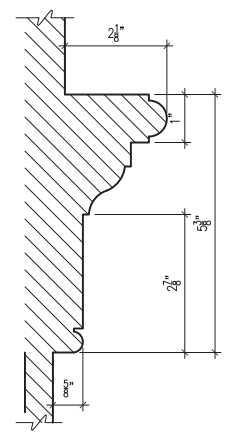


6 / A5.50 PARLOR/ LIVING ROOM 102 BASEBOARD
SCALE A

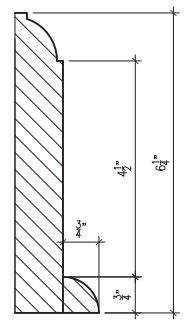
DINING ROOM 103



7 / A5.50 DINING ROOM 103 CROWN MOLDING
SCALE A

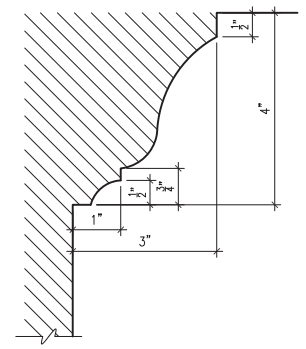


8 / A5.50 DINING ROOM 103 CHAIR RAIL
SCALE A

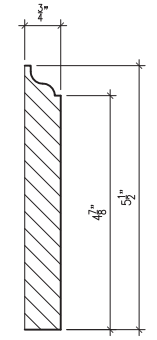


9 / A5.50 DINING ROOM 103 BASEBOARD
SCALE A

KITCHEN 104

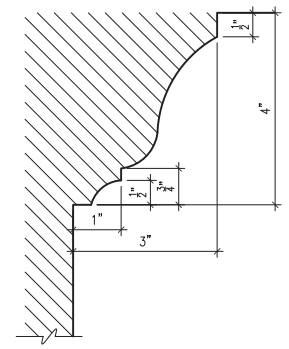


10 / A5.50 KITCHEN 104 CROWN MOLDING
SCALE A

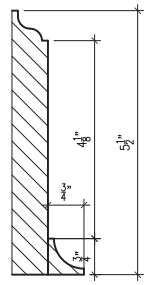


11 / A5.50 KITCHEN 104 BASEBOARD
SCALE A

SUN ROOM 106



12 / A5.50 KITCHEN 104 CROWN MOLDING
SCALE A

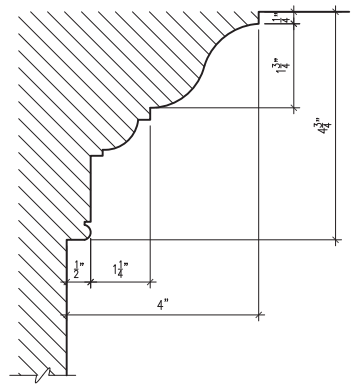


13 / A5.50 SUN ROOM 106 BASEBOARD
SCALE A

SCALE OF INCHES (6" = 1'-0")
SCALE A

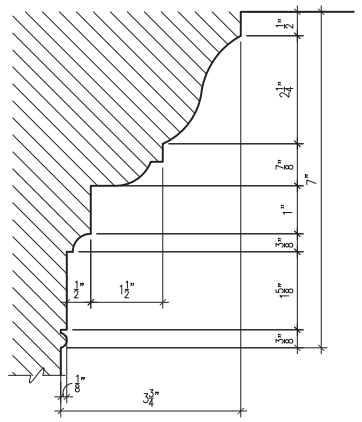
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		DATE: 9/25/12			

CENTRAL HALL 201



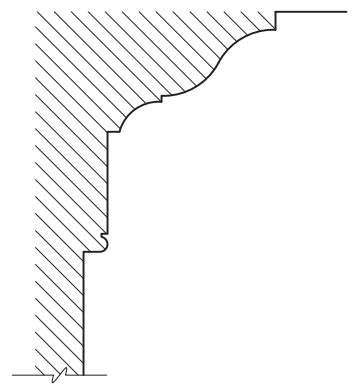
1 A5.51 — CENTRAL HALL 201 CROWN MOLDING
SCALE (A)

NORTH BEDROOM 202

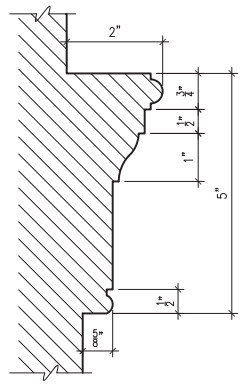


4 A5.51 — NORTH BEDROOM 202 CROWN MOLDING
SCALE (A)

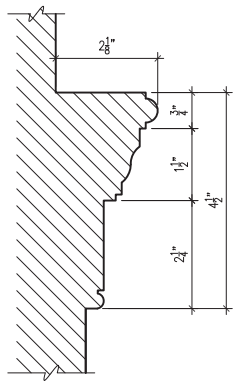
SOUTH BEDROOM 203



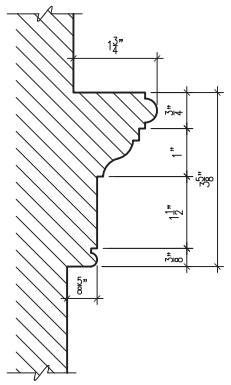
8 A5.51 — SOUTH BEDROOM 203 CROWN MOLDING
SCALE (A)



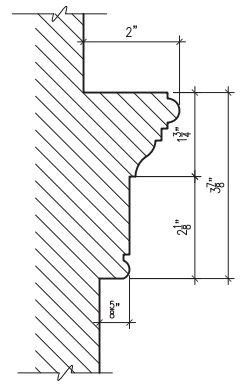
2 A5.51 — CENTRAL HALL 201 CHAIR RAIL
SCALE (A)



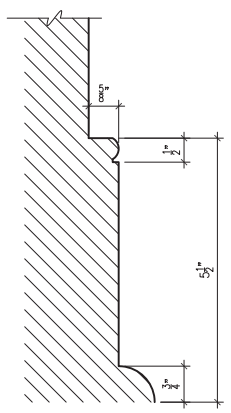
5 A5.51 — NORTH BEDROOM 202 CHAIR RAIL
SCALE (A)



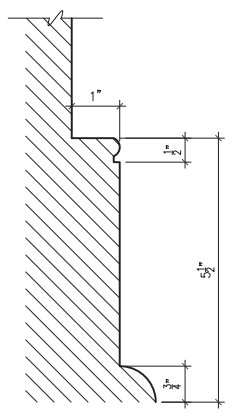
7 A5.51 — NORTH BEDROOM 202 CHAIR RAIL @ BATHROOM WALL
SCALE (A)



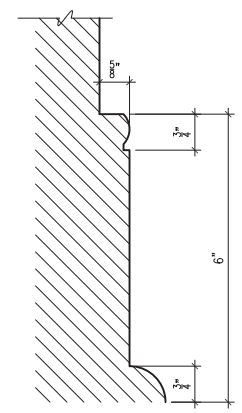
9 A5.51 — SOUTH BEDROOM 203 CHAIR RAIL
SCALE (A)



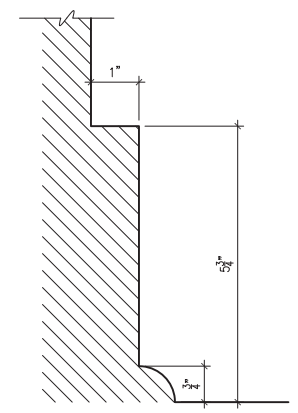
3 A5.51 — CENTRAL HALL 201 BASEBOARD
SCALE (A)



6 A5.51 — NORTH BEDROOM 202 BASEBOARD
SCALE (A)



10 A5.51 — SOUTH BEDROOM 203 BASEBOARD
SCALE (A)



11 A5.51 — SOUTH BEDROOM 203 BASEBOARD, EAST WALL
SCALE (A)

2 0 2 4
SCALE OF INCHES (6" = 1'-0")
SCALE (A)

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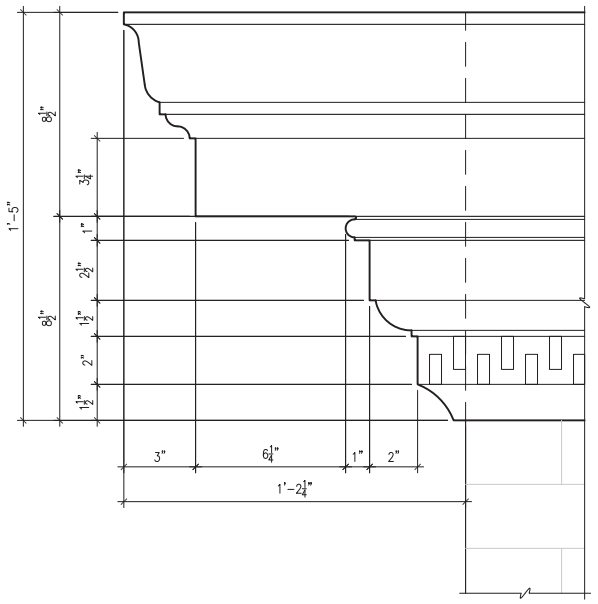
SUB SHEET NO.
A5.51

TITLE OF SHEET
DECORATIVE WOOD CORNICES
HARMONY HALL: HISTORIC STRUCTURE REPORT

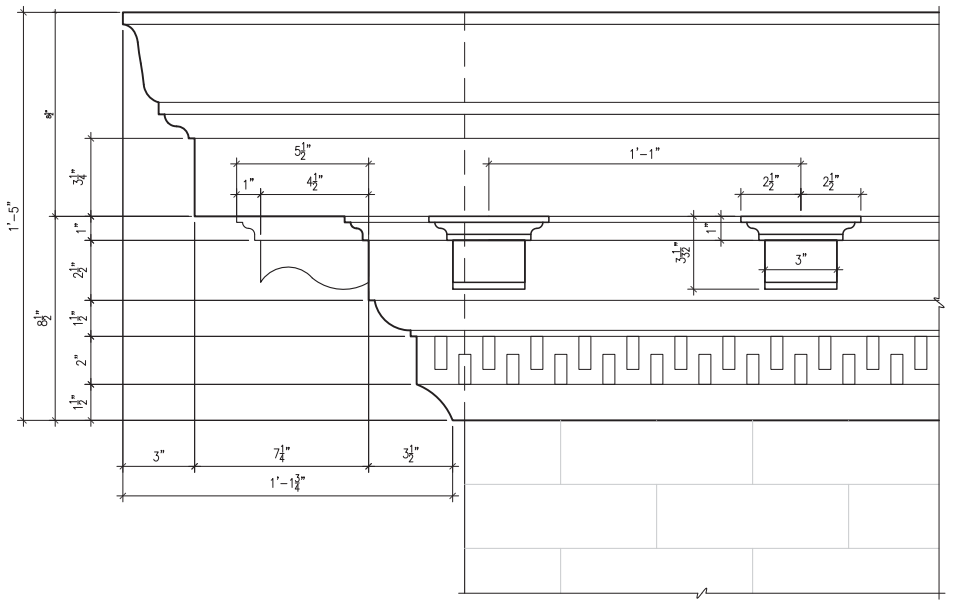
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899
116834

PKG. NO.

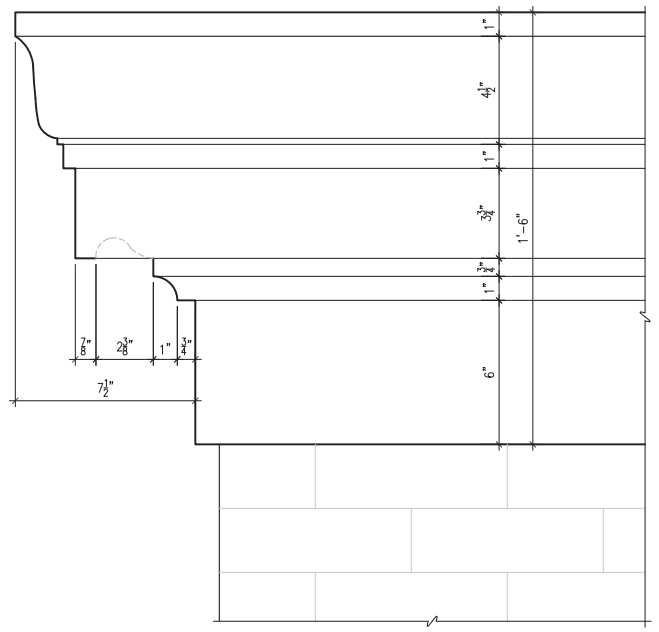
SHEET
81
OF 115



1 A5.52 EAST FACADE MAIN BLOCK DECORATIVE WOOD CORNICE
SCALE (A)



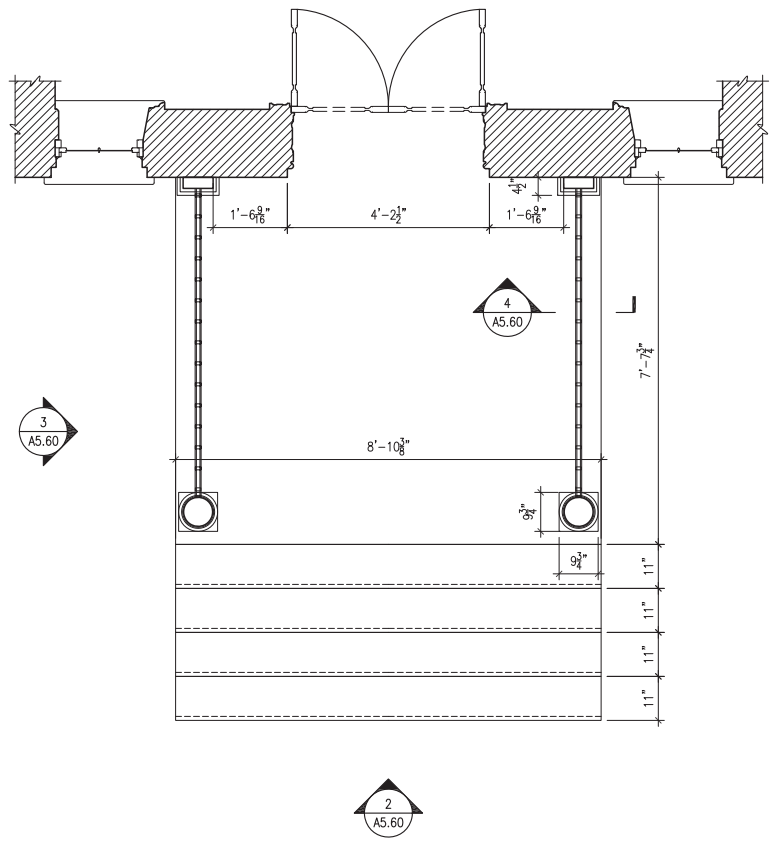
2 A5.52 EAST FACADE MAIN BLOCK DECORATIVE WOOD CORNICE
SCALE (A)



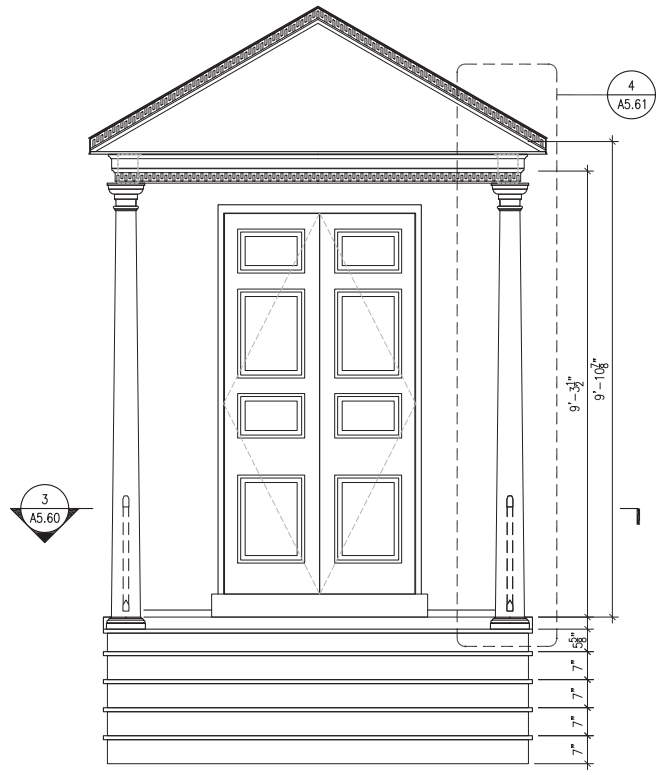
1 A5.53 SOUTH ADDITION AND CENTRAL SOUTH ADDITION DECORATIVE WOOD CORNICE
SCALE (A)

6 3 0 6
SCALE OF INCHES (3" = 1'-0")
SCALE (B)

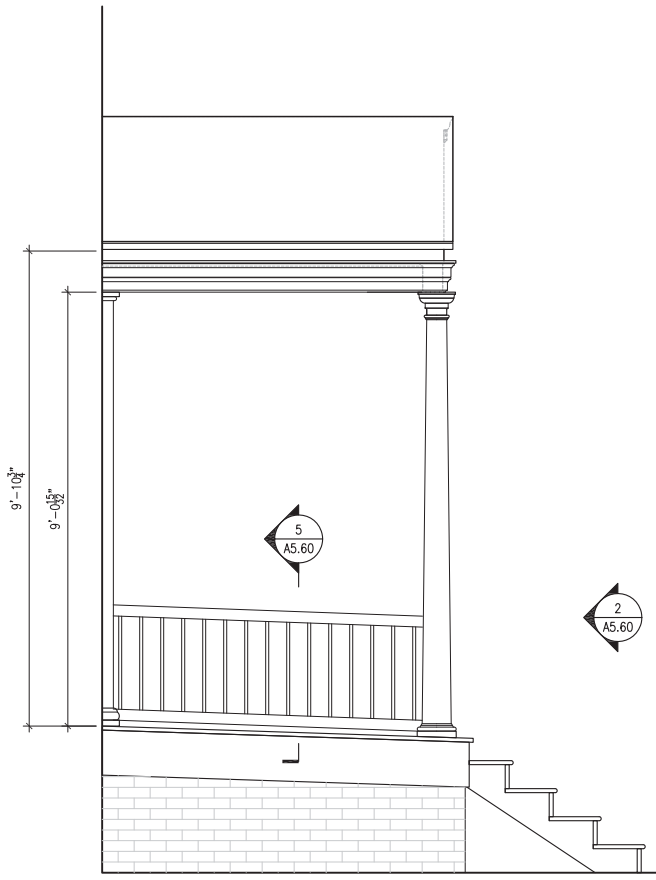
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		CADD: SP	A5.52	TRIM DETAILS CROWN MOLDINGS, CHAIR RAILS, BASEBOARDS	899 116834
		TECH REVIEW: SP			PKG. NO. — SHEET 82
		DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115



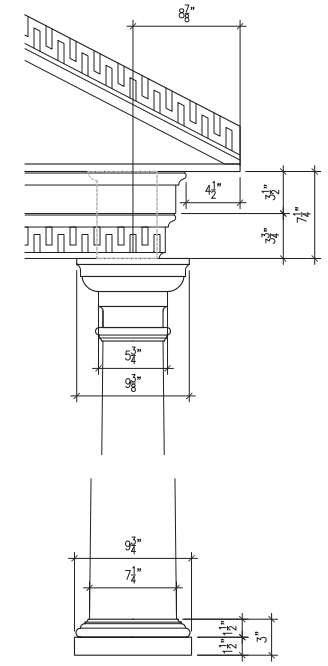
PLAN
FRONT PORCH
1 A5.60 SCALE (A)



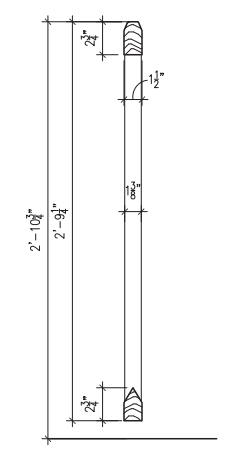
ELEVATION
FRONT PORCH
2 A5.60 SCALE (A)



ELEVATION
FRONT PORCH
3 A5.60 SCALE (A)



FRONT PORCH
COLUMN DETAIL
4 A5.60 SCALE (B)



FRONT PORCH
RAILING PICKET DETAIL
5 A5.60 SCALE (B)

2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

12 6 0 12
SCALE OF INCHES (1 1/2" = 1'-0")
SCALE (B)

PRIME/ ARCHITECTURE:
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ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

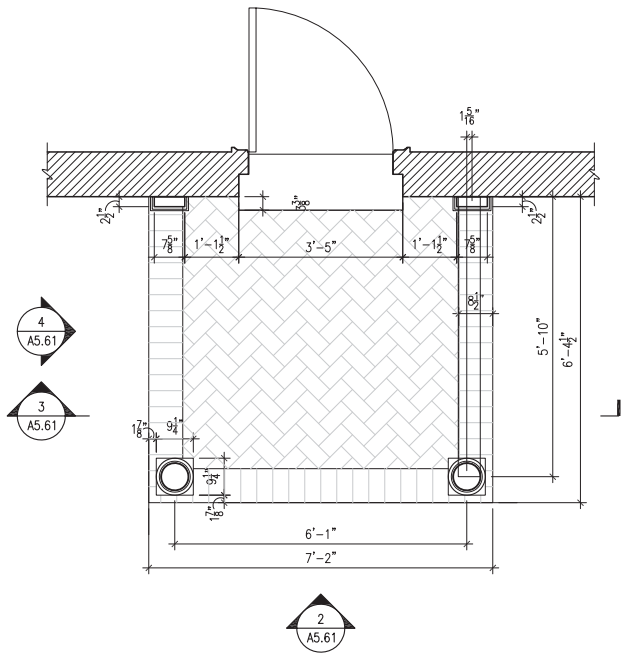
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CADD: SP
TECH REVIEW: SP
DATE: 9/25/12

SUB SHEET NO.
A5.60

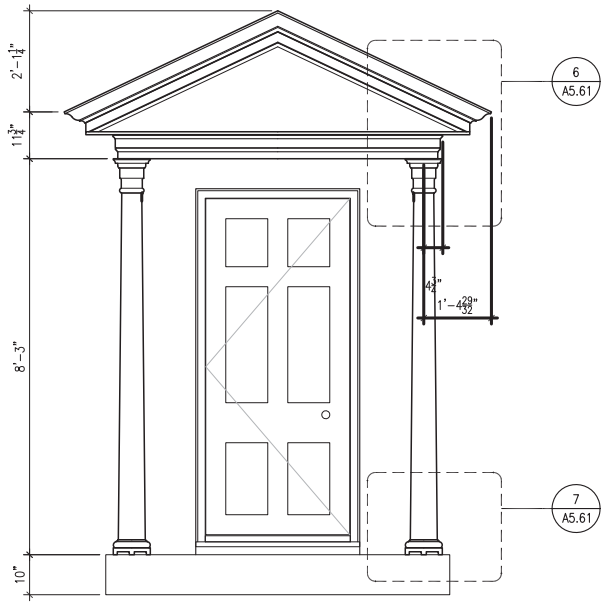
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FRONT PORCH DETAILS

HARMONY HALL: HISTORIC STRUCTURE REPORT

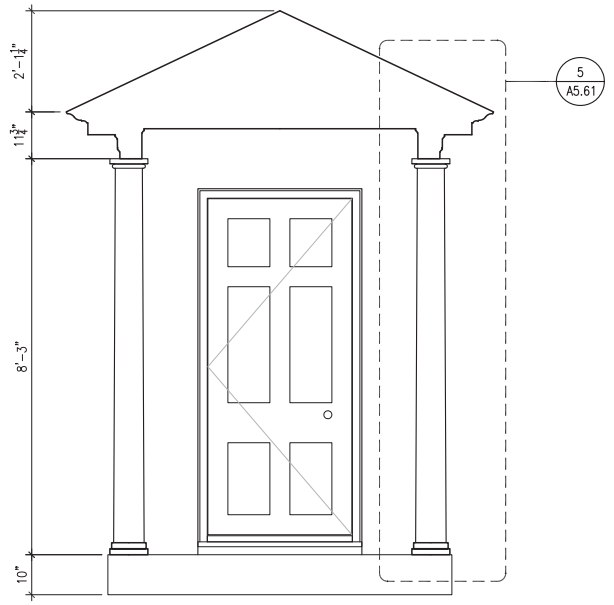
DRAWING NO. 899 / 116834
PKG. NO.
SHEET 83 OF 115



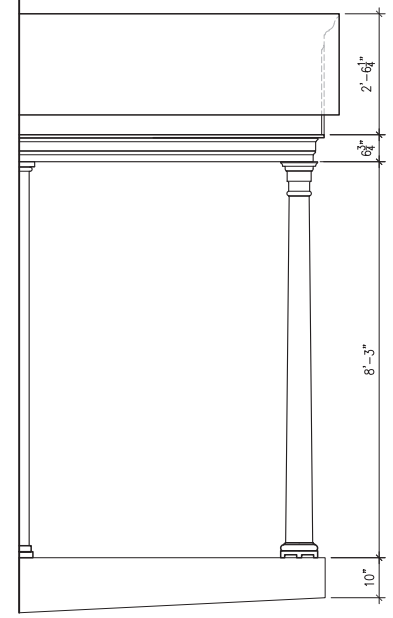
1 A5.61 PLAN
SOUTH ENTRY PORCH
SCALE (A)



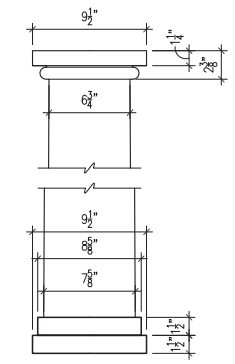
2 A5.61 ELEVATION
SOUTH ENTRY PORCH
SCALE (A)



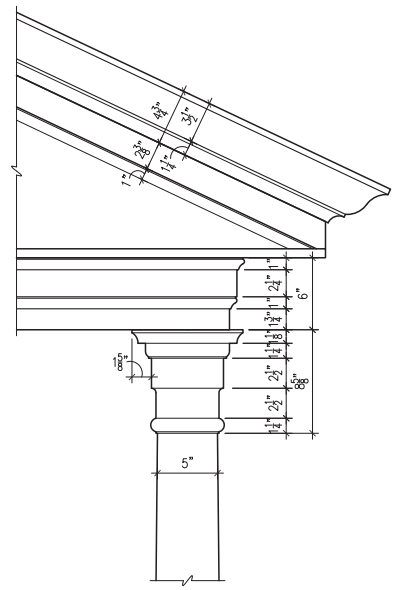
3 A5.61 SECTION
SOUTH ENTRY PORCH
SCALE (A)



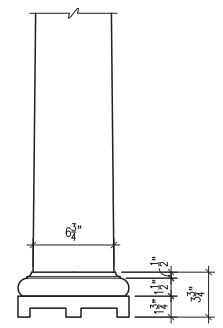
4 A5.61 ELEVATION
SOUTH ENTRY PORCH
SCALE (A)



5 A5.61 SOUTH ENTRY PORCH
PILASTER DETAIL
SCALE (B)



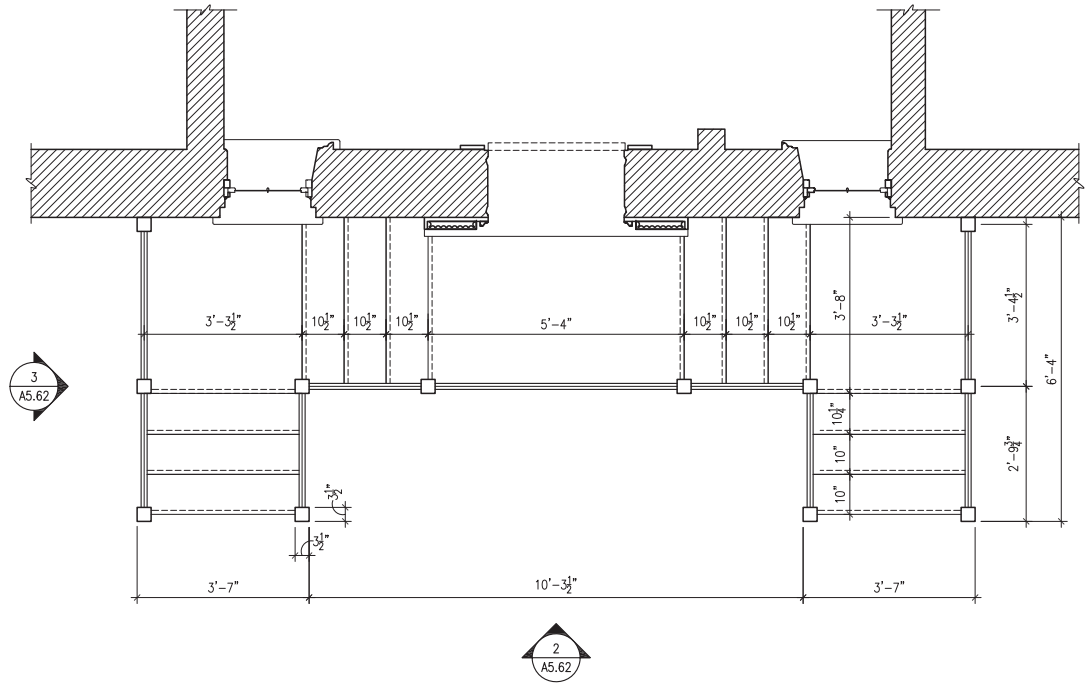
6 A5.61 SOUTH ENTRY PORCH
COLUMN CAPITAL DETAIL
SCALE (B)



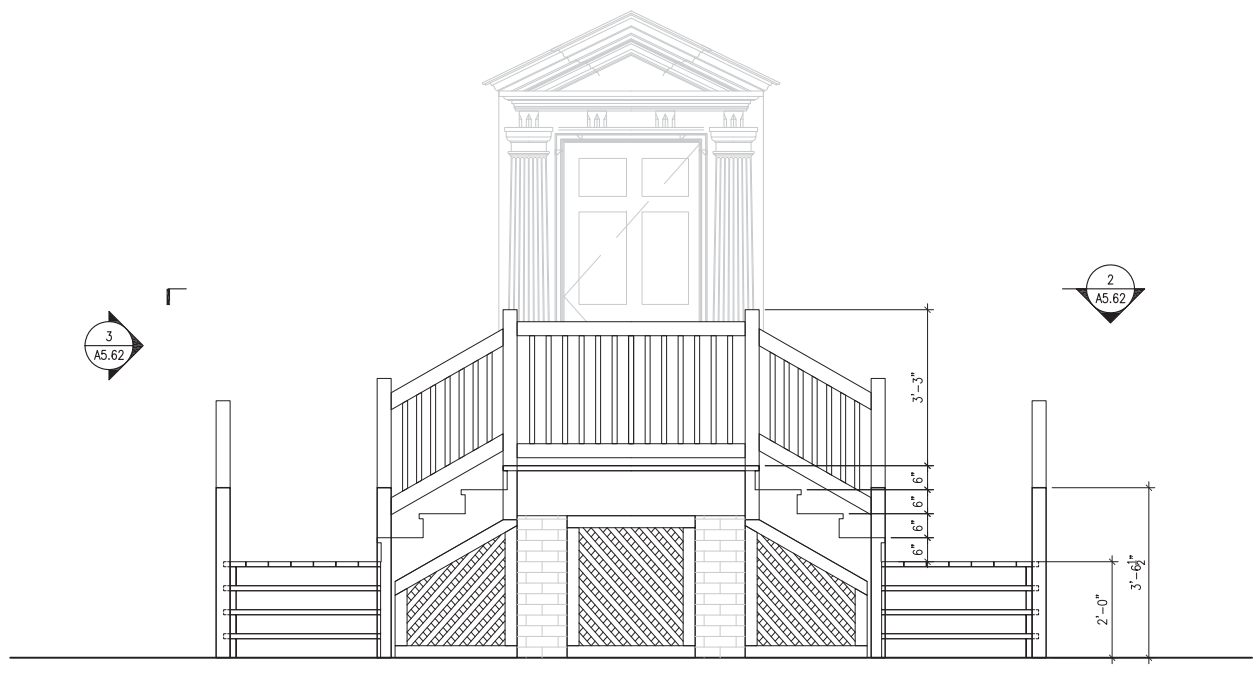
7 A5.61 FRONT PORCH
COLUMN BASE DETAIL
SCALE (B)



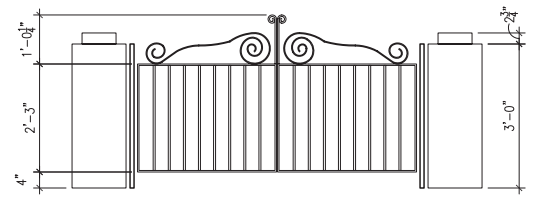
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		TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	SHEET 84 OF 115
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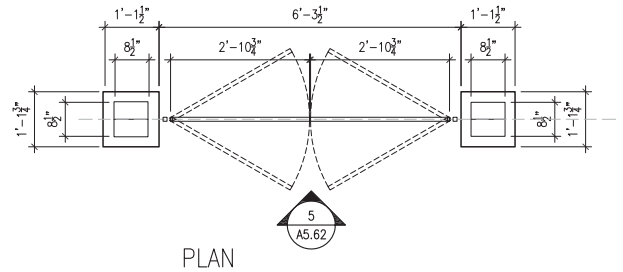
1 A5.62 PLAN
SOUTH ENTRY PORCH
SCALE (A)



2 A5.62 ELEVATION
SOUTH ENTRY PORCH
SCALE (A)



5 A5.62 ELEVATION
BRICK PIERS AND IRON GATE
SCALE (A)



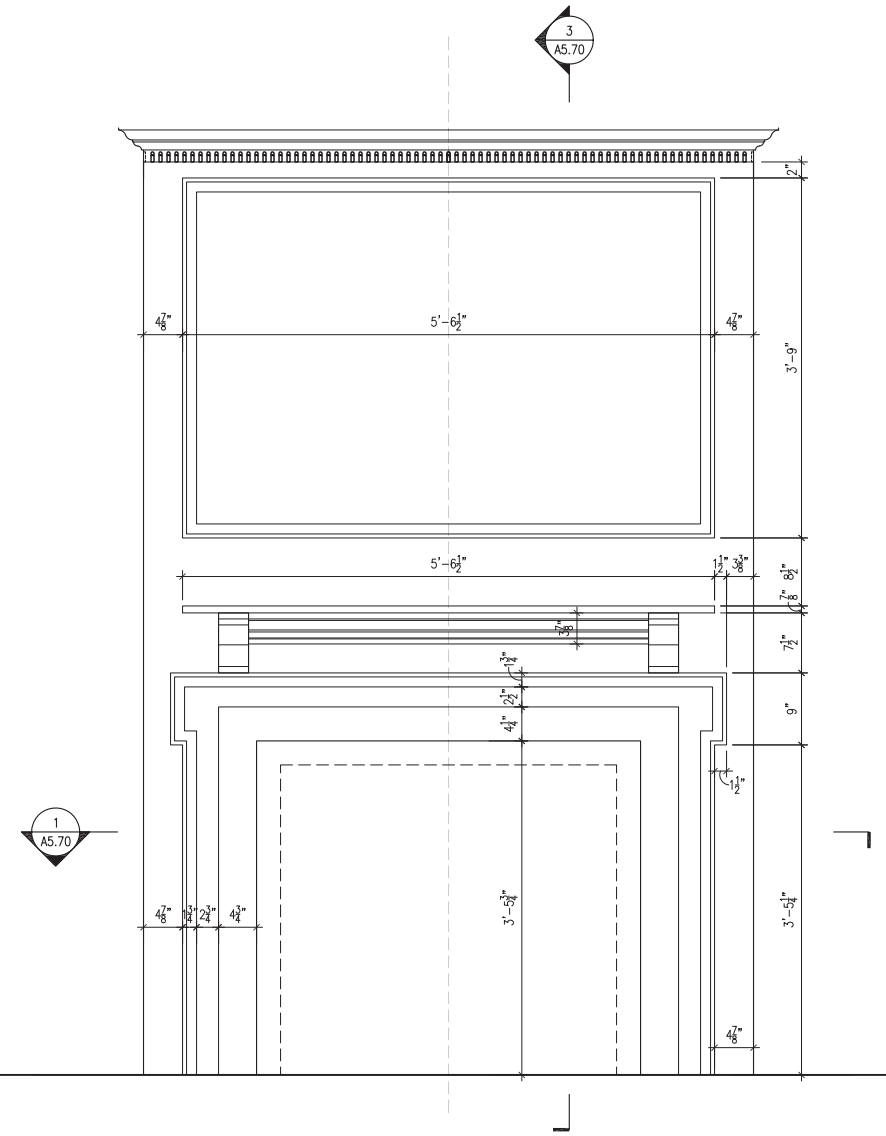
4 A5.62 PLAN
BRICK PIERS AND IRON GATE
SCALE (A)

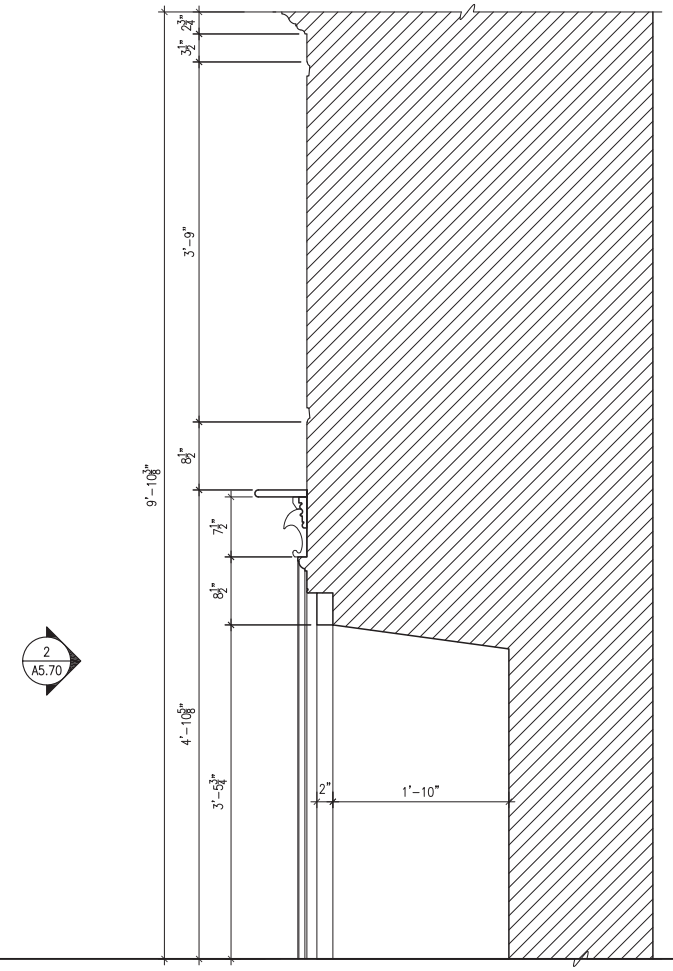
2 0 2 4
SCALE OF FEET (1/2" = 1'-0")
SCALE (A)

12 6 0 12
SCALE OF INCHES (1 1/2" = 1'-0")
SCALE (B)

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		DATE: 9/25/12		HARMONY HALL: HISTORIC STRUCTURE REPORT	SHEET 85 OF 115

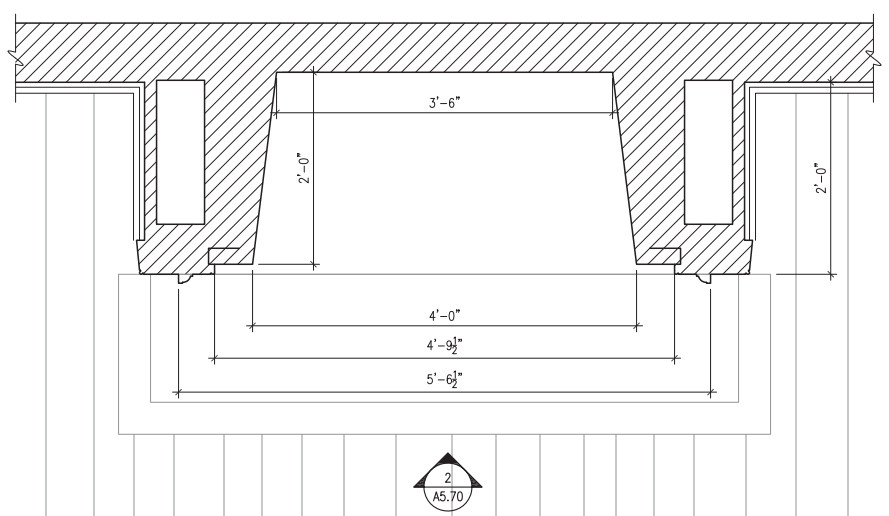
ROOM 102
LIVING ROOM/ PARLOR





2 A5.70 ELEVATION
FIREPLACE – ROOM 102
SCALE (A)

3 A5.70 SECTION
FIREPLACE – ROOM 102
SCALE (A)

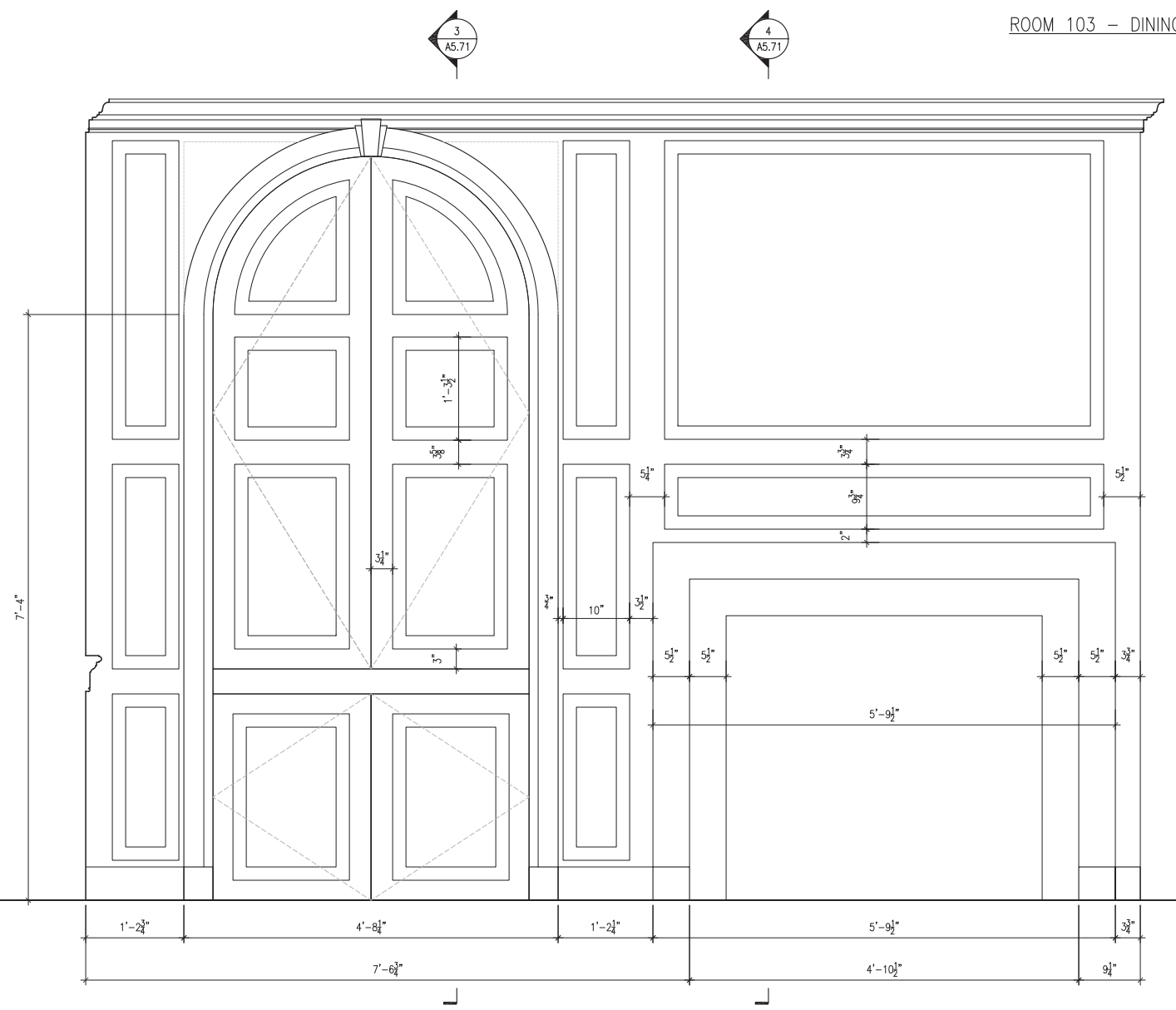


1 A5.70 PLAN
FIREPLACE – ROOM 102
SCALE (A)

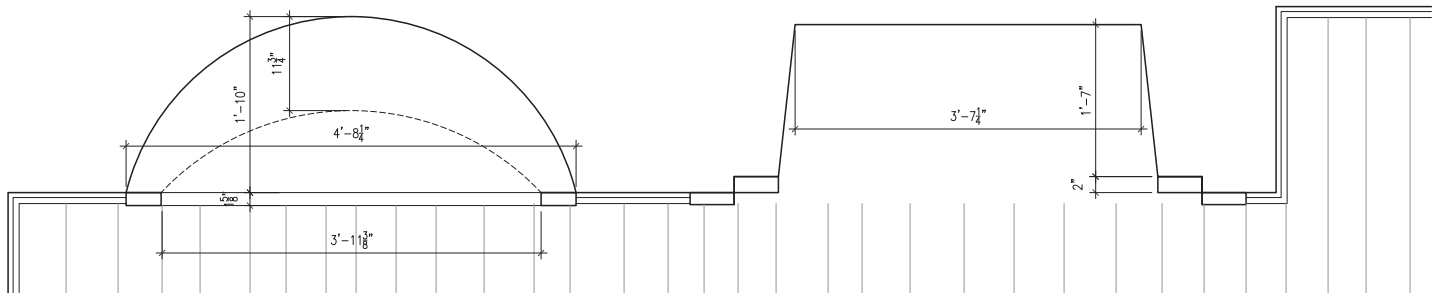
1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

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ROOM 103 – DINING ROOM



ELEVATION
2 / A5.71 FIREPLACE AND CUPBOARD – ROOM 103
SCALE (A)



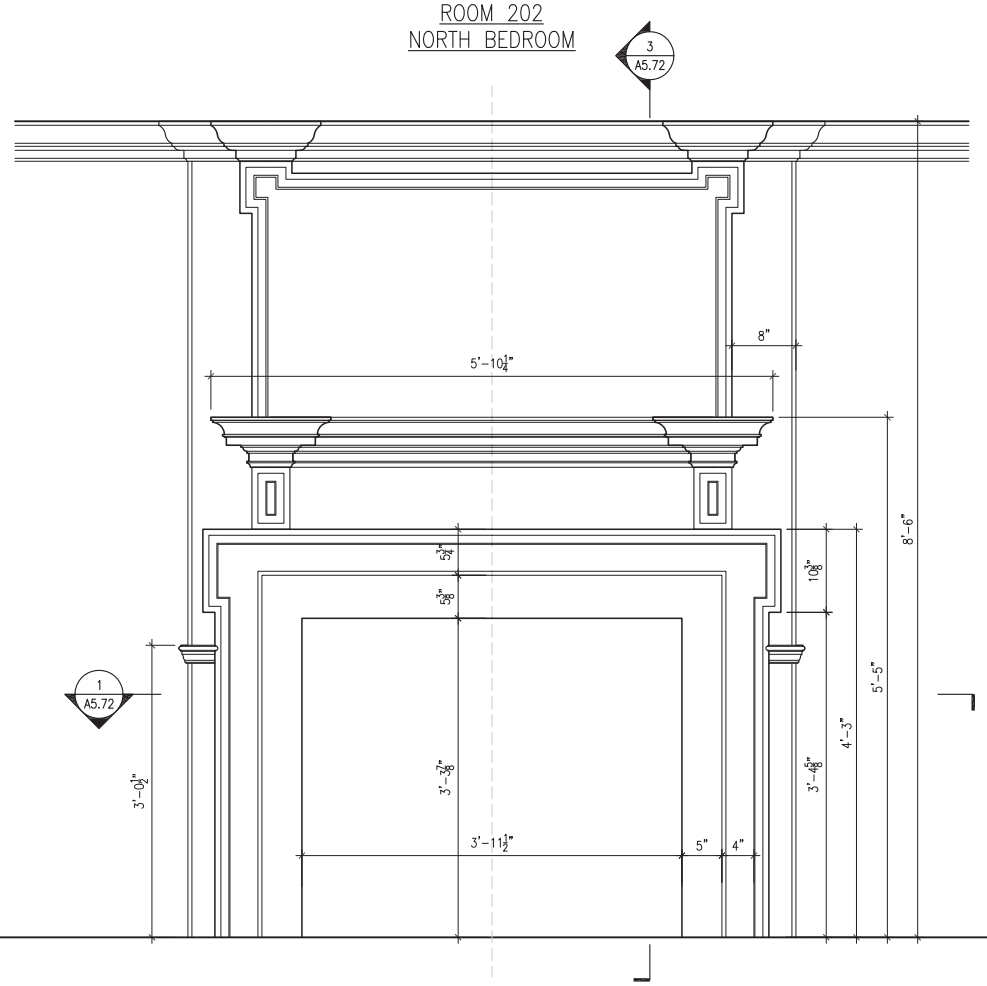
2 / A5.71

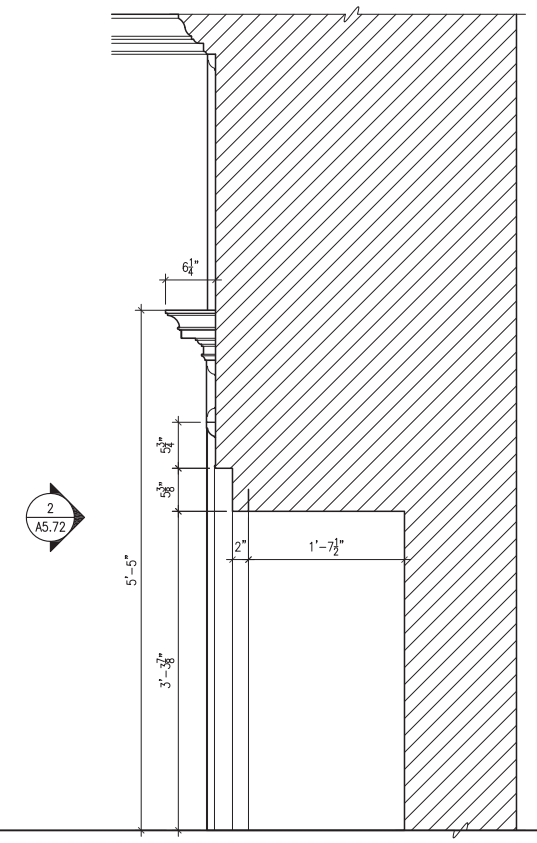
PLAN
1 / A5.71 FIREPLACE AND CUPBOARD – ROOM 103
SCALE (A)

1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

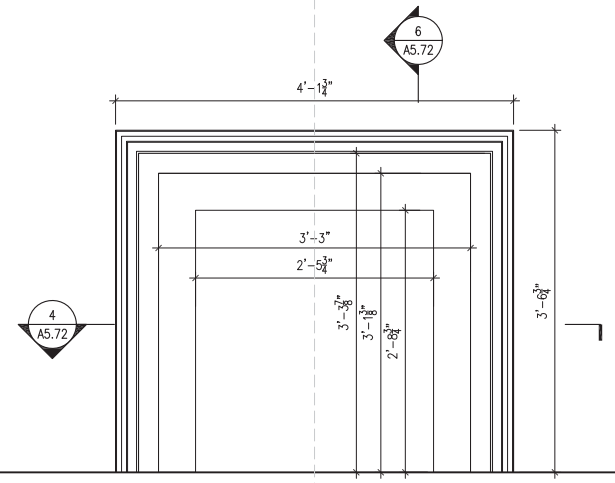
PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 / 116834
	CADD: SP	A5.71	FIREPLACE DETAILS ROOM 103–DINING ROOM	PKG. NO. — SHEET 87
	TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	OF 115
	DATE: 9/25/12			

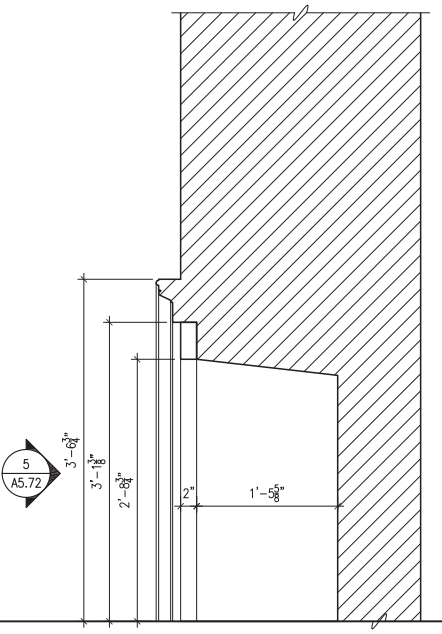
ROOM 202
NORTH BEDROOM





ROOM 203
SOUTH BEDROOM



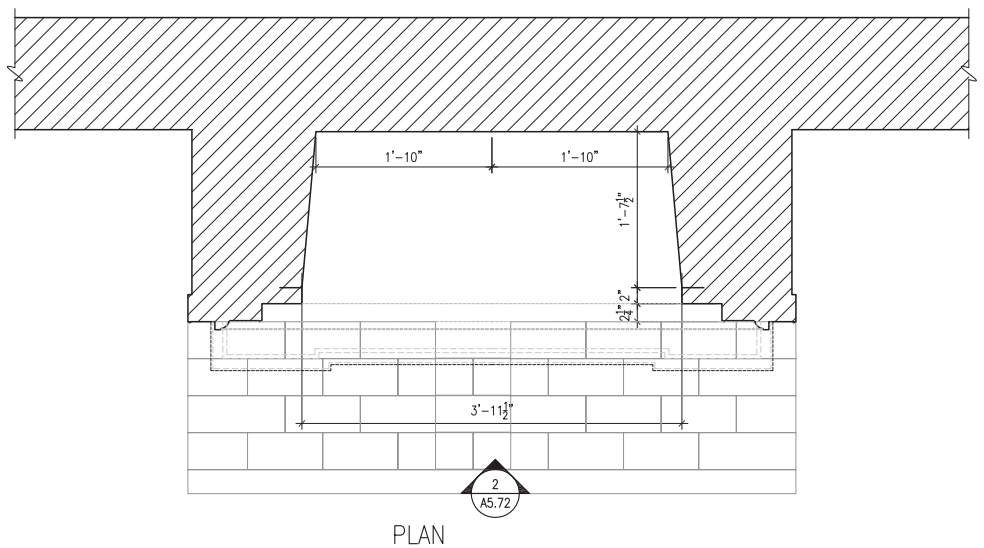


2 A5.72 ELEVATION
FIREPLACE – ROOM 202
SCALE (A)

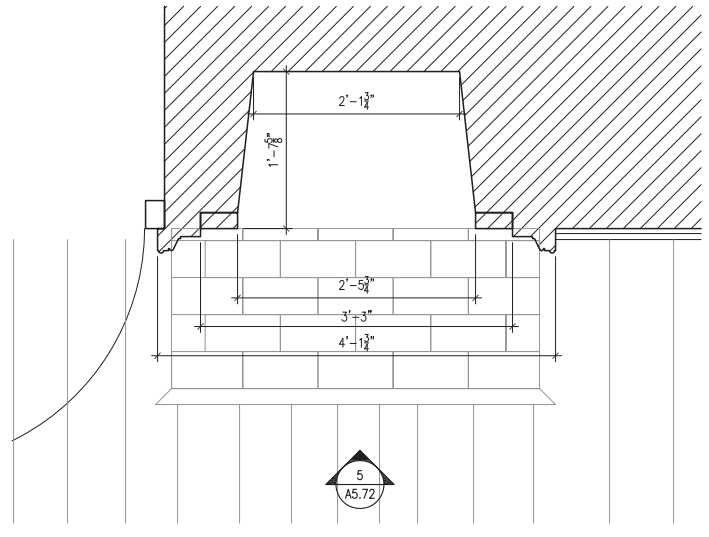
3 A5.72 SECTION
FIREPLACE – ROOM 202
SCALE (A)

5 A5.72 ELEVATION
FIREPLACE – ROOM 203
SCALE (A)

6 A5.72 SECTION
FIREPLACE – ROOM 203
SCALE (A)



1 A5.72 PLAN
FIREPLACE – ROOM 202
SCALE (A)

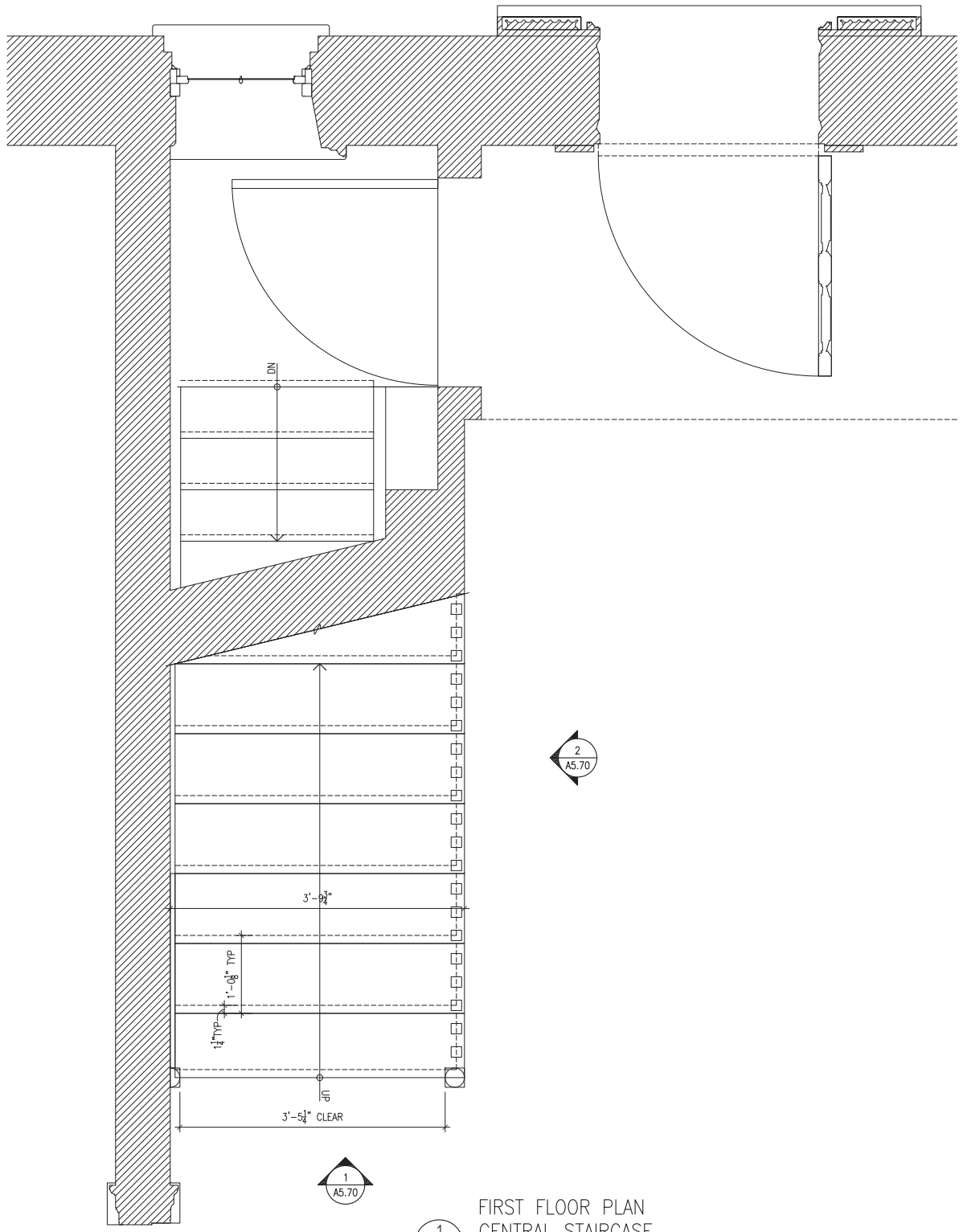


4 A5.72 PLAN
FIREPLACE – ROOM 203
SCALE (A)

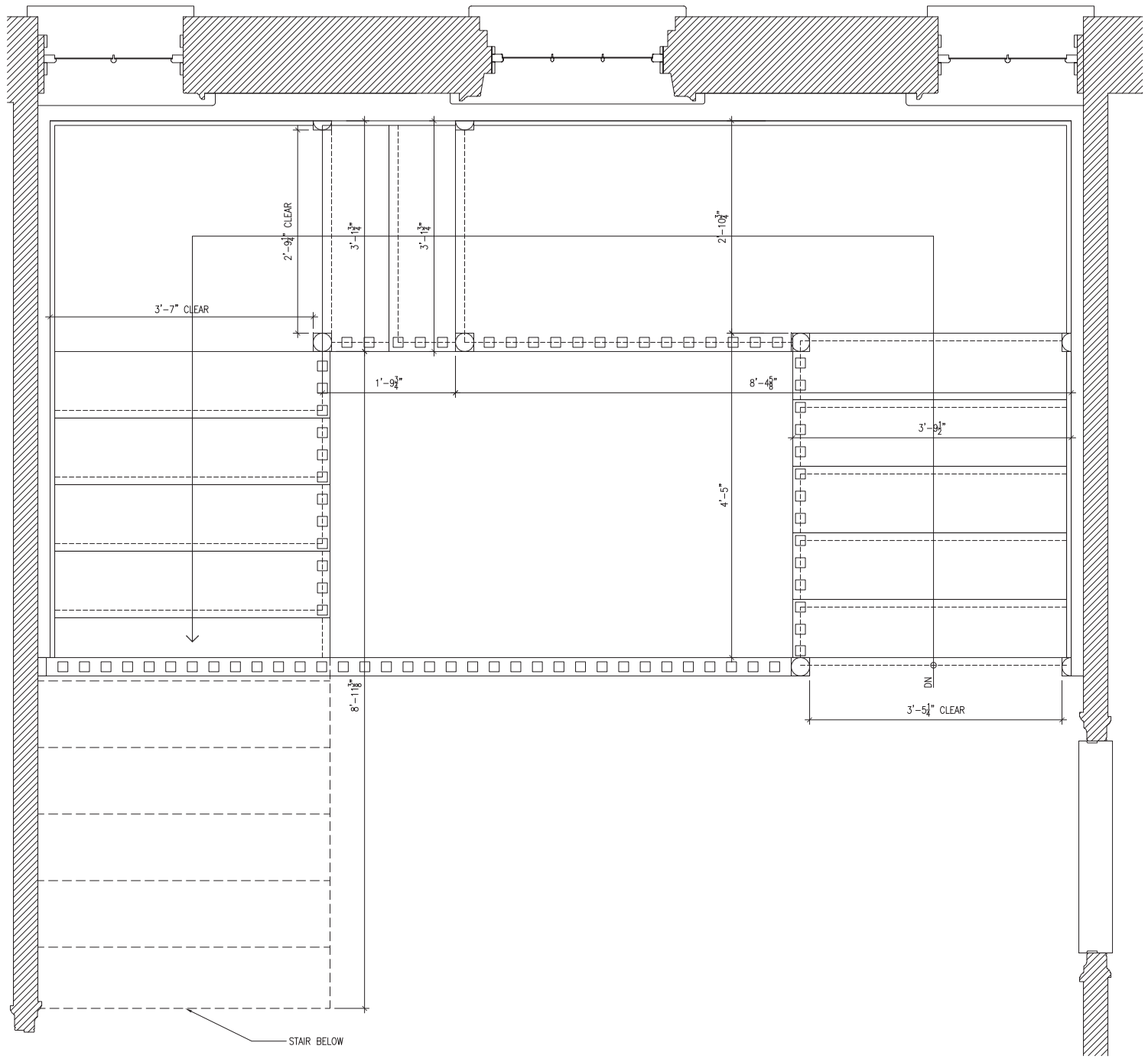
1 0 1 2
SCALE OF FEET (1" = 1'-0")
SCALE (A)

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO. A5.72	TITLE OF SHEET: FIREPLACE DETAILS ROOM 202–NORTH BEDROOM & ROOM 203–SOUTH BEDROOM HARMONY HALL: HISTORIC STRUCTURE REPORT
		CADD: SP		
		TECH REVIEW: SP		
		DATE: 9/25/12		

DRAWING NO. 899 116834
PKG. NO.
SHEET 88 OF 115

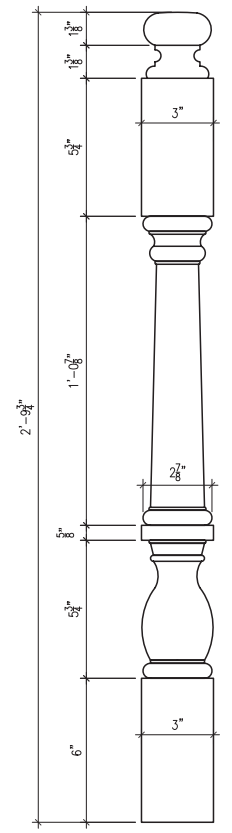


1 A5.70 FIRST FLOOR PLAN
CENTRAL STAIRCASE
SCALE (B)

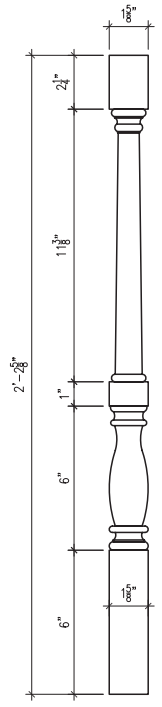


2 A5.70 FIRST FLOOR PLAN
CENTRAL STAIRCASE
SCALE (B)

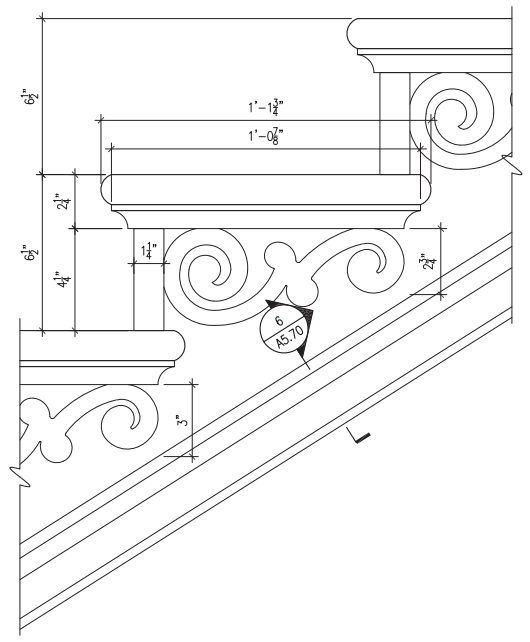
PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 899 / 116834
	CADD: SP	A5.80	CENTRAL STAIRCASE DETAILS	PKG. NO. —
	TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	SHEET 89 OF 115
	DATE: 9/25/12			



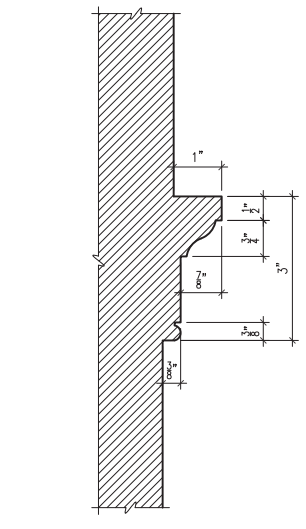
3 A5.70 CENTRAL STAIRCASE NEWEL POST
SCALE (B)



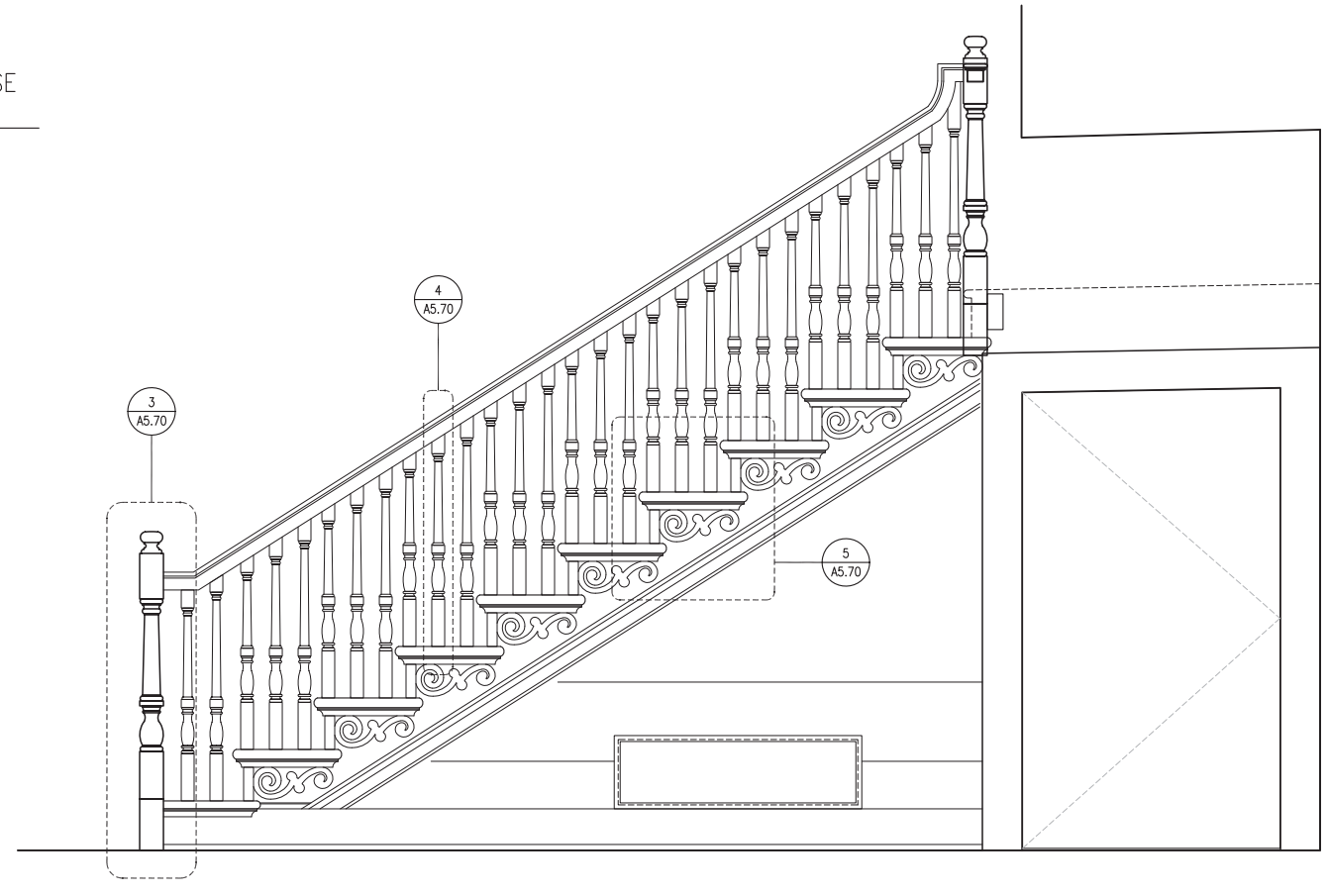
4 A5.70 CENTRAL STAIRCASE BALUSTER
SCALE (B)



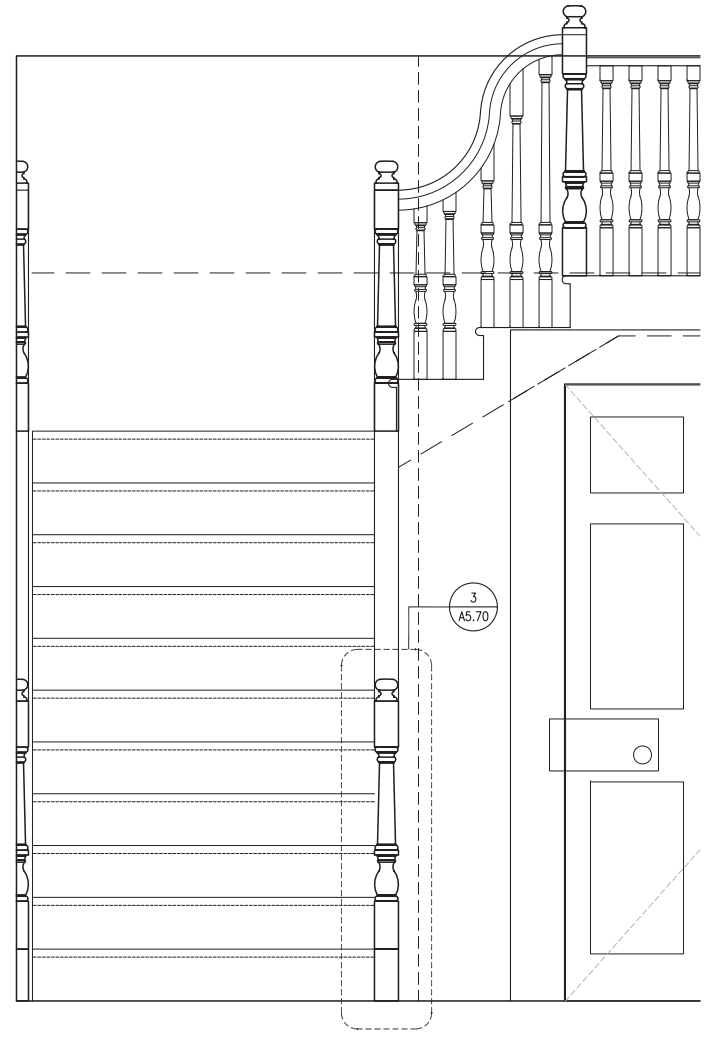
5 A5.70 CENTRAL STAIRCASE STRINGER SCROLL DETAIL
SCALE (B)



6 A5.70 CENTRAL STAIR TRIM DETAIL
SCALE (B)

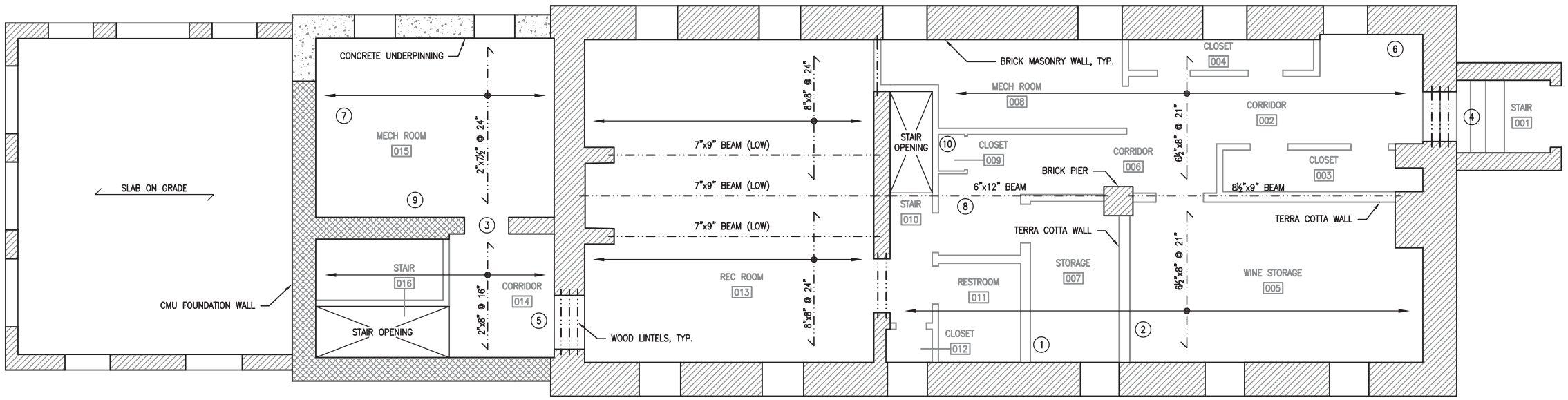


2 A5.70 CENTRAL STAIRCASE ELEVATION
SCALE (B)



1 A5.70 CENTRAL STAIRCASE ELEVATION
SCALE (B)

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
		CADD: SP	A5.81	CENTRAL STAIRCASE DETAILS	899 116834
		TECH REVIEW: SP		HARMONY HALL: HISTORIC STRUCTURE REPORT	PKG. NO. — SHEET 90
		DATE: 9/25/12			OF 115



NOTES:
1. DIMENSIONS GIVEN IN STRUCTURAL DRAWINGS ARE BASED ON LIMITED FIELD OBSERVATIONS AND MEASUREMENTS.
2. FRAMING LUMBER SIZES ARE ACTUAL DIMENSIONS UNLESS NOTED OTHERWISE.
3. 1x FLOOR BOARDS WERE NOTED THROUGHOUT ABOVE THE FIRST FLOOR FRAMING.
4. FLAT JACK ARCH LINTELS WERE TYPICALLY NOTED AT EXTERIOR OPENINGS IN THE BRICK MASONRY.

1 / S1.01 FIRST FLOOR FRAMING PLAN
SCALE (A)

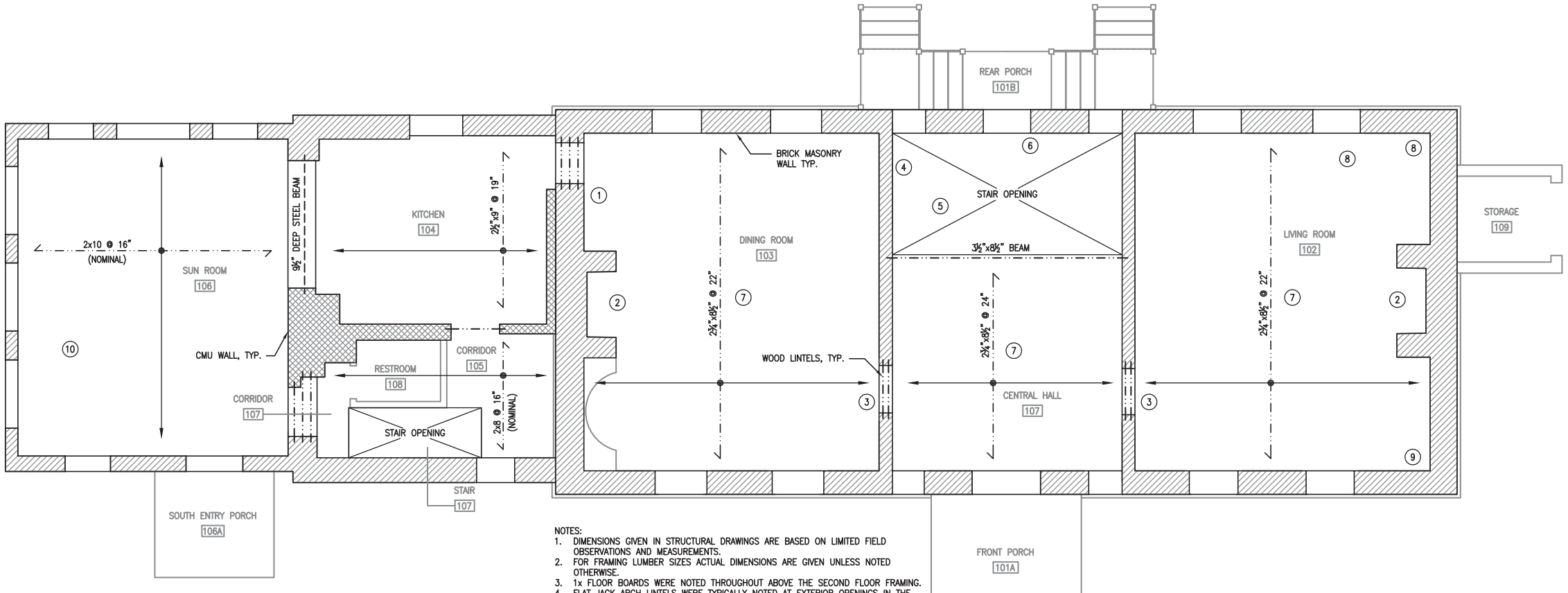
EXISTING CONDITIONS NOTED (STRUCTURAL ONLY)

1. DIAGONAL CRACKING IN PLASTER AT WALL
2. HORIZONTAL CRACKING IN TERRA COTTA WALL
3. TEMPORARY SHORING OF MASONRY OPENING INTO MECHANICAL ROOM
4. VERTICAL CRACK IN MASONRY ABOVE LINTEL
5. SPLITTING ON FACE OF WOOD LINTELS
6. BLISTERING IN PLASTER AT WALL DUE TO MOISTURE INFILTRATION
7. PREVIOUS WATER DAMAGE AND STAINING OF WOOD FRAMING
8. INSECT DETERIORATION OF WOOD BEAM
9. POOR BEARING END CONNECTION DETAIL BETWEEN WOOD JOISTS AND CMU WALL
10. ASSUMED DEFLECTION OF HEADER UNDER LOADS FROM STAIR POST ABOVE

NORTH

4 0 4 8
SCALE OF FEET
SCALE (A)

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC STRUCTURAL ENGINEER: ROBERT SILMAN ASSOC. WASHINGTON, DC	DESIGNED: NH CADD: NH TECH REVIEW: NF DATE: 9/25/12	SUB SHEET NO. S1.01	TITLE OF SHEET: FIRST FLOOR FRAMING PLAN HARMONY HALL: HISTORIC STRUCTURES REPORT	DRAWING NO. 899 / 116834 PKG. NO. SHEET 91 OF 115



NOTES:
1. DIMENSIONS GIVEN IN STRUCTURAL DRAWINGS ARE BASED ON LIMITED FIELD OBSERVATIONS AND MEASUREMENTS.
2. FOR FRAMING LUMBER SIZES ACTUAL DIMENSIONS ARE GIVEN UNLESS NOTED OTHERWISE.
3. 1x FLOOR BOARDS WERE NOTED THROUGHOUT ABOVE THE SECOND FLOOR FRAMING.
4. FLAT JACK ARCH LINTELS WERE TYPICALLY NOTED AT EXTERIOR OPENINGS IN THE BRICK MASONRY.

1 / S1.02 SECOND FLOOR FRAMING PLAN
SCALE (A)

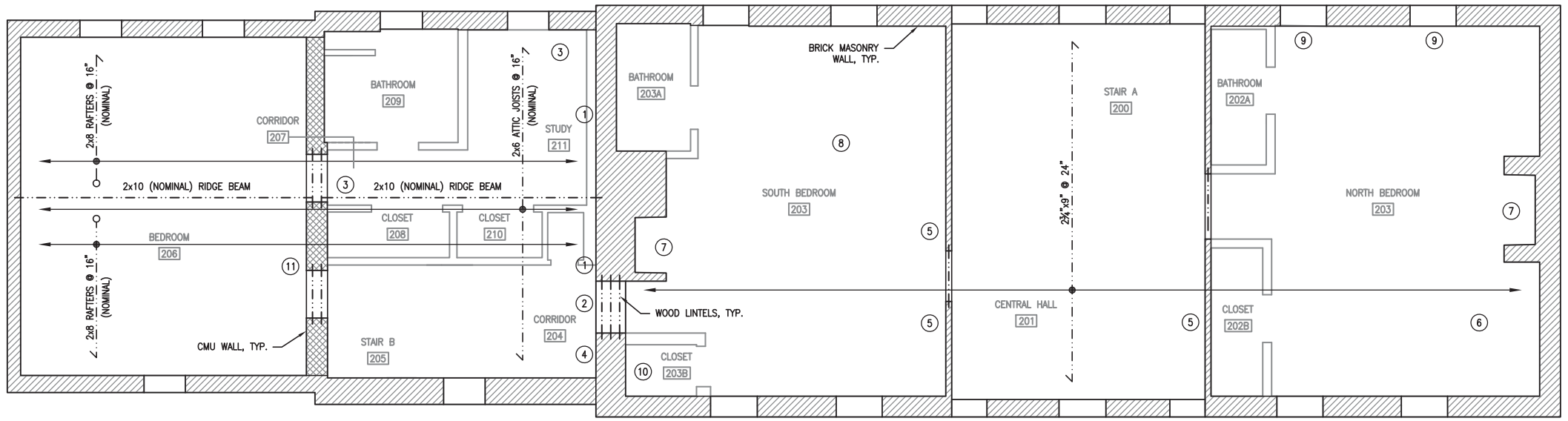
EXISTING CONDITIONS NOTED (STRUCTURAL ONLY)

1. VERTICAL CRACK IN PLASTER AT WALL NEAR DOOR OPENING
2. SETTLEMENT OF BRICK HEARTH
3. VERTICAL CRACK IN PLASTER AT WALL ABOVE DOOR OPENING, BOTH SIDES OF WALL
4. SIGNIFICANT CRACKING AT UNDERSIDE OF STAIR
5. SIGNIFICANT SLOPE AT STAIR DUE TO VERTICAL DISPLACEMENT OF POST SUPPORTING THE NORTHEAST CORNER OF THE LANDING
6. CRACK IN PLASTER BELOW WINDOW
7. BOWING OF FLOOR
8. INSECT AND WATER DAMAGE AT FLOOR BOARDS
9. WATER DAMAGE AT WALL AND CEILING FINISHES DUE TO MOISTURE INFILTRATION
10. CRACKS AT GYPSUM BOARD CEILING

NORTH

4 0 4 8
SCALE OF FEET
SCALE (A)

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC STRUCTURAL ENGINEER: ROBERT SILMAN ASSOC. WASHINGTON, DC	DESIGNED: NH CADD: NH TECH REVIEW: NF DATE: 9/25/12	SUB SHEET NO. S1.02	TITLE OF SHEET: SECOND FLOOR FRAMING PLAN HARMONY HALL: HISTORIC STRUCTURES REPORT	DRAWING NO. 899 / 116834 PKG. NO. SHEET 92 OF 115



NOTES:
1. DIMENSIONS GIVEN IN STRUCTURAL DRAWINGS ARE BASED ON LIMITED FIELD OBSERVATIONS AND MEASUREMENTS.
2. FRAMING LUMBER SIZES ARE ACTUAL DIMENSIONS UNLESS NOTED OTHERWISE.
3. 1x FLOOR BOARDS WERE NOTED THROUGHOUT ABOVE THE THIRD FLOOR FRAMING. PLYWOOD WAS NOTED ABOVE THE ROOF FRAMING AT THE SOUTH ADDITION.
4. FLAT JACK ARCH LINTELS WERE TYPICALLY NOTED AT EXTERIOR OPENINGS IN THE BRICK MASONRY.

1 / S1.03 THIRD FLOOR FRAMING PLAN
SCALE (A)

EXISTING CONDITIONS NOTED (STRUCTURAL ONLY)

1. SIGNIFICANT MECHANICAL PENETRATIONS AT BRICK MASONRY WALL
2. DEFLECTION OF LINTEL
3. SIGNS OF POTENTIAL WATER DAMAGE TO WOOD FRAMING INCLUDING BLACK MOLD AT CEILING
4. DIAGONAL CRACK AND OUT-OF-PLANE DISPLACEMENT OF MASONRY
5. VERTICAL CRACK IN BRICK MASONRY ON EACH SIDE OF WALL
6. WATER INFILTRATION AND DAMAGE AT CEILING
7. SETTLEMENT OF BRICK HEARTH
8. BOWING FLOOR
9. WINDOWS SLOPED RELATIVE TO FLOOR
10. DIAGONAL CRACK IN BRICK MASONRY AT WALL INSIDE CLOSET
11. VERTICAL CRACK IN WALL FINISH AT DOOR OPENING. LIKELY EXTENDS INTO THE UNDERLYING MASONRY.

NORTH

4 0 4 8
SCALE OF FEET
SCALE (A)

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

STRUCTURAL ENGINEER:
ROBERT SILMAN ASSOC.
WASHINGTON, DC

DESIGNED: NH
CADD: NH
TECH REVIEW: NF
DATE: 9/25/12

SUB SHEET NO.
S1.03

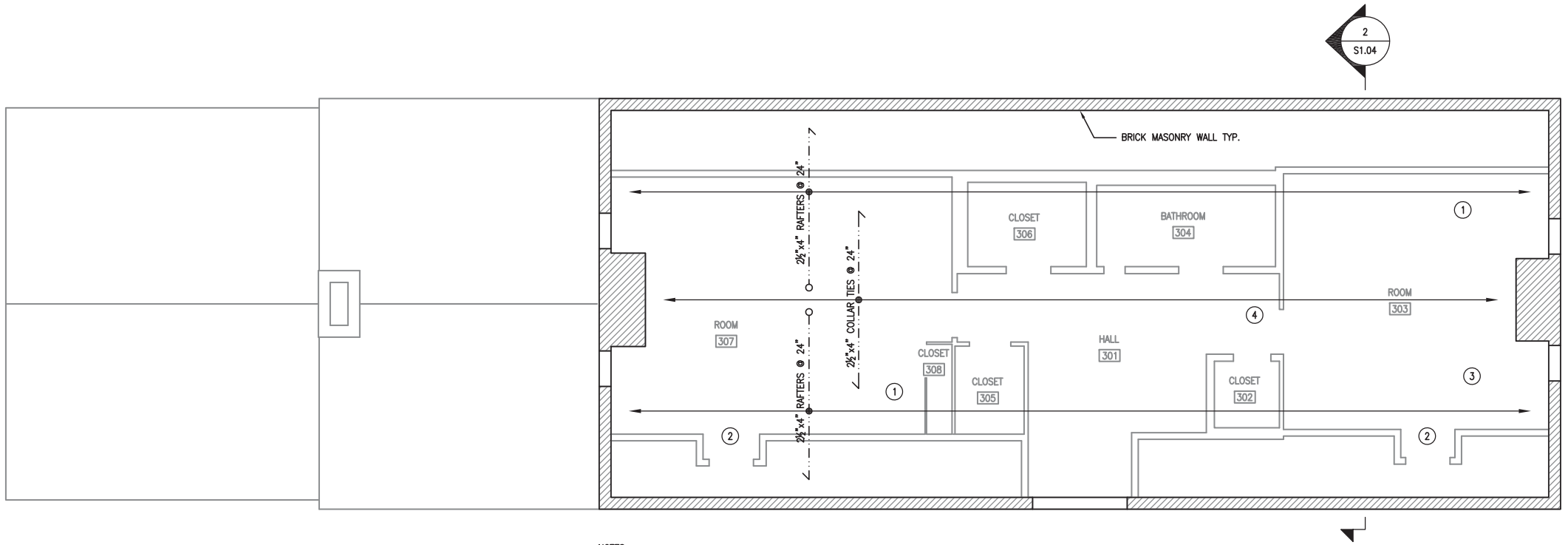
TITLE OF SHEET
THIRD FLOOR FRAMING PLAN

HARMONY HALL: HISTORIC STRUCTURES REPORT

DRAWING NO.
899
116834

PKG. NO.

SHEET
93
OF 115

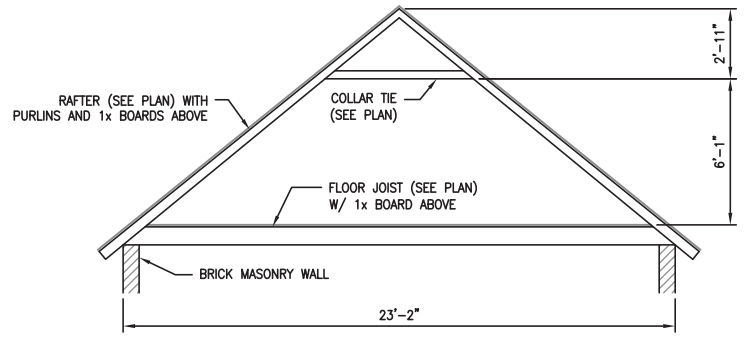


NOTES:
1. DIMENSIONS GIVEN IN STRUCTURAL DRAWINGS ARE BASED ON LIMITED FIELD OBSERVATIONS AND MEASUREMENTS.
2. FOR FRAMING LUMBER SIZES ACTUAL DIMENSIONS ARE GIVEN UNLESS NOTED OTHERWISE.
3. 1x TONGUE & GROOVE BOARDS AND 1"x3" PURLINS WERE NOTED THROUGHOUT THE ROOF FRAMING ABOVE THE RAFTERS.
4. FLAT JACK ARCH LINTELS WERE TYPICALLY NOTED AT EXTERIOR OPENINGS IN THE BRICK MASONRY.

EXISTING CONDITIONS NOTED (STRUCTURAL ONLY)

1. INSECT DAMAGE AND DETERIORATION EVIDENT AT RAFTERS
2. RAFTERS CUT IN THE PAST TO ACCOMMODATE DORMERS.
3. SPLIT IN RAFTER
4. SLOPE IN FLOORING DUE TO DEFLECTIONS OF FRAMING

1 / S1.04 ROOF FRAMING PLAN
SCALE A



NOTES:
1. RAFTERS ARE HAND HEWN AND TAPERED SUCH THAT THE MEMBERS HAVE A DEPTH OF APPROXIMATELY 5" AT THE THIRD FLOOR LEVEL AND 3½" AT THE ROOF PEAK.
2. WHERE VISIBLE CONNECTIONS BETWEEN MEMBERS USE WOOD PEGS. DUE TO ACCESS LIMITATIONS IT IS UNKNOWN IF THE RAFTERS ARE TIED TO THE FLOOR JOISTS.

2 / S1.04 ROOF FRAMING SECTION
SCALE A

NORTH

4 0 4 8
SCALE OF FEET
SCALE A

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC STRUCTURAL ENGINEER: ROBERT SILMAN ASSOC. WASHINGTON, DC	DESIGNED: NH CADD: NH TECH REVIEW: NF DATE: 9/25/12	SUB SHEET NO. S1.04	TITLE OF SHEET: ROOF FRAMING PLAN HARMONY HALL: HISTORIC STRUCTURES REPORT	DRAWING NO. 899 116834 PKG. NO. — SHEET 94 OF 115

GENERAL MECHANICAL NOTES

1. GENERAL NOTES
   - 1.1. SYMBOLS, ABBREVIATIONS AND MECHANICAL GENERAL NOTES ARE COMPOSITE. ALL SYMBOLS, ABBREVIATIONS AND MECHANICAL NOTES MAY NOT BE USED ON THIS PROJECT.
   - 1.2. WORK INDICATED ON THESE DRAWINGS IS DIAGRAMMATIC AND SHOULD NOT BE SCALED TO ESTABLISH LOCATION OF WORK. THE DRAWINGS ARE INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE GENERAL ARRANGEMENTS OF ENGINEERED SYSTEMS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND MAKE ADJUSTMENTS AS NECESSARY TO COMPLETE THE WORK.
   - 1.3. FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES FOR ALL WORK, IN ACCORDANCE WITH PROVISIONS OF THE CONTRACT DOCUMENTS. ALTHOUGH SUCH WORK IS NOT SPECIFICALLY INDICATED, FURNISH AND INSTALL ALL SUPPLEMENTARY OR MISCELLANEOUS ITEMS, APPURTENANCES AND DEVICES INCIDENTAL TO OR NECESSARY FOR A SOUND, SECURE AND COMPLETE INSTALLATION, AT NO ADDITIONAL COST TO THE OWNER.
   - 1.4. IT IS THE INTENTION OF THE CONTRACT DOCUMENTS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, OF FIRST QUALITY AND COMPATIBLE WITH EXISTING SYSTEMS OR MATERIAL WHERE THEY INTERFACE, UNLESS OTHERWISE INDICATED.
   - 1.5. CLEAN UP ALL WASTE AND DEBRIS AT THE END OF EACH WORKING DAY AND AS REQUIRED TO KEEP ALL BUILDING AREAS CLEAN, CLEAR AND UNOBSTRUCTED. AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL TOOLS, APPLIANCES, SURPLUS MATERIAL AND SCRAP FROM THE JOB SITE. SEE ARCH. DWGS. FOR WASTE DISPOSAL REQUIREMENTS.
   - 1.6. AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL CLEAN THE ENTIRE JOB SITE, INCLUDING ALL NEW AND EXISTING SURFACES OF BUILDING, EQUIPMENT AND SYSTEMS, LEAVING THE AREA THOROUGHLY CLEAN, CLEAR AND READY FOR OCCUPANCY.
   - 1.7. ALL SPECIFIED EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
   - 1.8. RELOCATE EXISTING VAV BOX IF REQUIRED TO PROVIDE INSTALLATION OF ADJACENT ELEMENTS AND PROPER VAV ACCESS FOR MAINTENANCE. VAV, ELECTRICAL WIRING AND ALL ASSOCIATED APPURTENANCES SHOULD BE RELOCATED.
   - 1.9. IN ADHERENCE WITH THE INTENT OF THESE CONTRACT DOCUMENTS, PROVIDE FINISHED WORK, TESTED AND READY FOR OPERATION. WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN "FURNISHED, INSTALL, BALANCE, ADJUST AND TEST, COMPLETE AND READY FOR USE".
   - 1.10. ALL CEILING DEVICES (DIFFUSERS, LIGHTS, ETC.) SHALL COMPLY WITH BASE BUILDING STANDARDS.
   - 1.11. CONTRACTOR SHALL VISIT SITE TO VERIFY EXISTING CONDITIONS AND COORDINATE WITH NEW PIPING, DUCTWORK, LIGHTING AND PROPOSED CEILING HEIGHTS. SUBMIT A COORDINATION SHOP DRAWINGS FOR REVIEW PRIOR TO ORDERING, FABRICATING OR INSTALLING ITEMS.
   - 1.12. ALL VAV BOXES MUST HAVE 100% ACCESS FOR SERVICE AND PROPERTY MANAGEMENT.
2. COORDINATION AND SCHEDULING
   - 2.1. COMPLETELY COORDINATE AND SCHEDULE WORK OF ALL TRADES. CONTRACTOR SHALL COMPENSATE FOR EXISTING CONDITIONS SO THAT CONFLICTS IN SCHEDULING AND LOCATION WILL NOT OCCUR.
   - 2.2. CONTRACTOR IS RESPONSIBLE FOR COMPLETE COORDINATION BETWEEN ALL SUB-CONTRACTORS, SUPPLIERS, GOVERNMENT AUTHORITIES HAVING JURISDICTION, BUILDING PERSONNEL, CODE ENFORCEMENT OFFICIALS, ARCHITECT/ENGINEER AND BUILDING OWNER.
   - 2.3. CONTRACTOR SHALL REVIEW AND COORDINATE THE INSTALLATION OF NEW SYSTEM(S) AND EQUIPMENT. NO WORK SHALL BE PERFORMED PRIOR TO THE CONTRACTOR OBTAINING EXACT FIELD DIMENSIONS OF EXISTING BUILDINGS, EXISTING CEILINGS, STRUCTURAL OBSTRUCTIONS, EXISTING BUILDING SYSTEMS TO REMAIN, EXISTING FURNITURE TO REMAIN, ETC., WHICH, MAY AFFECT INSTALLATION OF NEW EQUIPMENT OR SYSTEMS.
   - 2.4. CONTRACTOR'S ATTENTION IS DIRECTED TO THE IMPORTANCE OF PROPER SCHEDULING AND PHASING OF WORK SO AS TO CAUSE MINIMUM DISTURBANCE TO ACTIVITIES IN OTHER AREAS OF THE BUILDING, WHICH WILL REMAIN OCCUPIED THROUGHOUT THE DURATION OF THE CONTRACT. CONTRACTOR'S WORK SCHEDULE SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER.
   - 2.5. NOTIFY THE OWNER, IN WRITING, AT LEAST SEVEN DAYS IN ADVANCE OF ANY REQUIRED SHUTDOWN OF ANY UTILITY. OBTAIN OWNER'S WRITTEN APPROVAL PRIOR TO SHUTDOWN.
   - 2.6. CONTRACTOR SHALL THOROUGHLY EXAMINE PREMISES AND OBSERVE ALL CONDITIONS AND CIRCUMSTANCES UNDER WHICH THE WORK SHALL BE PERFORMED. NO ALLOWANCES WILL BE MADE FOR ERRORS OR NEGLIGENCE IN THIS RESPECT.
   - 2.7. CONTRACTOR SHALL COMPLY WITH RULES AND REGULATIONS OF THE BUILDING LANDLORD AND PROPERTY MANAGER.
3. CODE, PERMITS AND INSPECTIONS
   - 3.1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LATEST APPLICABLE CODES, REGULATIONS AND STANDARDS. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND SHALL ARRANGE FOR ALL INSPECTIONS BY AUTHORITIES HAVING JURISDICTION.
   - 3.2. APPROVAL AND SIGN-OFF BY ALL AUTHORITIES HAVING JURISDICTION IS REQUIRED AT THE COMPLETION OF PROJECT. SECURE PERMIT AND INSPECTION CERTIFICATES AND TRANSMIT SAME TO THE OWNER AT THE COMPLETION OF THE PROJECT.
   - 3.3. PERFORM ALL WORK IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS:
     - 3.3.A. INTERNATIONAL MECHANICAL CODE: YYYY
     - 3.3.B. INTERNATIONAL ENERGY CONSERVATION CODE: YYYY
     - 3.3.C. INTERNATIONAL FUEL GAS CODE: YYYY
     - 3.3.D. INTERNATIONAL FIRE CODE: YYYY
     - 3.3.E. INTERNATIONAL BUILDING CODE: YYYY
     - 3.3.F. NATIONAL ELECTRIC CODE: YYYY
     - 3.3.G. SMACNA DUCT CONSTRUCTION STANDARDS: YYYY
   - 3.4. CODES AND STANDARDS LISTED ARE MINIMUM STANDARDS. WHERE CONTRACT DOCUMENTS CALL FOR A HIGHER STANDARD, CONTRACT DOCUMENTS WILL TAKE PRECEDENCE OVER ALL REFERENCED CODES AND STANDARDS. IF CONTRACT DOCUMENTS CONFLICT WITH CODES OR STANDARDS, CONTRACTOR SHALL INFORM ARCHITECT/ENGINEER, IN WRITING, PRIOR TO QUOTE.
   - 3.5. CONTRACTOR SHALL COMPLY WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS.
   - 3.6. CONTRACTOR SHALL COMPLY WITH RULES AND REGULATIONS OF ALL AFFECTED UTILITY COMPANIES.
4. WARRANTY:
   - 4.1. ALL WORK SHALL BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE. ALL DEFECTS THAT DEVELOP OR ARE DISCOVERED WITHIN THIS PERIOD WILL BE REPAIRED BY THE CONTRACTOR, TO THE SATISFACTION OF THE ARCHITECT/ENGINEER AND AT NO ADDITIONAL COST TO THE OWNER.
5. SUBMITTALS
   - 5.1. SUBMIT FOUR SETS OF SHOP DRAWINGS, TO ARCHITECT/ENGINEER AND OBTAIN APPROVAL, PRIOR TO ORDERING OF EQUIPMENT OR MATERIAL AND BEFORE FABRICATION OF COMPONENTS. SUBMIT SHOP DRAWINGS FOR THE FOLLOWING:
     - 5.1.A. AIR DISTRIBUTION DEVICES AND ACCESSORIES.
     - 5.1.B. ALL MANUFACTURED MECHANICAL EQUIPMENT.
6. RECORD (AS BUILT) DRAWINGS
   - 6.1. REPRODUCIBLE RECORD DRAWINGS SHALL BE SUPPLIED BY CONTRACTOR, UPON WHICH CORRECTIONS SHALL BE MADE, TO PROVIDE AN ACCURATE AND COMPLETE RECORD OF THE WORK, AS INSTALLED. ALL DUCTWORK, EQUIPMENT, PIPING AND AIR DISTRIBUTION DEVICES SHALL BE SHOWN AND DIMENSIONED ON THE RECORD DRAWINGS. CONTRACTOR SHALL PROVIDE LASTEST AUTOCAD VERSION AS-BUILT DRAWINGS AT THE COMPLETION OF THE PROJECT.
   - 6.2. FULL SIZE AS-BUILT DRAWINGS SHALL BE SUPPLIED AT THE COMPLETION OF THE JOB.
   - 6.3. PROVIDE A COMPLETE SET OF DRAWINGS ON A CD WHEN THE JOB IS COMPLETE.
7. MECHANICAL GENERAL NOTES
   - 7.1. ALL EQUIPMENT TO BE LOCATED IN THE CEILING PLENUM SHALL BE SUITABLE FOR INSTALLATION IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.
   - 7.2. ALL EQUIPMENT (INCLUDING DUCTWORK AND PIPING) SHALL BE SECURELY SUPPORTED FROM THE BUILDING STRUCTURE IN AN APPROVED MANNER. EQUIPMENT SHALL NOT GENERATE NOISE GREATER THAN CATALOG RATINGS. ALL EQUIPMENT AND APPURTENANCES SHALL NOT TRANSMIT NOISE OR VIBRATION TO THE OCCUPIABLE SPACES.
   - 7.3. DUCTWORK SHALL BE INSTALLED TIGHT TO THE UNDERSIDE OF THE SLAB/DECK UNLESS OTHERWISE NOTED.
   - 7.4. PROVIDE FIRE SAFING APPROVED BY THE AUTHORITY HAVING JURISDICTION, AROUND ALL PIPING AND DUCTWORK PENETRATIONS THROUGH BUILDING CONSTRUCTION TO MAINTAIN FIRE, SMOKE, AND SOUND RATINGS.
   - 7.5. MECHANICAL EQUIPMENT, DUCTWORK, SUPPORTS, AND MATERIALS SHALL BE RELOCATED AS NECESSARY TO ACCOMMODATE INSTALLATION OF LIGHT FIXTURES AND SPRINKLER SYSTEM/PLUMBING PIPING.
   - 7.6. THE CONTRACTOR SHALL FURNISH AND INSTALL ACCESS PANELS WHERE REQUIRED FOR ACCESS TO EQUIPMENT, VALVES, DAMPERS, CONTROLS, ETC. IN DUCTWORK AND/OR CONCEALED BEHIND FINISHES NOT INTENDED TO BE REMOVED; COORDINATE WITH THE ARCHITECT PRIOR TO ANY INSTALLATION.
   - 7.7. MECHANICAL CONTRACTOR SHALL PROVIDE ALL MOTOR STARTERS, DISCONNECTS ETC. AS REQUIRED BY THE MECHANICAL EQUIPMENT; THE ELECTRICAL CONTRACTOR SHALL INSTALL AND PROVIDE FINAL CONNECTIONS. WHERE THE MECHANICAL SYSTEMS COME WITH INTEGRAL STARTERS, DISCONNECTS, ETC., THE ELECTRICAL CONTRACTOR SHALL PROVIDE FINAL CONNECTIONS.
   - 7.8. ALL EQUIPMENT MUST BE INSTALLED SUCH THAT FACTORY REQUIRED CLEARANCES FOR SERVICEABILITY ARE MAINTAINED. NOTIFY THE ENGINEER IMMEDIATELY SHOULD ANY EQUIPMENT HAVE ACCESS LIMITED BECAUSE OF FIELD CONDITIONS, EQUIPMENT ORIENTATION, ETC. DO NOT INSTALL THIS EQUIPMENT UNTIL THE SITUATION HAS BEEN RESOLVED.
8. TESTING AND BALANCING
   - 8.1. PROVIDE ALL NECESSARY ACCESSORIES TO ALLOW FOR PROPER AIR AND WATER BALANCE. UPON COMPLETION OF THE INSTALLATION, ALL AIR AND WATER SYSTEMS SHALL BE ADJUSTED AND BALANCED TO PROVIDE THE AIR AND WATER FLOW RATE INDICATED. CONTRACTOR SHALL PROVIDE VOLUME DAMPERS, SPLITTER DAMPERS AND/OR VOLUME EXTRACTORS AS INDICATED OR REQUIRED FOR BALANCING. BALANCING WORK SHALL BE PERFORMED BY A CERTIFIED BALANCING CONTRACTOR WHO IS A MEMBER IN GOOD STANDING OF AABC, NEBB OR SMACNA. BALANCING WORK SHALL BE IN COMPLIANCE WITH THE STANDARD PROCEDURE MANUAL PUBLISHED BY THE TESTING AND BALANCING ORGANIZATION AFFILIATED WITH THE BALANCING CONTRACTOR. PRIOR TO ACCEPTANCE OF THE WORK, CONTRACTOR SHALL SUBMIT TO THE ARCHITECT/ENGINEER ALL APPROPRIATE FIELD DATA ON STANDARD FORMS OF THE TESTING AND BALANCING ORGANIZATION IN ACCORDANCE WITH STANDARD PROCEDURES.
9. SHEET METAL DUCTWORK
   - 9.1. ALL NEW DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL (UNLESS OTHERWISE INDICATED) AND INSTALLED IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARDS, LATEST EDITION, 2" PRESSURE CLASS. AUDIBLE LEAKAGE WILL NOT BE ALLOWED.
   - 9.2. ALL NEW DUCTWORK MUST BE FIELD VERIFIED PRIOR TO FABRICATION, PURCHASE, OR INSTALLATION. NO ALLOWANCE WILL BE MADE FOR DUCTWORK THAT IS NOT USED.
   - 9.3. ALL NEW DUCTWORK DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS. DUCTWORK SIZES SHALL BE INCREASED TO ACCOMMODATE 1" INTERNAL LINING WHERE INDICATED ON PLANS.
   - 9.4. PROVIDE SINGLE THICKNESS TURNING VANES IN ALL DUCTWORK ELBOWS (45° & 90°). TURNING VANES SHALL COMPLY WITH SMACNA STANDARDS, 2005 EDITION.
   - 9.5. INSULATION: INSULATE ENTIRELY NEW SUPPLY AIR DUCTWORK WITH 1-1/2" THICK FIBERGLASS DUCT WRAP WITH VAPOR BARRIER IN ACCORDANCE WITH IMC-604. SEAL SEAMS TOGETHER W/STAPLES AND AN APPROVED MASTIC SEALANT. THE USE OF DUCT TAPE IS NOT ACCEPTABLE. (MEDIUM PRESSURE OR LOW PRESSURE DUCTWORK)
   - 9.6. ALL SUPPLY DUCTS, AND FITTINGS INDICATED ON DRAWINGS TO BE LINED, SHALL BE INSULATED WITH DUCT LINER MEETING THE REQUIREMENTS OF ASTMC1071 AND THE ADDITIONAL FOLLOWING REQUIREMENTS:
     - 9.6.A. HAVE A LIQUID WATER REPELLENCY RATING NOT LESS THAN 4 WHEN TESTED IN ACCORDANCE WITH INDA IST 80.6.
     - 9.6.B. HAVE A POTENTIAL HEAT VALUE NOT EXCEEDING 3500 BTU/LB WHEN TESTED IN ACCORDANCE WITH NFPA 259 AND MEETING THE CLASSIFICATION OF "LIMITED COMBUSTIBLE" AS DEFINED BY NFPA 90A.
     - 9.6.C. MAXIMUM RATED VELOCITY NOT LESS THAN 6000 FPM WHEN TESTED IN ACCORDANCE WITH ASTM C 1138, G21 AND G22.
     - 9.6.D. RESISTANT TO MICROBIAL GROWTH USING A "NO GROWTH CRITERIA" WHEN TESTED IN ACCORDANCE WITH ASTM C 1138, G 21 AND G22.
10. FLEXIBLE DUCTWORK
    - 10.1. MAXIMUM LENGTH OF FLEXIBLE DUCTWORK SHALL NOT EXCEED 6'-0" UNLESS OTHERWISE NOTED. USE ROUND METAL DUCTWORK WITH INSULATION WHERE NECESSARY TO MEET THIS REQUIREMENT. ROUND METAL DUCTWORK WITH INSULATION AND FLEXIBLE DUCT SIZE SHALL BE THE SAME AS THE NECK SIZE OF THE DIFFUSERS.
    - 10.2. FLEXIBLE DUCT SHALL BE FACTORY GLASS FIBER INSULATED ASSEMBLY WITH VAPOR BARRIER JACKET AND MAXIMUM THERMAL CONDUCTANCE OF 0.23 BTUH/FT.SQ. PER °F. IT SHALL BE CONSTRUCTED OF MACHINE WOUND SPIRAL ALUMINUM HELIX OR REINFORCED ALUMINUM FOIL FABRIC MECHANICALLY LOCKED INTO ALUMINUM SPIRAL HELIX.
    - 10.3. FLEXIBLE DUCT SHALL BE SUITABLE FOR A 3" W.C. POSITIVE WORKING PRESSURE AND SHALL BE LISTED AS CLASS 1 BY UL AT A FLAME SPREAD NOT TO EXCEED 25 AND SMOKE DEVELOPED NOT OVER 50 AND SHALL COMPLY WITH NFPA 90A.
    - 10.4. MANUFACTURERS: GENFLEX TYPE IHPL, THERMAFLEX TYPE M-KC, OR FLEXMASTER TYPE II OR III.
    - 10.5. FLEXIBLE DUCT SHALL BE CONNECTED TO SHEET METAL DUCTWORK WITH STAINLESS STEEL DUCT CLAMP WITH SWIVEL ACTION SCREW OR 100% NYLON SELF-LOCKING DUCT CLAMP AS APPROVED BY THE LOCAL AUTHORITIES.
    - 10.6. CONICAL TAKEOFF DUCT CONNECTIONS ARE REQUIRED. FLANGED CONNECTIONS WITH DOUBLE BACKED FOAM TAPE WITH A MINIMUM OF 4 SHEET METAL SCREWS SHALL BE PROVIDED. SPIN-INS ARE NOT PERMITTED.
11. CONTROLS
    - 11.1. THERMOSTAT SHALL BE INSTALLED 4'-0" (ADA COMPLIANCE) ABOVE FINISHED FLOOR WHERE SHOWN ON PLANS UNLESS NOTED OTHERWISE.
12. INSTRUCTION AND IDENTIFICATION
    - 12.1. WRITTEN INSTRUCTIONS IN A SINGLE BINDER DESCRIBING THE PROPER OPERATION AND MAINTENANCE OF EQUIPMENT AND SYSTEMS SHALL BE PROVIDED TO THE OWNER AT THE COMPLETION OF THE WORK. THE CONTRACTOR SHALL DEMONSTRATE AND INSTRUCT THE OPERATION OF SYSTEMS TO THE OWNER'S REPRESENTATIVE. ALL VALVES, CONTROLS, ETC., SHALL BE PERMANENTLY IDENTIFIED AND LABELED WITH METAL TAGS OR ENGRAVED NAMEPLATES AS APPLICABLE. COORDINATE WITH HVAC ZONE SCHEDULE.
13. GUARANTEE
    - 13.1. THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER AND SHALL REPAIR OR REPLACE AT NO ADDITIONAL COST TO THE OWNER ANY PART THEREOF WHICH MAY BECOME DEFECTIVE DURING THE PERIOD OF GUARANTEE, ORDINARY WEAR AND TEAR EXCEPTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND PAY FOR ANY DAMAGES RESULTING FROM OR CAUSED BY DEFECTS IN HIS/HER WORK.
14. PIPING
    - 14.1. THE CONTRACTOR SHALL NOT CORE DRILL CONCRETE SLAB WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE STRUCTURAL ENGINEER AND THE BUILDING OWNER AND SHALL X-RAY PRIOR TO ANY CORE DRILLING. X-RAYING AND CORE DRILLING SHALL BE SCHEDULED WITH THE BUILDING OWNER.
    - 14.2. PIPE HANGERS, SUPPORTS, AND COMPONENTS. GALVANIZED, METAL COATINGS: FOR PIPING AND EQUIPMENT THAT SHALL HAVE FIELD-APPLIED FINISH. NONMETALLIC COATINGS: ON ATTACHMENTS FOR ELECTROLYTIC PROTECTION WHERE ATTACHMENTS ARE IN DIRECT CONTACT WITH COPPER TUBING. THERMAL-HANGER SHIELD INSERTS: 100-PSI MIN. COMPRESSIVE-STRENGTH INSULATION ENCASED IN SHEET METAL SHIELD. MATERIAL FOR COLD PIPING: ASTM C 522, TYPE I CELLULAR GLASS OR WATER-REPELLANT TREATED, ASTM C 533, TYPE I CALCIUM SILICATE WITH VAPOR BARRIER.
    - 14.3. PROVIDE REFRIGERANT PIPING IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. VERIFY LINE SIZES FOR EQUIPMENT FURNISHED. REFRIGERANT PIPING SHALL BE COPPER TYPE "ACR" WITH FORGED OR WROUGHT COPPER FITTINGS CONFORMING TO ASTM B280 AND COPPER DEVELOPMENT ASSOCIATION STANDARDS. JOINTS SHALL BE MADE WITH SILVER SOLDER SILFOS OR EQUAL. REFRIGERANT SUCTION PIPING INSULATE WITH CLOSED-CELL FLEXIBLE ELASTOMETRIC INSULATION 1/2" THICK. PROVIDE A WEATHER RESISTANT FINISH ON INSULATION EXPOSED TO OUTDOORS. "ARMSTRONG", "HALSTEAD" OR EQUAL.
    - 14.4. CONDENSER, GLYCOL WATER AND CONDENSATE DRAIN PIPING SHALL BE TYPE "L" HARD DRAWN COPPER TUBING WITH COPPER FITTING, CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 3/4" THICK FIBER GLASS INSULATION WITH ASJ VAPOR BARRIER.
15. PIPE SUPPORT
    - 15.1. SUPPORT VERTICAL PIPES AT EACH FLOOR OR VERTICALLY NOT MORE THAN 10 FEET APART.
    - 15.2. SUPPORT HORIZONTAL PIPE AT 10 FEET MAXIMUM INTERVALS.
16. INSTALLATION
    - 16.1. ALL PIPES SHALL BE INSTALLED IN A NEAT AND ORDERLY APPEARANCE AND FREE FROM CONTACT WITH STRUCTURE OR INSTALLED ITEMS.
    - 16.2. RUN PIPING PARALLEL TO WALLS AND FLOORS OF BUILDING UNLESS OTHERWISE INDICATED.

SYMBOLS

- EXISTING DUCTWORK OR EQUIPMENT TO REMAIN
- EXISTING DUCTWORK OR EQUIPMENT TO BE REMOVED
- 12x10 — NEW DUCT (1ST DIMENSION INDICATES TOP SHOWN, INSIDE CLEAR DIMENSIONS).
- DUCTWORK WITH SOUND LINING
- DUCT WORK WITH TRANSITION
- RECTANGULAR/SQUARE DUCT TO ROUND DUCT SIZE TRANSITION
- FLEXIBLE DUCT CONNECTOR
- VD — MANUAL VOLUME DAMPER
- SD — SMOKE DAMPER
- M — MOTORIZED DAMPER
- FD — FIRE DAMPER
- SUPPLY AIR DUCT TO RISE UP
- SUPPLY AIR DUCT TO DROP DOWN
- RETURN AIR DUCT TO RISE UP
- RETURN AIR DUCT TO DROP DOWN
- EXHAUST DUCT TO RISE UP
- EXHAUST DUCT TO DROP DOWN
- ELBOW WITH TURNING VANES
- SUPPLY AIR DEVICE
- RETURN OR EXHAUST AIR DEVICE
- EXHAUST AIR DEVICE
- VD — DUCTWORK WITH DUCT BRANCH
- VD — DUCTWORK WITH ROUND DUCT TAKE-OFF
- OPEN END DUCT WITH CAP
- ROUND DUCT TO RISE UP
- ROUND DUCT TO DROP DOWN
- FLEXIBLE ROUND DUCT
- M — AIR INTAKE LOUVER WITH MOTORIZED DAMPER
- BDD — RELIEF AIR LOUVER WITH BACKDRAFT DAMPER
- CEILING SUPPLY AIR DIFFUSER
- LINEAR SLOT DIFFUSER
- RETURN AIR GRILLE OPEN TO CEILING
- T — EXISTING THERMOSTAT
- T — NEW THERMOSTAT
- S — SMOKE DUCT DETECTOR
- U — UNDER CUT DOOR, 1/2" CLEAR
- L — LOUVER DOOR (SEE ARCH. DWGS. FOR TYPE AND SPEC.)
- S — SWITCH

- SD — DUCT MOUNTED SMOKE DETECTOR
- C — CARBON MONOXIDE SENSOR
- H — HUMIDISTAT
- NEW EXHAUST FAN
- TRANSFER DUCT WITH 1" ACOUSTICAL SOUND-LINING.
- CHWR — CHILLED WATER RETURN
- CHWS — CHILLED WATER SUPPLY
- D — CONDENSATE DRAIN
- CD — CONDENSATE PIPING
- CWR — CONDENSER WATER RETURN
- CWS — CONDENSER WATER SUPPLY
- DTR — DUAL TEMPERATURE RETURN
- DTS — DUAL TEMPERATURE SUPPLY
- GWS — GLYCOL WATER SUPPLY
- GWR — GLYCOL WATER RETURN
- HWR — HOT WATER RETURN
- HWS — HOT WATER SUPPLY
- CAPPED CONNECTION
- ELBOW TURNED DOWN
- ELBOW TURNED UP
- REDUCER/INCREASER
- BOTTOM PIPE TAKE OFF
- TOP PIPE TAKE OFF
- TEE DOWN
- TEE UP
- UNION
- BALANCING VALVE
- BALL VALVE
- MOTORIZED BALL VALVE
- BOTTOM CONNECTION
- BUTTERFLY VALVE
- OR — CHECK VALVE
- DIAPHRAM VALVE
- GATE ANGLE VALVE
- GATE VALVE
- GLOBE ANGLE VALVE
- OR — GLOBE VALVE
- NEEDLE VALVE
- PLUG VALVE
- OR — PRESSURE REDUCING VALVE
- 2-WAY AUTOMATIC CONTROL VALVE
- 3-WAY AUTOMATIC CONTROL VALVE
- 2-WAY ELECTRIC CONTROL VALVE
- 3-WAY ELECTRIC CONTROL VALVE
- H — AIR VENT
- HOSE END DRAIN
- EXPANSION JOINT
- FLEXIBLE CONNECTOR
- INTERMEDIATE ANCHOR
- MAIN ANCHOR
- PRESSURE GAGE
- STRAINER
- TEMPERATURE GAGE
- DETAIL NUMBER
- 1 / M1.01 M2.01 — WHERE THE DETAIL IS DRAWN
- 2 / M2.01 — WHERE THE DETAIL REFERENCED
- 1 / 1 — KEYED DRAWING NOTE
- EQPM-01 — EQUIPMENT DESIGNATION TAG
- AIR DEVICE TAG
- EQPM-## / 100 CFM — DIFFUSED TYPE / AIR VOLUME IN CFM
- POINT OF DEMOLITION
- POINT OF CONNECTION
- 1 — REVISION NUMBER

NOTE: ALL SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.

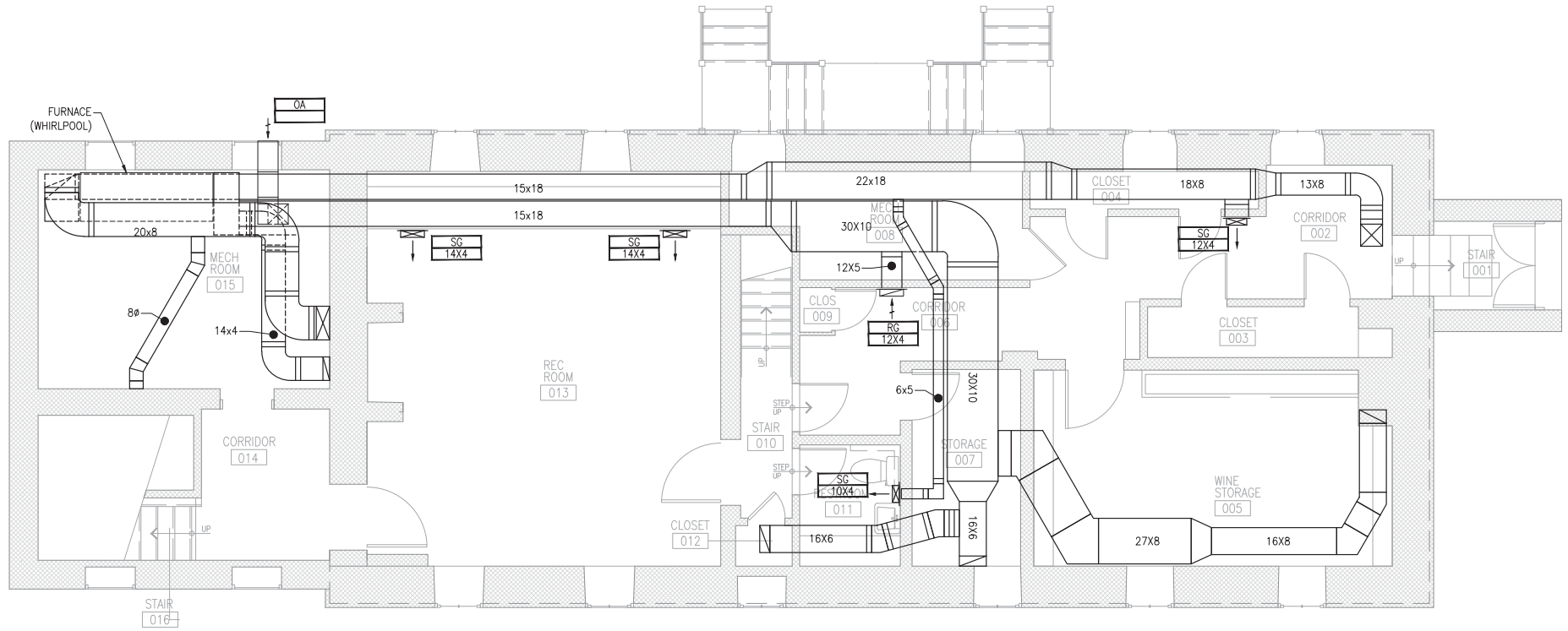
ABBREVIATIONS

AC	AIR CONDITIONING UNIT	MAX	MAXIMUM
AF	AIR FILTER	MBH	1000 BTUH
AFF	ABOVE FINISHED FLOOR	MECH	MECHANICAL
AHU	AIR HANDLING UNIT	MIN	MINIMUM
AI	ANALOG INPUT	MTD	MOUNTED
AO	ANALOG OUTPUT		
APD	AIR PRESSURE DROP	NC	NOISE CRITERIA
ARCH	ARCHITECTURAL	NC	NORMALLY CLOSED
AS	AIR SEPARATOR	NIC	NETWORK INTERFACE CARD
ATC	AUTO TEMPERATURE CONTROL	NIC	NOT IN CONTRACT
		NO	NORMALLY OPEN
BHP	BRAKE HORSE POWER	NOM	NOMINAL
BLDG	BUILDING	No.	NUMBER
BLW	BELOW		
BP	BOOSTER PUMP	OA	OUTSIDE AIR
BTUH	BRITISH THERMAL UNIT PER HOUR	OAT	OUTSIDE AIR TEMPERATURE
		P	PUMP
		PD	PRESSURE DROP
CAC	CONTROL AIR COMPRESSOR	PS	PRESSURE SENSOR
CC	COOLING COIL	PSI	POUNDS PER SQUARE INCH
CFM	CUBIC FEET PER MINUTE		
CH	CHILLER	(R)	RELOCATED
CHP	CHILLED WATER PUMP	RA	RETURN AIR
CHWS	CHILLED WATER SUPPLY	RAT	RETURN AIR TEMPERATURE
CHWR	CHILLED WATER RETURN	RF	RETURN FAN
CLG	CEILING	RHC	REHEAT COIL
CO	CLEAN OUT	RLA	RELIEF AIR
CP	CONDENSER WATER PUMP	RLF	RELIEF FAN
CR	CONDENSER WATER RETURN	RPM	REVOLUTION PER MINUTE
CRAC	COMPUTER ROOM AIR CONDITIONING UNIT	SA	SUPPLY AIR
CS	CONDENSER WATER SUPPLY	SAT	SUPPLY AIR TEMPERATURE
CV	CONVERTER	SD	SMOKE DETECTOR
CU	CONDENSING UINT	SF	SUPPLY FAN
		SR	SUPPLY REGISTER
DB	DRY BULB	SS	STAINLESS STEEL
DDC	DIRECT DIGITAL CONTROL		
DI	DIGITAL INPUT	TS	TEMPERATURE SENSOR
DIA	DIAMETER	TYP	TYPICAL
DN	DOWN		
DO	DAMPER OPERATOR	UH	UNIT HEATER
DO	DIGITAL OUTPUT	UNO	UNLESS NOTED OTHERWISE
DPS	DIFFERENTIAL PRESSURE SWITCH	V	VALVE (MOTORIZED)
DWG	DRAWING	VAV	VARIABLE AIR VOLUME
		VSD	VARIABLE FREQUENCY/SPEED DRIVE
EA	EACH		
EAT	ENTERING AIR TEMPERATURE	W	WATT
EF	EXHAUST FAN	WB	WET BULB
EQUIP	EQUIPMENT	WC	WATER COLUMN
ET	EXPANSION TANK	WPD	WATER PRESSURE DROP
ETR	EXISTING TO REMAIN	W/	WITH
EWT	ENTERING WATER TEMPERATURE	W/O	WITHOUT
EXIST	EXISTING		
(E)	EXISTING		
EXT	EXTERNAL		
F	FAHRENHEIT		
FC	FAN COIL UNIT		
FD	FIRE DAMPER		
FL	FLOOR		
FPM	FEET PER MINUTE		
FT	FEET		
FT	FLASH TANK		
FTR	FINNED TUBE RADIATOR		
FZ	FREEZE STAT		
GPM	GALLONS PER MINUTE		
GWR	GLYCOL WATER RETURN		
GWS	GLYCOL WATER SUPPLY		
HC	HEATING COIL		
HP	HORSE POWER / HEAT PUMP		
HR	HOUR		
HS	HUMIDITY SENSOR		
IN	INCH		
IU	INDUCTION UNIT		
KW	KILOWATT		
LAN	LOCAL AREA NETWORK		
LAT	LEAVING AIR TEMPERATURE		
LB	POUNDS		
LF	LINEAR FEET		
LWT	LEAVING WATER TEMPERATURE		

NOTE:
ALL ABBREVIATIONS MAY NOT APPEAR ON THE DRAWINGS.

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	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC M/E/P ENGINEERS: SETTY & ASSOC. INT'L PLLC WASHINGTON, DC	DESIGNED: DN CADD: DN TECH REVIEW: DATE: 9/21/12	SUB SHEET NO. **M0.01**	TITLE OF SHEET: MECHANICAL GENERAL NOTES, SYMBOLS, AND ABBREVATIONS HARMONY HALL: HISTORIC STRUCTURES REPORT	DRAWING NO. 899 116834 PKG. NO. SHEET 95 OF 115



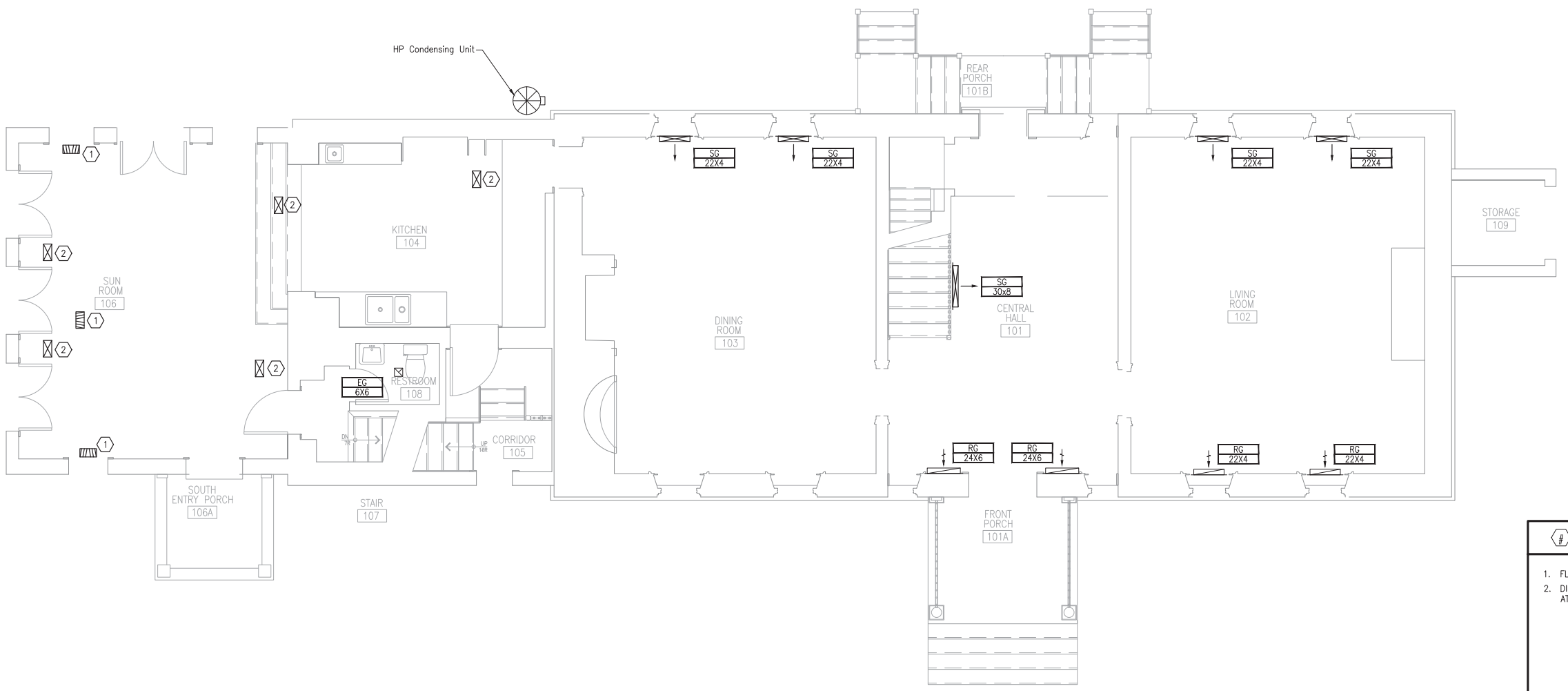
1 / M1.00 MECHANICAL BASEMENT LEVEL FLOOR PLAN

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

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SHEET NOTES

1. FLOOR GRILLE CONNECTED TO FURNACE.
2. DIFFUSER (12X6) CONNECTED TO HEAT PUMP IN ATTIC.

1 / M1.01 MECHANICAL FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

M/E/P ENGINEERS:
SETTY & ASSOC. INT'L PLLC
WASHINGTON, DC

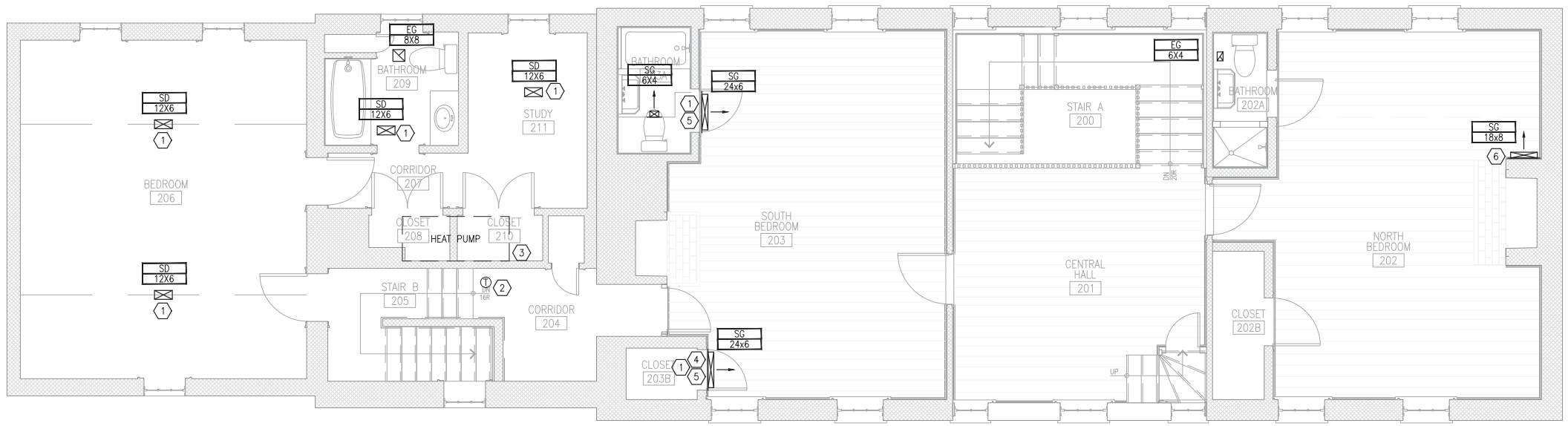
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CADD: DN
TECH REVIEW:
DATE: 9/21/12

SUB SHEET NO.
M1.01

TITLE OF SHEET
MECHANICAL FRIST FLOOR PLAN
HARMONY HALL: HISTORIC STRUCTURES REPORT

DRAWING NO. 899 / 116834
PKG. NO.
SHEET 97 OF 115

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SHEET NOTES

1. CONNECTED TO HEAT PUMP IN ATTIC
2. THERMOSTAT TO HEAT PUMP IN ATTIC
3. HEAT PUMP IN ATTIC ABOVE CLOSE 208 AND 210
4. FLEX DUCT CONNECTION TO HEAT PUMP.
5. 84" A.F.F.
6. 72" A.F.F

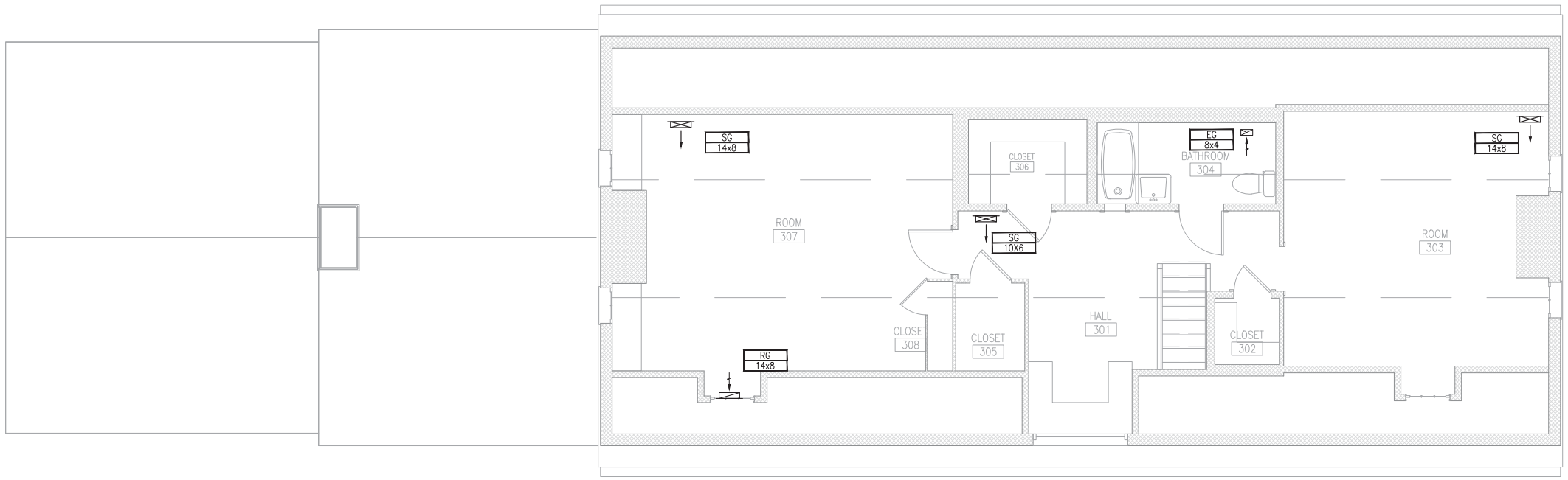
1 / M1.02 MECHANICAL SECOND FLOOR PLAN

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

N

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1 / M1.03 MECHANICAL THRID FLOOR PLAN
SCALE: 1/4" = 1'-0"

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DRAWING INDEX

Sheet Number	Sheet Title
P001	Plumbing General Notes, Symbols, and Abbrevations
P100	Plumbing Basment Level Floor Plan
P101	Plumbing First Floor Plan
P102	Plumbing Second Floor Plan
P103	Plumbing Third Floor Plan
P601	PLUMBING SCHEDULES

GENERAL PLUMBING NOTES

1. ALL PLUMBING WORK SHALL COMPLY WITH THE 2006 INTERNATIONAL PLUMBING CODE AND THE DISTRICT OF COLUMBIA AMENDMENTS.
2. ALL WORK SHALL BE FINISHED WORK, TESTED, AND READY FOR OPERATION. WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN "FURNISH AND INSTALL, COMPLETE AND READY FOR USE."
3. THE DRAWINGS ARE DIAGRAMMATIC ONLY. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS OF THE BUILDING AND EXACT LOCATIONS OF ALL FIXTURES AND EQUIPMENT.
4. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES AND TAXES.
5. CONTRACTOR SHALL MAKE NO CHANGES WITHOUT THE WRITTEN PERMISSION FROM THE ARCHITECT.
6. ALL MATERIAL AND EQUIPMENT INDICATED ON THE PLANS OR DESCRIBED IN THE SPECIFICATIONS OR BOTH SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE IN NEW CONDITION AT ACCEPTANCE OF WORK.
7. CONTRACTOR ASSUMES RESPONSIBILITY FOR PROPER ARRANGEMENT OF PIPE, FIXTURES, ETC TO CONNECT APPROVED EQUIPMENT IN A PROPER AND APPROVED MANNER. CONTRACTOR SHALL FOLLOW EQUIPMENT MANUFACTURER'S DETAILED INSTRUCTIONS AND THE CONTRACT DOCUMENTS. NOTIFY THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH ALL WORK. NO EQUIPMENT INSTALLATION OR CONNECTIONS SHALL BE MADE IN A MANNER THAT VOIDS THE MANUFACTURER'S WARRANTY.
8. CONTRACTOR SHALL OBTAIN APPROVAL FROM ARCHITECT AND THE STRUCTURAL ENGINEER PRIOR TO CUTTING STRUCTURAL MEMBERS.
9. 9PROVIDE SLEEVES FOR ALL FLOOR PENETRATIONS WITH TOP OF SLEEVE 2' ABOVE FINISHED FLOOR
10. PROVIDE SHUT-OFF VALVES ON ALL EQUIPMENT AND ANGLE STOPS IN HOT AND COLD WATER PIPING TO ALL PLUMBING FIXTURES.
11. CONTRACTOR SHALL PROVIDE ACCESS PANELS FOR ALL VALVES AND MECHANICAL EQUIPMENT LOCATED IN CONCEALED SPACES.
12. MAINTAIN WORK AREA CLEAN AT ALL TIMES DURING CONSTRUCTION. AFTER COMPLETING INSTALLATION OF WORK, CLEAN ALL FIXTURES OF ALL RUBBISH, PLASTER, DIRT AND OTHER DEBRIS.
13. TEST ALL SYSTEMS. ALL FIXTURES SHALL OPERATE SATISFACTORILY AS DESIGNED AND INTENDED. REPORT ANY DEFICIENCIES TO THE ARCHITECT/ENGINEER.
14. THE DOMESTIC WATER SYSTEM SHALL BE DISINFECTED AND FLUSHED IN FULL ACCORDANCE WITH THE LOCAL AUTHORITIES HAVING JURISDICTION.
15. ALL PIPING SYSTEMS SHALL BE PRESSURE TESTED
16. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY SITE LOCATIONS OF ALL UTILITIES AND PIPING, ALL BUILDING CONDITIONS, ACTUAL CONSTRUCTION, CLEARANCES AND COORDINATE WITH ALL OTHER TRADES. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD AS REQUIRED. DO NOT SCALE SLAB PENETRATIONS FROM THIS DRAWING. COORDINATE ALL SLAB PENETRATION DRILLING WITH FIELD CONDITIONS. REFER TO EQUIPMENT LAYOUT PLANS, ARCHITECTURAL DRAWINGS, MANUFACTURERS CUT SHEETS AND INSTALLATION INSTRUCTIONS AS REQUIRED. COORDINATE WITH STRUCTURAL AS REQUIRED. PATCH AND SEAL ALL SLAB PENETRATIONS AS REQUIRED WITH CODE APPROVED MATERIALS AS REQUIRED TO MAINTAIN FIRE AND WATER PROOFING RATINGS AND INTEGRITY.
17. CONTRACTOR SHALL REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS AND CUT SHEETS AS REQUIRED FOR INSTALLATION OF EQUIPMENT.
18. ALL FLOOR DRAIN TRAP SEALS SHALL BE MAINTAINED BY AN APPROVED TRAP PRIMER.
19. ALL PIPING HANGERS AND SUPPORTS SHALL COMPLY WITH MFMA-4, MSS SP-58 AND MSS SP-69.
20. ALL DOMESTIC HOT AND COLD WATER PIPING SHALL BE INSULATED AND COVERED WITH A 1" THICK FIBERGLASS PIPING INSULATION WITH VAPOR BARRIER AND ALL SEAMS SEALED AS REQUIRED. INSULATE ALL RAIN WATER LEADERS, DOMESTIC WATER AND CONDENSATE DRAINS IN CEILING SPACE AND IN FURRED AREAS.
21. CONTRACTOR SHALL FURNISH AND INSTALL WATER SHOCK ARRESTORS. AIR CHAMBERS SHALL NOT BE CONSIDERED AN EQUAL TO WATER ARRESTORS AS SPECIFIED.
22. VALVES AND FITTINGS SHALL BE OF THE SAME SIZE AS THE LINE ON WHICH THEY ARE LOCATED, UNLESS OTHERWISE INDICATED ON DRAWINGS.
23. ALL SANITARY DRAINAGE PIPING 3" AND LARGER SHALL BE INSTALLED WITH A MINIMUM SLOPE OF 1/8" FALL PER 1'-0" OF RUN
24. ALL SANITARY DRAINAGE PIPING 2" AND LESS SHALL BE INSTALLED WITH A MINIMUM SLOPE OF 1/4" FALL PER 1'-0" OF RUN.
25. ALL STORM DRAINAGE PIPE SHALL BE INSTALLED WITH A MINIMUM SLOPE OF 1/8" FALL PER 1'-0" OF RUN.
26. ALL ILLUSTRATED DRAINAGE PIPING IS BELOW THE FLOOR ON WHICH IT IS DRAWN UNLESS OTHERWISE NOTED. ALL DOMESTIC WATER AND VENT PIPING ILLUSTRATED IS ABOVE OR AT THE CEILING ON WHICH IT IS DRAWN UNLESS OTHERWISE NOTED.
27. DOMESTIC WATER PIPING SHALL BE OF TYPE "L" OR TYPE "M" COPPER TUBING WITH WROUGHT COPPER FITTINGS.
28. SET TEMPERING VALVES AT 105'F
29. PROVIDE PRODUCTS AND FIXTURES AS SPECIFIED OR EQUIVALENT.

DESIGN CRITERIA

2006	INTERNATIONAL BUILDING CODE
2006	INTERNATIONAL PLUMBING CODE
2006	INTERNATIONAL MECHANICAL CODE
2006	INTERNATIONAL FUEL GAS CODE
2006	DISTRICT OF COLUMBIA AMENDMENTS
2008	IECC
2008	DCMA

SYMBOLS

- EXISTING TO REMAIN PIPE
- EXISTING TO REMAIN VENT PIPE
- REMOVE/DEMOLISH EXISTING PIPE
- COLD WATER PIPING
- G — GAS PIPING
- G — GAS VENT PIPING
- HOT WATER PIPING
- HOT WATER RETURN PIPING
- ID — INDIRECT DRAINAGE PIPE
- SOIL OR WASTE PIPING ABOVE GROUND
- SOIL OR WASTE PIPING BELOW GROUND
- ST — STORM WATER PIPING ABOVE GROUND
- ST — STORM WATER PIPING BELOW GROUND
- TP — TRAP PRIMER TUBE
- VENT PIPING
- CAPPED CONNECTION
- ELBOW TURNED DOWN
- ELBOW TURNED UP
- REDUCER/INCREASER
- TEE DOWN
- TEE UP
- UNION
- BACKFLOW PREVENTER (ASSE 1024)
- BALANCING VALVE
- BALL VALVE
- CHECK VALVE
- DOUBLE CHECK VALVE BACKFLOW PREVENTER (ASSE 1015, 1048)
- GATE VALVE
- PLUG VALVE
- PRESSURE REDUCING VALVE
- REDUCED PRESSURE ZONE BACKFLOW PREVENTER (ASSE1013)
- SHUT-OFF VALVE IN RISER
- SOLENOID VALVE
- THERMOSTATIC MIXING VALVE
- A — AQUASTAT VALVE
- PRESSURE GAUGE
- PUMP
- THERMOMETER GAUGE
- A — WATER HAMMER ARRESTOR W/DESIGNATION
- GM — GAS METER
- CO — HORIZONTAL CLEANOUT
- HB — HOSE BIB
- STRAINER
- WH — WALL HYDRANT
- M — WATER METER
- F — WATER FILTER
- AD — AREA DRAIN
- FCO — FLOOR CLEANOUT
- FD — FLOOR DRAIN
- FS — FLOOR SINK DRAIN
- FUNNEL FLOOR DRAIN
- GD — GARAGE DRAIN
- OSD — OPEN SITE DRAIN
- ORD — OVERFLOW ROOF DRAIN
- RD — ROOF DRAIN
- TD — TRENCH DRAIN
- DIRT LEG
- TEMPERATURE AND PRESSURE RELIEF VALVE
- TP — TRAP PRIMER
- VACUUM RELIEF VALVE
- VACUUM BREAKER

- 1 / M1.01 M2.01 — DETAIL NUMBER
- 2 / M2.01 — WHERE THE DETAIL IS DRAWN
- WHERE THE DETAIL REFERENCED
- W / 1 — DOMESTIC WATER RISER DESIGNATION
- G / 1 — GAS RISER DESIGNATION
- OSD / 1 — OVERFLOW STORM DESIGNATION
- S / 1 — SANITARY RISER DESIGNATION
- ST / 1 — STORM RISER DESIGNATION
- 1 / 1 — KEYED DRAWING NOTE
- EQPM-01 — EQUIPMENT DESIGNATION TAG
- POINT OF DEMOLITION
- POINT OF CONNECTION
- 1 — REVISION NUMBER

NOTE:
ALL SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.

ABBREVIATIONS

AD	AREA DRAIN
ADA	AMERICAN DISABILITY ACT
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASPE	AMERICAN SOCIETY OF PLUMBING ENGINEERS
ASSE	AMERICAN SOCIETY OF SANITARY ENGINEERS
BLDG	BUILDING
BTU	BRITISH THERMAL UNIT
BTH	BRITISH THERMAL UNIT PER HOUR
BV	BACKWATER VALVE
CLG	CEILING
CO	CLEANOUT
CONT	CONTINUATION
CW	COLD WATER
DFU	DRAINAGE FIXTURE UNIT
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
DWH	DOMESTIC WATER HEATER
E	EXISTING
F	WATER FILTER
FD	FLOOR DRAIN
FS	FLOW SWITCH
FT	FEET
GAL	GALLON
GD	GARBAGE DISPOSAL
GCO	GRADE CLEANOUT
GPM	GALLONS PER MINUTE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HORSE POWER
HW	HOT WATER SUPPLY
HWR	HOT WATER RETURN
INV	INVERT
MAX	MAXIMUM
MBH	THOUSAND BTU PER HOUR
MFR	MANUFACTURER
MIN	MINIMUM
MTD	MOUNTED
N	NEW
NO.	NUMBER
P	PUMP
PDI	PLUMBING DRAIN INSTITUTE
PH	PHASE (ELECTRICAL)
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
REF	REFRIGERATOR
RD	ROOF DRAIN
RPM	REVOLUTIONS PER MINUTE
SAN	SANITARY/WASTE PIPE
SF	SQUARE FEET
SFU	SUPPLY FIXTURE UNIT
SS	STAINLESS STEEL
ST	STORM WATER
TEMP	TEMPERATURE
TMV	THERMOSTATIC MIXING VALVE
TP	TRAP PRIMER TUBE
TW	TEMPERED WATER
TYP	TYPICAL
UR	URINAL
VTR	VENT THRU ROOF
WC	WATER CLOSET
WCO	WALL CLEANOUT
WM	WATER METER

NOTE:
ALL ABBREVIATIONS MAY NOT APPEAR ON THE DRAWINGS.

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

M/E/P ENGINEERS:
SETTY & ASSOC. INT'L. PLLC
WASHINGTON, DC

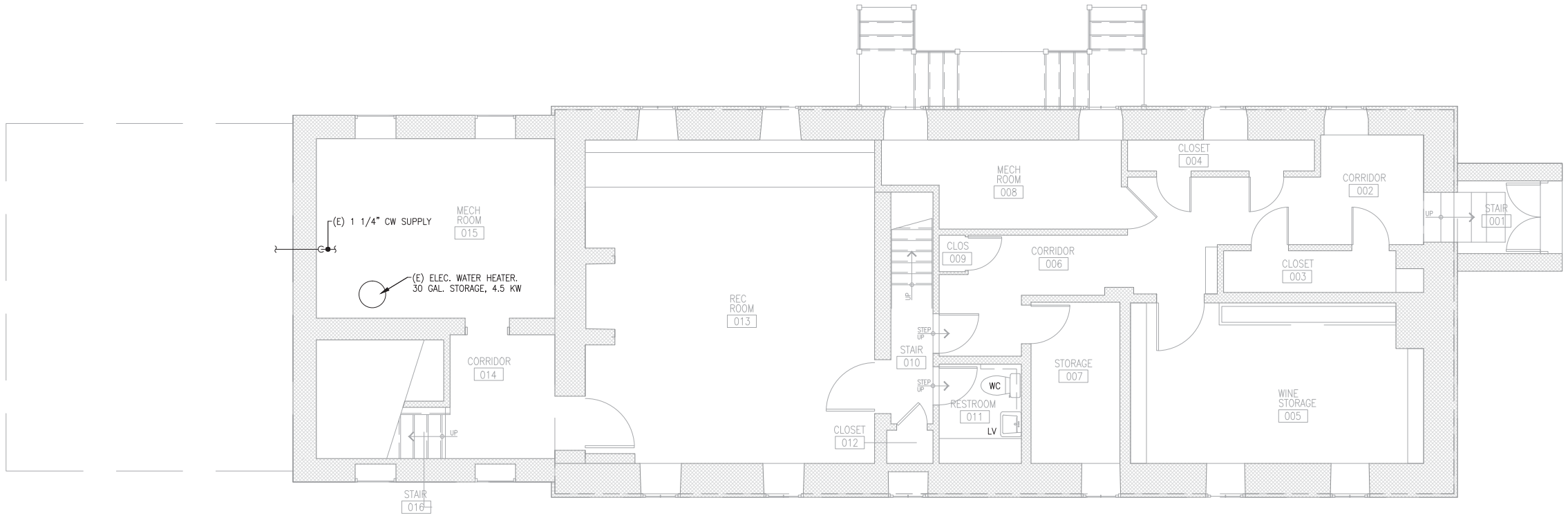
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DATE: 9/21/12

SUB SHEET NO.
P0.01

TITLE OF SHEET
PLUMBING GENERAL NOTES, SYMBOLS, AND ABBREVATIONS
HARMONY HALL: HISTORIC STRUCTURES REPORT

DRAWING NO. 899 / 116834
PKG. NO.
SHEET 100 OF 115

Plotted By: JORDAN REYNOLDS Plot Date: 10/7/2012 9:58:42 PM
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1 / P1.00 PLUMBING BASMENT LEVEL FLOOR PLAN

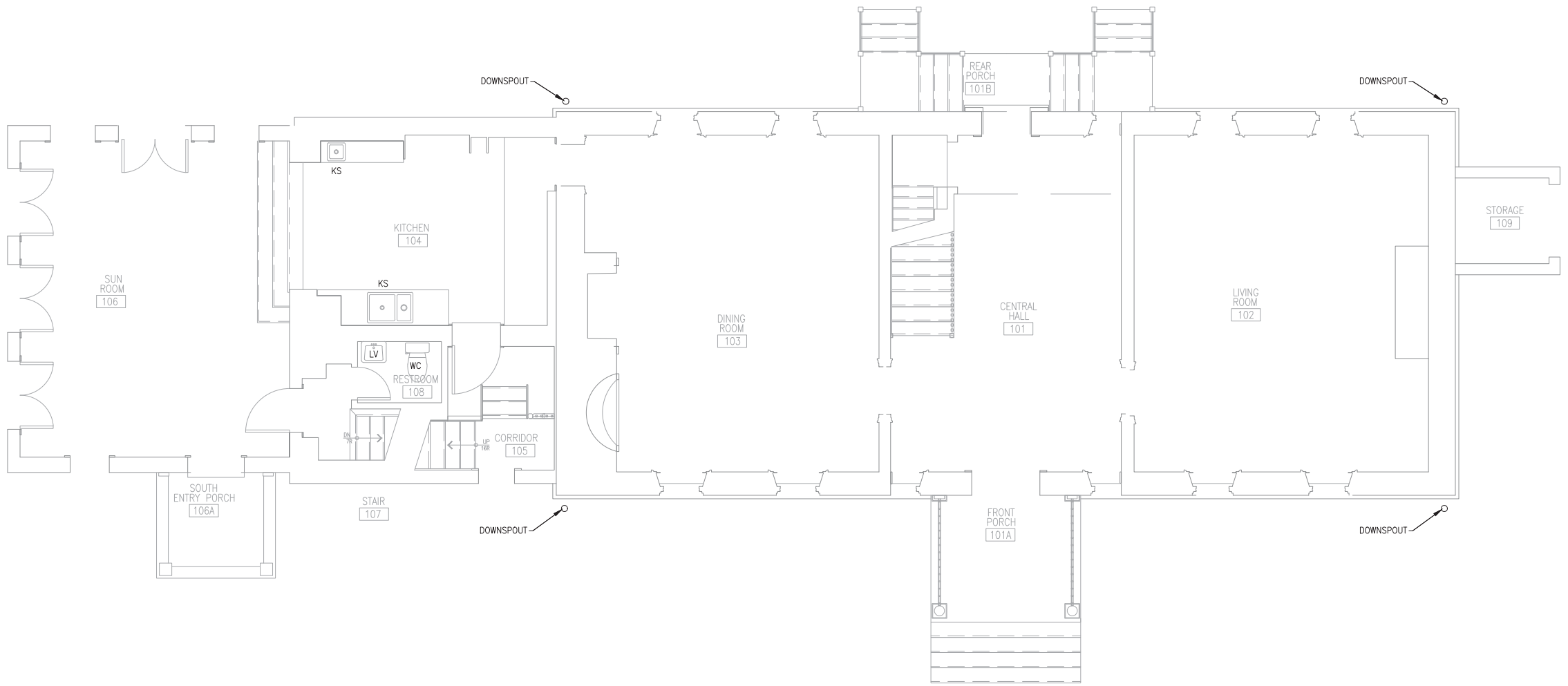
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FREESTANDING YARD HYDRANT



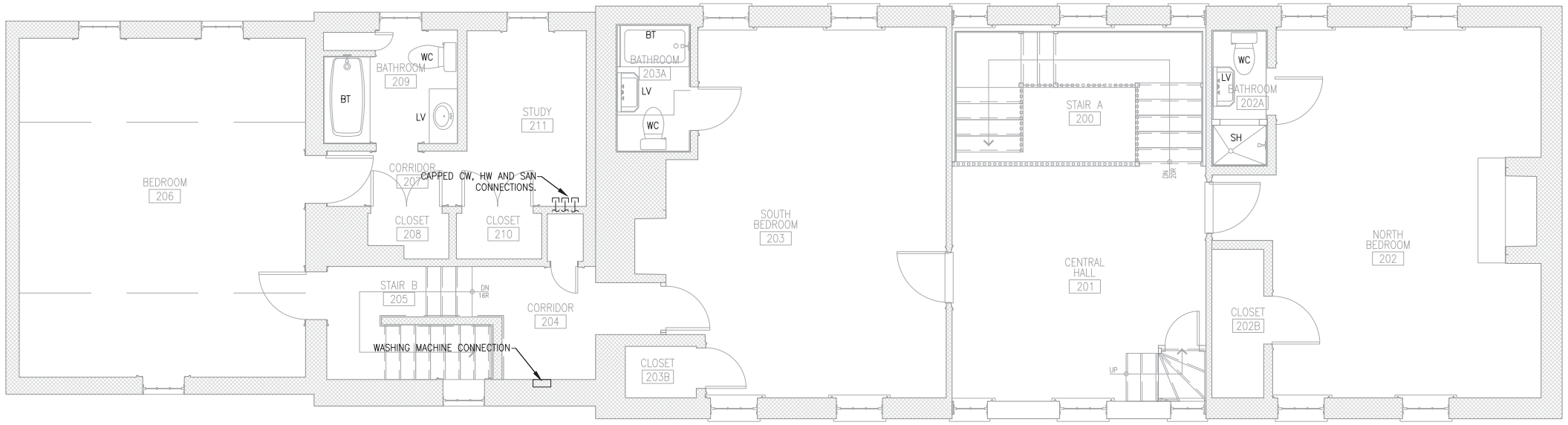
1 / P1.01 PLUMBING FIRST FLOOR PLAN

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

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1 / P1.02 PLUMBING SECOND FLOOR PLAN

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

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Project Name: Harmony Hall
Project Code: IPC 2006
Project Engineer: Dejan Tadic
Date: 03/20/2012

Domestic and Sanitary Water Service Fixture Count

Fixture Type	Occupancy	Type of Supply Control	Quantity	Load (CWFU)	Load (HWFU)	Total	Total (Cold)	Total (Hot)	Total (SFU)	Load (DFU)	Total (DFU)
Bathroom group	Private	Flush Tank(1.6 gpf)	4	2.7	1.5	3.6	10.8	6	14.4	5	20
Bathroom group	Private	Flush Valve (1.6 gpf)	0	6	3	8	0	0	0	5	0
Bathtub	Private	Faucet	0	1	1	1.4	0	0	0	2	0
Bathtub	Public	Faucet	0	3	3	4	0	0	0	2	0
Bidet	Private	Faucet	0	1.5	1.5	2	0	0	0	1	0
Dishwashing Machine	Domestic	Automatic	0	0	1.4	1.4	0	0	0	2	0
Drinking Fountain	Gymnasium	3/8"	0	0.25		0.25	0	0	0	0.5	0
Kitchen Sink	Commercial	Faucet	0	3	3	4	0	0	0	2	0
Kitchen Sink	Private	Faucet	2	1	1	1.4	2	2	2.8	2	4
Lavatory Trays (1.5 compartments)	Private	Faucet	0	1	1	1.4	0	0	0	2	0
Lavatory	Public	Faucet	0	1.5	1.5	2	0	0	0	1	0
Lavatory	Private	Faucet	2	0.5	0.5	0.7	1	1	1.4	1	2
Service Sink	Commercial	Faucet	0	2.25	2.25	3	0	0	0	2	0
Shower Head	Public	Mixing valve	0	3	3	4	0	0	0	2	0
Shower Head	Private	Mixing valve	0	1	1	1.4	0	0	0	2	0
Urinal	Public	Flush Valve (1") 1 Gal. or less per Flush	0	10	0	10	0	0	0	2	0
Urinal	Public	Flush Valve (3/4") 1 Gal. or less per Flush	0	5	0	5	0	0	0	2	0
Urinal	Public	Flush Tank 1 Gal. or less per Flush	0	3	0	3	0	0	0	2	0
Urinal	Public	Non Water Supplied	0	0	0	0	0	0	0	0.5	0
Laundry Machine (8 lbs)	Private	Automatic	1	1	1	1.4	1	1	1.4	2	2
Laundry Machine (8 lbs)	Public	Automatic	0	2.25	2.25	3	0	0	0	3	0
Laundry Machine (15 lbs)	Public	Automatic	0	3	3	4	0	0	0	4	0
Water Closet	Public	Flush Tank (1.6 gpf)	0	5	0	5	0	0	0	4	0
Water Closet	Public	Flush Valve (1.6 GPF)	0	10	0	10	0	0	0	4	0
Water Closet	Private	Flush Valve (1.6 GPF)	2	6	0	8	12	0	17	4	8
Water Closet	Private	Flush Tank (1.6 GPF)	0	2.2	0	2.2	0	0	0	3	0
Water Closet	Private/ Public	Flushometer Tank	0	2	0	2	0	0	0	4	0
Water Closet	Public	Flush Valve (1.6 GPF)	0	10	0	10	0	0	0	6	0
Fixture	Drain/Trap Size	1 1/4"	0	0	0	0	0	0	0	1	0
Fixture	Drain/Trap Size	1 1/2"	0	0	0	0	0	0	0	2	0
Fixture	Drain/Trap Size	2"	0	0	0	0	0	0	0	3	0
Fixture	Drain/Trap Size	3"	0	0	0	0	0	0	0	6	0
Fixture	Drain/Trap Size	4"	0	0	0	0	0	0	0	8	0
Hose Bib	General	Automatic	1	3	0	3	3	0	3	5	5

Total CWFU (Cold)	29.8	
Total HWFU (HOT)	10	
Total WSFU	35	
Total DFU	36	
Estimated Demand for WSFU	25	GPM
Irrigation System	0	GPM
Mechanical Load/ Other	0	GPM
TOTAL ESTIMATED DEMAND	25	GPM
EXISTING WATER SERVICE LINE	1 1/4	"
SANITARY BUILDING DRAIN	0	"

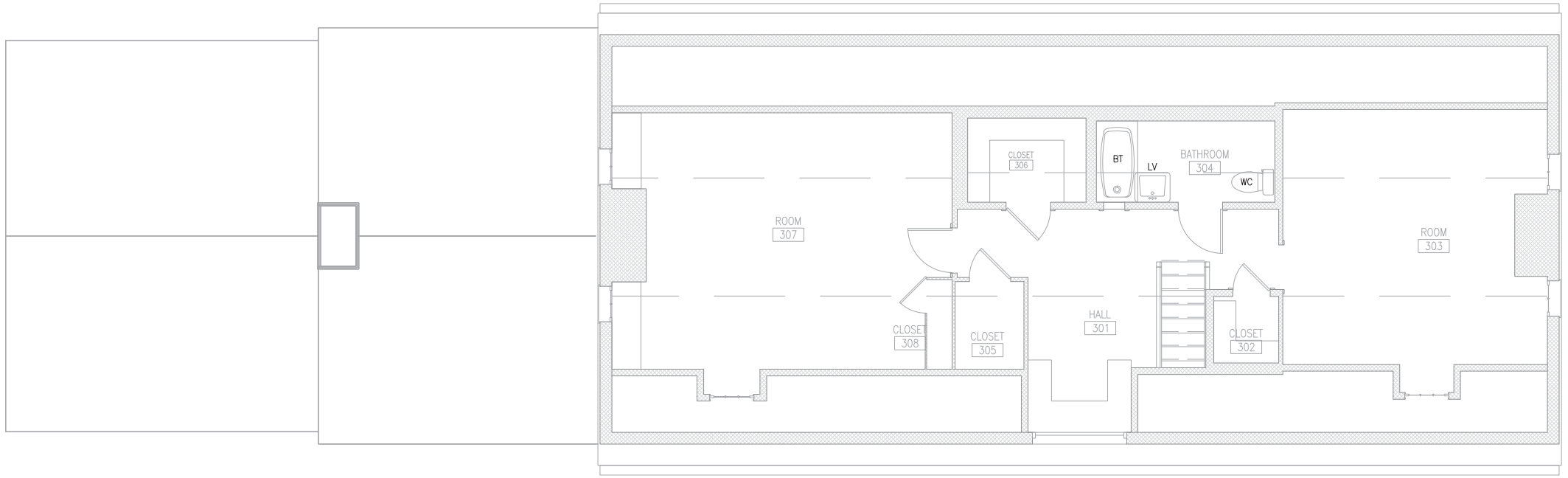
DOMESTIC WATER HEATER CALCULATIONS (DWH-1)

	FIXTURE	QTY	TOTAL LOAD SHOWN	TOTAL SHOWN	Total Demand:	107 Gallons
					Water Storage:	40 Gallons
					Water Recovery at Peak:	67 Gallons
HWH-1	Lavatory Public	2	4	1	HWH Hot Water Fixture Demand:	1
HWH-1	Lavatory Private	4	8	10	HWH Hot Water Fixture Demand:	10
HWH-1	Bathroom Sink	0	0	0	HWH Hot Water Fixture Demand:	0
HWH-1	Kitchen Sink	2	4	4	Total Demand:	15
HWH-1	Dishwasher Private	0	0	0		
HWH-1	Clothes Washer	0	0	0		
HWH-1	Laundry Machine	0	0	0		
HWH-1	Bath Tub	0	0	0		
HWH-1	Service Sink	0	0	0		
HWH-1	Shower Private	0	0	0		

Total Water Demand:	107	Selected Water Heater:	Existing RUUD Electric Water Heater
HWH Hot Water Fixture Demand:	1	Selected Storage:	30 Gallons Existing
HWH Hot Water Fixture Demand:	15	Water Heater Storage Capacity:	30
HWH Hot Water Fixture Demand:	10	Selected Storage:	1 Gallons
Hot Water Fixture HWH Peak Demand @ 8.5 gpm:	8.5	Total Storage:	31
Hot Water Fixture HWH Peak Demand @ 8.5 gpm:	8.5	Usable Storage 67%:	24 Gallons
Demand Factor:	0.30	Recovery @ 70°F:	67 Gallons
Storage Capacity Factor:	1.25	Total Available Hot Water:	48 Gallons

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC M/E/P ENGINEERS: SETTY & ASSOC. INT'L PLLC WASHINGTON, DC	DESIGNED: DT CADD: DT TECH REVIEW: DATE: 9/21/12	SUB SHEET NO. P6.01	TITLE OF SHEET: PLUMBING SCHEDULES HARMONY HALL: HISTORIC STRUCTURES REPORT	DRAWING NO. 899 116834 PKG. NO. SHEET 105 OF 115	

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1 / P1.03 PLUMBING THIRD FLOOR PLAN

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

N

PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

M/E/P ENGINEERS:
SETTY & ASSOC. INT'L. PLLC
WASHINGTON, DC

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DATE: 9/21/12

SUB SHEET NO.
P1.03

TITLE OF SHEET
PLUMBING THIRD FLOOR PLAN

HARMONY HALL: HISTORIC STRUCTURES REPORT

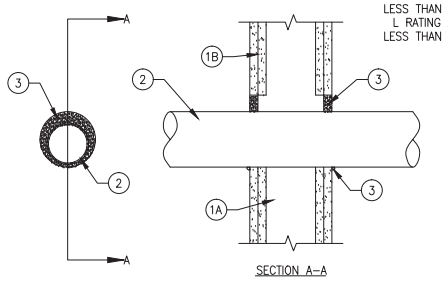
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PKG. NO.
SHEET 104 OF 115

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FIRE STOP PENETRATION DETAILS

SYSTEM NO. W-L-1062

F RATINGS – 1 AND 2 HR
T RATING – 0 HR
L RATING AT AMBIENT – LESS THAN 1 CFM/SQ FT
L RATING AT 400 F – LESS THAN 1 CFM/SQ FT

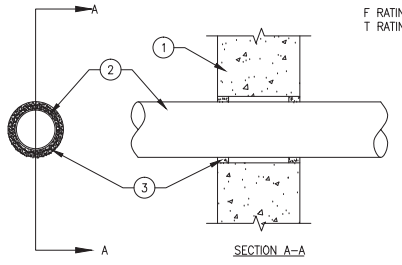


SECTION A–A

1. WALL ASSEMBLY – THE FIRE–RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
   - 1.1. STUDS – WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. LUMBER SPACED 16 IN. OC. STEEL STUDS TO BE MIN 3–5/8 IN. WIDE AND SPACED MAX 24 IN. OC.
   - 1.2. GYPSUM BOARD* – THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS AS REQUIRED IN THE INDIVIDUAL WALL AND PARTITION DESIGN. MAX DIAM OF OPENING IN WOOD STUD WALLS IS 8 IN. MAX DIAM OF OPENING IN STEEL STUD WALLS IS 14 IN. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.
2. THROUGH PENETRANT – ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM. THE SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE A MIN 0 IN. (POINT CONTACT) TO A MAX 2 IN. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
   - 2.1. STEEL PIPE – NOM 12 IN. DIAM (OR SMALLER) SCHEDULE 5 (OR HEAVIER STEEL PIPE.
   - 2.2. IRON PIPE – NOM 12 IN. DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
   - 2.3. CONDUIT – NOM 4 IN. DIAM (OR SMALLER) ELECTRICAL METALLIC TUBING, NOM 6 IN. DIAM (OR SMALLER) STEEL CONDUIT OR NOM 1 IN. DIAM (OR SMALLER) FLEXIBLE STEEL CONDUIT.
   - 2.4. COPPER TUBING – NOM 6 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
   - 2.5. COPPER PIPE – NOM 6 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
   - 2.6. FILL, VOID OR CAVITY MATERIAL* – CAULK – MIN 5/8 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 3/8 IN. DIAM BEAD OF FILL MATERIAL APPLIED AT POINT CONTACT LOCATION AT THE PENETRANT/GYPSUM BOARD INTERFACE ON BOTH SIDES OF WALL.
3. MOMENTIVE PERFORMANCE MATERIALS – PENSIL 100 CAULK.
4. SPECIFIED TECHNOLOGIES INC – PENSIL 100 SEALANT AND PENSIL 300 SEALANT.

SYSTEM NO. W-J-1030

F RATING – 2 HR.
T RATING – 0 HR.



SECTION A–A

1. WALL ASSEMBLY – MIN 6 IN. (152 MM) THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100–150 PCF OR 1600–2400 KG/M3) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS 25 IN. (635 MM). SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR THE NAMES OF MANUFACTURERS.
2. THROUGH PENETRANT – ONE METALLIC PIPE, TUBING OR CONDUIT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPES, TUBING OR CONDUITS AND PERIPHERY OF OPENING IS DEPENDENT UPON THE TYPE AND MAX DIAM OF THE THROUGH PENETRANT AS TABULATED BELOW. PIPE, TUBING OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, TUBING OR CONDUITS MAY BE USED:
   - 2.1. STEEL PIPE – NOM 24 IN. (610 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
   - 2.2. IRON PIPE – NOM 24 IN. (610 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
   - 2.3. COPPER TUBING – NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
   - 2.4. COPPER PIPE – NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
   - 2.5. CONDUIT – NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING, NOM 6 IN. (152 MM) DIAM GALV STEEL CONDUIT OR NOM 1 IN. DIAM FLEXIBLE STEEL CONDUIT.

TYPE OF THROUGH PENETRANT	MAX DIAM OF THROUGH PENETRANT, IN. (MM)	MIN & MAX ANNULAR SPACE, IN. (MM)
STEEL OR IRON PIPE	4 (102)	0, 1–1/2 (38)
STEEL TUBING OR CONDUIT	4 (102)	0, 1–1/2 (38)
STEEL CONDUIT	6 (152)	1/8 (3), 1/2 (13)
STEEL OR IRON PIPE	24 (610)	1/8 (3), 1/2 (13)
COPPER TUBING OR PIPE	6 (152)	1/8 (3), 1/2 (13)

3. FILL, VOID OR CAVITY MATERIAL* – SEALANT – MIN 5/8 IN. (16 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL AT THE POINT CONTACT LOCATION BETWEEN THROUGH PENETRANT AND CONCRETE, A MIN 3/8 IN. (10 MM) DIAM BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/THROUGH PENETRANT INTERFACE ON BOTH SURFACES OF WALL.
4. SPECIFIED TECHNOLOGIES INC – SPECSEAL LC 150 SEALANT, SPECSEAL LE600 SEALANT

GENERAL ELECTRICAL NOTES

1. INSTALLATION OF ALL WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING REGULATIONS, CODES, ETC.
   - 1.1. LOCAL CODES AND ORDINANCES
   - 1.2. THE EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.) IN EFFECT.
   - 1.3. THE NATIONAL BOARD OF FIRE UNDERWRITERS.
2. PRIOR TO BEGINNING ANY WORK, SECURE NECESSARY PERMITS OR CLEARANCES FROM THE AUTHORITIES HAVING JURISDICTION. PROVIDE ALL LABOR AND MATERIALS FOR A COMPLETE INSTALLATION. WORK SHALL BE EXECUTED BY EXPERIENCED ELECTRICIANS WHO ARE LICENSED IN THE JURISDICTION WHERE THE PROJECT IS LOCATED.
3. ALL CONDUITS SHALL BE RUN BEHIND FINISHED SURFAES UNLESS OTHERWISE NOTED.
4. THE CONTINUITY OF ALL EXISTING CIRCUITS TO REMAIN SHALL BE MAINTAINED.
5. THE ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. COORDINATE ELECTRICAL EQUIPMENT LOCATION AND INSTALLATION WITH EQUIPMENT BEING SERVED. PROVIDE ALL POWER AND TELECOMMUNICATION FINAL CONNECTIONS TO THE SYSTEM FURNITURE AS REQUIRED.
6. ALL EQUIPMENT SUCH AS RELAYS, CONDUCTORS, SWITCHES, PANELS, AND OTHER APPURTENANCES SHALL HAVE IDENTIFICATION PLATES OF BLACK LAMINATED PLASTIC WITH 1/2" WHITE LETTERS. ALL JUNCTION BOXES IN CEILING CAN BE MARKED WITH BLACK PERMANENT MARKER ON COVER PLATES AS PANEL DESIGNATION AND CIRCUIT NUMBER FROM WHICH THEY ARE FED. PANELS IN FINISHED AREAS SHALL HAVE PLATES MOUNTED ON INSIDE OF DOOR COVER PANEL DIRECTORY. OTHERWISE, PLATES SHALL BE MOUNTED ON FRONT OF EQUIPMENT. FASTEN PLATES WITH FOUR SCREWS.
7. ALL CONDUCTORS SHALL BE IDENTIFIED. ALL WIRING DEVICES SHALL BE PROVIDED WITH TYPED LABEL ON THE COVER PLATE IDENTIFYING THE PANEL DESIGNATION AND CIRCUIT NUMBER FROM WHICH THEY ARE FED.
8. ALL EQUIPMENT SHALL BE "UL" LABELED.
9. ELECTRICAL SYSTEMS SHALL BE GROUNDED PER ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE. PROVIDE GROUND WIRE FOR EACH PIECE OF EQUIPMENT AND FOR EACH BRANCH CIRCUIT.
10. ALL CONNECTIONS TO DEVICES SHALL BE TAPED WITH SCOTCH 33 ELECTRICAL TAPE.
11. ALL CONDUITS AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED AREAS. PRIOR TO CONCEALMENT OF NEW CONSTRUCTION, ALL WORK BEHIND FINISHED SURFACES SHALL BE INSPECTED BY THE OWNER'S REPRESENTATIVE.
12. CONTRACTOR SHALL INFORM THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO COMPLETION OF CONSTRUCTION TO ALLOW SUFFICIENT TIME FOR COORDINATION OF EXISTING BUILDING ACTIVITIES WITH THE CONSTRUCTION WORK.
13. CONTRACTOR SHALL PROVIDE A PANELBOARD DIRECTORY AND BALANCE THE LOAD ON ALL THREE PHASES FOR EACH PANELBOARD WHERE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S SPECIFICATIONS.
14. CONTROL WIRING SHALL BE TAGGED AT EACH END AND TERMINATED WHERE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH EQUIPMENT MANUFACTURES SPECIFICATIONS.
15. IF MATERIAL OR EQUIPMENT IS INSTALLED BEFORE IT IS APPROVED, THE CONTRACTOR SHALL BE LIABLE FOR ITS REMOVAL AND REPLACEMENT AT NO ADDITIONAL CHARGE OR IF IN THE OPINION OF THE ARCHITECT OR ENGINEER, THE MATERIAL OR EQUIPMENT DOES NOT MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
16. THE CONTRACTOR SHALL INCLUDE IN THE WORK, WITHOUT EXTRA COST, ANY LABOR, MATERIALS, SERVICES, APPARATUS, DRAWINGS (IN ADDITION TO CONTRACT DRAWINGS AND DOCUMENTS), IN ORDER TO COMPLY WITH ALL APPLICABLE LAWS, INDICATED AND/OR SPECIFIED.
17. BEFORE SUBMITTING BIDS, THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE ALL ADJOINING EXISTING BUILDINGS, EQUIPMENT, AND SPACE CONDITIONS ON WHICH HIS WORK IS ANY WAY DEPENDANT FOR THE BEST WORKMANSHIP AND OPERATION ACCORDING TO THE INTENT OF THE SPECIFICATIONS AND DRAWINGS. HE SHALL REPORT TO THE ARCHITECT/ENGINEER ANY CONDITION WHICH MIGHT PREVENT HIM FROM INSTALLING HIS EQUIPMENT IN THE MANNER SPECIFIED OR AS SHOWN IN CONTRACT DOCUMENTS TEN BUSINESS DAYS PRIOR TO SUBMISSION OF BIDS. NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED FOR FAILURE TO VISIT THE SITE, NOR FOR ANY ALLEGED MISUNDERSTANDING OF MATERIALS TO BE FURNISHED OR WORK TO BE PERFORMED.
18. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCOVERED CONFLICTS BETWEEN EXISTING INSTALLATIONS WHICH ARE NOT SCHEDULED FOR DEMOLITION AND THE NEW WORK INDICATED WITHIN THE CONTRACT DOCUMENTS. SUCH NOTIFICATION SHALL BE ACCOMPANIED BY A DRAWING DELINEATING THE PROPOSED SOLUTION PRIOR TO STARTING ANY WORK IN THE AFFECTED AREA.
19. ALL MATERIALS AND WORK SHALL BE ACCORDING TO BASE BUILDING SPECIFICATIONS UNLESS NOTED OTHERWISE.
20. ALL CONDUCTORS SHALL BE COPPER. MINIMUM SIZE SHALL BE #12 AWG. CONDUCTOR #10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED. CONDUCTORS SHALL HAVE THHN INSULATION.
21. NUMBER OF WIRES MAY NOT BE INDICATED FOR ALL CIRCUITS, ONLY THOSE WHERE CLARIFICATION IS NECESSARY. PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEM WHETHER INDICATED ON PLAN OR NOT.
22. REFER TO ARCHITECTURAL DRAWINGS FOR THE FINISH, EXACT LOCATION, ELEVATION, MOUNTING HEIGHTS AND DETAILS OF ALL LIGHT FIXTURES AND DEVICES. REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY.
23. VERIFY DOOR SWINGS BEFORE INSTALLING LIGHT SWITCHES.
24. CONNECT NEW/RELOCATED FIRE ALARM DEVICES TO EXISTING BASE BLDG. FIRE ALARM SYSTEM PER LOCAL CODES AND IN ACCORDANCE WITH BASE BUILDING SPECIFICATIONS. COORDINATE INSTALLATION WITH THE BUILDING ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY COMPONENTS, INCLUDING CABLES, CONDUIT, CONTROL MODULES, FIRE ALARM DEVICES, A NEW EXTENDER (BOOSTER) PANEL AND/OR MAKE ANY MODIFICATIONS NECESSARY TO THE EXISTING FIRE ALARM CONTROL PANEL. PROVIDE POWER SUPPLY TO NEW EXTENDER PANEL AS REQUIRED. CONTRACTOR TO PROVIDE AN ALTERNATE PRICE IN BID DOCUMENT TO POTENTIALLY ADD A NEW EXTENDER PANEL OR TO REPLACE THE EXISTING ONE AS NEEDED ALONG WITH ANY OTHER ACCESSORY DEVICES WHICH WOULD BE REQUIRED FOR THE SYSTEM TO BE COMPLETELY OPERATIONAL. ALL WIRING SHALL BE IN 3/4" EMT.
25. GANG ALL SWITCHES SHOWN TO BE INSTALLED AT SAME LOCATION UNDER A SINGLE COVER PLATE.
26. PROVIDE PLASTER RING WITH PULL STRING TO SPACE ABOVE SUSPENDED CEILING FOR ALL TELEPHONE, DATA, FAX, MODEM, CATV, CARD READER, ETC. OUTLETS INSTALLED IN HOLLOW PARTITIONS. PROVIDE 3/4" EMPTY CONDUIT AND PULL STRING TO SPACE ABOVE SUSPENDED CEILING FOR THESE OUTLETS INSTALLED IN AN INSULATED PARTITION. PROVIDE 1" E.C. WITH 2 STRINGS FOR COMBINATION DATA/TEL OUTLET.
27. MAINTAIN INTEGRITY OF THE FIRE RATED CONSTRUCTION WHERE CONDUITS PASS THROUGH WALLS AND FLOORS.
28. OUTLETS BOXES INSTALLED ON OPPOSITE SIDES OF THE SAME PARTITION SHALL BE STAGGERED. DO NOT MOUNT OUTLET BOXES BACK TO BACK.
29. TYPE MC CABLE MAY BE USED IN LIEU OF EMT FOR BRANCH CIRCUITS, IN DRYWALL PARTITION AND IN CEILING PLENUM WHERE IS ALLOWED BY NEC AND THE BUILDING OWNER. (MC CABLE FOR ISOLATED CIRCUIT SHALL HAVE TWO (2) SEPARATE GROUNDING CONDUCTORS).
30. CONTRACTOR'S SCOPE OF WORK INCLUDES TRACING ALL EXISTING CIRCUITS IN THE CONSTRUCTION AREA BACK TO SOURCE. IF REMOVAL OF EXISTING ELECTRICAL EQUIPMENT AFFECTS ANY EXISTING CIRCUITS, CONTRACTOR SHALL PROVIDE CIRCUIT BREAKERS, WIRING, CONDUIT, ETC. REQUIRED TO RECONNECT EXISTING–TO–REMAIN ELECTRICAL EQUIPMENT BACK TO SOURCE.
31. PROVIDE ACCESS PANELS IN ALL INACCESSIBLE JUNCTION BOXES AS REQUIRED BY THE N.E.C.
32. CONTRACTOR TO MAKE ALL FINAL CONNECTIONS OF SYSTEMS FURNITURE WHIPS. JUNCTION BOXES SERVING SYSTEM FURNITURE SHALL REMAIN ACCESSIBLE.
33. PROVIDE FIRE ALARM INTERFFACE HARDWARE AND WIRING TO ALL ELECTRICALLY SECURED DOORS. COORDINATE WITH BUILDING SECURITY SYSTEM.
34. CONTRACTOR SHALL PROVIDE TWO BALLASTS IN ALL LIGHTING FIXTURES WHERE TWO LEVELS OF SWITCHING ARE INDICATED.
35. ALL EXISTING AND NEW PANELS IMPACTED BY THIS PROJECT SHALL BE PROVIDED WITH NEW UPDATED TYPEWRITTEN PANEL SCHEDULES INDICATING THE FINAL ROOM NUMBER AND THE EQUIPMENT OR DEVICES SERVED BY THE CIRCUIT.
36. INSTALLATION OF EQUIPMENT, COMPONENTS AND WIRING FOR ELECTRICAL SYSTEMS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF EQUIPMENT MANUFACTURER.
37. DELIVER PRODUCTS TO PROJECT SITE IDENTIFIED WITH NAMES, MODEL NUMBERS, TYPES, GRADES, COMPLIANCE LABELS, AND OTHER INFORMATION NEEDED FOR DISTINCT IDENTIFICATION; ADEQUATELY PACKAGED AND PROTECTED TO PREVENT DAMAGE DURING SHIPMENT, STORAGE, AND HANDLING. PROTECT STORED EQUIPMENT AND MATERIALS FROM DAMAGE. COMPLY WITH MANUFACTURER'S RIGGING AND MOVING INSTRUCTIONS FOR UNLOADING EQUIPMENT AND MOVING INTO FINAL LOCATION.
38. CONTRACTOR TO COORDINATE ELECTRICAL WORK TO AVOID INTERFERENCE BETWEEN MECHANICAL, ELECTRICAL, AND ARCHITECTURAL WORK.
   - 38.1. DETERMINE INTERFERENCE BEFORE WORK IS FABRICATED OR INSTALLED. THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH ALL DETAILS OF WORK AND WORKING CONDITIONS AND COORDINATE WORK DURING PRELIMINARY STAGES TO ENSURE ACTUAL ERECTION WILL PROCEED WITHOUT INTERFERENCE. COORDINATION IS OF PARAMOUNT IMPORTANCE AND NO REQUESTS FOR ADDITIONAL PAYMENT WILL BE CONSIDERED WHERE REQUEST IS BASED ON INTERFERENCE.
   - 38.2. WHERE JOB CONDITIONS REQUIRE REASONABLE DEVIATIONS FROM CONTRACT DOCUMENTS, MAKE DEVIATIONS WITHOUT ADDITIONAL COST TO OWNER, AFTER OBTAINING APPROVAL OF ARCHITECT.
   - 38.3. PROVIDE MAXIMUM PRACTICAL SPACE FOR OPERATION, REPAIR, REMOVAL, AND TESTING OF ELECTRICAL EQUIPMENT. APPROVED DEVIATIONS MAY BE MADE TO PROVIDE REQUIRED ACCESSIBILITY.
   - 38.4. KEEP CONDUITS, WIREWAYS AND SIMILAR ITEMS AS CLOSE AS POSSIBLE TO CEILING, WALLS AND COLUMNS IN ORDER TO TAKE UP MINIMUM AMOUNT OF SPACE.
   - 38.5. PROVIDE OFFSETS, FITTINGS AND SIMILAR ITEMS NECESSARY TO ACCOMPLISH REQUIREMENTS OF COORDINATION WITHOUT ADDITIONAL EXPENSE TO OWNER.
   - 38.6. PROVIDE ACCESS TO AND CLEARANCES AROUND EQUIPMENT AS REQUIRED BY THE N.E.C.
39. CONTRACTOR SHALL PROVIDE WRITTEN CERTIFICATION THAT ALL PRODUCTS, MATERIALS AND PROCESSES INSTALLED IN THE TENANT SPACE CONTAINS NO ASBESTOS OR PCB.
40. TESTING:
   - 40.1. TEST AND ADJUST EQUIPMENT AND SYSTEMS INSTALLED AND DEMONSTRATE PROPER OPERATION TO OWNER'S REPRESENTATIVE. NO EQUIPMENT SHALL BE TESTED OR OPERATED FOR ANY PURPOSE UNTIL IT HAS BEEN FULLY PREPARED FOR OPERATION IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
   - 40.2. SHOW, BY DEMONSTRATION IN SERVICE, THAT ALL CIRCUITS AND DEVICES ARE IN GOOD OPERATING CONDITION. EACH PIECE OF EQUIPMENT AND COMPONENT OF THE ELECTRICAL SYSTEM SHALL FUNCTION NO LESS THAN FIVE TIMES IN THE COURSE OF THE ACCEPTANCE TESTS.

ELECTRICAL DEMOLITION NOTES

1. GENERAL:
   - 1.1. BEFORE SUBMITTING BID, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE TO VERIFY/EXAMINE THE EXACT EXTENT OF EXISTING CONDITIONS. NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED FOR FAILURE TO VISIT THE SITE, NOR FOR ANY ALLEGED MISUNDERSTANDING OF WORK TO BE PERFORMED. THE CONTRACTOR SHALL INCLUDE IN HIS BID PRICE ALL LABOR AND MATERIAL THAT MAY EFFECT HIS WORK.
   - 1.2. THE GENERAL EXTENT OF EXISTING ELECTRICAL WORK TO BE DISMANTLED AND REMOVED OR RELOCATED IS INDICATED ON THE DRAWINGS.
   - 1.3. ALL COMPONENTS ASSOCIATED WITH SYSTEMS AND EQUIPMENT TO BE REMOVED OR RELOCATED MAY NOT BE SPECIFICALLY INDICATED. REMOVE ALL ASSOCIATED ELECTRICAL COMPONENTS, HANGERS, WIRING, CABLING, CONDUIT, BOXES, DEVICES AND ALL OTHER ITEMS RELATED TO EQUIPMENT AND MATERIALS WHICH ARE INDICATED TO BE REMOVED OR RELOCATED. REMOVE ALL WIRING/CONDUIT BACK TO THE SOURCE IN EXISTING CIRCUITS WHICH ARE BEING DEMOLISHED. UNLESS SPECIFICALLY INDICATED, NO EQUIPMENT, MATERIALS OR ASSOCIATED COMPONENTS SHALL BE ABANDONED IN PLACE.
   - 1.4. ABANDONED ALL CONDUITS WHICH ARE CONCEALED IN CONCRETE WALLS OR SLABS AND REMOVE ALL WIRING/CABLES FROM ABANDONED CONDUITS.
2. ISPOSAL OF DEMOLITION:
   - 2.1. CONTRACTOR SHALL CLEAN THE PROJECT SITE AT THE END OF EACH WORKING DAY. CONTRACTOR SHALL NOTIFY BUILDING OWNER PRIOR TO DISPOSAL OF ALL DEMOLISHED MATERIALS TO ALLOW THE OWNER TO SALVAGE ANY USABLE MATERIALS. AFTER INSPECTING FROM THE OWNER'S REPRESENTATIVE ALL UNWANTED MATERIALS SHALL BE REMOVED FROM THE JOB SITE WITH DISPOSAL IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS AND REGULATIONS.
3. PROTECTION:
   - 3.1. PROTECT FROM DAMAGE ALL EXISTING WORK TO REMAIN. ANY EXISTING TO REMAIN OR EXISTING TO BE RELOCATED MATERIALS AND EQUIPMENT DAMAGED DURING THE COURSE OF THE WORK SHALL BE REPLACED WITH MATERIALS AND EQUIPMENT CONFORMING TO THESE SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER. CARE MUST TAKEN IN REMOVING ALL EXISTING MATERIALS.
4. TERMINATION AND PATCHING:
   - 4.1. DISCONNECT EXISTING TO BE REMOVED OR EXISTING TO BE RELOCATED CONDUIT, WIRING, CABLING, AND EQUIPMENT FROM EXISTING TO REMAIN POINT INDICATED. IF NOT INDICATED ON THE PLANS, VERIFY WITH THE DESIGN ENGINEERS OR BUILDING OWNER'S REPRESENTATIVE PRIOR TO DISCONNECTION.
   - 4.2. WHERE EXISTING FLOORS, WALLS AND ROOFS MUST BE CUT OR ARE DAMAGED DURING REMOVAL OR RELOCATION OF ELECTRICAL WORK, PATCH THE CUT OR DAMAGED AREAS TO MATCH ADJACENT CONSTRUCTION.
   - 4.3. THE CONTINUITY OF ALL EXISTING CONDUITS AND FEEDERS SERVICING AREAS TO REMAIN SHALL BE MAINTAINED. MODIFY THE EXISTING CIRCUITS IF REQUIRED IN ORDER TO MAINTAIN THE EXISTING CIRCUITRY.

SYMBOLS

- WALL/CEILING/FLOOR DUPLEX RECEPTACLE. 20A/125V/2P/3W (GROUNDED)
- WALL/CEILING/FLOOR QUADRUPLEX RECEPTACLE. 20A/125V/2P/3W (GROUNDED)
- WALL/CEILING/FLOOR SIMPLEX RECEPTACLE.
- WALL/CEILING/FLOOR SPECIAL PURPOSE RECEPTACLE.
- WALL/CEILING/FLOOR DUPLEX IG RECEPTACLE.
- WALL/CEILING/FLOOR QUADRUPLEX IG RECEPTACLE.
- WALL/CEILING/FLOOR MOUNTED TELEPHONE OUTLET
- WALL/CEILING/FLOOR MOUNTED TELEPHONE OUTLET
- WALL/CEILING/FLOOR MOUNTED DATA OUTLET
- CAM 1 — SECURITY CAMERA
- $ — SINGLE POLE TOGGLE SWITCH
- $3 — 3–WAY DUAL/DUAL LIGHTING SWITCH
- $D — DIMMER SWITCH
- $K — KEY OPERATED SWITCH
- MS — WALL/CEILING MOUNTED OCCUPANCY SENSOR SWITCH
- SR — EMERGENCY SHUNT RELAY
- J — WALL/CEILING/FLOOR MOUNTED JUNCTION BOX
- ID — WALL/CEILING/FLOOR MOUNTED DATA WHIP BOX
- PD — WALL/CEILING/FLOOR MOUNTED POWER WHIP BOX
- NON–FUSIBLE DISCONNECT SWITCH
- 100 — FUSIBLE DISCONNECT SWITCH
- 100 — SHUNT TRIP FUSED DISCONNECT SWITCH
- M — MOTOR
- T — TRANSFORMER
- MDP — ELECTRICAL PANEL
- TV — WALL MOUNTED TV OUTLET
- WALL MOUNTED EMERGENCY POWER OFF SWITCH
- CL — WALL/CEILING CLOCK
- IC — INTERCOM SWITCH
- S — WALL/CEILING MOUNTED SPEAKER
- B — FIRE ALARM AUDIO BELL
- P — WALL MOUNTED INDICATOR LAMP
- EMERGENCY DISCONNECT PUSH BUTTON
- H — WALL/CEILING MOUNTED FIRE ALARM HEAT DETECTOR
- FS — FLOW SWITCH
- TS — TAMPER SWITCH
- F — WALL MOUNTED FIRE ALARM SYSTEM MANUAL PULL STATION AT 48" AFF
- S — WALL/CEILING MOUNTED FIRE ALARM SMOKE DETECTOR
- D — FIRE ALARM DUCT SMOKE DETECTOR
- AV — WALL/CEILING MOUNTED FIRE ALARM COMBINATION AUDIO/VISUA
- V — WALL/CEILING MOUNTED FIRE ALARM (VISUAL)
- SF — WALL/CEILING MOUNTED FIRE ALARM (AUDIO)
- FACP — FIRE ALARM CONTROL PANEL
- FAAP — FIRE ALARM ANNUNCIATOR PANEL
- SINGLE/DOUBLE FACED EXIT SIGN FIXTURES
- LP–2,4,6 — HOMERUN TO DESIGNATED PANEL
- (M)DP–"X" : DISTRIBUTION PANEL AND CIRCUIT NUMBER
- ARROWS INDICATE NUMBER OF CIRCUITS
- INDICATES SEPARATE EQUIPMENT GROUND WIRE WIRING SHOWN WITHOUT ANY SLASH MARKS SHALL INCLUDE 2#12 AWG+ 1#12 AWG G IN 3/4" EMT.
- SPLIT CIRCUIT
- C — COMPUTER CIRCUIT
- 1 / E1.01 — DETAIL NUMBER
- 2 / E2.01 — WHERE THE DETAIL IS DRAWN
- WHERE THE DETAIL REFERENCED
- 1 / 1 — KEYED DRAWING NOTE
- EQPM–01 — EQUIPMENT DESIGNATION TAG
- POINT OF DEMOLITION
- POINT OF CONNECTION
- 1 — REVISION NUMBER

NOTE: ALL SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.

ABBREVIATIONS

A	AMPERE
AFF	ABOVE FINISHED FLOOR
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CB	CIRCUIT BREAKER
CP	CONDENSATE PUMP
BRK	BREAKER
D	EXISTING TO BE DEMOLISHED
DISCSW	DISCONNECT SWITCH
DP	DISTRIBUTION PANEL
DWG	DRAWING
E, EX	EXISTING TO REMAIN
EG	EQUIPMENT GROUND
EM	DEVICE ON EMERGENCY CIRCUIT
EMT	ELECTRICAL METALLIC TUBING
EW	EMERGENCY WHITE (NIGHT) LIGHT
EWH	ELECTRIC WATER HEATER
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
F.L.A.	FULL LOAD AMPS
G, GND	GROUND
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
HP	HORSE POWER
IG	INTERRUPTER ISOLATED GROUND
KVA	KILOVOLT–AMPS
KW	KILOWATT
MCB	MAIN CIRCUIT BREAKER
MD	MOTORIZED DAMPER
MLO	MAIN LUGS ONLY
MDP	MAIN DISTRIBUTION PANEL
N	NEW
NEC	NATIONAL ELECTRICAL CODE
NF	NON FUSED
N/L	NIGHT LIGHT FIXTURE ON A TIMER
NTS	NOT TO SCALE
R	RELOCATED AT NEW LOCATION
RR	REMOVE AND RELOCATE
P	POLE
PH, ø	PHASE
PNL	PANEL
S.N.	SOLID NEUTRAL
SM	MOTOR THERMAL SWITCH CONTROL
SWBD	SWITCHBOARD
TEL	TELEPHONE
T, XFMR	TRANSFORMER
TYP	TYPICAL
U.H.	UNIT HEATER
U.O.N.	UNLESS OTHERWISE NOTED
V	VOLTS
W	WATTS
WP	WEATHERPROOF

NOTE:
ALL ABBREVIATIONS MAY NOT APPEAR ON THE DWGS.

DRAWING INDEX

DRAWINGS#	SHEET TITLE
E001	ELECTRICAL GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS
EL100	ELECTRICAL LIGHTING – BASEMENT LEVEL FLOOR PLAN
EL101	ELECTRICAL LIGHTING – FIRST FLOOR PLAN
EL102	ELECTRICAL LIGHTING – SECOND FLOOR PLAN
EL103	ELECTRICAL LIGHTING – THIRD FLOOR PLAN
EP100	ELECTRICAL POWER & FA – BASEMENT LEVEL FLOOR PLAN
EP101	ELECTRICAL POWER & FA – FIRST FLOOR PLAN
EP102	ELECTRICAL POWER & FA – SECOND FLOOR PLAN
EP103	ELECTRICAL POWER & FA – THIRD FLOOR PLAN
E601	ELECTRICAL PANEL SCHEDULES

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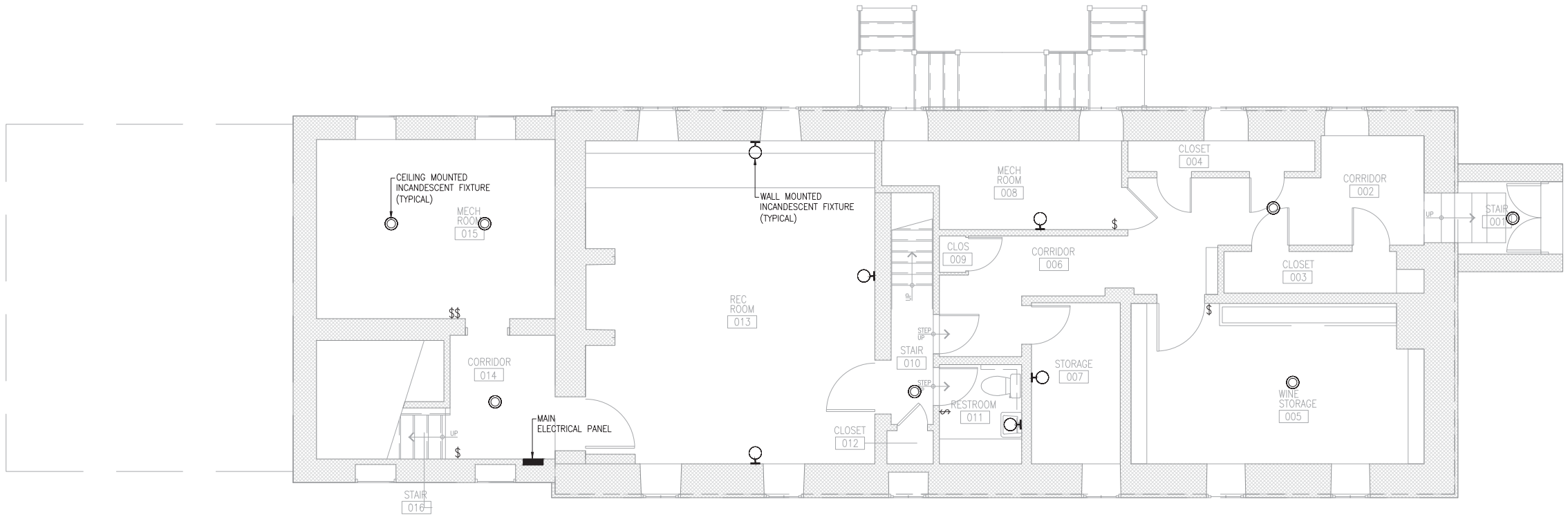
DESIGNED: PJ
CADD: MJ
TECH REVIEW:
DATE: 9/21/12

SUB SHEET NO. E0.01

TITLE OF SHEET
ELECTRICAL GENERAL NOTES, SYMBOLS, AND ABBREVATIONS
HARMONY HALL: HISTORIC STRUCTURES REPORT

DRAWING NO. 899 116834
PKG. NO.
SHEET 106 OF 115

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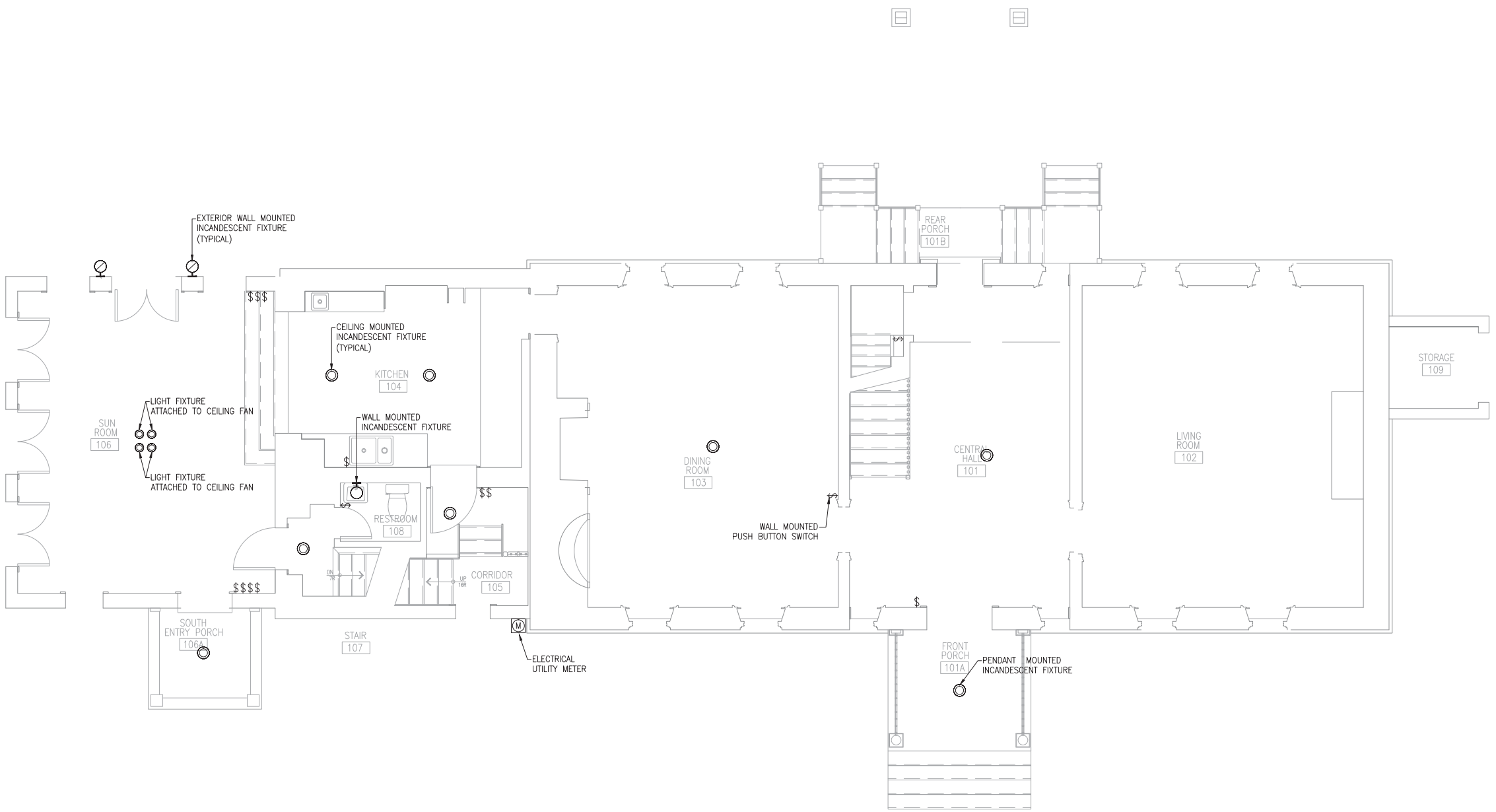
1 / EL1.00 ELECTRICAL LIGHTING BASEMENT LEVEL FLOOR PLAN

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

N

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC M/E/P ENGINEERs: SETTY & ASSOC. INT'L PLLC WASHINGTON, DC	DESIGNED: PJ CADD: MJ TECH REVIEW: DATE: 9/21/12	SUB SHEET NO. EL1.00	TITLE OF SHEET: ELECTRICAL LIGHTING BASEMENT LEVEL FLOOR PLAN HARMONY HALL: HISTORIC STRUCTURES REPORT	DRAWING NO. 899 116834 PKG. NO. SHEET 107 OF 115

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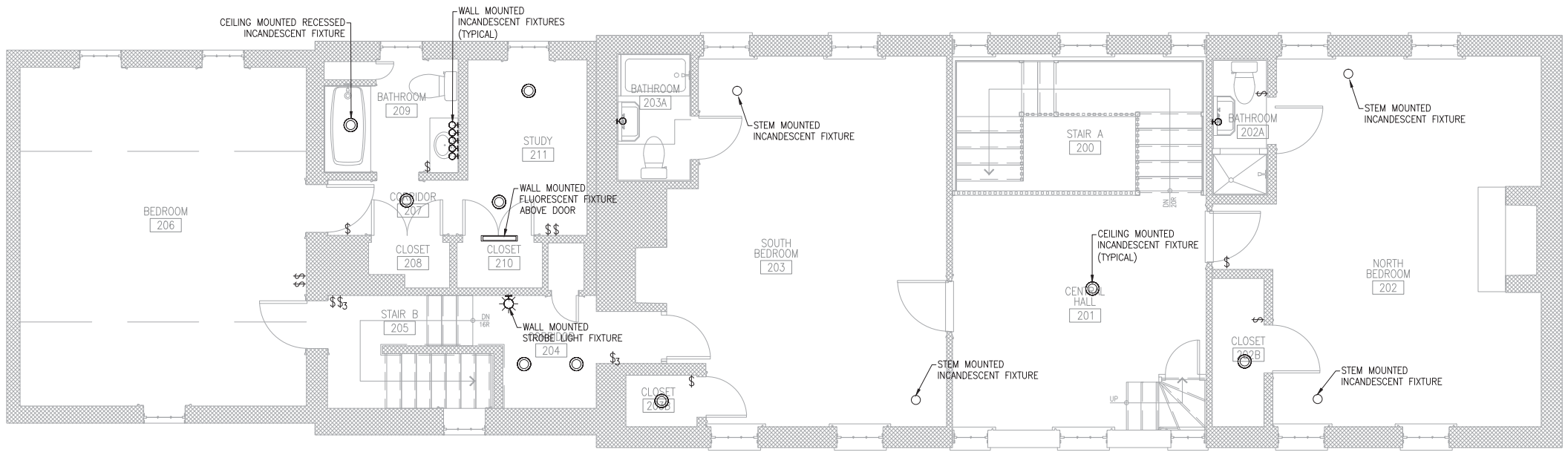
1 / EL1.01 ELECTRICAL LIGHTING FIRST FLOOR PLAN

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

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PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC M/E/P ENGINEERS: SETTY & ASSOC. INT'L. PLLC WASHINGTON, DC	DESIGNED: PJ CADD: MJ TECH REVIEW: DATE: 9/21/12	SUB SHEET NO. EL1.01	TITLE OF SHEET: ELECTRICAL LIGHTING FIRST FLOOR PLAN HARMONY HALL: HISTORIC STRUCTURES REPORT	DRAWING NO. 899 / 116834 PKG. NO. SHEET 108 OF 115	

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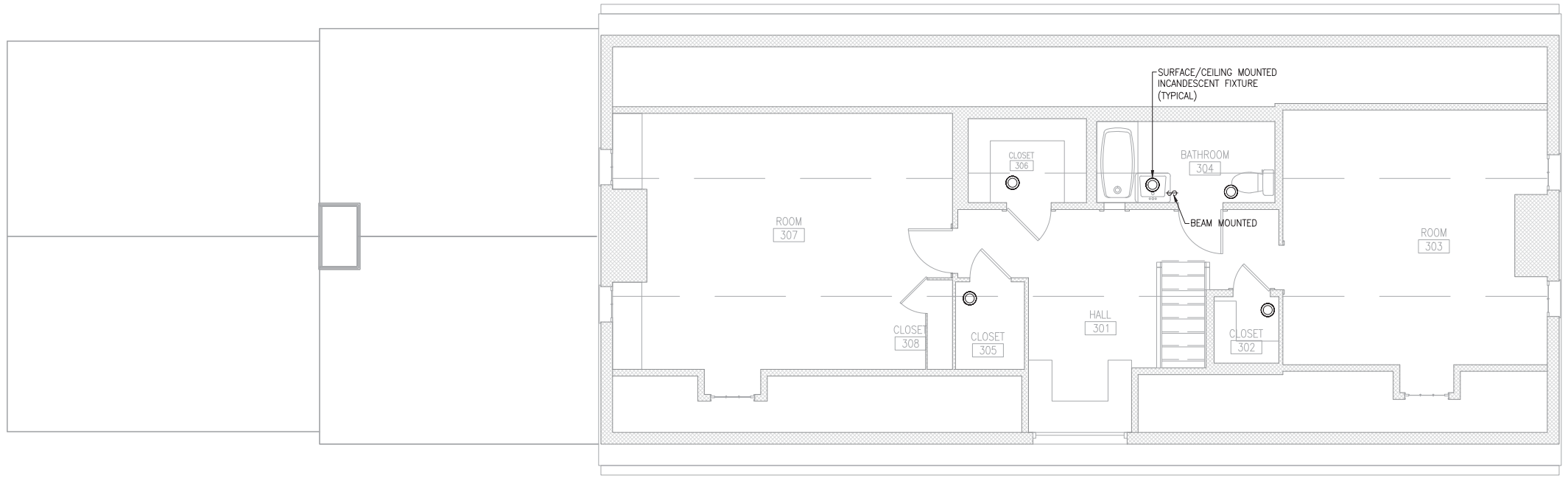
1 / EL1.02 ELECTRICAL LIGHTING SECOND FLOOR PLAN

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

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	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC M/E/P ENGINEERS: SETTY & ASSOC. INT'L PLLC WASHINGTON, DC	DESIGNED: PJ CADD: MJ TECH REVIEW: DATE: 9/21/12	SUB SHEET NO. EL1.02	TITLE OF SHEET: ELECTRICAL LIGHTING SECOND FLOOR PLAN HARMONY HALL: HISTORIC STRUCTURES REPORT	DRAWING NO. 899 / 116834 PKG. NO. SHEET 109 OF 115

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1 / EL1.03 ELECTRICAL LIGHTING THIRD FLOOR PLAN

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

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ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

M/E/P ENGINEERS:
SETTY & ASSOC. INT'L. PLLC
WASHINGTON, DC

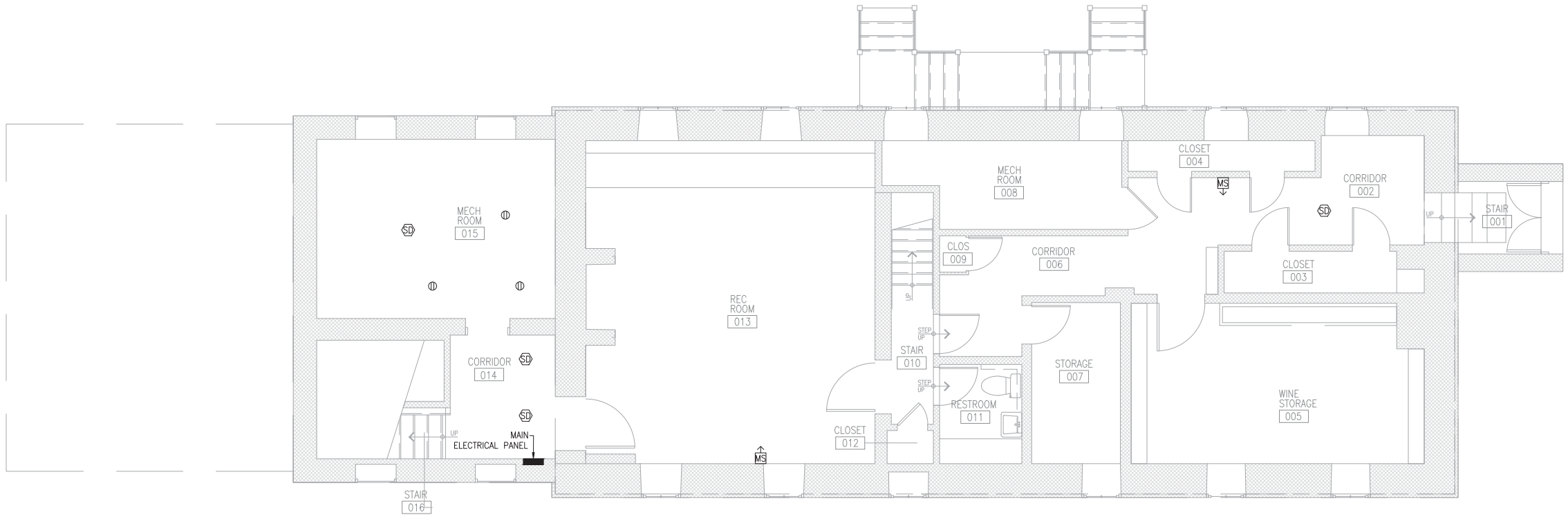
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TECH REVIEW:
DATE: 9/21/12

SUB SHEET NO. EL1.03

TITLE OF SHEET
ELECTRICAL LIGHTING THIRD FLOOR PLAN
HARMONY HALL: HISTORIC STRUCTURES REPORT

DRAWING NO. 899 / 116834
PKG. NO.
SHEET 110 OF 115

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1 / EP1.00 ELECTRICAL POWER & FA - BASEMENT LEVEL FLOOR PLAN

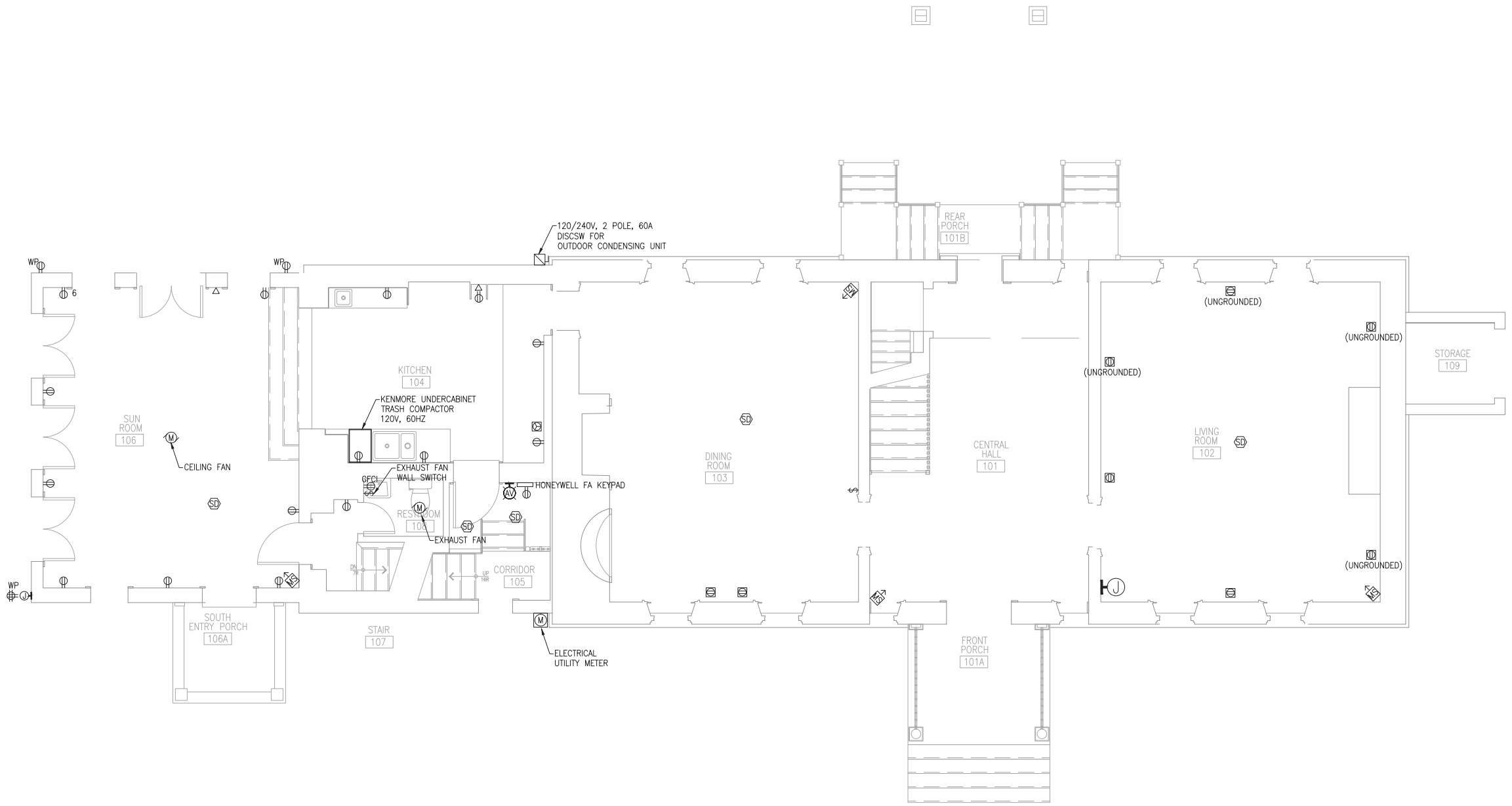
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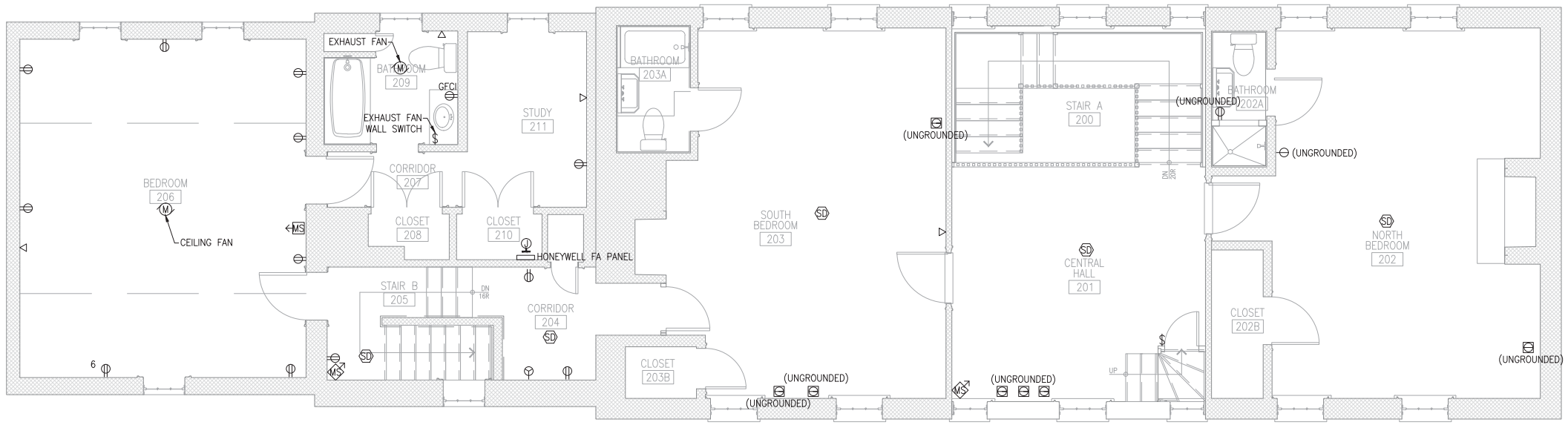


1 / EP1.01 ELECTRICAL POWER & FA - FIRST FLOOR PLAN

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

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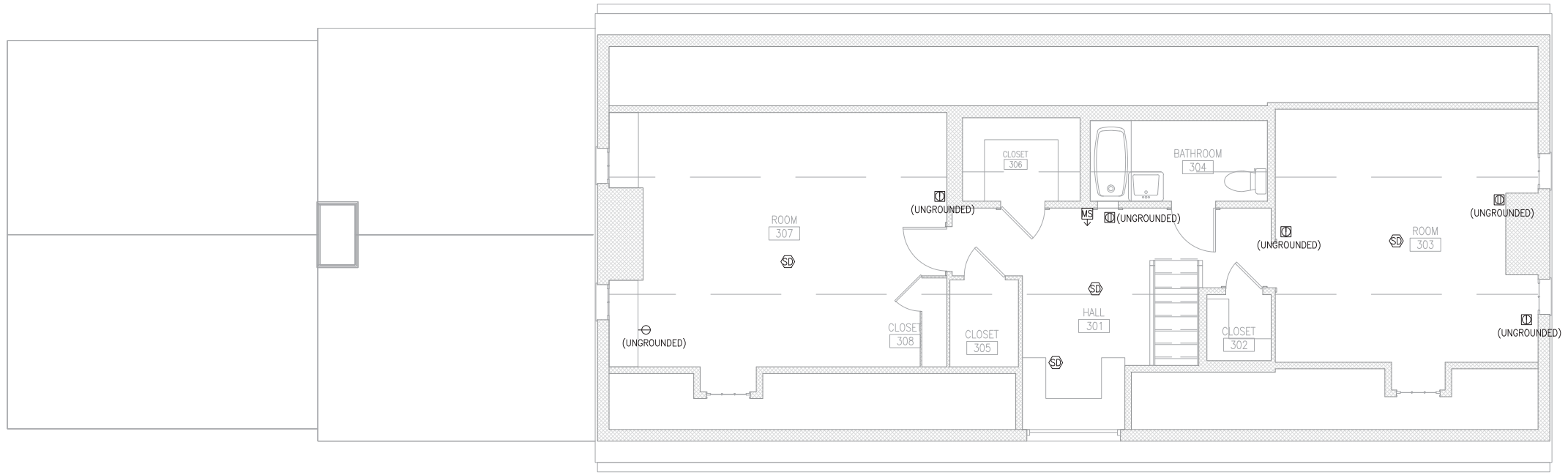


1 / EP1.02 ELECTRICAL POWER & FA - SECOND FLOOR PLAN

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

	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC M/E/P ENGINEERs: SETTY & ASSOC. INT'L PLLC WASHINGTON, DC	DESIGNED: PJ CADD: MJ TECH REVIEW: DATE: 9/21/12	SUB SHEET NO. EP1.02	TITLE OF SHEET: ELECTRICAL POWER & FA - SECOND FLOOR PLAN HARMONY HALL: HISTORIC STRUCTURES REPORT	DRAWING NO. 899 116834 PKG. NO. SHEET 113 OF 115

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1 / EP103 ELECTRICAL POWER & FA - THIRD FLOOR PLAN

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

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	PRIME/ ARCHITECTURE: BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC M/E/P ENGINEERS: SETTY & ASSOC. INT'L. PLLC WASHINGTON, DC	DESIGNED: PJ CADD: MJ TECH REVIEW: DATE: 9/21/12	SUB SHEET NO. **EP103**	TITLE OF SHEET ELECTRICAL POWER & FA - THIRD FLOOR PLAN HARMONY HALL: HISTORIC STRUCTURES REPORT	DRAWING NO. 899 / 116834 PKG. NO. SHEET 114 OF 115

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PANEL [illegible]	**PHASE & WIRE:** [illegible]	**MOUNTING:** [illegible]	
LOCATION: [illegible]	**BUS/MAIN AMPS** [illegible]	**NEMA TYPE** [illegible]	

CKT	OCD			LOAD KVA					ØPH SEQUENCE			LOAD KVA						OCD		CKT
NO	A	P	DESCRIPTION	MISC	HVAC-H	HVAC-C	REC	LTG	A	B	C	MISC	HVAC-H	HVAC-C	REC	LTG	DESCRIPTION	A	P	NO
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E6.01

ELECTRICAL PANEL SCHEDULES

SCALE: NTS

PRIME/ ARCHITECTURE:

BEYER BLINDER BELLE
ARCHITECTS AND PLANNERS, LLP
WASHINGTON, DC

M/E/P ENGINEERs:

SETTY & ASSOC. INT'L PLLC
WASHINGTON, DC

DESIGNED: PJ

CADD: MJ

TECH REVIEW:

DATE: 9/21/12

SUB SHEET NO.

E6.01

TITLE OF SHEET

ELECTRICAL PANEL SCHEDULES

HARMONY HALL: HISTORIC STRUCTURES REPORT

DRAWING NO.
899
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PKG. NO.

SHEET
115
OF 115

Appendix A: Limited Hazardous Materials Survey Report



Harmony Hall

Fort Washington, Maryland

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LIMITED HAZARDOUS MATERIALS SURVEY REPORT

National Park Service
Harmony Hall Property
1900 Anacostia Drive, SE
Washington, DC 20013

Prepared For:
Beyer, Blinder, Belle
3307 M Street, NW, Suite 301
Washington, DC 20007

Prepared By:
Froehling & Robertson, Inc.
7798 Waterloo Road
Jessup, Maryland 20794

F&R Project Number 68N-0089

April 28, 2012

Prepared by:

Andre Steuer
Environmental Project Manager

Reviewed by:

Herman Garcia
Sr. Project Manager

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APPENDICES

Appendix A – Asbestos Documentation, Laboratory Reports

Appendix B – XRF Data Table
Explanation of XRF Data

1.0 Introduction

As authorized by Ms. Susan Pommerer of Beyer, Blinder, Belle (Client), Froehling & Robertson, Inc. (F&R) personnel performed a limited non-invasive hazardous materials survey of the Harmony Hall Property on March 8, 2012, in support of the proposed Renovations and upgrades at the site. F&R surveyed only areas directly impacted by the scope of work for this project.

The structure consisted of a two-story, approximately 6,500 square foot brick masonry plantation home with a gable asphalt roof and full finished basement. The property also has a former animal pen and barn structure. The buildings were not occupied at the time of the survey. The survey was conducted in anticipation of a planned renovation of the structure.

The scope of the hazardous materials survey for the areas consisted of the following items only:

- Non-invasive survey for suspect asbestos-containing materials (ACMs);
- Screening of surface coatings that may contain lead-based paint (LBP); and
- Inventory of suspect PCB and Mercury containing components.

Notes:

1. F&R only sampled areas that will be impacted during the proposed renovation, per Beyer, Blinder, Belle Architects & Planners, LLP of Washington, DC.
2. No "as-built" drawings were available.

2.0 Asbestos-Containing Material (ACM)

2.1 Methodology

For this project, a non-invasive visual survey and sampling for suspect ACMs were conducted at the above referenced site.

All samples were collected by an AHERA trained and qualified environmental professional with experience in conducting HAZMAT surveys and submitted to EMSL Analytical, Inc. (EMSL) located in Beltsville, Maryland. EMSL is accredited for the analysis of bulk asbestos samples by the National Voluntary Laboratory Accreditation Program (NVLAP). A total of sixty-one (61) samples were analyzed using Polarized Light Microscopy (PLM) following EPA Method 600/R-93/116. Samples were analyzed utilizing the Positive Stop method in which samples within a homogeneous group are not analyzed once a sample of a material from that group tests positive.

2.2 Results

Please find the analytical results from our sampling presented in Table 1 below.

Table 1 ACM Laboratory Results – Harmony Hall			
Sample ID	**Location**	**Material Type**	**% Asbestos**
1	Basement (Corridor 014)	Joint Compound	Not Detected
2	Basement (Corridor 014)	Drywall	Not Detected
03A-C	Mechanical Room (015)	Plaster and Fiber Backing	Not Detected
04A-C	Rec Room (013)	Corrugated Paper Insulation (Seat)	60% Chrysotile
05A-I	Throughout House	Plaster Skim Coat	Not Detected
06A-I	Throughout House	Plaster Base Coat	Not Detected
07A-C	Closet (009)	Ceiling Corrugated Paper Insulation	15% Chrysotile
08A-C	Closet (009)	Skim coat on Fiberboard Wall	Not Detected
9	Closet	Fiberboard	Not Detected
10A-C	Basement (008)	Particle Board	Not Detected
11A-C	Mechanical Room (008)	Pipe Insulation	60% Chrysotile
12A-C	Mechanical Room (008)	Plaster Skim Coat on Ceiling	Not Detected
13A-C	Wine Storage (005)	Duct Insulation	Not Detected
14	Mechanical Room (008)	Transite Panels (loose on floor)	40% Chrysotile
15A-C	Stairwell to Basement (001C)	Plaster	Not Detected
16	Front Porch (101A)	Black Asphalt Shingle	Not Detected
17	Second Floor Hallway (204)	Sheet Vinyl	Not Detected
18	Second Floor Bathroom (209)	Sheet Vinyl	Not Detected
19	First Floor Sunroom (106)	Mastic on Pipe in Wall	Not Detected
20	Kitchen (104)	Blue 12" Vinyl Floor Tile	Not Detected
21	3rd Floor	Fiberboard	Not Detected
22	3rd Floor	Joint Compound	Not Detected
23	3rd Floor	Floor Glazing/ Wood Filler	75% Chrysotile
24	Throughout House	Electrical Wiring	PACM

2.3 Conclusions and Recommendations

Please see **Table 2** below for a summary of the ACM and Presumed Asbestos-Containing Materials (PACM) located within the Harmony Hall Property.

Table 2
ACM and PACM-Harmony Hall

Material Description	Location	Friable?	NESHAP Category	Condition	Asbestos Content
Corrugated Paper Insulation (Seat)	Rec Room (013)	Yes	Regulated ACM	Poor-Fair	60% Chrysotile
Ceiling Corrugated Paper Insulation	Closet (009)	Yes	Regulated ACM	Poor-Fair	15% Chrysotile
Pipe Insulation	Mechanical Room (008)	Yes	Regulated ACM	Poor-Fair	60% Chrysotile
Transite Panels (loose on floor)	Mechanical Room (008)	Yes	Regulated ACM	Poor-Fair	40% Chrysotile
Floor Glazing/ Wood Filler	3rd Floor	Yes	Category II Non-Friable ACM	Poor-Fair	75% Chrysotile
Electrical Wiring	Throughout House	Yes	Category II Non-Friable ACM	Fair	PACM

F&R offers the following observations in regards to the information presented in **Table 2:**

- This survey was limited to areas that were delineated as being within the limits of the proposed renovations.
- Areas behind solid walls and ceilings were inaccessible and could not be visually surveyed for the presence of ACM. ACM including, but not limited to, thermal pipe and pipe fitting insulation may exist in these locations.
- F&R recommends that an Operation and Maintenance (O&M) plan be developed and implemented to manage all known and suspect ACMs that will remain in the building following renovation activities in accordance with 29 CFR 1926.1101.
- Roofing paints and mastics were not collected as part of this investigation. Additionally, F&R did not penetrate any roofing membranes to collect asbestos samples thus making the presence of asbestos-containing materials within the roofing matrices unknown.

2.3.1 Friable Asbestos-Containing Materials

- **Corrugated Paper Insulation: 60% Chrysotile**

  Asbestos was detected in samples of the Corrugated Paper Insulation located on the seat cushions in the Rec Room in the Main House during F&R's survey. This material is classified as Regulated Asbestos-Containing Material by the United States Environmental Protection Agency (USEPA) under the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 763 and was in damaged condition at the time of survey. NOTE: Per OSHA 29 CFR 1926.1101, this material can be removed as Class II work.

- **Ceiling Corrugated Paper Insulation: 60% Chrysotile**

  Asbestos was detected in samples of the Ceiling Corrugated Paper Insulation located in the closet (009) in the Main House during F&R's survey. This material is classified as Regulated Asbestos-Containing Material by the United States Environmental Protection Agency (USEPA) under the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 763 and was in good condition at the time of survey. All Ceiling Corrugated Paper Insulation located throughout the building should be assumed to contain asbestos.

- **Pipe Insulation: 60% Chrysotile**

  Asbestos was detected in samples of the Pipe Insulation located in the Mechanical Room in the basement in the Main House during F&R's survey. This material is classified as Regulated Asbestos-Containing Material by the United States Environmental Protection Agency (USEPA) under the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 763 and was in good condition at the time of survey. All pipe insulation located throughout the building should be assumed to contain asbestos.

- **Transite Panels: 40% Chrysotile**

  Asbestos was detected in samples of the loose transite panels located on the floor in the mechanical room in the Main House during F&R's survey. This material is classified as Regulated Asbestos-Containing Material by the United States Environmental Protection Agency (USEPA) under the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 763 and was in good condition at the time of survey. All transite panels located throughout the building should be assumed to contain asbestos.

2.3.2 Non-friable Asbestos-Containing Materials

- **Floor Glazing/ Wood Filler: 75% Chrysotile**

  Asbestos was detected in a sample of the Floor Glazing/Wood Filler located on the third floor inside the Main House during F&R's survey. This material is classified as Category II Non-friable Asbestos-Containing Material by the United States Environmental Protection Agency (USEPA) under the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 763 and was in good condition at the time of survey. All interior Floor Glazing/Wood Filler located throughout the building should be assumed to contain asbestos.

- **Roof Flashing and Penetrations: 2% Chrysotile**

  Asbestos was detected in a sample of the Silver Coating on the Flashing on the Main House Roof during F&R's survey. This material is classified as Category I Non-friable Asbestos-Containing Material by the

United States Environmental Protection Agency (USEPA) under the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 763 and was in good condition at the time of survey. All roof components (flashing and penetrations) with Silver Coating located throughout the roof should be assumed to contain asbestos.

2.3.3 Suspect/Presumed Asbestos-Containing Materials

The following suspect materials should be presumed to be asbestos-containing until sampling determines otherwise. If these materials are determined to contain asbestos, they should be removed by a District Licensed Asbestos Abatement Contractor prior to impact by renovation or demolition activities:

- Electrical Wiring

2.4 Applicable Regulations

EPA / NESHAP Regulations for Asbestos Containing Materials

The U.S. Environmental Protection Agency promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR Part 61], which addresses the application, removal, and disposal of asbestos-containing materials (ACM). Under NESHAP the following categories are defined for asbestos-containing materials:

Friable - When dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

Non-Friable - When dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Category I Non-Friable ACM - Packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than 1% asbestos.

Category II Non-Friable ACM – Any material, excluding Category I Non-friable ACM, containing more than 1% asbestos.

Regulated Asbestos Containing Material (RACM) – One of the following:

1. Friable ACM
2. Category I Non-friable ACM that has become friable.
3. Category I Non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading.
4. Category II Non-friable ACM that has a high probability of becoming, or has become, friable by the forces expected to act on the material in the course of demolition or renovation operations.

Under NESHAP, the following actions are required:

1. Prior to the commencement of demolition or renovation activities, the building owner must inspect the affected facility or part of the facility where the demolition or renovation activities will occur for the presence of asbestos.

2. Remove all RACM from the facility before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access for subsequent removal.

3. RACM need not be removed if:

   a) It is Category I non-friable ACM that is not in poor condition.

b) It is on a facility component that is encased in concrete or other similar material and is adequately wet whenever exposed.
c) It was not accessible for testing and was therefore not discovered until after demolition began and because of the demolition the material cannot be safely removed.
d) It is Category II non-friable ACM and the probability is low that the material will become crumbled, pulverized, or reduced to powder during demolition.

3.0 Lead-Based Paint

3.1 Methodology

A screening survey of the component's surface that will be impacted during the proposed renovation was conducted using a Niton XL-300 X-Ray Fluoresence (XRF) Lead Paint Analyzer. Only accessible painted and/or varnished surfaces were tested using the XRF. The survey was conducted following EPA's work practice standards for conducting lead-based paint activities (40 CFR 745.227), and the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* (1997 & 2000 revisions). Readings are taken to represent component types; therefore if there is a positive result of a component, similar components in that building should be assumed to contain lead-based paint.

The XRF contains a small radioisotopic source and operates on the principle of x-ray fluorescence, whereby lead atoms in paint are stimulated to emit characteristic x-rays, which are then detected by the instrument. The XRF can measure surface or non-surface concentrations of lead with 95% accuracy at the HUD action level of 1.0 mg/cm^2. Levels of lead are reported in units of milligrams per square centimeter (mg/cm^2). The XRF is able to accurately detect as little as 0.1 mg/cm^2 of lead. The XRF classifies painted surfaces as "positive", "negative", or "null" for lead content based on the HUD action level (1.0 mg/cm^2) and the performance characteristics of the XRF. The XRF was checked for calibration before and after the survey. The calibration was checked against a standard reference material (1.04 mg/cm^2 NIST Standard) supplied by the XRF manufacturer.

Positive: Lead is present at or above the U.S. HUD Guidelines standard of 1.0 mg/cm^2 on *one or more* of the components.

Negative: Lead is not present below the U.S. HUD Guidelines standard of 1.0 mg/cm^2 on any of the components.

Null: Insufficient data was collected by the XRF during the sample time to determine if the surface is positive or negative (i.e. – premature removal or instrument slippage, terminating the test).

3.2 Results

A total of one hundred twenty-one (121) readings were taken as part of this survey. Of the 121 readings, 71 of these were positive for lead-based paint.

Lead based paint was detected on the following representative painted surfaces:

Interior

- All White Window Components
- White Door Components in the Kitchen
- All Orange Wall Paint

- All White Painted Walls
- All White Painted Trim
- All Lite Blue Paint on Doors , Closets or Walls

Please see the Appendix for a complete list of the specific locations and substrates tested.

3.3 Recommendations

The scope of the abatement of the LBP identified in the above referenced areas will be dependent upon the planned scope of the renovation work. This will depend on the purpose of the work, the degree of disturbance, method of removal of LBP, and Federal funding, etc.

It is important to note that OSHA, under its Lead in Construction standard (29 CFR 1926.62, Paragraph d), does not define acceptable levels of lead in paint at which no exposure to airborne lead (above the action level) would be expected. Rather, OSHA defines airborne concentrations, and references specific types of work practices and operations from which a lead hazard may be generated. Environmental and personnel monitoring should be conducted during any removal/demolition process (as appropriate) to verify that actual personal exposures are below the Permissible Exposure Limit (PEL). Under OSHA requirements, the contractor performing the work will be required to conduct this monitoring and follow all of the other requirements found under 29 CFR 1926.62.

F&R recommends that a Commonwealth of Virginia Licensed Lead-Based Paint Abatement Contractor conduct the removal of LBP and lead-contaminated dust. At a minimum an EPA Renovator, Repair, and Painting (RRP) certified firm with certified RRP individual and trained worker conduct the removal of LBP and/or lead-containing paint.

Adequate personal protection should be provided to any personnel working on the LBP surfaces, or other similar surfaces which are painted with the same painting history, when there is potential for generation of airborne lead dust or fumes (i.e., through grinding, cutting, or sanding). During demolition work, environmental controls will be required to capture lead dust that is generated. Lead dust and/or residue should be properly removed and disposed of in accordance with federal, state, and local regulations. Demolition debris should be tested for hazardous waste determination per the EPA Toxicity Characteristic Leaching Procedure (TCLP) prior to disposal; and disposed of accordingly.

F&R recommends informing the demolition contractor of the presence of LBP in the work area. If the removal of LBP is the primary scope of the demolition project, it is recommended that a Commonwealth of Virginia Licensed Lead-Based Paint Abatement Contractor perform the work. It is further recommended that environmental and personal monitoring be conducted by the demolition contractor during any removal process to determine actual personal exposure during demolition activity in order to determine the levels of personal protection and environmental controls required.

4.0 PCB-Containing Light Ballasts

4.1 Methodology

Light ballasts are the electrical components attached to fluorescent light fixtures usually found under a metal overplate. Prior to 1978, ballasts were commonly manufactured with polychlorinated biphenyls (PCBs). PCBs were used in fluorescent light ballasts because of their good electrical insulating capabilities. Ballasts made after 1978 are usually marked "Non-PCB."

4.2 Results

During this survey, F&R personnel observed approximately twenty-two (22) light ballasts throughout the property.

4.3 Findings and Recommendations

F&R recommends that all fluorescent light ballasts in the building that do not contain the "Non-PCB" label be assumed to contain PCBs. Ballasts with a clearly marked "Non-PCB" label are not regulated and can be disposed of with general construction and demolition debris. The fluorescent light ballasts without the "Non-PCB" label should be removed, disposed of and/or recycled according to Federal and Commonwealth of Virginia waste disposal guidelines by an appropriately licensed contractor.

5.0 Mercury-Containing Components

5.1 Methodology

Mercury is used in several building components including fluorescent lamps, thermostats and thermometers. F&R conducted a visual non-invasive survey to identify mercury-containing components throughout the building.

5.2 Results

During this survey, F&R personnel observed approximately fifteen (15) fluorescent lamps throughout the Renovation Phase I portion of the building. F&R also observed two (2) thermometers and thermostats suspected to contain mercury, on the first and second floor.

5.3 Findings and Recommendations

F&R recommends that all fluorescent lamps and thermometers associated with mechanical equipment be presumed to be mercury-containing. The mercury-containing building components that are to be impacted as part of renovation/demolition activities should be removed, disposed of and/or recycled according to Federal and Commonwealth of Virginia hazardous waste disposal guidelines by an appropriately licensed contractor.

6.0 Limitations

This report has been prepared for the exclusive use of Beyer, Blinder, Belle and/or their agents. This service was performed in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made. Our conclusions and recommendations are based, in part, upon information provided to us by others and our site observations. We have not verified the completeness or accuracy of the information provided by others, unless otherwise noted. Our observations and recommendations are based upon conditions readily visible at the site at the time of our site visit, and upon current industry standards. During F&R's non-invasive inspection, accessible areas were visually surveyed for the presence of suspected ACM and LBP. Inaccessible areas, such as behind solid walls or above solid ceilings were not surveyed and therefore suspected ACM may be present. Areas inspected for the above-referenced materials were limited to those designated by the client.

During this study, suspect material samples were analyzed for asbestos and/or lead-based paint. As with any similar survey of this nature, actual conditions exist only at the precise locations from which suspect samples were collected. Certain inferences are based on the results of this sampling and related testing to form a professional opinion of conditions in areas beyond those from which the samples were collected. No other warranty, expressed or implied, is made.

Under this scope of services, F&R assumes no responsibility regarding response actions (e.g. O&M Plans, Encapsulation, Abatement, Removal, Notifications, etc.) initiated as a result of these findings. F&R assumes no

liability for the duties and responsibilities of the Client with respect to compliance with these regulations. Compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements and should be performed by appropriately qualified and licensed-personnel, as warranted.

Froehling & Robertson, Inc. by virtue of providing the services described in this report, does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies any conditions at the site that may present a potential danger to public health, safety, or the environment. The client agrees to notify the appropriate local, state, or federal public agencies as required by law, or otherwise to disclose, in a timely manner, any information that may be necessary to prevent any danger to public health, safety, or the environment. The contents of the report should not be construed in any way as a recommendation to purchase, sell, or develop the project site.

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APPENDIX A

ASBESTOS DOCUMENTATION, LABORATORY REPORTS

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10768 Baltimore Avenue, Beltsville, MD 20705
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EMSL Order:	191201929
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CustomerPO:	68N0089-00001
ProjectID:	

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Received:	02/28/12 12:55 PM
Analysis Date:	3/2/2012
Collected:	2/28/2012

Project: **68N0089 HARMONY**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**		**% Non-Fibrous**	**% Type**
01 *191201929-0001*	JOINT COMPOUND BASEMENT	White Non-Fibrous Heterogeneous			85% Non-fibrous (other) 15% Mica	**None Detected**
02 *191201929-0002*	DRYWALL BASEMENT	Brown/Cream Fibrous Heterogeneous	20%	Cellulose	10% Non-fibrous (other) 70% Gypsum	**None Detected**
03A-Plaster *191201929-0003*	MECHANICAL RM PLASTER & FB.BOARD BACKING	Gray/White Non-Fibrous Heterogeneous			50% Non-fibrous (other) 50% Quartz	**None Detected**
03A-Fiber board *191201929-0003A*	MECHANICAL RM PLASTER & FB.BOARD BACKING	Brown Fibrous Heterogeneous	100%	Cellulose	0% Non-fibrous (other)	**None Detected**
03B-Plaster *191201929-0004*	MECHANICAL RM PLASTER & FB.BOARD BACKING	Gray/White Non-Fibrous Heterogeneous			60% Non-fibrous (other) 40% Quartz	**None Detected**
03B-Fiber Board *191201929-0004A*	MECHANICAL RM PLASTER & FB.BOARD BACKING	Brown Fibrous Heterogeneous	100%	Cellulose	0% Non-fibrous (other)	**None Detected**

Analyst(s)

Emily Baker (42)
George Malone (16)

Joe Centifonti, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from 03/02/2012 16:35:56

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			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**		**% Non-Fibrous**	**% Type**
03C-Plaster *191201929-0005*	MECHANICAL RM PLASTER & FB.BOARD BACKING	Brown/Gray Non-Fibrous Heterogeneous			55% Non-fibrous (other) 45% Quartz	**None Detected**
03C-Fiber Board *191201929-0005A*	MECHANICAL RM PLASTER & FB.BOARD BACKING	Brown Fibrous Homogeneous	100%	Cellulose	0% Non-fibrous (other)	**None Detected**
04A *191201929-0006*	CORRUGATED PAPER INSULATION SEAT	Gray/White Fibrous Heterogeneous			40% Non-fibrous (other)	**60% Chrysotile**
04B *191201929-0007*	CORRUGATED PAPER INSULATION SEAT					**Stop Positive (Not Analyzed)**
04C *191201929-0008*	CORRUGATED PAPER INSULATION SEAT					**Stop Positive (Not Analyzed)**
05A *191201929-0009*	PLASTER SKIM COAT	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**

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Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
05B *191201929-0010*	PLASTER SKIM COAT	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
05C *191201929-0011*	PLASTER SKIM COAT	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
05D *191201929-0012*	PLASTER SKIM COAT	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
05E *191201929-0013*	PLASTER SKIM COAT	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
05F *191201929-0014*	PLASTER SKIM COAT	Brown/Gray/White Non-Fibrous Heterogeneous		80% Non-fibrous (other) 15% Quartz 5% Mica	**None Detected**
		Result includes a small amount of inseparable attached material			
05G *191201929-0015*	PLASTER SKIM COAT	Tan/White/Blue Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
05H *191201929-0016*	PLASTER SKIM COAT	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
05I *191201929-0017*	PLASTER SKIM COAT	Brown/White/Green Non-Fibrous Heterogeneous		90% Non-fibrous (other) 10% Quartz	**None Detected**
		Result includes a small amount of inseparable attached material			
06A *191201929-0018*	PLASTER BASE COAT	Beige Non-Fibrous Heterogeneous		25% Non-fibrous (other) 60% Quartz 15% Mica	**None Detected**
06B *191201929-0019*	PLASTER BASE COAT	Beige Non-Fibrous Heterogeneous		28% Non-fibrous (other) 60% Quartz 12% Mica	**None Detected**
06C *191201929-0020*	PLASTER BASE COAT	Beige Non-Fibrous Heterogeneous		32% Non-fibrous (other) 60% Quartz 8% Mica	**None Detected**
06D *191201929-0021*	PLASTER BASE COAT	Beige Non-Fibrous Heterogeneous		18% Non-fibrous (other) 70% Quartz 12% Mica	**None Detected**
06E *191201929-0022*	PLASTER BASE COAT	Beige Non-Fibrous Heterogeneous		35% Non-fibrous (other) 50% Quartz 15% Mica	**None Detected**

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos				Asbestos
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**%**	**Non-Fibrous**	**% Type**
06F *191201929-0023*	PLASTER BASE COAT	Brown/Gray/Cream Fibrous Heterogeneous	15%	Cellulose	40% 45%	Non-fibrous (other) Quartz	**None Detected**
06G *191201929-0024*	PLASTER BASE COAT	Brown/Gray/Cream Fibrous Heterogeneous	5%	Cellulose	45% 50%	Non-fibrous (other) Quartz	**None Detected**
06H *191201929-0025*	PLASTER BASE COAT	Brown/Gray/Cream Fibrous Heterogeneous	7%	Cellulose	48% 45%	Non-fibrous (other) Quartz	**None Detected**
06I *191201929-0026*	PLASTER BASE COAT	Brown/Gray Fibrous Heterogeneous	15%	Cellulose	35% 50%	Non-fibrous (other) Quartz	**None Detected**
07A *191201929-0027*	CORRUGATED PAPER INSULATION CEILING CLOSET	Gray/White Fibrous Heterogeneous	75%	Cellulose	10%	Non-fibrous (other)	**15% Chrysotile**
07B *191201929-0028*	CORRUGATED PAPER INSULATION CEILING CLOSET						**Stop Positive (Not Analyzed)**

Analyst(s)

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Sample	Description	Appearance	Non-Asbestos %	Fibrous	Non-Asbestos %	Non-Fibrous	Asbestos % Type
07C *191201929-0029*	CORRUGATED PAPER INSULATION CEILING CLOSET						**Stop Positive (Not Analyzed)**
08A *191201929-0030*	SKIM COAT ON FIBERBOARD	Gray/Tan Fibrous Heterogeneous	20%	Cellulose	10% 70%	Non-fibrous (other) Gypsum	**None Detected**
		This is a leveling, not skim coat					
08B *191201929-0031*	SKIM COAT ON FIBERBOARD	Gray/Tan Fibrous Heterogeneous	35%	Cellulose	15% 50%	Non-fibrous (other) Gypsum	**None Detected**
08C *191201929-0032*	SKIM COAT ON FIBERBOARD	Brown/Beige/Cream Fibrous Heterogeneous	25%	Cellulose	30% 45%	Non-fibrous (other) Quartz	**None Detected**
09 *191201929-0033*	FIBERBOARD	Brown Fibrous Heterogeneous	100%	Cellulose	0%	Non-fibrous (other)	**None Detected**
10A *191201929-0034*	INSULATION RECESSED LIGHTS	White/Beige Fibrous Heterogeneous	25%	Cellulose	10% 50% 15%	Non-fibrous (other) Gypsum Quartz	**None Detected**

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Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
10B *191201929-0035*	INSULATION RECESSED LIGHTS	White/Beige Fibrous Heterogeneous	18% Cellulose	2% Non-fibrous (other) 70% Gypsum 10% Quartz	**None Detected**
10C *191201929-0036*	INSULATION RECESSED LIGHTS	Brown/Beige/Cream Fibrous Heterogeneous	15% Cellulose	35% Non-fibrous (other) 5% Mica 45% Quartz	**None Detected**
11A *191201929-0037*	PIPE INSULATION MECH. ROOM	White Fibrous Heterogeneous		40% Non-fibrous (other)	**60% Chrysotile**
11B *191201929-0038*	PIPE INSULATION MECH. ROOM				**Stop Positive (Not Analyzed)**
11C *191201929-0039*	PIPE INSULATION MECH. ROOM				**Stop Positive (Not Analyzed)**
12A *191201929-0040*	SKIM COAT ON CEILING	Tan/White Fibrous Heterogeneous	20% Cellulose	60% Non-fibrous (other) 20% Quartz	**None Detected**
12B *191201929-0041*	SKIM COAT ON CEILING	White/Beige Fibrous Heterogeneous	15% Cellulose	78% Non-fibrous (other) 7% Quartz	**None Detected**

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Received:	02/28/12 12:55 PM
Analysis Date:	3/2/2012
Collected:	2/28/2012

Project: **68N0089 HARMONY**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos				Asbestos
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**%**	**Non-Fibrous**	**% Type**
12C *191201929-0042*	SKIM COAT ON CEILING	Gray/Beige Non-Fibrous Heterogeneous	7%	Cellulose	78% 15%	Non-fibrous (other) Quartz	**None Detected**
12D *191201929-0043*	SKIM COAT ON CEILING	Brown/Gray/Cream Fibrous Heterogeneous	15%	Cellulose	40% 45%	Non-fibrous (other) Quartz	**None Detected**
12E *191201929-0044*	SKIM COAT ON CEILING	Brown/Gray/Cream Fibrous Heterogeneous	20%	Cellulose	35% 5% 40%	Non-fibrous (other) Mica Quartz	**None Detected**
13A *191201929-0045*	DUCT INSULATION WINE ROOM	White/Cream Fibrous Heterogeneous	70% 20%	Cellulose Synthetic	10%	Non-fibrous (other)	**None Detected**
13B *191201929-0046*	DUCT INSULATION WINE ROOM	White/Cream Non-Fibrous Heterogeneous	80% 15%	Cellulose Synthetic	5%	Non-fibrous (other)	**None Detected**
13C *191201929-0047*	DUCT INSULATION WINE ROOM	Gray/Tan/White Fibrous Heterogeneous	15% 85%	Glass Cellulose	0%	Non-fibrous (other)	**None Detected**
14 *191201929-0048*	TRANSITE PANEL	Gray Fibrous Heterogeneous			60%	Non-fibrous (other)	**40% Chrysotile**

Analyst(s)

Emily Baker (42)
George Malone (16)

Joe Centifonti, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from 03/02/2012 16:35:56

Test Report PLM-7.23.0 Printed: 3/2/2012 4:35:56 PM

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CustomerID:	FROE62
CustomerPO:	68N0089-00001
ProjectID:	

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Project: **68N0089 HARMONY**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos				Asbestos
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**%**	**Non-Fibrous**	**% Type**
15A *191201929-0049*	PLASTER STAIRWELL; CEILING TO BASEMENT	Beige Non-Fibrous Heterogeneous	7%	Cellulose	46% 40% 7%	Non-fibrous (other) Quartz Mica	**None Detected**
15B *191201929-0050*	PLASTER STAIRWELL; CEILING TO BASEMENT	Beige Fibrous Heterogeneous	15%	Cellulose	27% 50% 8%	Non-fibrous (other) Quartz Mica	**None Detected**
15C *191201929-0051*	PLASTER STAIRWELL; CEILING TO BASEMENT	Brown/Gray/White Fibrous Heterogeneous	15%	Cellulose	40% 45%	Non-fibrous (other) Quartz	**None Detected**
16 *191201929-0052*	ASPHALT SHINGLE	Black Fibrous Heterogeneous	30%	Glass	70%	Non-fibrous (other)	**None Detected**
17-Flooring *191201929-0053*	SHEET VINYL 2ND FL CORRIDOR	Gray/White Fibrous Heterogeneous	25%	Cellulose	75%	Non-fibrous (other)	**None Detected**
17-Mastic *191201929-0053A*	SHEET VINYL 2ND FL CORRIDOR	Yellow Fibrous Heterogeneous	15%	Cellulose	85%	Non-fibrous (other)	**None Detected**
18-Flooring *191201929-0054*	SHEET VINYL 2ND FL BATHROOM	Gray Fibrous Heterogeneous	40%	Cellulose	60%	Non-fibrous (other)	**None Detected**

Analyst(s)

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Project: **68N0089 HARMONY**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**		**% Non-Fibrous**	**% Type**
18-Mastic *191201929-0054A*	SHEET VINYL 2ND FL BATHROOM	Yellow Non-Fibrous Heterogeneous	7%	Cellulose	93% Non-fibrous (other)	**None Detected**
19-Tile *191201929-0055*	PIPE IN WALL SOUTH	Peach Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**
19-Mastic *191201929-0055A*	PIPE IN WALL SOUTH	Black Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**
20-Floor Tile *191201929-0056*	BLUE 12" VFT	Blue Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**
20-Mastic *191201929-0056A*	BLUE 12" VFT	Tan Non-Fibrous Heterogeneous	5%	Cellulose	95% Non-fibrous (other)	**None Detected**
21 *191201929-0057*	JOINT COMPOUND 3RD FLOOR	Gray/White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**

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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

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APPENDIX B

XRF DATA TABLES
EXPLANATION OF XRF DATA

EXPLANATION OF XRF DATA

The table header displays Inspector's name and license number, XL-309 serial number, the job site location, and sampling date.

Column	Description
Reading No	Consecutive sample numbers assigned by the instrument at testing time.
Site	Testing site location(s).
Component	The major building component being tested.
Substrate	The type of material underlying the painted coating.
Color	Color of the painted or varnished surface.
Result	Result of the test: NEG = negative POS = positive NULL = incomplete test / reading error *There is no inconclusive range for the Niton XL-309.*
Action Level	Concentration of lead defined as lead-based paint.
Pbc	Combined L and K-Shell x-ray readings of lead level.

LEAD BASED PAINT TEST RESULTS

Reading No	Time	Type	Component	Substrate	Location	Condition	Color	Floor	Results
1	Calibraton Test								
2	Calibraton Test								
3	Calibraton Test								
4	Calibraton Test								
5	2/15/2012 12:33	PAINT	Column	wood	South Entry-Exterior	good	white	exterior	Negative
6	2/15/2012 12:33	PAINT	Door	wood	South Entry	good	red	exterior	Negative
7	2/15/2012 12:34	PAINT	window sill	wood	Sun Room	poor	white	exterior	Negative
8	2/15/2012 12:36	PAINT	door	wood	South entry	good	white	first floor	Negative
9	2/15/2012 12:36	PAINT	door frame	wood	South entry	good	white	first floor	Negative
10	2/15/2012 12:37	PAINT	Wall	drywall	Sun Room	good	beige	first floor	Negative
11	2/15/2012 12:37	PAINT	window frame	wood	Sun Room	good	white	first floor	Negative
12	2/15/2012 12:38	PAINT	window sill	wood	Sun Room	good	white	first floor	Negative
13	2/15/2012 12:38	PAINT	window sash	wood	Sun Room	good	white	first floor	Negative
14	2/15/2012 12:39	PAINT	double door	wood	Sun Room	good	white	first floor	Negative
15	2/15/2012 12:39	PAINT	double door frame	wood	Sun Room	good	white	first floor	Negative
16	2/15/2012 12:40	PAINT	baseboard	wood	Sun Room	good	white	first floor	Negative
17	2/15/2012 12:40	PAINT	door to basement	wood	Sun Room	good	white	first floor	Negative
18	2/15/2012 12:41	PAINT	door frame to above	wood	Sun Room	good	white	first floor	Negative
19	2/15/2012 12:41	PAINT	ceiling	drywall	Sun Room	good	white	first floor	Negative
20	2/15/2012 12:42	PAINT	wall	drywall	Kitchen	good	beige	first floor	Negative
21	2/15/2012 12:43	PAINT	ceiling	drywall	Kitchen	good	white	first floor	Negative
22	2/15/2012 12:44	PAINT	window sill	wood	Kitchen	good	white	first floor	Negative
23	2/15/2012 12:44	PAINT	window frame	wood	Kitchen	fair	white	first floor	Positive
24	2/15/2012 12:45	PAINT	window sash	wood	Kitchen	poor	white	first floor	Positive
25	2/15/2012 12:45	PAINT	shelving unit	wood	Kitchen	good	white	first floor	Negative
26	2/15/2012 12:46	PAINT	bench	wood	Kitchen	good	white	first floor	Negative
27	2/15/2012 12:46	PAINT	door frame	wood	kitchen to Dining	good	beige	first floor	Positive
28	2/15/2012 12:48	PAINT	door	wood	kitchen to Dining	good	beige	first floor	Positive
29	2/15/2012 12:48	PAINT	wall	plaster	dining room	poor	orange	first floor	Positive
30	2/15/2012 12:49	PAINT	window shutter	wood	dining room	poor	white	first floor	Positive
31	2/15/2012 12:50	PAINT	window trim	wood	dining room	poor	white	first floor	Positive
32	2/15/2012 12:50	PAINT	window frame	wood	dining room	poor	white	first floor	Positive
33	2/15/2012 12:51	PAINT	chair rail	wood	dining room	poor	white	first floor	Positive
34	2/15/2012 12:52	PAINT	baseboard	wood	dining room	poor	white	first floor	Positive
35	2/15/2012 12:52	PAINT	fire place surround	wood	dining room	poor	white	first floor	Positive
36	2/15/2012 12:53	PAINT	shelving unit	wood	dining room	poor	white	first floor	Positive
37	2/15/2012 12:57	PAINT	ceiling	plaster	dining room	fair	white	first floor	Positive
38	2/15/2012 12:59	PAINT	fire place surround	metal	dining room	poor	black	first floor	Positive
39	2/15/2012 13:01	PAINT	wall	plaster	central hall	fair	lt. brown	first floor	Positive
40	2/15/2012 13:01	PAINT	front door frame	wood	central hall	fair	white	first floor	Positive
41	2/15/2012 13:02	PAINT	front door	wood	central hall	fair	white	first floor	Positive
42	2/15/2012 13:03	PAINT	rear door	wood	central hall	good	white	first floor	Negative
43	2/15/2012 13:03	PAINT	rear door frame	wood	central hall	good	white	first floor	Positive
44	2/15/2012 13:04	PAINT	rear door trim	wood	central hall	good	white	first floor	Positive
45	2/15/2012 13:04	PAINT	chair rail	wood	central hall	poor	white	first floor	Positive
46	2/15/2012 13:05	PAINT	stair riser	wood	central hall	poor	white	first floor	Positive
47	2/15/2012 13:06	PAINT	stair post	wood	central hall	poor	white	first floor	Positive
48	2/15/2012 13:06	PAINT	stair spindle	wood	central hall	poor	white	first floor	Positive
49	2/15/2012 13:07	PAINT	stair stringer	wood	central hall	poor	white	first floor	Positive
50	2/15/2012 13:07	PAINT	stair handrail	wood	central hall	good	brown	first floor	Positive
51	2/15/2012 13:08	PAINT	ceiling	drywall	central hall	good	white	first floor	Positive
52	2/15/2012 13:09	PAINT	wall	plaster	living room	fair	green	first floor	Negative
53	2/15/2012 13:10	PAINT	wall - rear	plaster	living room	fair	green	first floor	Positive
54	2/15/2012 13:11	PAINT	crown molding	wood	dining room	fair	white	first floor	Positive
55	2/15/2012 13:17	PAINT	shelving unit ceiling	plaster	dining room	poor	blue	first floor	Positive
56	2/15/2012 13:19	PAINT	ceiling	drywall	central hall	good	white	second floor	Positive
57	2/15/2012 13:20	PAINT	front wall	plaster	south bedroom	fair	white	second floor	Positive
58	2/15/2012 13:22	PAINT	wall	drywall	bathroom	poor	white	second floor	Positive
59	2/15/2012 13:23	PAINT	front wall	plaster	north bedroom	good	white	second floor	Positive
60	2/15/2012 13:23	PAINT	window trim	wood	north bedroom	poor	white	second floor	Positive
61	2/15/2012 13:24	PAINT	window frame	wood	north bedroom	poor	white	second floor	Positive
62	2/15/2012 13:24	PAINT	window sill	wood	north bedroom	poor	white	second floor	Positive
63	2/15/2012 13:25	PAINT	wall	plaster	bathroom	poor	white	second floor	Positive
64	2/15/2012 13:26	PAINT	chair rail	wood	north bedroom	poor	white	second floor	Positive
65	2/15/2012 13:26	PAINT	baseboard	wood	north bedroom	poor	white	second floor	Positive
66	2/15/2012 13:27	PAINT	wall	plaster	north bedroom	poor	lt. green	second floor	Positive
67	2/15/2012 13:28	PAINT	wall	drywall	corridor 204	good	beige	second floor	Negative
68	2/15/2012 13:29	PAINT	ceiling	drywall	corridor 204	good	white	second floor	Negative

LEAD BASED PAINT TEST RESULTS (CONTINUED)

69	2/15/2012 13:29	PAINT	stair rail	wood	corridor 204	good	white	second floor	Negative
70	2/15/2012 13:30	PAINT	door frame	wood	bedroom	good	white	second floor	Negative
71	2/15/2012 13:31	PAINT	door trim	wood	bedroom	good	white	second floor	Negative
72	2/15/2012 13:31	PAINT	door	wood	bedroom	good	white	second floor	Negative
73	2/15/2012 13:32	PAINT	window sill	wood	bedroom	good	white	second floor	Negative
74	2/15/2012 13:32	PAINT	window frame	wood	bedroom	good	white	second floor	Negative
75	2/15/2012 13:32	PAINT	window sash	wood	bedroom	good	white	second floor	Negative
76	2/15/2012 13:33	PAINT	wall	drywall	restroom	good	beige	second floor	Negative
77	2/15/2012 13:34	PAINT	closet wall	drywall	bedroom	good	yellow	second floor	Negative
78	2/15/2012 13:35	PAINT	wall	drywall	bedroom	good	beige	second floor	Negative
79	2/15/2012 13:36	PAINT	stair stringer	wood	to 3rd floor	good	white	second floor	Positive
80	2/15/2012 13:43	PAINT	stair riser	wood	to 3rd floor	poor	yellow	second floor	Positive
81	2/15/2012 13:44	PAINT	stair tread	wood	to 3rd floor	fair	brown	second floor	Positive
82	2/15/2012 13:47	PAINT	stair stringer	wood	stairwell	fair	white	third floor	Positive
83	2/15/2012 13:48	PAINT	fireplace stack	plaster	Room 303	fair	lt. blue	third floor	Negative
84	2/15/2012 13:50	PAINT	window trim	wood	oval window	fair	white	third floor	Positive
85	2/15/2012 13:50	PAINT	window frame	wood	oval window	fair	white	third floor	Positive
86	2/15/2012 13:51	PAINT	window sash	wood	oval window	fair	white	third floor	Negative
87	2/15/2012 13:52	PAINT	door	wood	bathroom	good	white	third floor	Positive
88	2/15/2012 13:53	PAINT	door trim	wood	bathroom	good	white	third floor	Positive
89	2/15/2012 13:53	PAINT	door frame	wood	bathroom	good	white	third floor	Positive
90	2/15/2012 13:54	PAINT	ceiling	fiberboard	bathroom	good	white	third floor	Positive
91	2/15/2012 13:55	PAINT	exposed beam	wood	bathroom	good	white	third floor	Positive
92	2/15/2012 13:55	PAINT	wall	wood	closet	good	white	third floor	Negative
93	2/15/2012 13:56	PAINT	ceiling	fiberboard	room 307	good	lt. blue	third floor	Positive
94	2/15/2012 13:57	PAINT	wall	fiberboard	room 307	good	lt. blue	third floor	Positive
95	2/15/2012 13:58	PAINT	closet door	wood	room 307	good	lt. blue	third floor	Positive
96	2/15/2012 13:59	PAINT	baseboard	wood	room 307	good	lt. blue	third floor	Positive
97	2/15/2012 13:59	PAINT	stair baluster	wood	hall 301	good	white	third floor	Positive
98	2/15/2012 14:00	PAINT	stair pickett	wood	hall 301	good	white	third floor	Positive
99	2/15/2012 14:02	PAINT	bench seat	wood	hall 301	good	white	third floor	Positive
119	2/16/2012 12:29	PAINT	door	wood	rec room	fair	white	basement	Positive
120	2/16/2012 12:30	PAINT	door frame	wood	rec room	fair	white	basement	Positive
121	2/16/2012 12:31	PAINT	molding	wood	stair room	fair	green	basement	Positive
122	2/16/2012 12:31	PAINT	door	wood	closet 012	good	green	basement	Positive
123	2/16/2012 12:31	PAINT	door trim	wood	storage 007	good	white	basement	Positive
124	2/16/2012 12:32	PAINT	door	wood	storage 007	good	white	basement	Negative
125	2/16/2012 12:32	PAINT	door	wood	closet 009	good	white	basement	Positive
126	2/16/2012 12:33	PAINT	wall	fiberboard	corridor 008	fair	white	basement	Negative
127	2/16/2012 12:33	PAINT	column	concrete	corridor 008	good	white	basement	Negative
128	2/16/2012 12:34	PAINT	door	wood	mechancal room 008	good	white	basement	Positive
129	2/16/2012 12:35	PAINT	door trim	wood	mechancal room 008	good	white	basement	Positive
130	2/16/2012 12:36	PAINT	wall	concrete	corridor 002	good	white	basement	Negative
131	2/16/2012 12:36	PAINT	storage rack	wood	wine storage 005	good	white	basement	Negative
132	2/16/2012 12:37	PAINT	storage rack	wood	wine storage 005	good	white	basement	Negative
133	2/16/2012 12:38	PAINT	wall	concrete	wine storage 005	good	white	basement	Negative
134	2/16/2012 12:39	PAINT	stair riser	wood	stairwell to central hall	good	green	basement	Positive
135	2/16/2012 12:40	PAINT	wainscoting	wood	central hall	poor	white	first floor	Negative
136	2/16/2012 12:40	PAINT	wainscoting	wood	central hall	poor	white	first floor	Negative
137	2/16/2012 12:42	PAINT	stable doors	wood	stable	good	blue/grey	Horse Stable	Negative
138	2/16/2012 12:45	PAINT	door trim	wood	stable	good	black	Horse Stable	Negative
139	2/16/2012 12:46	PAINT	door	wood	storage	poor	white	Livestock Pen	Positive
140	2/16/2012 12:47	PAINT	door trim	wood	storage	poor	white	Livestock Pen	Positive
141	2/16/2012 12:47	PAINT	window trim	wood	storage	poor	white	Livestock Pen	Positive
142	2/16/2012 12:47	PAINT	window sash	wood	storage	poor	white	Livestock Pen	Positive
143	2/16/2012 12:49	PAINT	ceiling	fiberboard	2nd floor	poor	white	Livestock Pen	Negative
144	2/16/2012 12:50	PAINT	Wall	concrete	2nd floor	fair	white	Livestock Pen	Negative

Appendix B: Plaster, Mortar, and Finish Analysis



Harmony Hall

Fort Washington, Maryland

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Plaster Analysis

Harmony Hall
Fort Washington, Maryland

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PLASTER ANALYSIS

INTRODUCTION

Five plaster samples were removed from Harmony Hall and analyzed. Plaster samples 1 through 5 were removed by architectural conservator Stephanie M. Hoagland. Plaster sample 6 was removed by Beyer Blinder Belle and sent to JBC for analysis. The plaster investigations included microscopic inspection, spot testing and gravimetric techniques. These analyses conformed to standard wet-chemical techniques, and were requested to provide the primary characteristics of the plasters with the goal of establishing which plasters date to the original construction of Harmony Hall. One of the samples was a wallboard instead of a plaster. While gravimetric analysis was not performed on this sample it was researched and described.

METHODOLOGY

Microscopic Inspection

Freshly broken surfaces of each plaster sample were examined and measured under a variable zoom microscope with an external light source equipped with daylight filters. Each sample was listed as either a two-part system including a "scratch-coat" and "finish-coat", or a three-part system comprised of a "scratch-coat", "brown-coat" and "finish-coat." The binder in the sample was matched to a color standard of the Munsell Color Chart (as per ASTM "1535 Specifying Color by the Munsell System") under natural light. The presence, type and concentration of fibers in the plasters was noted. The degree of bonding between each layer was also evaluated.

Ground portions of specific layers from select samples were mounted on glass slides and examined under plane and cross polarized light using a Zeiss Axioskop 40 polarizing light microscope. Optical properties of the powders were noted and compared to the *McCrone Particle Atlas*[1], and *Pigment Compendium: A Dictionary and Optical Microscopy of Historical Pigments*[2]. Polarized light microscopy was performed in order to help further identify the binder and aggregate portions in the plaster layers. Polarized light microscopy was also performed to help identify fibers found.

Gravimetric Analysis

Each layer of the plaster sample was separated using an X-acto® blade and gravimetric analysis completed on each section. Each layer was separated into three component parts (i.e. pigment, clay or cement residue) acid-soluble, "fines", and aggregate or sand, via wet-chemical techniques. Samples were first crushed and then digested with 3M hydrochloric acid. Levigation and filtration were used to separate the fines from the aggregate. Weight percentages of the constituent parts were calculated to gain an understanding of the original plaster mix. The colors of the "fines" and sand were matched to the Munsell Soil Color Chart. Predominant colors and shapes of sand grains

[1] Walter C. McCrone and John Gustav Delly, *The McCrone Particle Atlas: An encyclopedia of techniques for small particle identification*, 2nd ed. (Ann Arbor: Ann Arbor Science Publishers, Inc., 1973).
[2] Nicholas Eastaugh, Valentine Walsh, Tracy Chaplin, and Ruth Siddall, *Pigment Compendium: A Dictionary of Optical Microscopy of Historical Pigments* (Oxford: Butterworth-Heinemann, 2008).

were noted during examination of the aggregate fractions. Sieve analysis of the sand was performed to determine particle size distribution.

Sulfate Tests

Each layer of each sample was also examined for the presence of sulfates using quantitative test strips to help determine if it was a gypsum or lime plaster. Gypsum is calcium sulfate dehydrate. If high sulfate levels were detected in the plasters it would indicate the presence of gypsum.

Ion-specific quantitative test strips are designed to provide a semi-quantitative amount of a specific ion in water. The concentration of the specific ion causes the reaction zones on the test strip to change color. This color change is then compared to the color chart on the side of the container. In this application, sulfate test strips are used to determine the presence of the sulfate ion in each sample. Any color change on the strip indicates the presence of the ion.

The sample of plaster was first dissolved in de-ionized water.

1. The test strip was completely immersed in the test solution for 1 second, so that all reaction zones were completely wetted.
2. The excess liquid was shaken from the strip and the coloration of the reaction zones assessed against the color coded graphics on the side of the container.

RESULTS OF ANALYSES:

HARMONY HALL SAMPLE P-1

This sample was removed from the south wall of the dining room, Room 103 (Figure PA-1). The bond was broken between the scratch coat and the brown coat. The scratch coat was well bonded to the wall and was not removed.



Figure PA-1: Condition of the plaster in the Dining Room.

General Description:

This plaster is a three-part system comprised of a scratch coat, a brown coat and a finish coat. There is an additional thin, modern skim coat on the top of the plaster. This layer was not analyzed as it is a modern repair. The scratch coat ranges in thickness from 6/8" to 3/16"; the brown coat is 1/16" thick; and the finish coat approximately 1/16" thick.

In cross-section the matrix of the scratch coat is pale yellow (Munsell 2.5Y 8/2) in color; the matrix of the brown coat is very pale brown (Munsell 10YR 8/2); and the matrix of the finish coat is white (Munsell 10YR 8/1). Jute fibers were found in all three layers: scratch, brown and finish coat. In undamaged areas the brown coat is well-adhered to the scratch coat, and the finish coat is well-adhered to the brown coat.

Wet Chemical Analyses

Scratch Coat Components:

Acid soluble fraction – 16% of the total sample weight. There was a slight reaction to the addition of 3M hydrochloric acid.

"Fines" – 26% of the total sample weight. The "fines" are light gray (Munsell 2.5Y 7/2) in color.

Aggregate – 58% of the total sample weight. The aggregate is comprised of clear and cloudy quartz with black quartz. The shape of the aggregate is sub-rounded. The size of

the aggregate is predominantly medium (1/4 – 1/2 mm) and coarse (1/2 – 1.0 mm) with the largest granule measuring 3mm.

Brown Coat Components:

Acid soluble fraction – 70% of the total sample weight. There was no visual reaction to the addition of 3M hydrochloric acid but digestion occurred over a long period of time.

"Fines" – 15% of the total sample weight. The "fines" are light gray (Munsell 2.5Y 7/2) in color.

Aggregate – 15% of the total sample weight. The aggregate is comprised of clear and cloudy quartz. The shape of the aggregate is sub-angular. The size of the aggregate is medium (1/4 – 1/2 mm).

Finish Coat Components:

Acid soluble fraction – 72% of the total sample weight. There was no visual reaction to the addition of 3M hydrochloric acid but digestion occurred over a long period of time.

"Fines" – 19% of the total sample weight. The "fines" are light yellowish brown (Munsell 2.5Y 6/4) in color.

Aggregate – 9% of the total sample weight. The aggregate is comprised of clear and cloudy quartz. The shape of the aggregate is angular. The size of the aggregate is medium (1/4 – 1/2 mm).

Polarized Light Microscopy

Examination of crushed portions of the brown coat and finish coat revealed that those layers are gypsum plasters with a quartz and calcite aggregate.

Sulfate Tests

The brown coat had slightly elevated sulfate levels, >1200. This indicates a presence of gypsum in the plaster but may also be caused by the presence of a sulfate containing finish on the plaster.

Harmony Hall P-1 Summary of Findings

- Plaster applied in three layers
- Gypsum plaster with mixed calcite and quartz aggregate in same formulation for finish and brown coats
- Calcite aggregate in the finish coat and brown coat was digested by the 3M hydrochloric acid
- Gauge plaster scratch coat
- Jute fibers used to strengthen binder
- Scratch and brown and finish coats are well bonded

HARMONY HALL SAMPLE P-2

This sample was removed from the west wall of the parlor, room 102. The bond was broken between the scratch coat and the brown coat; the scratch coat remained on the wall (Figure PA-2).

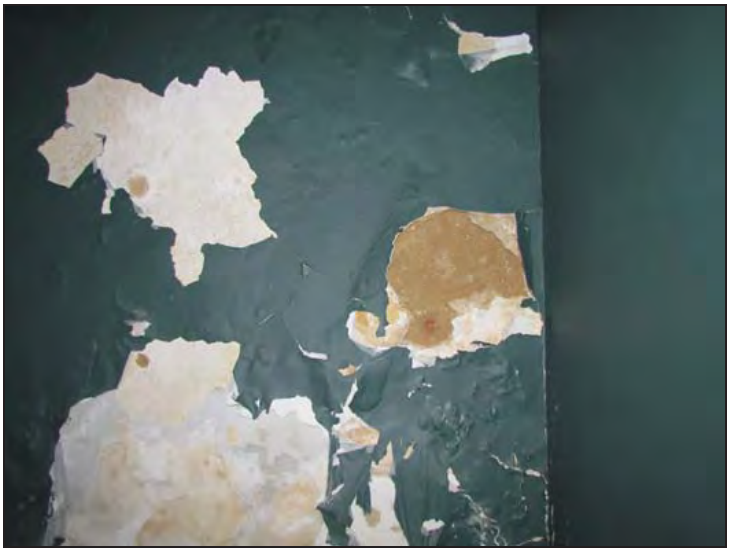


Figure PA-2: Condition of the plaster in the Parlor.

General Description:

This plaster was a two part system comprised of a scratch coat and a finish coat. The scratch coat measures 1/4" deep and the finish coat measures 1/16" deep. In cross-section, both the finish coat and the scratch coat are pale yellow (Munsell 2.5Y 8/2) in color. Jute fibers are present in the scratch coat. The finish coat was slightly more difficult to crush than the scratch coat.

Wet Chemical Analyses

Scratch Coat Components:

Acid soluble fraction – 17% of the total sample weight. There was a slight reaction to the addition of 3M hydrochloric acid.

"Fines" – 19% of the total sample weight. The "fines" are light gray (Munsell 2.5Y 7/2) in color.

Aggregate – 64% of the total sample weight. The aggregate is comprised of clear and cloudy quartz with black quartz. The shape of the aggregate is sub-rounded. The size of the aggregate is predominantly medium (1/4 – 1/2 mm) to coarse (1/2 – 1.0 mm) with some very coarse (1.0 – 2.0 mm) granules with the largest granule being 5mm.

Finish Coat Components:

Acid soluble fraction – 41% of the total sample weight. There was a slight reaction to the addition of 3M hydrochloric acid.

"Fines" – 56% of the total sample weight. The "fines" are light gray (Munsell 2.5Y 7/2) in color.

Aggregate – 3% of the total sample weight. The aggregate is comprised of clear and cloudy quartz. The shape of the aggregate is sub-rounded. The size of the aggregate is fine (1/8 – 1/4 mm).

Polarized Light Microscopy

Examination of crushed portions of the scratch coat and finish coat revealed that those layers are gypsum plasters with a quartz and calcite aggregate.

Harmony Hall P-2 Summary of Findings

- Plaster sample had two layers but plaster was most likely applied in 3
- Finish coat is a gypsum plaster
- Gauge plaster scratch coat
- Jute fiber used to strengthen binder of scratch coat
- Finish and brown coats appear to be fairly well bonded
- Bond was broken between the scratch coat and the brown coat (the scratch coat remained on the wall)
- Calcite aggregate in the finish coat was digested by the 3M hydrochloric acid thereby creating a large percentage of fines (56%) with a small percentage of aggregate (3%)
- Neither of the layers had elevated sulfate levels

HARMONY HALL SAMPLE P-3

This sample was removed from the ceiling of the Entrance Hall, Room 101 (Figure PA-3).



Figure PA-3: Sample P-3 was removed from ceiling.

General Description:

The wall board is 3/8" thick. There are two different layers of fiber, the top layer (directly under the plaster, is 2/8" thick and the bottom layer is 1/8" thick. The back of the wall board was stamped with "Johns-Manville Insulite". Based on historic documentation and the finishes analysis, the wall board dates to the circa 1930 alteration of the building.

HARMONY HALL SAMPLE P-4

This sample was removed from the stairway, Room 201, from the south wall at the landing. The plaster was applied directly to the brick nogging. The plaster was completely separated from the wall when the sample was taken (Figure PA-4).



Figure PA-4: Area of damaged plaster at stair where sample was removed.

General Description:

This plaster was a three part system comprised of a scratch coat, a brown coat and a finish coat. The finish coat is not found throughout the entire sample and there was not enough of it present to perform a wet-chemical analysis. The layer appears, however, to be gypsum as no digestion was observed when 3M hydrochloric acid was dripped onto it. There is a modern, white, gypsum skim coat, matching that found in sample P-1, on top. Both the scratch coat and the brown coat are 1/8" deep. Where present, the finish layer varies from approximately 1/32" to 1/16" deep. In cross-section the matrix of the finish coat was very pale brown (Munsell 10YR 8/3) in color, the brown coat was light gray (Munsell 2.5Y 7/1) in color and the scratch coat was pale yellow (Munsell 2.5Y 7/3) in color. Animal hair, horse hair and cow hair, was found in the scratch coat. Both brown and white hair was found. All three coats appeared well adhered.

Wet Chemical Analyses

Scratch Coat Components:

Acid soluble fraction – 58% of the total sample weight. There was a slight reaction to the addition of 3M hydrochloric acid.

"Fines" – 16% of the total sample weight. The "fines" are light gray (Munsell 2.5Y 7/2) in color.

Aggregate – 26% of the total sample weight. The aggregate is comprised primarily of clear quartz with cloudy quartz, black, and orange colored quartz. The shape of the aggregate ranges from sub-angular to sub-rounded. The size of the aggregate ranges from fine (1/8 - ¼ mm) to coarse (1/2 – 1.0 mm) with the largest granite granule being 3 mm.

Brown Coat Components:

Acid soluble fraction – 59% of the total sample weight. There was no visual reaction to the addition of 3M hydrochloric acid but digestion occurred over a long period of time.

"Fines" – 32% of the total sample weight. The "fines" are gray (Munsell 2.5Y 6/1) in color.

Aggregate – 9% of the total sample weight. The aggregate is comprised of mainly clear quartz. The shape of the aggregate is sub-rounded. The size of the aggregate is medium (1/4 – 1/2 mm).

Finish Coat Components:

Sample was too small to be digested.

Polarized Light Microscopy

Examination of crushed portions of the scratch coat and brown coat revealed that those layers are gypsum plasters with a quartz and calcite aggregate.

Harmony Hall P-4 Summary of Findings

- Plaster applied in three layers
- Gauge plaster scratch coat
- Gypsum brown and finish coats
- Calcite aggregate in the brown coat was digested by the 3M hydrochloric acid
- Animal hair used in scratch coat
- Scratch coat, brown coat and finish coat appear to be well bonded
- Calcite aggregate in the brown coat was digested by the 3M hydrochloric acid

HARMONY HALL SAMPLE P-5

This sample was removed from the south wall of the closet in the south bedroom (Figure PA-5). The plaster was applied directly to the brick nogging. The plaster was completely separated from the wall when the sample was taken.



Figure PA-5: Sample was removed from area of cracked plaster at the back wall of the closet

General Description:

This plaster was a two part system comprised of a scratch coat and a finish coat. The scratch coat was 3/8" deep and the finish coat was 1/16" deep. In cross-section the matrix of the finish coat appeared white (Munsell 2.5Y 8/1) in color and the scratch coat appeared pale yellow (Munsell 2.5Y 8/2) in color. Jute fiber was present in the scratch coat. The finish coat was comprised solely of gypsum and appeared well bonded to the scratch coat.

Wet Chemical Analyses

Scratch Coat Components:

Acid soluble fraction – 27% of the total sample weight. There was a slight reaction to the addition of 3M hydrochloric acid.

"Fines" – 15% of the total sample weight. The "fines" are light gray (Munsell 2.5Y 7/2) in color.

Aggregate – 57% of the total sample weight. The aggregate is comprised primarily of clear and cloudy quartz with some black quartz. The shape of the aggregate is sub-rounded. The size of the aggregate is predominantly medium (1/4 – 1/2 mm).

Finish Coat Components:

Acid soluble fraction – 74% of the total sample weight. There was no visual reaction to the addition of 3M hydrochloric acid but digestion occurred over a long period of time.

"Fines" – 18% of the total sample weight. The "fines" are very pale brown (Munsell 10YR 7/4) in color.

Aggregate – 8% of the total sample weight. The aggregate is comprised primarily of clear and cloudy quartz with some orange quartz. The shape of the aggregate is angular. The size of the aggregate is predominantly medium (1/4 – 1/2 mm).

Polarized Light Microscopy

Examination of crushed portions of the scratch coat and finish coat revealed that those layers are gypsum plaster with a quartz and calcite aggregate.

Harmony Hall P-5 Summary of Findings

- **Plaster applied in two layers**
- **Finish coat is of gypsum**
- **Jute fiber used in scratch coat**
- **Scratch coat and finish coat appear to be well bonded**
- **Gauge plaster scratch coat**
- **Calcite aggregate in the finish coat was digested by the 3M hydrochloric acid**

HARMONY HALL SAMPLE P-6

This sample was removed from the north wall of the north bedroom (Room 202), just above the chair rail at the window infill.

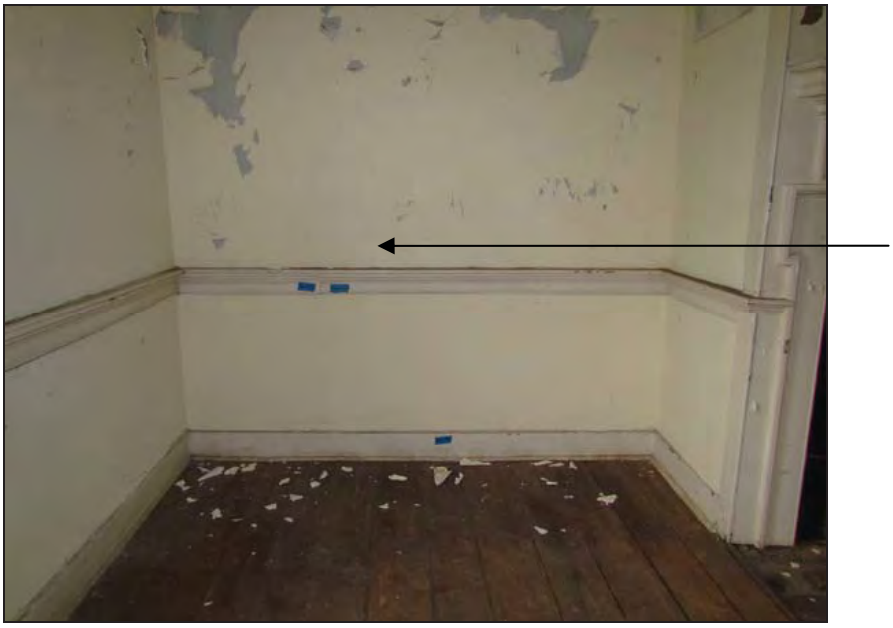


Figure PA-6: Plaster sample removed from area of window infill (arrow).

General Description:

This plaster was a three part system comprised of a scratch coat (6a), a brown coat (6b) and a finish coat (6c). The sample removed was small (less than 1/2" diameter) and there was not enough sample present to perform a wet-chemical analysis. Spot testing using a microscope and a spot plate was completed on each layer of the sample. All three layers partially digested when 3M hydrochloric acid was dripped onto it. Sulfate testing completed on each layer indicated elevated levels of sulfate in all three layers.

On the removed sample both the scratch coat and the brown coat are approximately 1/8" deep. The finish layer varies from approximately 1/32" to 1/16" deep. In cross-section the matrix of the finish coat is white (Munsell 10YR 8/1) in color, the brown coat was very pale brown (Munsell 10YRY 7/4) in color and the scratch coat was pale yellow (Munsell 2.5Y 7/3) in color. Fibers were visible in the brown and scratch coats, the fibers were too small to be positively identified but are either jute or sisal. Cement particles and asbestos fibers were identified in the finish layer.

Polarized Light Microscopy

Examination of crushed portions of the base coat, scratch coat revealed that those layers are gypsum-lime plasters with quartz and calcite aggregate. Examination of the finish layer found that this layer contains gypsum, lime, cement, and asbestos with quartz and calcite aggregate.

Harmony Hall P-6 Summary of Findings

- Plaster applied in three layers
- Finish coat is of gypsum-lime-cement-asbestos

- Jute or sisel fiber used in base and scratch coats
- Gauged plaster base coat
- Gauge plaster scratch coat
- Gypsum-hydrated lime-cement finish coat
- Asbestos used in finish coat

CONCLUSIONS

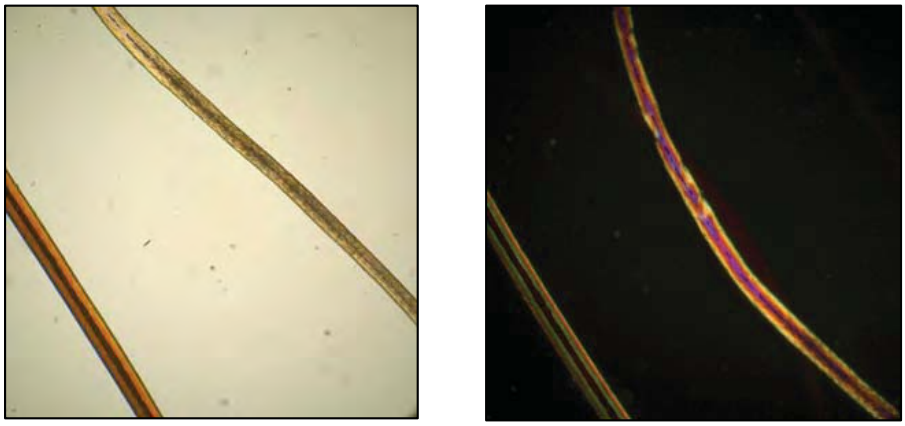
Based upon microscopic inspection and wet-chemical analysis of the five plaster samples, two types of plaster mixes and one wallboard were found at the interior of Harmony Hall.

Plaster Type 1

The earliest type of plaster was found as sample P-4 from the Stairway, Room 201. Based on the findings of the finishes investigation it is believed that the plaster at the stairway dates to 1792.

The brown coat of this sample had no visual reaction to the addition of 3M hydrochloric acid while the scratch coat had a mild reaction. The scratch coat was applied directly to the brick nogging and is a gauge plaster of gypsum and lime. Neither the scratch coat nor the brown coat had elevated sulfate levels.

Fibers found in this plaster were animal hair. The use of animal hair; horse, hog, goat or cattle, was used in America until the end of the 1800s. The hair from this sample was examined using a polarized stereoscope and determined to be horse and cow hair (Figures PA-6 & PA-7).



Figures PA-6 and PA-7: Polarized (left) and crossed polarized (right) images of animal hair fibers from Sample 4c. The fiber at the lower left is horse hair while cow hair is seen at the top right.

Plaster Type 2

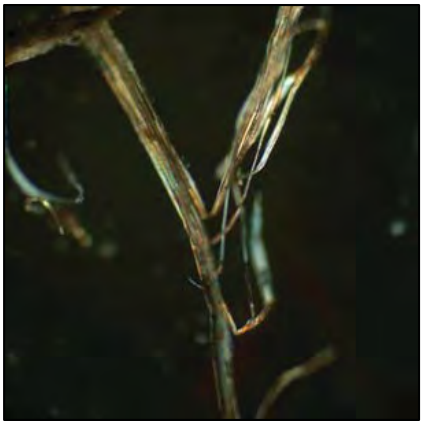
The second type of plaster was found at the south wall of the Dining Room, the west wall of the Parlor, and the south wall of the closet in the South Bedroom. Based on the finishes investigation, this plaster dates to approximately 1892. According to the Historic Structures Report and historic documents, the house was possibly uninhabited from 1850 to 1892. In 1892 the house was found to be in a state of disrepair. It is possible that the plaster walls were deteriorated and replaced at that time.

The brown coats and finish coats of plasters 1a, 1b, 2a, 4a, 4b and 5a are all gypsum plasters with a mixed calcite (crushed marble) and quartz aggregate. It was common for gypsum to be added to decorative or finish plaster, but gypsum began being added to base coat plaster in the 1890s.[3]

[3] Mary Lee MacDonald, "Repairing Historic Flat Plaster: Walls and Ceilings," *Preservation Brief 21* (October 1989), accessed October 18, 2010, http://www.nps.gov/history/hps/tps/briefs/brief21.htm.

Although gypsum itself is used as a strengthening additive to plaster, animal hair and plant fibers were necessary in the base coats of plaster on wood lath "to prevent an excess from going through the keys of the lath and dropping on the floor behind"[4] and to give it tensile strength. Hair for use in plaster was best if it were 1-4 inches long, "strong, soft and not springy, and free from grease or other impurities."[5] Samples 1a and 1b had jute fibers in them. Jute was often used as a plaster fiber in the nineteenth century. In the nineteenth century, jute was often mixed into the plaster to add strength.

Samples 1c, 2b and 5b, 6a and 6b all had what appears to be jute fiber included as a binder.[6] Please note that samples 6a and 6b were too small to conclusively identify the fibers as jute, they may be sisel.

Figures PA-8 and PA-9: Polarized (left) and crossed polarized (right) images of jute fibers found in plaster sample P-5.

The scratch coat was a gauge plaster, which is a lime plaster mixed with gypsum. The addition of gypsum, often in the form of plaster of Paris, to lime plaster helps to strengthen the plaster and to speed the time it takes the plaster to set. Gypsum also helps to counteract the slight shrinking of lime as it cures. The scratch coats of plaster type 2 were predominantly gypsum with some lime mixed in. Lime is not water soluble and therefore adds stability to the plaster. It is expected that any plasters applied directly to brick (plasters 4 and 5 were applied directly to brick nogging) would have lime in them. This would give some protection to the plaster in case moisture traveled through the wall.

Plaster Type 3

The third type of plaster was found at the north wall of Room 202 (north bedroom). The finish coat was a gauged gypsum cement plaster with asbestos fibers. As described by the *National Builder* in 1922 "Neat Gypsum Plaster (sometimes termed Gypsum Cement Plaster) is a plastering material in which not less than 85% by weight of the cementitious material is calcined gypsum. The remainder

[4] F. Van Den Branden and Thomas L. Hartsell, *Plastering Skills* (Homewood, Illinois: American Technical Publishers, Inc., 1984), 108-109.
[5] Simpson & Brown Architects, *Technical Advice Note 2: Conservation of Plasterwork* (Edinburgh: Historic Scotland, 2002), 23.
[6] Ashurst, John and Nicola, *Practical Building Conservation, English Heritage Technical Handbook, Volume* 3 (New York: Halsted Press, 1988), 30.

is composed of hydrated lime, ground clay, asbestos, retarder fiber, or cementitious material other than calcined gypsum, mixed in the required proportion by the manufacture."[7]

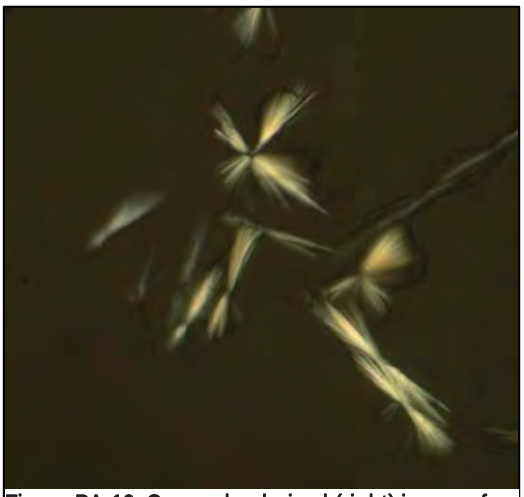


Figure PA-10: Crossed polarized (right) image of asbestos fibers found in plaster sample P-6c.

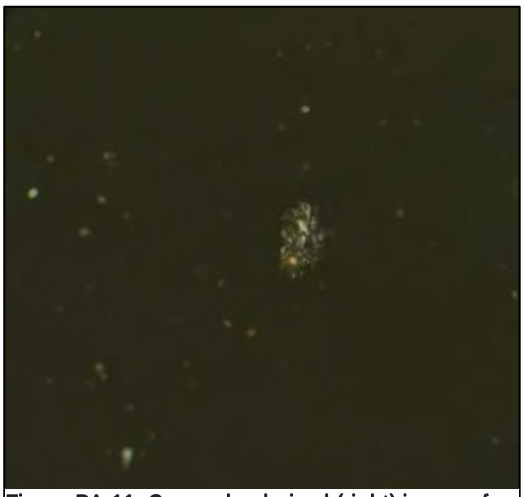


Figure PA-11: Crossed polarized (right) image of cement particle found in plaster sample P-6c

[7] "What is Gypsum Plaster" National Builder. November 1922, page 73.

The sands used in each of the mixes, while of slightly different colors, conforms to the shape requirements laid out in traditional recipes of a clean sharp sand. The function of the sand is to induce the plaster to shrink uniformly during the process of setting and is a factor in the solidity and hardness. According to the book *Plastering Plain and Decorative* by William Millar "the coarser the sand the better." The coarseness allows the carbonic acid to penetrate further into the body of the plaster and assists in the hardening process.[8]

Sample Comparison Chart

Sample #	Acid Soluble %	Fines %	Aggregate %	Room number	Plaster Type	Est. Date	Fiber
P-1 Scratch	15.77%	26.14%	58.09%	103	2	1892	Jute
P-1 Brown	69.98%	15.38%	14.63%	103	2	1892	Jute
P-1 Finish	71.93%	19.30%	8.77%	103	2	1892	Jute
P-2 Scratch	17.44%	18.54%	64.02%	102	2	1892	Jute
P-2 Finish	41.42%	55.45%	3.13%	102	2	1892	N/A
P-3 Wallboard	N/A	N/A	N/A	101	n/a	1929	N/A
P-4 Scratch	26.19%	16.38%	57.43%	201	1	1792	Horse & Cow Hair
P-4 Brown	59.30%	32.22%	8.47%	201	1	1792	N/A
P-4 Finish	N/A	N/A	N/A	201	1	1934	N/A
P-5 Scratch	27.35%	15.80%	56.85%	Closet	2	1892	Jute
P-5 Finish	73.92%	17.70%	8.37%	Closet	2	1892	N/A
P-6 Base	N/A	N/A	N/A	202	3	1892	Jute/Sisal
P-6 Scratch	N/A	N/A	N/A	202	3	1892	Jute/Sisal
P-6 Finish	N/A	N/A	N/A	202	3	*	N/A

*A complete comparison between plaster sample 6 and sample 1, 2 and 5 could not be performed due to the small size of the sample however it appears that a later skim coat was applied as a repair and this now serves as the finish coat.

There was no visual reaction when 3M hydrochloric acid was added to plaster samples 1a, 1b, 2a, 4a, 4b and 5a but there is a high percentage of acid soluble materials. The low percentage of aggregate combined with the high percentage of acid soluble material indicates that a portion of the aggregate was composed of acid soluble material such as calcite stone. Plaster was viewed under polarized light and the presence of marble was detected.

[8] Miller, William. *Plastering Plain and Decorative* (London: B.T. Batstrop, 1897).

The finish coat and the brown coat of plaster P-1 had no visual reaction to the addition of 3M hydrochloric acid; digestion of the aggregate occurred over a long period of time. The scratch coat, a gauge plaster, had a slight positive reaction to the 3M hydrochloric acid.

The finish coat of plaster sample P-2 had a slight reaction to the addition of 3M hydrochloric acid but this may be because it digested the aggregate. The scratch coat, a gauge plaster of gypsum and lime, had a slight positive reaction to the 3M hydrochloric acid.
The finish coat of sample P-5 had no visual reaction to the addition of 3M hydrochloric acid; digestion of the aggregate occurred over a long period of time. The scratch coat had a slight reaction to the addition of 3M hydrochloric acid, the scratch coat is a gauge plaster of gypsum and lime. Neither had elevated sulfate levels. During digestion of the samples with 3M hydrochloric acid, the aggregate (crushed marble) in the finish coat got digested.

Wallboard

Based on the finishes analysis and historic documentation, sample P-3 (a wallboard removed from the entrance hall ceiling, Room 101) dates to about 1929. According to the architect, the back of the wall board was stamped with “Johns-Manville Insulite”. According to the 1932 Sweet’s Architectural Catalogues, Volume B, “Johns-Manville Insulating Board is a rigid, structural insulation, composed of wood fibers molded into sheets possessing pleasing color and texture”.

Recommended Replication Mixes:

Estimated Plaster Mix Ratios

Plaster sample P-4:
Brown coat:
- 2 parts gypsum
- 1 part ‘New Jersey Pulverizing 4020 FF’ sand

Scratch coat:
- 2 parts gypsum
- 1 part lime
- 3 parts ‘180’ sand sieved through #16

Plaster sample #5:
Finish coat:
- 2 parts gypsum
- 1 part ‘New Jersey Pulverizing 4020 FF’ sand
- 3 parts ‘180’ sand sieved through #16

Scratch coat:
- 2 parts gypsum
- 1 part lime
- 3 parts ‘180’ sand sieved through #16

Plaster sample #6
The provided sample was too small for the creation of a replication mix.

Please note that these mixes match in texture only, not color. By matching the texture, the repair plasters will have the same properties of expansion and contraction as the existing plasters, thereby ensuring that cracking and failure does not occur between the new and the old plasters. The plasters will be covered up so a color match is not essential. Color matches are difficult because the color of the gypsum plaster comes mostly from the gypsum itself (sand does not change the overall color of the mix). Modern gypsum is much purer and therefore much white than historic gypsum. If a color match is needed, pigments will need to be added to the plaster mix.

Although the exact quantity of hair and fibers could not be determined, William S. Lowndes' 1928 *Plastering and Fireproofing* book suggests typical quantities of animal hair required for a typical lime-sand-animal hair plaster:

> The scratch and brown coats of lime plaster together, when laid on wood lath having ¾-inch grounds, will require about 600 pounds of lime, 3600 pounds of sand, and 24 pounds of hair, or 16 pounds of hair and 8 pounds of fiber for 100 square yards of surface.[9]

A 1912 book on plastering, *The Practical Plasterer*, offers an alternative measurement for the amount of hair required: "1 lb. to 2 cubic feet of stuff for superior work, and 1 lb. to 3 feet for ordinary work."[10] As William Millar describes in *Plastering – Plain and Decorative*, the plaster mix used for base coats "may be tested by lifting some from the heap on the point of a trowel; if it is sufficiently haired and properly mixed, the stuff should cling to the trowel when held up, and the hairs should not be more than 1/16 inch apart."[11]

The use of animal hair— horse, ox, goat or cattle—was used in America until the end of the 1800s.

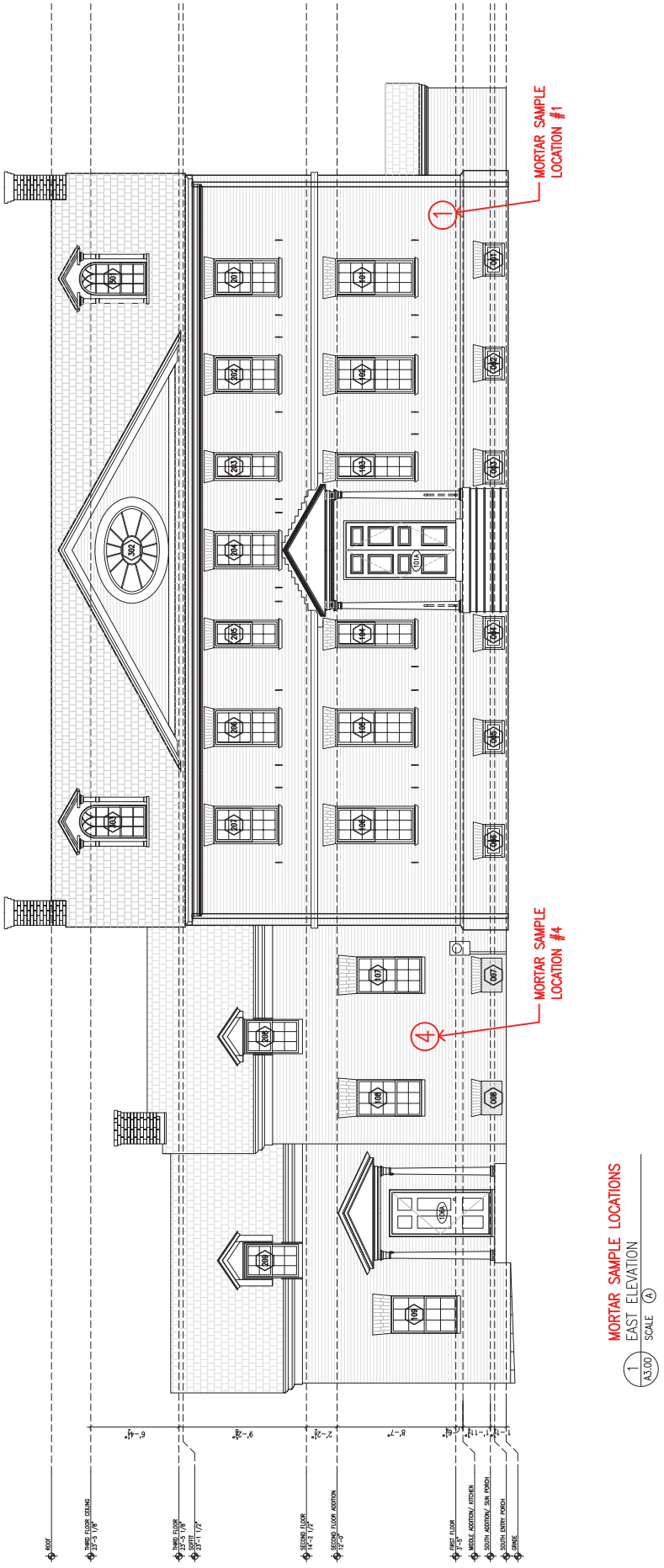
[9] Lowndes, 41.
[10] Wilfred Kemp, *The Practical Plasterer* (London: Crosby Lockwood and Son, 1912), 44.
[11] William Miller, *Plastering – Plain and Decorative* (1897; reprint, London: Donhead Publishing, 1998), 90.

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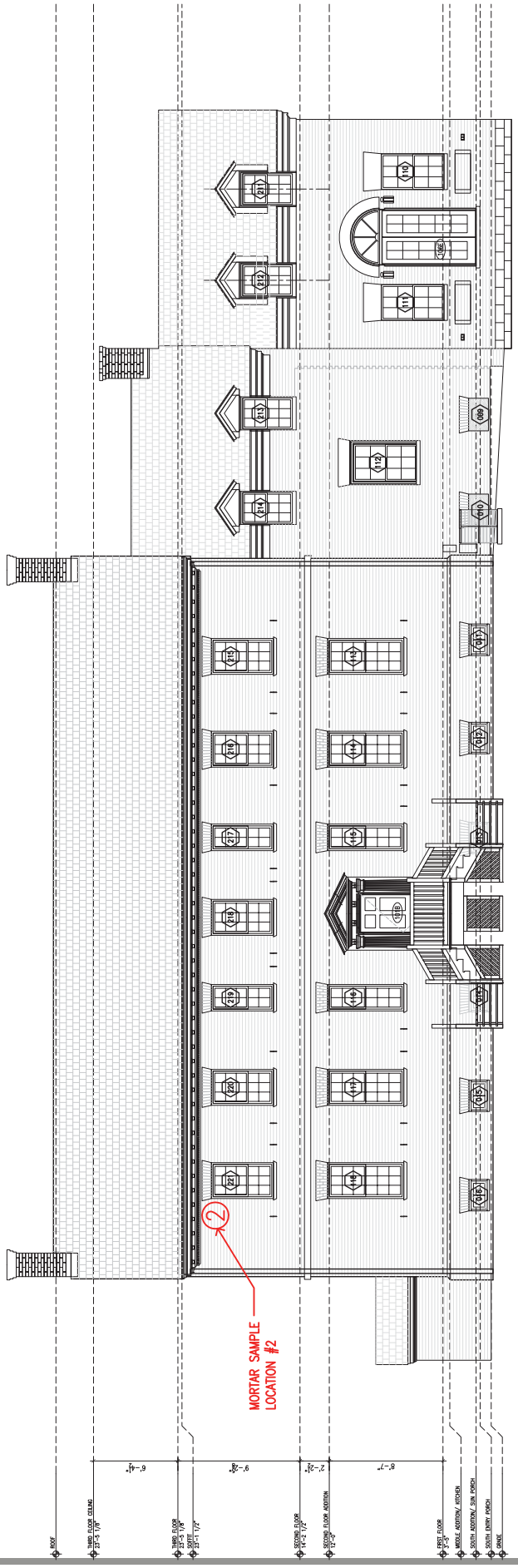
Mortar Analysis

Harmony Hall
Fort Washington, Maryland

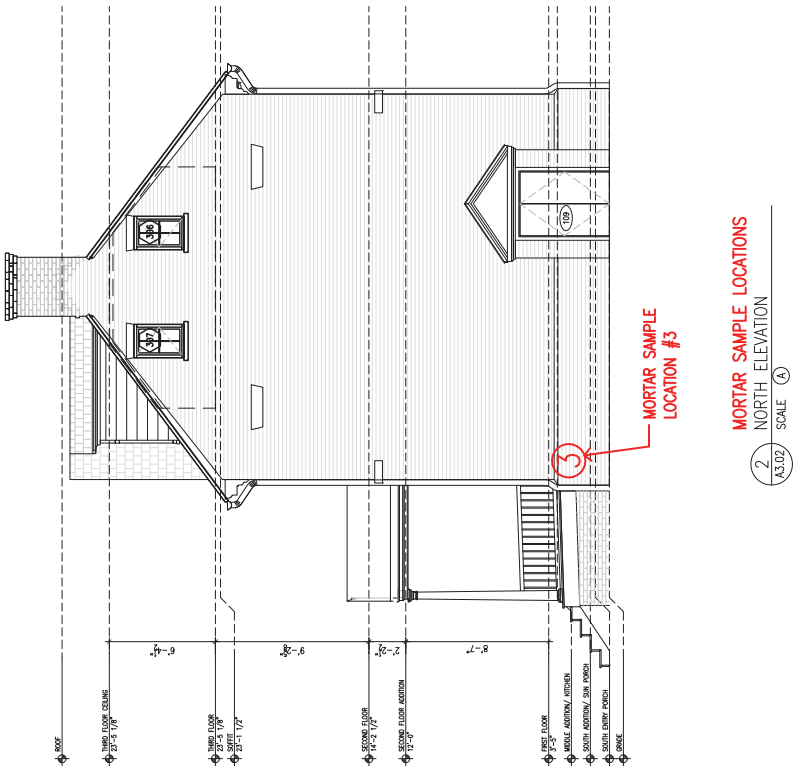
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MORTAR SAMPLE LOCATION #1
MORTAR SAMPLE LOCATION #4
MORTAR SAMPLE LOCATIONS
EAST ELEVATION
SCALE

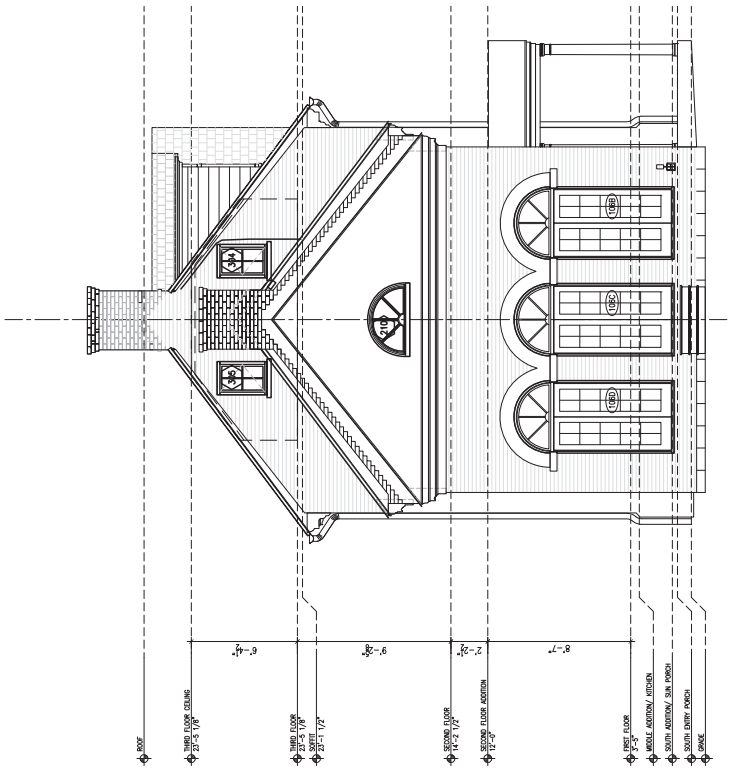
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MORTAR SAMPLE LOCATION #2
MORTAR SAMPLE LOCATIONS
1 A3.01 WEST ELEVATION SCALE 1/8"
ROOF
THIRD FLOOR CEILING 23'-5 1/8"
THIRD FLOOR 23'-5 1/8"
SOFFIT 23'-1 1/2"
SECOND FLOOR 14'-2 1/2"
SECOND FLOOR ADDITION 12'-9"
FIRST FLOOR 9'-3"
MIDDLE ADDITION/ KITCHEN
SOUTH ADDITION/ SUN PORCH
SOUTH ENTRY PORCH
GRADE

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MORTAR SAMPLE LOCATIONS
NORTH ELEVATION
2 A3.02 SCALE A



MORTAR SAMPLE LOCATIONS
SOUTH ELEVATION
1 A3.02 SCALE A

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MORTAR ANALYSIS AND RECOMMENDED REPLICATION MIXES

METHODOLOGY

Jablonski Building Conservation, Inc. (JBC) analyzed four mortars removed from the exterior of Harmony Hall; one from the east elevation of the main house, one from the water table at the north elevation, one from the 2nd floor of the west elevation of the main house and one from the east elevation of the middle wing. The analyses, which conformed to standard wet-chemical techniques, were requested to provide the primary characteristics of the existing pointing mortars used on the exterior brick. These analyses are critical in the formulation of appropriate replication mixes.

A freshly broken surface of each sample was examined under a variable zoom microscope with an external light source equipped with daylight filters. The binder in each sample was matched to a color standard of the Munsell Color Chart (as per ASTM "1535 Specifying Color by the Munsell System") under natural light. Each sample was then separated into three component parts (i.e. pigment, clay or cement residue) acid-soluble, "fines", and aggregate or sand, via wet-chemical techniques

Samples were first crushed and then digested with 3M hydrochloric acid. Levigation and filtration were used to separate the fines from the aggregate. Weight percentages of the constituent parts were calculated to gain an understanding of the original mortar mix. The colors of the "fines" and sand were matched to the Munsell Soil Color Chart. Predominant colors and shapes of sand grains were noted during examination of the aggregate fractions. Sieve analysis of the sand was performed to determine particle size distribution.

RESULTS

Sample 1 - Brick Mortar – Main Body of House East Elevation

In cross-section the matrix of the mortar was light gray (Munsell 2.5Y 7/1) in color, dense and fat, with large amounts of lime and small amounts of aggregate visible. There were very few visible voids, which were irregular in shape and size. The joint size varied from 3/8" to 1/2" wide and has a "V"- shaped tooled profile. The mortar sample was very easy to crush.

Components of mortar:

Acid soluble fraction – 52.69% of the total sample weight. A continuously vigorous effervescent reaction was produced upon the addition of a 3M solution of hydrochloric acid to the crushed portion of the sample, suggesting high lime content.

"**Fines**" – 4.48% of the total sample weight. The "fines" are brown (Munsell 10YR 5/3) in color.

Aggregate – 42.83% of the total sample weight. The overall color of the aggregate is pale yellow (Munsell 2.5Y 7/4), mostly citrine and cloudy quartz and some clear and rosy quartz. The grains are sub-angular to sub-rounded in shape and are mostly medium in size (1/4mm-1/2mm).



Figure B-1. Sample 1 sand, freed from mortar.

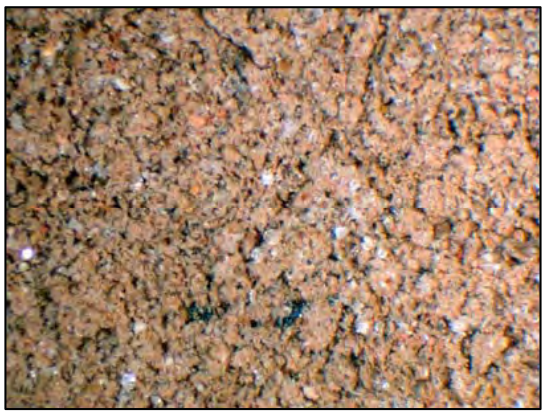


Figure B-2. Sample 1 'fines'.

Sieve analysis of the aggregate portion is as follows:

Sieve Number	% Passing	ASTM limit for Natural Sand
#4	100.00	100%
#8	100.00	95 – 100%
#16	99.68	70 – 100%
#30	94.48	40 – 75%
#50	23.05	10 – 35%
#100	4.06	2 – 15%
#200	0.81	0 – 5%

Sample 2 - Brick Mortar – Main Body of House West Elevation

Mortar Sample 2 was nearly identical to Mortar Sample 1 in terms of color, tooling, aggregate and components. In cross-section the matrix of the mortar was light gray (Munsell 2.5Y 7/1) in color, dense and fat, with large amounts of lime and small amounts of aggregate visible. There were very few visible voids, which were irregular in shape and size. The joint size varied from 3/8" to 1/2" wide and has a "V"- shaped tooled profile. The mortar sample was very easy to crush.

Components of mortars:

Acid soluble fraction – 50.42% of the total sample weight. A continuously vigorous effervescent reaction was produced upon the addition of a 3M solution of hydrochloric acid to the crushed portion of the sample, suggesting high lime content.

"**Fines**" – 5.39% of the total sample weight. The "fines" are brown (Munsell 10YR 5/3) in color.

Aggregate – 44.19% of the total sample weight. The overall color of the aggregate is pale yellow (Munsell 2.5Y 7/4), mostly citrine and cloudy quartz and some clear and rosy quartz. The grains are sub-angular to sub-rounded in shape and are mostly medium in size (1/4mm-1/2mm).

The aggregate, fines and sieve analysis for Sample 2 were identical to those found in Sample 1.

Sample 3 Brick Mortar – Water Table, North Elevation

In cross-section the matrix of the mortar appears to be pale yellow (Munsell 2.5Y 8/2) in color. The matrix of the mortar is very dense, with very few visible voids. Lime blebs, and the mortar aggregate are easily visible. The surface of the joint has a "V"-shaped profile and is approximately 1/2" wide. The sample was moderately difficult to crush.

Components of Water Table Mortar:

Acid soluble fraction – 47.72% of the total sample weight. A brief vigorous effervescent reaction, and a very strong sulphuric smell, was produced upon the addition of a 3M solution of hydrochloric acid to the crushed portion of the sample.

"**Fines**" – 10.51% of the total sample weight. The "fines" are very pale brown (Munsell 10YR 7/2) in color.

Aggregate – 41.77% of the total sample weight. The overall color is the aggregate is white (Munsell 10YR 8/1), mostly cloudy and clear quartz with some rosy quartz and mica flakes. The grains are sub-angular to sub-rounded in shape and range in size from fine to medium (1/8mm to 1/2mm) with some coarse to very coarse (1/2mm to 2mm).

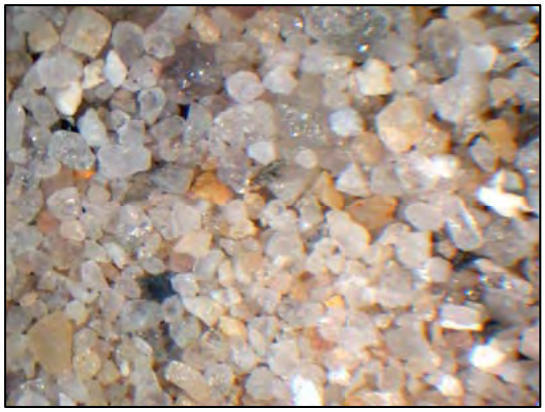


Figure B-3: Sample 3 sand freed from mortar.

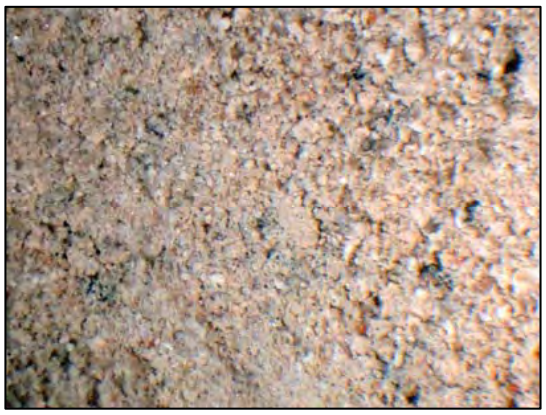


Figure B-4: Sample 3 'fines'.

Sieve analysis of the aggregate portion is as follows:

Sieve Number	% Passing	ASTM limit for Natural Sand
#4	100.00	100%
#8	99.49	95 – 100%
#16	96.44	70 – 100%
#30	86.44	40 – 75%
#50	41.69	10 – 35%
#100	8.47	2 – 15%
#200	1.02	0 – 5%

Sample 4 - Brick Mortar – Middle Wing

In cross-section the matrix of the mortar appears to be light brownish gray (Munsell 2.5Y 6/2) in color. The mortar matrix is dense with very few visible voids. Lime blebs and mortar aggregate are visible throughout the sample. The joint surface has a "V"- shaped profile and measures approximately 1/2" wide. The sample was moderately difficult to crush.

Components of Mortar:

Acid soluble fraction – 27.62% of the total sample weight. A brief and vigorous effervescent reaction was produced upon the addition of a 3M solution of hydrochloric acid to the crushed portion of the sample.

"**Fines**" – 15.04% of the total sample weight. The "fines" are light gray (Munsell 2.5Y 7/2) in color.

Aggregate – 57.33% of the total sample weight. The overall color is the aggregate is pale yellow (Munsell 2.5Y 8/2), mostly clear, cloudy, and citrine quartz and some rosy quartz. The grains are sub-angular to sub-rounded in shape and are mostly fine to medium (1/8mm to 1/2mm).

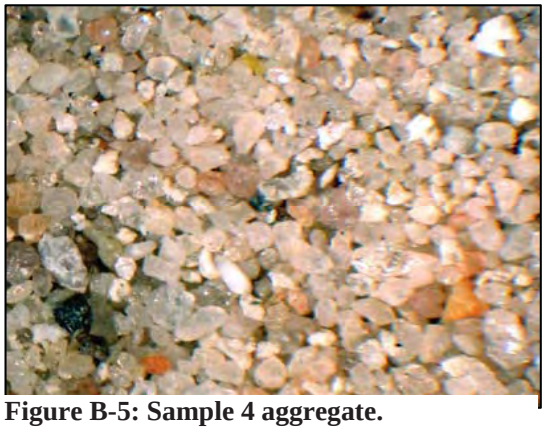


Figure B-5: Sample 4 aggregate.



Figure B-6: Sample 4 mortar "fines."

Sieve analysis of the aggregate portion is as follows:

Sieve Number	% Passing	ASTM limit for Natural Sand
#4	100.00	100%
#8	99.09	95 – 100%
#16	98.17	70 – 100%
#30	94.13	40 – 75%
#50	48.30	10 – 35%
#100	10.31	2 – 15%
#200	1.96	0 – 5%

CONCLUSIONS

Mortar Samples 1 and 2 are lime-sand mortars and appear to be the original pointing mortars for Harmony Hall. These mortars were easy to crush and only lime was visible in cross-section. Mortar Samples 1 and 2 also contained a high percentage of acid soluble ingredients, which suggests a lime-based mortar.

Mortar Samples 3 & 4 are cement-lime-sand mortars and are later re-pointing mortars. These mortars are moderately difficult to crush and contained lime blebs, suggesting a cement base. The sulphuric smell released during levigation of Sample 3 may be attributed to its function as a water table, allowing ground water contaminated with sulfates to infiltrate the mortar. While the aggregates used in Samples 3 & 4 are similar, they varied slightly in color, and varied greatly in component percentages indicating that the mortars date from different pointing campaigns.

REPLICATION RECOMMENDATIONS

Jablonski Building Conservation, Inc. was requested to match the appearance of the historic mortars with modern materials. The recommendations below represent an effort to approximate the properties of the historic mortar using modern materials. Consideration was given to matching the color, texture, and strength of the sample. The recommended mortar mix conform to ASTM/BIA Standards. The replication mortar was matched to freshly broken samples.

As with the pointing of masonry in any historic structure, the original joint profiles for the masonry and joint widths should be documented before joints are raked and replicated during pointing.

As the historic brick at the exterior of Harmony Hall are rather soft, it is our recommendation that the mortar mix for replication of the Main House pointing mortars at Harmony Hall be either a lime/sand mix, or an ASTM Standard Type O(ASTM C-270 95a.:

The Brick Industry Association describes Type N as a general all-purpose mortar with good bonding capabilities and workability, which we feel may be too hard for use on the historic brick. Type O is a low-strength mortar, used mostly for restoration applications. All mortar joints should be fully raked to a depth of 2.5 times the width of the joint or to sound mortar, whichever is deeper, and the units should be pointed to the same depth.

Main House Mortar Mix, Type O:

1 part Cement (ASTM C150) to be composed of:
- 1 part White Portland Cement, Type I

2 parts Hydrated Lime, Type S (ASTM C207)

6 parts aggregate to be composed of:
- 3 parts County Concrete “Yellow Mason Sand”
- 3 parts County Concrete “White Mason Sand”

1/64 part Dark Ochre, Italian, Kremer pigment #40320

Main House Mortar Mix, lime mortar:

2 parts Hydrated Lime, Type S (ASTM C207)

2.5 parts aggregate to be composed of:
- 1.5 parts County Concrete “Yellow Mason Sand”
- 1 part County Concrete “White Mason Sand”

NOTE: All parts should be measured by volume (not by weight). Dry ingredients should be well blended before the addition of water. The enclosed sample is made from the above recommended mix. Half of the enclosed sample has been etched to remove the laitance from the surface. Laitance is the accumulation of the fine binder particles that rise to the surface of the wet mortar when the mortar is placed and tooled. The laitance affects the color of the mortar and makes it appear lighter. The laitance was removed to help properly match the replication to the broken surface of the original mortar.

When newly installed, the mortar may resemble the un-etched half of the replication samples. However, the laitance will naturally wear away and will resemble the etched half of the enclosed sample.

RECOMMENDED MATERIALS AND SUPPLIERS

As accurate replication mixes are difficult to formulate, the type and quantity of materials used are essential to ensure on-site reproduction. Materials recommended in this report or their equal may be used. If materials are substituted, the resulting appearance of the mortar may vary.

Recommended Cement

White Portland Cement, Type I
Available from Lehigh Cement 1-800-638-1716, or substitute equal

Recommended Lime

Hydrated Lime, Type S
Available from Graymont, call for local supplier (800) 537-4489, or substitute equal

Recommended Sand

As the selection of an appropriate aggregate is critical to the formulation of any replication mortar, the sand fraction isolated during analysis was compared to a library of sands commercially available in the greater New York area. Aggregate samples have been enclosed to facilitate substitutions with locally available sands. The following are sand suppliers in the Washington, D.C. metro area that may have a product that matches the enclosed samples. The enclosed samples should be brought to the supplier for an in-person comparison to ensure a proper match.

Aggregate Transport Corp.
7535 Railroad Ave., Harmans, MD 21076
1-888-766-4242

Brandywine Sand & Gravel Co.
5800 Sheriff Rd, Capitol Heights, MD 20743
(301) 925-8100

Galliher & Huguely
5925 Blair Rd. NW, Washington D.C. 20011
(202) 723-1000

Recommended Pigments:

Kremer Pigments:

#40320 – Dark Ochre, Italian (Dark Ochre Italian)
Available from Kremer Pigments, 247 West 29th Street New York, NY 10001 (212-219-2394)

Finish Color Investigation

Harmony Hall
Fort Washington, Maryland

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FINISH COLOR INVESTIGATION

METHODOLOGY

On February 10, 2012 and April 18, 2012 architectural conservator Stephanie M. Hoagland visited the site and removed a total of 217 paint samples. Samples were removed from various elements of the house including: 65 samples from the Exterior, 25 samples from the Entrance Hall (Room 101); 26 samples from the Stairway at the Central Hall (Room 201), 28 samples from the Parlor (Room 102), 35 samples from the Dining Room (Room 103), 18 samples from the South Bedroom (Room 203) and 20 samples from the North Bedroom (Room 202). Upon returning to the laboratory, the samples were broken to reveal fresh cross-sections and cast in clear resin. Each sample was examined in normal reflected light under illumination conditions that simulate daylight (fiber optic illuminator) for the purpose of color-corrected stratigraphy identification. The samples were examined microscopically during the investigation using a Nikon Stereo Zoom microscope with 10x-63x magnification and a Zeiss Axioskop 40 polarizing light microscope with ultraviolet illuminator.

Polarized light microscopy (PLM) and ultraviolet illumination were used to identify the pigments found in two of the paint layers. PLM was performed using a Ziess Axioskop microscope with 100X-400X magnification. Samples of the pigments were mounted on glass slides using Cargille Meltmount adhesive (refractive index 1.662.)

All layers have been recorded using a descriptive color name rather than a standardized color notation system. This was done to document the seriation of the samples for comparative purposes. The layers were identified using both a standardized universal color system (Munsell) and a commercial paint color system including Benjamin Moore Paints and Pittsburgh Paints.

Each paint layer was identified as a primer, finish or component of a complex finish system. While primers did not usually affect the color of the finish coat, they were important for the opacity and richness of the finish. Complex finishes were found throughout the interior including several different campaigns of wood graining and others involving a base coat and colored glaze. Base coats were important for the intended appearance of glazes which were applied as a semi-translucent layer over an opaque base coat to change the color of the paint and to give it greater sheen, luminosity and light reflectance.

As part of the paint archaeology for Harmony Hall, the chromochronologies were organized into a table arranged by painting campaigns listed from the earliest retained to the most recent. Dates were assigned to the painting campaigns based upon several factors. Interiors that are consistently occupied tend to be painted every 7-10 years. Repainting campaigns for exteriors can vary greatly. Intervals between re-painting campaigns at exteriors can vary widely and are based upon factors such as the home being occupied, wealth of the home owners and the availability of painting materials. Many early exterior elements of the Colonial Era were originally left unpainted. Historic documentation and oral histories for Harmony Hall were reviewed to determine changes in property ownership and possible dates of alterations. Elements that could be definitively dated (either original or later additions) were used as bench markers for specific painting campaigns.

Illustrations showing the location of paint sample removals are included in Appendix A of this report with chromochronologies for each paint sample included in Appendix B. Photomicrographs of each sample, under both simulated daylight and ultraviolet light can be found in Appendix C.

PAINT COLOR HISTORIES AND TECHNOLOGIES

Early to Mid 18th Century Paint Colors

Colonial architecture, from the period up to and including the American Revolution, is based on the traditions and precedents that European settlers knew from their ancestral cultures and the tastes and fashions transmitted to the colonies from the mother countries. Paint and color treatments for these houses reflects the limited number of colors available at the time, most of which were simply derived from earth, stone, or other natural pigments. Typical 17th century paint treatments detailed the framing or trim elements in colors that contrasted boldly with the surrounding untreated or neutral wood.

Earth-toned colors for modest colonial homes were most often white, creamy yellow, almond, ochers, reddish and chocolate browns, beige, taupe and muted greens. Hues of gray, black and dark brown were used for wood trim and baseboards and were universal to nearly all homes.

The Dutch settlers were more interested in "Home Comforts" than the English and they had a greater knowledge of how to obtain them.[12] Like many early settlers, they followed the building traditions brought from their country of origin.

Late Eighteenth Century Paint Colors

Interior paint colors of the late eighteenth century continued to be colorful. The 1780s saw the increased use of bright blues and greens as well as an extensive use of painted graining.[13] Green pigments were very rare until late in the 18th century. Other popular colors included yellowish whites (creams), pumpkins, sage greens and muted blues. The late 18th century also saw an increase in the use of wallpapers. Early documentation shows that the manufacture of wallpapers in America did not begin until the late 1750s with John Hickey's advertisement in the New York Mercury noting that he "stamps or prints paper in the English Manner." Earlier wallpapers had to be imported across the Atlantic making them prohibitively expensive for most Americans.

Early 19th Century Paint Colors

The early 19th century saw a distinct lightening of interior finishes. Influenced by Greek revival structures, interiors were often painted white to match what was believed to be the original color of ancient Greek ruins. It was later discovered that the Greek ruins were painted polychrome, but this discovery did not affect American tastes for white Greek revival buildings.

PAINT TECHNOLOGIES FOUND AT HARMONY HALL

Varnish

Varnish is a transparent, hard, protective finish or film primarily used in wood finishing, but which can also be used in faux finishes such as graining and marbleizing. Varnish is traditionally a combination of a drying oil, a resin, and a thinner or solvent. Varnish finishes are usually glossy, but may be designed to product satin or semi-gloss sheens by the addition of flattening agents. While varnish itself has no color, pigments can be added to provide a more opaque finish.

[12] Kettell, Russell Hawes, ed. *Early American Rooms: 1650 – 1858*. Dover Publications, New York, 1967, pg. 93.
[13] Mosca, Matthew, "Paint Decoration at Mount Vernon: The Revival of Eighteenth-Century Techniques," in *Paint in America: The Colors of Historic Buildings*, Roger W. Moss, Ed. (Washington, D.C.: Preservation Press, 1994): 106.

After being applied, the film-forming substances in varnishes either harden directly, as soon as the solvent has fully evaporated, or hardens after evaporation of the solvent through certain curing processes. Resin varnishes "dry" by evaporation of the solvent and harden almost immediately upon drying. Resins used in varnishes include amber, kauri gum, dammar, copal, rosin, sandarac, balsam, elemi, mastic and others.

Distemper Paint

Distemper is a water based paint in which pigments and size were mixed with whiting, gypsum or lime. They can often be discerned by their bright, pastel appearance. The finish has a matte, velvety appearance and was much less expensive and quicker to apply. Period books on interior decoration state that distemper paint "may be used in any of the rooms in the house including walls, halls and ceilings." The books stress the use of distemper paints as "cheap, clean and healthy."[14] In addition, because distemper paints retained a "clearness and brightness…which is not attainable in oil colors," it was considered a superior material for application in "dark situations."[15] As these paints are easily removed with water, they were considered sanitary since the walls could be washed down and a new coat of distemper paint applied. In addition, distemper paints were often applied as a way of finishing a wall while waiting for the plaster to fully cure, which could take up to a year. As distemper paints were applied to wet walls, a "green" plaster would not hinder the application and could produce a better bond between the wall and paint.[16]

Graining

Beginning in the 1850's the technique of "graining" became a popular form of decoration. The use of faux bois, painting a plain or common wood such as pine to look like mahogany or some finer wood, or faux marble, painting a wood or plaster surface to look like marble--realistically or fantastically--was common in homes regardless of their size. The look of graining was achieved using a brushes and tools such as combs. For the less skilled, a patterned tool could be used. The decorative painter would build up layers of paint over a base coat, manipulating each of the layers with brushes and combs and even fingers. Typically the layers would be a mix of oil based paints and water colors.
If a grainer was using a tool, it would be dipped in paint or varnish, and the tool was rolled across the surface of the wood or plaster leaving behind markings that replicated the look of the desired material.

Graining is the imitation of the natural veining, curl, etc of wood. It is performed by laying an opaque ground of oil paint that is a close match to the general color of the wood to be imitated. After the ground dries, transparent graining colors that match the hue and depth of the grain are applied. They can be either oil or water based paint. This is followed by a process in which a variety of tools are used such as broad, flat and thin brushes, combs and rubbers. Based upon the type of paint used for the graining layers, these tools are dipped in turpentine or water and manipulated to leave streaky grains, curls or knots. When these graining layers are dried, a varnish or glaze is applied.

The art of graining consists of working transparent colors over an oil ground, the ground being of a color that will match the lightest tone in the markings of the wood. The transparent colors used for the general markings match the colors in the real wood and are applied with large brushes and manipulated with a variety of tools. The effect is made more realistic by still darker touches of color put on here and there in places with smaller brushes.

[14] Paul, F.T. *A Text-Book of Domestic Economy* London: Longmans Green & Company, 1894: 238.
[15] Davidson, E.A. *House Painting, Graining, Marbling, and Sign Writing*. London: Crosby Lockwood and Son, 1900. 28.
[16] Tesh, Gill. "Paints and Their Histories" www.mikewye.co.uk, 2002. (December 4, 2009).

Generally the graining work placed on top of the ground is done is done in oils or watercolor. Outdoor work is always done in oils. A turpentine varnish is required to protect the graining work. Two coats are used over water based graining.

Glazing

Glazing involves the application of a transparent glaze color to a dry, flat light colored base coat of paint. The glaze color typically compliments the base color, but may contrast the base coat to produce a layered effect. The applied glaze can be thinned using a brush or cloth immediately after brushing it on the wall, which produces an antique appearance. The glaze can also be stippled or manipulated in other ways to give texture to the wall.

HARMONY HALL EXTERIOR PAINT SAMPLE LOCATIONS

Sample #	Description
HHE-001	Window W006 Sash
HHE-002	Window W006 Frame
HHE-003	Window W105 Sash
HHE-004	Window W105 Frame
HHE-005	Entrance Porch, Pilaster
HHE-006	Entrance Porch, Column
HHE-007	Entrance Porch, Baluster
HHE-008	Entrance Porch, Beam
HHE-009	Entrance Porch, Ceiling
HHE-010	Entrance Porch, Floor
HHE-011	Door D101A, Field
HHE-012	Door D101A, Panel
HHE-013	Door D101A, Recess
HHE-014	Door D101A, Frame Return Field
HHE-015	Door D101A, Frame Return Panel
HHE-016	Door D101A, Frame Corner Molding
HHE-017	Window W107 Sash
HHE-018	Window W107 Frame
HHE-019	Window W109 Sash
HHE-020	Window W109 Frame
HHE-021	Door D106B
HHE-022	Door D106B, Frame
HHE-023	Window W304 Sash
HHE-024	Window W304 Frame
HHE-025	Window W116 Sash
HHE-026	Window W116 Frame
HHE-027	Window W207 Sash
HHE-028	Window W207 Frame
HHE-029	Window W010 Sash
HHE-030	Window W010 Frame
HHE-031	Window W112 Sash
HHE-032	Window W112 Frame
HHE-033	Door D101B Field
HHE-034	Door D101B Raised Panel
HHE-035	Door D101B Frame Return Field
HHE-036	Door D101B Frame Return Raised Panel
HHE-037	Door D101B Frame Corner Molding
HHE-038	Door D101B Surround Fluted Pilaster
HHE-039	Door D101B Surround Field
HHE-040	Door D101B Surround Pediment
HHE-041	Door D101B Surround Raised Panel under Pediment
HHE-042	Door D101B Surround Architrave
HHE-043	Door D101B Center of Pediment
HHE-044	Door D101B Pediment Dentils
HHE-045	Door D101B Molding above Dentils
HHE-046	Door D101B Molding outside Pediment
HHE-047	Door D101B Surround Cornice under Pediment
HHE-048	Oval Window found in basement, Mullions
HHE-049	Oval Window found in basement, Sash
HHE-048a	Window W302 Sash

HHE-049a	Window W302 Frame
HHE-050	Dormer Window W303 Sash
HHE-051	Dormer Window W303 Frame
HHE-052	Dormer Outer Pilaster
HHE-053	Dormer Pediment
HHE-054	Cornice Upper Molding
HHE-055	Cornice Dentil Molding
HHE-056	Small Wing Cornice Return
HHE-057	Small Wing Cornice Lower Molding
HHE-058	Middle Wing Cornice Lower Molding
HHE-059	Middle Wing Cornice Upper Molding
HHE-060	Back Cornice Bracket Molding 1
HHE-061	Back Cornice Dentil Molding
HHE-062	Window W220 Sash
HHE-063	Window W220 Frame
HHE-064	Window W306 Sash
HHE-065	Window W306 Frame

SUMMARY OF FINISHES

The earliest finishes found at the exterior were very different than the white finishes currently visible, being deep, rich earth-tone colors consistent with the mineral pigments available at the time. The earliest finish found on the exterior of Harmony Hall way a dark brown (Munsell 5YR 2/1) tinted varnish matching Benjamin Moore's 1239 "Rural Earth." This finish was found on the window frame of W105, the door and door frame of D101a, the door and frame of D101b and the fluted pilaster of the door surround for D101b. Some variation in the color of this varnish was also observed, with the finish appearing lighter and redder on the cornice (Munsell 2.5YR 3/4). This color only appeared on one sample from the cornice, so it could not be verified against adjacent samples.

While the majority of the elements at the exterior had been stripped, some samples retained traces of earlier finishes. Samples that retained their full chromochronology retained 31 painting campaigns.

This varnish finish was found on elements believed to date to 1768 (W105, D101b and Cornice) or 1792 (D101a). As only one layer of the coating was found on elements dating to both periods, it is unlikely that the finishes date to a period earlier than 1792. If the finishes dated to 1768, you would expect to see at least two layers (one dating to 1768 and one from 1792) on the earlier elements. The substrate on samples showing the varnish finish was generally unweathered, which indicates that the elements were not left unpainted for any significant period of time. This suggests that the elements believed to date to 1768 may actually be later additions. The varnish finish was followed by two campaigns of a similarly colored, opaque dark reddish brown paint (Munsell 10R 3/2), which was found almost uniformly on elements believed to date to the period from 1768 to 1792. Given the similarity in color between the varnish and this paint, it is likely the paint followed shortly after the varnish.

In determining the approximate dates for the subsequent finishes, various factors were taken into consideration, such as documented changes in ownership or occupation of the house, or documented alterations. Drastic changes in color scheme frequently indicate a change in ownership. Soiling

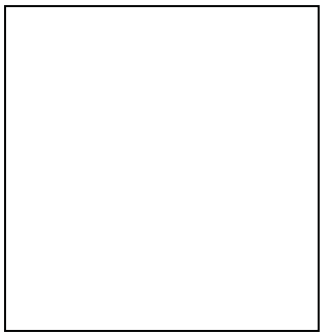
patterns, if present, can also be used to determine whether a finish was exposed for a considerable period of time. When little or no evidence is available that could indicate the approximate date of a finish, the number of visible finishes and the date of an element, if known, are taken into account. This evidence can be used to determine the frequency of repainting, assuming all finish layers are intact.
One of the most useful methods of determining the age of a given finish is examining the cross-section under ultraviolet illumination. Advancements in paint manufacture in the post-World War II period resulted in the widespread use of modern oil emulsion paints which appear dark under ultraviolet illumination unlike early oil paints which fluoresce brightly depending on pigment content. Therefore, identifying the point at which paints shift to “modern” paint types can help focus the dating for early finish layers.

At Harmony Hall, there are up to five campaigns of early brightly-colored finishes. These finishes appear to date to the late 1700s and early 1800s, at which point there is a drastic shift from these colors to a stark white finish. Based on historical evidence, this shift in color likely signals the period of inconsistent occupation from 1850-1892 (the property was sold seven times during this period including several at auction), as well as the period of popularity for the white finishes of the Greek Revival style. At this point, most elements received two coats of a white or grayish white paint and the majority of elements would continue to be painted in similar fashion until the present.

FINDINGS

Earliest Finish

The earliest finish found on the exterior of Harmony Hall way a dark brown (Munsell 5YR 2/1) tinted varnish matching Benjamin Moore's 1239 "Rural Earth." This finish was found on the window frame of W105, the door and door frame of D101a, the door and frame of D101b and the fluted pilaster of the door surround for D101b. While the majority of the elements at the exterior had been stripped, some samples retained traces of earlier finishes. Samples that retained their full chromochronology retained 31 painting campaigns.



Earliest Finish
Exterior

Benjamin Moore
1239
"Rural Earth"

This finish is ***not*** a paint layer. A translucent varnish should be matched to this color.

ROOM 101 ENTRANCE HALL PAINT SAMPLE LOCATIONS

Sample #	Description
HHI-001	Door D102
HHI-002	Door D102 Frame
HHI-003	Door D101A Raised Panel
HHI-004	Door D101A Field
HHI-005	Door D101A Frame
HHI-006	Door D101C
HHI-007	Door D101C Frame
HHI-008	Door 101B
HHI-009	Door D101B Frame
HHI-010	Wainscot, Upper Molding
HHI-011	Wainscot, Raised Decoration
HHI-012	Wainscot, Field behind Decoration
HHI-013	Wainscot, Raised Molding below Decoration
HHI-014	Wainscot, Horizontal Panels
HHI-015	Window Bench Seat W103
HHI-016	Window Bench Back W103
HHI-017	Wainscot adj. to D101A
HHI-018	East Wall adjacent to W104
HHI-019	North Wall adjacent to W116
HHI-020	Baseboard North Wall
HHI-021	Baseboard, Quarter Round
HHI-022	Window W103 Return
HHI-022a	Window W103 Inner Trim
HHI-023	Window W103 Sash
HHI-024	Entrance Hall Ceiling, Under the Stairs
HHI-025	Entrance Hall Ceiling
HHI-025a	Ceiling Trim, Upper Molding
HHI-025b	Ceiling Trim, Middle Molding
HHI-025c	Ceiling Trim, Dentil

SUMMARY OF EARLIST FINISHES

Early finishes in the Entrance Hall (Room 101) were found only on the wood elements. While many of these elements had been stripped, traces of early finishes remained on almost every sample, and carved wood elements such as the wainscot and door frames retained their full chromochronologies. The earliest finishes found on the wood elements were very different than those applied later in the room (see Figure 101-1 below). The earliest finishes were complex wood grained finishes consisting of deep, rich earth-tone colors consistent with the mineral pigments available at the time. Three campaigns of wood graining were found with the earliest finish being a moderate reddish brown (Munsell 10R 4/6) over an uneven layer of blackish brown (Munsell 10YR 2/1). The second wood grained finish consisted of a light olive brown (Munsell 2.5Y 5/4) over an uneven layer of dark grayish yellowish brown (Munsell 10YR 3/2). The third wood grained finish consisted of a dark orange yellow (Munsell 10YR 6/6) over a dark yellowish brown (Munsell 10YR 3/4). The fourth and fifth painting campaigns were a moderate yellowish green (Munsell 2.5G 4/4-5/4) and a very dark yellowish green (Munsell 2.5G 2/4) respectively. The remaining eleven painting campaigns consisted of shades of yellowish white, a pale orange yellow and white paint layers.

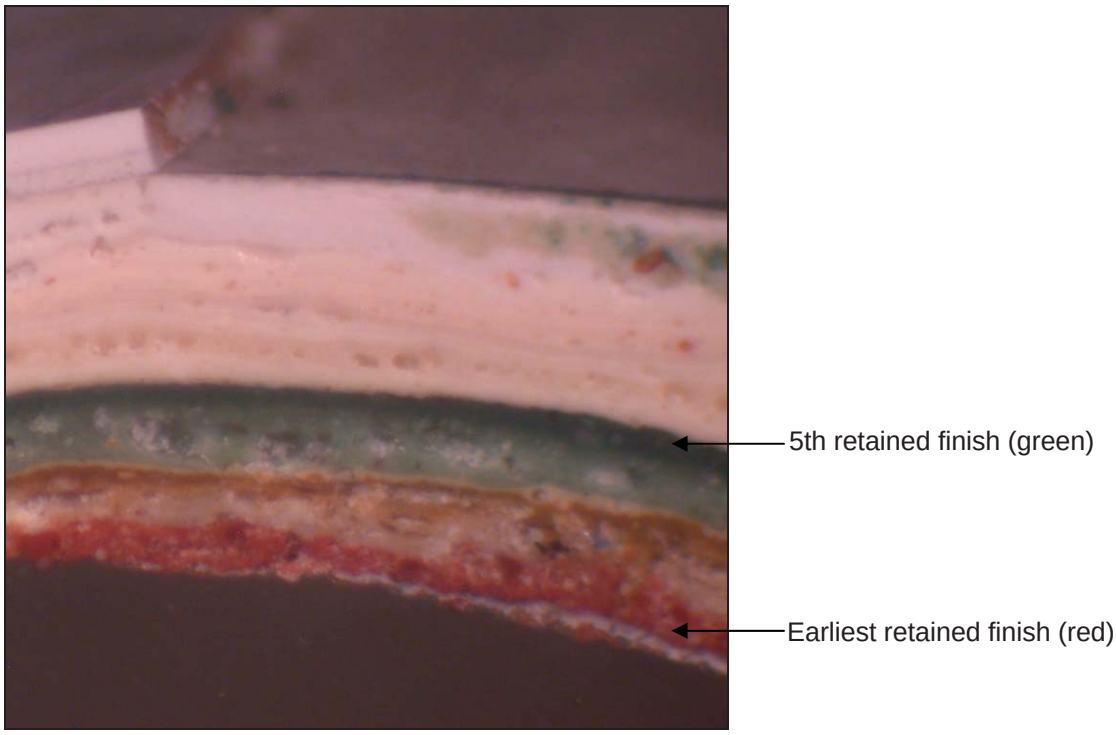


Figure 101-1: Photomicrograph of HHI-002 taken from the door frame showing the change in color schemes

Pigment identification was performed on the early red and green finishes (the first and fifth painting campaigns respectively) in an attempt to date these finishes. Once isolated the red pigment was found to be very fine, anisotropic and with a refractive index greater than 1.66. Based upon these factors, it was determined that this pigment was Red Lead. Red Lead is prepared by oxidizing the calcining metallic lead. This pigment has been in use as early as classical antiquity and is often found in house paints and in small quantities as a drier for the preparation of oils used in oil-based paints. As this pigment has been in use since before 1300, it cannot be used to date the early finishes of Harmony Hall.

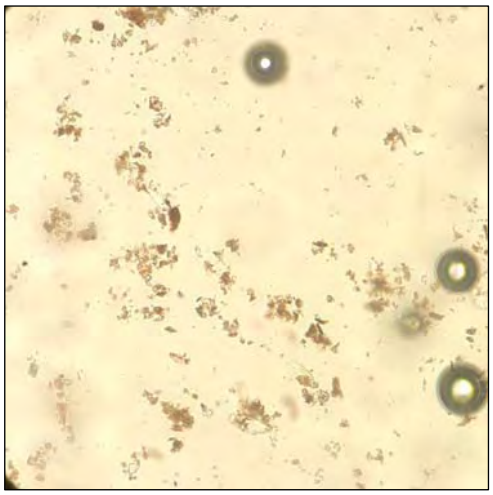


Figure 101-2: Red pigment under polarized light.

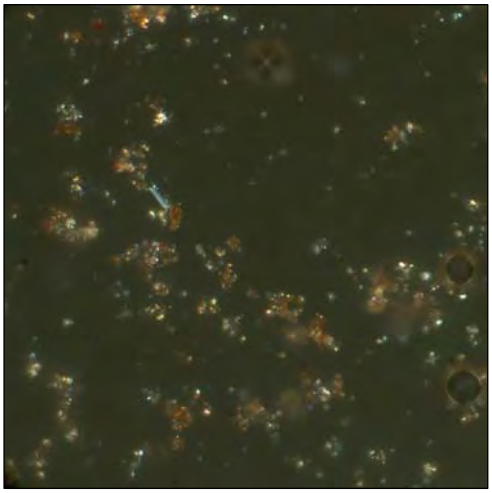


Figure 101-3: Red pigment under cross polarized light

The green pigment was more difficult to identify. Until the late 18th century, green pigments were rare. Copper was the only metal in general use at that time that would yield suitable green pigments. Other green pigments were created by combining blue and yellow pigments. Under magnification, the green pigment was finely ground (individual particles were difficult to discern even at 400X magnification), a pure green color (not a combination of yellow and blue pigments), anisotropic and with a refractive index less than 1.66. The color was noted as being very saturated and uniform in appearance. According to the *The McCrone Particle Atlas*[17] and *Pigment Compendium: A Dictionary of Optical Microscopy of Historical Pigments*[18] there are only two green pigments with a refractive index less than 1.66, Terre Verte (a variable yellow to blue colored pigment that is rounded and ill-formed) and Verdigris (coarse, pleochroic rods with highly dispersed extinction). Visually, the green pigment of the 5th finish did not match either of these pigments. Additional research found a description for Schweifurt Green in the *Bulletin of the Association for Preservation Technology*. According to the article titled "Decorative and Protective Finishes, 1750-1850: Materials, Process, and Craft" this pigment is a green arsenic pigment discovered at Schweinfurt, Germany by two chemists named Rusz and Sattler in 1814.[19] The pigment was created by dissolving verdigris in vinegar and white arsenic in water. The arsenic was poured into the verdigris until all the sediment had dissolved. As the liquid boiled away, very fine green crystals settled to the base of the container where they would be separated, washed with cold water and dried. Schweinfurt green is described as a "remarkably brilliant" pigment. While it cannot be determined that this pigment is definitely Schweinfurt Green, the qualities of this pigment explain the finely ground nature of the pigment, the pure saturated green color and the refractive index of less than 1.66. As this pigment was not commercially available until 1814, it was assumed that this finish post-dates 1820.

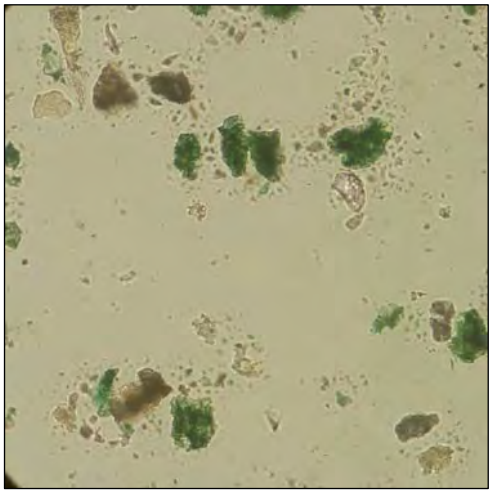


Figure 101-4: Green pigment under polarized light

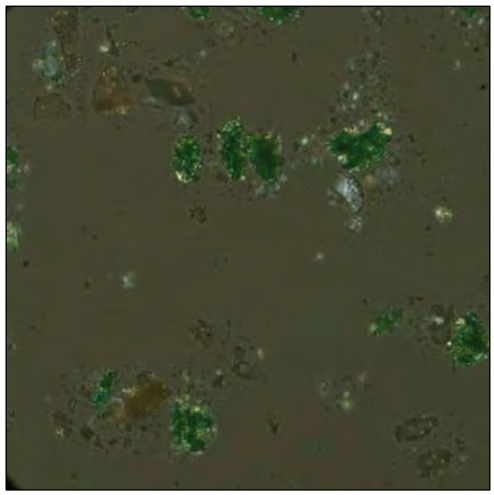


Figure 101-5: Green pigment under cross polarized light

[17] Walter C. McCrone and John Gustav Delly, *The McCrone Particle Atlas: An encyclopedia of techniques for small particle identification*, 2nd ed. (Ann Arbor: Ann Arbor Science Publishers, Inc., 1973).
[18] Nicholas Eastaugh, Valentine Walsh, Tracy Chaplin, and Ruth Siddall, *Pigment Compendium: A Dictionary of Optical Microscopy of Historical Pigments* (Oxford: Butterworth-Heinemann, 2008).
[19] Zuk Penn, Theodore. "Decorative and Protective Finishes, 1750-1850: Materials, Process, and Craft." *Bulletin of the Association for Preservation Technology*, Vol. 16. No. 1. Pg. 3-46.

While the majority of the wood elements in the Entrance Hall appear to be original to the space, three elements sampled; the inner trim at the windows, the window sashes and the quarter round molding along the baseboard are later replacements. The window sash is a modern replacement retaining only one painting campaign.

The plaster elements of the Entrance Hall retained only modern finishes. The earliest finishes on the original plaster wall would have most likely been water soluble distemper paints which were often washed away prior to the application of the next finish. Samples removed from the east wall adjacent to Window 104 retained only one painting campaign. Samples removed from the west wall retained five painting campaigns (all post-1929) with the earliest retained finish being a yellowish white (Munsell 5Y 8/2) oil paint. Samples removed from the ceiling, both flat and under the stairs, had earliest finishes that corresponded with the 12th painting campaign for the room. This finish had been applied to wallboard and dates to the circa 1930 renovation of the house by Charles Collins. This finish was a pale orange yellow (Munsell 10YR 9/2) oil-based paint.



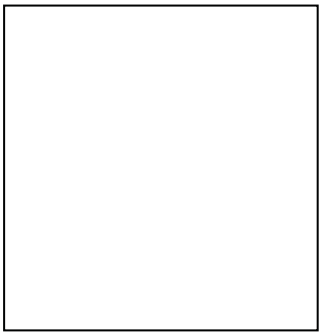
Figure 101-6: Door 102 Frame showing early finishes.

FINDINGS

Woodwork

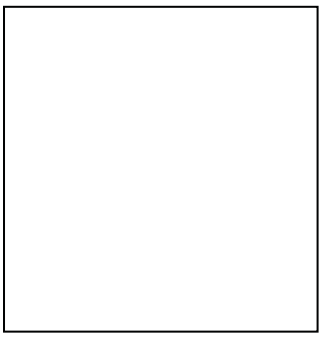
The earliest finish found on the woodwork of the Entrance Hall was a complex finish consisting of a blackish brown (Munsell 10YR 2/1) colored base coat matching Benjamin Moore's 2114-10 "Bittersweet Chocolate" topped with a moderate reddish brown (Munsell 10R 4/6) colored top coat matching Benjamin Moore's HC-50 "Georgian Brick." The blackish brown was applied in an uneven layer suggesting a wood grained finish which can be seen on the frame of door 102 leading into the Parlor (Rm. 102) (see Figure 101-2 above).

This finish was found on the door and door frame of doors 102, 101C 101B and the raised panel of door 101A; all samples removed from the wainscot except the horizontal panels and window bench; the return of window 103; and the ceiling trim. Samples removed from flat elements such as the doors and wainscot panels were missing multiple layers of paint and exhibited evidence of chemical paint removers, such as bubbling of the paint, indicating that they had been stripped. Elements that retained all of their finish layers retained 16 painting campaigns.



Earliest Finish
Woodwork
Base Coat
(uneven)

Benjamin Moore
2114-10
"Bittersweet
Chocolate"



Earliest Finish
Woodwork
Top Coat

Benjamin Moore
HC-50
"Georgian Brick"

Walls & Ceiling

No finishes corresponding to the earliest finishes of the woodwork were found on the plaster elements sampled. All finishes removed from the walls had finishes that post-dated the 1929 renovation. The earliest retained finish found on the walls was a yellowish white (Munsell 5Y 8/2) oil-based paint matching Benjamin Moore's HC-96 "Richmond Gray." This finish was found on the west wall and corresponds with the 13th painting campaign for the room. The sample removed from the east wall retained only one painting campaign.

Samples removed from the ceiling, both flat and under the stairs, had finishes that corresponded with the 12th painting campaign for the room. This finish was a pale orange yellow (Munsell 10YR 9/2) matching Benjamin Moore OC-74 "Onyx White."

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ROOM 201 STAIRS AT CENTRAL HALL PAINT SAMPLE LOCATIONS

Sample #	Description
HHI-026	Raised Decoration
HHI-027	Field behind Decoration
HHI-028	Molding below Decoration
HHI-029	Panel at Stair Enclosure
HHI-030	Stair Tread, Nose
HHI-031	Stair Pendant Post
HHI-032	Square Baluster
HHI-033	Carved Baluster
HHI-034	Newel Post, Body
HHI-035	Newel Post, Knob
HHI-036	Hand Rail, Lower
HHI-037	Hand Rail, Upper
HHI-038	West Wall, above Chair Rail
HHI-039	West Wall, below Chair Rail
HHI-040	West Wall, below Baseboard
HHI-041	West Wall, below Handrail
HHI-042	Chair Rail, 2nd Floor
HHI-043	Baseboard, 2nd Floor
HHI-044	Stair Trim, Inside Stringer, 2nd Floor
HHI-045	Stair Rail, Lower South Wall
HHI-046	Stair Rail, Upper South Wall
HHI-047	Stair Riser
HHI-048	Ceiling, Flat
HHI-049	Crown Molding
HHI-050	North Wall, above Chair Rail
HHI-051	North Wall, below Chair Rail

SUMMARY OF EARLIST FINISHES

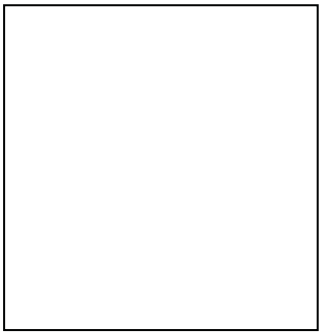
The early finishes found in the Stairway and the 2nd floor Central Hall (Room 201) were nearly identical to those found in the Entrance Hall (Room 101). While the largest number of finish layers was found on the woodwork, additional finishes were found on the walls. Like the Entrance Hall, the earliest finishes found on the wood were deep, rich, earth-tone colors. The earliest finish found on the wood elements of the Stairway and the Central Hall was a moderate reddish brown (Munsell 10R 4/6). The blackish brown seen in the Entrance Hall was not seen in the samples removed from the stair.

The plaster sampled from the middle and lower sections of the west wall at the stair landing retained ten finishes with the earliest being a yellowish white (Munsell 2.5Y 9/2) matching Benjamin Moore's OC-70 "Whitewater Bay," topped with yellowish brown (Munsell between 10YR 8/4-2.5Y 8/4) tinted glaze matching Benjamin Moore's 2153-50 "Tapestry Gold." This finish appears to correspond with the third painting campaign for the room, circa 1792. The sample removed from the upper portion of the west wall retained only six painting campaigns with the earliest finish being a pale orange yellow (Munsell 10YR 9/2) corresponding to the Collins renovations circa 1930.

FINDINGS

Woodwork

The earliest finish found on the woodwork of the Stairway and the 2nd Floor Central Hall was a moderate reddish brown (Munsell 10R 4/6) color matching Benjamin Moore's HC-50 "Georgian Brick." This finish was found on all samples removed from the stair enclosure, the stair treads, the dropped pendant, the body of the newel post and the hand rails. These elements retained 16 painting campaigns.



Earliest Finish
Woodwork

Benjamin Moore
HC-50
"Georgian Brick"

While the majority of the wood elements in the Central Hall appear to be original to the space, several elements sampled; the balusters at the stairs, the knob of the newel post, the stair raiser, and the trim, inside stringer and baseboard at the second floor appear to be later replacements. The balusters, stair trim and baseboard at the 2nd floor had finishes that that corresponded with the 3rd painting campaign for the room. The earliest finish found on the stair riser was corresponded with the 4th painting campaign for the room, the inside stringer and the 2nd floor corresponds to the 5th painting campaign while the finish found on the newel post knob corresponded to the 6th painting campaign for the Hall. As some of the elements in this room had evidence of chemical paint removers, it is unknown if the earliest finishes had been stripped, or if the elements sampled were later replacements.

Walls

No finishes corresponding to the earliest finishes of the woodwork were found on the plaster elements sampled. The plaster sampled from the middle and lower sections of the west wall at the landing retained ten finishes with the earliest being a yellowish white (Munsell 2.5Y 9/2) matching Benjamin Moore's OC-70 "Whitewater Bay," topped with yellowish brown (Munsell between 10YR 8/4-2.5Y 8/4) tinted glaze matching Benjamin Moore's 2153-50 "Tapestry Gold." This finish appears to correspond with the third painting campaign for the room, circa 1792. Plaster analysis of a sample removed from the stair landing indicated that this plaster is an early plaster that used animal hair (horse and cow) in the binder. It is unknown if this plaster dates to the original 1769 construction of the building. Earlier finishes may have been water-based paints that were washed away prior to the application of the next finish. The samples removed from the upper portion of the west wall and the ceiling retained only six

painting campaigns with the earliest finish being a pale orange yellow (Munsell 10YR 9/2) corresponding to the 1929 renovation of the building.

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ROOM 103 DINING ROOM PAINT SAMPLE LOCATIONS

Sample #	Description
HHI-052	Door D103 Frame
HHI-053	Door D104 Frame
HHI-053a	Door D103
HHI-054	Door D103 Field
HHI-055	Door D103 Recessed Panel
HHI-056	Window W106 Sash
HHI-057	Window W106 Shutter, Inner
HHI-058	Window W106 Shutter Outer
HHI-059	Window W106 Recess for Shutter
HHI-060	Window W106 Frame
HHI-061	Window W106 Window Seat
HHI-062	Chair Rail, Projecting Roll
HHI-063	Chair Rail, Lower Molding
HHI-064	Cupboard Frame Field
HHI-065	Cupboard Frame Recessed Molding
HHI-066	Cupboard Frame Raised Panel
HHI-067	Cupboard, Arched Molding
HHI-068	Cupboard, Upper Door Field
HHI-069	Cupboard, Door Raised Panel
HHI-070	Cupboard, Inside Face
HHI-071	Cupboard, Lower Shelf
HHI-072	Cupboard, Back Wall, lower
HHI-073	Cupboard, Dome Ceiling
HHI-074	Mantel, Inner Molding
HHI-075	Mantel, Middle Molding
HHI-076	Mantel, Outer Molding
HHI-077	Paneling, Field
HHI-078	Paneling Recessed Molding
HHI-079	Paneling, Raised Panel, narrow
HHI-080	Paneling, Large Raised Panel
HHI-081	Panel, Fireplace Surround
HHI-082	Mantel, Block at Base
HHI-083	Cupboard, Keystone
HHI-084	Ceiling, Trim
HHI-085	Ceiling
HHI-086	Walls

SUMMARY OF EARLIST FINISHES

Early finishes found in the Dining Room (Room 103) were nearly identical to those found in the Entry Hall and the Stairway. Much of the woodwork in this room had been striped and the early finishes were found as traces of residue on areas of the cupboards, chair rail and fireplace mantel. Full stratigraphies were found on recessed areas of the mantel, window frames and the arched molding of the cupboards. The earliest finishes were complex wood grained finishes consisting of deep, rich earth-tone colors consistent with the mineral pigments available at the time. Three campaigns of wood graining were found with the earliest finish being a moderate reddish brown (Munsell 10R 4/6) over an uneven layer of blackish brown (Munsell 10YR 2/1). The second wood grained finish consisted of a light olive brown (Munsell 2.5Y 5/4) over an uneven layer of dark grayish yellowish brown (Munsell

10YR 3/2). The third wood grained finish consisted of a dark orange yellow (Munsell 10YR 6/6) over a dark yellowish brown (Munsell 10YR 3/4). The fourth and fifth painting campaigns were a moderate yellowish green (Munsell 2.5G 4/4-5/4) and a very dark yellowish green (Munsell 2.5G 2/4) respectively.

Samples removed from the ceiling and the north and east walls retained very few finish layers with the earliest finish being a pale orange yellow (Munsell 10YR 9/2) paint that corresponds with the 1929 renovation of the house. Although the finishes on these walls are 20th century, the plaster appears to pre-date the earliest finish. The painted finishes found on the plaster sample removed from the south wall retained two additional painting campaigns of distemper paints. The analysis of this sample revealed that the material composition of this wall was nearly identical to that found on the west wall of the Parlor and the closet of the South Bedroom. In addition to similar component percentages, each of these plasters used jute to strengthen the binder, which was a common practice in the 19th century. Based upon the findings of the plaster analysis and this interior finishes investigation, it appears that the plasters date to the early to mid-1800s. The ceiling is constructed of wallboard, which would not be unusual for the time period, circa 1929.

Dating the elements in this room was made difficult by the loss of the historic finishes. The frame to Door D103 on the north wall is an original element, but the earliest finish found on the accompanying door corresponds with the 6th painting campaign for the room. It is unknown if this door is a later replacement or is original and has been thoroughly stripped.

The earliest finishes found on the door and frame for D104 on the south wall are also different from each other. The earliest finish found on the door fame corresponds to the 3rd campaign for the room (circa 1792) while the door corresponds to the 6th painting campaign (circa 1830s). The frame for door D104 appears to be an early addition to the room as the molding profile is different than that found on Door D103. The style of door D104 is identical to that of D103, which is identical to door D102 in the Parlor.

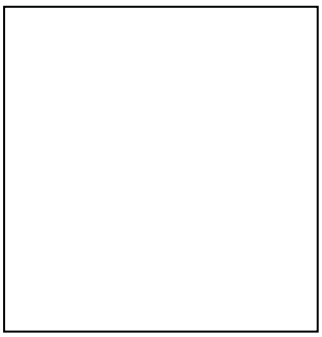
While the earliest finishes are missing from the shutters, full stratigraphies were retained on both the window frames and the recesses for the shutters indicating that these elements are original. While the cupboards and fireplace mantel have been stripped, traces of the early moderate reddish brown paint were found on multiple elements. Alterations had been made to the interior of the cupboard. The earliest finish found on the shelves, the back wall and the domed ceiling each correspond with the 4th painting campaign for the room. The window sashes are modern replacements.

FINDINGS

Woodwork

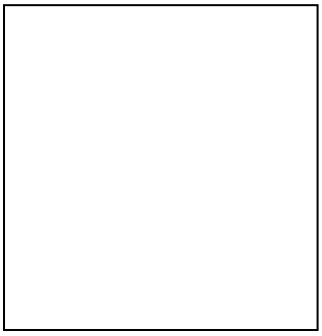
The earliest finish found on the woodwork of the Dining Room was a complex finish consisting of a blackish brown (Munsell 10YR 2/1) colored base coat matching Benjamin Moore's 2114-10 "Bittersweet Chocolate" topped with a moderate reddish brown (Munsell 10R 4/6) colored top coat matching Benjamin Moore's HC-50 "Georgian Brick." The blackish brown was applied in an uneven layer suggesting a wood grained.

This finish was found on door frame D103, the window frame, window seat and shutter recess of W106, the moldings, panels and doors of the cupboards and the panels and moldings of the fireplace mantel. Elements that retained all of their finish layers retained 16 painting campaigns.



Earliest Finish
Woodwork
Base Coat
(uneven)

Benjamin Moore
2114-10
"Bittersweet
Chocolate"



Earliest Finish
Woodwork
Top Coat

Benjamin Moore
HC-50
"Georgian Brick"

Walls & Ceiling

No finishes corresponding to the earliest finishes of the woodwork were found on the plaster elements sampled. The earliest retained finish found on the north and east walls and the ceiling was a pale orange yellow (Munsell 10YR 9/2) matching Benjamin Moore OC-74 "Onyx White." This finish corresponds with the 12th painting campaign which relates to the circa 1930 alterations by Charles Collins. Finishes found on the plaster sample removed from the south wall found two additional painting campaigns, the earliest of which was a pale orange yellow (Munsell 5Y 9/2) distemper paint matching Benjamin Moore's HC-102 "Devon Cream."

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ROOM 102 PARLOR PAINT SAMPLE LOCATIONS

Sample #	Description
HHI-087	Door D102 Surround, Outer Frame
HHI-088	Door D102, Frame, Inner Molding
HHI-089	Door D102 Field
HHI-090	Door D102, Recessed Panel
HHI-091	Window W117 Sash
HHI-092	Window W117 Frame
HHI-093	Window W102 Shutter, Outside
HHI-094	Window W102 Shutter, Inside
HHI-095	Window W102 Sash
HHI-096	Window W102 Frame
HHI-097	South Wall
HHI-098	East Wall
HHI-099	West Wall
HHI-100	Cornice, Dentil
HHI-101	Cornice, Middle Roll
HHI-102	Cornice, Upper Roll
HHI-103	Ceiling
HHI-104	Chair Rail, Upper
HHI-105	Chair Rail, Horizontal Lines
HHI-106	Chair Rail, Diamond Decoration
HHI-107	Mantel, Field
HHI-108	Mantel, Raised Molding
HHI-109	Mantel, Bracket
HHI-110	Mantel, Shelf
HHI-111	Mantel, Molding under Shelf
HHI-112	Mantel, Raised Panel
HHI-113	Wainscot, South Wall
HHI-114	Baseboard, South Wall

SUMMARY OF EARLIST FINISHES

Early finishes in the Parlor (Room 102) were slightly more elaborate than those found in the other rooms of the house. Like the other rooms, early finishes were found only on the wood elements. While the fireplace mantel had been stripped, the wainscot, window frames, door frames and the ceiling trim retained their full stratigraphy. The earliest finish was a complex finish consisting of deep, rich earth-tone colors consistent with the mineral pigments available at the time. This complex finish was retained for the first two painting campaigns and consists of a light brown (Munsell between 5YR and 7.5YR 6/4) base coat followed by grayish yellow (Munsell 2.5Y 8.5/4) and light grayish olive (Munsell 10Y 6/2) graining layers topped with a dark reddish brown (Munsell 5YR 2/4) glaze. This finish was found on the wainscot, door frame, window frames and wainscot. The trim at the ceiling was similarly finished, but had a lighter dark orange yellow (Munsell 10YR 6/6) tinted top coat glaze. The second wood grained finish consisted of a light yellowish brown base coat topped with a yellowish brown glaze. The early wood grained finishes were followed by finishes found in the other rooms of the first floor including a moderate yellowish green (Munsell 2.5G 4/4-5/4) and a very dark yellowish green (Munsell 2.5G 2/4). The remaining painting campaigns consisted of shades of yellowish white, pale orange yellow and white paint layers.

No original finishes were found on the plaster walls or ceiling. The earliest finish found on the south and east walls was a pale orange yellow distemper paint which corresponded to the 6th painting campaign (circa 1830) for the room. No historic finishes were found on the west wall which retained only post 1950 finishes. Plaster analysis of a sample removed from the west wall revealed that the material composition of this wall was nearly identical to that found on the south wall of the Dining Room and the closet of the South Bedroom. In addition to similar component percentages, each of these plasters used jute to strengthen the binder, which was a common practice in the 19th century. Based upon the findings of the plaster analysis and this interior finishes investigation, it appears that the plasters date to the early to mid-1800s.

The earliest finish found on the ceiling was a pale orange yellow which corresponded to the circa 1930s alterations of the house. The ceiling is constructed of wallboard, which would not be unusual for the time period.

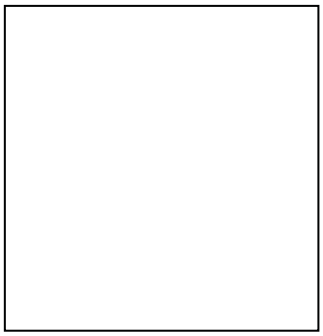
The majority of the elements in this room appear to be original. Although the earliest finish found on the interior of Door D102 corresponded to the 6th painting campaign for the room, the exterior of the door retained the full stratigraphy indicating that while it had been fully stripped of its historic finishes, it is original to the house. Aside from the plaster walls and wallboard ceiling, the only elements not original to the room are the window sashes which date to 1995.

FINDINGS

Woodwork

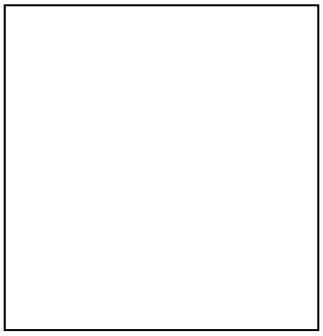
Fireplace Mantel, Window & Door Frame, Chair Rail and Wainscot

The earliest finish found on these elements was a complex finish consisting of a light brown (Munsell between 5YR and 7.5YR 6/4) base coat matching Benjamin Moore Paint's 1215 "Baker's Dozen," followed by two graining layers; a grayish yellow (Munsell 2.5Y 8.5/4) matching Benjamin Moore's HC-30 "Philadelphia Cream" and a light grayish olive (Munsell 10Y 6/2) matching Benjamin Moore's 475 "Galapagos Green." These layers were topped with a dark reddish brown (Munsell 5YR 2/4) tinted glaze matching Benjamin Moore's 1246 "Cup O' Java." Elements that retained all of their finish layers retained 16 painting campaigns.



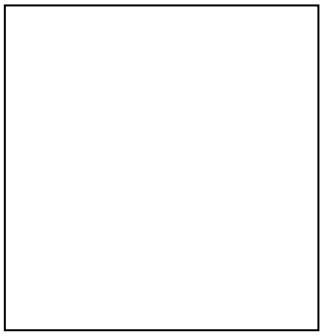
Earliest Finish
Lower Woodwork
Base Coat

Benjamin Moore
1216
"Baker's Dozen



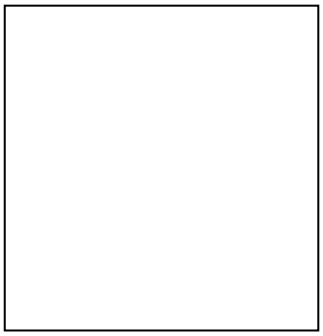
Earliest Finish
Lower Woodwork
Graining Layer
(uneven)

Benjamin Moore
HC-30
"Philadelphia Cream"



Earliest Finish
Lower Woodwork
Graining Layer
(uneven)

Benjamin Moore
475
"Galapagos Green"



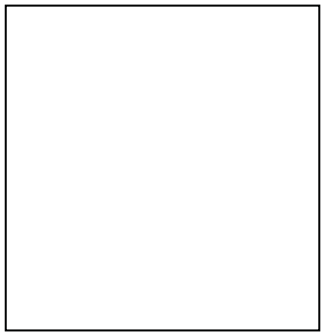
Earliest Finish
Lower Woodwork
Top Coat Glaze

Benjamin Moore
1246
"Cup O' Java"

*This is **not** a paint layer. A tinted glaze should be matched to this color.*

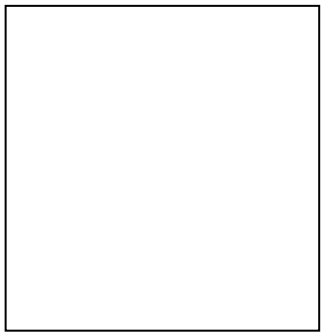
Ceiling Trim

The earliest finish found on the ceiling trim was a complex finish consisting of a light brown (Munsell between 5YR and 7.5YR 6/4) base coat matching Benjamin Moore Paint's 1215 "Baker's Dozen," followed by a grayish yellow (Munsell 2.5Y 8.5/4) graining layer matching Benjamin Moore's HC-30 "Philadelphia Cream" topped with a dark orange yellow (Munsell 10YR 606) tinted glaze matching Benjamin Moore's 217 "Antique Bronze." Each of these elements retained 16 painting campaigns.



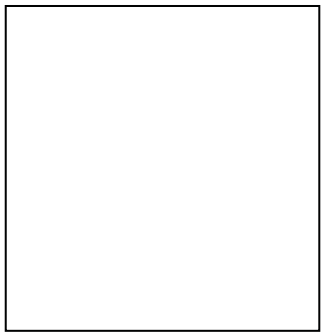
Earliest Finish
Lower Woodwork
Base Coat

Benjamin Moore
1216
"Baker's Dozen



Earliest Finish
Lower Woodwork
Graining Layer
(uneven)

Benjamin Moore
HC-30
"Philadelphia Cream"



Earliest Finish
Lower Woodwork
Top Coat Glaze

Benjamin Moore
217
"Antique Bronze"

*This is **not** a paint layer. A tinted glaze should be matched to this color.*

Walls & Ceiling

No original finishes were found on the plaster walls or ceiling. The earliest finish found on the south and east walls was a pale orange yellow (Munsell 5Y 9/2) distemper paint matching Benjamin Moore Paint's OC-102 "Devon Cream." This finish corresponds to the 6th painting campaign (circa 1830) for the room. No historic finishes were found on the west wall which retained only post 1950 finishes.

The earliest finish found on the ceiling was a pale orange yellow (Munsell 10YR 9/2) matching Benjamin Moore OC-74 "Onyx White," which corresponds to the circa 1930s alterations of the house.

ROOM 203 SOUTH BEDROOM PAINT SAMPLE LOCATIONS

Sample #	Description
HHI-115	Door D203
HHI-116	Door D203 Frame
HHI-117	Door D203a
HHI-118	Door D203a Frame
HHI-119	Window W206 Sash
HHI-120	Window W206 Frame
HHI-121	Window W215 Sash
HHI-122	Window W215 Frame
HHI-123	East Wall above Chair Rail
HHI-124	West Wall
HHI-125	Chair Rail, west of joint
HHI-126	Chair Rail, east of joint
HHI-127	Mantel, Outer Molding
HHI-128	Mantel, Inner Molding
HHI-129	Baseboard, East Wall
HHI-130	Baseboard, North Wall at possible door location
HHI-131	Ceiling
HHI-132	Ceiling Trim

SUMMARY OF EARLIST FINISHES

This space has been altered several times including the addition of a bathroom at the southwest corner of the room, a closet at the southeast corner and the possible removal of a north/south wall that divided the room into two separate spaces. Early finishes on the window frames have different stratigraphies for the east and west walls. The earliest retained finish on Door D203 and the Frame for D203 are different. The earliest retained finish for the Frame D203 and the two areas of chair rail sampled on the north wall corresponds with the 3rd painting campaign for the room. This as does the chair rail on the north wall. Doors D203, D203a and D203b are four paneled doors rather than the six paneled style found elsewhere in the house. Door D204 on the south wall matches the other doors found throughout the house.

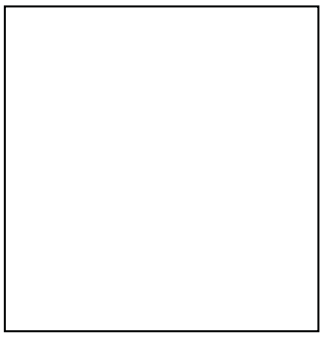
The only elements in the South Bedroom that retain their 1769 finishes are the window frames and sashes and possibly the baseboard on the east wall. The earliest finish found on the window frames was a grayish yellow (Munsell 2.5Y 8/2) followed by a strong brown (Munsell 2.5YR 5/2) colored graining layer topped with a strong brown (Munsell 7.5YR 3/6) tinted glaze. The 1769 finish found on the window sashes had a lighter grayish yellow (Munsell 2.5Y 8/2) colored base coat topped with a pale yellow (Munsell 2.5Y 6/6) colored glaze. Door D203. The earliest retained finish found on the baseboard was black. It was not uncommon for Colonial Era baseboards to be painted dark colors such as black.

No 18th century finishes were found on the walls or ceiling. The earliest finish found on the east and west walls was a pale orange yellow finish which corresponded to the 9th painting campaign (circa 1892) for the room. The earliest finish found on the ceiling was a pale orange yellow which corresponded to the circa 1930s alterations of the house.

FINDINGS

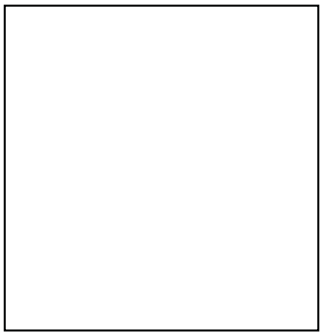
Window Frames

The earliest finish found on these elements was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Benjamin Moore Paint's HC-35 "Powell Buff," followed by a strong brown (Munsell 7.5YR 3/6) colored graining layer matching Benjamin Moore's 2162-10 "Autumn Bronze" topped by a strong brown (Munsell 105YR 4/8) tinted glaze matching Benjamin Moore's 2153-20 "Corduroy." The window frame on the east wall retained 13 finish layers while the frame on the west wall retained 11.



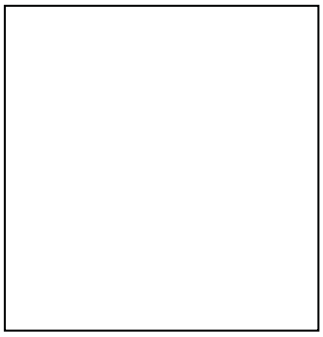
Earliest Finish
Window Frames
Base Coat

Benjamin Moore
HC-35
"Powell Buff"



Earliest Finish
Window Frames
Graining Layer

Benjamin Moore
2162-10
"Autumn Bronze"



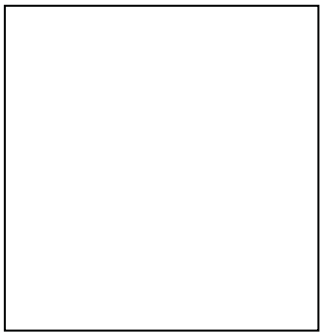
Earliest Finish
Woodwork
Top Coat Glaze

Benjamin Moore
2153-20
"Corduroy"

*This is **not** a paint layer. A tinted glaze should be matched to this color.*

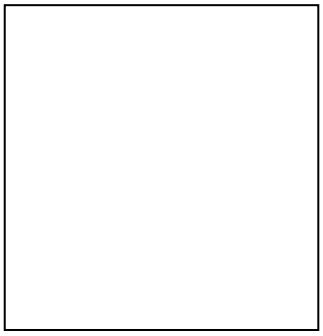
Window Sashes

The earliest finish found on the window sashes was lighter than that found on the window frame. This finish was a grayish yellow (Munsell 2.5Y 8/4) base coat matching Benjamin Moore Paint's HC-30 "Philadelphia Cream," topped with a dark yellow (Munsell 2.5Y 6/6) tinted glaze matching Benjamin Moore's 2153-30 "Tapestry Gold." The sashes retained 9 painting campaigns.



Earliest Finish
Window Sashes
Base Coat

Benjamin Moore
HC-30
"Philadelphia Cream"



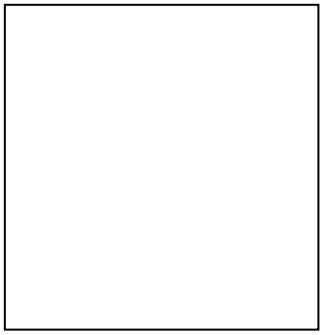
Earliest Finish
Window Sashes
Top Coat Glaze

Benjamin Moore
2153-30
"Tapestry Gold"

*This is **not** a paint layer. A tinted glaze should be matched to this color.*

Baseboard

The earliest finish found on the baseboard was a black (Munsell N/.5) paint matching Benjamin Moore Paint's Interior Ready Mix "Black." This finish was different than that found on the baseboard of the north wall. This baseboard retained 11 painting campaigns, while the baseboard on the east wall retained 9 finish layers.



Earliest Finish
Baseboard

Benjamin Moore
Interior Ready Mix
"Black"

Walls & Ceiling

No original finishes were found on the plaster walls or ceiling. The earliest finish found on the east and west walls was a pale orange yellow (Munsell 5Y 9/2) finish matching Benjamin Moore Paint's OC-102 "Devon Cream." This finish corresponds to the 9th painting campaign (circa 1892) for the room. The earliest finish found on the ceiling was a pale orange yellow (Munsell 10YR 9/2) matching Benjamin Moore OC-74 "Onyx White," which corresponds to the circa 1930s alterations of the house.

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ROOM 202 NORTH BEDROOM PAINT SAMPLE LOCATIONS

Sample #	Description
HHI-133	Door D202 Frame
HHI-134	Door D202
HHI-135	Door D202a Frame
HHI-136	Door D202a
HHI-137	Window 219 Sash
HHI-138	Window 219 Frame
HHI-139	Window 202 Sash
HHI-140	Window 202 Frame
HHI-141	West Wall
HHI-142	North Wall
HHI-143	Chair Rail North Wall
HHI-144	Chair Rail, North Wall former location of window
HHI-145	Mantel Inner Field
HHI-146	Mantel, Raised Molding
HHI-147	Mantel Ledge
HHI-148	Mantel Field below Shelf
HHI-149	Mantel Upper Panel
HHI-150	Mantel Outer Field, Upper
HHI-151	Baseboard, North Wall
HHI-152	Baseboard at closet
HHI-153	Ceiling
HHI-154	Ceiling Trim at Fireplace

SUMMARY OF EARLIST FINISHES

Like the other rooms of Harmony Hall, early finishes in the North Bedroom were found only on the wood elements. The earliest finish found on the door, door frame, window frame, chair rail and all elements of the fireplace mantel was a complex finish, possibly wood graining, consisting of a grayish yellow (Munsell 2.5Y 8/4) colored base coat topped with a moderate brown (Munsell 7.5YR 3/4) tinted glaze. The earliest finish found on the window sashes had the same grayish yellow base coat topped with a strong yellowish brown (Munsell 10YR 5/6) tinted glaze. The earliest finish found on the baseboard of the north wall was a moderate reddish brown (Munsell 10R 4/6) finish identical to that found as the 1769 finish downstairs. The circa 1792 finish for all of the woodwork was a darker wood grained finish. The early wood grained finishes were followed by finishes found in the other rooms of the first floor including a moderate yellowish green (Munsell 2.5G 4/4-5/4) and a very dark yellowish green (Munsell 2.5G 2/4). The remaining painting campaigns consisted of shades of yellowish white, pale orange yellow and white paint layers.

No original finishes were found on the plaster walls or ceiling. The earliest finish found on the north and west walls was a pale orange yellow finish which corresponded to the 9th painting campaign (circa 1892) for the room. The earliest finish found on the ceiling was a pale orange yellow which corresponded to the circa 1930s alterations of the house.

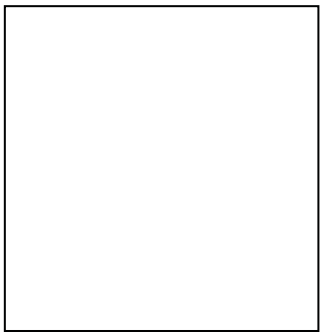
While the majority of the woodwork in this room appears to be original, several elements have early finishes that do not match those found elsewhere in the room. Door 202a and the baseboard at the closet appear to be re-used or recycled elements. Samples were removed from the chair rail along the north wall, both at the western end (sample HHI-143) and at the possible location of a former window (sample HHI-144). While the paint stratigraphies are nearly identical and the wood of each sample looks to be the same species, the finishes of sample HHI-144 cleave differently than the finishes found on sample HHI-143. The finishes on sample 143 cleave roughly and unevenly after the first finish, while the finishes on sample 144 cleave smoothly at the wood. This type of cleaving is identical to the way that the finishes cleaved on the mantel. Additionally, it residual traces of a deep red paint are found on the wood which appears to have been stripped. The chair rail at the former window location may be a recycled element from elsewhere in the house, or even from elsewhere in the room.

FINDINGS

Woodwork

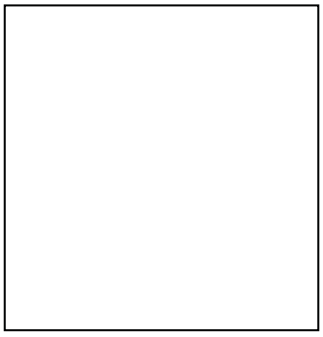
Fireplace Mantel, Door, Window & Door Frame and Chair Rail

The earliest finish found on these elements was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Benjamin Moore Paint's HC-35 "Powell Buff," topped by a moderate brown (Munsell 7.5YR 3/4) tinted glaze matching Benjamin Moore's E-66 "Charleston Brown." Elements that retained all of their finish layers retained 12 painting campaigns.



Earliest Finish
Woodwork
Base Coat

Benjamin Moore
HC-35
"Powell Buff"



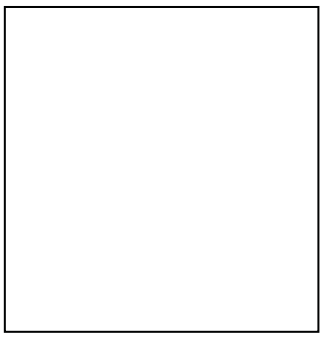
Earliest Finish
Woodwork
Top Coat Glaze

Benjamin Moore
E-66
"Charleston Brown"

*This is **not** a paint layer. A tinted glaze should be matched to this color.*

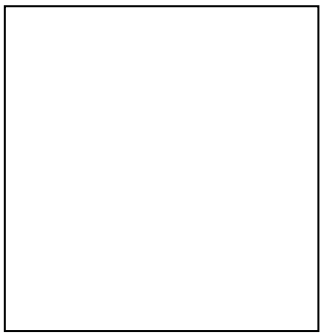
Window Sashes

The earliest finish found on the window sashes was lighter than that found on the other wood of the room. This finish was a grayish yellow (Munsell 2.5Y 8/4) base coat matching Benjamin Moore Paint's HC-30 "Philadelphia Cream," topped with a dark yellow (Munsell 2.5Y 6/6) tinted glaze matching Benjamin Moore's 2153-30 "Tapestry Gold." Each of these elements retained 10 painting campaigns.



Earliest Finish
Window Sashes
Base Coat

Benjamin Moore
HC-30
"Philadelphia Cream"



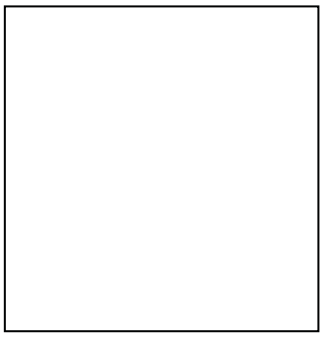
Earliest Finish
Window Sashes
Top Coat Glaze

Benjamin Moore
2153-30
"Tapestry Gold"

*This is **not** a paint layer. A tinted glaze should be matched to this color.*

Baseboard

The earliest finish found on the baseboard is a moderate reddish brown (Munsell 10R 4/6) color matching Benjamin Moore Paint's HC-50 "Georgian Brick." Although this finish is different than the colors found on the other woodwork, this color was found as the circa 1769 finish on all of the woodwork downstairs. Each of these elements retained 10 painting campaigns.



Earliest Finish
Baseboard

Benjamin Moore
HC-50
"Georgian Brick"

Walls & Ceiling

No original finishes were found on the plaster walls or ceiling. The earliest finish found on the west and north walls was a pale orange yellow (Munsell 5Y 9/2) finish matching Benjamin Moore Paint's OC-102 "Devon Cream." This finish corresponds to the 9th painting campaign (circa 1892) for the room. The earliest finish found on the ceiling was a pale orange yellow (Munsell 10YR 9/2) matching Benjamin Moore OC-74 "Onyx White," which corresponds to the circa 1930s alterations of the house.

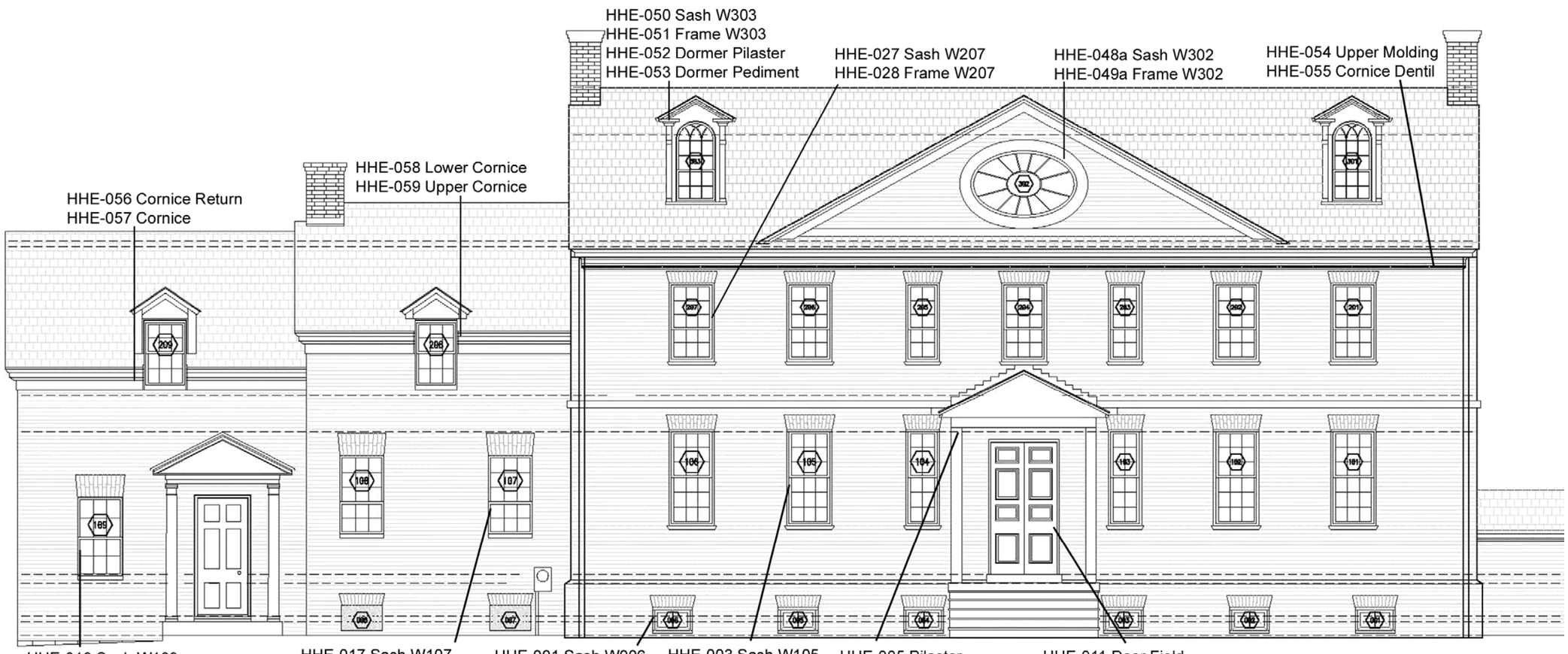
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Attachment 1: Paint Sample Locations

Harmony Hall
Fort Washington, Maryland

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Harmony Hall Exterior Paint Samples



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Harmony Hall Exterior Paint Samples



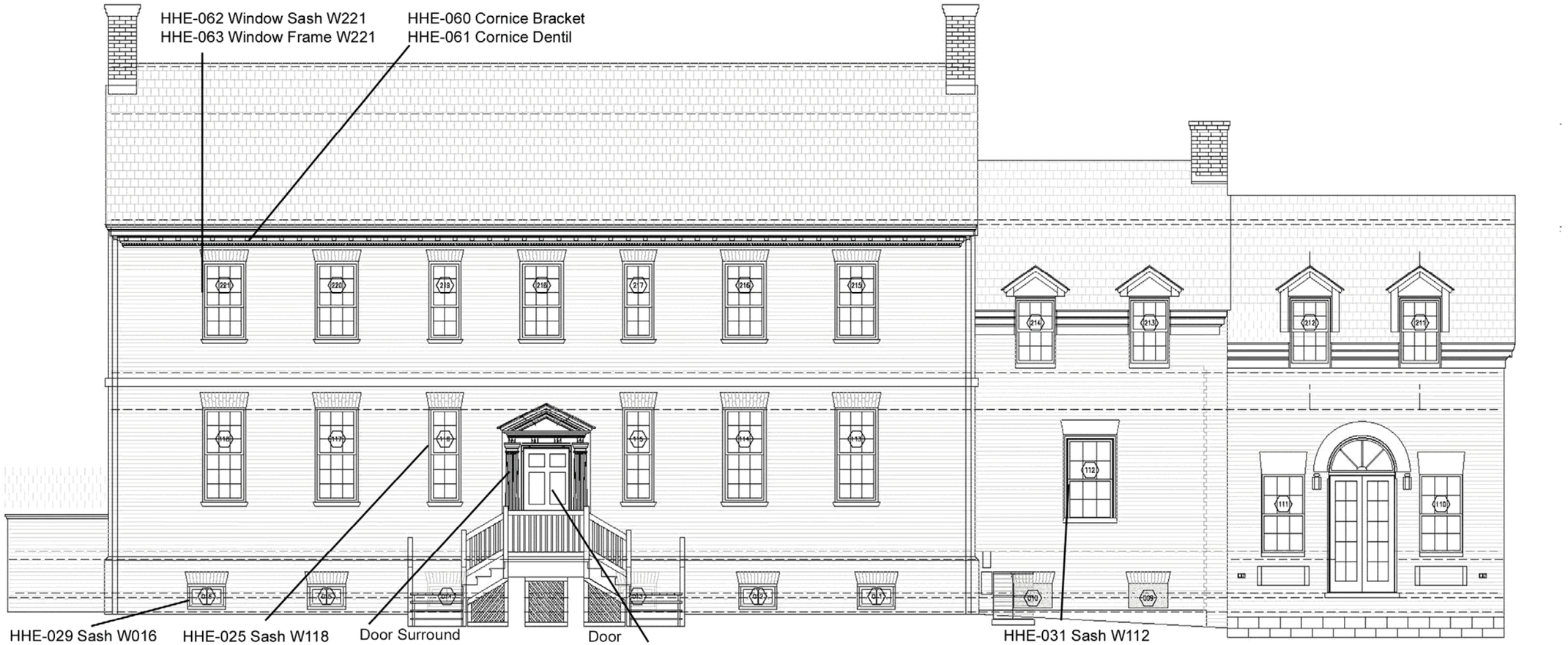
1 A3.02 SOUTH ELEVATION
SCALE A



2 A3.02 NORTH ELEVATION
SCALE A

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Harmony Hall Exterior Paint Samples



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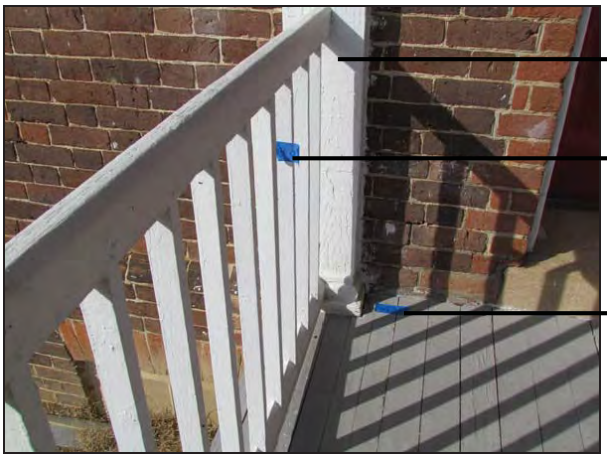
Harmony Hall Exterior Paint Sample Locations



HHE-001 Window 006 Sash
HHE-002 Window 006 Frame



HHE-003 Window 105 Sash
HHE-004 Window 105 Frame



HHE-005 Porch Pilaster

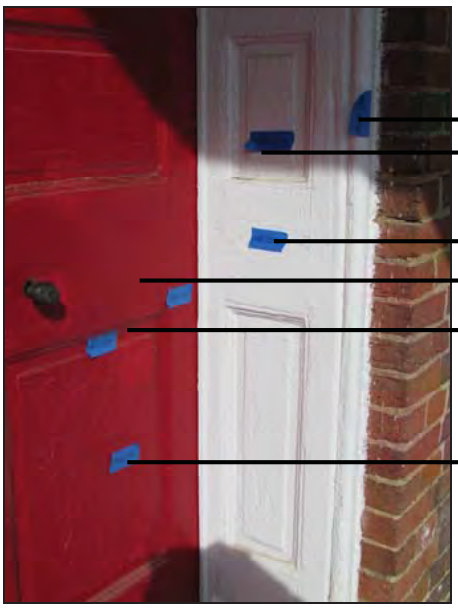
HHE-007 Porch Baluster

HHE-010 Porch Floor

Exterior Paint Sample Locations



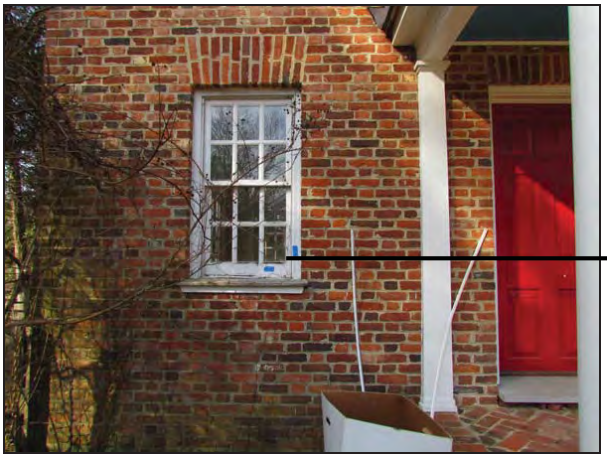




Exterior Paint Sample Locations



HHE-017 Window 107 Sash
HHE-018 Window 107 Frame

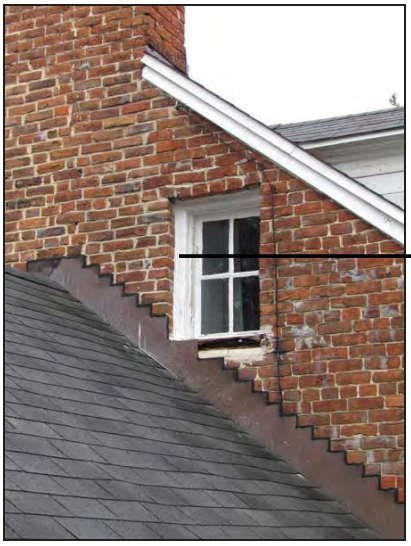


HHE-019 Window 109 Sash
HHE-020 Window 109 Frame



HHE-021 Door 106B
HHE-022 Door 106B Frame

Exterior Paint Sample Locations



HHE-023 Window 304 Sash
HHE-024 Window 304 Frame



HHE-062 Window 220 Sash
HHE-063 Window 220 Frame

HHE-031 Window 112 Sash
HHE-032 Window 112 Frame

HHE-025 Window 116 Sash
HHE-026 Window 116 Frame

HHE-029 Window 010 Sash
HHE-030 Window 010 Frame

Exterior Paint Sample Locations







Exterior Paint Sample Locations



HHE-048a Window 302 Sash
HHE-049a Window 302 Frame



HHE-053 Dormer Pediment

HHE-052 Dormer Pilaster

HHE-050 Window 303 Sash
HHE-051 Window 303 Frame



HHE-054 Cornice Upper Molding

HHE-055 Cornice Dentil

Exterior Paint Sample Locations





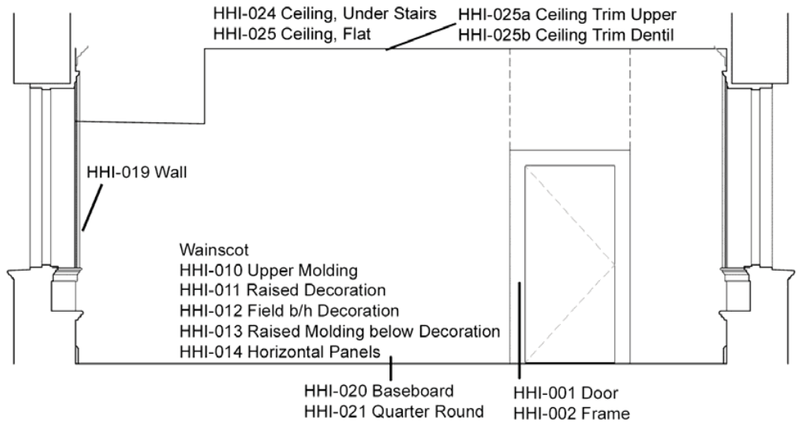


Exterior Paint Sample Locations

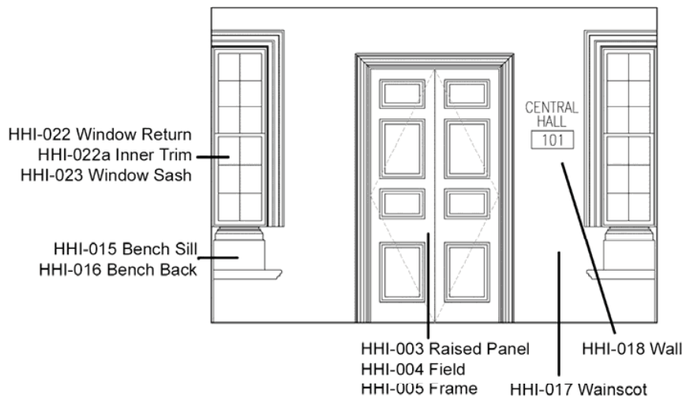


HHE-064 Window 306 Sash
HHE-065 Window 306 Frame

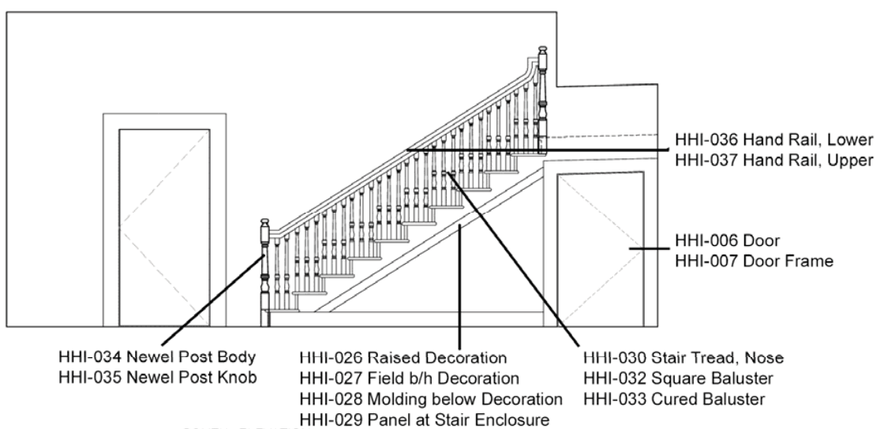
Harmony Hall Entrance Hall Paint Samples



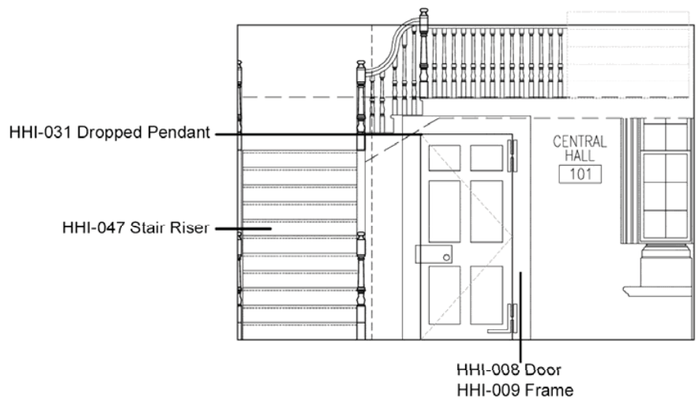
1 A1.01 NORTH ELEVATION
FIRST FLOOR CENTRAL HALL 101
SCALE A



1 A1.01 EAST ELEVATION
FIRST FLOOR CENTRAL HALL 101
SCALE A



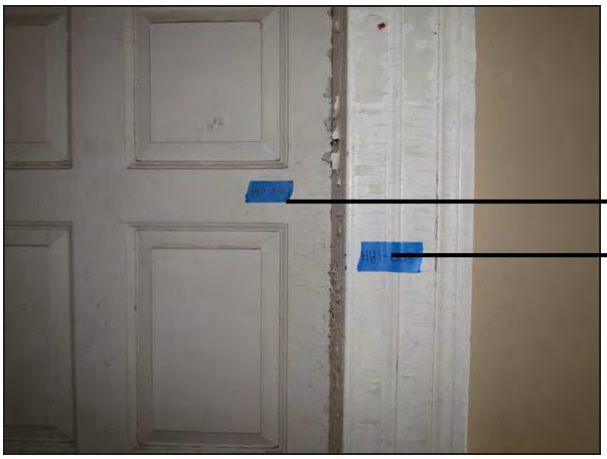
1 A1.01 SOUTH ELEVATION
FIRST FLOOR CENTRAL HALL 101
SCALE A



1 A1.01 WEST ELEVATION
FIRST FLOOR CENTRAL HALL 101
SCALE A

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Entrance Hall Paint Sample Locations







Entrance Hall Paint Sample Locations







Entrance Hall Paint Sample Locations



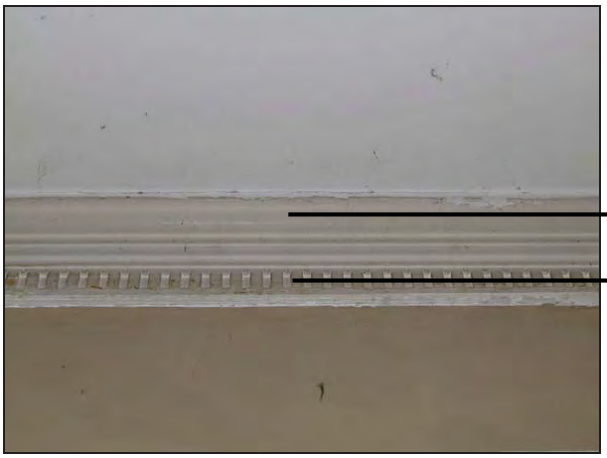




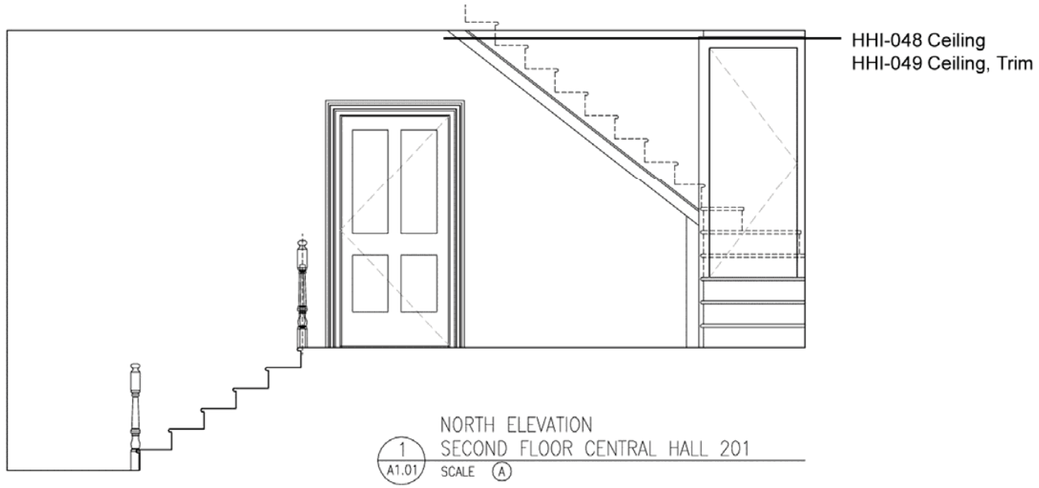
Entrance Hall Paint Sample Locations

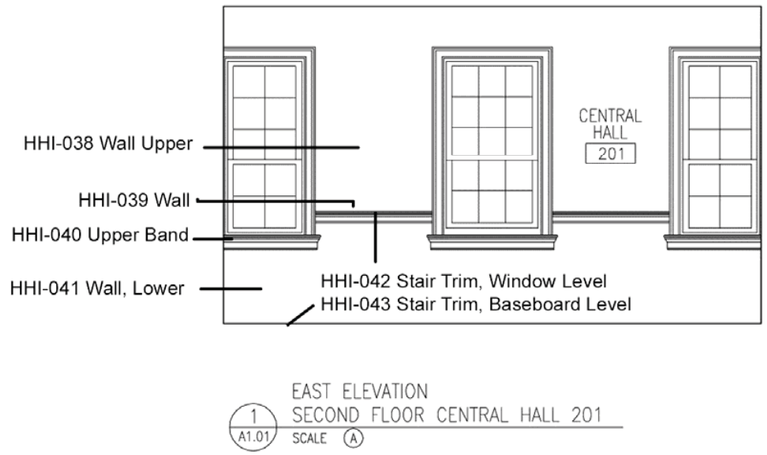


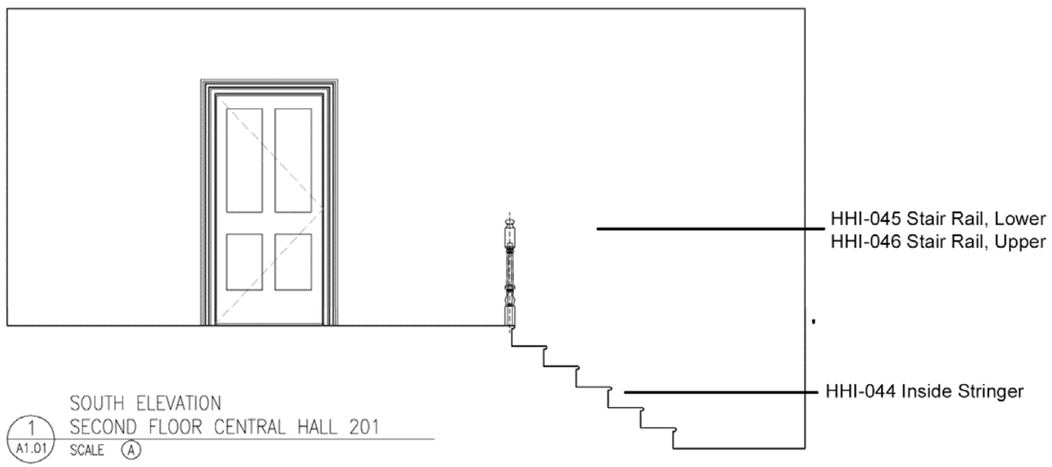


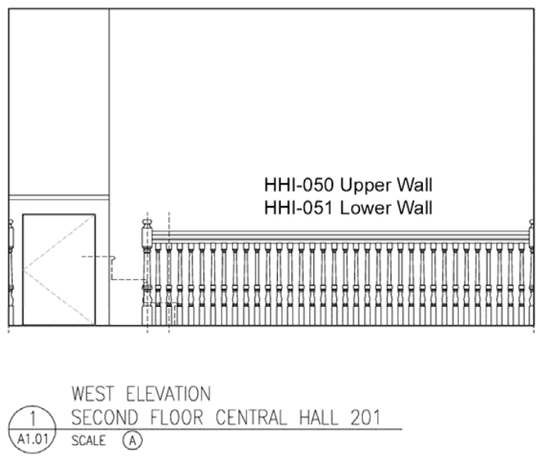


Harmony Hall Stairway and Central Hall Paint Samples



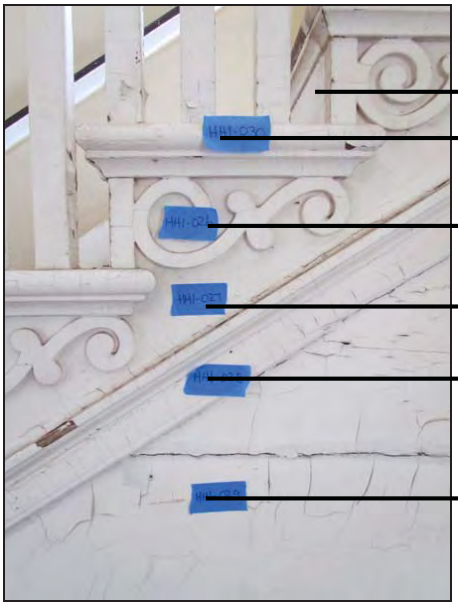






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Stairway and Central Hall Paint Sample Locations







Stairway and Central Hall Paint Sample Locations



HHI-035 Newel Post Knob

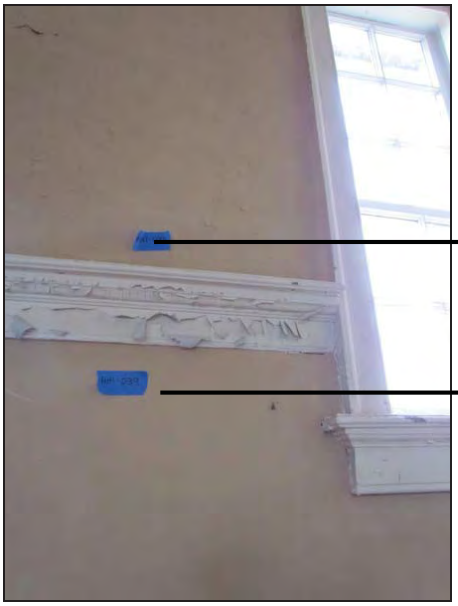
HHI-034 Newel Post Body



HHI-037 Hand Rail, Upper

HHI-036 Hand Rail, Lower

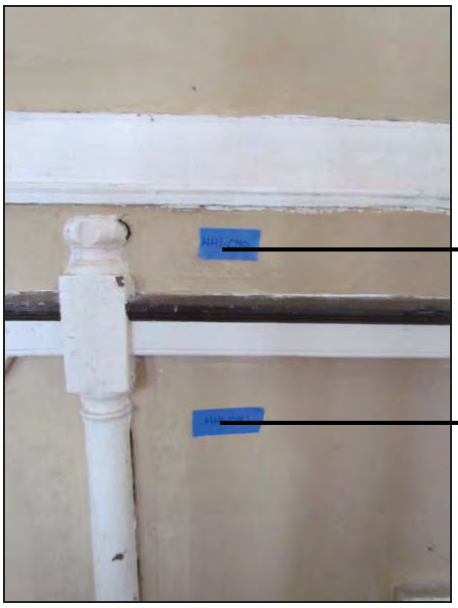
Samples not visible:
HHI-045 South Wall Hand Rail, Lower
HHI-046 South Wall Hand Rail, Upper



HHI-038 West Wall, above Chair Rail

HHI-039 West Wall, below Chair Rail

Stairway and Central Hall Paint Sample Locations



HHI-040 West Wall, below Baseboard

HHI-041 West Wall, below Hand Rail

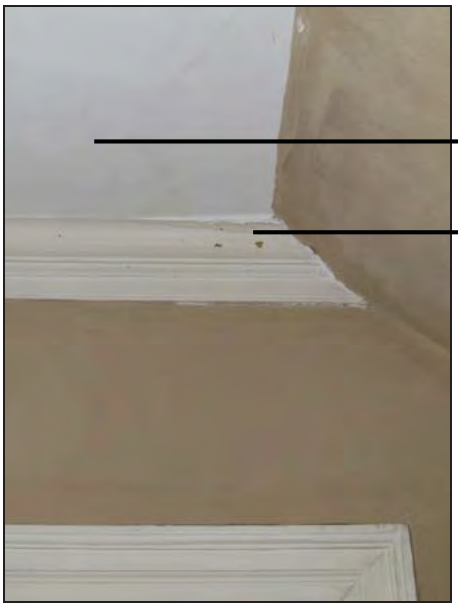


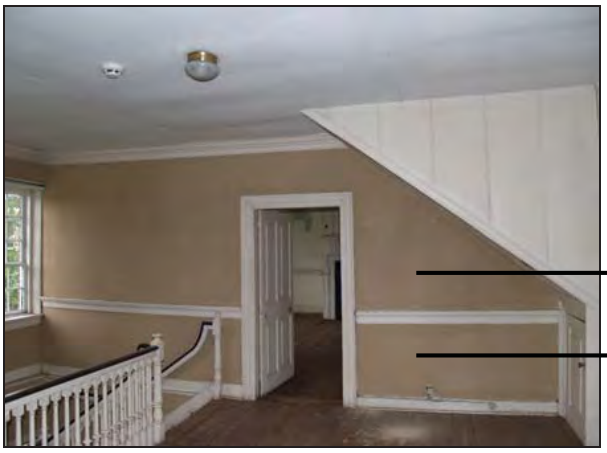
HHI-042 Chair Rail 2nd Floor

HHI-043 Baseboard 2nd Floor

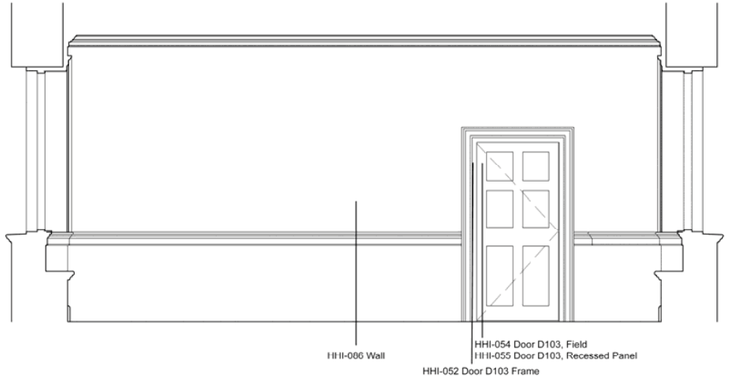
HHI-044 Stair Inside Stringer, 2nd Floor

Stairway and Central Hall Paint Sample Locations

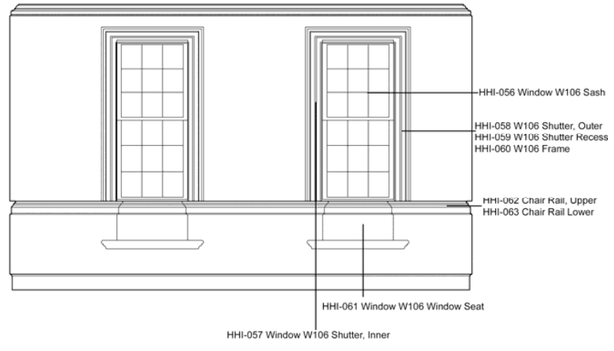




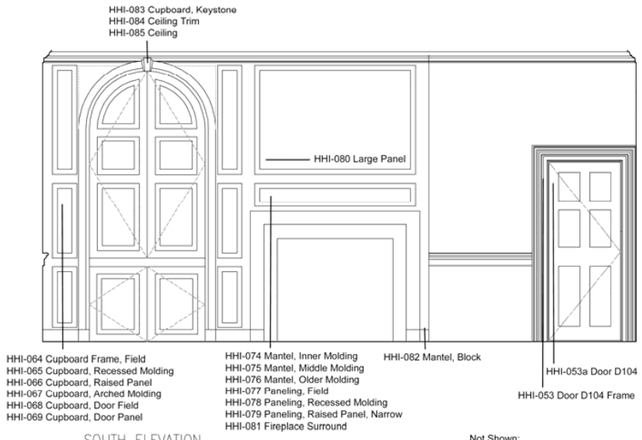
Harmony Hall Dining Room Paint Samples



1 A5.12 NORTH ELEVATION
FIRST FLOOR DINING ROOM 103
SCALE A

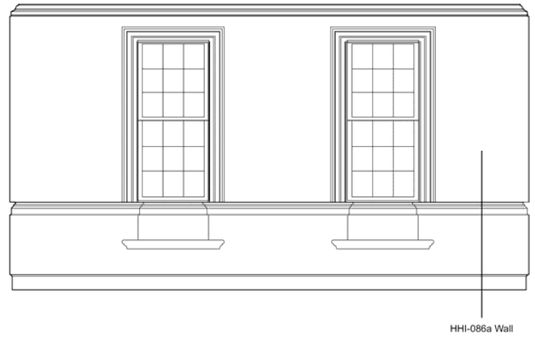


1 A5.12 EAST ELEVATION
FIRST FLOOR DINING ROOM 103
SCALE A



1 A5.12 SOUTH ELEVATION
FIRST FLOOR DINING ROOM 103
SCALE A

Not Shown:
HHI-070 Cupboard, Inside Face Door
HHI-071 Cupboard, Lower Shelf
HHI-072 Cupboard, Back Wall, Lower
HHI-073 Cupboard, Domed Ceiling



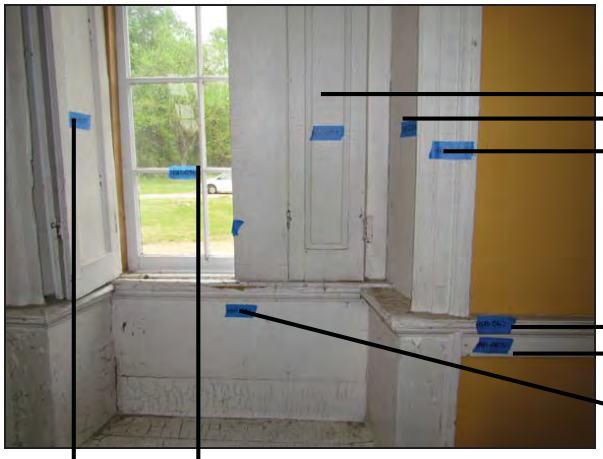
1 A5.12 WEST ELEVATION
FIRST FLOOR DINING ROOM 103
SCALE A

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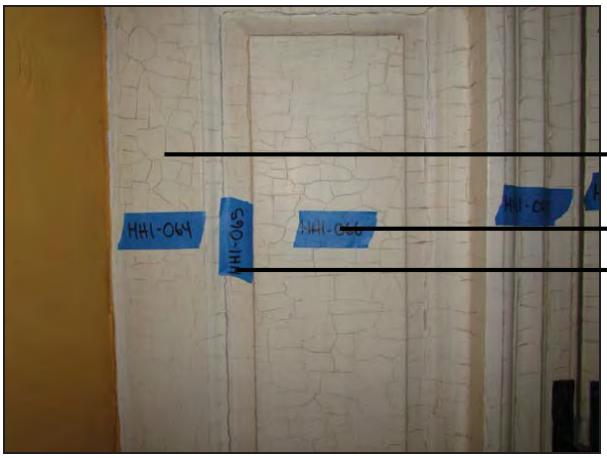
Dining Room Paint Sample Locations



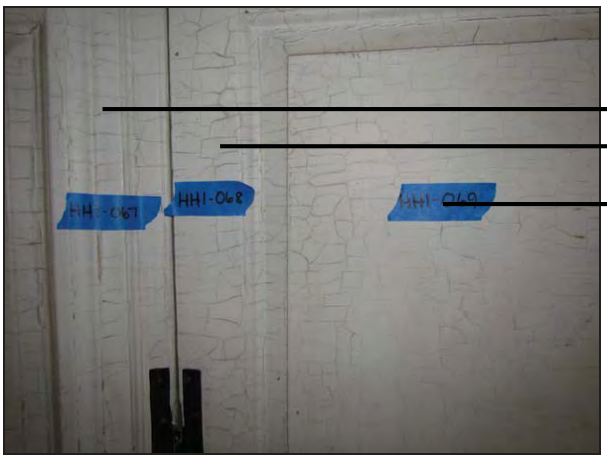




Dining Room Paint Sample Locations



HHI-064 Cupboard Frame Field
HHI-066 Cupboard Frame, Panel
HHI-065 Cupboard Frame Raised Molding



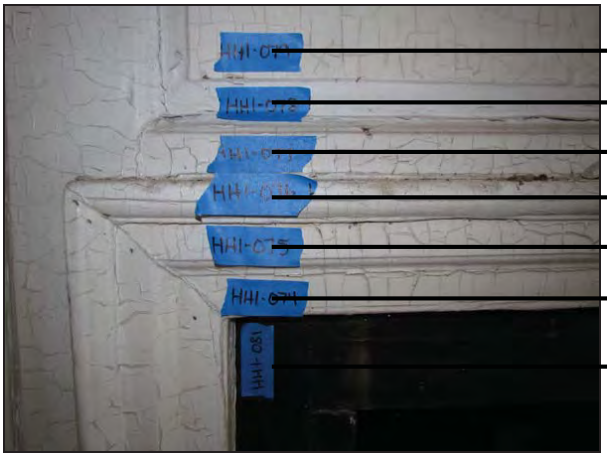
HHI-067 Cupboard Arched Frame
HHI-068 Cupboard Door Field
HHI-069 Cupboard Door Panel



HHI-070 Cupboard Door Inner

Dining Room Paint Sample Locations



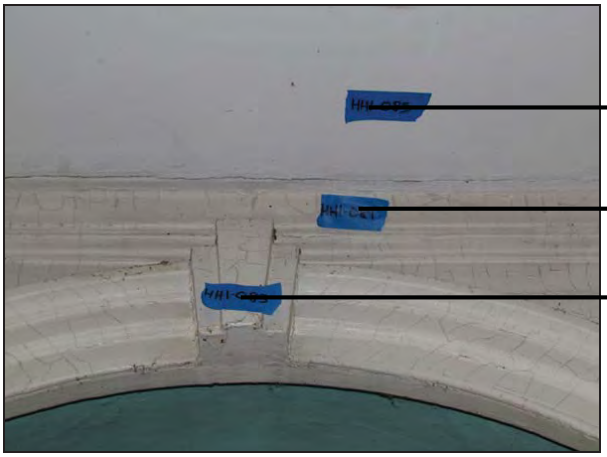




Dining Room Paint Sample Locations



HHI-082 Mantel, Base Block



HHI-085 Ceiling

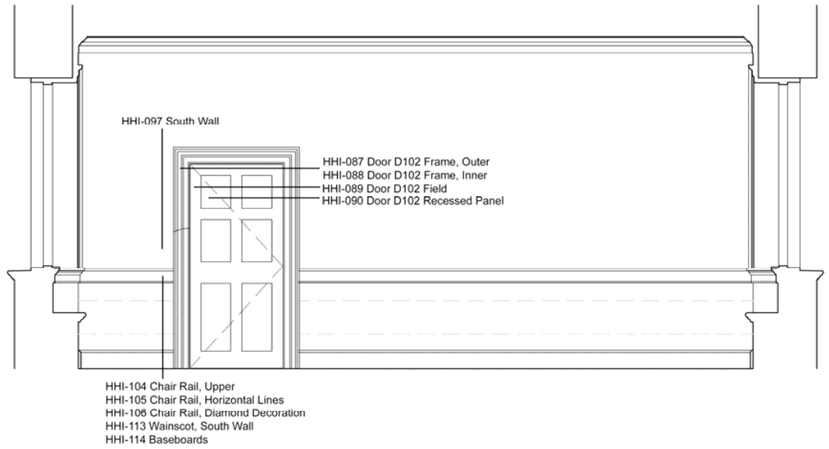
HHI-084 Ceiling Trim

HHI-083 Cupboard Keystone

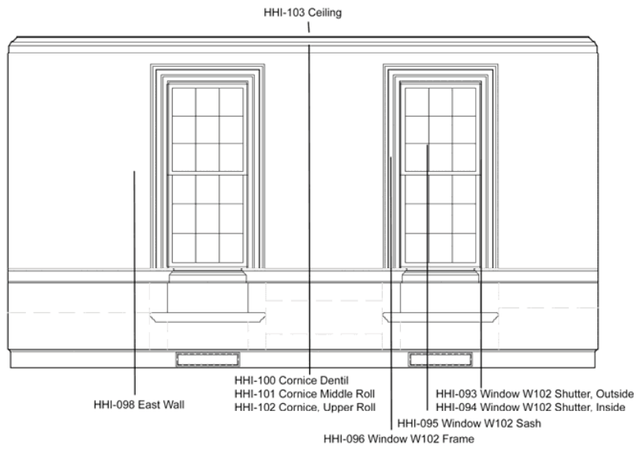


HHI-086 North Wall

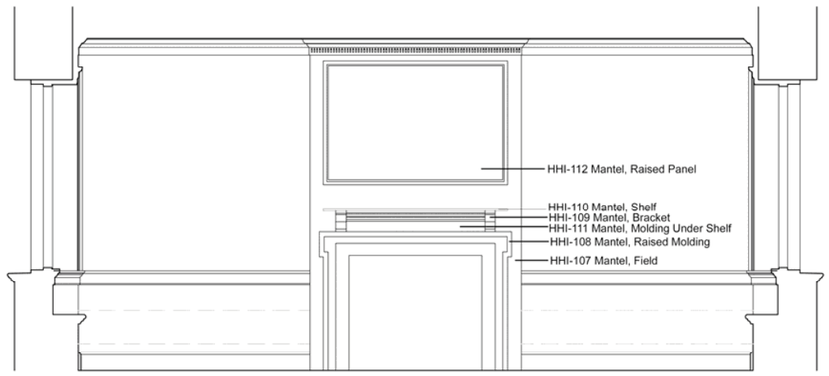
Harmony Hall Parlor Paint Samples



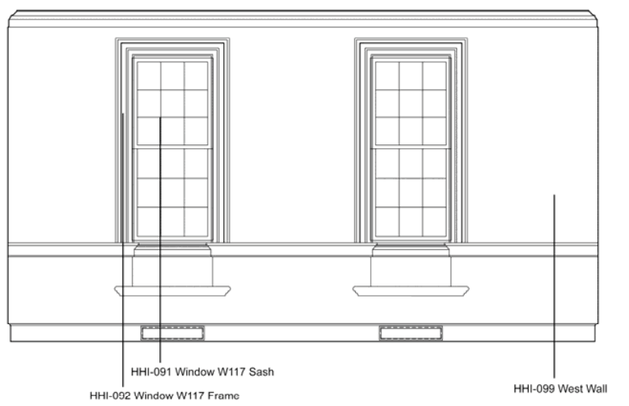
1 A5.11 SOUTH ELEVATION
FIRST FLOOR LIVING ROOM/ PARLOR 102
SCALE (A)



1 A5.11 EAST ELEVATION
FIRST FLOOR LIVING ROOM/ PARLOR 102
SCALE (A)



1 A5.11 NORTH ELEVATION
FIRST FLOOR LIVING ROOM/ PARLOR 102
SCALE (A)



1 A5.11 WEST ELEVATION
FIRST FLOOR LIVING ROOM/ PARLOR 102
SCALE (A)

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Parlor Paint Sample Locations



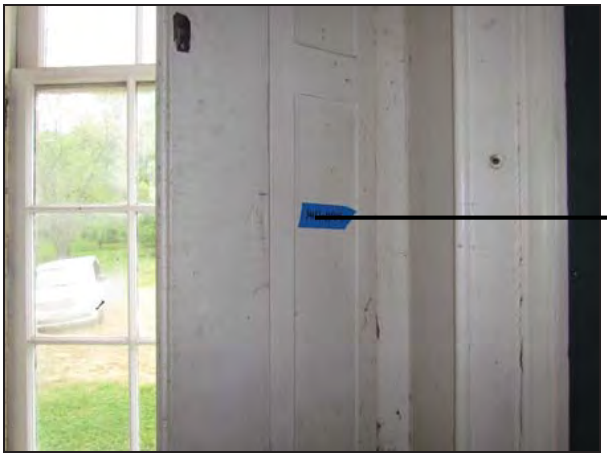




Parlor Paint Sample Locations



HHI-093 Window W102 Shutter, Outside



HHI-094 Window W102 Shutter, Inside

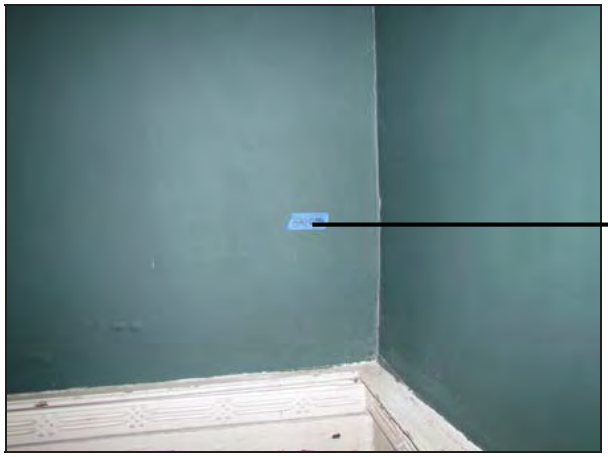


HHI-096 Window W102 Frame
HHI-095 Window W102 Sash

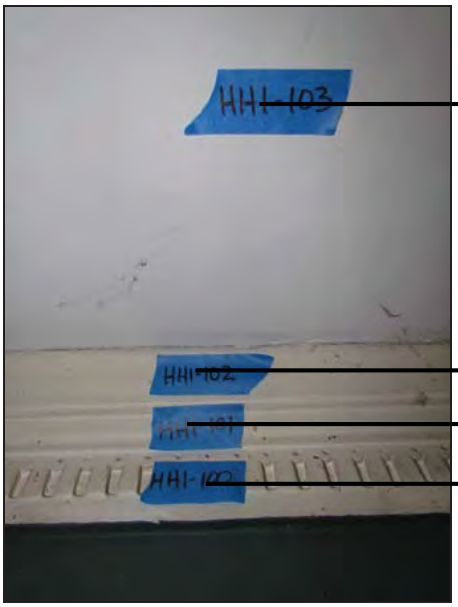
Parlor Paint Sample Locations



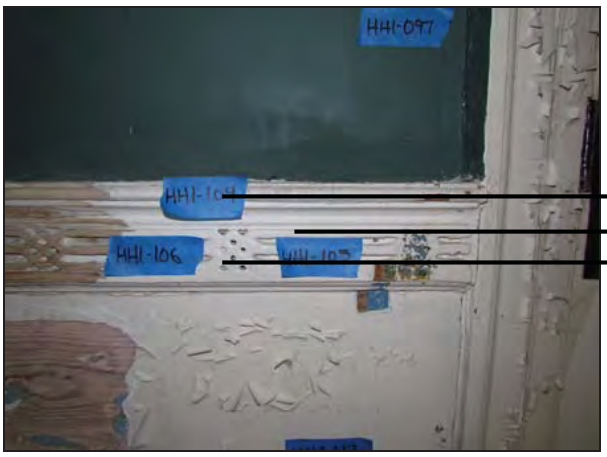




Parlor Paint Sample Locations



HHI-103 Ceiling
HHI-102 Cornice, Upper Roll
HHI-101 Cornice, Middle Roll
HHI-100 Cornice, Dentil

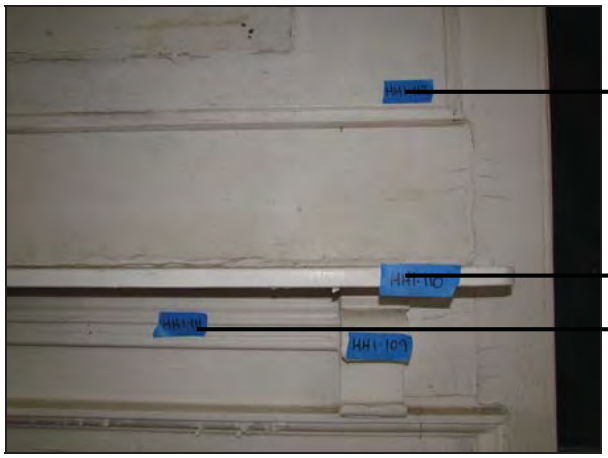


HHI-104 Chair Rail, Upper
HHI-105 Chair Rail, Horizontal Lines
HHI-106 Chair Rail, Diamond Decoration



HHI-109 Mantel Bracket
HHI-108 Mantel Raised Molding
HHI-107 Mantel Field

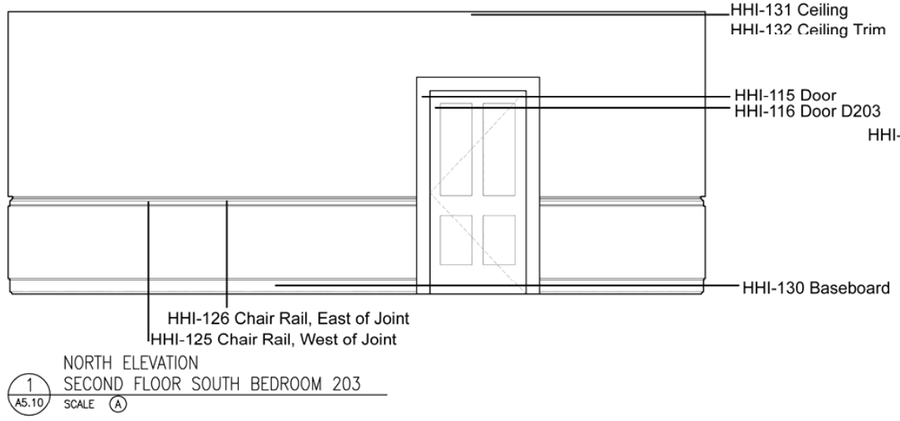
Parlor Paint Sample Locations

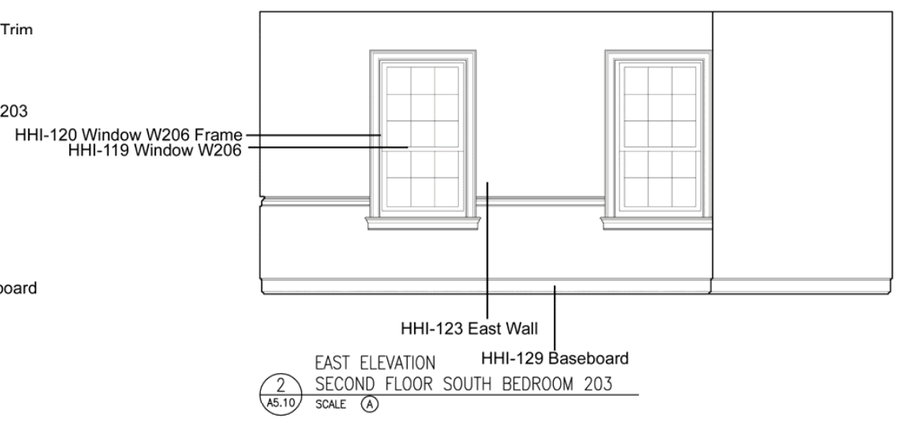


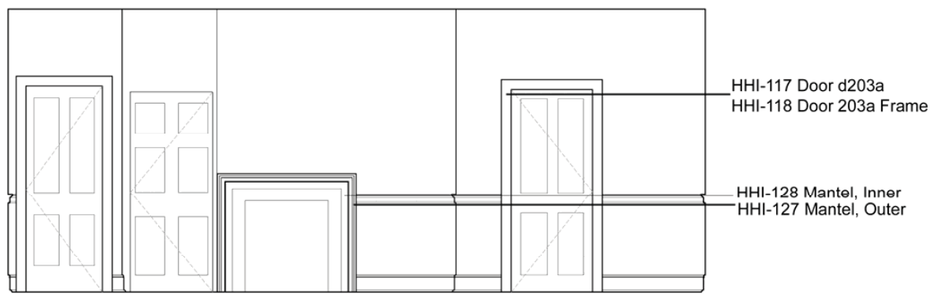


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Harmony Hall South Bedroom Paint Samples









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South Bedroom Paint Sample Locations

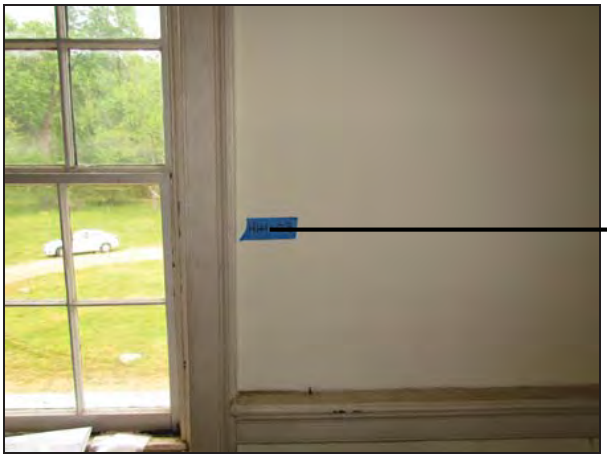






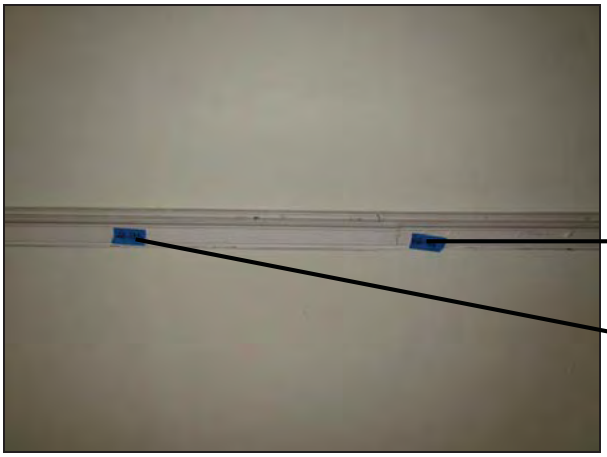
South Bedroom Paint Sample Locations







South Bedroom Paint Sample Locations

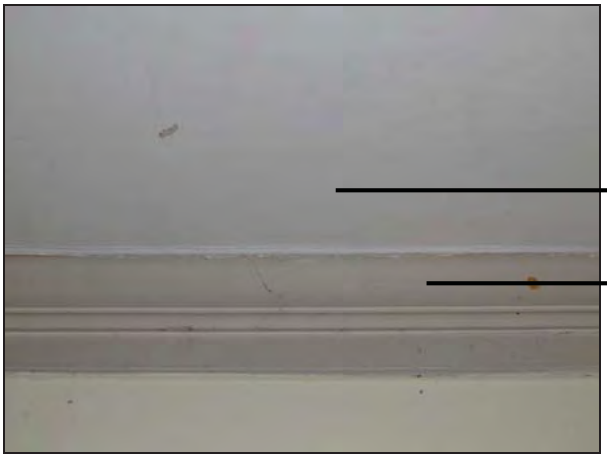




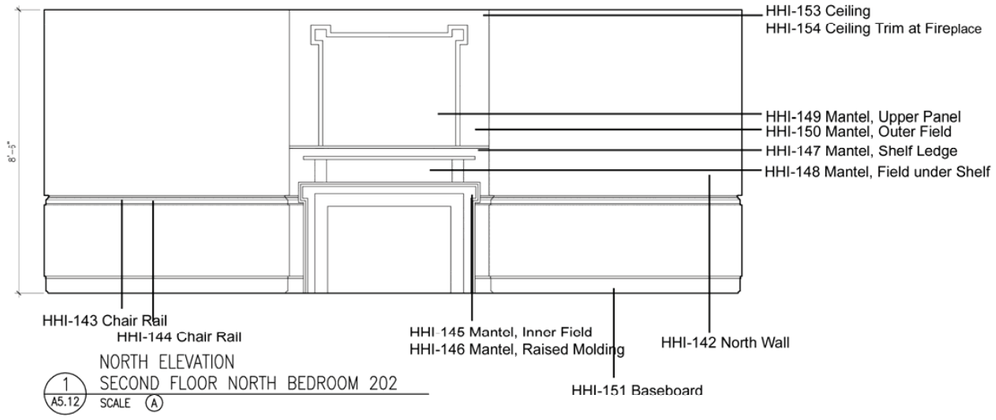


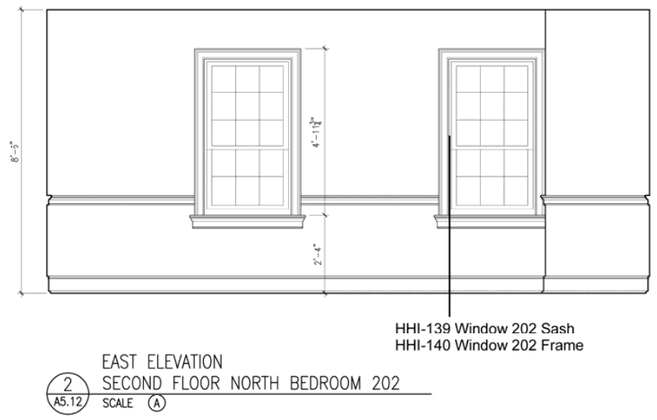
South Bedroom Paint Sample Locations

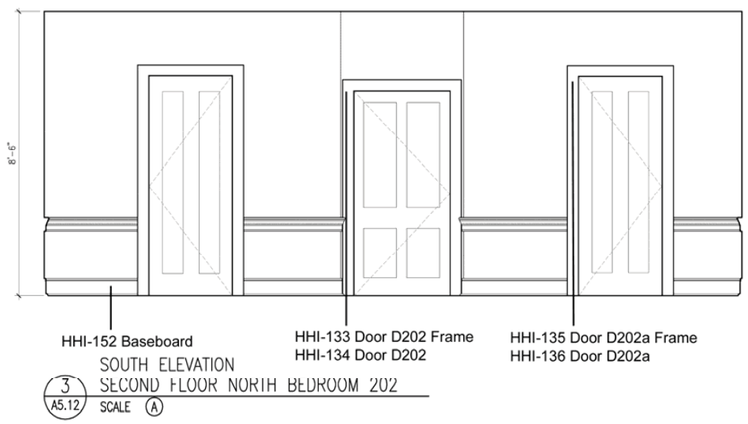


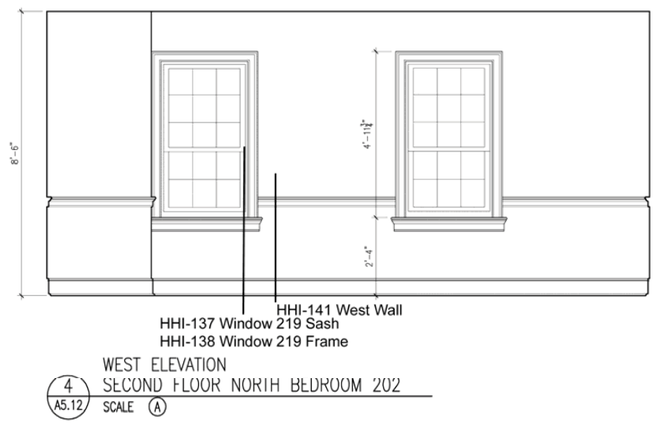


Harmony Hall North Bedroom Paint Samples





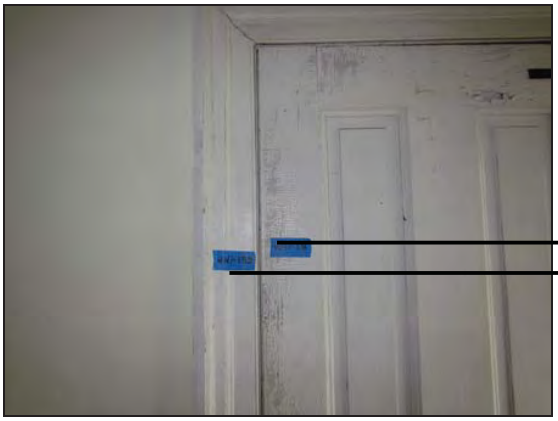


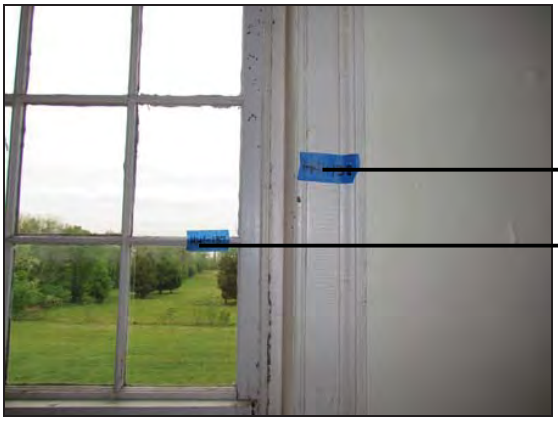


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North Bedroom Paint Sample Locations



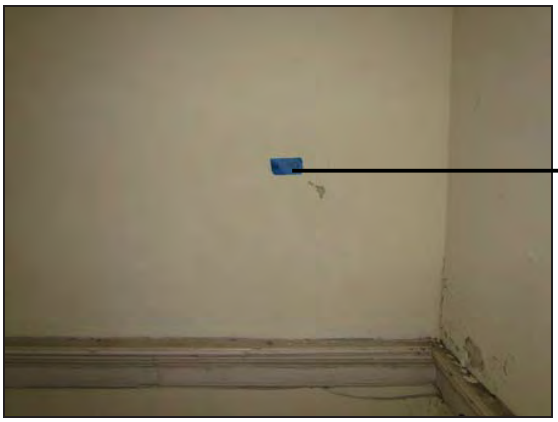




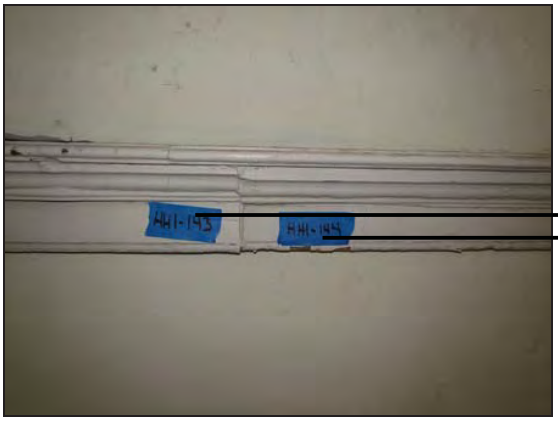
North Bedroom Paint Sample Locations



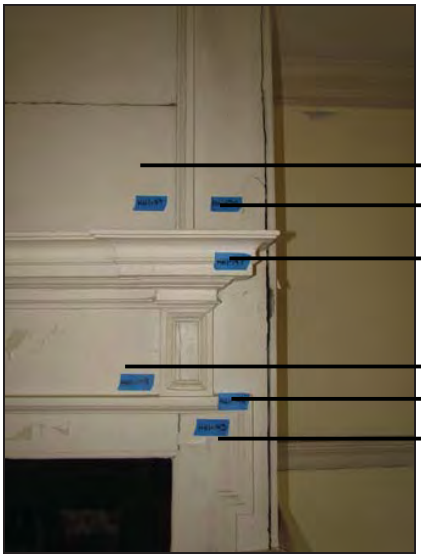




North Bedroom Paint Sample Locations



HHI-143 Chair Rail, North Wall, West of Joint
HHI-144 Chair Rail, North Wall East of Joint



HHI-149 Mantel, Upper Panel
HHI-150 Mantel, Outer Field, Upper
HHI-147 Mantel, Shelf Ledge
HHI-148 Mantel, Field below Shelf
HHI-146 Mantel, Raised Molding
HHI-145 Mantel, Inner Field



HHI-151 Baseboard, North Wall

North Bedroom Paint Sample Locations





Attachment 2: Chromochronologies

Harmony Hall
Fort Washington, Maryland

Key:

B = Base Coat
D = Distemper
F = Finish
G = Glaze
L = Leaf
P = Primer
R = Residue
S = Scratch Coat

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-001 to HHE-004

Sample #	**HHE-001**	**HHE-002**	**HHE-003**	**HHE-004**
Location	Window 006 Sash	Window 006 Frame	Window 105 Sash	Window 105 Frame
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)		V: Dark Brown		V: Dark Brown
2nd Found Finish				
3rd Found Finish				
4th Found Finish (c. 1815-1820)				
5th Found Finish		F: Green		F: Green
6th Found Finish		F: Bright Red		
7th Found Finish		F: Light Yellow		
8th Found Finish (c. 1892)				F: White
9th Found Finish				F: Grayish White
10th Found Finish (c. 1929)				F: White
11th Found Finish				F: Yellowish White
12th Found Finish				F: White
13th Found Finish				
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-001 to HHE-004 continued

Sample #	**HHE-001**	**HHE-002**	**HHE-003**	**HHE-004**
Location	Window 006 Sash	Window 006 Frame	Window 105 Sash	Window 105 Frame
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				F: Grayish White
26th Found Finish				F: White
27th Found Finish				F: Grayish White
28th Found Finish				F: Grayish White
29th Found Finish				F: White
30th Found Finish				F: Yellowish White
31st Found Finish				P: White F: White
32nd Found Finish	F: Yellowish white	F: Yellowish White		F: Pale Yellow
33rd Found Finish	P: White F: White	F: White	P: White F: White	P: White F: White
Munsell match		**5YR 2/1**		**5YR 2/1**
Commercial match		**BM 1239**		**BM 1239**
Comments	No historic finishes remain.	Munsell and commercial match is for circa 1792 finish.	No historic finishes remain.	Munsell and commercial match is for circa 1792 finish.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-005 to HHE-008

Sample #	**HHE-005**	**HHE-006**	**HHE-007**	**HHE-008**
Location	Porch Pilaster	Porch, Column	Porch, Baluster	Porch Beam
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)				
2nd Found Finish				
3rd Found Finish				
4th Found Finish (c. 1815-1820)				
5th Found Finish				
6th Found Finish				
7th Found Finish				
8th Found Finish (c. 1892)				
9th Found Finish				
10th Found Finish (c. 1929)	F: Yellowish white			F: White
11th Found Finish				F: White
12th Found Finish	F: Yellowish white			F: Yellowish white
13th Found Finish	F: White			F: White
14th Found Finish	F: Grayish white			F: Yellowish White
15th Found Finish	F: White			
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-005 to HHE-008 continued

Sample #	**HHE-005**	**HHE-006**	**HHE-007**	**HHE-008**
Location	Porch Pilaster	Porch, Column	Porch, Baluster	Porch Beam
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish	F: Grayish white			F: White
21st Found Finish	F: White			F: White
22nd Found Finish	F: Yellowish White			F: White
23rd Found Finish	F: White			F: White
24th Found Finish	F: White			F: White
25th Found Finish	F: White			F: White
26th Found Finish	F: Grayish white			F: White
27th Found Finish	F: Pale Yellow			F: White
28th Found Finish	F: White			F: Yellowish White
29th Found Finish	F: Pale Yellow			F: White
30th Found Finish	F: Grayish White	F: Pale Gray		F: White
31st Found Finish	F: White	P: Yellowish white F: Yellowish White		F: White
32nd Found Finish	F: White			F: White
33rd Found Finish	F: White	F: White	P: White F: Yellowish white	F: White
Munsell match				
Commercial match				
Comments	No historic finishes remain.	No historic finishes remain.	No historic finishes remain.	No historic finishes remain.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-009 to HHE-012

Sample #	**HHE-009**	**HHE-010**	**HHE-011**	**HHE-012**
Location	Porch, Ceiling	Porch, Floor	D101a Field	D101a, Panel
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)			V: Dark Brown	V: Dark Brown
2nd Found Finish			F: Deep Red (residue)	F: Grayish Purple
3rd Found Finish			F: Light Brown V: Yellowish Brown	P: Pale Yellow F: Pale Yellow
4th Found Finish (c. 1815-1820)				F: Light Green
5th Found Finish				F: Gray
6th Found Finish				F: Dark Green
7th Found Finish				
8th Found Finish (c. 1892)			F: Yellowish white	P: White F: White
9th Found Finish			F: Yellowish white	F: Grayish White
10th Found Finish (c. 1929)	B: Light Yellowish Brown V: Brown		F: Yellowish white	F: Yellowish white
11th Found Finish	B: Light Yellowish Brown V: Brown		F: Yellowish white	F: Yellowish white
12th Found Finish	B: Light Yellowish Brown V: Brown		F: Yellowish white	F: Yellowish White
13th Found Finish	F: Pale Yellow		F: Yellowish white	
14th Found Finish	F: Pale Yellow		F: Yellowish white	
15th Found Finish			F: White	
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-009 to HHE-012 continued

Sample #	**HHE-009**	**HHE-010**	**HHE-011**	**HHE-012**
Location	Porch, Ceiling	Porch, Floor	D101a Field	D101a, Panel
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)			F: Pale Yellow	F: White
19th Found Finish			F: White	F: White
20th Found Finish			F: Pale Yellow	F: Yellowish White
21st Found Finish			F: Yellowish White	F: Yellowish White
22nd Found Finish	F: Blue Green		F: Yellowish White	F: Yellowish White
23rd Found Finish	F: Blue Green		F: Yellowish White	F: Yellowish White
24th Found Finish	F: Blue Green		F: Yellowish White	F: Yellowish White
25th Found Finish	F: Blue Green		F: Yellowish White	F: Yellowish White
26th Found Finish	F: Bluish White		F: Yellowish White	F: Yellowish White
27th Found Finish	F: Pale Yellow		F: Yellowish White	F: Yellowish White
28th Found Finish	F: Bright Blue Green		P: White F: Yellowish White	P: White F: Yellowish white
29th Found Finish	F: Bright Green		F: Yellowish White	P: White F: Yellowish White
30th Found Finish	F: Bright Green		F: Yellowish White	F: Yellowish white
31st Found Finish	F: Moderate Olive Brown		F: Pale Yellow	F: Yellowish white
32nd Found Finish	F: Bright Blue		F: Yellowish white	F: Pale Yellow
33rd Found Finish	F: Bright Blue		F: Yellowish White	F: Yellowish White
34th Found Finish	F: Green		F: White	F: White
35th Found Finish	F: Bright Blue		F: Bright Red	F: Bright Red
36th Found Finish	F: Yellowish White	P: Yellowish White F: Light Gray	F: Bright Red	F: Bright Red
37th Found Finish	P: Bright Blue F: Bright Blue	P: White F: Light Gray	F: Bright Red	F: Bright Red
Munsell match			**5YR 2/1**	**5YR 2/1**
Commercial match			**BM 1239**	**BM 1239**
Comments	No historic finishes remain.	No historic finishes remain.	Munsell and commercial match is for circa 1792 finish.	Munsell and commercial match is for circa 1792 finish.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-013 to HHE-016

Sample #	**HHE-013**	**HHE-014**	**HHE-015**	**HHE-016**
Location	D101a Recess	D101a Return Field	D101a Return Panel	D101a Corner Molding
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)	V: Dark Brown		V: Dark Brown	V: Dark Brown
2nd Found Finish	F: Grayish Purple	F: Red Brown	F: Red Brown	F: Red Brown
3rd Found Finish	P: Pale Yellow F: Pale Yellow	F: Moderate Yellowish Gray	P: Pale Yellow F: Pale Yellow	P: Pale Yellow F: Pale Yellow
4th Found Finish (c. 1815-1820)	F: Light Green		F: Light Green	F: Light Green
5th Found Finish	F: Gray		F: Gray	F: Gray
6th Found Finish				F: Bright Green
7th Found Finish	F: Dark Green			F: Moderate Orange Brown
8th Found Finish (c. 1892)	P: White F: White	P: White F: White	P: White F: White	P: White F: White
9th Found Finish	F: Grayish White	F: Grayish White	F: Grayish White	F: Grayish White
10th Found Finish (c. 1929)	F: Yellowish white	F: Yellowish White	F: Yellowish white	F: Yellowish white
11th Found Finish	F: Yellowish white	F: Yellowish White	F: Yellowish white	F: Yellowish white
12th Found Finish	F: Yellowish White	F: Yellowish White	F: Yellowish white	F: Yellowish white
13th Found Finish				
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-001 to HHE-004 continued

Sample #	**HHE-013**	**HHE-014**	**HHE-015**	**HHE-016**
Location	D101a Recess	D101a Return Field	D101a Return Panel	D101a Corner Molding
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)	F: White	F: White	F: Yellowish white	F: Yellowish white
19th Found Finish	F: White		F: Pale Yellow	F: Pale Yellow
20th Found Finish	F: Yellowish White	F: Yellowish White	F: Yellowish white	F: Yellowish white
21st Found Finish	F: Yellowish White	F: White	F: Yellowish white	F: Yellowish white
22nd Found Finish	F: Yellowish White	F: White	F: Yellowish white	F: Yellowish white
23rd Found Finish	F: Yellowish White	F: White	F: Yellowish white	F: Yellowish white
24th Found Finish	F: Yellowish White	F: Grayish White	F: Yellowish white	F: Yellowish white
25th Found Finish	F: Yellowish White	F: White	F: Yellowish white	F: Yellowish white
26th Found Finish	F: Yellowish White	F: White	F: Yellowish white	F: Yellowish white
27th Found Finish	F: Yellowish White	F: White	F: Grayish white	F: Grayish white
28th Found Finish	P: White F: Yellowish white	F: White		
29th Found Finish	P: White F: Yellowish White			
30th Found Finish	F: Yellowish white			
31st Found Finish	F: Yellowish white			
32nd Found Finish	F: Pale Yellow	F: Pale Yellow	F: Light Yellow	F: Light Yellow
33rd Found Finish	F: Yellowish White	F: White	F: Yellowish White	F: Yellowish White
34th Found Finish	F: White	F: White	F: Yellowish White	F: Yellowish White
35th Found Finish	F: Bright Red	F: White	F: Yellowish white	F: Yellowish white
36th Found Finish	F: Bright Red	F: White	F: White	F: White
37th Found Finish	F: Bright Red	P: White F: White	F: White	F: White
Munsell match	**5YR 2/1**		**5YR 2/1**	**5YR 2/1**
Commercial match	**BM 1239**		**BM 1239**	**BM 1239**
Comments	Munsell and commercial match is for circa 1792 finish.	Incomplete Sample.	Munsell and commercial match is for circa 1792 finish.	Munsell and commercial match is for circa 1792 finish.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-017 to HHE-020

Sample #	**HHE-017**	**HHE-018**	**HHE-019**	**HHE-020**
Location	W107 Sash	W107 Frame	W109 Sash	W109 Frame
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)				
2nd Found Finish				
3rd Found Finish				
4th Found Finish (c. 1815-1820)				
5th Found Finish				
6th Found Finish				
7th Found Finish				
8th Found Finish (c. 1892)				
9th Found Finish				
10th Found Finish (c. 1929)				
11th Found Finish				
12th Found Finish				
13th Found Finish				
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-017 to HHE-020 continued

Sample #	**HHE-017**	**HHE-018**	**HHE-019**	**HHE-020**
Location	W107 Sash	W107 Frame	W109 Sash	W109 Frame
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				
26th Found Finish				
27th Found Finish				
28th Found Finish				
29th Found Finish				
30th Found Finish				
31st Found Finish				
32nd Found Finish	P: White F: Yellowish white	P: White F: Yellowish white	P: White F: Yellowish white	P: White F: Yellowish white
33rd Found Finish	P: White F: Yellowish White	P: White F: Yellowish White	P: White F: Yellowish White	P: White F: Yellowish White
Munsell match				
Commercial match				
Comments	Later Addition	Later Addition.	Later Addition.	Later Addition.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-021 to HHE-024

Sample #	**HHE-021**	**HHE-022**	**HHE-023**	**HHE-024**
Location	D106b Door	D106b Frame	W302 Sash	W302 Frame
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)				V: Dark Brown (residue)
2nd Found Finish				F: Dark Reddish Brown
3rd Found Finish				F: Grayish yellow
4th Found Finish (c. 1815-1820)				F: Yellowish Brown
5th Found Finish			F: Pale Blue Green	F: Bright Green
6th Found Finish				F: Bright Green
7th Found Finish				F: Reddish Brown
8th Found Finish (c. 1892)			F: Grayish White	F: White
9th Found Finish			F: White	F: White
10th Found Finish (c. 1929)			F: yellowish white	
11th Found Finish			F: White	
12th Found Finish			B: White V: Colorless	B: White V: Colorless
13th Found Finish			B: White V: Colorless	
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-021 to HHE-024 continued

Sample #	**HHE-021**	**HHE-022**	**HHE-023**	**HHE-024**
Location	D106b Door	D106b Frame	W302 Sash	W302 Frame
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				
26th Found Finish				
27th Found Finish				
28th Found Finish				
29th Found Finish			F: White	F: White
30th Found Finish			F: White	F: White
31st Found Finish			F: Pale Blue	
32nd Found Finish	P: White F: Yellowish white	F: Yellowish white	F: Yellowish white	F: Yellowish white
33rd Found Finish	P: White F: Yellowish White	P: White F: Yellowish white	P: White F: Yellowish white	P: White F: Yellowish white
Munsell match				**5YR 2/1**
Commercial match				**BM 1239**
Comments	Later Addition.	Later Addition.	No historic finishes remain.	Munsell and commercial match is for circa 1792 finish.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-025 to HHE-028

Sample #	**HHE-025**	**HHE-026**	**HHE-027**	**HHE-028**
Location	W116 Sash	W116 Frame	W207 Sash	W207 Frame
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)				
2nd Found Finish		P: White F: Reddish brown		P: White F: Reddish brown
3rd Found Finish		P: Light Yellow F: Light Yellow		P: Light Yellow F: Light Yellow
4th Found Finish (c. 1815-1820)		F: Light Green		F: Light Green
5th Found Finish		F: Moderate Orange Brown		F: Moderate Orange Brown
6th Found Finish		P: White F: White	F: White	P: White F: White
7th Found Finish		F: White	F: Grayish white	F: White
8th Found Finish (c. 1892)		F: Grayish white	F: Grayish white	F: Grayish white
9th Found Finish		P: White F: White	F: White	P: White F: White
10th Found Finish (c. 1929)			F: White	F: Grayish white
11th Found Finish			F: White	F: White
12th Found Finish			F: White	F: White
13th Found Finish			F: White	
14th Found Finish	F: White		F: White	
15th Found Finish	F: Yellowish white	F: Grayish white	F: Grayish white	F: Grayish White
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-025 to HHE-028 continued

Sample #	**HHE-025**	**HHE-026**	**HHE-027**	**HHE-028**
Location	W116 Sash	W116 Frame	W207 Sash	W207 Frame
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				
26th Found Finish				
27th Found Finish				
28th Found Finish			F: White	F: White
29th Found Finish			F: White	F: White
30th Found Finish			F: White	F: White
31st Found Finish			F: Yellowish White	F: Yellowish White
32nd Found Finish		F: White	F: White	F: White
33rd Found Finish	P: White F: Yellowish White	F: White	F: White	F: White
Munsell match				
Commercial match				
Comments	Later Addition.	No historic finishes remain.	Later Addition.	No historic finishes remain.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-029 to HHE-032

Sample #	**HHE-029**	**HHE-030**	**HHE-031**	**HHE-032**
Location	W010 Sash	W010 Frame	W112 Sash	W112 Frame
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)				
2nd Found Finish				
3rd Found Finish				
4th Found Finish (c. 1815-1820)				
5th Found Finish				
6th Found Finish	F: Yellowish white		F: Yellowish white	
7th Found Finish	F: Yellowish white		F: Yellowish white	
8th Found Finish (c. 1892)	F: White		F: White	
9th Found Finish	F: Grayish white		F: Grayish white	P: Grayish white F: Grayish white
10th Found Finish (c. 1929)	F: White		F: White	F: Yellowish white
11th Found Finish	F: Grayish white		F: Grayish white	F: Yellowish white
12th Found Finish	F: White		F: White	F: Yellowish White
13th Found Finish	F: Yellowish White		F: Yellowish White	F: Yellowish white
14th Found Finish	F: White		F: White	
15th Found Finish	F: White		F: White	
16th Found Finish	F: White		F: White	
17th Found Finish	F: Grayish white		F: Grayish white	

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-029 to HHE-032 continued

Sample #	**HHE-029**	**HHE-030**	**HHE-031**	**HHE-032**
Location	W010 Sash	W010 Frame	W112 Sash	W112 Frame
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				
26th Found Finish				
27th Found Finish	F: Pale Yellow		F: Pale Yellow	
28th Found Finish	F: White		F: White	
29th Found Finish	F: Pale Yellow		F: Pale Yellow	F: White
30th Found Finish	F: Grayish White		F: Grayish White	F: Yellowish white
31st Found Finish	F: White		F: White	F: White
32nd Found Finish	F: White		F: White	F: White
33rd Found Finish	F: White	F: White	F: White	F: White
Munsell match				
Commercial match				
Comments	Later Addition.	Later Addition.	Later Addition.	Later Addition.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-033 to HHE-036

Sample #	**HHE-033**	**HHE-034**	**HHE-035**	**HHE-036**
Location	D101b Field	D101b Raised Panel	D101b Return Field	D101b Return Panel
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)		V: Dark Brown		V: Dark Brown
2nd Found Finish				
3rd Found Finish				
4th Found Finish (c. 1815-1820)				
5th Found Finish				
6th Found Finish				
7th Found Finish				
8th Found Finish (c. 1892)				
9th Found Finish				
10th Found Finish (c. 1929)				
11th Found Finish				
12th Found Finish				
13th Found Finish				
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-033 to HHE-036 continued

Sample #	**HHE-033**	**HHE-034**	**HHE-035**	**HHE-036**
Location	D101b Field	D101b Raised Panel	D101b Return Field	D101b Return Panel
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				
26th Found Finish				
27th Found Finish				
28th Found Finish				
29th Found Finish				
30th Found Finish				
31st Found Finish		F: White		F: White
32nd Found Finish		F: White		F: White
33rd Found Finish	P: White F: White	F: White	F: White	F: White
Munsell match		**5YR 2/1**		**5YR 2/1**
Commercial match		**BM 1239**		**BM 1239**
Comments	No historic finishes remain.	Amorphous residue of red brown, light yellow, and light green after varnish. Munsell and commercial match is for circa 1792 finish.	No historic finishes remain.	Amorphous residue of red brown, light yellow, and light green after varnish. Munsell and commercial match is for circa 1792 finish.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-037 to HHE-040

Sample #	**HHE-037**	**HHE-038**	**HHE-039**	**HHE-040**
Location	D101b Corner Molding	D101b Pilaster	D101b Surround Field	D101b Pediment
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)		V: Dark Brown*		
2nd Found Finish			F: Reddish brown	F: Reddish brown
3rd Found Finish	F: Yellowish Gray		P: Light Yellow F: Light Yellow	P: Light Yellow F: Light Yellow
4th Found Finish (c. 1815-1820)	P: Light Gray F: Light Gray		F: Light Green	F: Light Green
5th Found Finish				F: Moderate Orange Brown
6th Found Finish	P: White F: White		P: White F: White	P: White F: White
7th Found Finish	F: Yellowish white			
8th Found Finish (c. 1892)	F: White		F: White	F: White
9th Found Finish	F: Grayish White		F: Grayish white	F: Grayish white
10th Found Finish	F: White		P: White F: White	P: White F: White
11th Found Finish				
12th Found Finish				
13th Found Finish				
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-037 to HHE-040 continued

Sample #	**HHE-037**	**HHE-038**	**HHE-039**	**HHE-040**
Location	D101b Corner Molding	D101b Pilaster	D101b Surround Field	D101b Pediment
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish	F: Grayish White		F: Grayish white	F: Grayish white
21st Found Finish	F: Yellowish white			
22nd Found Finish	F: Grayish white			
23rd Found Finish	F: Yellowish white		F: White	F: White
24th Found Finish	F: Yellowish white		F: White	F: White
25th Found Finish	F: Yellowish white			
26th Found Finish	P: Yellowish white F: Yellowish white			
27th Found Finish	P: Yellowish white F: Yellowish white		P: Yellowish white F: Yellowish white	P: Yellowish white F: Yellowish white
28th Found Finish	F: White		F: White	F: White
29th Found Finish	F: Grayish white		F: Grayish white	F: Grayish white
30th Found Finish	F: Yellowish white		F: Yellowish white	F: Yellowish white
31st Found Finish	F: Yellowish white	F: White	F: Yellowish white	F: Yellowish white
32nd Found Finish	F: Yellowish white	F: White	F: Yellowish white	F: Yellowish white
33rd Found Finish	F: Yellowish white	F: White	F: Yellowish white	F: Yellowish white
Munsell match		**5YR 2/1**		
Commercial match		**BM 1239**		
Comments	No 1792 Finishes.	Residue of red brown, light yellow, and light green after varnish. Munsell and commercial match is for circa 1792 finish.	No 1792 Finishes.	No 1792 Finishes.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-041 to HHE-044

Sample #	**HHE-041**	**HHE-042**	**HHE-043**	**HHE-044**
Location	D101b Panel at Pediment	D101b Architrave	D101b Pediment Center	D101b Dentils
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)				V: Dark Reddish Brown
2nd Found Finish	F: Reddish brown	F: Reddish brown	P: White* P: Reddish brown* F: Reddish brown	P: White F: Reddish brown
3rd Found Finish	P: Light Yellow F: Light Yellow	P: Light Yellow F: Light Yellow	P: Light Yellow F: Light Yellow	P: Light Yellow F: Light Yellow
4th Found Finish (c. 1815-1820)	F: Light Green	F: Light Green	F: Light Green	F: Light Green
5th Found Finish	F: Moderate Orange Brown			F: Moderate Orange Brown
6th Found Finish	P: White F: White	P: White F: White		F: Pale Yellow
7th Found Finish	F: White	F: White		F: White
8th Found Finish (c. 1892)	F: Grayish white	F: Grayish white	F: Grayish white	F: White
9th Found Finish	P: White F: White	P: White F: White	F: White	F: White
10th Found Finish (c. 1929)	F: Grayish white	F: Grayish white	F: White	F: White
11th Found Finish	F: White	F: White	F: Pale Yellow	F: Pale Yellow
12th Found Finish	F: White	F: White	F: White	F: White
13th Found Finish				
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-041 to HHE-044 continued

Sample #	**HHE-041**	**HHE-042**	**HHE-043**	**HHE-044**
Location	D101b Panel at Pediment	D101b Architrave	D101b Pediment Center	D101b Dentils
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish			F: White	F: White
23rd Found Finish			F: White	F: White
24th Found Finish			F: White	F: White
25th Found Finish			F: White	F: White
26th Found Finish			F: White	F: White
27th Found Finish	P: Yellowish white F: Yellowish white	P: Yellowish white F: Yellowish white	F: White	F: White
28th Found Finish	F: White	F: White	F: White	F: White
29th Found Finish	F: Grayish white	F: Grayish white	F: White	F: White
30th Found Finish	F: Yellowish white	F: Yellowish white	F: White	
31st Found Finish	F: Yellowish white	F: Yellowish white	P: Gray Filler F: Yellowish White	
32nd Found Finish	F: Yellowish white	F: Yellowish white	F: White	
33rd Found Finish	F: Yellowish white	F: Yellowish white	F: White	
Munsell match				**5YR 2/1**
Commercial match				**BM 1239**
Comments	No 1792 Finishes.	No 1792 Finishes.	First layers appear only as isolated residue in cross section. No 1792 Finishes.	Composite of mounted and un-mounted samples. Varnish is visible only in isolated areas. Munsell and commercial match is for circa 1792 finish.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-045 to HHE-048

Sample #	**HHE-045**	**HHE-046**	**HHE-047**	**HHE-048**
Location	D101b Molding @ Dentils	D101b Pediment Molding	D101b Pediment Cornice	Oval Window in Basement
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)				
2nd Found Finish	P: White F: Reddish brown	P: White F: Reddish brown	P: White F: Reddish brown	
3rd Found Finish	P: Light Yellow F: Light Yellow	P: Light Yellow F: Light Yellow	P: Light Yellow F: Light Yellow	
4th Found Finish (c. 1815-1820)	F: Light Green	F: Light Green	F: Light Green	
5th Found Finish	F: Moderate Orange Brown	F: Moderate Orange Brown	F: Moderate Orange Brown	
6th Found Finish	F: Pale Yellow	F: Pale Yellow	P: White F: White	
7th Found Finish	F: White	F: White	F: White	
8th Found Finish (c. 1892)	F: White	F: White	F: Grayish white	P: Grayish white F: Grayish white
9th Found Finish	F: White	F: White	P: White F: White	F: Yellowish white
10th Found Finish (c. 1929)	F: White	F: White	F: Grayish white	F: Yellowish white
11th Found Finish	F: Pale Yellow	F: Pale Yellow	F: White	F: Yellowish White
12th Found Finish	F: White	F: White	F: White	F: Yellowish white
13th Found Finish				F: White
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-045 to HHE-048 continued

Sample #	**HHE-045**	**HHE-046**	**HHE-047**	**HHE-048**
Location	D101b Molding @ Dentils	D101b Pediment Molding	D101b Pediment Cornice	Oval Window in Basement
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				
26th Found Finish	F: White	F: White		
27th Found Finish	F: White	F: White		
28th Found Finish	F: White	F: White		
29th Found Finish	F: White	F: White		
30th Found Finish	F: White	F: White		F: Yellowish white
31st Found Finish	F: White	F: White		F: White
32nd Found Finish	F: White	F: White		F: White
33rd Found Finish	F: White	F: White		F: White
Munsell match				
Commercial match				
Comments	No 1792 Finishes.	No 1792 Finishes.	No 1792 Finishes.	Later Addition.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-049 to HHE-050

Sample #	**HHE-049**	**HHE-048a**	**HHE-049a**	**HHE-050**
Location	Oval window in Basement	W301 Sash	W301 Frame	W306 Sash
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)				
2nd Found Finish			P: Dark Reddish Brown F: Dark Reddish Brown	
3rd Found Finish			P: Yellow F: Yellow	
4th Found Finish (c. 1815-1820)			F: Light Yellow	
5th Found Finish			F: Yellow Orange	
6th Found Finish				
7th Found Finish				
8th Found Finish (c. 1892)	P: Grayish white F: Grayish white		F: Grayish white	
9th Found Finish	F: Yellowish white		F: Grayish white	
10th Found Finish (c. 1929)	F: Yellowish white			
11th Found Finish	F: Yellowish White			
12th Found Finish	F: Yellowish white			
13th Found Finish	F: White			
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-049 to HHE-050 continued

Sample #	**HHE-049**	**HHE-048a**	**HHE-049a**	**HHE-050**
Location	Oval window in Basement	W301 Sash	W301 Frame	W306 Sash
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				
26th Found Finish				
27th Found Finish				
28th Found Finish			F: White	
29th Found Finish			F: White	
30th Found Finish	F: Yellowish white		F: Yellowish White	
31st Found Finish	F: White		F: Yellowish white	
32nd Found Finish	F: White		F: White	F: Grayish white
33rd Found Finish	F: White	P: White P: White F: White	F: White	F: White
Munsell match				
Commercial match				
Comments	Later Addition.	Later Addition.	No 1792 Finishes.	Substrate surface is weathered and soiled

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-051 to HHE-054

Sample #	**HHE-051**	**HHE-052**	**HHE-053**	**HHE-054**
Location	W306 Frame	Dormer Pilaster	Dormer Pediment	Cornice Upper Molding
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)				
2nd Found Finish	P: Dark Reddish Brown F: Dark Reddish Brown	P: Dark Reddish Brown F: Dark Reddish Brown	P: Dark Reddish Brown F: Dark Reddish Brown	P: Dark Reddish Brown F: Dark Reddish Brown
3rd Found Finish	P: Yellow F: Yellow	P: Yellow F: Yellow	P: Yellow F: Yellow	P: Yellow F: Yellow
4th Found Finish (c. 1815-1820)	F: Light Yellow	F: Light Yellow	F: Light Yellow	F: Light Yellow
5th Found Finish	F: Yellow Orange	F: Yellow Orange	F: Yellow Orange	F: Yellow Orange
6th Found Finish				
7th Found Finish				
8th Found Finish (c. 1892)	F: Grayish white	F: Grayish white	F: Grayish white	F: Grayish white
9th Found Finish	F: Grayish white	F: Grayish white	F: Grayish white	F: Grayish white
10th Found Finish (c. 1929)				
11th Found Finish				
12th Found Finish				
13th Found Finish				
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-051 to HHE-054 continued

Sample #	**HHE-051**	**HHE-052**	**HHE-053**	**HHE-054**
Location	W306 Frame	Dormer Pilaster	Dormer Pediment	Cornice Upper Molding
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				
26th Found Finish				
27th Found Finish				
28th Found Finish	F: White	F: White	F: White	F: White
29th Found Finish	F: White	F: White	F: White	F: White
30th Found Finish	F: Yellowish White	F: Yellowish White	F: Yellowish White	F: Yellowish White
31st Found Finish	F: Yellowish white	F: Yellowish white	F: Yellowish white	F: Yellowish white
32nd Found Finish	F: White	F: White	F: White	F: White
33rd Found Finish	F: White	F: White	F: White	F: White
Munsell match				
Commercial match				
Comments	No 1792 Finishes.	No 1792 Finishes.	No 1792 Finishes.	No 1792 Finishes.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-055 to HHE-058

Sample #	**HHE-055**	**HHE-056**	**HHE-057**	**HHE-058**
Location	Cornice Dentil Molding	Wing Cornice Return	Wing Cornice Molding	Window Lower Molding
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)	V: Dark Reddish Brown			
2nd Found Finish	P: White P: Dark Reddish Brown F: Dark Reddish Brown			
3rd Found Finish	P: Yellow F: Yellow			
4th Found Finish (c. 1815-1820)	F: Light Yellow			
5th Found Finish	F: Yellow Orange			
6th Found Finish				
7th Found Finish				
8th Found Finish (c. 1892)	F: Grayish white			
9th Found Finish	P: Grayish white F: Grayish white			
10th Found Finish (c. 1929)				
11th Found Finish				
12th Found Finish				
13th Found Finish				
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-055 to HHE-058 continued

Sample #	**HHE-055**	**HHE-056**	**HHE-057**	**HHE-058**
Location	Cornice Dentil Molding	Wing Cornice Return	Wing Cornice Molding	Window Lower Molding
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				
26th Found Finish				
27th Found Finish				F: Yellowish white
28th Found Finish	F: White	F: Yellowish white		F: White
29th Found Finish	F: White	F: Yellowish white		F: White
30th Found Finish	F: Yellowish White	F: Yellowish white		F: White
31st Found Finish	F: Yellowish white	F: White		F: White
32nd Found Finish	F: White	F: Yellowish white	F: White	F: White
33rd Found Finish	F: White	F: White	F: White	F: White
Munsell match	**2.5YR 3/4**			
Commercial match	**2095-20**			
Comments	Munsell and commercial match is for circa 1792 finish.	Substrate is weathered. Later Addition.	Later Addition.	Later Addition.

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-059 to HHE-062

Sample #	**HHE-059**	**HHE-060**	**HHE-061**	**HHE-062**
Location	Wing Upper Molding	Rear Cornice Bracket	Rear Cornice Dentil	W220 Sash
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1792)				
2nd Found Finish		P: Dark Reddish Brown F: Dark Reddish Brown	P: Dark Reddish Brown F: Dark Reddish Brown	
3rd Found Finish		P: Yellow F: Yellow	P: Yellow F: Yellow	
4th Found Finish (c. 1815-1820)		F: Light Yellow	F: Light Yellow	
5th Found Finish		F: Yellow Orange	F: Yellow Orange	
6th Found Finish				
7th Found Finish				
8th Found Finish (c. 1892)		F: Grayish white	F: Grayish white	F: Grayish white
9th Found Finish		P: Grayish white F: Grayish white	P: Grayish white F: Grayish white	F: Grayish white
10th Found Finish (c. 1929)				F: Grayish white
11th Found Finish				P: White F: White
12th Found Finish				
13th Found Finish				
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-059 to HHE-062 continued

Sample #	**HHE-059**	**HHE-060**	**HHE-061**	**HHE-062**
Location	Wing Upper Molding	Rear Cornice Bracket	Rear Cornice Dentil	W220 Sash
Substrate	Wood	Wood	Wood	Wood
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				F: Yellowish white
26th Found Finish				F: Yellowish white*
27th Found Finish	F: Yellowish white			F: Yellowish White
28th Found Finish	F: White	F: White	F: White	F: Yellowish white*
29th Found Finish	F: White	F: White	F: White	F: Yellowish white
30th Found Finish	F: White	F: Yellowish White	F: Yellowish White	F: Yellowish white
31st Found Finish	F: White	F: Yellowish white	F: Yellowish white	F: White
32nd Found Finish	F: White	F: White	F: White	P: White F: White
33rd Found Finish	F: White	F: White	F: White	F: White
Munsell match				
Commercial match				
Comments	Later Addition.	No 1792 Finishes.	No 1792 Finishes.	*Heavy layer of wood particles

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-063 to HHE-065

Sample #	**HHE-063**	**HHE-064**	**HHE-065**	
Location	W220 Frame	W304 Sash	W304 Frame	
Substrate	Wood	Wood	Wood	
Earliest Retained Finish (c. 1792)				
2nd Found Finish	F: Light Yellow		F: Light Yellowish Brown	
3rd Found Finish	P: White F: Light yellow		F: Light Yellowish Brown	
4th Found Finish (c. 1815-1820)	F: Light green	F: Light Green	F: Light Yellowish Brown	
5th Found Finish	F: Light green	F: Light Green	F: Light Yellowish Brown	
6th Found Finish	F: Gray	F: Gray	F: Light Yellowish Brown	
7th Found Finish	F: Moderate orange brown		F: Light Yellowish Brown	
8th Found Finish (c. 1892)	P: White F: White	F: White	F: Grayish white	
9th Found Finish	F: Grayish white	P: White F: White		
10th Found Finish (c. 1929)	F: Yellowish white	F: Yellowish white		
11th Found Finish	F: White	B: White V: Colorless/gray	B: White V: Gray	
12th Found Finish	F: White	B: White V: Colorless/gray		
13th Found Finish				
14th Found Finish				
15th Found Finish				
16th Found Finish				
17th Found Finish				

EXTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES
Samples HHE-063 to HHE-065 continued

Sample #	**HHE-063**	**HHE-064**	**HHE-065**	
Location	W220 Frame	W304 Sash	W304 Frame	
Substrate	Wood	Wood	Wood	
18th Found Finish (Modern paints c. 1950)				
19th Found Finish				
20th Found Finish				
21st Found Finish				
22nd Found Finish				
23rd Found Finish				
24th Found Finish				
25th Found Finish				
26th Found Finish			F: Light Yellowish Brown	
27th Found Finish			F: Light Yellowish Brown	
28th Found Finish			F: Gray	
29th Found Finish			F: White	
30th Found Finish	F: White	F: White	F: White	
31st Found Finish	F: Yellowish white	F: Light Yellow	F: Light yellow	
32nd Found Finish	F: White	F: White	F: Light yellow	
33rd Found Finish	P: Gray filler P: White P: Gray filler F: White	F: White	F: Grayish white	
Munsell match				
Commercial match				
Comments	No 1792 Finishes.	No 1792 Finishes.	No 1792 Finishes.	

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-001**	**HHI-002**	**HHI-003**	**HHI-004**
Location	Door D102	D102 Frame	D101a Raised Panel	D101a Field
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: blackish brown T: moderate reddish brown	B: blackish brown T: moderate reddish brown		
2nd Found Finish (c 1786)	P: yellowish white B: dark gray yellow brown T: light olive brown	P: yellowish white B: dark gray yellow brown T: light olive brown		
3rd Found Finish (c. 1792)	B: dark yellowish brown T: dark orange yellow	B: dark yellowish brown T: dark orange yellow	P: yellowish white B: dark yellowish brown T: dark orange yellow	
4th Found Finish (c. 1810s)	P: yellowish white F: mod yellowish green	P: yellowish white F: mod yellowish green	P: yellowish white F: mod yellowish green	
5th Found Finish (c. 1820s)	F: dark yellowish green	F: dark yellowish green	F: dark yellowish green	
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	
7th Found Finish (c. 1840s)	F: yellowish white	F: yellowish white	F: yellowish white	
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white	F: yellowish white	
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	
13th Found Finish (c. 1950)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
15th Found Finish (c. 1988)	F: white	F: white	F: white	F: white
16th Found Finish (c. 1995)	F: white	F: white	F: white	F: white
Munsell match Earliest Finish	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 2/1 T: 10R 4/6**	**P: 2.5Y 9/2 B: 10YR 3/2 T: 2.5Y 5/4**	**No Historic Finishes**
Commercial match Earliest Finish	**B: BM 2114-10 T: BM HC-50**	**B: BM 2114-10 T: BM HC-50**	**P: BM Cameo White B: BM 1239 T: BM HC-20**	**No Historic Finishes**
Comments	This element has been stripped. Finishes 1-4 found as traces.	Earliest finishes appear to be wood graining.	This element has been stripped. Finishes 2-4 found as traces.	Surface of wood is rough indicating it has been stripped.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-005**	**HHI-006**	**HHI-007**	**HHI-008**
Location	D101a Frame	D101c	D101c Frame	D101b
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)		B: blackish brown T: moderate reddish brown	B: blackish brown T: moderate reddish brown	B: blackish brown T: moderate reddish brown
2nd Found Finish (c 1786)	R: yellowish white	P: yellowish white	P: yellowish white B: dark gray yellow brown T: light olive brown	P: yellowish white B: dark gray yellow brown T: light olive brown
3rd Found Finish (c. 1792)	T: dark yellowish brown T: dark orange yellow	B: dark yellowish brown T: dark orange yellow	B: dark yellowish brown T: dark orange yellow	B: dark yellowish brown T: dark orange yellow
4th Found Finish (c. 1810s)			P: yellowish white F: mod yellowish green	
5th Found Finish (c. 1820s)	F: dark yellowish green	F: dark yellowish green	F: dark yellowish green	
6th Found Finish (c 1830s)			P: yellowish white F: yellowish white	
7th Found Finish (c. 1840s)			F: yellowish white	
8th Found Finish (c. 1850s)			F: yellowish white	
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
15th Found Finish (c. 1988)	F: white	F: white	F: white	F: white
16th Found Finish (c. 1995)	F: white	F: white	F: white	F: white
Munsell match Earliest Finish	**B: 10YR 3/4 T: 10YR 6/6**	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 2/1 T: 10R 4/6**
Commercial match Earliest Finish	**B: BM E-66 T: BM 217**	**B: BM 2114-10 T: BM HC-50**	**B: BM 2114-10 T: BM HC-50**	**B: BM 2114-10 T: BM HC-50**
Comments	This element has been stripped. Finishes 2 through 4 found as traces.	This element has been stripped. Finishes 1-4 found as traces.	Earliest finishes appears to be wood grained.	This element has been stripped. Finishes 1-3 found as traces.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-009**	**HHI-010**	**HHI-011**	**HHI-012**
Location	D101b Frame	Wainscot Upper Molding	W. Raised Decoration	W. Field b/h Decoration
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: blackish brown T: moderate reddish brown	B: blackish brown T: moderate reddish brown	B: blackish brown T: moderate reddish brown	B: blackish brown T: moderate reddish brown
2nd Found Finish (c 1786)	P: yellowish white B: dark gray yellow brown T: light olive brown	P: yellowish white B: dark gray yellow brown T: light olive brown	P: yellowish white B: dark gray yellow brown T: light olive brown	P: yellowish white B: dark gray yellow brown T: light olive brown
3rd Found Finish (c. 1792)	B: dark yellowish brown T: dark orange yellow	B: dark yellowish brown T: dark orange yellow	B: dark yellowish brown T: dark orange yellow	B: dark yellowish brown T: dark orange yellow
4th Found Finish (c. 1810s)	P: yellowish white F: mod yellowish green	P: yellowish white F: mod yellowish green	P: yellowish white F: mod yellowish green	P: yellowish white F: mod yellowish green
5th Found Finish (c. 1820s)	F: dark yellowish green	F: dark yellowish green	F: dark yellowish green	F: dark yellowish green
6th Found Finish (c 1830s)		P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)		F: yellowish white	F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)		F: yellowish white	F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)		F: yellowish white	F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)		F: yellowish white	F: yellowish white	F: yellowish white
11th Found Finish		F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	P: light gray F: white	P: light gray F: white	P: light gray F: white	P: light gray F: white
14th Found Finish (c. 1960s)	P:light gray F: white	P:light gray F: white	P:light gray F: white	P:light gray F: white
15th Found Finish (c. 1988)	F: white	F: white	F: white	F: white
16th Found Finish (c. 1995)	F: white	F: white	F: white	F: white
Munsell match Earliest Finish	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 2/1 T: 10R 4/6**
Commercial match Earliest Finish	**B: BM 2114-10 T: BM HC-50**	**B: BM 2114-10 T: BM HC-50**	**B: BM 2114-10 T: BM HC-50**	**B: BM 2114-10 T: BM HC-50**
Comments	This element has been stripped. Finishes 1-4 found as traces.	This element has been stripped. Finishes 1-5 found as traces.	This element has been stripped. Finishes 1-5 found as traces.	This element has been stripped. Finishes 1-5 found as traces.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-013**	**HHI-014**	**HHI-015**	**HHI-016**
Location	W. Raised Molding Lower	W. Horizontal Panels	W. Bench Sill W103	W. Bench W103
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: blackish brown T: moderate reddish brown		B: blackish brown	B: blackish brown
2nd Found Finish (c 1786)	F:dark gray			
3rd Found Finish (c. 1792)	P: yellowish white F: dark yellowish brown			
4th Found Finish (c. 1810s)	F: mod yellowish green		F: mod yellowish green	F: mod yellowish green
5th Found Finish (c. 1820s)	F: dark yellowish green		F: dark yellowish green	F: dark yellowish green
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white		P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	F: yellowish white		F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white		F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white		F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white		F: yellowish white	F: yellowish white
11th Found Finish	F: yellowish white		F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	F: white	F: white	F: white	F: white
14th Found Finish (c. 1960s)	P:light gray F: white	F: white	P:light gray F: white	P:light gray F: white
15th Found Finish (c. 1988)	F: white	F: white	F: white	F: white
16th Found Finish (c. 1995)	F: white	F: white	F: white	F: white
Munsell match Earliest Finish	**B: 10YR 2/1 T: 10R 4/6**	**No Historic Finishes**	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 2/1 T: 10R 4/6**
Commercial match Earliest Finish	**B: BM 2114-10 T: BM HC-50**	**No Historic Finishes**	**B: BM 2114-10 T: BM HC-50**	**B: BM 2114-10 T: BM HC-50**
Comments	Earliest finish appears to be wood grained.	This element has been stripped.	This element has been stripped. Finishes 1, 4 &-5 found as traces.	This element has been stripped. Finishes 1, 4 &-5 found as traces.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-017**	**HHI-018**	**HHI-019**	**HHI-020**
Location	Wainscot adj. D101a	Wall adj. W104	Wall adj. W116	Baseboard, N. Wall
Substrate	Wood	Plaster	Plaster	Wood
Earliest Retained Finish (c. 1769)	B: blackish brown			F: moderate reddish brown
2nd Found Finish (c 1786)				F:dark gray F: black F: dark reddish brown
3rd Found Finish (c. 1792)				F: dark orange yellow
4th Found Finish (c. 1810s)	F: mod yellowish green			F: mod yellowish green
5th Found Finish (c. 1820s)				F: dark yellowish green
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white			P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	F: yellowish white			F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white			F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white			F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white			F: yellowish white
11th Found Finish	F: yellowish white			F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow			F: pale orange yellow
13th Found Finish (c. 1950)	F: white		P: yellowish gray F: yellowish gray	F: white
14th Found Finish (c. 1960s)	P:light gray F: white		F: pale orange yellow	F: white
15th Found Finish (c. 1988)	F: white		P: light gray F: white	
16th Found Finish (c. 1995)	F: white	P: white F: light brown (sanded)	R: skim coat P: white F: light brown (sanded)	F: white
Munsell match Earliest Finish	**B: 10YR 2/1 T: 10R 4/6**	**No Historic Finishes**	**F: 5Y 8/2**	**F: 10R 4/6**
Commercial match Earliest Finish	**B: BM 2114-10 T: BM HC-50**	**No Historic Finishes**	**F: BM HC096**	**F: BM HC-50**
Comments	This element has been stripped. Finishes 1 &4 found as traces.	Modern Repair	Munsell & Commercial are for earliest retained.	Blackish brown of Finish 1 not seen on this sample

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-021**	**HHI-022**	**HHI-022a**	**HHI-023**
Location	Baseboard, Qurter Round	W103 Return	W103 Inner Trim	W103 Sash
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)		F: moderate reddish brown		
2nd Found Finish (c 1786)		P: yellowish white F: dark yellowish brown		
3rd Found Finish (c. 1792)		F: dark yellowish brown		
4th Found Finish (c. 1810s)		F: mod yellowish green		
5th Found Finish (c. 1820s)				
6th Found Finish (c 1830s)		P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	
7th Found Finish (c. 1840s)		F: yellowish white	F: yellowish white	
8th Found Finish (c. 1850s)		F: yellowish white	F: yellowish white	
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	
13th Found Finish (c. 1950)	F: white	F: white	F: white	
14th Found Finish (c. 1960s)	P:light gray F: white	P:light gray F: white	P:light gray F: white	
15th Found Finish (c. 1988)	F: white	F: white	F: white	
16th Found Finish (c. 1995)	F: white	F: white	F: white	P: white F: white
Munsell match Earliest Finish	**No Historic Finishes**	**F: 10R 4/6**	**F: 5Y 9/2**	**No Historic Finishes**
Commercial match Earliest Finish	**No Historic Finishes**	**F: BM HC-50**	**F: BM OC-102**	**No Historic Finishes**
Comments	Later Addition		Later Addition	Modern Replacement

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-024**	**HHI-025**	**HHI-025a**	**HHI-025b**
Location	Ceiling, under the Stairs	Ceiling, Flat	Ceiling Trim Molding	Ceiling Trim, Dentil
Substrate	Plaster	Plaster	Wood	Wood
Earliest Retained Finish (c. 1769)			F: moderate reddish brown	F: moderate reddish brown
2nd Found Finish (c 1786)			P: yellowish white F: light olive brown	P: yellowish white F: light olive brown
3rd Found Finish (c. 1792)			F: dark yellow brown	F: dark yellow brown
4th Found Finish (c. 1810s)				
5th Found Finish (c. 1820s)			F: dark yellowish green	F: dark yellowish green
6th Found Finish (c 1830s)			P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)			F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)			F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)			F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)			F: yellowish white	F: yellowish white
11th Found Finish			F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	P: oil size P: white F: pale orange yellow	P: oil size P: white F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	F: pale orange yellow	F: pale orange yellow	F: white	F: white
14th Found Finish (c. 1960s)	F: white	P: light gray F: white	F: white	F: white
15th Found Finish (c. 1988)		F: white		
16th Found Finish (c. 1995)	R: skim coat P: white F: light brown (sanded)	P: white F: white	F: white	F: white
Munsell match Earliest Finish	**F: 10YR 9/2**	**F: 10YR 9/2**	**F: 10R 4/6**	**F: 10R 4/6**
Commercial match Earliest Finish	**F: BM OC-74**	**F: BM OC-74**	**F: BM HC-50**	**F: BM HC-50**
Comments	Munsell & Commercial are for earliest retained.	Munsell & Commercial are for earliest retained.	Blackish brown of Finish 1 not seen on this sample	Blackish brown of Finish 1 not seen on this sample

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-026**	**HHI-027**	**HHI-028**	**HHI-029**
Location	Raised Decoration	Field b/h Decoration	Molding blw Decoration	Panel at Stair Enclosure
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	F: moderate reddish brown	F: moderate reddish brown	F: moderate reddish brown	F: moderate reddish brown
2nd Found Finish (c 1786)	F: dark gray	F: dark gray	F: dark gray	F: dark gray
3rd Found Finish (c. 1792)	P: yellowish white F: light olive brown	P: yellowish white F: light olive brown	P: yellowish white F: light olive brown	P: yellowish white F: light olive brown
4th Found Finish (c. 1810s)	F: mod yellowish green	F: mod yellowish green	F: mod yellowish green	F: mod yellowish green
5th Found Finish (c. 1820s)	F: dark yellowish green	F: dark yellowish green	F: dark yellowish green	F: dark yellowish green
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	F: white	F: white	F: white	F: white
14th Found Finish (c. 1960s)	P: light gray F: white	P: light gray F: white	P: light gray F: white	P: light gray F: white
15th Found Finish (c. 1988)	F: white	F: white	F: white	F: white
16th Found Finish (c. 1995)	F: white	F: white	F: white	F: white
Munsell match Earliest Finish	**F: 10R 4/6**	**F: 10R 4/6**	**F: 10R 4/6**	**F: 10R 4/6**
Commercial match Earliest Finish	**F: BM HC-50**	**F: BM HC-50**	**F: BM HC-50**	**F: BM HC-50**
Comments	Blackish brown of Finish 1 not seen on this sample	Blackish brown of Finish 1 not seen on this sample	Blackish brown of Finish 1 not seen on this sample	This element has been stripped, but traces of finishes 1-5 are visible.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-030**	**HHI-031**	**HHI-032**	**HHI-033**
Location	Stair Tread, Nose	Stair Pendant Post	Square Baluster	Carved Baluster
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	F: moderate reddish brown	F: moderate reddish brown		
2nd Found Finish (c 1786)	F: dark gray	F: dark gray		
3rd Found Finish (c. 1792)	P: yellowish white F: light olive brown	P: yellowish white F: light olive brown	F: dark reddish brown	F: dark reddish brown
4th Found Finish (c. 1810s)	F: mod yellowish green	F: mod yellowish green	F: mod yellowish green	F: mod yellowish green
5th Found Finish (c. 1820s)	F: dark yellowish green	F: dark yellowish green	F: dark yellowish green	F: dark yellowish green
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	F: white	F: white	F: white	F: white
14th Found Finish (c. 1960s)	P: light gray F: white	P: light gray F: white	P: light gray F: white	P: light gray F: white
15th Found Finish (c. 1988)	F: white	F: white	F: white	F: white
16th Found Finish (c. 1995)	F: white	F: white	F: white	F: white
Munsell match Earliest Finish	**F: 10R 4/6**	**F: 10R 4/6**	**F: 2.5YR 3/4**	**F: 2.5YR 3/4**
Commercial match Earliest Finish	**F: BM HC-50**	**F: BM HC-50**	**F: M 2104-10**	**F: M 2104-70**
Comments	Blackish brown of Finish 1 not seen on this sample	Blackish brown of Finish 1 not seen on this sample	Finishes 1 and 2 not visible on this element. May be an early alteration.	Finishes 1 and 2 not visible on this element. May be an early alteration.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-034**	**HHI-035**	**HHI-036**	**HHI-037**
Location	Newel Post, Body	Newel Post, Knob	Hand Rail, Lower	Hand Rail, Upper
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	F: moderate reddish brown		F: moderate reddish brown	F: moderate reddish brown
2nd Found Finish (c 1786)	F: dark gray		F: dark gray	F: dark gray
3rd Found Finish (c. 1792)	P: yellowish white F: yellowish brown F: dark brown		P: yellowish white F: yellowish brown F: dark brown	P: yellowish white F: yellowish brown F: dark brown
4th Found Finish (c. 1810s)	F: mod yellowish green		F: mod yellowish green	F: mod yellowish green
5th Found Finish (c. 1820s)	F: dark yellowish green		F: dark yellowish green	F: dark yellowish green
6th Found Finish (c 1830s)	P: yellowish white F: dark brownish red	P: yellowish white F: yellowish white	P: yellowish white F: dark brownish red	P: yellowish white F: dark brownish red
7th Found Finish (c. 1840s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	F: white	F: white	F: white	F: white
14th Found Finish (c. 1960s)	P: light gray F: white	P: light gray F: white	P: light gray F: white	P: light gray F: white
15th Found Finish (c. 1988)	F: white	F: white	F: white	F: white
16th Found Finish (c. 1995)	F: white	F: white	F: white	P: white F: dark brown
Munsell match Earliest Finish	**F: 10R 4/6**	**F: 5Y 9/2**	**F: 10R 4/6**	**F: 10R 4/6**
Commercial match Earliest Finish	**F: BM HC-50**	**F: BM OC-102**	**F: BM HC-50**	**F: BM HC-50**
Comments		Wood is different from other wood found in this room and no traces of earlier finishes, suggest this is a later addition		

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-038**	**HHI-039**	**HHI-040**	**HHI-041**
Location	West Wall, Upper	West Wall, Middle	West Wall, Upper Band	West Wall, Lower
Substrate	Plaster	Plaster	Wood	Plaster
Earliest Retained Finish (c. 1769)				
2nd Found Finish (c 1786)			R: dk gray yellow brown	
3rd Found Finish (c. 1792)		P: size B: yellowish white G: pale brown		P: size B: yellowish white G: pale brown
4th Found Finish (c. 1810s)		P: white F: mod yellowish green G: light olive brown	F: mod yellowish green	P: white F: mod yellowish green G: light olive brown
5th Found Finish (c. 1820s)		P: yellowish white F: yellowish white	F: dark yellowish green	P: yellowish white F: yellowish white
6th Found Finish (c 1830s)				
7th Found Finish (c. 1840s)		F: yellowish white	B: yellowish white G: thin glaze	F: yellowish white
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)		F: light gray		F: light gray
10th Found Finish (c. 1900s)				
11th Found Finish				
12th Found Finish (c. 1929)	P: oil size P: pale orange yellow F: pale orange yellow	P: yellowish white F: yellowish white		P: yellowish white F: yellowish white
13th Found Finish (c. 1950)	P: pale orange yellow F: yellowish gray	F: white	F: white	F: white
14th Found Finish (c. 1960s)	P: light gray F: light gray	P: light gray F: light gray	P: light gray F: light gray	P: light gray F: light gray
15th Found Finish (c. 1988)	P: light grayish brown F: light grayish brown	R: skim coat P: white P: light grayish brown F: light grayish brown	P: white F: white	R: skim coat P: white P: light grayish brown F: light grayish brown
16th Found Finish (c. 1995)	R: skim coat P: white F: light brown (sanded)	P: white F: light brown (sanded)	P: white F: light brown (sanded)	P: white F: light brown (sanded)
Munsell match Earliest Finish	**F: 10YR 9/2**	**B: 2.5Y 9/2 G: btw 10YR 8/4-2.5Y 8/4**	**F: 10YR 3/2**	**B: 2.5Y 9/2 G: btw 10YR 8/4-2.5Y 8/4**
Commercial match Earliest Finish	**F: BM OC-74**	**B: BM OC-07 G: BM 2153-50**	**F: BM 1239**	**B: BM OC-07 G: BM 2153-50**
Comments	Munsell & Commercial are for earliest retained.	Munsell & Commercial are for earliest retained.	Element has been stripped.	Munsell & Commercial are for earliest retained.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-042**	**HHI-043**	**HHI-044**	**HHI-045**
Location	Stair Trim, Window Level	Stair Trim, Baseboard	Stair, Inside Stringer	South Stair Rail, Lower
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)				F: moderate reddish brown
2nd Found Finish (c 1786)				F: dark gray
3rd Found Finish (c. 1792)	P: yellowish white F: pinkish gray	P: yellowish white F: pinkish gray		P: yellowish white F: yellowish brown F: dark brown
4th Found Finish (c. 1810s)		F: mod yellowish green		F: mod yellowish green
5th Found Finish (c. 1820s)	F: dark yellowish green	F: dark yellowish green	F: dark yellowish green	F: dark yellowish green
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: dark brownish red
7th Found Finish (c. 1840s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	F: white	F: white	F: white	F: white
14th Found Finish (c. 1960s)	F: white	F: white	F: white	P: light gray F: white
15th Found Finish (c. 1988)				F: white
16th Found Finish (c. 1995)	P: white F: white	P: white F: white	P: white F: white	F: white
Munsell match Earliest Finish	**F: 5YR 5/2**	**F: 5YR 5/2**	**F: 2.5H 2/4**	**F: 10R 4/6**
Commercial match Earliest Finish	**F: BM HC-87**	**F: BM HC-87**	**F: BM RM Chrome Green**	**F: BM HC-50**
Comments	Munsell & Commercial are for earliest retained.	Munsell & Commercial are for earliest retained.	Munsell & Commercial are for earliest retained.	

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-046**	**HHI-047**	**HHI-048**	**HHI-049**
Location	South Rail, Upper	Stair Riser	Ceiling, under stairs 2nd Fl	Ceiling Trim, 2nd Floor
Substrate	Wood	Wood	Plaster	Wood
Earliest Retained Finish (c. 1769)	F: moderate reddish brown			
2nd Found Finish (c 1786)	F: dark gray			
3rd Found Finish (c. 1792)	P: yellowish white F: yellowish brown F: dark brown			P: yellowish white F: pinkish gray
4th Found Finish (c. 1810s)	F: mod yellowish green	F: mod yellowish green		F: mod yellowish green
5th Found Finish (c. 1820s)	F: dark yellowish green	F: dark yellowish green		F: dark yellowish green
6th Found Finish (c 1830s)	P: yellowish white F: dark brownish red	P: yellowish white F: dark brownish red		P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)		F: yellowish white		F: yellowish white
8th Found Finish (c. 1850s)		F: yellowish white		F: yellowish white
9th Found Finish (c. 1892)		F: yellowish white		F: yellowish white
10th Found Finish (c. 1900s)		F: yellowish white		F: yellowish white
11th Found Finish		F: yellowish white		F: yellowish white
12th Found Finish (c. 1929)		F: pale orange yellow	P: yellow size B: pale orange yellow G: pale yellow	F: pale orange yellow
13th Found Finish (c. 1950)		F: white	F: white	F: white
14th Found Finish (c. 1960s)		P: light gray F: white	P: light gray F: white	F: white
15th Found Finish (c. 1988)		F: white		
16th Found Finish (c. 1995)	F: dark brown	F: white	P: white F: light brown (sanded)	P: white F: white
Munsell match Earliest Finish	**F: 10R 4/6**	**F: 2.5G 4/4-5/4**	**B: 10YR 9/2 G: Too thin to determine**	**F: 5YR 5/2**
Commercial match Earliest Finish	**F: BM HC-50**	**F: BM 131**	**B: BM OC-74 G: Too thin to determine**	**F: BM HC-87**
Comments		This element appears to be a replacement.		Munsell & Commercial are for earliest retained.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-050**	**HHI-051**		
Location	Center Hall, Upper Wall	Center Hall, Lower Wall		
Substrate	Plaster	Plaster		
Earliest Retained Finish (c. 1769)				
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)				
4th Found Finish (c. 1810s)				
5th Found Finish (c. 1820s)				
6th Found Finish (c 1830s)				
7th Found Finish (c. 1840s)				
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)				
10th Found Finish (c. 1900s)				
11th Found Finish				
12th Found Finish (c. 1929)	P: yellow size F: pale orange yellow	P: yellow size F: pale orange yellow		
13th Found Finish (c. 1950)	F: grayish yellow	F: grayish yellow		
14th Found Finish (c. 1960s)	P: light gray F: yellowish gray	P: light gray F: yellowish gray		
15th Found Finish (c. 1988)				
16th Found Finish (c. 1995)	P: light gray F: light brown	P: light gray F: light brown		
Munsell match Earliest Finish	**F: 10YR 9/2**	**F: 10YR 9/2**		
Commercial match Earliest Finish	**F: BM OC-74**	**F: BM OC-74**		
Comments	Munsell is for earliest retained finish.	Munsell is for earliest retained finish.		

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-052**	**HHI-053**	**HHI-053a**	**HHI-054**
Location	Door D103 Frame	Door D104 Frame	Door D104	Door D103 Field
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	F: moderate reddish brown			
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)	F: strong brown	B: yellowish brown G: dark brown		
4th Found Finish (c. 1810s)	F: grayish yellowish green			
5th Found Finish (c. 1820s)	F: dark yellowish green			
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	F: yellowish white	P: grayish yellow F: yellowish white	P: grayish yellow F: yellowish white	P: grayish yellow F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
11th Found Finish	F: yellowish white			
12th Found Finish (c. 1929)	F: pale orange yellow	P: yellowish white F: white	P: yellowish white F: white	P: yellowish white F: white
13th Found Finish (c. 1950)	P: white F: white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
14th Found Finish (c. 1960s)	P: white F: white	P: light gray F: white	P: light gray F: white	P: light gray F: white
15th Found Finish (c. 1988)	F: white			
16th Found Finish (c. 1995)				
Munsell match Earliest Finish	**B: 10R 4/6 T: 7.5YR 3/6**	**B: 2.5Y 5/6 T: 10YR 3/2**	**F: 5Y 9/2**	**F: 5Y 9/2**
Commercial match Earliest Finish	**B: BM HC-50 T: BM 2161-10**	**B: BM 2153-20 T: BM 1239**	**F: BM OC-102**	**F: BM OC-102**
Comments	Element has been stripped, earliest finishes seen only as traces.	This element has been stripped.	This element has either been stripped or is a replacement.	Possible replacement. No traces of early finishes

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-055**	**HHI-056**	**HHI-057**	**HHI-058**
Location	D103 Recessed Panel	Window 106 Sash	W106 Shutter Inner Face	W106 Shutter, Outer Face
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)				
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)			B: yellowish brown G: dark brown	
4th Found Finish (c. 1810s)				
5th Found Finish (c. 1820s)				F: pale orange yellow
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white		P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	P: grayish yellow F: yellowish white		P: grayish yellow F: yellowish white	P: grayish yellow F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white		F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white		F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white		F: yellowish white	F: yellowish white
11th Found Finish				
12th Found Finish (c. 1929)	P: yellowish white F: white		P: yellowish white F: white	P: yellowish white F: white
13th Found Finish (c. 1950)	P: yellowish white F: yellowish white	F: white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
14th Found Finish (c. 1960s)	P: light gray F: white	P: white F: white	P: light gray F: white	P: light gray F: white
15th Found Finish (c. 1988)				
16th Found Finish (c. 1995)				
Munsell match Earliest Finish	**F: 5Y 9/2**	**No Historic Finishes**	**B: 2.5Y 5/6 G: 10YR 3/2**	**F: 10 YR 9/2**
Commercial match Earliest Finish	**F: BM OC-102**	**No Historic Finishes**	**B: BM 2153-20 G: BM 1239**	**F: BM OC-84**
Comments	Possible replacement. No traces of early finishes	UV shows only modern finishes	This element has been stripped. Early finishes seen only as traces.	This element has been stripped. Pale orange yellow not seen on all pieces of sample.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-059**	**HHI-060**	**HHI-061**	**HHI-062**
Location	W106 Recess for Shutter	W106 Frame	W106 Window Seat	Chair Rail, Projecting
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: blackish brown T: moderate reddish brown	B: blackish brown T: moderate reddish brown	R: blackish brown R: moderate reddish brown	
2nd Found Finish (c 1786)	P: yellowish white B: dark gray yellow brown T: light olive brown	P: yellowish white B: dark gray yellow brown T: light olive brown		
3rd Found Finish (c. 1792)	B: dark yellowish brown T: dark orange yellow	B: dark yellowish brown		R:brown R: strong brown
4th Found Finish (c. 1810s)	P: yellowish white F: mod yellowish green			
5th Found Finish (c. 1820s)	F: dark yellowish green	F: dark yellowish green		
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
15th Found Finish (c. 1988)	F: white	F: white	F: white	F: white
16th Found Finish (c. 1995)	F: white	F: white	F: white	F: white
Munsell match Earliest Finish	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 3/4 T: 7.5YR 3/6**
Commercial match Earliest Finish	**B: BM 2114-10 T: BM HC-50**	**B: BM 2114-10 T: BM HC-50**	**B: BM 2114-10 T: BM HC-50**	**B: BM E-66 T: BM 2161-20**
Comments	Earliest finishes appear to be wood graining.	Earliest finishes appear to be wood graining. Element has been stripped.	Element has been stripped.	Element has been stripped.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-063**	**HHI-064**	**HHI-065**	**HHI-066**
Location	Chair Rail, Lower Molding	Cupboard, Field	Cup. Recessed Molding	Cup. Raised Panel
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: mod reddish brown T: yellowish brown	B: mod reddish brown T: dark olive brown	B: blackish brown T: moderate reddish brown	R: mod reddish brown R: dark olive brown
2nd Found Finish (c 1786)			P: yellowish white B: dark gray yellow brown T: light olive brown	
3rd Found Finish (c. 1792)			B: dark yellowish brown T: dark orange yellow	R: yellowish brown
4th Found Finish (c. 1810s)			P: yellowish white F: mod yellowish green	R: mod yellowish green
5th Found Finish (c. 1820s)			F: dark yellowish green	
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
15th Found Finish (c. 1988)	F: white	F: white	F: white	F: white
16th Found Finish (c. 1995)	F: white	F: white	F: white	F: white
Munsell match Earliest Finish	**B: 10YR 4/6 T: 2.5Y 3/2**	**B: 10YR 4/6 T: 10YR 2/2**	**B: 10YR 2/1 T: 10R 4/6**	**B: 10YR 2/1 T: 10R 4/6**
Commercial match Earliest Finish	**B: BM HC-50 T: BM 2153-20**	**B: BM HC-50 T: BM 2114-10**	**B: BM 2114-10 T: BM HC-50**	**B: BM 2114-10 T: BM HC-50**
Comments	Element has been stripped.	Element has been stripped.	Earliest finishes appear to be wood graining.	Earliest finishes appear to be wood graining. Element has been stripped

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-067**	**HHI-068**	**HHI-069**	**HHI-070**
Location	Cup. Arched Molding	Cup. Upper Door Field	Cup. Door Raised Panel	Cup. Inside Face Door
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	P: yellowish white F: mod reddish brown T: dk olive brown	R: mod reddish brown	R: mod reddish brown	
2nd Found Finish (c 1786)	B: light yellowish brown G: dk gray yellowish brown			
3rd Found Finish (c. 1792)	B: strong yellowish brown G: dk gray yellowish brown			R: dk gray yellowish brown
4th Found Finish (c. 1810s)	B: mod yellowish green G: dark orange yellow			R: mod yellowish green
5th Found Finish (c. 1820s)	F: mod yellowish green			R: mod yellowish green
6th Found Finish (c 1830s)	B: yellowish white G: strong brown	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
15th Found Finish (c. 1988)	F: white	F: white	F: white	F: white
16th Found Finish (c. 1995)	F: white	F: white	F: white	F: white
Munsell match Earliest Finish	**B: 10R 4/6 T: 10YR 2/2**	**R: 10R 4/6**	**R: 10R 4/6**	**R: 10YR 2/2**
Commercial match Earliest Finish	**B: BM HC-50 T: BM 2114-10**	**R: BM HC-50**	**R: BM HC-50**	**R: BM 2114-10**
Comments	Earliest finishes appear to be wood graining.	Element has been stripped	Element has been stripped	Element has been stripped

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-071**	**HHI-072**	**HHI-073**	**HHI-074**
Location	Cup. Lower Shelf	Cup. Back Wall, Lower	Cup. Domed Ceiling	Mantel, Inner Molding
Substrate	Wood	Wood	Plaster	Wood
Earliest Retained Finish (c. 1769)				R: grayish red R: dark olive brown
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)				
4th Found Finish (c. 1810s)	B: mod yellowish green G: dark orange yellow	P: linseed oil F: light olive gray		
5th Found Finish (c. 1820s)	F: mod yellowish green	B: grayish olive green G: pale yellow	P: linseed oil P: grayish yellow B: dark greenish blue G: too thin to determine	
6th Found Finish (c 1830s)	B: yellowish white G: strong brown	B: light yellowish brown G: strong yellowish brown		P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	F: yellowish white	B: light yellowish brown G: strong yellowish brown	B: light yellowish brown G: strong yellowish brown	F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	B: pale orange yellow G: light olive brown		F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	B: grayish yellow G: brownish gray	B: grayish yellow G: grayish brown	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	B: mod yellowish green G: dark orange yellow	B: mod yellowish green G: pale yellow	F: yellowish white
11th Found Finish	F: yellowish white	B: grayish yellow G: yellowish brown	B: light yellowish brown G: grayish yellow	F: yellowish white
12th Found Finish (c. 1929)	F: pale orange yellow	P: pale orange yellow F: pale orange yellow	F: pale orange yellow	P: pale orange yellow F: pale orange yellow
13th Found Finish (c. 1950)	P: white F: white	P: pale orange yellow F: pale orange yellow	P: brownish gray F: pale grayish blue	F: yellowish white
14th Found Finish (c. 1960s)	P: white F: white	F: yellowish white	P: yellowish white F: greenish blue	F: yellowish white
15th Found Finish (c. 1988)	F: white		P: greenish blue F: pale greenish blue	P: light gray F: white
16th Found Finish (c. 1995)	F: white	R: skim coat F: white		
Munsell match Earliest Finish	**B: 2.5G 4/4 G: 10YR 6/6**	**F: 10Y 5/1**	**B: 7.5B 3/4 G: Too thin to determine**	**B: 2.5YR 6/6 T: : 10YR 2/2**
Commercial match Earliest Finish	**B: BM HC-127 G: BM 217**	**F: BM HC-106**	**B: BM 728 G: Too thin to determine**	**B: BM 1216 T: BM 2114-10**
Comments	Earliest finishes have been stripped, or this area is an alteration.	Element has been stripped or this is an area of alteration.	Element has been stripped or this is an area of alteration.	Element has been stripped

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-075**	**HHI-076**	**HHI-077**	**HHI-078**
Location	Mantel, Middle Molding	Mantel, Outer Molding	Panel, Field	Panel, Recessed Molding
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	R: mod reddish brown		R: mod reddish brown R: dark olive brown	
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)		AB: white AD: very dk yellow green AG: dark yellowish green		
4th Found Finish (c. 1810s)	R: mod yellowish green	BB: mod yellowish green BG: dark green	R: mod yellowish green	
5th Found Finish (c. 1820s)		R: light brown R: strong yellowish brown	R: strong brown R: strong yellowish brown	
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	P: grayish yellow F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
11th Found Finish		B: grayish yellow G: strong yellowish brown	B: grayish yellow G: strong yellowish brown	B: grayish yellow G: strong yellowish brown
12th Found Finish (c. 1929)	P: yellowish white F: white	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
13th Found Finish (c. 1950)	P: yellowish white F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
14th Found Finish (c. 1960s)	P: light gray F: white	F: yellowish white	F: yellowish white	F: yellowish white
15th Found Finish (c. 1988)		P: light gray F: white	P: light gray F: white	P: light gray F: white
16th Found Finish (c. 1995)				
Munsell match Earliest Finish	**R: 10R 4/6**	**B: N D: 2.5G 2/2 G: 2.5G 3/2**	**B: 10R 4/6 T: 10YR 2/2**	**F: 5Y 9/2**
Commercial match Earliest Finish	**R: BM HC-50**	**B: BM Brilliant White D: BM 2140-10 G: BM 2140-20**	**B: BM HC-50 T: 2114-10**	**F: BM OC-102**
Comments	Element has been stripped.	Earliest finish varies on different pieces of sample (A vs B).	Element has been stripped. Early finishes are seen only as traces.	Element has been stripped.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-079**	**HHI-080**	**HHI-081**	**HHI-082**
Location	Raised Panel, Narrow	Raised Panel, Large	Fireplace Surround	Mantel, Base Block
Substrate	Wood	Wood	Cast Iron / Plaster	Wood
Earliest Retained Finish (c. 1769)	R: mod reddish brown	R: mod reddish brown		R: dark olive brown
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)		R: grayish yellow R: yellowish grayish brown		
4th Found Finish (c. 1810s)				R: strong yellowish brown
5th Found Finish (c. 1820s)				
6th Found Finish (c 1830s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white		P: yellowish white F: yellowish white
7th Found Finish (c. 1840s)	F: yellowish white	F: yellowish white		F: yellowish white
8th Found Finish (c. 1850s)	F: yellowish white	F: yellowish white		F: yellowish white
9th Found Finish (c. 1892)	F: yellowish white	F: yellowish white		F: yellowish white
10th Found Finish (c. 1900s)	F: yellowish white	F: yellowish white		F: yellowish white
11th Found Finish	B: grayish yellow G: strong yellowish brown	B: grayish yellow G: strong yellowish brown		B: grayish yellow G: strong yellowish brown
12th Found Finish (c. 1929)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: dark brownish red (CI) P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
13th Found Finish (c. 1950)	F: yellowish white	F: yellowish white	P: black F: black	F: yellowish white
14th Found Finish (c. 1960s)	F: yellowish white	F: yellowish white	P: black F: black	F: yellowish white
15th Found Finish (c. 1988)	P: light gray F: white	P: light gray F: white	F: black	P: light gray F: white
16th Found Finish (c. 1995)				
Munsell match Earliest Finish	**R: 10R 4/6**	**R: 10R 4/6**	**F: 10YR 9/2**	**R: 10YR 2/2**
Commercial match Earliest Finish	**R: BM HC-50**	**R: BM HC-50**	**F: BM OC-74**	**R: 2114-10**
Comments	Element has been stripped.	Element has been stripped.	Element stripped. Red lead primer only seen on cast iron element.	Element has been stripped.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-083**	**HHI-084**	**HHI-085**	**HHI-086**
Location	Cup. Keystone	Ceiling, Trim	Ceiling	Walls
Substrate	Wood	Wood	Plaster	Plaster
Earliest Retained Finish (c. 1769)	R: mod reddish brown			
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)				
4th Found Finish (c. 1810s)	B: mod yellowish green			
5th Found Finish (c. 1820s)	B: light olive brown D: dark brown G: strong yellowish brown			
6th Found Finish (c 1830s)				P: oil size D: pale orange yellow
7th Found Finish (c. 1840s)				D: yellowish gray D: bluish gray
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)				
10th Found Finish (c. 1900s)				
11th Found Finish				
12th Found Finish (c. 1929)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: yellowish white F: yellowish white	F: pale orange yellow
13th Found Finish (c. 1950)	F: yellowish white	F: yellowish white	P: yellowish white F: yellowish white	F: grayish yellow
14th Found Finish (c. 1960s)	F: yellowish white	F: yellowish white	F: yellowish white	P: grayish yellow F: grayish yellow
15th Found Finish (c. 1988)	P: light gray F: white	P: light gray F: white	P: light gray F: white	R: skim coat P: light gray F: dark yellow
16th Found Finish (c. 1995)			P: white F: white	
Munsell match Earliest Finish	**R: 10R 4/6**	**F: 10YR 9/2**	**P: F:**	**F: 5Y 9/2**
Commercial match Earliest Finish	**R: BM HC-50**	**F: BM OC-74**	**P: F:**	**F: BM HC-102**
Comments	Element has been stripped.	Later addition	Later addition	Earliest finishes are distemper paints and found only on the west wall.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-087**	**HHI-088**	**HHI-089**	**HHI-090**
Location	D102, Frame, Outer	D102 Frame, Inner	D102 Field	D102, Recessed Panel
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	P: light brown D: grayish yellow D: light grayish olive G: dark reddish brown	P: light brown G: dark reddish brown		
2nd Found Finish (c 1786)	B: light yellowish brown G: strong brown			
3rd Found Finish (c. 1792)	P: yellowish white F: mod yellowish green F: mod yellowish green	F: mod yellowish green		
4th Found Finish (c. 1810s)	B: mod yellowish green F: dark green	F: dark green		
5th Found Finish (c. 1820s)	P: dark yellow F: dark yellow	F: dark yellow		
6th Found Finish (c 1830s)		P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow
7th Found Finish (c. 1840s)		F: grayish yellow	F: grayish yellow	F: grayish yellow
8th Found Finish (c. 1850s)		F: grayish yellow	F: grayish yellow	F: grayish yellow
9th Found Finish (c. 1892)		F: grayish yellow	F: grayish yellow	F: grayish yellow
10th Found Finish (c. 1900s)		F: grayish yellow	F: grayish yellow	F: grayish yellow
11th Found Finish		B: grayish yellow G: strong yellowish brown	B: grayish yellow G: strong yellowish brown	B: grayish yellow G: strong yellowish brown
12th Found Finish (c. 1929)	P: pale orange yellow F: pale orange yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow
13th Found Finish (c. 1950)		F: yellowish white	F: yellowish white	F: yellowish white
14th Found Finish (c. 1960s)	P: yellowish white F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
15th Found Finish (c. 1988)	P: white F: white	P: light gray F: white	P: light gray F: white	P: light gray F: white
16th Found Finish (c. 1995)	F: white			
Munsell match Earliest Finish	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**No historic finishes**	**No historic finishes**
Commercial match Earliest Finish	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**No historic finishes**	**No historic finishes**
Comments	Earliest finish appears to be wood graining.	Element has been stripped.	This element has been stripped.	This element has been stripped.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-091**	**HHI-092**	**HHI-093**	**HHI-094**
Location	W117 Sash	W117 Frame	W102 Shutter, Outer	W102 Shutter, Inner
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)		P: light brown D: grayish yellow D: light grayish olive G: dark reddish brown	B: light brown	B: grayish yellow G: light olive brown
2nd Found Finish (c 1786)		P: grayish yellow B: white G: dark reddish brown	B: grayish yellow G: dark reddish brown	G: dark reddish brown
3rd Found Finish (c. 1792)		B: grayish yellow G: yellowish brown	B: light yellowish brown G: strong brown	
4th Found Finish (c. 1810s)		P: mod yellowish green F: mod yellowish green	F: mod yellowish green	B: mod yellowish green G: dark orange yellow
5th Found Finish (c. 1820s)		F: dark green		
6th Found Finish (c 1830s)		P: dark yellow F: dark yellow	F: light purplish blue	
7th Found Finish (c. 1840s)		P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
8th Found Finish (c. 1850s)		F: grayish yellow	F: grayish yellow	F: grayish yellow
9th Found Finish (c. 1892)		F: grayish yellow	F: grayish yellow	F: grayish yellow
10th Found Finish (c. 1900s)		F: grayish yellow	F: grayish yellow	F: grayish yellow
11th Found Finish		F: grayish yellow	F: grayish yellow	F: grayish yellow
12th Found Finish (c. 1929)		F: grayish yellow	F: grayish yellow	F: grayish yellow
13th Found Finish (c. 1950)		F: yellowish white	F: yellowish white	F: yellowish white
14th Found Finish (c. 1960s)		F: yellowish white	F: yellowish white	F: yellowish white
15th Found Finish (c. 1988)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
16th Found Finish (c. 1995)			F: white	F: white
Munsell match Earliest Finish	**No historic finishes**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**B: 2.5Y 8.5/4 G: 2.5Y 5/8**
Commercial match Earliest Finish	**No historic finishes**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**B: BM HC-30 G: 2153-30**
Comments	Modern replacement.	Earliest finish appears to be wood graining.	Earliest finish appears to be wood graining.	

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-095**	**HHI-096**	**HHI-097**	**HHI-098**
Location	W102 Sash	W102 Frame	South Wall	East Wall
Substrate	Wood	Wood	Plaster	Plaster
Earliest Retained Finish (c. 1769)		P: light brown D: grayish yellow D: light grayish olive G: dark reddish brown		
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)		B: grayish yellow G: yellowish brown		
4th Found Finish (c. 1810s)		P: mod yellowish green F: mod yellowish green		
5th Found Finish (c. 1820s)		F: dark green		
6th Found Finish (c 1830s)		P: dark yellow F: dark yellow	P: oil size D: pale orange yellow	P: oil size D: pale orange yellow
7th Found Finish (c. 1840s)		P: pale orange yellow F: pale orange yellow	D: yellowish gray D: bluish gray	D: yellowish gray D: bluish gray
8th Found Finish (c. 1850s)		F: pale orange yellow	B: yellowish white G: pale yellow	
9th Found Finish (c. 1892)		F: pale orange yellow	B: grayish yellow G: too thin to determine	
10th Found Finish (c. 1900s)		F: pale orange yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow
11th Found Finish		F: pale orange yellow	F: grayish yellow	F: grayish yellow
12th Found Finish (c. 1929)		F: pale orange yellow	P: white F: pale orange yellow	P: white F: pale orange yellow
13th Found Finish (c. 1950)		F: pale orange yellow	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)		F: pale orange yellow	P: white F: white	P: white F: white
15th Found Finish (c. 1988)	P: white F: white	P: white F: white	F: white	F: white
16th Found Finish (c. 1995)		F: white	R: skim coat F: dark green	R: skim coat F: dark green
Munsell match Earliest Finish	**No historic finishes**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**F: 5Y 9/2**	**F: 5Y 9/2**
Commercial match Earliest Finish	**No historic finishes**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**F: BM HC-102**	**F: BM HC-102**
Comments	Modern replacement.	Earliest finish appears to be wood graining.	**Later addition**	**Later addition**

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-099**	**HHI-100**	**HHI-101**	**HHI-102**
Location	West Wall	Cornice, Dentil	Cornice, Middle Roll	Cornice, Upper Roll
Substrate	Plaster	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)		P: light brown B: grayish yellow G: dark orange yellow	P: light brown B: grayish yellow G: dark orange yellow	P: light brown B: grayish yellow G: dark orange yellow
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)		B: light yellowish brown G: strong brown	B: light yellowish brown G: strong brown	B: light yellowish brown G: strong brown
4th Found Finish (c. 1810s)		F: mod yellowish green	F: mod yellowish green	F: mod yellowish green
5th Found Finish (c. 1820s)		F: dark green	F: dark green	F: dark green
6th Found Finish (c 1830s)		P: dark yellow D: light purpleish blue F: dark yellow	P: dark yellow F: dark yellow	P: dark yellow F: dark yellow
7th Found Finish (c. 1840s)		P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
8th Found Finish (c. 1850s)		F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
9th Found Finish (c. 1892)		F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
10th Found Finish (c. 1900s)		F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
11th Found Finish		F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
12th Found Finish (c. 1929)		F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
13th Found Finish (c. 1950)		F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
14th Found Finish (c. 1960s)		F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
15th Found Finish (c. 1988)	R: skim coat P: yellowish gray F: yellowish gray	P: white F: white	P: white F: white	P: white F: white
16th Found Finish (c. 1995)	F: dark green	F: white	F: white	F: white
Munsell match Earliest Finish		**P: btw 5YR – 7.5YR 6/4 B: 2.5Y 8.5/4 G: 10YR 6/6**	**P: btw 5YR – 7.5YR 6/4 B: 2.5Y 8.5/4 G: 10YR 6/6**	**P: btw 5YR – 7.5YR 6/4 B: 2.5Y 8.5/4 G: 10YR 6/6**
Commercial match Earliest Finish		**P: BM 1216 B: BM HC-30 G: BM 217**	**P: BM 1216 B: BM HC-30 G: BM 217**	**P: BM 1216 B: BM HC-30 G: BM 217**
Comments	Modern repair			

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-103**	**HHI-104**	**HHI-105**	**HHI-106**
Location	Ceiling	Chair Rail, Upper	Chair Rail, Horizontal	Chair Rail, Diamonds
Substrate	Plaster	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)		P: light brown D: grayish yellow D: light grayish olive G: dark reddish brown	P: light brown D: grayish yellow D: light grayish olive G: dark reddish brown	P: light brown D: grayish yellow D: light grayish olive G: dark reddish brown
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)		B: grayish yellow G: yellowish brown	B: grayish yellow G: yellowish brown	B: grayish yellow G: yellowish brown
4th Found Finish (c. 1810s)		P: mod yellowish green F: mod yellowish green	P: mod yellowish green F: mod yellowish green	P: mod yellowish green F: mod yellowish green
5th Found Finish (c. 1820s)		F: dark green	F: dark green	F: dark green
6th Found Finish (c 1830s)		P: dark yellow F: dark yellow	P: dark yellow D: light purplish blue F: dark yellow	P: dark yellow D: light purplish blue F: dark yellow
7th Found Finish (c. 1840s)		P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
8th Found Finish (c. 1850s)		F: grayish yellow	F: grayish yellow	F: grayish yellow
9th Found Finish (c. 1892)		F: grayish yellow	F: grayish yellow	F: grayish yellow
10th Found Finish (c. 1900s)		F: grayish yellow	F: grayish yellow	F: grayish yellow
11th Found Finish		F: grayish yellow	F: grayish yellow	F: grayish yellow
12th Found Finish (c. 1929)	P: oil size P: pale orange yellow F: pale orange yellow	F: grayish yellow	F: grayish yellow	F: grayish yellow
13th Found Finish (c. 1950)	F: pale orange yellow	F: yellowish white	F: yellowish white	F: yellowish white
14th Found Finish (c. 1960s)	F: pale orange yellow	F: yellowish white	F: yellowish white	F: yellowish white
15th Found Finish (c. 1988)	P: light gray F: white	P: white F: white	P: white F: white	P: white F: white
16th Found Finish (c. 1995)	P: white F: white			
Munsell match Earliest Finish	**No historic finishes**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**
Commercial match Earliest Finish	**No historic finishes**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**
Comments	Later addition	Wood graining.	Wood graining.	Wood graining.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-107**	**HHI-108**	**HHI-109**	**HHI-110**
Location	Mantel, Field	Mantel, Raised Molding	Mantel Bracket	Mantel, Shelf
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	R: light brown R: grayish yellow	R: light brown R: grayish yellow R: dark reddish brown	R: light brown R: grayish yellow R: dark reddish brown	R: dark reddish brown
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)		R: light brown		
4th Found Finish (c. 1810s)		R: mod yellowish green		
5th Found Finish (c. 1820s)		R: dark green		
6th Found Finish (c 1830s)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	R: light purplish blue	P: pale orange yellow F: pale orange yellow
7th Found Finish (c. 1840s)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
8th Found Finish (c. 1850s)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
9th Found Finish (c. 1892)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
10th Found Finish (c. 1900s)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
11th Found Finish	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
12th Found Finish (c. 1929)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
13th Found Finish (c. 1950)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
14th Found Finish (c. 1960s)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
15th Found Finish (c. 1988)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
16th Found Finish (c. 1995)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
Munsell match Earliest Finish	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**
Commercial match Earliest Finish	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**
Comments	Element has been stripped.	Element has been stripped.	Element has been stripped.	Element has been stripped.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-111**	**HHI-112**	**HHI-113**	**HHI-114**
Location	Mantel, Under Shelf	Mantel, Raised Panel	Wainscot, South Wall	Baseboard, South Wall
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	R: dark reddish brown	R: light brown R: grayish yellow	P: light brown D: grayish yellow D: light grayish olive G: dark reddish brown	P: light brown D: grayish yellow D: light grayish olive G: dark reddish brown
2nd Found Finish (c 1786)	R: light brown	R: light brown	B: light yellowish brown G: strong brown	P: grayish yellow G: strong brown
3rd Found Finish (c. 1792)	R: mod yellowish green		P: yellowish white B: mod yellowish green G: dark orange yellow	F: mod yellowish green F: dark green
4th Found Finish (c. 1810s)			F: light purplish blue	P: dark yellow F: dark yellow F: dark yellow
5th Found Finish (c. 1820s)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
6th Found Finish (c 1830s)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	F: pale orange yellow
7th Found Finish (c. 1840s)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
8th Found Finish (c. 1850s)	P: pale orange yellow F: pale orange yellow G: strong yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	F: pale orange yellow
9th Found Finish (c. 1892)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
10th Found Finish (c. 1900s)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	F: grayish yellow	F: pale orange yellow
11th Found Finish	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	F: yellowish white	F: pale orange yellow
12th Found Finish (c. 1929)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	F: yellowish white	F: pale orange yellow
13th Found Finish (c. 1950)	F: pale orange yellow	F: pale orange yellow		F: pale orange yellow
14th Found Finish (c. 1960s)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow		
15th Found Finish (c. 1988)	P: white F: white	P: white F: white	R: skim coat P: white F: white	P: white F: white
16th Found Finish (c. 1995)	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**	**P: btw 5YR 7.5YR 6/4 D: 2.5Y 8.5/4 D: 10Y 6/2 G: 5YR 2/4**
Commercial match Earliest Finish	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**	**P: BM 1216 D: HC-30 D: BM 475 G: BM 1246**
Comments	Element has been stripped.	Element has been stripped.		

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-115**	**HHI-116**	**HHI-117**	**HHI-118**
Location	Door D203	D203 Frame	Door D203a	D203a Frame
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: dark reddish brown G: dark green			
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)		B: dark reddish brown D: lt gray reddish brown G: strong brown	P: grayish yellow B: dark reddish brown D: lt gray reddish brown G: strong brown	
4th Found Finish (c. 1810s)	P: mod yellowish green F: mod yellowish green	F: mod yellowish green G: dark yellow	B: mod yellowish green G: dark yellow	
5th Found Finish (c. 1820s)	F: mod yellowish green	F: dark green	F: mod yellowish green	
6th Found Finish (c 1830s)	P: greenish gray F: dark yellow	P: moderate gray F: dark yellow	F: light grayish green	
7th Found Finish (c. 1840s)				
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)	P: pale orange yellow B: pale orange yellow G: grayish yellow	P: pale orange yellow B: pale orange yellow G: grayish yellow	P: pale orange yellow B: pale orange yellow G: grayish yellow	P: pale orange yellow B: pale orange yellow G: grayish yellow
10th Found Finish (c. 1900s)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow
13th Found Finish (c. 1950)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
15th Found Finish (c. 1988)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
16th Found Finish (c. 1995)				
Munsell match Earliest Finish	**B: 5YR 2/4 G: 10YR 6/4**	**B: 5YR 2/4 D: 2.5YR 5/2 G: 7.5YR 3/6**	**B: 5YR 2/4 D: 2.5YR 5/2 G: 7.5YR 3/6**	**P: 5Y 9/2 B: 5Y 9/2 G: too thin to determine**
Commercial match Earliest Finish	**B: BM 1246 G: BM 2140-10**	**B: BM 1246 D: BM 2114-10 G: 2162-10**	**B: BM 1246 D: BM 2114-10 G: 2162-10**	**P: OC-102 B: 5Y 9/2 G: too thin to determine**
Comments	Stratigraphy different than frame. Possibly recycled	Earliest finish appears to be wood graining	Element has been stripped. Possibly re-used	Later addition

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-119**	**HHI-120**	**HHI-121**	**HHI-122**
Location	W206 Sash	W206 Frame	W215 Sash	W215 Frame
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: grayish yellow G: pale yellow	B: grayish yellow D: strong brown G: strong brown	B: grayish yellow G: pale yellow	B: grayish yellow D: strong brown G: strong brown
2nd Found Finish (c 1786)	B: grayish yellow G: pale yellow	P: grayish yellow B: dark green G: grayish brown	B: grayish yellow G: pale yellow	
3rd Found Finish (c. 1792)	P: yellowish white F: grayish yellow	P: light olive gray B: light brown G: strong brown	P: yellowish white F: grayish yellow	P: grayish red B: light brown G: strong brown
4th Found Finish (c. 1810s)	P: grayish yellow F: grayish yellow D: mod yellowish green	F: mod yellowish green	P: grayish yellow F: grayish yellow D: mod yellowish green	F: mod yellowish green
5th Found Finish (c. 1820s)		F: dark green		F: dark green
6th Found Finish (c 1830s)		P: moderate gray F: dark yellow		
7th Found Finish (c. 1840s)				
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)	B: grayish yellow G: too thin to determine	P: pale orange yellow B: pale orange yellow G: grayish yellow	B: grayish yellow G: too thin to determine	P: pale orange yellow B: pale orange yellow G: grayish yellow
10th Found Finish (c. 1900s)		F: pale orange yellow		F: pale orange yellow
11th Found Finish		F: yellowish white		F: yellowish white
12th Found Finish (c. 1929)	F: grayish yellow	P: grayish yellow F: grayish yellow	F: grayish yellow	P: grayish yellow F: grayish yellow
13th Found Finish (c. 1950)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
15th Found Finish (c. 1988)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
16th Found Finish (c. 1995)				
Munsell match Earliest Finish	**B: 2.5Y 8/4 G: 2.5Y 6/6**	**B: 2.5Y 8/2 D: 7.5YR 3/6 G: 10YR 4/8**	**B: 2.5Y 8/4 G: 2.5Y 6/6**	**B: 2.5Y 8/2 D: 7.5YR 3/6 G: 10YR 4/8**
Commercial match Earliest Finish	**B: BM HC-30 G: BM 2153-30**	**B: BM HC-35 D: BM 2162-10 G: BM 2153-20**	**B: BM HC-30 G: BM 2153-30**	**B: BM HC-35 D: BM 2162-10 G: BM 2153-20**
Comments			.	.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-123**	**HHI-124**	**HHI-125**	**HHI-126**
Location	East Wall above Rail	West Wall above Rail	Chair Rail, west of joint	Chair Rail, east of joint
Substrate	Plaster	Plaster	Wood	Wood
Earliest Retained Finish (c. 1769)				
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)			B: grayish yellow G: yellow	B: grayish yellow G: yellow
4th Found Finish (c. 1810s)			B: grayish pink G: too thin to determine	B: grayish pink G: too thin to determine
5th Found Finish (c. 1820s)			F: dark green	F: dark green
6th Found Finish (c 1830s)				
7th Found Finish (c. 1840s)				
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)	P: oil size P: pale orange yellow F: pale orange yellow	P: oil size P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
10th Found Finish (c. 1900s)	F: pale reddish orange	F: pale reddish orange	F: pale orange yellow	F: pale orange yellow
11th Found Finish	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
12th Found Finish (c. 1929)	P: pale blue F: pale blue	P: pale blue F: pale blue	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
13th Found Finish (c. 1950)	F: pale blue	F: pale blue	F: yellowish white	F: yellowish white
14th Found Finish (c. 1960s)	P: pale bluish green F: pale bluish green	P: pale bluish green F: pale bluish green	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
15th Found Finish (c. 1988)	R: skim coat P: pale orange yellow F: pale orange yellow	R: skim coat P: pale orange yellow F: pale orange yellow	P: white F: white	P: white F: white
16th Found Finish (c. 1995)			F: white	F: white
Munsell match Earliest Finish	**P: 10YR 9/2 F: 10YR 9/2**	**P: 10YR 9/2 F: 10YR 9/2**	**B: 2.5Y 8/2 G: 7.5YR 3/6**	**B: 2.5Y 8/2 G: 7.5YR 3/6**
Commercial match Earliest Finish	**P: BM OC-84 F: BM OC-84**	**P: BM OC-84 F: BM OC-84**	**B: BM HC-96 G: BM 2162-10**	**B: BM HC-96 G: BM 2162-10**
Comments	No finish plaster on walls. Later addition.	No finish plaster on walls. Later addition.	Early addition	Early Addition

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-127**	**HHI-128**	**HHI-129**	**HHI-130**
Location	Mantel, Outer Molding	Mantel, Inner Molding	Baseboard East Wall	Baseboard North Wall
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)			R: black	
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)				P: grayish yellow F: dark gray
4th Found Finish (c. 1810s)			F: mod yellowish green	
5th Found Finish (c. 1820s)		R: black	F: dark green	
6th Found Finish (c 1830s)			F: moderate gray F: dark yellow	F: strong brown
7th Found Finish (c. 1840s)				
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)	F: pale orange yellow	P: pale orange yellow B: pale orange yellow G: grayish yellow	P: pale orange yellow B: pale orange yellow G: grayish yellow	P: pale orange yellow B: pale orange yellow G: grayish yellow
10th Found Finish (c. 1900s)		F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
13th Found Finish (c. 1950)				
14th Found Finish (c. 1960s)		P: white F: white	P: white F: white	P: white F: white
15th Found Finish (c. 1988)		P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
16th Found Finish (c. 1995)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
Munsell match Earliest Finish		**F: N/ .5**	**F: N/ .5**	**P: 2.5Y 8/4 F: N 3.75**
Commercial match Earliest Finish		**F: BM IRM Black**	**F: BM IRM Black**	**P: BM HC-30 F: BM HC-166**
Comments		Element has been stripped. Surface of the wood is rough		Element has been stripped.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-131**	**HHI-132**		
Location	Ceiling	Ceiling Trim		
Substrate	Plaster	Wood		
Earliest Retained Finish (c. 1769)				
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)				
4th Found Finish (c. 1810s)				
5th Found Finish (c. 1820s)				
6th Found Finish (c 1830s)				
7th Found Finish (c. 1840s)				
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)		P: pale orange yellow F: pale orange yellow		
10th Found Finish (c. 1900s)		P: yellowish gray B: yellowish gray G: dark yellow		
11th Found Finish				
12th Found Finish (c. 1929)	P: pale orange yellow F: pale orange yellow	F: pale orange yellow		
13th Found Finish (c. 1950)	P: grayish yellow F: grayish yellow			
14th Found Finish (c. 1960s)	P: white F: white	F: white		
15th Found Finish (c. 1988)	P: yellowish white F: yellowish white	P: white F: white		
16th Found Finish (c. 1995)	P: white F: white	R: skim coat F: white		
Munsell match Earliest Finish	**P: 10YR 9/2 F: 10YR 9/2**	**P: 5Y 9/2 F: 5Y 9/2**		
Commercial match Earliest Finish	**P: BM OC-84 F: BM OC-84**	**P: BM OC-104 F: BM OC-104**		
Comments	Later addition.			

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-133**	**HHI-134**	**HHI-135**	**HHI-136**
Location	D202 Frame	Door 202	D202a Frame	Door 202a
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: grayish yellow G: moderate brown	B: grayish yellow G: moderate brown		P: grayish yellow B: yellowish gray G: mod yellowish brown
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)	P: grayish red B: light brown G: strong brown	B: dark reddish brown G: dark olive brown		G: strong brown
4th Found Finish (c. 1810s)	F: mod yellowish green	F: mod yellowish green		G: strong brown
5th Found Finish (c. 1820s)	F: dark green	F: light grayish green		
6th Found Finish (c 1830s)	F: moderate gray			
7th Found Finish (c. 1840s)				
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
10th Found Finish (c. 1900s)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow
13th Found Finish (c. 1950)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	F: yellowish white	F: yellowish white
15th Found Finish (c. 1988)				
16th Found Finish (c. 1995)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
Munsell match Earliest Finish	**B: 2.5Y 8/4 G: 7.5YR 3/4**	**B: 2.5Y 8/4 G: 7.5YR 3/4**		**B: 2.5Y 7/4 B: 2.5Y 7/2 G: btw 10YR 2.5Y 4/2**
Commercial match Earliest Finish	**B: BM HC-35 G: BM E-66**	**B: BM HC-35 G: BM E-66**		**P: BM AC-5 B: BM HC-45 G: BM 2108-30**
Comments	Earliest finish is possibly wood graining.	Earliest finish is possibly wood graining.		These colors are not found elsewhere in the house suggesting that this element was recycled.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-137**	**HHI-138**	**HHI-139**	**HHI-140**
Location	W219 Sash	W219 Frame	W202 Sash	W202 Frame
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: grayish yellow G: dark yellow	B: grayish yellow G: moderate brown	B: grayish yellow G: dark yellow	B: grayish yellow G: moderate brown
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)		P: grayish red B: light brown G: strong brown		P: grayish red B: light brown G: strong brown
4th Found Finish (c. 1810s)	B: mod yellowish green G: dark yellow	F: mod yellowish green	B: mod yellowish green G: dark yellow	F: mod yellowish green
5th Found Finish (c. 1820s)	P: pale orange yellow F: pale orange yellow	F: dark green	P: pale orange yellow F: pale orange yellow	F: dark green
6th Found Finish (c 1830s)	F: grayish yellow	F: moderate gray	F: grayish yellow	F: moderate gray
7th Found Finish (c. 1840s)				
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)	P: white F: grayish yellow	P: pale orange yellow F: pale orange yellow	P: white F: grayish yellow	P: pale orange yellow F: pale orange yellow
10th Found Finish (c. 1900s)	P: yellowish white F: yellowish white	F: pale orange yellow	P: yellowish white F: yellowish white	F: pale orange yellow
11th Found Finish		F: yellowish white		F: yellowish white
12th Found Finish (c. 1929)	P: white F: light gray	P: grayish yellow F: grayish yellow	P: white F: light gray	P: grayish yellow F: grayish yellow
13th Found Finish (c. 1950)	P: yellowish white F: light gray	P: white F: white	P: yellowish white F: light gray	P: white F: white
14th Found Finish (c. 1960s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
15th Found Finish (c. 1988)				
16th Found Finish (c. 1995)	F: white	P: white F: white	F: white	P: white F: white
Munsell match Earliest Finish	**B: 2.5Y 8/4 G: 2.5Y 6/6**	**B: 2.5Y 8/4 G: 7.5YR ¾**	**B: 2.5Y 8/4 G: 2.5Y 6/6**	**B: 2.5Y 8/4 G: 7.5YR ¾**
Commercial match Earliest Finish	**B: BM HC-30 G: BM 2153-30**	**B: BM HC-35 G: BM E-66**	**B: BM HC-30 G: BM 2153-30**	**B: BM HC-35 G: BM E-66**
Comments		Earliest finish is possibly wood graining.		Earliest finish is possibly wood graining.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-141**	**HHI-142**	**HHI-143**	**HHI-144**
Location	West Wall	North Wall	Chair Rail, North Wall	Chair Rail, former window
Substrate	Plaster	Plaster	Wood	Wood
Earliest Retained Finish (c. 1769)			B: grayish yellow G: moderate brown	R: deep red B: grayish yellow G: moderate brown
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)			B: light brown G: strong brown	P: grayish red B: light brown G: strong brown
4th Found Finish (c. 1810s)			F: mod yellowish green	F: mod yellowish green
5th Found Finish (c. 1820s)			F: dark green	F: dark green
6th Found Finish (c 1830s)				F: moderate gray
7th Found Finish (c. 1840s)				
8th Found Finish (c. 1850s)				
9th Found Finish (c. 1892)	P: oil size F: pale orange yellow	P: oil size F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
10th Found Finish (c. 1900s)	P: grayish greenish blue F: grayish greenish blue	P: grayish greenish blue F: grayish greenish blue	F: pale orange yellow	F: pale orange yellow
11th Found Finish	F: grayish greenish blue	F: grayish greenish blue	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	P: pale blue F: pale blue	P: pale blue F: pale blue	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow
13th Found Finish (c. 1950)	F: pale blue	F: pale blue	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	F: pale yellowish green	F: pale yellowish green	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
15th Found Finish (c. 1988)				
16th Found Finish (c. 1995)	R: skim coat F: pale orange yellow	R: skim coat F: pale orange yellow	P: white F: white	P: white F: white
Munsell match Earliest Finish	**F: 5Y 9/2**	**F: 5Y 9/2**	**B: 2.5Y 8/4 G: 7.5YR ¾**	**B: 2.5Y 8/4 G: 7.5YR ¾**
Commercial match Earliest Finish	**F: BM HC-102**	**F: BM HC-102**	**B: BM HC-35 G: BM E-66**	**B: BM HC-35 G: BM E-66**
Comments	Later addition	Later addition	Earliest finish is possibly wood graining.	Deep red color is seen before the earliest finish. Paint layers cleave differently than other woods in this room.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-145**	**HHI-146**	**HHI-147**	**HHI-148**
Location	Mantel, Inner Field	Mantel, Raised Molding	Mantel, Ledge	Mantel, Field under Shelf
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: grayish yellow G: moderate brown	B: grayish yellow G: moderate brown	B: grayish yellow G: moderate brown	B: grayish yellow G: moderate brown
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)	P: grayish red B: light brown G: strong brown	P: grayish red B: light brown G: strong brown	P: grayish red B: light brown G: strong brown	B: light brown G: strong brown
4th Found Finish (c. 1810s)	F: mod yellowish green	F: mod yellowish green	F: mod yellowish green	F: mod yellowish green G: dark yellow
5th Found Finish (c. 1820s)	F: dark green	F: dark green	F: dark green	
6th Found Finish (c 1830s)	F: moderate gray	F: moderate gray		
7th Found Finish (c. 1840s)	P: yellowish white F: yellowish white		P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
8th Found Finish (c. 1850s)	P: yellowish white F: yellowish white		P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
9th Found Finish (c. 1892)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
10th Found Finish (c. 1900s)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow
13th Found Finish (c. 1950)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
15th Found Finish (c. 1988)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
16th Found Finish (c. 1995)	P: white P: white		P: white P: white	P: white P: white
Munsell match Earliest Finish	**B: 2.5Y 8/4 G: 7.5YR ¾**	**B: 2.5Y 8/4 G: 7.5YR 3/4**	**B: 2.5Y 8/4 G: 7.5YR ¾**	**B: 2.5Y 8/4 G: 7.5YR ¾**
Commercial match Earliest Finish	**B: BM HC-35 G: BM E-66**	**B: BM HC-35 G: BM E-66**	**B: BM HC-35 G: BM E-66**	**B: BM HC-35 G: BM E-66**
Comments	Earliest finish is possibly wood graining.	Earliest finish is possibly wood graining.	Earliest finish is possibly wood graining.	Earliest finish is possibly wood graining.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-149**	**HHI-150**	**HHI-151**	**HHI-152**
Location	Mantel, Upper Panel	Mantel, Outer Field	Baseboard, North Wall	Baseboard, Closet
Substrate	Wood	Wood	Wood	Wood
Earliest Retained Finish (c. 1769)	B: grayish yellow G: moderate brown	B: grayish yellow G: moderate brown	F moderate reddish brown	P: yellowish gray F: dark gray
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)	B: light brown G: strong brown	B: light brown G: strong brown		
4th Found Finish (c. 1810s)	F: mod yellowish green G: dark yellow	B: mod yellowish green G: dark yellow	B: mod yellowish green G: dark yellow	
5th Found Finish (c. 1820s)			F: dark green	F: dark olive brown
6th Found Finish (c 1830s)				
7th Found Finish (c. 1840s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white		
8th Found Finish (c. 1850s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white		
9th Found Finish (c. 1892)	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow
10th Found Finish (c. 1900s)	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow	F: pale orange yellow
11th Found Finish	F: yellowish white	F: yellowish white	F: yellowish white	F: yellowish white
12th Found Finish (c. 1929)	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow	P: grayish yellow F: grayish yellow
13th Found Finish (c. 1950)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
14th Found Finish (c. 1960s)	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white	P: yellowish white F: yellowish white
15th Found Finish (c. 1988)	P: white F: white	P: white F: white	P: white F: white	P: white F: white
16th Found Finish (c. 1995)	P: white P: white	P: white P: white		
Munsell match Earliest Finish	**B: 2.5Y 8/4 G: 7.5YR ¾**	**B: 2.5Y 8/4 G: 7.5YR ¾**	**F: 10R 4/6**	**P: 5Y 8/2 F: N 4.75**
Commercial match Earliest Finish	**B: BM HC-35 G: BM E-66**	**B: BM HC-35 G: BM E-66**	**F: BM HC-50**	**P: BM HC-96 F: BM HC-166**
Comments	Earliest finish is possibly wood graining. This element has been stripped. Early finishes are seen only as traces.	Earliest finish is possibly wood graining.		Recycled element.

INTERIOR PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	**HHI-153**	**HHI-154**		
Location	Ceiling	Ceiling trim at fireplace		
Substrate	Plaster	Wood		
Earliest Retained Finish (c. 1769)		B: grayish yellow G: moderate brown		
2nd Found Finish (c 1786)				
3rd Found Finish (c. 1792)		B: light brown G: strong brown		
4th Found Finish (c. 1810s)		F: mod yellowish green G: dark yellow		
5th Found Finish (c. 1820s)				
6th Found Finish (c 1830s)				
7th Found Finish (c. 1840s)		P: yellowish white F: yellowish white		
8th Found Finish (c. 1850s)		P: yellowish white F: yellowish white		
9th Found Finish (c. 1892)		P: pale orange yellow F: pale orange yellow		
10th Found Finish (c. 1900s)		F: pale orange yellow		
11th Found Finish		F: yellowish white		
12th Found Finish (c. 1929)	P:pale orange yellow F: pale orange yellow	P: grayish yellow F: grayish yellow		
13th Found Finish (c. 1950)	F: pale orange yellow	P: white F: white		
14th Found Finish (c. 1960s)	F: grayish yellow P: white F: yellowish white	P: yellowish white F: yellowish white		
15th Found Finish (c. 1988)	P: light gray F: grayish yellow	P: white F: white		
16th Found Finish (c. 1995)	R: skim coat F: white	P: white P: white		
Munsell match Earliest Finish	**P: 10YR 9/2 F: 10YR 9/2**	**B: 2.5Y 8/4 G: 7.5YR ¾**		
Commercial match Earliest Finish	**P: BM OC-84 F: BM OC-84**	**B: BM HC-35 G: BM E-66**		
Comments		Earliest finish is possibly wood graining.		

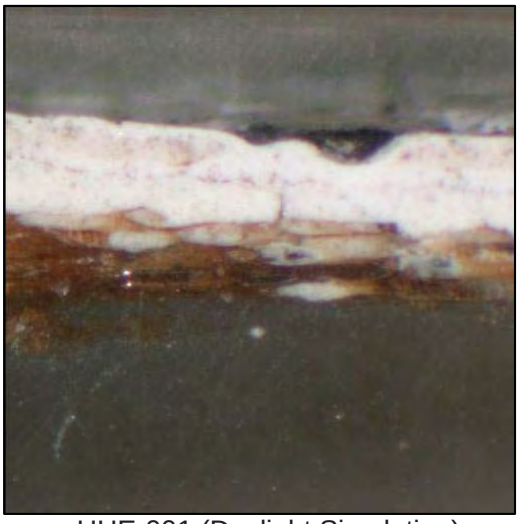
Attachment 3: Photomicrographs

Harmony Hall
Fort Washington, Maryland

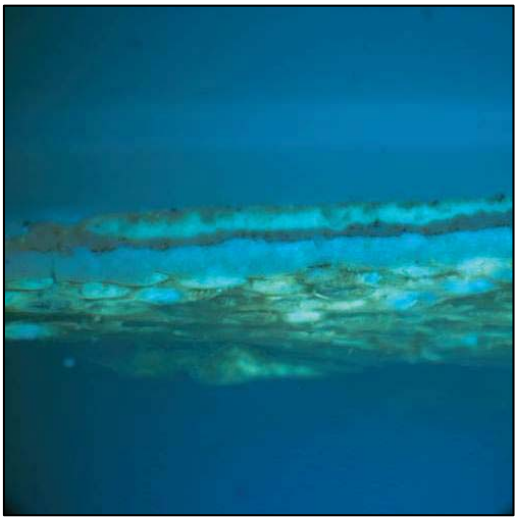
Note: Earliest paint layer is at bottom of each photograph
Photomicrographs simulate daylight unless otherwise noted

As many of the paint samples cleaved between paint layers, multiple photomicrographs for many of the samples were required. Samples labeled “a” contain the earliest finishes with letters increase towards the more modern finishes.

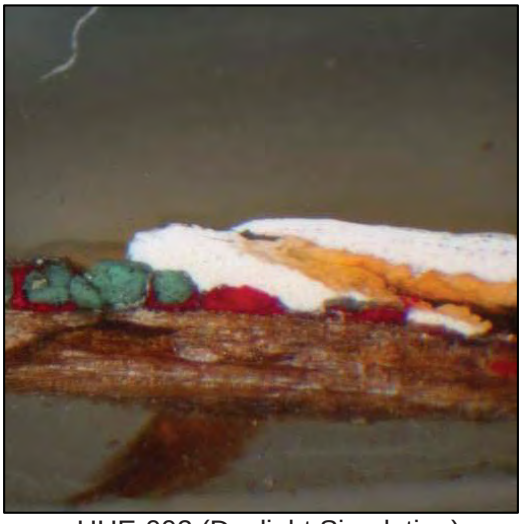
Exterior Samples



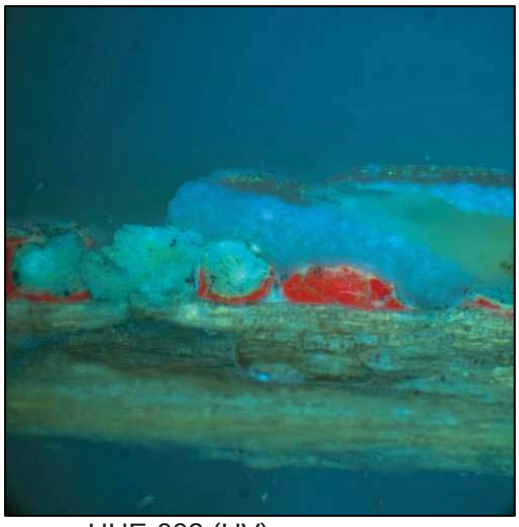
HHE-001 (Daylight Simulation)



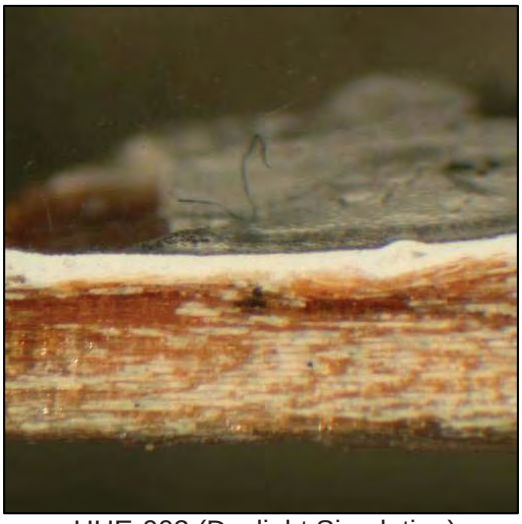
HHE-001 (UV)



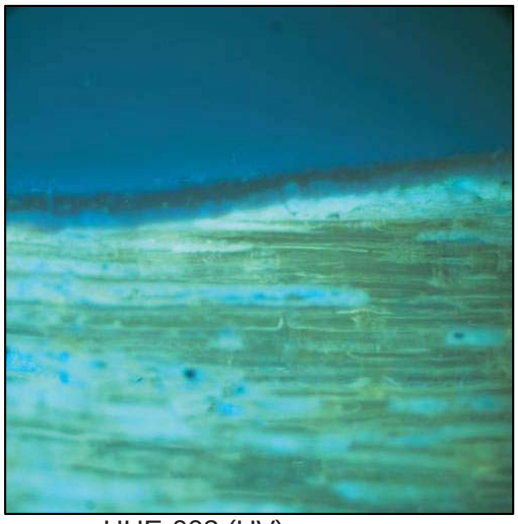
HHE-002 (Daylight Simulation)



HHE-002 (UV)



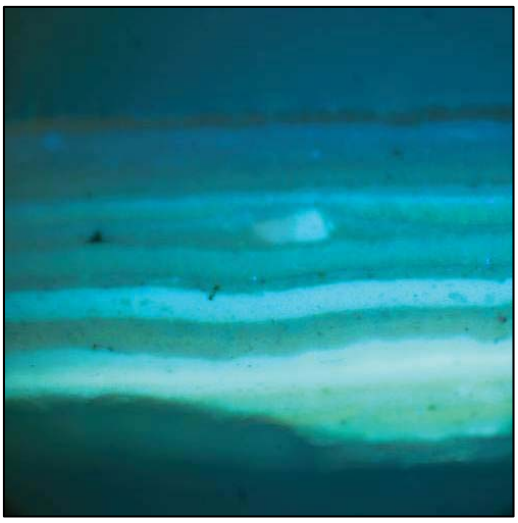
HHE-003 (Daylight Simulation)



HHE-003 (UV)



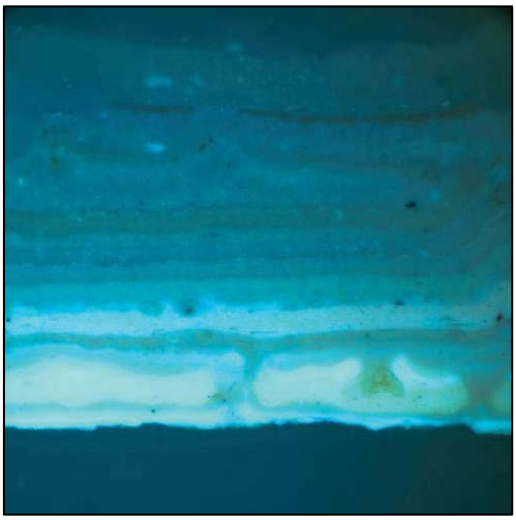
HHE-004 (Daylight Simulation)



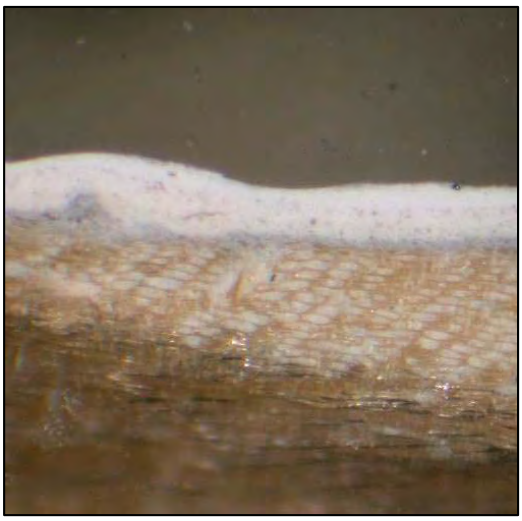
HHE-004 (UV)



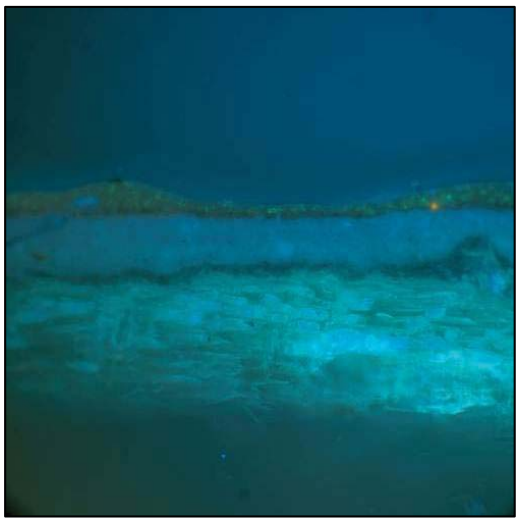
HHE-005 (Daylight Simulation)



HHE-005 (UV)



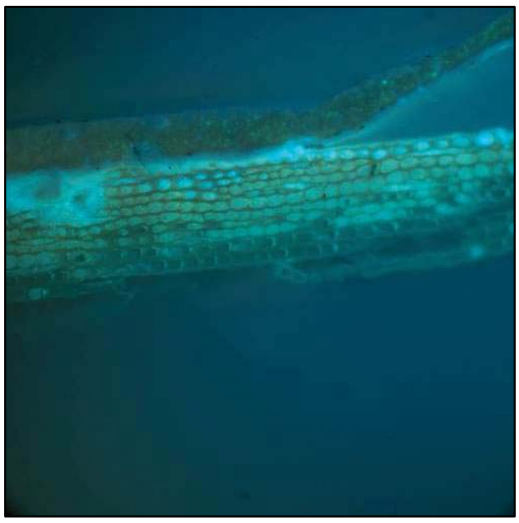
HHE-006 (Daylight Simulation)



HHE-006 (UV)



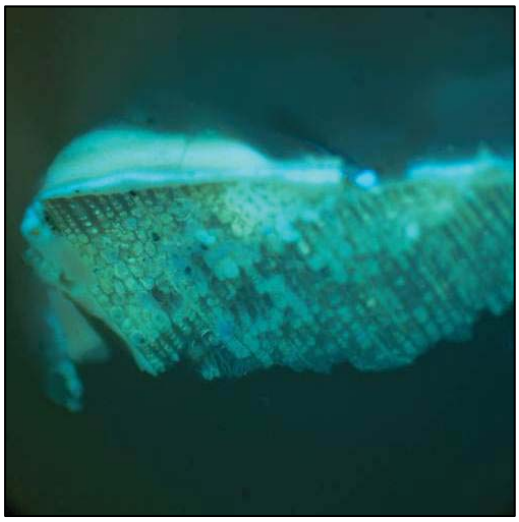
HHE-007 (Daylight Simulation)



HHE-007 (UV)



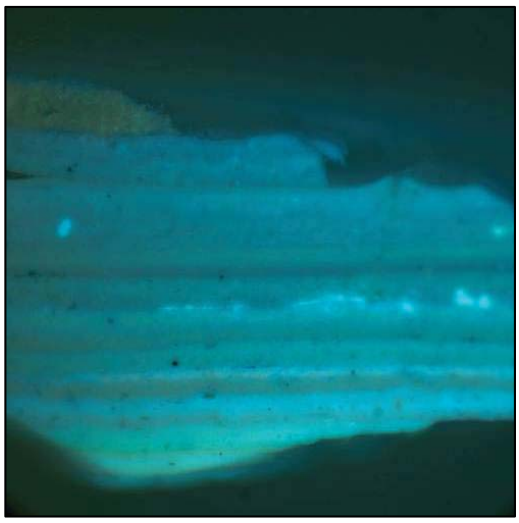
HHE-008a (Daylight Simulation)



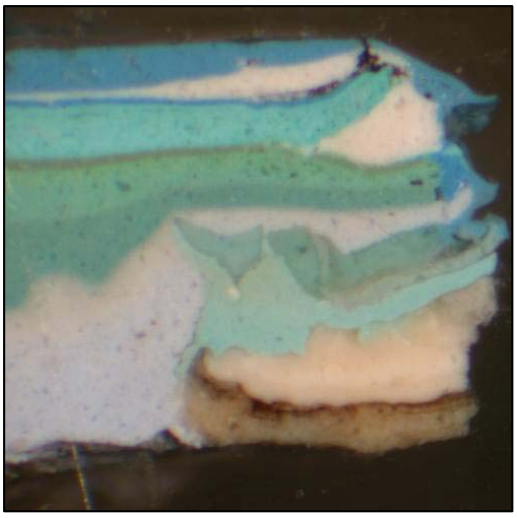
HHE-008a (UV)



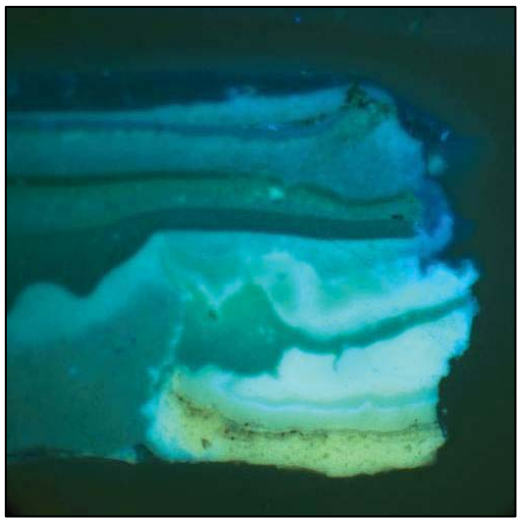
HHE-008b (Daylight Simulation)



HHE-008b (UV)



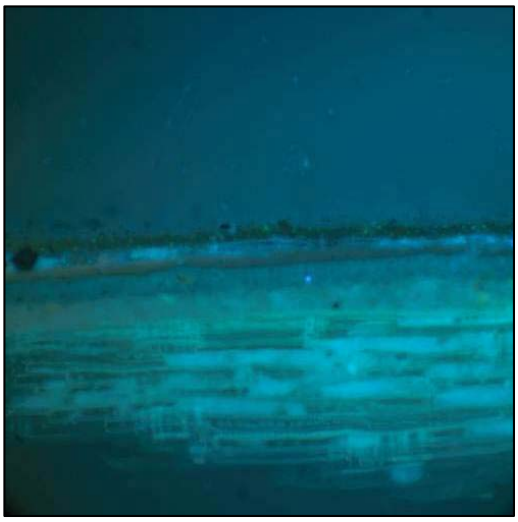
HHE-009 (Daylight Simulation)



HHE-009 (UV)



HHE-010 (Daylight Simulation)



HHE-010 (UV)

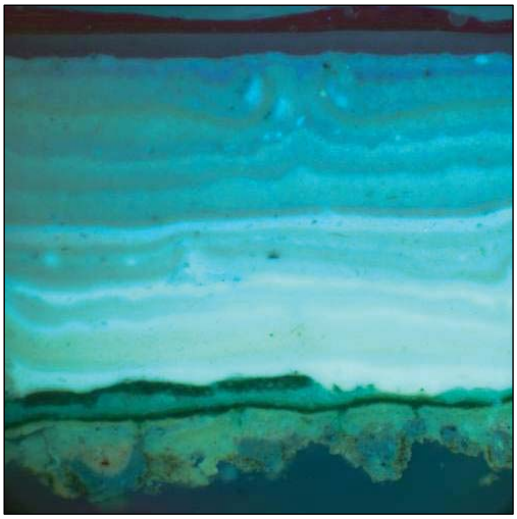


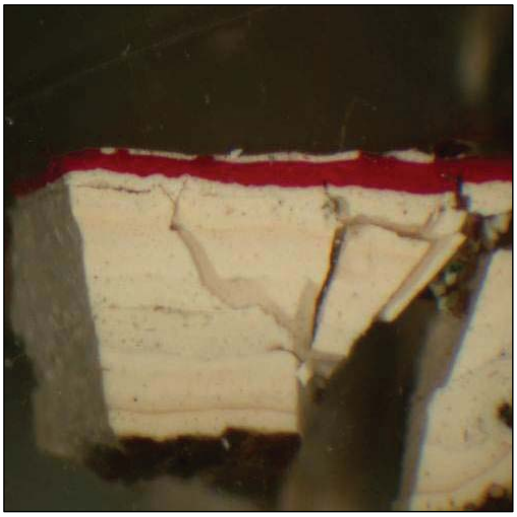
HHE-011 (Daylight Simulation)

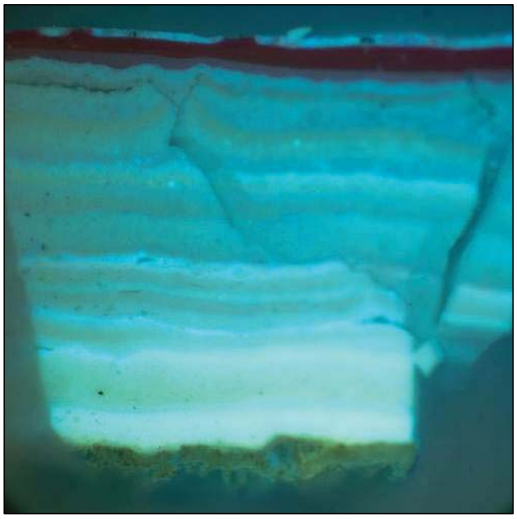


HHE-011 (UV)

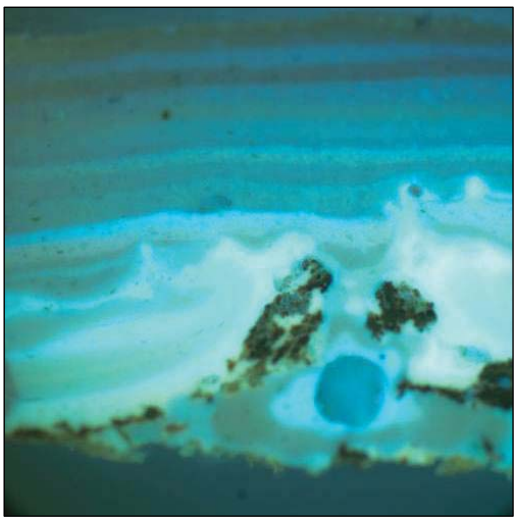

HHE-012 (Daylight Simulation)

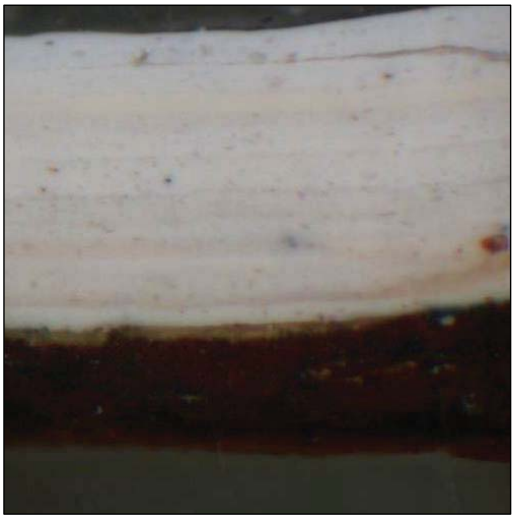

HHE-012 (UV)

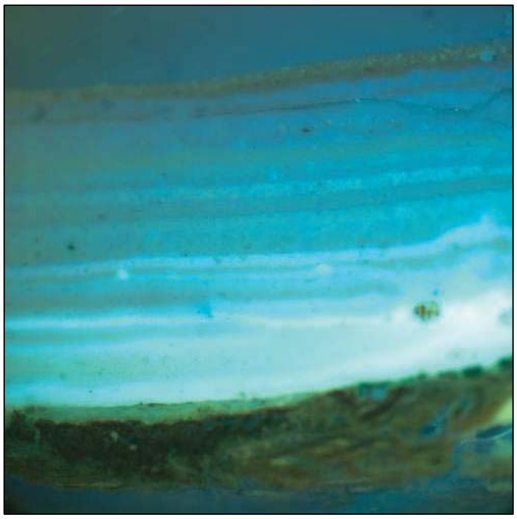

HHE-013 (Daylight Simulation)

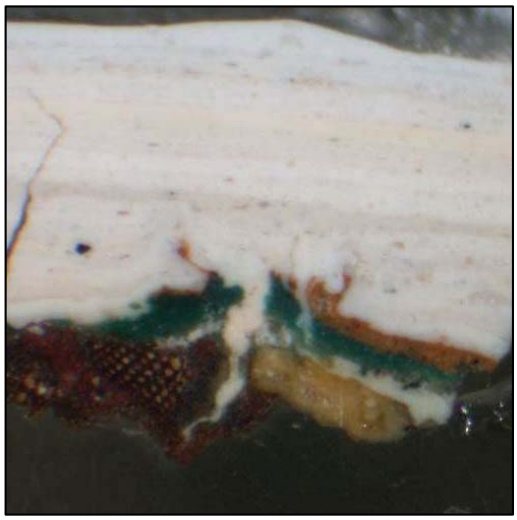

HHE-013 (UV)

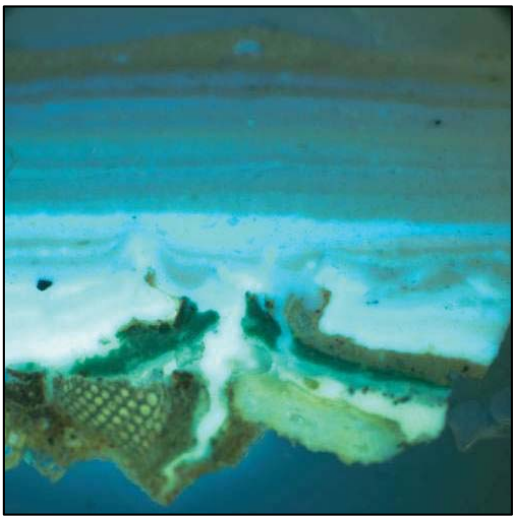

HHE-014 (Daylight Simulation)


HHE-014 (UV)


HHE-015 (Daylight Simulation)

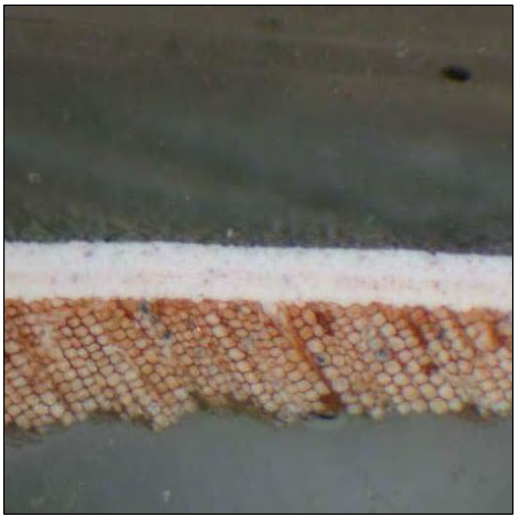

HHE-015 (UV)


HHE-016 (Daylight Simulation)

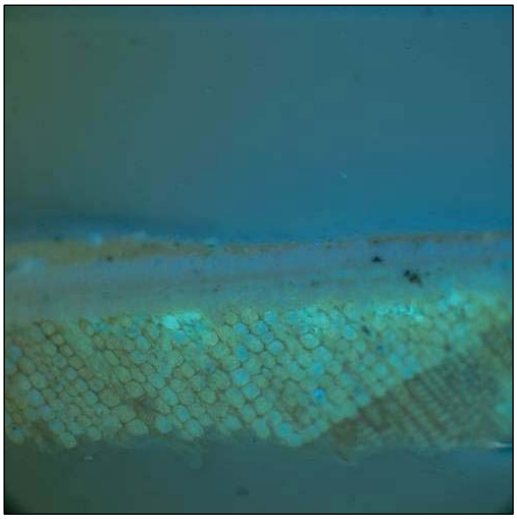

HHE-016 (UV)


HHE-017 (Daylight Simulation)

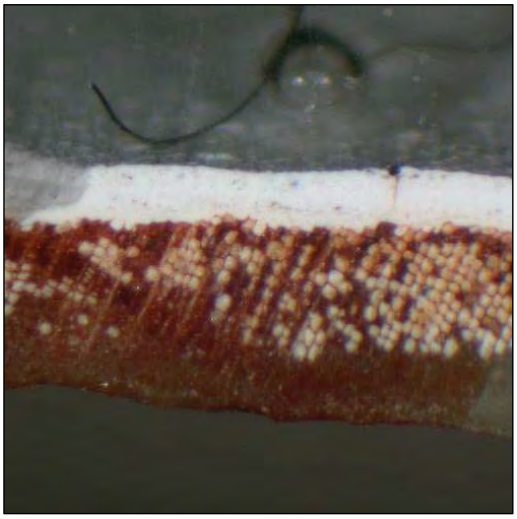

HHE-017 (UV)



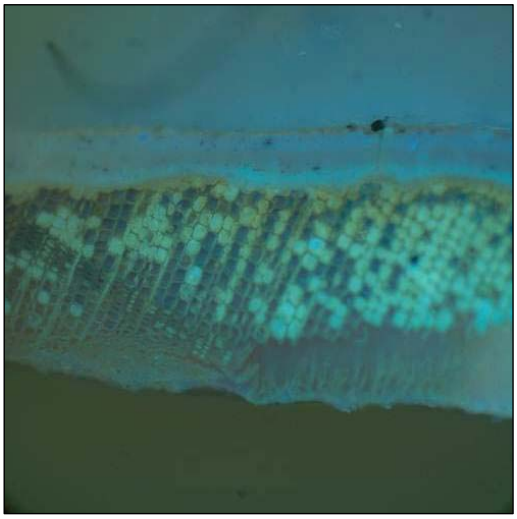
HHE-018 (Daylight Simulation)



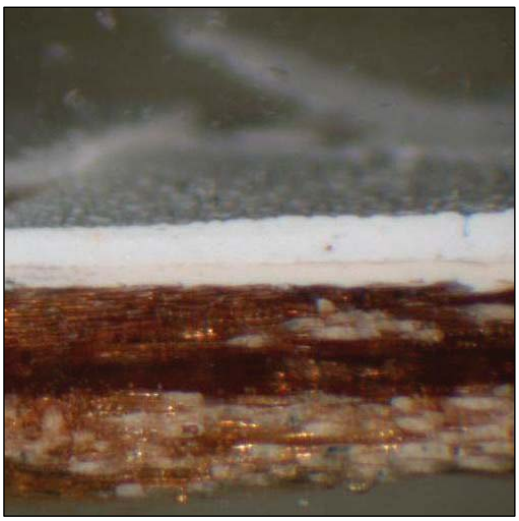
HHE-018 (UV)



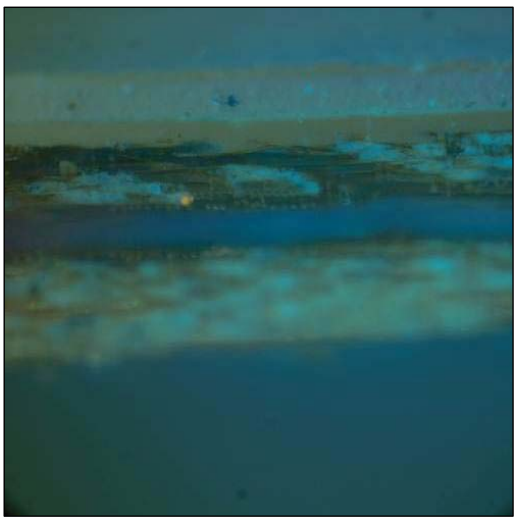
HHE-019 (Daylight Simulation)



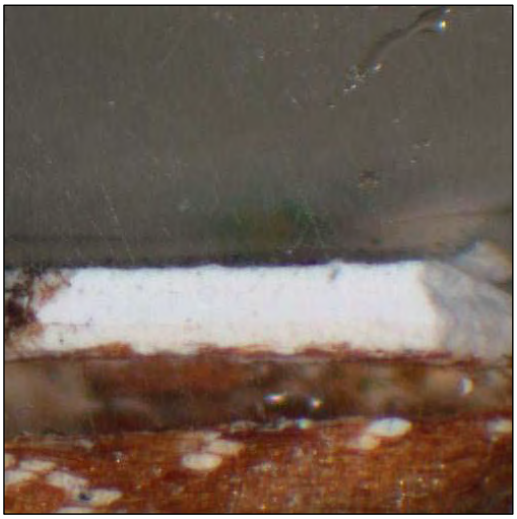
HHE-019 (UV)

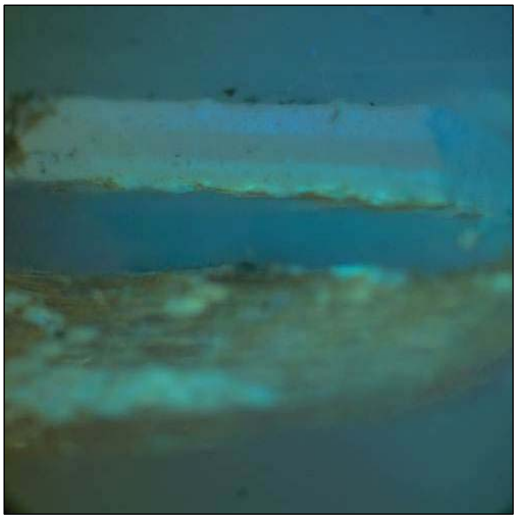


HHE-020 (Daylight Simulation)

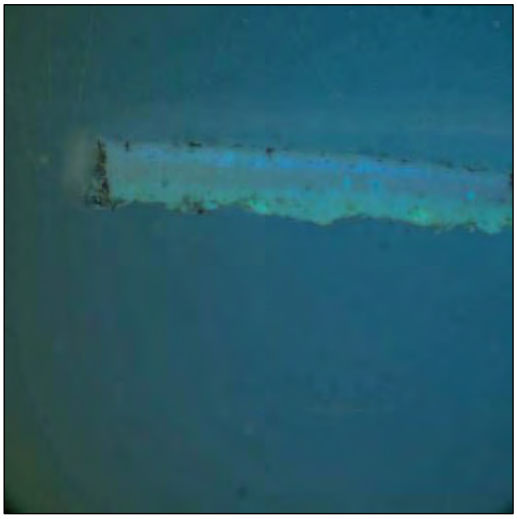


HHE-020 (UV)

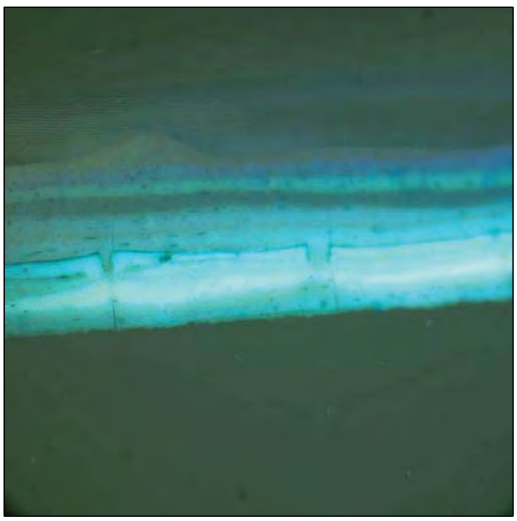

HHE-021 (Daylight Simulation)

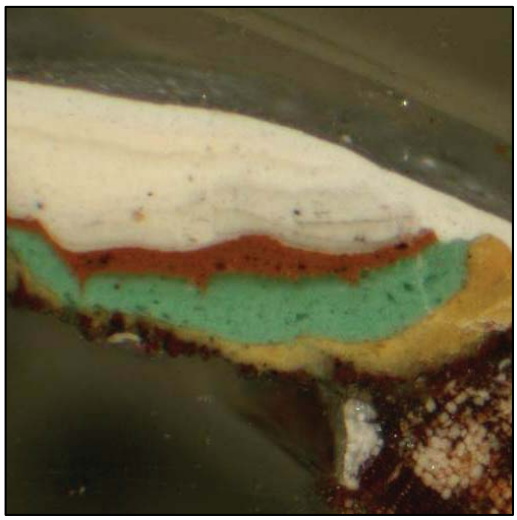

HHE-021 (UV)

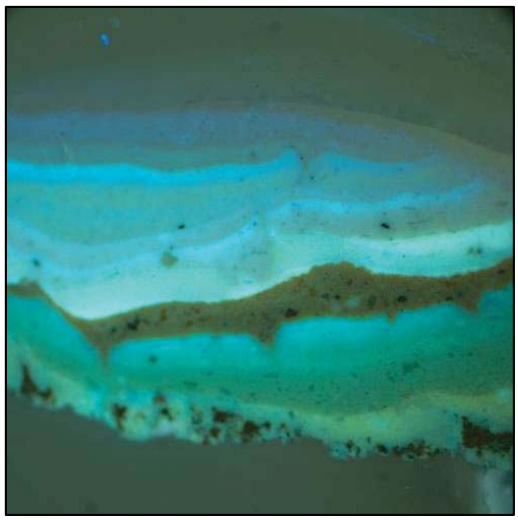

HHE-022 (Daylight Simulation)

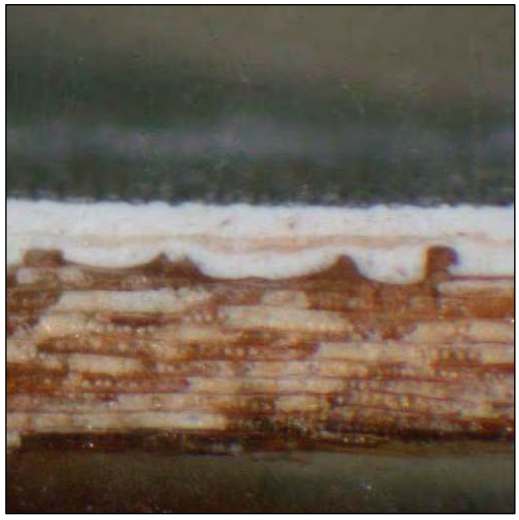

HHE-022 (UV)

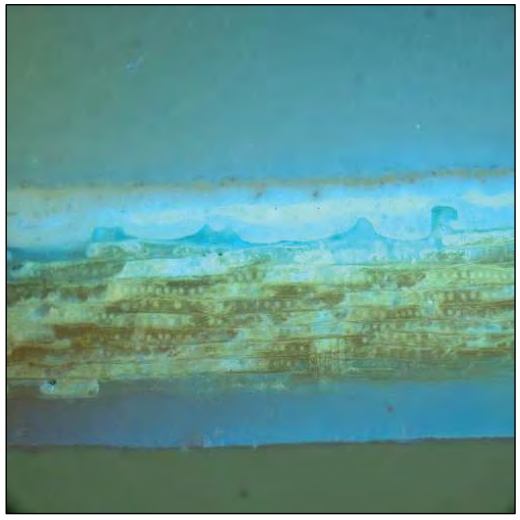

HHE-023 (Daylight Simulation)

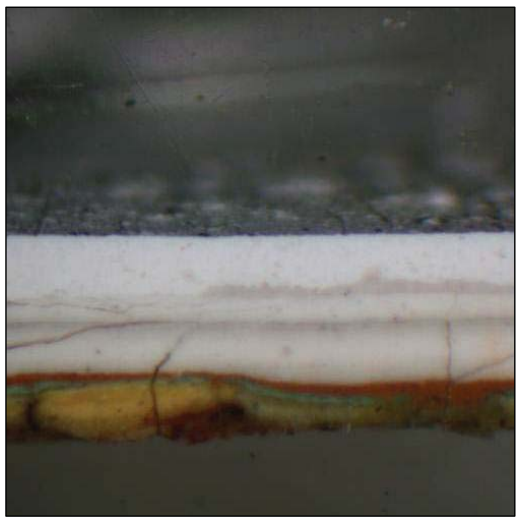

HHE-023 (UV)

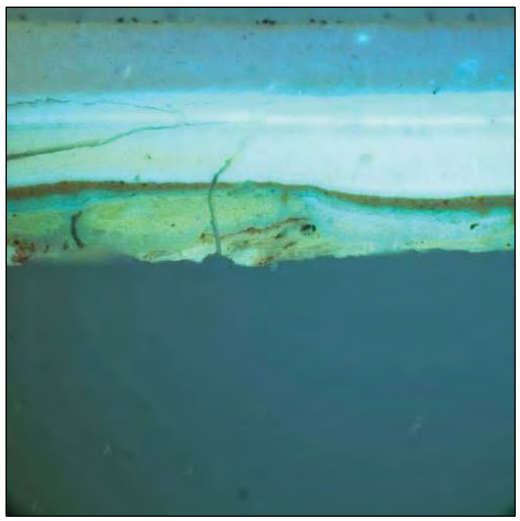

HHE-024 (Daylight Simulation)

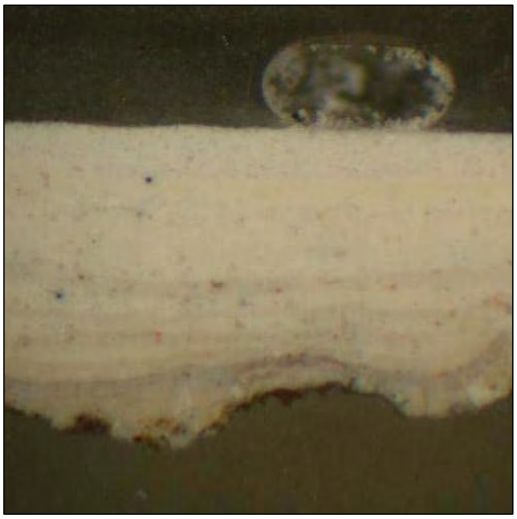

HHE-024 (UV)


HHE-025 (Daylight Simulation)

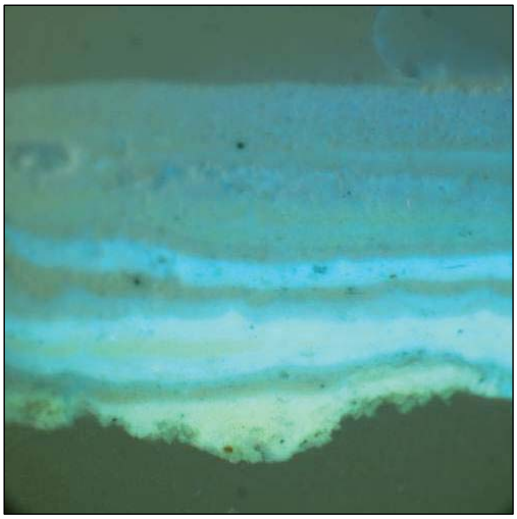

HHE-025 (UV)


HHE-026 (Daylight Simulation)


HHE-026 (UV)



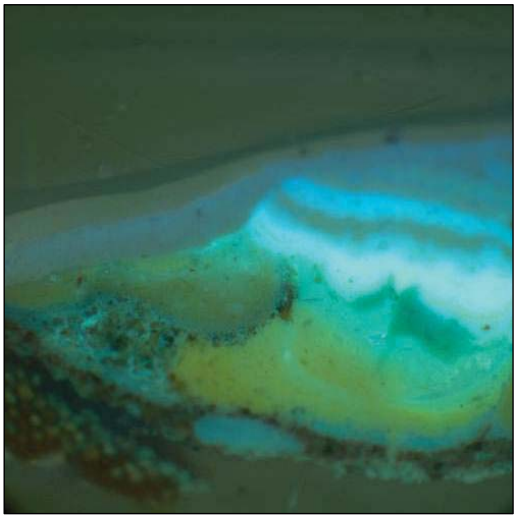
HHE-027 (Daylight Simulation)



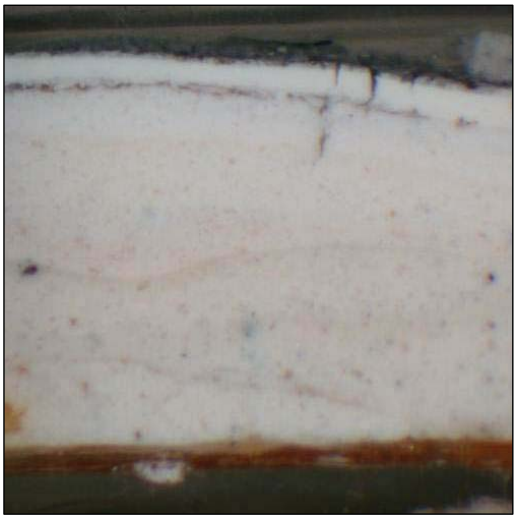
HHE-027 (UV)



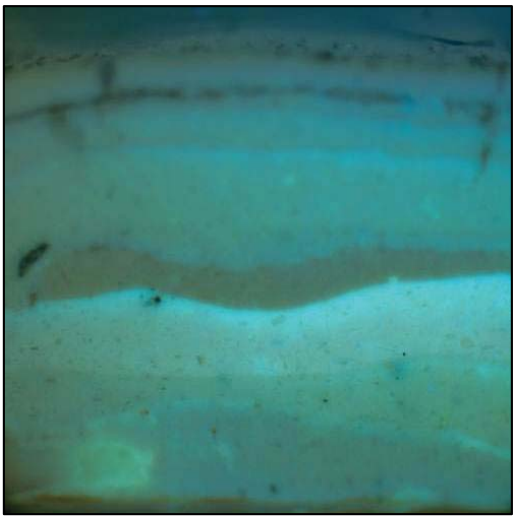
HHE-028 (Daylight Simulation)



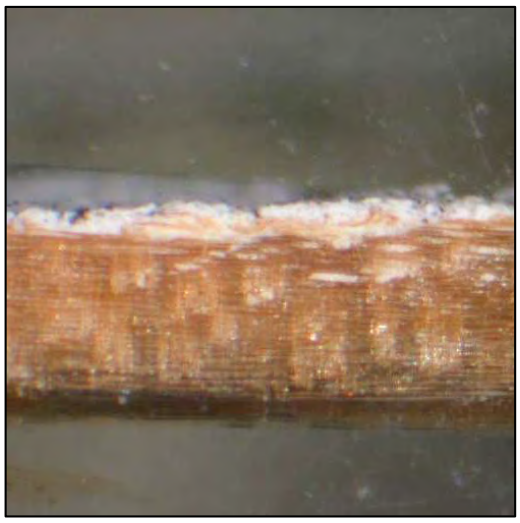
HHE-028 (UV)



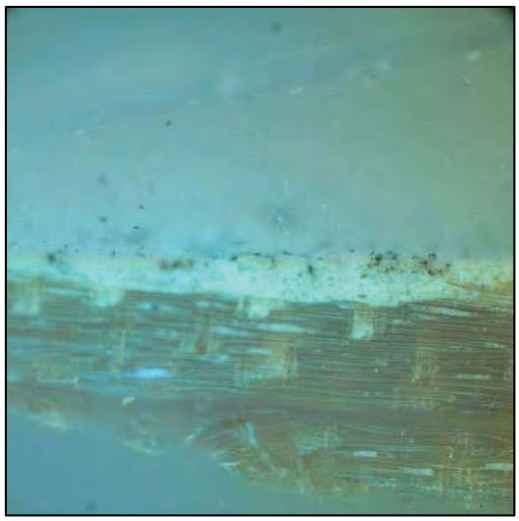
HHE-029 (Daylight Simulation)



HHE-029 (UV)



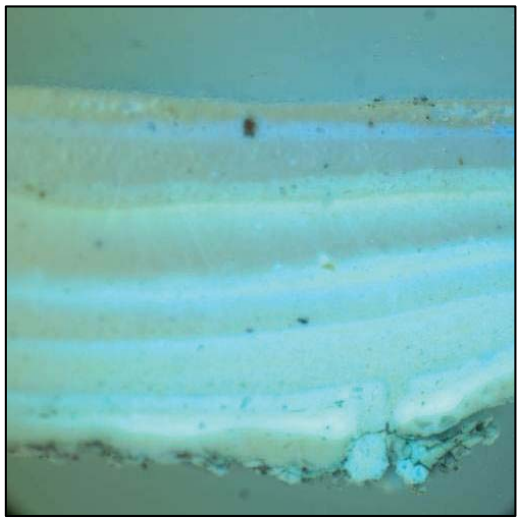
HHE-030 (Daylight Simulation)



HHE-030 (UV)



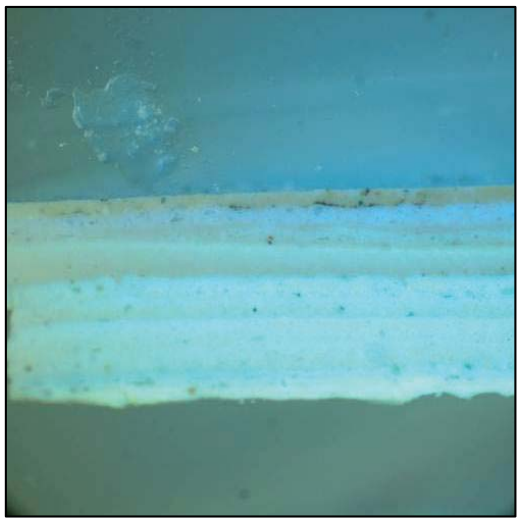
HHE-031 (Daylight Simulation)



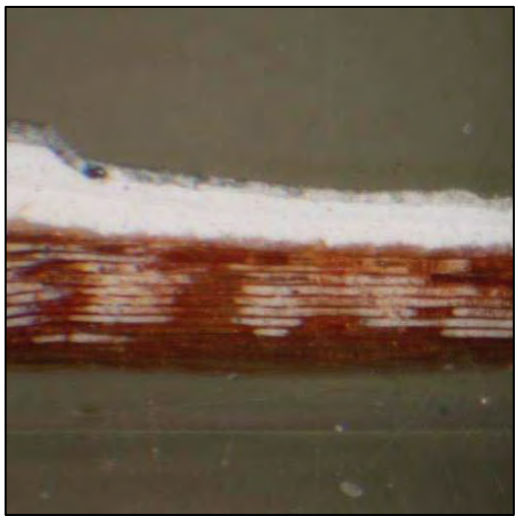
HHE-031 (UV)



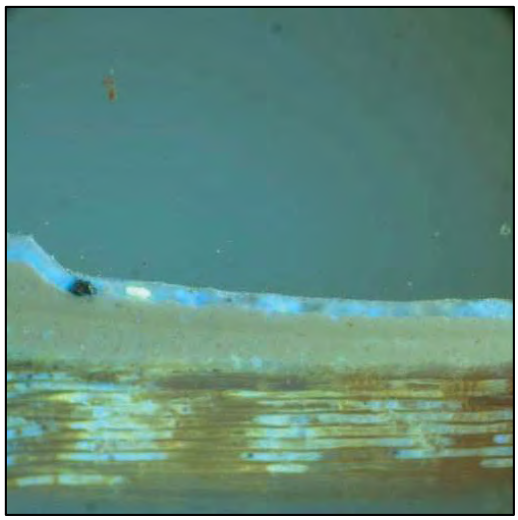
HHE-032 (Daylight Simulation)



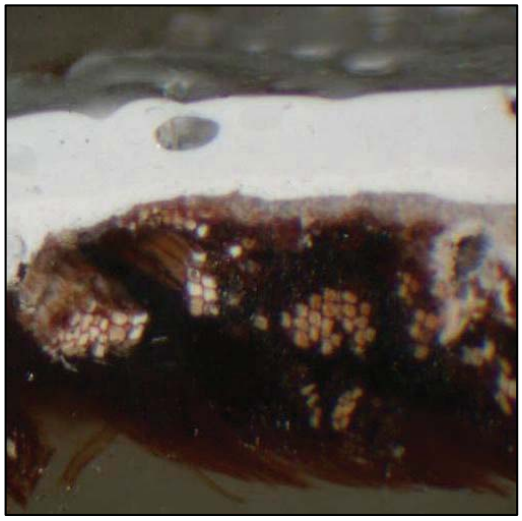
HHE-032 (UV)



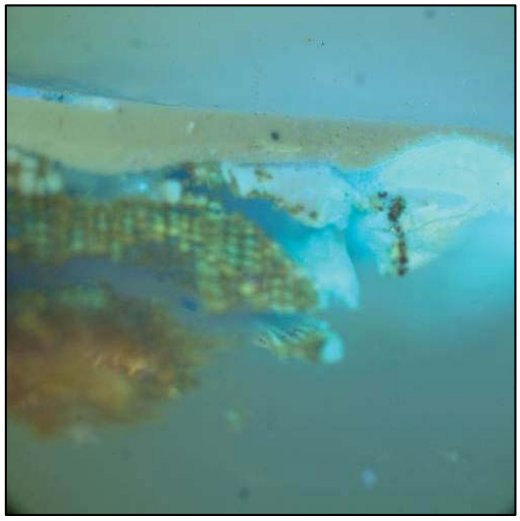
HHE-033 (Daylight Simulation)



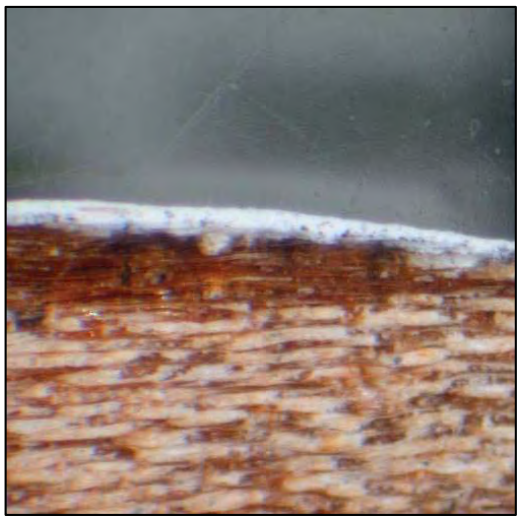
HHE-033 (UV)



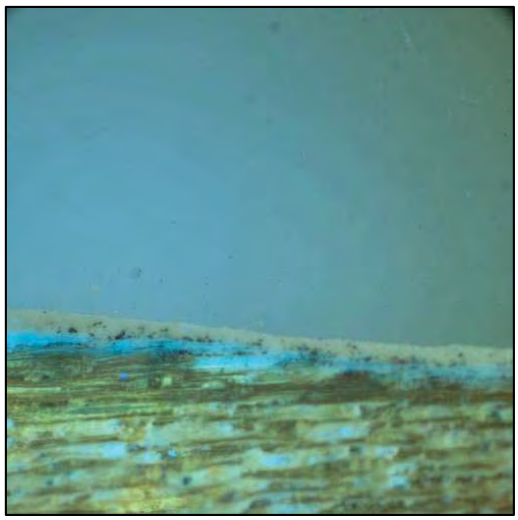
HHE-034 (Daylight Simulation)



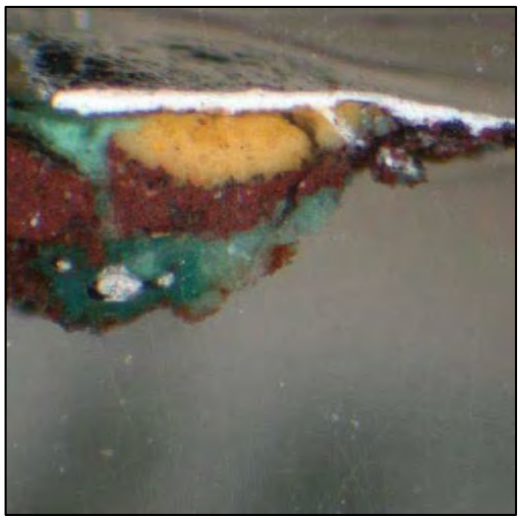
HHE-034 (UV)



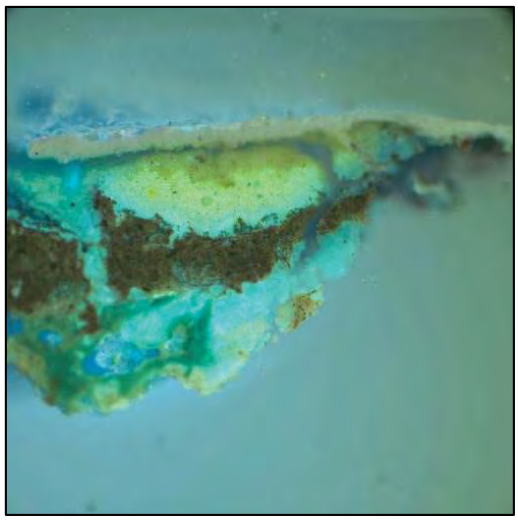
HHE-035 (Daylight Simulation)



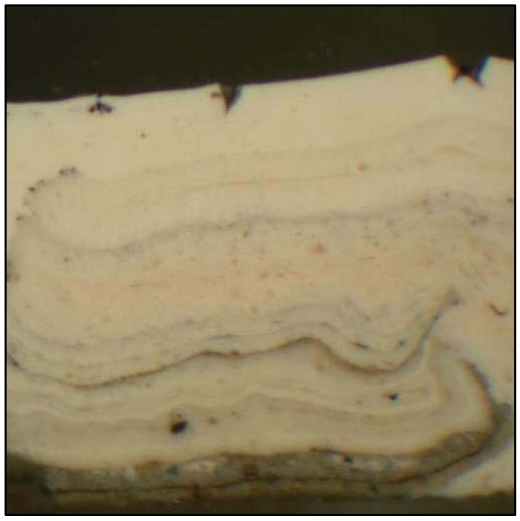
HHE-035 (UV)



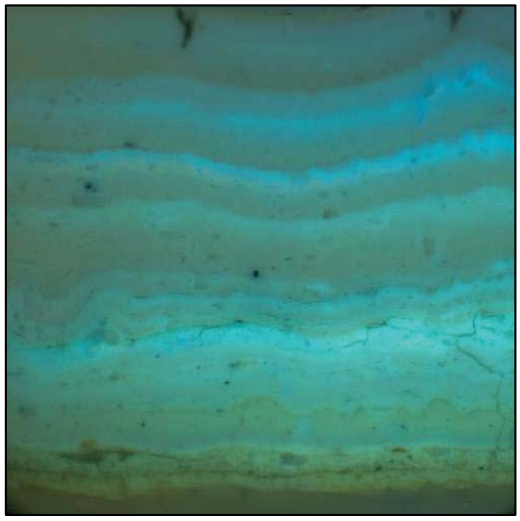
HHE-036 (Daylight Simulation)



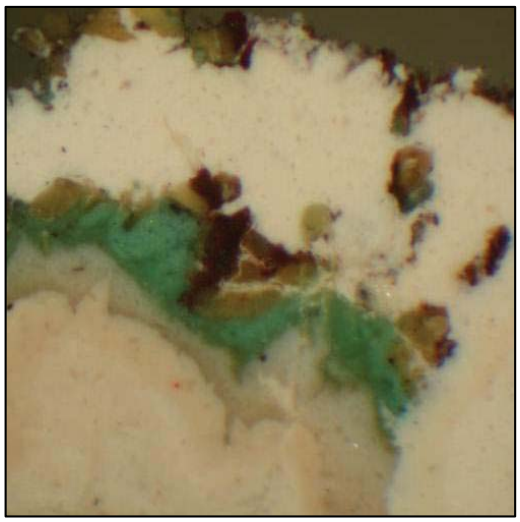
HHE-036 (UV)



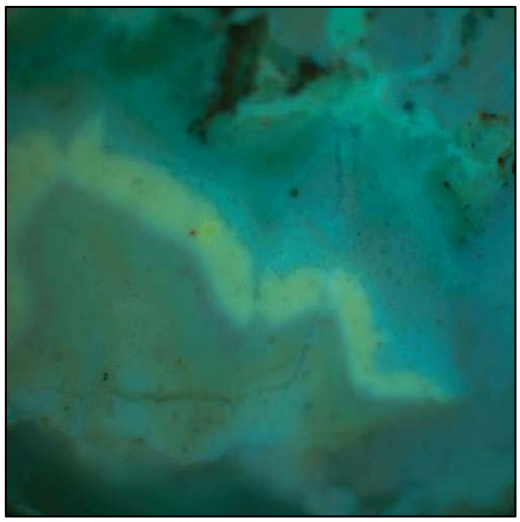
HHE-037 (Daylight Simulation)



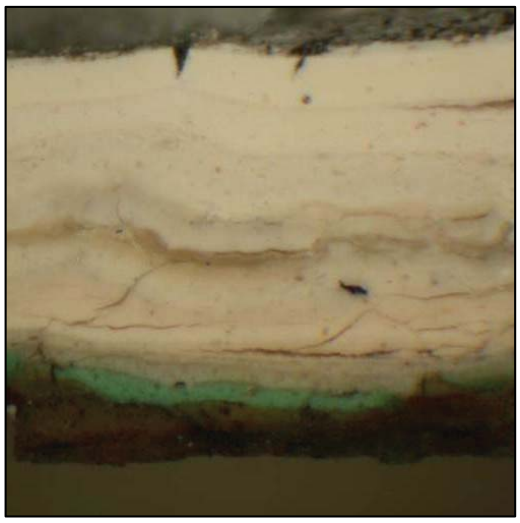
HHE-037 (UV)



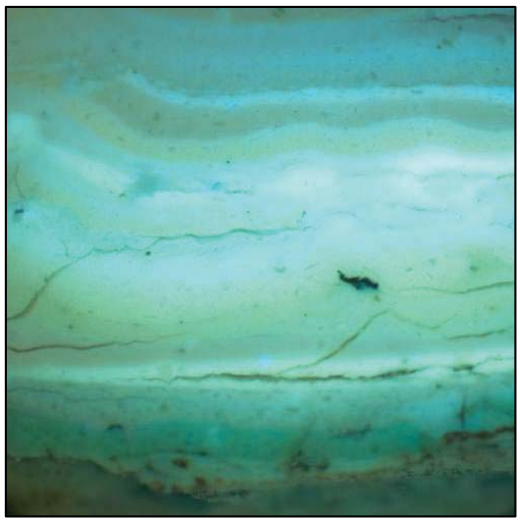
HHE-038 (Daylight Simulation)



HHE-038 (UV)



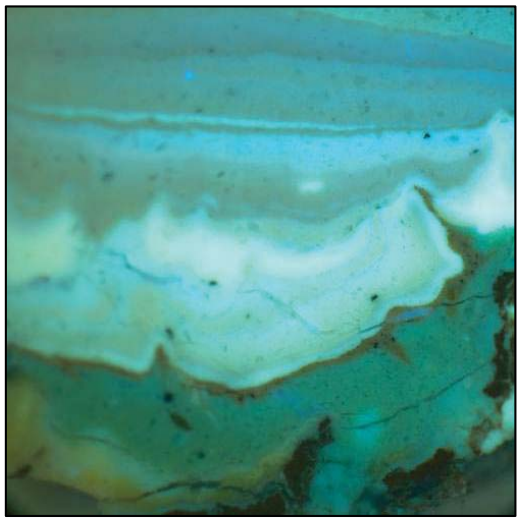
HHE-039 (Daylight Simulation)



HHE-039 (UV)



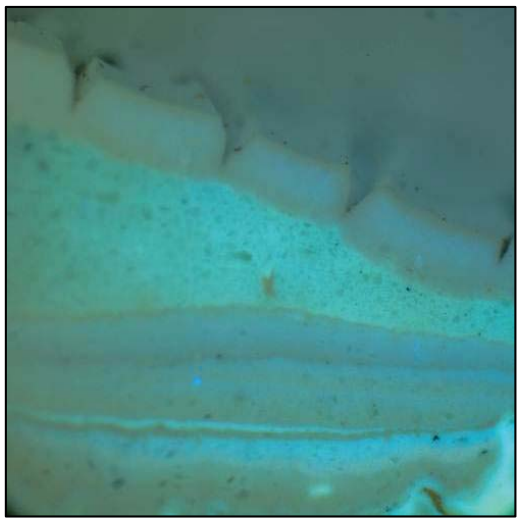
HHE-040a (Daylight Simulation)



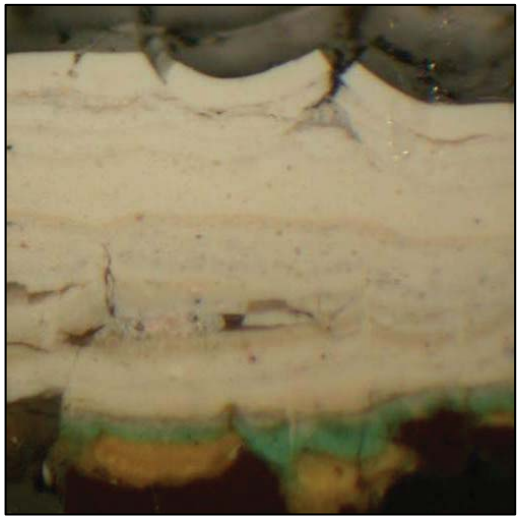
HHE-040a (UV)



HHE-040b (Daylight Simulation)



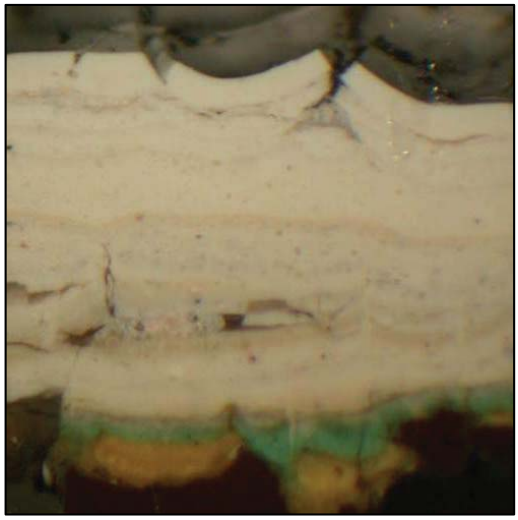
HHE-040b (UV)

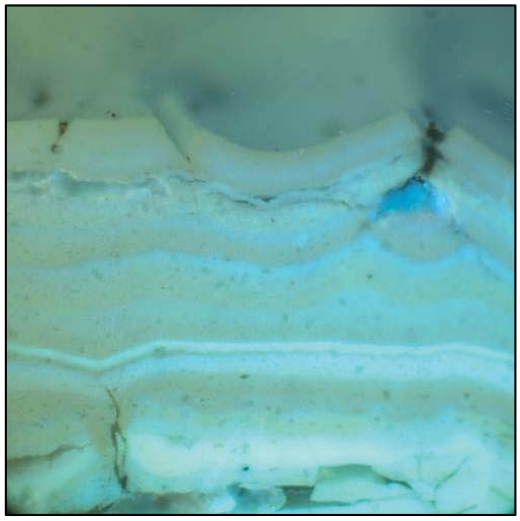


HHE-041 (Daylight Simulation)

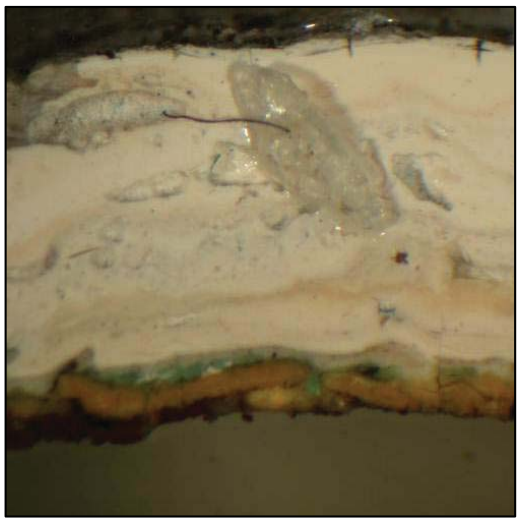


HHE-041a (UV)

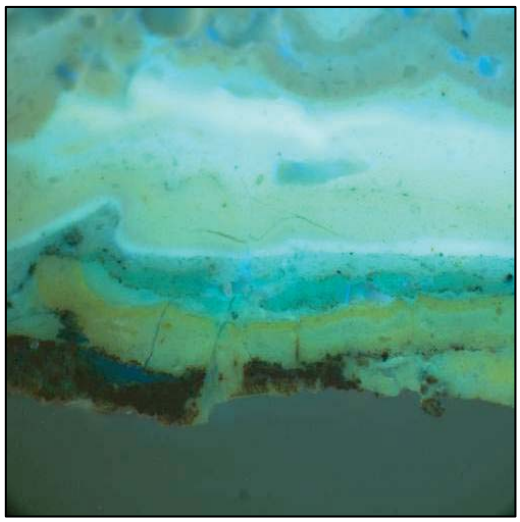




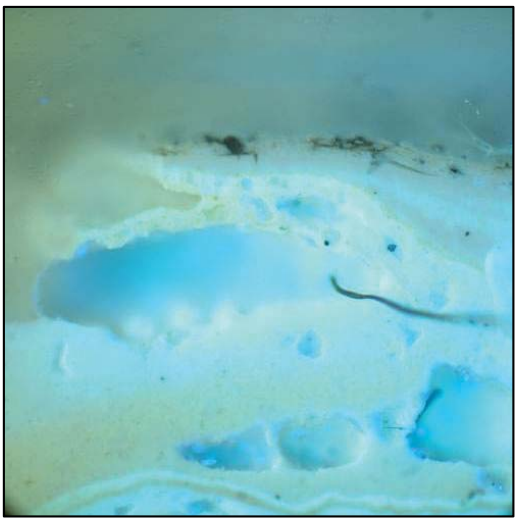
HHE-041b (UV)



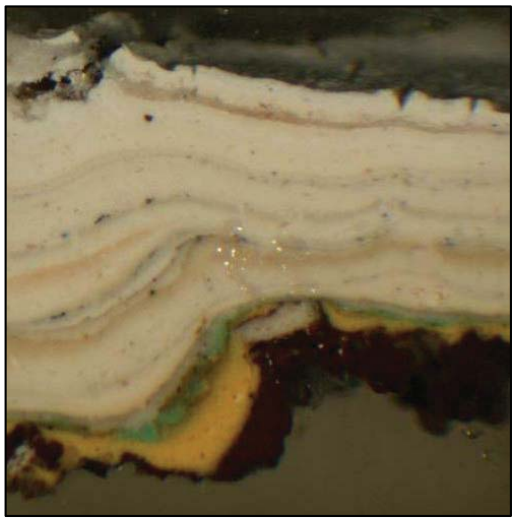
HHE-042 (Daylight Simulation)



HHE-042a (UV)



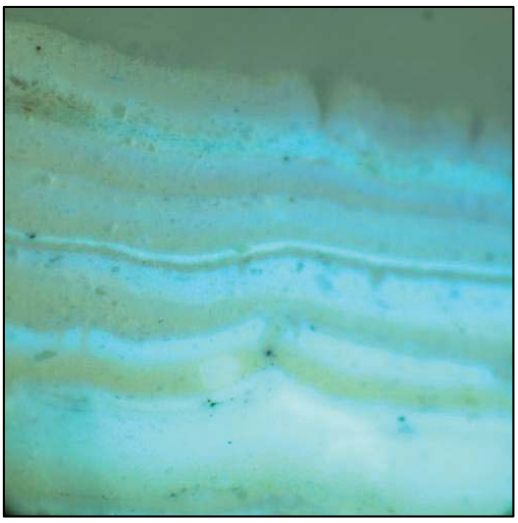
HHE-042 b (UV)



HHE-043 (Daylight Simulation)



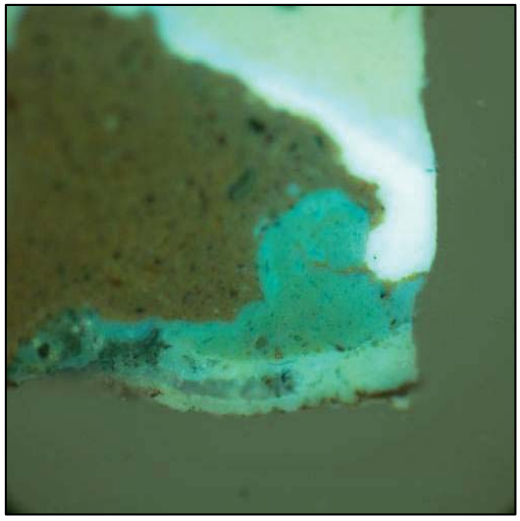
HHE-043 a (UV)



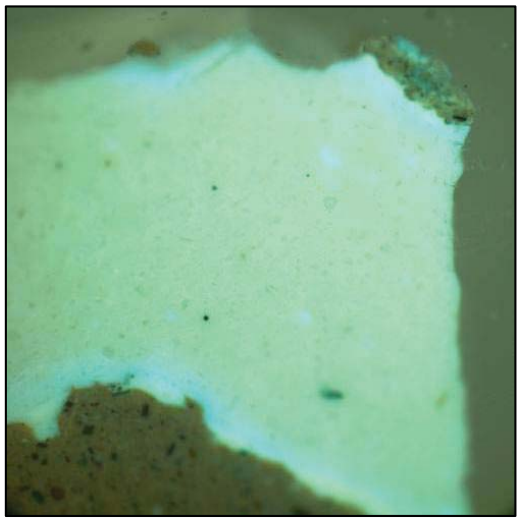
HHE-043 b (UV)



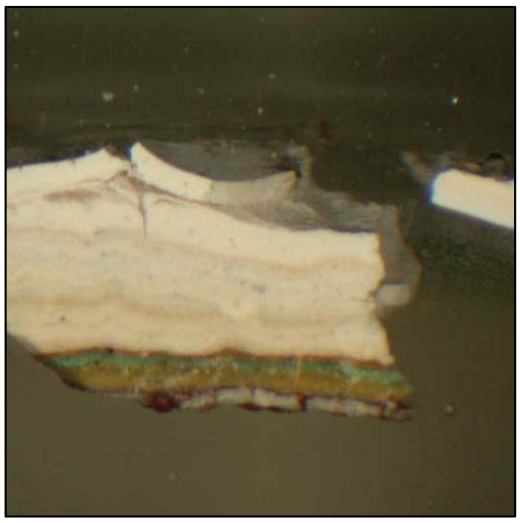
HHE-044 (Daylight Simulation)



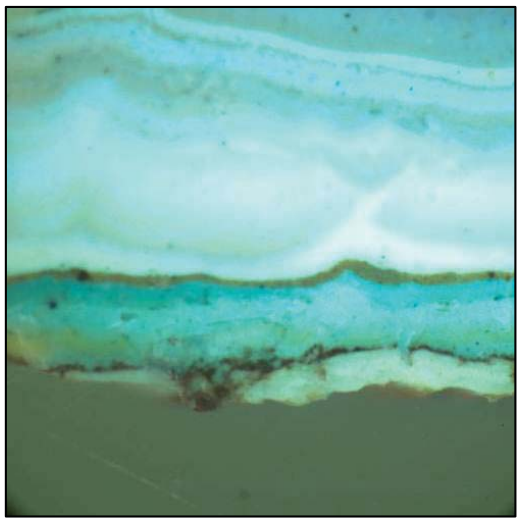
HHE-044 a (UV)



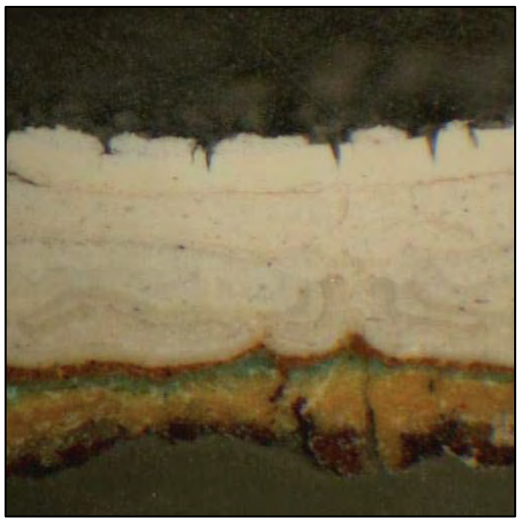
HHE-044 b (UV)



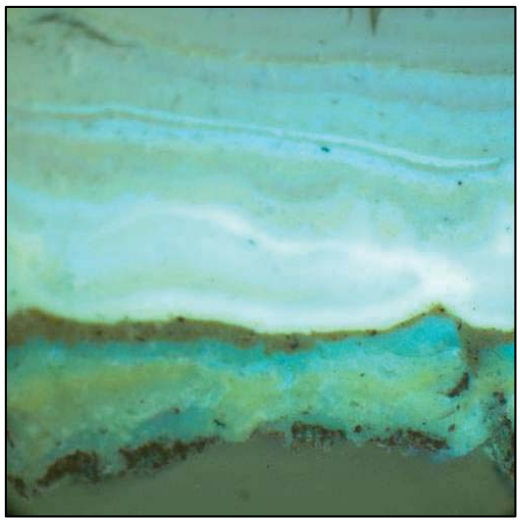
HHE-045 (Daylight Simulation)



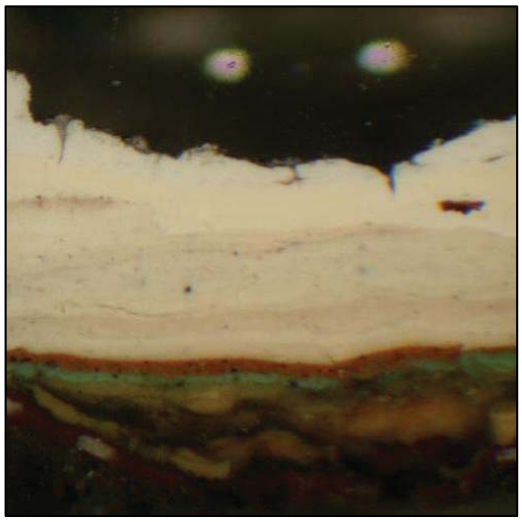
HHE-045 (UV)



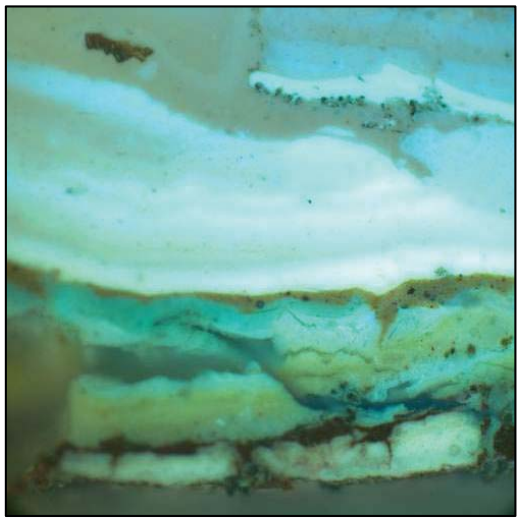
HHE-046 (Daylight Simulation)



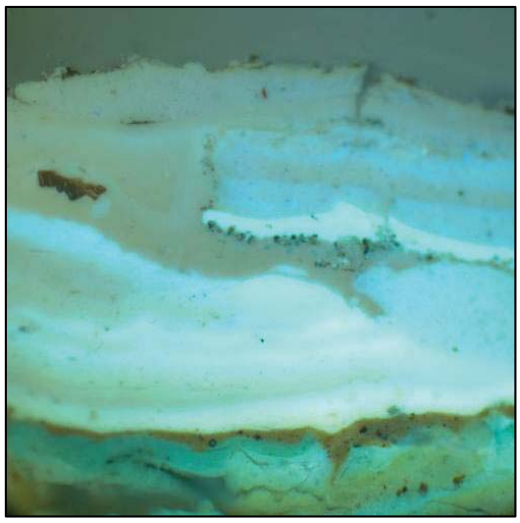
HHE-046(UV)



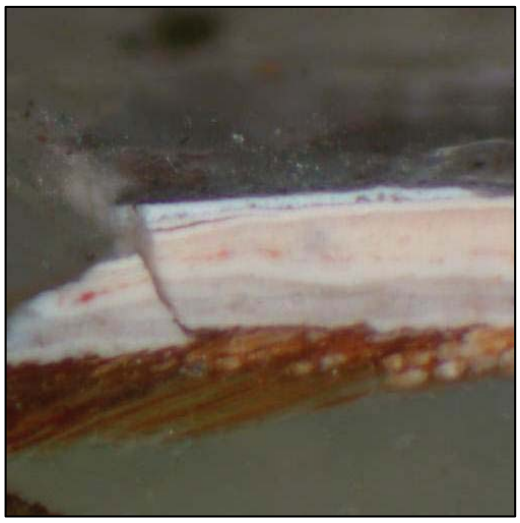
HHE-047 (Daylight Simulation)



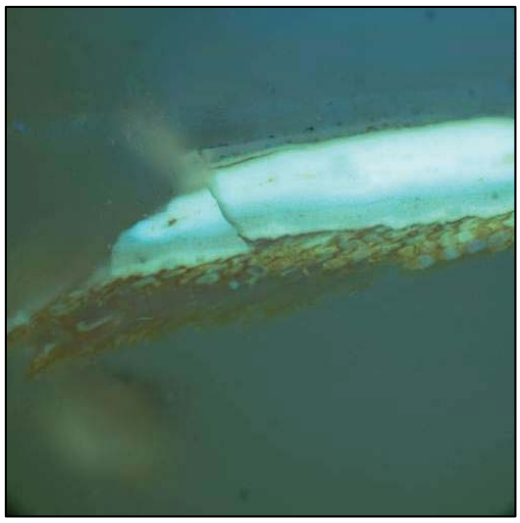
HHE-047a (UV)



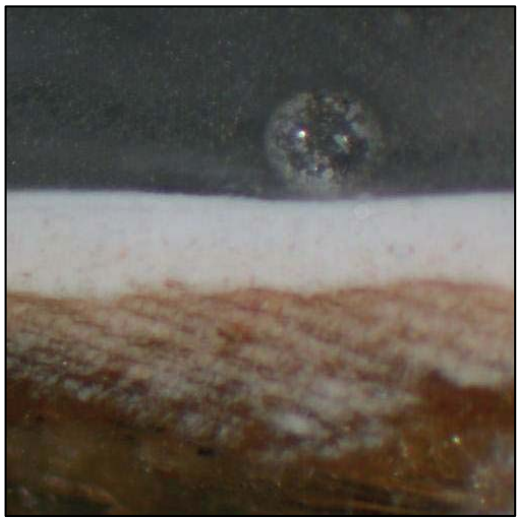
HHE-047b (UV)



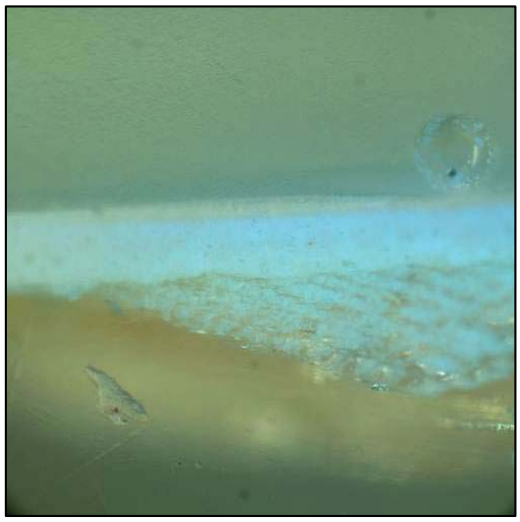
HHE-048 (Daylight Simulation)



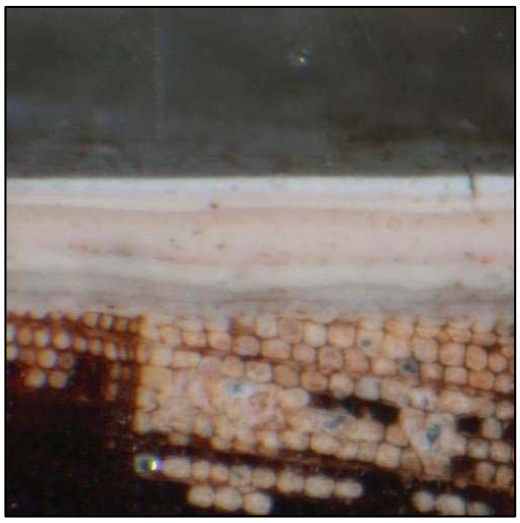
HHE-048 (UV)



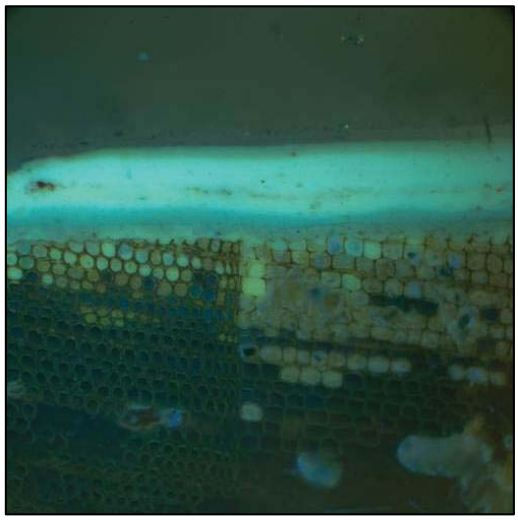
HHE-048a (Daylight Simulation)



HHE-048a (UV)

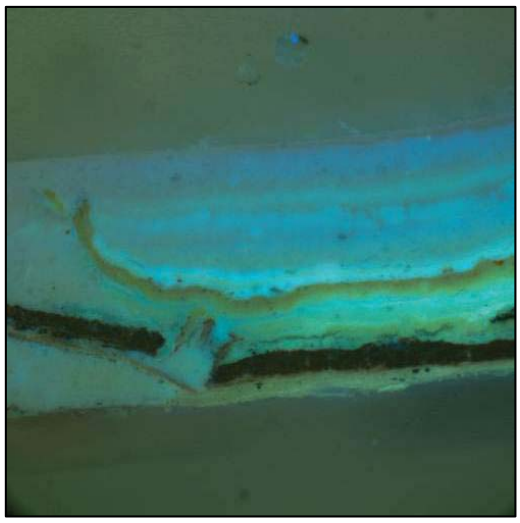


HHE-049 (Daylight Simulation)

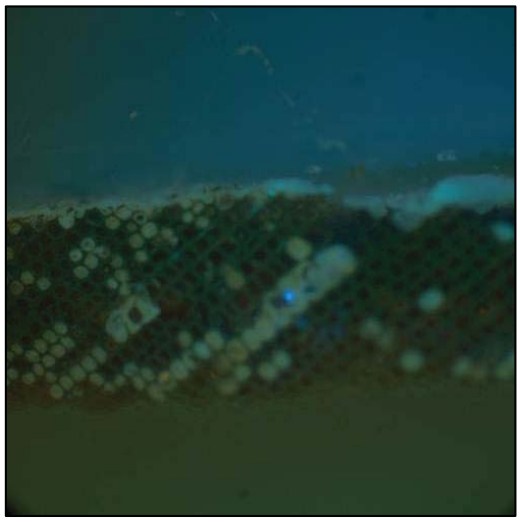


HHE-049 (UV)

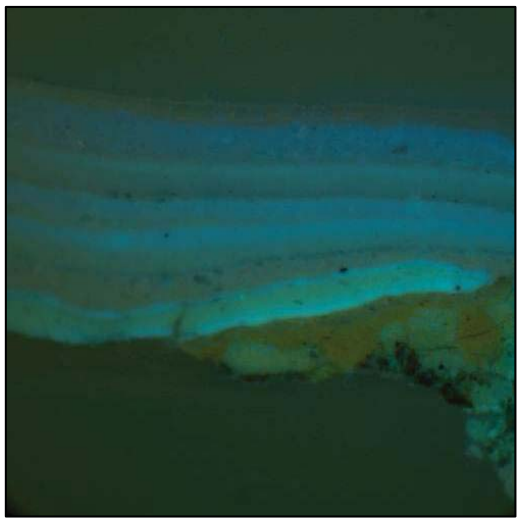

HHE-049a (Daylight Simulation)


HHE-049a (UV)


HHE-050 (Daylight Simulation)

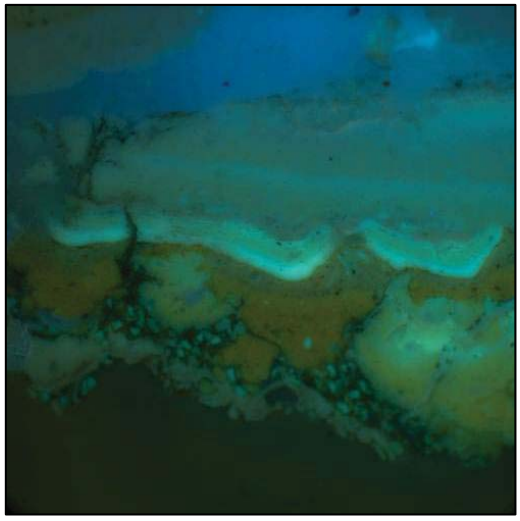

HHE-050 (UV)


HHE-051 (Daylight Simulation)

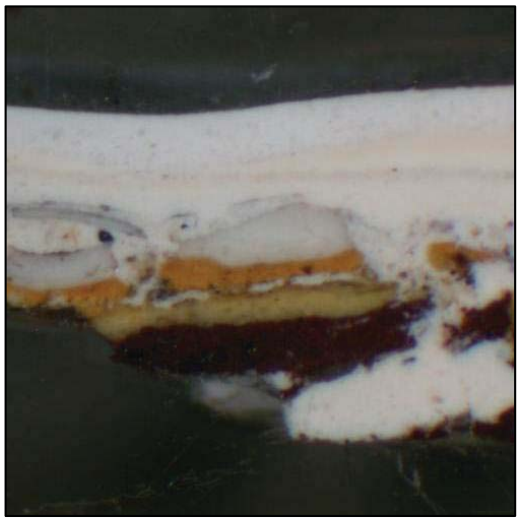

HHE-051 (UV)



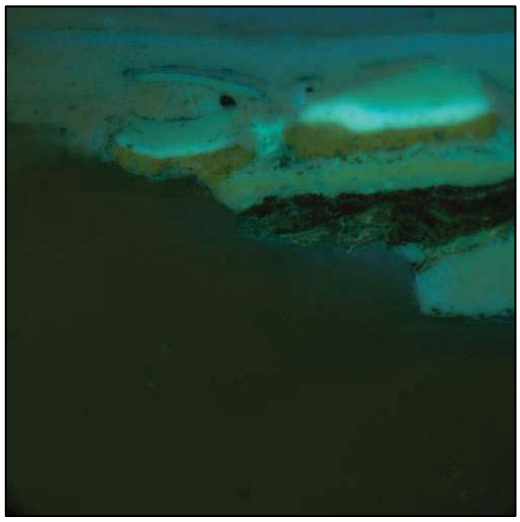
HHE-052 (Daylight Simulation)



HHE-052 (UV)



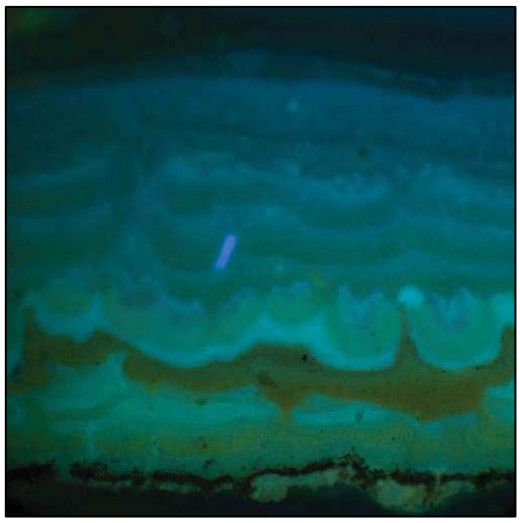
HHE-053 (Daylight Simulation)



HHE-053 (UV)



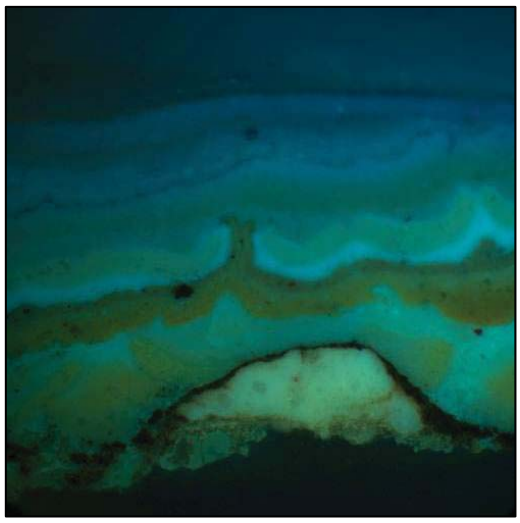
HHE-054 (Daylight Simulation)



HHE-054 (UV)



HHE-055 (Daylight Simulation)



HHE-055 (UV)



HHE-056 (Daylight Simulation)



HHE-056 (UV)



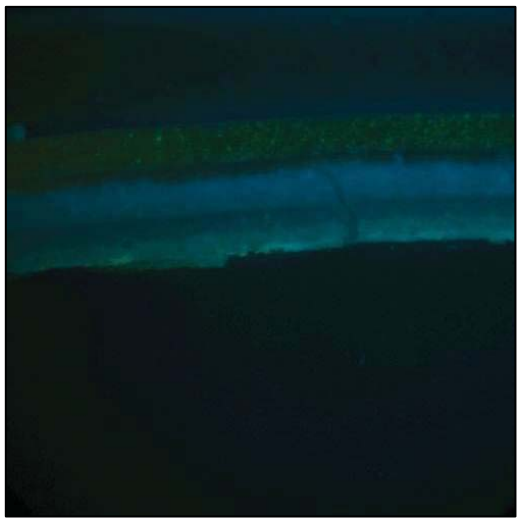
HHE-057 (Daylight Simulation)



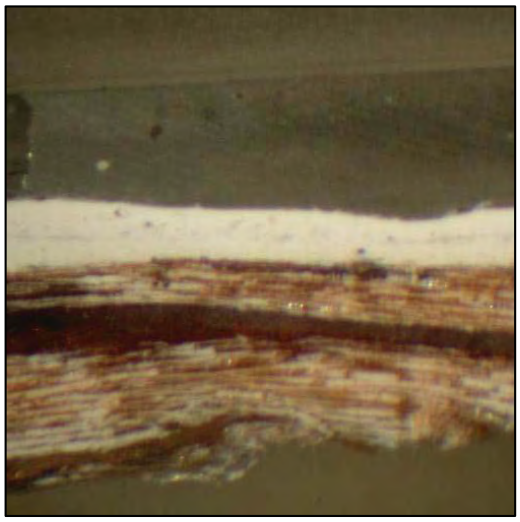
HHE-057 (UV)



HHE-058 (Daylight Simulation)



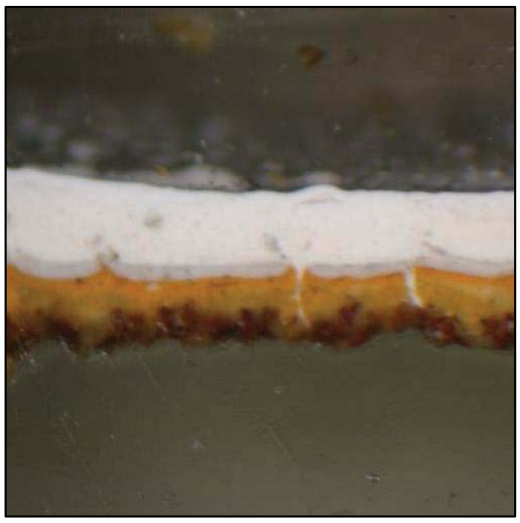
HHE-058 (UV)



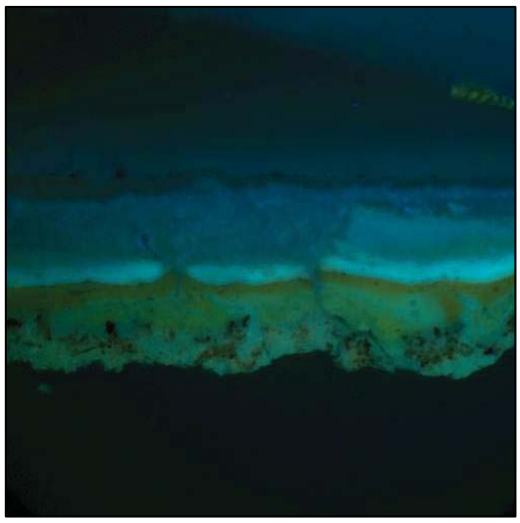
HHE-059 (Daylight Simulation)



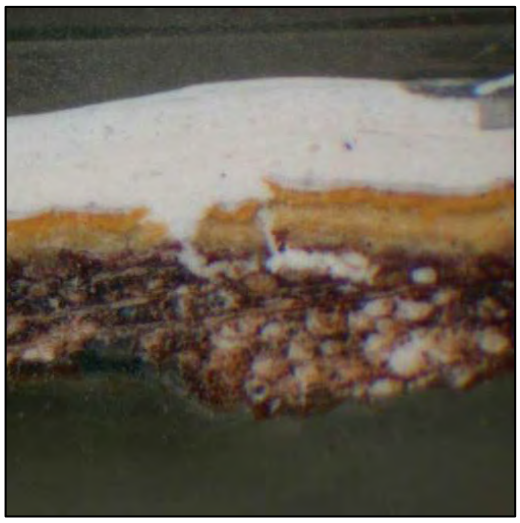
HHE-059 (UV)



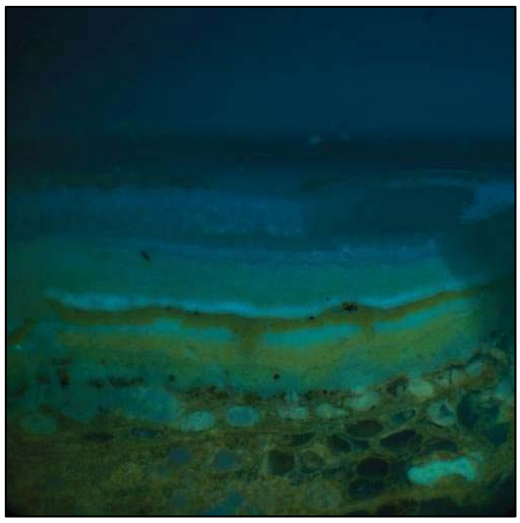
HHE-060 (Daylight Simulation)



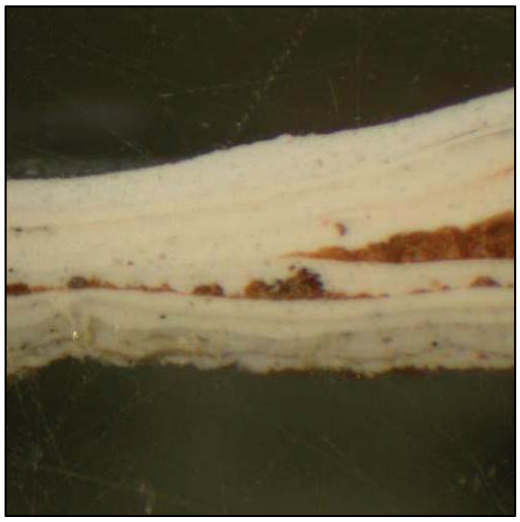
HHE-060 (UV)



HHE-061 (Daylight Simulation)



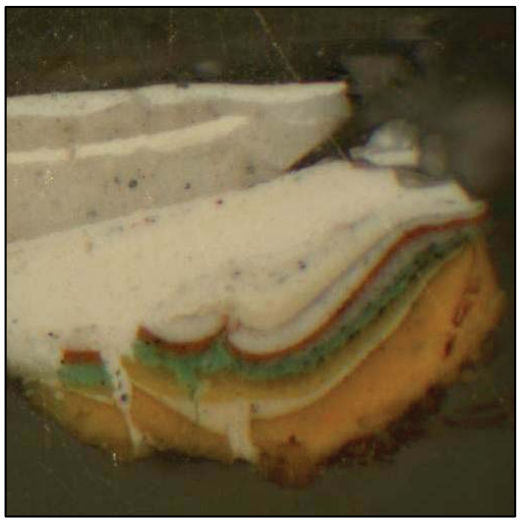
HHE-061 (UV)



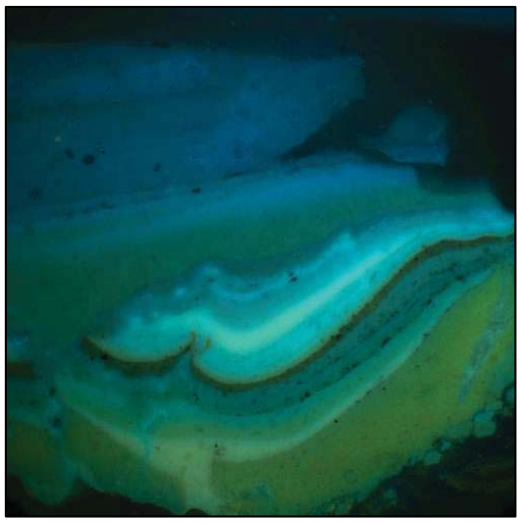
HHE-062 (Daylight Simulation)



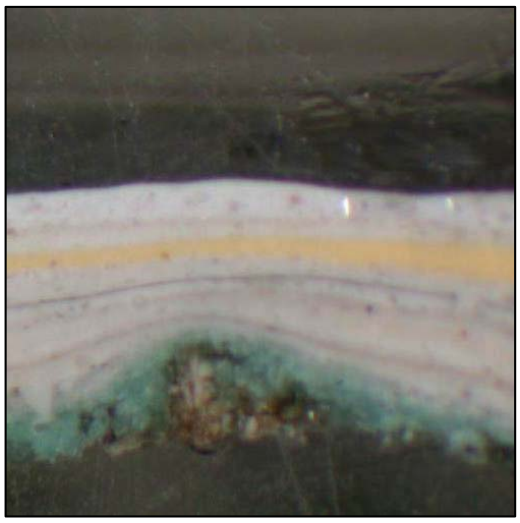
HHE-062 (UV)



HHE-063 (Daylight Simulation)



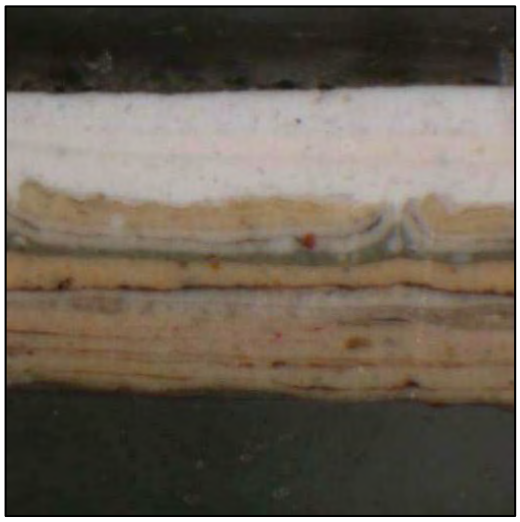
HHE-063 (UV)



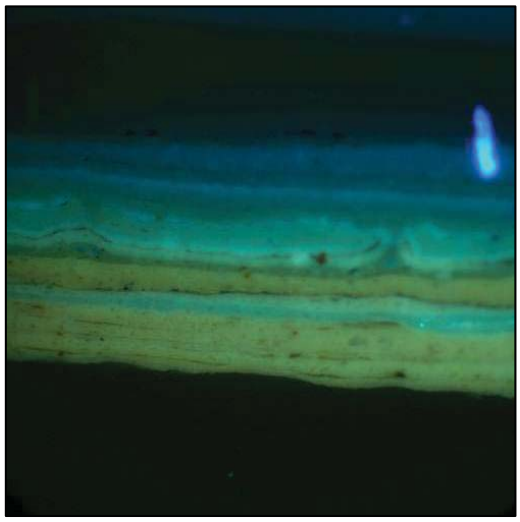
HHE-064 (Daylight Simulation)



HHE-064 (UV)



HHE-065 (Daylight Simulation)

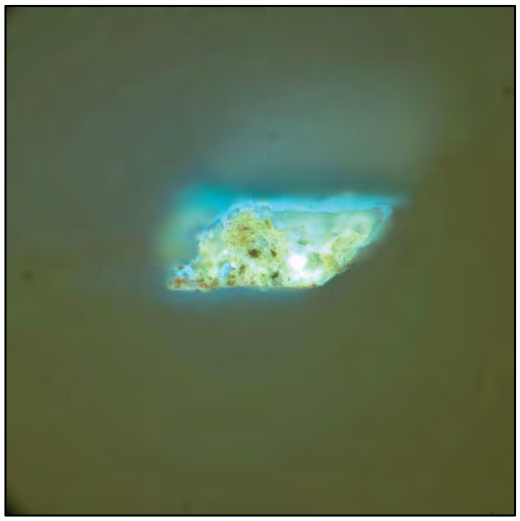


HHE-065 (UV)

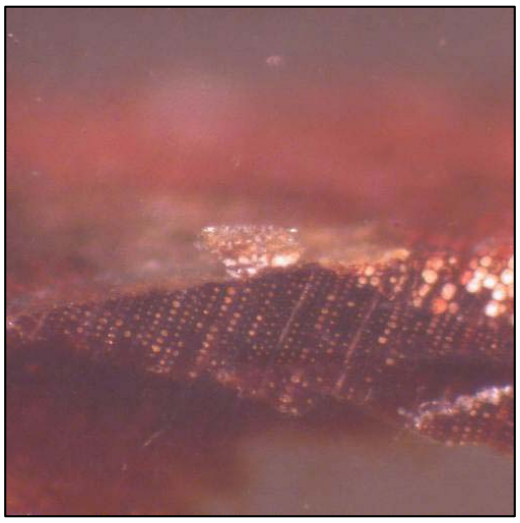
Interior Samples



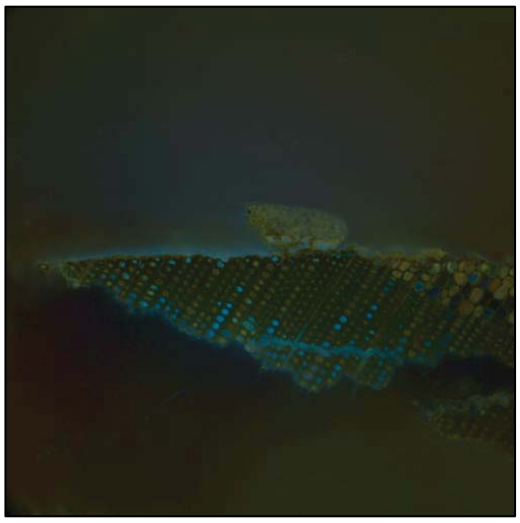
HHI-001 (Daylight Simulation)



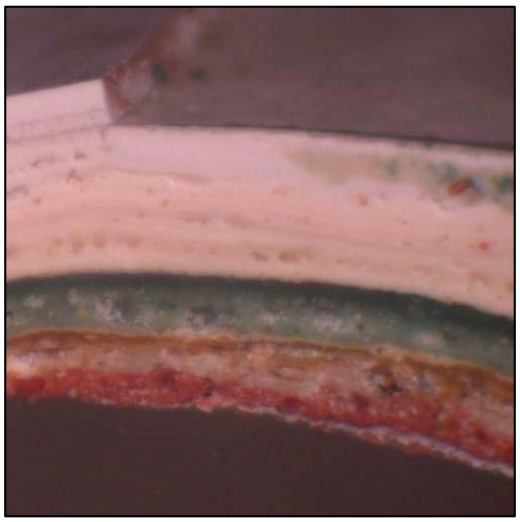
HHI-001 (UV)



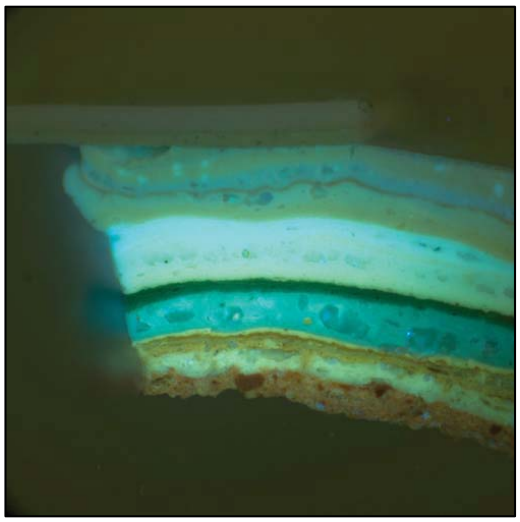
HHI-002a (Daylight Simulation)



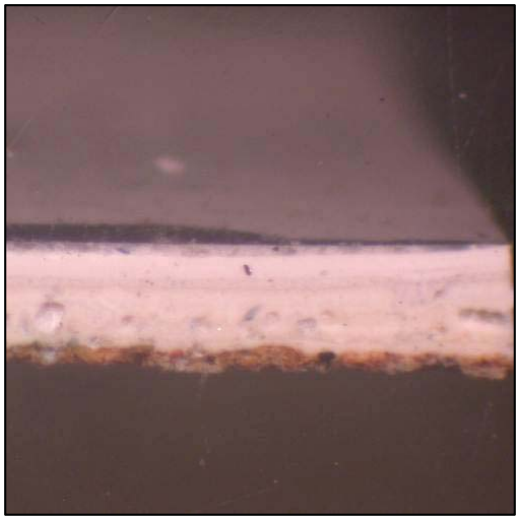
HHI-002 (UV)



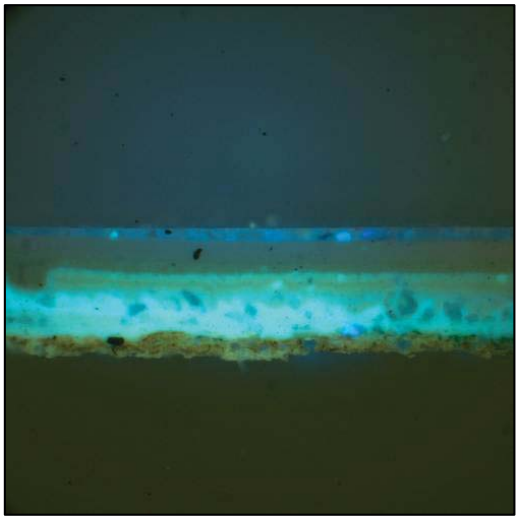
HHI-002b (Daylight Simulation)



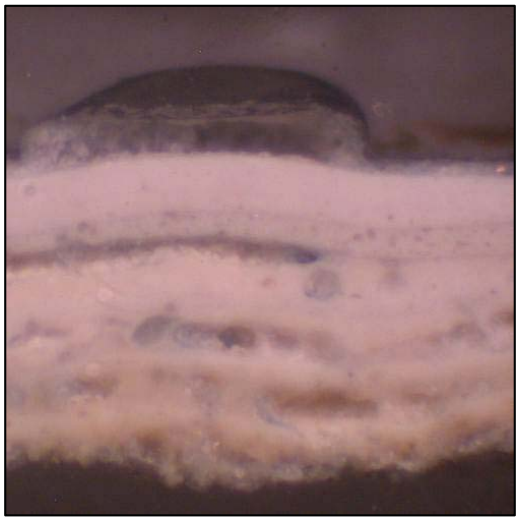
HHI-002b (UV)



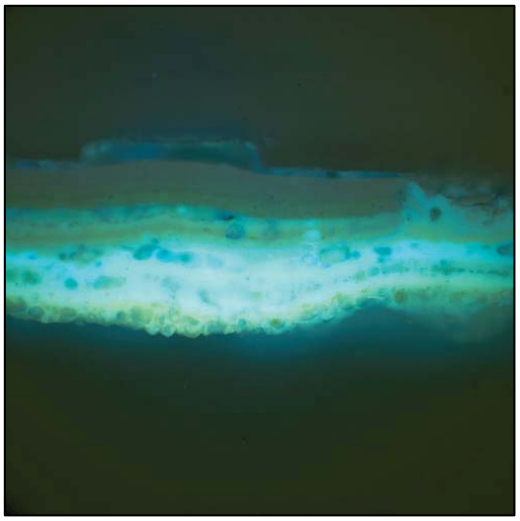
HHI-003 (Daylight Simulation)



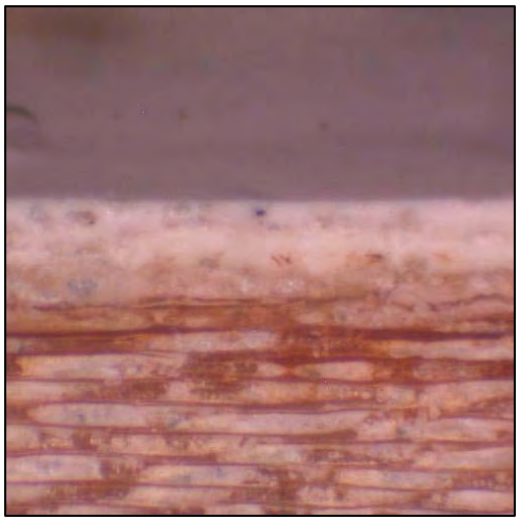
HHI-003 (UV)



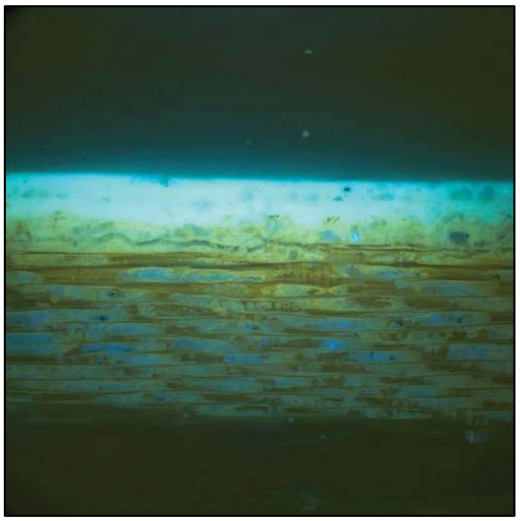
HHI-004 (Daylight Simulation)



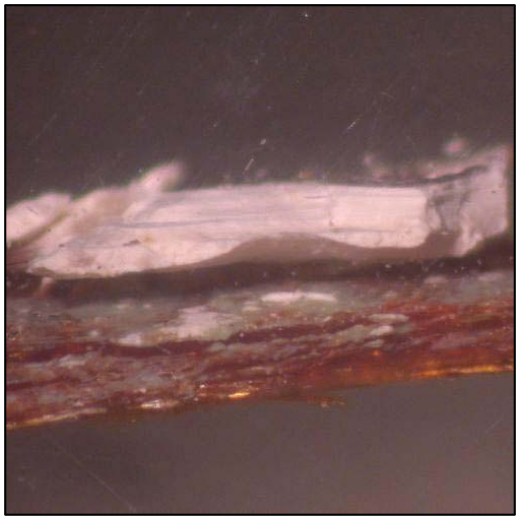
HHI-004 (UV)



HHI-005 (Daylight Simulation)

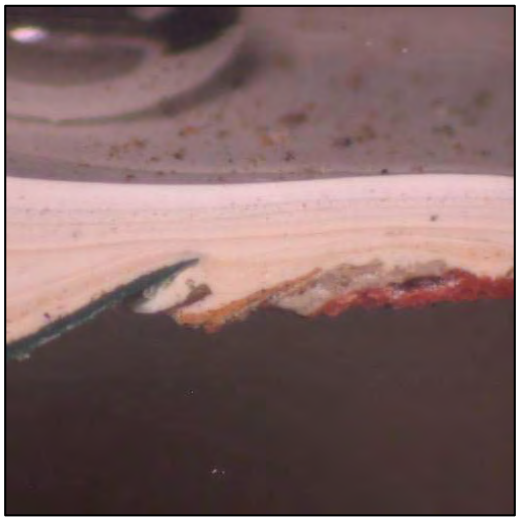


HHI-005 (UV)

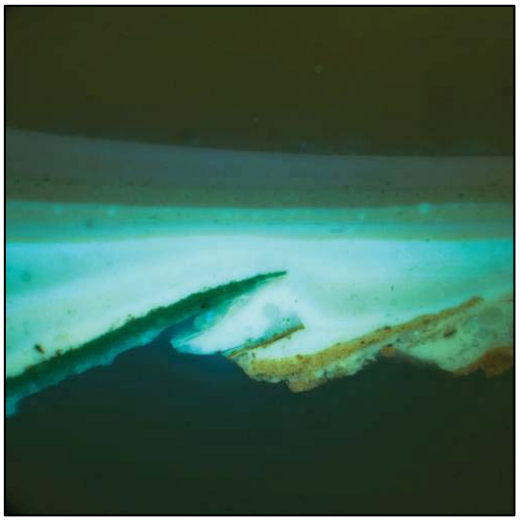


HHI-006 (Daylight Simulation)

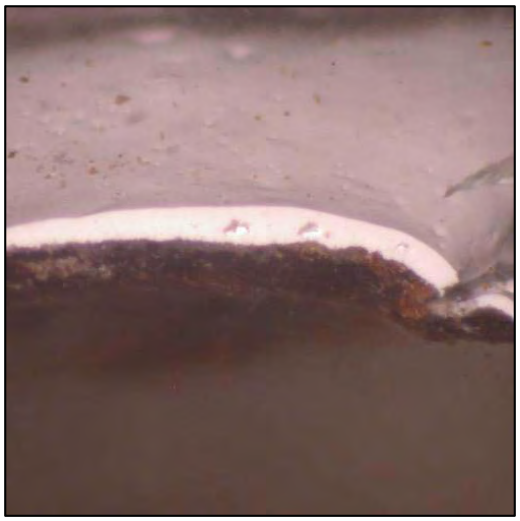
HHI-006 (UV)



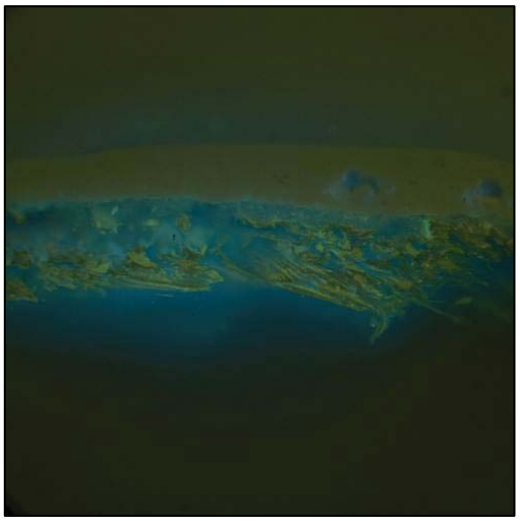
HHI-007 (Daylight Simulation)



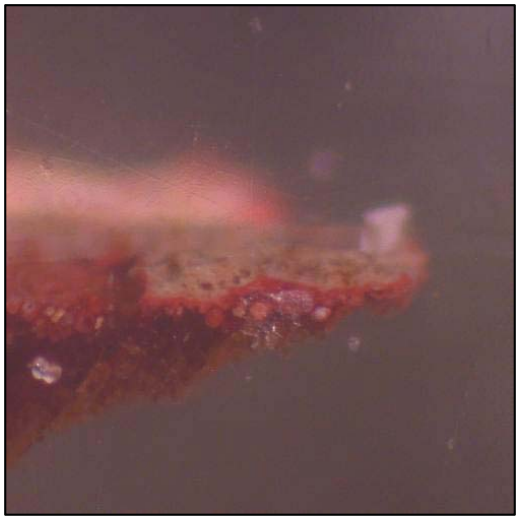
HHI-007 (UV)



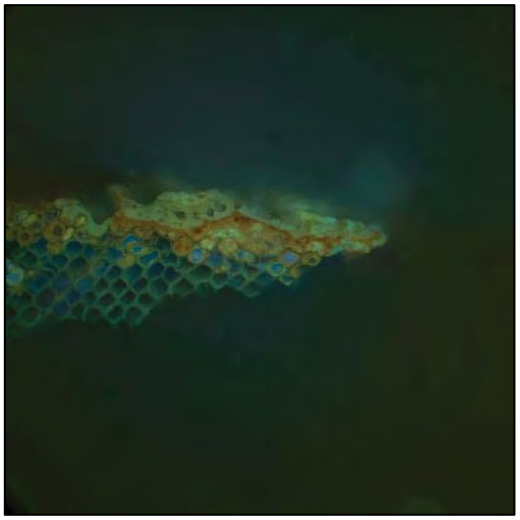
HHI-008 (Daylight Simulation)



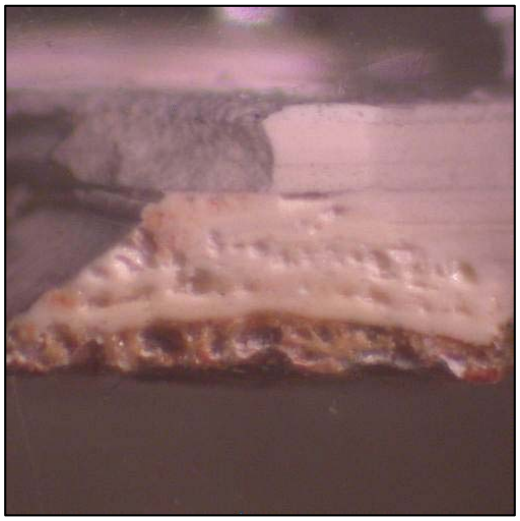
HHI-008 (UV)



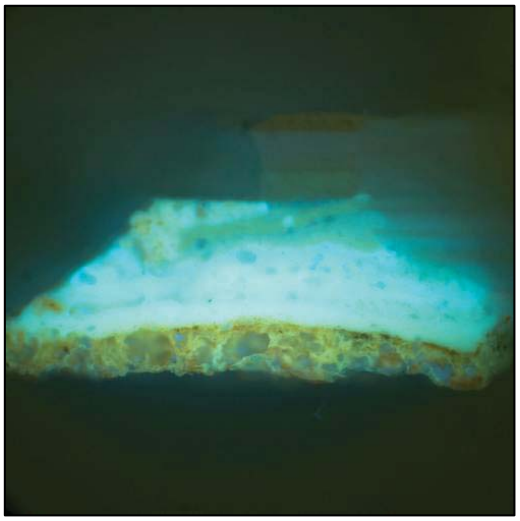
HHI-009a (Daylight Simulation)



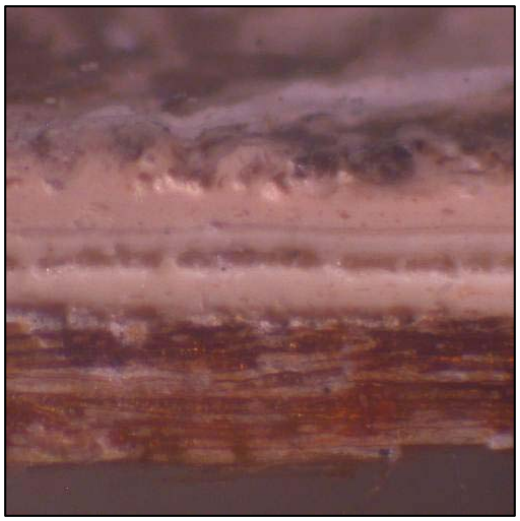
HHI-009a (UV)



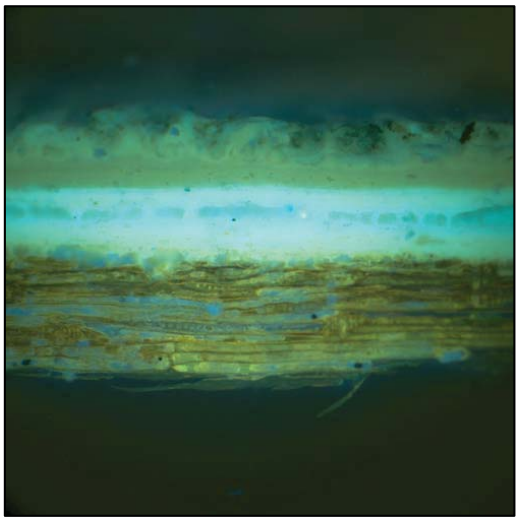
HHI-009b (Daylight Simulation)



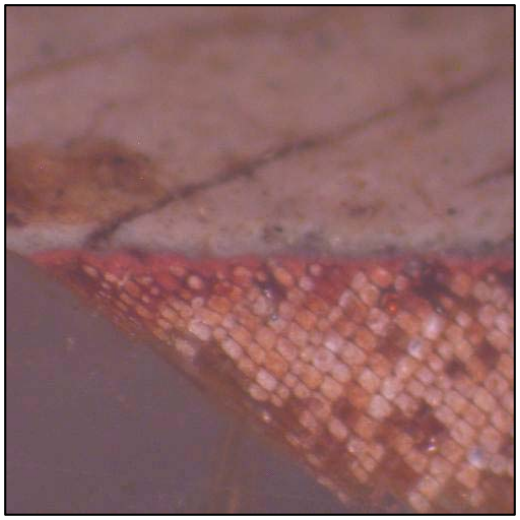
HHI-009b (UV)



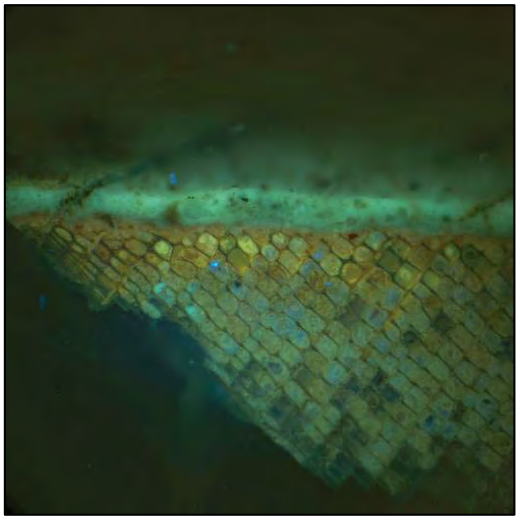
HHI-010 (Daylight Simulation)



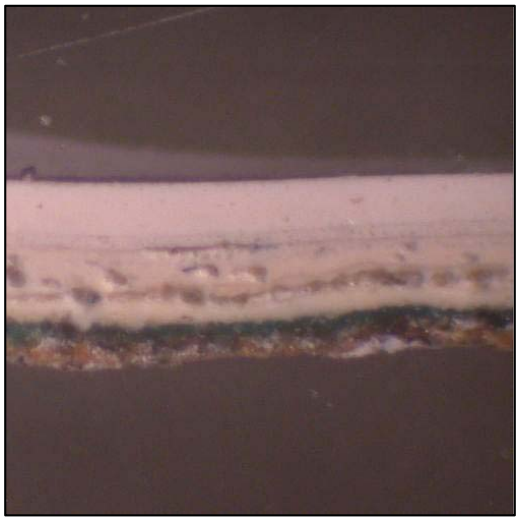
HHI-010 (UV)



HHI-011a (Daylight Simulation)



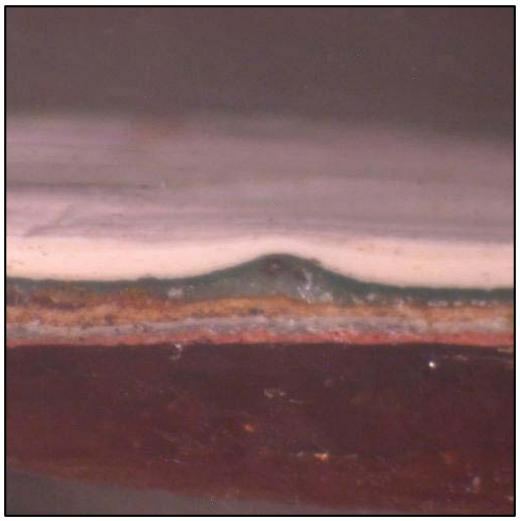
HHI-011a (UV)



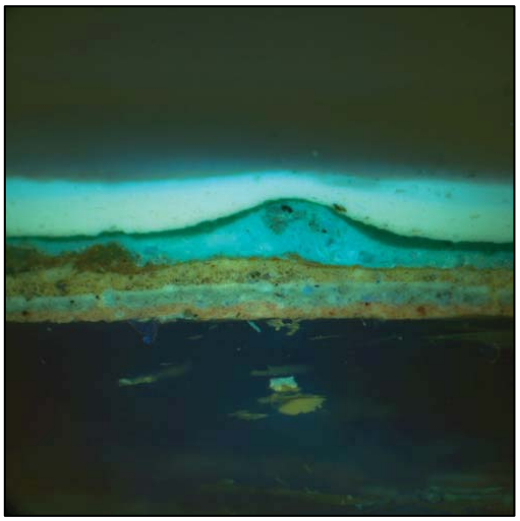
HHI-011b (Daylight Simulation)



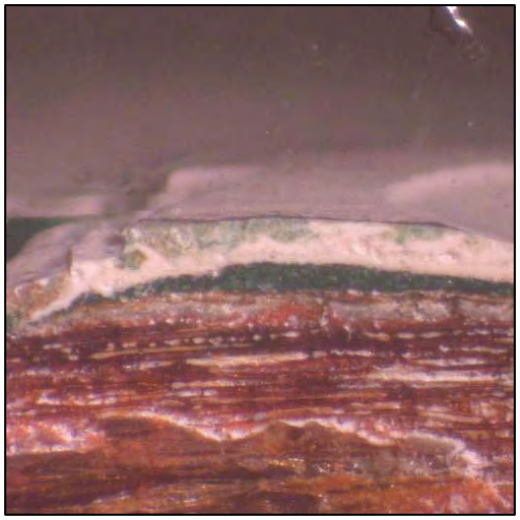
HHI-011b (UV)



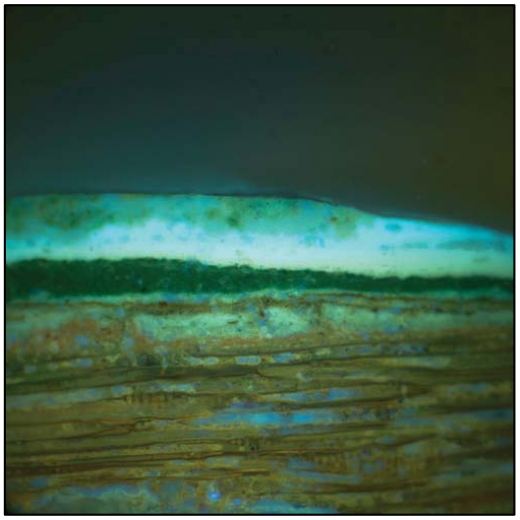
HHI-012 (Daylight Simulation)



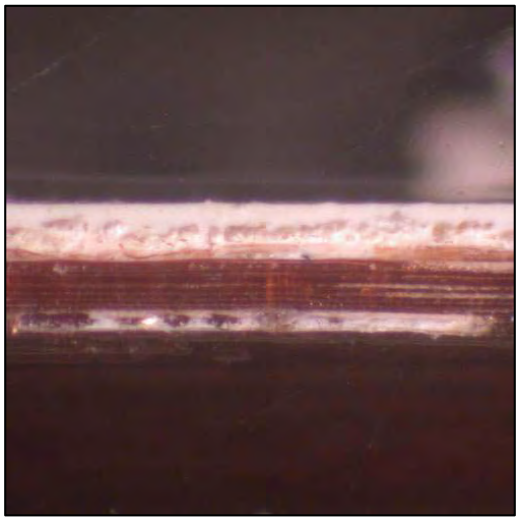
HHI-012 (UV)



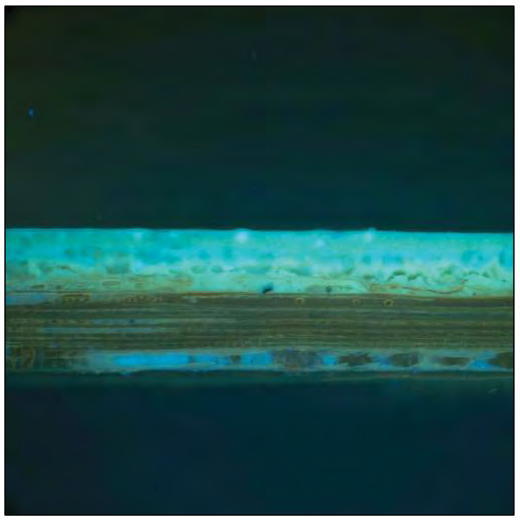
HHI-013 (Daylight Simulation)



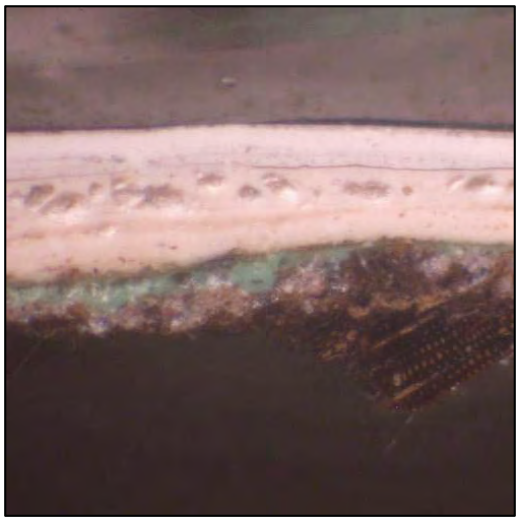
HHI-013 (UV)



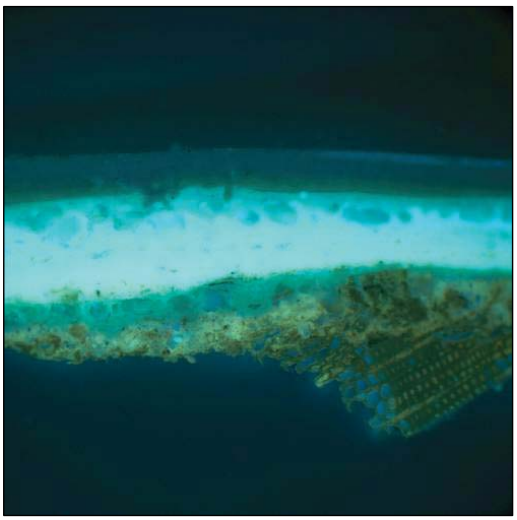
HHI-014 (Daylight Simulation)



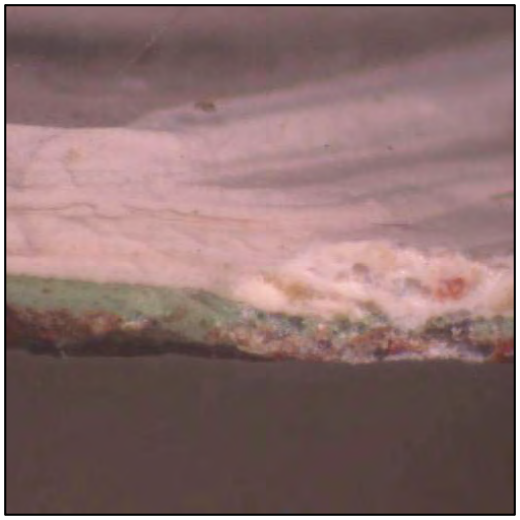
HHI-014 (UV)



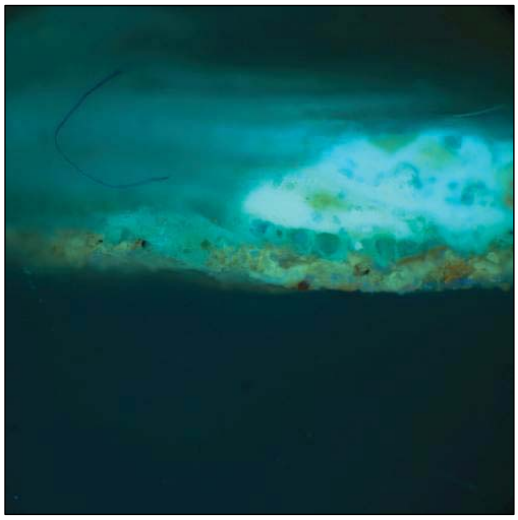
HHI-015 (Daylight Simulation)



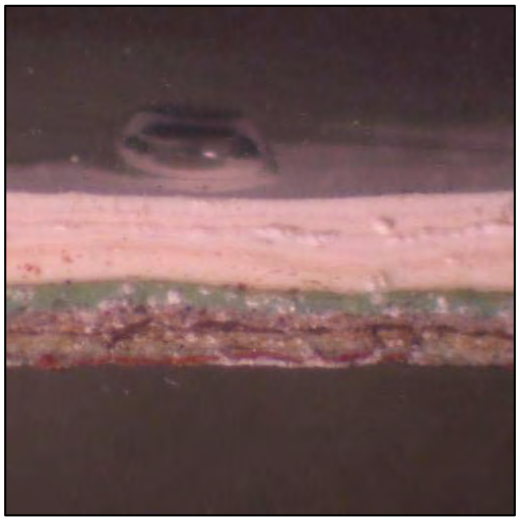
HHI-015 (UV)



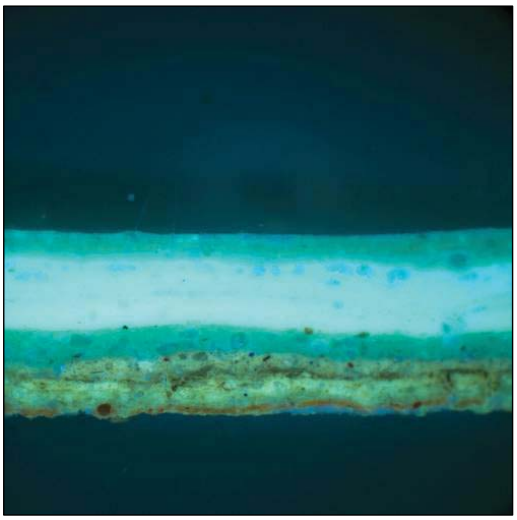
HHI-016 (Daylight Simulation)



HHI-016 (UV)



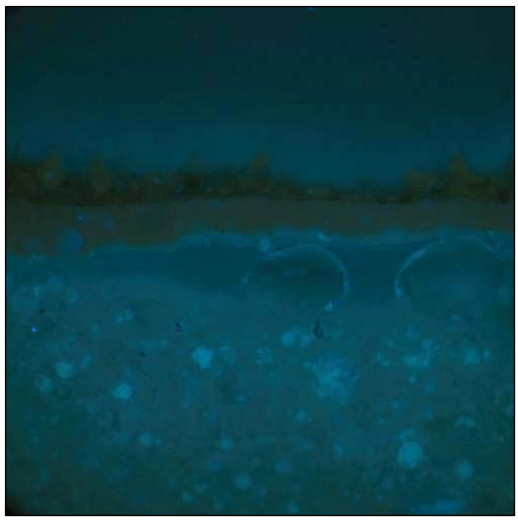
HHI-017 (Daylight Simulation)



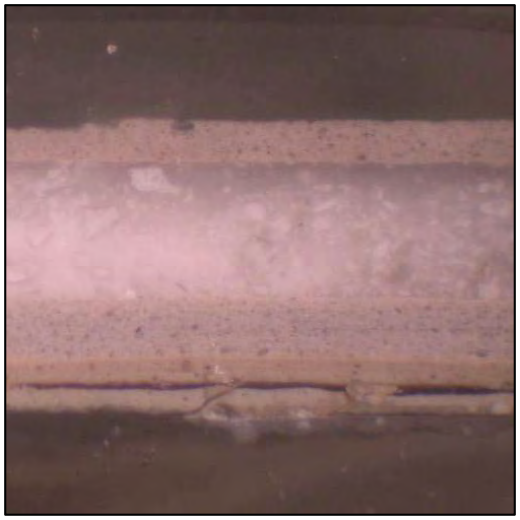
HHI-017 (UV)



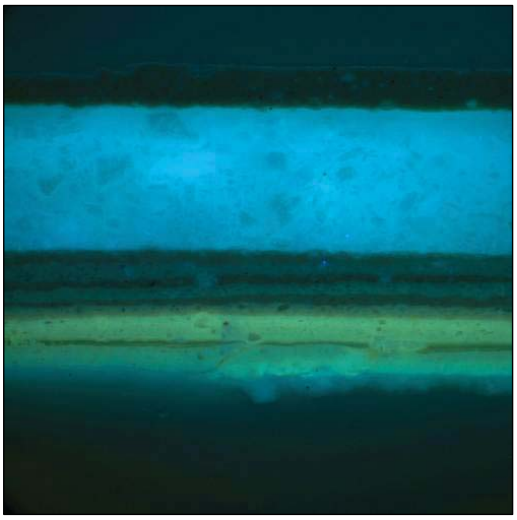
HHI-018 (Daylight Simulation)



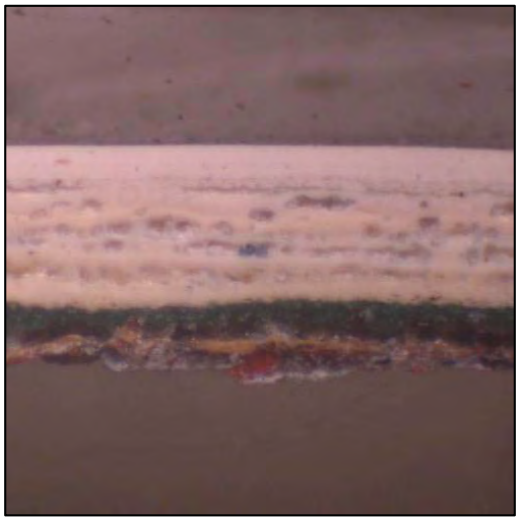
HHI-018 (UV)



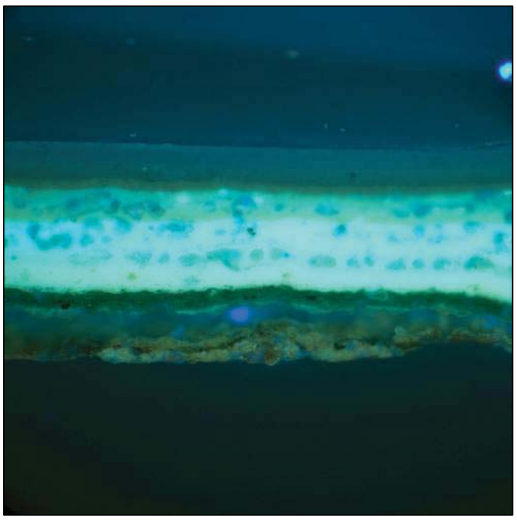
HHI-019 (Daylight Simulation)



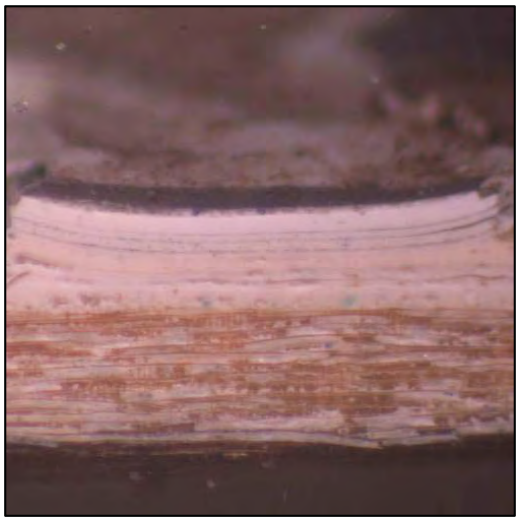
HHI-019 (UV)



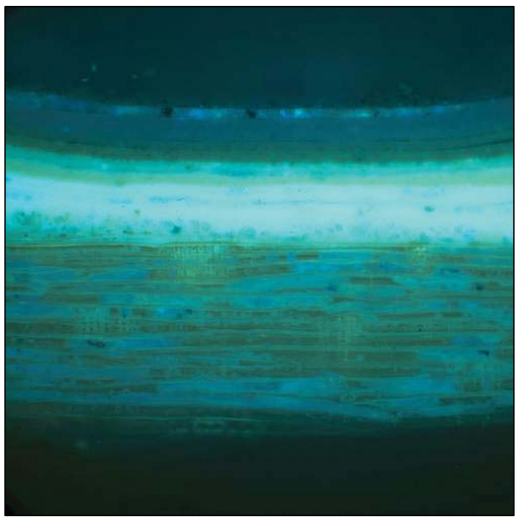
HHI-020 (Daylight Simulation)



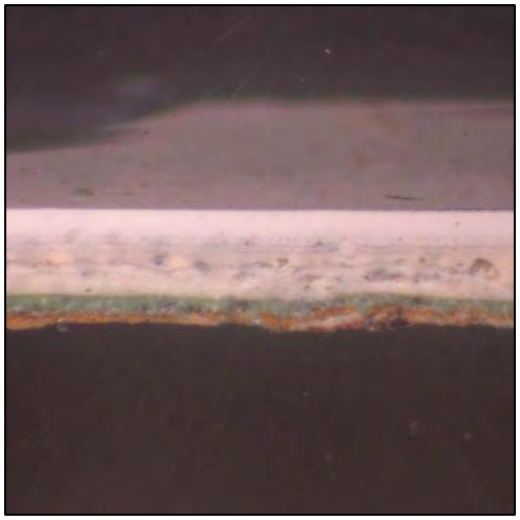
HHI-020 (UV)



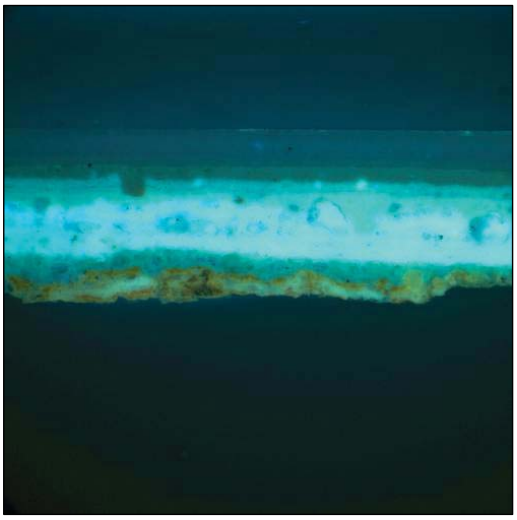
HHI-021 (Daylight Simulation)



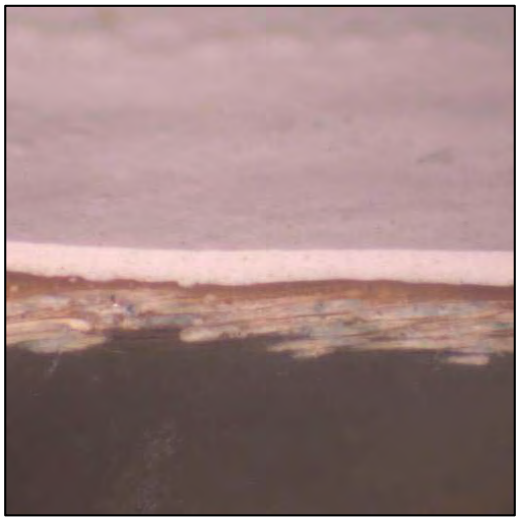
HHI-021 (UV)



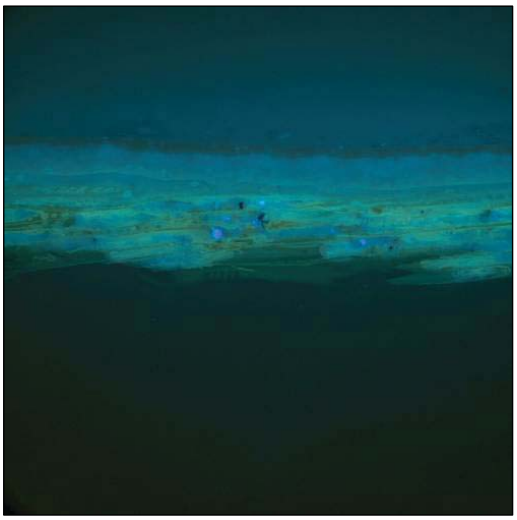
HHI-022 (Daylight Simulation)



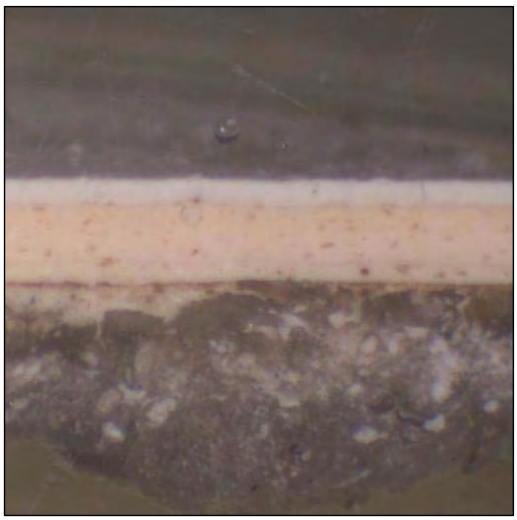
HHI-022 (UV)



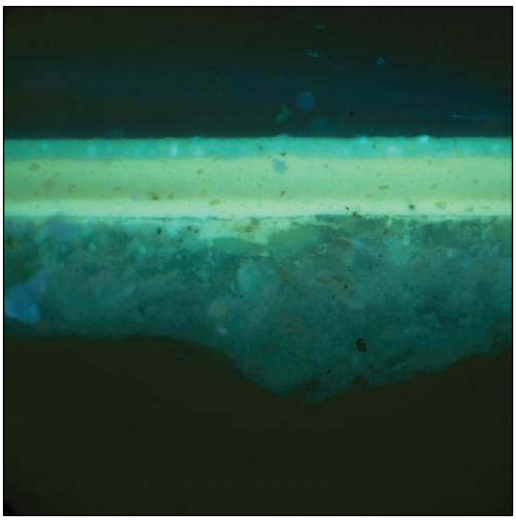
HHI-023 (Daylight Simulation)



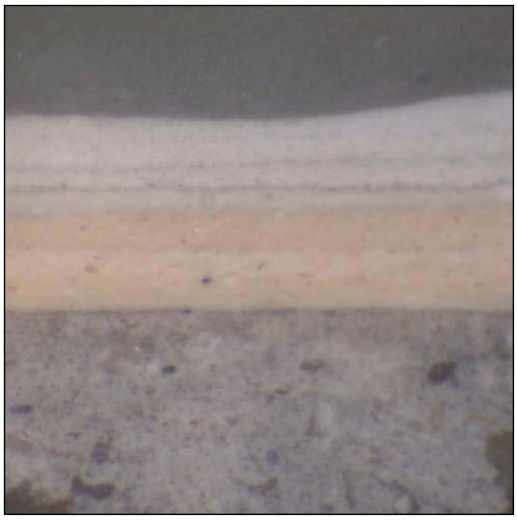
HHI-023 (UV)



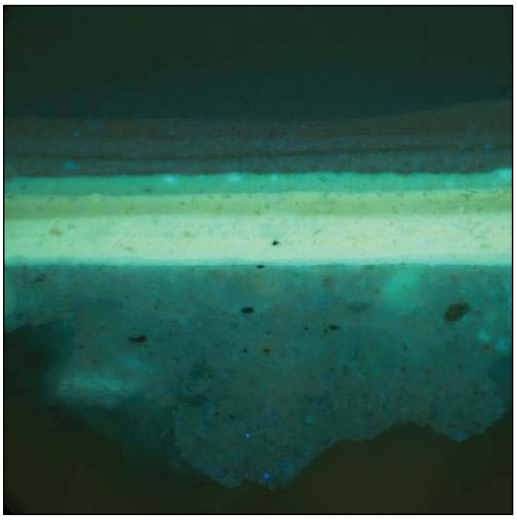
HHI-024 (Daylight Simulation)



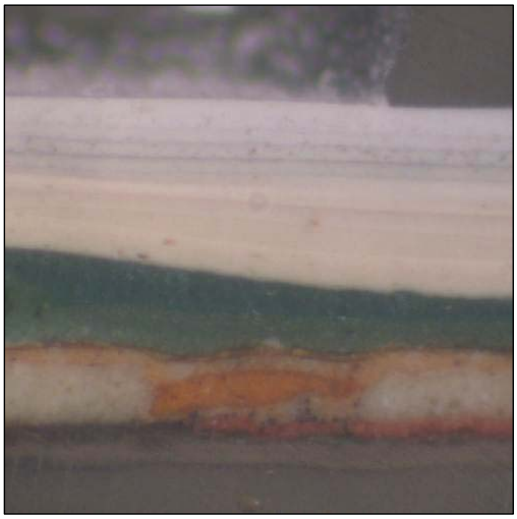
HHI-024 (UV)



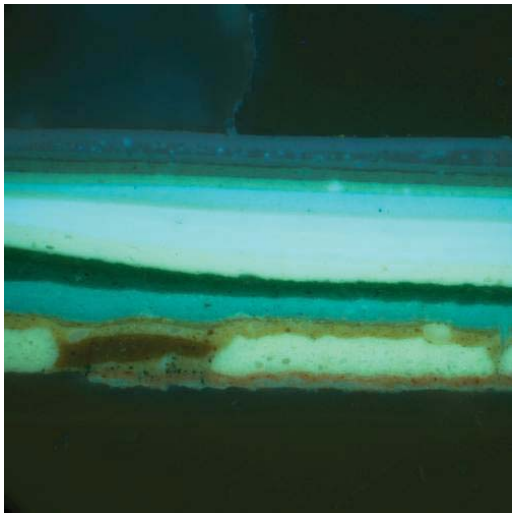
HHI-025 (Daylight Simulation)



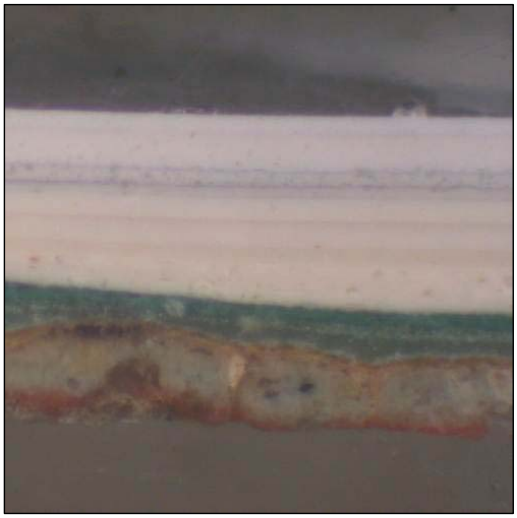
HHI-025 (UV)



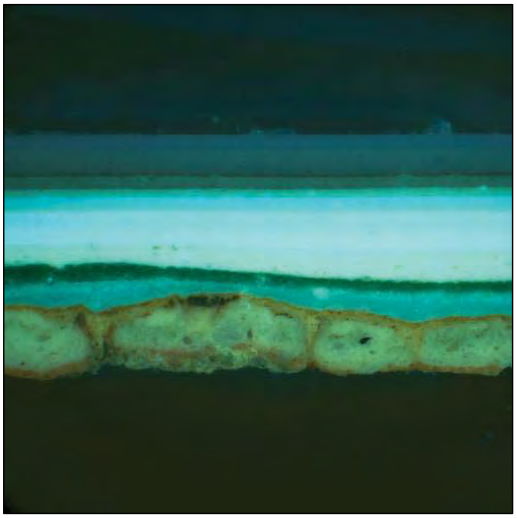
HHI-025a (Daylight Simulation)



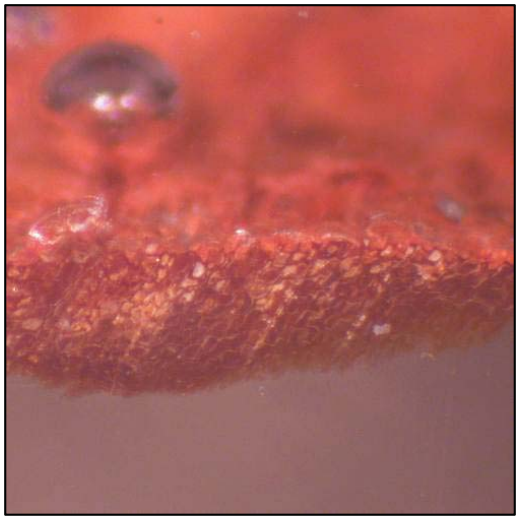
HHI-025a (UV)



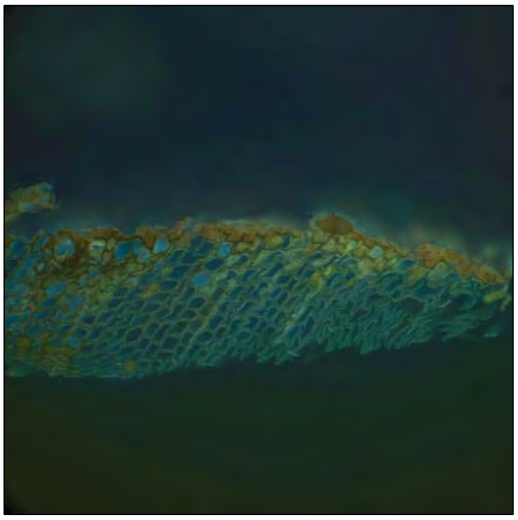
HHI-025b (Daylight Simulation)



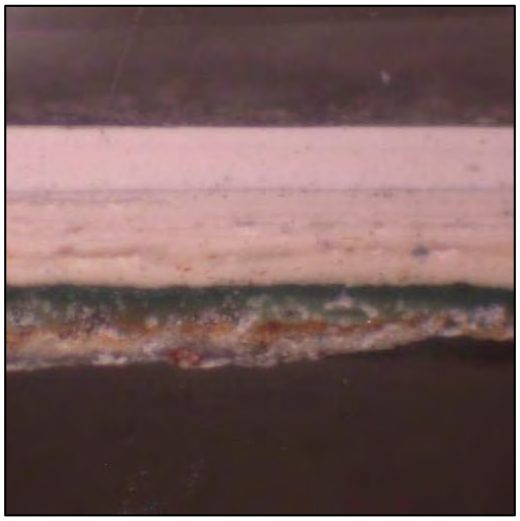
HHI-025b (UV)



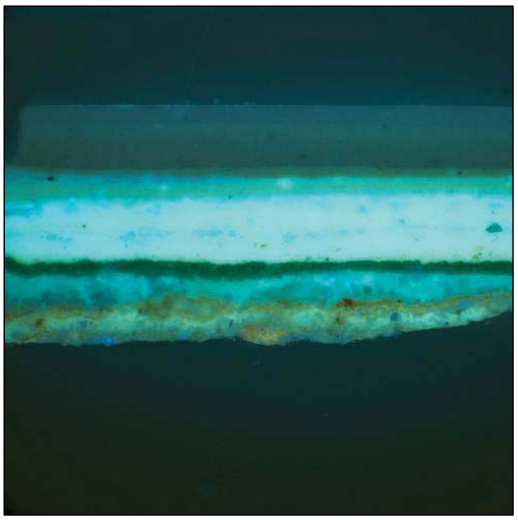
HHI-026a (Daylight Simulation)



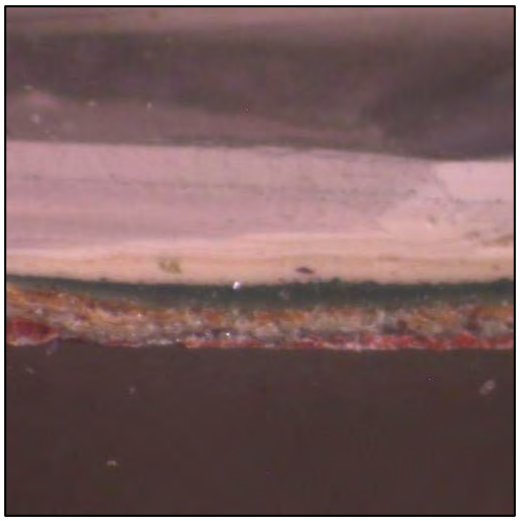
HHI-026a (UV)



HHI-026b (Daylight Simulation)



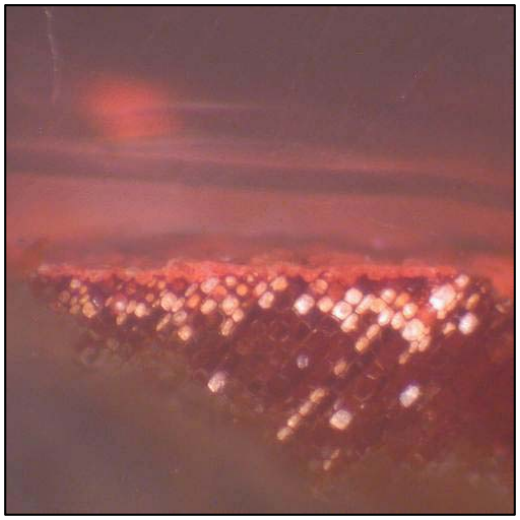
HHI-026b (UV)



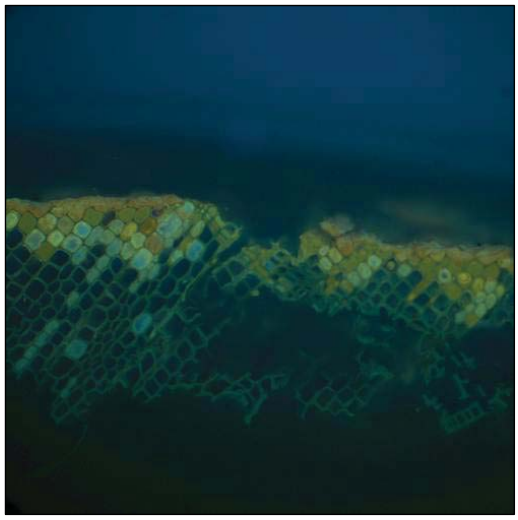
HHI-027 (Daylight Simulation)



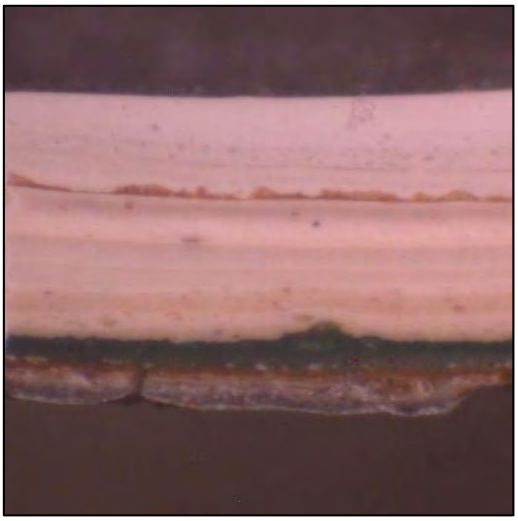
HHI-027 (UV)



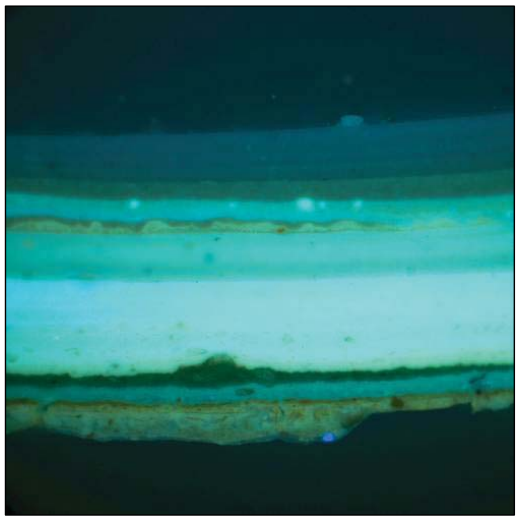
HHI-028a (Daylight Simulation)



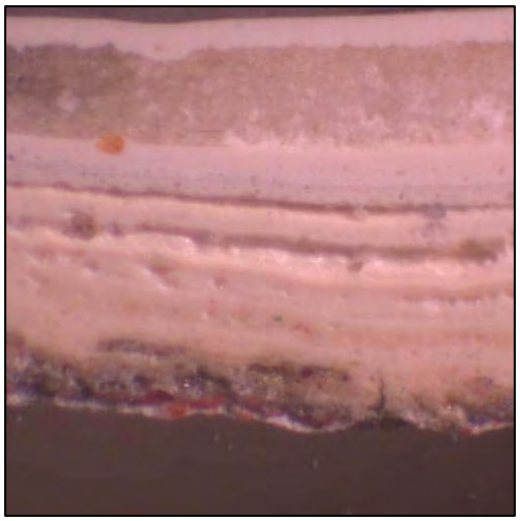
HHI-028a (UV)



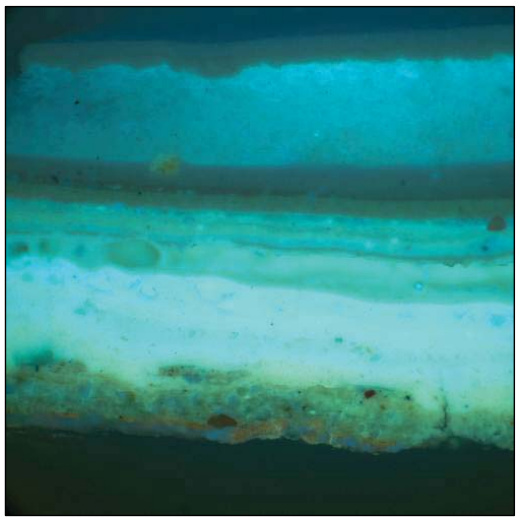
HHI-028b (Daylight Simulation)



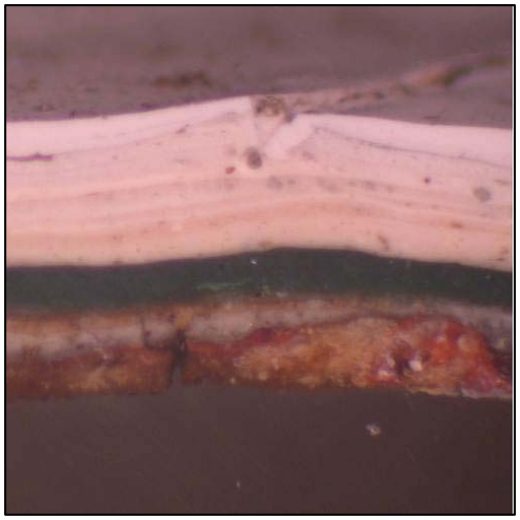
HHI-028b (UV)



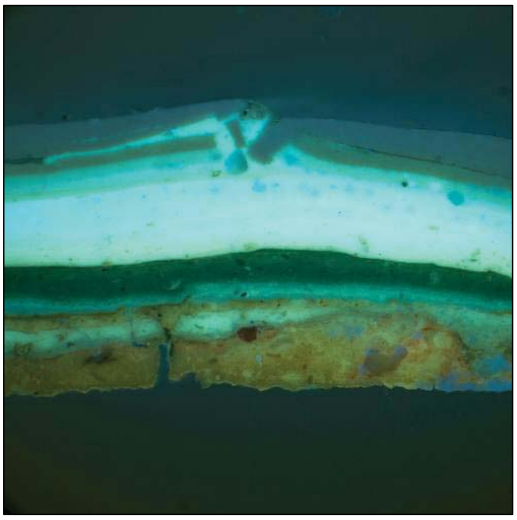
HHI-029 (Daylight Simulation)



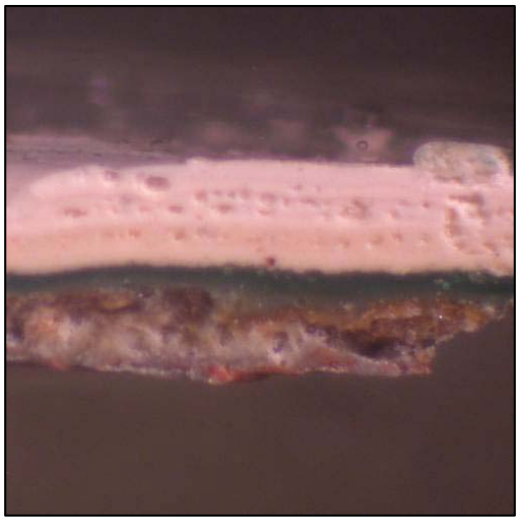
HHI-029 (UV)



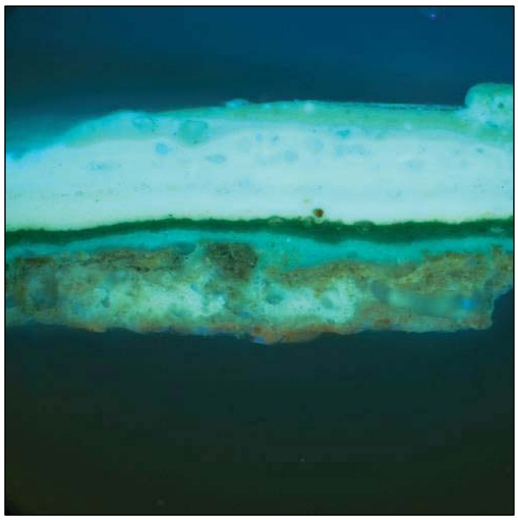
HHI-030 (Daylight Simulation)



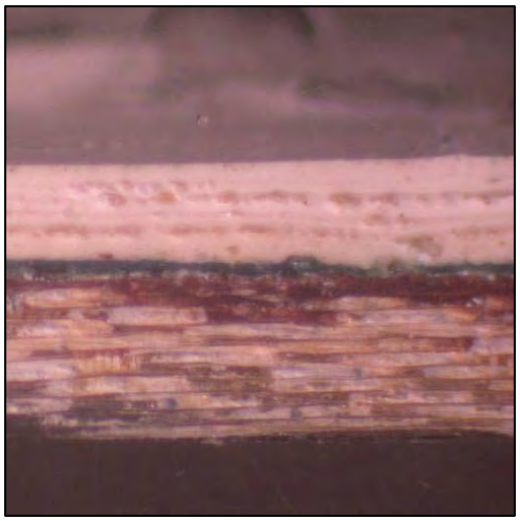
HHI-030 (UV)



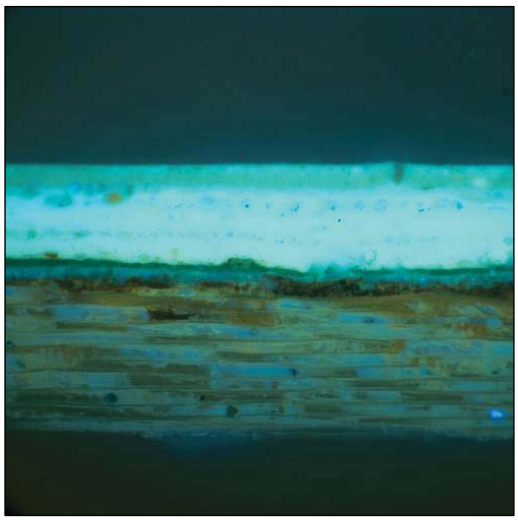
HHI-031 (Daylight Simulation)



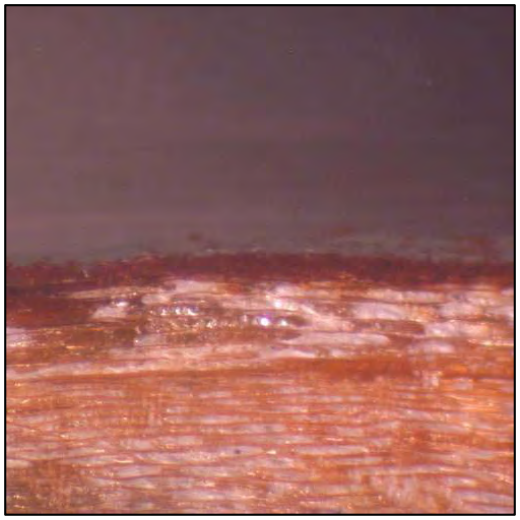
HHI-031 (UV)



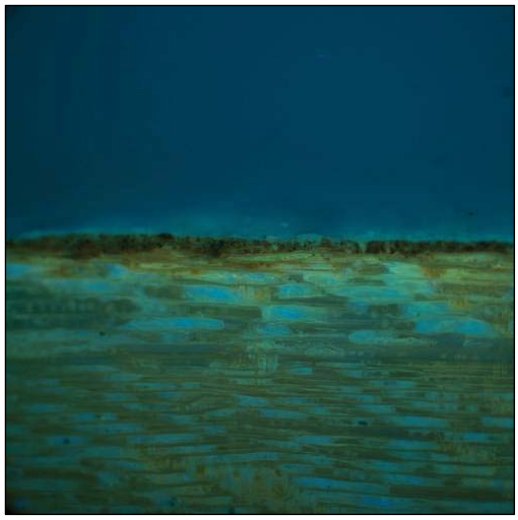
HHI-032 (Daylight Simulation)



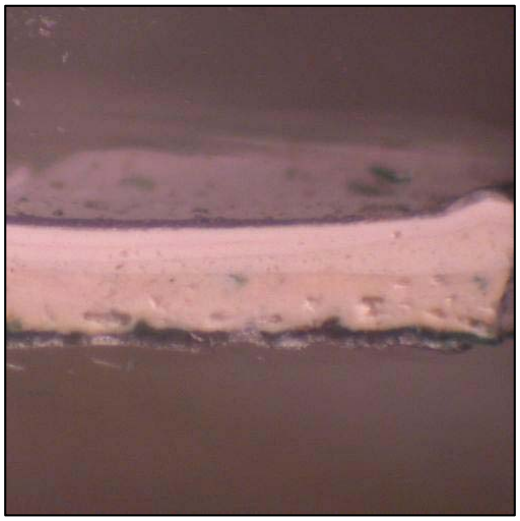
HHI-032 (UV)



HHI-033a (Daylight Simulation)



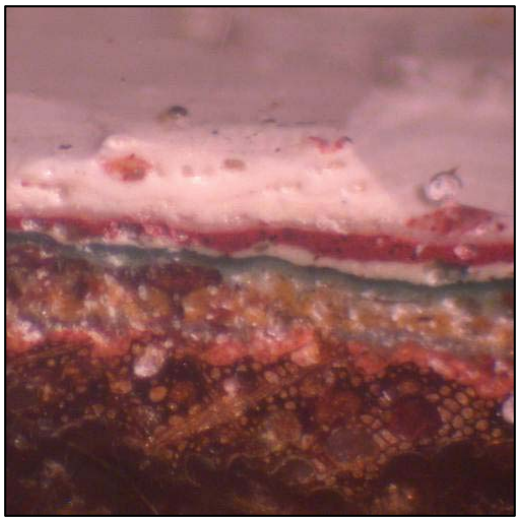
HHI-033a (UV)



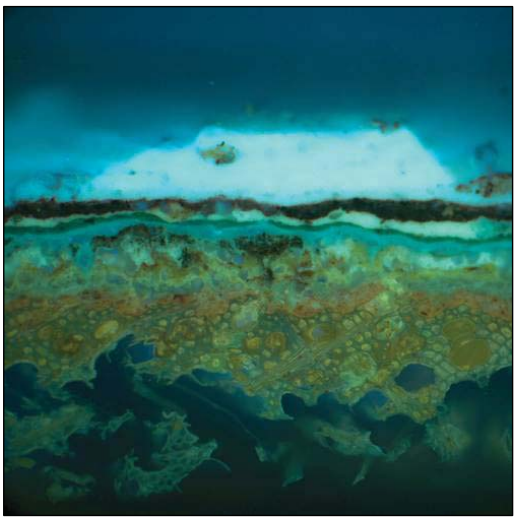
HHI-033b (Daylight Simulation)



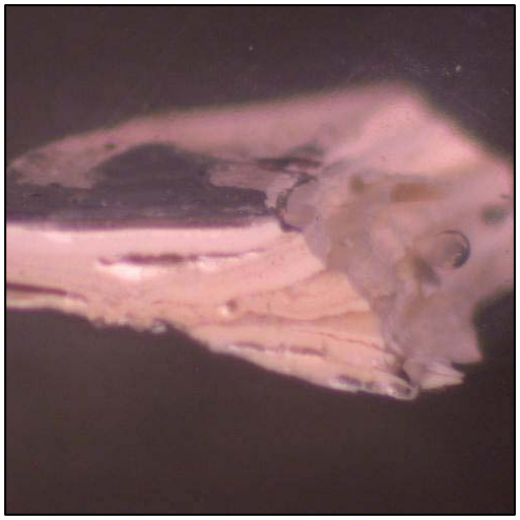
HHI-033b (UV)



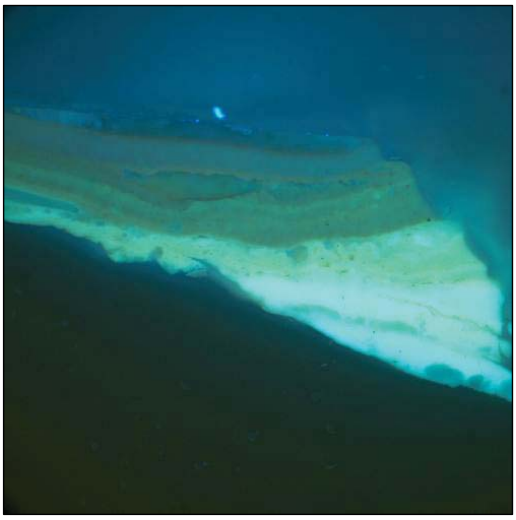
HHI-034 (Daylight Simulation)



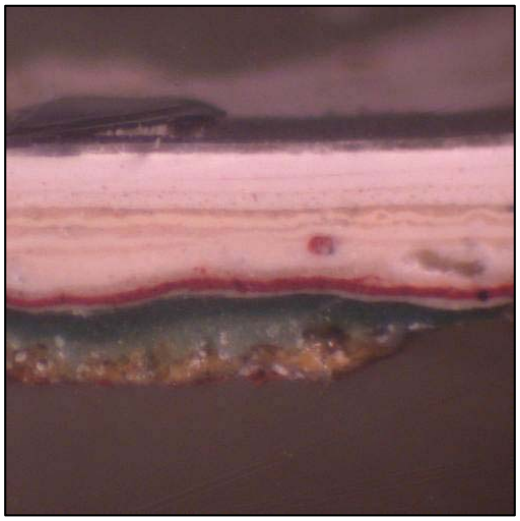
HHI-034 (UV)



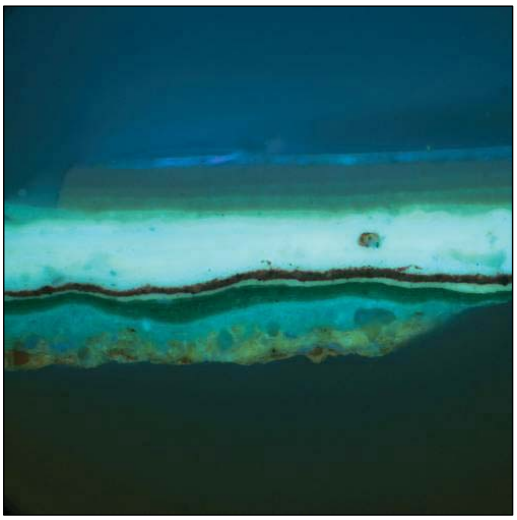
HHI-035 (Daylight Simulation)



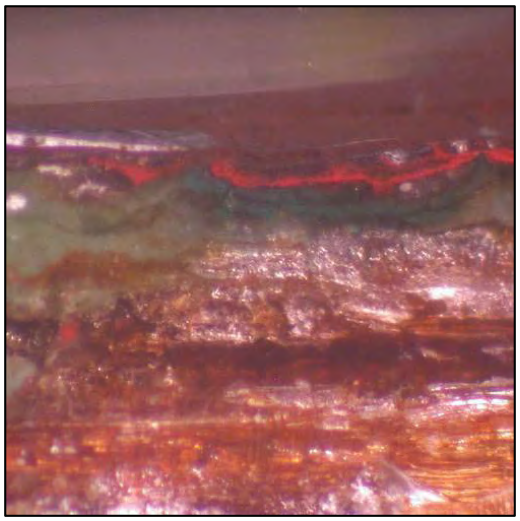
HHI-035 (UV)



HHI-036 (Daylight Simulation)



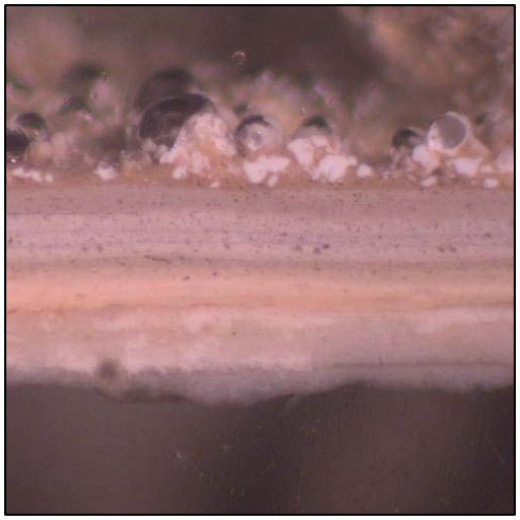
HHI-036 (UV)



HHI-037 (Daylight Simulation)



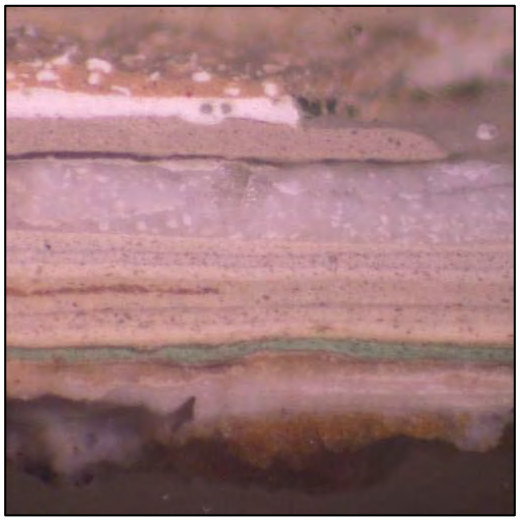
HHI-037 (UV)



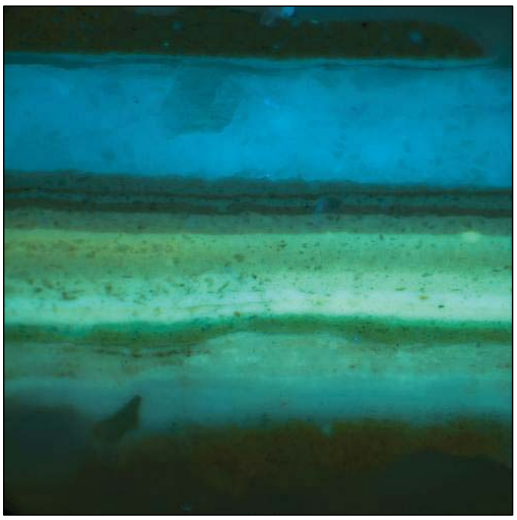
HHI-038 (Daylight Simulation)



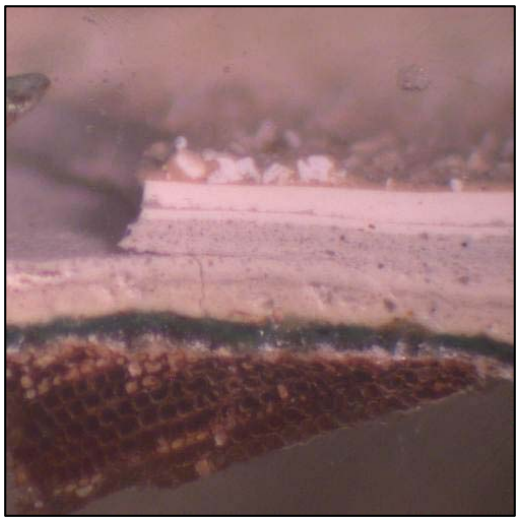
HHI-038 (UV)



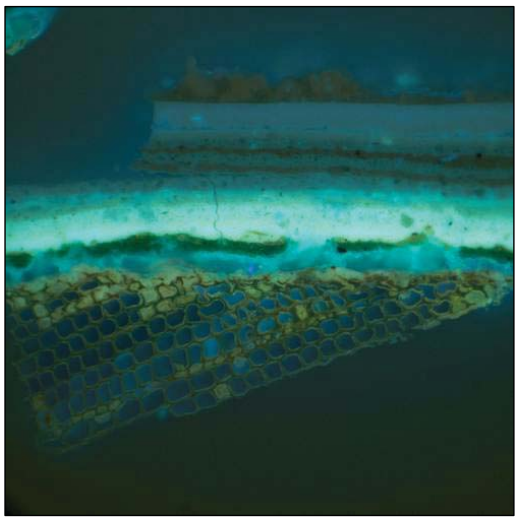
HHI-039 (Daylight Simulation)



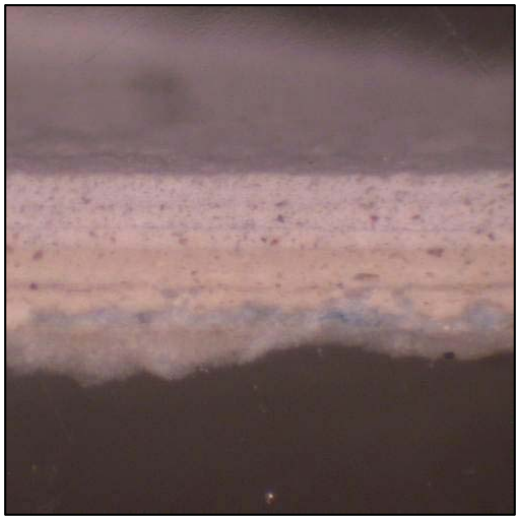
HHI-039 (UV)



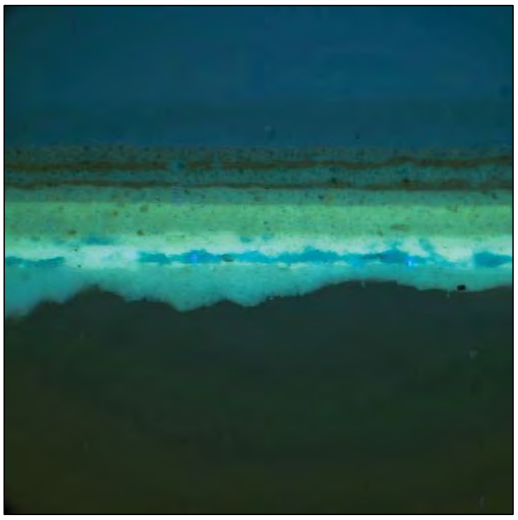
HHI-040 (Daylight Simulation)



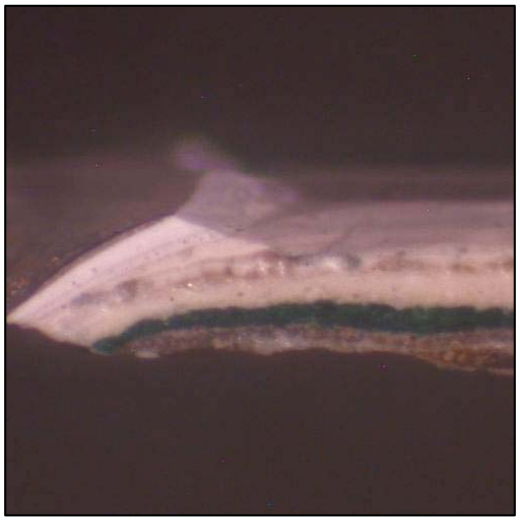
HHI-040 (UV)



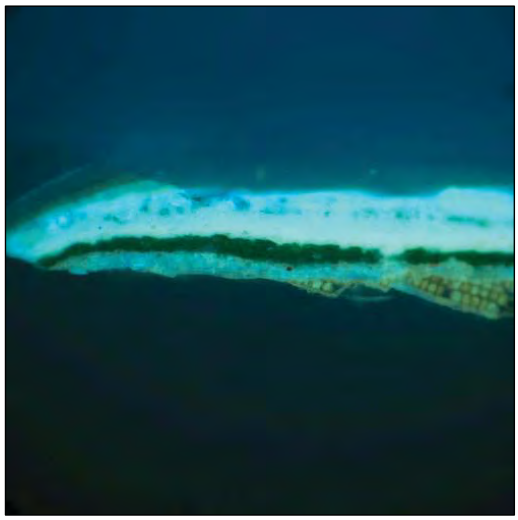
HHI-041 (Daylight Simulation)



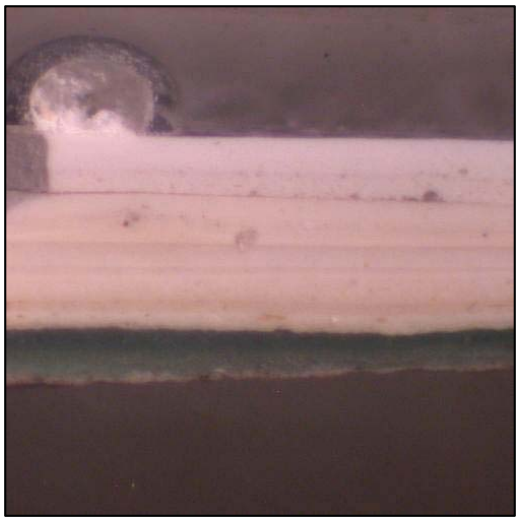
HHI-041 (UV)



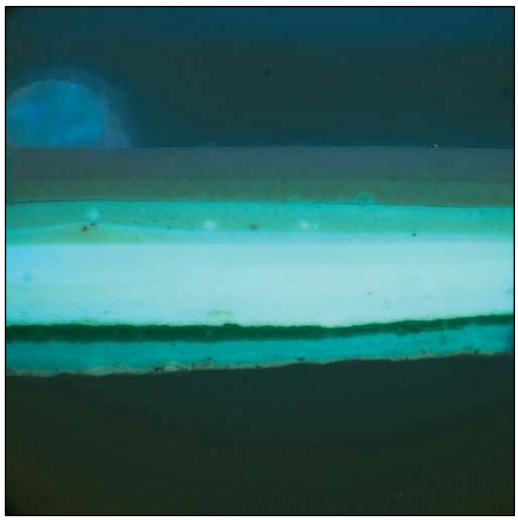
HHI-042 (Daylight Simulation)



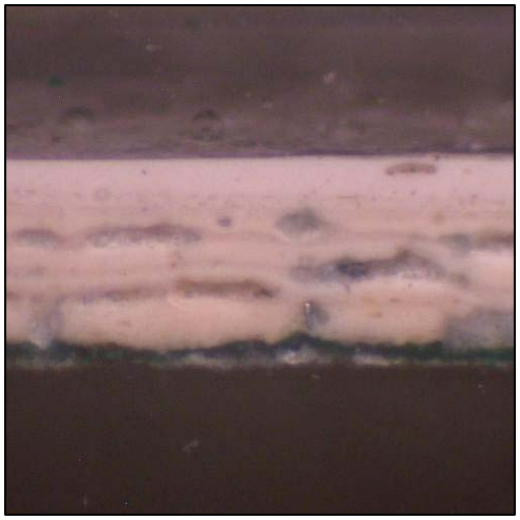
HHI-042 (UV)



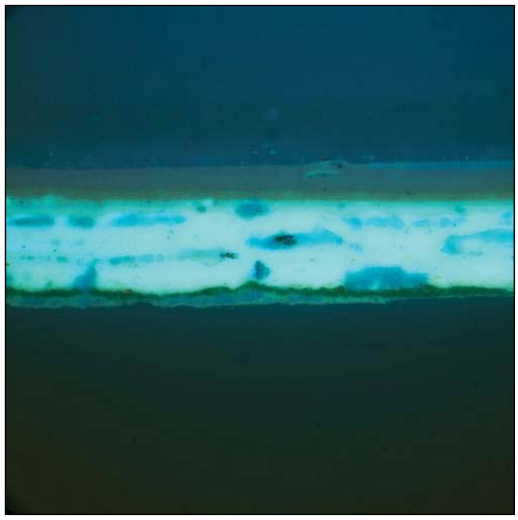
HHI-043 (Daylight Simulation)



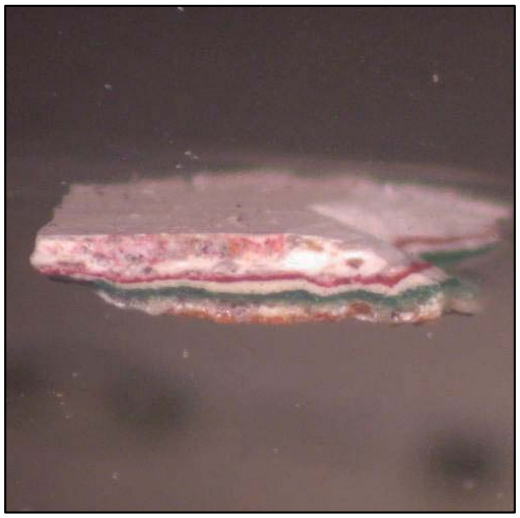
HHI-043 (UV)



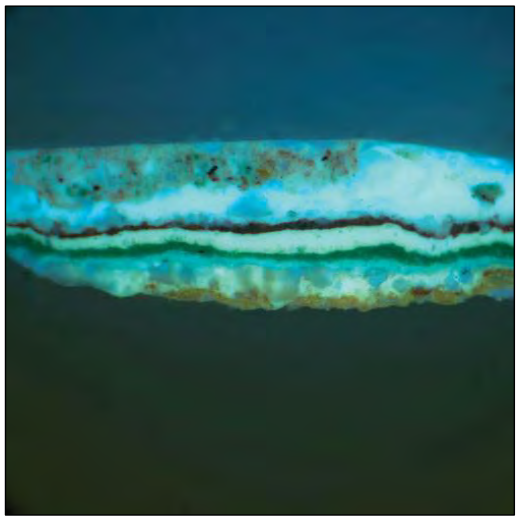
HHI-044 (Daylight Simulation)



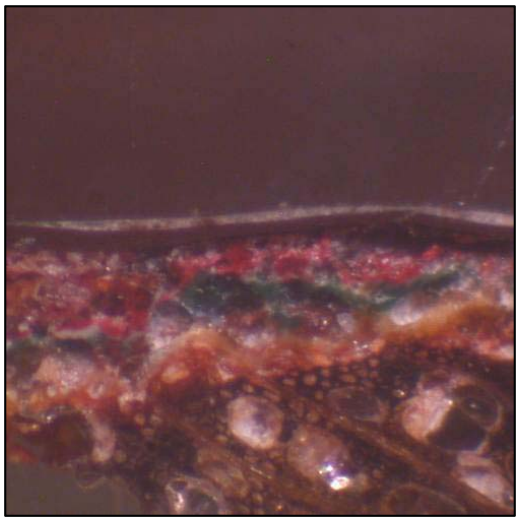
HHI-044 (UV)



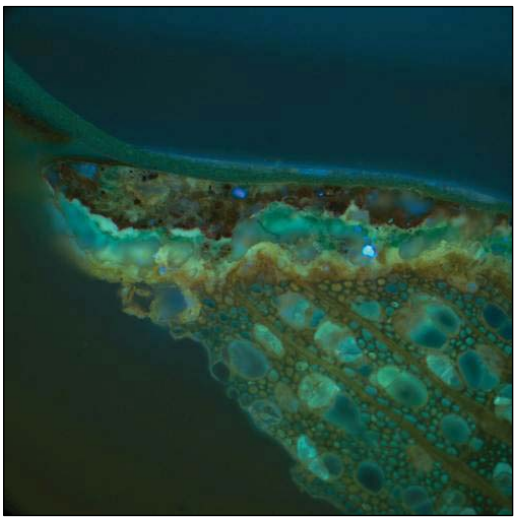
HHI-045 (Daylight Simulation)



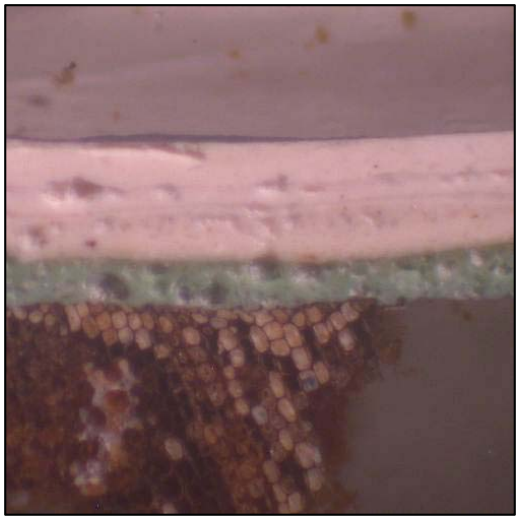
HHI-045 (UV)



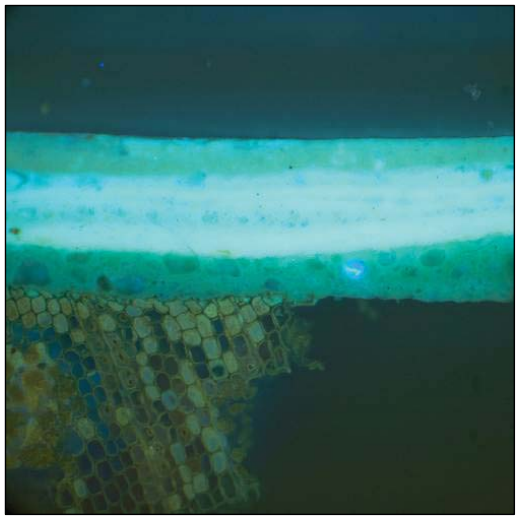
HHI-046 (Daylight Simulation)



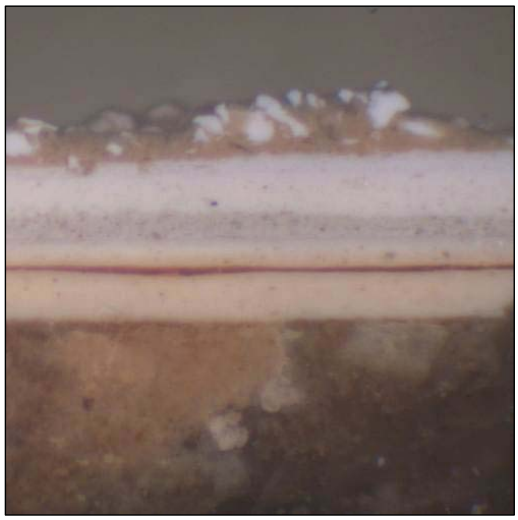
HHI-046 (UV)



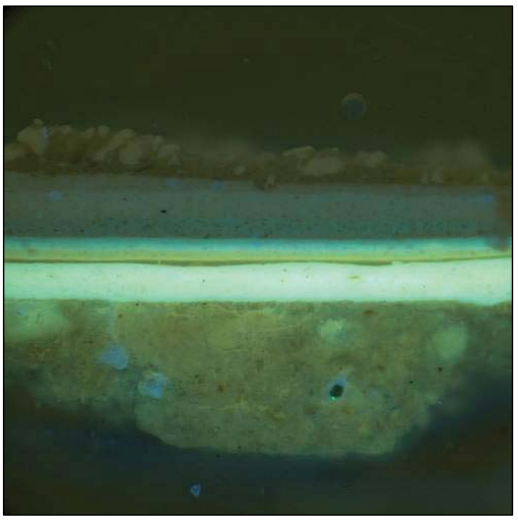
HHI-047 (Daylight Simulation)



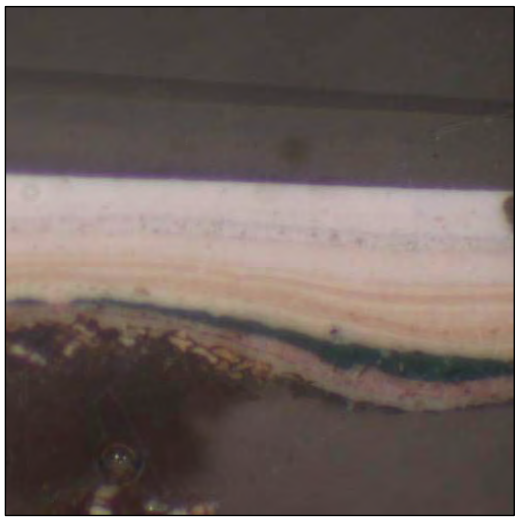
HHI-047 (UV)



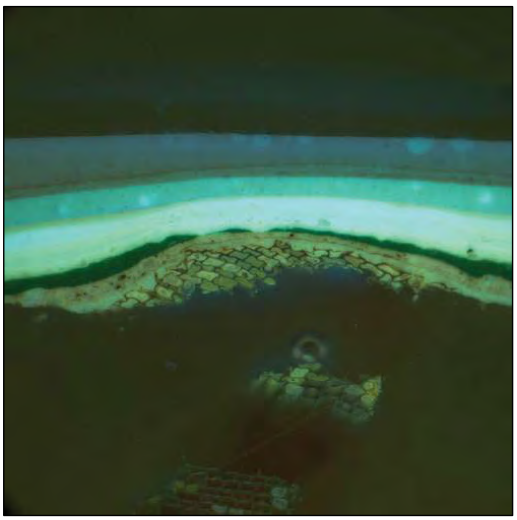
HHI-048 (Daylight Simulation)



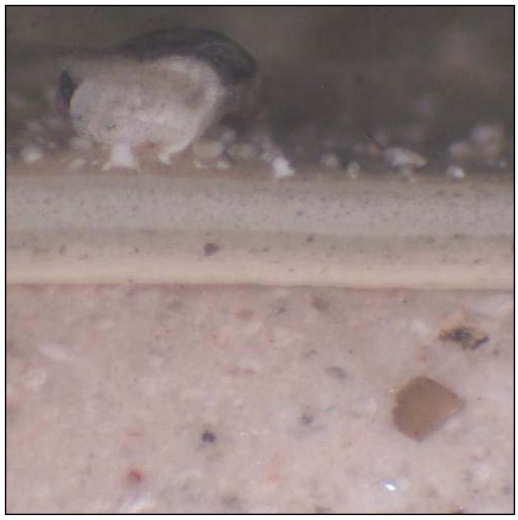
HHI-048 (UV)



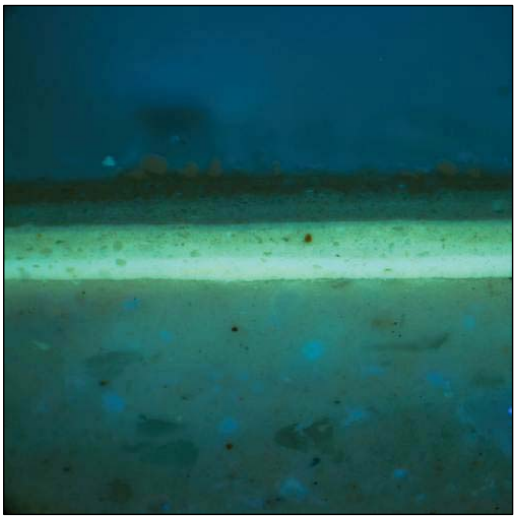
HHI-049 (Daylight Simulation)



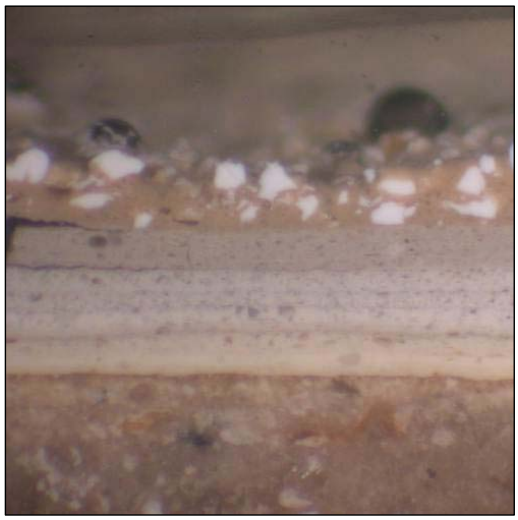
HHI-049 (UV)



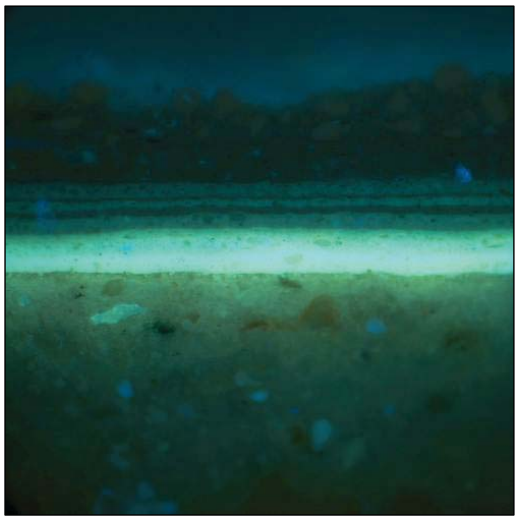
HHI-050 (Daylight Simulation)



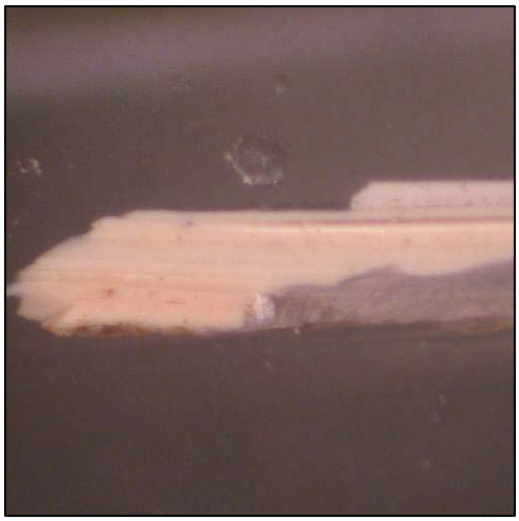
HHI-050 (UV)



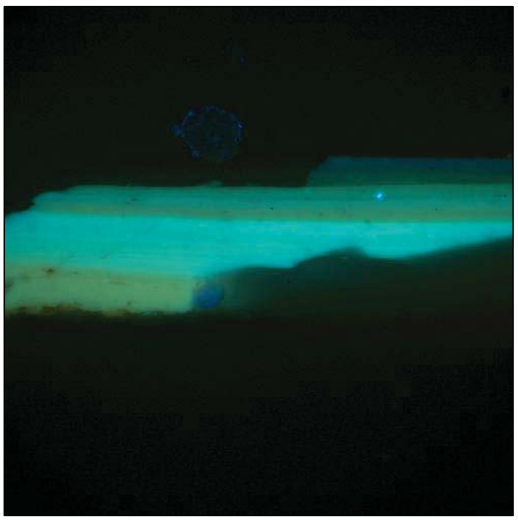
HHI-051 (Daylight Simulation)



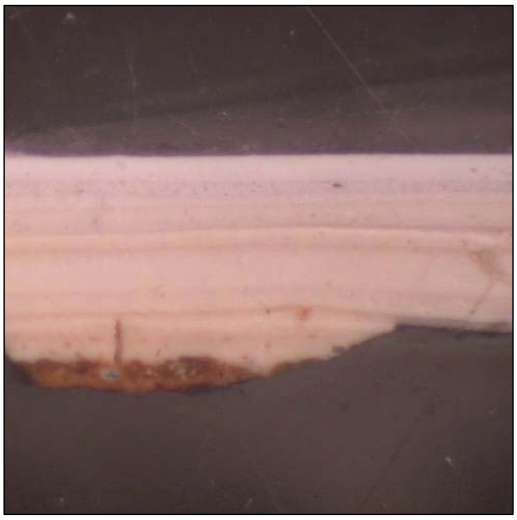
HHI-051 (UV)



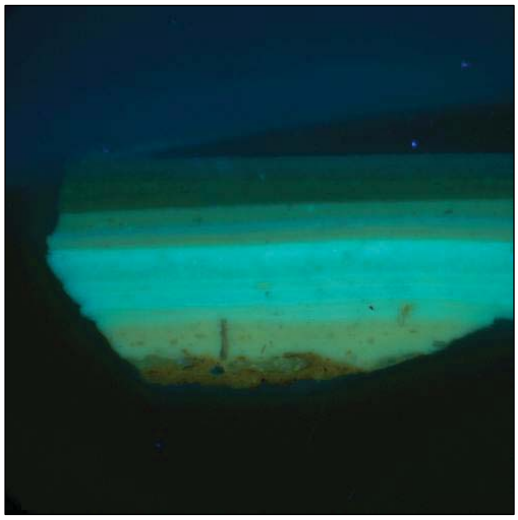
HHI-052 (Daylight Simulation)



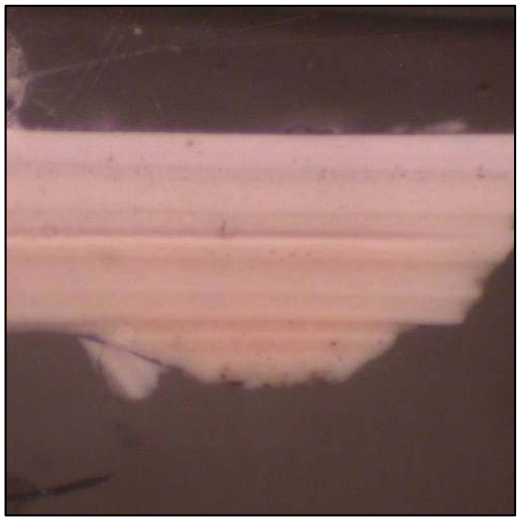
HHI-052 (UV)



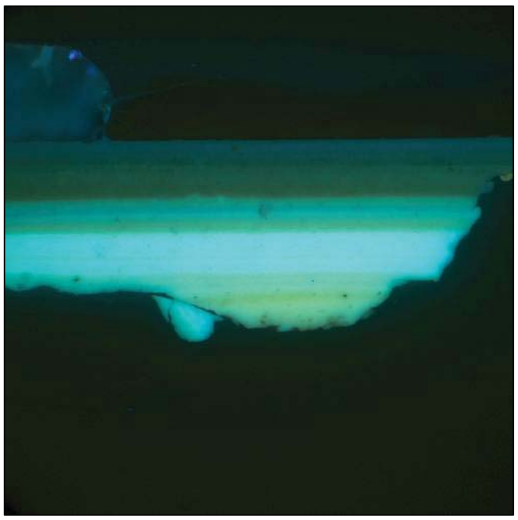
HHI-053 (Daylight Simulation)



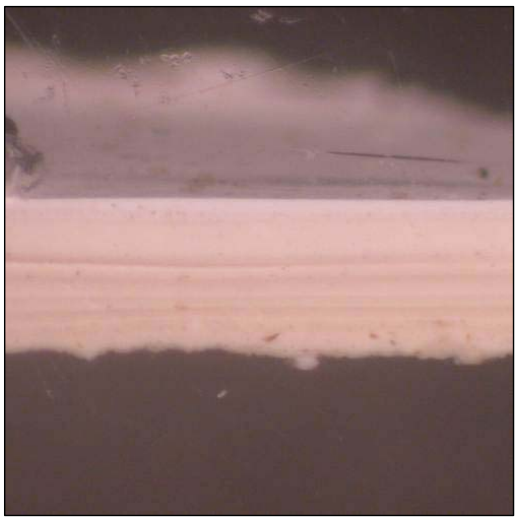
HHI-053 (UV)



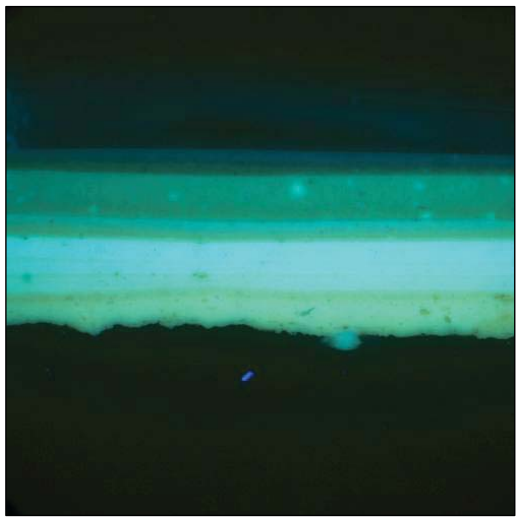
HHI-053a (Daylight Simulation)



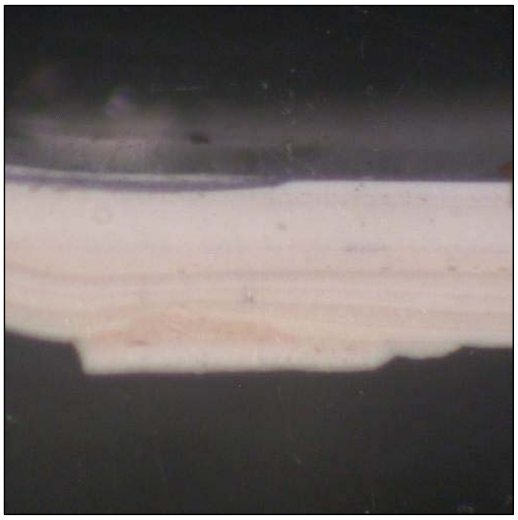
HHI-053a (UV)



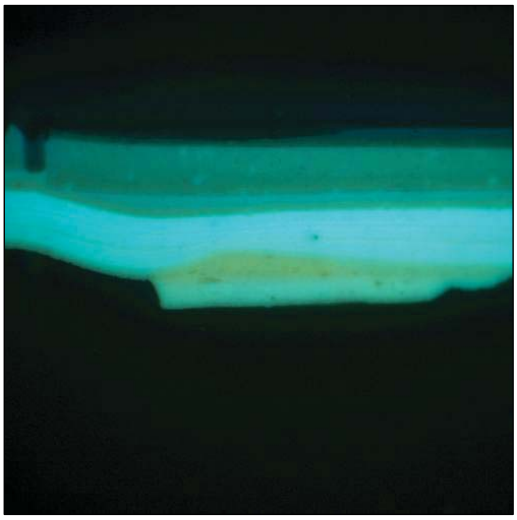
HHI-054 (Daylight Simulation)



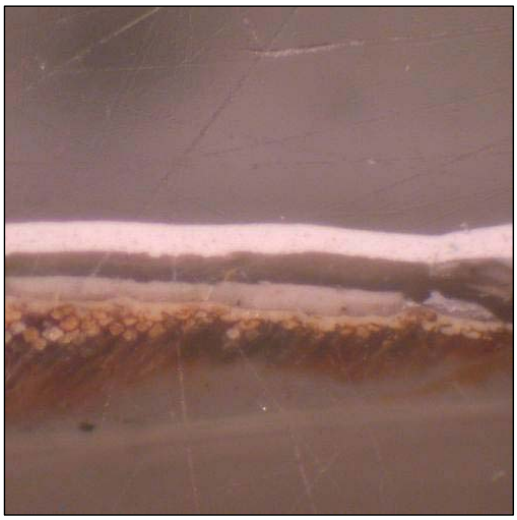
HHI-054 (UV)



HHI-055 (Daylight Simulation)



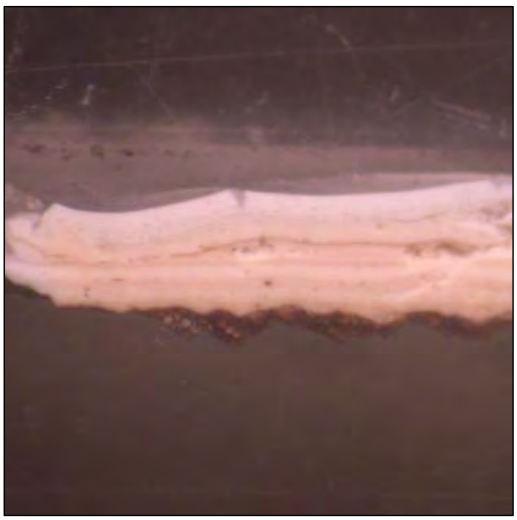
HHI-055 (UV)



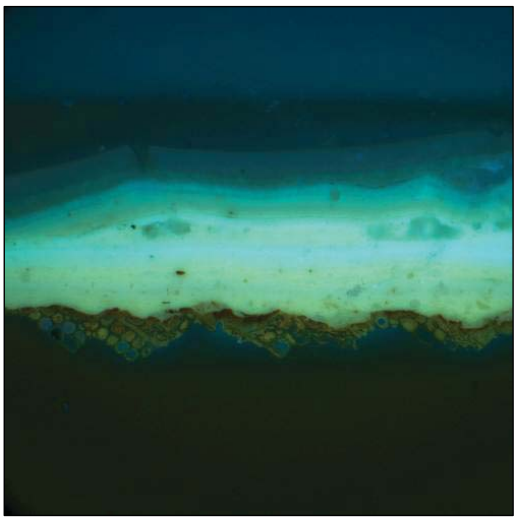
HHI-056 (Daylight Simulation)



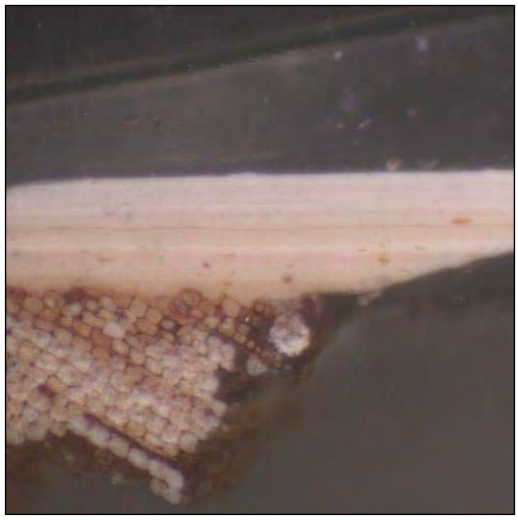
HHI-056 (UV)



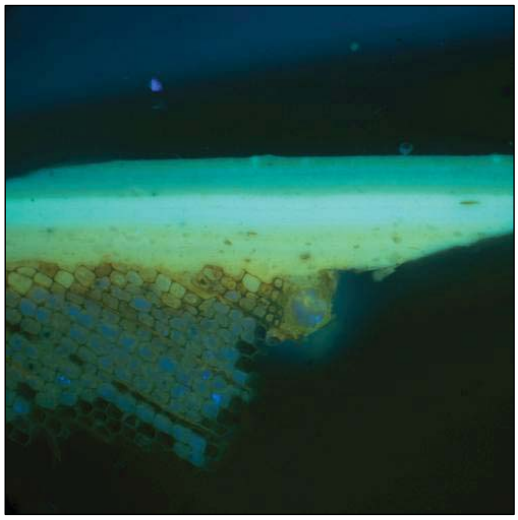
HHI-057 (Daylight Simulation)



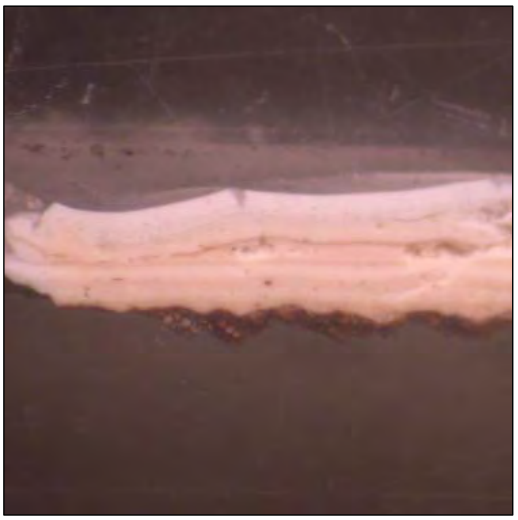
HHI-057 (UV)



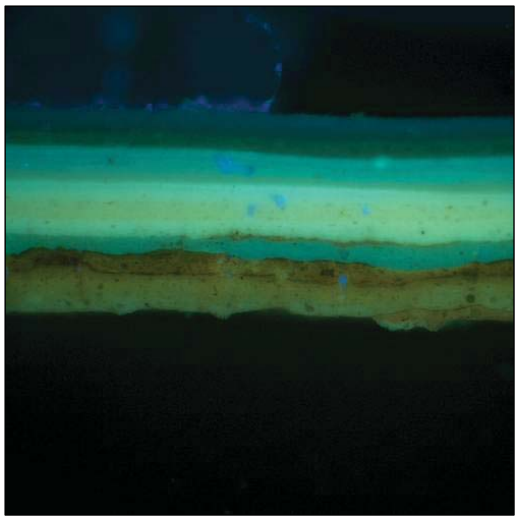
HHI-058 (Daylight Simulation)



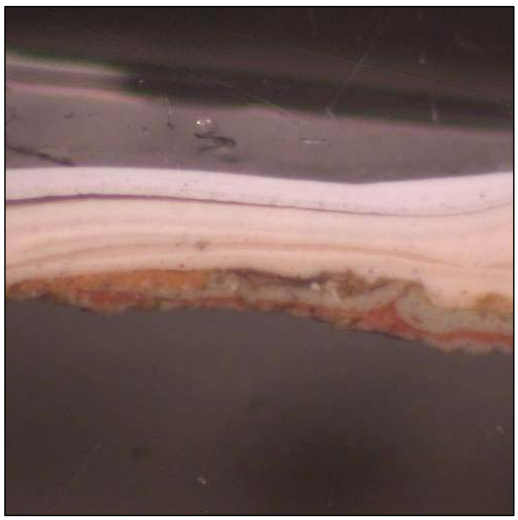
HHI-058 (UV)



HHI-059 (Daylight Simulation)



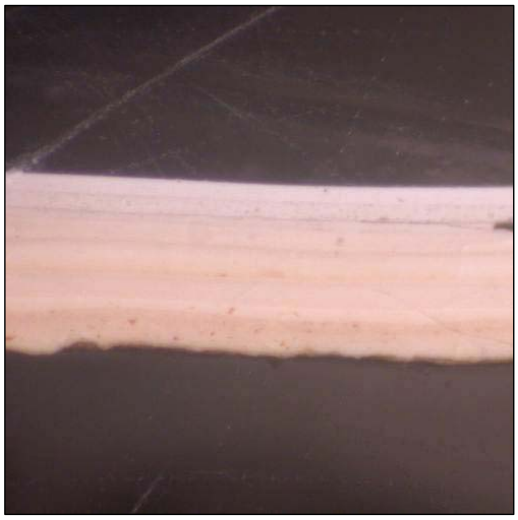
HHI-059 (UV)



HHI-060 (Daylight Simulation)



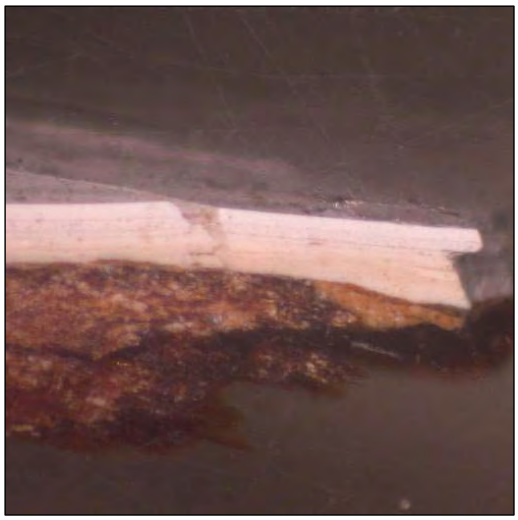
HHI-060 (UV)



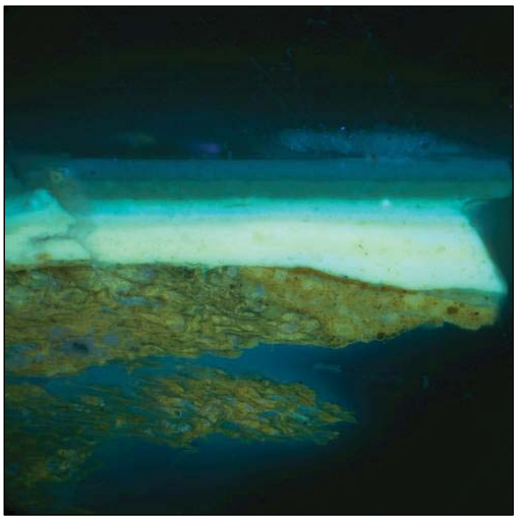
HHI-061 (Daylight Simulation)



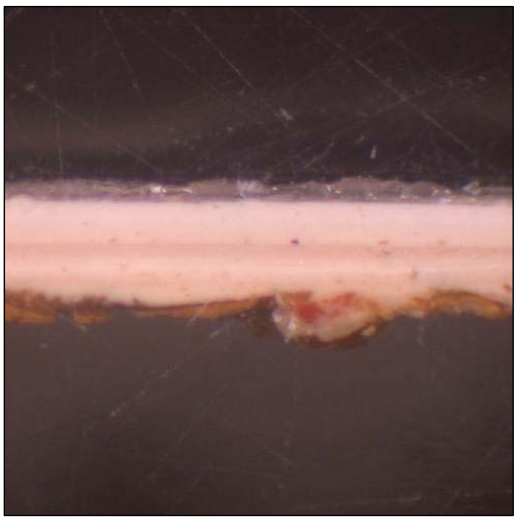
HHI-061 (UV)



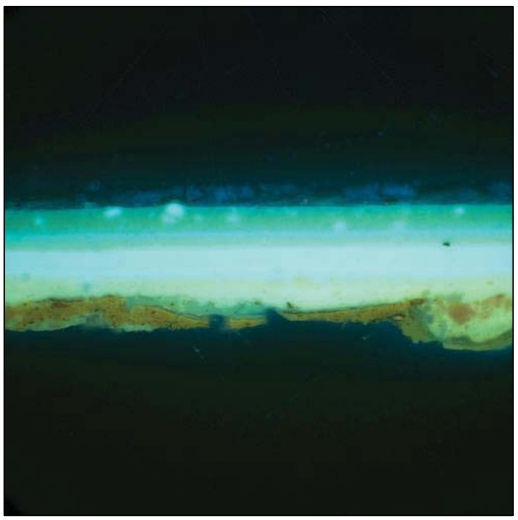
HHI-062 (Daylight Simulation)



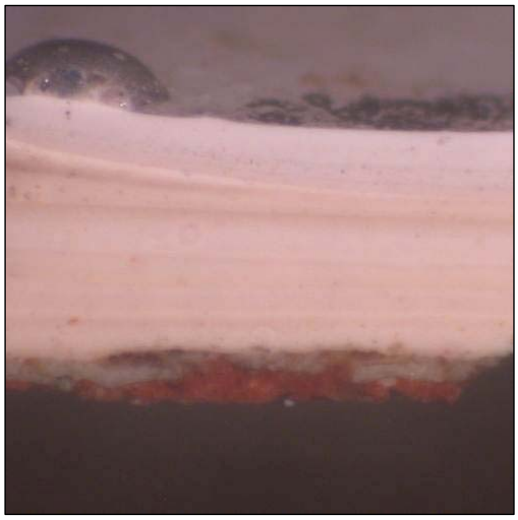
HHI-062 (UV)



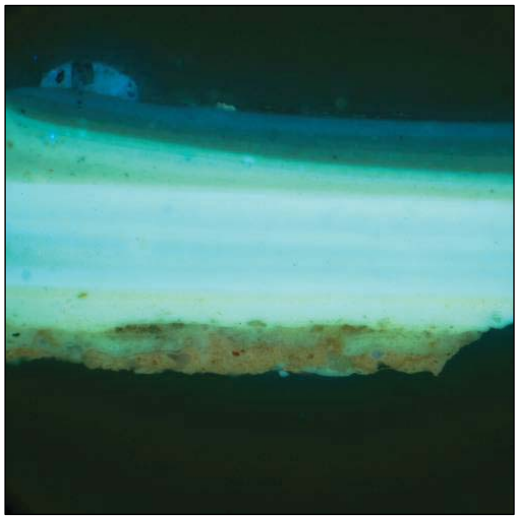
HHI-063 (Daylight Simulation)



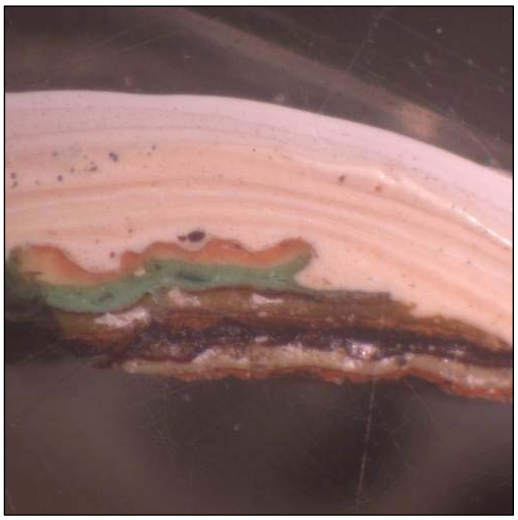
HHI-063 (UV)



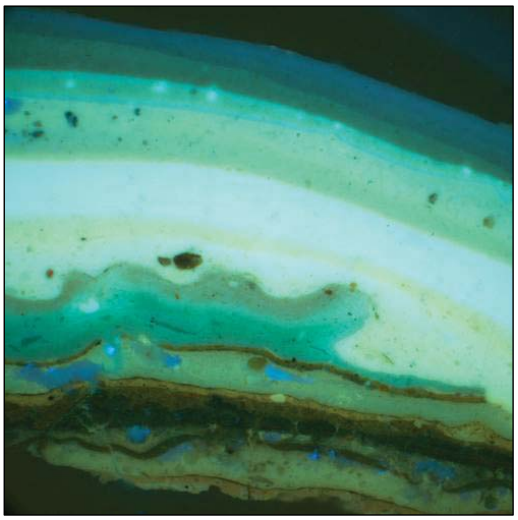
HHI-064 (Daylight Simulation)



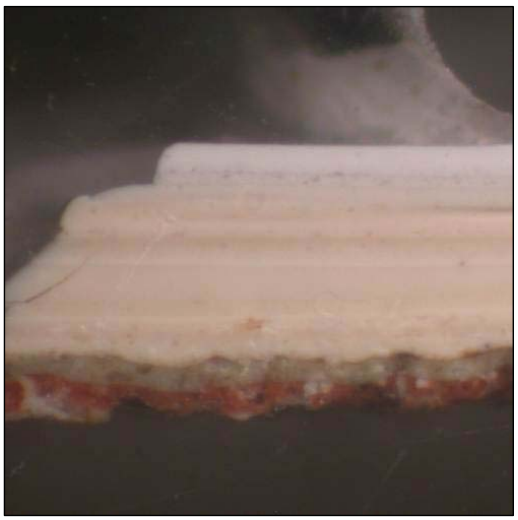
HHI-064 (UV)



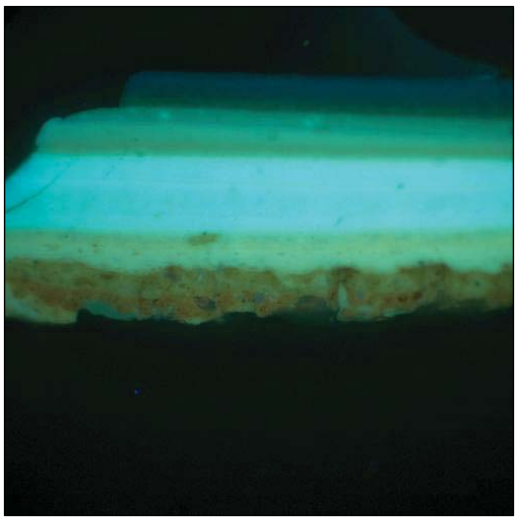
HHI-065 (Daylight Simulation)



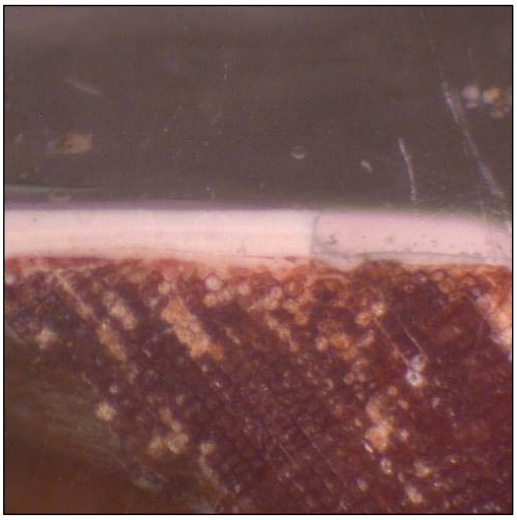
HHI-065 (UV)



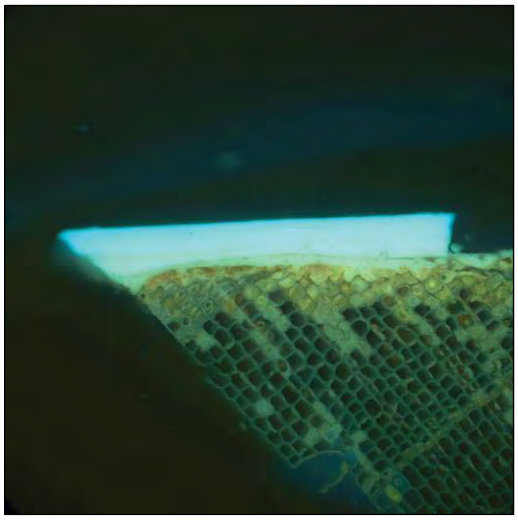
HHI-066 (Daylight Simulation)



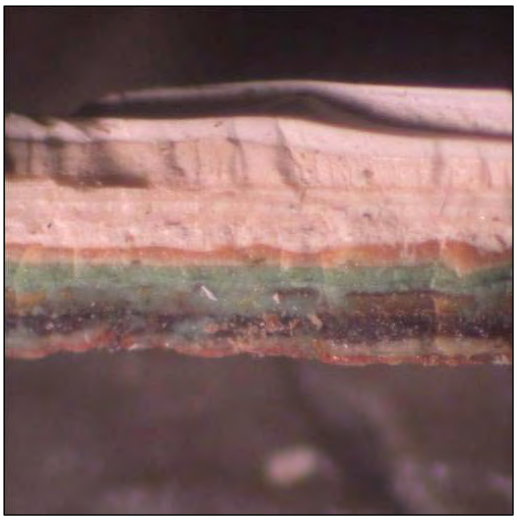
HHI-066 (UV)



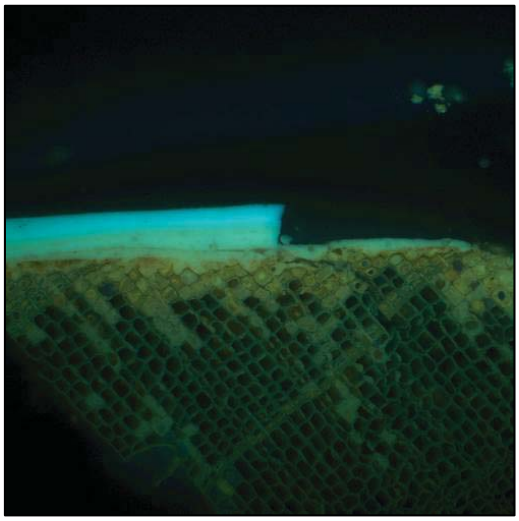
HHI-067 (Daylight Simulation)



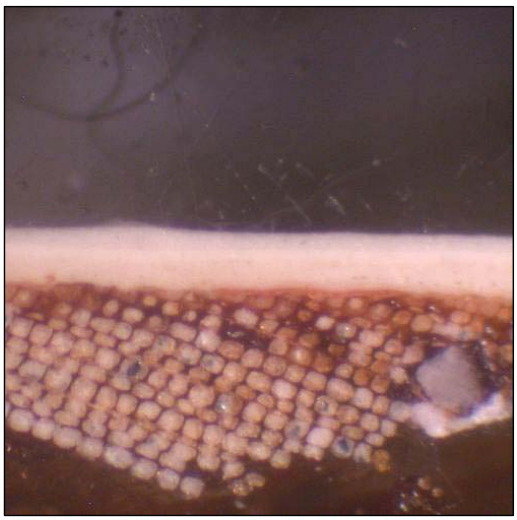
HHI-067 (UV)



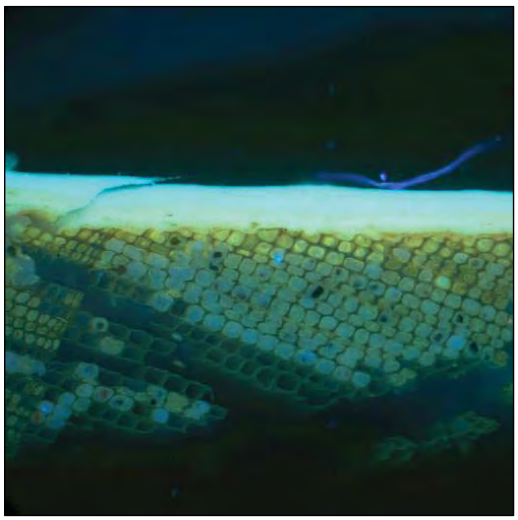
HHI-068 (Daylight Simulation)



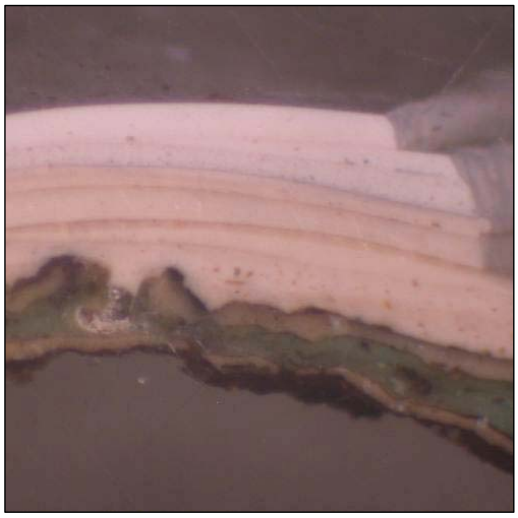
HHI-068 (UV)



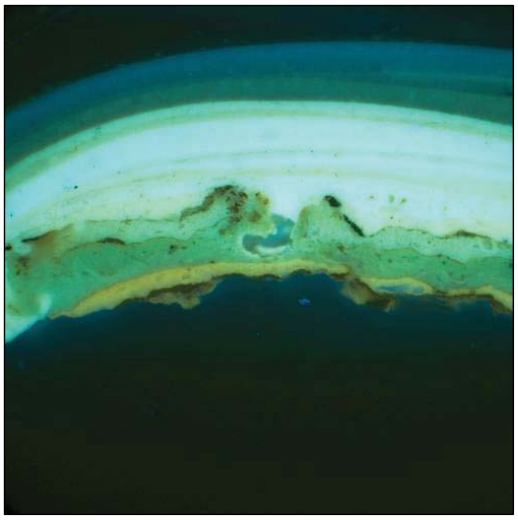
HHI-069 (Daylight Simulation)



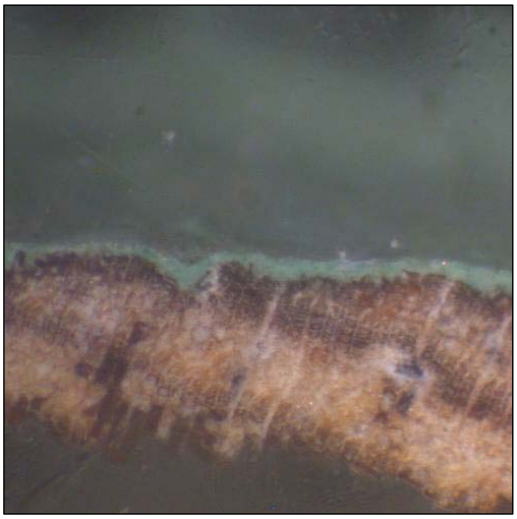
HHI-069 (UV)



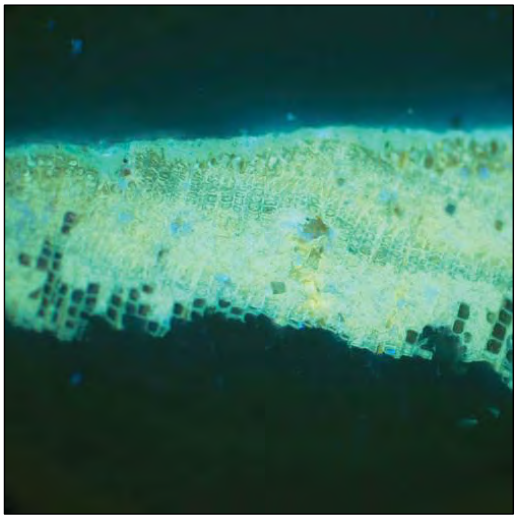
HHI-070 (Daylight Simulation)



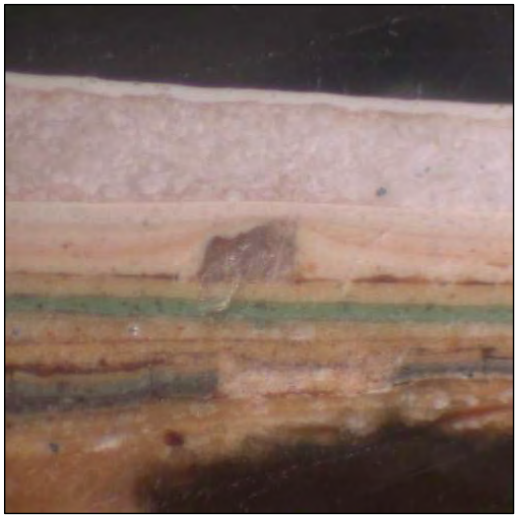
HHI-070 (UV)



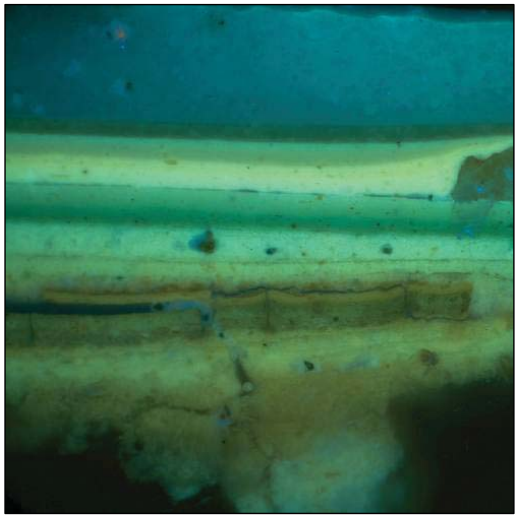
HHI-071 (Daylight Simulation)



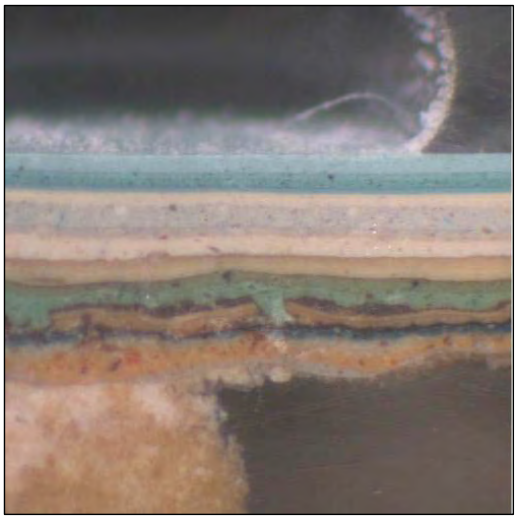
HHI-071 (UV)



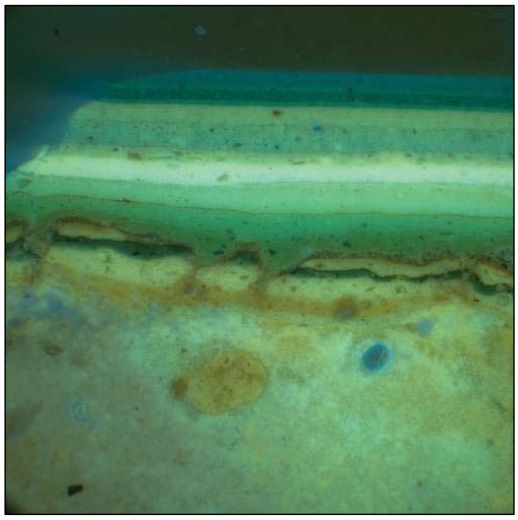
HHI-072 (Daylight Simulation)



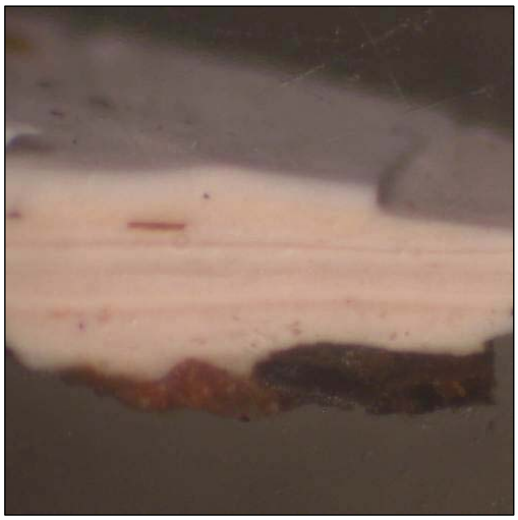
HHI-072 (UV)



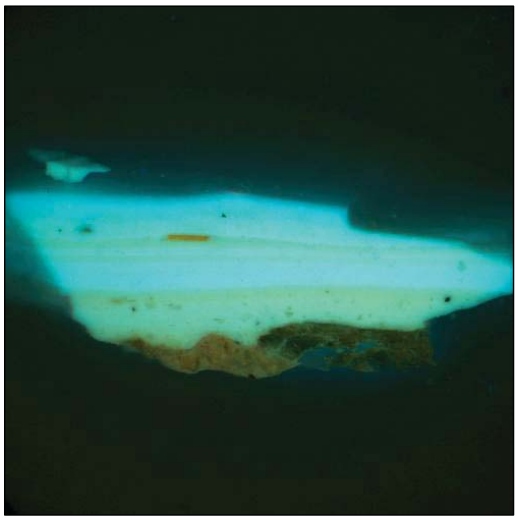
HHI-073 (Daylight Simulation)



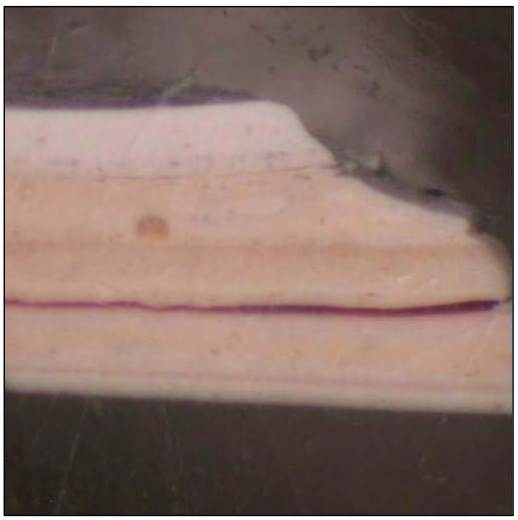
HHI-073 (UV)



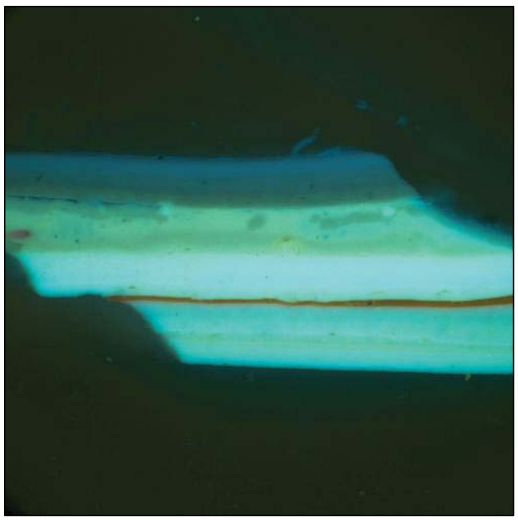
HHI-074a (Daylight Simulation)



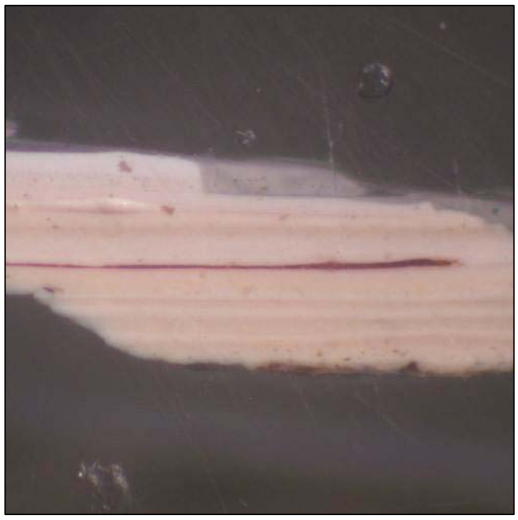
HHI-074a (UV)



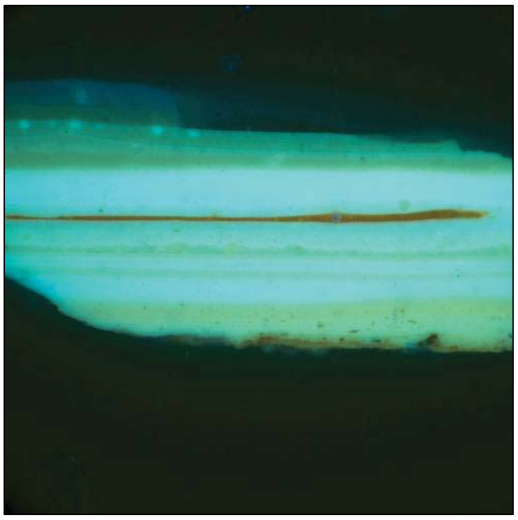
HHI-074b (Daylight Simulation)



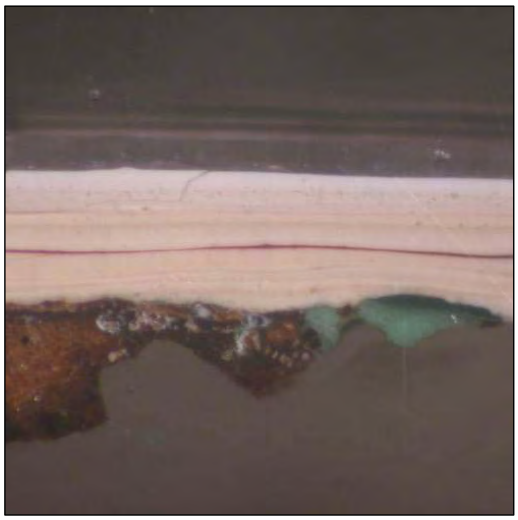
HHI-074b (UV)



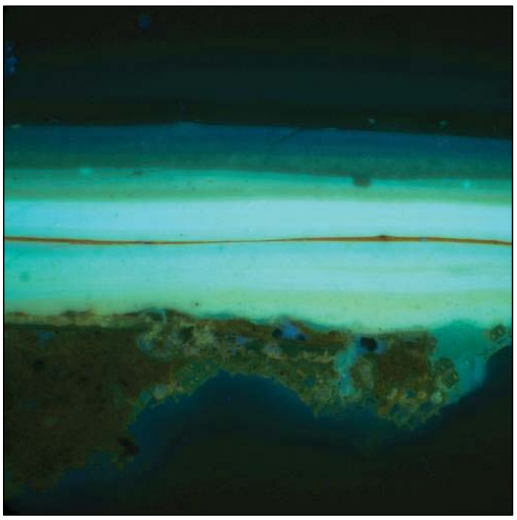
HHI-075 (Daylight Simulation)



HHI-075 (UV)



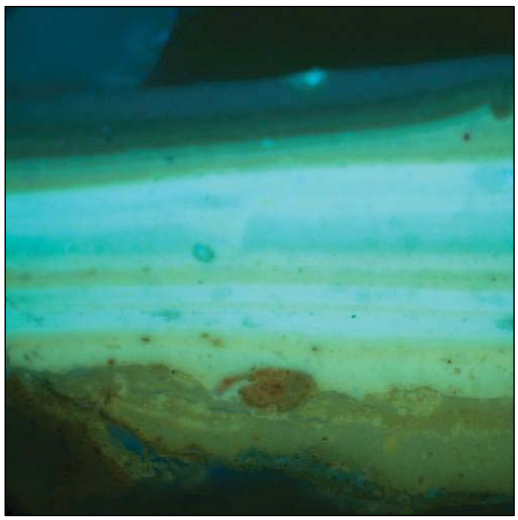
HHI-076 (Daylight Simulation)



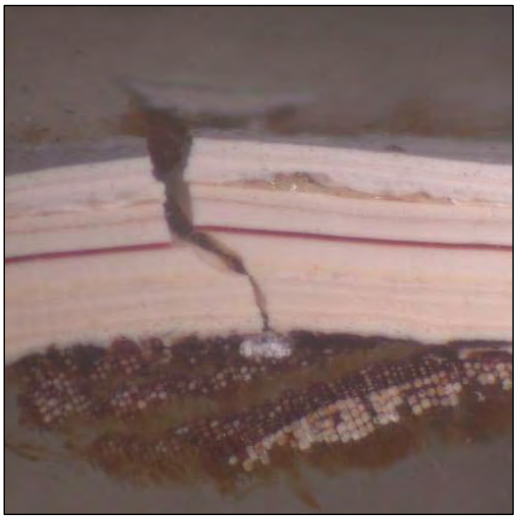
HHI-076 (UV)



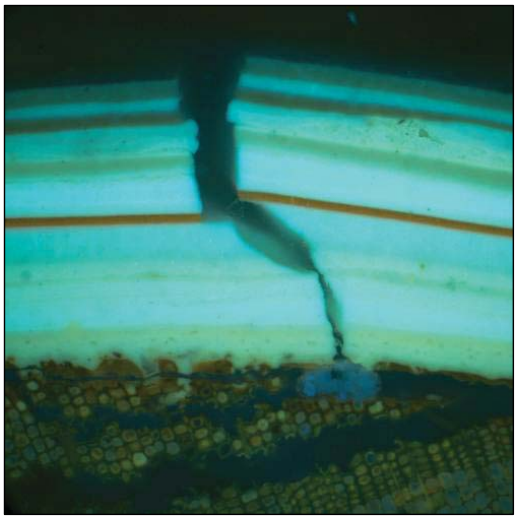
HHI-077 (Daylight Simulation)



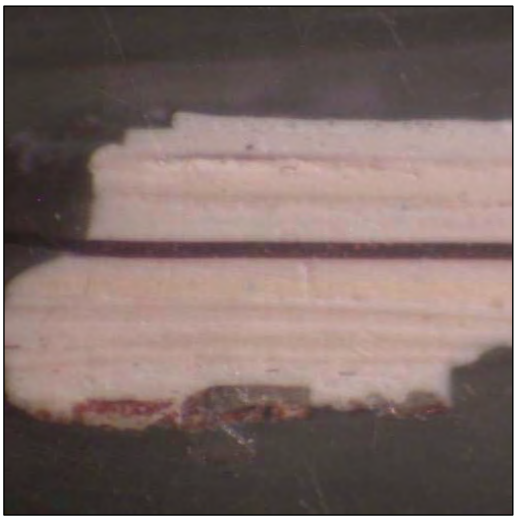
HHI-077 (UV)



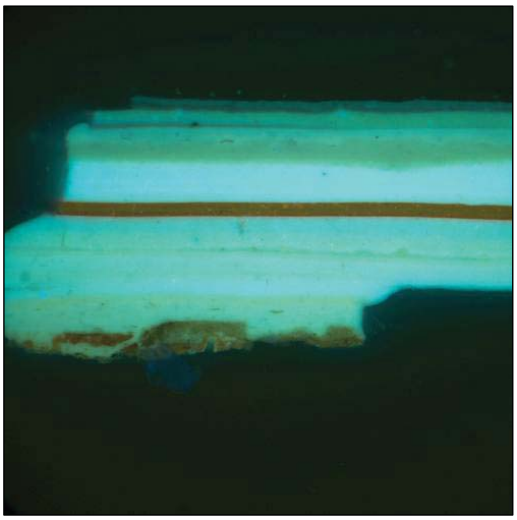
HHI-078 (Daylight Simulation)



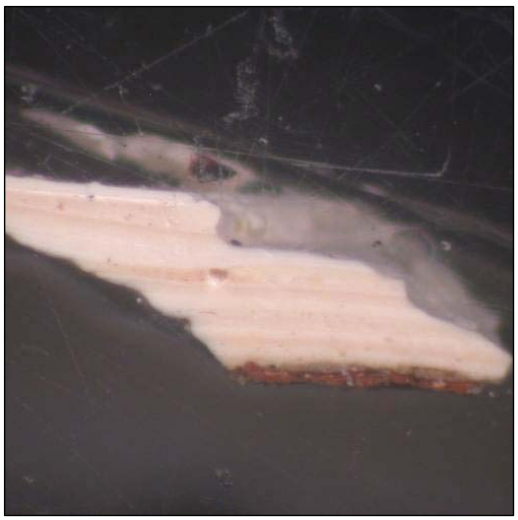
HHI-078 (UV)



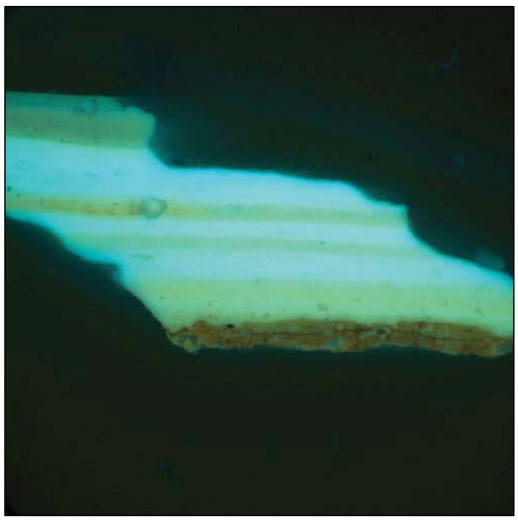
HHI-079 (Daylight Simulation)



HHI-079 (UV)



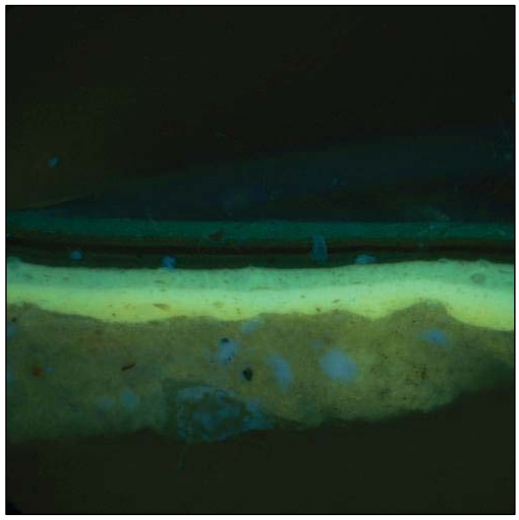
HHI-080 (Daylight Simulation)



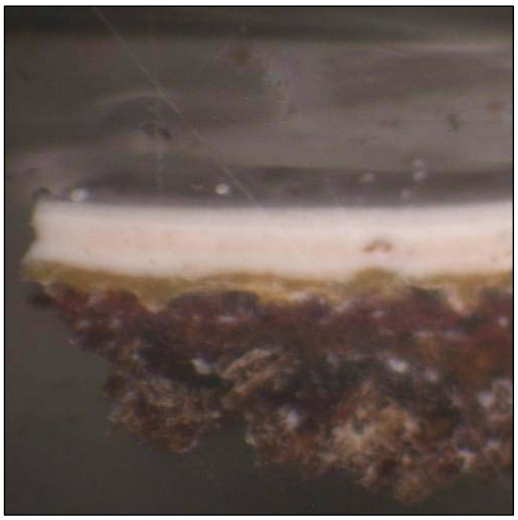
HHI-080 (UV)



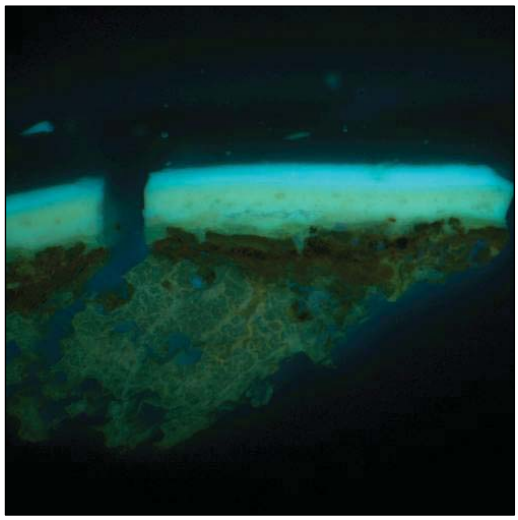
HHI-081 (Daylight Simulation)



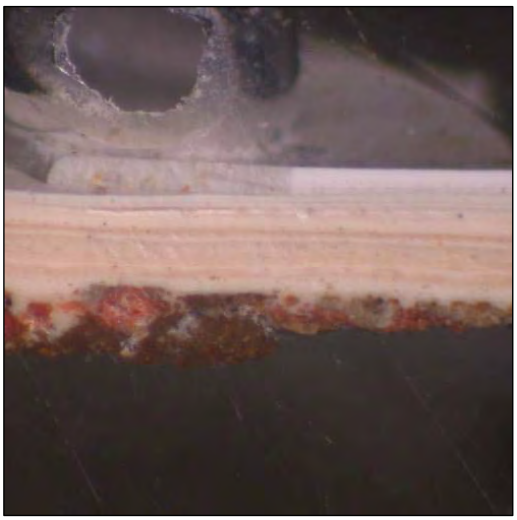
HHI-081 (UV)



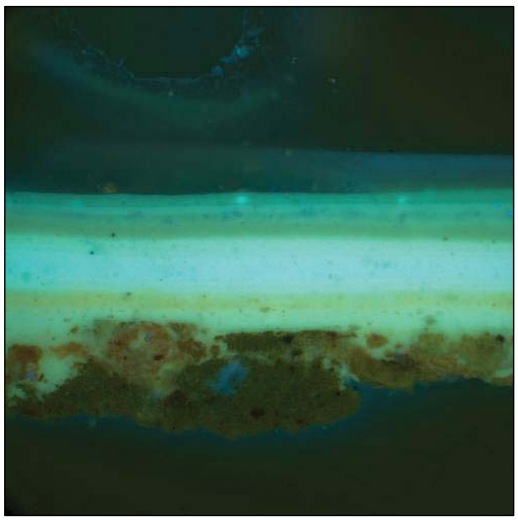
HHI-082 (Daylight Simulation)



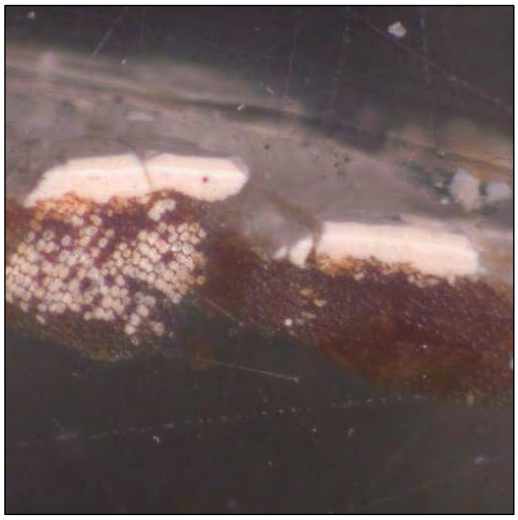
HHI-082 (UV)



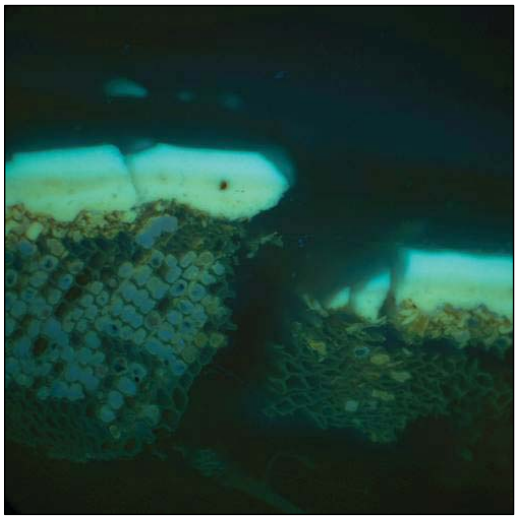
HHI-083 (Daylight Simulation)



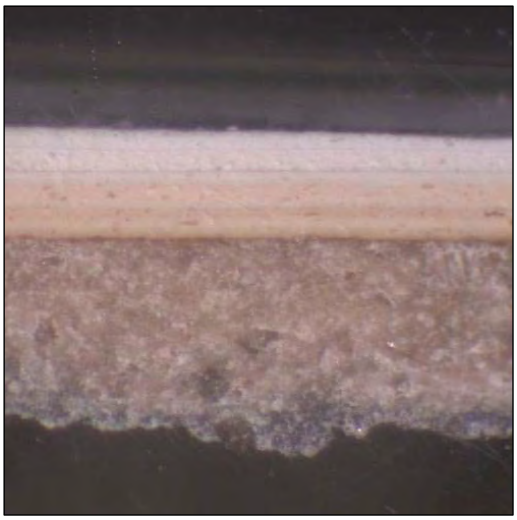
HHI-083 (UV)



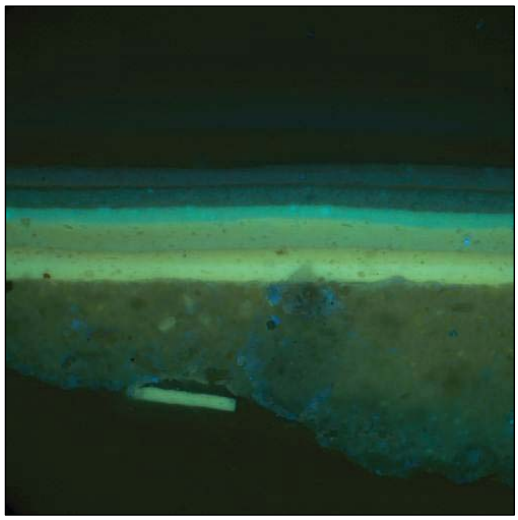
HHI-084 (Daylight Simulation)



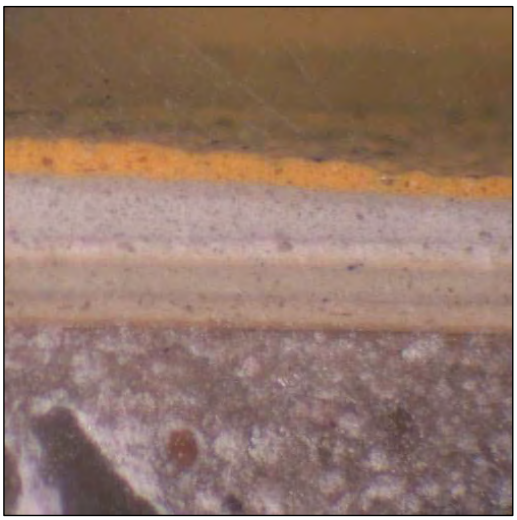
HHI-084 (UV)



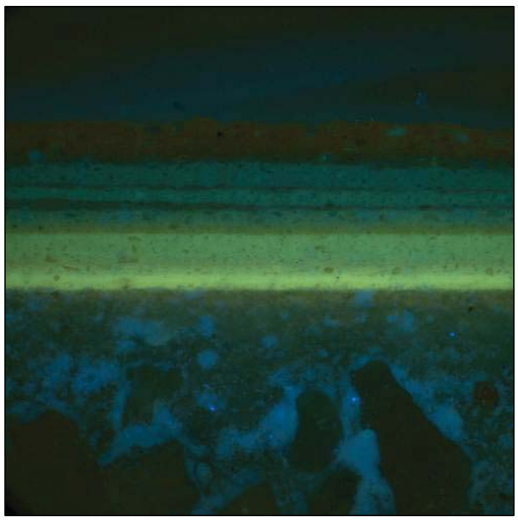
HHI-085 (Daylight Simulation)



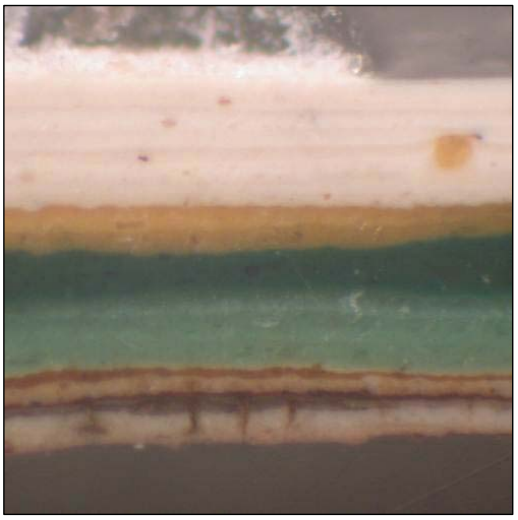
HHI-085 (UV)



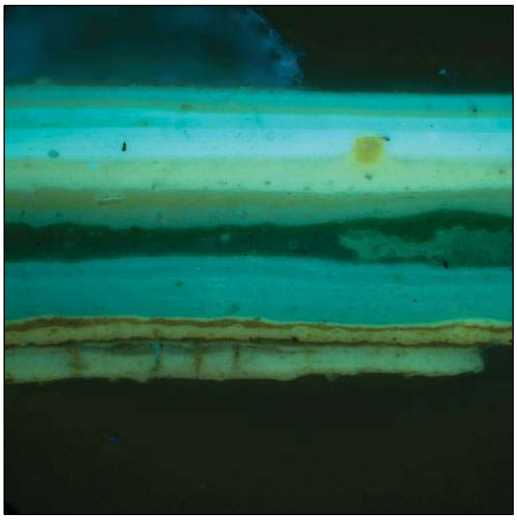
HHI-086 (Daylight Simulation)



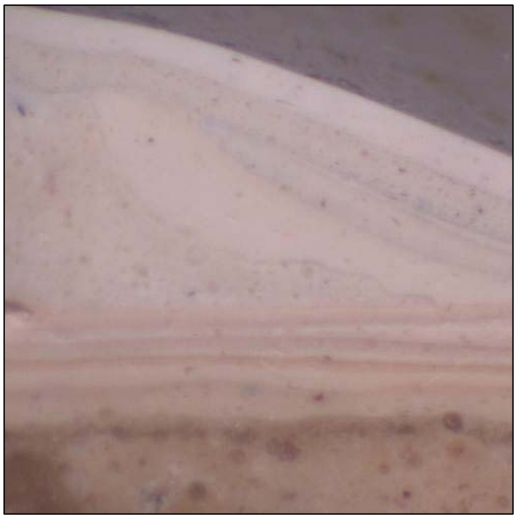
HHI-086 (UV)



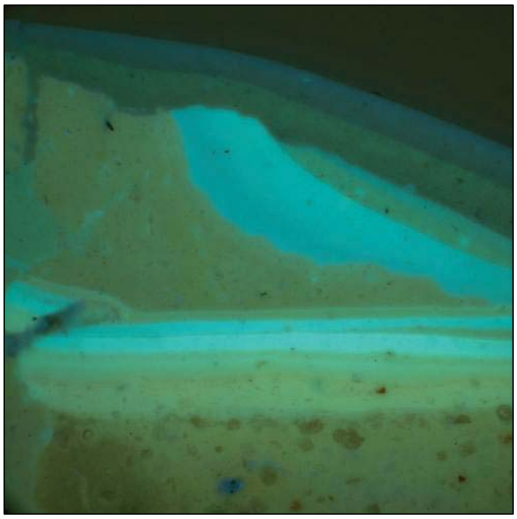
HHI-087 (Daylight Simulation)



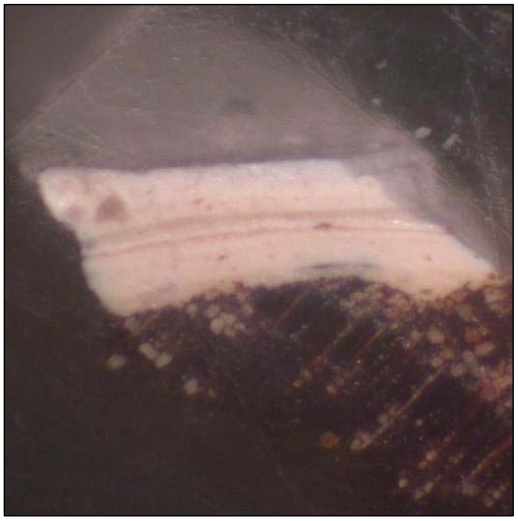
HHI-87 (UV)



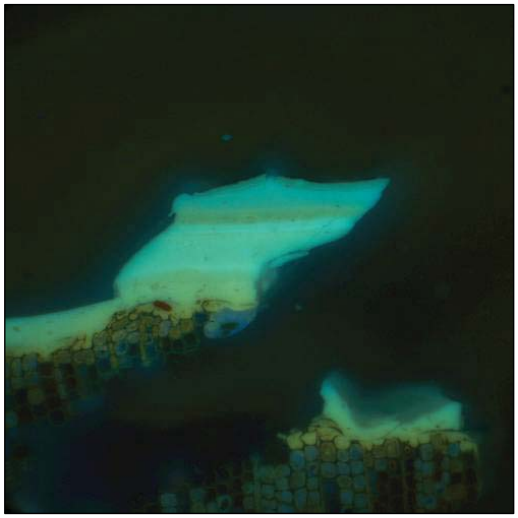
HHI-088a (Daylight Simulation)



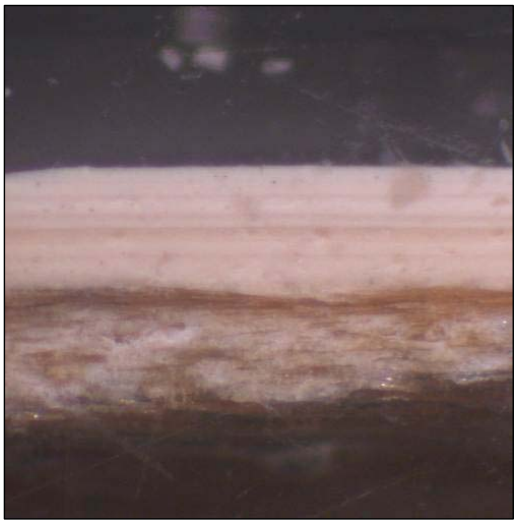
HHI-088aUV)



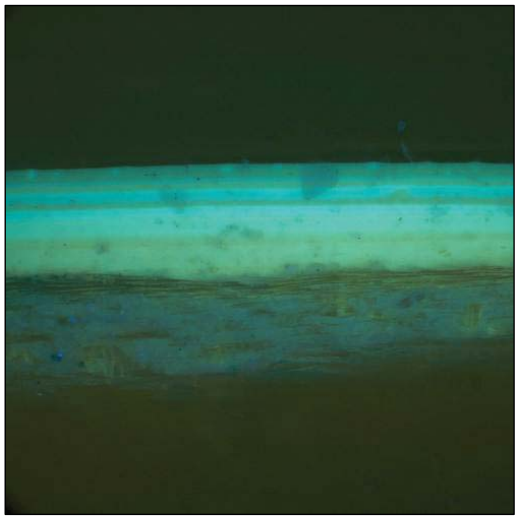
HHI-088b (Daylight Simulation)



HHI-08ab (UV)



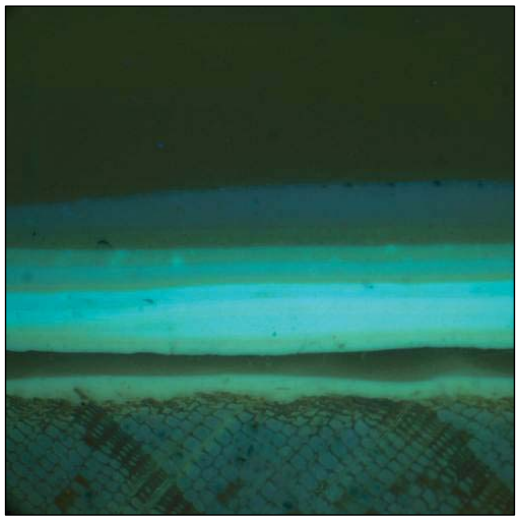
HHI-089 (Daylight Simulation)



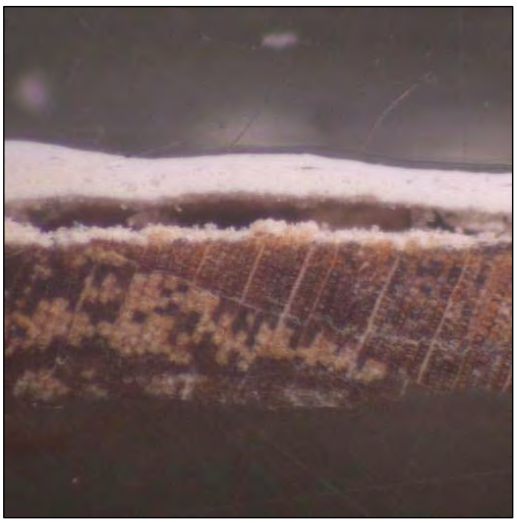
HHI-089 (UV)



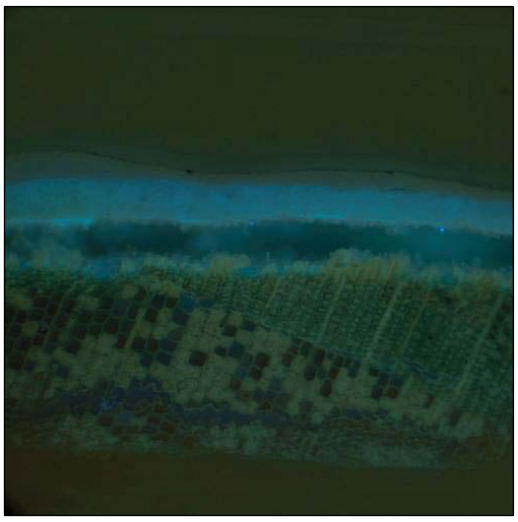
HHI-090 (Daylight Simulation)



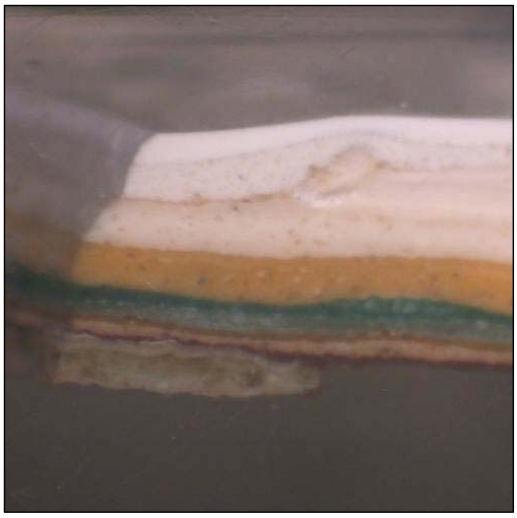
HHI-090 (UV)



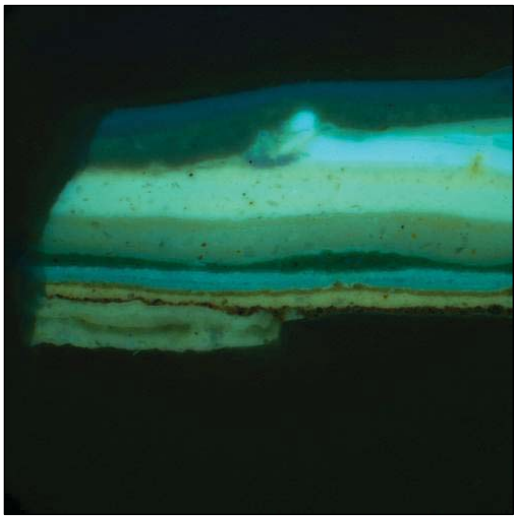
HHI-091 (Daylight Simulation)



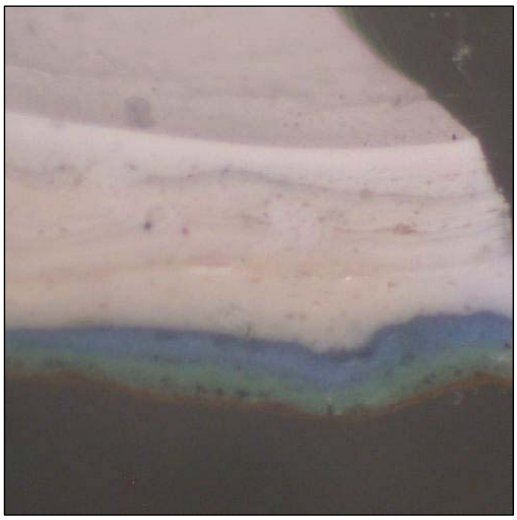
HHI-091 (UV)



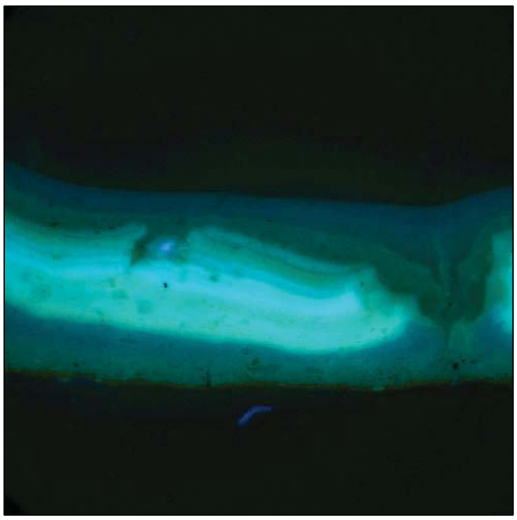
HHI-092 (Daylight Simulation)



HHI-092 (UV)



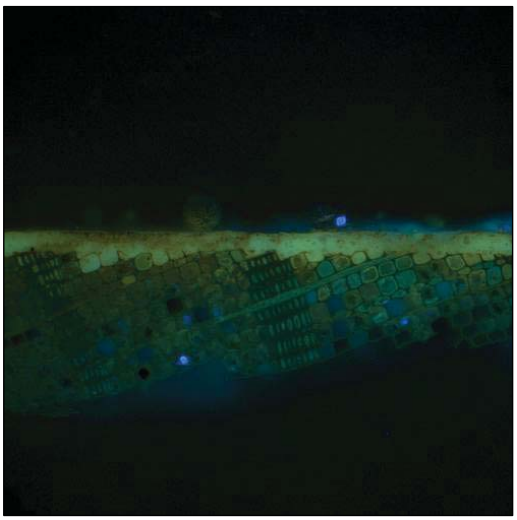
HHI-093 (Daylight Simulation)



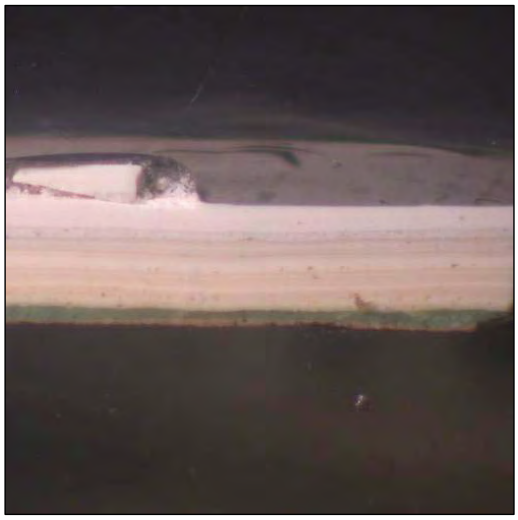
HHI-093 (UV)



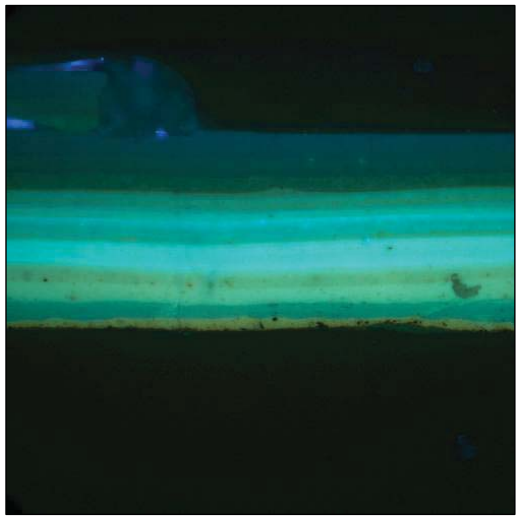
HHI-094a (Daylight Simulation)



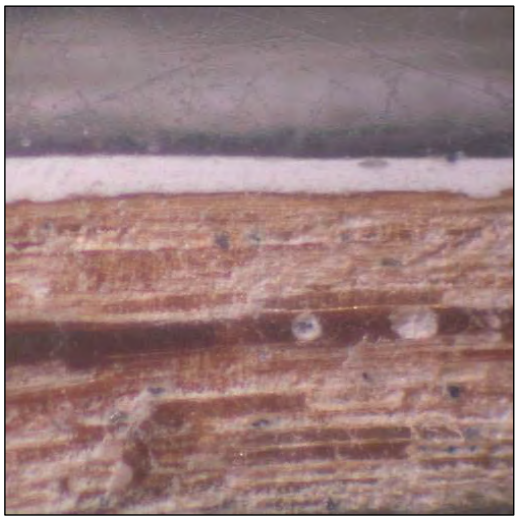
HHI-094a (UV)



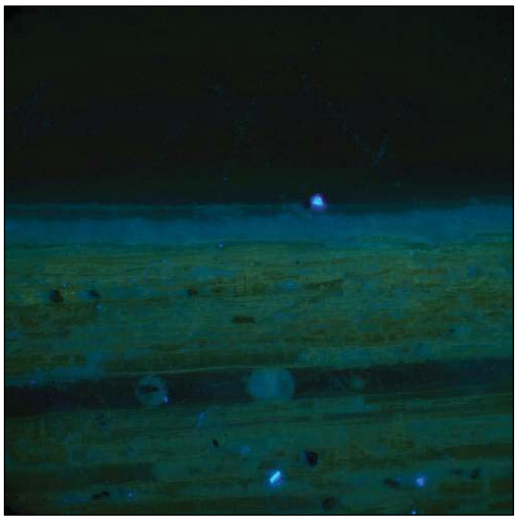
HHI-094b (Daylight Simulation)



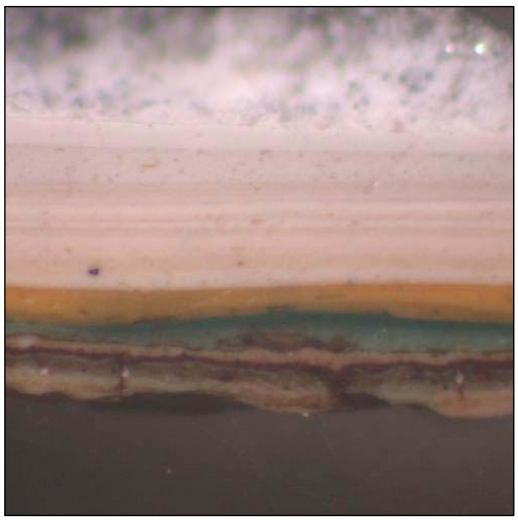
HHI-094b (UV)



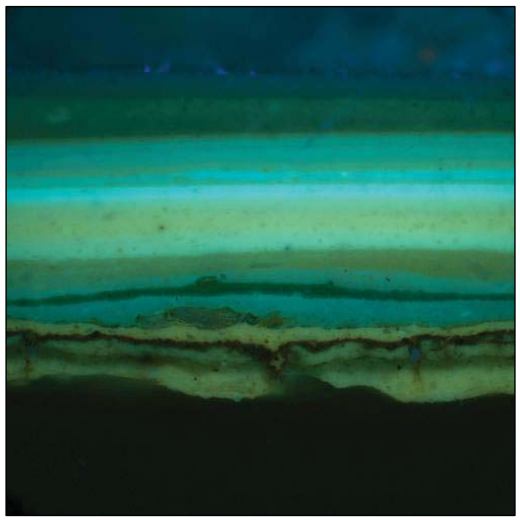
HHI-095 (Daylight Simulation)



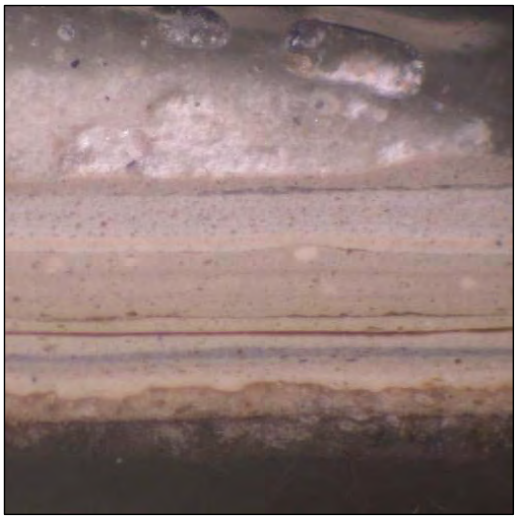
HHI-095 (UV)



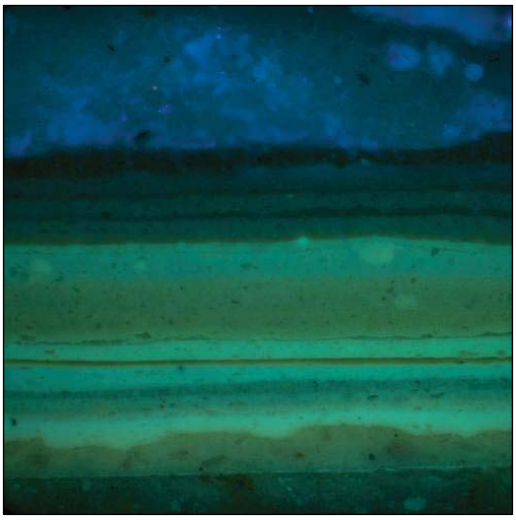
HHI-096 (Daylight Simulation)



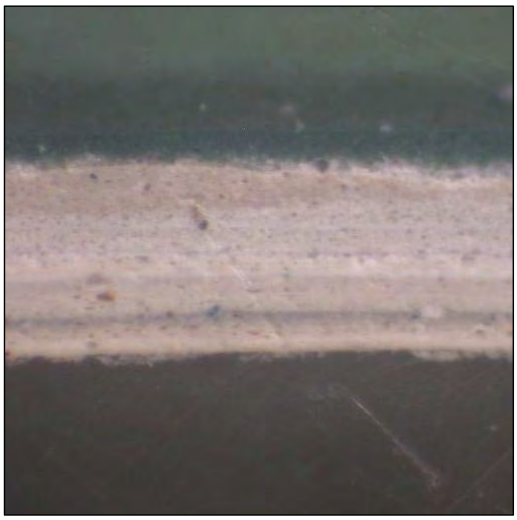
HHI-096 (UV)



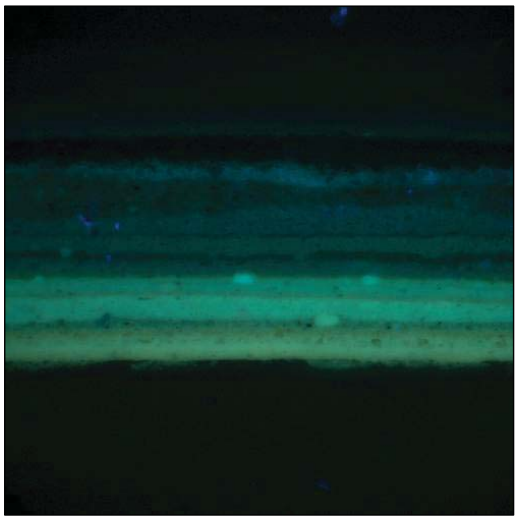
HHI-097 (Daylight Simulation)



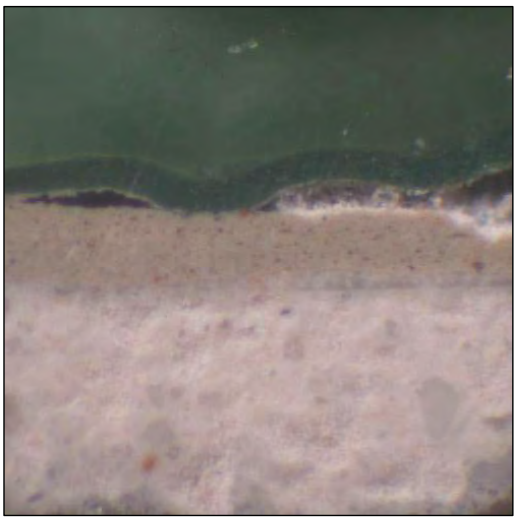
HHI-097 (UV)



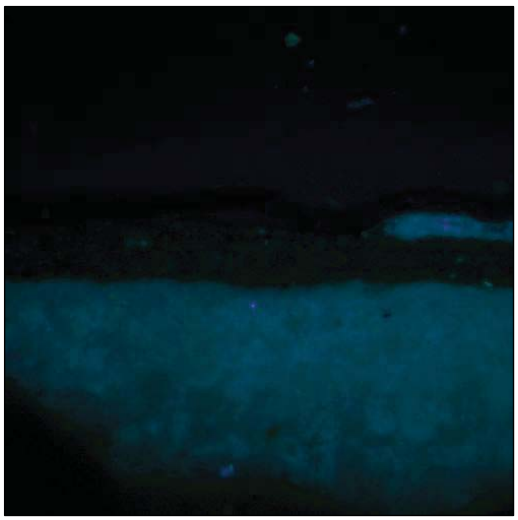
HHI-098 (Daylight Simulation)



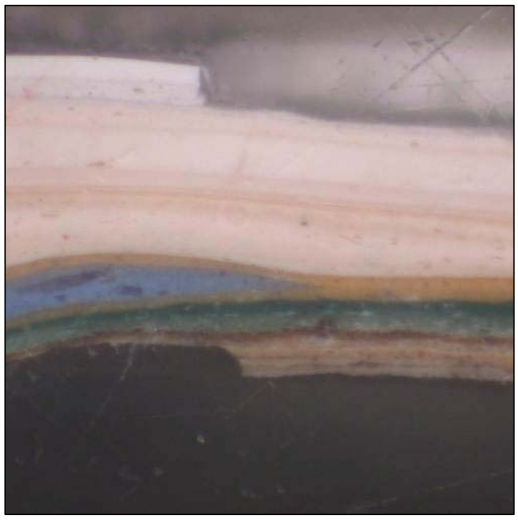
HHI-098 (UV)



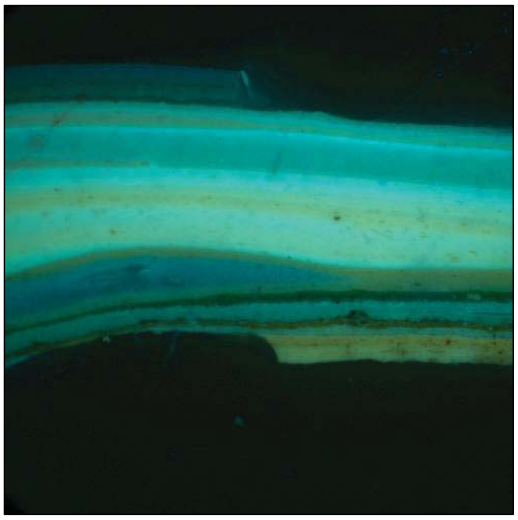
HHI-099 (Daylight Simulation)



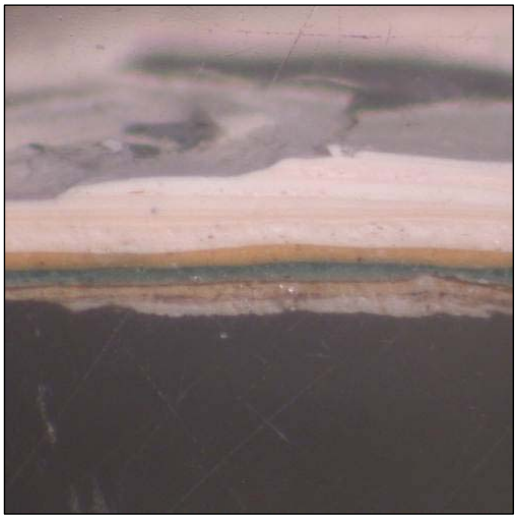
HHI-099 (UV)



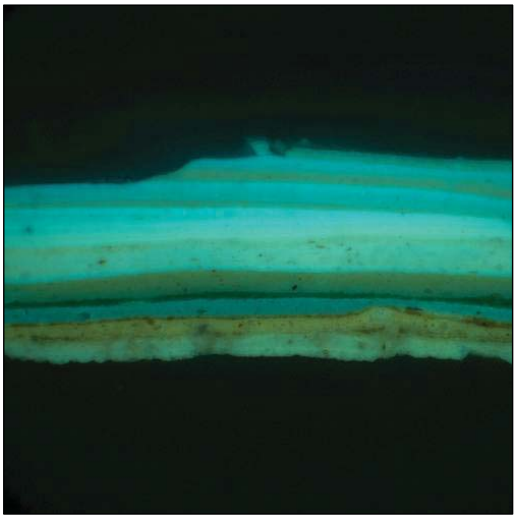
HHI-100 (Daylight Simulation)



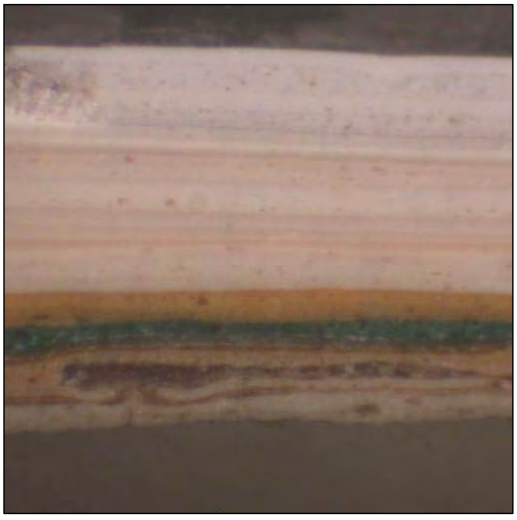
HHI-100 (UV)



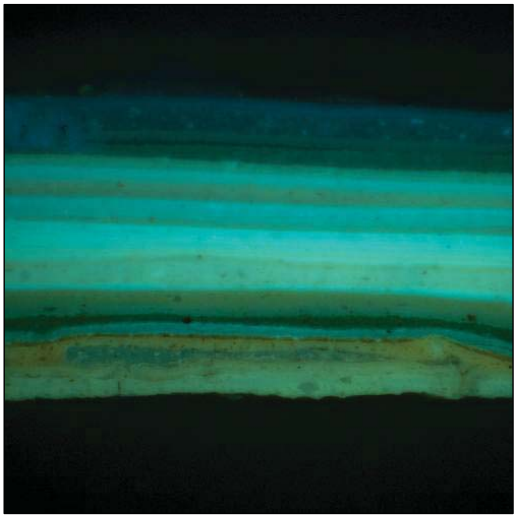
HHI-101 (Daylight Simulation)



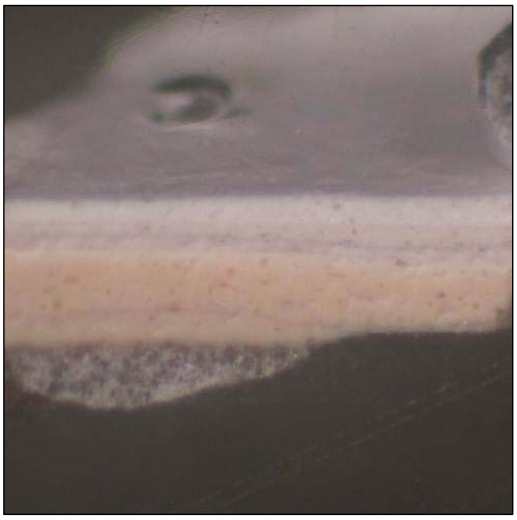
HHI-101 (UV)



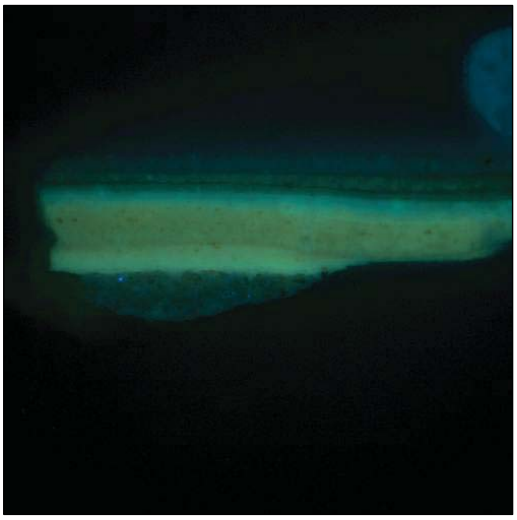
HHI-102 (Daylight Simulation)



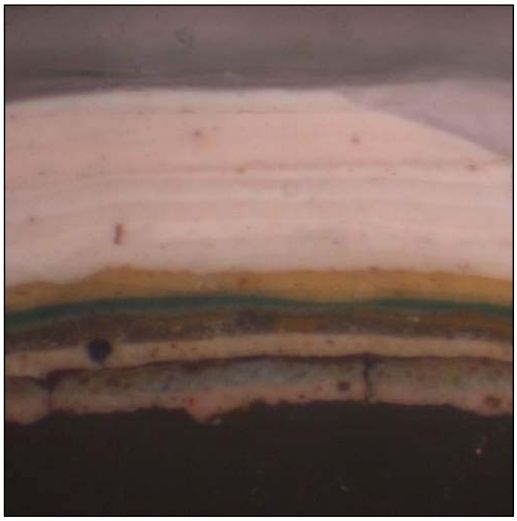
HHI-102 (UV)



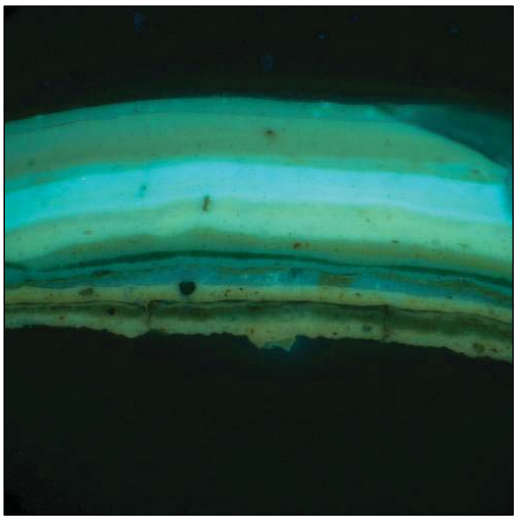
HHI-103 (Daylight Simulation)



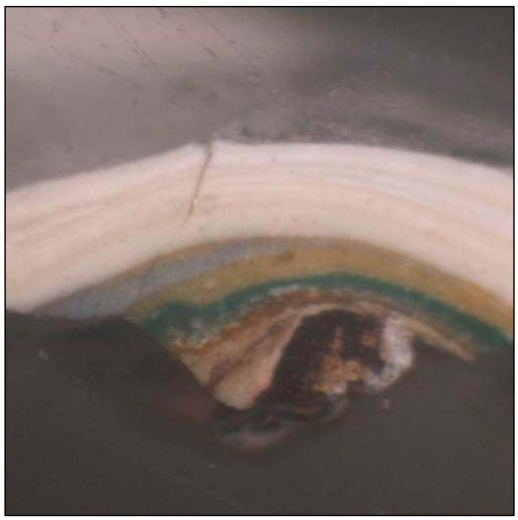
HHI-103 (UV)



HHI-104 (Daylight Simulation)



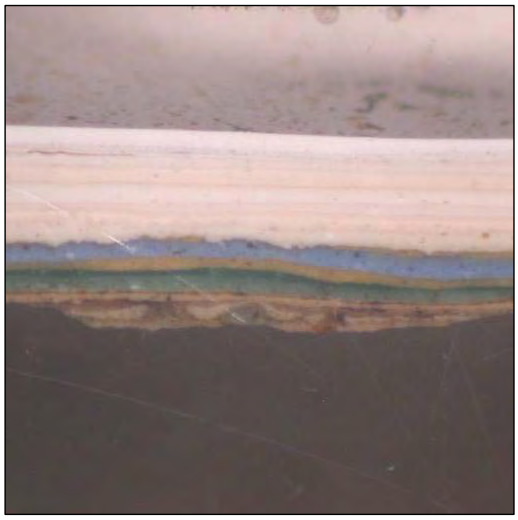
HHI-104 (UV)



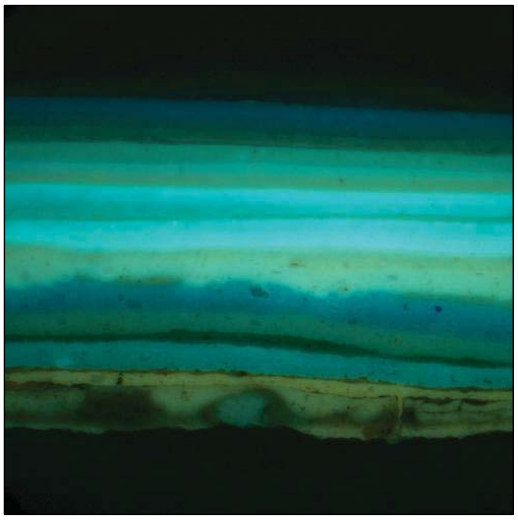
HHI-105 (Daylight Simulation)



HHI-105 (UV)



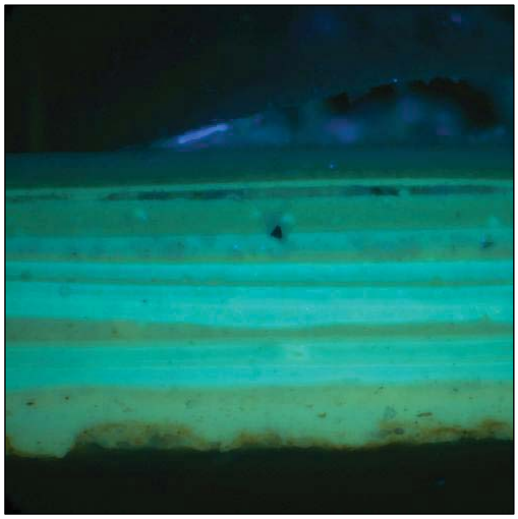
HHI-106 (Daylight Simulation)



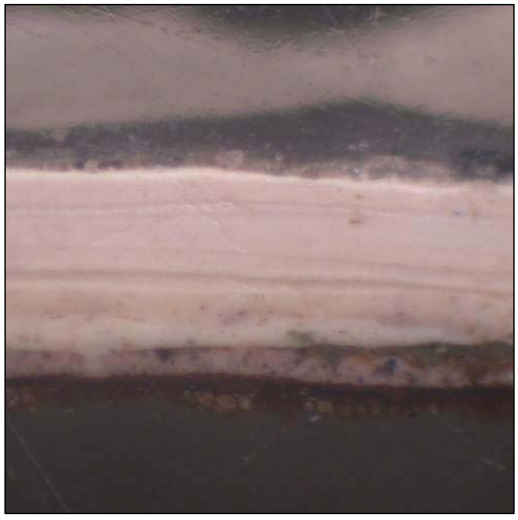
HHI-106 (UV)



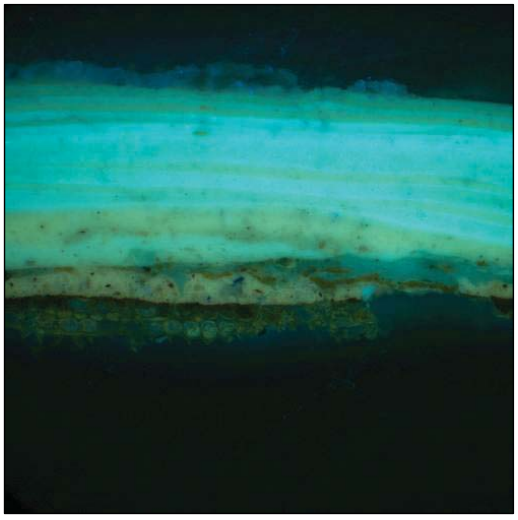
HHI-107 (Daylight Simulation)



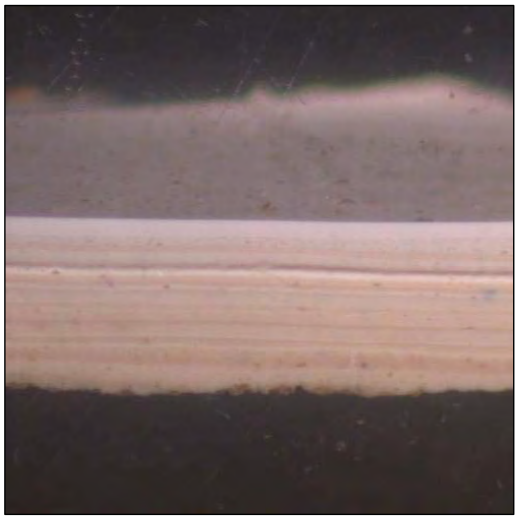
HHI-107 (UV)



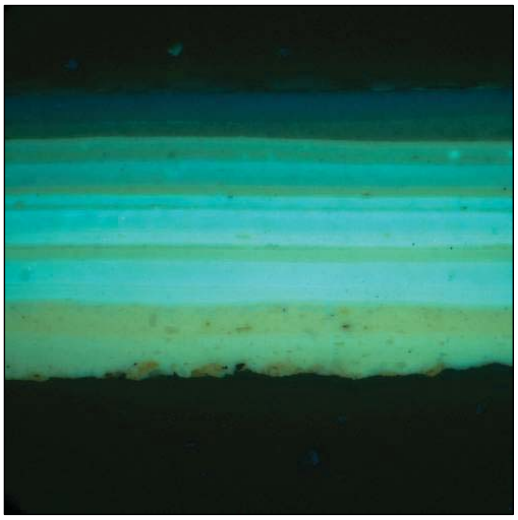
HHI-108 (Daylight Simulation)



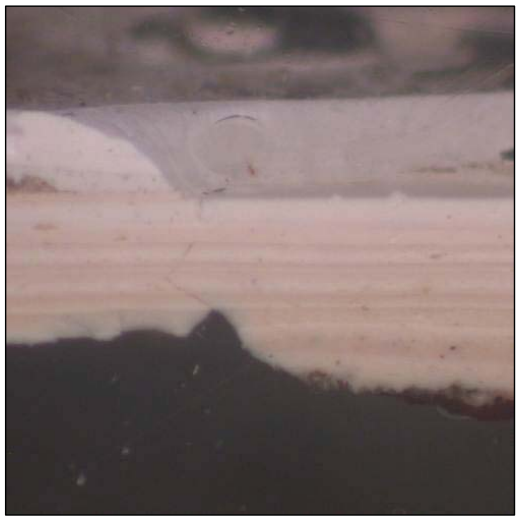
HHI-108 (UV)



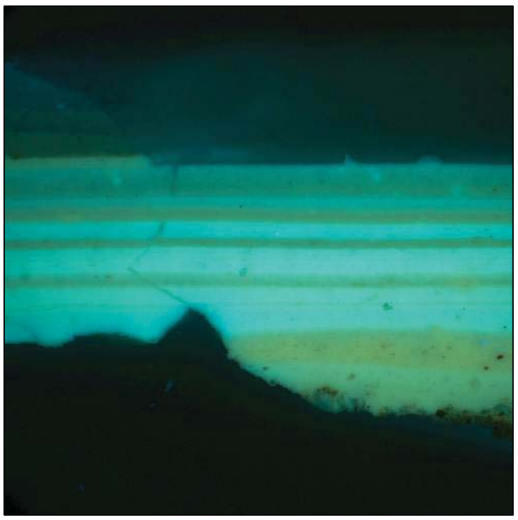
HHI-109 (Daylight Simulation)



HHI-109 (UV)



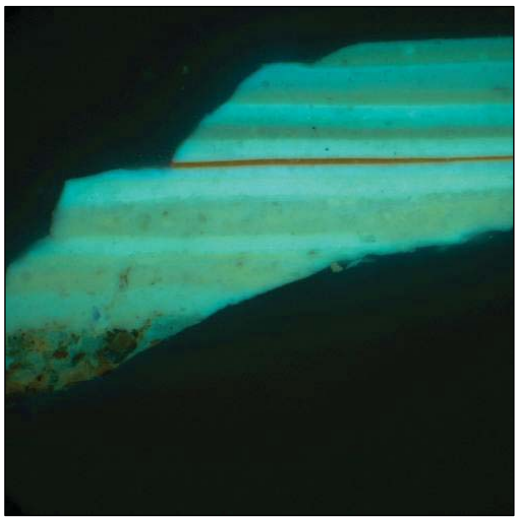
HHI-110 (Daylight Simulation)



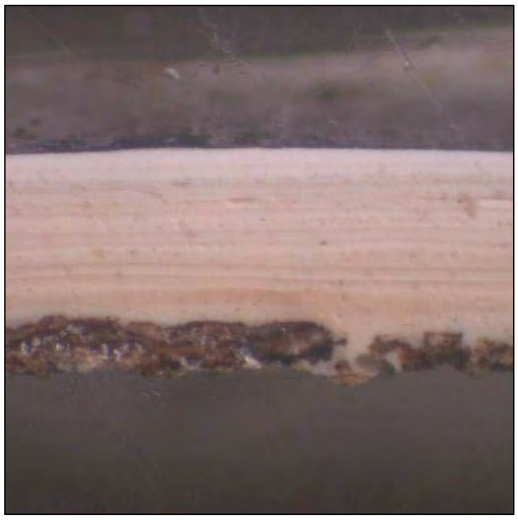
HHI-110 (UV)



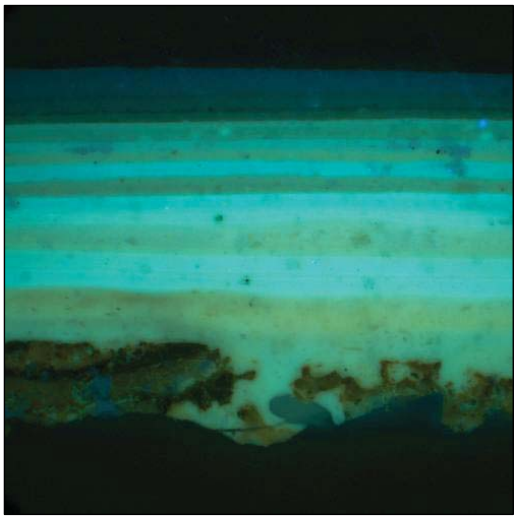
HHI-111 (Daylight Simulation)



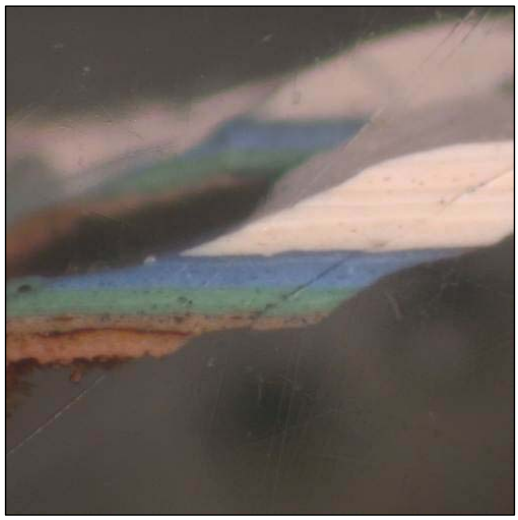
HHI-111 (UV)



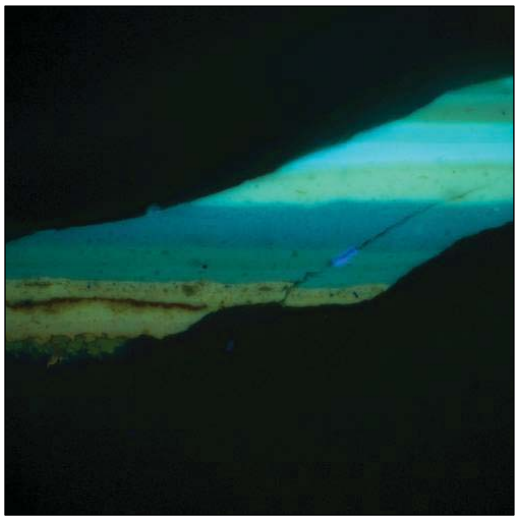
HHI-112 (Daylight Simulation)



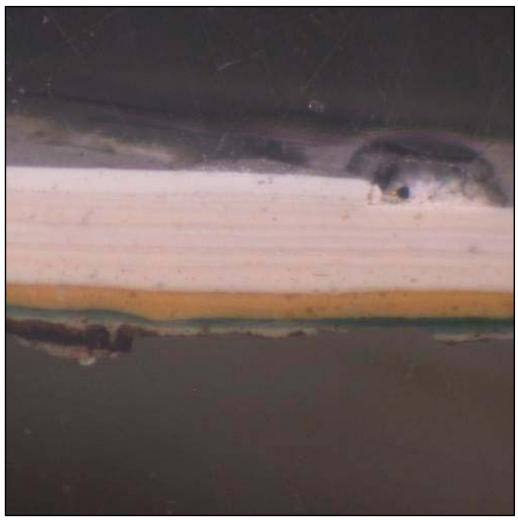
HHI-112 (UV)



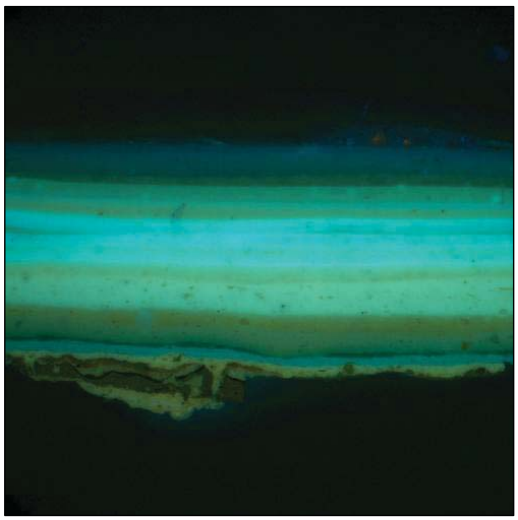
HHI-113 (Daylight Simulation)



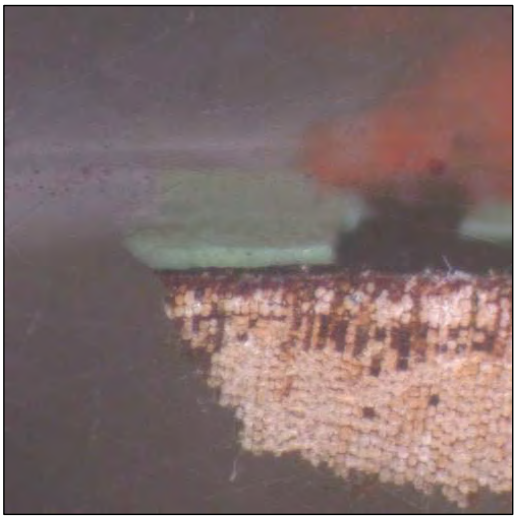
HHI-113 (UV)



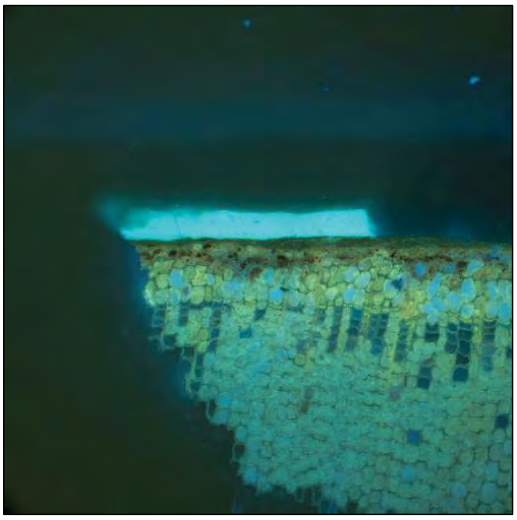
HHI-114 (Daylight Simulation)



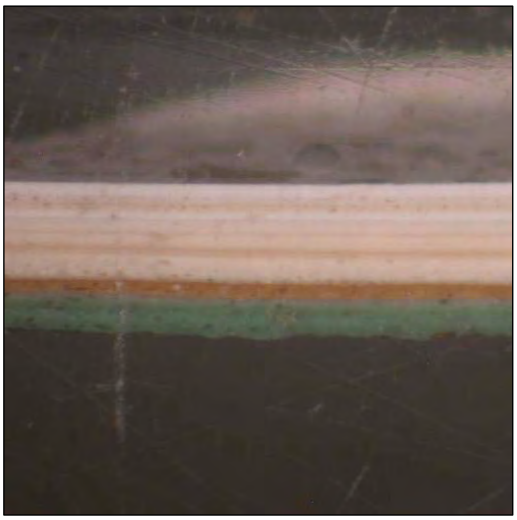
HHI-114 (UV)



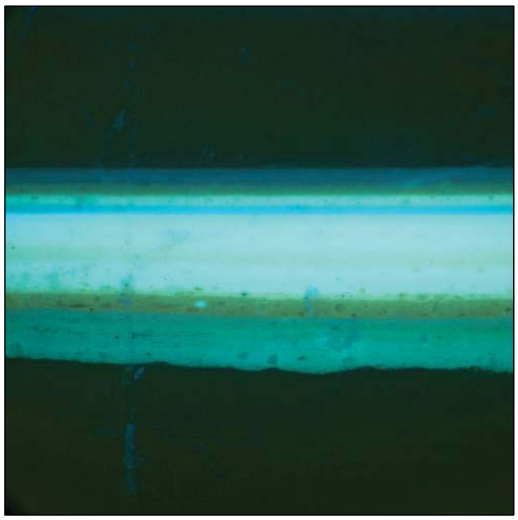
HHI-115a (Daylight Simulation)



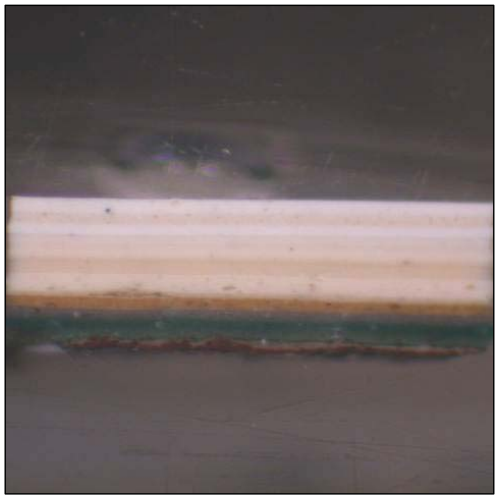
HHI-115a (UV)



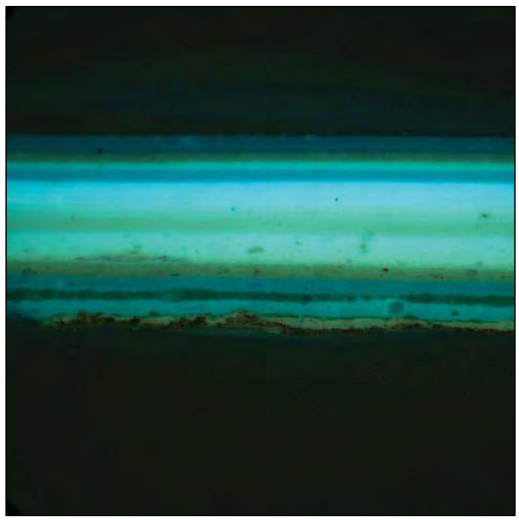
HHI-115b (Daylight Simulation)



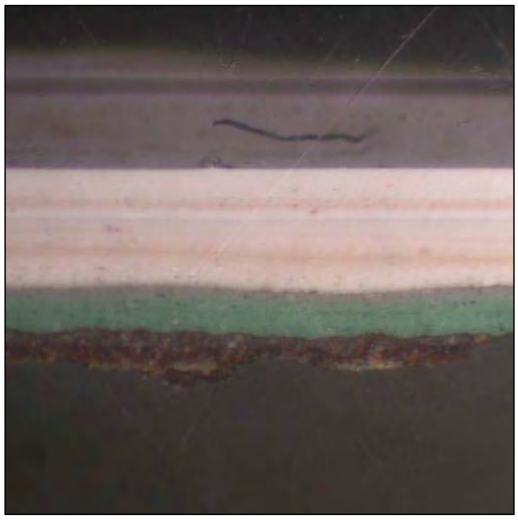
HHI-115b (UV)



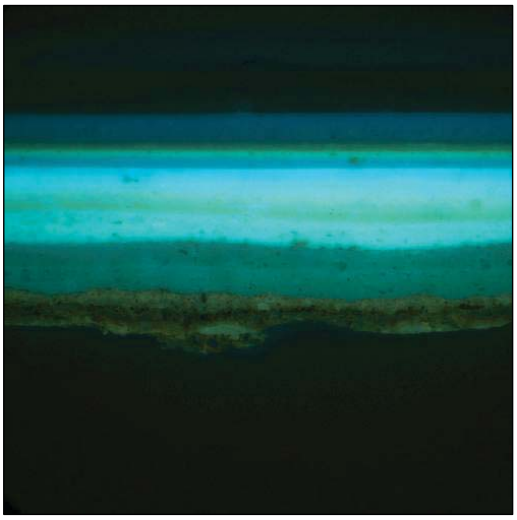
HHI-116 (Daylight Simulation)



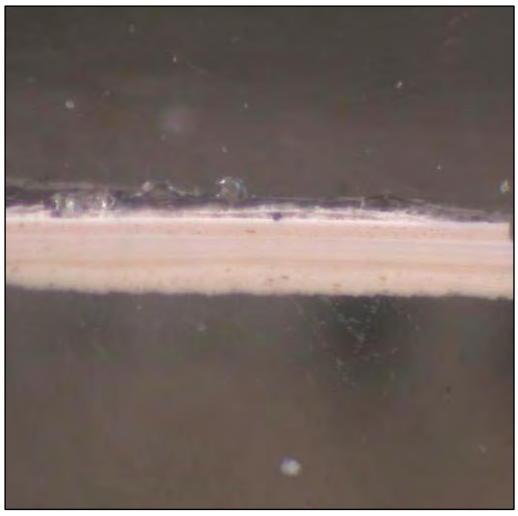
HHI-116 (UV)



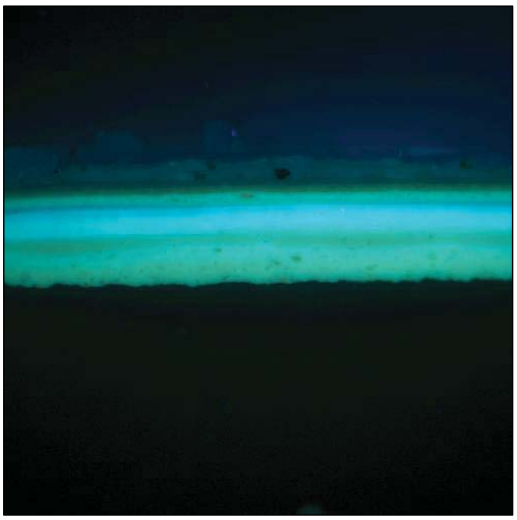
HHI-117 (Daylight Simulation)



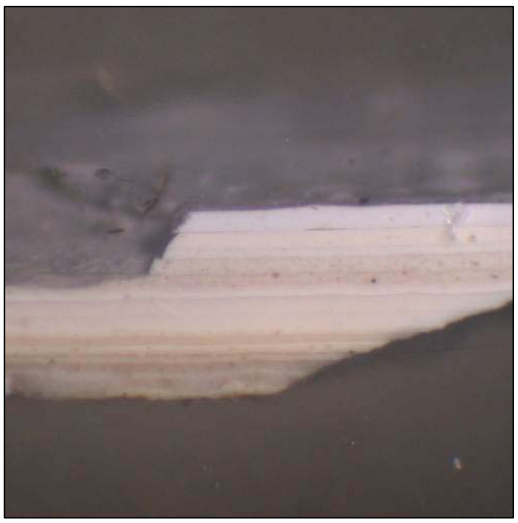
HHI-117 (UV)



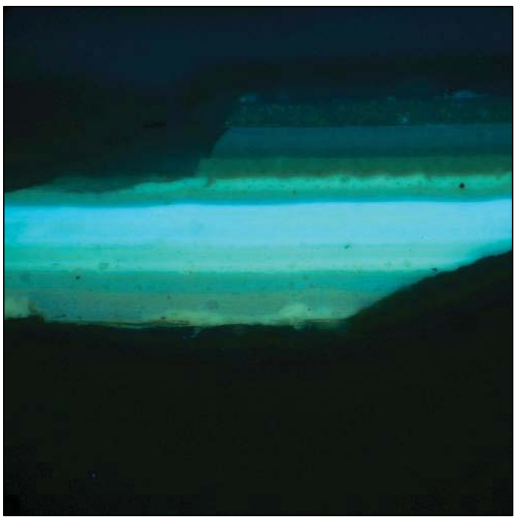
HHI-118 (Daylight Simulation)



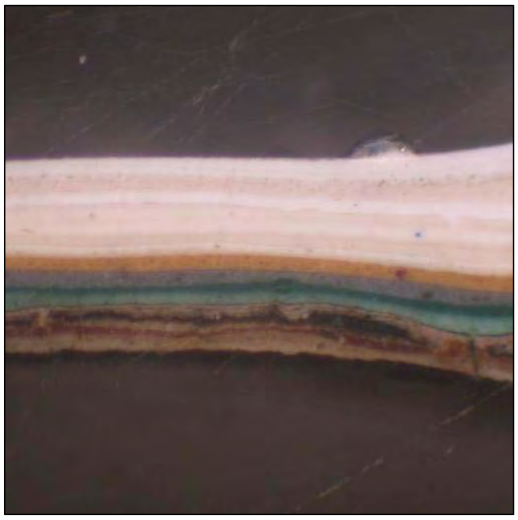
HHI-118 (UV)



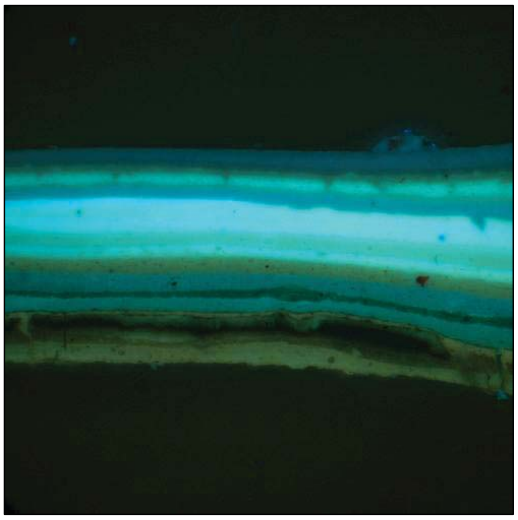
HHI-119 (Daylight Simulation)



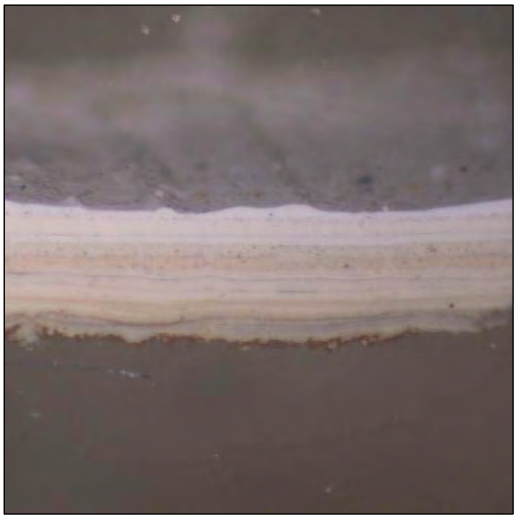
HHI-119 (UV)



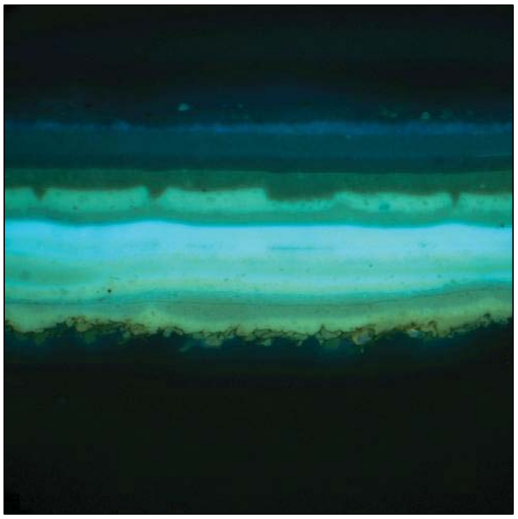
HHI-120 (Daylight Simulation)



HHI-120 (UV)



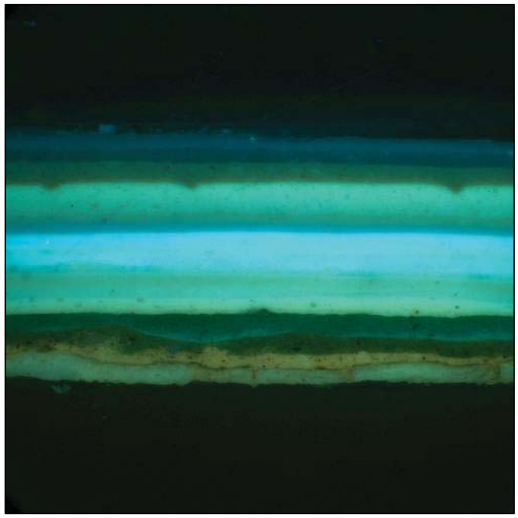
HHI-121 (Daylight Simulation)



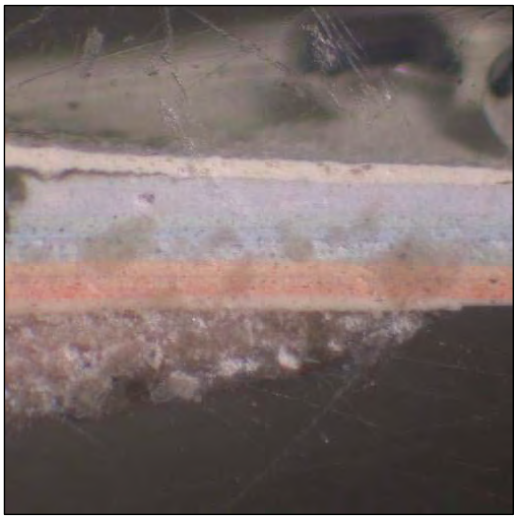
HHI-121 (UV)



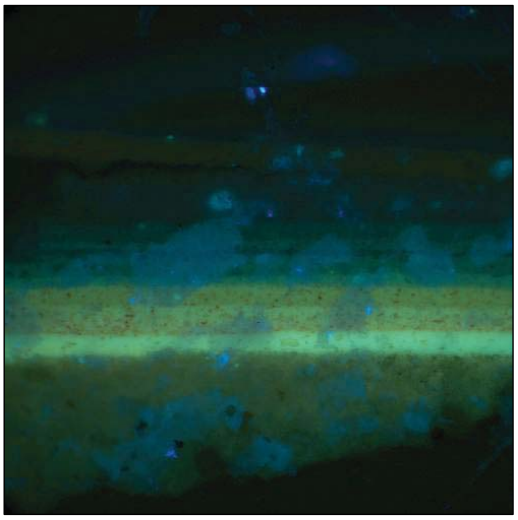
HHI-122 (Daylight Simulation)



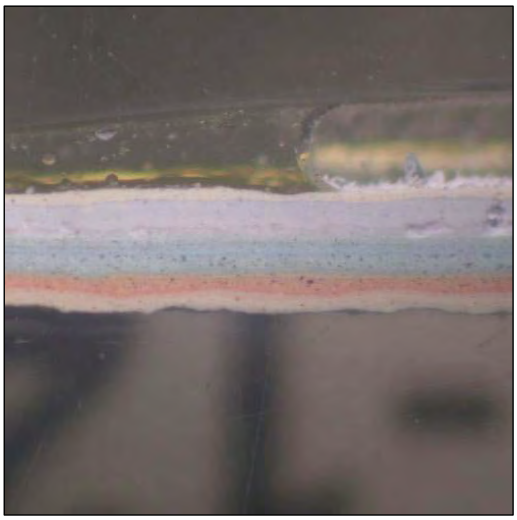
HHI-122 (UV)



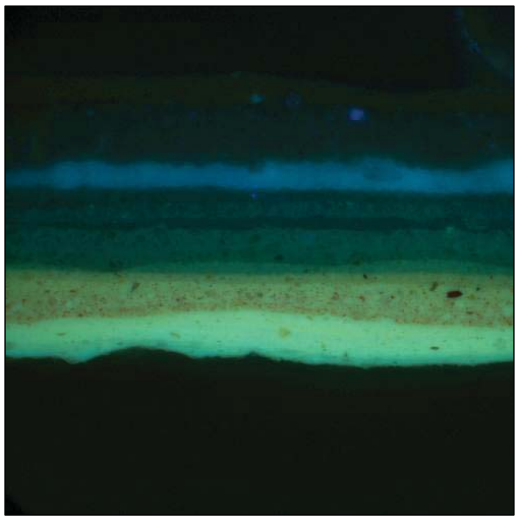
HHI-123(Daylight Simulation)



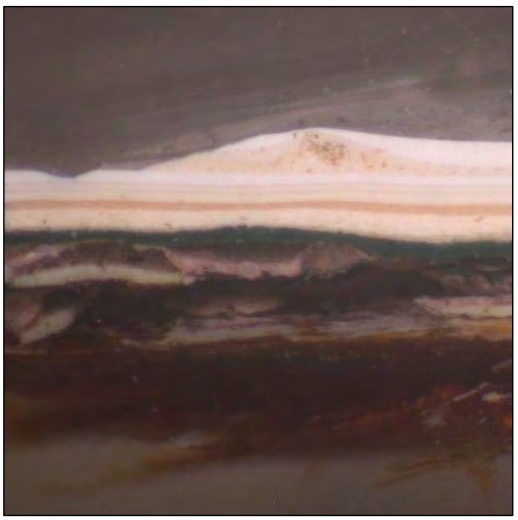
HHI-123 (UV)



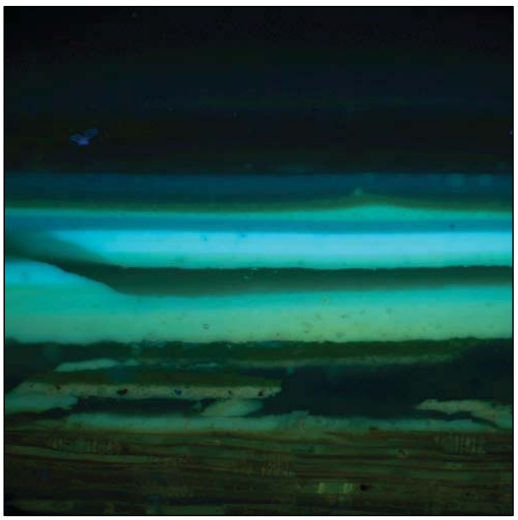
HHI-124 (Daylight Simulation)



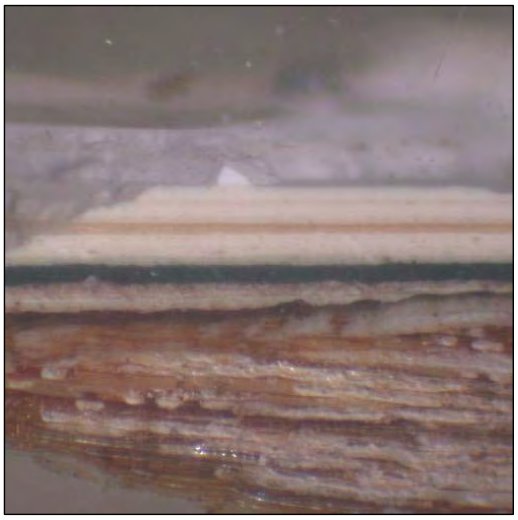
HHI-124 (UV)



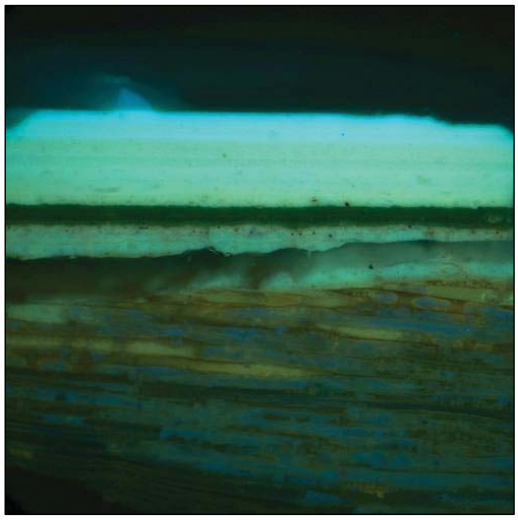
HHI-125 (Daylight Simulation)



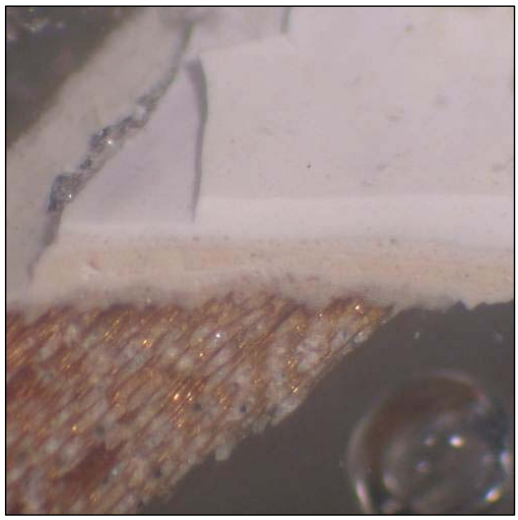
HHI-125 (UV)



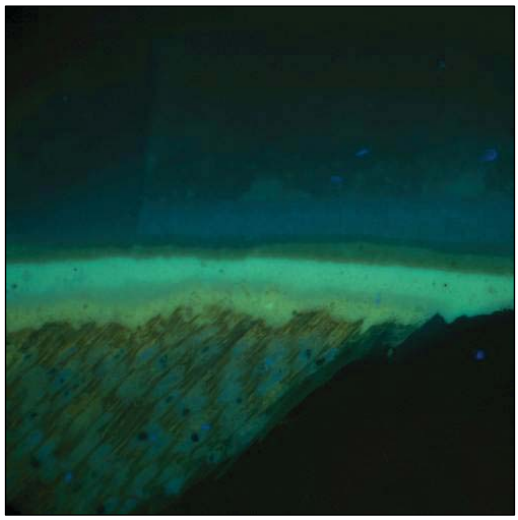
HHI-126 (Daylight Simulation)



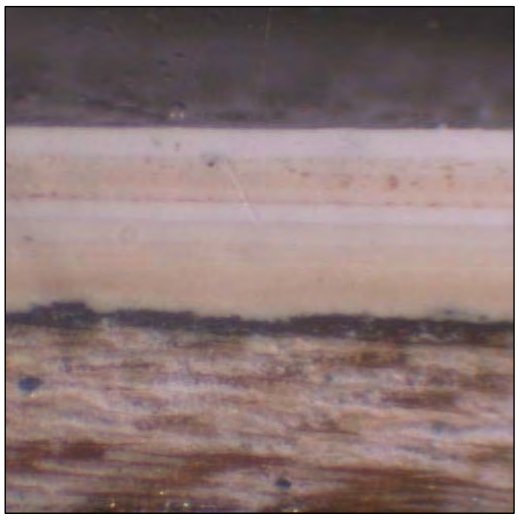
HHI-126 (UV)



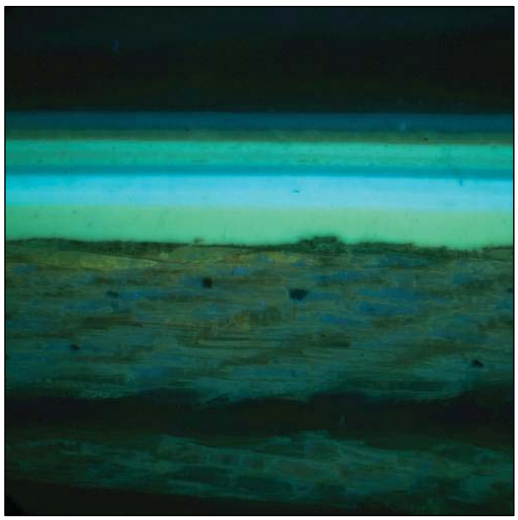
HHI-127 (Daylight Simulation)



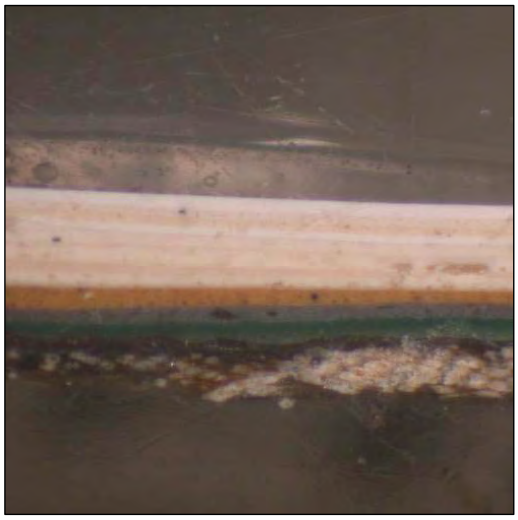
HHI-127 (UV)



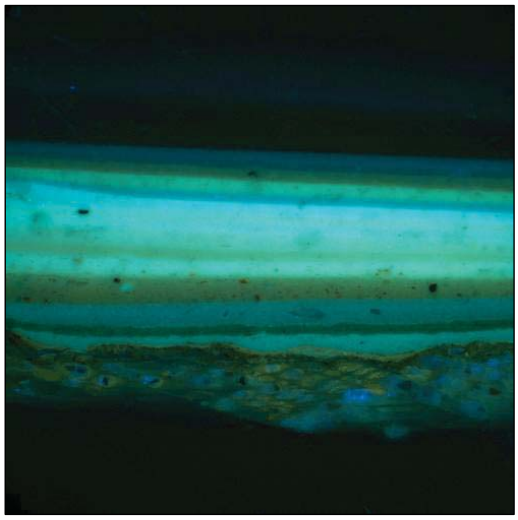
HHI-128 (Daylight Simulation)



HHI-128 (UV)



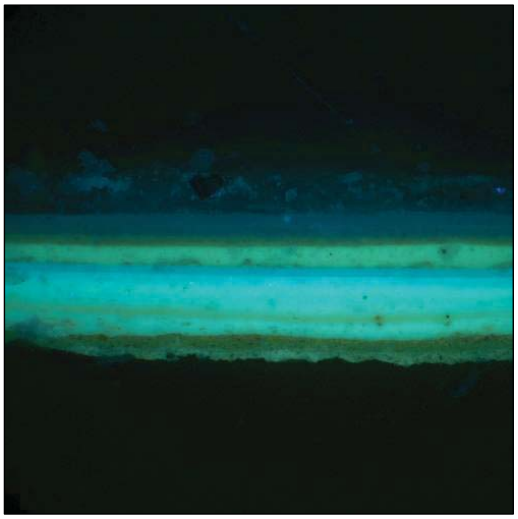
HHI-129 (Daylight Simulation)



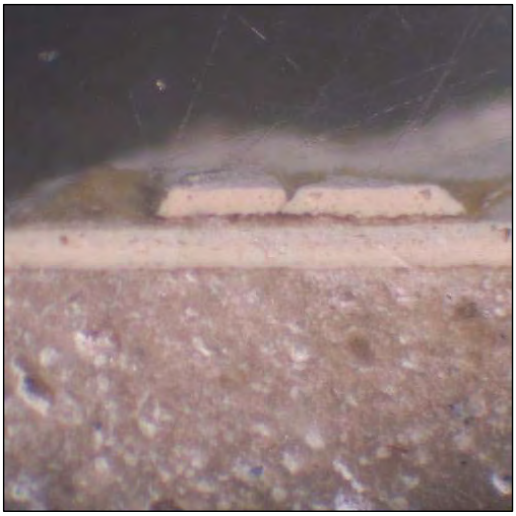
HHI-129 (UV)



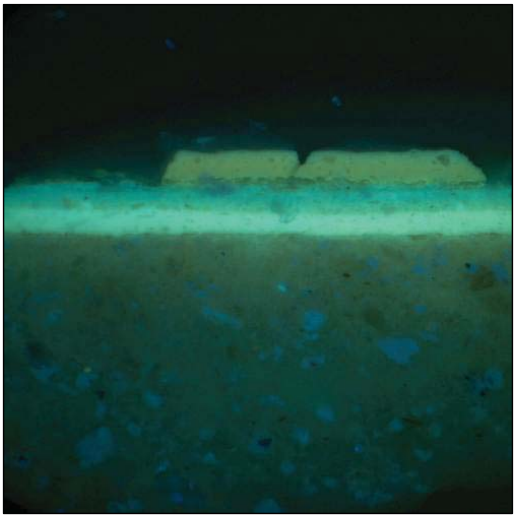
HHI-130 (Daylight Simulation)



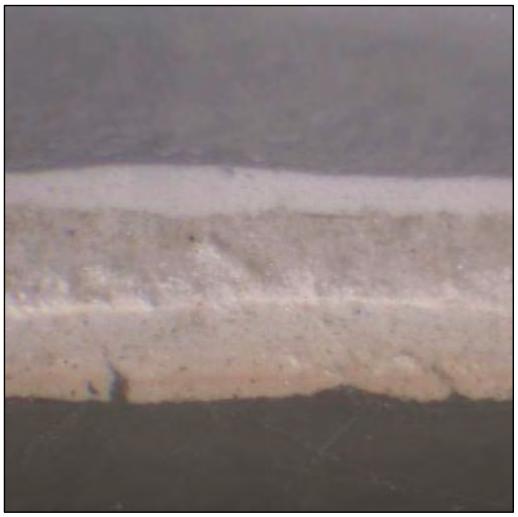
HHI-130 (UV)



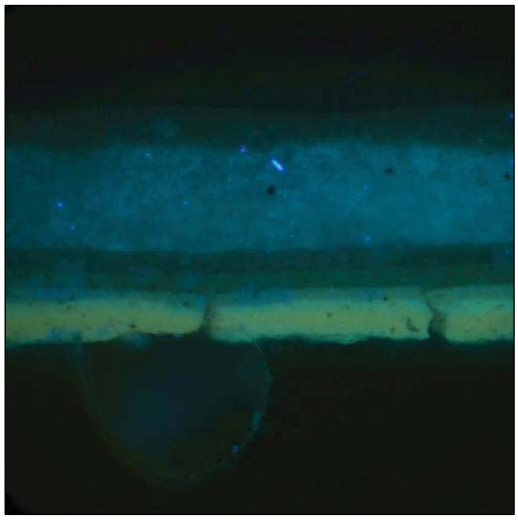
HHI-131a (Daylight Simulation)



HHI-131a (UV)



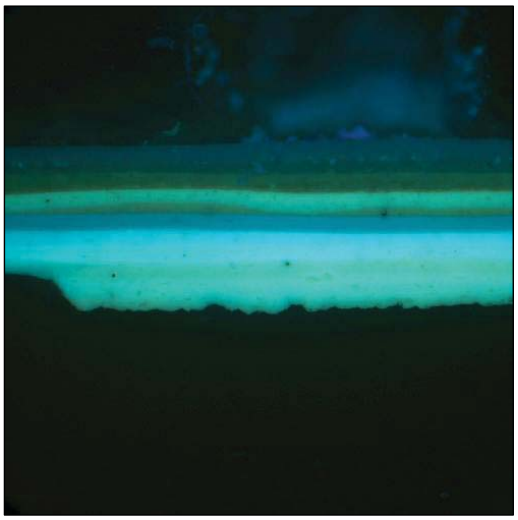
HHI-131b (Daylight Simulation)



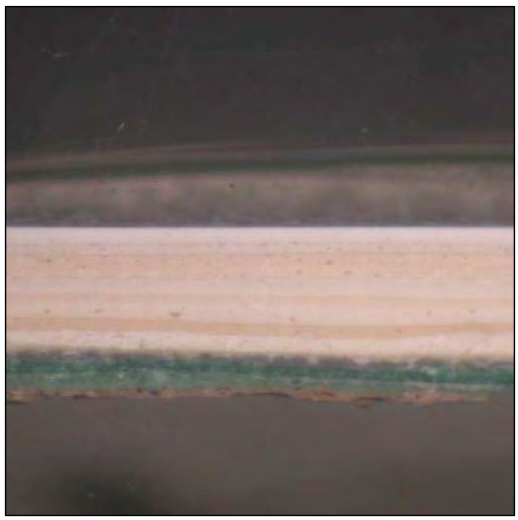
HHI-131b (UV)



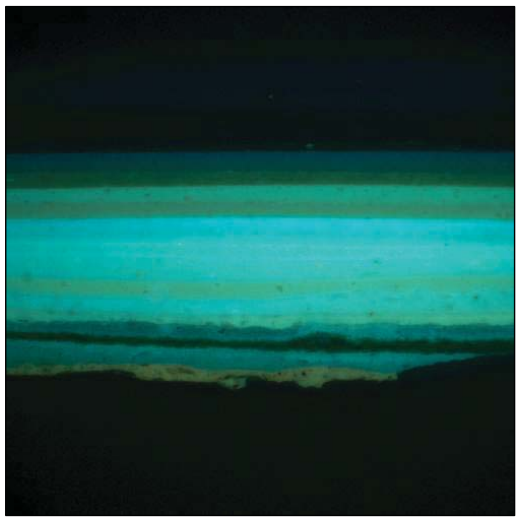
HHI-132 (Daylight Simulation)



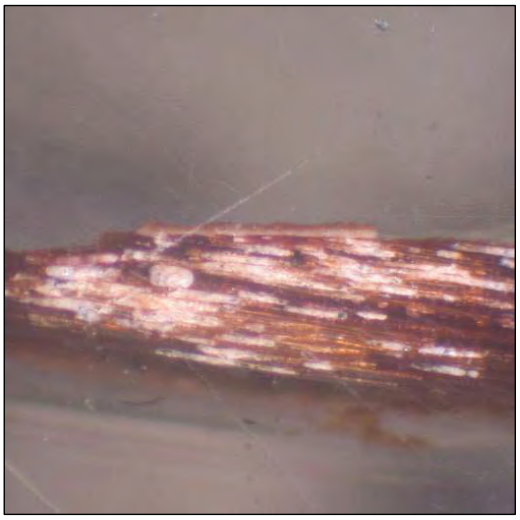
HHI-132 (UV)



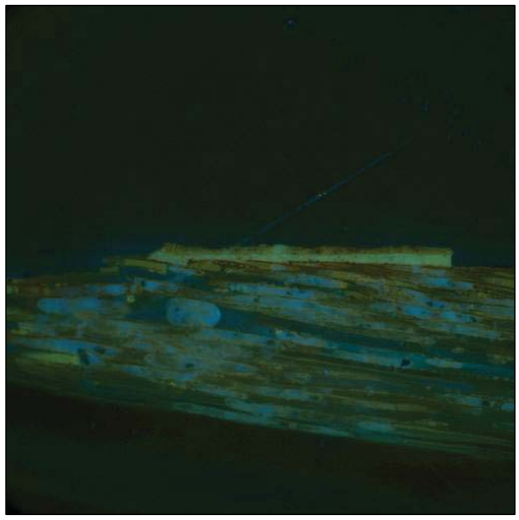
HHI-133 (Daylight Simulation)



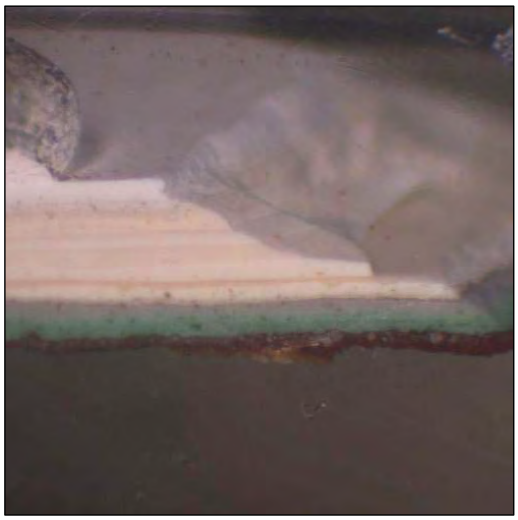
HHI-133 (UV)



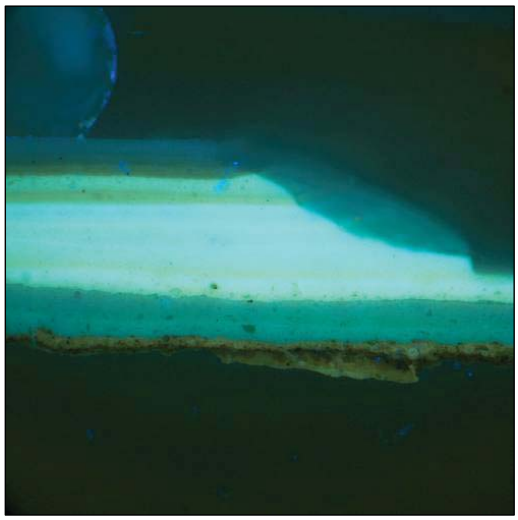
HHI-134a (Daylight Simulation)



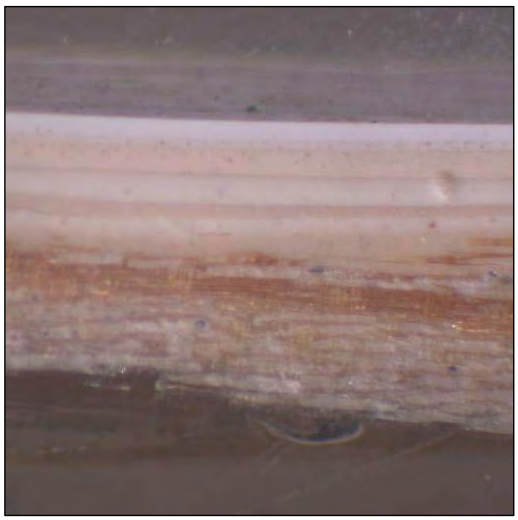
HHI-134a (UV)



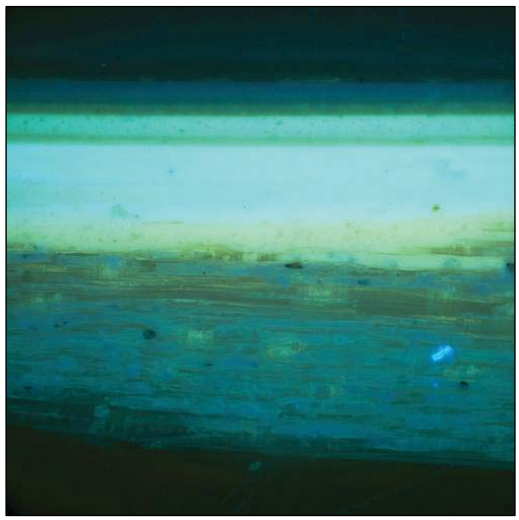
HHI-134b (Daylight Simulation)



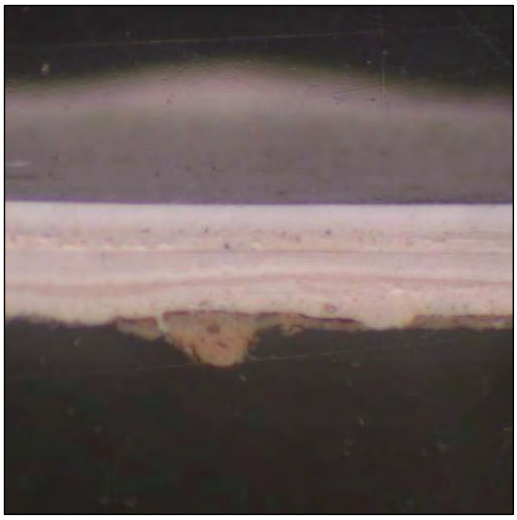
HHI-134b (UV)



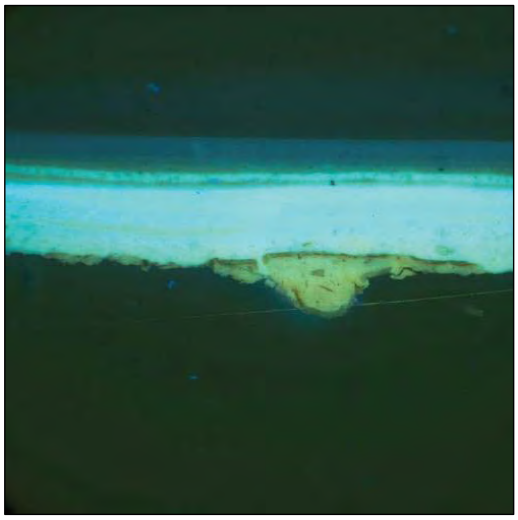
HHI-135 (Daylight Simulation)



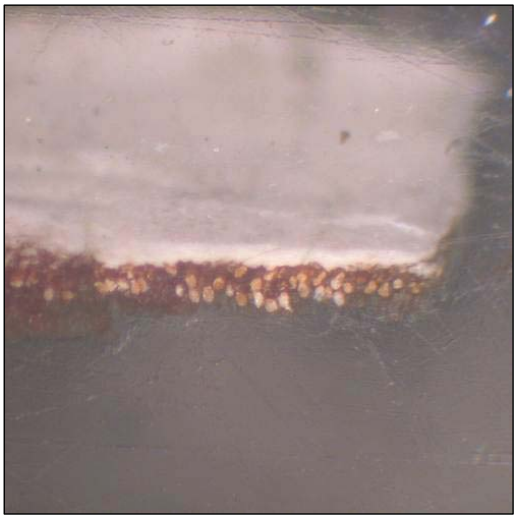
HHI-135 (UV)



HHI-136 (Daylight Simulation)



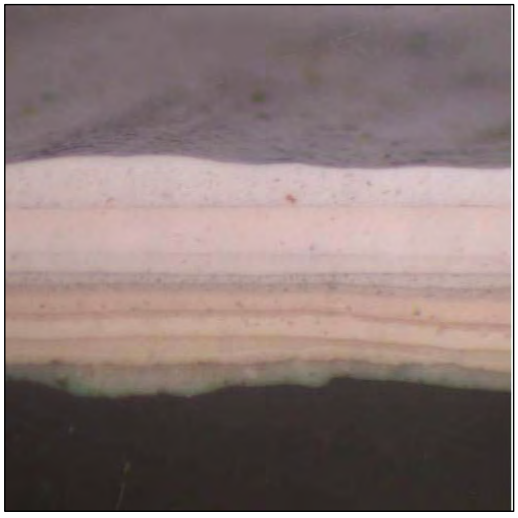
HHI-136 (UV)



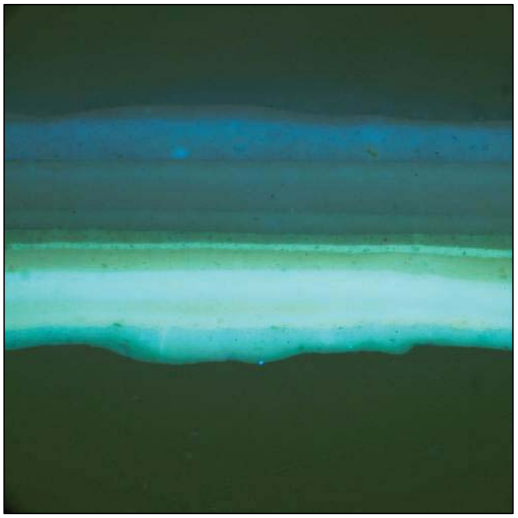
HHI-137a (Daylight Simulation)



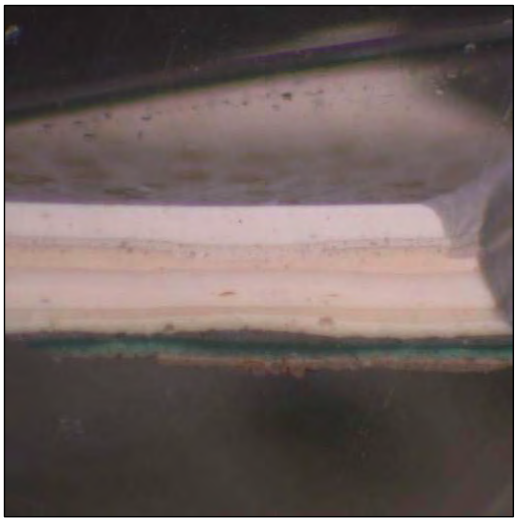
HHI-137a (UV)



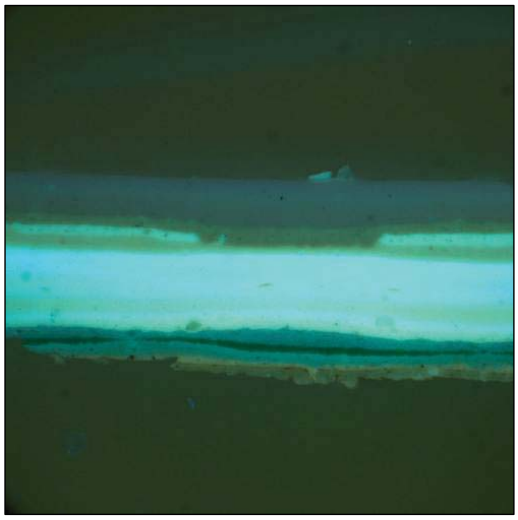
HHI-137b (Daylight Simulation)



HHI-137b (UV)



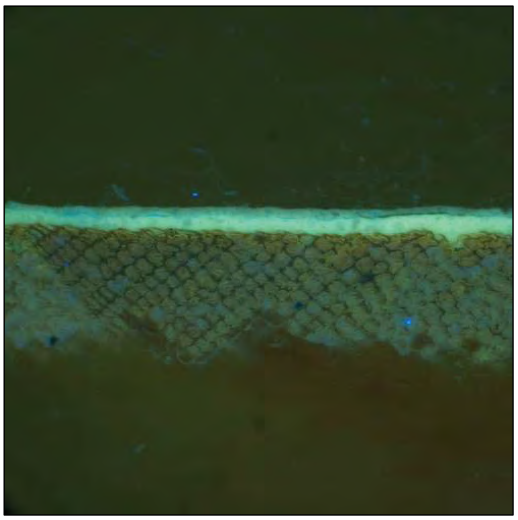
HHI-138 (Daylight Simulation)



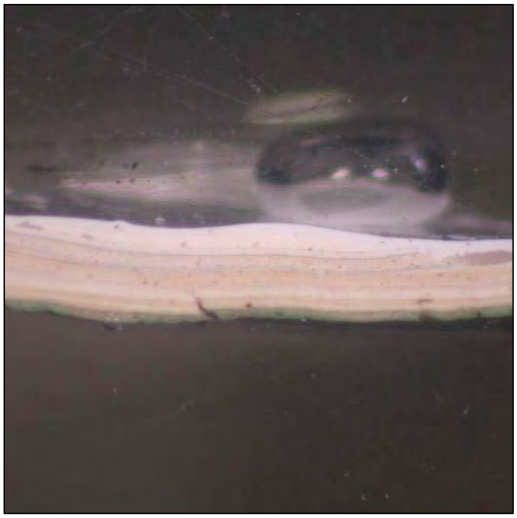
HHI-138 (UV)



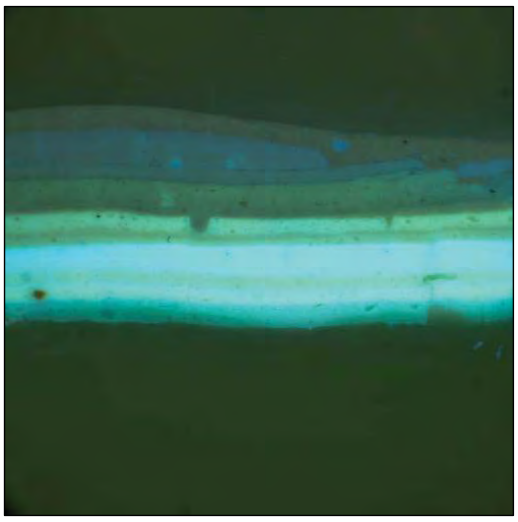
HHI-139a (Daylight Simulation)



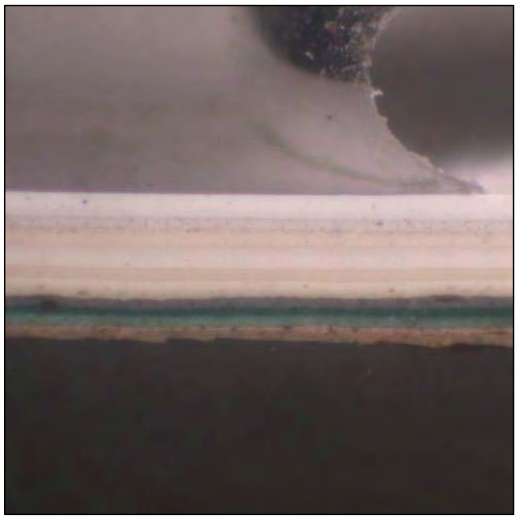
HHI-139a (UV)



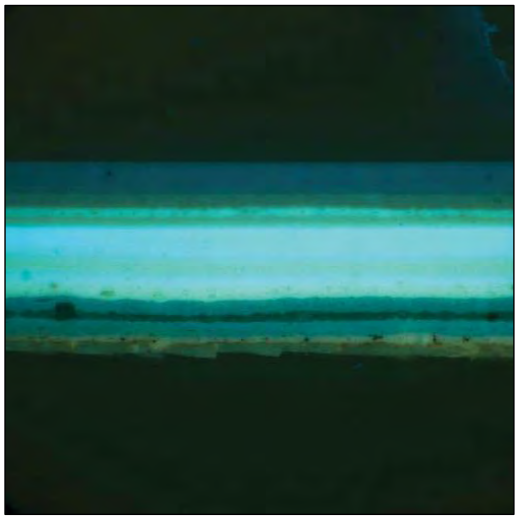
HHI-139b (Daylight Simulation)



HHI-139b (UV)



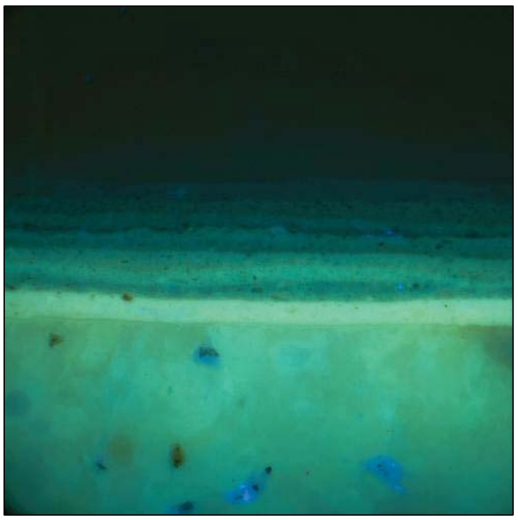
HHI-140 (Daylight Simulation)



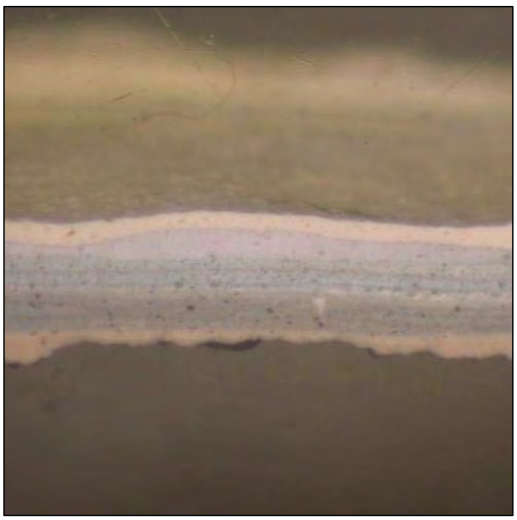
HHI-140 (UV)



HHI-141 (Daylight Simulation)



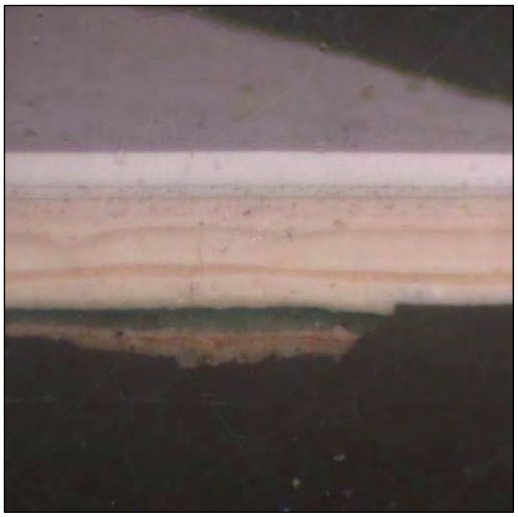
HHI-141 (UV)



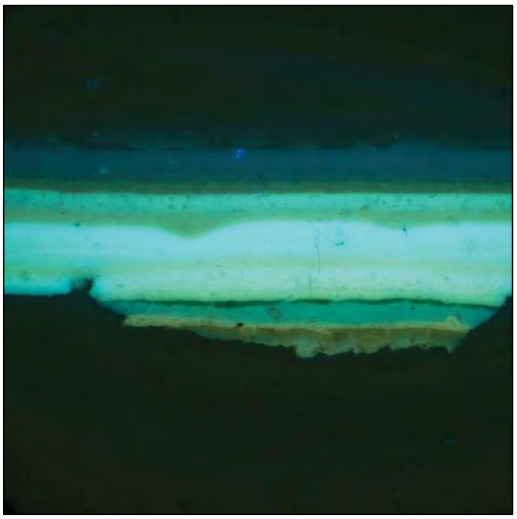
HHI-142 (Daylight Simulation)



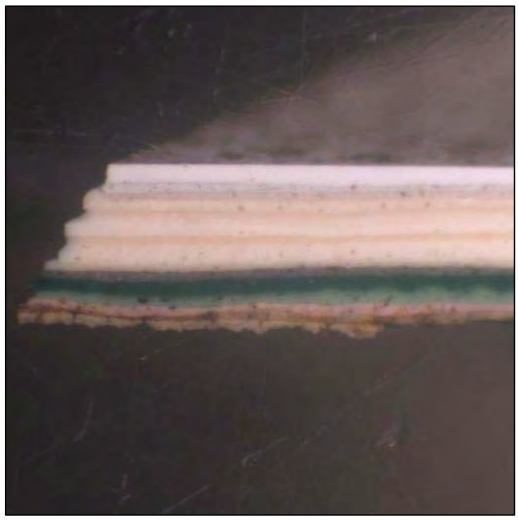
HHI-142 (UV)



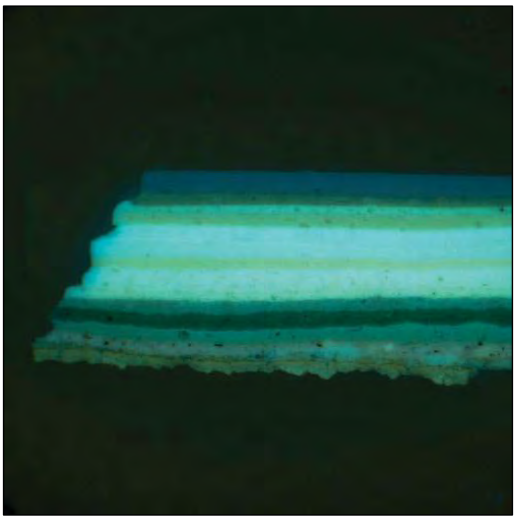
HHI-143 (Daylight Simulation)



HHI-143 (UV)



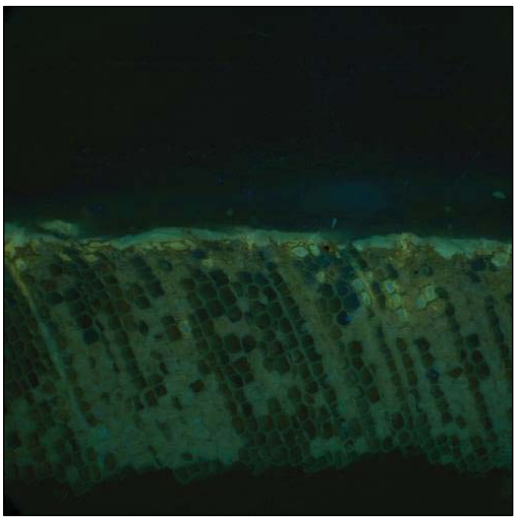
HHI-144 (Daylight Simulation)



HHI-144 (UV)



HHI-145a (Daylight Simulation)



HHI-145a (UV)



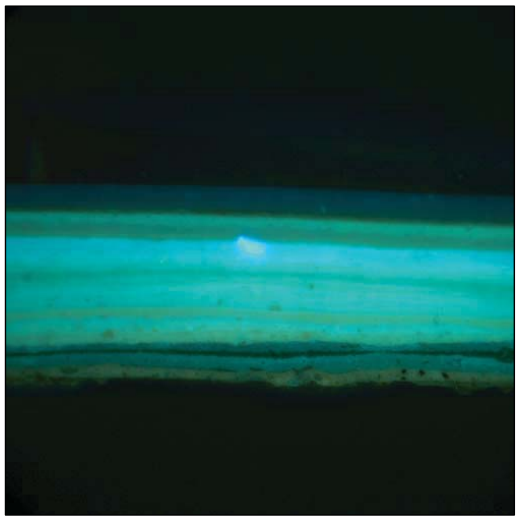
HHI-145b (Daylight Simulation)



HHI-145b (UV)



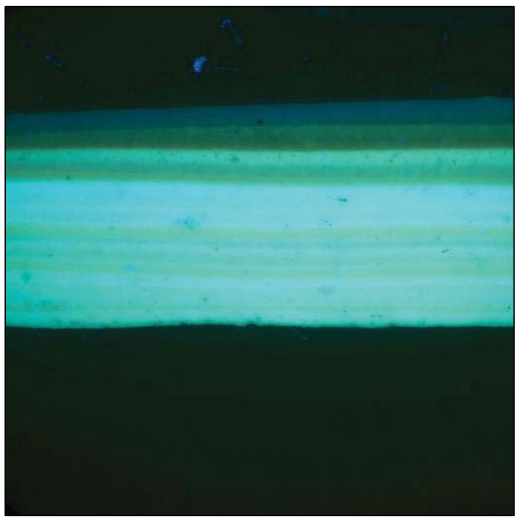
HHI-146 (Daylight Simulation)



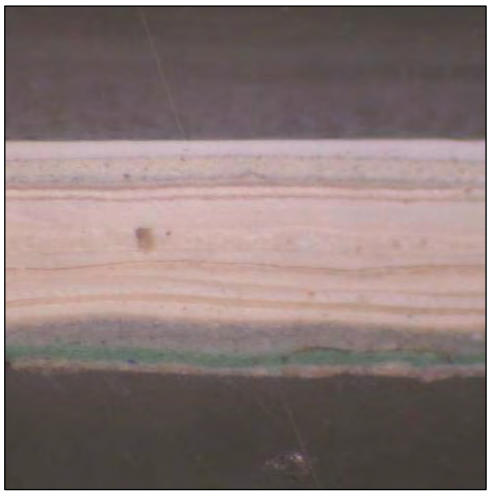
HHI-146 (UV)



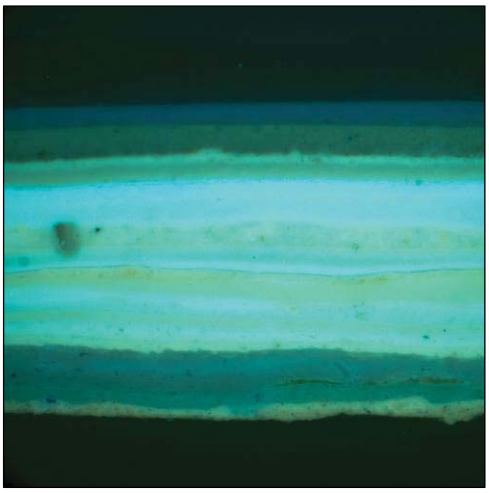
HHI-147 (Daylight Simulation)



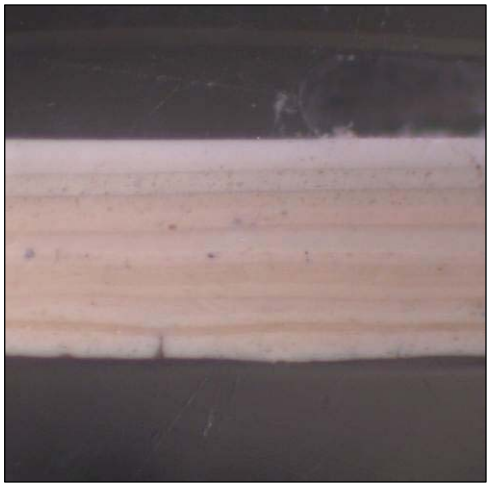
HHI-147 (UV)



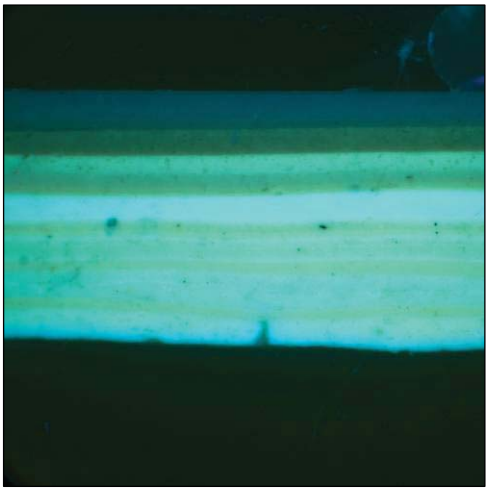
HHI-148 (Daylight Simulation)



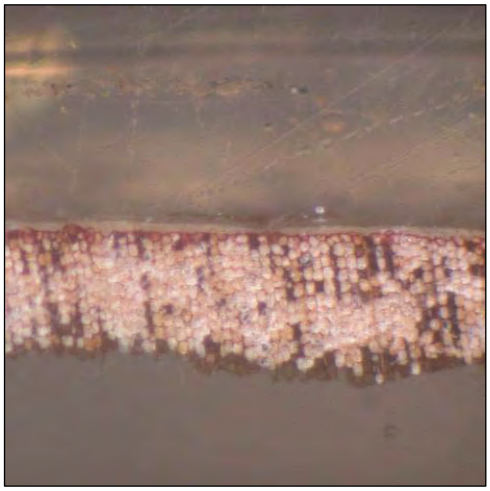
HHI-148 (UV)



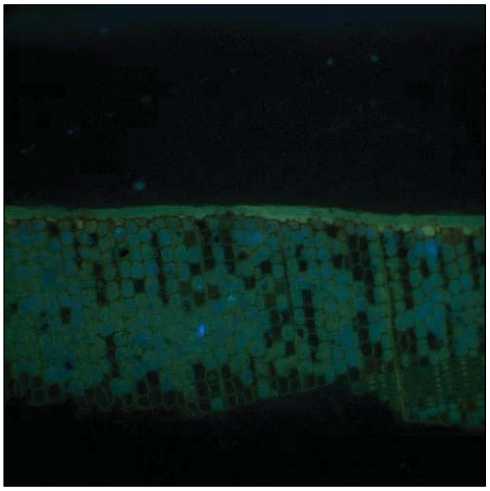
HHI-149 (Daylight Simulation)



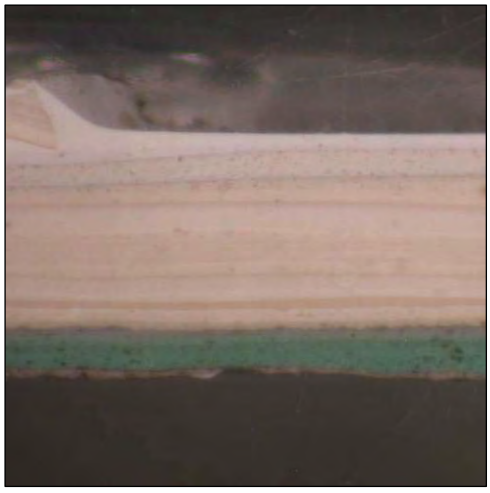
HHI-149 (UV)



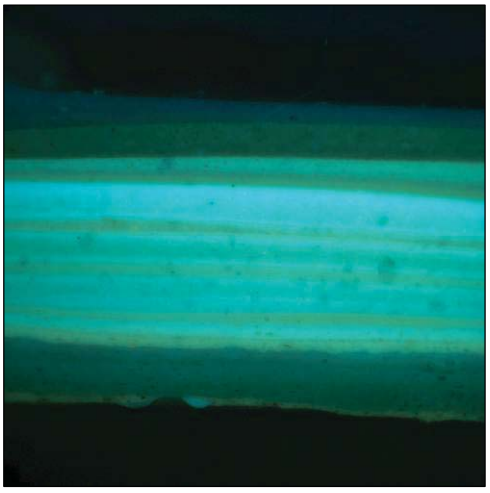
HHI-150a (Daylight Simulation)



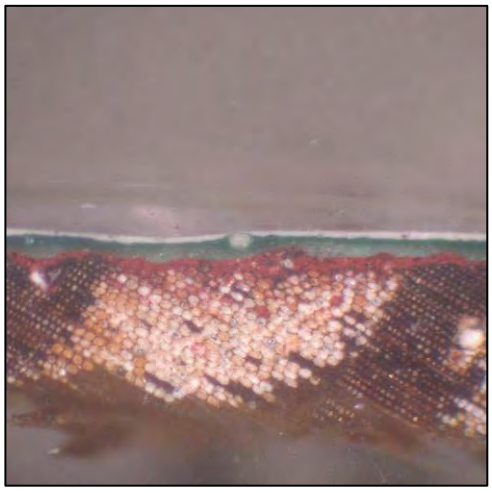
HHI-150a (UV)



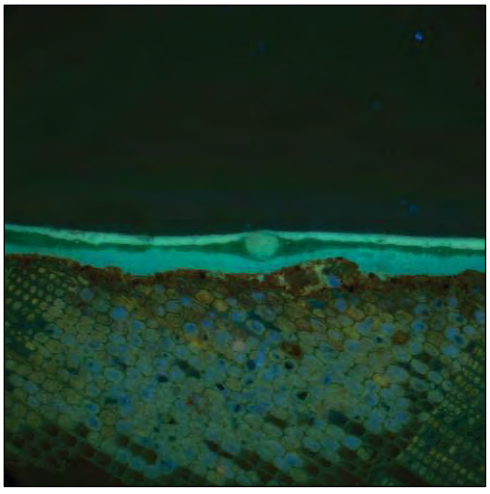
HHI-150b (Daylight Simulation)



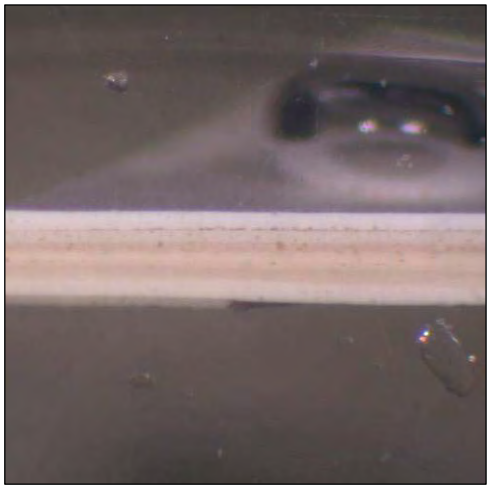
HHI-150b (UV)



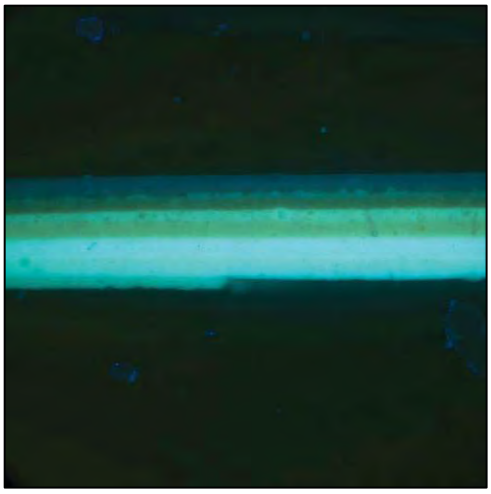
HHI-151a (Daylight Simulation)



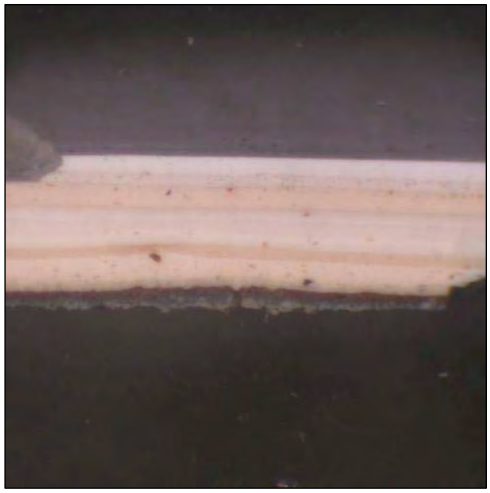
HHI-151a (UV)



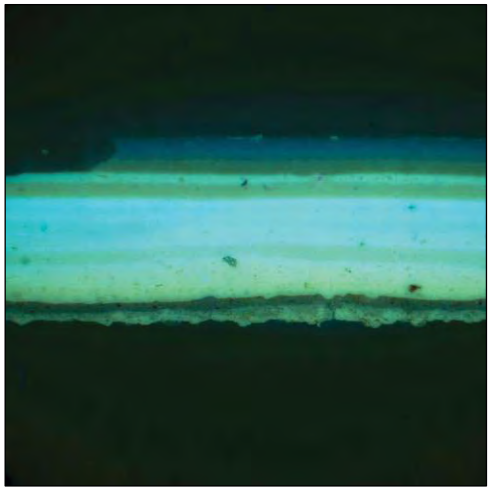
HHI-151b (Daylight Simulation)



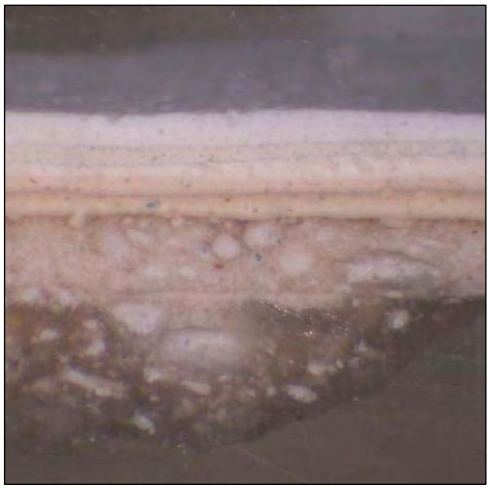
HHI-151b (UV)



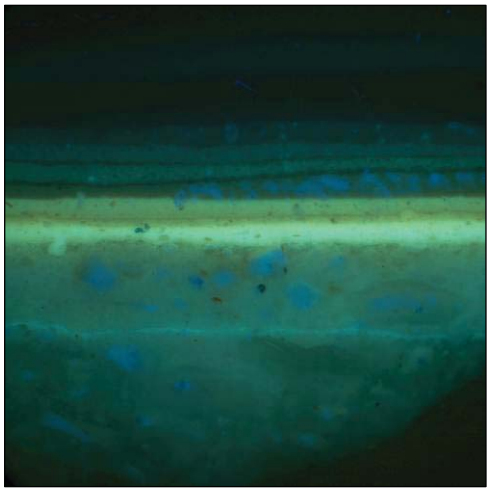
HHI-152 (Daylight Simulation)



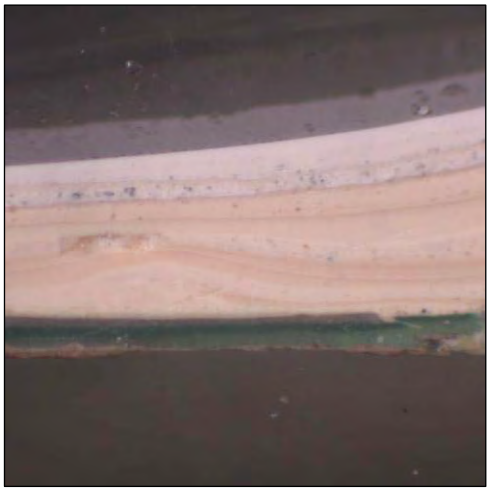
HHI-152 (UV)



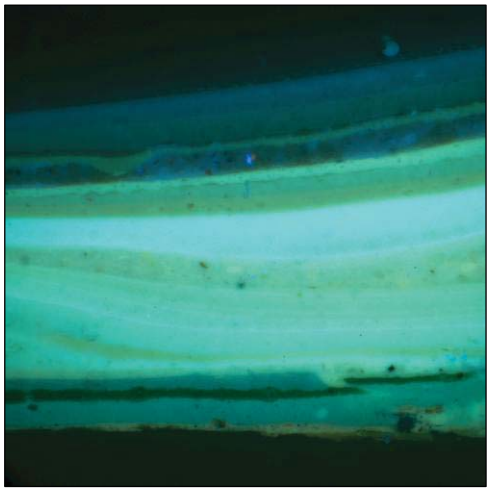
HHI-153 (Daylight Simulation)



HHI-153 (UV)



HHI-154 (Daylight Simulation)



HHI-154 (UV)

Appendix C:

35mm Black and White Photographic Documentation



Harmony Hall

Fort Washington, Maryland

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1 of 99 South & East Elevation
2 of 99 South Elevation




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South & East Elevation
Date: 7/19/2012
Photo: 1 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South Elevation
Date: 7/19/2012
Photo: 2 of 99



3 of 99 West Elevation
4 of 99 West Elevation




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: West Elevation
Date: 7/19/2012
Photo: 3 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: West Elevation
Date: 7/19/2012
Photo: 4 of 99



5 of 99 Rear Porch – 101B
6 of 99 Window 117 - Exterior




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Rear Porch – 101B
Date: 7/19/2012
Photo: 5 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Window 117 - Exterior
Date: 7/19/2012
Photo: 6 of 99



7 of 99 Door 101B - Exterior
8 of 99 Roof Eave – West Elevation




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Door 101B - Exterior
Date: 7/19/2012
Photo: 7 of 99
017 BA 00NX0N0. NNN 0 0041 000352 693
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Roof Eave – West Elevation
Date: 7/19/2012
Photo: 8 of 99
016 BA 00NX0N0. NNN 0 0041 000352 692



9 of 99 Window 214 - Exterior
10 of 99 Window 303 - Exterior




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Window 214 - Exterior
Date: 7/19/2012
Photo: 9 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Window 303 - Exterior
Date: 7/19/2012
Photo: 10 of 99



11 of 99 Front Porch – 101A
12 of 99 Window 302 - Exterior




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Front Porch – 101A
Date: 7/19/2012
Photo: 11 of 99
013 BA 00NX0N0. NNN 0 0041 000352 689
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Window 302 - Exterior
Date: 7/19/2012
Photo: 12 of 99
012 BA 00NX0N0. NNN 0 0041 000352 688



13 of 99 East Elevation
14 of 99 Window 102 - Exterior



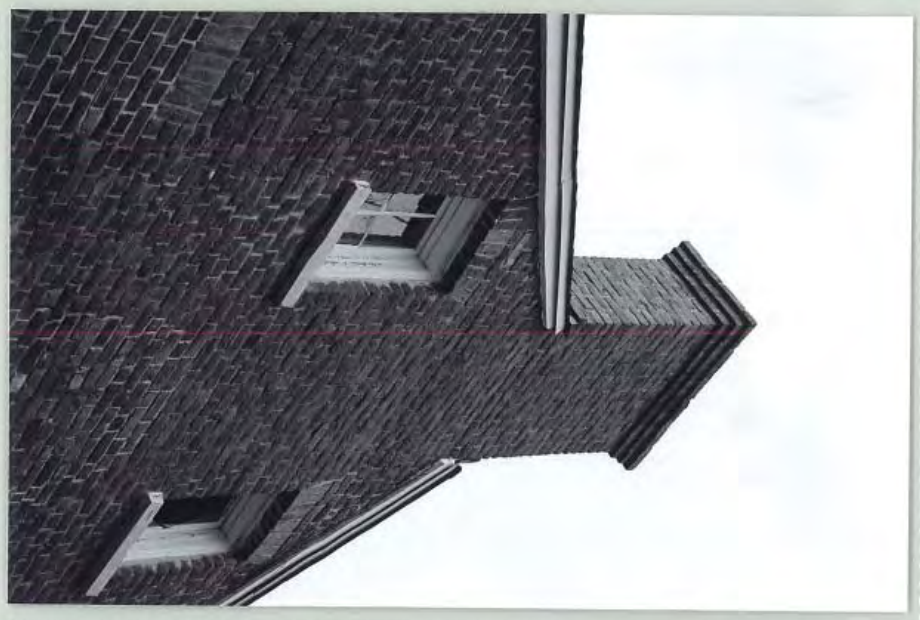

NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: East Elevation
Date: 7/19/2012
Photo: 13 of 99
011 BA 00NX0N0. NNN 0 0041 000352 687
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Window 102 - Exterior
Date: 7/19/2012
Photo: 14 of 99
010 BA 00NX0N0. NNN 0 0041 000352 686



15 of 99 Shutter Dog – Window 102
16 of 99 Basement Entrance, Door 109




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Shutter Dog – Window 102
Date: 7/19/2012
Photo: 15 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Basement Entrance, Door 109
Date: 7/19/2012
Photo: 16 of 99



17 of 99 Chimney – North Elevation
18 of 99 Front Porch - Detail




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Chimney – North Elevation
Date: 7/19/2012
Photo: 17 of 99
007 BA 00KXDND, NNN 0 0041 000352 682
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Front Porch - Detail
Date: 7/19/2012
Photo: 18 of 99
006 BA 00KXDND, NNN 0 0041 000352 682



19 of 99 South Entry Porch - 106A
20 of 99 South Entry Porch - Detail




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South Entry Porch - 106A
Date: 7/19/2012
Photo: 19 of 99
005 BA 00NX0N0. NNN 0 0041 000352 521
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South Entry Porch - Detail
Date: 7/19/2012
Photo: 20 of 99
004 BA 00NX0N0. NNN 1 0041 000352 599



21 of 99 Dining Room 103 - Fireplace
22 of 99 Dining Room 103 - Fireplace




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Dining Room 103 - Fireplace
Date: 7/19/2012
Photo: 21 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Dining Room 103 - Fireplace
Date: 7/19/2012
Photo: 22 of 99



23 of 99 Dining Room 103 - Cupboard
24 of 99 East Elevation




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Dining Room 103 - Cupboard
Date: 7/19/2012
Photo: 23 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: East Elevation
Date: 7/19/2012
Photo: 24 of 99



25 of 99 East Elevation
26 of 99 East Elevation




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: East Elevation
Date: 7/19/2012
Photo: 25 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: East Elevation
Date: 7/19/2012
Photo: 26 of 99



27 of 99 West Elevation
28 of 99 West Elevation




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: West Elevation
Date: 7/19/2012
Photo: 27 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: West Elevation
Date: 7/19/2012
Photo: 28 of 99



29 of 99 West Elevation
30 of 99 West Elevation




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: West Elevation
Date: 7/19/2012
Photo: 29 of 99
020 BA 00NX0N0, NNN 0 0040 000351 671
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: West Elevation
Date: 7/19/2012
Photo: 30 of 99
019 BA 00NX0N0, NNN 0 0040 000351 670



31 of 99 Rec Room 013 – West Elevation
32 of 99 Rec Room 013 – South Elevation




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Rec Room 013 – West Elevation
Date: 7/19/2012
Photo: 31 of 99
018 BA 00KX00. NNN 0 0040 00035I 669
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Rec Room 013 – South Elevation
Date: 7/19/2012
Photo: 32 of 99
017 BA 00KX00. NNN 0 0040 00035I 668



33 of 99 Rec Room 013 – North Elevation
34 of 99 Corridor 006




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Rec Room 013 – North Elevation
Date: 7/19/2012
Photo: 33 of 99
016 BA 00KXGN0, NNN 0 0040 000351 667
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Corridor 006
Date: 7/19/2012
Photo: 34 of 99
015 BA 00KXGN0, NNN+ 1 0040 000351 666



35 of 99 Wine Storage – Door 005
36 of 99 Wine Storage – Door 005




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Wine Storage – Door 005
Date: 7/19/2012
Photo: 35 of 99
014 BA 00NX0N0. NNN 0 0040 000351 665
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Wine Storage – Door 005
Date: 7/19/2012
Photo: 36 of 99
013 BA 00NX0N0. NNN 0 0040 000351 664



37 of 99 Bathroom 203A
38 of 99 Bathroom 203A




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bathroom 203A
Date: 7/19/2012
Photo: 37 of 99
012 BA 00X0N0. NNN 0 0040 000351 663
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bathroom 203A
Date: 7/19/2012
Photo: 38 of 99
011 BA 00NX0N0. NNN 0 0040 000351 662



39 of 99 Stair B 205
40 of 99 Bathroom 209




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Stair B 205
Date: 7/19/2012
Photo: 39 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bathroom 209
Date: 7/19/2012
Photo: 40 of 99


41 of 99 Bathroom 304
42 of 99 Bathroom 304


NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bathroom 304
Date: 7/19/2012
Photo: 41 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bathroom 304
Date: 7/19/2012
Photo: 42 of 99



43 of 99 Third Floor Stair
44 of 99 Central Hall 101 – Door 101C




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Third Floor Stair
Date: 7/19/2012
Photo: 43 of 99
006 BA 00NX010, NNN+ 1 0040 000351 657
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Central Hall 101 – Door 101C
Date: 7/19/2012
Photo: 44 of 99
005 BA 00NX010, NNN+ 3 0040 000351 656



45 of 99 Door 101B Hardware
46 of 99 Dining Room 103 – Light Fixture


NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Door 101B Hardware
Date: 7/19/2012
Photo: 45 of 99
004 BA 00NX0N0. NNN+ 3 0040 000351 655
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Dining Room 103 – Light Fixture
Date: 7/19/2012
Photo: 46 of 99
003 BA 00NX0N0. NNN+ 2 0040 000351 654



47 of 99 Central Hall 101 – Window 103
48 of 99 Living Room 102 –
Door 102 - Hardware




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Central Hall 101 – Window 103
Date: 7/19/2012
Photo: 47 of 99
002 BA 00NX0N0. NNN 0 0040 000351 653
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Living Room 102 –
Door 102 - Hardware
Date: 7/19/2012
Photo: 48 of 99
001 BA 00NX0N0. NNN 0 0040 000351 652



49 of 99 Sun Room 106 – South Elevation
50 of 99 Living Room 102 –
Window 118 – Shutters Closed




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Sun Room 106 – South Elevation
Date: 7/19/2012
Photo: 49 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Living Room 102 –
Window 118 – Shutters Closed
Date: 7/19/2012
Photo: 50 of 99



51 of 99 Living Room 102 – Fireplace
52 of 99 Living Room 102 – Crown Molding




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Living Room 102 – Fireplace
Date: 7/19/2012
Photo: 51 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Living Room 102 – Crown Molding
Date: 7/19/2012
Photo: 52 of 99



53 of 99 Central Hall 201 – Stair A 200
54 of 99 Central Hall 201 – Stair A 200




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Central Hall 201 – Stair A 200
Date: 7/19/2012
Photo: 53 of 99
022 BA 00NX0N0. NNN4 1 0038 000349 022
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Central Hall 201 – Stair A 200
Date: 7/19/2012
Photo: 54 of 99
021 BA 00NX0N0. NNN 0 0038 000349 021



55 of 99 Bedroom 206 – Window 210
56 of 99 Bedroom 206 – Window 212




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bedroom 206 – Window 210
Date: 7/19/2012
Photo: 55 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bedroom 206 – Window 212
Date: 7/19/2012
Photo: 56 of 99



57 of 99 South Bedroom 203 - Fireplace
58 of 99 South Bedroom 203 – Door 203A


NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South Bedroom 203 - Fireplace
Date: 7/19/2012
Photo: 57 of 99
018 BW 00NX0N0. NNN+ 2 0038 000349 618
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South Bedroom 203 – Door 203A
Date: 7/19/2012
Photo: 58 of 99
017 BW 00NX0N0. NNN+ 1 0038 000349 617



59 of 99 South Bedroom 203 – Window 216
60 of 99 Central Hall 201 – Door 201A




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South Bedroom 203 – Window 216
Date: 7/19/2012
Photo: 59 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Central Hall 201 – Door 201A
Date: 7/19/2012
Photo: 60 of 99



61 of 99 Central Hall 201 – West Elevation
62 of 99 North Bedroom 202 - Fireplace




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Central Hall 201 – West Elevation
Date: 7/19/2012
Photo: 61 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: North Bedroom 202 - Fireplace
Date: 7/19/2012
Photo: 62 of 99



63 of 99 North Bedroom 202 – Crown Molding
64 of 99 North Bedroom 202 – Door 202A




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: North Bedroom 202 –
Crown Molding
Date: 7/19/2012
Photo: 63 of 99
012 BA 00NX0N0. NNN 0 0038 000349 012
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: North Bedroom 202 – Door 202A
Date: 7/19/2012
Photo: 64 of 99
011 BA 00NX0N0. NNN 0 0038 000349 011



65 of 99 Hall 301 – Window 302
66 of 99 Bedroom 303 – Door 303




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Hall 301 – Window 302
Date: 7/19/2012
Photo: 65 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bedroom 303 – Door 303
Date: 7/19/2012
Photo: 66 of 99



67 of 99 Bedroom 307, Door 308
68 of 99 Door 308 - Hardware




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bedroom 307, Door 308
Date: 7/19/2012
Photo: 67 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Door 308 - Hardware
Date: 7/19/2012
Photo: 68 of 99



69 of 99 Closet 306 – Auto-Fyr Stop
70 of 99 Bathroom 202A - Toilet




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Closet 306 – Auto-Fyr Stop
Date: 7/19/2012
Photo: 69 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bathroom 202A - Toilet
Date: 7/19/2012
Photo: 70 of 99



71 of 99 Bathroom 202A - Shower
72 of 99 Stair A 200 - Detail




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Bathroom 202A - Shower
Date: 7/19/2012
Photo: 71 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Stair A 200 - Detail
Date: 7/19/2012
Photo: 72 of 99



73 of 99 Rec Room 013 - Fireplace
74 of 99 Sun Room 106




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Rec Room 013 - Fireplace
Date: 7/19/2012
Photo: 73 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Sun Room 106
Date: 7/19/2012
Photo: 74 of 99



75 of 99 East Elevation – Window 108
76 of 99 East Elevation – Door 106A




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: East Elevation – Window 108
Date: 7/19/2012
Photo: 75 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: East Elevation – Door 106A
Date: 7/19/2012
Photo: 76 of 99



77 of 99 East Elevation – Door 101A
78 of 99 Door 101A – Door Knocker




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: East Elevation – Door 101A
Date: 7/19/2012
Photo: 77 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Door 101A - Door Knocker
Date: 7/19/2012
Photo: 78 of 99



79 of 99 South Elevation – Door 106C
80 of 99 South Elevation – Window 210




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South Elevation – Door 106C
Date: 7/19/2012
Photo: 79 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South Elevation – Window 210
Date: 7/19/2012
Photo: 80 of 99



81 of 99 Partial West Elevation
82 of 99 West Elevation - Eaves




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Partial West Elevation
Date: 7/19/2012
Photo: 81 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: West Elevation – Eaves
Date: 7/19/2012
Photo: 82 of 99



83 of 99 West Elevation – Window 016
84 of 99 West Elevation – Wood Cornice




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: West Elevation – Window 016
Date: 7/19/2012
Photo: 83 of 99
017 BA 00NX0N0. NNN 0 0039 000350 643
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: West Elevation – Wood Cornice
Date: 7/19/2012
Photo: 84 of 99
016 BA 00NX0N0. NNN 0 0039 000350 642



85 of 99 West Elevation – Door 101B
86 of 99 South and East Elevation




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: West Elevation – Door 101B
Date: 7/19/2012
Photo: 85 of 99
015 BA 00NX0N0. HHN 0 0039 000350 641
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South and East Elevation
Date: 7/19/2012
Photo: 86 of 99
014 BA 00NX0N0. HHN 0 0039 000350 640



87 of 99 South and East Elevation
88 of 99 Sun Room 106 – South Elevation




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: South and East Elevation
Date: 7/19/2012
Photo: 87 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Sun Room 106 – South Elevation
Date: 7/19/2012
Photo: 88 of 99



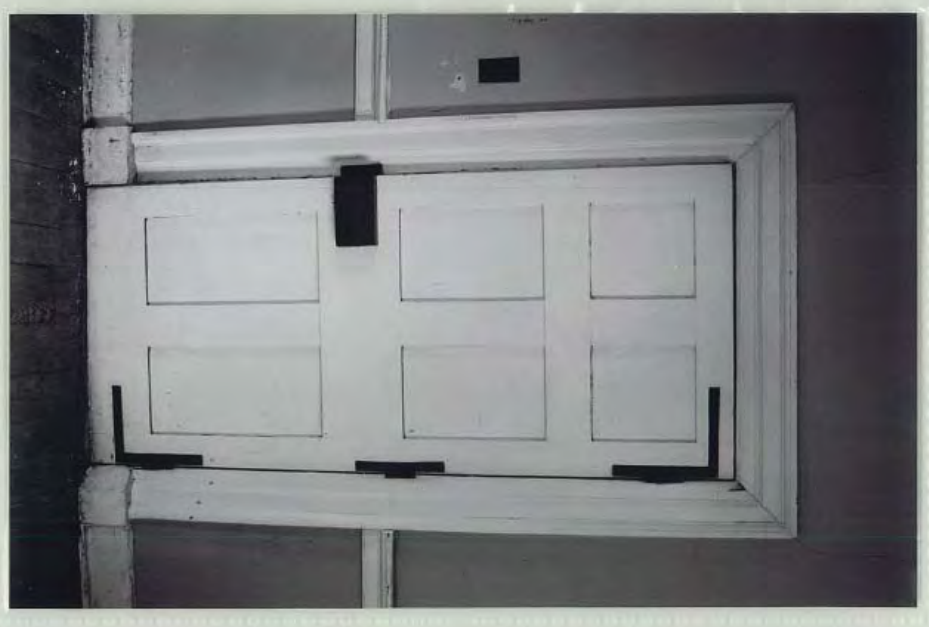
89 of 99 Sun Room 106 - Stairs
90 of 99 Kitchen 104




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Sun Room 106 - Stairs
Date: 7/19/2012
Photo: 89 of 99
011 BA 00KWNO, HAN 0 0039 000350 537
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Kitchen 104
Date: 7/19/2012
Photo: 90 of 99
010 BA 00KWNO, HAN 0 0039 000350 536



91 of 99 Dining Room 103 – South Elevation
92 of 99 Dining Room 103 – Door 103




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Dining Room 103 – South Elevation
Date: 7/19/2012
Photo: 91 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Dining Room 103 – Door 103
Date: 7/19/2012
Photo: 92 of 99



93 of 99 Dining Room 103 – Door 104
94 of 99 Central Hall 101 – Stair A 200



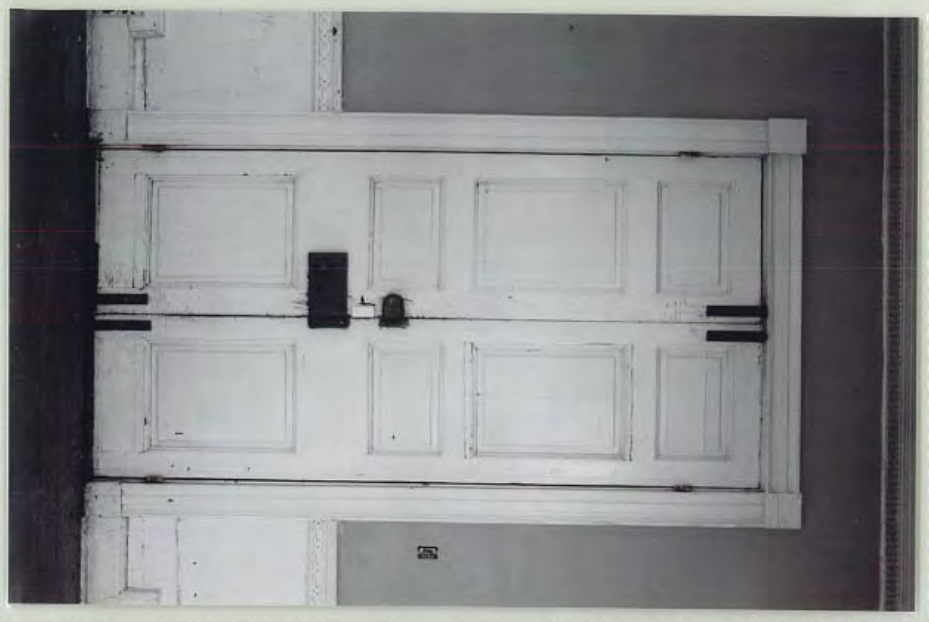

NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Dining Room 103 – Door 104
Date: 7/19/2012
Photo: 93 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Central Hall 101 - Stair A 200
Date: 7/19/2012
Photo: 94 of 99



95 of 99 Central Hall 101 – Chair Rail
96 of 99 Central Hall 101 – Stair A 200 - Detail




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Central Hall 101 – Chair Rail
Date: 7/19/2012
Photo: 95 of 99
005 BA 00NX010, NNN 0 0039 000350 121
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Central Hall 101 –
Stair A 200 - Detail
Date: 7/19/2012
Photo: 96 of 99
004 BA 00NX010, NNN 0 0039 000350 120



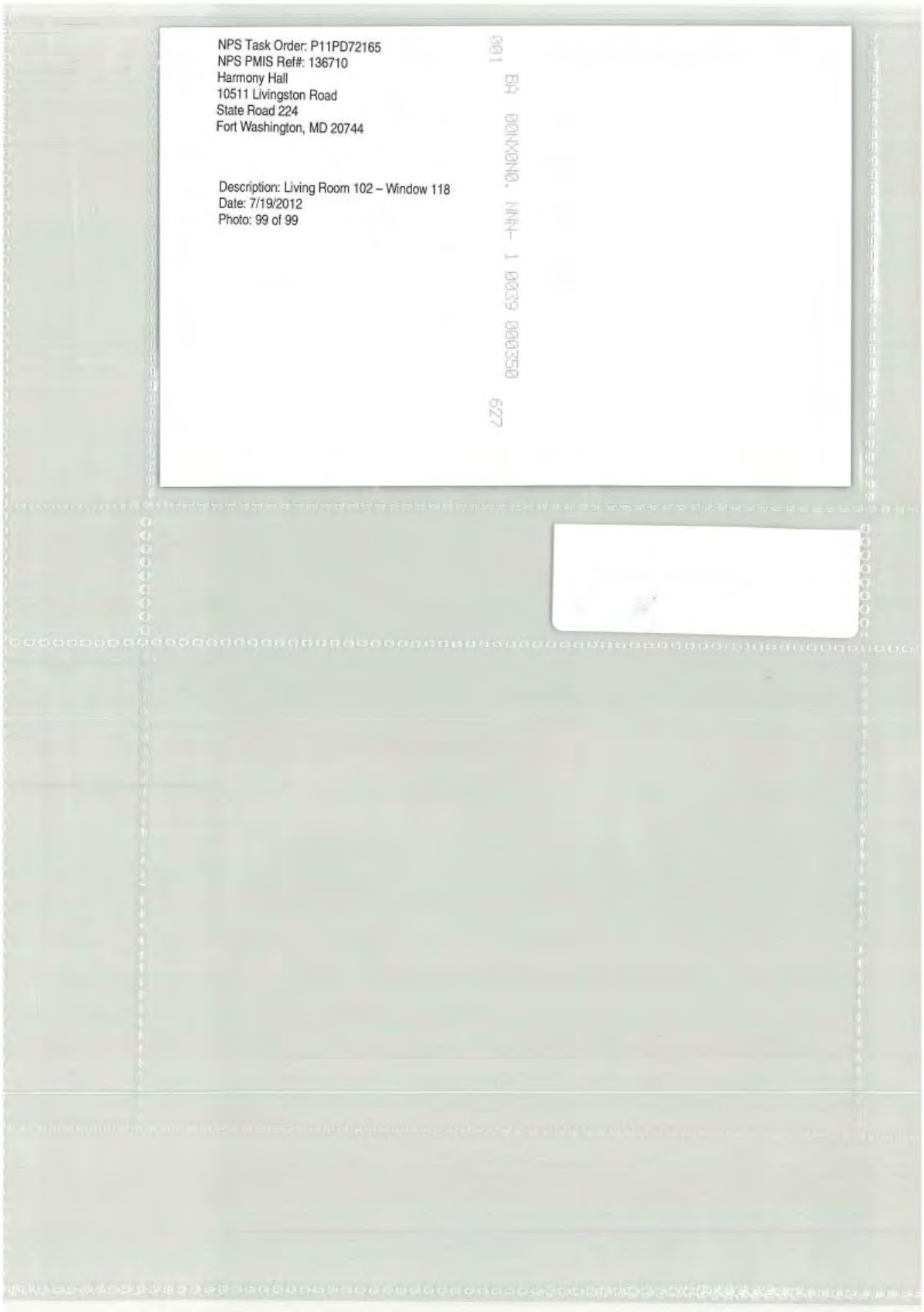
97 of 99 Central Hall – Door 101A
98 of 99 Living Room 102 – Chair Rail




NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Central Hall 101 – Door 101A
Date: 7/19/2012
Photo: 97 of 99
NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Living Room 102 – Chair Rail
Date: 7/19/2012
Photo: 98 of 99



99 of 99 Living Room 102 – Window 118


NPS Task Order: P11PD72165
NPS PMIS Ref#: 136710
Harmony Hall
10511 Livingston Road
State Road 224
Fort Washington, MD 20744
Description: Living Room 102 – Window 118
Date: 7/19/2012
Photo: 99 of 99

Appendix D: Historic Photos

University of Maryland, Special Collections, Hornbake Library



Harmony Hall

Fort Washington, Maryland

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Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: Marshall House



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: Marshall House



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: "Frankland" originally three stones



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: Marshall House



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: Old Marshall House



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: Old Marshall House used in restoration of Harmony Hall 1929 - 30



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: "Frankland" originally three stones



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
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Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: umd: 76341



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



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Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: Harmony Hall - River front, kitchen & servants Hall to right



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: umd: 76345 The painting in the panel is of the Old English hany/hauy yard at Dept. ford below ... , about 1750. I ran across this print but I do not know who took it. It summer time for the floor is bare...used the chain has a summer cown (Look at it with your ...)



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: River front - tulip bed against box hedge - taken last year



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: umd: 76347



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: Harmony Hall, Sheep 1935



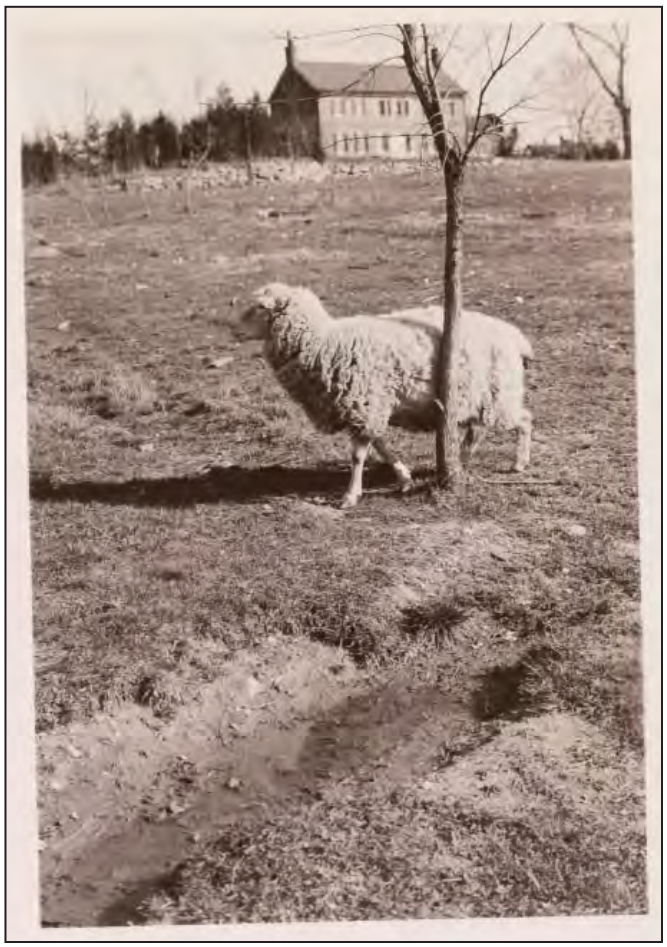
Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: umd: 66190



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated



Charles Wallace Collins papers, Special Collections, University of Maryland Libraries
Series 7: Photographs, 1924-1985 and undated
Handwritten note on back: umd: 76349

Appendix E: HABS Photographs

Historic American Building Survey



Harmony Hall

Fort Washington, Maryland

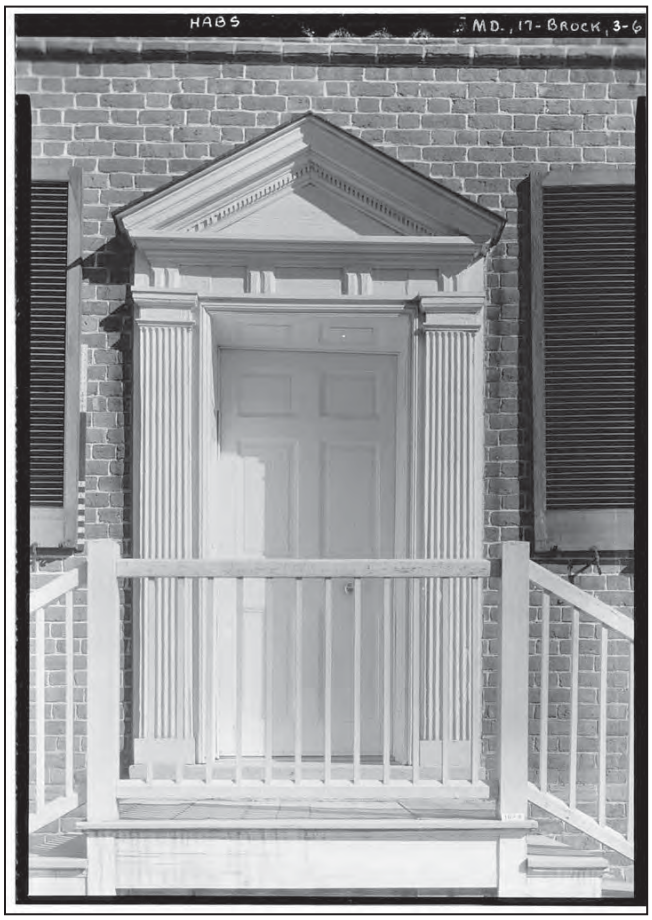
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Title: 4. Historic American Buildings Survey Albert S. Burns, Photographer October 7, 1935. EAST ELEVATION, FRONT (a) - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD, 17-BROCK, 3--4



Title: 5. Historic American Buildings Survey Albert S. Burns, Photographer October 7, 1935. VIEW FROM NORTHWEST - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--4



Title: 6. Historic American Buildings Survey Albert S. Burns, Photographer October 7, 1935. ENTRANCE, WEST ELEVATION - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--6



Title: 7. Historic American Buildings Survey Albert S. Burns, Photographer October 5, 1935. MAIN STAIRWAY, FIRST FLOOR - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3—7



Title: 8. Historic American Buildings Survey Albert S. Burns, Photographer October 5, 1935. LIVING ROOM DETAIL - SOUTHEAST CORNER - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--8



Title: 9. Historic American Buildings Survey Albert S. Burns, Photographer October 5, 1935. DETAIL, SOUTHWEST CORNER OF LIVING ROOM SHOWING CORNICE - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--9



Title: 10. Historic American Buildings Survey Albert S. Burns, Photographer October 5, 1935. DINING ROOM DETAIL - SOUTH WALL - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.

Reproduction Number: HABS MD,17-BROCK,3--10



Title: 11. Historic American Buildings Survey Albert S. Burns, Photographer October 5, 1935. MANTEL IN NORTH BEDROOM - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.

Reproduction Number: HABS MD,17-BROCK,3--11



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--20



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--21



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--22



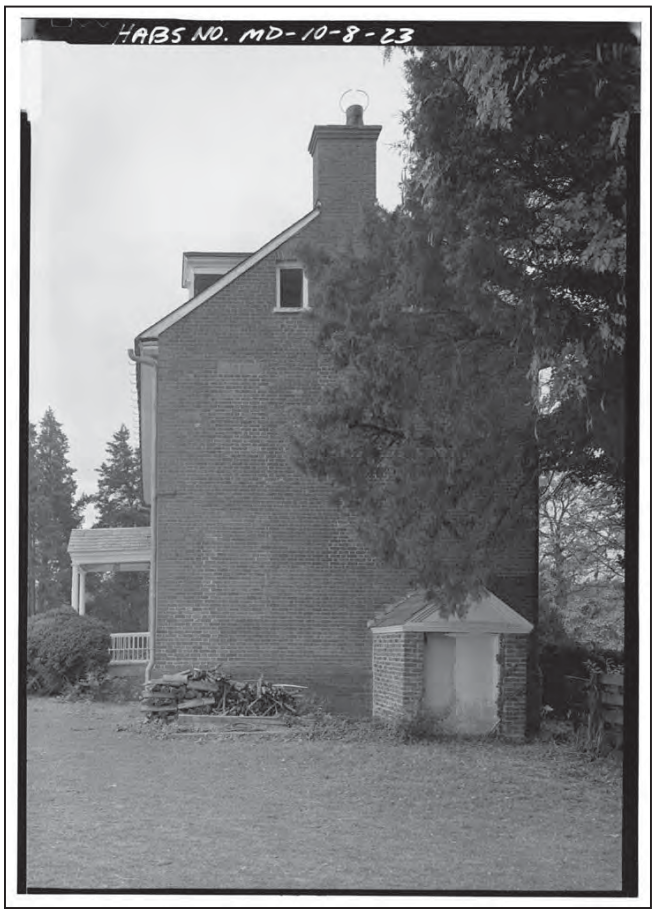
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Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--23



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--24



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--25



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--26



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--27



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--28



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--29



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--30



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--31



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--32



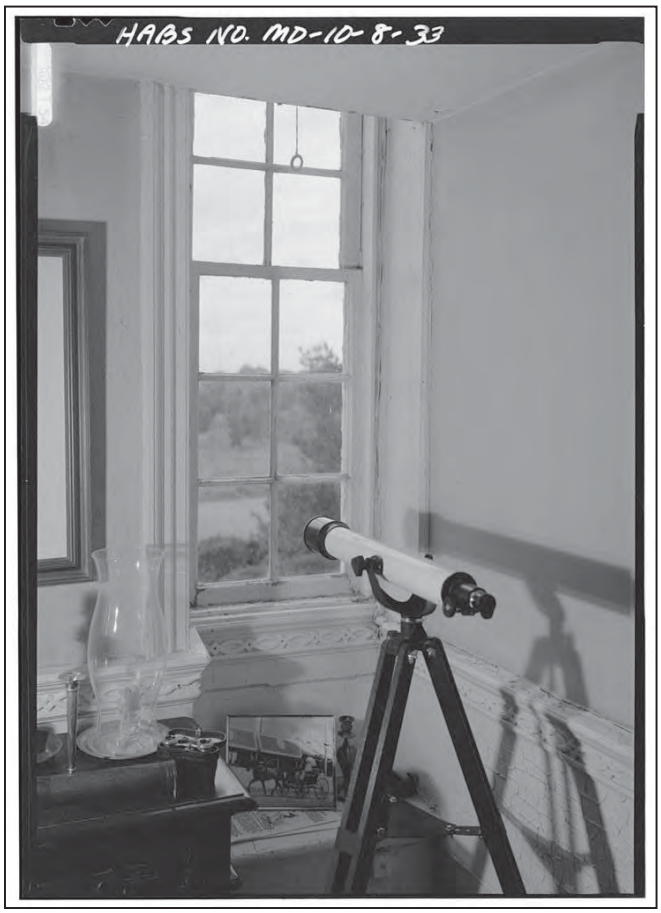
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Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--33



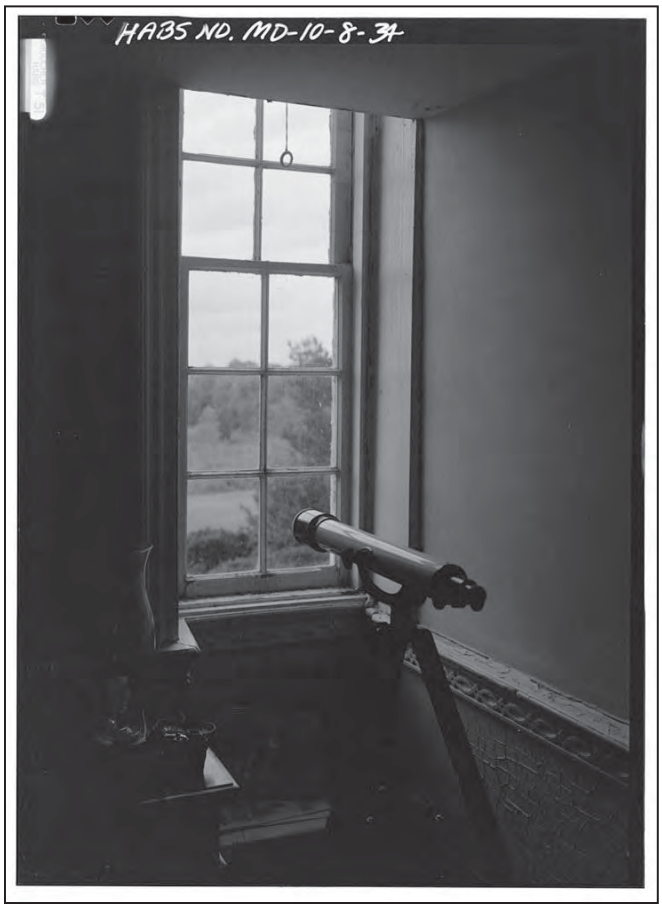
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Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--34



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--35



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--36



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--37



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--38



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--39



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--40



Title: - Harmony Hall, 10500 Livingstone Road (10511 Livingstone Road), Friendly, Prince George's County, MD
Medium: 5 x 7 in.
Reproduction Number: HABS MD,17-BROCK,3--41

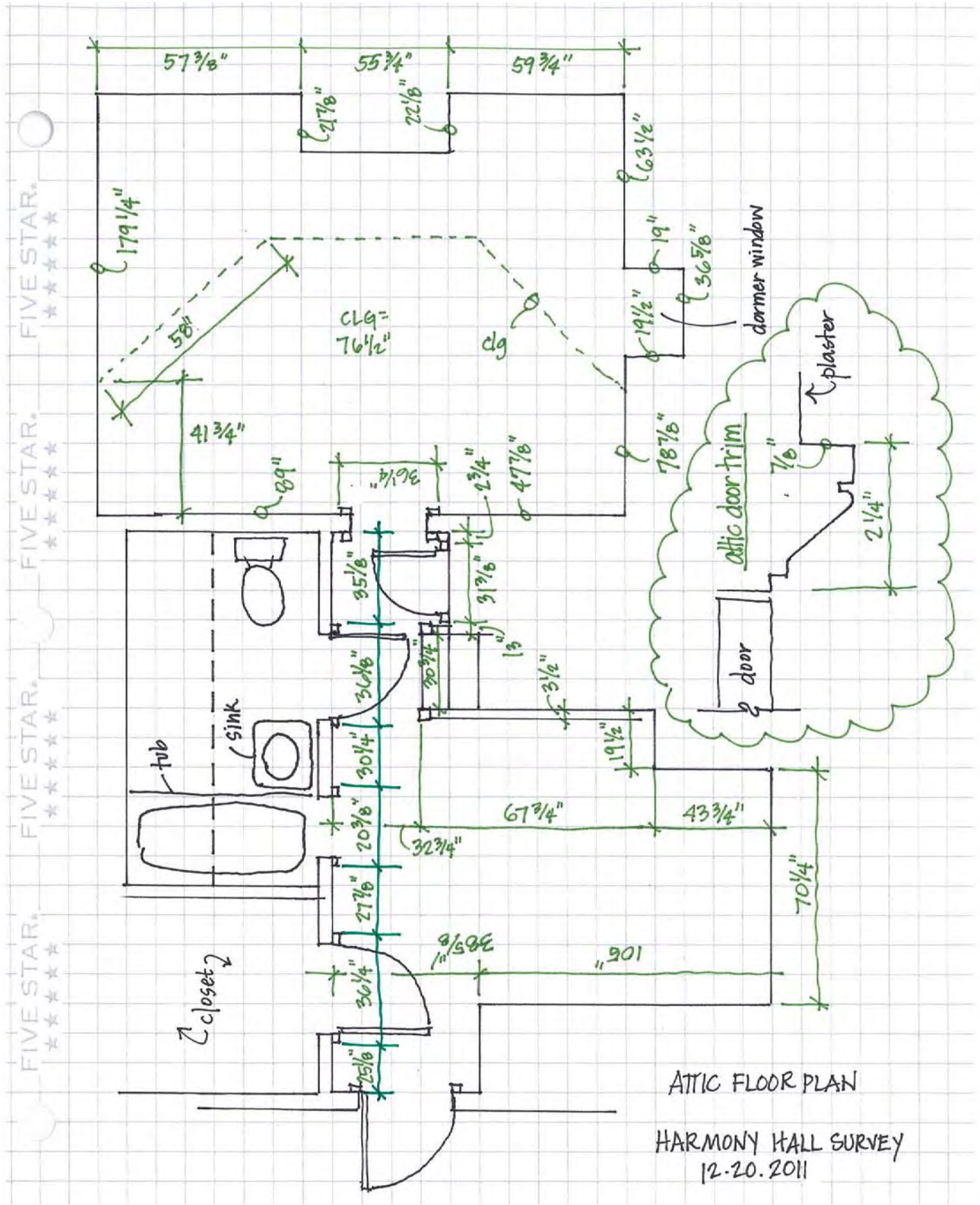
Appendix G: Field Notes and Sketches

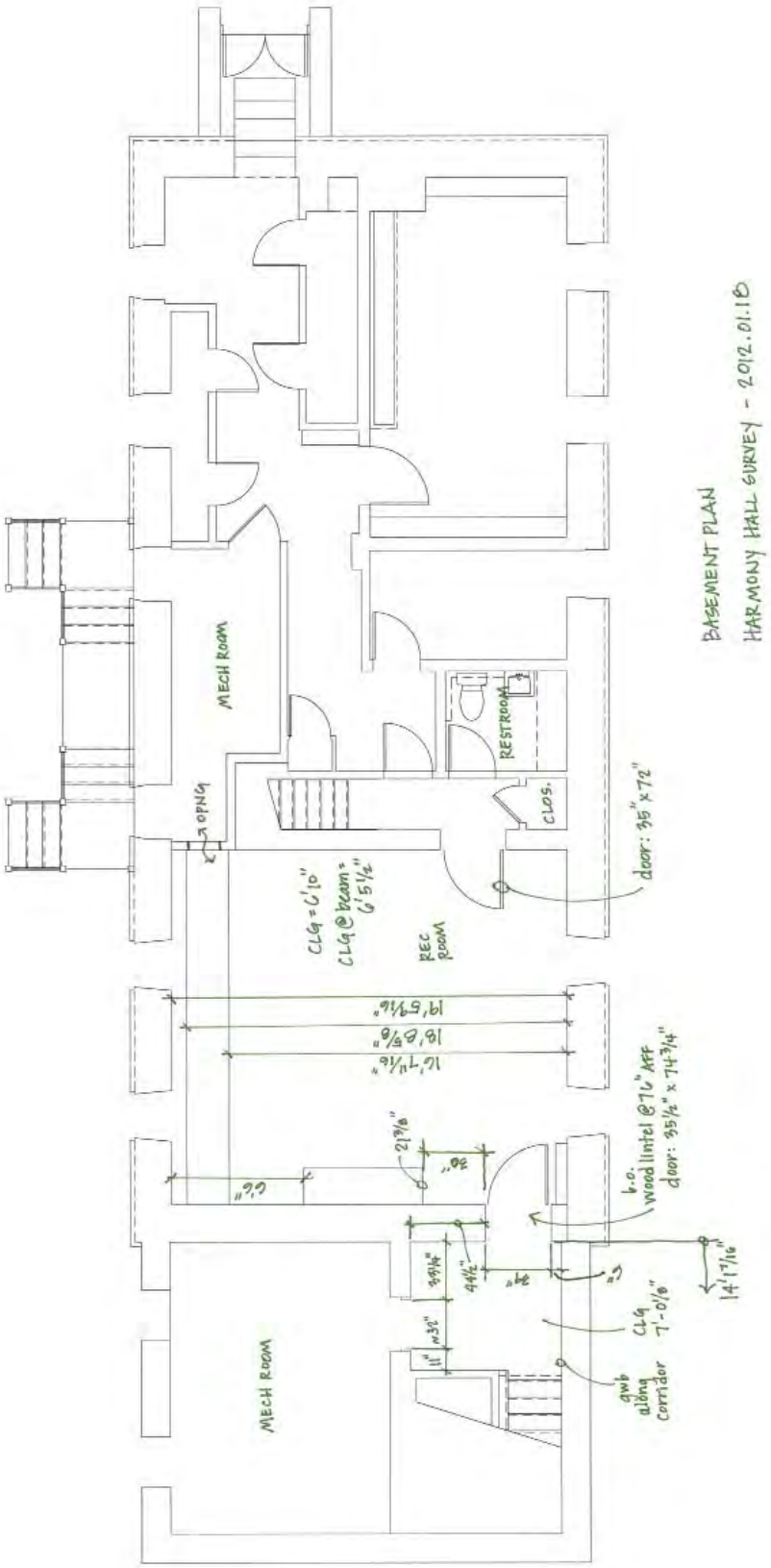


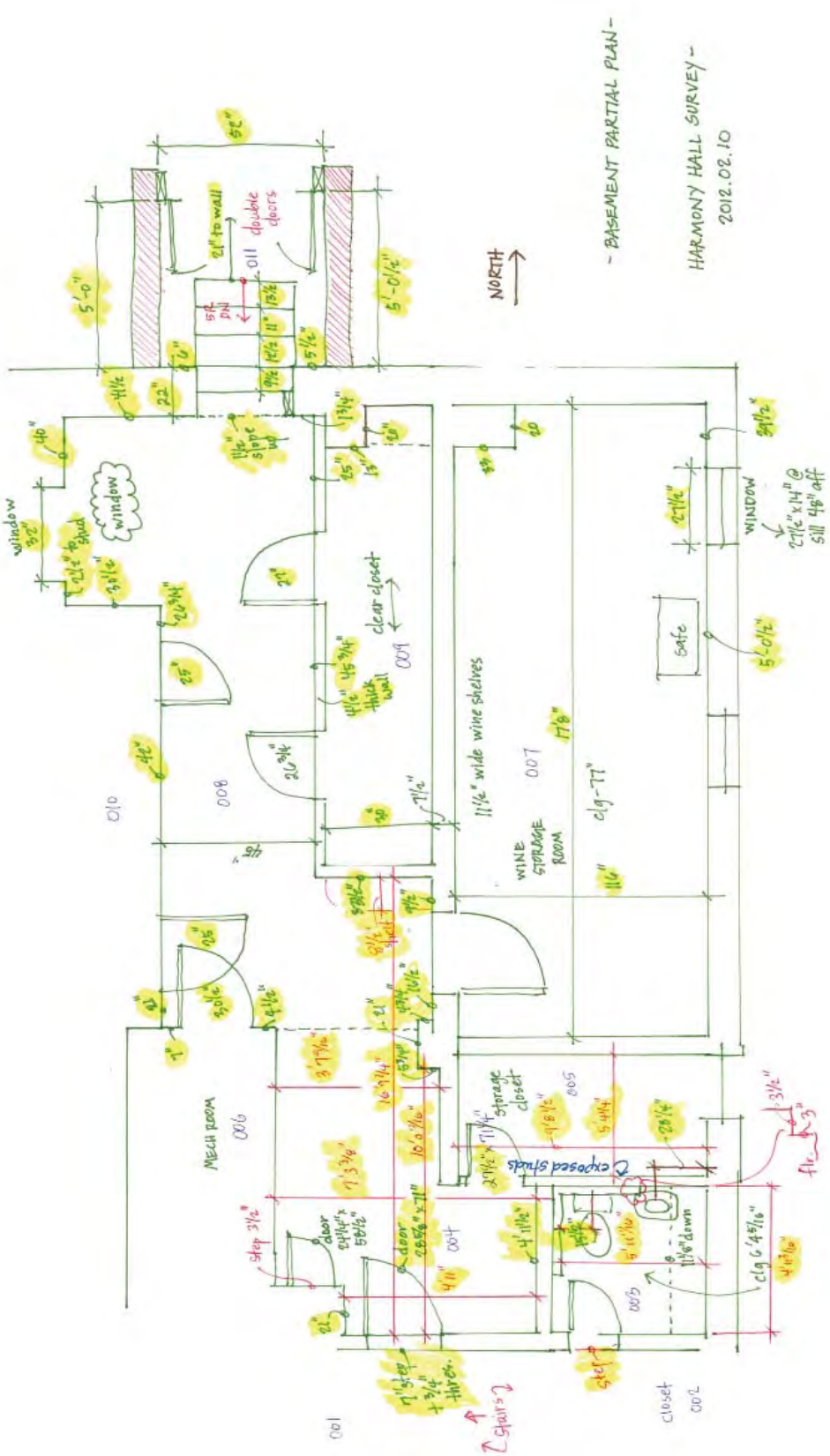
Harmony Hall

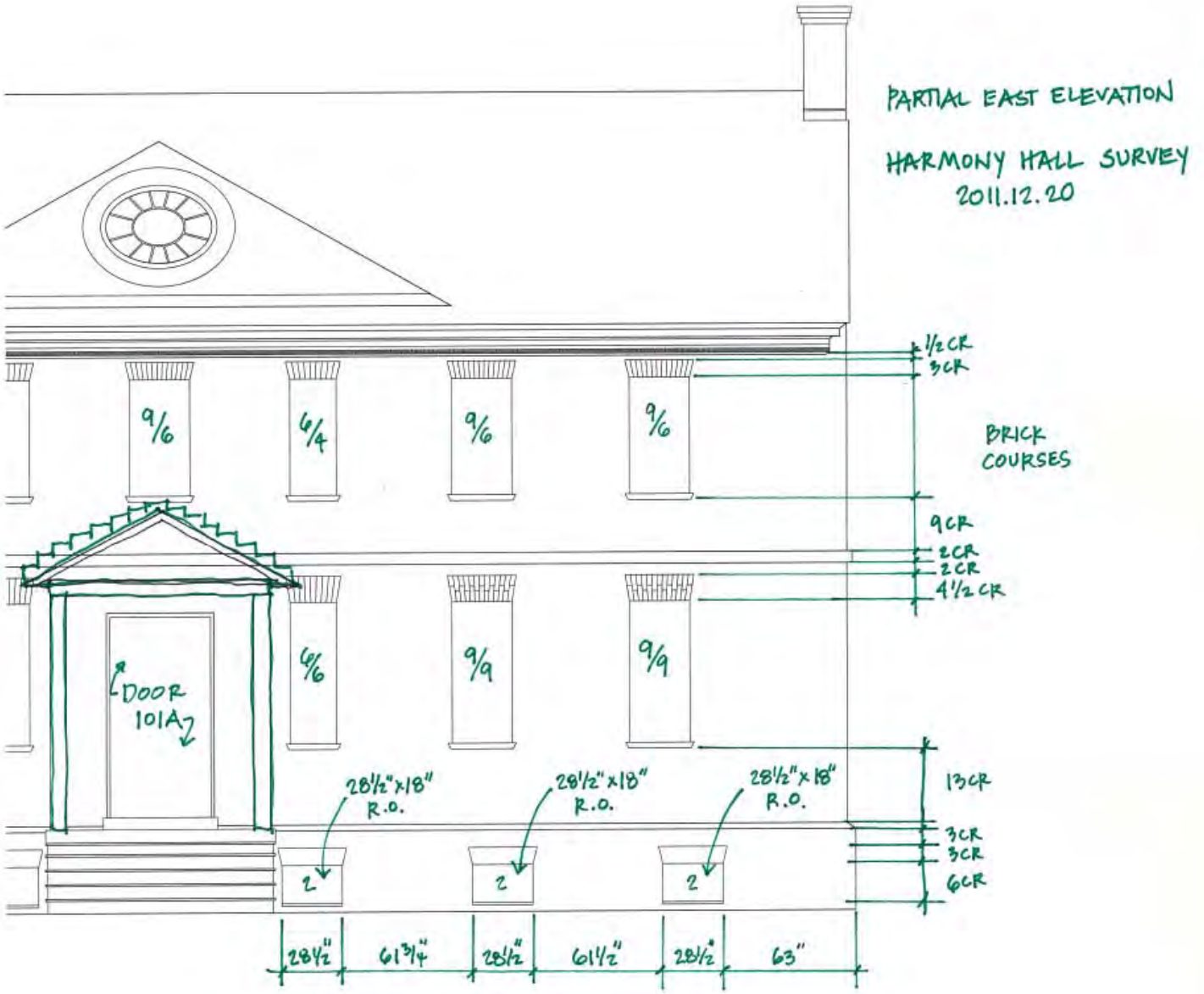
Fort Washington, Maryland

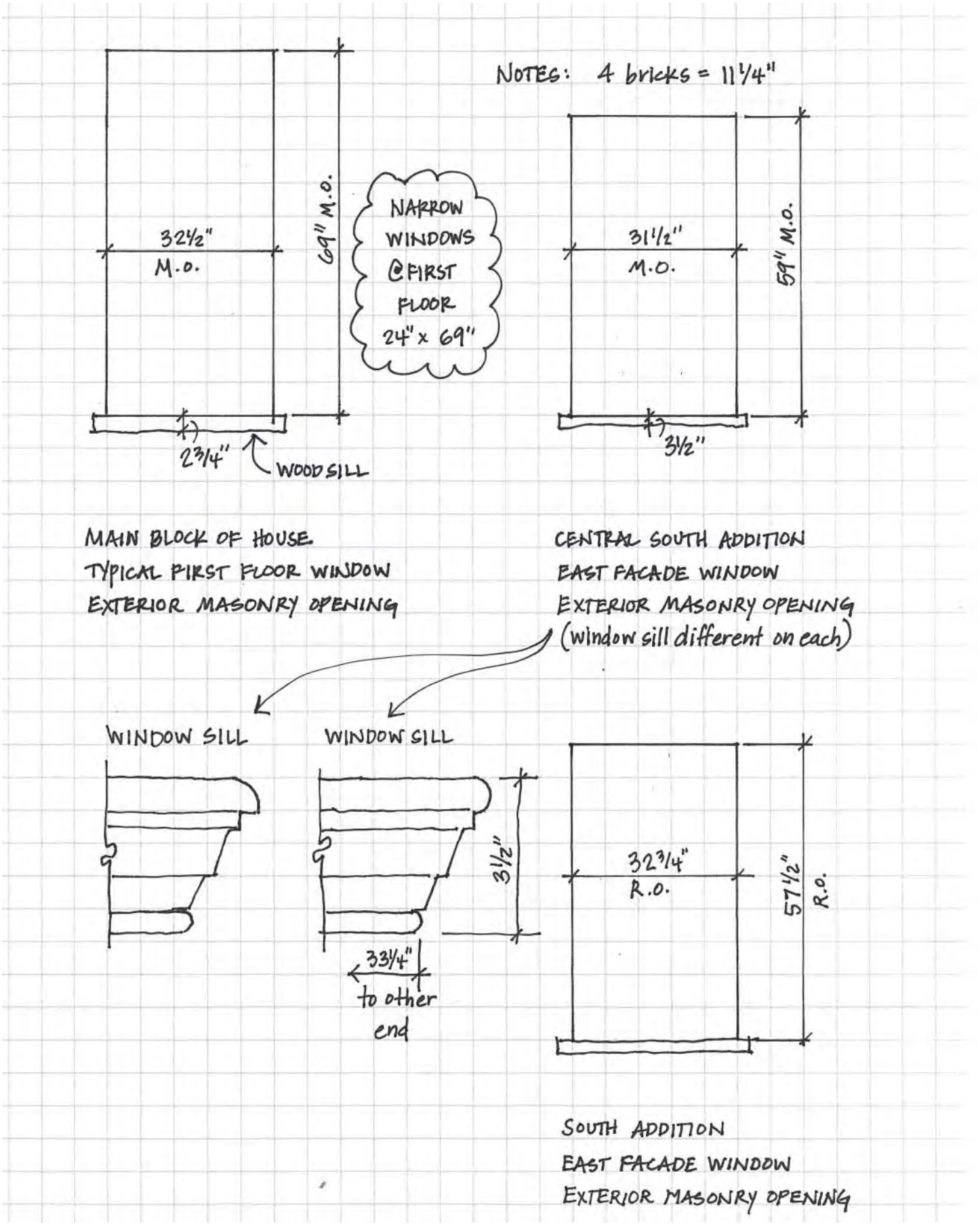
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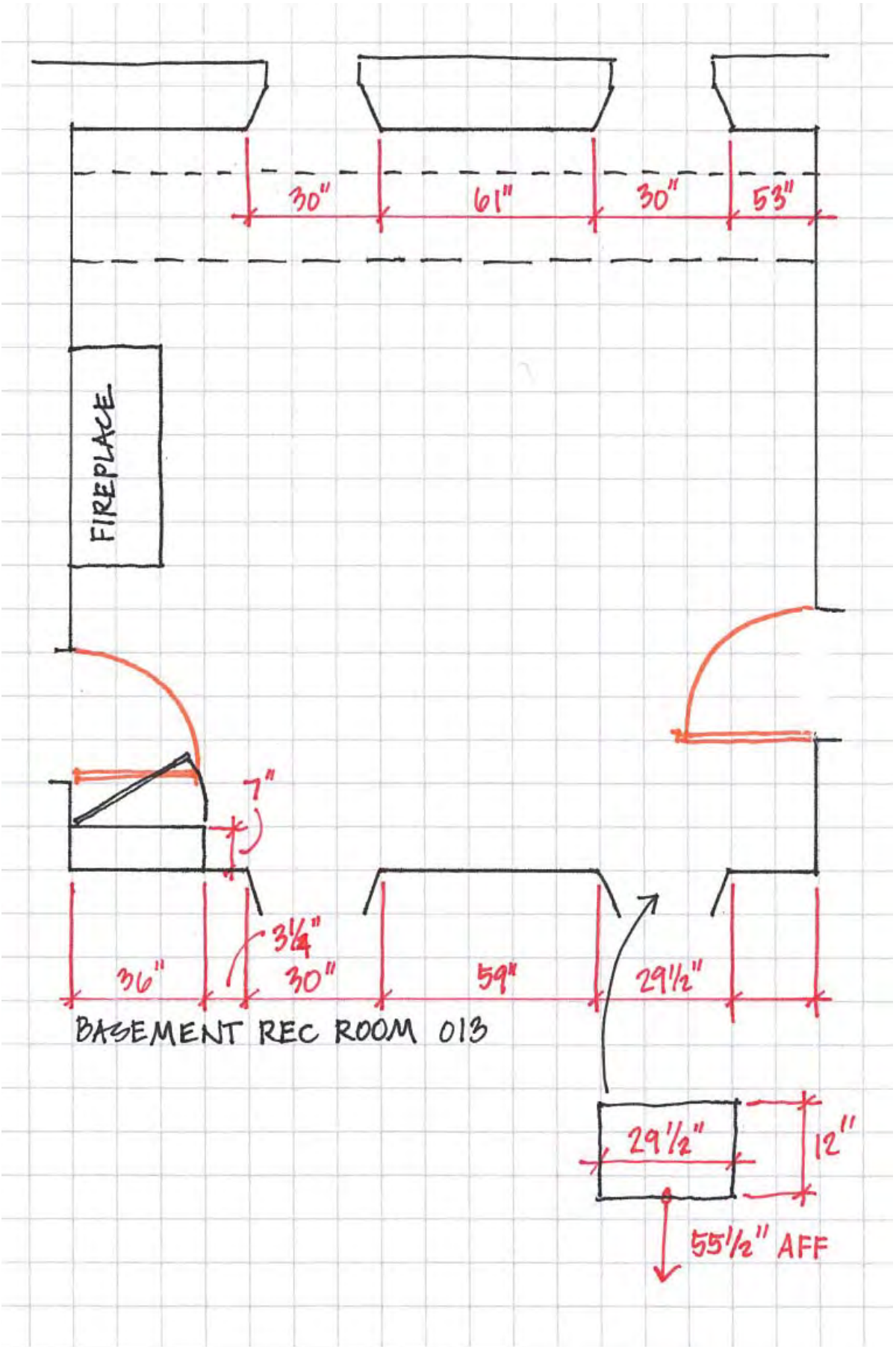

57 3/8"
55 3/4"
59 3/4"
21 7/8"
22 1/8"
63 1/2"
179 1/4"
19"
36 5/8"
19 1/2"
dormer window
58"
CLG=
76 1/2"
clg
41 3/4"
89"
3 1/16"
2 3/4"
47 7/8"
78 7/8"
plaster
7/8"
attic door trim
2 1/4"
door
35 1/8"
31 3/8"
13"
30 3/4"
34 1/8"
3 1/2"
19 1/2"
sink
tub
30 1/4"
20 3/8"
67 3/4"
43 3/4"
32 3/4"
27 7/8"
70 1/4"
38 5/8"
90"
closet
30 1/4"
25 1/8"
ATTIC FLOOR PLAN
HARMONY HALL SURVEY
12.20.2011

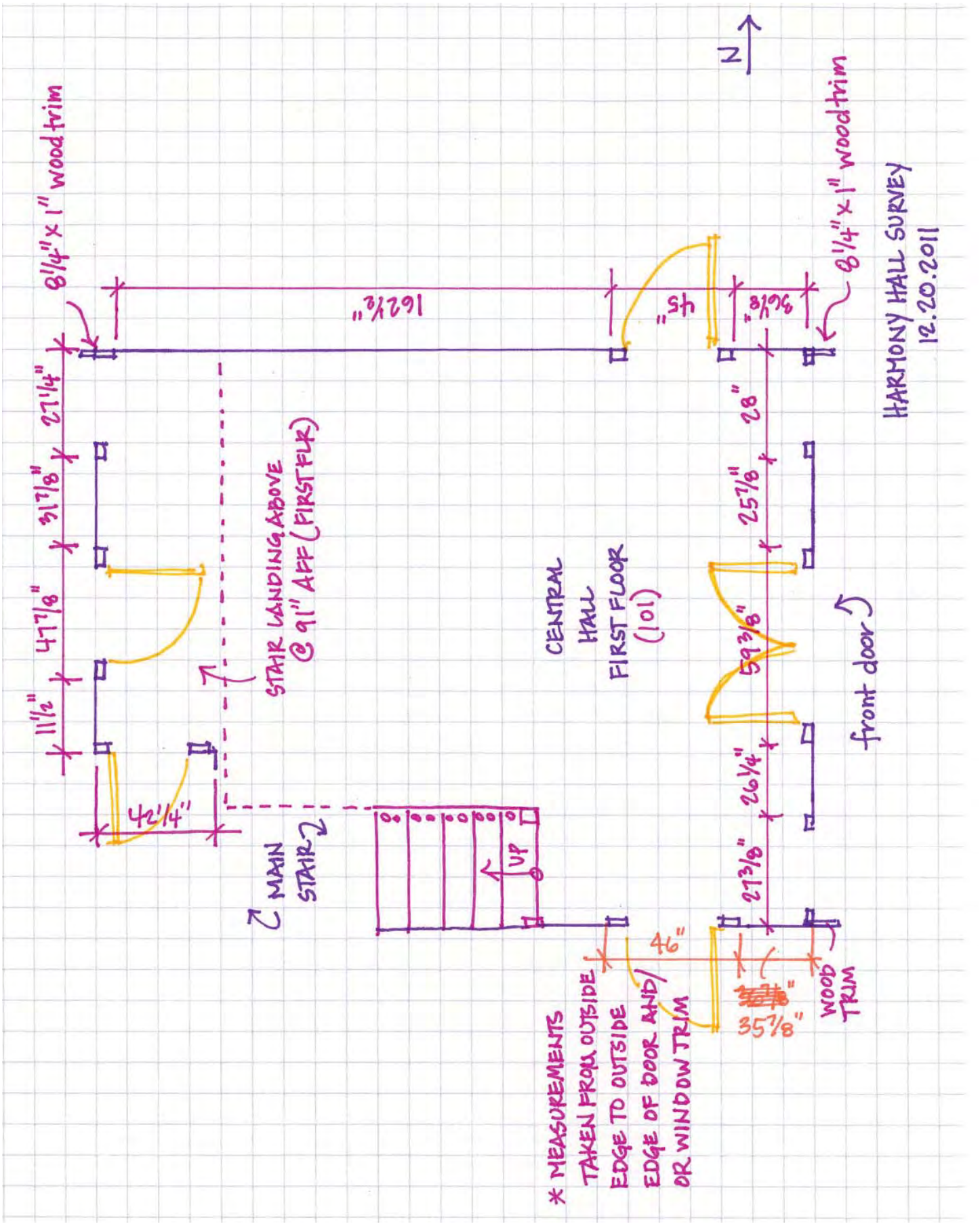

BASEMENT PLAN
HARMONY HALL SURVEY - 2012.01.18
MECH ROOM
RESTROOM
CLOS.
OPNG
CLG = 6'10"
CLG @ beam = 6'5½"
REC ROOM
door: 36" x 72"
19'6 9/16"
18'6 5/8"
17'11 1/16"
21 3/8"
.09
.93
h.o. wood lintel @ 76" AFF
door: 35½" x 74 3/4"
3 9/16"
4½"
.34
14'1 7/16"
CLG 7'-0 1/8"
11"
.39
MECH ROOM
gwb along corridor

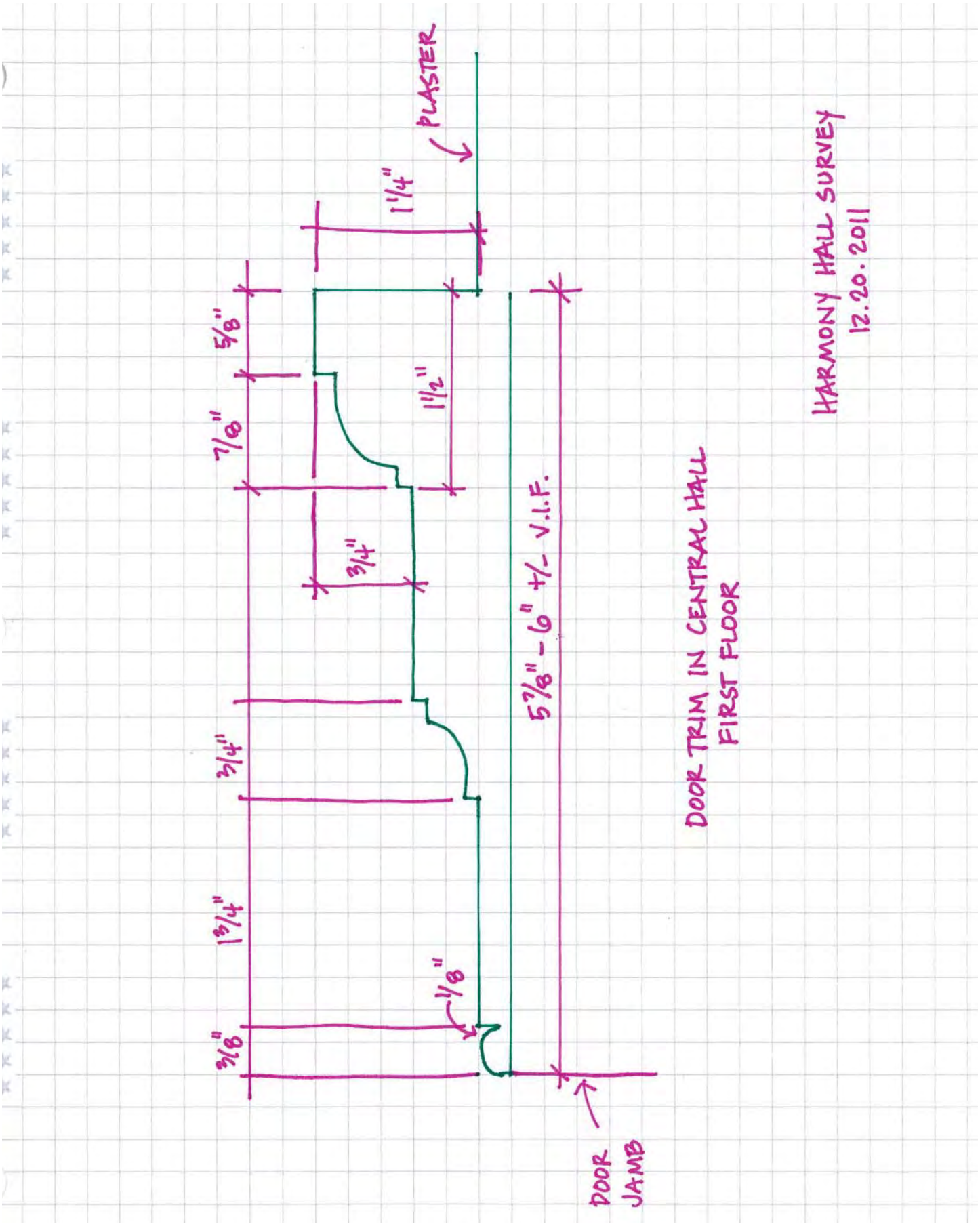

- BASEMENT PARTIAL PLAN -
HARMONY HALL SURVEY -
2012.02.10
NORTH
WINE STORAGE ROOM
MECH ROOM
clear closet
storage closet
exposed studs
safe
WINDOW
Stairs

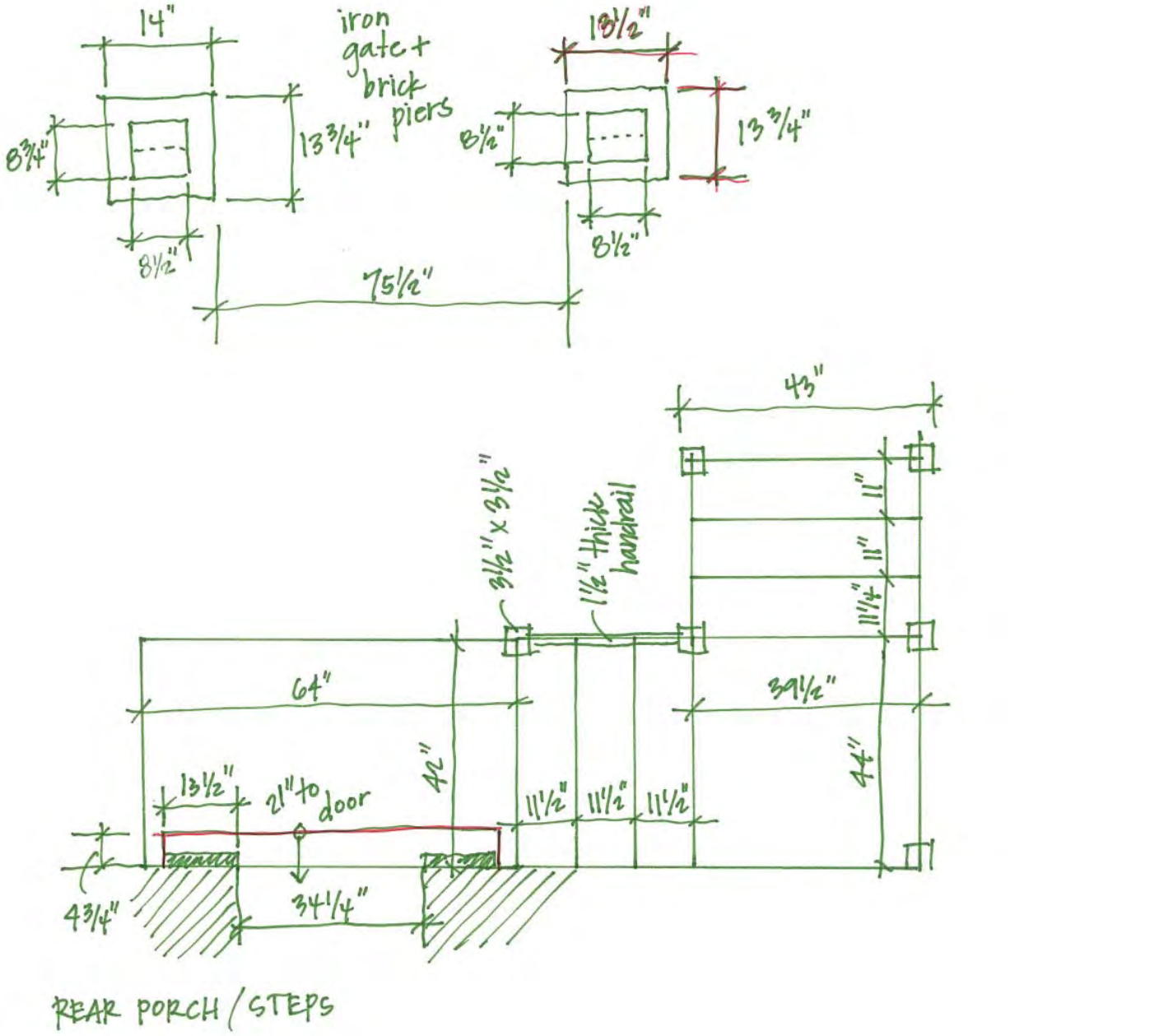

PARTIAL EAST ELEVATION
HARMONY HALL SURVEY
2011.12.20
1/2 CR
3 CR
BRICK COURSES
9 CR
2 CR
2 CR
4 1/2 CR
13 CR
3 CR
3 CR
6 CR
9/6
6/4
9/6
9/6
6/6
9/9
9/9
DOOR 101A
28 1/2" x 18" R.O.
28 1/2" x 18" R.O.
28 1/2" x 18" R.O.
2
2
2
28 1/2"
61 3/4"
28 1/2"
61 1/2"
28 1/2"
63"


NOTES: 4 bricks = 11¼"
32½" M.O.
69" M.O.
NARROW WINDOWS @ FIRST FLOOR 24" x 69"
2¾"
WOOD SILL
MAIN BLOCK OF HOUSE
TYPICAL FIRST FLOOR WINDOW
EXTERIOR MASONRY OPENING
31½" M.O.
59" M.O.
3½"
CENTRAL SOUTH ADDITION
EAST FACADE WINDOW
EXTERIOR MASONRY OPENING
(window sill different on each)
WINDOW SILL
WINDOW SILL
3½"
33¼"
to other end
32¾" R.O.
57½" R.O.
SOUTH ADDITION
EAST FACADE WINDOW
EXTERIOR MASONRY OPENING

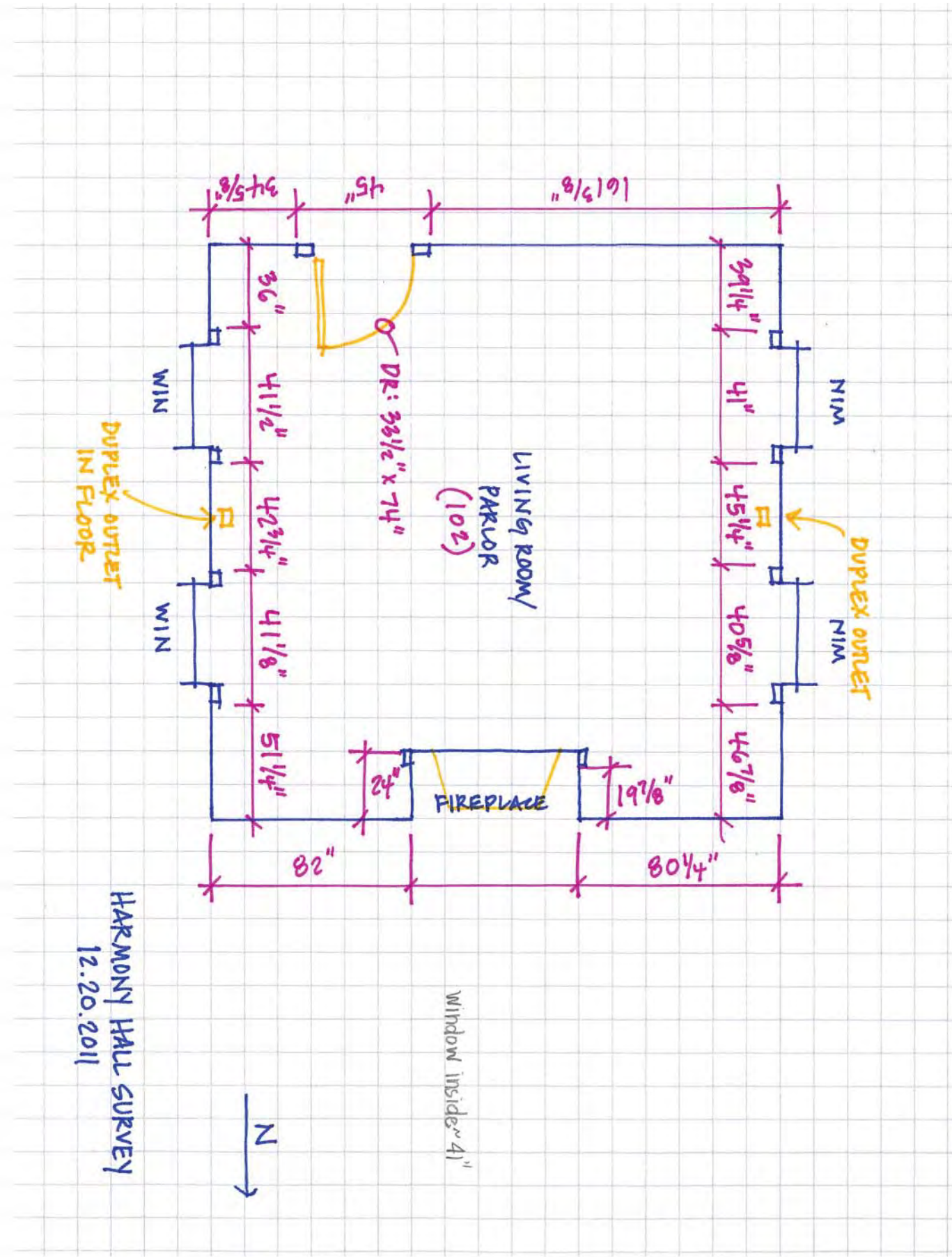

30"
61"
30"
53"
FIREPLACE
7"
3¼"
36"
30"
59"
29½"
BASEMENT REC ROOM 013
29½"
12"
55½" AFF

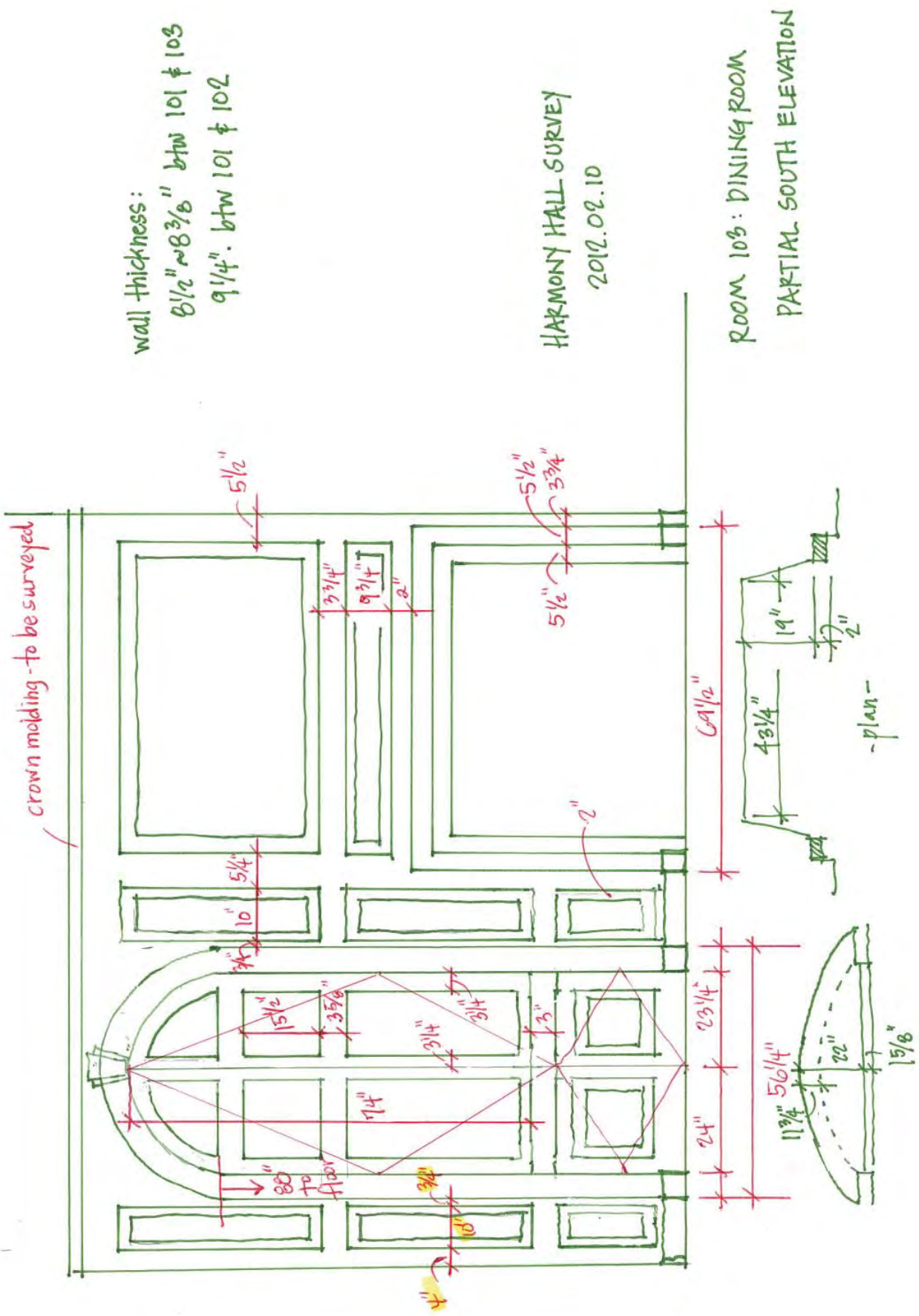

N
8 1/4" x 1" wood trim
162 3/4"
45"
3 3/8"
8 1/4" x 1" wood trim
HARMONY HALL SURVEY
12.20.2011
27 1/4"
31 7/8"
47 7/8"
11 1/2"
42 1/4"
STAIR LANDING ABOVE @ 91" AFF (FIRST FLR)
MAIN STAIR
UP
CENTRAL HALL FIRST FLOOR (101)
front door
28"
25 7/8"
59 3/8"
26 1/4"
27 3/8"
46"
35 7/8"
WOOD TRIM
* MEASUREMENTS TAKEN FROM OUTSIDE EDGE TO OUTSIDE EDGE OF DOOR AND/OR WINDOW TRIM

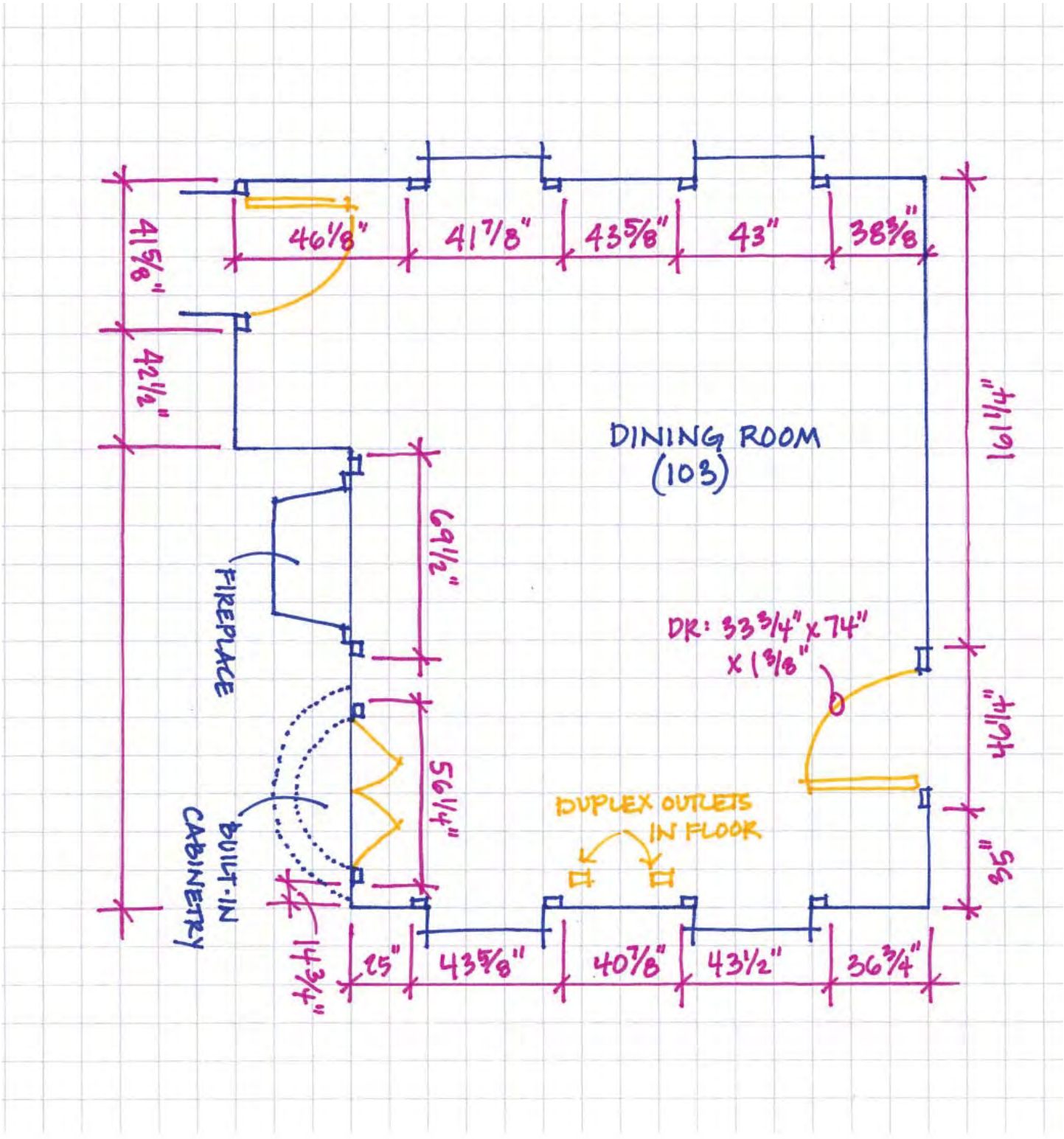

HARMONY HALL SURVEY
12.20.2011
DOOR TRIM IN CENTRAL HALL
FIRST FLOOR
PLASTER
1 1/4"
5/8"
7/8"
1 1/2"
3/4"
3/4"
1 3/4"
1/8"
3/8"
5 7/8" - 6" +/- V.I.F.
DOOR JAMB

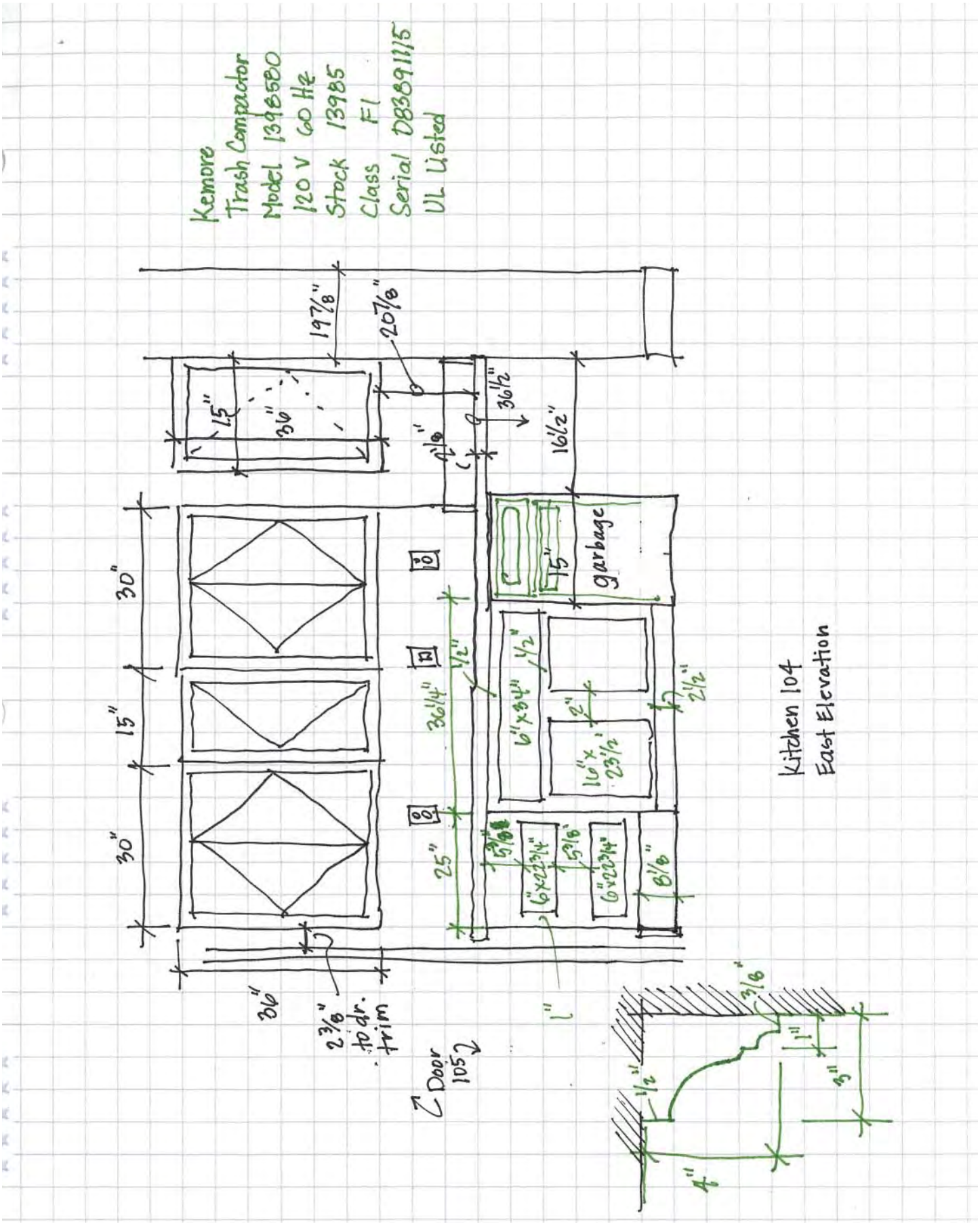


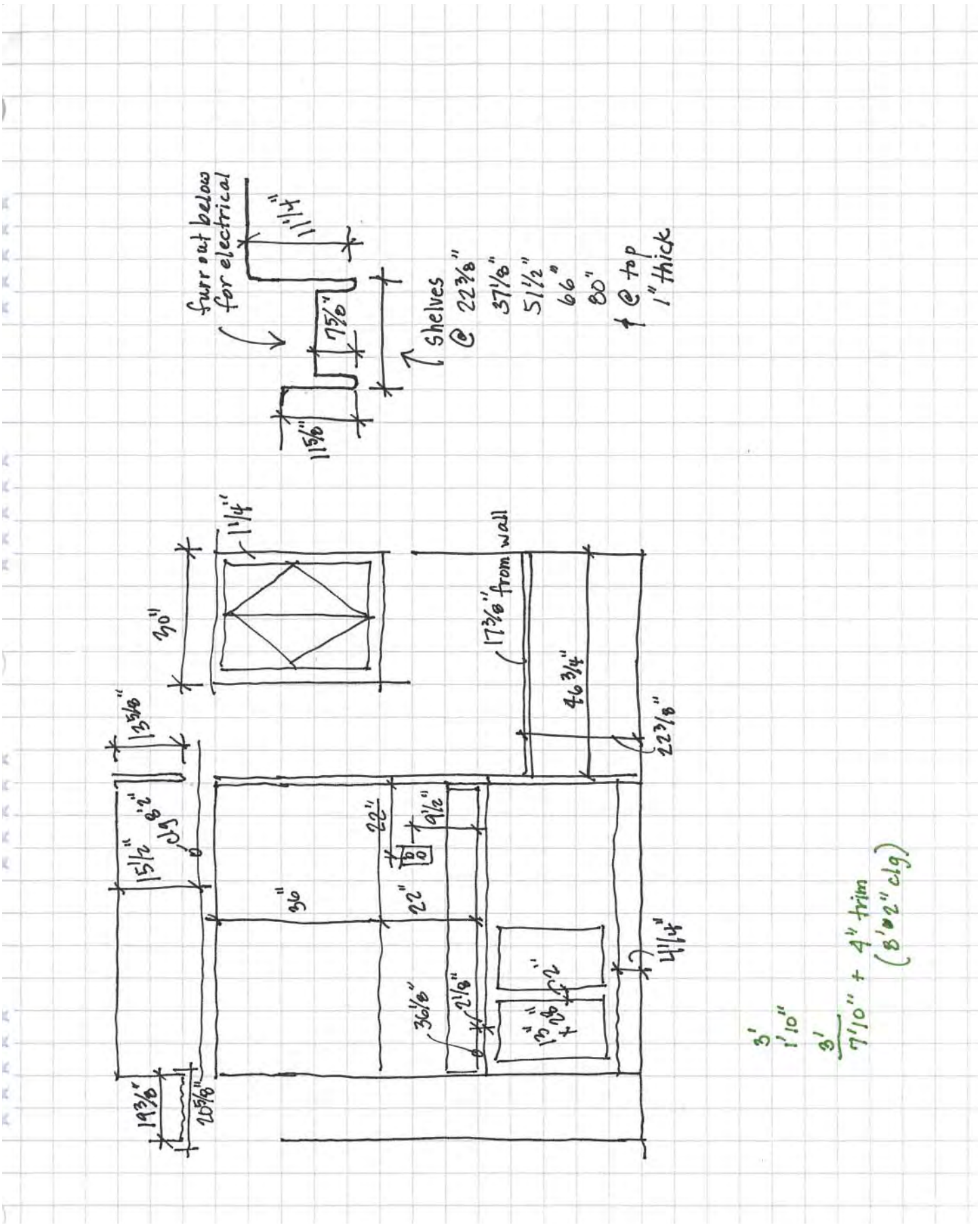
HARMONY HALL SURVEY - 2012.02.10


34 5/8"
45"
161 3/8"
36"
41 1/2"
42 3/4"
41 1/8"
51 1/4"
24"
19 7/8"
82"
80 1/4"
34 1/4"
41"
45 1/4"
40 5/8"
42 7/8"
WIN
WIN
WIN
WIN
DR: 33 1/2" x 74"
LIVING ROOM
PARLOR
(102)
FIREPLACE
DUPLEX OUTLET
IN FLOOR
DUPLEX OUTLET
Window inside ~ 41"
HARMONY HALL SURVEY
12.20.2011
N


wall thickness:
8 1/2" ≈ 8 3/8" btw 101 & 103
9 1/4". btw 101 & 102
HARMONY HALL SURVEY
2012.02.10
ROOM 103: DINING ROOM
PARTIAL SOUTH ELEVATION
crown molding - to be surveyed
- plan -

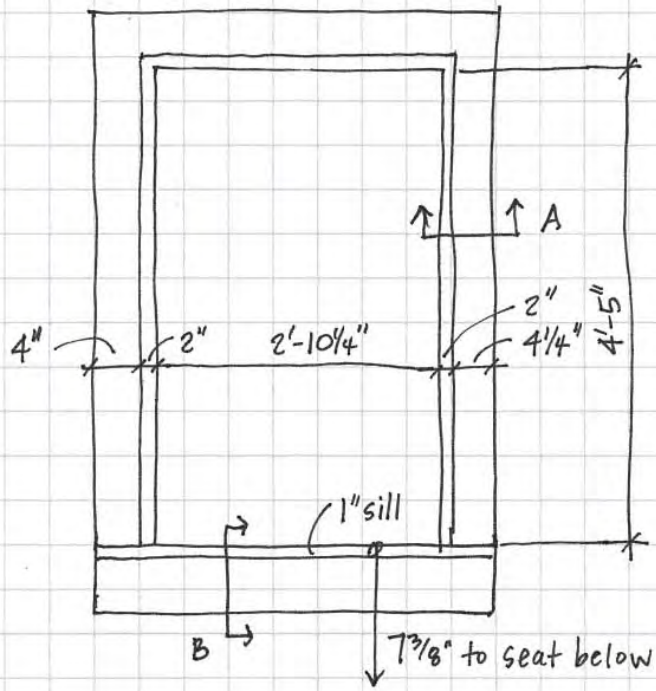

DINING ROOM
(103)
46⅛"
41⅞"
43⅝"
43"
38⅜"
41⅝"
42½"
161¼"
69½"
FIREPLACE
DR: 33¾" x 74"
x 1⅜"
46¼"
56¼"
BUILT-IN
CABINETRY
DUPLEX OUTLETS
IN FLOOR
35"
4¾"
25"
43⅝"
40⅞"
43½"
36¾"

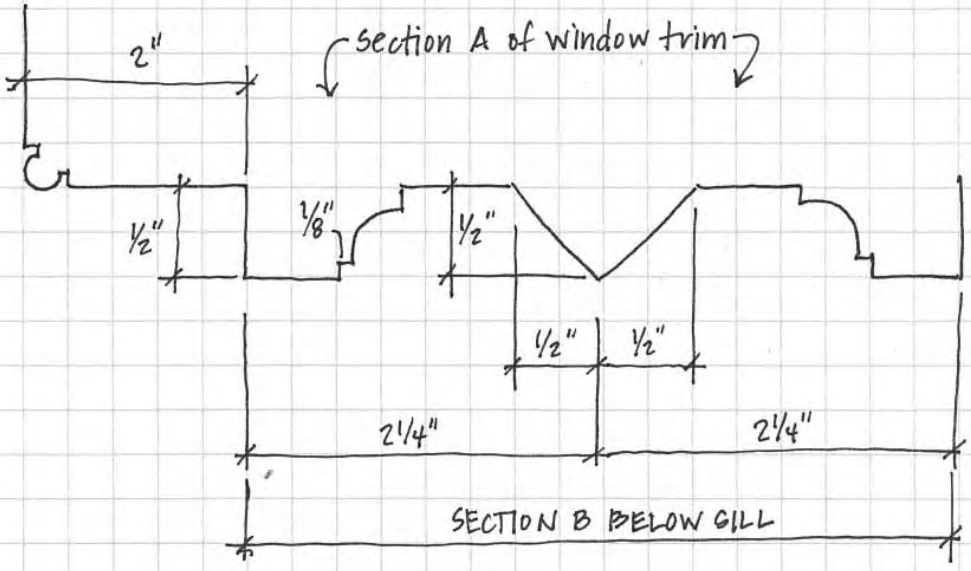

Kemore
Trash Compactor
Model 1396580
120 V 60 Hz
Stock 13985
Class F1
Serial D0838911115
UL Listed
19 7/8"
20 1/8"
15"
30"
36 1/2"
16 1/2"
garbage
30"
15"
30"
36 1/4"
1/2"
6"x34"
1/2"
2"
10"x 23 1/2"
2 1/2"
25"
6"x22 3/4"
6"x22 3/4"
8 1/8"
30"
2 3/8" top. trim
Door 105
1"
Kitchen 104
East Elevation
3/8"
1"
1/2"
4"
4"

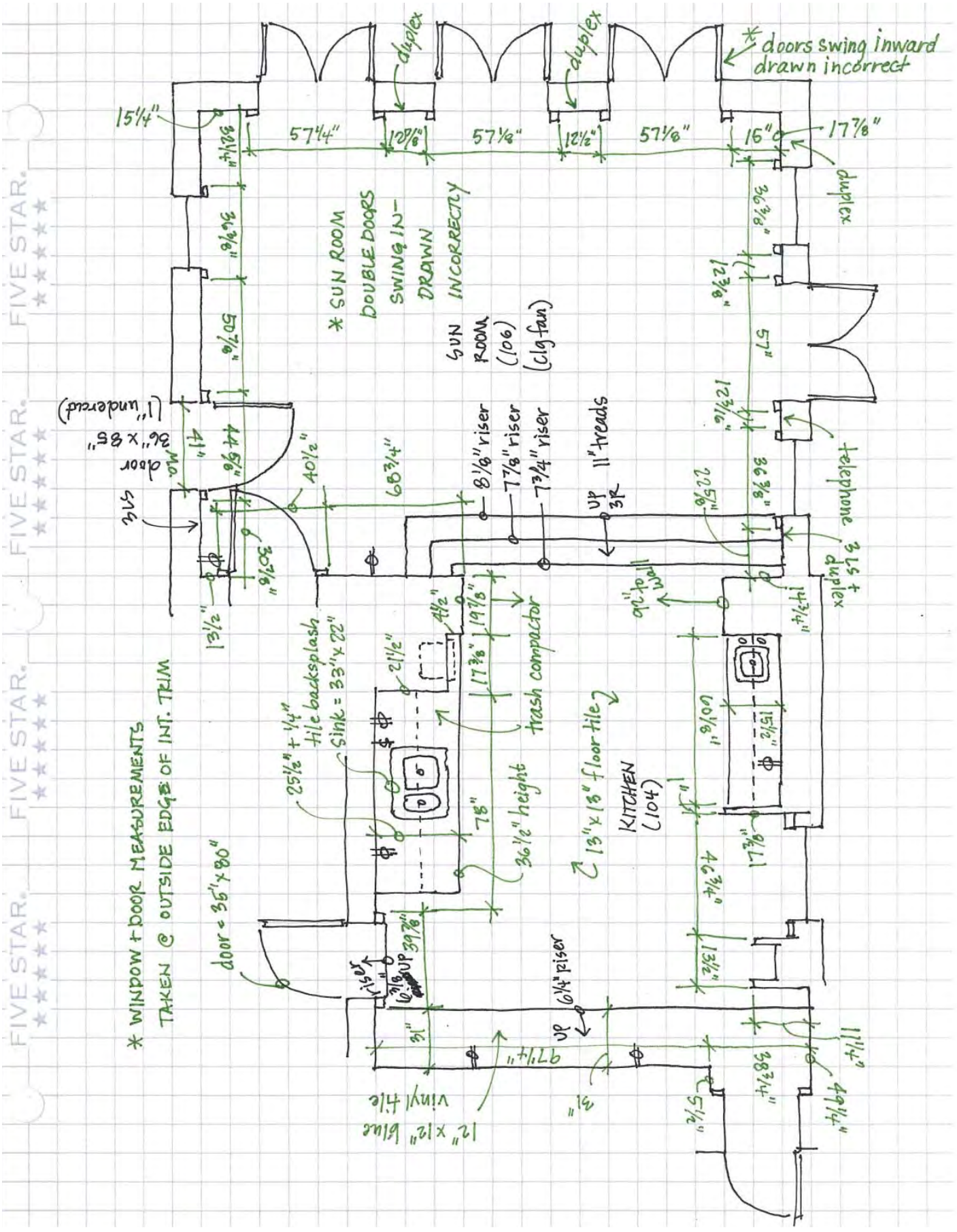

furr out below for electrical
11 1/4"
7 5/8"
11 5/8"
Shelves @ 22 3/8"
37 1/8"
51 1/2"
66"
80"
1 @ top
1" thick
20"
11 1/4"
17 3/8" from wall
46 3/4"
22 3/8"
13 5/8"
15 1/2"
9 1/2"
22"
36"
36 1/8"
2 1/8"
11 1/4"
19 3/8"
10 5/8"
3'
1'10"
3'
7'10" + 4" trim
(8'02" clg)

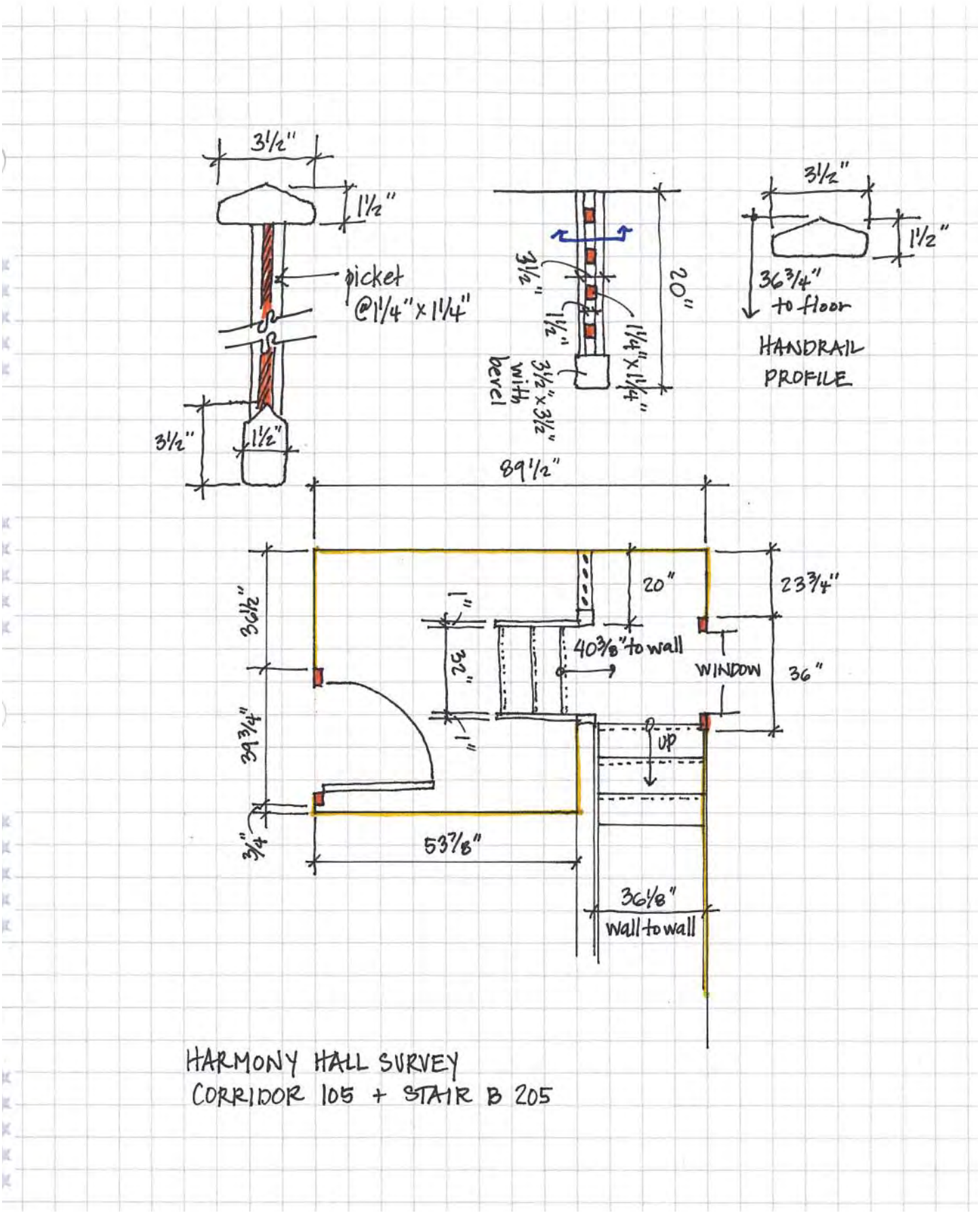
HARMONY HALL SURVEY

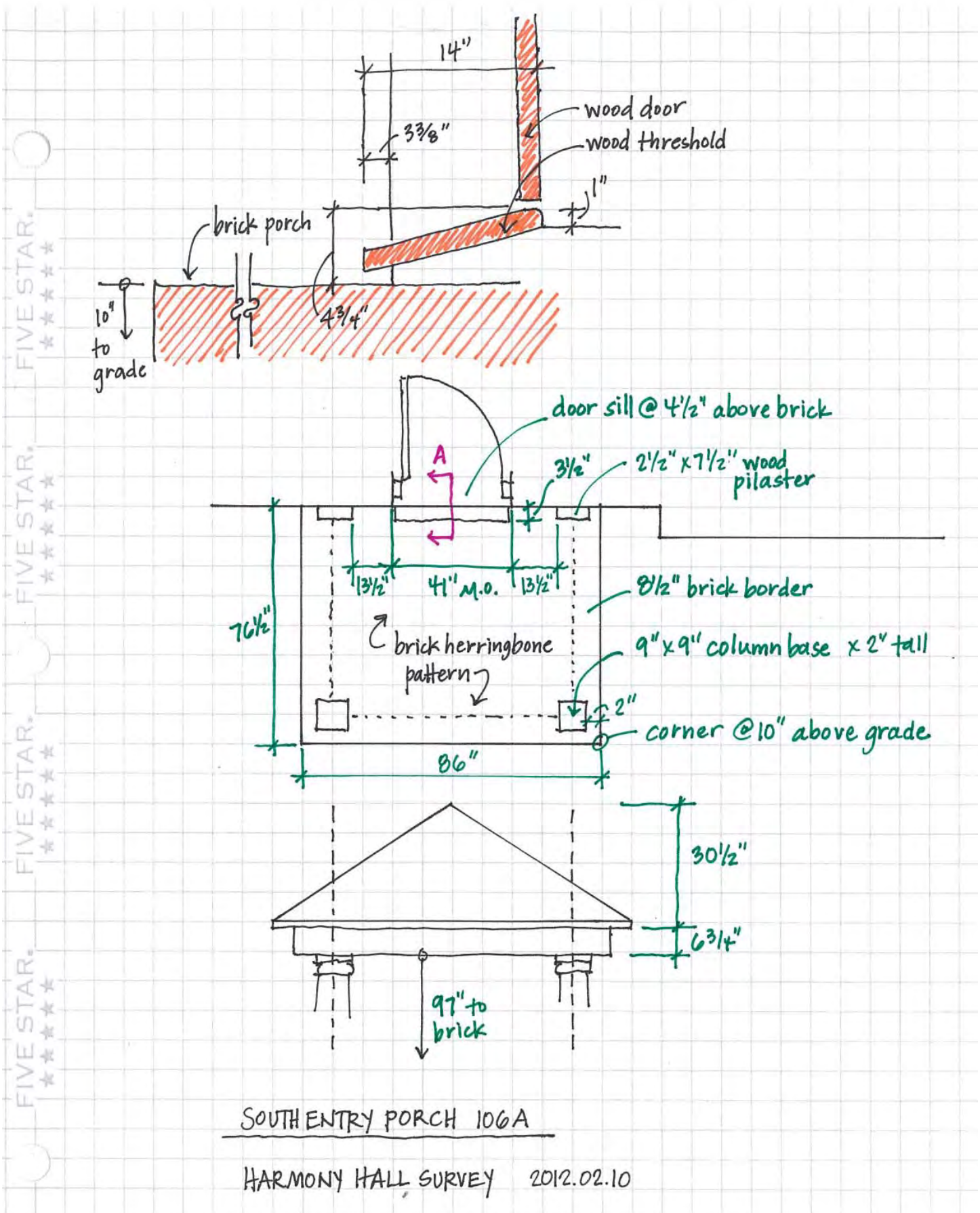
KITCHEN 104
WEST WINDOW, INTERIOR

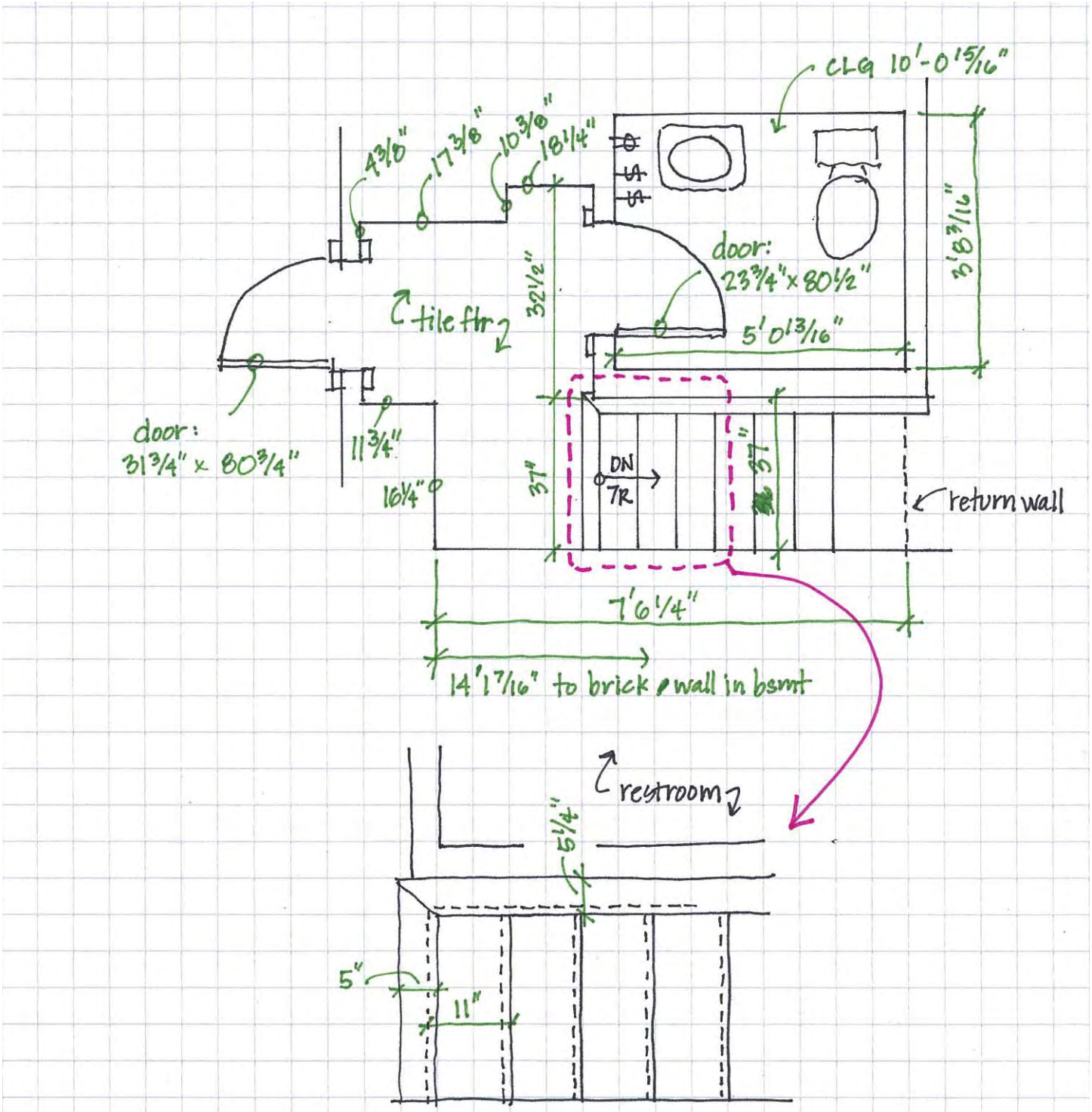





* doors swing inward drawn incorrect
duplex
duplex
duplex
15¼"
57¼"
10⅜"
57⅛"
12½"
57⅛"
16"
17⅞"
* SUN ROOM DOUBLE DOORS SWING IN-DRAWN INCORRECTLY
SUN ROOM (106) (clg fan)
8⅛" riser
7⅞" riser
7¾" riser
UP 11" treads 3R
40½"
68¾"
(1" undercut)
36" x 80" door
telephone
duplex
KITCHEN (104)
* WINDOW + DOOR MEASUREMENTS TAKEN @ OUTSIDE EDGES OF INT. TRIM
door = 36" x 80"
25½" + ¼" tile backsplash
sink = 33" x 22"
trash compactor
36½" height
78"
13" x 18" floor tile
12" x 12" blue vinyl tile
UP 6¼" riser
UP 3 risers
97¼"
49¼"

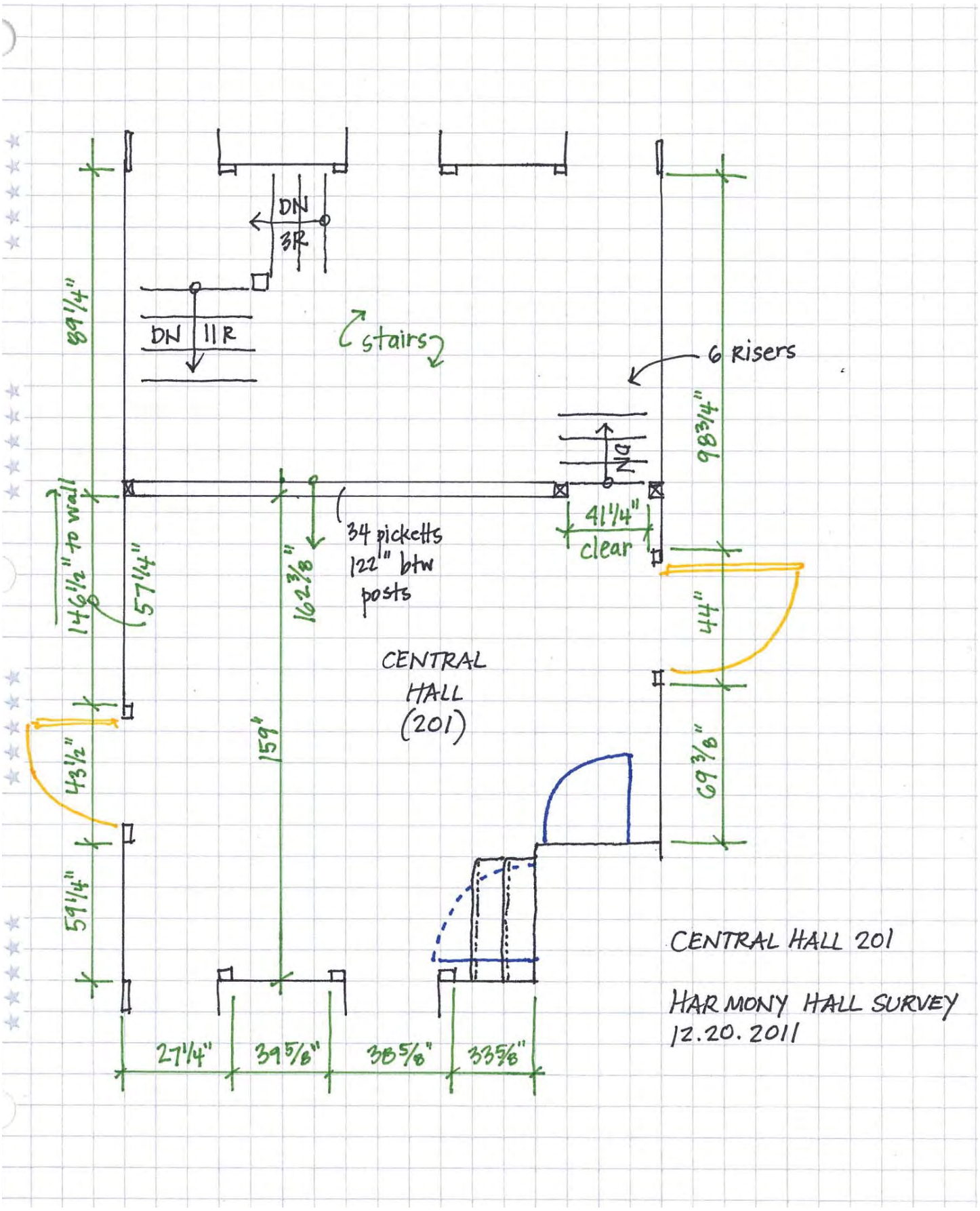

3½"
1½"
picket
@1¼"x1¼"
3½"
1½"
3½"
1½"
1¼"x1¼"
20"
3½"x3½"
with
bevel
3½"
36¾"
to floor
1½"
HANDRAIL
PROFILE
89½"
36½"
20"
23¾"
1"
32"
40⅜" to wall
WINDOW
36"
1"
UP
39¾"
¾"
53⅞"
36⅛"
wall to wall
HARMONY HALL SURVEY
CORRIDOR 105 + STAIR B 205

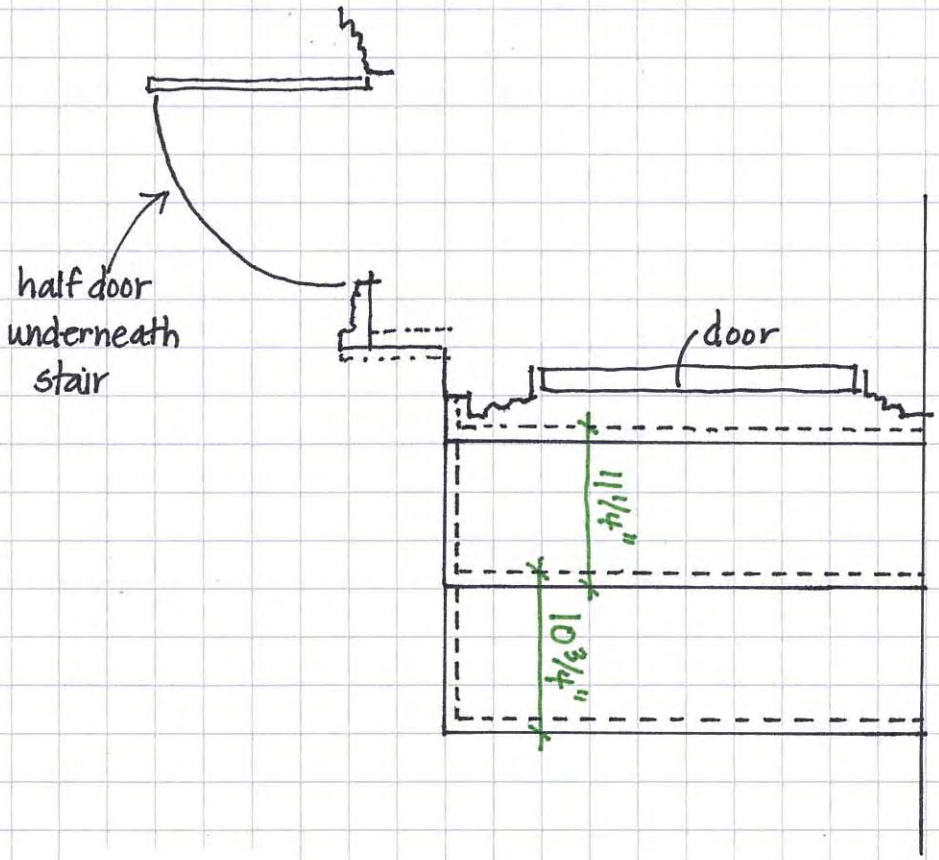

14"
3 3/8"
wood door
wood threshold
1"
brick porch
10" to grade
4 3/4"
door sill @ 4 1/2" above brick
A
3 1/2"
2 1/2" x 7 1/2" wood pilaster
13 1/2"
41" M.O.
13 1/2"
8 1/2" brick border
76 1/2"
brick herringbone pattern
9" x 9" column base x 2" tall
2"
corner @ 10" above grade
86"
30 1/2"
6 3/4"
97" to brick
SOUTH ENTRY PORCH 106A
HARMONY HALL SURVEY 2012.02.10



FIRST FLOOR RESTROOM (108)

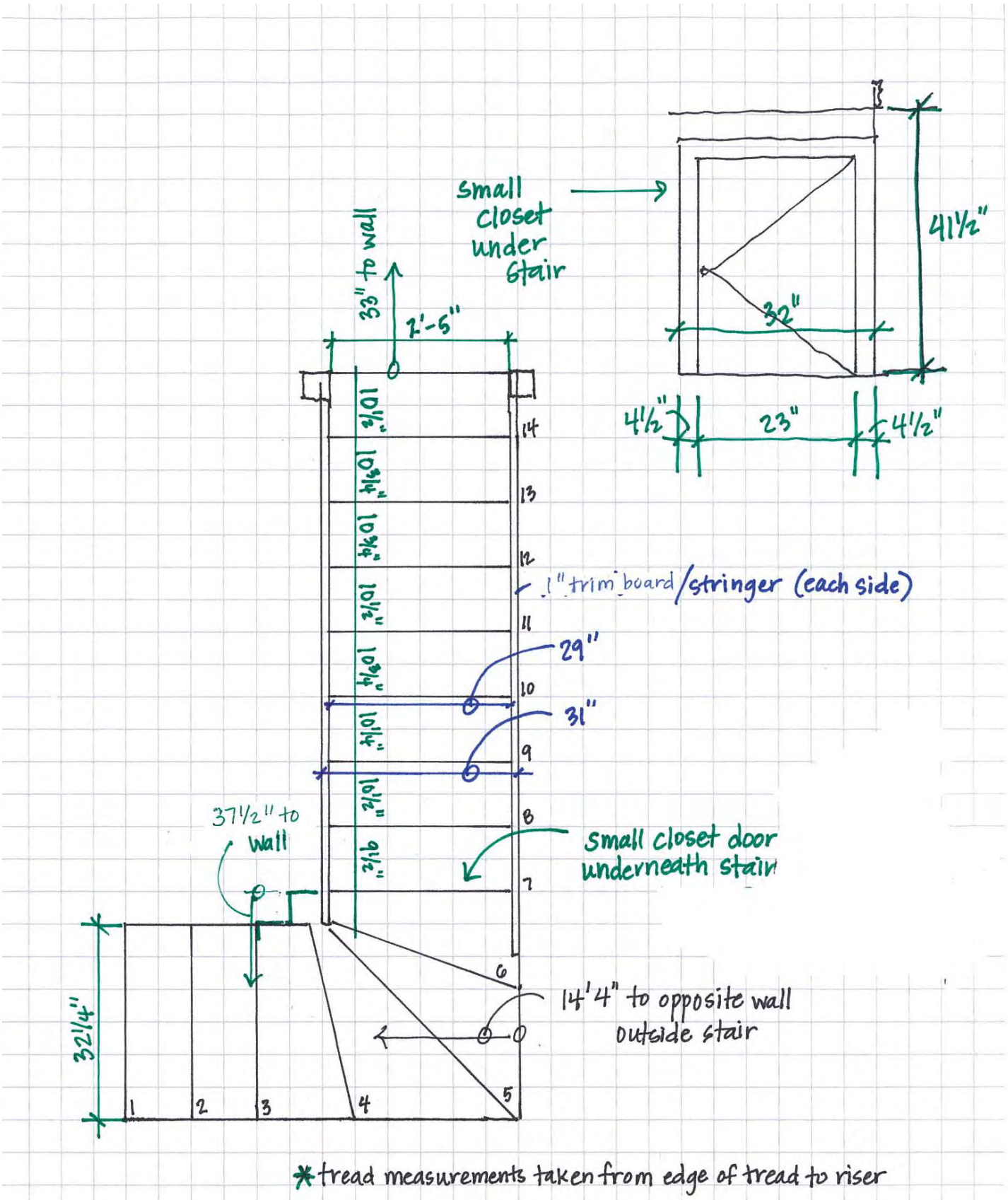
HARMONY HALL SURVEY
2012.01.18

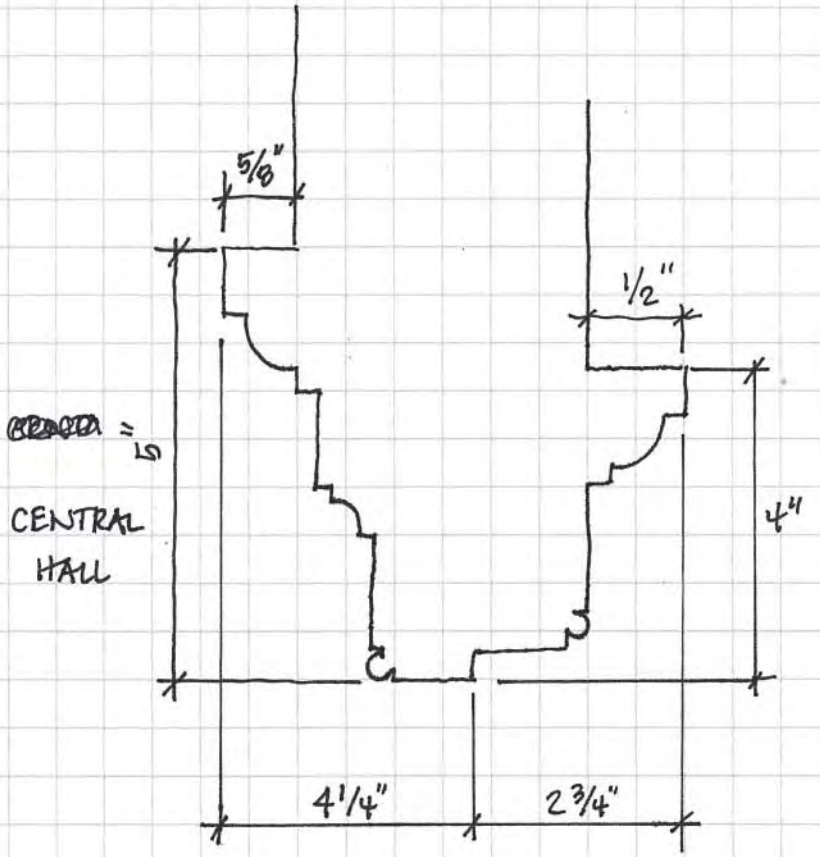

DN
3R
DN 11R
stairs
6 risers
89 1/4"
98 3/4"
DN
41 1/4"
clear
34 pickets
122" btw
posts
146 1/2" to wall
57 1/4"
162 3/8"
44"
CENTRAL
HALL
(201)
159"
43 1/2"
69 3/8"
59 1/4"
27 1/4"
39 5/8"
38 5/8"
33 5/8"
CENTRAL HALL 201
HARMONY HALL SURVEY
12.20.2011



CENTRAL HALL - STAIR TO ATTIC

HARMONY HALL SURVEY
12.20.2011


small closet under stair
41½"
32"
4½"
23"
4½"
33" to wall
2'-5"
3/16"
10¾"
14
13
12
1" trim board/stringer (each side)
11
29"
10
31"
9
8
37½" to wall
small closet door underneath stair
7
6
14'4" to opposite wall outside stair
32¼"
1
2
3
4
5
*tread measurements taken from edge of tread to riser

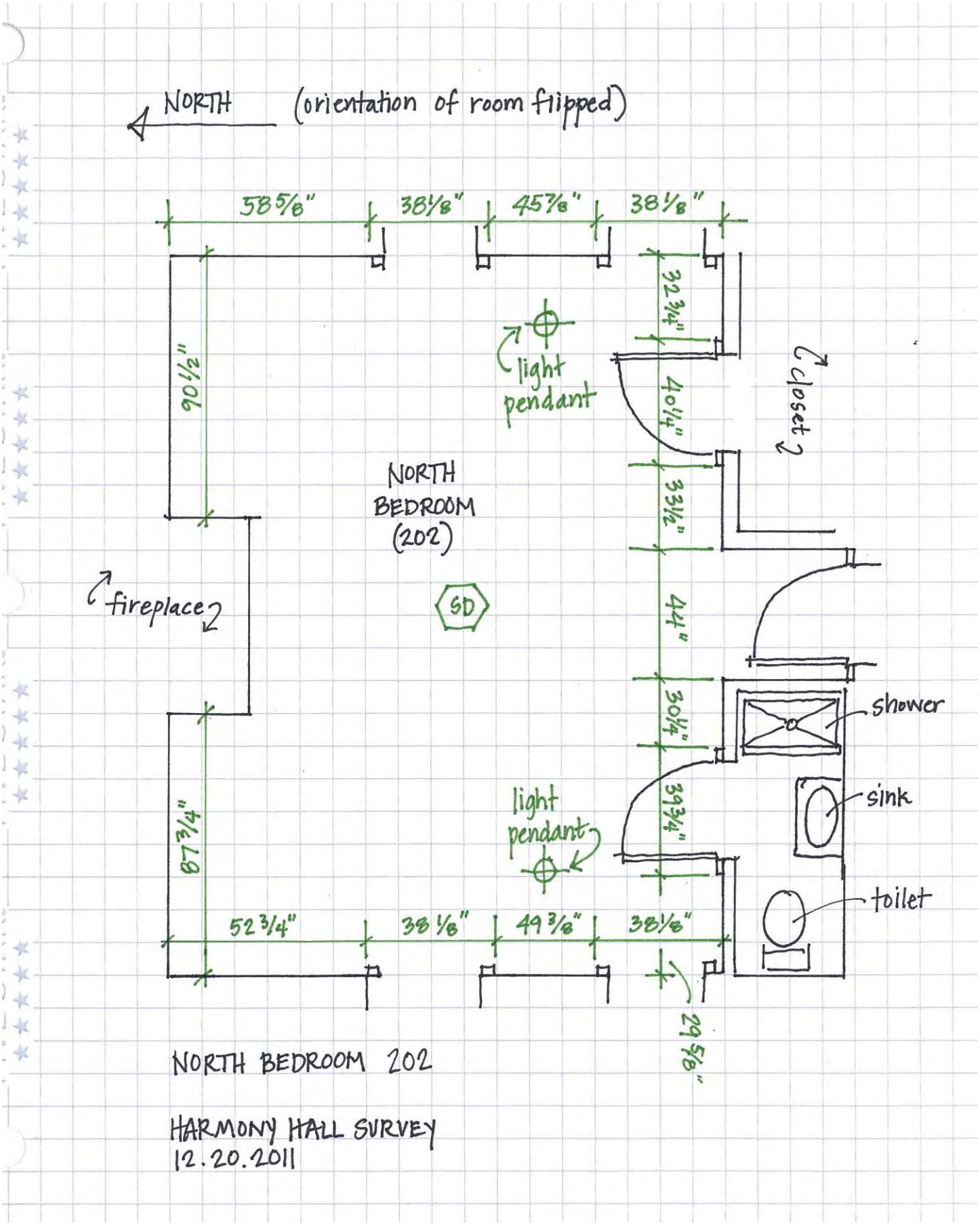


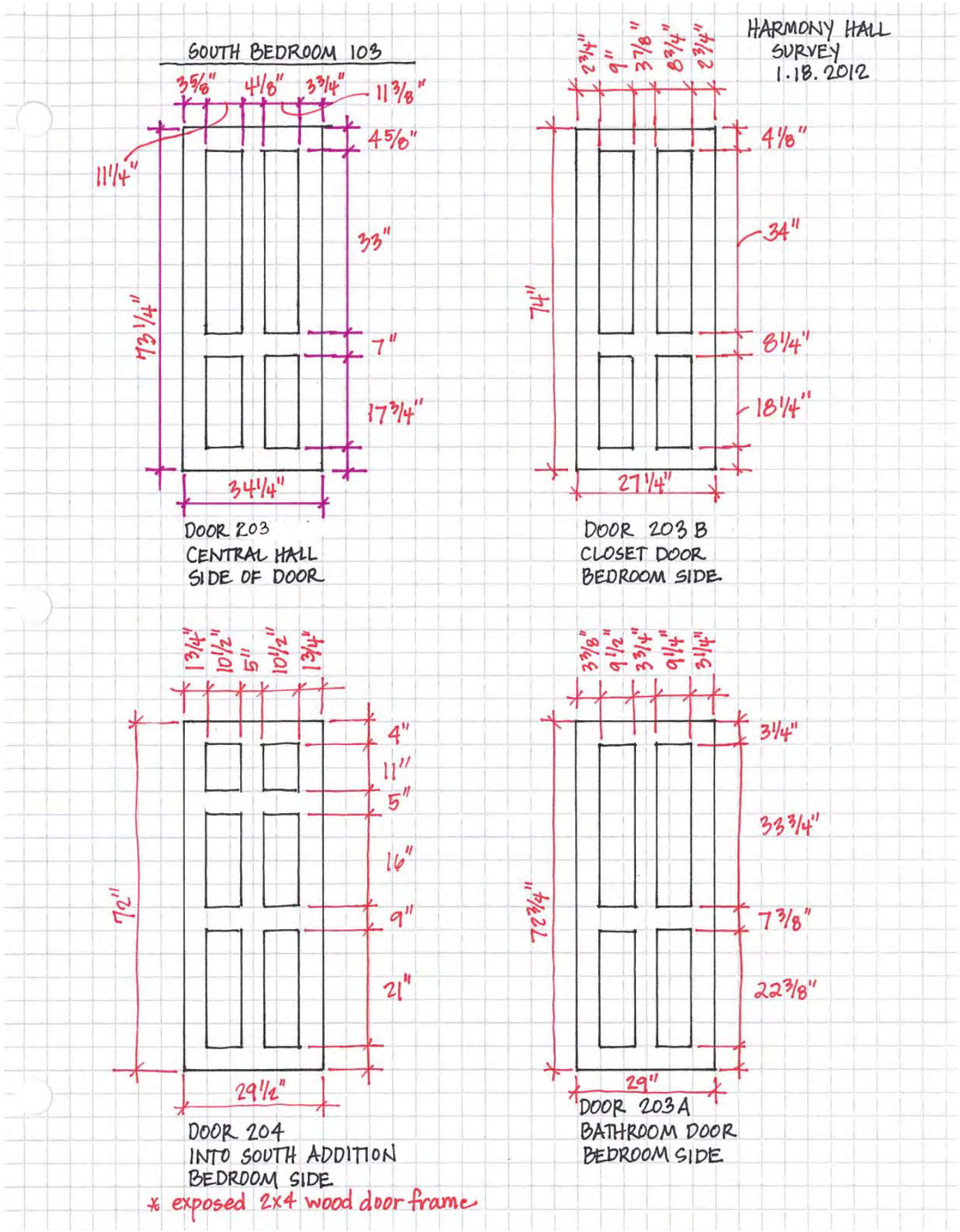
NORTH BEDROOM
OR
SOUTH
BEDROOM

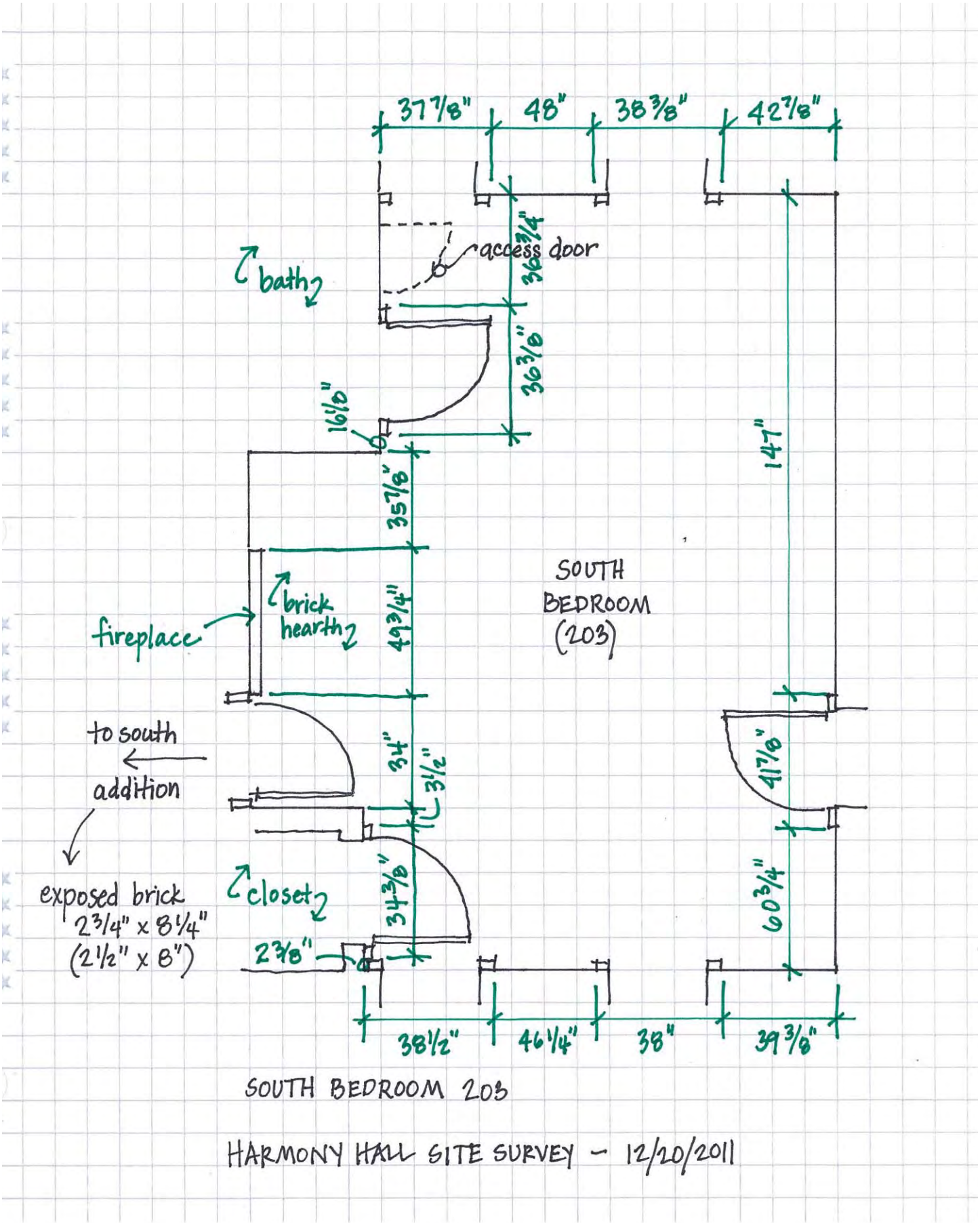
CENTRAL
HALL

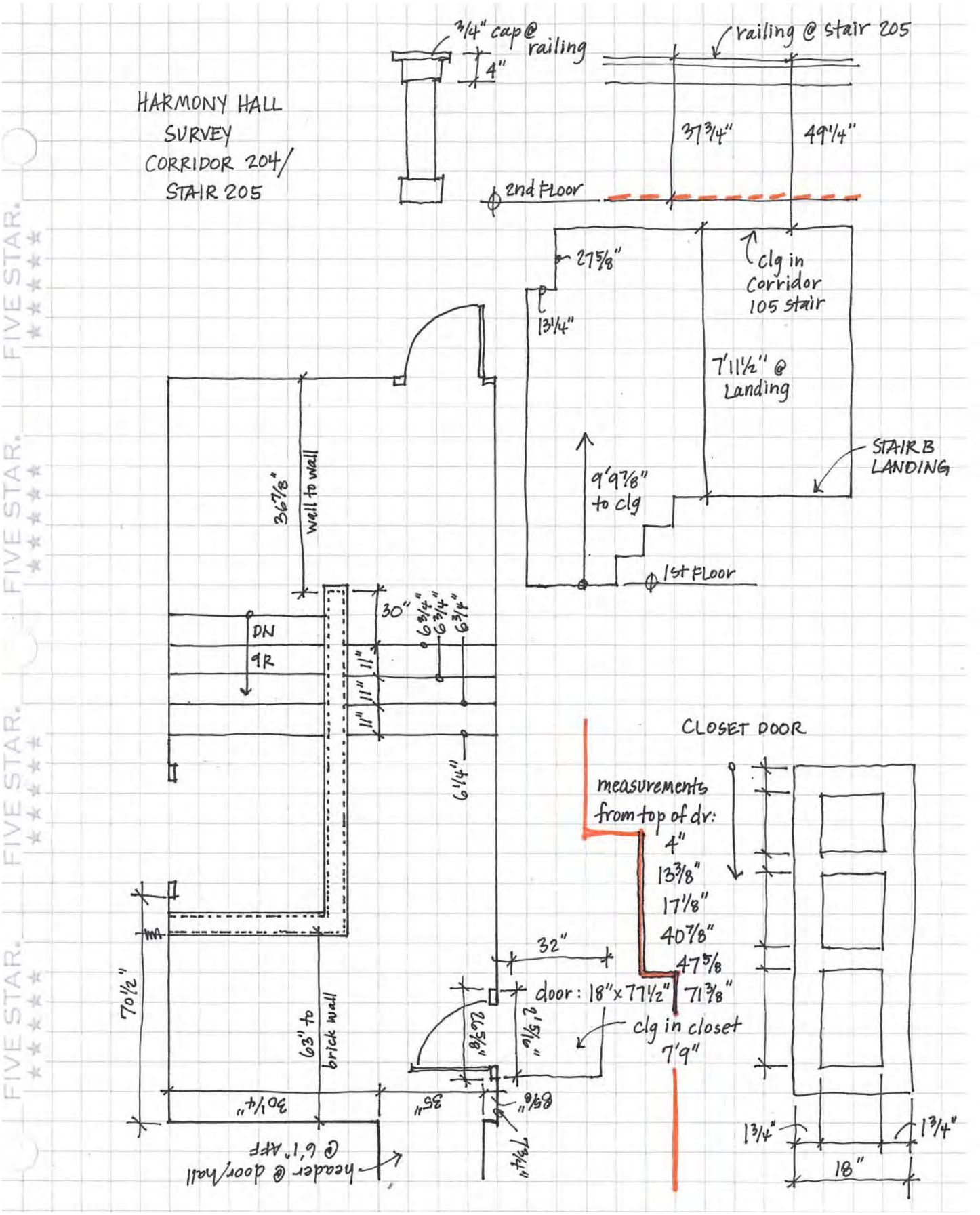
SECOND FLOOR DOOR TRIM

HARMONY HALL SURVEY

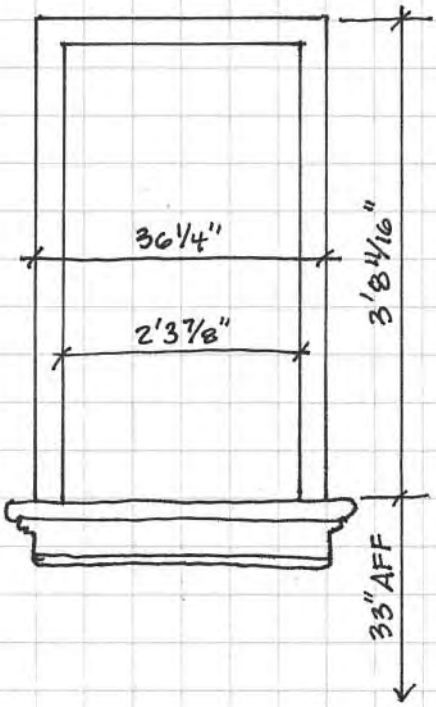

NORTH (orientation of room flipped)
58 5/8"
38 1/8"
45 7/8"
38 1/8"
32 3/4"
40 1/4"
33 1/2"
44"
30 1/4"
39 3/4"
29 5/8"
90 1/2"
87 3/4"
52 3/4"
38 1/8"
49 3/8"
38 1/8"
light pendant
light pendant
closet
NORTH BEDROOM (202)
SD
fireplace
shower
sink
toilet
NORTH BEDROOM 202
HARMONY HALL SURVEY
12.20.2011


SOUTH BEDROOM 103
3 5/8"
4 1/8"
3 3/4"
11 3/8"
11 1/4"
4 5/8"
33"
73 1/4"
7"
17 3/4"
34 1/4"
DOOR 203
CENTRAL HALL
SIDE OF DOOR
HARMONY HALL
SURVEY
1.18.2012
2 3/4"
9"
3 7/8"
8 3/4"
2 3/4"
4 1/8"
34"
74"
8 1/4"
18 1/4"
27 1/4"
DOOR 203 B
CLOSET DOOR
BEDROOM SIDE
1 3/4"
10 1/2"
5"
10 1/2"
1 3/4"
4"
11"
5"
16"
70"
9"
21"
29 1/2"
DOOR 204
INTO SOUTH ADDITION
BEDROOM SIDE
* exposed 2x4 wood door frame
3 3/8"
9 1/2"
3 3/4"
9 1/4"
3 1/4"
3 1/4"
33 3/4"
72 1/4"
7 3/8"
22 3/8"
29"
DOOR 203A
BATHROOM DOOR
BEDROOM SIDE

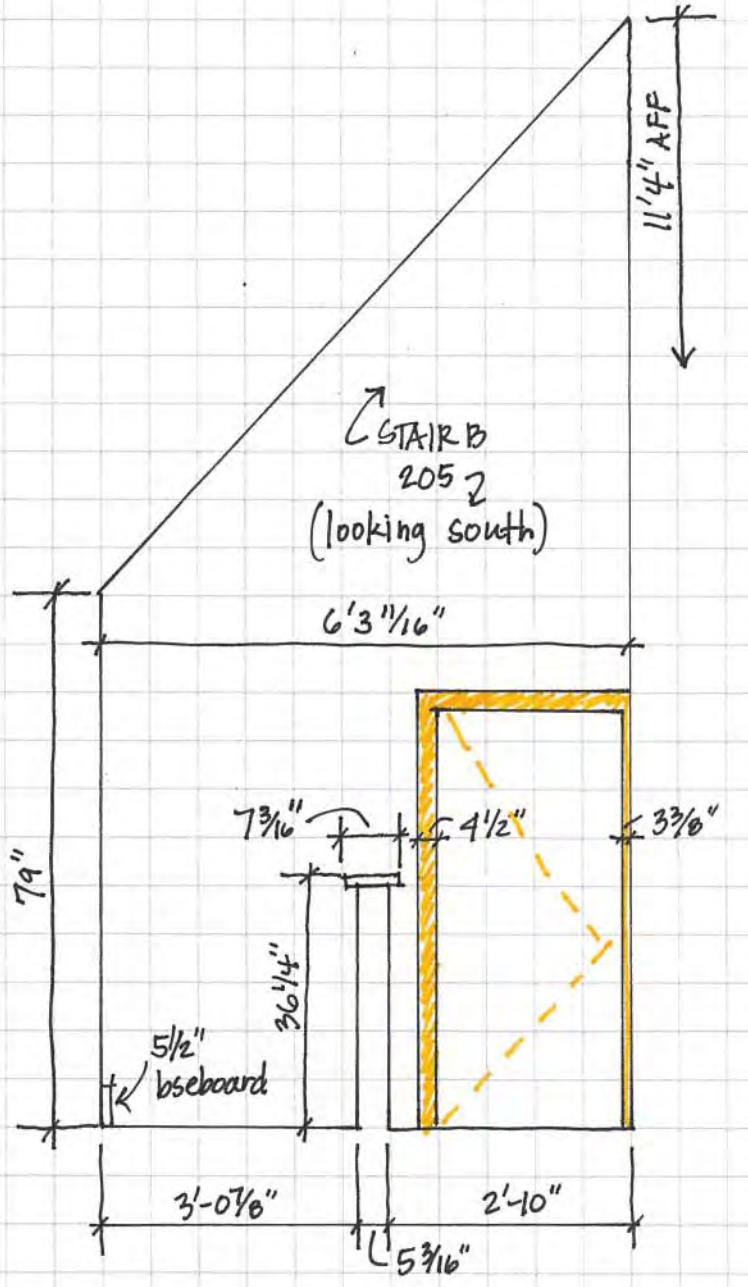

37 7/8"
48"
38 3/8"
42 7/8"
access door
bath
36 3/4"
36 3/8"
16 1/2"
35 7/8"
49 3/4"
brick hearth
fireplace
SOUTH BEDROOM (203)
147"
to south
addition
34"
3 1/2"
34 3/8"
closet
2 3/8"
exposed brick
2 3/4" x 8 1/4"
(2 1/2" x 8")
41 7/8"
60 3/4"
38 1/2"
46 1/4"
38"
39 3/8"
SOUTH BEDROOM 203
HARMONY HALL SITE SURVEY - 12/20/2011

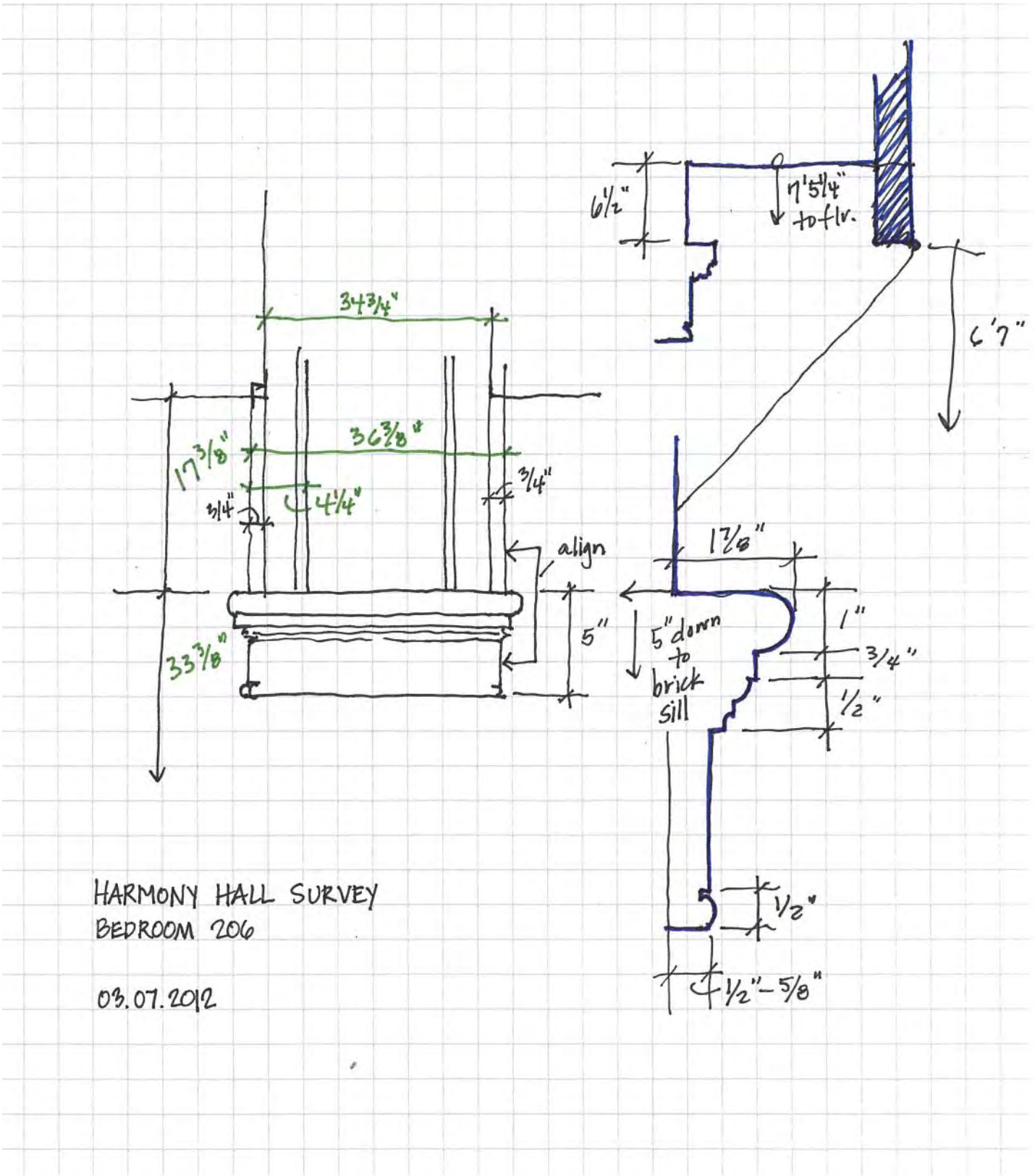

HARMONY HALL
SURVEY
CORRIDOR 204/
STAIR 205
3/4" cap @ railing
4"
railing @ stair 205
37 3/4"
49 1/4"
2nd FLOOR
27 5/8"
13 1/4"
clg in Corridor 105 stair
7'11 1/2" @ Landing
STAIR B LANDING
9'9 7/8" to clg
1st FLOOR
36 7/8"
wall to wall
30"
DN
9R
11"
11"
11"
6 1/4"
6 3/4"
6 3/4"
6 3/4"
CLOSET DOOR
measurements from top of dr:
4"
13 3/8"
17 1/8"
40 7/8"
47 5/8
71 3/8"
clg in closet 7'9"
door: 18" x 77 1/2"
32"
70 1/2"
63" to brick wall
30 1/4"
26 5/8"
21 5/16"
85"
8 5/8"
7 3/4"
header @ door/wall @ 6'1" AFF
13/4"
13/4"
18"

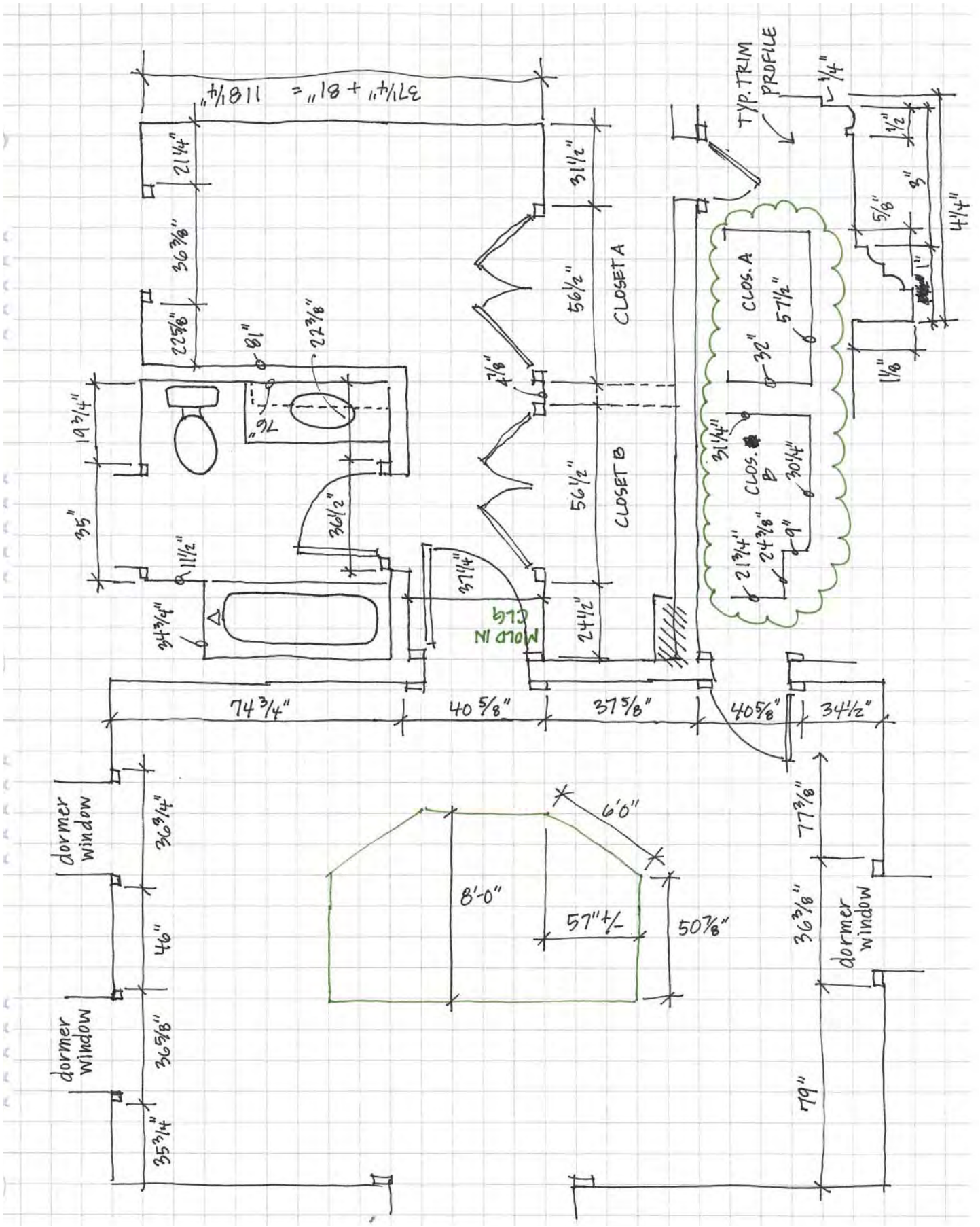
CENTRAL SOUTH ADDITION
OFFICE/STUDY WINDOW
INTERIOR ELEVATION

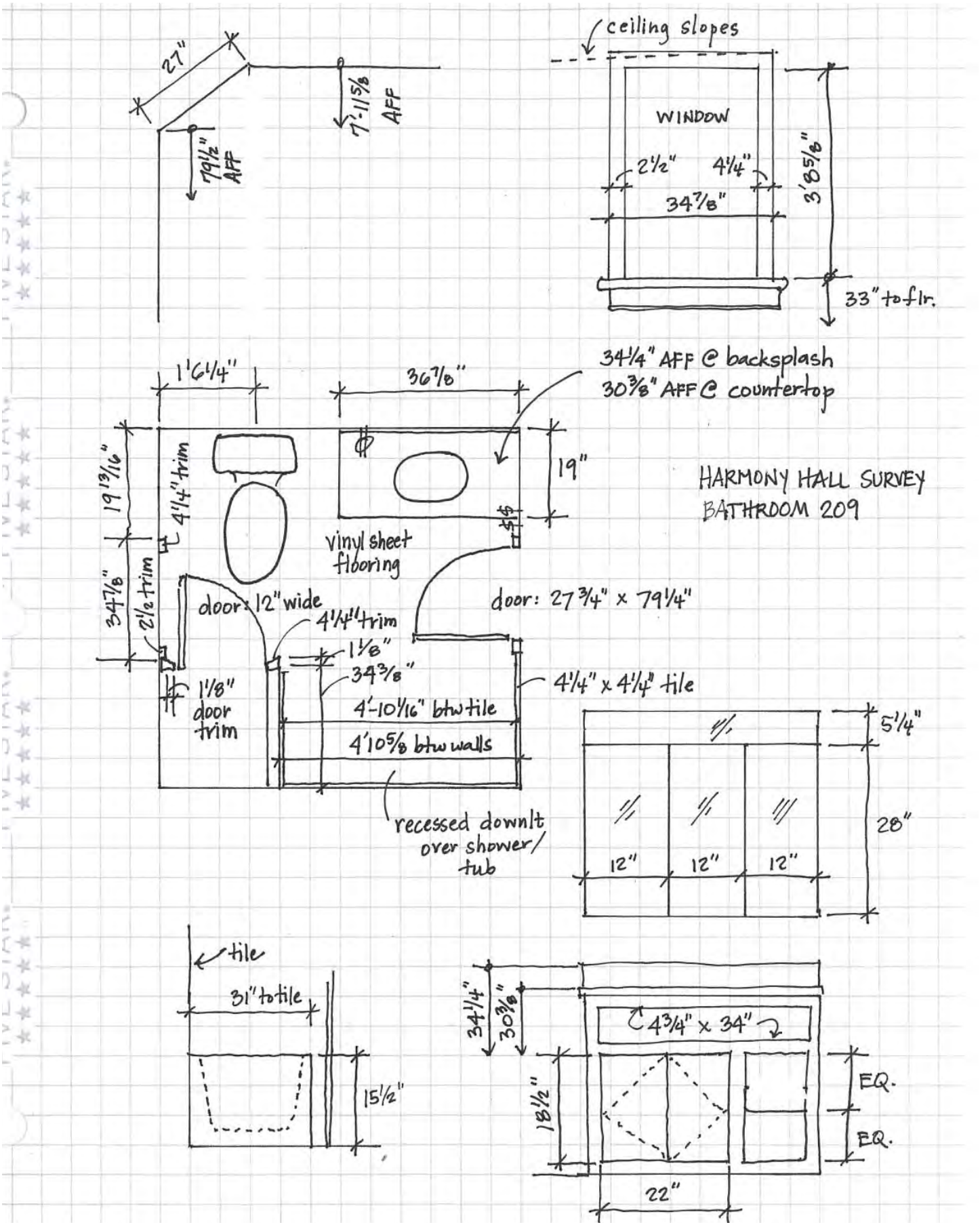


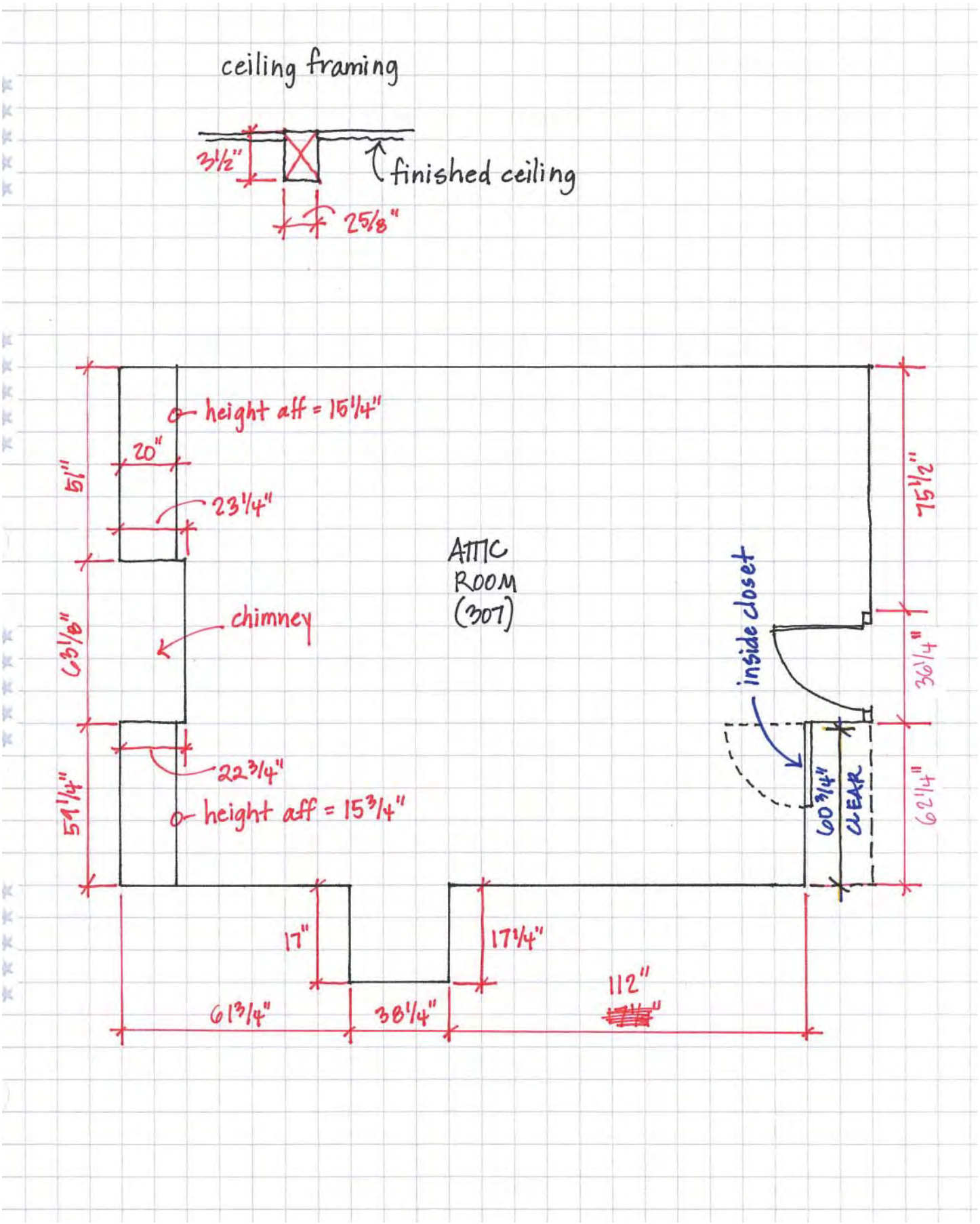
SOUTH ADDITION BEDROOM 206
- WINDOW SILLS @ 33 1/2" AFF
- CENTER CLG HEIGHT @ 7'-11 5/16" AFF

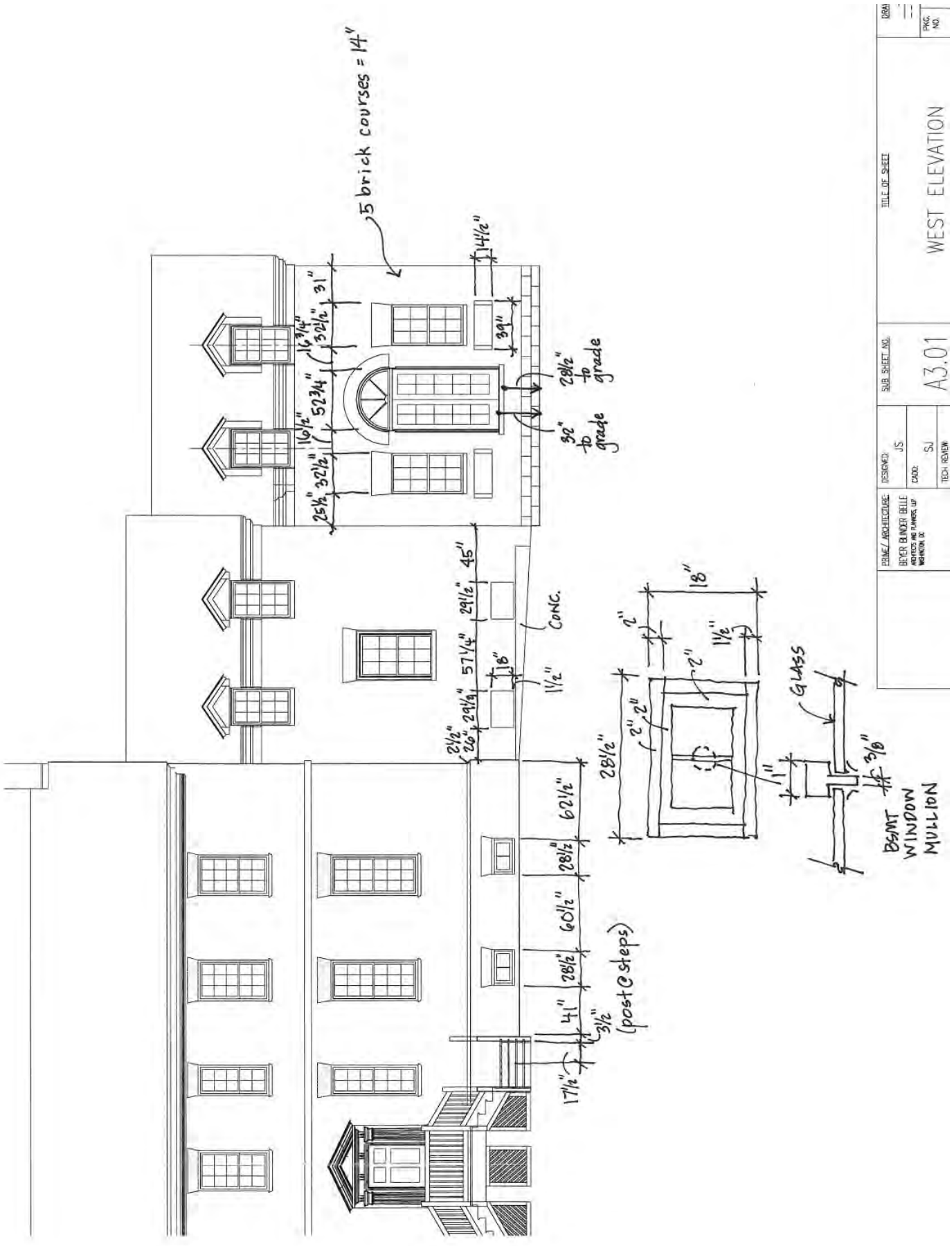


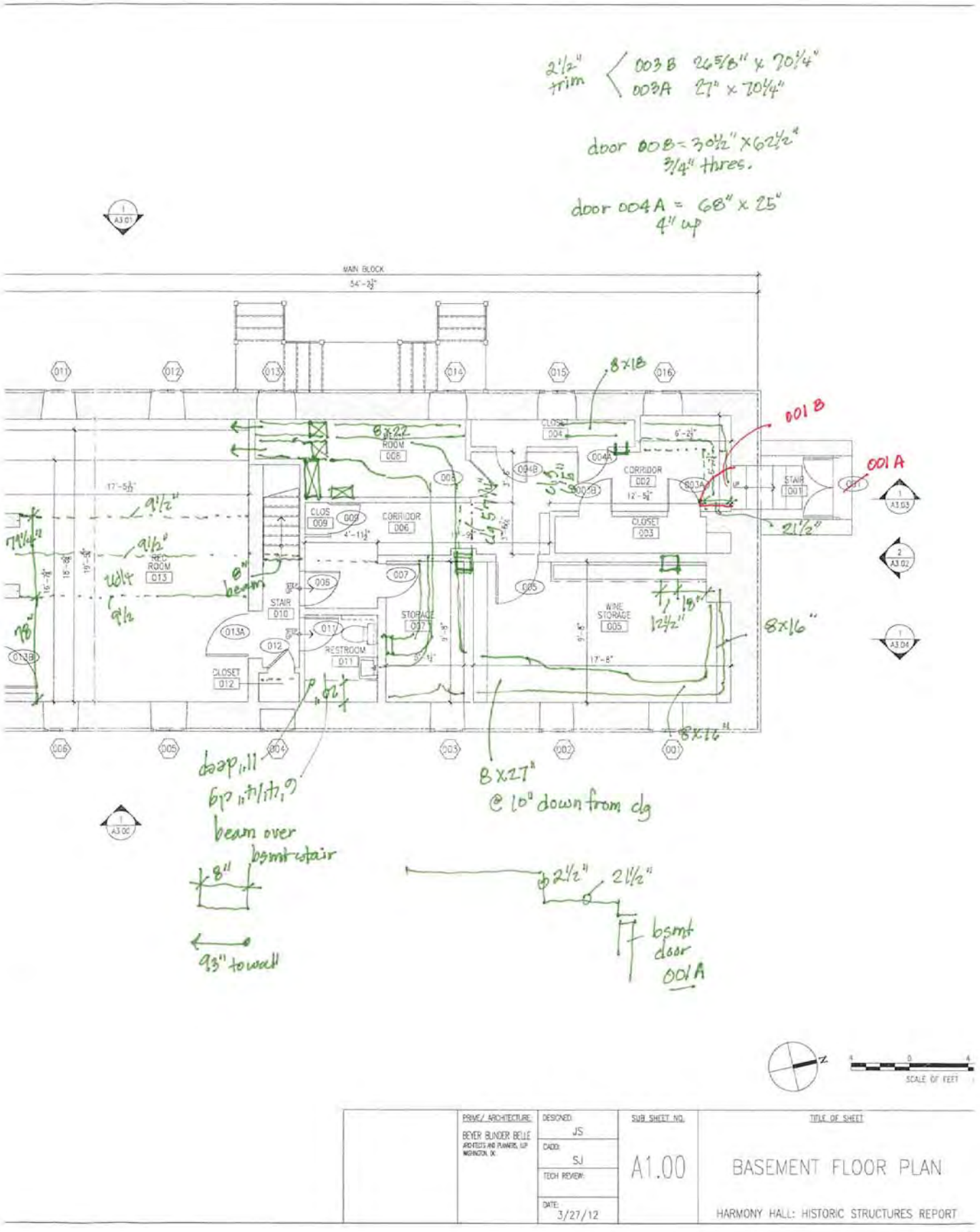

6½"
7'5¼" to flr.
6'7"
34¾"
17⅜"
36⅜"
¾"
¾"
4¼"
align
5"
33⅜"
17⅞"
1"
5" down to brick sill
¾"
½"
½"
½"–⅝"
HARMONY HALL SURVEY
BEDROOM 206
03.07.2012

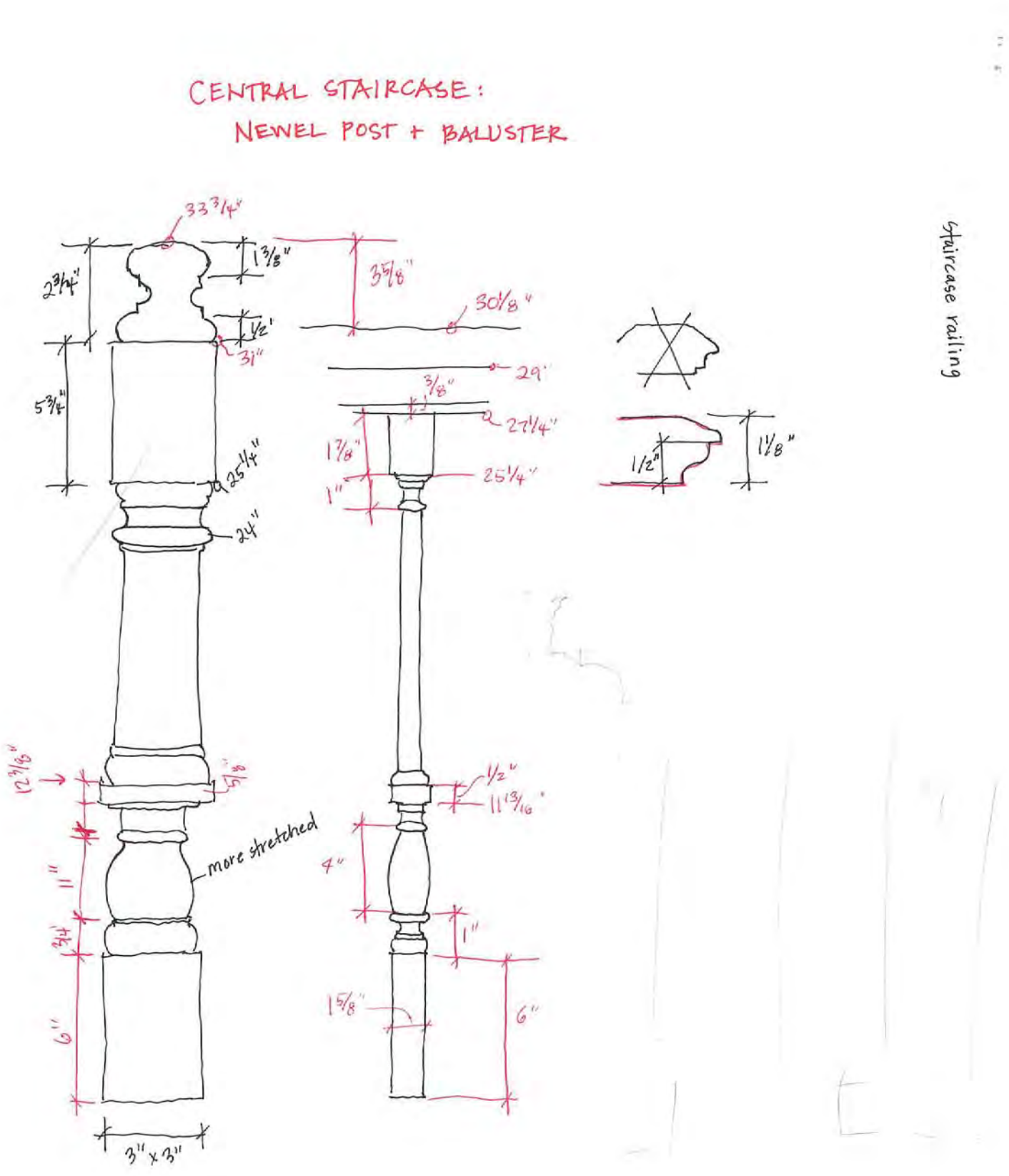

TYP. TRIM PROFILE
CLOSET A
CLOSET B
CLOS. A
CLOS. B
MOLD IN CLG
dormer window
dormer window
6'0"
8'-0"
57"+/-
74 3/4"
40 5/8"
37 5/8"
40 5/8"
34 1/2"

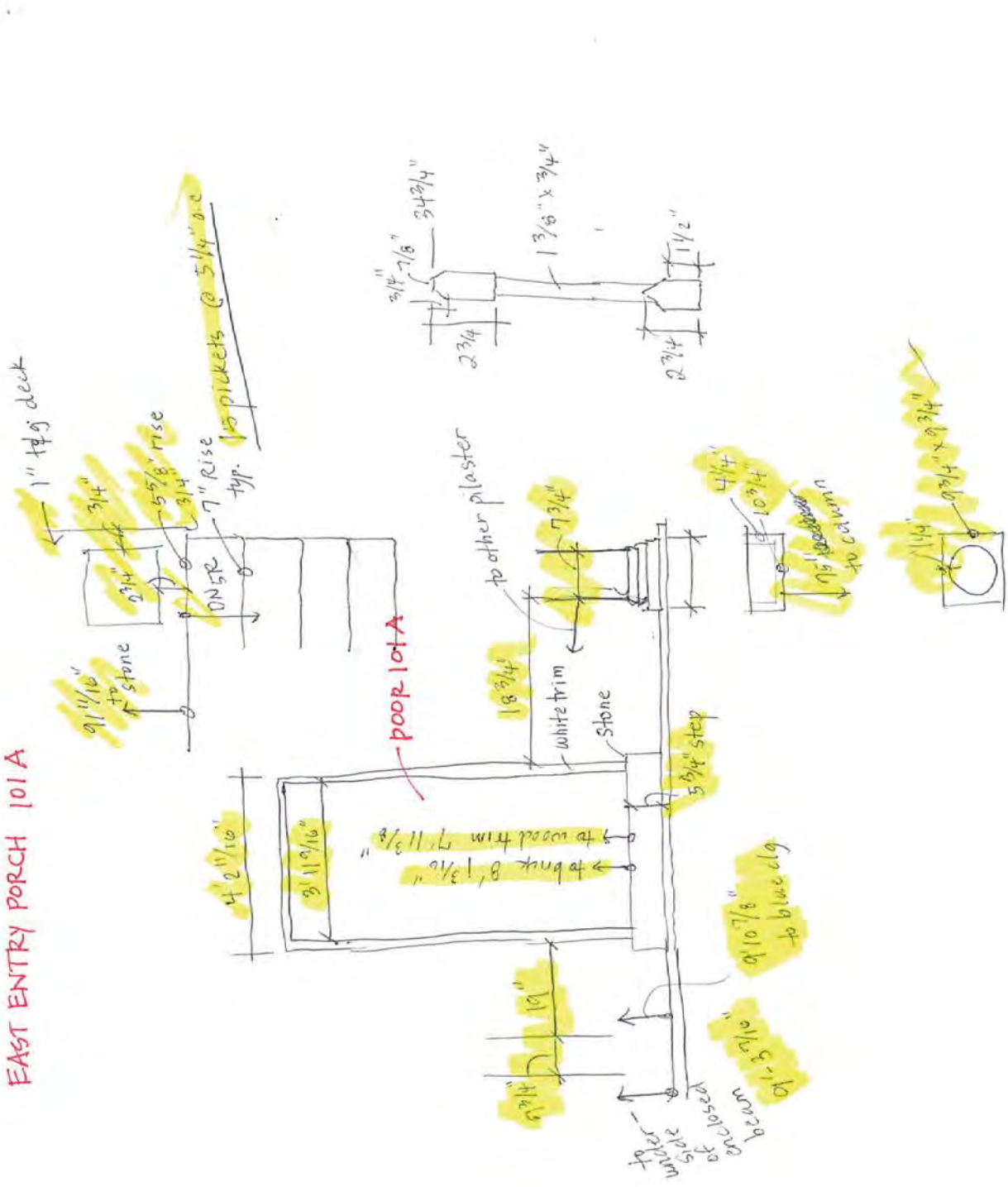

27"
7'-11 5/8" AFF
79 1/2" AFF
ceiling slopes
WINDOW
2 1/2"
4 1/4"
34 7/8"
3'85/8"
33" to flr.
1'6 1/4"
36 7/8"
34 1/4" AFF @ backsplash
30 3/8" AFF @ countertop
19"
19 13/16"
4 1/4" trim
34 7/8"
2 1/2 trim
vinyl sheet flooring
HARMONY HALL SURVEY
BATHROOM 209
door: 12" wide
door: 27 3/4" x 79 1/4"
4 1/4" trim
1 1/8"
34 3/8"
4'-10 1/16" btw tile
4'10 5/8 btw walls
1 1/8" door trim
4 1/4" x 4 1/4" tile
recessed downlt over shower/ tub
5 1/4"
28"
12"
12"
12"
tile
31" to tile
15 1/2"
34 1/4"
30 3/8"
4 3/4" x 34"
18 1/2"
EQ.
EQ.
22"


ceiling framing
3½"
finished ceiling
2⅝"
height aff = 15¼"
20"
51"
23¼"
ATTIC
ROOM
(307)
chimney
63⅛"
75½"
inside closet
36¼"
22¾"
54¼"
height aff = 15¾"
60¾"
CLEAR
62¼"
17"
17¼"
112"
61¾"
38¼"

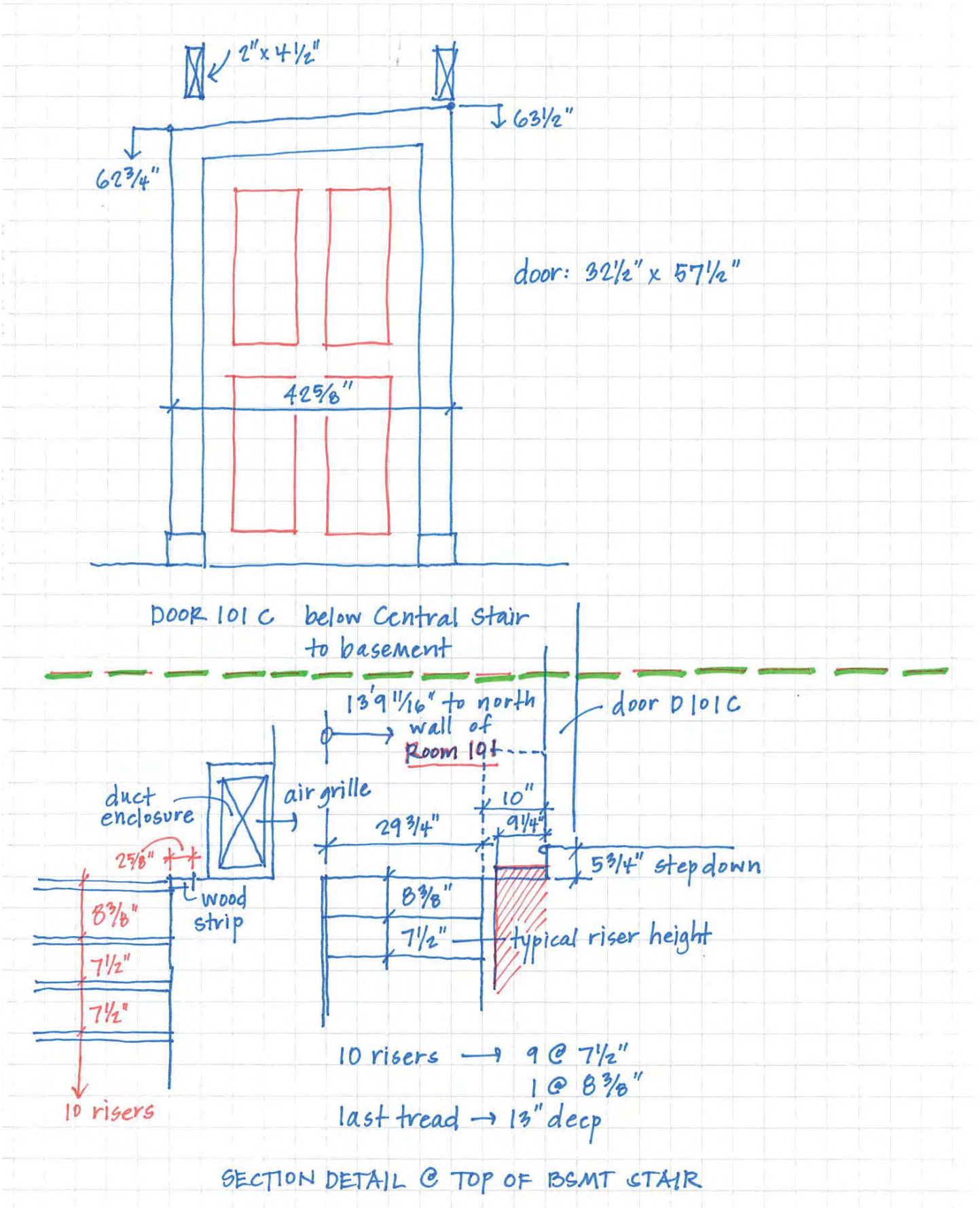

5 brick courses = 14"
14½"
39"
28½" to grade
32" to grade
16¾"
32½"
31"
16½"
52¾"
25½"
32½"
45"
29½"
57¼"
18"
1½"
CONC.
21½"
26"
29½"
62½"
28½"
60½"
28½"
41"
3½"
17½"
(post @ steps)
18"
2"
1½"
2"
2"
2"
28½"
GLASS
1"
3/8"
BSMT WINDOW MULLION
PRIME/ ARCHITECTURE:
BEYER BLINDER BELLE
DESIGNED:
JS
CADD:
SJ
TECH REVIEW
SUB SHEET NO.
A3.01
TITLE OF SHEET
WEST ELEVATION
DRAWING NO.
PKG. NO.

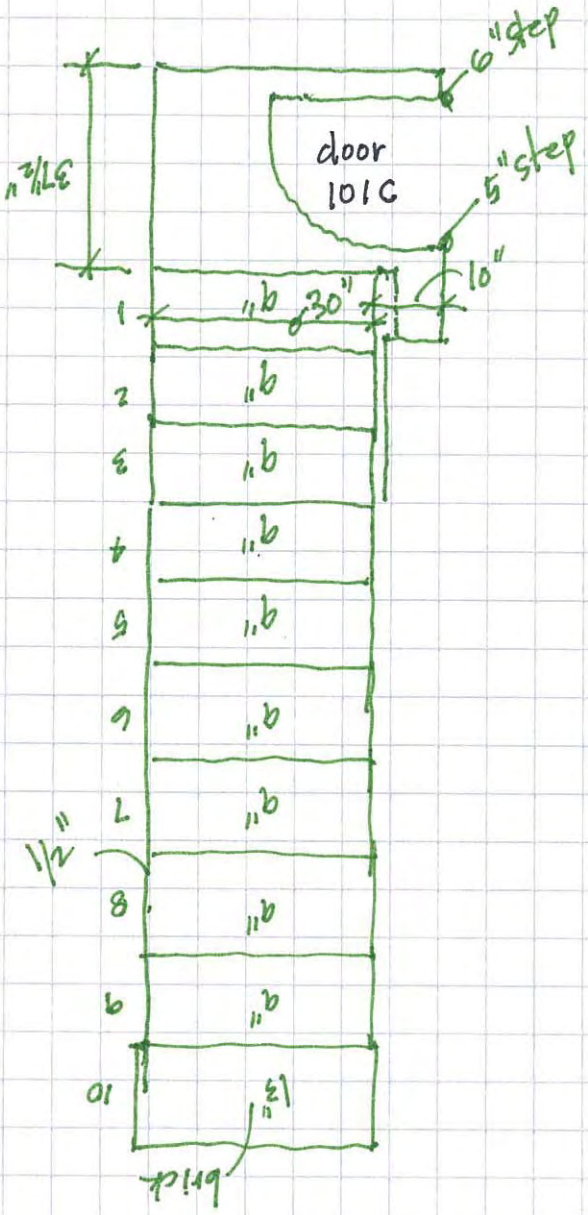

2½" trim
003B 26⅝" x 70¼"
003A 27" x 70¼"
door 003B = 30½" x 62½"
3/4" thres.
door 004A = 68" x 25"
4" up
MAIN BLOCK
54'-2½"
8x18
001B
001A
8x22
CLOSET 004
CORRIDOR 002
CLOSET 003
STAIR 001
CLOS 009
CORRIDOR 006
ROOM 013
STAIR 010
STORAGE 007
RESTROOM 011
CLOSET 012
WINE STORAGE 005
8" beam
8x16"
8x16"
8x22" @ 10" down from clg
deep 11.11 6p 11.11/11.9 beam over bsmt stair
8"
93" to wall
2½"
21½"
bsmt door 001A
SCALE OF FEET
PRIME/ ARCHITECTURE
BEYER BLINDER BELLE ARCHITECTS AND PLANNERS, LLP WASHINGTON, DC
DESIGNED: JS
DRAWN: SJ
TECH REVIEW:
DATE: 3/27/12
SUB SHEET NO. A1.00
TITLE OF SHEET
BASEMENT FLOOR PLAN
HARMONY HALL: HISTORIC STRUCTURES REPORT


CENTRAL STAIRCASE:
NEWEL POST + BALUSTER
staircase railing
33 3/4"
2 3/4"
1 3/8"
1/2"
31"
5 3/4"
25 1/4"
24"
12 3/16"
5 7/8"
more stretched
11"
3 1/4"
6"
3" x 3"
35 5/8"
30 1/8"
29"
3/8"
27 1/4"
1 7/8"
1"
25 1/4"
1/2"
11 13/16"
4"
1"
1 5/8"
6"
1/2"
1 1/8"

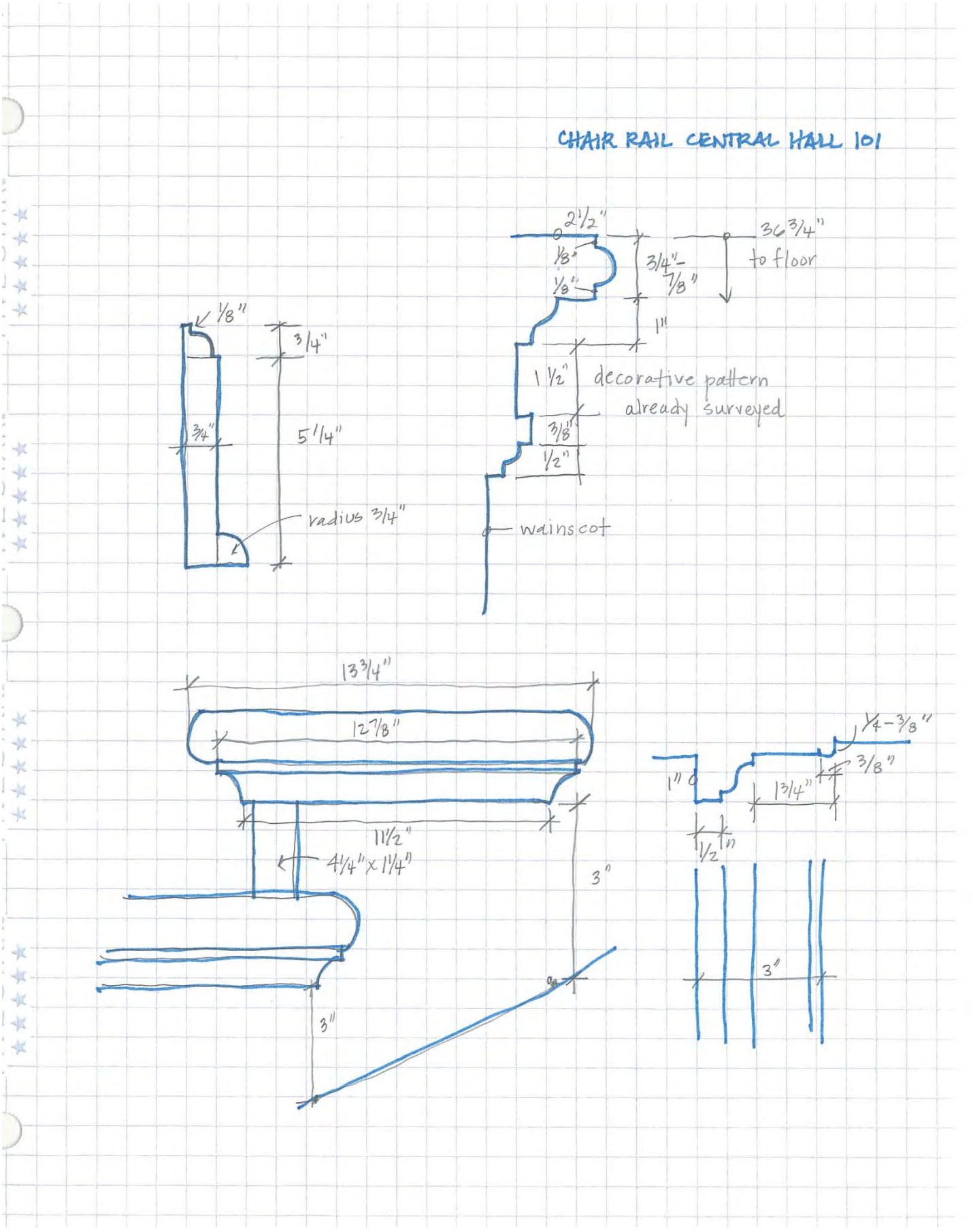

EAST ENTRY PORCH 101A
POOR 101A
1" tapj deck
3/4"
5 5/8" rise
7" Rise
ONTR
typ.
4 pickets @ 5 1/4" o.c
3/4"
stone
to
9 11/16"
to plaster
18 3/4"
white trim
Stone
5 3/4" step
to bmk 8' 1 3/16"
to wood trim 7' 11 3/8"
4' 2 11/16"
3' 11 9/16"
10"
9 1/4"
to
underside of
plaster
6' 10 7/8"
to plaster
6' 3 1/16"
beam
3/4"
2 3/4
3/4"
2 7/8"
3 3/4"
1 3/8" x 3/4"
2 3/4
1 1/2"
4 1/4"
10 3/4"
to
beam
1 1/16"
3 3/4" x 3 3/4"

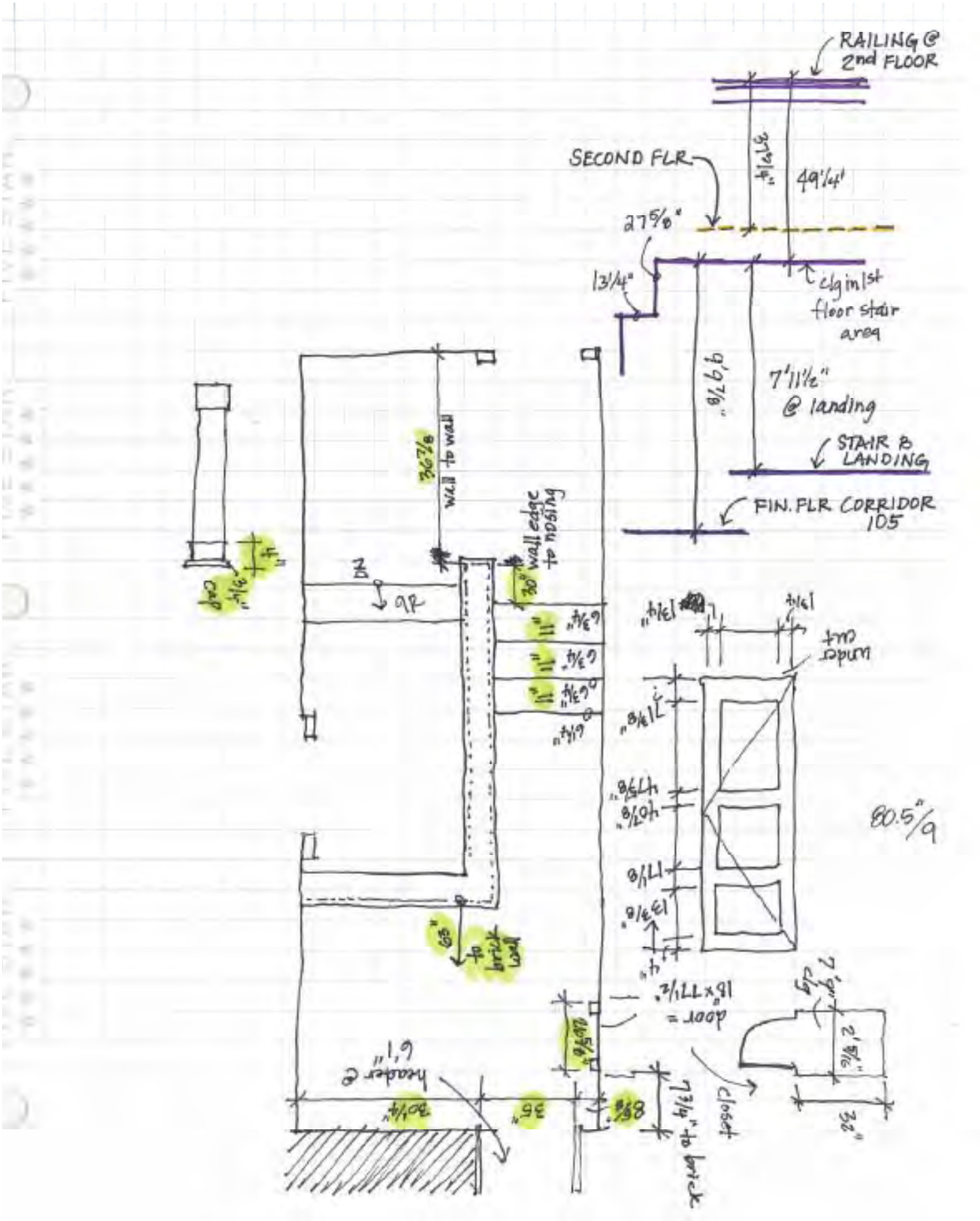

DOOR 101 B
Central Hall
Front door panel
Central Hall
Back Door Panel
Lock
1½" deep


2"x 4½"
63½"
62¾"
door: 32½" x 57½"
42⅝"
DOOR 101 C below Central Stair to basement
13'9 11/16" to north wall of Room 101
door D101C
duct enclosure
air grille
2⅝"
wood strip
29¾"
10"
9¼"
5¾" step down
8⅜"
7½"
typical riser height
8⅜"
7½"
7½"
10 risers
10 risers → 9 @ 7½"
1 @ 8⅜"
last tread → 13" deep
SECTION DETAIL @ TOP OF BSMT STAIR



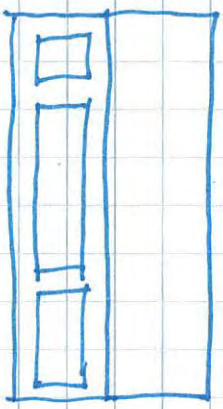
basement stairs


CHAIR RAIL CENTRAL HALL 101
2 1/2"
1/8"
1/8"
3/4" - 7/8"
1"
36 3/4" to floor
1 1/2"
decorative pattern already surveyed
3/8"
1/2"
wainscot
1/8"
3/4"
3/4"
5 1/4"
radius 3/4"
13 3/4"
12 7/8"
11/2"
4 1/4" x 1 1/4"
3"
3"
1/4 - 3/8"
3/8"
1"
1 3/4"
1/2"
3"

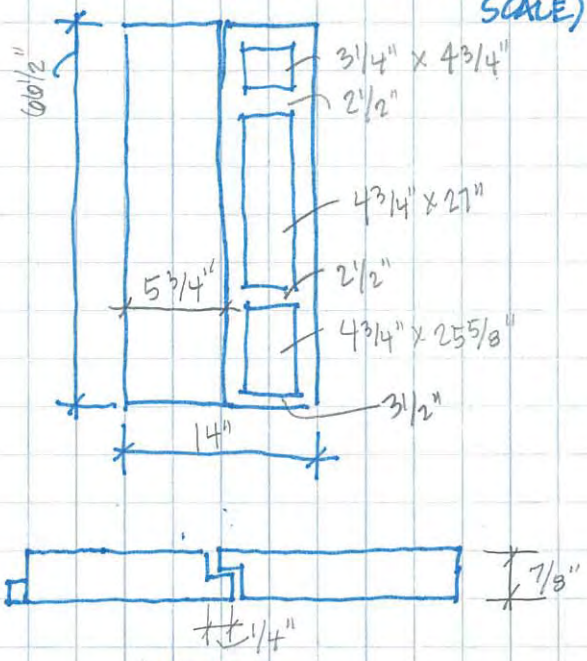

RAILING @ 2nd FLOOR
SECOND FLR
49'4"
27 5/8"
13/4"
clg in 1st floor stair area
7'11½" @ landing
STAIR & LANDING
FIN. FLR CORRIDOR 105
wall to wall
wall edge to nosing
cap
brick wall
header
door
closet
80.5"/9

DINING ROOM, WINDOW 105
SHUTTERS

INSIDE
SHUTTER, LEFT



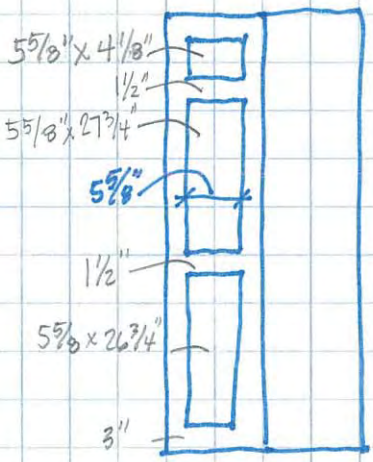
INSIDE
SHUTTER, RIGHT (NOT TO SCALE)

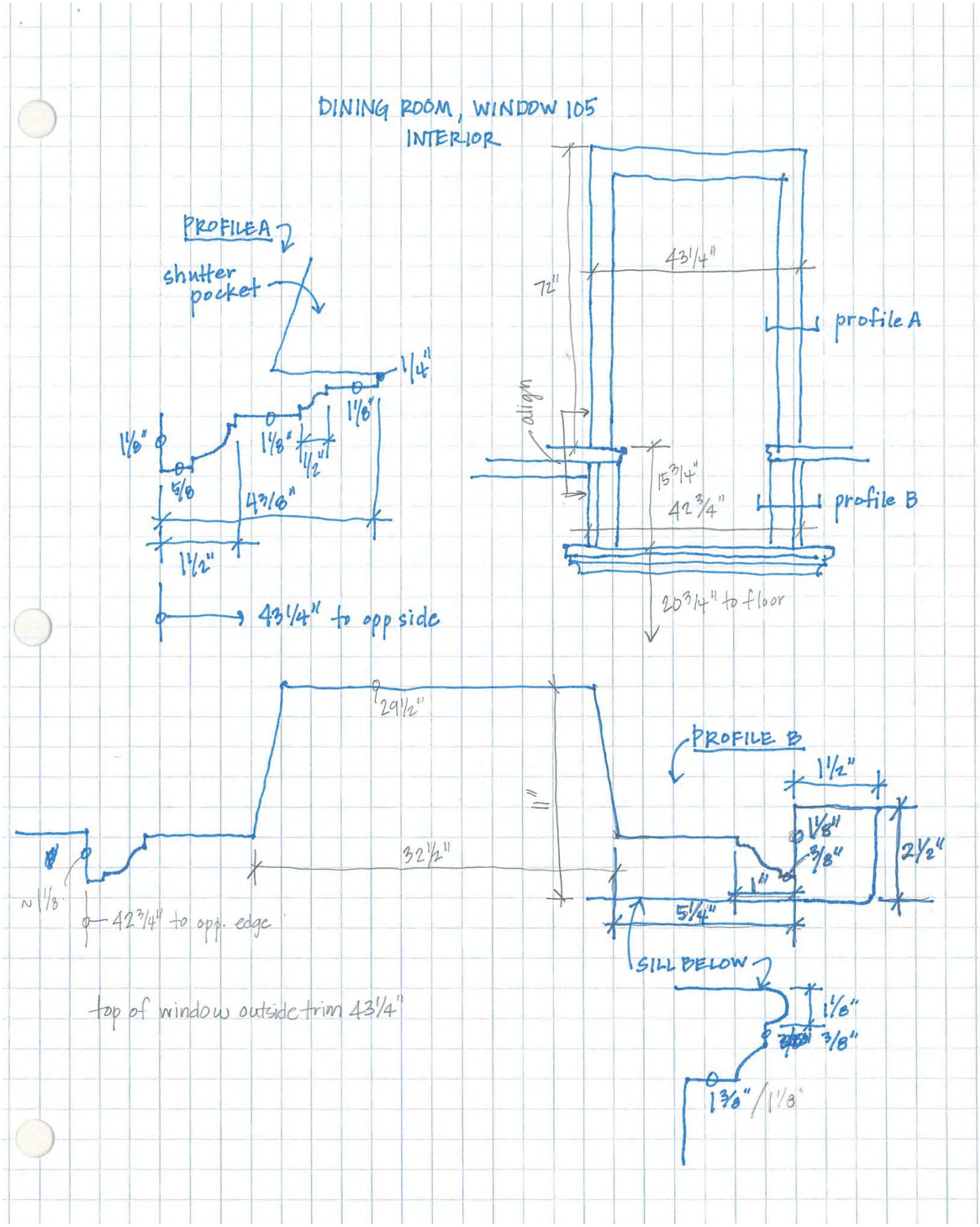


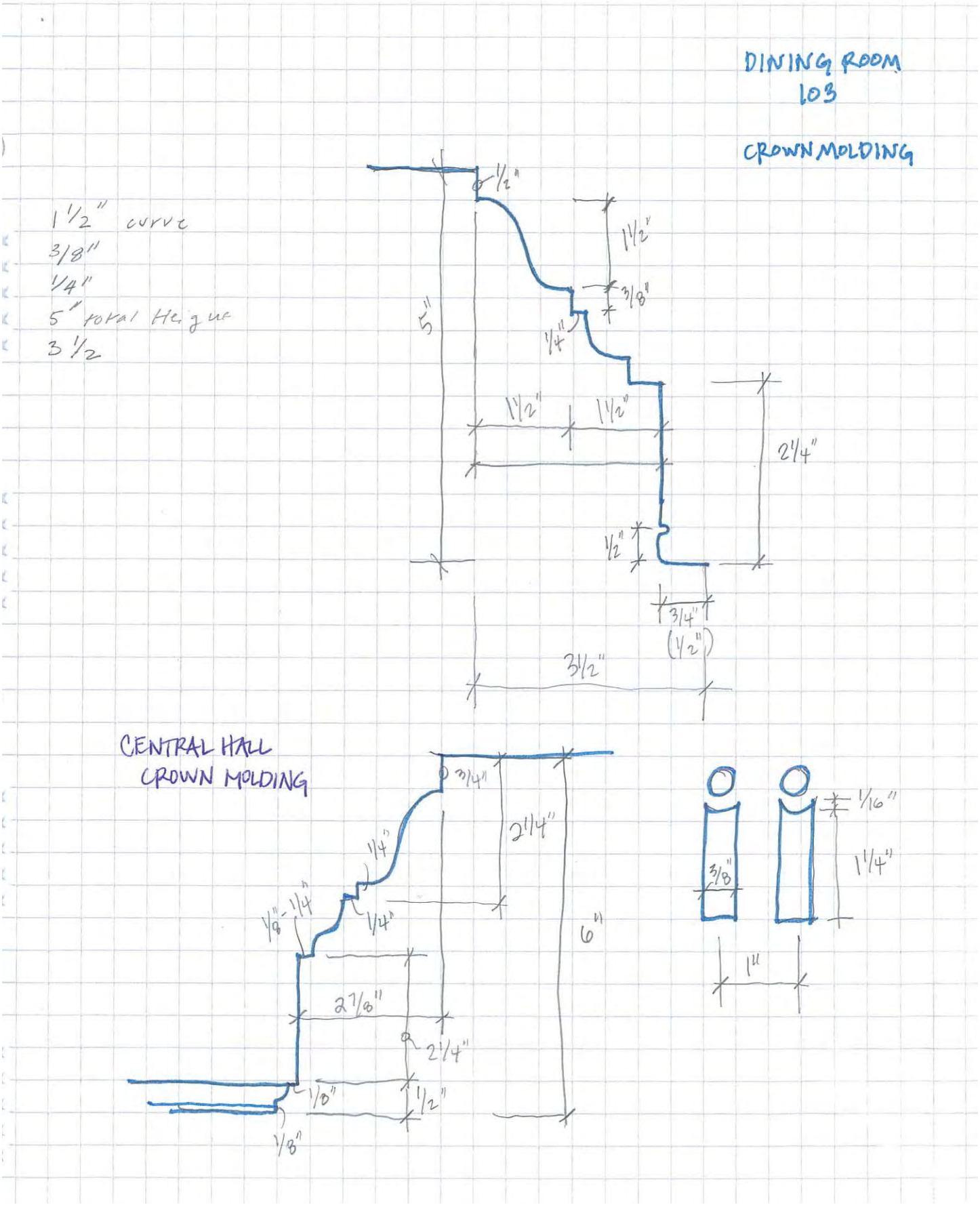
OUTSIDE

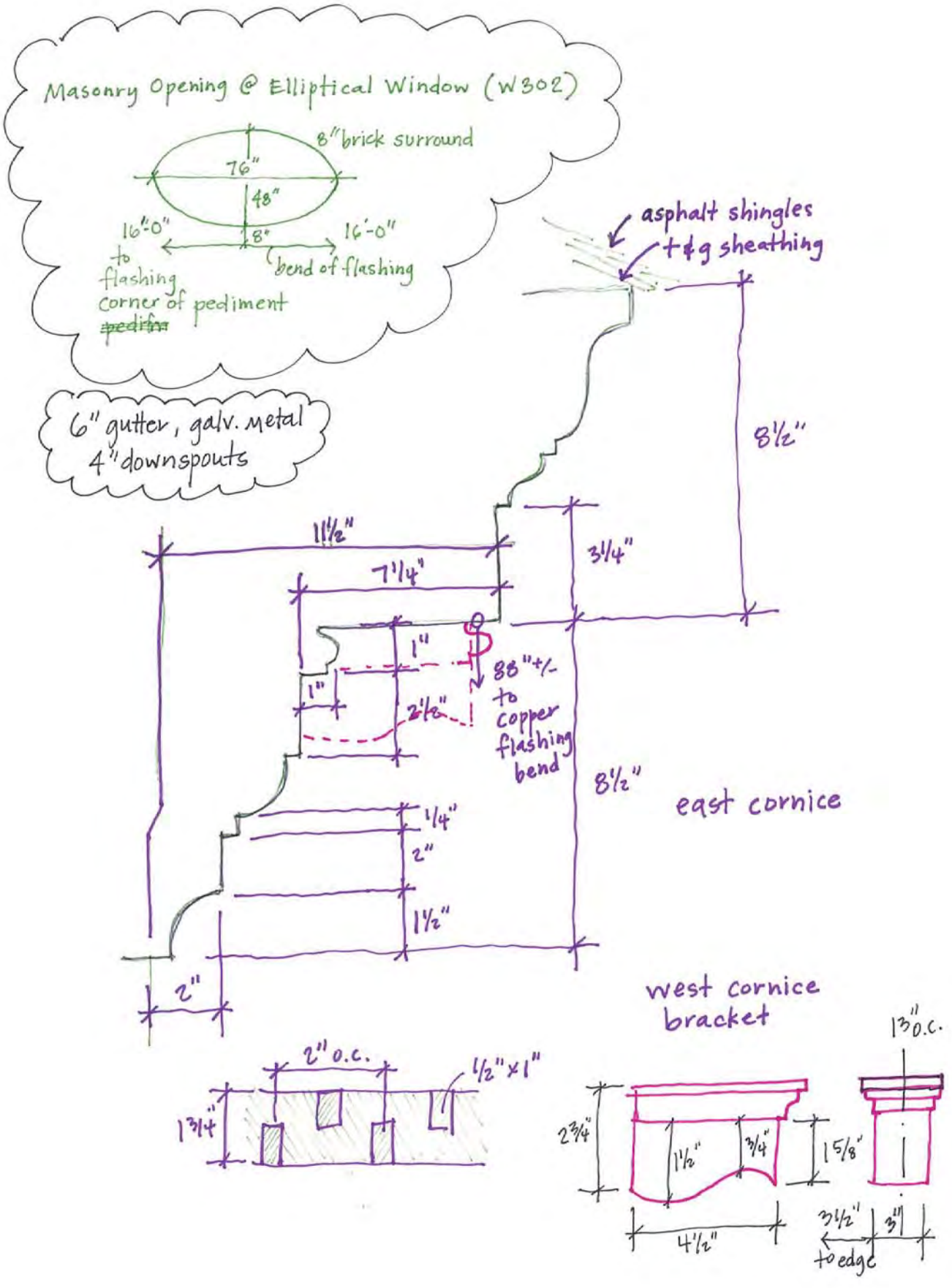


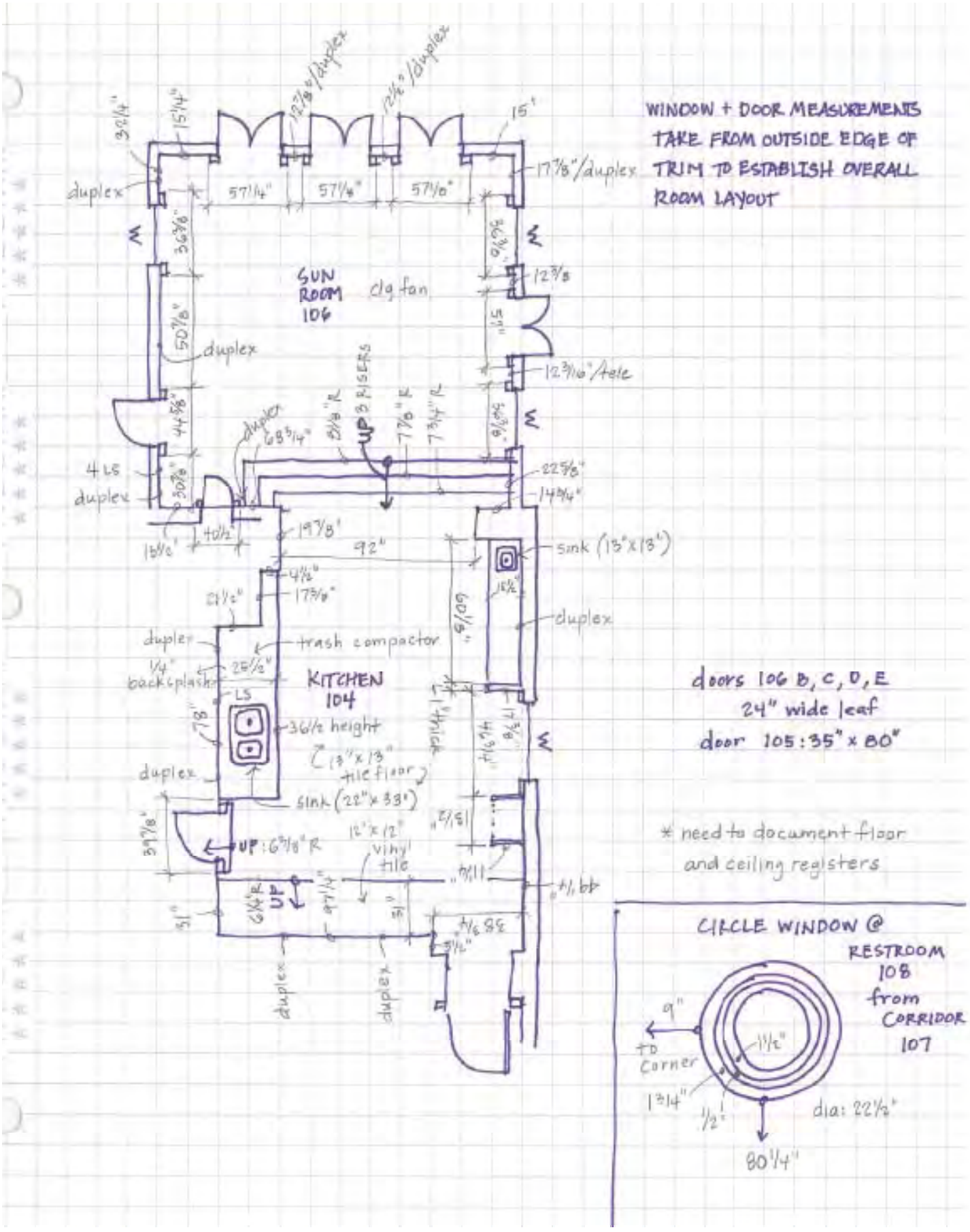
OUTSIDE

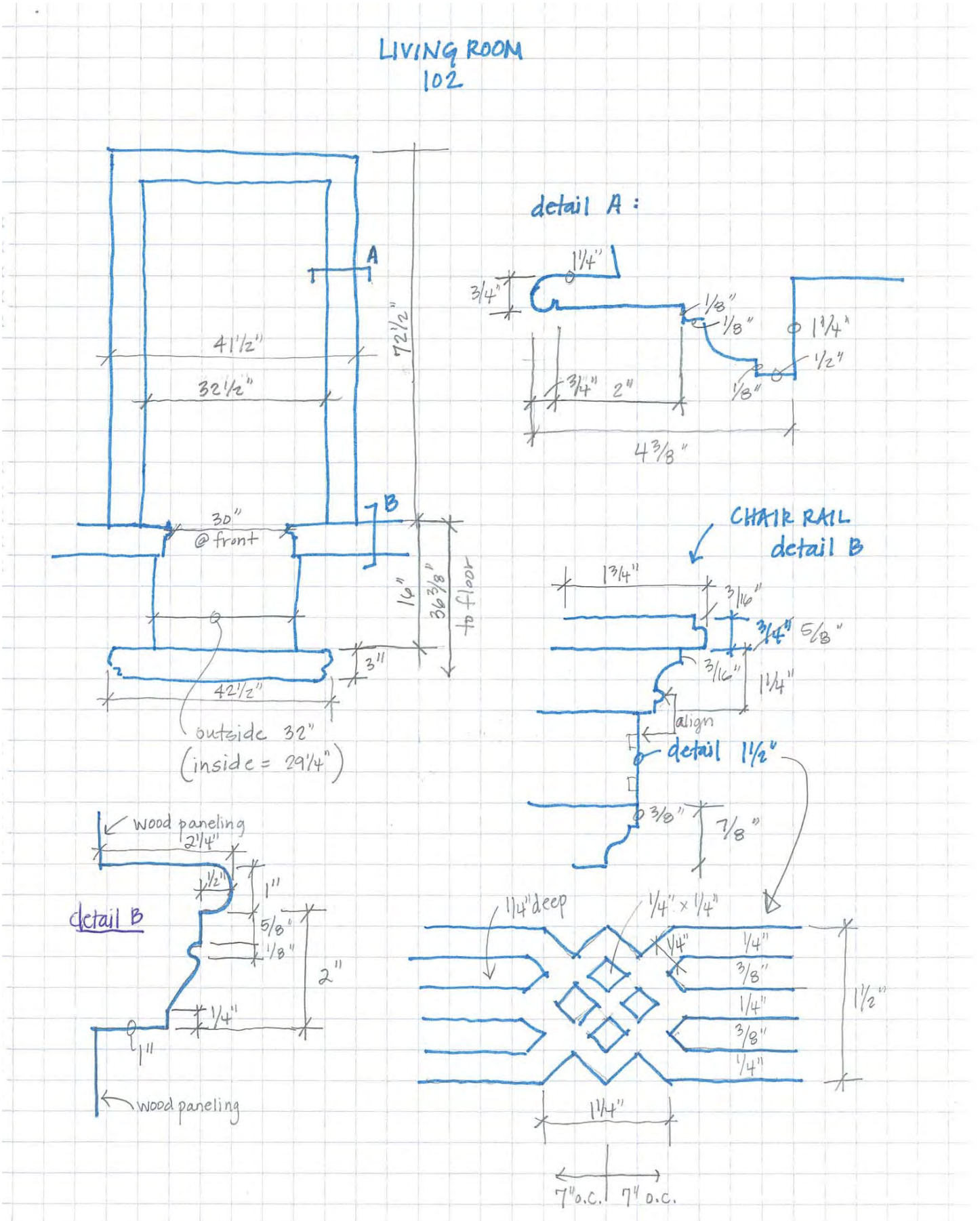


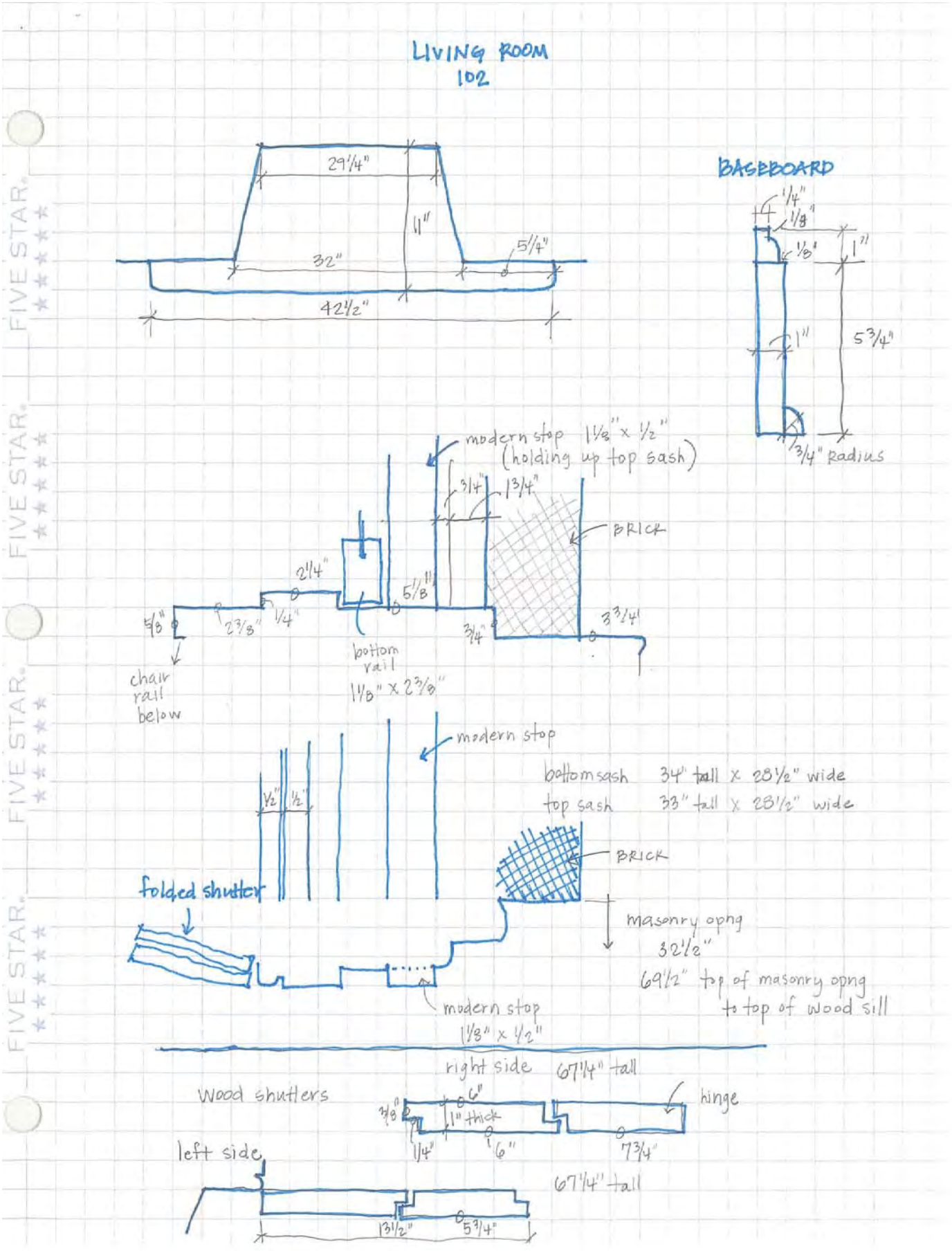

DINING ROOM, WINDOW 105
INTERIOR
PROFILE A
shutter pocket
1¼"
1⅛"
1⅛"
1⅛"
½"
⅝
43⅛"
1½"
43¼" to opp side
72"
43¼"
profile A
align
15¾"
42¾"
profile B
20¾" to floor
29½"
32½"
~1⅛"
42¾" to opp. edge
PROFILE B
1½"
1⅛"
⅜"
1"
2½"
5¼"
SILL BELOW
1⅛"
⅜"
1⅜" / 1⅛"
top of window outside trim 43¼"

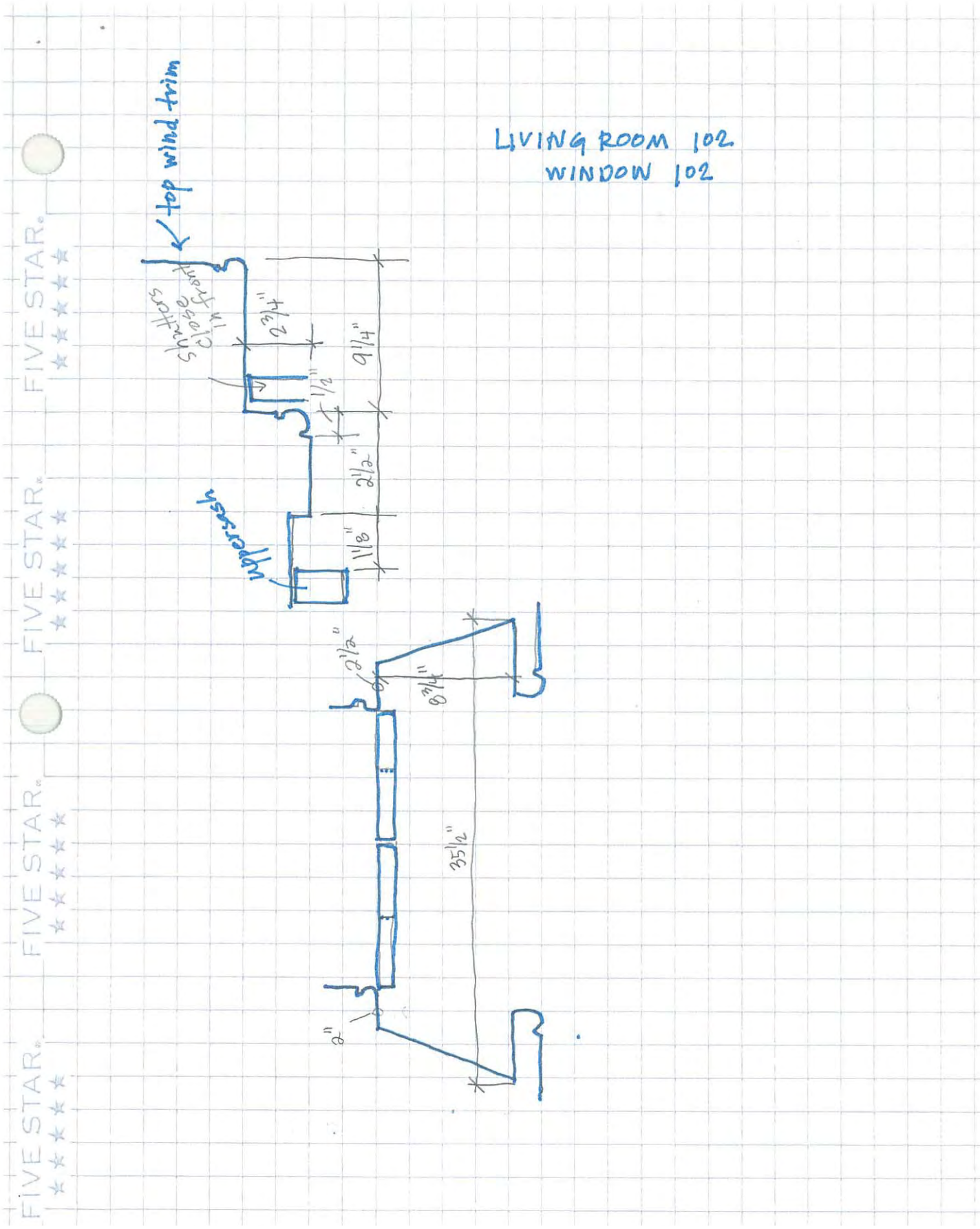

DINING ROOM
103
CROWN MOLDING
1 1/2" curve
3/8"
1/4"
5" total Height
3 1/2
1/2"
1 1/2"
3/8"
1/4"
5"
1 1/2"
1 1/2"
2 1/4"
1/2"
3/4"
(1/2")
3 1/2"
CENTRAL HALL
CROWN MOLDING
3/4"
2 1/4"
1/4"
1/8"
1/4"
1/4"
6"
2 7/8"
2 1/4"
1/8"
1/2"
1/8"
1/16"
1 1/4"
3/8"
1"

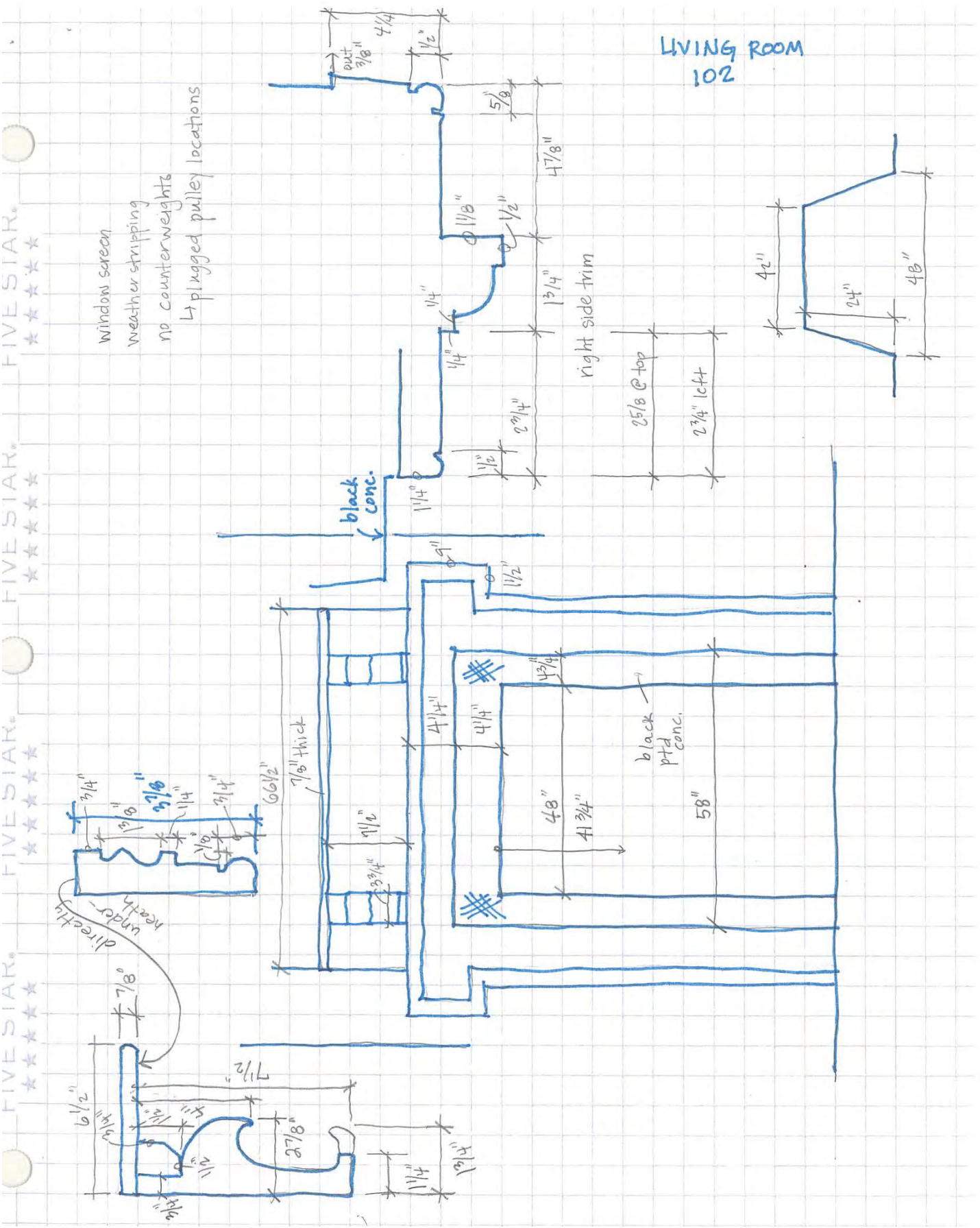

Masonry Opening @ Elliptical Window (W302)
8" brick surround
76"
48"
16'-0"
8"
16'-0"
to flashing
bend of flashing
corner of pediment
pedifm
6" gutter, galv. metal
4" downspouts
asphalt shingles
t&g sheathing
8½"
11½"
7¼"
3¼"
1"
1"
2½"
88"+/-
to copper flashing bend
8½"
east cornice
¼"
2"
1½"
2"
west cornice bracket
2" o.c.
½"×1"
1¾"
13" o.c.
2¾"
1½"
¾"
1⅝"
3½"
4½"
3"
to edge

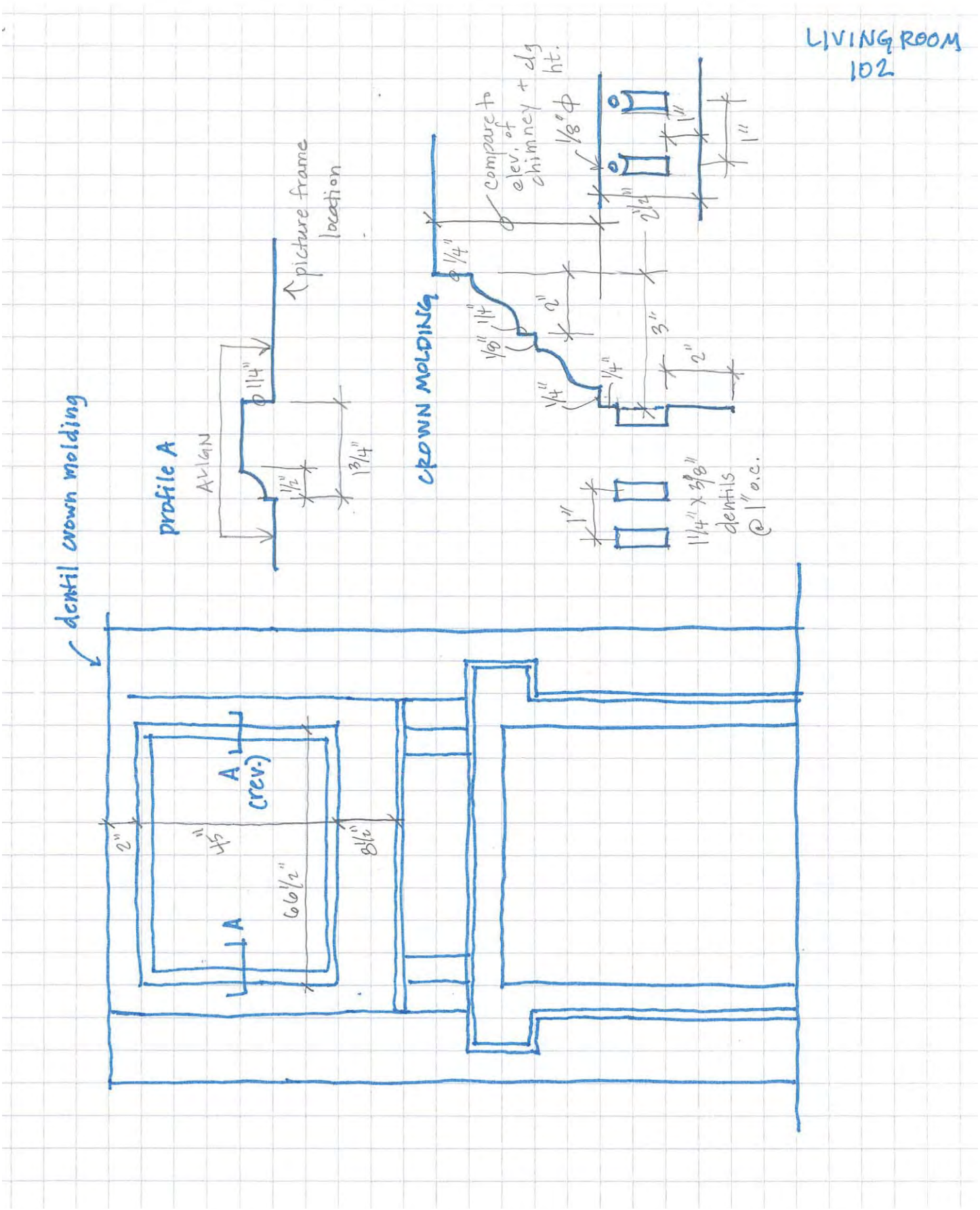

WINDOW + DOOR MEASUREMENTS TAKE FROM OUTSIDE EDGE OF TRIM TO ESTABLISH OVERALL ROOM LAYOUT
SUN ROOM 106
clg fan
KITCHEN 104
trash compactor
sink (15"x18")
sink (22"x33")
36½ height
2" (13"x13" tile floor)
12"x12" vinyl tile
UP 3 RISERS
UP: 6⅜" R
duplex
4 LS
LS
92"
57¼"
57⅛"
57⅛"
doors 106 B, C, D, E
24" wide leaf
door 105: 35" x 80"
* need to document floor and ceiling registers
CIRCLE WINDOW @ RESTROOM 108 from CORRIDOR 107
9"
TO Corner
1¾"
1½"
dia: 22½"
80¼"

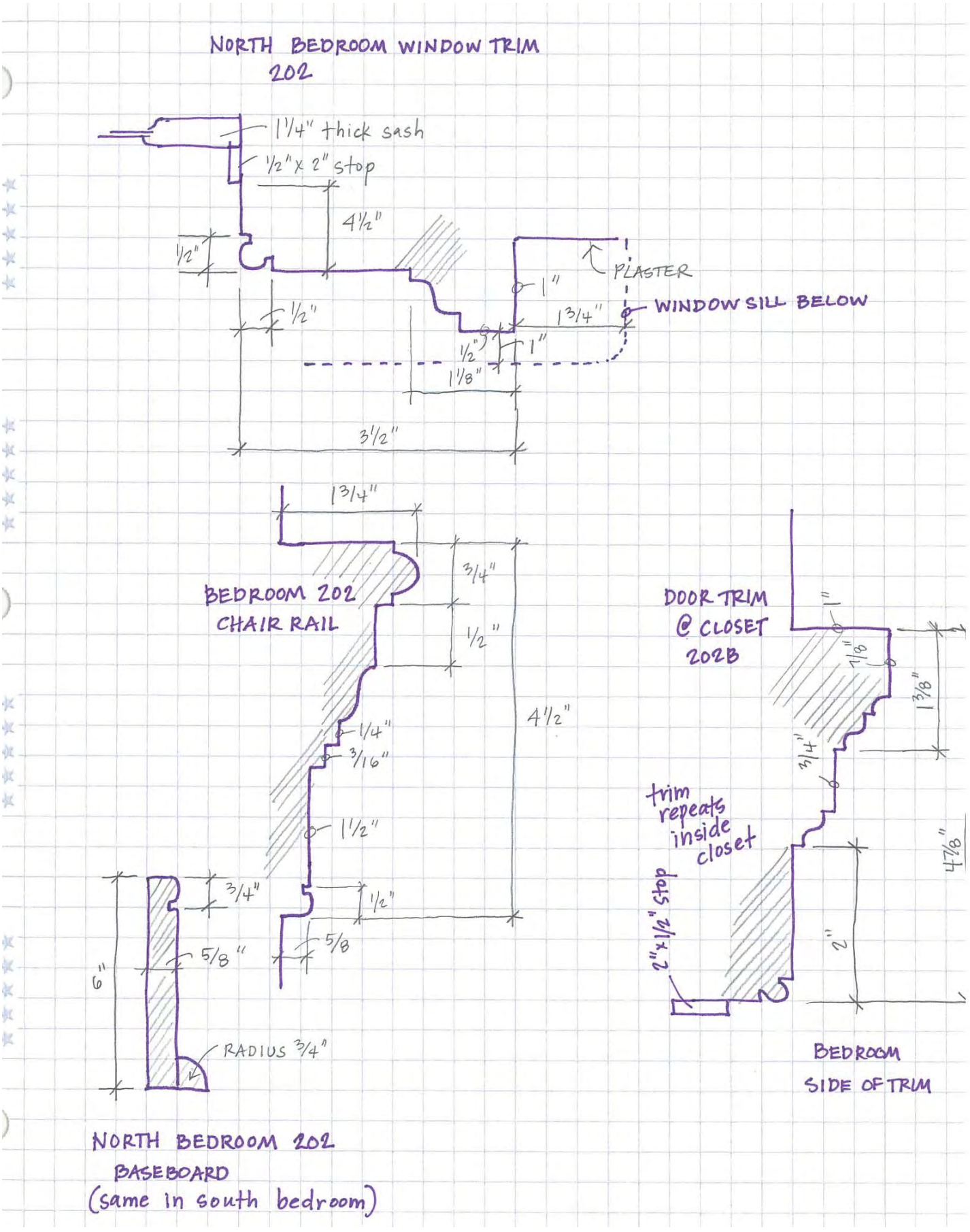

LIVING ROOM
102
A
41½"
32½"
72½"
B
30" @ front
16"
36⅜" to floor
3"
42½"
outside 32"
(inside = 29¼")
detail A:
1¼"
¾"
⅛"
⅛"
1¾"
½"
⅛"
¾" 2"
4⅜"
CHAIR RAIL
detail B
1¾"
3/16"
¾" 5/8"
3/16"
1¼"
align
detail 1½"
⅜"
⅞"
wood paneling
2¼"
½"
1"
detail B
5/8"
⅛"
2"
¼"
1"
wood paneling
1¼" deep
¼" × ¼"
¼"
¼"
⅜"
¼"
⅜"
¼"
1½"
1¼"
7" o.c.
7" o.c.

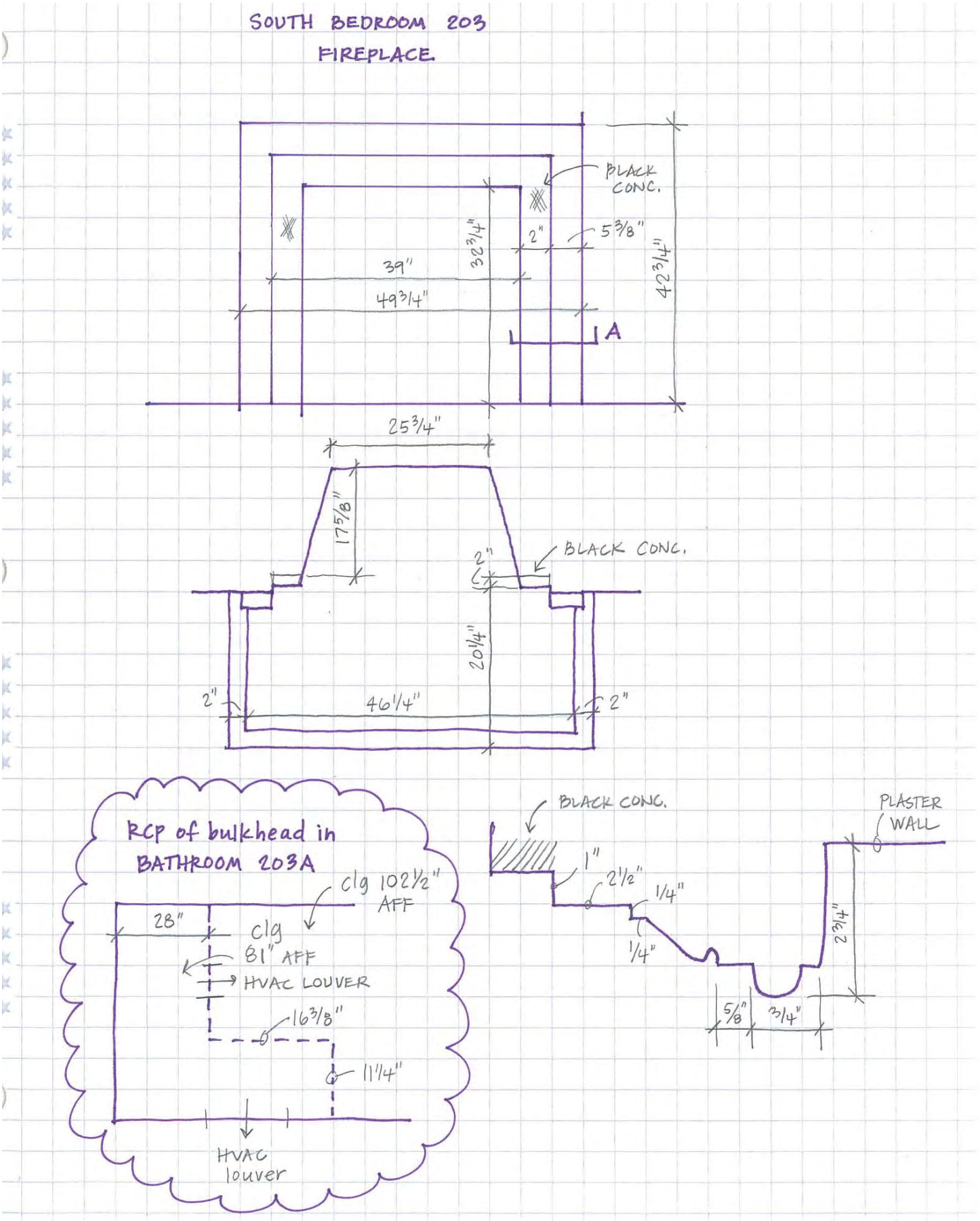

LIVING ROOM
102
29 1/4"
11"
32"
5 1/4"
42 1/2"
BASEBOARD
1/4"
1/8"
1/8"
1"
1"
5 3/4"
3/4" Radius
modern stop 1 1/8" x 1/2"
(holding up top sash)
3/4"
1 3/4"
BRICK
2 1/4"
5/8"
5/8"
2 3/8"
1/4"
3/4"
3 3/4"
bottom rail
1 1/8" x 2 3/8"
chair rail below
modern stop
bottom sash 34" tall x 28 1/2" wide
top sash 33" tall x 28 1/2" wide
1/2"
1/2"
folded shutter
BRICK
masonry opng
32 1/2"
69 1/2" top of masonry opng to top of wood sill
modern stop
1 1/8" x 1/2"
right side 67 1/4" tall
Wood shutters
3/8"
6"
1" thick
hinge
1/4"
6"
7 3/4"
left side
67 1/4" tall
13 1/2"
5 3/4"

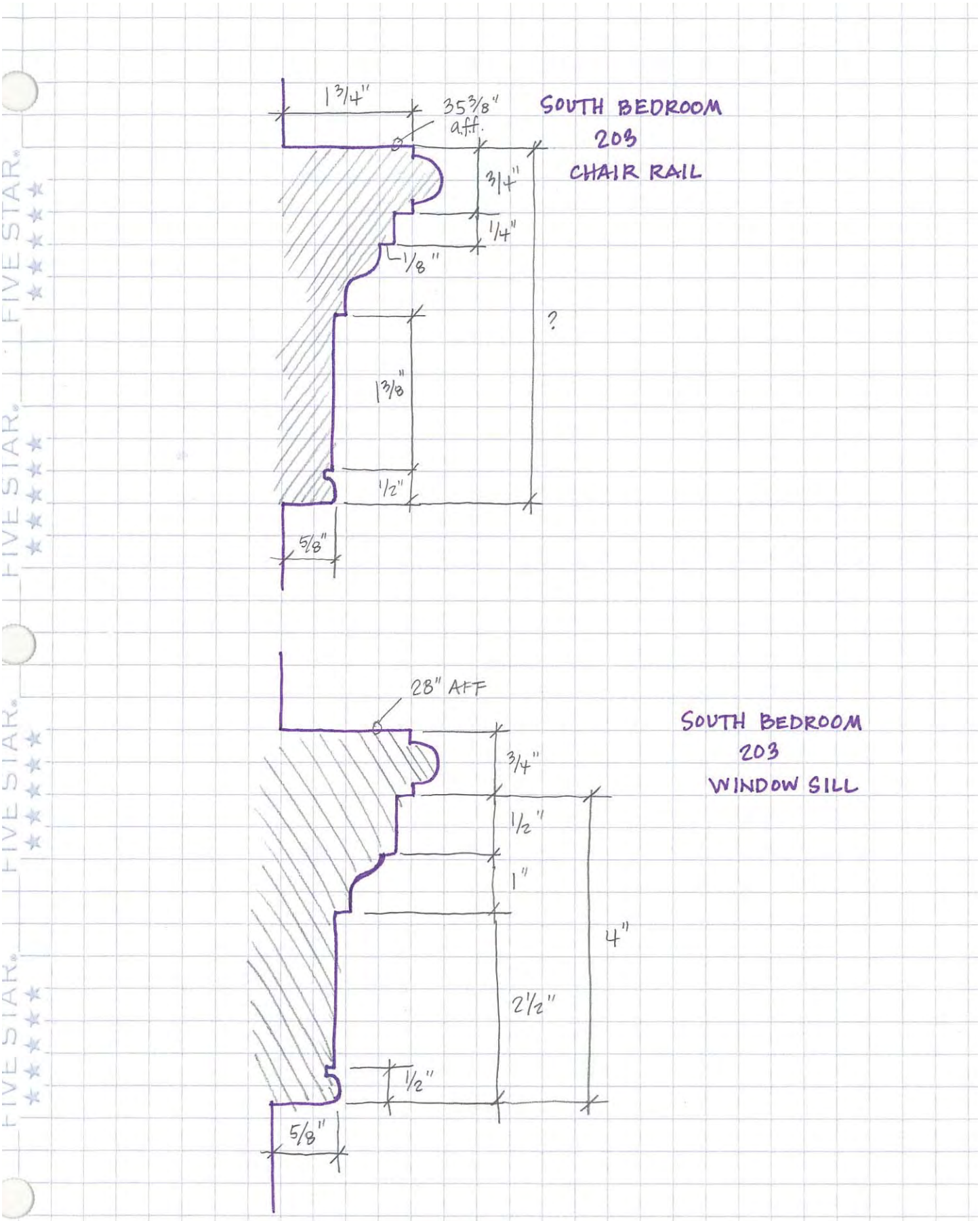

LIVING ROOM 102
WINDOW 102
top wind trim
shutters
chase
frame
2 3/4"
1 1/2"
9 1/4"
2 1/2"
1 1/8"
upper sash
2 1/2"
8 3/4"
35 1/2"
2"


LIVING ROOM
102
Window screen
Weather stripping
no counterweights
4 plugged pulley locations
right side trim
25/8 @ top
23/4" left
42"
24"
48"
black conc.
7/8" thick
black ptd conc.
58"
48"
41 3/4"
dirt
under-
earth

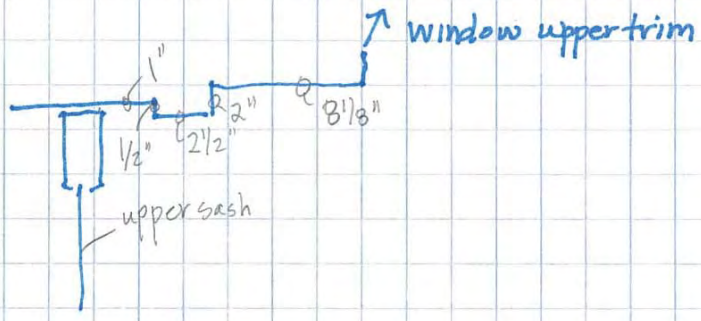

LIVING ROOM
102
dentil crown molding
Profile A
AVIAN
picture frame location
1 1/4"
1 1/2"
3 3/4"
CROWN MOLDING
compare to elev. of chimney + dg ht.
1/8" dia
1/4"
1/8"
1"
2"
3"
2 1/4"
1 1/4" x 3/8" dentils @ 1" o.c.
A
(rev.)
A
2"
45°
66 1/2"
8 1/2"


NORTH BEDROOM WINDOW TRIM
202
1¼" thick sash
½" x 2" stop
4½"
½"
½"
PLASTER
1"
WINDOW SILL BELOW
1¾"
½"
1"
1⅛"
3½"
1¾"
BEDROOM 202
CHAIR RAIL
¾"
½"
4½"
¼"
3/16"
1½"
¾"
½"
5/8"
5/8
6"
RADIUS ¾"
DOOR TRIM
@ CLOSET
202B
1"
⅛"
1⅜"
¾"
trim repeats inside closet
2½" x 2" stop
8¼"
2"
BEDROOM
SIDE OF TRIM
NORTH BEDROOM 202
BASEBOARD
(same in south bedroom)

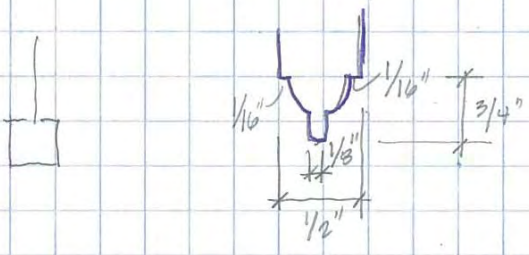

SOUTH BEDROOM 203
FIREPLACE
BLACK CONC.
2"
5 3/8"
32 3/4"
42 3/4"
39"
49 3/4"
A
25 3/4"
17 5/8"
BLACK CONC.
2"
20 1/4"
2"
46 1/4"
2"
RCP of bulkhead in BATHROOM 203A
clg 102 1/2" AFF
28"
clg 81" AFF
HVAC LOUVER
16 3/8"
11 1/4"
HVAC louver
BLACK CONC.
PLASTER WALL
1"
2 1/2"
1/4"
1/4"
2 3/4"
5/8"
3 1/4"


1 3/4"
35 3/8" a.f.f.
SOUTH BEDROOM
203
CHAIR RAIL
3/4"
1/4"
1/8"
?
1 3/8"
1/2"
5/8"
28" AFF
SOUTH BEDROOM
203
WINDOW SILL
3/4"
1/2"
1"
4"
2 1/2"
1/2"
5/8"

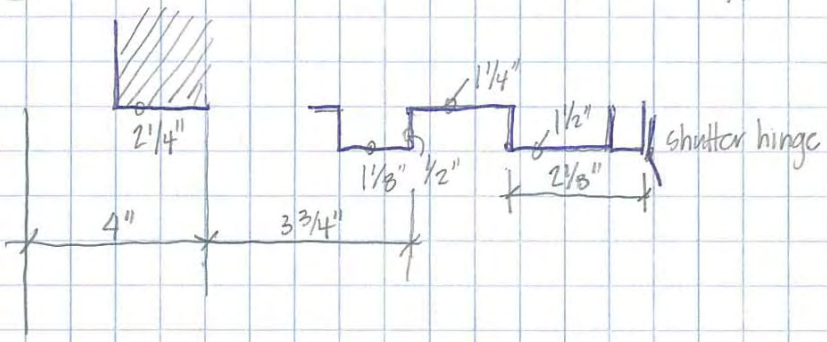
WINDOW 105



upper sash = 28 3/8" wide x 33" — rails: top = 1 1/2" bottom = 3/4"
lower sash = 28 3/8" wide x 33 1/2 tall — top = 3/4" bottom = 2 1/8"



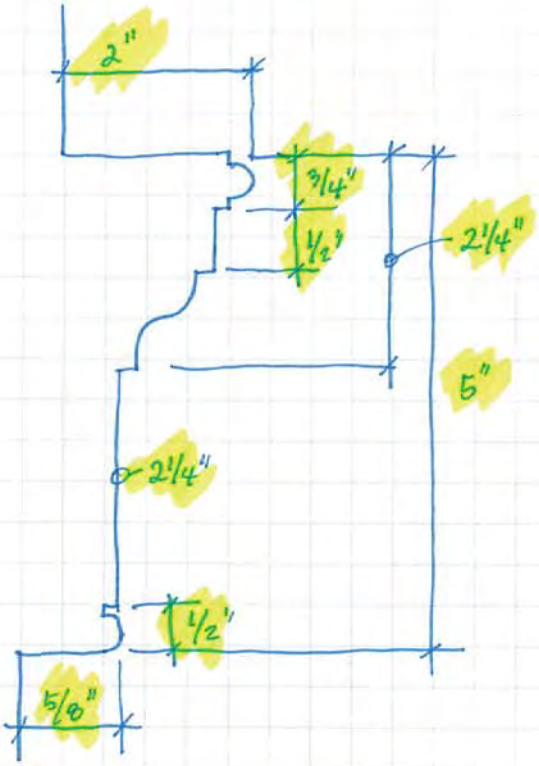
*Johns Manville
~~Const~~
Insulating Lumber



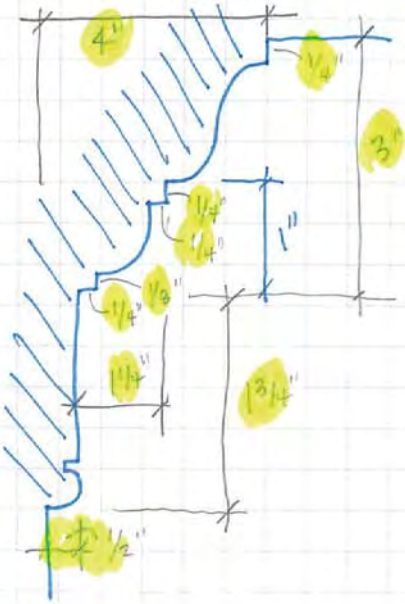
CentralHall Second Floor Chair Rail

CENTRAL HALL 201

Chair Rail @ Central Hall 201

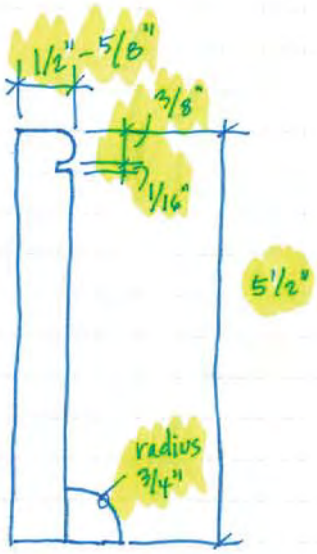


Crown Molding @ Central Hall 201

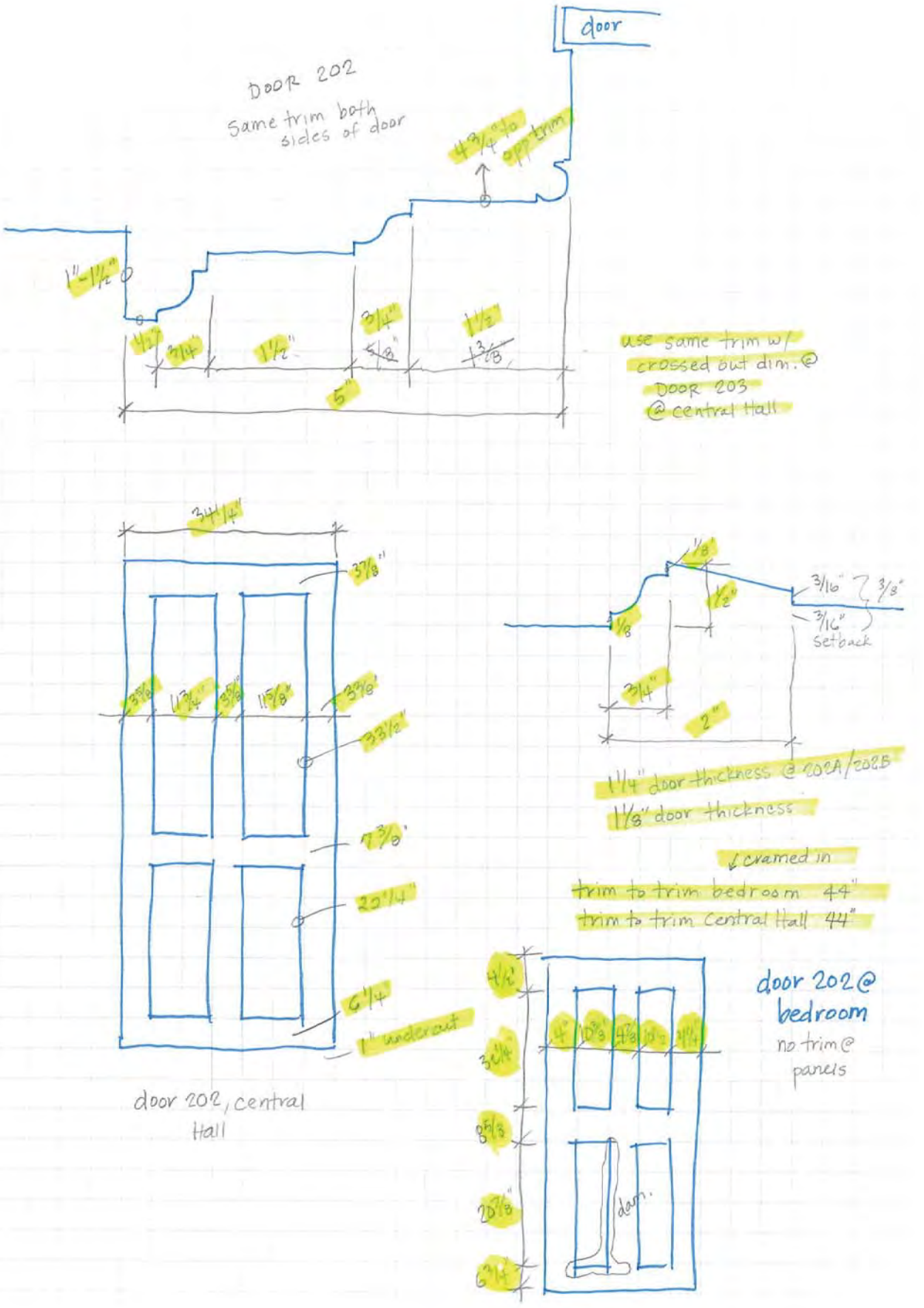


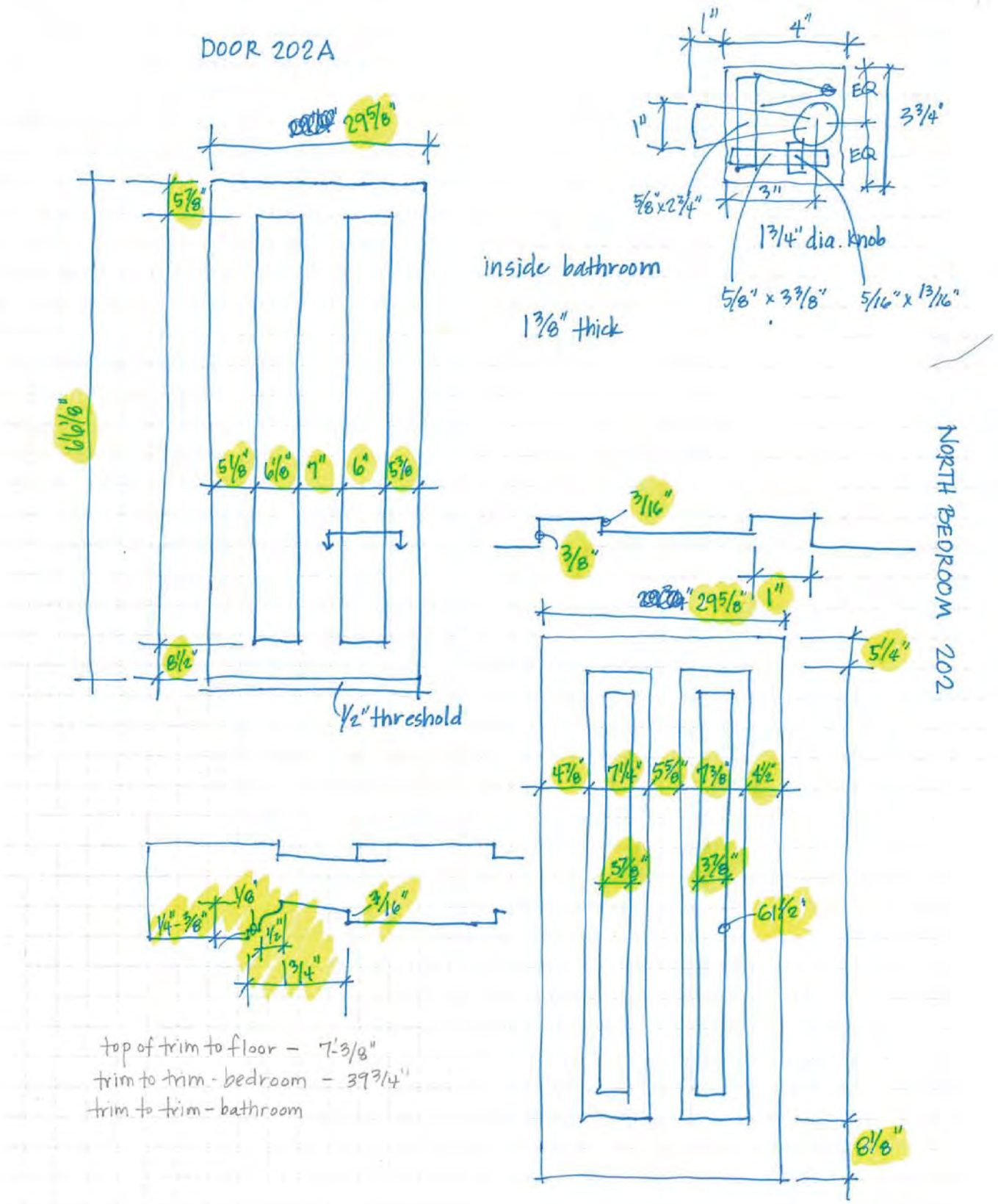
Central Hall 201

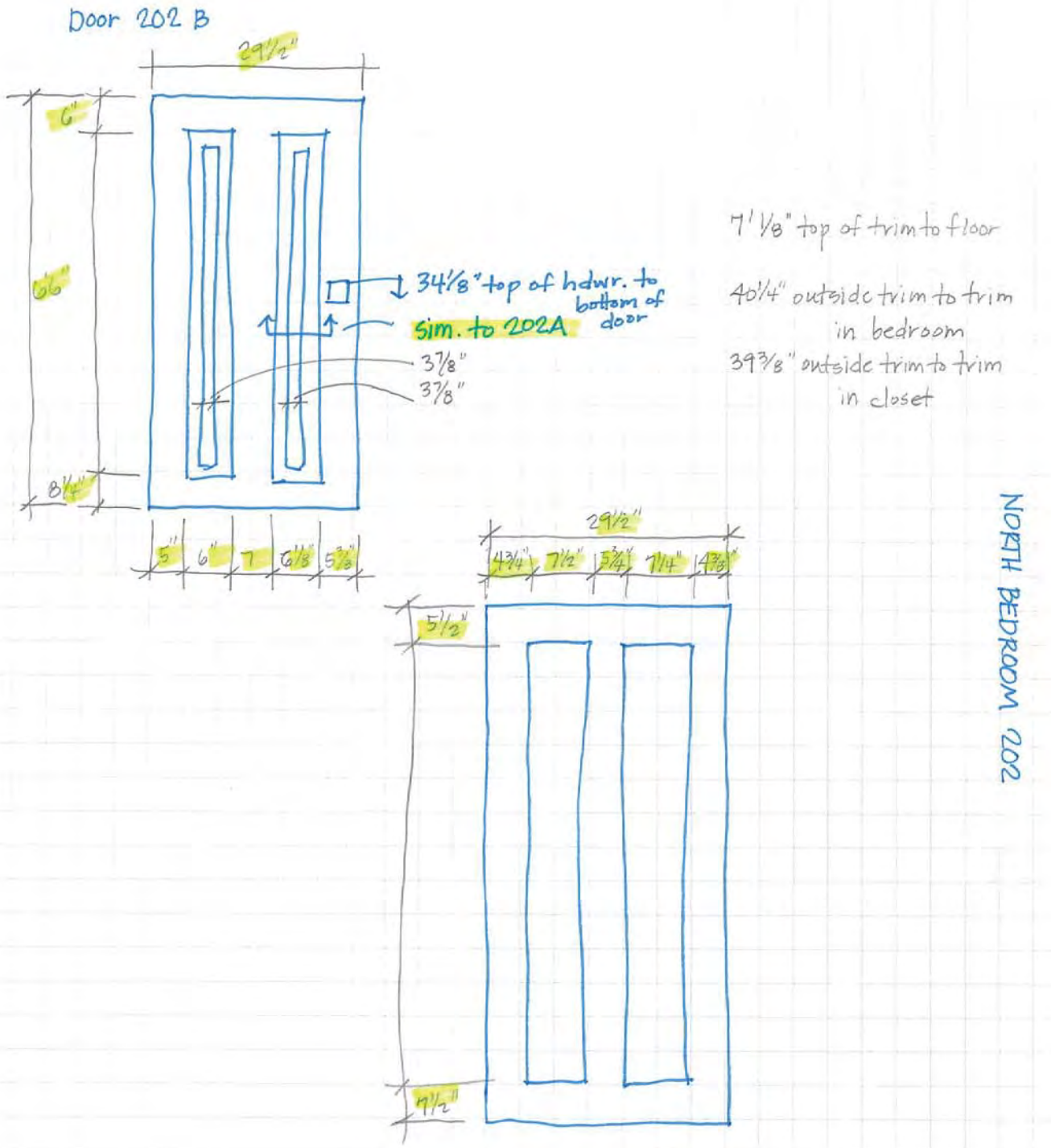
baseboard

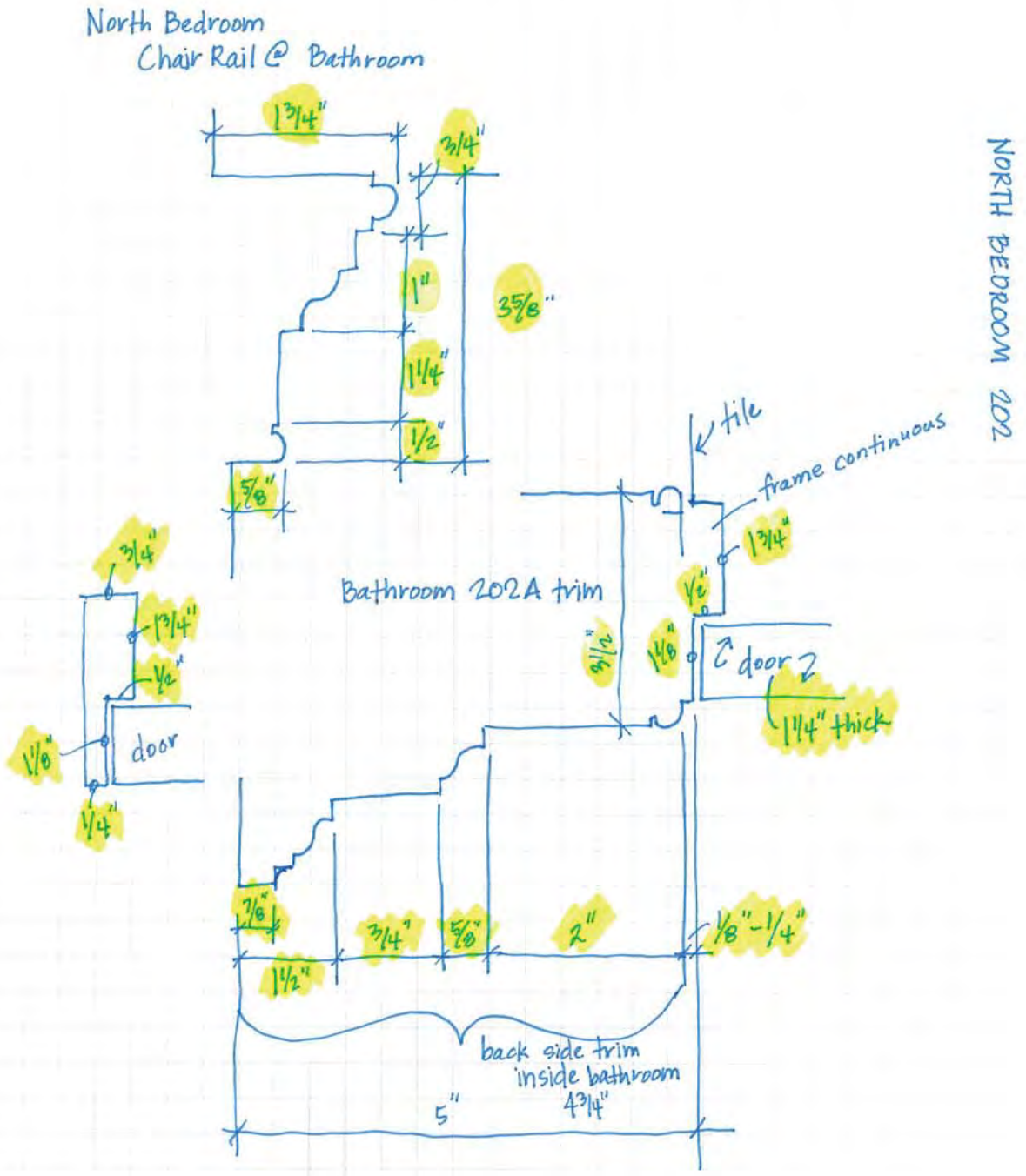


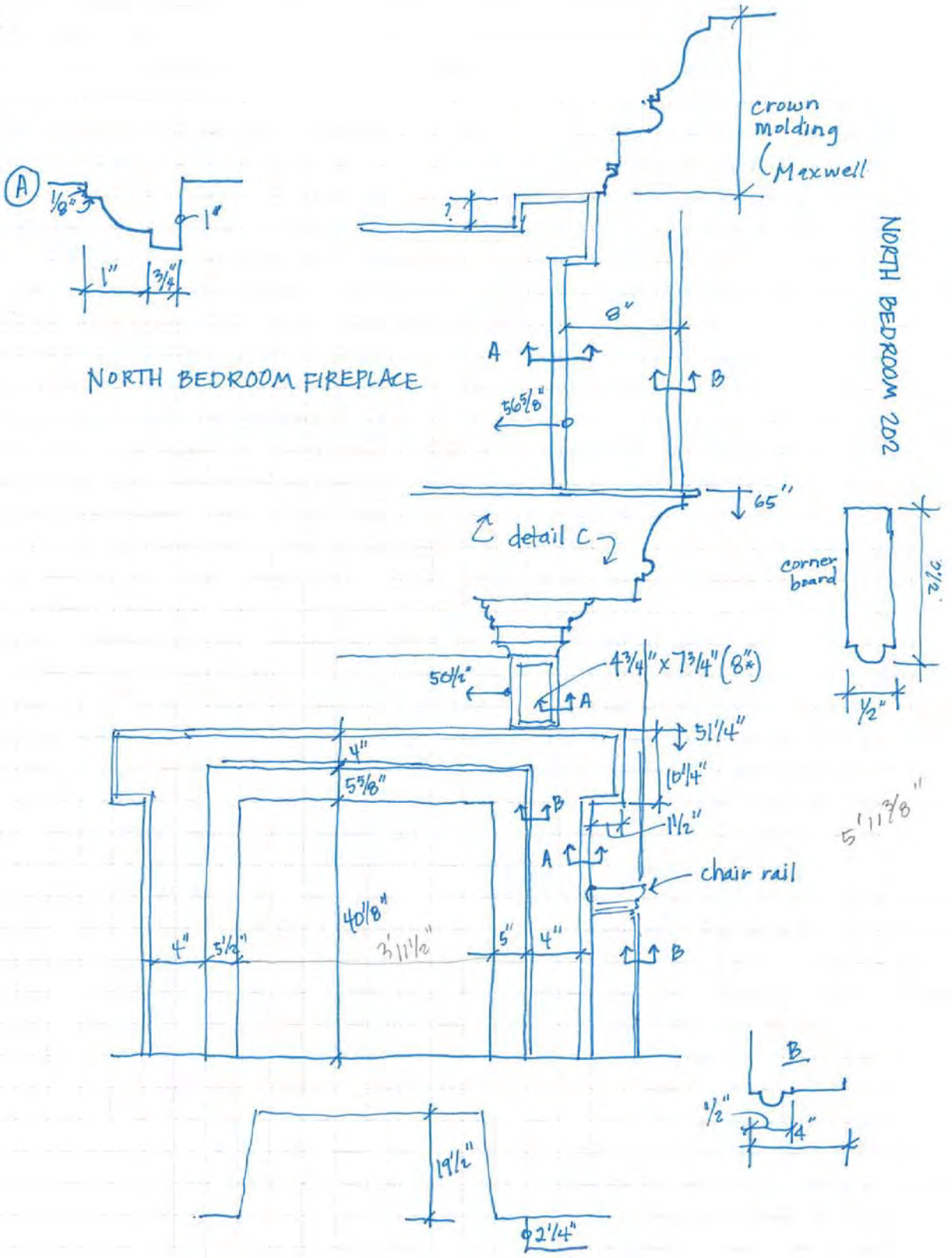
CENTRAL HALL 201

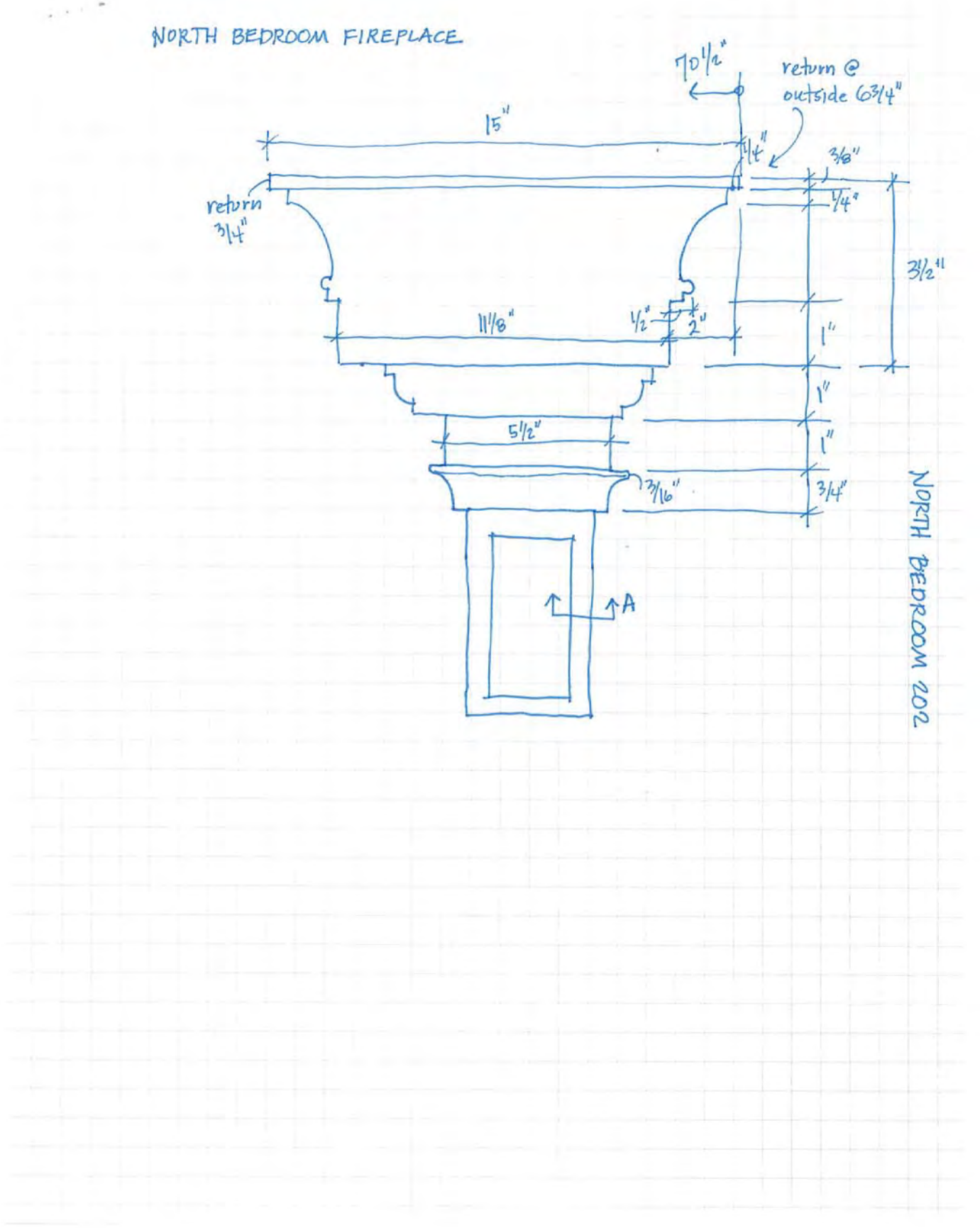

door
DOOR 202
Same trim both sides of door
4 3/4" to opp trim
1"-1 1/2"
1/2"
3/4"
1 1/2"
3 1/4"
5/8"
5"
1 1/2"
1 3/8"
use same trim w/ crossed out dim. @ DOOR 203 @ central Hall
3 1/4"
1 1/4"
3 7/8"
3 7/8"
1 3/4"
3 5/8"
11 5/8"
3 7/8"
33 1/2"
7 3/8"
29 1/4"
6 1/4"
1" undercut
door 202, central Hall
1/8"
3/16"
3/8"
1/2"
1/8"
3/16" setback
3 1/4"
2"
1 1/4" door thickness @ 202A/202B
1 1/8" door thickness
↓ cramed in
trim to trim bedroom 44"
trim to trim central Hall 44"
4 1/2"
3 1/4"
8 5/8"
20 7/8"
6 3/4"
door
door 202 @ bedroom
no trim @ panels


DOOR 202A
29 5/8"
5 7/8"
6 1/8"
5 1/8"
6 1/8"
7"
6"
5 3/8"
8 1/2"
1/2" threshold
1"
4"
1"
EQ
3 3/4"
EQ
5/8" x 2 3/4"
3"
1 3/4" dia. knob
inside bathroom
1 3/8" thick
5/8" x 3 3/8"
5/16" x 13/16"
NORTH BEDROOM 202
3/16"
3/8"
29 5/8"
1"
5 1/4"
4 7/8"
7 1/4"
5 5/8"
7 3/8"
4 1/2"
5 7/8"
3 7/8"
6 1/2"
8 1/8"
1/8"
1/4" - 3/8"
1/2"
3/16"
1 3/4"
top of trim to floor - 7'-3/8"
trim to trim - bedroom - 39 3/4"
trim to trim - bathroom

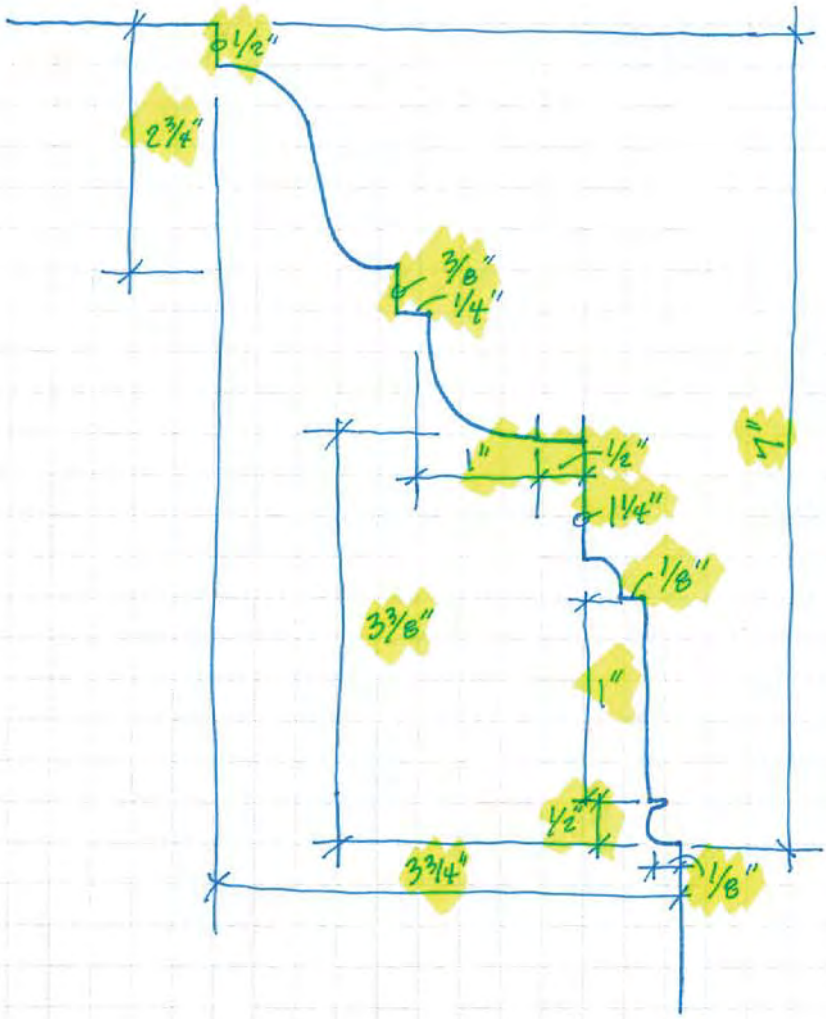

Door 202 B
29½"
6"
6'6"
8¼"
34⅛" top of hdwr. to bottom of door
sim. to 202A
3⅞"
3⅞"
5"
6"
7"
6⅛"
5⅜"
7' ⅛" top of trim to floor
40¼" outside trim to trim in bedroom
39⅜" outside trim to trim in closet
NORTH BEDROOM 202
29½"
4¾"
7½"
5¾"
7¼"
4⅜"
5½"
9½"


North Bedroom
Chair Rail @ Bathroom
1 3/4"
3/4"
1"
3 5/8"
1 1/4"
1/2"
5/8"
NORTH BEDROOM 202
tile
frame continuous
1 3/4"
1/2"
Bathroom 202A trim
3 1/2"
1 1/8"
door 2
1 1/4" thick
3/4"
1 3/4"
1/2"
1 1/8"
door
1 1/4"
7/8"
3/4"
5/8"
2"
1/8" - 1/4"
1 1/2"
back side trim
inside bathroom
5"
43/4"

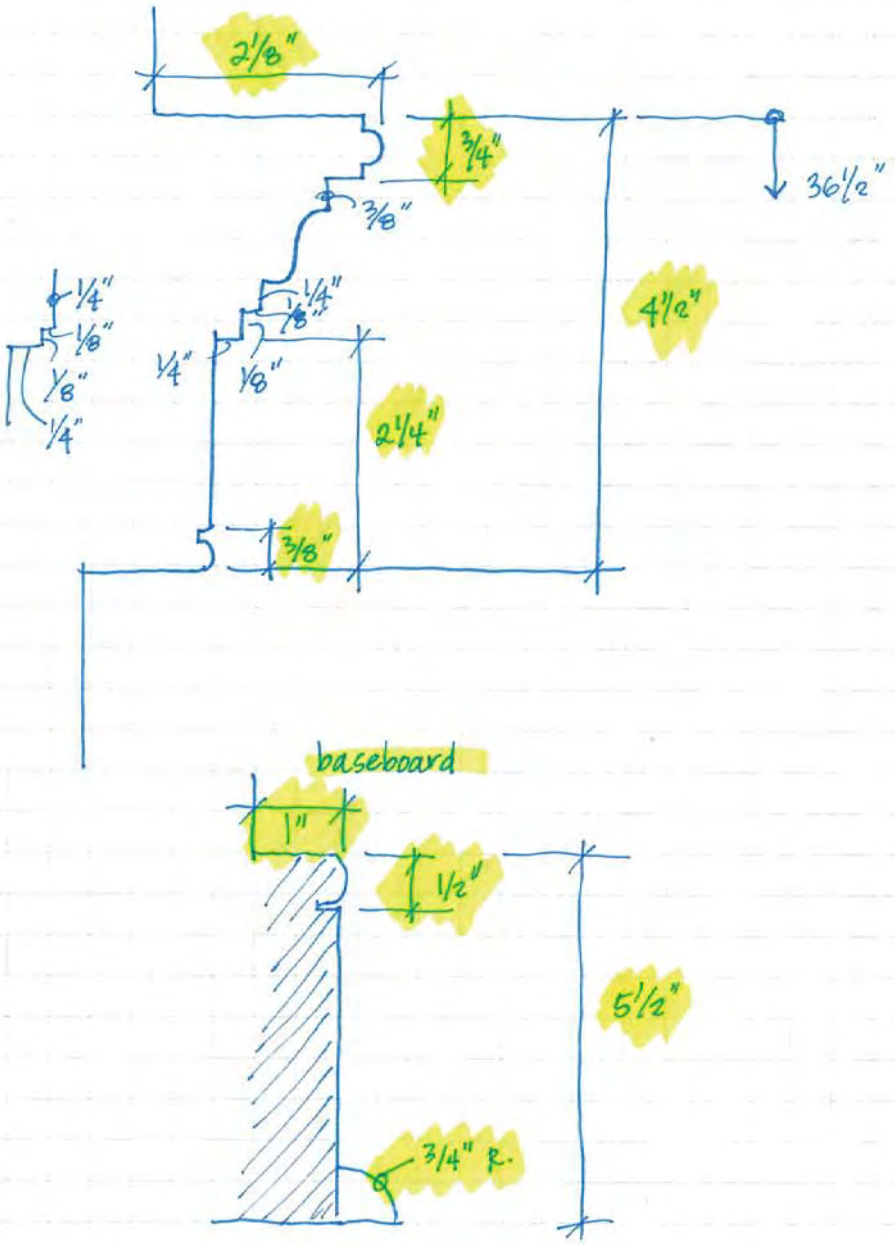

crown molding (Maxwell
NORTH BEDROOM 202
NORTH BEDROOM FIREPLACE
detail C
corner board
chair rail
A
B

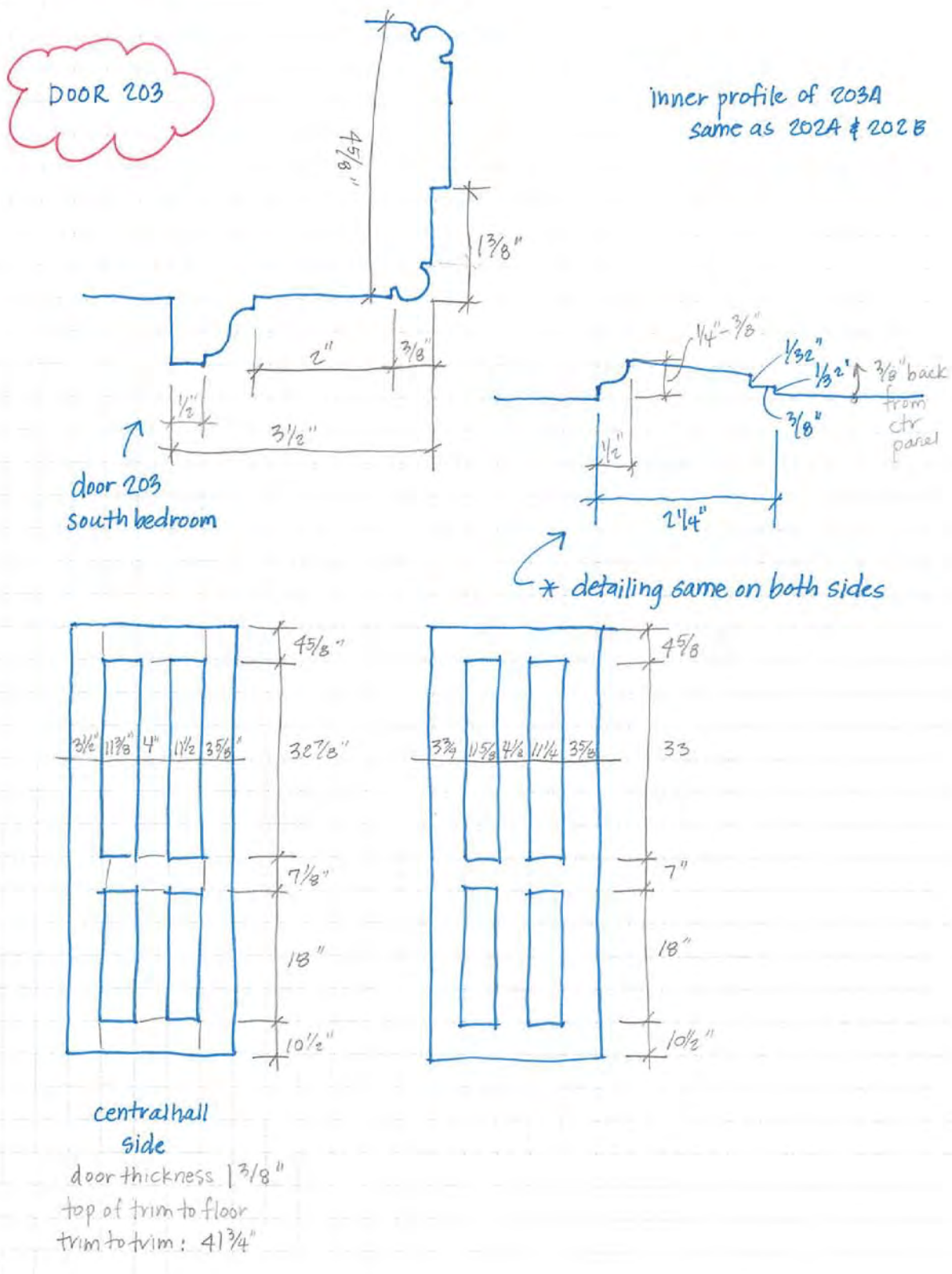

NORTH BEDROOM FIREPLACE
70 1/2"
return @
outside 6 3/4"
15"
1/4"
3/8"
1/4"
return
3/4"
3 1/2"
11 1/8"
1/2"
2"
1"
1"
5 1/2"
1"
3/16"
3/4"
A
NORTH BEDROOM 202

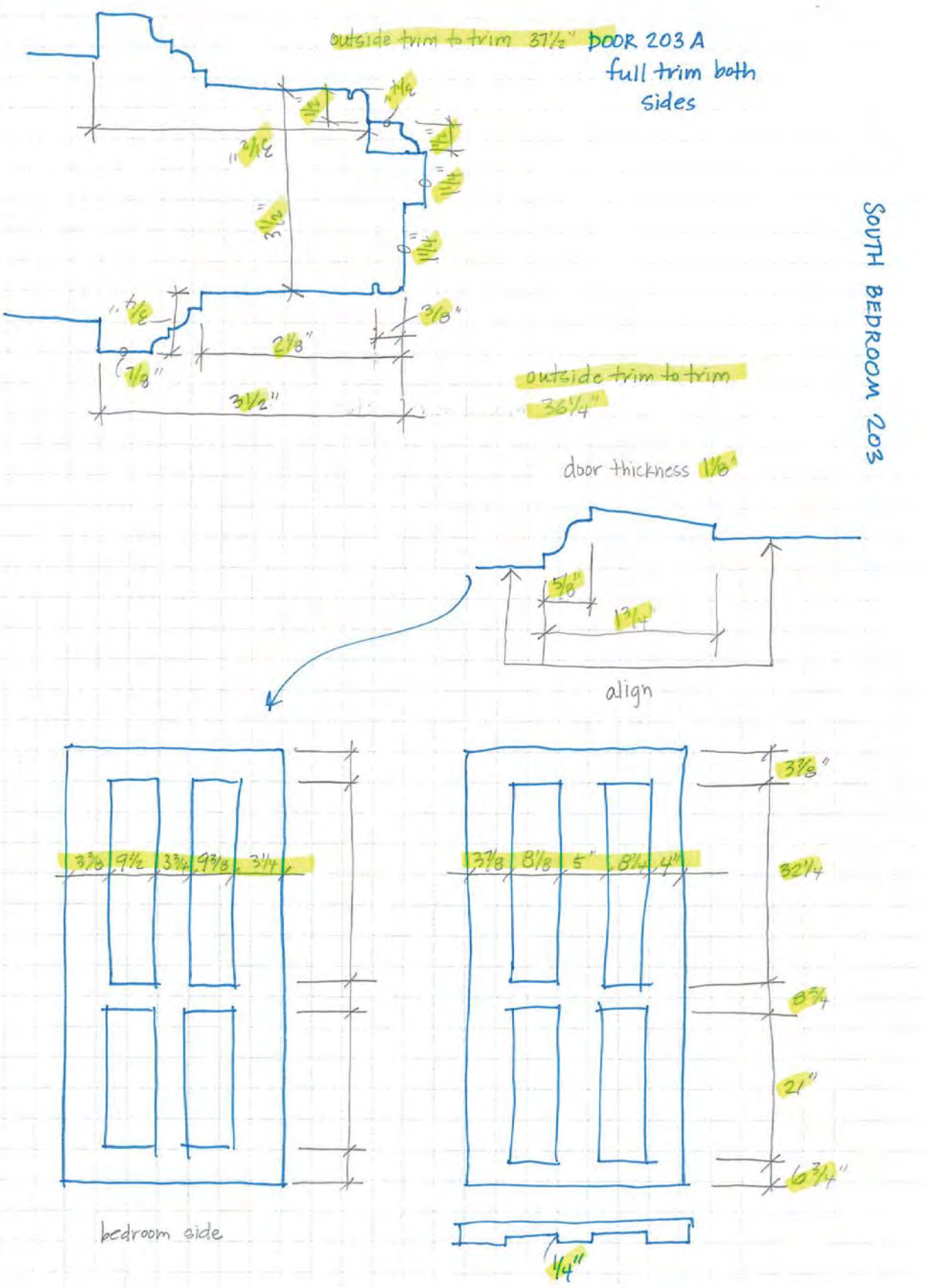
North Bedroom 202 : crown molding

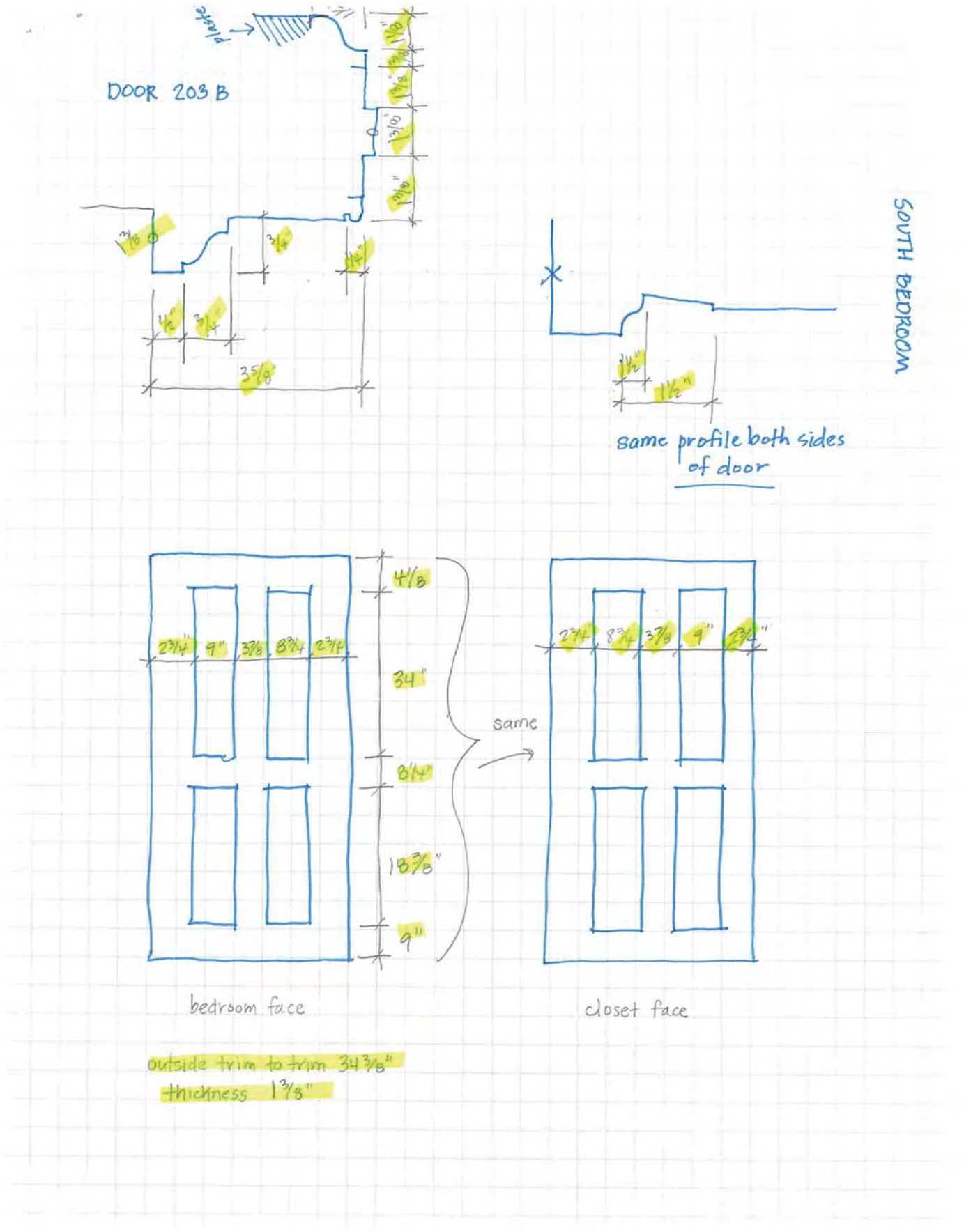


North Bedroom Chair Rail
202



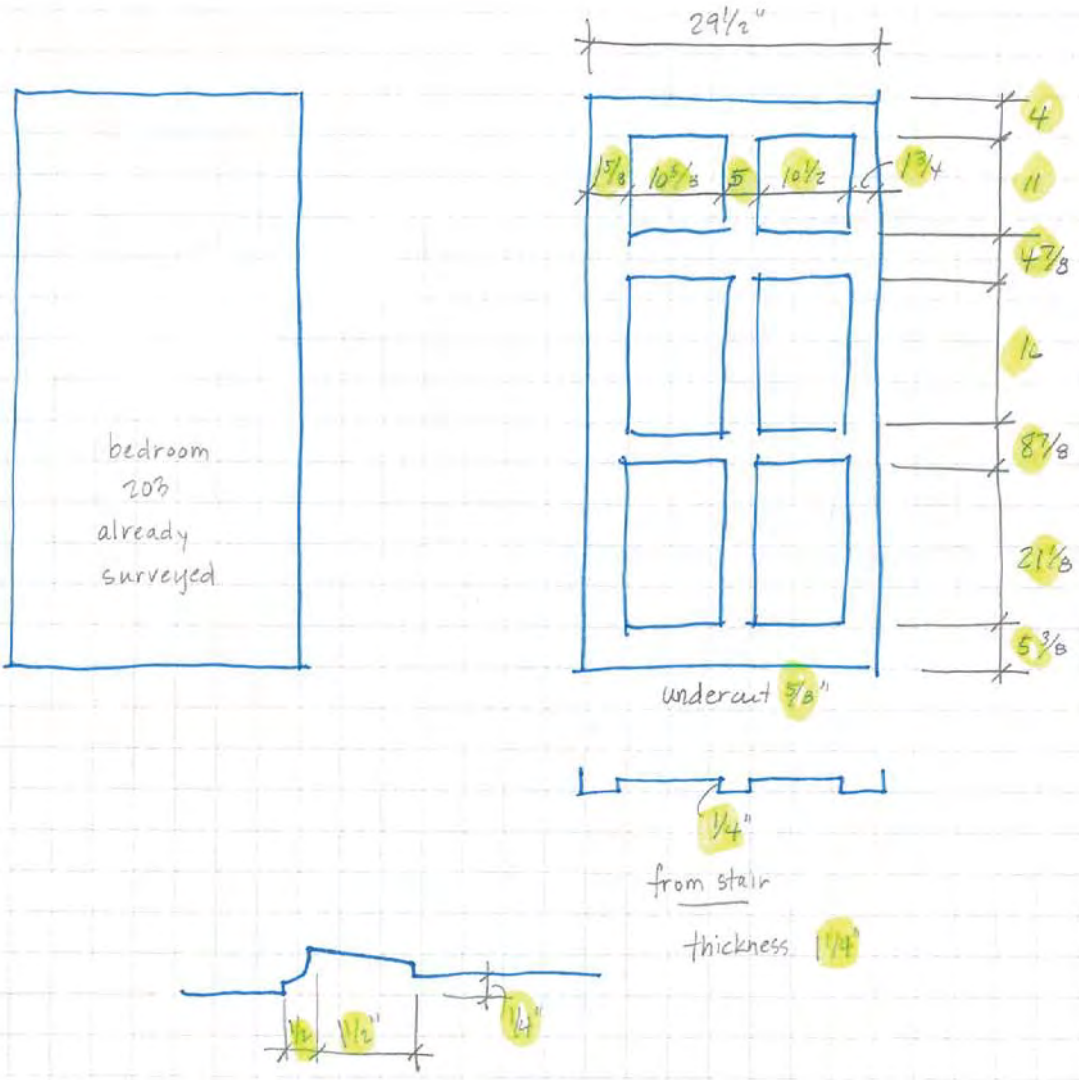

DOOR 203
inner profile of 203A
same as 202A & 202B
4 5/8"
1 3/8"
2"
3/8"
1/2"
3 1/2"
door 203
south bedroom
1/4"-3/8"
1/32"
1/32"
3/8" back from ctr panel
3/8"
1/2"
2'1/4"
* detailing same on both sides
4 5/8"
3 1/2"
1 1 3/8"
4"
1 1/2"
3 5/8"
30 7/8"
7 1/8"
18"
10 1/2"
4 5/8"
3 3/4
1 1 5/8"
4 1/8
1 1 1/4
3 5/8
33
7"
18"
10 1/2"
centralhall
side
door thickness 1 3/8"
top of trim to floor
trim to trim: 41 3/4"

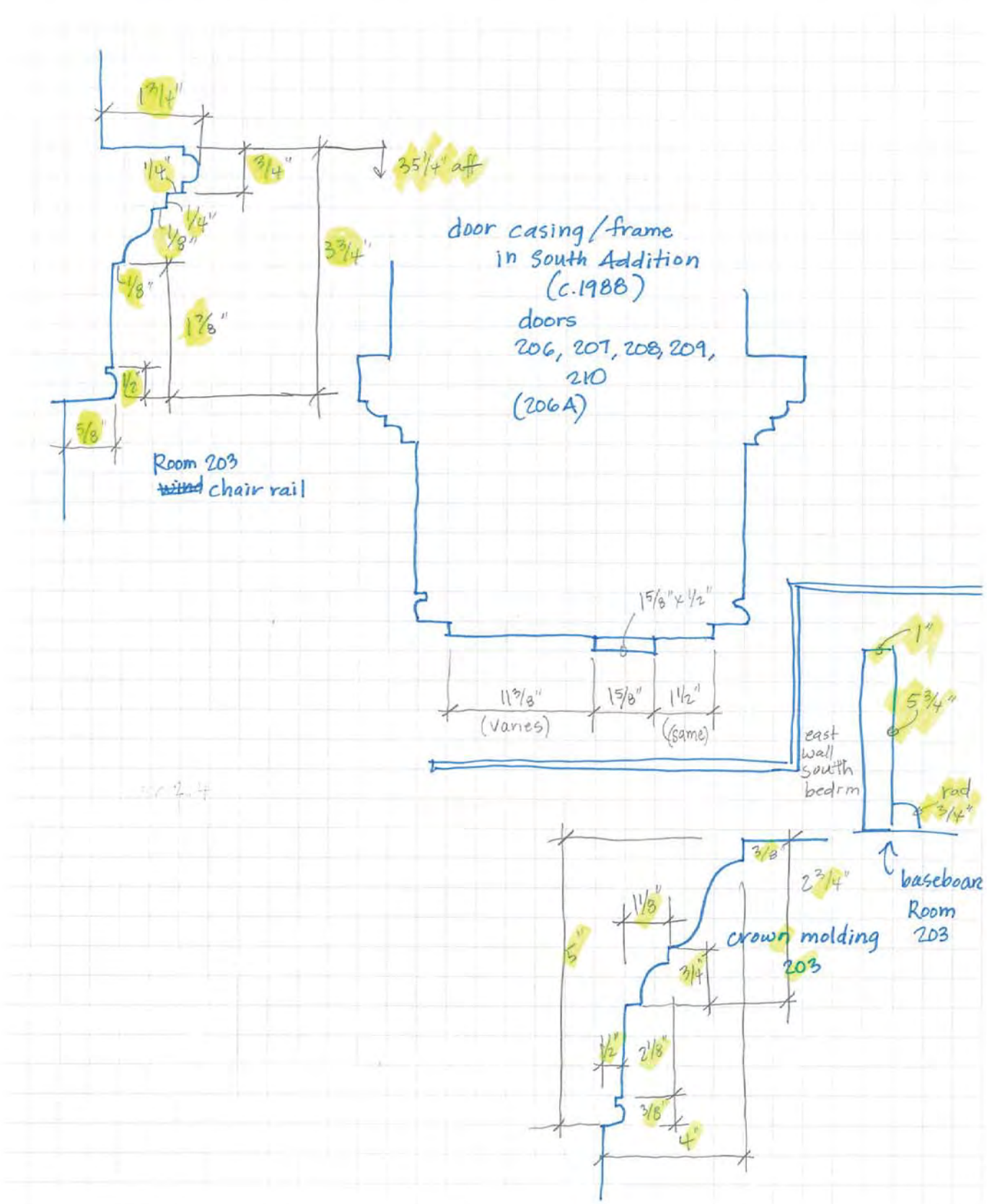

outside trim to trim 37½"
DOOR 203 A
full trim both sides
SOUTH BEDROOM 203
outside trim to trim
36¼"
door thickness 1⅛"
align
bedroom side
1/4"


plaster
DOOR 203 B
1 1/8"
1 7/8"
1 3/8"
1 3/10"
1 7/8"
3/16"
3/4"
1/4"
4 1/2"
3 1/4"
3 5/8"
SOUTH BEDROOM
1 1/2"
1 1/2"
same profile both sides of door
2 3/4"
9"
3/8"
8 3/4"
2 3/4"
4 1/8"
34"
8 1/4"
18 3/8"
9"
same
2 3/4"
8 3/4"
3/8"
9"
2 3/4"
bedroom face
closet face
outside trim to trim 34 3/8"
thickness 1 3/8"

door 204

no trim




1 3/4"
1/4"
3/4"
35 1/4" aff
1/4"
1/8"
3 3/4"
1/8"
1 7/8"
1/2"
5/8"
Room 203
~~wind~~ chair rail
door casing / frame
in South Addition
(c.1988)
doors
206, 207, 208, 209,
210
(206A)
15/8" x 1/2"
11 3/8"
(varies)
15/8"
1 1/2"
(same)
east
wall
south
bedrm
1"
5 3/4"
rad
3/4"
baseboard
Room
203
3/8"
2 3/4"
1 1/8"
5"
crown molding
203
3/4"
1/2"
2 1/8"
3/8"
4"

small closet door 204A?

door 206 : outside / stair

L→R 4" / 10 1/8" / 3 3/4" / 10" / 4"

T→B 4 1/8 / 9 1/4 / 23 3/4 / 6 3/4" / 23 3/4" / 7 5/8"

undercut = ~~3/8~~ (1/4")



1" undercut on door

door 206 : bedroom

L→R 4 1/8" / 10" / 3 3/4" / 10" / 4"

T→B 4 1/8" / 9 1/4 / 3 3/4 / 23 3/4" / 6 3/4" / 23 3/4" / 7 5/8"

undercut = 1/4"

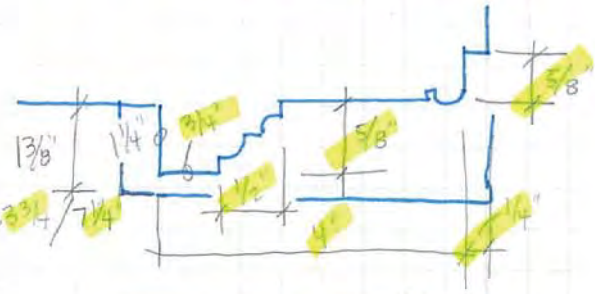
door thickness = 1 3/8"

door 207 : bedroom

L→R 4" / 10" / 3 3/4" / 10" / 4"

T→B 4 1/8" / 9 1/4 / 3 3/4 / 23 3/4 / 6 3/4 / 23 3/4 / 7 1/4"

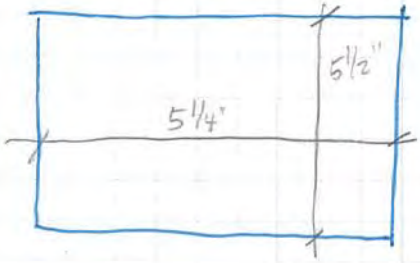
undercut = 3/8"



door 207 : hall

L→R 4" / 10" / 3 3/4" / 10" / 4"

T→B same



door 209

door 209A

L→R 1 3/4 / 5 1/4 / 1 3/4

T→B 4 1/8 / 9 1/4 / 3 3/4 / 23 3/4 / 6 3/4 / 23 3/4 / 4 7/8"

undercut 1/4"

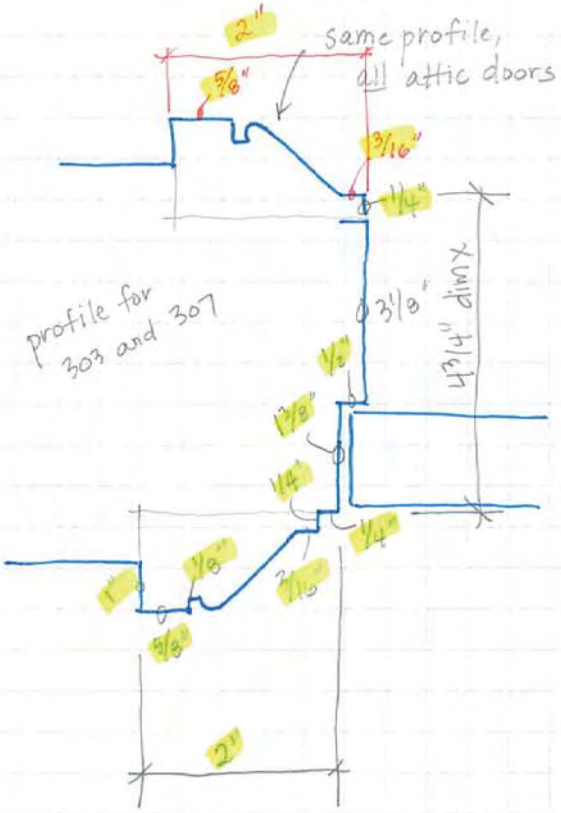
door 208 / 210

L→R 4" / 10 1/8 / 3 3/4 / 6" / 4"

T→B 4 1/8 / 9 1/4 / 23 3/4 / 23 3/4 / 6 3/4 / 23 3/4 / 1 3/8"

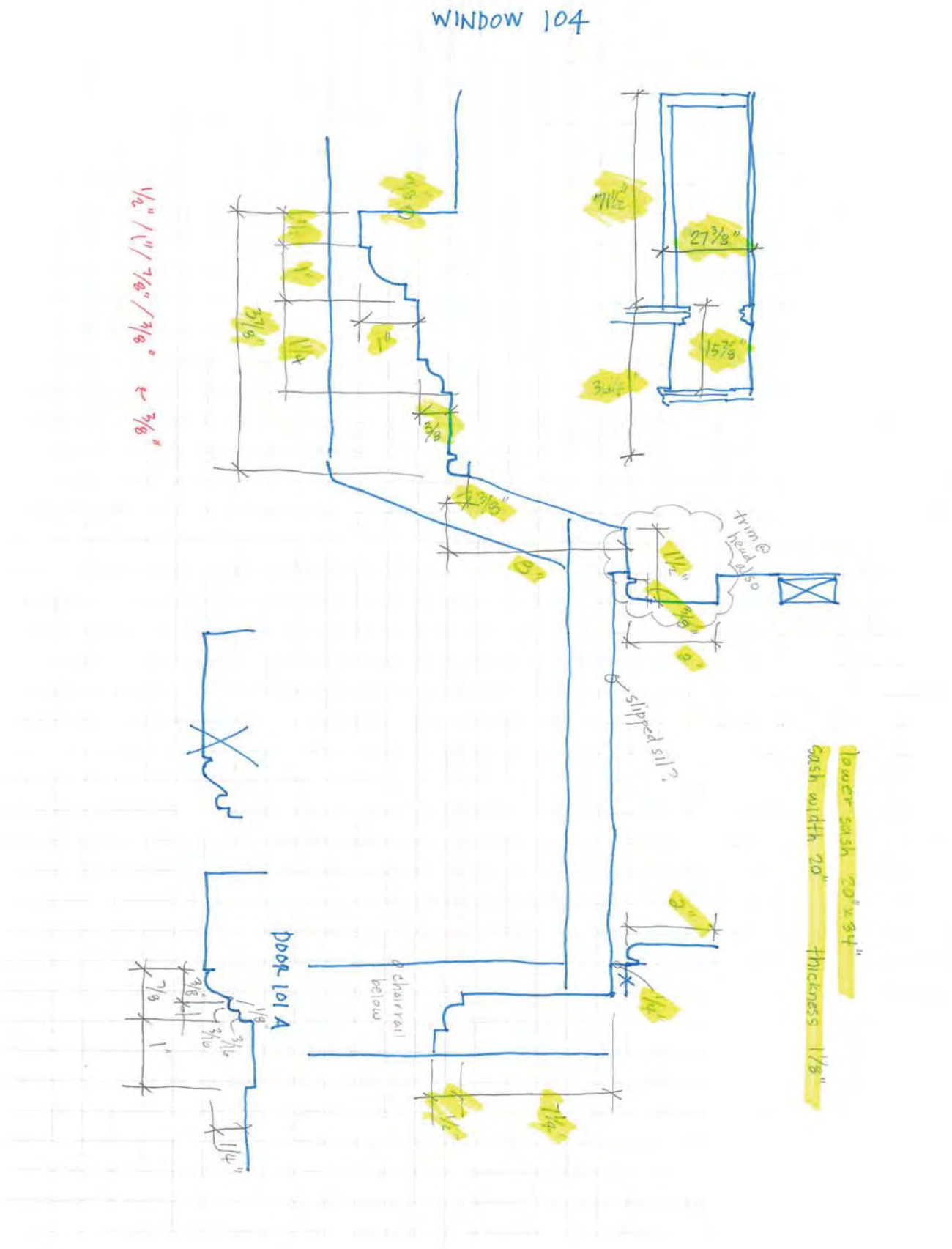
undercut 3/8"

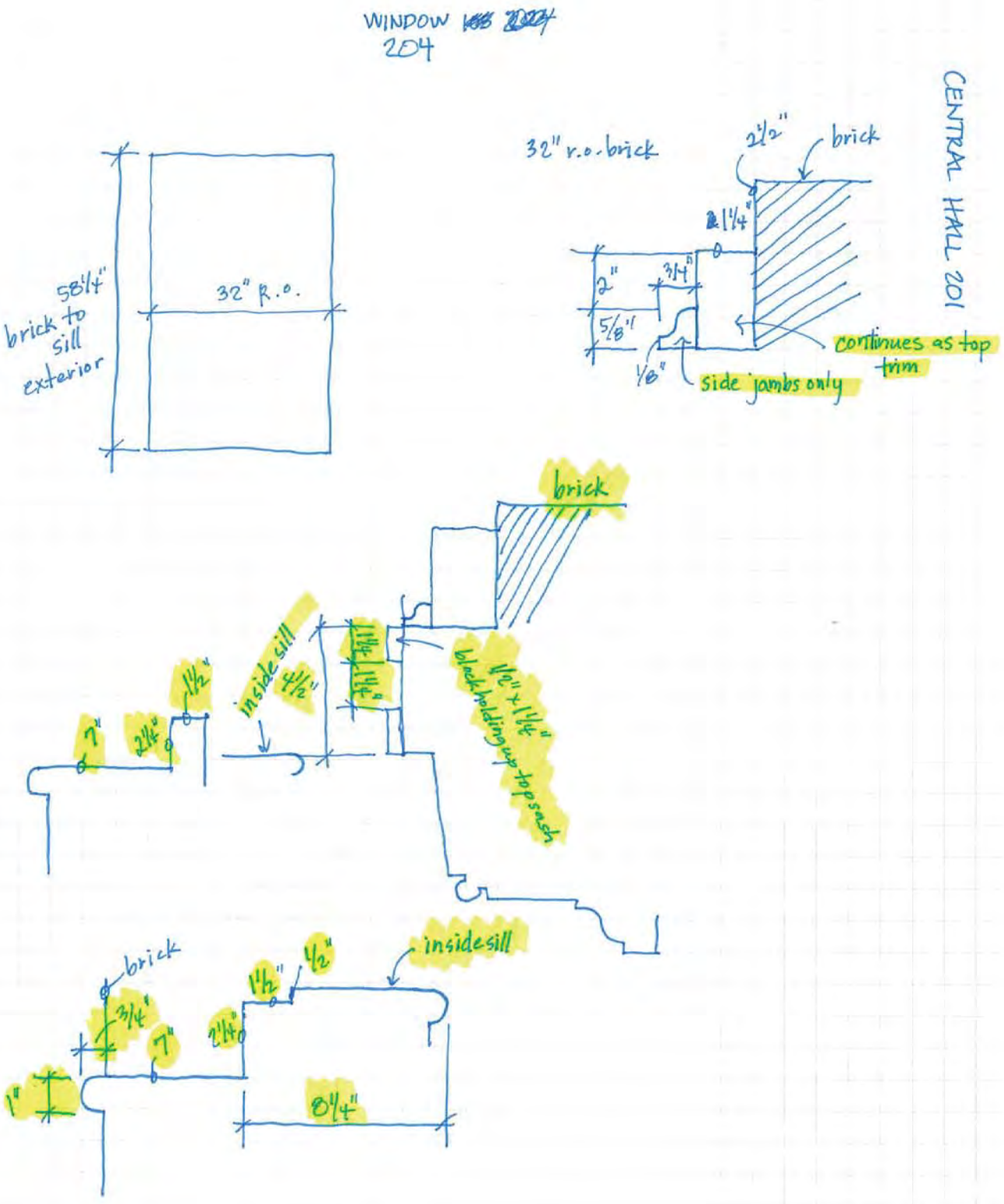
door 303 31 5/8" x 70 3/4"
3/4" undercut
trim to trim 36"

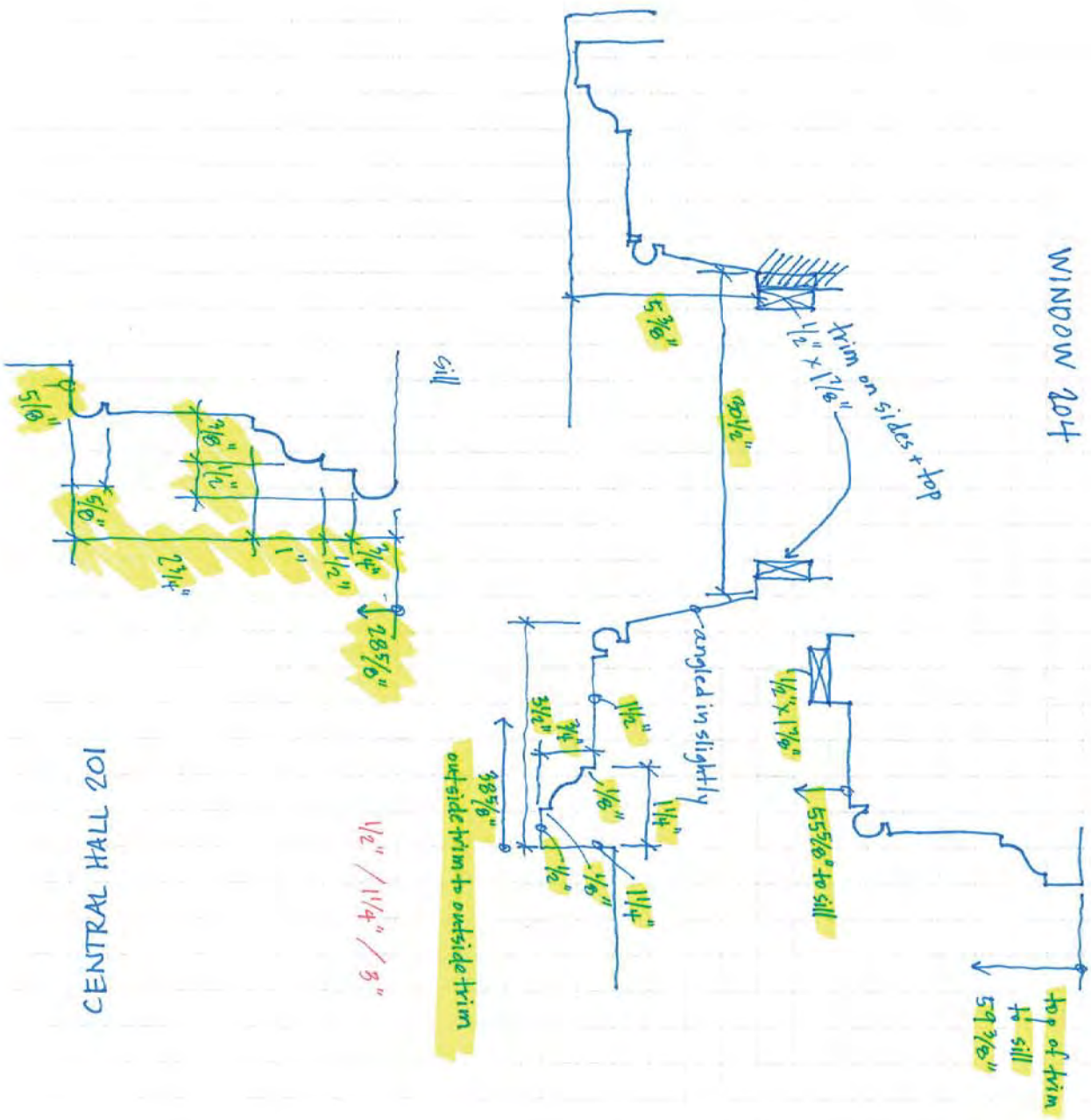


bathroom

door 307 31 1/2" x 71 1/4"


WINDOW 104
1/2" / 1" / 7/8" / 3/8" ← 3/8"
27 3/8"
15 7/8"
trim @ head also
slipped sill?
lower sash 20" x 34"
sash width 20"
thickness 1 1/8"
DOOR 101 A
@ chair rail below

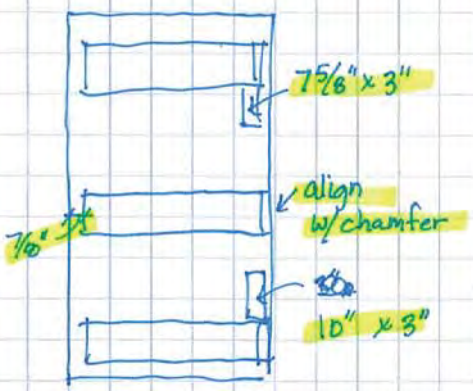

WINDOW
204
CENTRAL HALL 201
32" r.o. brick
2½"
brick
1¼"
2"
3/4"
5/8"
1/8"
continues as top trim
side jambs only
58¼"
brick to sill exterior
32" R.O.
brick
inside sill
1½"
1¼"
1¼"
1/2" x 1¼" blocks holding up top sash
7"
2¼"
1½"
brick
3/4"
7"
2¼"
1½"
1½"
inside sill
1"
8¼"


WINDOW 204
CENTRAL HALL 201
sill
trim on sides + top
angled in slightly
outside trim to outside trim
top of trim
to sill
59 3/8"
55 5/8" to sill
28 5/8"
28 5/8"

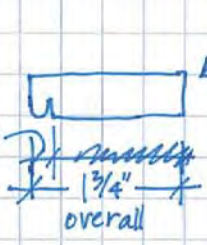
door 001 outside 35 5/8" x off slab 69 7/8" w/ 1" undercut
L→R 9 1/2" - 1/4" - 4 1/2" - 1/4" - 7" - 1/4" - 5 3/8" - 1/4" - 7 1/2"

inside
T→B 4 3/8" - 5 1/2" - 21 1/4" - 7 7/8" - 21 1/8" - 6" - remain. beaded 1/2" trim

thickness 1"
batten 1" thick



door 003A + 003B not elevated
26 7/8" x 70 5/8"
no undercut
door 003A
inside (east)

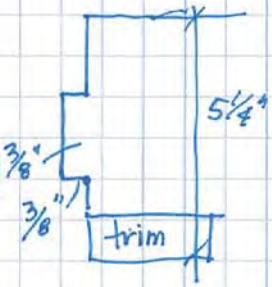


T→B 3" - 27/8" - 26 1/2" - 3" - 26 1/8" - 3" - remain.

batten - 26" - 3/4" thick
thickness - 3/4"
trim 2 1/2" x 1"

door 003B 26 5/8" x 70 3/8" no undercut

T→B 2" - 3 1/4" - 26 1/4" - 3 1/4" - 26 1/4" - 3" - remaining



batten - 25" / 3/4" thick
thick - 3/4"
trim 2 1/4" x 1"

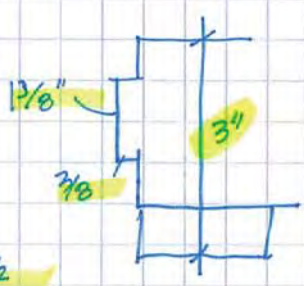
004 A → 24 7/8" x (slab to top 6'-3/8") x 68 1/2"
outside
L → R 1 1/2" * 1/4" - 6" - 1/4"
repeat 4x

trim 2 1/4"
thick 7/8"
inside: mirror image of boards

batten 1/2" detail @ top + bottom batten width 24"

T → B 2" - 6 1/4" - 52" - 6" - remaining

004 A + B



004 B → 25" x (slab to top 73") x 69"
outside:
L → R 3 1/8" - 4 1/4" - 2 1/2" - 4 3/8" - 3 3/8 - 3 3/8 - 3 1/2
thick 7/8"

trim 2 1/4"

battens width 23" depth 1/2" (thick)
T → B 6 1/2" - 4 1/2" - 48 1/2" - 4 1/2" - remaining

008 / mech room 30 1/2" x (slab to top 66 1/8") x 65 1/4" thick 3/4"
outside

repeat 9x
L → R 1/4" - 1/4" - [illegible]"
bead 23/4"

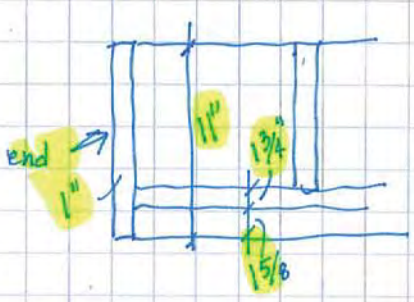


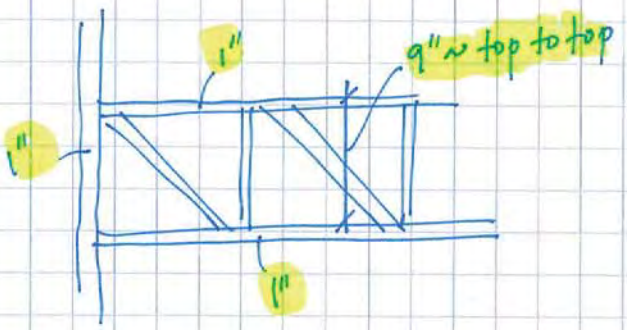
T → B 1 1/2" - 4 3/4" - 50 3/4" - 6 3/8" - remaining
width 28 3/4"

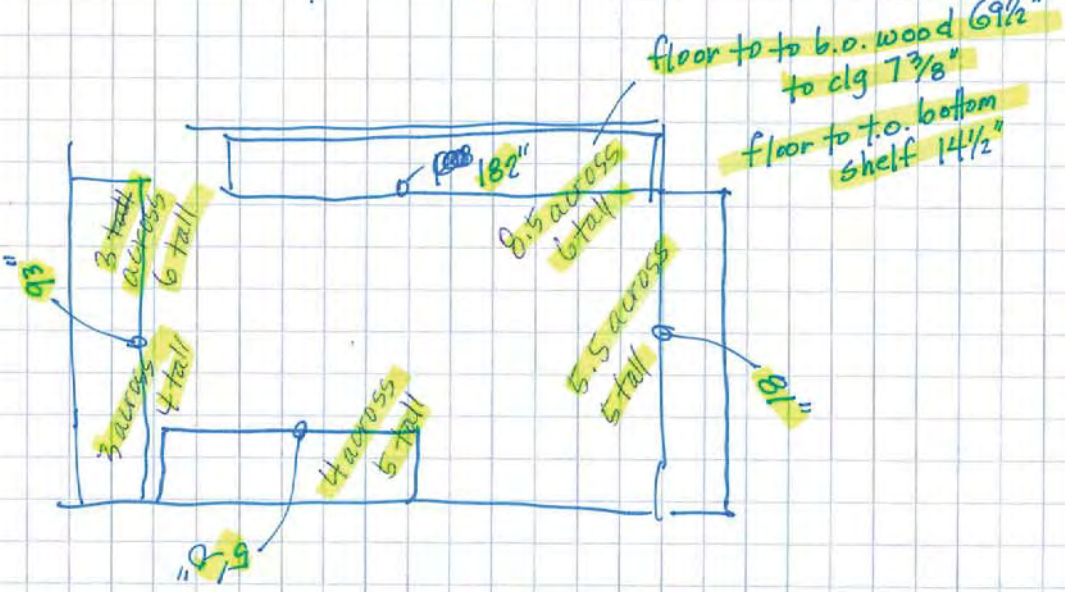
1/2" bead @ top + bottom of batten

inside
L → R 3" - 3 1/2" - 3 1/2" - 3 1/2" - 3" - 3" - 3 1/2" - 3 1/2" - 3 1/2" - 1/4"

door 005 34½" x (slab to top 71") x 69¾" thick 1¾" wood only
mtl 3/8" ~ ¼" thick







009
frame 2¼"
24" x (slab to top 62⅜") x 58½"
thick door ¾" batten ⅞"

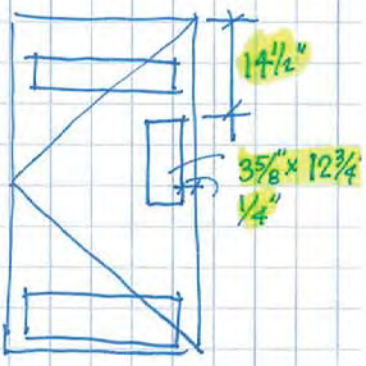
outside
L–R 3⅜" – ¼" – 5½" – ¼" – 6¾" – ¼" – 7¼"

inside
T–B 5⅜" – 5½" – 34" – 5½"

batten width 21½"

boards mirror image on inside face





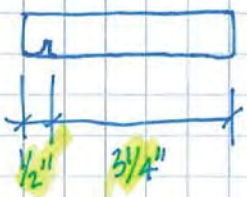
inside elev.

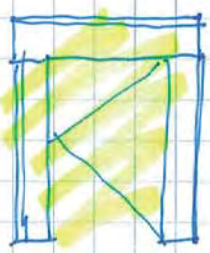
007
27½" x (slab to top 6'-0") x 71¼"

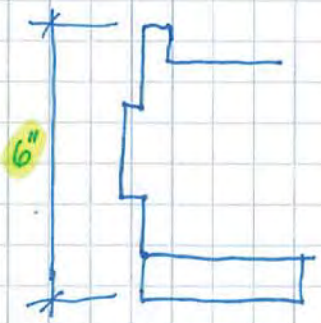
outside
L → R
11¼" – ¾" – 3" – ¾" – 11½"
door thick ⅞"
batten thick ⅞"

inside
L → R
12⅜" – 3" – 12"
T → B 2 battens
4¾" – 5½" – 42" – 12" – remaining

width of battens 26¾"







006 stair side 28 5/8" x (slab to top 72 1/4") x 71 1/8"

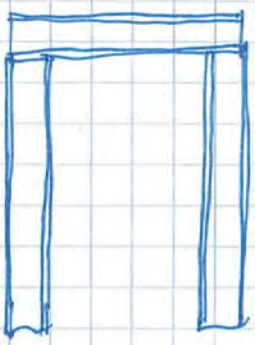
L → R 7 3/4" - 1/4" - 6 5/8" - 1/4" - 5 3/4" - 1/4" - 7 1/4"

corridor side →
boards mirror image

T → B battens flush to edges width
4 3/4" - 5 1/2" - 21" - 5 1/2" - 22" - 5 1/2" - remaining

trim





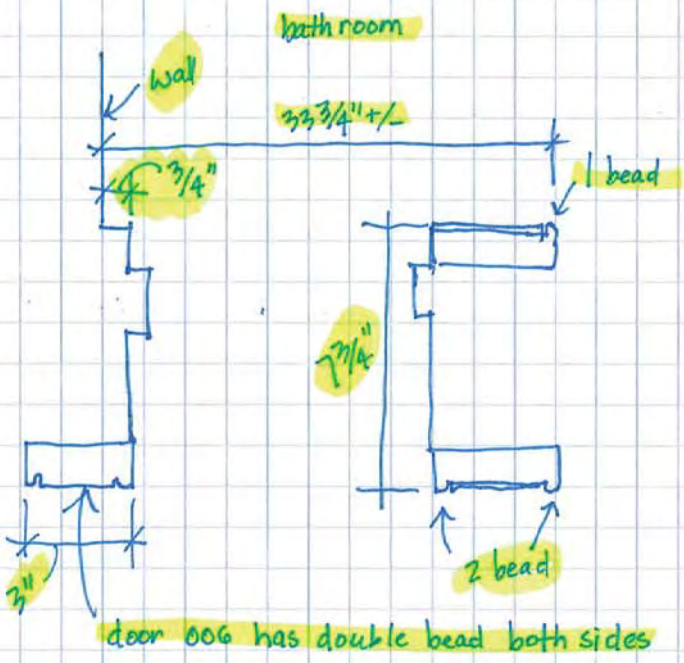
step up from stair 7 3/4" to thres.
(3/4" thres.)
↓
door 006 + bathroom

011
bathroom (001?)
30" x (slab to top 72") x 70 1/2"

corridor side
L → R 11 1/2" - 3/4" - 5 1/2" - 3/4" - 11 3/8"



bathroom side (no bead)
L → R 12 1/4" - 5 1/2" - 12"
battens - width 28 3/4"
T-B 5" - 6" - 40 1/4" - 12" - remaining -


bath room
wall
33 3/4" +/-
3/4"
1 bead
7 3/4"
3"
2 bead
door 006 has double bead both sides

stair closet 012 — 24 1/4" x (72 3/8" slab to top) x 71 3/4"

outside
L → R 3 1/2" - 3/8" - 5 1/4" - 3/8" - 5 3/8" - 3/8" - 5 1/2" - 3/8" - 2 1/2"

trim: 3" plain wood thick door: 3/4" batten thick: 7/8"

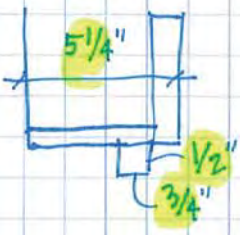
inside
L → R mirror image

T → B battens w/ 1/2" beads @ top + bottom
3 1/4" - 6" - 23" - 7" - 23" - 5 1/2" - remaining

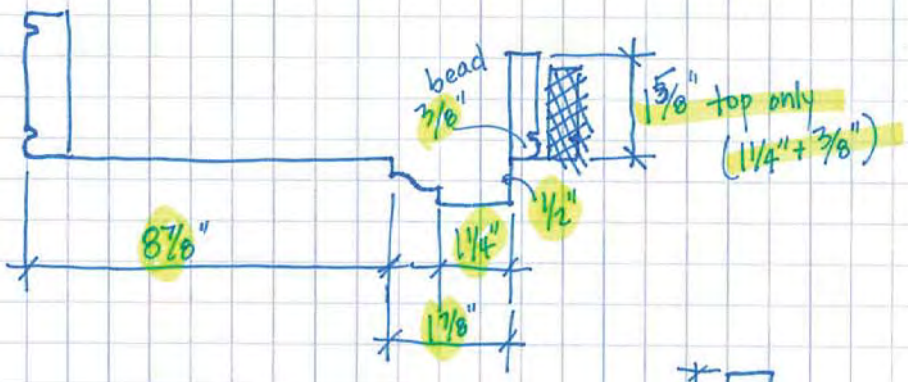




1/2" overhang @ doors 006, 007, 012 @ stair 010 side



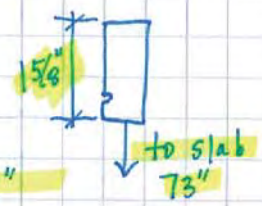
013A



Corridor side

35" x 72" thick: 1"

L → R 5" - 3/8" - 11" - 3/8" - 5 1/2" - 3/8" - 12"

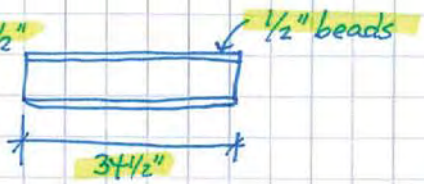


rec room side

L → R board mirror image

T → B 3 1/4" - 5 1/2" - 23 3/4" - 7 1/2" - 22 1/2" - 5 1/2"

batten thick: 1"



* no right + left trim on rec room side

013 B 35¼" x (slab to top 75") x 73¾"
thick 7/8"

inside rec room

L → R 11" – 3/8" – 9" – 3/8" – 6½" – 3/8" – 75/8

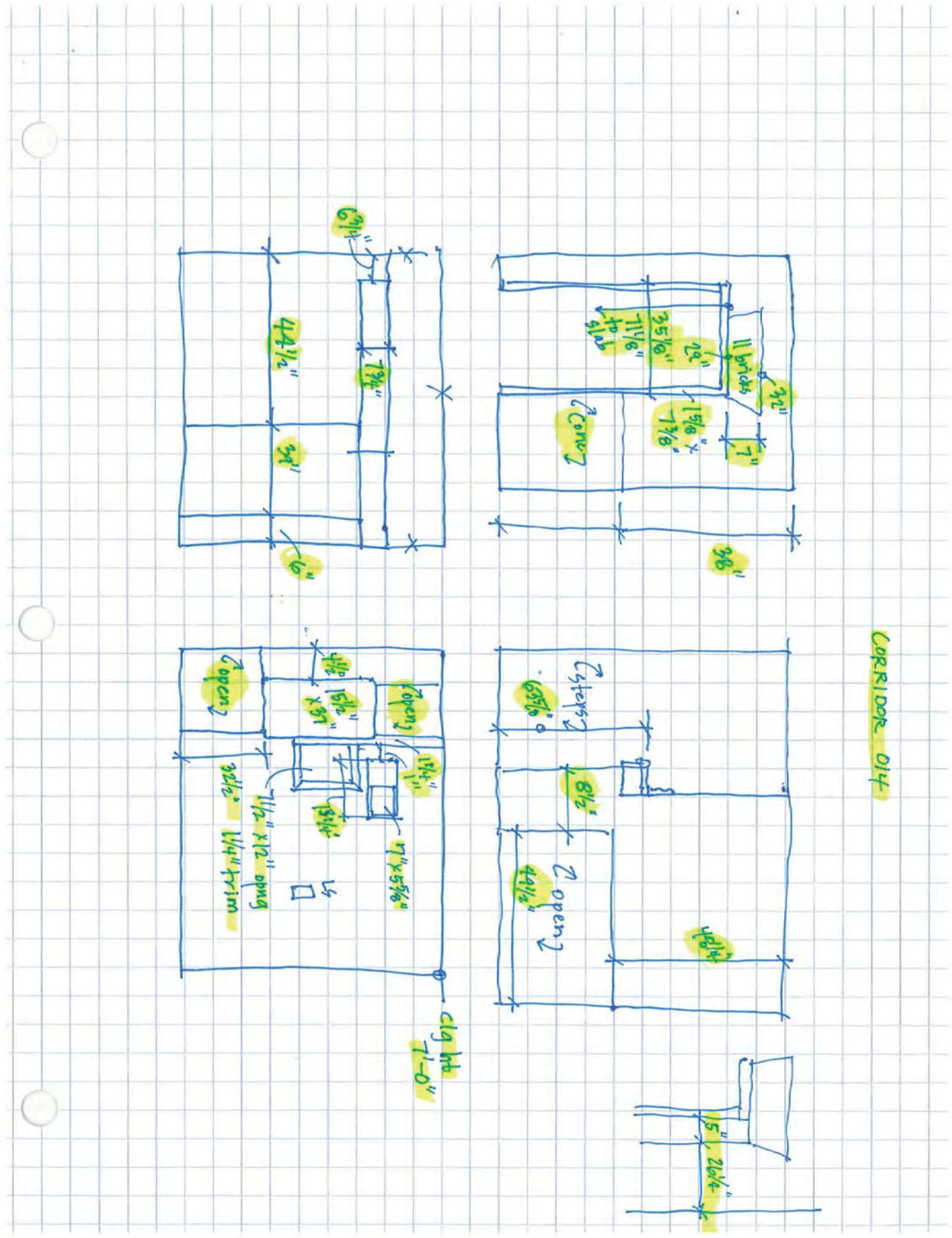
battens 1" thick – in Rec room
T–B 3½" – 5¾" – 24" – 7½" – 24" – 5¾"

inside room
mirror image of board

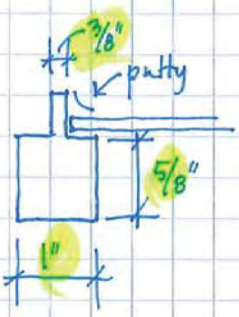


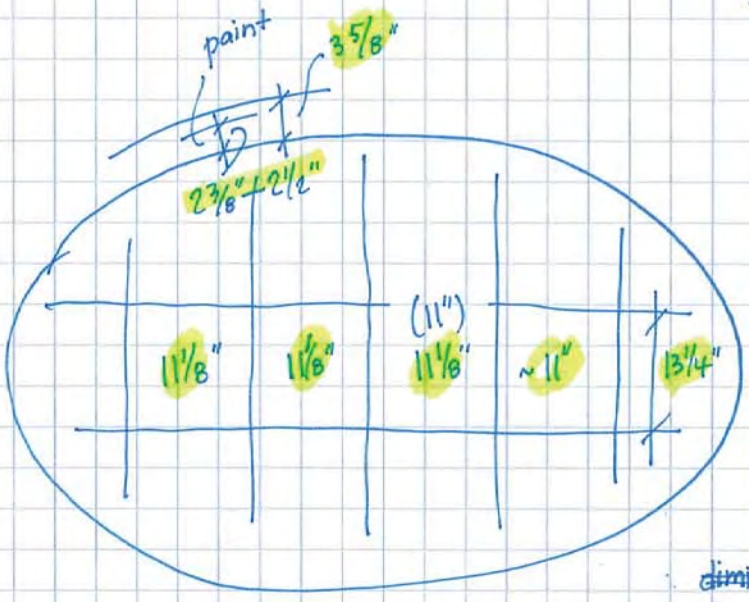


used to be double exterior door w/ lock @ middle
hinges still evident


CORRIDOR 014
6¼"
47½"
7¾"
36"
6"
35⅝"
11⅛"
12"
11 brick
32"
7"
Conc.
1⅝" x 7⅜"
98"
Cistern
63⅝"
8½"
open
47½"
48"
open
open
1½"
15½" x 36"
1¼"
13½"
3½"
11¼" x 12" opng
1¼" trim
11" x 55⅝"
clg ht 7'-0"
15"
26¼"

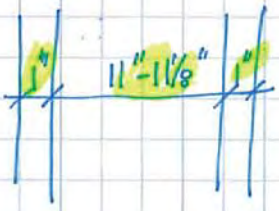
basement ~~ext~~. window sash
elliptical

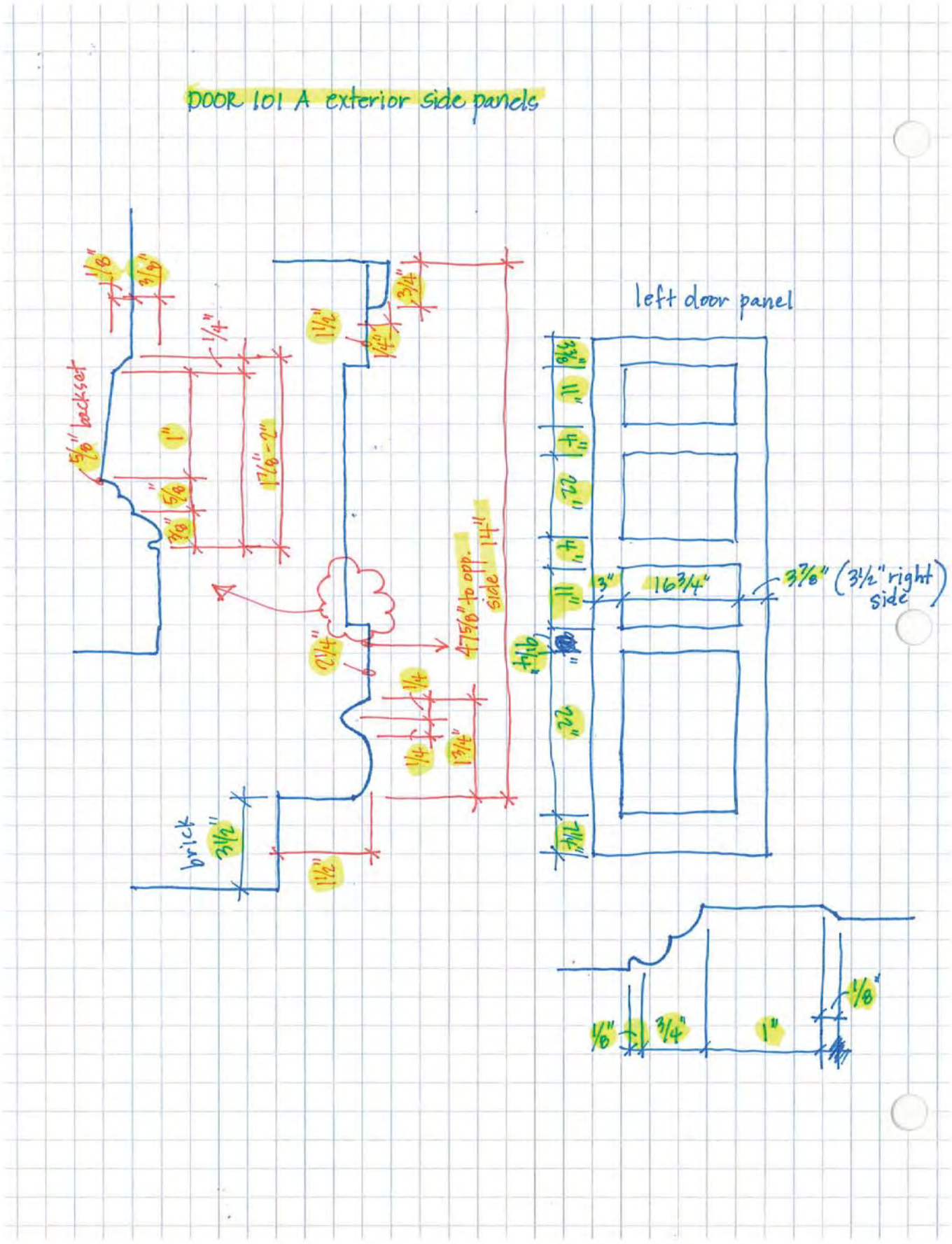


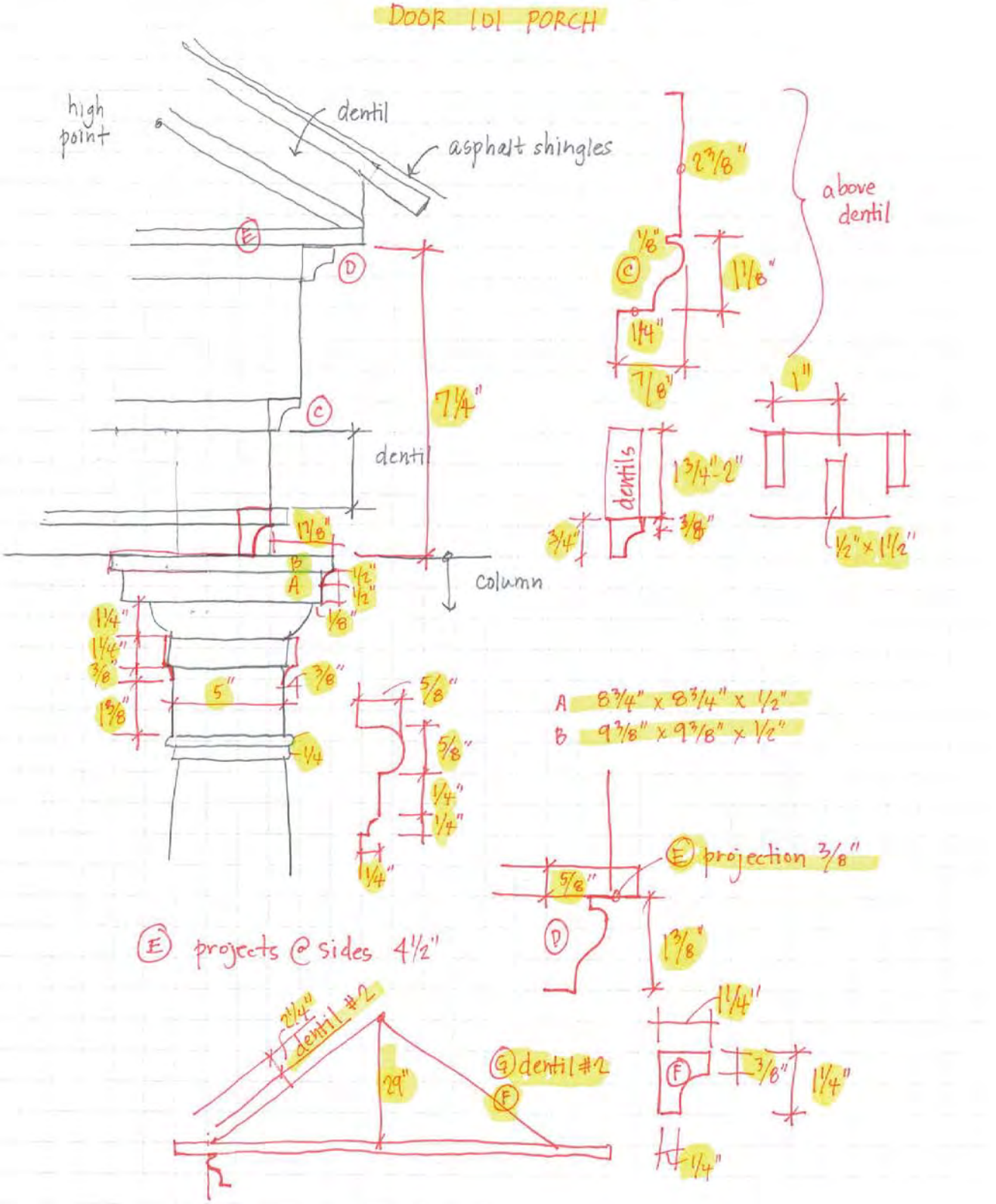


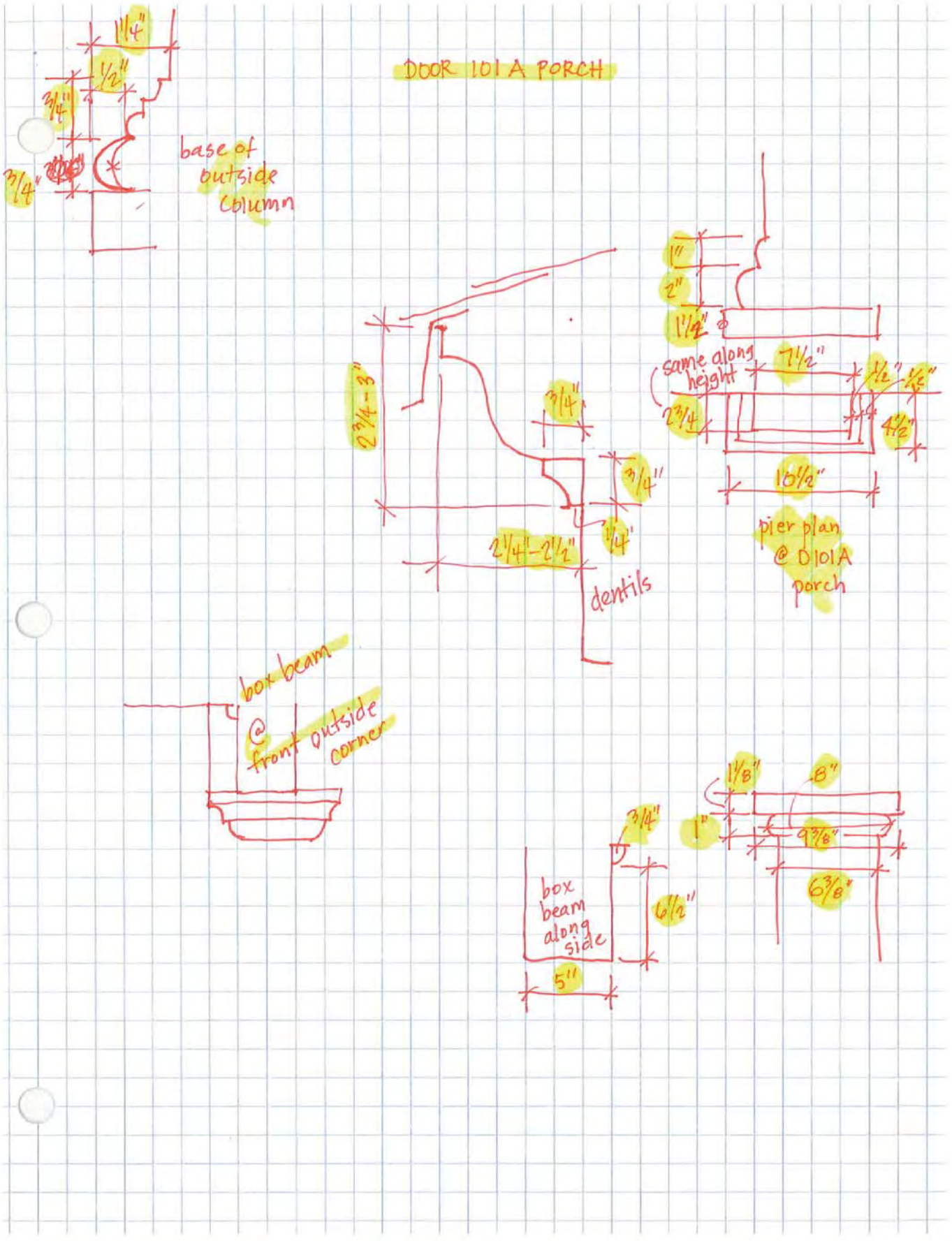
thickness 2"

~~dimin~~
dimensions taken from
outside of 1" muntins




DOOR 101 A exterior side panels
5/8" backset
1/8"
3/4"
1/4"
1"
1 7/8"
2 1/8"
1 1/2"
3/4"
1 1/2"
1/4"
4 1/2"
3/4"
1/4"
1/4"
3 1/4"
1 1/2"
brick
3 1/2"
side 14"
left door panel
3 3/8"
11"
4"
22"
4"
11"
3"
16 3/4"
3 7/8" (3 1/2" right side)
22"
3 3/8"
1/8"
3/4"
1"
1/8"

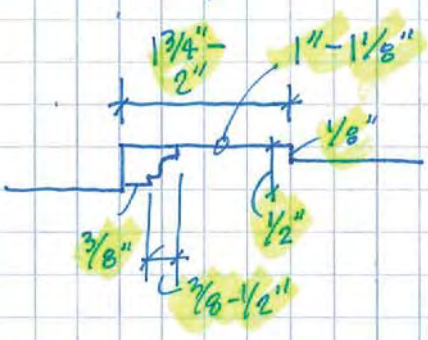

DOOR [D] PORCH
high point
dentil
asphalt shingles
E
D
C
7 1/4"
dentil
1 7/8"
B
A
1/2"
1/2"
1/8"
1 1/4"
1 1/4"
3/8"
1 3/8"
5"
3/8"
1/4
5/8"
5/8"
1/4"
1/4"
1/4"
column
2 3/8"
above dentil
1/8"
C
1 1/8"
1 1/4"
7/8"
dentils
1 3/4"-2"
3/4"
3/8"
1"
1/2" x 1 1/2"
A 8 3/4" x 8 3/4" x 1/2"
B 9 3/8" x 9 3/8" x 1/2"
E projection 3/8"
5/8"
D
1 3/8"
E projects @ sides 4 1/2"
2 1/4"
dentil #2
29"
G dentil #2
F
1 1/4"
F
3/8"
1 1/4"
1/4"


DOOR 101A PORCH
1¼"
½"
¾"
¾"
base of outside column
1"
2"
1¼"
same along height
7½"
½"
½"
2¾"
4½"
16½"
pier plan @ D101A porch
2¾"-3"
¾"
¾"
¼"
2¼"-2½"
dentils
box beam @ front outside corner
1⅛"
8"
1"
9⅜"
6⅜"
¾"
box beam along side
6½"
5"

door 101 B

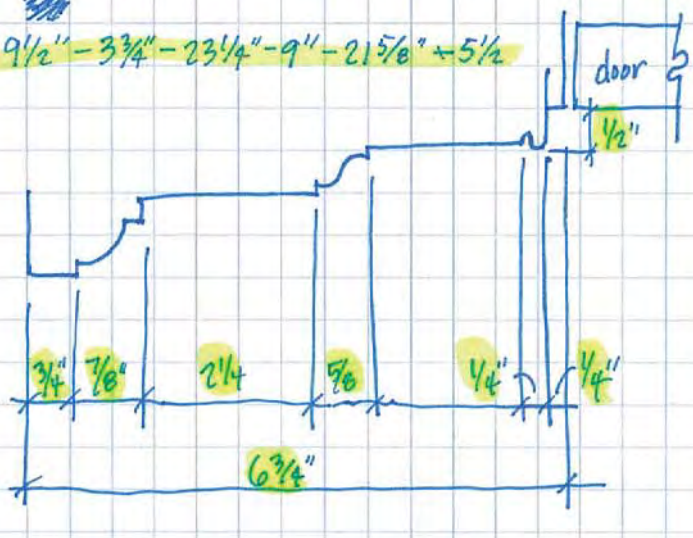
34½" x (top to floor 78¾") x 76⅞"

exterior door profile



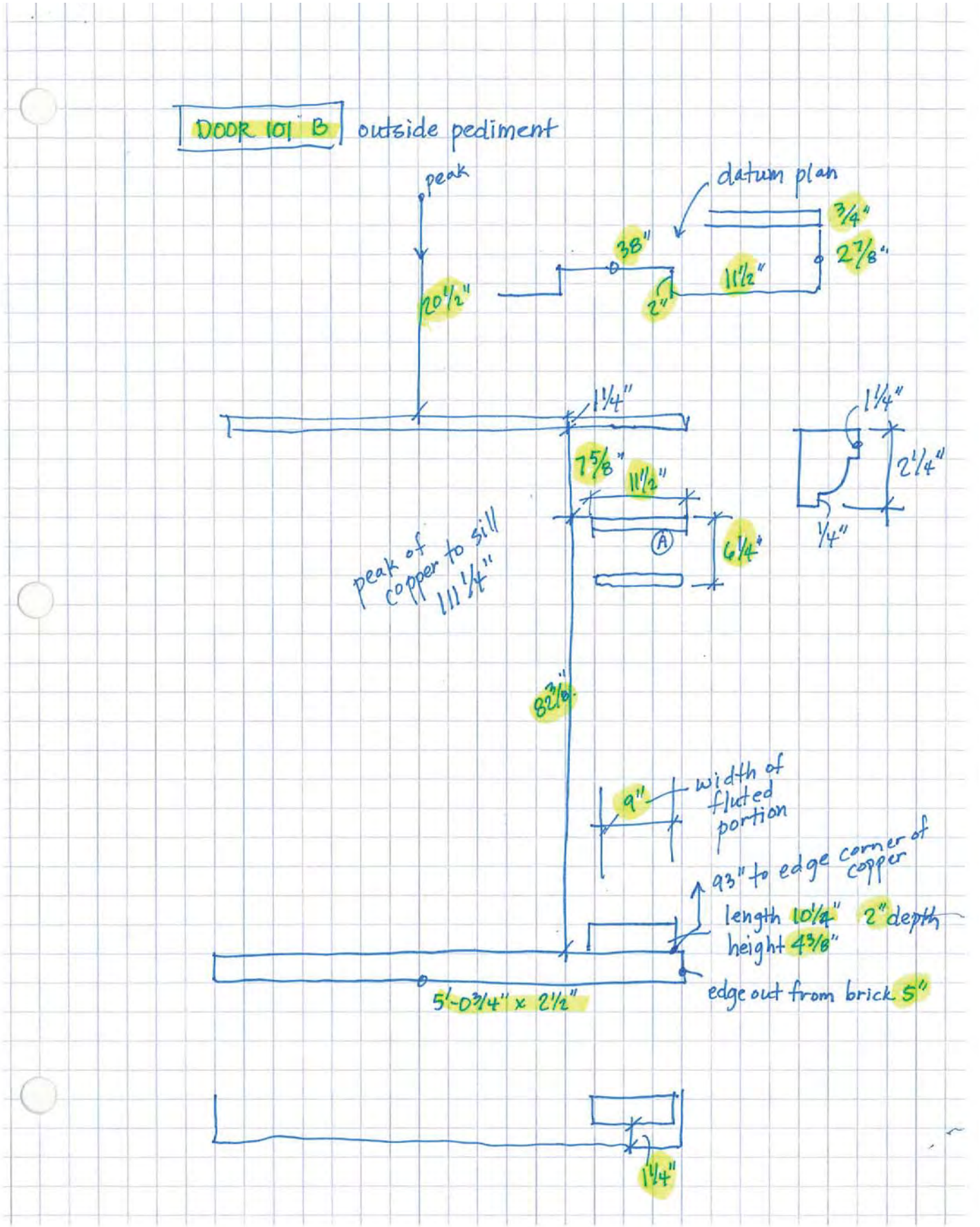
L → R 3½" – 12" – 3⅞" – 11¾" – 3½ @ top
3¼ @ bottom

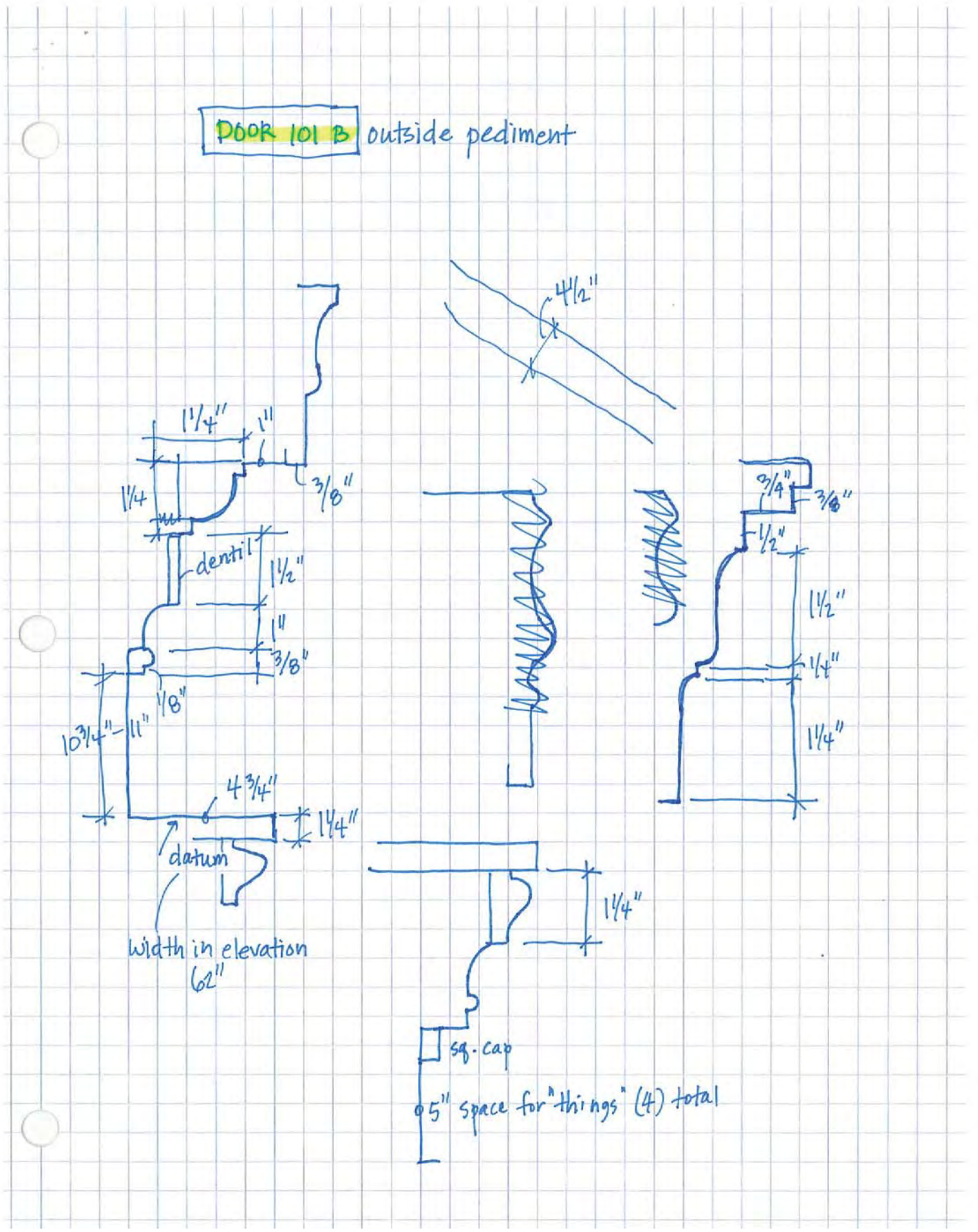
T → B
3⅞" – 9½" – 3¾" – 23¼" – 9" – 21⅝" – 5½

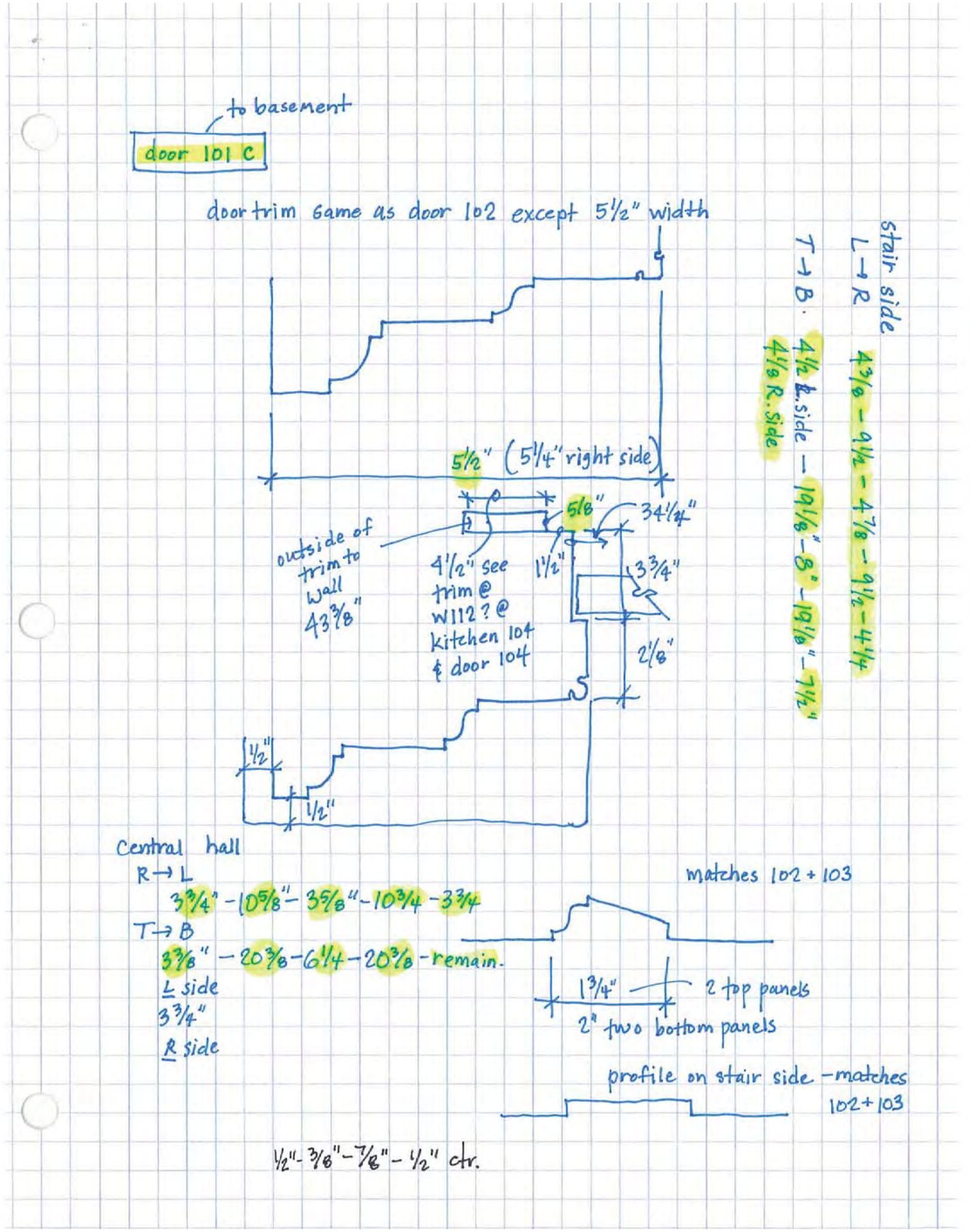


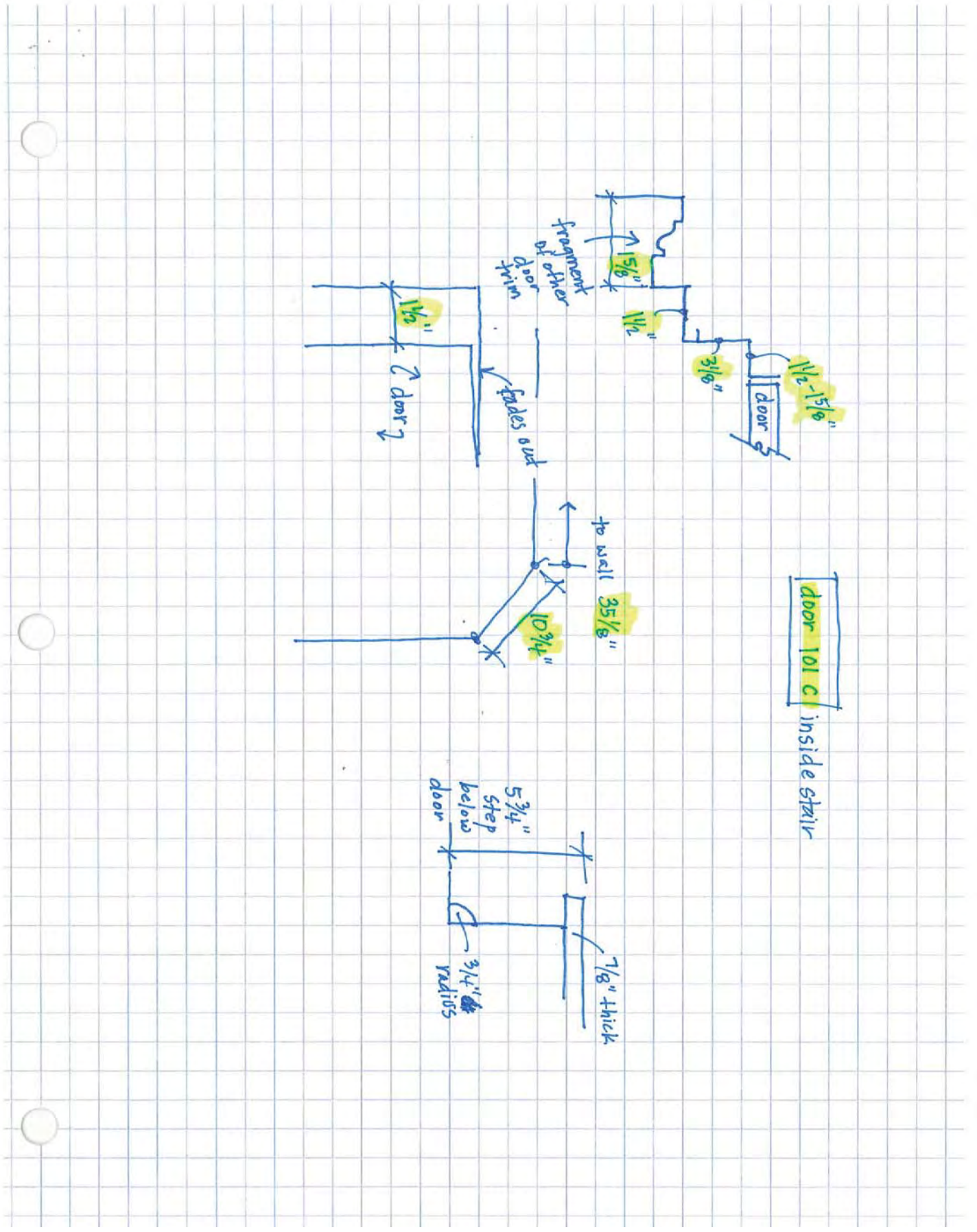



9"
1 1/4"
1 1/2"
1/8"
1"
3/4"
clear 3 1/4"
1 3/8"
right side + top
1/2"
3/4"
may be set back
1/4"
DOOR 101 B trim
2 3/8"
5/8"
1/2"
5/8"
1/2"
1 1/4"
3/8"
3/4"
door


DOOR 101 B
outside pediment
peak
datum plan
3/4"
2 7/8"
3B"
11 1/2"
2"
20 1/2"
1 1/4"
1 1/4"
2 1/4"
1/4"
7 5/8"
11 1/2"
A
6 1/4"
peak of copper to sill
111 1/4"
82 3/8"
9"
width of fluted portion
93" to edge corner of copper
length 10 1/4" 2" depth
height 4 3/8"
edge out from brick 5"
5'-0 3/4" x 2 1/2"
1 1/4"


DOOR 101 B outside pediment
4 1/2"
1 1/4"
1"
3/8"
1 1/4
dentil
1 1/2"
1"
3/8"
1/8"
10 3/4"
11"
4 3/4"
1 1/4"
datum
width in elevation
62"
3 1/4"
3/8"
1 1/2"
1 1/2"
1/4"
1 1/4"
1 1/4"
sq. cap
@ 5" space for "things" (4) total


to basement
door 101 C
door trim same as door 102 except 5½" width
stair side
L→R 4 3/8 - 9½ - 4 7/8 - 9½ - 4¼
T→B. 4½ L. side - 19⅛" - 8" - 19⅛" - 7½"
4⅛ R. side
5½" (5¼" right side)
5⅛"
34¼"
outside of trim to wall 43⅜"
4½" see trim @ W112? @ kitchen 104 & door 104
1½"
3¾"
2⅛"
1½"
1½"
Central hall
R→L
3¾" - 10⅝" - 3⅝" - 10¾ - 3¾
T→B
3⅜" - 20⅜ - 6¼ - 20⅜ - remain.
L side
3¾"
R side
matches 102 + 103
1¾" 2 top panels
2" two bottom panels
profile on stair side - matches 102+103
½" - ⅜" - ⅞" - ½" ctr.


door 101 C inside stair
1½-1⅝"
door
3/16"
1½"
⅝"
fragment of other door trim
1½"
door
fades out
to wall 35⅛"
10¾"
5¾" step below door
3/4" radius
⅞" thick

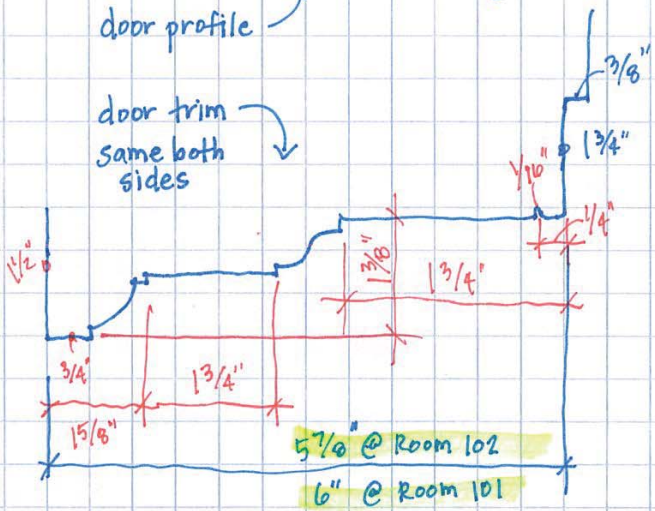
door 102 | living room / parlor

panels →
@ parlor/living room
L→R 3¾" / 10½" / 5" / 10½" / 3¾"
T→B 3½" / 11" / 4⅞" / 16" / 9" / 21" / 7¾"
¾" undercut



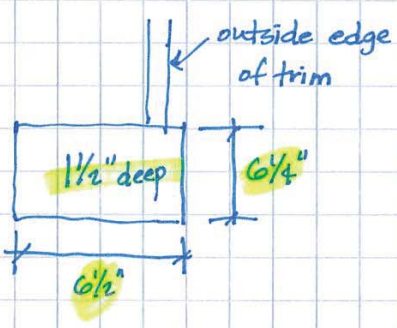
door profile

door trim
same both sides



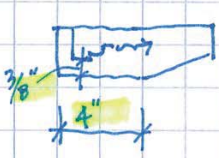
width 33½" height 73⅜"
trim to trim 45"
top trim to floor 80⅜"

trim block @ ~~floor~~ floor



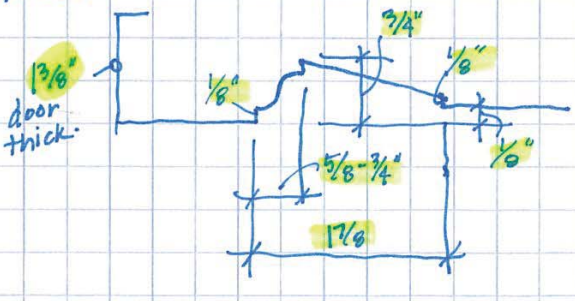
left side block





door 102 : central hall

panels →
L→R 3" / 11¾" / 3¾" / 11¾" / 3¼" +?
T→B 3⅛" / 12¼" / 3¾" / 17⅛" / 7⅞" / 22¼" / 6⅞"
width 33⅝"
height 79⅜"
trim to trim 45"
trim to floor ~~80⅜~~" 79½" ~ 79¾"



door 103 — door trim + profile matches door 102. both sides

dining room

top of trim to floor 80 3/8"

L → R 3 7/8" – 10 1/2" – 5" – 10 1/2" – 3 7/8"

5"

T → B 3 3/4" – 11" – 16" – 9" – 21" – 7 5/8" +/- ↳ remaining

same as door 102

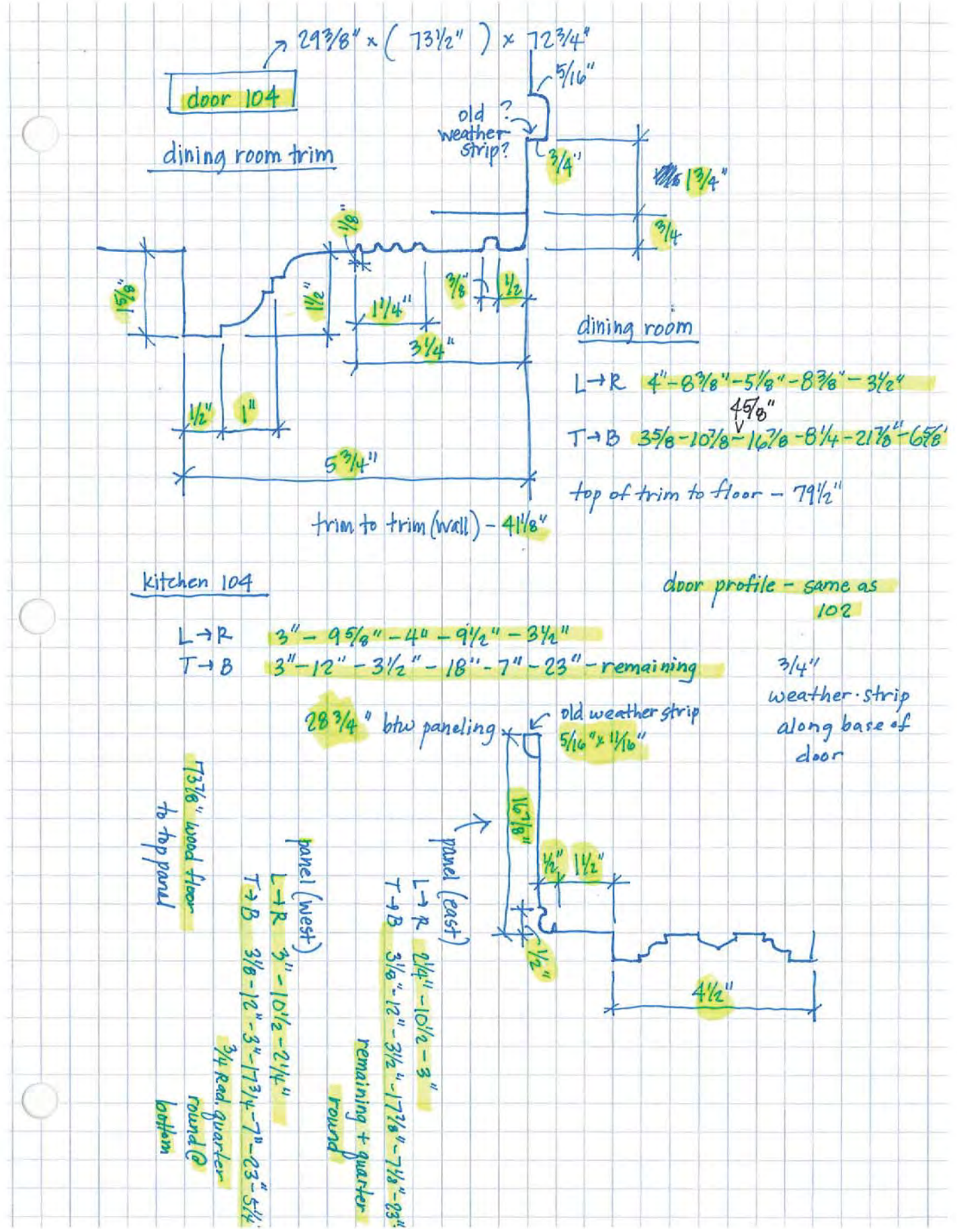
outside trim to trim 46 1/8"

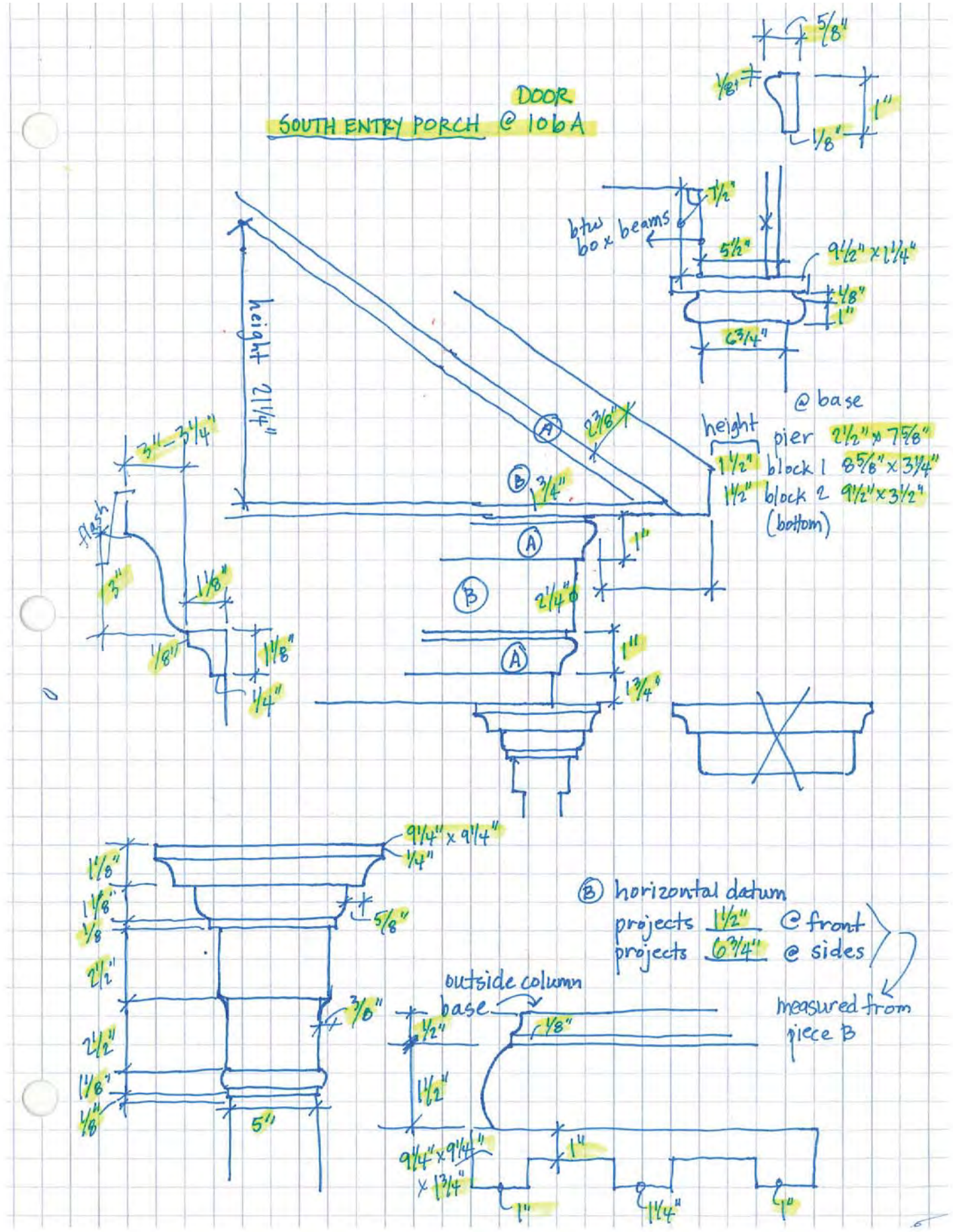
central hall 33 3/4" x (74 1/4) x 73 7/8"

L → R 3 1/4" – 11 3/4" – 3 3/4" – 11 3/4" – 3 1/4"

T → B 3 1/4" – 12 1/8" – 3 3/4" – 17 1/4" – 7 3/4" – 22 1/4" – remaining

outside trim to trim 46 1/8"


door 104
29 3/8" x (73 1/2") x 72 3/4"
dining room trim
old weather strip?
5/16"
3/4"
1 3/4"
dining room
L → R 4" - 8 3/8" - 5 1/8" - 8 3/8" - 3 1/2"
45/8"
T → B 35/8 - 10 7/8 - 16 7/8 - 8 1/4 - 21 7/8" - 6 5/8"
top of trim to floor - 79 1/2"
trim to trim (wall) - 41 1/8"
kitchen 104
door profile - same as 102
L → R 3" - 9 5/8" - 4" - 9 1/2" - 3 1/2"
T → B 3" - 12" - 3 1/2" - 18" - 7" - 23" - remaining
3/4" weather-strip along base of door
28 3/4" btw paneling
old weather strip 5/16" x 11/16"
panel (east)
panel (west)
73 7/8" wood floor to top panel
3/4 Rad. quarter round @ bottom
remaining + quarter round
4 1/2"


SOUTH ENTRY PORCH @ 106A
DOOR
5/8"
1/8"
1"
1/8"
btw box x beams
1 1/2"
5 1/2"
9 1/2" x 1 1/4"
1/8"
1"
6 3/4"
height 21 1/4"
@ base
height
pier 2 1/2" x 7 5/8"
1 1/2" block 1 8 5/8" x 3 1/4"
1 1/2" block 2 9 1/2" x 3 1/2"
(bottom)
2 3/8"
3/4"
1"
2 1/4" ϕ
1"
1 3/4"
3" - 3 1/4"
flash
3"
1 1/8"
1/8"
1 1/8"
1/4"
9 1/4" x 9 1/4"
1/4"
1 1/8"
1 1/8"
1/8
5/8"
2 1/2"
3/8"
2 1/2"
1 1/8"
1/8"
5"
outside column base
1/2"
1/8"
1 1/2"
9 1/4" x 9 1/4" x 1 3/4"
1"
1"
1 1/4"
1"
B horizontal datum
projects 1 1/2" @ front
projects 6 3/4" @ sides
measured from piece B

door 209 — 27 3/4 x (79 3/8") x 79"

L → R 4" – 8" – 3 3/4" – ~~8 1/4"~~ (8") – 4"

T → B 4 1/8" – 9 1/4" – 23 3/4" – 6 3/4" – 23 3/4" – remaining 3 3/4"

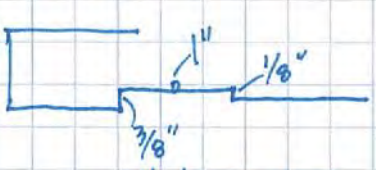
1 3/8" thick

* bsmt window
* attic dormer

303 31 3/4" x (71 3/4") x 70 3/4" 1 1/4" thick

bedroom 303
L→R 5 3/4" - 7 1/8" - 5 7/8" - 7 1/8 - 5 3/4"
T→B 3 1/2" - ? - 4 3/4"
fill in

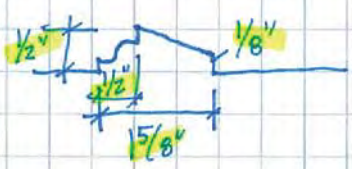
corridor 301 (hall 301)
mirror image



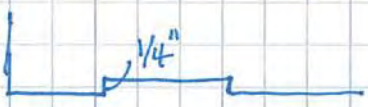
all doors except
302 + 305

302 26 3/4" x (69 1/2") x 69" 1" thick

hall 301
L→R 3 3/4" - 7 3/4" - 4" - 7 3/4" - 3 1/2"
T→B 3 1/8" - 30 3/4" - 7 1/2" - 21" - 6 1/4"



closet 302
L→R 4" - 6 3/4" - 4 7/8" - 6 3/4" - 4 1/4"
T→B 3 1/8 - 29 3/4" - 8 5/8" - 20" - 7"



304 31 3/4" (6'-0") x 71 1/4" thick 1 1/4"

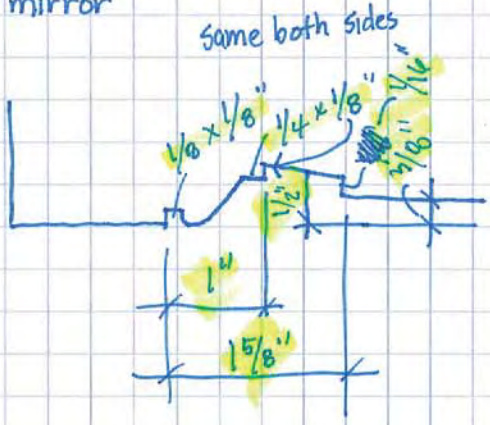
hall 301
L→R 5 3/4 - 7 1/8 - 5 7/8 - 7 1/8 - 5 3/4"
T→B 3 1/2" - ? - 5 1/4"
fill in

bathroom 304
mirror image

305 ~~27 1/8~~ 27" x (67") x 66" thick 1 3/8"

hall 301
L → R 2 7/8" - 8 1/4 - 4 3/4 - 8 1/4 - 2 3/4
T → B 3 1/2 - ? - 8 3/4"
(fill in)

closet 305
same / mirror



306 31 3/4" x (72 1/4") x 71 1/4" thick 1 1/4"

hall 301
L → R 5 3/4 - 7 1/8 - 5 7/8 - 7 1/8" - 5 3/4"
T → B 4" - ? - 5"
fill in

closet 306
same mirror image

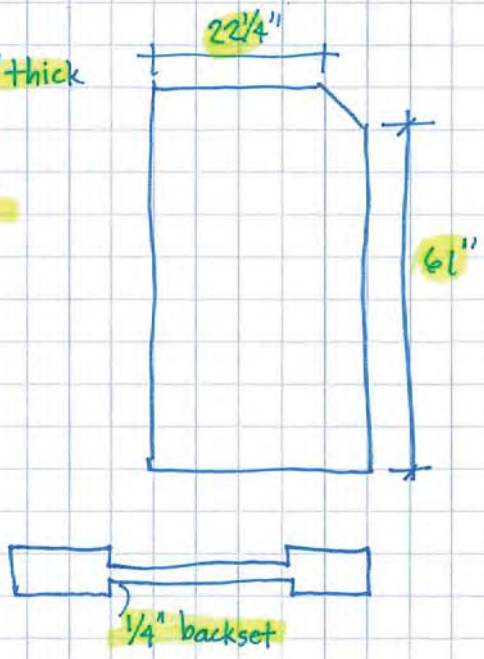
307 31 3/4" x (6'-0") x 71 3/8"

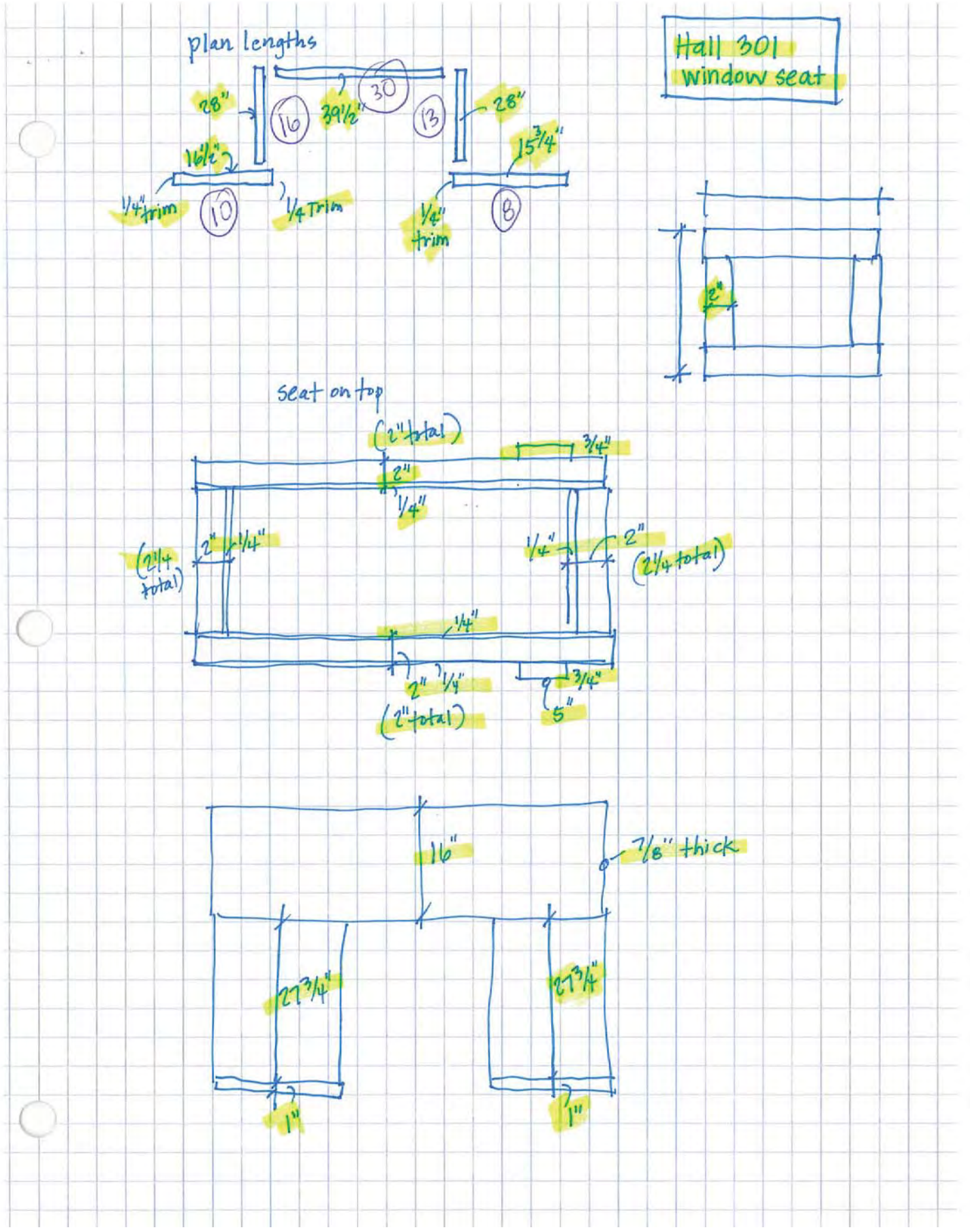
bedroom 307 south
L → R 5 3/4" - 7" - 5 7/8" - 7" - 5 7/8"
T - B → 3 3/4" - ? - 5"
fill in

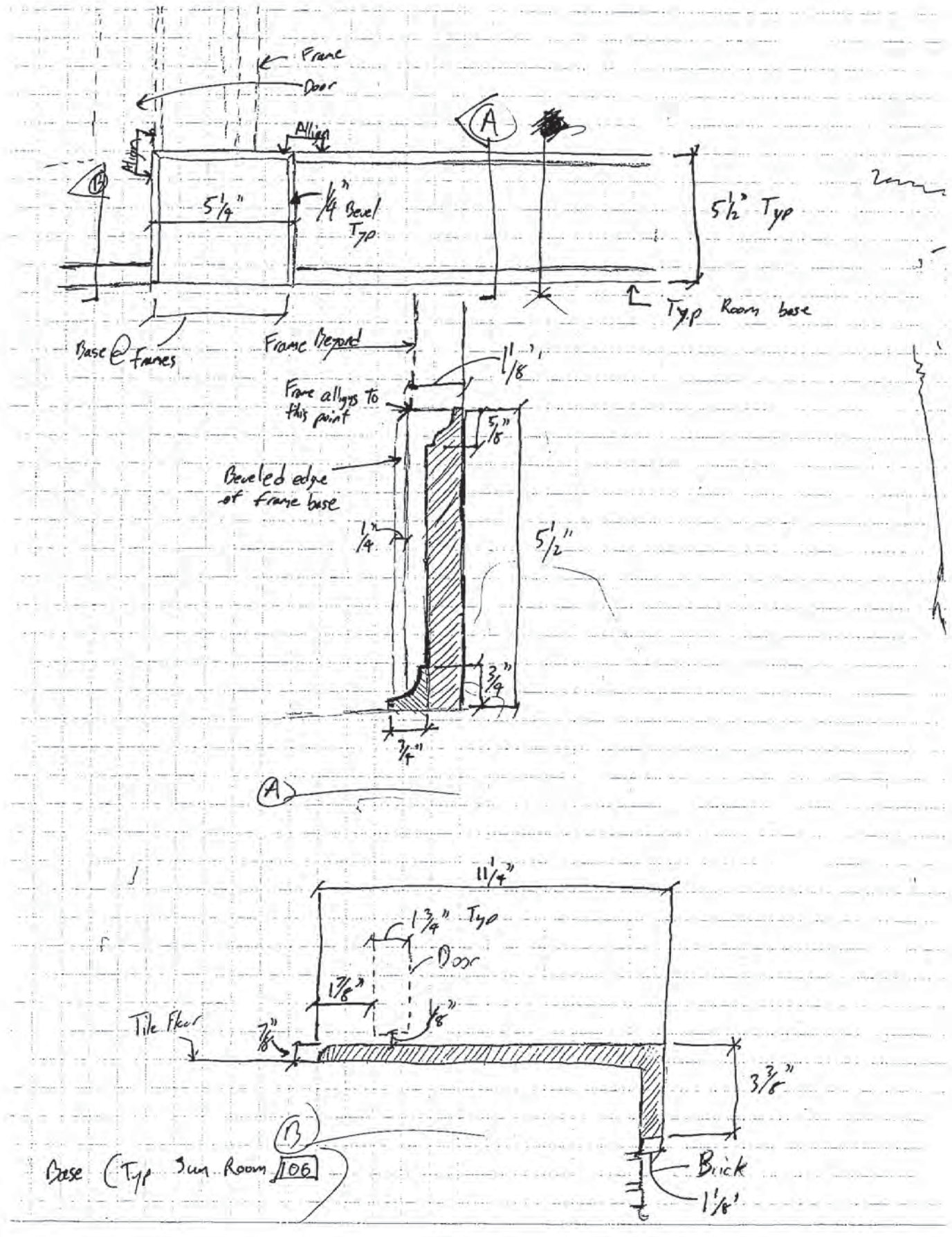
308 25" x (68") x 63 5/8" 3/4" thick

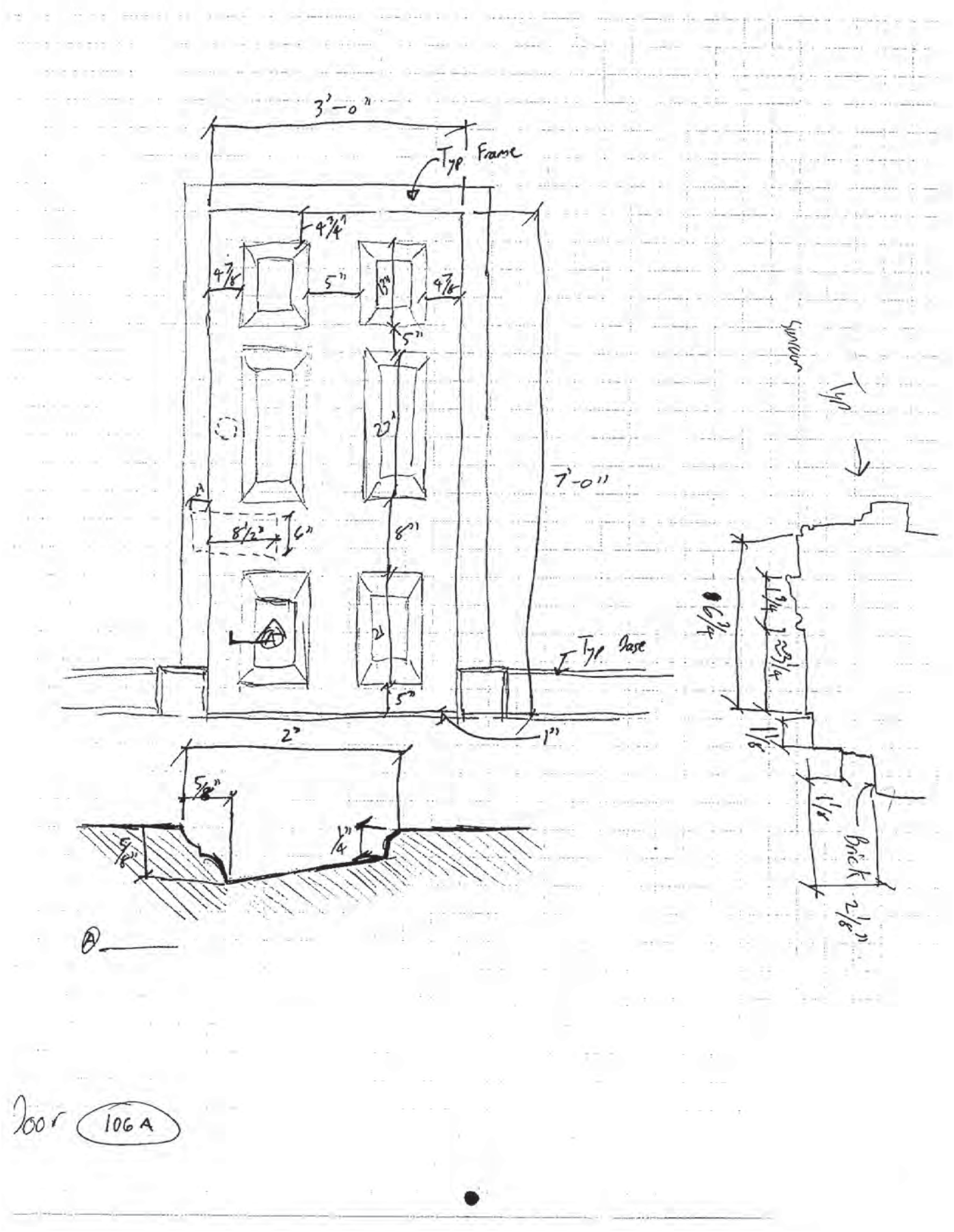
bedroom 307
L → R 4 3/8 - 17 1/2 - 3 1/8"
T → B 2 7/8 - 26 1/2 - 4 7/8 - 26 1/2 - 3"

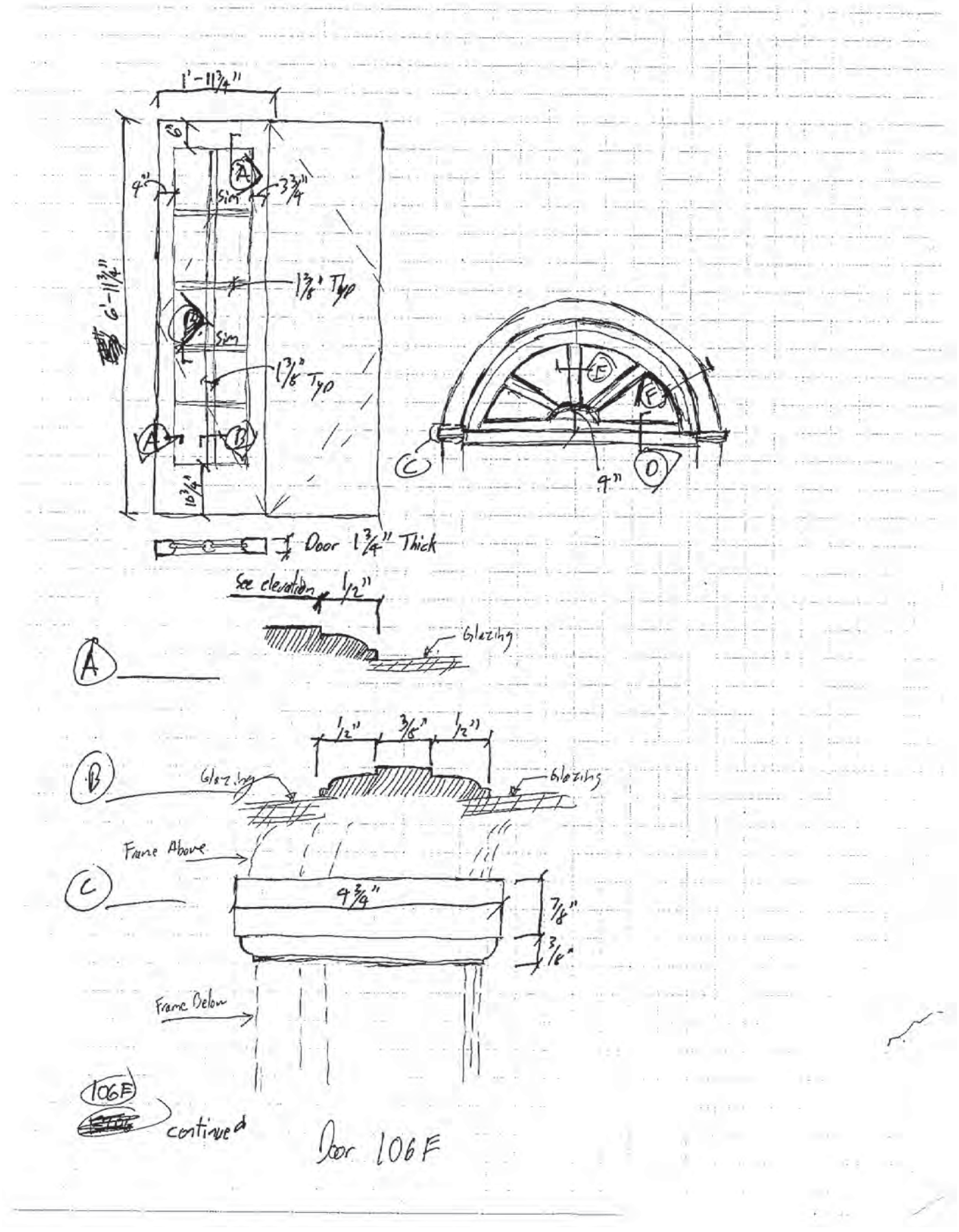
closet 308
same / mirror

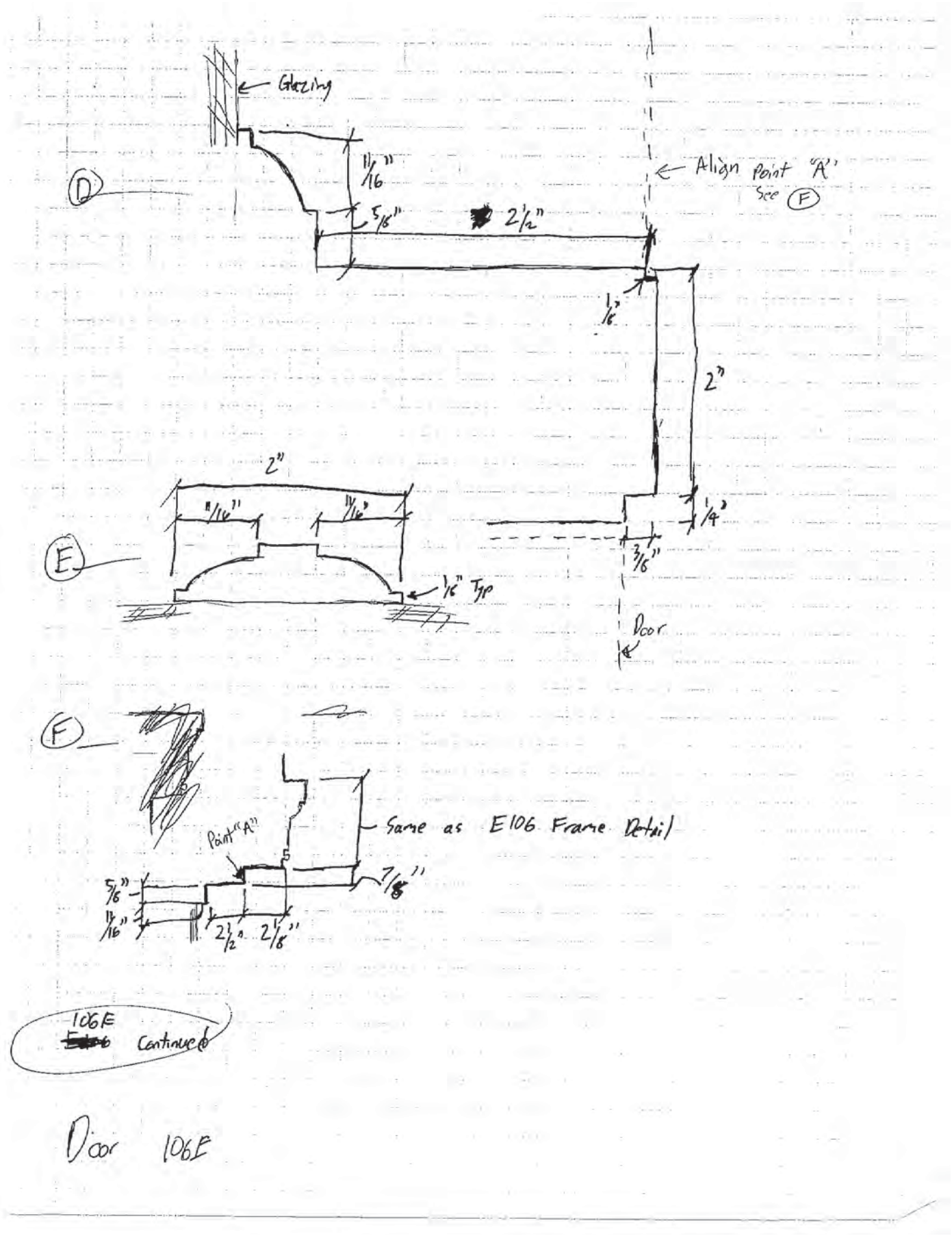


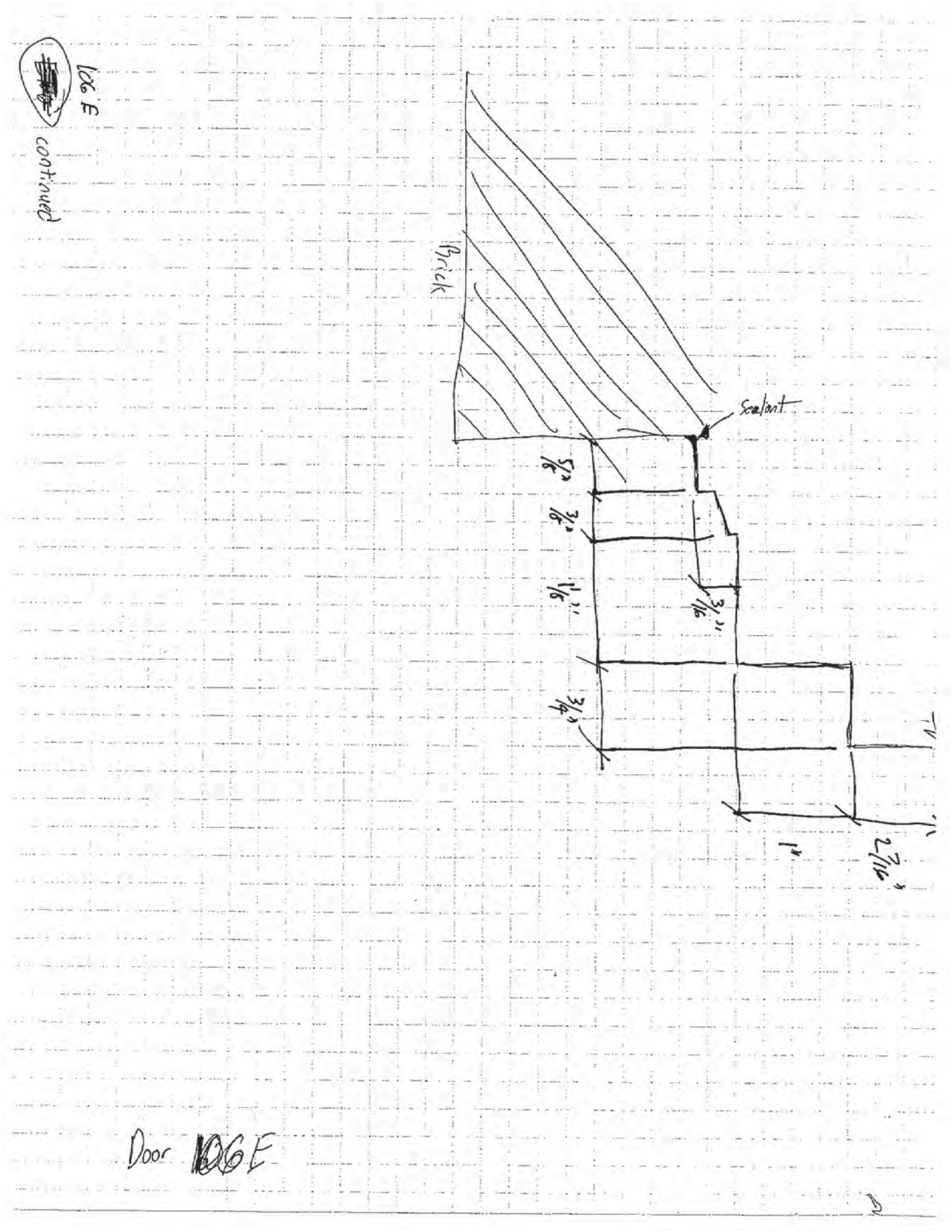

plan lengths
28"
16
39½"
30
13
28"
15¾"
16½"
¼" trim
10
¼ Trim
¼" trim
8
Hall 301
window seat
2"
seat on top
(2" total)
¾"
2"
¼"
2"
1¼"
(2¼ total)
¼"
2"
(2¼ total)
¼"
2" ¼"
(2" total)
¾"
5"
16"
⅞" thick
27¾"
27¾"
1"
1"

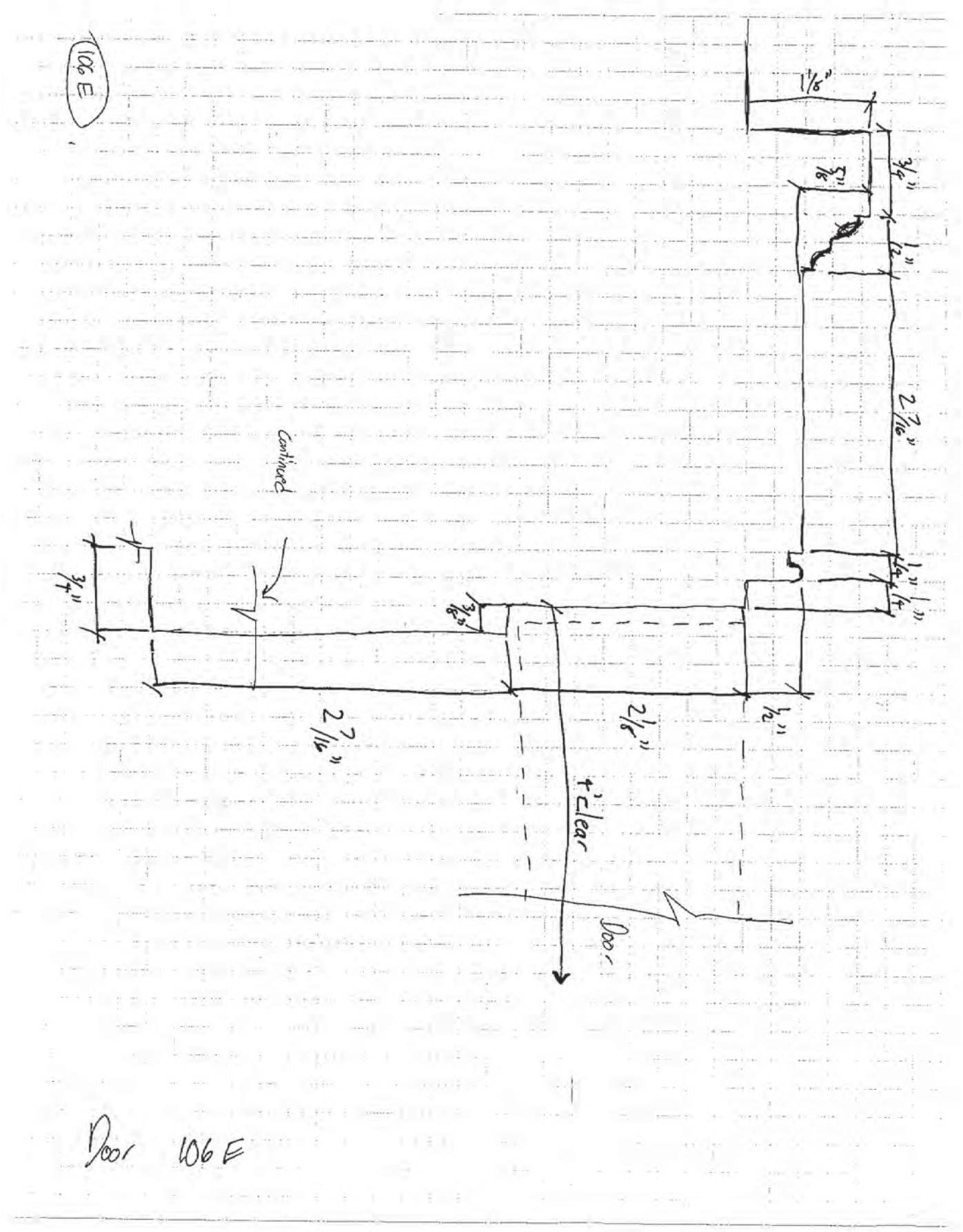

Frame
Door
Align
Align
A
5 1/4"
1/4" Bevel Typ
5 1/2" Typ
Typ Room base
Base @ Frames
Frame Beyond
1 1/8"
Frame aligns to this point
5/8"
Beveled edge of frame base
1/4"
5 1/2"
3/4"
3/4"
A
11 1/4"
1 3/4" Typ
Door
1 7/8"
1/8"
Tile Floor
7/8"
3 3/8"
B
Base (Typ Sun Room 106
Brick
1 1/8"

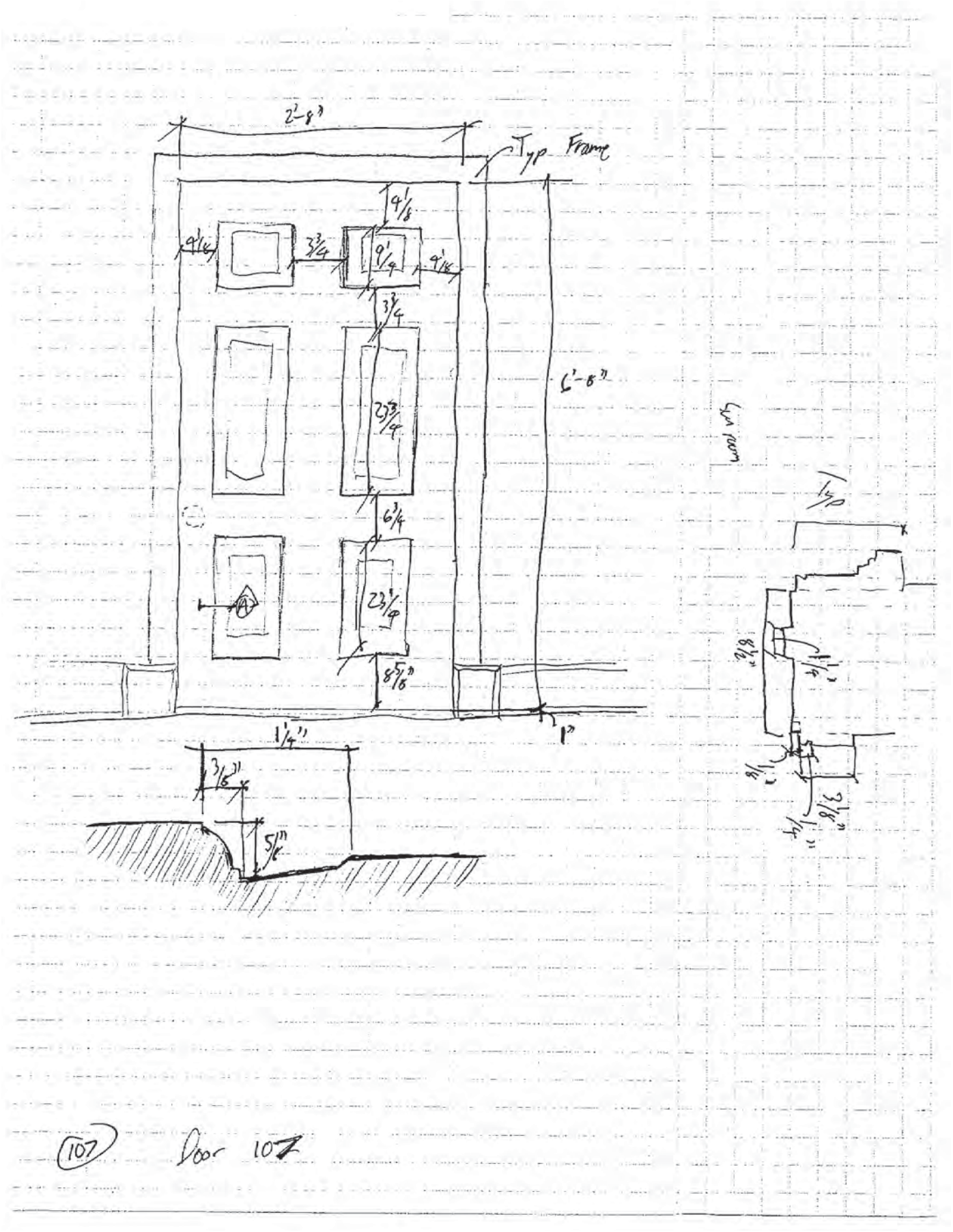

3'-0"
Typ Frame
4 3/4"
4 7/8
5"
18"
20"
7'-0"
8 1/2"
6"
8"
Typ Base
2"
1"
5/8"
1/4"
Typ
6 3/4
1 3/4
23 1/4
1 1/8
1 1/8
Brick
2 1/8"
Door
106 A

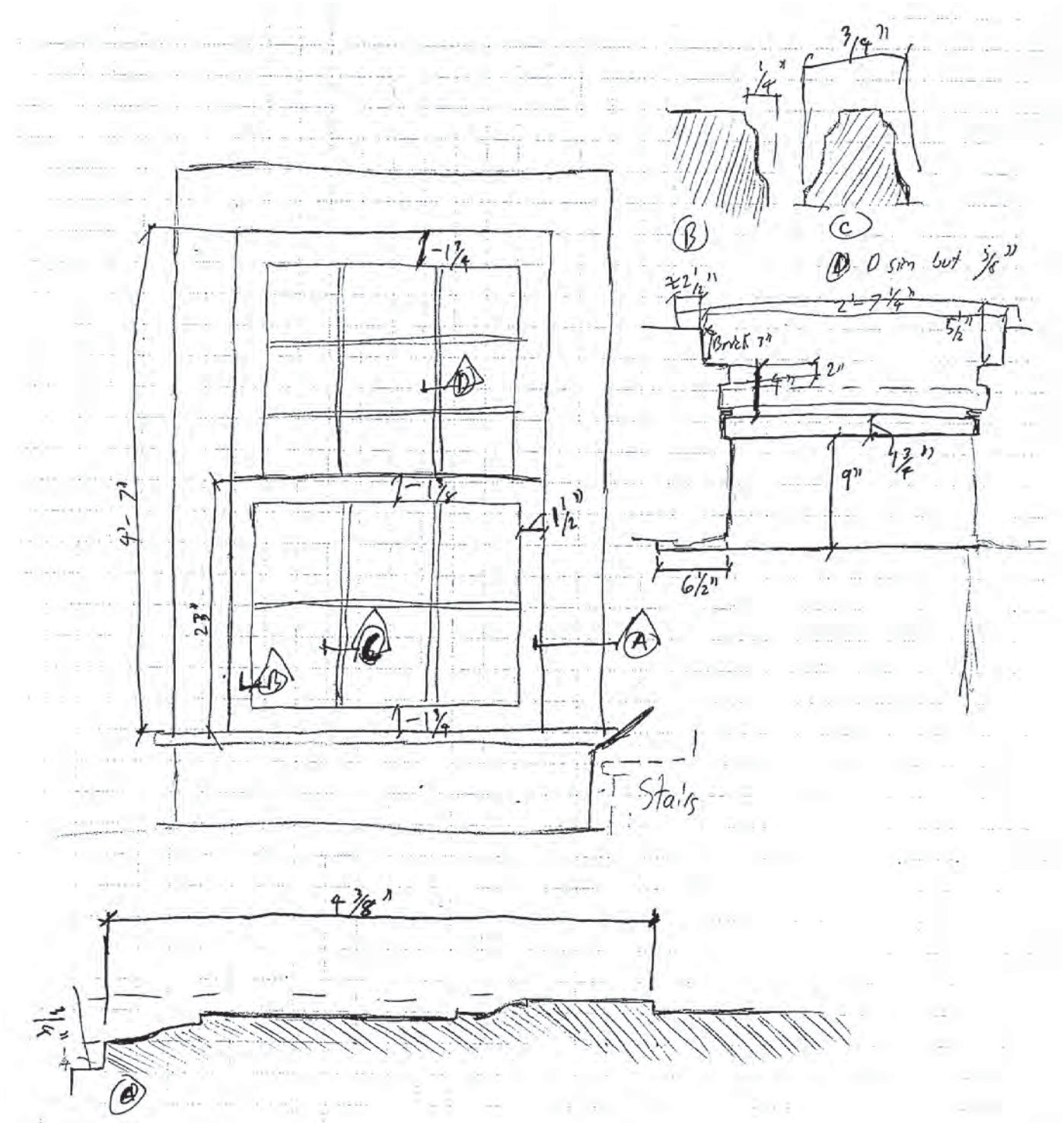

1'-11 3/4"
6'-11 3/4"
4"
Sim
3 3/4"
1 3/8" Typ
Sim
1 3/8" Typ
10 3/4"
Door 1 3/4" Thick
See elevation
1/2"
Glazing
A
1/2"
3/8"
1/2"
B
Glazing
Glazing
Frame Above
C
4 3/4"
7/8"
3/8"
Frame Below
106F
continued
Door 106F
E
F
C
D
9"

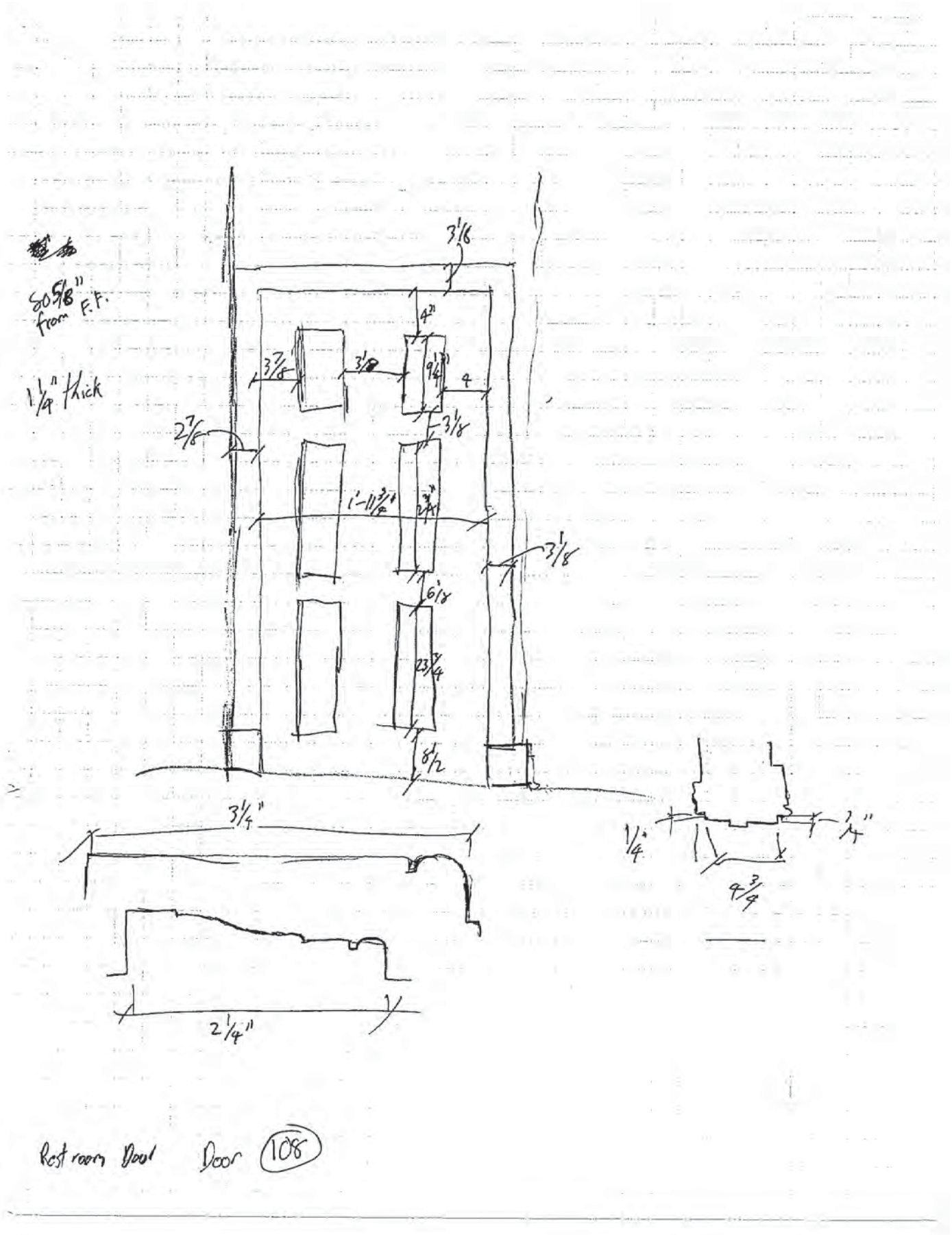

Glazing
D
11/16"
5/16"
2 1/2"
Align Point "A"
See F
1/16"
2"
1/4"
3/16"
Door
2"
11/16"
11/16"
E
1/16" Typ
F
Point "A"
Same as E106 Frame Detail
5/16"
11/16"
7/8"
2 1/2"
2 1/8"
106E
Continued
Door 106E

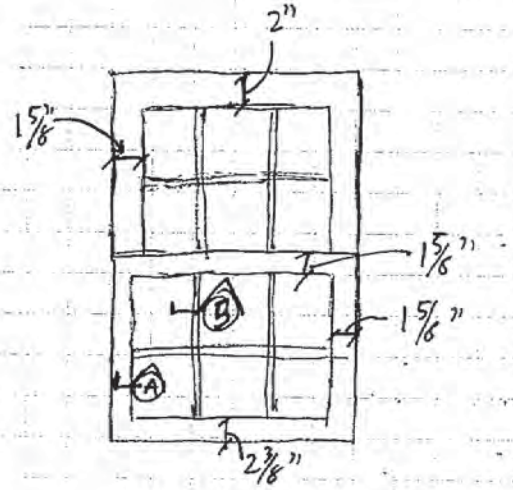

Loc E
continued
Brick
Sealant
5/8"
3/4"
1 1/16"
3/16"
3/4"
1"
2 7/16"
Door 106E

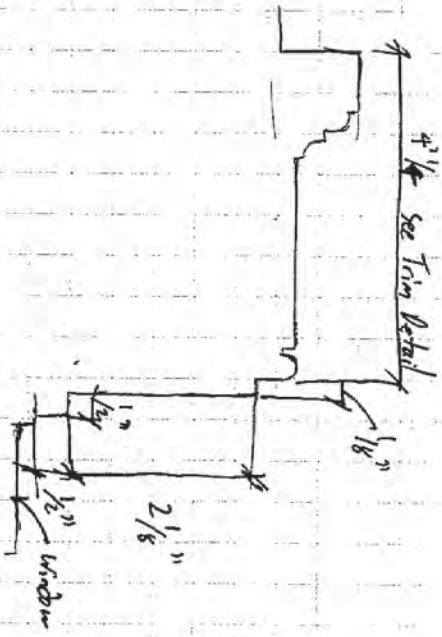

106 E
1/16"
3/16"
3/8"
1/2"
2 7/16"
1/4"
1/4"
continued
3/4"
3/8"
2 7/16"
2 1/8"
1/2"
4' clear
Door
Door 106 E

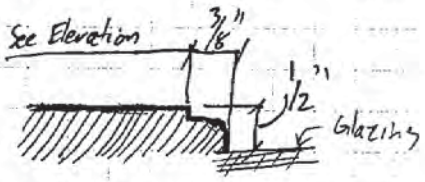

2'-8"
Typ Frame
9 1/8
9 1/16
3 3/4
9 1/4
9 1/16
3 3/4
6'-8"
23 3/4
6 3/4
23 1/4
8 5/16"
1"
1 1/4"
3/16"
5/16"
Typ
3/8"
1 1/4"
3/8"
3 1/8"
1/4"
(107) Door 107

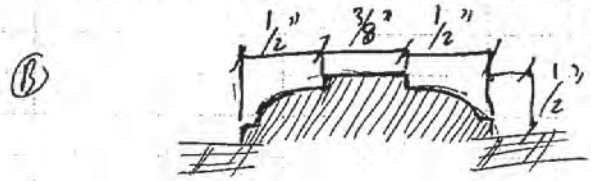

3/4"
1/4"
B
C
D same but 5/8"
2'-2 1/2"
2'-7 1/4"
Brick 7"
5 1/2"
4"
2"
9"
4 3/4"
6 1/2"
4'-7"
1-1 3/4
1 1/2"
23"
A
Stairs
4 3/8"
3 1/4"
E
Window 107


80 5/8" from F.F.
1 1/4" thick
3 1/16
4"
3 7/8"
3 1/8"
9 1/4"
4
3 1/8
2 7/8
1'-11 3/8"
3"
3 1/8
6 1/8
23 3/4
8 1/2
3 1/4"
2 1/4"
1/4"
2"
4 3/4
Rest room Door
Door
108









Window 109, 110, 111

Appendix H: Glossary



Harmony Hall

Fort Washington, Maryland

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GLOSSARY

Term	Description
Awning Window	A window with an operable sash, hinged at the top, which projects outward at the bottom edge when opened.
Base Shoe	A section of molding that trims out or covers the gap between the finish flooring and the bottom of the base-board.
Baseboard	A section of molding that provides a transition between wall finish and finish floor
Belt Course	(Stringcourse or sill course) A horizontal board across or around a building; usually a flat member with a molding.
Bracketed Stair	A flight of open string stairs with decorative brackets on the exposed outer string and under the return nosing of the treads.
Casement Window	A window with an operable sash, hinged at one side, which projects outward at the non-hinged side when opened.
Chair Rail	A section of molding affixed to wall surfaces at a height so that it protects the wall finish from marring and impact from the backs of chairs.
Chimney Breast	The projection into a room of fireplace walls forming the front portion of the chimney stack.
Column	A long, slender, generally vertical, structural compression member such as a post, pillar or strut, supporting a load which acts in or near the direction of its longitudinal axis.
Cornice	A molded projection that crowns or finishes the part to which it is affixed. E.G. the exterior trim of a structure at the meeting of the roof and wall; frequently consisting of bed molding, soffit, fascia and crown molding.
Dentil / Dentils	Singular: One of a band of small, square, tooth-like blocks. Plural: A series of these shapes, generally forming a decorative band.
Door Head	The uppermost member of a door frame or the horizontal projection above a door.
Door Jamb	The vertical member on each side of a door.
Door Knocker	A piece of decorative hardware, affixed to a door, and generally consisting of a hinged striker and a striking plate, that enables a person to announce their presence by operating the hinged member so that it strikes the plate affixed to the door.
Door Rail	A horizontal member which forms part of the framework of a door, connecting the hinge stile and the lock stile at top, bottom and some number of intermediate locations vertically in the door assembly.
Door Sill	A horizontal member covering the floor joint at the threshold of a doorway.
Door Stile	A vertical member which forms part of the framework of a door and connects the top, bottom and intermediate door rails.
Doric Capital	A relatively simple and unornamented form of decorative termination of the top of a column shaft, generally consisting of a series of several radiused, circumferential bands, generally increasing in diameter toward its upper terminus.
Dormer	A vertical window which projects from a sloping roof, placed in a small gable.

Term	Description
Double-hung Window	A window with two operable sashes, offset one from the other, the lower sash inboard and the upper sash outboard, arranged one above the other vertically so that each slides past the other when the window is opened.
Earthfast	A timber framed structure supported by posts sunk into the ground rather than supported by a foundation.
Fixed Window	A window with a sash which is not operable - that does not open.
Flat Arch	An arch with a flat or nearly flat bottom; with little or no convexity.
Flemish Bond	A brick coursing pattern in which each course consists of headers and stretchers laid alternately with each header centered above the stretcher below and below the stretcher above.
Fluted	A decorative pattern composed of a series of parallel grooves, typically semicircular or elliptical in section.
Foliated	A decorative pattern composed of a series of circular or semi-circular lobes or leaf-like shapes tangent to the inner circumference of an arch or arranged in a series along or around a border.
French Door	A door with top and bottom horizontal rails and with vertical stiles which has glass panes throughout the majority of its entire length and is often used in pairs.
Gable	The vertical triangular portion of the end of a building having a double sloping roof or a vertical triangular projection from the face of a sloping roof.
Gable Roof	A roof having a gable at both ends.
Gable Window	A window in a gable or shaped like a gable.
Georgian Architecture	An architectural style, derived from classical, Renaissance and Baroque forms, named after George I, II & III and prevailing in the 18th century in Great Britain and the North American colonies.
Gutter	A shallow channel arranged and located to catch and carry off rainwater.
Ha-ha	A feature of landscape architecture consisting of a sloping or walled trench or depression in the earth arranged to provide uninterrupted views across a lawn but to prevent livestock from passing or entering.
Jack Arch	A flat arch.
Modillion	A horizontal bracket or console, typically in the form of a scroll with acanthus, supporting the corona under a cornice.
Molded Brick	A brick formed by placing the clay body mixture forming each individual brick into a mold rather than by extruding a rectangular cross section and wire cutting it to produce individual bricks.
Molding	A form introducing varieties in outline and contour, which may be of any of many different materials, typically used in construction as decoration or as trim to conceal joints between or permit connection of dissimilar materials or construction in a pleasing fashion.
Pediment	An ornamental construction used over doors or windows, or the triangular gable end of a roof above a horizontal cornice.
Pilaster	A pier or pillar partially engaged with the vertical surface it projects from; as opposed to a column, which stands free of surrounding construction.
Portico	A porch or covered walk consisting of a roof supported by posts or columns.

Term	Description
Rafter	One of the series of individual inclined members which supports a roof.
Raised Panel	A panel with its center portion thicker than the perimeter edges.
Raking Cornice	A cornice that follows the slope of a roof, gable or pediment.
Sill	The exterior projection of a door or window opening.
Shutters	Hinged panels designed to be closed and secured to cover and protect window openings or to be opened and secured against the adjacent face of a structure.
Stiles	The vertical members of the framework of a door or, in landscaping, a structure or construction which allows people passage over or through a fence with the intention of preventing livestock from passage.
Stool	The interior projection of a window opening.
Threshold	A strip fastened to the floor at an opening or beneath a door, generally for the purposes of covering a joint between materials or for weather protection.
Water Table	A projecting feature in a masonry façade that deflects water running down the face of the structure away from lower courses and the foundation.
Window Seat	A seating area, interior to the building, located at or built into the bottom of a window.

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Appendix I:
Bibliography & Inventory of Archival Research



Harmony Hall

Fort Washington, Maryland

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BIBLIOGRAPHY

Sources of information, the basis for facts stated, and conjectures derived have been regularly cited and documented via footnotes throughout the body of the report. This bibliography is intended to elaborate on the information provided in those footnotes and to further document and give credit to authors and published sources of information and to major compendia of unpublished information that were accessed and which served to inform the statements and details provided within the body of the report. It is not intended to be an exhaustive listing of every source cited within the body of the document. For that type of information, the reader is referred to the footnotes and to the Inventory of Archival Research contained within Appendix I, following this bibliography.

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PROPERTY TITLE: Land Acquisition Memorandum No. 76 to Regional Director, National Capital Region, National Park Service from Daniel H. Shear, General Counsel, National Capital Planning Commission: Subject: Acquisition of Land – George Washington Memorial Parkway – Prince George's County, Maryland, Unit No. 3 Part of Charles W. Collins tract (Harmony Hall) Provided by National Capital Parks-East (NACE)

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INVENTORY OF ARCHIVAL RESEARCH

DATE	TITLE	DESCRIPTION	FILE NAME
1662 October 8	**Title:** Battersea Patent (copy) **Source:** Maryland State Archives Land Office **Provided by:** National Capital Parks East (NACE)	• Land Office (Patents) 5, pp. 528-29 • Humphrey Haggett, "Battersea", 8 October 1662	**File 001:** 1662 - Battersea Patent from Land Office MSA.pdf
1668 September 18	**Title:** Battersea Patent (copy) **Source:** Maryland State Archives Land Office **Provided By:** National Capital Parks East (NACE)	• Patent granted to Richard Fowke • "Grant for five hundred acres (issued?) to Richard Fowke of the County of Charles County bearing date the Eighteenth day of September in the seven and thirtieth year of his (__?__) one thousand six hundred sixty eight…"	**File 002:** 1668 - Grant of Patent of Battersea to Richard Fowke.pdf
1919 March 12	**Title:** *The Olden Time*, Marlboro Gazette **Source**: Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• Account of extravagant lifestyle and wealth of Dennis Magruder • Dennis Magruder was born at Castel Magruder in Maryland on July 4, 1759. He was the sun of Enoch Magruder and Miss McElderry • He was a descendant of Alexander Magruder, an emigrant to the Colony of Maryland in 1683. • Dennis Magruder married 4 times: 1. Miss Contee of a well-known Maryland family in 1779 2. Miss Fitzgerald, related to the Lees of Virginia 3. Miss Rollins 4. A sister of captain Breads of the Army, a near relative of Commodore Mayo (a distinguished Naval Officer belonging to one of the noblest families of Virginia, the Mayos of Richmond) in 1920 • Dennis Magruder dies in 1836. • The Magruders in Scotland were the MCGregor's who owned land along the eastern side of Loch Lomond. They immigrated to America in 1655.	**File 003:** 1919.03.12 - The Olden Time - Marlboro Gazette.pdf
1929 June 13	**Title:** purchase of property from Charles J. Sellner or Rosanna Sellner Shipley **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• 13.3 acres next to "Stein Tract called Harmony Hall"	**File 004:** Collins purchase of 13 acres from Charles Sellners.pdf
c. 1930	**Title:** Photograph of Harmony Hall		**File 005:** c. 1930 Photo of Main Block
1931 August 18	**Title:** Inventory of Furniture at Harmony Hall **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		**File 006:** Inventory of Furniture 1931
1931	**Title:**	(Newspaper/ Periodical)	**File 007:**

DATE	TITLE	DESCRIPTION	FILE NAME
October 16	Washington Post "Washington's Kin to Visit His Tomb: George C.W. Magruder Will Be Principal Figure at Mount Vernon" **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• George Corbin Washington Magruder (descendant of John Augustine Washington a brother of George Washington and of Augustine Washington, a half brother) Deputy Chieftain of American Clan Gregor Society of Oklahoma	1931.10.16 - Washington Post.pdf
1932 January 6	**Title:** Proposed Dredging at Mouth of Broad Creek - Roberts Paving Co. - Pot.D-117 **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		**File 008:** 1932.01.06 - Proposed Dredging - Roberts Paving Co. - Pot.D-117.pdf
1932 September 2	**Title:** Proposed Dredging at Mouth of Broad Creek - C.W. Collins - Pot.D-125 **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		**File 009:** 1932.09.02 - Proposed Dredging - C.W. Collins - Pot.D-125.pdf
1932 September 26	**Title:** War Department Correspondence regarding dredging by Collins - Pot.D-125 **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		**File 010:** 1932.09.26 - War Department Correspondence.pdf
1933	**Title:** Maryland Tercentenary 1634-1934 Maryland Tercentenary Commission **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• Maryland Tercentenary, 1634-1934: A bibliography of early colonial Maryland history	**File 011:** Maryland Tercentenary 1634-1934.pdf
1933 November	**Title:** History of a Tract of Land **Provided By:** National Capital Parks East (NACE)		**File 012:** 1933.11 - History of a Tract of Land.pdf
1933 November 1	**Title:** Index of Maryland Colonial Wills 1634-1777 By James M. Magruder, Jr. Ready for distribution November 1, 1933	• Cover sheet only	**File 013**: Index of Maryland Colonial Wills.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
	Source: Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		
1933 November 20	**Title:** Baltimore Sun, Evening Sun Spots "How our Ancestors Lives Before the Hurry-up Age" **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	(Newspaper/ Periodical)	**File 014:** 1933.11.20 Baltimore Sun Article.pdf
1933 November 24	**Title:** Letter to Hon. J. Alexis Shriver, General Director, Maryland Tercentenary Committee 1007 Union Trust Building Baltimore, Maryland Signed: Charles W. Collins **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• Letter requesting State markers for both Harmony Hall and the old house on Want Water • Letter references attachment of a summary of the early history of these two tracts	**File 015:** 1933.11.24 - letter to Mr. J. Alexis Shriver.pdf
Unknown (c. 1933 possible since Charles Collins was requesting state marker at this time.)	**Title:** Memorandum to Mr. J. Alexis Shriver, General Director, Maryland Tercentenary Committee Battersea (Harmony Hall) **Provided By:** National Capital Parks East (NACE)	• This historical document is a similar account to: **Battersea (Harmony Hall)** Charles Collins Papers, University of Maryland, Special Collections, Hornbake Library • Revised description includes the following: Colonel William Lyles dies in 1815 and left both Harmony Hall and Want Water to his son, Thomas G. Lyles, upon the death of his wife (Sarah Magruder Lyles) (Will probated January 31, 1816 – Liber TT No. 1 Page 164-166 Prince George's County Wills). Sarah McGruder Lyles dies in 1820. (Liber TT No. 1 Page 282 Prince George's County Wills)	**File 016**: Memo to Mr. J. Alexis Shriver.pdf
Unknown (between 1929 – 1935: Collins referenced this event in an address to the Clan Gregor Society on October 19, 1935)	**Title:** Memo Harmony Hall **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• "On September 7 while removing earth for grading the terrace on the river front of Harmony Hall there was discovered the remains of a small stone building about three feet below the ground level. It was 12 feet by 18 feet with a fireplace at the east end and the door facing the water. The walls were built of round cobblestone and mortar and the floor was laid with slabs of red sandstone each two feet square and four inches thick and perfectly squared and finished on the sides and top, the whole floor fitted perfectly together on a level without any cracks. The slabs were unfinished underneath and showed that they had been split off there being occasional chisel marks taking off the rougher parts. The floor was laid upon a native clay and gravel mixture which was very hard and solid. Twenty of the slabs were in perfect condition and the entire outline of the walls was intact but some of the slabs had disappeared." • Charles Collins removed all remains of this structure	**File 017**: 1929-35 (unknown) - Memo Regarding Excavation for Re-Grading Harmony Hall.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
		all allow for the regarding of the site for installation of a terrace.	
1934 January 22	**Title:** Memorandum by Charles Collins To: Hon. Frederic A. Delano, Chairman, National Park and Planning Commission, Washington, DC Subject: Treatment of Broad Creek in the Proposed Plan of the George Washington Memorial Parkway **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• Broad Creek is a freshwater tidal estuary along the east bank of the Potomac River halfway between Mount Vernon and Alexandria. • Enoch Magruder was a descendant of Alexander Magruder, the founder of the family of Magruders or McGregor's of Scotland. • When the first English settlers first arrived in the area they were unable to settle in the Broad creek area due to the inability to devise a treaty with the Piscataway Indians of the area. However, as they moved north during the late 17th and very early 18th centuries, they began to settle areas of Broad Creek though land grants from Lord Baltimore. Since there were no roadways in this area at the time the river served as a vital source in their livelihood and transportation throughout the area. The town of Aire was established as a result of the area developing as a thriving shipping port for tobacco. It also necessitated the construction of a tobacco inspection station before the end of the 17th Century. Warehouses, taverns and docks were built throughout the thriving community. Broad Creek provided an advantage to the settlers in the area due to its navigability and direct access to the Potomac. • The area of Broad Creek was in some ways an extension to and a very accessible neighbor to Mount Vernon just across the Potomac River. Since there was a lack of good roadways throughout the area, in the difficult winter months, it was easier for the colonists to access Broad Creek by water than to cross land to other neighboring communities. • The area also provided for a profitable business in the first half of the 20th century as people dredged for sand and gravel. • **Broad Creek Church:** Colon John Addison, who was a large land owner in England, was a leader in the establishment of a Protestant community in Broad Creek. The Church of England established a presence in the area and had constructed the Broad Creek Church, a wood frame church in 1693, known today as St. John's Church. The establishment of this church is considered the founding church of all Episcopal Churches in the surrounding Washington, D.C. area. Consistent with local legends and probably supported by local records, George Washington worshipped frequently at Broad Creek Church. It was in particular during the cold winter months that access to Broad creek Church just on the opposite bank of the Potomac River was easier to visit than more inland churches in Virginia. • **Want Water:** The Want Water tract was patented by Colonel Thomas Addison in 1702. During George Washington's day, the land and house were owned and occupied by Colonel William Lyles who owned other extensive lands and plantations in southern Maryland. Colonel William Lyles was a personal friend of George Washington.	**File 018**: 1934.01.22 - Treatment of Broad Creek in Proposed Plan of GWParkway.pdf
1934 January 30	**Title:** Letter From H. Brooks Price, District Officer, HABS To: Charles W. Collins	• References letter Collins wrote on November 29, 1933 to Bureau of National Parks, Buildings, and Reservations	**File 019**: 1934.01.30 - letter from H.Brooks Price Dept of Interior to Collins.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
	Source: Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		
1934 April 17 1934 April 18	**Title:** Memorandum for H. Brooks Price (second draft) (Department of Interior, Historic American Buildings Survey/ HABS) Harmony Hall, Broad Creek, Prince George's County Maryland **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library **Title:** Memorandum for Historic American Building Survey ~~(Memorandum for H. Brooks Price)~~ (Department of Interior, Historic American Buildings Survey/ HABS) Harmony Hall, Broad Creek, Prince George's County Maryland **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• Settlement of Maryland by the English colonists began at St. Mary's City in 1634 fifty miles south of Broad Creek. About thirty years later the settlers began moving into the areas surrounding Broad Creek. When Harmony Hall, Broad Creek Church and other settlements and plantations were established in the area, Broad Creek was the furthest point north of any English settlement in Maryland. Alexandria, Virginia and Georgetown were not established until about a century later and Washington was not built until nearly a century and a half later. • Collins describes that the brick structure which existed in 1934 as he witnessed it was the central portion of the house as it existed at the second half of the 18th century. The remaining central portion was how the building appeared when first constructed minus a few modifications. Collins explains in his records that north and south wings were added to the home at an early date, but all that remained of these additions when he acquired the home in 1929 were portions of the stone foundations partially buried in the ground. • William Tyler, Jr. passes away in 1755, before his mother (Elizabeth Tyler). He lived at Battersea until his death. Upon the death of his mother Battersea is willed to his son John Tyler. John Tyler conveyed 100 acres of Battersea to James Marshall upon his death (date unknown). • Early parish record of St. Johns Church (maintained and archived at the Washington National Cathedral) indicate that contracts were established on January 26, 1722 for John Lane to construct the brickwork for a new church and John Bradford, a carpenter, to complete all of the woodwork for the new church including the roof, porch, windows, doors and all interior trim. Local legend and tradition carries that the remaining bricks from the construction of St. John's Church in 1722-23 were used in the construction of Harmony Hall. • **Original Historic Fabric:** Sufficient changes and alterations have been made at Harmony Hall, however some original fabric remains. The floor boards are not of a tongue and groove construction, but have straight edges and doweled together with black walnut pegs cut by hand. The chimney breast and jambs are paneled on all sides and are designed without mantles. This paneling which extends to the ceiling is simple in form. The east entry door was modified from a single six paneled door to a larger and higher double door. Charles Collins noted that the brick used in the modifications to the east entry door and in the construction of the east pediment with the bullseye window were handmade but were smaller in size and slightly redder in color than the original bricks used to construct the house. The central block of the	**File 020:** 1934.04.18 - Memoradium for Historic Am Bldg Survey.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
		house also had four windows on the north facade and four windows on the south façade, but these were probably enclosed at the time of these other modifications. The reason for these windows being enclosed could have been to allow for the construction of the north and south addition to the home. Collins explains that the cupboard along the south wall of the Dining Room, though constructed at an early date, does conceal an earlier window opening and extant jack arch in the south masonry wall. Charles Collins states that these additions and modifications to the home were made in 1968, the same year that Broad Creek Church (St. John's Church) was enlarged. • Charles Collins constructed the west façade double stair in 1930. • Enoch Magruder, great grandson of the immigrant Alexander Magruder, purchased Harmony Hall from James Marshall on September 6, 1769. • **St. John's Church:** There is a strong connection and relationship through history between both the construction of Harmony Hall and Broad Creek Church and through the inhabitants of Harmony Hall and the leadership and congregation of the church. The establishment and leadership of the colonization and settlement of the land around broad Creek was accomplished by gentlemen of birth and education who also were loyal to the church of England. Many of these prominent families and leaders of the broad Creek church had a connection with the land of Battersea and Harmony Hall. Following the Revolutionary War the Reverend Joseph Messenger was installed the rector of Broad Creek Church in 1781. He was only the third rector of this congregation since the church was founded in 1692. During part of his ministry he utilized Harmony Hall as the parsonage of the church. Walter Dulaney Addison (whose wife named Battersea "Harmony Hall") was the fourth generation of Addisons born in Maryland and was a direct descendant of Colon John Addison who founded Broad Creek Church in 1692. Walter dulaney's great uncle Henry Addison was installed as the second rector of the church and Walter Dulaney was installed as the fourth rector after Joseph Messenger. The two brothers, Walter Dulaney Addison and John Addison, were heirs to Oxon Hill Manor and Gieseborough Manor respectively, having been born to a family of wealth and establishment. • **Dennis Magruder:** Dennis Magruder was the executor of his father's will. He also resided at Harmony Hall for some time, despite the home being willed to his sister, Sarah Magruder Lyles. In the accounts of Charles Collins, Dennis Magruder is described as being a man of great wealth inherited from his father and he often indulged in quite an extravagant lifestyle. He socialized with the established and elite throughout the Washington, DC area and was well known throughout Prince George's County.	

DATE	TITLE	DESCRIPTION	FILE NAME
		Dennis Magruder married Ann Contee in 1779 (one of four marriages). The Contee family was well connected and close friends with George Washington and his family. Charles Collins indicates that evidence existing that the Contee family visited quite frequently with the Washingtons. • **19th Century Decline:** When the railroad extended into Maryland the shoreline along the Potomac contained so many tidewater estuaries that it was determined not fit for establishment of a railroad line. As a result the whole area surrounding Broad Creek, being a large estuary along the east shore of the Potomac River just south of Washington, D.C, became gradually isolated and cut off from the surrounding communities. Many plantations and estates throughout the southern Maryland peninsula were abandoned and neglected.	
1934 April 20	**Title:** Letter From Wm. M. Rittenhouse, District Officer, HABS To: Charles W. Collins **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		**File 021**: 1934.04.30 - letter from Wm. M. Rittenhouse District Officer to Collins.pdf
Unknown (signed with initials C.W.C, probably Charles W. Collins, c. 1935)	**Title:** History of the Addison Family Lyles Family Magruder Family **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• Family tree for each family • (Poor image, may need to return to University of Maryland to get a higher quality scan.)	**File 022**: History of the Addison Lyles and Magruder Families.pdf
c.1935 Unknown date	**Title:** HABS Final Draft **Provided By:** National Capital Parks East (NACE)	• Description - 1. Two-and-a-half-story, seven-bay wide, one-room deep Flemish-bond brick plantation home 2. Carriage and riverfront facades 3. Molded brick water table and belt course 4. Flat arch lintels/ jack arches 5. Crenelated and dentiled cornice moldings 6. Two-run open well staircase 7. Chair rail in gougework and diamond pattern fretwork 8. Recessed windows with paneled shutters 9. Round-arched china cupboard 10. Fireplaces with bolection molding surrounds (A bolection moulding is a moulding, especially in wood panelling which projects in front of the face of the framing used to cover the joint between two members with different surface	**File 023:** 1936 HABS Narrative Final Draft.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
		levels.) 11. Telescoping wings built on the south side replace earlier wings	
1934 May 8th (signed on 1934 May 21)	**Title:** Mortgage Forbearance Agreement **Provided By:** National Capital Parks East (NACE)	• On March 21, 1929, Charles Collins agreed to pay the mortgage of $14,000 to Richard Stein on or by March 21, 1934 (five years later) • This document extended payment of the mortgage to the estate of Robert Stein from the agreed date of March 21, 1934 to one year after the date of Robert Stein's death • Signed: Rudolph F. Adler, Margaret Clabaugh, Richard Stein, Charles W. Collins on May 21 1934.	**File 024:** 1934.05.08 - Mortgage Forbearance Agreement.pdf
1935 October 19	**Title:** Remarks by Charles W. Collins upon the occasion of the visit to Harmony Hall, Broad Creek, prince George's County, Maryland of the American Clan Gregor Society **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• Harmony Hall is considered an ancestral home of the Magruders, of the McGregor clan of Scotland. • Dennis Magruder was married four times and had twenty (20) children. • The original architectural fabric of the building remains in the original hardwood flooring, wood paneling throughout the first floor, the detailed central staircase and hardware. • Want Water: Site investigations and architectural research indicate that the house was built about 1685. The earliest record of the property indicate that the tract was owned by Colonel Thomas Addison, son of Colonel John Addison, the immigrant, in 1706. • Colonel William Lyles was owner of a large amount of land in Maryland and was one of the founders of the Farmers Bank of Alexandria. After living at Want Water with his wife, Sarah Magruder Lyles, he later moved to Alexandria.	**File 025:** 1935.10.19 - Remarks to American Clan Gregor Society.pdf
1936 (assumed)	**Title:** Historic American Buildings Survey/ HABS Final version of prior document: Memorandum for Historic American Building Survey ~~(Memorandum for H. Brooks Price)~~ (Department of Interior, Historic American Buildings Survey/ HABS) Harmony Hall, Broad Creek, Prince George's County Maryland **Provided By:** National Capital Parks East (NACE)	• Harmony Hall has been home to many wealthy landowners during the 18th and early 19th centuries. • Detailed description of interior • Author: Charles W. Collins, National Press Building, Washington, D.C. • Approved: Major H. Brooks Price, District Officer • Signed by: Wm. M. Rittenhouse	**File 026**: 1936 HABS Narrative.pdf
Unknown (1929 – 1964)	**Title:** Battersea (Harmony Hall) **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• Patent by Humphrey Haggett, lawyer, granted October 27, 1662 • It is known that Haggett lived on the land before the patent was issues as evident in the county records where he entered the brand for his livestock at the Court for Charles County in 1661. There is also no other record land ownership by him in the province of Maryland. The court records of this time also give evidence of his professional practice of law (Liber B. No. 1 Folio 19, 20, and 155). • Architectural evidence and detailing would date to	**File 027**: 1929-64 (unknown) - Battersea (Harmony Hall).pdf

DATE	TITLE	DESCRIPTION	FILE NAME
		the early part of the 18th Century, but the dining room paneling was remodeled prior to the American Revolution. The bullseye window, decorative wood cornice, and double entry door on the east façade were added in the 18th Century. The west façade has not be altered from the original design. • 1761 – Enoch Magruder purchases Want Water from Richard Barnes. • September 6, 1769 – Enoch Magruder purchased the Battersea property from James Marshall. • 1786 – Sarah Magruder Lyles (married to Colonel William Lyles) inherits Want Water and Battersea (Harmony Hall) from her father, Enoch Magruder. • 1793 – Battersea renamed "Harmony Hall" by Mrs. Walter Dulaney Addison • August 26, 1795 the title for Harmony Hall and Want Water were perfected in Colonel William Lyles through a conveyance by Colonel Lyles and his wife Sarah to Dr. William Baker and back to Colonel William Lyles. (Liber JRM No. 4 Folio 96 and 99, Prince Georges's County, Maryland). • Colonel Lyles and his wife lived at Want Water until they moved to Alexandria and his son Thomas G. Lyles. • Dennis Magruder. Brother of Sarah Magruder Lyles and son of Enoch Magruder lived at Harmony Hall and Mt Lubentia, • Thomas G. Lyles inherited Harmony Hall and Want Water from his father upon his death in 1820, but following the death of his mother on August 20, 1815. • Both Harmony Hall and Want Water remained in the Lyles family until 1850 when Harmony Hall was sold to William J. Edelen.	
Unknown (1929 – 1964)	**Title:** Harmony Hall (Battersea) **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• Humphrey Haggett died on March 30, 1663, before the patent was granted by Lord Baltimore. His last will and testament was probated on July 30th, 1663, leaving his entire estate to his wife Anne Haggett. • The estate was much involved and complicated and in a very brief time many law suits had developed. Many creditors gained control of Haggett's estate, but Battersea remained in the possession of his widow. • Remodeled several times as some of characteristics are typical with the design tradition of the late 18th century in comparison to the transitional design seen in the early part of the early 18th century • In his will, William Tyler is described as a "carpenter" It should be noted that during that time period a carpenter was known to be both an architect and a builder equally and it is likely William Tyler constructed his own home at Battersea. • "To the right of the house, as one enters from the highway, is a single wing which was added about 1800." --- Charles Collins makes reference to a north addition to Harmony Hall, which no longer stands today, but would be plausible explanation for the infill of the second floor windows of the North Bedroom along the north wall, flanking the chimney. • Richard Fowke gained the formal patent on Battersea on October 18, 1668. • The Calvert Papers by an undated rent roll show that the plantation was at one time divided equally between Henry Acton and Richard Lewis. • Richard Fowke died in 1677. Prior to his death, Battersea was purchased by Richard Iles and Philip Mason. Before 1694, these two equal tracts of land	**File 028**: 1929-64 (unknown) - Harmony Hall (Battersea).pdf

DATE	TITLE	DESCRIPTION	FILE NAME
		were sold to William Thompson and Thomas Lewis. • In 1695 William Thompson sold his 250 acres to Richard Gambra. • 1709 Thomas Stonestreet purchased 100 acres of the Battersea tract from Richard Lewis. In 1711, Thomas Stonestreet purchased as additional 50 acres from John Lewis and in 1726 he purchased the 250 acres owned by Richard Gambra. • Prior to 1769, an undated rent roll indicated that Thomas Stonestreet owned 275 acres of Battersea and his son Butler Stonestreet owned 125 acres comprising 400 acres of the original Battersea tract of land. The remaining 100 acres (John Tyler's portion) were held by Willliam Eilbeck. Eilbeck was a Magistrate of Charles County who built Araby in Charles County. • September 6, 1769 – Enoch Magruder purchased 100 acres of Battersea from James Marshall.	
Unknown (1929 – 1964)	**Title:** Ghost Story --- Harmony Hall **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• Ghost of Enoch Magruder • Changes during 19th Century: ➢ First convenient form of transportation in the 17th and 18th Century to and from the Broad Creek area was by water. ➢ Stage coach lines were developing and Harmony Hall was located on the main line of travel from the old town of Piscataway to Alexandria. ➢ Invention and increased use of the locomotive left Harmony Hall in an isolated peninsula of Maryland where the lack of population of the rural area and the minimal traffic did not justify extension of the railroad lines to the area. For about seventy-five years until the widespread use of automobiles, Harmony Hall remained out of touch and neglected.	**File 029**: 1929-64 (unknown) - Ghost Story Harmony Hall.pdf
1937	**Title:** *The Maryland Club Woman*, page 21 **Provided By:** University of Maryland, Special Collections, Hornbake Library	• This article attributes the use of Harmony Hall as rectory for St. John's Church under the Rev. Joseph Messenger as probable evidence that George Washington would have visited Harmony Hall. General George Washington and his household were frequent worshippers at St. John's Church. (letter from Sue Collins requesting copies February 24, 1937 since front cover is of central Stair)	**File 030**: Maryland Club Women.pdf
1937 September 24 November 4	**Title:** Stuart Moffett Barnette, Architect Fredericksburg, Virginia 315 Wolf Street, Alexandria, Virginia **Provided By:** University of Maryland, Special Collections, Hornbake Library	• correspondence re: sketch for basement entrance	**File 031:** 1937.11.04 - Letter to Stuart Moffett Barnette.pdf
1938 March 1	**Title:** Proposed Dredging at Mouth of Broad Creek - Smoot Gravel and Sand - Pot.D-157 **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special		**File 032**: 1938.03.01 - Proposed Dredging - Smoot Gravel and Sand - Pot.D-157.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
	Collections, Hornbake Library		
1938 April 24	**Title:** Washington Post "…All Tourists to Its Famous Homes and Gardens" **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	(Newspaper/ Periodical) • photo of west facade	**File 033**: 1938.04.24.pdf
1940 April 26-27	**Title:** Maryland Garden Pilgrimage, Prince George's County **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		**File 034:** Maryland Garden Pilgrimage - tour of homes.pdf
c. 1941	**Title:** Scanned photographs of Central South Addition **Provided By:** National Capital Parks East (NACE)		**File 035:** c.1941 Photos of Central South Addition.pdf
1942 September 30 November 20	**Title:** Ward Brown, Architect **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	• correspondence re: sketches, working drawings and specifications for 'alterations and addition' to Harmony Hall 1. proposed garage at Piscataway House 2. suggested alterations to houses #1-2	**File 036**: Ward Brown Architect.pdf
1944	**Title:** "Maryland's Colonial Charm – Portrayal in Silver" by Harry W. Hill, Commander, U.S. Navy **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		**File 037**: Silver Platter.pdf
1949 June 28	**Title:** correspondence from Mrs. St. George Barber (Elsie B. Barber) on behalf of the Colonial Dames **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		**File 038**: 1949.06.29 Colonial Dames signage P4272830.pdf
1949 October 19	**Title:** Remarks of Charles Wallace Collins upon the occasion of the marking of the date of Harmony Hall by the	• Charles Collins stated in his address to the Colonial Dames that the house was built during the ninth year of the reign of George the First (1714 plus nine	**File 039a:** 1949.10.19 - Charles Collins Remarks to Colonial Dames.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
	Maryland Society of the Colonial Dames of America **Provided By:** National Capital Parks East (NACE)	years = 1723) • Humphrey Haggett's residence was closer to the waterfront than the existing brick manor house. Charles Collins speculated that the foundation remains he discovered during the construction of the ha-ha running north to south on the west side of the house halfway between the house and Broad Creek, were the remains of one of the structures that Haggatt occupied. Currently there are not archeological remains of this structure still intact and no other evidence of this structure to verify its existence. • Broad Creek was a tobacco port of consequence in the latter part of the 17th Century with great tobacco warehouses and ship building. Lord Baltimore maintained an inspector here. • Charles Collins attributed the decline of the Broad creek community and the surrounding areas of southern Maryland to various economic and transportation issues during the 19th century. (Remarks of Collins to Colonial Dames). The deterioration of Harmony Hall is a direct result of this neglect and decline in the surrounding community. The area of Broad Creek depended greatly and in many ways existed and thrived on the access to Broad Creek and the Potomac River. The early community on Broad Creek relied on the river for transportation throughout the area before there were roads established to connect various communities and towns. The establishment of primary road way between communities and the large cities operated by use of stage coach lines. Following the prominent use of the stage coach lines, the development and use of the steam engine railroad resulted in the establishment of railroads throughout Maryland, however there was not a railroad line that extended into this area of southern Maryland leaving it very disconnected and cut off from the greater Washington, DC area. Though this did help to preserve the very rural nature of this location, it left certain areas very neglected and in a state of decline well into the 19th Century. • When Charles Collins purchased Harmony Hall from the Stein family in 1929 he indicated it has been occupied by a bachelor farmer who had immigrated to the United State in the 1880s. The Stein family who was instrumental in the development of the German community Silesia had owned the house for about 40 years. Collins account of the condition of the house at the time he acquired it included the description of a basement entrance consisting of a large hole through the exterior wall. His documentation explains that the house was used for storage of meat, corn and dried fish. Fresh vegetables were cleaned and washed in the Dining Room which was equipped with a square hold cut in the flooring to deposit trash to the basement. His records indicate that all of the original woodwork remained and that he spent about a year restoring the home before living there.	**File 039b**: 1949.10.19 Collins address to Colonial Dames.pdf (transcribed version)
Unknown	**Title:** Parts of 18th Century Dwellings used in the restoration of Harmony Hall & Piscataway House (letterhead: L.T. Hogarth, Agent and Consultant) 1. Frankland 2. Cherry Hill		**File 040**: Historic Homes used to restore Harmony Hall and Piscataway House.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
	3. Marshall House 4. Old Masonic Lodge 5. St. Mary's Old Schoolhouse 6. Piscataway House 7. old frame 18th century house in Piscataway **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		
Unknown	**Title:** Sketches (plan and elevations) for 'Servant's Quarters for Harmony Hall' D.M. Turner and T.S. McClelland Architects **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		**File 041**: plan and sketches for Servants Quarters.pdf
Unknown	**Title:** Plot Plan Restoration of Harmony Hall Prince George's County, Maryland, C.W. Collins, Esq. Owner D.M. Turner and T.S. McClelland Architects **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		**File 042**: Plot Plan Restoration of Harmony Hall - Turner and McClelland Architects.pdf
Unknown	**Title:** Plot Plan of Harmony Hall – Estate of Charles W. Collins, Esq. D.M. Turner and T.S. McClelland Architects **Source:** Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library	plan includes: 1. north and south additions to Harmony Hall 2. Smoke House 3. Garage 4. Servants Quarters (2) 5. Stables 6. implements (spelling?) 7. Woof (spelling?) 8. Entrance Gate	**File 043**: Plot Plan of Harmony Hall - Turner and McClelland Architects.pdf
1955	**Charles Collins Paper:** Chapter XVII (handwritten notes) **Provided By:** National Capital Parks East (NACE)		**File 044:** 1955 - Chapter XVII Collins Handwritten Notes.pdf
Unknown	**Title:** postcards addressing Charles Collins at Harmony Hall at the following address: 7751 Livingstone Road Oxon Hill, Maryland **Source:**		**File 045:** Postcards.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
	Charles Collins Papers **Provided By:** University of Maryland, Special Collections, Hornbake Library		
1964 October 8	**Title:** Survey of the Property of Charles Wallace Collins **Source:** National Capital Park Commission **Provided By:** National Capital Parks East (NACE)		**File 046:** 1964.10.08 - NCPPC Survey of the Property of Collins
c.1966	**Title:** National Capital Parks - Site Plan **Provided By:** National Capital Parks East (NACE)		**File 047:** c.1966 - NCPPC - Site Plan
c.1966	**Title:** National Capital Parks – Topography: Oxon Run to Piscataway Creek **Provided By:** National Capital Parks East (NACE)		**File 048:** c.1966 - Topo Oxon Run to Piscataway Creek
1966 August 2	**Title:** Deed of Property transferring Harmony Hall to the National Park Service (subject to life tenancy for Sue Collins) **Provided By:** National Capital Parks East (NACE)		**File 049:** 1966.08.02 - Deed transfer from Sue Collins to NPS.pdf
1966 September 7	**Title:** **Land Acquisition Memorandum No. 76** To: Regional Director, National Capital Region, National Park Service From: Daniel H Shear, General Counsel National Capital Planning Commission Subject: Acquisition of Land – George Washington Memorial Parkway – Prince George's County, Maryland, Unit No 3 Part of Charles W. Collins tract (Harmony Hall) **Provided By:** National Capital Parks East (NACE)	*By deed dated August 2, 1966 and recorded among the land record of Prince George's County, Maryland, on August 12, 1966, in Liber 3370 at Folio 556, the National Capital Planning Commission acquired for the United States of America from Sue Spencer Collins....* *On November 4, 1966, the following ACQUISITION was recorded in the Land Records of the National Capital Region as a part of the National Capital Park System....* Book 3370, Page 556	**File 050:** 1966.09.07 - Land Acquisition.pdf
1966 November 4	**Title:** National Park Service National Capital Region Land Record No. 540 **Provided By:** National Capital Parks East (NACE)	George Washington Memorial Parkway Section 4, Maryland Reservation No. 404M Prince George's County, Maryland	**File 051:** 1966.11.04 - NPS Land Record No. 540.pdf
1967	**Title:** Maryland State Department of Assessment and Taxation - Tax Map		**File 052:** 1967 - Tax Map.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
	Provided By: National Capital Parks East (NACE)		
1980 February 20	**Title:** National Register of Historic Places Inventory – Nomination Form **Provided By:** Historic Preservation Training Center (HPTC) and National Capital Parks East (NACE) (listed in Scope of Work for HSR)		**File 053:** Harmony Hall National Register Form.pdf
1980	**Title:** Maryland Historical Trust, Maryland National Register Properties National Register Inventory Information Harmony Hall **Source:** http://mht.maryland.gov/nr **Provided By:** National Capital Parks East (NACE)	Photo dated November 1973 shows the 1934 Servant's Dining Room and Kitchen constructed by Charles Collins in the background of the picture	**File 054:** 1980.06.06 - MHT - National Register Inventory Info.pdf
1982	**Title:** Early Manor and Plantation Houses of Maryland: An Architectural and Historical Compendium, 1634-1800, with three hundred twenty photographs and one-hundred forty-five plans, details and sketches. By H. Chandlee Forman **Provided By:** Historic Preservation Training Center (HPTC)		**File 055:** Early Manor and Plantation Houses of Maryland - complete book.pdf
1984 October 9	**Title:** Prince George's Journal "Park service has mansion for rent" **Provided By:** National Capital Parks East (NACE)	(Newspaper/ Periodical)	**File 056:** 1984.10.09 - Newspaper A6.pdf
1984 December 12	**Title:** Washington Post "Stately Halls, Bawdy Tavern Up for Lease" **Provided By:** National Capital Parks East (NACE)	(Newspaper/ Periodical)	**File 057:** 1984.12.09 Stately Halls, Bawdy Tavern Up for Lease.pdf
c. 1985	**Title:** Site Plan for Battersea Driving Center **Provided By:** National Capital Parks East (NACE)		**File 058:** c.1985 Site Plan for Battersea Driving Ctr.pdf
1985 February 28	**Title:** Harmony Hall: Proposed Site Plan Approved by HPC (Historic Preservation Commission), 1986 April 15 **Provided By:** National Capital Parks East (NACE)		**File 059**: 1985.02.28 - HPC Site Plan Approval.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
1985 August 5	**Title:** Letter from National Park Service (Robert S?) To: Mr. J. Rodney Little State Historic Preservation Officer Maryland Historical Trust **Provided By:** National Capital Parks East (NACE)	• The National Park Service leased Harmony Hall to Frank L. Calhoun and Herman Carlton Huhn for use as a carriage driving center and a Morgan horse breeding farm under the NPS historic property leasing program. The agreement and terms of the lease included restoration of the structure according to the Secretary of the Interior's Standards for Historic Preservation. The plans included construction of a new stable, paddocks and car park nearby the historic house. The National Park Service indicated intent to conduct archeological investigations prior to any major construction or landscaping on the site. During the second year of the lease the on-grade structures, including the existing garage, smokehouse, and shed will be demolished.	**File 060:** 1985.08.05 - Letter to Mr little.pdf
1985 December 4	**Title:** Letter To: Ms. Marilyn Nickles, National Capital Parks From: Rembert Donelson **Provided By:** National Capital Parks East (NACE)	• Maintenance and Repairs Update: 1. Replaced old furnace, cleaned oil tanks and concluded a service contract with Southern Maryland Oil Co. 2. Hot water heater to be replaced with an electric model once the electric service has been modified. 3. Proposed trenching below the 30" frost line from the old pump house to the present main house hook up for the water service. This service will ultimately connect to the main in a utility room in the proposed addition. (This is referring to the South Addition constructed in c.1988 following the archeological investigations conducted from 1985-87.) 4. Electricity will be routed underground from the PEPCO service pole to a new meter and main in the pump house, then to the main house and outbuildings. 5. Calhoun and Kuhn requested the approval to construct a barn at the site occupied by the collapsed wood barn to the south of the proposed stable. • The covered passageway between the old kitchen and main house will be removed to allow for any necessary archeological investigations required prior to excavating for installation of new foundations. (This is referring to the covered passage as seen in the 1934 HABs drawings, as constructed by Charles Collins. This covered passage connected the Pantry addition to the Servant's Dining Room and Kitchen. Per the historic photograph from Maryland Historic Trust historic site inventory dated November 1973, this covered passage, servant's Dining Room and Kitchen remained on site until 1985 (Photo Credit: Michael F. Dwyer).)	**File 061:** 1985.12.04 - Letter to M.S. Nickles.PDF
1986 March 19	**Title:** South County Current "Harmony Restored: 'Beneficial partnership,' puts public property to private use" **Provided By:** National Capital Parks East (NACE)	6. (Newspaper/ Periodical)	**File 062:** 1986.03.19 - South County Current Article.PDF
1986 December	**Title:** Harmony Hall Documentary Record National Capital Parks East National Park Service Marilyn W. Nickels and Barbara Grady		**File 063:** 1986.12 - Harmony Hall Documentary Record - Nickels and Grady.PDF

DATE	TITLE	DESCRIPTION	FILE NAME
	Provided By: National Capital Parks East (NACE)		
1987 January 8	**Title:** South County Times "Partners Bring Life Back to Mansion" **Provided By:** National Capital Parks East (NACE)	(Newspaper/ Periodical)	**File 064:** 1987.01.08 The South County Times.pdf
1987 April	**Title:** Report on the Investigation of Original and Early Finishes in Harmony Hall – Broad Creek, Maryland Completed by Peter Wollenberg, Architectural Conservator **Provided By:** National Capital Parks East (NACE)		**File 065:** 1987.04 - Original and Early Finishes in Harmony Hall
1987 May	**Title:** Partial Guide to the Charles Wallace Collins Paper Historic Manuscripts & Archives Department University of Maryland College Park Libraries Processed by Mary Lacy **Provided By:** National Capital Parks East (NACE)	• Charles Collins papers include documents pertaining to the restoration of Harmony Hall, Piscataway House, Lyles House (Want Water) and two unnamed houses in the Broad creek area (#1 and #2, 7740 and 7800 Livingston Road) • Harmony Hall used to be identified at another address along Livingston Road – 7751 Livingston Road • The inventory and collections include plans of Ward Brown, Architect to attach Want Water as a wing to the south side of Harmony Hall. This plan was ultimately abandoned and Collins planned to restore Harmony Hall independently. • Bills and receipts documenting Harmony Hall Farms as a working farm including cattle, swine, sheep, plants and machinery. • Photographs and negatives documenting Harmony Hall before and after restoration. • Contract with Gravel Contract Capital Materials for gravel removal from Broad Creek in 1936-38 Prints of Frankland and Marshall House used in the restoration of Harmony Hall	**File 066:** 1987.05 - Partial Guide to Collins Papers.PDF
1987 June 1	**Title:** Battersea Driving Center Addition & Restoration to Harmony Hall Siegfried Ising, AIA Architect **Provided By:** National Capital Parks East (NACE)		**File 067:** 1987.06.01 - Renovations by S. Ising
1987 November	**Title:** Harmony Hall History M. Nickels **Provided By:** National Capital Parks East (NACE)	• 1662 February 27th – Battersea surveyed • 1662 October 27th – Battersea recorded in name of Humphrey Haggett • 1668 September 18th - Battersea patent granted to Richard Fowke • Depositions taken in 1745 for a land commission regarding the boundaries for Battersea document recollections of early farmers in the area. They recount that from a time between 1685 – 95 there was occupancy and farming of the Battersea land. • According to Thomas Lewis' will, he was living on the property at that time with his wife. The National Park Service (NPS) archeological investigations reveal that this structure may have burnt down, but was determined to have been from a time between 1690 and 1710. Thomas Lewis' will does include an inventory which provides some clues as to his wealth and possessions at the time of his death.	**File 068:** 1987.11 - Nickels Harmony Hall History.PDF

DATE	TITLE	DESCRIPTION	FILE NAME
		These records can sometimes provide evidence of the type and quality of dwelling on the property at that time period based upon the quality of life and value of the possessions associated with the property and the owner. • William Tyler, Sr. dies in 1721 and his wife remarried in 1726 and lived elsewhere with her husband, Henry Massey. William Tyler, Jr. who was to inherit Battersea following the death of his mother Elizabeth was living in Pomonkey according to his will of 1755. It is unlikely that William Tyler, Jr. would have built a house as stately as Harmony Hall if neither he nor his mother continued to live on the property for any substantial period of time following the death of his father in 1721. Following the death of Elizabeth Tyler Massey, John Tyler inherits Battersea. • In 1763, John Tyler, son of William Tyler, Jr. sells the 100-acres of Battersea to James Marshall.	
1988 March 18	**Title:** Addition & Restoration to Harmony Hall Siegfried Ising, AIA Architect (assumed) **Provided By:** National Capital Parks East (NACE)		**File 069:** 1988.03.18 - Renovations to Harmony Hall
1988 April 14	**Title:** Washington Times "A New Life or an Old Plantation: Harmony Hall" **Provided By:** National Capital Parks East (NACE)	• (Newspaper/ Periodical)	**File 070:** 1988.04.14 - Washington Times Article.PDF
1989 April 26 (documented April 28)	**Title:** Telephone Interview with Nancy Bruce, niece of Charles W. Collins **Provided By:** National Capital Parks East (NACE)	• Mrs. Nancy Bruce, daughter of Manley Owen Collins and niece of Charles Wallace Collins , had visited Harmony Hall frequently during the time Charles Collins owned and restored the house. The interview between Marilyn Nickels, NPS Historian and Nancy Bruce documented that her recollections and perception was that "*while Charles Collins wanted to replicate a Southern plantation of his youth at Harmony Hall, it was more a romanticized version than one he was familiar with personally. She said he lived somewhat in a dream world in this regard, setting up a life in the country at Harmony Hall almost out of another century*" (Nickels Interview with Nancy Bruce, 1). • Mrs. Bruce's memory recalls when the Pantry Addition, as seen in the 1934 HABS drawings, was only one story in height and was used for cooking until the larger kitchen outbuilding was constructed. She recalled that Charles Collins had replaced all the windows in the house "to make them more Georgian" in appearance and more in line with the historical period of the home. She did not provide any description of the windows which existing prior to Collins' replacement of all the windows at Harmony Hall.	**File 071:** 1989.04.28 Interview with Nancy Bruce, niece of Collins.PDF
1989 October	**Title:** Statement for Management: Harmony Hall **Provided By:** National Capital Parks East (NACE)	• The patent for the Battersea tract of land was originally granted by the English Kings Charles I and Charles II. • It is well documented that George Washington regularly attended services at Pohick Church in Virginia. It is known that during inclement weather	**File 072:** 1989.10 - Statement for Management.PDF

DATE	TITLE	DESCRIPTION	FILE NAME
		when the Virginia roads were impassable, Washington would cross the Potomac to the Broad Creek wharf and attend services at St. John's Church. • John and Walter Dulaney were the sons of the third Thomas Addison. • The "Capper-Cramton Act provided for the extension of the George Washington Memorial Parkway through property along the eastern shore of the Potomac River. • Under the Historic Leasing Program of the National Park Service, NPS signed a lease in 1985 with the Battersea Company Ltd. for use of the property and to provide restoration and preservation maintenance for Harmony Hall in compliance with standards set forth by the National Park Service and the Secretary of the Interior's Standards. • Nine (9) of the outbuildings on the property were determined to be modern additions and in various stages of deterioration. Under the terms of the lease agreement, the Battersea Company was granted permission to rehabilitate, remove or construct other temporary facilities at these locations if they are in compliance with NPS policy and regulation. • The major mechanical, electrical, and plumbing systems were upgraded during the time that the Battersea Company occupied the property.	
c. 1990	**Title:** Details for Brick Steps from Room 106-Sun Room, South Addition (never constructed) Siegfried Ising, AIA Architect (assumed) **Provided By:** National Capital Parks East (NACE)		**File 073:** c.1990 - Brick Steps at Sun Room - never built
1991 March	**Title:** Details for South Addition Entry Porch Siegfried Ising, AIA Architect (assumed) **Provided By:** National Capital Parks East (NACE)		**File 074:** 1991.03 - South Addition Entry Porch
1993 January	**Title:** Harmony Hall (Battersea) Draft by Nickels **Provided By:** National Capital Parks East (NACE)	(This document is text taken from the book **Archeology at Harmony Hall** published in 1993. This is a draft of Chapter 1: Harmony Hall, the Historical Perspective by Marilyn W. Nickels Ph.D., former Park Historian for National Capital Parks – East)	**File 075:** 1993.01 - Harmony Hall - Battersea - draft by Nickels.PDF
1993	**Title:** Archeology at Harmony Hall: Exploring the late seventeenth-century frontier of Maryland By Robert C. Sonderman, Matthew R. Virta, Marilyn W. Nickels, Stephen R. Potter **Provided By:** National Capital Parks East (NACE)		**File 076:** Archeology at Harmony Hall.pdf
1994 June	**Title:** Harmony Hall: Park Purposes and Resource Values **Provided By:** National Capital Parks East (NACE)	(This document is partial text taken from the **Statement for Management: Harmony Hall** written in October 1989. See entry above.)	**File 077:** 1994.06 - Park Purposes and Resource Values.PDF

DATE	TITLE	DESCRIPTION	FILE NAME
1995 April 15	**Title:** Recent History of Harmony Hall Author unknown, NPS? **Provided By:** National Capital Parks East (NACE)	• During the first five years (1985-1990) that the Battersea Company leased the property, the tenants had added a new south wing to the house, upgraded the mechanical, electrical and plumbing systems, erected new fencing around the property and constructed a new barn for their horses. The National Park Service documented that almost no funds were spent to restore and preserve the Main Block of the house. • The National Park Service began emergency interventions in order to halt further deterioration of the roof, gutter, and windows.	**File 078a:** 1995.04.15 - Recent History of Harmony Hall (1).PDF **File 078b:** 1995.04.15 - Recent History of Harmony Hall (2).PDF **File 078c:** 1995.04.15 - Recent History of Harmony Hall (3).PDF
1996 May 14 June 24 June 25 June 26 June 27 June 28 July 1 July 2 July 10 July 15 July 16 July 17 July 24 July 29 July 30 July 31 August 6 August 13 August 15 August 16 August 19 August 20	**Title:** National Capital Parks East (NACE) Chronology of Harmony Hall Management By Frank Faragasso **Provided By:** National Capital Parks East (NACE)	May 14: • Gutter repairs recently completed and were inspected by NPS; they were not installed properly according to NPS records. June 24: • Harley Ricketts, Maintenance • Judy Crane, Safety Officer • Frank Faragasso, Historian • twelve windows on the first floor had been removed and sent to window contractor's site for repairs (contractor: Tony Proto); repairs included sanding and re-glazing prior to returning them for re-installation • Window frames were treated with two coats of primer and two coats of outdoor latex paint. Upon further inspection of the windows, it was determined that portions of the frames seem old enough to be original. It is thought that when Charles Collins restored the home he may have reused piece from other building, as he was known to have done at other properties he restored. The molding in the house appears to be original, but the fireplace mantle is from a later time period. It was determined that the floor boards may also not be original fabric. • While on site, NPS observes crushed blue stone being delivered to the house. They were informed that this gravel was to be used as the base for a new brick walkway. Continued…..	**File 079:** 1996 - NACE Chronology Frank Faragasso.PDF
1996 April 17	**Title:** Prince George's Journal "At home in history: More than a motto at Harmony Hall" **Provided By:** National Capital Parks East (NACE)	(Newspaper/ Periodical)	**File 080:** 1996.04.17 - Newspaper - At Home in History.pdf
1996 June 19	**Title:** Assessment of Actions Having an Adverse Effect on Cultural Resources **Provided By:** National Capital Parks East (NACE)		**File 081:** 1996.06.19 - Assessment of Actions on Cultural Resource
1996 June 26	**Title:** Trip Report to Harmony Hall National Capital Parks East **Provided By:** National Capital Parks East (NACE)	Review and Assessment of Window Repairs and Treatment	**File 082:** 1996.06.26 - Trip Report.pdf

DATE	TITLE	DESCRIPTION	FILE NAME
1996 August 4-16	**Title:** Harmony Hall Progress Report by Frank Faragasso **Provided By:** National Capital Parks East (NACE)	August 4: Harmony Hall Report on Alternative Courses of Action 1. Offer the property to another agency such as GSA 2. Offer the property to the state or county 3. Restore, manage, and interpret the property as a site representing colonial life 4. Establish a coalition of existing preservation organizations in a joint effort to save the house and open it to the public. 5. Adapt it to a contemporary use, such as a conference center. 6. Attempt another lease under the Historic Leasing Program 7. Establish a foundation to take over the property with a cooperating agreement to provide money for them to manage and interpret the property. August 14: Draft letter From Gentry Davis to Battersea Corporation August 15: Harmony Hall Evaluation Meeting Agenda August 15: Summary of Repairs • The repaired windows have been reinstalled. Repair procedures documented by the general contractor, Tony Proto and the National Park Service, included removal of all window sashes, removal of all glass panes, stripping of all paint from window shutters followed by reinstallation of all glazing. The sashes were then coated with a paint primer and two coats of exterior paint. The sashes were reinstalled into the existing window frames which were stripped, repaired and repaint on site. • The oval window in the third floor/ attic pediment was replaced with a window in a design more characteristic of the timer period of the house. The window is of better construction than the original and is seen as an improvement. The new "bullseye" design is to be finished with antique glazing. • The east entry door is being repairs and the contractor has use wood putty for some repairs to the existing wood door frame. • The gutters and downspouts have been replaced, but the details and installation does not meet NPS standards. • The tenants have made some repairs and alterations to the structure, which were not previously approved by the National Park Service. These include a stone walkway from the fence to the house, a rose garden along the front drive from Livingston Road, and a courtyard and pond at the south yard just outside the new South Addition. The tenants have also expressed the intent to install new decorative posts, typical of 18th century plantation homes, at the entry which have not been approved by NPS. August 16: Harmony Hall Progress Report • The porch at the east entry of the Main Block has been constructed except for the installation of the railings.	**File 083:** 1996.08.16 - Progress Report.PDF
1996 October 17	**Title:** Harmony Hall Restoration Plan (draft) by Frank Faragasso	• Maintenance and restoration requirements based upon the Request for Proposal signed by the lessee (Battersea Corporation) on March 11, 1985.	**File 084:** 1996.10.17 - Draft Restoration Plan.PDF

DATE	TITLE	DESCRIPTION	FILE NAME
	Provided By: National Capital Parks East (NACE)	• (see document for further detailed list of recommendations)	
1997 April (possibly 1987 April 2)	**Title:** Scope of Work: Harmony Hall Preservation Author unknown, NPS? **Provided By:** National Capital Parks East (NACE)	• Checklist of repairs indicating what has been completed and what has not been completed. • Does this document accompany the **Harmony Hall Restoration Plan** (draft) by Frank Faragasso as outlined above? • The Scope of work indicates the following task was completed: A color and finish analysis shall be performed on the original structure, room by room. Stains, paints, plaster, papers, and hardware shall be investigated and documented, layer by layer, item by item. •	**File 085:** 1987.04.02 - Scope of Work - 1987.PDF
1998 September 11	**Title:** Alternative Courses of Action for Harmony Hall: A Report by Frank Faragasso **Provided By:** National Capital Parks East (NACE)	1. Restore, manage and interpret the property as a colonial plantation. 2. Adaptive reuse as a conference center. 3. Offer the property to another agency such as GSA. 4. Offer the property to the state of Maryland or Prince George's County. 5. Establish a foundation to take over the property. 6. Lease the property again under the Historic Leasing Program. 7. Sell the property on the prevailing market or sell it at auction. 8. Move Parks and History to Harmony Hall. (Use as NPS administrative offices.)	**File 086:** 1998.09.11 - Alternative Courses of Action.PDF
1998 December 21	**Title:** DVD: "Harmony Hall Existing Conditions and Inventory", NPS NACE RM, 1/28/2006 **Provided By:** National Capital Parks East (NACE		**File 087:** 1998.12.21 - DVD: "Harmony Hall Existing Conditions and Inventory"
2001 March 23	**Title:** Maryland Historical Trust National Register Eligibility Review Form **Provided By:** Historic Preservation Training Center (HPTC) and National Capital Parks East (NACE) (listed in Scope of Work for HSR)	Inventory No. PG: 80-24 Property Name: Broad Creek Historic district City: Broad Creek Date of Construction: 1662-1800	**File 088:** Broad Creek National Register Form.pdf
2001 March 31	**Title:** Broad Creek History (draft) **Provided By:** National Capital Parks East (NACE)		**File 089:** 2001.03.31 - Broad Creek History.PDF
2002 February	**Title:** Management Plan for Harmony Hall (draft) **Provided By:** National Capital Parks East (NACE)	This document is referenced in the **Planning for the Future of Harmony Hall** Prepared by J. Glenn Eugster in July 2003. (See below) BBB did not receive a copy of this document.	N/A (Not included in this inventory.)
Unknown (2002? Might be comments on Management plan for Harmony Hall	**Title:** Comments on Site Management Plan for Harmony Hall By Mike Antonioni, NACE	• Preferred use option would be to utilize the site in cooperation with a foundation. • A foundation could assist NPS with funding for the preservation and maintenance, providing staff to provide tours and interpret the site, maintain the	**File 090:** 2002 - Antonioni Management Plan Comments.PDF

DATE	TITLE	DESCRIPTION	FILE NAME
(draft) from February 2002.)	**Provided By:** National Capital Parks East (NACE)	collections and grounds of the property. • Horses could be maintain at the property as both a security measure and for interpretive history of the site since horses and livestock have existing on the site since from the 17th century through the 20th century. • Furnish the house as a historic house museum. However, this would require addition research and investigations. • Exhibit artifacts and archeological findings form the site and surrounding community. • Some rooms and spaces could be utilized for a visitor's center or bookshop.	
2002 June	**Title:** Broad Creek Historic District Planning Study The Maryland-National Capital Park and Planning Commission **Provided By:** National Capital Parks East (NACE)	Subject: The history, architecture, planning context and goals of the broad Creek Historic Distric	**File 091:** Broad Creek Historic Preservation Planning Study.pdf
2003 May 15	**Title:** Gazette "Park Service considers selling mansion" **Provided By:** National Capital Parks East (NACE)	• (Newspaper/ Periodical)	**File 092:** 2003.05.15 - Gazette.PDF
2003 July 21-22 (report prepared July 29)	**Title:** Planning for the Future of Harmony Hall Prepared by J. Glenn Eugster Assistant Regional Director for Partnerships **Provided By:** National Capital Parks East (NACE)	• References draft Management Plan for Harmony Hall, dated February 2002. (BBB was not provided a copy.) • Harmony Hall is an important element of the Broad Creek Historic District. Broad Creek Historic District was the first historic district established under the Prince George's County preservation law in 1985. • Options Considered in Management Plan 1. Develop a conference center. (Con: would require significant addition and/ or alternation.) 2. Operate a police sib-station. 3. Offer the property to another agency. 4. Form a museum coalition. 5. Establish a foundation. 6. Lease the property through the Historic Leasing Program. 7. Sell the property on the prevailing market. 8. Move Parks and History to Harmony Hall. *9. Commercial Use such as Bed-and-Breakfast. (Con: Must implement with many easements and restrictions. Risk of long term financial viability and possible failure of business.)* *10. National park Service would restore, maintain and operate the house and grounds as a park with emphasis on the natural and cultural interpretation. This option would require partnerships with other government agencies and/ or non-profit agencies and organizations.* • The report provides a general framework for considering the future ownership and use options for Harmony Hall. Includes various configurations to consider subdivision for the property to assist in its	**File 093:** 2003.07.29 - Planning for the Future.PDF

DATE	TITLE	DESCRIPTION	FILE NAME
		management and future use strategy. 1. Convey – National Park Service sells, trades, or donates all or portions of Harmony Hall to another owner. 2. Retain – The National Park Service retains ownership and assumes direct management responsibilities of all or portions of the property. 3. Lease – Retaining ownership, the National Park Service leases all or portions of the property to a federal, state or local government agency, nonprofit organization, corporation, partnership or individual who will assume exclusive or shared management responsibilities. Terms may vary with the circumstances, capabilities and interests of the lessee. An alternative to the lease might be a memorandum of agreement. • The fundamental challenge in the restoration and maintenance of Harmony Hall exists in the significant expense and funding required to successfully undertake such a venture.	
2004 February 17	**Title:** Harmony Hall Management Plan (draft) National Park Service National Capital Parks – East **Provided By:** National Capital Parks East (NACE)		**File 094**: 2004.02 - Draft of Harmony Hall Management Plan.PDF
Unknown (post 1999, 2005?)	**Title:** Statement Scope of Work Request for Proposals (draft) **Provided By:** National Capital Parks East (NACE)	• The Harmony Hall property includes historic structures and archeological ruins, offering the opportunity to exhibit and interpret the property through the entire history of human habitation and settlement along the Potomac River. • In November, under the Capper-Cramton Act of May 2, 1930, Harmony Hall and the surrounding 65.71 acres of the property were purchased by the Federal government as part of a right of way for a proposed extension of the George Washington Memorial Parkway. The property was purchased from Charles Wallace Collins' widow, Sue Spencer Collins in exchange for a life tenancy of the property. At the time of her death on 1983, the proposed plans for the extension of the George Washington Memorial Parkway were no longer being considered for construction and the National Park Service was left with the task of managing and maintaining the property. • A year after the death of Sue Collins, the National Park Service decided to include Harmony Hall and the surrounding property in the Historic Leasing Program. On October 18, 1985, a fifty-five year lease was signed with the Battersea Company, Ltd. to be utilized as a residence. The lease agreement included use of the surrounding property as a horse breeding farm and carriage driving school. • This statement scope of work indicates that following eviction of The Battersea Company in 1999, The National Park Service decided to manage the property through a new NPS leasing program. (BBB assumes this document was written following consideration of other options as outlined in the following documents:	**File 095:** post 1999 Section C - Scope of Work.PDF

DATE	TITLE	DESCRIPTION	FILE NAME
		Alternative Courses of Action for Harmony Hall: A Report by Frank Faragasso September 11, 1998 **Management Plan for Harmony Hall (draft)** February 2002 **Comments on Site Management Plan for Harmony Hall** By Mike Antonioni, NACE **Planning for the Future of Harmony Hall** Prepared by J. Glenn Eugster Assistant Regional Director for Partnerships July 21-22, 2003 **Harmony Hall Management Plan** (draft) National Park Service National Capital Parks – East February 17, 2004	
2005 December 14 (recorded December 20)	**Title:** Interview with Rudolph Adler (member of Stein Family) **Provided By:** National Capital Parks East (NACE)	• 1885-92 Robert Stein purchases 320 acres including Harmony Hall from Domenico Christofanie (sp?) 1889 Court change name of area around Harmony Hall (to "Silesia"?)	**File 096:** 2005.12.20 - Interview with Rudolph Adler - Stein Family.PDF
2006 January 1	**Title:** Security System Installation Drawings **Provided By:** National Capital Parks East (NACE)		**File 097:** 2006.01.13 - Security System Installation
2006 January 28	**Title:** DVD: "Harmony Hall Oral History Interviews", NPS NACE RM, 1/28/2006 **Provided By:** National Capital Parks East (NACE)		**File 098:** 2006.01.28 - DVD: "Harmony Hall Oral History"
2006 February 2	**Title:** Gazette "Residents, park service work to preserve Harmony Hall. Fort Washington manor acquired by National Park Service in the 1960s will be refurbished in attempt to save its history." **Provided By:** National Capital Parks East (NACE)	• (Newspaper/ Periodical)	**File 099:** 2006.02.02 Gazette Article.PDF
	Title: Gunston Hall Plantation, Probate Inventory Database Maryland Aspiring Inventories listing Livestock **Provided By:** National Capital Parks East (NACE)	Website with links to several probate inventories which have been digitized.	**File 100:** Gunston Hall Probate Inventory
2008 June 6	**Title:** Washington Post "Historic Md. Manor's Deteriorating Situation"	• (Newspaper/ Periodical)	**File 101:** 2008.06.22 - Articles +.PDF

DATE	TITLE	DESCRIPTION	FILE NAME
	Provided By: National Capital Parks East (NACE)		
2008 November	**Title:** Harmony Hall: Historic Overview By Frank Faragasso **Provided By:** National Capital Parks East (NACE)		**File 102:** 2008.11 - Frank Faragasso Harmony Hall Historic Overview.PDF
2009	**Title:** Application for Endangered Maryland **Provided By:** National Capital Parks East (NACE)		**File 103:** 2009 - Application for Endangered.PDF
2010 May 16	**Title:** History of Harmony Hall by Charles V. Reed Department of History University of Maryland, College Park **Provided By:** Historic Preservation Training Center (HPTC) and National Capital Parks East (NACE) (listed in Scope of Work for HSR)		**File 104:** Harmony Hall History - Charles Reed 2010.05.16.pdf
2012	**Title:** National Park Service: Cultural Landscapes Inventory National Capital Parks – East **Provided By:** National Capital Parks East (NACE)		**File 105:** 2012 - Harmony Hall Draft Cultural Landscapes Inventory.pdf

Part 6: Record of Treatment



Harmony Hall

Fort Washington, Maryland

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Project Title:	Hazardous Material Abatement
Project Description:	Removal of asbestos and fiberglass materials identified in Historic Structure Report
Goal of Project / Justifications:	
Goals Met?	Structure is considered clear of hazardous materials and additional investigation can be safely pursued.
Discoveries?	Additional asbestos was identified in breakfast nook and was removed.
Confirmation of Assumptions?	Lead paint remains and must be handled appropriately when performing any disruptive work.

PMIS Number(s):	123456

Project Accounting:		
Funding Source(s):	1234-XX-567	
Estimated Costs:	$25,000.00	
Actual Costs:	$27,956.45	
Percentage Increase:	11%	
Reason for Increase:	Additional asbestos indentified and removed.	

Purchase Order / Contract Information:	Purchase Order / Contract Number:	Purchase Order / Contract Amount:
Architect/Engineer:	NA	
Supplier/Vendor:	11P345K654	$27,956.45
Construction Contractor:	NA	
Other:	NA	

Project Duration:	
Original Schedule	June 25 – July 2, 2095 (1 week)
Schedule Extensions:	June 25 – July 6, 2095 (3 days)
Reason for Extensions:	Additional asbestos identified and removed.

Individuals Involved:	
Park Staff:	Cultural Resources Manager Maintenance Supervisor Southern District Manager
Volunteers:	NA
Design Professionals:	NA
Vendors:	Abatement R Us
Construction Contractors:	NA

SAMPLE

Photographic Documentation:

Before:



During:



SAMPLE

After:



Operations & Maintenance Information:	Dated:	Location:
Project Correspondence:	NA	Southern District Manager Files
Construction Specifications:	June 15, 2095	Southern District Manager Files
Construction Drawings:	June 15, 2095	Southern District Manager Files
Cut-Sheets:	NA	NA
Submittals:	NA	NA
As-Built Drawings:	July 21, 2095	Maintenance Files
Material Safety Data Sheets:	June 25, 2095	Maintenance Files
Other: Clearance Report	July 12, 2095	Southern District Manager Files
Other: Contracting Paperwork	NA	Southern District Manager Files
Other:		

Additional Information:

SAMPLE

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SAMPLE

Project Title:		
Project Description:		
Goal of Project / Justifications:		
Goals Met?		
Discoveries?		
Confirmation of Assumptions?		
PMIS Number(s):		
Project Accounting:		
Funding Source(s):		
Estimated Costs:		
Actual Costs:		
Percentage Increase:		
Reason for Increase:		

Purchase Order / Contract Information:	Purchase Order / Contract Number:	Purchase Order / Contract Amount:
Architect/Engineer:		
Supplier/Vendor:		
Construction Contractor:		
Other:		

Project Duration:	
Original Schedule	
Schedule Extensions:	
Reason for Extensions:	
Individuals Involved:	
Park Staff:	
Volunteers:	
Design Professionals:	
Vendors:	
Construction Contractors:	
Others:	

Photographic Documentation:

Before:

During:

After:

Operations & Maintenance Information:	Dated:	Location:
Project Correspondence:		
Construction Specifications:		
Construction Drawings:		
Cut-Sheets:		
Submittals:		
As-Built Drawings:		
Material Safety Data Sheets:		
Other:		
Other:		
Other:		

Additional Information:

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United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

BASIS OF ESTIMATE

PROJECT INFORMATION

Project:	Harmony Hall - Historic Structure Report
Park:	National Capital Parks - East (NACE)
Park Alpha:	-
PMIS Number:	136710
Estimate Date:	9/7/2012
Prepared By:	Russell McElreath
Company:	US Cost, Inc.
Address:	201 12th Street; Suite 502
City, State Zip:	Arlington, VA
Phone:	214-540-2809

BACKGROUND SUPPORTING MATERIAL (Scope of Work):

US Cost was tasked to prepare a Class C Cost estimate utilizing the Historic Structure Report dated August 6 2012, as a guide, which was prepared by the A/E, BBB for the National Park Service on Harmony Hall at Fort Washington, Maryland. The estimate is broken into 5 different treatment recommendations outlined in **Part 2D: Work Recommendations** and **Part 3: Treatment and Use** of the Historic Structure Report.

SOURCE OF COST DATA:

Estimate utilizes published database and US Cost historical data pricing.

ESTIMATE ASSUMPTIONS:

This cost estimate has been priced for construction by a General Contractor utilizing subcontractors.
It is anticipated that this work will be performed in 8 hour shifts during the day, Monday through Friday for the duration of the project; therefore a labor premium has not been included.

MAJOR CHANGES FROM PREVIOUS ESTIMATE:

N/A

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

BASIS OF ESTIMATE

PROJECT INFORMATION

Project: Harmony Hall - Historic Structure Report

Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710
Estimate Date: 9/7/2012

DESCRIPTION OF MARK-UP & ADD-ONS:

Location Factor:	0.00%	Estimate utilizes local wage and material pricing no adjustment factors have been incl.
Remoteness Factor:	0.00%	Site is only 18 miles from published commercial center (Washington DC) tno adjustment factors have been incl.
Wage Rate Factor:	0.00%	Local published wage rates are included in the individual cost items no adjustment factors have been incl.
State & Local Taxes:	6.00%	Local sales tax have been included
Design Contingency:	20.00%	Documents used in preparation of this cost estimate were preliminary
Standard. General Conditions:	10.00%	Estimate assumes a general contractor will oversee the bulk of the work that will be preformed by subcontractors
Government General Conditions:	10.00%	Per NPS
Historic Preservation Factor:	10.00%	Per NPS
Contractor Overhead:	10.00%	General contractors offsite (Home) office support. (Per NPS)
Contractor Profit:	10.00%	Based on complexity and current market conditions
Bonds and Permits:	2.00%	Based on project complexity
Contracting Method Adjustment (8a):	20.00%	Based on construction contract awarded to 8A Contractor.
Annual Inflation Escalation Factor:	0.00%	Estimate is priced at current market value, therefore no escalation is included
Time Until Project Midpoint (Months)	0	Number of months from estimate (or data) date until the projects midpoint of construction.

OTHER COMMENTS:

N/A

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

PROJECT COST SUMMARY

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By:
Date:

Executive Summary

Item No.	Description - Total Estimated Net Const. Cost	Quantity	Unit	Cost/Unit	Total
	Baseline Work Recommendations - Main Block, Central South Addition, South Addition	1	LS		$3,537,155
1	Treatment Option #1 Restoration, with Baseline Work Recommendations Cost	1	LS		$2,891,104
2	Treatment Option #2 Rehabilitation, with Baseline Work Recommendations Cost	1	LS		$3,389,933
3	Treatment Option #3 Rehabilitation, with Baseline Work Recommendations Cost	1	LS		$3,913,930
4	Treatment Option #4 "Mothballing", with Baseline Work Recommendations Cost	1	LS		$666,109

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Estimate Summary

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: Reviewer
Date: Review Date

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Baseline Work Recommendation: Main Block	3,780	SF	$280	$1,057,805
2	Baseline Work Recommendation: Central South Addition	805	SF	$254	$204,164
3	Baseline Work Recommendation: South Addition	596	SF	$357	$213,055
	Subtotal Direct Construction Costs				**$1,475,024**
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnote)*				**$0**
	Direct Cost Subtotal without GFP				**$1,475,024**
	Published Location Factor	0.00%			$0
	Remoteness Factor	0.00%			$0
	Federal Wage Rate Factor	0.00%			$0
	State & Local Taxes	6.00%			$88,501
	Design Contingency	20.00%			$295,005
	Total Direct Construction Costs				**$1,858,530**
	Standard General Conditions	10.00%			$185,853
	Government General Conditions	10.00%			$185,853
	Historic Preservation Factor	10.00%			$185,853
	Subtotal NET Construction Cost				**$2,416,089**
	Overhead	10.00%			$241,609
	Profit	10.00%			$241,609
	Estimated NET Construction Cost				**$2,899,307**
	Bonds & Permits	2.00%			**$57,986**
	Contracting Method Adjustment	20.00%			$579,861
	Inflation Escalation	0	Months	0.00%	$0
	Total Estimated NET Cost of Construction				**$3,537,155**

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10		**SUPERSTRUCTURE**					
	B101002	Remove and replace wood framing due to deterioration	3780	SF	$ 22.93	$86,672	
	B101003	Replace/Repair Inadequate Structural Framing	1	LS	$ 29,963.00	$29,963	
	B101004	Repair Water Damage at interior Ceilings/Walls	100	SF	$ 48.84	$4,884	
	B101005	Repair Cracks at Interior Walls	100	SF	$ 71.41	$7,141	
	B101006	Repair Missing or Inadequate Lintel	20	Ea	$ 1,662.30	$33,246	
	B101007	Repair Rusting of Window Shutter Holders Embedded in the Masonry	4	Ea	$ 919.17	$3,677	
	B101008	Remove and replace brick on thick sand bed, 1" thick sand bed at hearth	108	SF	$ 11.56	$1,248	
	B101009	Rebuild Displaced Chimney	1	Ea	$ 16,595.00	$16,595	
		SUBTOTAL SUPESTRUCTURE	**3780**	**SF**	**$ 48.53**	**$183,426**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		**EXTERIOR CLOSURE**					
	B201001	Scaffolding	3750	SF	$ 2.12	$7,950	
	B201002	Pressure Wash Exterior (A9)	3751	SF	$ 0.15	$563	
	B201003	Remove Bio Growth on Masonry (A1)	30	SF	$ 2.15	$65	
	B201004	Recaulk Wood Trim @ Masonry	44	LF	$ 8.06	$355	
	B201005	New Chimney Cap (A11)	2	Ea	$ 777.18	$1,554	
	B201006	Repair Dislocated Brick (A5)	90	SF	$ 18.00	$1,620	
	B201007	Ferrous Metal Anchors	12	Ea	$ 8.23	$99	
	B201008	Incompatable Patch (A8)	165	SF	$ 46.07	$7,602	
	B201009	Insect Infestation - Remove and provide treatment to prevent further insect infestation (Main Block, Central South Addition and South Addition)	1	LS	$ 13,525.79	$13,526	
	B201010	Repair Open Joints in Brick	32	SF	$ 13.56	$434	
	B201011	Patch Hole @ Missing Brick	3	Ea	$ 129.46	$388	
	B201012	Refinish Ext Wood Trim	360	SF	$ 29.99	$10,796	
	B201013	Refinish Ext. Stairs/Railings	2	Ea	$ 523.89	$1,048	
	B201014	Remove Vegetation	1	LS	$ 408.85	$409	
	B201015	Remove Plastic Embeds	4	Ea	$ 6.84	$27	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

	B201016	Replace Spalled Brick	10	SF	$ 78.44	$784	
	B201017	Replace Wood Porch Soffit	68	SF	$ 18.56	$1,262	
	B201018	Repair Through Brick Crack	50	SF	$ 66.13	$3,307	
	B201019	Repair Through Joint Crack	15	SF	$ 18.70	$281	
	B201020	Clean Masonry due to Failing Paint	58	SF	$ 2.15	$125	
	B201021	Copper Gutters & D.S.	205	LF	$ 23.28	$4,772	
	B201022	Replace Wood Rotted Trim	14	LF	$ 301.11	$4,216	
	B201023	Replace Wood Rotted Porch	23	SF	$ 40.59	$934	
	B202001	Replace Broken Window Panels	3	Ea	$ 355.56	$1,067	
	B202002	Replace Broken Window Sash	3	LF	$ 214.92	$645	
	B202003	Replace Missing Sills	3	LF	$ 231.80	$695	
	B202004	Replace Wood Rotted Sills	18	LF	$ 234.33	$4,218	
	B202005	Repaint Exterior Window Trim	43	Ea	$ 183.36	$7,884	
	B202006	Window Hardware	43	Ea	$ 264.30	$11,365	
	B203001	Repaint Existing Doors	4	Ea	$ 320.29	$1,281	
	B203002	Door Hardware	4	Ea	$ 1,083.45	$4,334	
		SUBTOTAL EXTERIOR CLOSURE	**1**	**VALUE**	**$ 93,603.75**	**$93,604**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B30		**ROOFING**					
	B301001	Replace Existing Roof	1900	SF	$ 11.62	$22,078	
	B301002	Misc Soffit Repair	168	SF	$ 3.99	$670	
		SUBTOTAL ROOFING	**3780**	**SF**	**$ 6.02**	**$22,748**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C10		**INTERIOR CONSTRUCTION**					
	C101001	Major Crack Repair in Plaster	3	Ea	$ 72.39	$217	
	C101002	Patch & Prep Existing Plaster Walls	8089	SF	$ 0.29	$2,346	
	C101003	Replace Plaster Walls	1553	SF	$ 4.92	$7,641	
	C101004	Refinish Interior Face of Window Trim	43	Ea	$ 204.11	$8,777	
	C102001	Refinish Existing Interior Single Doors	30	Ea	$ 243.88	$7,316	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

	C102002	Replace Threshold	1	Ea	$	44.81	$45	
	C103001	Refinish Int. Wood Casework	34	LF	$	20.74	$705	
	C103002	Refinish Fire Place	2	Ea	$	296.99	$594	
	C103003	Replace Window Seat	9	LF	$	132.98	$1,197	
	C103004	Refinish Window Seat	14	LF	$	16.47	$231	
		SUBTOTAL INTERIOR CONSTRUCTION	**1**	**VALUE**	**$**	**29,068.22**	**$29,068**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
C20		**STAIRCASES**						
	C201001	Repair Broken Tread	1	Ea	$	109.00	$109	
	C202001	Refinish Existing Stairs	128	SF	$	13.40	$1,715	
	C202002	Refinish Stair Rail	25	LF	$	18.01	$450	
		SUBTOTAL STAIRCASES	**1**	**VALUE**	**$**	**2,274.45**	**$2,274**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**						
	C301001	Refinish Wall Tile	120	SF	$	6.87	$824	
	C301002	Paint Walls	8089	SF	$	0.67	$5,420	
	C301003	Refinish Int. Wood Trim	900	LF	$	7.03	$6,327	
	C301004	Replace Wood Trim	11	LF	$	40.18	$442	
	C301005	Replace Wood Paneling	15	SF	$	192.90	$2,894	
	C301006	Replace Wainscot	231	SF	$	161.48	$37,302	
	C301007	Refinish Wainscot	40	SF	$	4.65	$186	
	C301008	Refinish Wood Paneling	527	SF	$	4.65	$2,451	
	C302001	Replace Wood Floor	100	SF	$	51.49	$5,149	
	C302002	Refinish Wood Floor	2426	SF	$	4.15	$10,068	
	C302003	Refinish Floor Tile	43	SF	$	6.87	$295	
	C302004	Replace Wood Floor Boards	55	SF	$	47.72	$2,625	
	C302005	Refinish Baseboard Trim	1150	LF	$	6.82	$7,843	
	C302006	Replace Baseboard Trim	65	LF	$	40.18	$2,612	
	C302007	Refinish Basement Floor	827	SF	$	4.15	$3,432	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

	C303001	Patch & Prep Existing Plaster Ceilings	2459	SF	$	0.44	$1,082	
	C303002	Replace Plaster ceilings	250	SF	$	4.89	$1,223	
	C303003	Paint Ceilings	3286	SF	$	0.68	$2,234	
		SUBTOTAL INTERIOR FINISHES	**1**	**VALUE**	**$**	**92,407.54**	**$92,408**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
D20		**PLUMBING**						
	D2001	Provide modern code compliant Plumbing System within Main Block. Replace Existing Plumbing Fixtures, Waste, Water & Vent System, comply w with codes, modernize to current energy requirements.	3780	SF	$	15.50	$58,593	
	D201001	**Plumbing Demolition:** Bathroom 202A and Bathroom 203A	1	LS	$	7,087.27	$7,087	
		Renovate Basement Bathroom 304: Replace all fixtures with more water efficient fixtures.	3	Ea	$	1,500.00	$4,500	
	D201002	**Replace Water Heater:** Replace existing hot water heater with new, re-circulating system.	1	Ea	$	3,540.47	$3,540	
	D201003	**Sanitary Waste System:** Perform video inspection of building sewer.	380	LF	$	5.67	$2,155	
	D201004	**Pipe Insulation:** Rehab Pipe Insulation	260	LF	$	7.90	$2,054	
		SUBTOTAL PLUMBING	**3780**	**SF**	**$**	**20.62**	**$77,930**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
D30		**HVAC**						
	D3001	Provide modern code compliant Mechanical HVAC System within Main Block. Replace HVAC system, DX Cooling, Gas Heating, comply with code, modernize to current energy requirements, and demolished existing system. Work to include replacement of all rusted and deteriorated supply and return air grilles and dampers.	3780	SF	$	36.38	$137,527	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

		Option 1: Replace with a new air-source heat pump unit with electric or gas-fired furnace backup to handle ventilation and heating/ cooling loads.	1	LS	$ 33,943.00	$33,943	
		Option 2: replace with a new air-source heat pump unit with new ground-source heat pump.	1	LS	$ 64,411.00	$64,411	
		SUBTOTAL HVAC	**3780**	**SF**	**$ 62.40**	**$235,881**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D40		**Fire Alarm and Fire Protection**					
	D4001	**Fire Protection:** Install Sprinkler System	3780	SF	$ 11.53	$43,574	
	D4002	**Fire Alarm:** System Upgrades	3780	SF	$ 3.00	$11,340	
	D4001	**Fire Grenade:** Potential Health Hazard-MB	8	Ea	$ 93.26	$746	
		SUBTOTAL Fire Protection	**3780**	**SF**	**$ 14.72**	**$55,660**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D50		**ELECTRICAL**					
		Provide modern code compliant **Electrical System** within Main Block. Work to include replacement of main electrical panelboard, sub-electrical panelboards, removal of all exposed wiring and conduit and installation of concealed code compliant wiring, and replacement of all electrical convenience outlets and devices to comply with code requirements.	3780	SF	$ 19.26	$72,819	
		Fuse Box for HVAC Unit: Replace existing with new, code compliant NEC compliant weather-proof disconnect switch.	1	LS	$ 1,877.32	$1,877	
		Emergency Lighting: Provide exit fixtures and emergency lighting that provides the required lighting levels along pat of egress.	1	LS	$ 27,798.65	$27,799	
	D5006	**Lighting:** Replace Lighting with new, alternate energy efficient fixtures to provide IES recommended light levels.	3780	SF	$ 3.84	$14,515	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 1: Baseline Work Recommendation: Main Block

Total Cost: $1,057,805

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
		Telephone/Data: Modernize	3780	SF	$ 10.42	$39,395	
		Security System Upgrades	3780	SF	$ 14.70	$55,570	
		SUBTOTAL ELECTRICAL	**3780**	**SF**	**$ 56.08**	**$211,975**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		**SELECTIVE BUILDING DEMOLITION**					
		Demolition of Basement Restroom 011	38	SF	$ 12.00	$456	
	F202001	ACM Removal	3780	SF	$ 0.88	$3,323	
	Level 3 Code	Lead Paint Removal	3780	SF	$ 10.95	$41,391	
	Level 3 Code	Mold Removal	3780	SF	$ 2.03	$7,662	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**3780**	**SF**	**$ 13.98**	**$52,832**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Baseline Work Recommendation: Main Bloc**	**3780**	**SF**	**$ 279.84**	**$1,057,805**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 2: Baseline Work Recommendation: Central South Addition

Total Cost: $204,164

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20		**EXTERIOR CLOSURE**					
	B201001	Scaffolding	683	SF	$ 2.12	$1,448	
	B201002	Pressure Wash Exterior	683	SF	$ 0.15	$102	
	B201003	Remove Bio Growth on Masonry	8	SF	$ 2.15	$17	
	B201004	Recaulk Wood Trim @ Masonry	3	LF	$ 8.06	$24	
	B201005	New Chimney Cap	1	Ea	$ 777.18	$777	
	B201006	Incompatable Patch	5	SF	$ 46.07	$230	
	B201007	Patch Hole @ Missing Brick	3	Ea	$ 129.46	$388	
	B201008	Refinish Wood Trim	90	SF	$ 4.67	$420	
	B201009	Replace Spalled Brick	80	SF	$ 78.44	$6,275	
	B201010	Repair Through Brick Crack	2	SF	$ 66.13	$132	
	B201011	Repair Through Joint Crack	2	SF	$ 18.70	$37	
	B201012	Replace Wood Rotted Trim	3	LF	$ 203.51	$611	
	B201013	Infill Salv. Brick to Match Existing@ Door 104, 107, 206, 207	127	SF	$ 51.47	$6,537	
	B201014	Restore & Repair Brick to Match Existing @ Removal	456	SF	$ 27.85	$12,700	
	B202001	Replace Broken Window Panels	2	Ea	$ 952.22	$1,904	
	B202002	Replace Missing Windows	4	Ea	$ 1,209.47	$4,838	
	B202003	Repair Dislocated Sills	12	LF	$ 32.74	$393	
	B202004	Replace Missing Sills	4	LF	$ 231.80	$927	
	B202005	Replace Wood Rotted Sills	4	LF	$ 234.33	$937	
	B202006	Repaint Window Trim	10	Ea	$ 183.36	$1,834	
	B202007	Window Hardware	10	Ea	$ 264.30	$2,643	
		SUBTOTAL EXTERIOR CLOSURE	**1**	**VALUE**	**$ 43,176.00**	**$43,176**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B30		**ROOFING**					
	Level 3 Code	Replace Existing Roof	500	SF	$ 11.62	$5,810	
	Level 3 Code	Misc Soffit Repair	36	SF	$ 3.99	$144	
		SUBTOTAL ROOFING	**805**	**SF**	**$ 7.40**	**$5,954**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 2: Baseline Work Recommendation: Central South Addition

Total Cost: $204,164

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C10		INTERIOR CONSTRUCTION					
	C101001	Patch & Prep Existing GWB Walls	2050	SF	$ 0.29	$595	
	C101002	Replace GWB Walls	500	SF	$ 2.70	$1,350	
	C101003	Replace Window Sills	3	LF	$ 234.33	$703	
	C101004	Refinish Interior Face of Window Trim	10	Ea	$ 204.11	$2,041	
	C102001	Refinish Existing Single Doors	5	Ea	$ 243.88	$1,219	
	C102002	Refinish Existing Pair Doors	2	Ea	$ 487.75	$976	
	C103001	Refinish Int. Wood Casework	25	LF	$ 20.74	$519	
		SUBTOTAL INTERIOR CONSTRUCTION	**1**	**VALUE**	**$ 7,401.99**	**$7,402**	

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C20		STAIRCASES					
	C202001	Refinish Existing Stairs	77	SF	$ 4.88	$376	
		SUBTOTAL STAIRCASES	**1**	**VALUE**	**$ 375.76**	**$376**	

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C30		INTERIOR FINISHES					
	C301001	Paint Walls	2050	SF	$ 0.62	$1,271	
	C301002	Refinish Int. Wood Trim	168	LF	$ 7.03	$1,181	
	C301003	Replace Wood Trim	10	LF	$ 40.18	$402	
	C302001	Replace Wood Floor	20	SF	$ 51.49	$1,030	
	C302002	Refinish Wood Floor	62	SF	$ 4.15	$257	
	C302003	Refinish Floor Tile	167	SF	$ 17.03	$2,844	
	C302004	Replace Wood Floor Boards	10	SF	$ 47.72	$477	
	C302005	Refinish Baseboard Trim	642	LF	$ 6.82	$4,378	
	C302006	Replace Baseboard Trim	64	LF	$ 9.13	$584	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 2: Baseline Work Recommendation: Central South Addition

Total Cost: $204,164

	C302007	Clean & Patch Vinyl Tile	190	SF	$	3.23	$614	
	C302008	Refinish Basement Floor	207	SF	$	4.15	$859	
	C303001	Patch & Prep Existing GWB Ceilings	805	SF	$	0.44	$354	
	C303002	Replace GWB ceilings	80	SF	$	2.07	$166	
	C303003	Paint Ceilings	805	SF	$	0.62	$499	
		SUBTOTAL INTERIOR FINISHES	**1**	**VALUE**	**$**	**14,916.56**	**$14,917**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
D20		**PLUMBING**						
	D2001	Provide modern code compliant Plumbing System within Main Block. Replace Existing Plumbing Fixtures, Waste, Water & Vent System, comply w with codes, modernize to current energy requirements.	805	SF	$	21.36	$17,196	
	D2001	Sanitary Waste System: Perform video inspection of building sewer. (Pipe, internal inspection, CCTV with recorded video, up to 500 linear feet, Subcontract)	190	LF	$	5.67	$1,077	
	D2002	Pipe Insulation: Rehab Pipe Insulation (Old, Worn or Not There-CSA)	110	LF	$	7.82	$860	
		SUBTOTAL PLUMBING	**1**	**VALUE**	**$**	**19,133.91**	**$19,134**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
D30		**HVAC**						
	D3001	Provide modern code compliant Mechanical HVAC System within Main Block. Replace HVAC system, DX Cooling, Gas Heating, comply with code, modernize to current energy requirements, and demolished existing system. Work to include replacement of all rusted and deteriorated supply and return air grilles and dampers.	805	SF	$	36.38	$29,288	
		Option 1: Replace with a new air-source heat pump unit with electric or gas-fired furnace backup to handle ventilation and heating/ cooling loads.	1	LS	$	33,943.00	$33,943	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 2: Baseline Work Recommendation: Central South Addition

Total Cost: $204,164

		Option 2: replace with a new air-source heat pump unit with new ground-source heat pump.	1	LS	$	64,411.00	$64,411	
		SUBTOTAL HVAC	**805**	**SF**	**$**	**78.55**	**$63,231**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
D40		**Fire Protection**						
	D4001	**Fire Protection:** Install Sprinkler System	805	SF	$	6.93	$5,576	
	D4002	**Fire Alarm:** System Upgrades	805	SF	$	3.00	$2,415	
	D4001	**Fire Grenade:** Potential Health Hazard-MB	3	Ea	$	107.43	$322	
		SUBTOTAL Fire Protection	**805**	**SF**	**$**	**10.33**	**$8,314**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
D50		**ELECTRICAL**						
	D5002	Provide modern code compliant **Electrical System** within Main Block. Work to include replacement of main electrical panelboard, sub-electrical panelboards, removal of all exposed wiring and conduit and installation of concealed code compliant wiring, and replacement of all electrical convenience outlets and devices to comply with code requirements.	805	SF			$0	
	D5001	**Emergency Lighting:** Provide exit fixtures and emergency lighting that provides the required lighting levels along pat of egress.	805	SF				
	D5001	**Lighting:** Replace Lighting with new, alternate energy efficient fixtures to provide IES recommended light levels.	805	SF	$	5.52	$4,444	
	Level 3 Code	**Telephone/Data:** Modernize	805	SF	$	10.42	$8,390	
	Level 3 Code	**Security System Upgrades**	805	SF	$	14.70	$11,834	
		SUBTOTAL ELECTRICAL	**805**	**SF**	**$**	**30.64**	**$24,668**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 2: Baseline Work Recommendation: Central South Addition

Total Cost: $204,164

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20		SELECTIVE BUILDING DEMOLITION					
	Level 3 Code	Lead Paint Removal	805	SF	$ 20.20	$16,261	
	Level 3 Code	Mold Removal	805	SF	$ 0.91	$733	
SUBTOTAL SELECTIVE BUILDING DEMOLITION			**805**	**SF**	**$ 21.11**	**$16,994**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Baseline Work Recommendation: Central S**	**805**	**SF**	**$ 253.62**	**$204,164**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 3: Baseline Work Recommendation: South Addition

Total Cost: $213,055

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20		**EXTERIOR CLOSURE**					
	B201001	Scaffolding	1087	SF	$ 2.12	$2,304	
	B201002	Pressure Wash Exterior	1087	SF	$ 0.15	$163	
	B201003	Remove Bio Growth on Masonry	60	SF	$ 2.15	$129	
	B201004	Repair Dislocated Brick	3	SF	$ 18.00	$54	
	B201005	Ferrous Metal Anchors	6	EA	$ 8.93	$54	
	B201006	INFES Removal	1	LS	$ 4,718.63	$4,719	
	B201007	Repair Open Joints in Brick	8	SF	$ 13.56	$108	
	B201008	Refinish Wood Trim	352	SF	$ 29.99	$10,556	
	B201009	Replace Wood Rotted Porch	42	SF	$ 40.59	$1,705	
	B201010	Remove Vegitation	1	LS	$ 408.85	$409	
	B201011	Repair Through Joint Crack	8	SF	$ 18.70	$150	
	B201012	Replace Wood Rotted Trim @ Porch	8	LF	$ 301.11	$2,409	
	B201013	Repair Concrete Step	1	EA	$ 1,819.31	$1,819	
	B202001	Replace Missing Sills	3	LF	$ 231.80	$695	
	B202002	Replace Wood Rotted Sills	9	LF	$ 234.33	$2,109	
	B202003	Repaint Window Trim	6	EA	$ 183.36	$1,100	
	B202004	Window Hardware	6	EA	$ 264.30	$1,586	
	B203001	Repaint Existing Doors	5	EA	$ 186.13	$931	
	B203002	Door Hardware	5	EA	$ 1,083.45	$5,417	
		SUBTOTAL EXTERIOR CLOSURE	**596**	**SF**	**$ 61.10**	**$36,417**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B30		**ROOFING**					
		Replace Existing Roof	550	SF	$ 11.62	$6,391	
		Misc Soffit Repair	60	SF	$ 3.99	$239	
		SUBTOTAL ROOFING	**596**	**SF**	**$ 11.12**	**$6,630**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C10		**INTERIOR CONSTRUCTION**					

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 3: Baseline Work Recommendation: South Addition

Total Cost: $213,055

	C101001	Patch & Prep Existing GWB Walls	1036	SF	$	0.29	$300	
	C101002	Replace GWB Walls	10	SF	$	2.70	$27	
	C101003	Replace Window Sills	3	LF	$	234.33	$703	
	C101004	Refinish Interior Face of Window Trim	4	EA	$	204.11	$816	
	C102001	Refinish Existing Single Doors	1	EA	$	243.88	$244	
		SUBTOTAL INTERIOR CONSTRUCTION	**596**	**SF**	**$**	**3.51**	**$2,091**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**		**Total Cost**	**Remarks**
C20		**STAIRCASES**						
	C202001	Refinish Existing Stairs	21	SF	$	4.88	$102	
		SUBTOTAL STAIRCASES	**596**	**SF**	**$**	**0.17**	**$102**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**		**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**						
	C301001	Paint Walls	1036	SF	$	0.62	$642	
	C301002	Refinish Int. Wood Trim	130	LF	$	7.03	$914	
	C301003	Replace Wood Trim	13	LF	$	40.18	$522	
	C302001	Replace Wood Floor Boards	10	SF	$	47.72	$477	
	C302002	Refinish Baseboard Trim	148	LF	$	6.82	$1,009	
	C302003	Replace Baseboard Trim	15	LF	$	40.18	$603	
	C302004	Clean & Patch Vinyl Tile	595	SF	$	3.23	$1,922	
	C303001	Patch & Prep Existing GWB Ceilings	596	SF	$	0.44	$262	
	C303002	Replace GWB ceilings	80	SF	$	2.07	$166	
	C303003	Paint Ceilings	596	SF	$	0.62	$370	
		SUBTOTAL INTERIOR FINISHES	**596**	**SF**	**$**	**11.56**	**$6,887**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**		**Total Cost**	**Remarks**
D20		**PLUMBING**						

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 3: Baseline Work Recommendation: South Addition

Total Cost: $213,055

	D2001	Provide modern code compliant Plumbing System within Main Block. Replace Existing Plumbing Fixtures, Waste, Water & Vent System, comply w with codes, modernize to current energy requirements.		SF	$ 21.36	$0	
	D2001	Sanitary Waste System: Perform video inspection of building sewer. (Pipe, internal inspection, CCTV with recorded video, up to 500 linear feet, Subcontract)	190	LF	$ 5.67	$1,077	
	D2002	Pipe Insulation: Rehab Pipe Insulation (Old, Worn or Not There-CSA)	370	LF	$ 7.82	$2,893	
		SUBTOTAL PLUMBING	**596**	**SF**	**$ 6.66**	**$3,971**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D30		**HVAC**					
	D3001	Provide modern code compliant Mechanical HVAC System within Main Block. Replace HVAC system, DX Cooling, Gas Heating, comply with code, modernize to current energy requirements, and demolished existing system. Work to include replacement of all rusted and deteriorated supply and return air grilles and dampers.	596	SF	$ 36.38	$21,684	
	D3001	**Option 1:** Replace with a new air-source heat pump unit with electric or gas-fired furnace backup to handle ventilation and heating/ cooling loads.	1	LS	$ 33,943.00	$33,943	
		Option 2: replace with a new air-source heat pump unit with new ground-source heat pump.	1	LS	$ 64,411.00	$64,411	
		SUBTOTAL HVAC	**596**	**SF**	**$ 201.41**	**$120,038**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D40		**Fire Protection**					
	D4001	**Fire Protection:** Install Sprinkler System	596	SF	$ 6.93	$4,128	
	D4002	**Fire Alarm:** System Upgrades	596	SF	$ 3.00	$1,788	
		SUBTOTAL Fire Protection	**596**	**SF**	**$ 9.93**	**$5,916**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Baseline Work Recommendations: South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 3: Baseline Work Recommendation: South Addition

Total Cost: $213,055

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50		**ELECTRICAL**					
	D5002	Provide modern code compliant **Electrical System** within Main Block. Work to include replacement of main electrical panelboard, sub-electrical panelboards, removal of all exposed wiring and conduit and installation of concealed code compliant wiring, and replacement of all electrical convenience outlets and devices to comply with code requirements.	596	SF		$0	
	D5001	**Emergency Lighting:** Provide exit fixtures and emergency lighting that provides the required lighting levels along pat of egress.	596				
	D5001	**Lighting:** Replace Lighting with new, alternate energy efficient fixtures to provide IES recommended light levels.	596	SF	$ 5.52	$3,290	
	Level 3 Code	**Telephone/Data:** Modernize	596	SF	$ 10.42	$6,212	
	Level 3 Code	**Security System Upgrades**	596	SF	$ 14.70	$8,762	
		SUBTOTAL ELECTRICAL	**596**	**SF**	**$ 30.64**	**$18,263**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		**SELECTIVE BUILDING DEMOLITION**					
		Lead Paint Removal	596	SF	$ 20.20	$12,039	
		Mold Removal	596	SF	$ 1.17	$699	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**596**	**SF**	**$ 21.37**	**$12,738**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Baseline Work Recommendation: South Ac**	**596**	**SF**	**$ 357.47**	**$213,055**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Treatment #1: Restoration
Estimate Summary

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: Reviewer
Date: Review Date

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Baseline Work Recommendation - Main Block	3,780	SF	$280	$1,057,805
2	Treatment #1 - Main Block	3,780	SF	$29	$110,405
3	Treatment #1 - Central South Addition	805	SF	$25	$20,359
4	Treatment #1 - South Addition	596	SF	$29	$17,045
	Subtotal Direct Construction Costs				**$1,205,615**
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnote)*				**$0**
	Direct Cost Subtotal without GFP				**$1,205,615**
	Published Location Factor	0.00%			$0
	Remoteness Factor	0.00%			$0
	Federal Wage Rate Factor	0.00%			$0
	State & Local Taxes	6.00%			$72,337
	Design Contingency	20.00%			$241,123
	Total Direct Construction Costs				**$1,519,075**
	Standard General Conditions	10.00%			$151,908
	Government General Conditions	10.00%			$151,908
	Historic Preservation Factor	10.00%			$151,908
	Subtotal NET Construction Cost				**$1,974,798**
	Overhead	10.00%			$197,480
	Profit	10.00%			$197,480
	Estimated NET Construction Cost				**$2,369,757**
	Bonds & Permits	2.00%			**$47,395**
	Contracting Method Adjustment	20.00%			$473,951
	Inflation Escalation	0	Months	0.00%	$0
	Total Estimated NET Cost of Construction				**$2,891,104**

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #1: Restoration
Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #1 - Main Block** **Total Cost:** $110,405

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A20		**BASEMENT CONSTRUCTION**					
	A2001	**Main Block: Basement Covered North Entry:** Rebuild Basement Enclosure at North Elevation	50	SF	$ 630.12	$31,506	
		SUBTOTAL BASEMENT CONSTRUCTION	**3780**	**SF**	**$ 8.33**	**$31,506**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B10		**SUPERSTRUCTURE**					
	B101001	ADA WD Ramp or Lift	1	Ea	$ 9,417.00	$9,417	
		SUBTOTAL SUPERSTRUCTURE	**3780**	**SF**	**$ 2.49**	**$9,417**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		**EXTERIOR CLOSURE**					
	B201024	**Install New Shutters:** Replace or reinstall missing shutters on east and west facades on Main Block	52	Ea	$ 287.50	$14,950	
	B201025	**Brick Infill:** Infill Salvaged Brick to Match Existing @ Door 013B, 204	40	SF	$ 51.47	$2,059	
	B201026	**Brick Restoration:** Restore & Repair Brick to Match Existing @ Removal of Central South Addition	456	SF	$ 61.08	$27,852	
		Restore/ Replace Missing First Floor Windows: Windows along north wall of Room 102 - Living Room	2	Ea	$ 3,000.00	$6,000	
		Restore/ Replace Missing Second Floor Windows: Windows along north wall of Room 202 - North Bedroom	2	Ea	$ 3,000.00	$6,000	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #1: Restoration
Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #1 - Main Block** **Total Cost:** $110,405

		Restore/ Replace Missing Second Floor Windows: Windows along south wall of Room 203 - South Bedroom	2	Ea	$	3,000.00	$6,000	
		Restore/ Replace Missing Basement Windows: Window 004,013, and 014	3	Ea	$	550.00	$1,650	
		SUBTOTAL EXTERIOR CLOSURE	**3780**	**SF**	**$**	**17.07**	**$64,511**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**						
		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	2050	SF	$	1.50	$3,075	
		SUBTOTAL INTERIOR FINISHES	**3780**	**SF**	**$**	**0.81**	**$3,075**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
F20		**SELECTIVE BUILDING DEMOLITION**						
		Demolition of Basement Restroom 011	38	SF	$	12.00	$456	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing first floor windows: Windows along north wall of Room 102 - Living Room	30	SF	$	16.00	$480	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing second floor windows: Windows along north wall of Room 202 - North Bedroom	30	SF	$	16.00	$480	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing second floor windows: Windows along south wall of Room 203 - South Bedroom	30	SF	$	16.00	$480	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**3780**	**SF**	**$**	**0.50**	**$1,896**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #1: Restoration
Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #1 - Main Block** **Total Cost:** $110,405

Uniformat II WBS	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
TOTAL COST	Treatment #1 - Main Block	3780	SF	$ 29.21	$110,405	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #1: Restoration
Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #1 - Central South Addition** **Total Cost:** $20,359

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20		SELECTIVE BUILDING DEMOLITION					
		Mass Building Demo - Central South Addition	805	SF	$ 19.08	$15,359	
					$ -	$0	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**805**	**SF**	**$ 19.08**	**$15,359**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
G20		SITE IMPROVEMENTS					
		Reseed/Sod/ Landscape Demolished area	1	LS	$ 5,000.00	$5,000	
					$ -	$0	
		SUBTOTAL SITE IMPROVEMENTS	**1**	**LS**	**$ 5,000.00**	**$5,000**	
Uniformat II WBS Code		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Treatment #1 - Central South Addition**	**805**	**SF**	**$ 25.29**	**$20,359**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #1: Restoration
South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #1 - South Addition** **Total Cost:** $17,045

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20		SELECTIVE BUILDING DEMOLITION					
		Mass Building Demo - South Addition	596	SF	$ 20.21	$12,045	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**596**	**SF**	**$ 20.21**	**$12,045**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
G20		SITE IMPROVEMENTS					
		Reseed/Sod/ Landscape Demolished area	1	LS	$ 5,000.00	$5,000	
		SUBTOTAL SITE IMPROVEMENTS	**1**	**LS**	**$ 5,000.00**	**$5,000**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Treatment #1 - South Addition**	**596**	**SF**	**$ 28.60**	**$17,045**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Treatment #2: Rehabilitation
Estimate Summary

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: _____
Date: _____

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Baseline Work Recommendation: Main Block	3,780	SF	$280	$1,057,805
2	Baseline Work Recommendation: Central South Ac	805	SF	$254	$204,164
3	Treatment #2 - Main Block	3,780	SF	$19	$73,656
4	Treatment #2 - Central South Addition	805	SF	$76	$60,961
5	Treatment #2 - South Addition	596	SF	$29	$17,045
	Subtotal Direct Construction Costs				**$1,413,631**
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnot				**$0**
	Direct Cost Subtotal without GFP				**$1,413,631**
	Published Location Factor	0.00%			$0
	Remoteness Factor	0.00%			$0
	Federal Wage Rate Factor	0.00%			$0
	State & Local Taxes	6.00%			$84,818
	Design Contingency	20.00%			$282,726
	Total Direct Construction Costs				**$1,781,175**
	Standard General Conditions	10.00%			$178,118
	Government General Conditions	10.00%			$178,118
	Historic Preservation Factor	10.00%			$178,118
	Subtotal NET Construction Cost				**$2,315,528**
	Overhead	10.00%			$231,553
	Profit	10.00%			$231,553
	Estimated NET Construction Cost				**$2,778,634**
	Bonds & Permits	2.00%			**$55,573**
	Contracting Method Adjustment	20.00%			$555,727
	Inflation Escalation	0	Months	0.00%	$0
	Total Estimated NET Cost of Construction				**$3,389,933**

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #2: Rehabilitation
Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By:
Date:

Summary Item Treatment #2 - Main Block **Total Cost:** $73,656

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A20		**BASEMENT CONSTRUCTION**					
	A2001	**Main Block: Basement Covered North Entry:** Rebuild Basement Enclosure at North Elevation	50	SF	$ 630.12	$31,506	
		SUBTOTAL BASEMENT CONSTRUCTION	**3780**	**SF**	**$ 8.33**	**$31,506**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		**EXTERIOR CLOSURE**					
	B201024	**Install New Shutters:** Replace or reinstall missing shutters on east and west facades on Main Block	52	Ea	$ 287.50	$14,950	
		Main Block: Restore Basement Windows: Remove existing window infill at windows 013, 014 and 004 and provide new wood awning windows to match Window Type 1.	3	Ea	$ 550.00	$1,650	
		Restore/ Replace Missing First Floor Windows: Windows along north wall of Room 102 - Living Room	2	Ea	$ 3,000.00	$6,000	
		Restore/ Replace Missing Second Floor Windows: Windows along north wall of Room 202 - North Bedroom	2	Ea	$ 3,000.00	$6,000	
		SUBTOTAL EXTERIOR CLOSURE	**3780**	**SF**	**$ 7.57**	**$28,600**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**					
		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	8089	SF	$ 1.50	$12,134	
		SUBTOTAL INTERIOR FINISHES	**3780**	**SF**	**$ 3.21**	**$12,134**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		**SELECTIVE BUILDING DEMOLITION**					
		Demolition of Basement Restroom 011	38	SF	$ 12.00	$456	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #2: Rehabilitation
Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	
PMIS Number:	**136710**	**Date:**	

Summary Item **Treatment #2 - Main Block** **Total Cost:** $73,656

Uniformat II WBS		Description	Quantity	Unit		Cost/Unit	Total Cost	Remarks
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing first floor windows: Windows along north wall of Room 102 - Living Room	30	SF	$	16.00	$480	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing second floor windows: Windows along north wall of Room 202 - North Bedroom	30	SF	$	16.00	$480	
SUBTOTAL SELECTIVE BUILDING DEMOLITION			**3780**	**SF**	**$**	**0.37**	**$1,416**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST -		**Treatment #2 - Main Block**	**3780**	**SF**	**$**	**19.49**	**$73,656**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #2: Rehabilitation
Central South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By:
Date:

Summary Item Treatment #2 - Central South Addition **Total Cost:** $60,961

Uniformat II		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10		SUPERSTRUCTURE					
	B101001	**ADA Accessibility: Exterior Building Access:** ADA WD Ramp or Mechanical Lift	1	Ea	$ 9,417.00	$9,417	
		ADA Accessibility: Interior: Install lift within Central South Addition to access Main Block	1	Ea	$ 9,417.00	$9,417	
		SUBTOTAL SUPERSTRUCTURE	**805**	**SF**	**$ 23.40**	**$18,834**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		EXTERIOR CLOSURE					
	B201026	**Brick Restoration:** Restore & Repair Brick to Match Existing @ Removal of South Addition	456	SF	$ 61.08	$27,852	
		Central South Addition: Missing Basement Windows: Replace the missing windows in the masonry opening currently infilled with plywood at window locations 007, 008, 009, and 010. Provide new wood awning windows to match Window Type 1.	4	EA	$ 550.00	$2,200	
		SUBTOTAL EXTERIOR CLOSURE	**805**	**SF**	**$ 37.33**	**$30,052**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		INTERIOR FINISHES					
		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	2050	SF	$ 1.50	$3,075	
		SUBTOTAL INTERIOR FINISHES	**805**	**SF**	**$ 3.82**	**$3,075**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D20		PLUMBING					
		ADA Accessibility: Restroom: Install ADA accessible restroom within Central South Addition	3	Ea	$ 3,000.00	$9,000	
		SUBTOTAL PLUMBING	**805**	**SF**	**$ 11.18**	**$9,000**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #2: Rehabilitation
Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	
PMIS Number:	**136710**	**Date:**	

Summary Item **Treatment #2 - Central South Addition** **Total Cost:** $60,961

Uniformat II	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
TOTAL COST -	Treatment #2 - Central South Addition	805	SF	$ 75.73	$60,961	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #2: Rehabilitation
South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By:
Date:

Summary Item Treatment #2 - South Addition **Total Cost:** $17,045

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20		SELECTIVE BUILDING DEMOLITION					
		Mass Building Demo - South Addition Block	596	SF	$ 20.21	$12,045	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**596**	**SF**	**$ 20.21**	**$12,045**	
Uniformat II WBS Code		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
G20		SITE IMPROVEMENTS					
		Reseed/Sod/ Landscape Demolished area	1	LS	$ 5,000.00	$5,000	
		SUBTOTAL SITE IMPROVEMENTS	**1**	**LS**	**$ 5,000.00**	**$5,000**	
Uniformat II WBS Code		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST -		**Treatment #2 - South Addition**	**596**	**SF**	**$ 28.60**	**$17,045**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Treatment #3: Rehabilitation
Estimate Summary

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: Reviewer
Date: Review Date

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Baseline Work Recommendation: Main Block	3,780	SF	$280	$1,057,805
2	Baseline Work Recommendation: Central South Ac	805	SF	$254	$204,164
3	Baseline Work Recommendation: South Addition	596	SF	$357	$213,055
3	Treatment #3 - Main Block	3,780	SF	$20	$75,856
4	Treatment #3 - Central South Addition	805	SF	$29	$23,692
5	Treatment #3 - South Addition	596	SF	$97	$57,571
	Subtotal Direct Construction Costs				**$1,632,143**
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnot				**$0**
				Direct Cost Subtotal without GFP	**$1,632,143**
	Published Location Factor	0.00%			$0
	Remoteness Factor	0.00%			$0
	Federal Wage Rate Factor	0.00%			$0
	State & Local Taxes	6.00%			$97,929
	Design Contingency	20.00%			$326,429
	Total Direct Construction Costs				**$2,056,500**
	Standard General Conditions	10.00%			$205,650
	Government General Conditions	10.00%			$205,650
	Historic Preservation Factor	10.00%			$205,650
	Subtotal NET Construction Cost				**$2,673,450**
	Overhead	10.00%			$267,345
	Profit	10.00%			$267,345
	Estimated NET Construction Cost				**$3,208,140**
	Bonds & Permits	2.00%			**$64,163**
	Contracting Method Adjustment	20.00%			$641,628
	Inflation Escalation	0	Months	0.00%	$0
	Total Estimated NET Cost of Construction				**$3,913,930**

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United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #3: Rehabilitation
Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item Treatment #3 - Main Block **Total Cost:** $75,856

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A20		**BASEMENT CONSTRUCTION**					
	A2001	**Main Block: Basement Covered North Entry:** Rebuild Basement Enclosure at North Elevation	50	SF	$ 630.12	$31,506	
		SUBTOTAL BASEMENT CONSTRUCTION	**3780**	**SF**	**$ 8.33**	**$31,506**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		**EXTERIOR CLOSURE**					
	B201024	**Main Block: Install New Shutters:** Replace or reinstall missing shutters on east and west facades on Main Block	52	Ea	$ 287.50	$14,950	
		Main Block: Restore Basement Windows: Remove existing window infill at windows 013, 014 and 004 and provide new wood awning windows to match Window Type 1.	3	Ea	$ 550.00	$1,650	
		Central South Addition: Missing Basement Windows: Replace the missing windows in the masonry opening currently infilled with plywood at window locations 007, 008, 009, and 010. Provide new wood awning windows to match Window Type 1.	4	Ea	$ 550.00	$2,200	
		Restore/ Replace Missing First Floor Windows: Windows along north wall of Room 102 - Living Room	2	Ea	$ 3,000.00	$6,000	
		Restore/ Replace Missing Second Floor Windows: Windows along north wall of Room 202 - North Bedroom	2	Ea	$ 3,000.00	$6,000	
		SUBTOTAL EXTERIOR CLOSURE	**3780**	**SF**	**$ 8.15**	**$30,800**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**				$30,800	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #3: Rehabilitation
Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #3 - Main Block** **Total Cost:** $75,856

		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	8089	SF	$	1.50	$12,134	
		SUBTOTAL INTERIOR FINISHES	**3780**	**SF**	**$**	**3.21**	**$12,134**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
F20		**SELECTIVE BUILDING DEMOLITION**						
		Demolition: Remove basement Restroom 011	38	SF	$	12.00	$456	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing first floor windows: Windows along north wall of Room 102 - Living Room	30	SF	$	16.00	$480	
		Removal of exterior brick wall and interior finishes to accommodate re-installaton of missing second floor windows: Windows along north wall of Room 202 - North Bedroom	30	SF	$	16.00	$480	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	**3780**	**SF**	$	0.37	**$1,416**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**		**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST		**Treatment #3 - Main Block**	**3780**	**SF**	**$**	**20.07**	**$75,856**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #3: Rehabilitation
Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #3 - Central South Addition** **Total Cost:** $23,692

Uniformat II		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10		**SUPERSTRUCTURE**					
		ADA Accessibility: Interior: Install lift within Central South Addition to access Main Block	1	Ea	$ 9,417.00	$ 9,417.00	
		SUBTOTAL SUPERSTRUCTURE	**805**	**SF**	**$ 11.70**	**$9,417**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
B20		**EXTERIOR CLOSURE**					
		Central South Addition: Missing Basement Windows: Replace the missing windows in the masonry opening currently infilled with plywood at window locations 007, 008, 009, and 010. Provide new wood awning windows to match Window Type 1.	4	Ea	$ 550.00	$ 2,200.00	
		SUBTOTAL EXTERIOR CLOSURE	**805**	**SF**	**$ 2.73**	**$2,200**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**					
		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	2050	SF	$ 1.50	$3,075	
		SUBTOTAL INTERIOR FINISHES	**805**	**SF**	**$ 3.82**	**$3,075**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D20		**PLUMBING**					
		ADA Accessibility: Restroom: Install ADA accessible restroom within Central South Addition	3	FXT	$ 3,000.00	$9,000	
		SUBTOTAL PLUMBING	**1**	**LS**	**$ 9,000.00**	**$9,000**	
Uniformat II		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #3: Rehabilitation
Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item	**Treatment #3 - Central South Addition**					**Total Cost:**	$23,692
TOTAL COST	**Treatment #3 - Central South Addition**	**805**	**SF**	**$**	**29.43**	**$23,692**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #3: Rehabilitation
South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item **Treatment #3 - South Addition** **Total Cost:** $57,571

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10		**SUPERSTRUCTURE**					
	B101001	**ADA Accessibility: Exterior Building Access:** ADA WD Ramp or Mechanical Lift	1	Ea	$ 9,417.00	$9,417	
		ADA Accessibility: Interior: Install accessible elevator within South Addition to provide accessible entry to first and second floors of Main Block of house	1	Ea	$ 46,600.00	$46,600	
		SUBTOTAL SUPERSTRUCTURE	**596**	**SF**	**$ 93.99**	**$56,017**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
C30		**INTERIOR FINISHES**					
		Interior Walls: Paint all interior walls with paint color appropriate to Period of Significance	1036	SF	$ 1.50	$1,554	
		SUBTOTAL INTERIOR FINISHES	**596**	**SF**	**$ 2.61**	**$1,554**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST -		**Treatment #3 - South Addition**	**596**	**SF**	**$ 96.60**	**$57,571**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

Treatment #4: "Mothballing"
Estimate Summary

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Alpha: -
PMIS: 136710

Estimate By: Russell McElreath
Date: 09/07/12

Reviewed By: Reviewer
Date: Review Date

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Treatment #4 "Mothballing" - Main Block	3,780	SF	$52	$197,611
2	Treatment #4 "Mothballing" - Central South Additio	805	SF	$55	$44,149
3	Treatment #4 "Mothballing" - South Addition	596	SF	$60	$36,013
	Subtotal Direct Construction Costs				**$277,773**
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnot				**$0**
				Direct Cost Subtotal without GFP	**$277,773**
	Published Location Factor	0.00%			$0
	Remoteness Factor	0.00%			$0
	Federal Wage Rate Factor	0.00%			$0
	State & Local Taxes	6.00%			$16,666
	Design Contingency	20.00%			$55,555
	Total Direct Construction Costs				**$349,994**
	Standard General Conditions	10.00%			$34,999
	Government General Conditions	10.00%			$34,999
	Historic Preservation Factor	10.00%			$34,999
	Subtotal NET Construction Cost				**$454,993**
	Overhead	10.00%			$45,499
	Profit	10.00%			$45,499
	Estimated NET Construction Cost				**$545,991**
	Bonds & Permits	2.00%			**$10,920**
	Contracting Method Adjustment	20.00%			$109,198
	Inflation Escalation	0	Months	0.00%	$0
	Total Estimated NET Cost of Construction				**$666,109**

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
Main Block

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 1 **Treatment #4 "Mothballing" - Main Block** **Total Cost:** $197,611

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20		**EXTERIOR CLOSURE**					
	B202005	Clean, Repair, Repaint and seal all Exterior Wood Windows, window frames, sills, and trim	69	Ea	$ 183.36	$12,652	
	B202006	Secure (Screw) Windows - Basement and First Floor windows only	24	Ea	$ 5.00	$120	
	B203003	Secure Doors (101A, 101B, 106A and 109) - provide temporary, but secure locking mechanisms	4	Ea	$ 50.00	$200	
	B201009	Insect Infestation - Remove and provide treatment to prevent further insect infestation (Main Block, Central South Addition and South Addition)	1	LS	$ 13,525.79	$13,526	
		SUBTOTAL EXTERIOR CLOSURE	**3780**	**SF**	**$ 7.01**	**$26,498**	

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D30		**HAVC**					
	D3001	Allow for temporary heating and cooling provisions for freeze and humidity protection.	1	LS	$ 51,832.07	$51,832	
		SUBTOTAL HVAC	**3780**	**SF**	**$ 13.71**	**$51,832**	

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D40		**Fire Protection**					
	D4001	Fire Alarm Upgrades	3780	SF	$ 3.00	$11,340	
		SUBTOTAL Fire Protection	**3780**	**SF**	**$ 3.00**	**$11,340**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
Main Block

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 1 Treatment #4 "Mothballing" - Main Block **Total Cost:** $197,611

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50		ELECTRICAL					
	Level 3 Code	Security System Upgrades	3780	SF	$ 14.70	$55,566	
		SUBTOTAL ELECTRICAL	3780	SF	$ 14.70	$55,566	
Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20		SELECTIVE BUILDING DEMOLITION					
	F202001	ACM Removal	3780	SF	$ 0.88	$3,323	
	Level 3 Code	Lead Paint Removal	3780	SF	$ 10.95	$41,391	
	Level 3 Code	Mold Removal	3780	SF	$ 2.03	$7,662	
					$ -	$0	
		SUBTOTAL SELECTIVE BUILDING DEMOLITION	3780	SF	$ 13.86	$52,376	
Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
TOTAL COST -		Treatment #4 "Mothballing" - Main Block	3780	SF	$ 52.28	$197,611	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
Central South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 2 **Treatment #4 "Mothballing" - Central South Addition** **Total Cost:** $44,149

Uniformat II WBS Code		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20		**EXTERIOR CLOSURE**					
	B202005	Clean, Repair, Repaint and seal all Exterior Wood Windows, window frames, sills, and trim	10	Ea	$ 183.36	$1,834	
	B202006	Secure (Screw) Windows - Basement and First Floor windows only	7	Ea	$ 5.00	$35	
		SUBTOTAL EXTERIOR CLOSURE	**805**	**SF**	**$ 2.32**	**$1,869**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D30		**HAVC**					
	D3001	Allow for temporary heating and cooling provisions for freeze and humidity protection.	1	LS	$ 11,038.31	$11,038	
		SUBTOTAL HVAC	**805**	**SF**	**$ 13.71**	**$11,038**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D40		**Fire Protection**					
	D4001	Fire Alarm Upgrades	805	SF	$ 3.00	$2,415	
		SUBTOTAL FIRE PROTECTION	**805**	**SF**	**$ 3.00**	**$2,415**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
Central South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 2 Treatment #4 "Mothballing" - Central South Addition **Total Cost:** $44,149

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50		ELECTRICAL					
		Security System Upgrades	805	SF	$ 14.70	$11,834	
		SUBTOTAL ELECTRICAL	**805**	**SF**	**$ 14.70**	**$11,834**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		SELECTIVE BUILDING DEMOLITION					
	Level 3 Code	Lead Paint Removal	805	SF	$ 20.20	$16,261	
	Level 3 Code	Mold Removal	805	SF	$ 0.91	$733	
		SUBTOTAL FIRE PROTECTION	**805**	**SF**	**$ 21.11**	**$16,994**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST -		**Treatment #4 "Mothballing" - Central South**	**805**	**SF**	**$ 54.84**	**$44,149**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
South Addition

Project:	**Harmony Hall - Historic Structure Report**	**Estimate By:**	Russell McElreath
Park:	**National Capital Parks - East (NACE)**	**Date:**	09/07/12
Park Alpha:	**-**	**Reviewed By:**	Reviewer
PMIS Number:	**136710**	**Date:**	Review Date

Summary Item 2 **Treatment #4 "Mothballing" - South Addition** **Total Cost:** $36,013

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20		**EXTERIOR CLOSURE**					
	B202005	Clean, Repair, Repaint and seal all Exterior Wood Windows, window frames, sills, and trim	7	EA	$ 183.36	$1,284	
	B202006	Secure (Screw) Windows - Basement and First Floor windows only	3	EA	$ 5.00	$15	
	B203003	Secure Doors (106A, 106B, 106C, 106D, 106E) - provide temporary, but secure locking mechanisms	5	Ea	$ 50.00	$250	
		SUBTOTAL EXTERIOR CLOSURE	**596**	**SF**	**$ 2.60**	**$1,549**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D30		**HVAC**					
	D3001	Allow for temporary heating and cooling provisions for freeze and humidity protection.	1	LS	$ 11,177.00	$11,177	
		SUBTOTAL HVAC	**596**	**SF**	**$ 18.75**	**$11,177**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
D40		**Fire Protection**					
	D4001	Fire Alarm Upgrades	596	SF	$ 3.00	$1,788	
		SUBTOTAL Fire Protection	**596**	**SF**	**$ 3.00**	**$1,788**	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
Line Item Cost Summary

Treatment #4: "Mothballing"
South Addition

Project: Harmony Hall - Historic Structure Report
Park: National Capital Parks - East (NACE)
Park Alpha: -
PMIS Number: 136710

Estimate By: Russell McElreath
Date: 09/07/12
Reviewed By: Reviewer
Date: Review Date

Summary Item 2 Treatment #4 "Mothballing" - South Addition **Total Cost:** $36,013

Uniformat II WBS		Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50		ELECTRICAL					
		Security System Upgrades	596	SF	$ 14.70	$8,761	
		SUBTOTAL ELECTRICAL	**596**	**SF**	**$ 14.70**	**$8,761**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
F20		SELECTIVE BUILDING DEMOLITION					
		Lead Paint Removal	596	SF	$ 20.20	$12,039	
		Mold Removal	596	SF	$ 1.17	$699	
		SUBTOTAL BUILDING DEMOLITION	**596**	**SF**	**$ 21.37**	**$12,738**	
Uniformat II WBS		**Description**	**Quantity**	**Unit**	**Cost/Unit**	**Total Cost**	**Remarks**
TOTAL COST -		**Treatment #4 "Mothballing" - South Additio**	**596**	**SF**	**$ 60.42**	**$36,013**	