

Arlington House, The Robert E. Lee Memorial

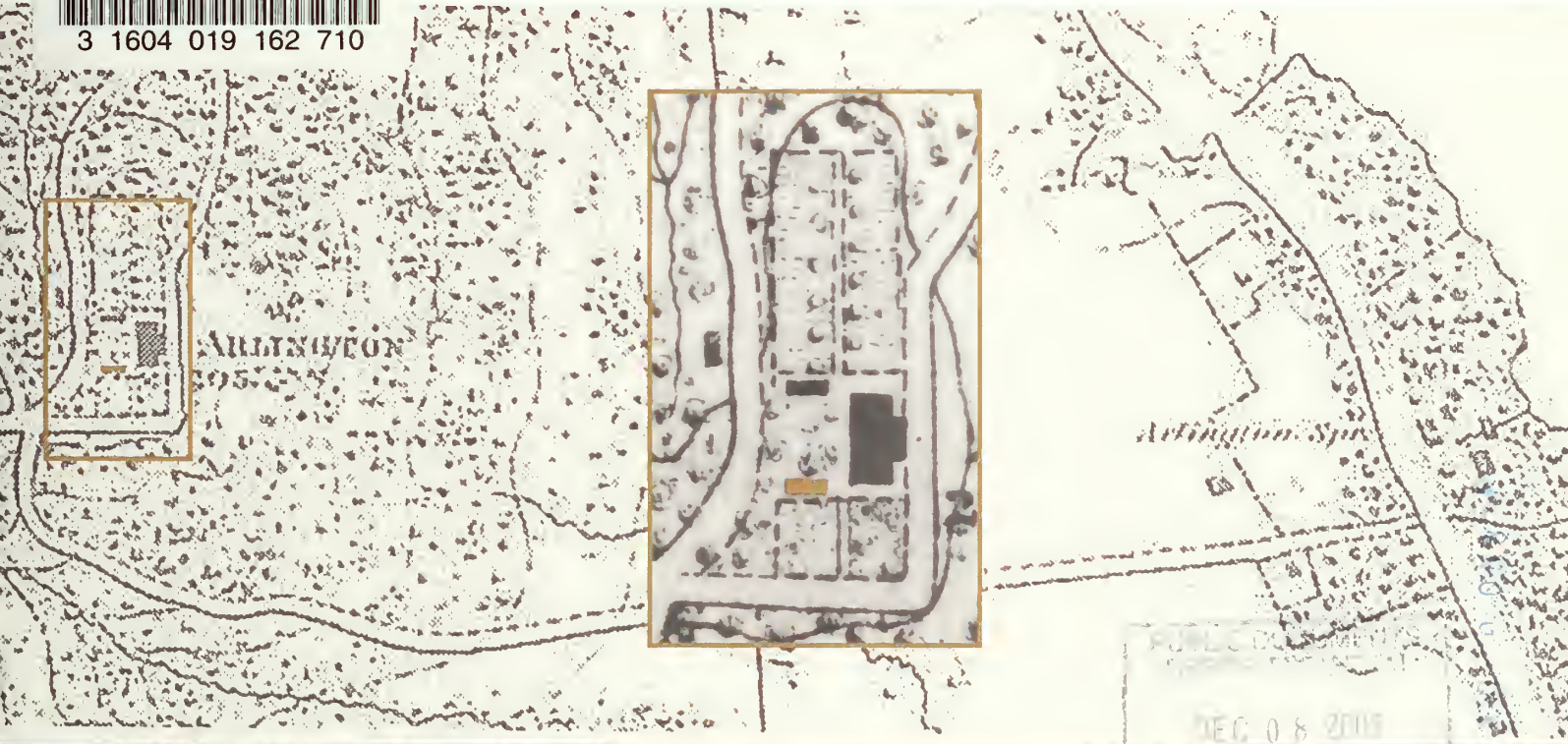



South Dependency Historic Structure Report

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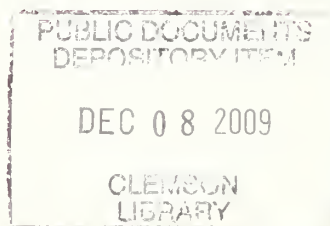
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South Dependency Historic Structure Report

Report prepared by Charles Fisher, Chad Randl and Kaaren Staveteig



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Table of Contents

Introduction

- Executive Summary
- Restoring the Arlington House Dependencies

Part I

- A) Historical Background and Context
- B) Chronology of Development and Use
- C) Physical Description/Conditional Assessment

Part II

- A) Ultimate Treatment and Use
- B) Requirements for Treatment
- C) Bibliography

Appendices

- A) National Park Service List of Classified Structures
- B) Historic Drawings
- C) Existing Conditions
- D) Material testing
- E) Field Notes
 - 1) Exterior Finishes--survey
 - 2) Exterior Woodwork--survey
 - 3) Architectural and Finishes Survey (George T. Fore & Associates)
 - 4) Interior
- F) Supplemental Drawings (Preservation Associates, Inc.)
- G) NPS Engineer's Report
- H) Period and Rehabilitation Drawings (Volz & Associates, Inc.)

Introduction

Executive Summary

Statement of Purpose

The purpose of this Historic Structures Report is to function as a central repository of information, analysis and conclusion resulting from the investigation of the South Dependency (South Servant's Quarters) at Arlington House, The Robert E. Lee Memorial, by National Park Service (NPS) historians and their associated consultants in 2002 and 2003. Based on a resulting understanding of the history, appearance and use of the structure over time (with particular emphasis on the period around 1860), this document will also propose an appropriate restoration program that will enable the NPS to better interpret the building, its occupants and functions during the period of significance.

The Building Today

Part of the Arlington House, The Robert E. Lee Memorial in Arlington, Virginia, the South Dependency (South Servant's Quarters) is one of two buildings contemporary with the Arlington House at the time when the Robert E. Lee family was in residence, just prior to the Civil War. This National Park Service site is administered by the George Washington Memorial Parkway, Turkey Run, Virginia, and is within the National Capital Region. Similar in architecture to the North Dependency across the yard (courtyard), these two detached buildings extend perpendicular off the back or west elevation of the Mansion House.

The South Dependency is of masonry construction, largely covered by stucco, and is one room deep and three rooms across. This early nineteenth-century building is one story in height. On the front façade, the fenestration consists of three doors, with each door opening to a separate room inside. The simple pitched roof is covered in flat tiles with a chimney at the west end.

The historic roadway circling the yard passes the front façade and at the east there is an area used at times for parking. Both of these elevations are devoid of immediate vegetation. Along the west and south elevations, there is vegetation cover on the ground.

The South Dependency is a contributing building to the Arlington House, The Robert E. Lee Memorial National Register listing of October 15, 1966, the first year of the National Register of Historic Places. It is identified as the South Servant's Quarters-Arlington House in the National Park Service's List of Classified Structures (see Appendix A). The Management Category is "Must Be Preserved and Maintained" that dates to December 5, 1990. Under the current General Management Plan, the ultimate structure treatment is identified as "restoration."

Investigation History

The current investigation is part of the third significant effort in the last seventy years to return the structure to its mid-nineteenth century appearance during the time of the occupancy by the family of Robert E. Lee, and to also help tell the story of slavery and the African-American life at Arlington.

The first restoration campaign began with a "Joint Resolution of Congress authorizing the Restoration of the Lee Mansion in Arlington National Cemetery, Virginia, (Public Resolution No. 74, 68th Congress) (H.J. Res. 264). The resolution was approved March 4, 1925, and reads as follows:

Resolved by the Senate and House of Representatives of the United States in Congress as

sembled. That the Secretary of War be, and he is hereby, authorized and directed, as nearly as may be practicable, to restore the Lee Mansion in the Arlington National Cemetery, Virginia, to the condition in which it existed immediately prior to the Civil War and to procure, if possible, articles of furniture and equipment which were in the Mansion and is used by occupants thereof. He is also authorized, in his discretion, to procure replicas of the furniture and other articles in use in the Mansion during the period mentioned, with a view to restoring, as far as may be practicable, the appearance of the interior of the Mansion to the condition of its occupancy by the Lee family.

As a result of the resolution, the dependency was restored in 1930 by the U.S. Army to what they believed to be its appearance immediately before the Civil War. An exhaustive study was not undertaken at the time and field investigations were inconclusive in some key components of the building's appearance. For the next thirty years, the NPS (which acquired the park in the 1930s) opened Arlington to the public as a memorial to George Washington Parke Custis and his son-in-law, Robert E. Lee. Never entirely comfortable with the Army's restoration of the structure, NPS embarked upon a second investigation in the 1960s. Repairs and some alteration of the structure was undertaken as a result of the NPS research, but essentially NPS retained the same interpretive use as the U.S. Army.

In 2002, the NPS initiated the third major effort to understand the historic appearance of the South Dependency. The current effort builds on the archival information, remaining physical evidence and complicated history of the two previous restorations. It has involved extensive onsite investigation of the exterior and center room and more limited investigation of the east and west rooms.

Investigation of the physical evidence of the masonry and the remaining woodwork, paint, plaster, and wood nailing blocks, along with other clues of the past have enabled the investigating team to better understand the building's construction. Of particular interest, it was determined that the South Dependency was built sometime after the North Dependency and not at the same time as previously believed.

Information and material from different eras were identified and evaluated, to form an accurate picture of a building that primarily served as secured storage for plantation goods and at the same time housed what would become the most famous of all the slave families at Arlington. It tells the story of a structure, exceptional in many ways: from engaged columns and recessed arches, making this an especially ornate plantation dependency, to a smoke house located in the center room, to exterior brick walls coated with a roughcast stucco, a remarkably early use of this masonry finish.

The results of the investigative research and documentation are contained in this Historic Structures Report, which is arranged in the following manner:

Introduction: This section includes a general description of the property and a brief overview on restoring the Arlington House dependencies. It also documents the scope of the project, the project team members, and the investigation methodology.

Part 1: Developmental History (Historical Background and Context; Chronology of Development and Use; and Physical Description) for the Historic Structures Report on the Arlington House Dependencies in accordance with Cultural Resource Management Guideline NPS-28 (Release No. 5,

August 1997). This section documents and analyzes historic information as it relates to the social history and physical evolution of the building and overall site. A detailed chronology of the South Dependency, including summarizations and references to historic documentation previously compiled by the federal government, as well as original information gathered by the current project team, is included in this section. In addition, it contains a description of the existing conditions, including annotated drawings based in part on the measured drawings produced by HABS during the spring of 2002.

Part 2: Treatment and Use (Ultimate Treatment and Use; Requirements for Treatment; and Bibliography) for the Historic Structures Report on the Arlington House Dependencies in accordance with Cultural Resource Management Guideline NPS-28 (Release No. 5, August 1997). This section explores possible treatments and uses of the South Dependency.

Project Team Members

Following the objectives of the George Washington Memorial Parkway (GWMP), which requested the preparation of a historic structure report to cover the physical history and analysis of the South Dependency of the Arlington House: The Robert E. Lee Memorial, the following team of professionals were engaged: Charles E. Fisher, III, historian, Technical Preservation Services, National Park Service; Chad Randl, architectural historian, Technical Preservation Services, National Park Service; Kaaren Staveteig, architectural historian, Technical Preservation Services, National Park Service; John Volz, AIA, preservation architect, Volz & Associates, Inc., Austin, TX; George Fore, architectural conservator, George T. Fore and Associates, Raleigh, NC; Doug Reed, architectural conservator, Preservation Associates, Inc., Hagerstown, MD; and Richard Pieper, architectural consultant, Jan Hird Pokorny Associates, New York, NY.



Lead team members: Chad Randl, Kaaren Staveteig and Chuck Fisher

Assistance provided by the staff of the George Washington Memorial Parkway was invaluable to the study: Kendell Thompson, site manager, Arlington House: The Robert E. Lee Memorial; Andrew Wenchel, architect, GWMP; Tim Buchner, GWMP External Programs and Land Use; Malcomb Willoughby, facility management specialist, Arlington House: The Robert E. Lee Memorial; Karen Kinzy, historian, Arlington House: The Robert E. Lee Memorial; Colleen Curry, site curator, Arlington House: The Robert E. Lee Memorial; Catherine Weinraub, museum technician, Arlington House: The Robert E. Lee Memorial; John V. Stefaniak, woodcrafter, GWMP; Tim Marshall, maintenance, Arlington House: The Robert E. Lee Memorial; and Matthew Virta, historian, GWMP. Louis Berger Group was hired by the GWMP to undertake limited archeology. Luis Teran, NPS architectural engineer for GWMP, consulted on condition of the roof.

Methodology

The project team conducted an in-depth study of primary and secondary resources as well as field investigations. Primary textual resources include official and familial correspondence, Office of the

Historic Structures Report

Quartermaster General Cemetery Reports, National Park Service memoranda and reports, oral history accounts, and historical narratives. Secondary sources including books and National Park Service reports were utilized primarily to provide additional context. Graphic resources include drawings, maps, and historic photographs. Material testing and both destructive and nondestructive investigations were discussed with the project and site managers and approved in advance of the work. Site visits were coordinated with primary park staff. Stucco and some paint samples were evaluated at the conservation lab in Lowell, MA under the direction of Peggy Albee, manager of the Historic Architecture Program NER/NPS.

Of necessity, the research is not concluded with the completion of this report. Rather it will be supplemented in the future by further information gathered through archeological and architectural investigations, and by subsequent documents as they are discovered.



Introduction

*Restoring the
Arlington House Dependencies*

Restoring the Arlington House Dependencies

Built by G.W.P. Custis, the North and South Dependencies are exceptional buildings that supported the Arlington Mansion at the time of residency of Robert E. Lee's family, prior to the outbreak of the Civil War. Commonly referred to as the kitchen (North Dependency) and slave quarters (South Dependency), even by Lee, the more accurate description by function would be slave quarters (North Dependency) and storehouse (South Dependency). The North Dependency originally had five rooms; all but one were used as quarters for household slaves. In addition, the North Dependency housed the Arlington Mansion's main kitchen, used year around, for which Lee recorded its use in an 1859 insurance policy. One of the rooms in the South Dependency was the quarters of the Gray family, the most notable of the household slaves. Yet the other two rooms served as the general storehouse for meats and other foods, as well as for domestic supplies for the African-American slaves at Arlington.

This historic structures report clearly establishes three important points:

- 1) The North Dependency was built sometime before the South Dependency. For a period of time after the South Dependency was constructed, the buildings were finished somewhat differently, including color. By the time of the Lee family residency, both buildings were finished on the outside to match each other.
- 2) Despite the age of the buildings, their numerous uses, periods of major neglect, and three major renovations, both buildings retain a relatively strong degree of historic fabric.
- 3) These two buildings are important in American architecture. The original interior plan of the North Dependency is extremely unique for its time and especially for its function. Probably nowhere else in the ante-bellum South did such a plan ever exist in a similar building. As to the South Dependency, the location of a smoke house in an interior or center room of a building, adjacent to a room used as living quarters and the other a storehouse for clothing and other domestic supplies, is very unusual.

The historic rough cast stucco, which has survived in large areas on the exterior, represents perhaps the earliest surviving example of this finish in the United States. This original stucco is also important to understanding how the stucco on the lower walls of Arlington House appeared at the time of the Lee's residency.

In most preservation work on properties such as Arlington, attention to authentic detail and material conservation are components of restoration work on the main building, not dependencies. Yet the work on these two buildings in the 20th century, first by the military and later by the National Park Service, reflects a strong preservation philosophy. For example, in the 1960s, the National Park Service abruptly cancelled its plans to restore the interior of the North Dependency, being unable to untangle potentially conflicting evidence.

During the 1920s restoration campaign by the military to restore Arlington House and the two De-

dependencies, the Quartermaster General's office that helped to guide the project instructed the Quartermaster Supply Officer as to the following:

The work... "should be carried out strictly with old methods, and every detail should be carefully supervised to avoid irreparable injury to work which must be preserved in its historic character."

While the military's restoration did make certain key mistakes in their restoration of the dependencies, they tried to keep to the spirit of the Quartermaster General's instruction. Attention to detail, good craftsmanship, and care not to damage historic fabric—these are essential to any preservation work on the North and South Dependencies in the future.

Part IA

Historical Background and Context



Figure 1. An interpretive historic map of Fairfax County, Virginia in 1760 by Beth Mitchell which shows properties owned by the Alexanders. Edited by Donald M. Sweig. Published by the Office of Comprehensive Planning, County of Fairfax, 1987.

1778-1802

The tract of land on which the Arlington estate was built became part of the Custis-Lee legacy in 1778.¹ John Parke Custis, adopted son of George Washington, purchased the land from Gerrard and Robert Alexander. The property was close in proximity to his stepfather's estate at Mount Vernon and to his wife's childhood home at Mount Airy in Upper Marlborough County. The hilltop setting offered spectacular views along the Potomac River, and the prospect of cultivating the site's rich alluvial soil near the river and turning it into a profitable working estate was very appealing.

John, his wife, Eleanor, and two children moved into Robert Alexander's former house located near the mouth of Four-mile Creek in 1779. Unfortunately they only lived on the land for a short period of time. In September 1781, John traveled to Williamsburg to serve as a volunteer aide to



Figure 2. "The Washington Family" by Edward Savage depicts George and Martha Washington with her two grandchildren, George Washington Parke Custis and Eleanor Parke Custis, 1796.

George Washington, caught camp fever and died.² In an effort to comfort his bereaved daughter-in-law, George Washington adopted the two youngest of their four children, George Washington Parke Custis (G.W.P. Custis) and Eleanor Parke Custis, and moved them in to live with him and their grandmother, Martha.³

As a young boy, G.W.P. Custis followed his guardian around the Mount Vernon estate, listening to him talk with prominent visitors about issues pertinent to both the estate and the country. Washington frequently discussed the importance of good transportation routes to free the young nation from its dependence on Europe. He also spoke about the need to breed hardier agricultural stock to promote the economic and political freedom of the country. As a grown man, G.W.P. Custis embraced these principles, experimenting with farming techniques and animal breeding.⁴



Figure 3. George Washington Parke Custis, likeness by Charles Fevret de Saint-Memin, 1805.

1803-1850

Upon reaching the age of 21 in 1802, G.W.P. Custis inherited over 18,000 acres of land and approximately 200 slaves from his father, John Custis, his grandmother, Martha Custis Washington, and his guardian, George Washington.⁵ During that time, Custis moved from Mount Vernon to the overseers four-room cottage on reclaimed marshland of the Potomac River on the Arlington property.⁶ His stay in this damp and unhealthy location

was brief. Within a year, Custis and his young bride, Mary Fitzhugh, began construction of a new home on the most prominent and highest point on the 1,100 acres, which he named Mount Washington. Although larger than the overseer's residence, the house was humble compared to the later Mansion. Of brick construction, the first floor of the two-story house had only three rooms.⁷

To improve the flat, rich plains by the river, G.W.P. Custis directed his sixty Mount Washington slaves to restore the remnants of the previous tenant farm—fixing and building enclosures, clearing the land of scrub growth and the river of snags. It was at this fertile location that Custis chose to cultivate a market garden, a large plot of land where crops were grown to provide fresh vegetables and fruits to nearby towns. This farm operation was a profitable venture in part because he could utilize his inexpensive slave labor to improve transportation routes and with close proximity to urban populations, he could deliver fresh produce in little time at less cost. However, it did not make the estate self-sufficient.

Of the extensive properties purchase by G.W.P. Custis's father in the mid-eighteenth century, the Custis family income was primarily generated by two estates, the White House and Romancoke, located about ten miles apart on the Pamunkey River in the central tidewater of Virginia. On the other hand, the Mount Washington estate (renamed Arlington shortly after Custis brought his bride there to live) was designed to be a Custis and Washington family showpiece and not necessarily a profitable operation.

When Custis was ready to design his grander home on the hill, he sought the assistance of a professional architect. George Hadfield, a brilliant, young English architect, had been in America only a few years at the time he first visited the site. A student of Wyatt at the Royal Academy of Arts, Hadfield had been the only architectural student in forty years to win the Academy's annual gold medal award. With it went a traveling scholarship enabling him to study classical architecture in Italy for three years, during which he drew restoration plans for several ancient temples. When exhibited at the Academy in 1795, the restoration plans caused quite a sensation. Shortly after he returned to England, Hadfield accepted a position to take over the construction of the U.S. Capitol in Washington, DC. Unfortunately, he became embroiled in controversy over plans for the building and was ultimately discharged.

Presumably Custis was using Hadfield's plans when he started construction at Arlington for there is no physical indication that any change was made in the design of the Mansion after it was begun. That Hadfield designed the entire structure—not just the center section and portico—is demonstrated by the close resemblance of the windows in the wings to those in other buildings from his drawing board, and to the fact that the wings are obviously designed to balance the massive portico. According to recent scholarship, Arlington House was the first temple-form residence built in the United States, a design subsequently repeated from Massachusettes to New York and in the eastern Midwest states of Ohio, Michigan, and Illinois.⁸

Custis completed the two wings by 1804. The work included extensive changes to the north building, his early home on the top of the hill. A large chimney breast of solid brick was constructed



Figure 4. Arlington House, 1824, John Farley.

as part of the west wall flanked by doorways leading to outside steps. Near the chimney breast, an inside stairway went down to the kitchen and laundry in the basement. The exterior walls were coated with a stucco plaster, scored with lines and tinted to resemble stone. The south wing, similar in size and shape to the north, was divided into a large parlor and a smaller room on the south end for a study and office. A basement was located under the larger room. The floor level in the south wing was several inches lower than in the north wing, necessitating an awkward step when the rest of the house was connected to the lower level. At the north end of the parlor was a great semi-circular arch, spanning the width of the room and touching the ceiling.

For 14 years, the Custis family lived in the two brick wings, divided by an open yard approximately fifty-eight feet wide, probably connected by a temporary hyphen structure or walkway.⁹ Due to a shortage of funds, the main block was not completed until 1818. Classical in style and designed to appear impressively large from a great distance, the main block of the Mansion reinforced the hierarchy of the estate. It is likely that the horse stable, the ice house, and the two surviving dependencies located immediately west of the Mansion were completed around this time as well.¹⁰ Custis' slaves

are said to have done much of the preliminary work—leveling the site, digging the foundations, and clearing the road down to the river.¹¹ By the time Custis completed the Mansion and numerous outbuildings, the farm contained a market garden, crop field, pasture, fishery, and living quarters for approximately 50 slaves.

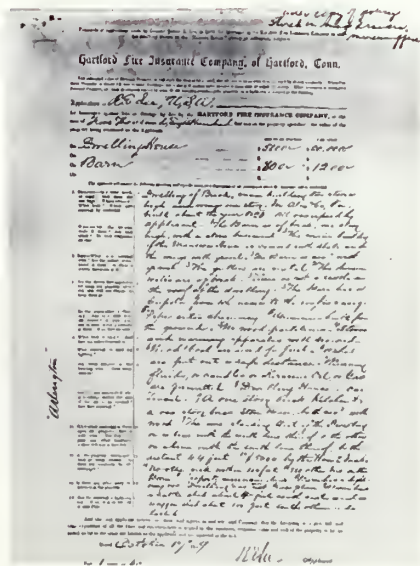


Figure 5. The 1859 insurance application prepared by Robert E. Lee describing the two slave dependencies

Formally aligned with the wings of the main house, the North and South Dependencies were also classical in appearance and of masonry construction. The elevations facing outward toward the formal spaces of the gardens were highly ornamented with engaged columns and recessed arches, reflecting design elements found on the main house. The elevations facing the work yard were relatively plain.¹² Similar to the farm and quarters below Arlington house, the yard was at least partially the domain of the house slaves—a space appropriated by the individuals through their many tasks. Historic images reveal that the work yard was screened by a row of cedar trees from the formal carriage turnabout in front of the house.¹³

In an 1859 insurance application prepared by Robert E. Lee, the South Dependency was described as “a one story brick store house. . . covered with wood.”¹⁴ The western portion of the building served as a sleeping room for the Gray family: Selina, the estate housekeeper; Thorton, her husband; and their six children. The center room served as a smoke house during the mid-1800s. The eastern-most room in this building was used as a store house for dry goods and slave rations—kept under lock and key by Mary Custis and Mary Lee as managers. Further description of the two dependencies within the yard comes from Elizabeth Randolph Calvert in 1875, the granddaughter of Mary Randolph and a cousin of Mrs. Lee, as she remembered them in 1845. “. . . Opening into this road at equal distances from the house, and as proportions will allow, are two long buildings consisting of three rooms each on one floor, the one right of the east contains a kitchen and furnished homes for some of the house servants. The opposite one accommodates a storeroom, wash and sleeping rooms.”¹⁵

Though G.W.P. Custis was the owner of the property for all but four years of the Custis and Lee families' tenure, other family members, hired employees, and slaves managed and influenced the development of the estate in many ways. Mary Custis and Mary Lee each helped manage various elements of the property including providing for the physical and spiritual needs of the slaves. Paid employees like Austin Brahm oversaw slave activities in the market garden and fields. Marriages, births, and deaths of family members and slaves at Arlington also affected the development of the property. In June of 1831, Mary Randolph Custis, daughter of G.W.P. Custis, married her childhood friend Robert E. Lee.¹⁶ Although a member of southern aristocracy through both the Lee and Carter lineages, Lee had little inheritance and limited financial resources. He cultivated strong emotional ties to Arlington even though throughout their forty year marriage, his military obligations as an army officer frequently kept him away from home. In contrast, his wife, Mary Custis Lee, and their seven children spent considerable time at Arlington.

Records show that late in the tenure of the Custis and Lee families, five log cabins provided housing for many of the slaves. The exact appearance of the cabins is unknown. Two cabins were located along the road that led west from Arlington Spring, at the edge of the Potomac River, to Arlington's main gate off the Alexandria and Georgetown Turnpike. Other slave quarters were located near the estate's collection of farm buildings. These farm buildings included a wheelwright's shop, blacksmith, saddlery, poultry yard, carriage shop, granary, large feeding barn, and pump house.¹⁷ Some of these buildings also housed slaves.¹⁸ This wide variety of farm buildings was not unusual during the first half of the nineteenth century as many large landowners sought to be as self-sufficient as possible. Slaves on the estate included people who were multi-skilled in blacksmithing, animal husbandry, and the working of leather for saddles and other goods. More duties undertaken by the slaves meant that less cash outlay was required by the Custis and Lee families.

In addition to the market garden and fields, farm animals such as cattle, chicken, and hogs were kept. Slaves also had family vegetable plots near their cabins to supplement their diets. By the 1840s, the estate had a fenced orchard stretching to the south of the road, running from the overseer's house east to the Alexandria Canal. The overseer's house (Custis' original home when he moved to Arlington) was one of the few log structures on the farm. It was two stories with a porch that stretched across the back overlooking a yard and slave quarters. Fields of corn, rye, and other crops were located to the north and south of the farm buildings. In 1850, the farm produced 200 bushels of rye, 900 bushels of Indian corn, 150 bushels of oats, 20 bushels of peas, 50 bushels of Irish potatoes, and 30 tons of hay.¹⁹ Unfortunately, land use and production levels at Arlington Farm were inconsistent. Crops were rotated, new crops were grown and areas formerly uncultivated were cleared in cycles of native vegetation re-growth and crop tillage in an effort to increase productivity.

Just to the east of the farm was an area which came to be known as Arlington Spring. Custis delineated the eight-acre site along the Potomac River with a fence. The site centered on a naturally fed spring flowing up from a rocky outcropping near an enormous oak tree. Custis developed the Spring as a place to hold his public sheep shearings and it included benches, a kitchen building, and



Figure 6. Detail from Environs of Washington map, c.1864 showing location of spring buildings.

pavilion. There in 1811, he publicized his new native breed sheep, the "Arlington Improved." Custis believed that by raising wool and making it into clothing on the plantations, Southerners could improve the lot of their slaves. Wool production would also check the steady deterioration of the land, as an over reliance on tobacco and cotton was exhausting southern farm lands. Though Custis' breed never gained widespread acclaim, the Spring became extremely popular as a day resort for people from surrounding areas to relax, picnic, and dance. Beginning in 1843, the resort was physically separated from the Arlington farm by the construction of the Alexandria Canal and plans were carried out to further promote visitation at Arlington Spring through a building campaign. All structures were rustic, creating a sylvanian resort. Though slaves would sometimes serve the guests, free blacks were not permitted. Custis frequently visited with the Spring's patrons, sharing stories of George Washington and enjoying the role of host. Little comment was made by contemporary visitors about the healthful benefits of the water from the spring. Yet the setting provided a gathering place for socializing among a primarily middle-class clientele.



Figure 7. Arlington Spring, from Benson Lossing, *Harpers Magazine* 1853.

1850-1865

Only during the few years that Lee was stationed near Arlington did he assist his wife Mary Custis and her father in overseeing the estate. In 1857 G.W.P. Custis died, three years after his wife. Custis left considerable debt, a poorly maintained and unproductive Arlington estate, and much confusion over his intention to free his slaves. Upon the death of his father-in-law, Robert E. Lee returned to Arlington to direct the development of the estate and sort out the will.

In his will, Custis directed the division of some of the property among his descendents, in particular he separated Arlington from the support of the White House and Romancock plantations. Eager to see his father-in-law's wishes fulfilled, Lee set about improving the farm and grounds with the help of his son George Washington Custis Lee, who would ultimately inherit the property. Lee resurfaced the roof on the Mansion, the stable, and the overseer's house, and also laid a new foundation for a barn. He fertilized the fields with lime, guano, and plaster, and also made improvements to the Arlington Mill which he later rented out for additional income.²⁰ The buildings and grounds at Arlington Spring were improved for lease to a concessionaire in the summer of 1859. To increase the efficiency of Arlington, Lee rented out a number of slaves to other estates—at least one from every slave family.²¹

On April 17, 1861, as the state of Virginia succeeded from the Union, war came to the estate. At home, surrounded by friends and family, Robert E. Lee, officer of the United States Army for over thirty years, resigned from his federal post. Two days later, he accepted command of the Virginia forces and left Arlington never to return. Acceding to her husband's pleas, Mary Lee soon departed

Arlington with her children, her dearest possessions, and a few of her slaves, leaving others behind to tend the estate.

Arlington House, perched high on the slope overlooking the city of Washington, conformed to the ideals of the nineteenth-century, picturesque, family-seat. Unfortunately, this commanding prospect also met the strategic needs of the Union forces. So on May 24, 1861, the Union army moved in and occupied the estate. Major General Charles W. Sandford, in charge of all New York regiments within the District of Columbia, established his divisional headquarters at Arlington House. Instead of moving into the Mansion, he had three large tents erected between the house and the flower garden. The following day he issued a proclamation stating that all property taken for use by the federal forces in Fairfax county, in which Arlington was then located, would be protected and used only for suppressing unlawful acts against the Union. Preventing vandalism on the 1,100 acres of the estate proved more difficult as time progressed.

The slaves who worked primarily in the house, yard, and garden—including Selina Gray, George Clarke, Eleanor Harris, Perry Parks, Daniel, and Ephriam—and most of the slaves whose quarters were located on the farm portion of the estate, remained at Arlington.²² Some assisted the federal soldiers with tasks such as washing and cooking, while others continued with agricultural work. On the farm, about fifty slaves remained in the quarters at least through 1862 and most likely continued to garden in their family vegetable plots.²³

At the end of May of 1862, Brigadier General Irvin McDowell, in charge of the newly named Army of the Potomac, took over the tent headquarters erected by General Sandford. A telegraph line connecting Arlington with Washington was set up on wooden poles that descended down the estate's east facing slope. Within the woods to the north, south, and east of the Mansion, thousands of soldiers bivouacked.²⁴

General McClellan replaced General McDowell as Commander of the Army of the Potomac soon after the Battle of Bull Run (First Battle of Manassas). Since McClellan lived in Washington, DC, McDowell remained at Arlington to preserve the estate from damage. One reason the estate remained in relatively good condition that first year—at least in the vicinity of the main house—was attributed to the care given by the slaves. Of particular note was Selina Gray, identified by Mary Lee in her letter to General Sandford as “the woman in the yard.” During the residency of the Custis and Lee families, she lived in the western third of the Southern Dependency with her husband and children. While federal troops occupied the estate, Selina worked to protect the inherited personal items that had belonged to George Washington and had been left behind with the departure of the Lee family.²⁵ During and after the War, Selina's family had the use of the entire South Dependency as their family residence. Doorways were cut by Selina's husband between the smoke house and the two end rooms for interior circulation.²⁶



Figure 8. Mrs. Lee's personal maid and housekeeper, Selina Gray, and her family lived in the South Dependency building for many years.

In March 1862, most of McClellan's army departed for Fort Monroe to begin the advance up the peninsula toward Richmond. The only evidence of their occupation at Arlington were the "blackened circles of campfires" that dotted the hillsides.²⁷ Although several thousand enlisted men remained on the heights to help guard the federal capital, the shift of the war campaign south slowed the intensity of activity at Arlington.



Figure 9. In 1864 the yard west of the mansion was so trampled that little vegetation grew. Photo by Andrew Russell, U.S. Army photographer.

Lower ranking officers and their families stationed at nearby forts moved into the Mansion vacated by McClellan and his staff. The departure of the higher ranking officers that shared the social circles and personal connections with Lee and his family prior to the war, led to neglect of the site. "All the boundaries, garden plats and smooth reaches of green turf . . . were swept away and even gradually descending terraces were broken down and became ragged embankments."²⁸ In fact, after the Union defeat at the Second Battle of Manassas in late August 1862, General McClellan ordered the Arlington Mansion burned if the Confederates moved on Washington. Fortunately, the southern forces retreated and the estate was spared.

On December 29, 1862, Lee, as executor of G.W.P. Custis's will, complied with a court order requiring that the slaves at Arlington—one hundred and eighty eight in total—be given their freedom by January 1, 1863. Their departure from the estate was optional. Many that remained became the early residents of Freedman's Village, a community established in the southeastern section of the estate in May of 1863.²⁹ At least a few individuals spent the rest of their lives at Arlington, later working for the military cemetery that was established and providing insight into what the property was like before the war.

During the war, the barns, slave cabins, and other structures associated with the agricultural pursuits of G.W.P. Custis were taken over by the federal forces and utilized in support of the Arlington Stables. Large corrals and stables for military use were constructed, supplementing the existing early nineteenth-century buildings on the farm.



Figure 10. Map commissioned by General Montgomery Meigs in June of 1864, in preparation for the creation of the National Cemetery at Arlington.



Figures 11 and 12. Union soldiers quartered at Arlington in 1864, photographs taken by Andrew Russell, for the U.S. Army. The south elevation of the South Dependency is shown on the far right of the top photograph; the west elevation is shown in the lower photograph.

Until 1863, Arlington was occupied by the federal government without legal title to the property. Mary Lee owned the land as direct inheritor of the estate of her father G.W.P. Custis. Shortly after McClellan's departure south in March 1862, Congress passed a law authorizing "the collection of direct taxes in the insurrectionary districts within the United States." Under this legislation, property owned by individuals loyal to the Confederacy, such as the Lee's, could be assessed federal taxes. If these taxes went unpaid, then the property would be forfeited to the government and auctioned to the highest bidder. This law was amended in 1863, to wit "any such sale of any tracts, parcels or lots of land which might be selected under the direction of the President for government use for war, military, naval, revenue, charitable, educational, or police purposes might be at said sale, be bid in under the directions of President and struck off to the United States." It was under the authority of this law that the United States government acquired ownership of the Arlington estate.³⁰

On September 16, 1863, Mary Ann Randolph Lee, was assessed approximately \$92.70 in taxes on property worth \$34,100.00, according to the 1860 census. She was allowed 60 days to pay. Mary, suffering from acute rheumatism, was unable to make the journey across enemy lines and so she sent someone else to make the payment. However, the person Mrs. Lee sent to make the payment was turned away. The taxes unpaid, Arlington was forfeited to the United States. On the sixth of January 1864, President Lincoln made an order directing a bid on the Arlington estate and subsequently acquired it for the United States for war, charitable, and education purposes. The property was purchased for \$26,800.00.



Figure 13. Arlington trees being cut down by Union soldiers, c.1861.

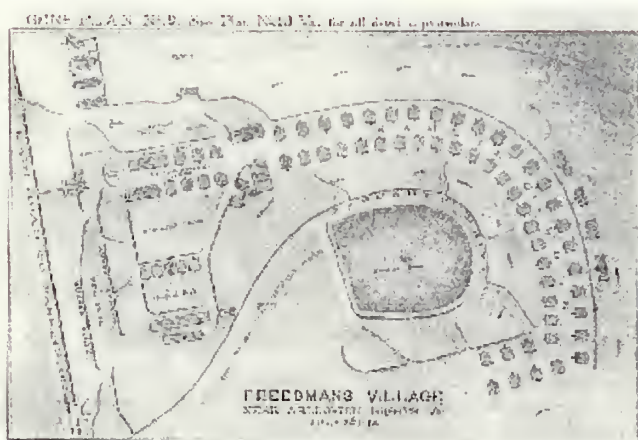


Figure 14: Plan of Freedman's Village.

By late 1863, the primary federal burial ground in the city of Washington, the Soldiers Home, was nearly full. Following an enormous loss of life in the Battle of Wilderness in early May 1864, the staff of the Quartermaster General's office was ordered to make an examination of all sites eligible for burials near the District. The Arlington estate was an immediate favorite. The Mansion and the grounds adjacent to it were quickly appropriated for a military cemetery with 200 acres to be surveyed, laid out, and enclosed for this purpose. A circular drive was laid out in the northwest corner of the property to access graves to be located there. The carriage roads that wound around Arlington House during the time of the Custis and Lee families were regraded and redefined. The drive that circled around the work yard west of the house was reestablished, as was the circular turn around to the east of the northern wing.

In 1865, the graves were concentrated in two areas—in the northeast corner of the property and just southwest of the house. The graves of 13,000 soldiers were marked with simple, wood headboards painted white with names written with black letters. Within three years, over 14,000 soldiers were buried at Arlington. By the end of the century, their numbers increased ten-fold.

Five years after the war, the former home of General Robert E. Lee, a hero of the South and a man esteemed by many in the North, was almost empty—its once grand rooms were used for storage and to house cemetery workers. Monuments to the dead stood nearby in the garden bordered on two sides with graves of Union officers.³¹

Although a battle never occurred on the soil of Arlington, the use of the estate to house and train Union soldiers during the four and one half years of the Civil War, caused the destruction of fences, forests, and buildings, and the deterioration of gardens, fields, and roads. The yard north of the South Dependency was so trampled that little vegetation grew. Instead, the firm earth spread almost smoothly to the trunks of the scattered trees. All the buildings were worn. Dampness that siphoned up from the soil during the rainy season and dust that blew in dry weather alternately clung to the foundations. The stucco walls were chipped, revealing the brick beneath. The agricultural buildings on the farms and the picturesque kitchen and pavilion of G.W.P. Custis' Arlington Spring were modified by the Army to serve specific functions during the war; some were removed completely for lumber. The overseer's house, where Custis lived in 1802, had also suffered damage. It was surrounded by temporary structures and the modified agricultural buildings that contained the horse corral and veterinary facility of the Union Army. Following the war, the enormous corral and the structures that could not be used were removed. The remaining buildings were later incorporated into Freedman's Village.

Eventually the appearance of Arlington Cemetery and the privately held farmland surrounding the federal property improved. The land of the former Arlington Estate outside of the cemetery to the east, west, and south of the Mansion, remained a military reservation and was used for experimental agriculture.

The legislative mandate of the Freeman's Bureau, which had established Freedman's Village in 1863, expired in 1868. As in villages of freed slaves elsewhere, steps were taken to remove the inhabitants and their homes from Arlington. Due to ensuing controversy, however, residents of Freedman's Village were allowed to remain. An inventory of the residents, buildings, and other improvements was made and the individuals were allowed to purchase their homes. The federal government retained ownership of the land, in addition to the right to evict the residents with little notice.

1866-1885

Between 1866 and 1868, approximately 400 acres of land—property outside the boundary of the National Cemetery, but within the original boundaries of the estate—was divided up into parcels averaging ten acres each and rented to the Freedman's Villagers in an attempt to increase financial autonomy.

Former Arlington slaves, including Martha Smith, Daniel Richardson, Margaret Taylor, and Lawrence, James, and William Parks, lived in the village and on the scattered 10-acre farms. Only one

family, the Syphax's, claimed legal ownership of the land, a 17-acre triangle cut out of the southern border of the original estate.

As additions were made to the cemetery and with the burial of highly-esteemed Union officers on the slope east of Arlington House, changes were made to the existing structures. The house, including the west elevation, which after the Civil War was covered with stucco for the first time, was repainted a light yellow in 1867. Later slate roofs were added to both the South and North Dependencies, the stables, and the wings of the Mansion. A new greenhouse and a potting building were constructed in the northern half of what had been the kitchen garden area.

In March 1883, the United States government was given clear title to Arlington. This property, which had been willed to Mary Lee by her father G.W.P. Custis for use during her lifetime, was to be inherited by her oldest son George Washington Custis Lee at her death. The property therefore had been a life estate in Mary Lee's name only. Upon her death, her son filed suit against the federal government for the return of Arlington. Bills were introduced in Congress both for and against restitution. The case finally was decided by the Supreme Court in 1882. The federal acquisition of the property during the Civil War was deemed a taking without just compensation and therefore illegal. Custis Lee was paid \$150,000.00 to settle the debt.

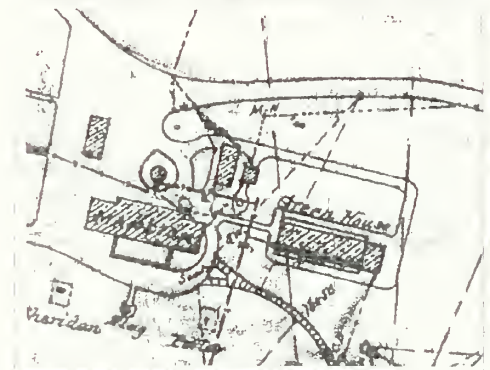


Figure 15: 1894 map enlargement showing water tower, public lavatory, and greenhouse locations that existed in close proximity to the Mansion and the South Dependency.

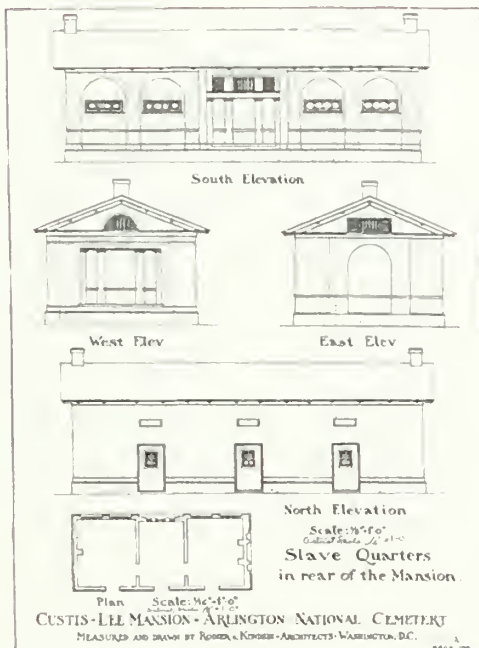


Figure 16: 1924 measured drawing of the South Dependency.

With the estate now firmly in federal hands, the breakup of Freedman's Village was inevitable, for according to the Regulations of the Army, "No civilian will be permitted to reside upon a Military reservation unless he be in the employ of the government . . . no permission will be given any one to cultivate any portion of a Military reservation."³² In the years immediately following the Supreme Court decision, attempts were made to remove the freed men from the village and surrounding farms. After much resistance from the residents, displacement efforts ceased and an inventory of the village and surrounding agricultural properties began, detailing the existing structures and improvements. The findings showed 763 individuals living on the former Arlington estate outside the boundary of the cemetery. They had improved their individual lots by adding trees, vines, houses, and outbuildings. Eight agricultural buildings and slave quarters remained from the G.W.P. Custis era. These structures were located near the eastern edge of the property where the farm and market gardens had once been. Custis' former slaves, unlike the other Freedman's Village residents, did not have to pay rent. A sum of

\$15,000.00 was appropriated by Congress to reimburse the renters and to cover the estimated cost of removing the buildings and making improvements. Many of the buildings were relocated.

1886-1928

With the disbanding of Freedman's Village in 1888, the acreage devoted to cemetery use increased. The construction of electric rail lines during the early 1890s, coupled with cessation of tolls on the bridge from Georgetown across the Potomac, exponentially increased tourism to Arlington Cemetery. In addition, throughout the nineteenth-century, the use of cemeteries as public parks, for picnicking, and contemplating nature, gained social acceptance.

During this time, public lavatories were also constructed to the immediate north of the North Dependency. By 1904, it appears that there were no longer any residents occupying the South Dependency and that its sole function was that of a storeroom. Newspaper articles and travel guides indicate that the main house functioned as an office and as quarters for the superintendent of the cemetery.

The stable to the west of the yard, built under the direction of Custis, was destroyed by fire in July 1904. The reconstructed stable was built in a style similar to the original, with its Doric columned portico, symmetrical wing form, and stuccoed walls.

After World War I, interest in returning Arlington to a pre-Civil War appearance and creating a public house museum gained momentum among the public and Congress. In 1924, measured drawings of the Mansion and South Dependency were completed by the architectural firm of Rodier and Kundzin. Congress authorized the Quartermaster General's office to restore the Mansion and two dependencies to how they appeared prior to the Civil War in honor of General Robert E. Lee. Mr. L. N. Leisenring, architect for the Quartermasters Corps of the War Department, was to direct the restoration.

Early in the planning stage it was clear that the restoration work would not adhere strictly to Congressional request that the house be returned to its appearance immediately before the war. Instead, under the watchful eye of Charles C. Moore, president of the Commission of Fine Arts and the former secretary of the McMillan Commission, the restoration was guided as much by contemporary aesthetics as historical accuracy. The Commission of Fine Arts (CFA) had been created in 1910 by President Taft to review the proposed developments in the District of Columbia, assuring that new designs and changes to existing conditions conformed to the McMillan Commission Plan. The landscape of Arlington House, visible from Washington and a focal point within Arlington National Cemetery, was within their purview.

In October of 1925, Charles C. Moore visited President Calvin Coolidge to discuss the plans for Arlington House. The *New York Times* reported soon after that:

the plan of creating a shrine in the memory of Robert E. Lee in the restoration of the Lee Mansion in Arlington National Cemetery probably will be dropped . . . Following a visit of Charles C. Moore, Chairman of the Fine Arts Commission, paid to President Coolidge today, it became known that an entire change of base with regard to the project virtually has been determined upon. The mansion will be restored, not in the decorative style it had as occupied by General Lee, but in the period style of the earlier years in which it was occupied

by members of the Custis family. There is no real demand from the South that a Lee shrine be established in Arlington Cemetery, Mr. Moore declared.³³



Figure 17. North elevation of the South dependency and yard, c.1928.

According to the Commission, Arlington House was “one of the famous buildings of the early days of the Republic in Washington” and the furnishings, architecture, and landscape were to reflect this ideology.³⁴

After much debate, plans went forward. The restoration of Arlington House, the South and North Dependencies, and grounds immediately surrounding were placed under the jurisdiction of the Quartermaster General of the War Department, with immediate supervision by Colonel Charles G. Mortimer. All facets of the project were subject to the approval of the

CFA, for according to the local papers, it was the first project of its kind ever undertaken by the War Department.

1929-1933

In 1929, Congress appropriated \$90,000.00 to fund the “continuing restoration of the Lee Mansion and the procurement of furnishings . . . subject to the approval of the Commission of Fine Arts.” The Quartermaster General’s office established a committee to oversee the restoration and conduct hearings. The committee interviewed witnesses who could share information about the history of the house, its appearance, function, and furnishings, and issued a report with treatment recommendations for the Mansion and two dependencies.

Members interviewed former slaves including Jim Parks, son of the cook who lived above the summer kitchen in the North Dependency, and two children of Gray family, Mrs. Emma Syphax and Mrs. Sarah Wilson. The Gray sisters stated that one of them was 17 years old and the other about 18 months younger at the time of the Civil War. There were eight children in their family. In describing the South Dependency they stated that the room they slept in was the one farthest from the Mansion; their parents’ bed was at the right as you came in the door; the children slept in a loft overhead; and the steps to the loft went up over the window nearest to the fireplace. When they got up there, “there was not enough room to stand upright.” They recounted that there were three divisions in this building; the center being the smoke house and the east room nearest the main house was storeroom and meat house, from which issues of supplies were made weekly to the slaves on the plantation. Jim Parks remembered the South Dependency as being occupied by other slaves. “As I now recollect it,” he said “there was no basement in that building; that it had a brick floor.”

The Quartermaster General’s office advised that the work be carried out strictly using old methods with every detail carefully supervised to avoid irreparable injury to the buildings and their historic fabric. This was certainly the case for the work done in the South Dependency. It was clear however, that they grappled with interpretation in the Mansion and the North Dependency, as demonstrated by the CFA request to change the mantles in some of the interior rooms of the Mansion from those present in the time of Lee to the original. Their rationale was the existing Victorian mantles were not

part of the “original fabric” and that their replacement with colonial examples would “preserve the old lines of the fireplaces.” Although it was known that a circular drive existed behind the Mansion in the era of the Lee’s, it was difficult to manage visitors on the site with such an arrangement and so the planners recommended its removal.

By 1932, restoration work was almost complete. The North Dependency interior had been converted to a two-level configuration with a reconstructed summer kitchen. The South remained a single story with three unconnected rooms. All interior spaces in the North Dependency and the South Dependency were interpreted to reflect the lives of the slaves who lived and worked there.³⁵

On June 10, 1933, management of the “Lee Mansion” and the two dependencies was transferred from the War Department to the Department of the Interior. This was pursuant to Executive Order 6166, which transferred all parks, monuments, and reservations under federal administration to the newly named Office of National Parks, Buildings and Reservations (later known as the National Park Service). Because Arlington National Cemetery was used for active burial, it remained under the jurisdiction of the War Department. The executive order that recorded the transfer, however, did not specify the boundaries of the area pertinent to the administration and protection of the buildings. The public protested the transfer fearing it would lead to petty conflicts of authority and questioned the Park Service’s ability to handle an historic cultural landmark.

1934-1957

Upon the transfer of Arlington to the National Park Service, NPS Assistant Historian Elbert Cox interviewed Leisenring and Moore of the Quartermaster Corps to learn the details of the Army’s restoration. Cox concluded that a thorough study and complete search for historical data had not been made and that justification for various improvements was not always founded on solid evidence.

Early in 1934, the large circa 1880 greenhouse was removed from the kitchen garden; the brick potting-house remained in the northeast corner of the garden space. A restoration of the kitchen garden was undertaken. By the summer of 1934, perennial and annual flowers were planted around the outside borders. Vegetables, bulbs, and young seedlings were growing within the perimeter. By the winter of 1935, the restoration of the garden was complete.

According to National Park Service records, over one million people visited the newly restored building and landscape during the summer of 1936.³⁶ Down the slopes from the house, on the former fields of the Government Experimental Farm, the Army constructed the South Post of Fort Myer. Meanwhile, only basic upkeep occurred on the grounds immediately surrounding Arlington House.

By the end of the Second World War, the grounds of Arlington House again required attention. Legislation that transferred the Mansion and two dependencies from the Department of War to the Department of the Interior was revisited. Jurisdiction over and management of the grounds was confusing. In 1947, it was determined that the executive order pursuant to the 1933 transfer could be construed to allow for the transfer of enough land to maintain the structures and interpret the site as a national memorial. The phrase “enough land” was determined to take in the land of the kitchen garden, including the potting building and the yard area. It did not include the comfort station and the land upon which it sat, near the North Dependency, nor did it include the flower garden south of



Figure 18. The South Dependency as restored by NPS in 1958.

the Mansion. In total, only 2.374 acres was transferred in fee simple to the National Park Service.

By the early 1950s, visitation increased. In order to better interpret Robert E. Lee's story, Murray H. Nelligan, one of the first historians employed at Arlington House, wrote a comprehensive social history of the Custis and Lee families from the eighteenth century to their departure at the beginning of the Civil War. A museum was created in the early 1950s to display artifacts associated with their lives at Arlington.³⁷ In 1955, the

Lee Mansion was officially designated as the Custis-Lee Mansion to avoid confusion with Stratford Hall, the birthplace of Robert E. Lee.

1958-1964

In the spring of 1959, a bill was introduced to extend the ground of the Custis-Lee Mansion to allow for the "completion of the physical layout of the Mansion . . . representing a continuation of the plans of the Quartermaster General." On August 18, 1959, the land encompassing Mary Custis and Mary Lee's flower garden was transferred from the Department of War to the Department of the Interior.

Never satisfied with the Army's restoration campaign, especially that on the North Dependency, the National Park Service undertook its own restoration program beginning in 1958. The scope of work for the South Dependency included repair and maintenance, while that of the North Dependency was major restoration and reinterpretation. Before proceeding however, they documented the Army's past work through photographs and drawings. In 1964, the interior restoration of the North Dependency was effectively cancelled. Interpretation of these spaces was discontinued and the rooms reverted to single levels and utilitarian functions, serving as spaces for the book store, storage and a dressing room. Only the South Dependency would be interpreted along with the Mansion.

1965-2004

In the early 1960s with a tour bus system to Arlington National Cemetery contributing to an unprecedented increase of visitation, plans began to address issues of resource protection and interpretation. In 1966, the National Park Service created a master plan for the Custis-Lee Mansion. Four major factors contributed to the specific objectives of the plan. First, was an increase in understanding and regulation of historic resources with the passage of the Historic Preservation Act in 1966. The passage of this legislation encouraged the NPS to focus on historically significant properties through the allotment of additional funding toward their preservation. Secondly, the NPS responded to nationwide increases in visitation and limited funding with "Mission 66," a ten-year program to upgrade park facilities and improve resource management. Third, across the country, the theories of living history interpretation and their basis in the rise of material culture studies generated an increased focus on recreating settings helpful in telling specific stories. Tours of house museums led by costumed

guides, for example became increasingly common in parks. Lastly, a master plan was produced to guide management of the Custis-Lee Mansion. As the mission statement of the 1966 Master Plan read, "The interpretation and restoration programs at Custis-Lee National Memorial will provide the visitor with a moving personal experience leading to a clear understanding of R.E. Lee and his place in American history."

Through legislation introduced by Representative Broyhill in 1972, the name of the Custis-Lee Mansion was legally changed to Arlington House: The Robert E. Lee Memorial. In May 1975, pursuant to the Federal Property Administration Services Act of 1949, the National Park Service agreed to assume the preservation and management of the forested area located west of the Mansion. The kitchen garden was replanted with vegetables. Fruit trees and shrubs were also planted, including raspberries, gooseberries, currants, pears, cherries, and plums.

During the 1980s, the varied jurisdiction of the site continued to affect its development. In 1981, the comfort station immediately north of the North Dependency was transferred to the National Park Service. The land where the comfort building was located, however, was retained by the Department of Army and leased to the Park Service under a renewable five-year permit. The administration building, a reconstruction of the 1904 stable, was transferred to the Park Service, while the parking lot and nearby structures remained under Department of the Army ownership.

In the 1990s, the use of Section 29, the forested area west of Arlington House first set aside for preservation in 1964 by the Secretary of War, was reconsidered as space for burials. Realizing that the current Arlington National Cemetery land would be at burial capacity within ten years, Army officials approached NPS with a proposal to allow burials in portions of the wooded areas that could be determined not to have historical significance or archeological resources. On February 22, 1995, the Department of the Interior and the Department of the Army signed an interagency agreement to transfer portions of Section 29. A Cultural Investigation Report was written, in compliance with the National Environmental Policy Act and in satisfaction of the requirements of Section 106 of the National Historic Preservation Act and other legislation. The report detailed the existing cultural resources within the primarily wooded 24.44-acre parcel. A draft assessment was developed based on the Cultural Investigation Report and the environmental issues regarding the site. Released for public review in June of 1999, a decision on the land transfer is still pending.¹⁸

Few changes have been made to the two dependency buildings since their restoration in the late 1950s and 1960s. There have been some upgrades to the building systems and the grade on the front of the South Dependency has been slightly raised for improved public accessibility. Some time during this period, interpretation of the east and center rooms of the South Dependency was discontinued. At present, the east room is used for exhibit space and extra room for storage.

End Notes

- ¹ The deeds were recorded in Records of Fairfax County, Liber N, 223, 226.
- ² George Washington Parke Custis, *Recollections and Private Memoirs of Washington*, with a memoir of the author by his daughter, and notes by Benson J. Lossing. New York: Derby & Jackson, 1859, 254f., 504f. According to a contemporary report, Jack contracted camp fever while visiting a British hospital. Letter by Mrs. Ann Dulany, c. November 1781, quoted in Kate Mason Rowland, "Maryland Women and French Officers," *Atlantic Monthly*, LXVI (November 1890): 654.
- ³ Custis, *Recollections*, 254f.
- ⁴ Custis adopted Washington's concern about the lack of an adequate breed of sheep that would provide a fine grain wool to compete with the merino wool coming out of Europe. His wool production took an even more prominent form in his annual sheep shearing at his resort called Arlington Spring.
- ⁵ This 18,000 acres includes approximately, Mount Washington/Arlington House (1,100 acres), Washington Forest Tract (1,200 acres), Monockin and Smith's Island (6,000 acres), Romancoke (4,656 acres), White House (5,000 acres), and Arlington on the Eastern Shore (537 acres). For lists of inherited slaves see *The Papers of George Washington Volume 6 Colonial Series*, W. W. Abbott, editor "Schedule A: Assignment of the Widow's Dower." (Charlottesville: University Press of Virginia, 1983-1995): 217-220; Prussing, Eugene Ernst. *The Estate of George Washington, Deceased*. (Boston: Little Brown and Company 1927): 448-459.
- ⁶ This house is most likely the house identified by a 1746 map of the Howsing tract as belonging to a tenant of Gerard Alexander during the period of time in which the map was created. Howsing Tract Map surveyed by Daniel Jennings 1750; Tract map dated March 31, 1746. Surveyor Jeremiah Hampton et. al. George Washington Memorial Parkway Headquarters, Natural Resource Map Files, Turkey Run, Virginia.
- ⁷ This structure was altered during the construction of the southern wing, so that the wings of the buildings matched. It has been suggested that the building materials for Arlington House were taken from the site. This is difficult to prove. Murray H. Nelligan. *Arlington House: The Story of the Robert E. Lee Memorial*, (Burke, Virginia: Chatelaine Press, 2001), 74.
- ⁸ Julia King, "Honour's Temple: George Hatfield's Arlington House, The Most Conspicuous Residence in America," Department of Art Birkbeck College. University of England. <http://www.let.uu.nl/CIHA/posurs/097.htm>.
- ⁹ English architect George Hadfield's obituary in 1826 stated that he was the designer of the Arlington House. He came to the United States in 1795 to serve as superintendent for the construction of the Capitol Building in Washington, but was dismissed in 1798 after difficulties with the commission overseeing the work. "Obituary of Hadfield." *Daily National Intelligencer* (February 13, 1826). No plans of Arlington House as drawn by George Hadfield have ever been discovered.
- ¹⁰ Since the foundations of the dependencies are similar to those of the wings, earlier investigators suggest that they were built concurrently, some time before 1818. Paint studies done in 2003 suggest that the North Dependency was constructed before the South Dependency by a number of years and that when they first appeared together, they were not painted to match each other.
- ¹¹ In 1807, on the Washington Forest tract, an 1,100 acre forested property along Four Mile Run, Custis began construction of flour and saw mills. These were custom mills, small scale business ventures serving only the needs of the Custis properties and people in the immediate area. During his life, Custis would sell off land lots of timber from the Washington Forest Tract to supplement his income.
- ¹² A drawing of the south elevation of the north building was found in a scrapbook belonging to one of Lee's daughters, dated 1851.

¹³ Image of east façade of Arlington House, 1864 Civil War photograph of Washington and Virginia in the A.J. Russell Album, 1866-1867. RG 64. National Archives. Cartographic Branch, College Park, MD. Interview with James Parks, former slave at Arlington. Transcript circa 1925. ARHO.

¹⁴ 19th century insurance records required that the size of a building be described by the height of the façade; the front of the North Dependency is one story, the back is nearly two stories.

¹⁵ Calvert, Elizabeth Randolph. *Childhood Days at Arlington*. Undated handwritten manuscript (circa 1870).

¹⁶ *Alexandria Gazette*, July 6, 1831.

¹⁷ This description is based on a variety of sources including the Insurance Policy for Arlington House written by Robert E. Lee, dated 1859; U.S. Census Bureau Records 1850, 1860 Agricultural Census, Alexandria County, Virginia, National Archives. Washington DC; Arlington Corral & Co. Arlington, VA, July 25, 1865, Record Group 77, National Archives. This map is part of a land survey undertaken during the Civil War, documents the locations of Arlington farm buildings by indicating former use of Civil War army structures confiscated by the Federal Army. *Environs of Washington Map* (1864). National Archives, RG77.

¹⁸ Vlach, John. *Back of the Big House, The Architecture of Plantation Slavery*, (Chapel Hill: The University of North Carolina Press 1993): 34-37.

¹⁹ 1850 Agricultural Census, Alexandria County, National Archives, Washington, DC.

²⁰ Lee to W.H.F. Lee, Aug. 7, 1858, in Jones, *Reminiscences*, 377f.; same to Mrs. A.M. Fitzhugh, Nov. 20, 1858, Lee MSS, Duke University.

²¹ Such an upheaval in the relatively stable familial relationships within the slave community at Arlington, perhaps coupled with increased demands, resulted in a number of slaves running away between 1858 and 1861.

²² Major General Charles W. Stanford. May 25, 1861 as quoted in *The History of the Seventh Regiment*.

²³ Fred W. Conklin to "Charley." December 16, 1861. ARHO. Robert Goldthwaite Carter. April 25, 1862 as quoted in *Four Brothers in Blue* (Washington: Press of Gibson Bros., Inc., 1913).

²⁴ *Frank Leslie's Illustrated Newspaper*, "Our Camps and Strongholds." (New York) June 15, 1861.

²⁵ Most of the Washington relics left in the house at the time of the Lee family's departure were taken by the Federal authorities and placed in the Patent Office for the duration of the War. After the War, Mary Lee unsuccessfully sued the federal government for their return. Rose, Ruth Preston. "Mrs. General Lee's attempts to regain her possessions after the Civil War." *American History Magazine*. October 1978.

²⁶ Interview with the Gray sisters, 1929.

²⁷ Dicey, Edward. *Six Months in the Federal States* (London 1863), 16-18.

²⁸ Decker and McSween, 61; See also Dicey Edward, entry for March 1862.

²⁹ Freedman's Village was established under the authority of the Department of Army. Many Freedman's camps were established on both sides of the Potomac River. The first camps were constructed to deal with the influx of former and fugitive slaves into Washington. These camps quickly became over-crowded and proved unhealthy. The former Arlington slaves who were heads of households at Freedman's Village at Arlington during the first years of its establishment, included Margaret Taylor, Austin Brannen, Lawrence Parks, William Parks, Martha Smith, James Parks, Daniel Richardson, Bettie Taylor, Sallie Norris, Lousia Bingham, and members of the Syphax family. *Valuation of Property Holdings of Freedman's Villagers, Heads of Family and Owner of Improvement*. From Records of the Assistant Commissioner for the District of Columbia for the Bureau of Refugees, Freedman and Abandoned Lands 1865-1869, in Arlington Archives. Also see, National Archives. Microfilm

Publication. M1055 Roll21. Miscellaneous Reports and Lists.

³⁰ Libel of Information filed in United States v. All the Rights, Titles of Robert E. Lee etc., February 1864.

³¹ Eighteen years later the Temple of Fame was erected from the stone columns, entablature and frieze discarded from the U.S. Patent Office. One year later, the names of several Civil War heroes of the Union Army were engraved into the frieze around the domed roof and onto the columns.

³² By the time the village disbanded in the late 1880s, it was the oldest Freedman's Village in the country. Reidy, Joseph. "Coming from the Shadow of the Past: The Transition from Slavery to Freedman at Freedman's Village, 1863-1900." *The Virginia Magazine of History and Biography*: 408.

³³ Sealy, "Lee Memorial Plans Dropped," *New York Times*, October 26, 1925.

³⁴ "Lee Memorial Plans to be Dropped." *New York Times*, October 26, 1925.

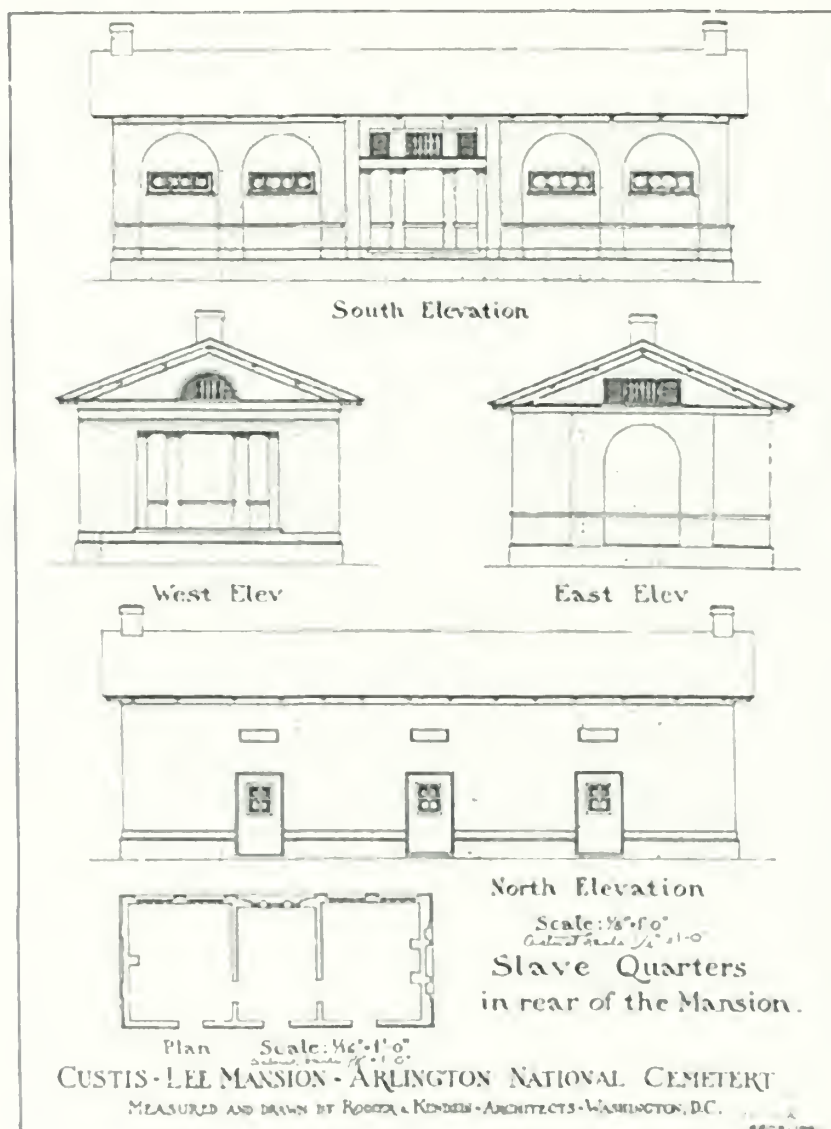
³⁵ The interior of the summer kitchen was re-excavated as it had been filled in sometime earlier.

³⁶ Harper L. Garrett, Assistant Historian, United States Department of the Interior, National Park Service. May 18, 1936.

³⁷ "Museum Planned as Adjunct to Lee Mansion." *Washington D.C. Evening Star*, April 18, 1950.

Part IB

Chronology of Development and Use



Rodier, 1924

Original Construction - to 1850

“Opening into this road at equal distances from the house, and as near as proportions will allow, are two long buildings consisting of three rooms each on one floor, the one of the east contains a kitchen and furnished homes for some of the house servants. The opposite one to the south accommodates a store room, wash and sleeping rooms.”¹ Written in 1845 by Elizabeth Randolph Calvert, the granddaughter of Mary Randolph and a cousin of Mrs. Lee, this description provides the earliest confirmed date of the South Dependency’s existence. The original construction date is unknown. Because its quarry stone foundation of the building is similar to that beneath the north wing of the Mansion, earlier investigators have speculated that the buildings may have been built at around the same time, before 1824.² Recent physical



Figure 1. South Dependency, northwest corner, 2003.

investigation and paint stratigraphy analysis of the two dependencies indicates that the South Dependency was constructed after the North Dependency. A conservative estimate of the initial construction date would fall between 1804 and the 1820s.

Few records exist concerning the early history of this structure. Its engaged columns, arches, and cornices were clearly designed to reflect and complement the architecture of the adjacent Mansion and mirror the already built North Dependency across the U-shaped courtyard (Figure 1). The building is approximately 40' x 20', oriented with the roof ridge parallel to the roof ridge of both the center section of the main building and the roof ridge of the North Dependency. The exterior dimensions and location on the site are presently the same as when originally built.

Exterior

Exterior walls are made of solid brick resting on an 18-inch thick stone foundation. As with the North Dependency, the rough manner in which the brick walls were laid (using underfired poor-quality bricks, a significant quantity of bat bricks, and inconsistent coursing) suggests that the South Dependency’s exterior walls were never meant to remain exposed. Recent physical investigation and finish analysis confirm that much of the current rough cast and smooth stucco finishes on the exterior walls are original to the building. The investigation also has revealed that a surprising amount of the historic wood moldings and embellishments—spindles, capitals, vents, and skirtboards have survived—in place, though some individual pieces have been replaced over time and a few others added at a later date.

From the yard the South Dependency’s exterior visually matched the North Dependency in its general scale (despite the latter having two full-sized levels), geometry, textured stucco, and key



Figure 2. West room, south wall, 1959, showing ghost of former late nineteenth century window opening.



Figure 3. South wall, 1959, showing different brick patterns within arches. The area within the box is where rows of larger blocks appear to correspond to altered surfaces.



Figure 4. West room attic, southwest corner, 2003 photo showing original joist with pegged scarf joint and lime-washed finish.

design elements. However, when first built, the South Dependency's woodwork color scheme was different than that of the North Dependency. Originally some of the South Dependency woodwork had a white finish flecked with quartz sand crystals meant to emulate stone—a marked contrast to the darker colors used on the North Dependency. Sometime before the 1860s, a distinctive bed molding was applied around the openings and to the capitals and cornices, and a rose-tan color was applied to both dependencies, harmonizing their appearance. For a detailed identification of original material on the South Dependency exterior, see Appendix E: Field Notes, sections 1 and 2 (stucco and woodwork drawings).

The three exterior door openings along the north elevation are in their original locations, though their height has been reduced since the 1850-60s. Because no nineteenth century photographs of the north elevation have been located, the details of the original doors are unknown. It is likely, however, that the doors (and cornices above) were similar to the North Dependency's six panel doors seen in the Civil War era photos.

George Washington Parke Custis reportedly painted the stucco panels above the north elevation doors. The framed panels above both the east and west door openings featured spread eagles, while that in the center featured a white horse. By the twentieth century, these paintings were severely deteriorated and "practically invisible."

Areas of the south elevation corresponding with the east and west rooms appear always to have had window openings set within the recessed arches.³ The horizontal openings present today existed in the 1860s. During the 1959 restoration, NPS architects working in Selina's room identified the ghost line of an infilled vertically-oriented window opening beneath the plaster (Figure 2). On the exterior, rows of larger brick or block appear to correspond with the altered surfaces on the interior (Figure 3). The former large window opening post dated the 1860s.

The south elevation center bay was constructed with a niche featuring a pair of wooden louvered vents flank-



Figure 5. West room attic, south pitch, 2003. This rafter was reused when the QMC rebuilt the South Dependency's roof in the 1880s. Its whitewash finish matches an original joist from the same location that is known to have not been moved to another position (*shown in Figure 4*). This suggests that though the rafter may not be in its exact original position, it is probably original to the South Dependency roof system.

ing a set of enframed spindles. The woodwork rests on a wood architrave and four engaged plaster columns. The east and west gable ends were built with recessed areas: on the east, a simple recessed arch and on the west, a rectangular recessed area with engaged columns. Within each gable of the east and west elevations were attic vents with enframed spindles and louvers.

The original roof structure and the upper masonry walls on which the system rested were almost completely replaced following the Civil War. The current understanding of the historic roof system was gathered through visual inspection, review of 1950s NPS drawings, limited views in historic photographs, and onsite investigation comparing surviving elements above the west room of the South Dependency and above the three rooms in the North Dependency.

Original joists along the west wall of the South Dependency's west room, as well as four original rafters above the west room (and original members above the North Dependency) provide some indication of the historic roof configuration. The surviving joist to the south of the fireplace is actually two separate timbers with a pegged scarf joint near the south end where the joist enters and extends beyond the exterior brick wall (Figure 4). Historically, these joists ran the width of the interior and extended beyond the outer walls to function as outriggers. As above the North Dependency west

room, the joists were probably set 4' on center and the rafters spaced more closely to provide a stable support for the lath sheathing and wood roof shingles.

A number of reused rafters measuring approximately 3'-1/4" to 4" by 3'-3/4" to 5'-1/4" survive above the west room. At least one has a lime wash finish matching the lime wash found on a nearby joist (that is known not to have been relocated) indicating that this rafter, though reused, probably came from the same original roof structure (Figure 5). Without access to the top side of these beams, they provide little additional information about the original sheathing and shingle spacing of the South Dependency's roof. Originally, the South Dependency roof structure was covered with wood shingles probably over lath skip sheathing.⁴

Interior

Both the historic record and physical investigation indicate that the South Dependency interior had always been divided by the existing brick demising walls into three distinct spaces: an east, west and center room. Both end rooms were roughly square shaped while the center room was rectangular with the longitudinal axis running north to south. The east and west end walls of the building had brick fireplaces in the center with chimneys extending through and above the roof ridge. Early on in its history, the South Dependency interior had a plaster finish. All three rooms appear to have been constructed with ceiling joists set into pockets in the masonry approximately 8'-6" above the 2003 floor level on the east and west walls. Physical investigation confirmed that the three center sets of pockets in the center room were original to the building's construction. In the east and west rooms, oral histories of former slaves suggest these joists (probably along with additional joists near the north and south walls) supported lofts that were used as sleeping (west room) and storage spaces (east room). In the center room, the joists may have been used to suspend meats during curing. Joists were set within pockets that passed through both of the interior walls (indicating that the loft levels were set at the same height in each room). Upper level spaces were likely reached by a wood ship's ladder for efficiency and space as no evidence of built-in stairs has been uncovered.

1850-1865

There were no known physical changes to the South Dependency during the period of significance. In the summer of 1855, as Robert E. Lee commanded the 2nd Cavalry in Kentucky and Missouri, the Mansion underwent a "renovation." Work included plastering, decorating, and furnishing the drawing-room, as well as the redecoration of other rooms.⁵ When he returned in 1858, however, Lee wrote that, "Everything is in ruins and will have to be rebuilt." Other letters noted that the mansion house and stables leaked, and the mill required \$800.00 in repairs.⁶ During Lee's first year of stewardship, he improved the estate to a degree that compelled him to raise the valuations he placed on the Mansion and dependent buildings from \$8,000.00 to \$9,100.00.⁷ Work included repairs to the overseer's house and the mill, covering the Mansion and stable, and laying the foundation for the barn. There was no mention of any work done on the dependencies, and photographs from the 1860s suggest that the renovation campaign did not extend to these buildings.

On an 1859 fire insurance application, Lee referred to the entire South Dependency as a store house.⁸ However, former slaves interviewed by the Quartermaster Corps as part of the restoration of the quarters, and physical investigations undertaken in 1929, 1959, and 2003 indicate that the building's west room housed Selina's family, the center room served as a smoke house, and the east room was the estate store house.

Oral History Relating to the South Dependency Interior 1850-1865

Elizabeth Randolph Calvert, an 1845 visitor to Arlington writing in the 1870s, stated that the South Dependency was used as a store room, laundry room, and living space. When Arlington's former slaves were interviewed in 1929, the daughters of Mary Lee's house slave, Selina Gray, stated that the Gray family (Selina, her husband Thornton, and their eight children including Emma, Sarah, Annie, and Ada) lived in the South Dependency's west room during the 1850s. At the time, the space was divided into "a room at floor level and an attic reached by a steep stair."⁹ The Gray sisters recalled that the east room functioned as a store room for issuing supplies of meat, meal, lard, and flour to the plantation slaves.¹⁰ According to the QMC, the former slaves also stated that the center room was used as a smoke house.

Photographic Documentation from the 1850-60s

Photographs taken by Army photographer Andrew Russell on June 28 and 29, 1864 (often referred to as the "Brady photos") show the South Dependency in a sound, though poorly maintained, condition (Figures 6 and 7). Unfortu-



Figure 6 (left and below). West elevation, 1864, original and close-up. Photos by Andrew Russell show that the South Dependency was poorly maintained at the time. Note the missing louvers in the arched attic vent and the deteriorated mortar joints in the exposed masonry foundation.





Figure 7 (left and above). South elevation, original and close-up. Andrew Russell's 1864 photo showing wide horizontal windows with three vertical mullions for structural support.

nately, the images are limited to views of the west end of the south elevation and the west elevation; no known mid-nineteenth century photographs of the north elevation and doorways or any interior photographs have been located. These images reveal a structure that, on the outside at least, is remarkably similar to that seen at Arlington today. The walls have a rough cast stucco finish with recessed areas of smooth stucco, resting on an exposed stone foundation. At least one of

the images shows how the chimneys were configured and some evidence of the historic roof comb (Figure 8). All other features including the outriggers, capitals, window openings, and other features shown in the photographs essentially match the current form and detailing of the building.

Most of the masonry foundation visible in the photographs needed repointing. The louvered vents set within the arched opening in the west gable were almost completely missing, the space behind them apparently filled in with a flat board. A molding was unseated from its place below the arch. It is not clear whether this level of deterioration (also seen on the North Dependency in other contemporary photographs) was a result of the Army's use of Arlington during the war, or whether this condition predated the Lee's departure.

Physical Evidence Relating to the Appearance of the South Dependency 1850-60s

As part of the research for this Historic Structure Report, limited physical investigation was undertaken on the exterior and interior of the South Dependency. Because the east room was in active use as an exhibit space and the west room functioned as the interpreted "Selina's Room," the in-depth physical investigation was limited primarily to the center room (a space that at the time was closed to the public and used for maintenance and storage) as well as the loft above Selina's room. From

the investigation of the center room, some conclusions could be made regarding features likely to be found in the end rooms.

Information gathered during this investigation is supplemented by evidence obtained through the archeological investigation that extended to all three interior rooms after the onsite architectural investigation had been completed. Additional information was gained through examination of photographs documenting the 1959 NPS restoration. Unlike the North Dependency, the basic interior of the South Dependency was not as extensively altered. However, the appearance of its interior rooms will be best understood when, in advance of the future restoration program, the current room functions are suspended, 1929 and 1959 materials are selectively removed, and additional original material is physically examined.

Physical Evidence - Exterior

Historic photographs, visual examination, and selected mortar and paint analysis have revealed important information about the South Dependency's exterior appearance during the period of significance. Paint analysis in particular helped establish a general chronology of work on the building, indicating the order in which various elements and finishes were applied or replaced over time. The investigation identified areas of rough cast and smooth stucco finishes that date to the period of significance, and distinguished this material from later patches. Much of the rough cast on the upper portions of the exterior is original to the building and was the finish present in the mid-nineteenth century. The historic



Figure 8. South elevation, close up of gable end and chimney, from Figure 6 photograph. Shows the chimney and roof comb as seen in the 1864 Andrew Russell image.

rough cast is a combination of pebble aggregate suspended in a lime matrix. During the period of significance, it was painted with a distemper wash, medium rose in color."

Paint analysis of the woodwork on the South Dependency revealed a significant number of elements that were original to the structure. The moldings, sash, and frames that are later pieces are replaced

previously existing elements. In other words, the current location of almost all of the woodwork is appropriate to the period of significance, even if that woodwork is not original to the 1850-60s. Some of the replacement woodwork lacks all the detail of the original fabric. Among the surviving original building fabric are many of the outriggers on the north and south elevations; vents and spindles on the north, west, and east elevations; columns and capitals on the west and south elevations; and fascia boards in the center bay of the South Dependency. Some of the historic features that date to the original construction had, as their primary paint layer, a white sand paint finish meant to replicate stone. By the 1850s they were painted a red ochre color.¹² For additional information on which finishes and decorative elements currently found on the South Dependency are historic, see Appendix G: Field Notes Sections 2 and 3 (stucco and woodwork drawings).

Physical Evidence - Interior

A limited amount of physical investigation was undertaken on the South Dependency during the 1929 QMC restoration, primarily to ascertain the historic function of the center room. This work was done while the restoration was underway and was focused on corroborating information gathered through interviews with former slaves. There is little discussion of the building's condition and characteristics prior to the QMC beginning work and little interpretation of the historic joist pockets, significant areas of historic plaster, and other original features that were undoubtedly revealed in the course of restoring the South Dependency. There is also scant record of the physical investigation NPS undertook as part of their restoration in the late 1950s. Though a series of photographs of the work in progress have survived, little information was recorded about what was found when the 1929 loft and plaster finishes (installed during the QMC restoration) were removed. Records mention sending sample materials off to a government forensic lab and plans to retain samples as a historical record, yet no reports or material samples seem to have survived. For a more detailed discussion of the restoration campaigns undertaken by the QMC and NPS, see the relevant sections below.

West Room

Since the 1929 QMC restoration, this room has been interpreted as "Selina's Room," home during the period of significance to Arlington's chief house slave Selina Gray, her husband Thornton, and their eight children. Because the west room was still interpreted as "Selina's Room" and open to view by park visitors, study of the space was limited primarily to visual investigation and measurements. However, the architectural team was able to examine the work of the archeological team that occurred later when the room was closed for interpretation.

Floor

In November 2003 and July 2004, archeologists gained access to the interior and opened one excavation unit extending from the hearth, and another unit to the doorway. Conclusions based on the recent archeological investigation reveal that the historic floor was just .85 of an inch below the current brick floor (which dates to the 1959 NPS restoration and has been relaid at least once since then). What appears to be a layer of historic plaster beneath the current (NPS) layer extends below the current floor level, further evidence of a lower floor position.

Archeologists also uncovered a hard pan surface within the fireplace, a feature consistent with the heat signature of a dirt hearth. The position of this hearth and its relationship to the other strata discovered during the investigation indicate that historically the room had a dirt floor.

Fireplace

A visual inspection of the inside of the fireplace and chimney (and review of images taken during the 1959 NPS restoration), reveals that this feature has undergone at least three alterations. Despite this history of change, large portions of the original floor have survived. The middle section of the chimney appears to be original—an indication that the chimney's current breadth during the period of significance was the same as today (6'-0" wide). Even the outer edges of the fireplace walls at the lower edge of the feature may have survived largely unaltered since the early nineteenth century. Much of the work on the fireplace over time has focused on changing the proportions of the firebox; its characteristics today are not typical for a nineteenth century room fireplace. Originally the side walls were splayed, rather than squared. The current angle iron lintel dates to the NPS



Figure 9. South Dependency, west room, 2004, an excavation unit by the front door revealed clues as to the historic location of the floor level.

restoration and appears inaccurate. During the mid-1800s, the opening in all likelihood was bridged with a flat jack arch lintel. The current one-inch lip on the chimney face, approximately 1'-9 1/2" above the head of the firebox, is not historic and was probably added as part of the 1929 QMC restoration. Areas of the upper chimney, between the 1880s rafters and joists, have also been altered. Key bricks protruding from the north side of the west gable wall and other disturbances to the



Figure 10. Recent archeology reveals that the historic floor was less than an inch below the current brick floor and that the hearth and floor had a dirt finish, 2004.

upper chimney indicate that portions were rebuilt, sometime during the nineteenth century. In this area, just below the roofline, the chimney measures approximately 1'-9" square. The chimney above the roofline was rebuilt in 1964.

Loft

It is known that the loftspace would have been fairly confined, just 7'-0" in height directly below the roof ridge, and descending to only 3'-7" near the north and south walls. Roof joists about 3'-0" above the loft floor and spanning the space at approximately 4' intervals would have further diminished the comfort of the loft. The space lacked windows, with two small vents on the west gable wall providing the primary source of fresh air. The original joist and areas of original brickwork above the west room have layers of white and gray wash finish that predate the post-Civil War era (when the space was effectively sealed off by removing the original loft and installing a new ceiling immediately below the roof joists). It appears, therefore, that the original loft area had exposed brick walls with a whitewash finish covering the brick and joists and possibly the rafters, lath, and undersides of the wood shingle roof.

The QMC purportedly installed the 1929 restoration loft in historic pockets (on the east and west walls) that they uncovered during their physical investigation. In 1959, the National Park Service removed this loft level, rebuilt the pockets and installed a plaster ceiling at the same height (approximately 8'-6" above the 2003 brick floor). Further investigation is necessary. By removing select areas of the current plaster layer around the historic joist pockets and along potentially undisturbed areas where the historic loft met the wall, information about the loft's position could be confirmed. Especially important would be indications of whether the underside of the loft had a finished ceiling or open joists.

Walls

The uppermost layer of plaster covering the west room's walls dates to the 1959 NPS restoration. It is clear from the shallow protrusion of the earlier window frames and sills along the south wall that this existing plaster is considerably thicker than that present during the period of significance. Physical examination of the center room's three historic joist pockets revealed that they extend through the west wall (an interior party wall) and probably served as pockets for the beams to support the loft above the west room. The pockets would also help establish the original ceiling height.

Center Room

In 1929, the QMC reportedly found physical evidence that the center room was used as a smoke house. According to L.M. Leisenring, the architect in charge of the restoration, "when a later covering of plaster was scraped from the old walls they were smoked and blackened and the pungent smell of hickory smoke was very strong for several days." Leisenring asserted that this discovery preceded the former slaves' oral accounts of the room function.

This space is the only room in either dependency that had louvered vents (on the south wall), rather than window sash. Such a configuration would have been conducive to smoking meat. Fitted coverings behind the louvers would have been closed during the smoking process and then opened and smoke vented through the louvers when the process was complete. Typically, smoke houses did not have chimneys or draft vents; the curing process depended on smoke generated from a smoldering

Figure 11. Center room, east wall, 2002. Intact 1959 plaster (A) has been removed revealing QMC plaster (B) covering brick infill over an interior door opening created when the Gray family occupied all three South Dependency rooms after the Civil War and infilled before the 1929 QMC restoration. When examined through a microscope, the original plaster (C) showed a considerable accumulation of soot and oil—remnants of the room's original function as a smoke room for meat.



fire often set on an open hearth. Yet the use of the center room as a smoke house, located within a larger structure between a store room and a living space, remains highly unusual. Throughout the east coast, the predominant eighteenth and nineteenth century smoke house type was of a detached structure, separate from the other buildings. Yet, recent physical and archeological investigation confirmed that during the nineteenth century the center room did indeed function as a smoke room.

Walls

As part of the recent physical investigation, select areas of twentieth century plaster were removed from the center room walls. Beneath these layers was an original layer, portions of which were in surprisingly good condition (Figure 11). The plaster finish was only a single coat thick, in some areas barely concealing the brick beneath. Under magnification this historic plaster layer (also identified on the upper east and west walls where it was not covered by 1959 NPS plaster) had a thick accumulation of soot and oils, likely remnants of the center room's use as a smoke chamber.

Beams

NPS plaster was removed during the recent study from the areas corresponding to the position where the NPS in 1959 and the QMC in 1929 installed several beams hung between the east and west walls. During both restorations these beams supported hanging meats for the interpretation of the space as a smoke room. The current investigation revealed that the three center joists (located toward the center of the room) corresponded with pockets, located approximately 8'-6" above the 2003 floor, that were original to the dependency's construction (Figure 12).

Examination of the additional two sets of surviving pockets in the far ends of the room indicated that they were probably not original to the structure but were created either at the time the South Dependency was converted to a single living quarters for the Gray family (to provide a loft area), or in 1929 as part of the QMC restoration. These end pockets were much less well defined than the center three sets and were surrounded by significant areas of disturbed brick and mortar. They were infilled in 1959 when the NPS reinterpreted the smoke room.

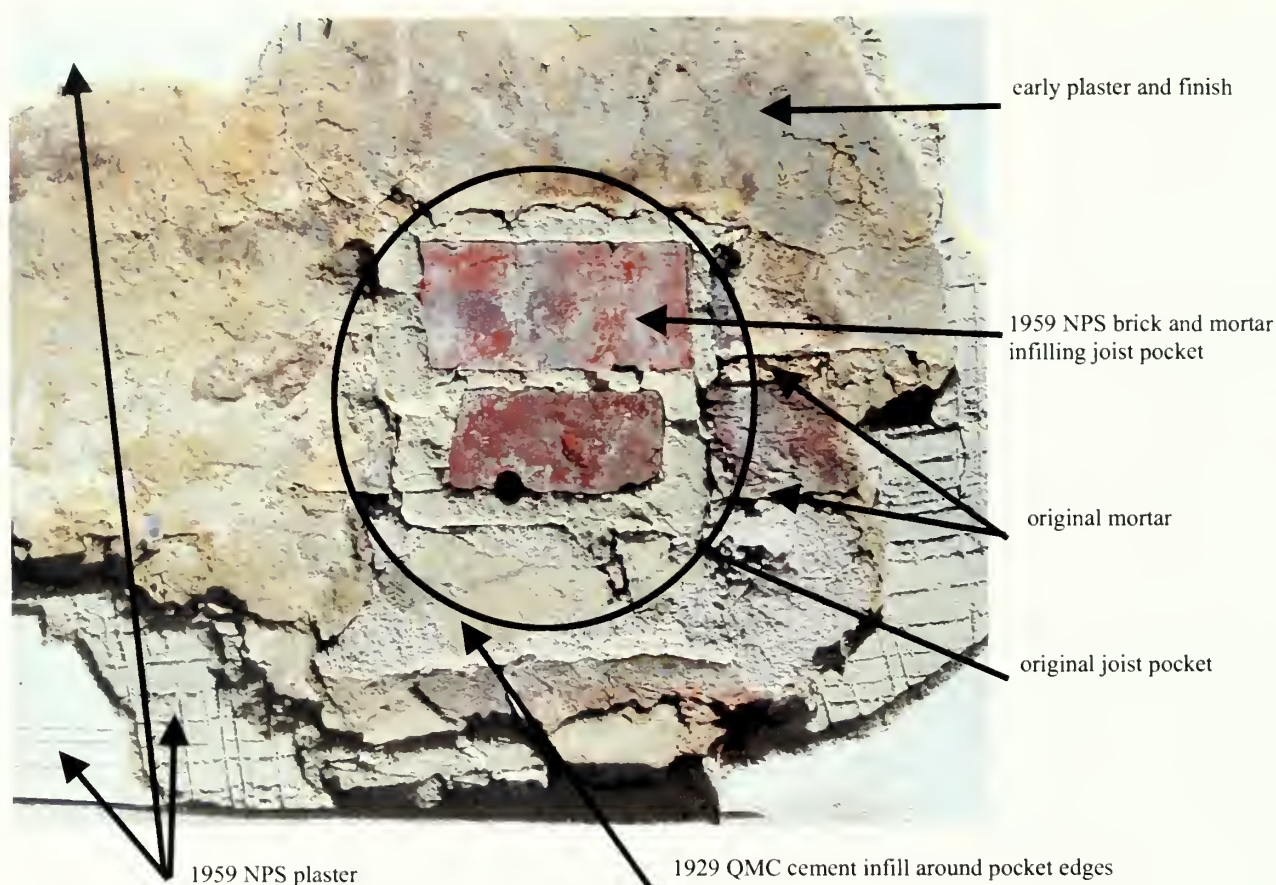


Figure 12. South Dependency, center room, east wall, 2002, physical investigation revealed the original loft joist pockets and the various treatments they underwent in 1929 and 1959.

The original three sets of pockets in the center of the room were 5-3/4" to 7-1/4" wide by 6" to 9-1/2" high. Considering the nature of the construction of the dependencies, it is assumed that these beams were not left in the round, but rather were sawn, hewn, or a combination thereof.

Floor

In 2003 and 2004, the archeological team opened an excavation unit in the middle of the center room floor. With the discovery of two distinct hearths carved in the earth floor surface, the work further confirmed the center room's historic use as a smokeroom. The upper hearth filled with charcoal remnants was located directly beneath the current sand and brick floor. The close proximity of this hearth to the surface and the presence of post-Civil War era artifacts beneath the hearth indicate that the feature was of relatively recent construction. It was probably inserted in 1929 as part of the QMC restoration of the space as a smoke house. The layer of fill between the upper hearth and lower hearth may correspond to the period when the Gray family inhabited the entire South Dependency and the center room was no longer used for smoking meat. The earlier hearth, carved into the subsoil, appears to be original to the structure and likely a feature present during the period of significance. This basin-shaped hearth was larger, contained several water-worn stones scattered around its base and also featured a lens or layer of charcoal. The archeologists reported that no distinct heat signature was found along the base of the feature suggesting that only low-temperature fires burned in the hearth (Figure 13). The floor of the smoke house was dirt at a level .95 feet below the 2003 brick floor.

East Room

As the east room walls and space above the current ceiling were inaccessible during the current study, no new physical evidence has been uncovered about the east room and its historic use as a store room. Due to extensive mid-zone disturbance of the floor, the recent archeological investigation in the center of the east room turned up little additional information. Physical investigation of the center room's historic joist pockets revealed that they went through the east wall (an interior party wall) and probably served as pockets for beams to either support a loft space above or for hanging household goods stored in the east room. An excavation unit revealed that construction of a modern concrete fireplace base and a utility line had destroyed any evidence of the historic fireplace in the floor. No intact historic living surface was found.



Figure 13. South Dependency, center room, an excavation unit uncovered evidence of cooking hearth used for smoking meats, 2004.

1866-1885

During the first phase of the development of Arlington National Cemetery, all efforts of the staff were directed at interring soldiers and laying out the cemetery. Some of this work is described in the Secretary of War's 1865 Annual Report as well as Arlington Superintendent Thompson R. East's reports for the period of June 1, 1867 to July 31, 1869.¹³ There is no mention of any repairs or improvements being made to cemetery buildings, namely Arlington House or the South and North Dependencies either during or immediately after the war.

Thompson East's reports and those of superintendents that followed were filed monthly with the Quartermaster General's office. They described the condition of, and any work on, the buildings, roads, walls, water supply, and graves at Arlington. Some of these reports had a space for information about the condition of the dependencies, though it was often left blank or filled in with the phrase "same as last report." Though not mentioned specifically, it is known that sometime before the 1870s, two doorways connecting the center room with the east and the west room were opened up in the South Dependency. The openings provided the Gray family interior access to all three rooms and remained a feature of the building's interiors until the 1929 QMC restoration (Figure 14).

Following the war, the first explicit mention of the dependencies in any postwar maintenance report was in April 1869, when Superintendent East wrote that "the old kitchen and servants quarters in rear of mansion are in a state of decay."¹⁴ In 1870, the description of the dependencies in the Monthly Report changed from "a state of decay," to "an advanced state of decay." When E. H. Harner took over as superintendent in late 1870, his first report on the condition of the cemetery stated "The two outhouses near the main building are very old and nearly worthless. I respectfully ask that these buildings may be inspected with a view of ascertaining whether they are worth the cost of repair."¹⁵ Harner's concerns were repeated in subsequent reports until August 1871 when he included estimates for repairs of the outbuildings totaling \$1,300.00. He noted that making the buildings habit-

able would require an additional \$500.00. Because the report indicates that the dependencies needed to be made “habitable,” it is unclear whether this signaled that the Gray family had vacated the space.

Repairs were approved and work, including plastering, whitewashing, and painting the woodwork, was undertaken in September and October 1871.¹⁶ A monthly report from June of 1872 stated that good condition until 1878 when the Quartermaster General’s office authorized the Arlington superintendent to repair the roofs of the mansions and outhouses.¹⁷ At that time, reports stated that the mansion’s shingle roof had slate nailed on top of a previous layer of old wood shingles. The wood shingles had deteriorated to the point where the nails no longer secured the slate. Repairs to the mansion roof were undertaken in June 1878, but subsequent records indicate that the work on the dependency roofs was delayed until the mid 1880s.

The dependencies were reported to be in good condition until 1884 when the superintendent stated that the “outhouses [were] in very fair condition, except one building connected with the mansion, which needs a new roof.”¹⁸ It is not clear to which building this note refers, as there was no known connection between either of the dependencies and the mansion. It appears, however, that the dependency roofs were not significantly repaired at the same time as the mansion roof in 1878. The September 1884 monthly report noted that the dependency previously described as being in bad condition was covered with a new slate roof.¹⁹



Figure 14. South Dependency, center room, northeast corner, 2002. Recent physical investigation revealed the door opening (created sometime after the QMC took over Arlington in 1861) that connected the center room with the east room. An identical opening was made on the west wall. Both allowed the Gray family interior access to the three South Dependency rooms that they occupied at the time.

In May 1885, a letter was written by QMG staff prescribing treatment for the other dependency roof. "The outbuildings should be covered with slate to correspond with the other outbuilding, reroofed last fall. The woodwork appears to be solid and would probably not have to be renewed. If it did, the extra cost would be about \$100.00."²⁰ During the summer of 1885, plans and expenditures were authorized for reroofing the dependency, as well as the mansion wings. A specification list prepared in September called for:

... removing sheathing and shingles from roofs of outbuilding and wings of the Mansion, indicated on accompanying drawing by red shaded lines. If any of the rafters are found to be rotten, out of line, or insufficient in number to support a slate roof, replace or correct them, and make such additions, as may be necessary. Sheath with common inch boards, well-seasoned and sound, surfaced, and of uniform thickness – to be laid with close joints and well nailed. Cover sheathing with best roofing felt. Slate with best No.1 Buckingham slate, 12"x 24" – 3" lap, 10 1/2" to weather, well nailed with galvanized nails. Finish in best manner at ridges. Valleys to be properly tinned and chimneys flashed. Tin to be IX Charcoal, painted both sides, well soldered, where necessary, and made secure against

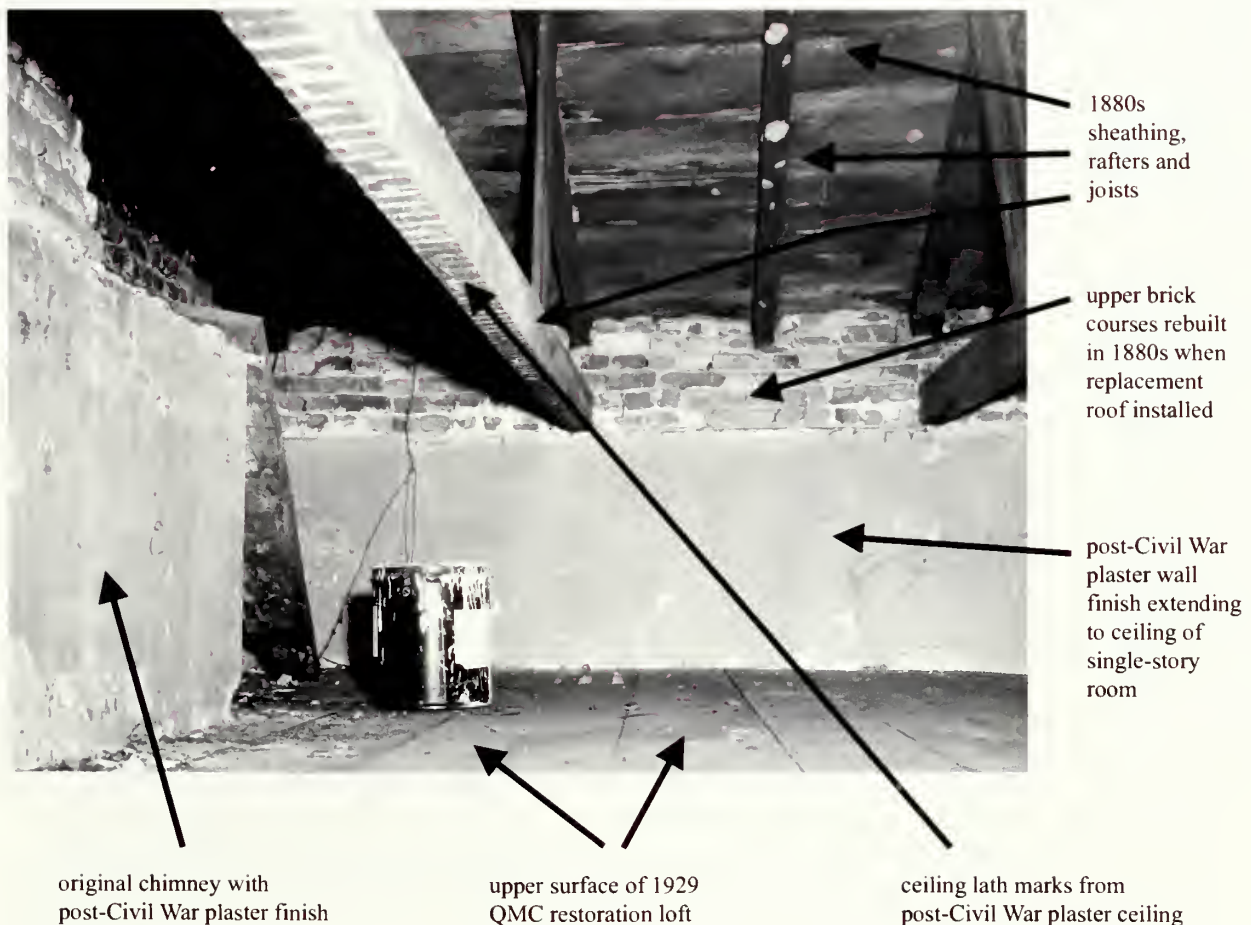


Figure 15. South Dependency, east room, 1957, space above QMC loft. When the QMC installed a loft in 1929, they closed off this upper area from view. Lath marks on the 1885 roof joists indicate the presence of a finished ceiling and layers of plaster date from the time after the Civil War when this space was a single level room. The roof system and portions of the historic plaster survive today above the west room loft.

leakage. Overhaul present gutters and conductors and put them in thorough repair, including painting, if necessary. Do any carpenter work, and painting, about the roofs, including repairs of cornices, necessary to put the whole in proper order. The whole to be done in a thoroughly complete and workmanlike manner, and guaranteed against leakage for one year. There will be about 46 squares of sheathing and slating.²¹

A subsequent examination of the roof showed that the “woodwork” of the roof was indeed deteriorated and would probably have to be renewed.²² Replacement of the dependency’s wood shingle roofs with slate was also confirmed by David H. Rhodes, Arlington’s landscape gardener from 1873-1930. In an oral interview conducted by the Quartermaster General, Rhodes recalled that in “about 1890 the old shingle roof was replaced with a slate roof as fire protection.”²³ If the earlier loft ceiling/second floor level had not been removed during the early 1870s work on the South Dependency, it was probably removed at this time.

The roof framing present in the South Dependency today is the same construction that was installed in the 1880s. In the September specifications, the mention of “additions as may be necessary” and “Do any carpenter work, and painting, about the roofs, including repairs of cornices, necessary to put the whole in proper order” ended up involving significant work on the roof. Some of the original outriggers that were probably extensions of original roof joists were removed and rebuilt around a new system of roof joists. New rafters, butted together at the peak, were set on top of the newly rebuilt walls. Continuous sheathing was added to the rafters. With the exception of approximately four original rafters reused from other locations and one original roof joist (directly against the west wall, the south corner), all of the roof framing above the center and west rooms dates to the 1880s.²⁴

1886-1927

There is little information about the condition and work done on the South Dependency during this period. An 1897

photograph of the southwest corner of the building shows it almost entirely covered in ivy. Only the recessed arches (areas corresponding to the smooth stucco finish) are free of growth. Another photograph, taken around the same time and from the same angle, also shows this growth covering the south elevation with



Figure 16. South Dependency, south elevation, 1897. Note the dark color of the moldings on the west elevation and portions of the south elevation. The offset between the window sash and the window mullions currently found on the building are also visible here.

the exception of the recessed arches and center square niche (Figure 16). The ivy wraps around the corner of the west elevation.

No known work was undertaken on the South Dependency again until 1903 when a \$35.00 authorization was made to rebuild the deteriorated fireplace in the tool room.²⁵ It is not clear whether this is referring to the east room or the west room, though the former seems more likely. By this time it is possible the space was unoccupied as a 1904 map calls the building a store room.²⁶ Two years later both of the dependencies were included in a painting contract that also covered the toilet, well house, water tank, amphitheatre, rostrum, and temple of fame. A circular inviting bid to do the work called for painting the "entire outside of two sets servants quarters with two coats pure white lead and oil tinted light drab."²⁷ Also that year, a five-inch gutter system was installed on the South Dependency for the first time.²⁸

There are no records to suggest that any changes or significant work was again undertaken on the South Dependency until after World War I. As interest in returning Arlington to its pre-Civil War appearance and converting it to a public house museum gained momentum, the Quartermaster General permitted Washington architect Gilbert Rodier to make measured drawings of both the Mansion and the South Dependency. Rodier wrote that drawings "would be not only of great architectural and historical value to many people, but also prove a great practical benefit to the Government in the unfortunate event that any part of the building were destroyed or damaged as well in the event that an improvement or restoration were to be made."²⁹ The drawings, completed by the spring of 1924, indicated how the dependency appeared before the Quartermaster General began the restoration (Figure 17). The South Dependency drawings and photos accompanied a March 1924 article in *Architectural Forum* about Arlington.³⁰

The following year the 68th Congress passed Public Resolution No. 74 authorizing the Quartermaster General to restore the mansion and the adjacent buildings in honor of Robert E. Lee "as nearly as may be practical to the condition in which it existed immediately prior to the Civil War." Initial Army estimates for structural changes, repairs and refurbishing the mansion and the dependencies came to \$160,000.00. In this estimate the North Dependency was already referred to as the "Summer Kitchen" and the South Dependency was called the "Slaves Quarters."³¹

Planning for the restoration continued for the next three years but no physical work was undertaken on either the house or the dependencies until 1928. It was clear early in the planning stage that the restoration would not adhere strictly to Congress' request that the house be returned to its appearance immediately before the Civil War.³² Instead, the restoration

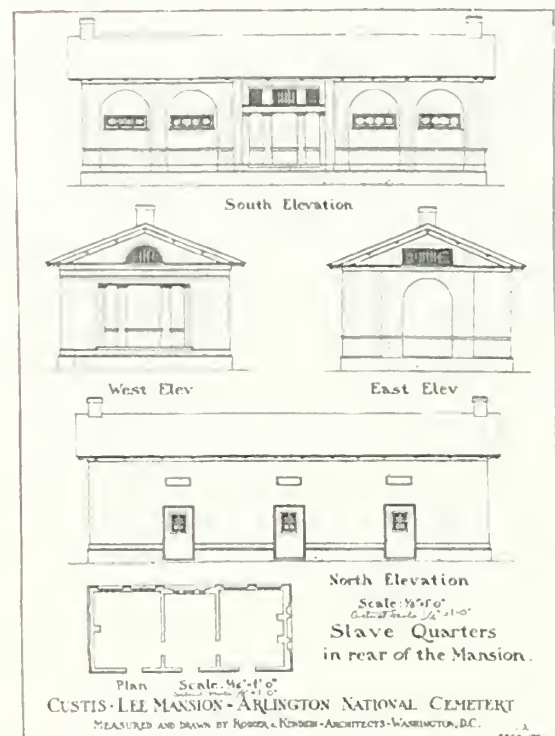


Figure 17. South Dependency, Rodier drawings, 1924. Note that the interior openings, created for the Gray family and linking all three rooms, are still present.



Figure 18. South Dependency, north elevation, shortly after the QMC restoration, 1923. Ongoing moisture issues are plainly evident on the lower portions of the wall.

was guided as much by contemporary aesthetic tastes as historic accuracy. Because most of these decisions related to the mansion interiors, the dependencies, with their bare plaster walls and utilitarian function, were probably not significantly affected by this approach.

Meanwhile, the condition of the dependencies was deteriorating. In 1926, the Arlington National Cemetery Superintendent Robert R. Dye wrote to the Quartermaster Supply Officer asking that steps be taken, “to thoroughly repair, both inside and out, including painting, the Custis-Lee Mansion and the two small outbuildings that comprise the original buildings of the cemetery, these buildings are getting in such dilapidated condition that they detract from the good appearance of the place, the walls need repainting, rooves [sic] and gutters as well as a good part of the woodwork should be immediately gone over and the outside of the buildings given at least two coats of paint.”³³

The letter also acknowledged plans to restore the structures, but argued for immediate repairs because appropriations for the restoration were unlikely for some time. Accompanying the letter was a more specific description of the dependencies’ condition. It stated that the walls and woodwork of the south building were badly in need of repairs. Roof sheathing and wood cornices were decayed and falling out and the exterior finish was missing from some areas, exposing the brick beneath to wear and the elements. The total estimate for work on the dependencies was \$700.00. Almost one-third was necessary for renewing broken slate, and removing defective roof sheathing on the south building. Smaller portions were devoted to sheet metal repairs for both buildings, replacing defective sheathing, cornice, and other trim, repairs to brickwork, replacing exterior rough cast, and painting the exterior walls and woodwork of both buildings. It is not known whether any of the work was undertaken, though subsequent records suggest that it was deferred.³⁴

1928-1933

In 1928, Congress appropriated \$10,000.00 to make a complete investigation and survey of the conditions of both the Mansion and the dependencies prior to their restoration. The Quartermaster General’s office established a committee to oversee the restoration, conduct hearings, and interview

witnesses who could share information about the history of the house, its appearance, function, and furnishings. A committee report was to be issued with treatment recommendations for the Mansion and “the subsidiary buildings in the rear of the Mansion, known as the kitchen and slave quarters.”³⁵ That year a photograph was taken of the South Dependency’s north elevation showing the eastern half almost entirely covered with ivy. Each of the wood doors featured a small four-light fixed sash. Significant areas of spalled stucco finish (revealing brick beneath) could be seen along the first two feet above the foundation. (Figure 18)

On the South Dependency, it was clear that most of the work would involve repair rather than restoration. An August 1928 letter to the Quartermaster Supply Officer included a recommended list of work to be done on the south building, including:

- Rebuild end wall (falling down) [this would have been in reference to the east wall]
- Renew stucco on columns
- Renew wood cornice
- Copper gutters
- Copper ridge
- Copper downspouts
- 2 Sets Wood Louvers
- Replace glass and incidental repairs to sash
- Replace broken slate
- Paint exterior
- Total for Slave quarters.....\$1000.00

The Quartermaster General’s office advised that the work “should be carried out strictly with old methods, and every detail should be carefully supervised to avoid irreparable injury to work which must be preserved in its historic character.”³⁶ In December 1928, additional estimates were calculated, in this case for “refurnishing” the interiors of the three rooms in the Slave Quarters. Though the original estimate was for \$1,500.00, later that month, the QMG approved \$1,200.00 for interior work, and \$500.00 for heating the building.³⁷

After an April 1929 meeting of the Arlington committee, the Quartermaster architect L.M. Leisenring wrote that the committee agreed that “the two out-buildings and slave quarters and the summer kitchen building be restored as nearly as possible to their original condition to illustrate their original use” and “that one room in the south dependency be finished and equipped to serve as an information and reception room, but that no changes be made in the exterior of the building to accomplish this result.”³⁸ An undated memo labeled simply “Restoration—General” mentioned that “As a result of studying the Brady photographs it seems evident that the Smoke House was stuccoed in the same texture as now exists and that these extended to the top of the rubble stone base which is left in its natural state. These photographs also confirm other features so that there is little or no doubt as to the exterior appearance of this building. The interior still presents questions, however, notably the level of the ceilings in the two end rooms which are almost certainly of a later date. [Leisenring was correct: the ceilings in the single-level rooms dated only to the 1880s.] It is recommended that radiant heat with coils under the floor be installed as a means of correcting the uncontrolled dampness that prohibits the furnishing of this building.”³⁹

In May 1929, a series of instructions were provided by Colonel Bash for the treatment of the South Dependency. They included opening and cleaning the chimneys, furnishing the fireplaces with open brick arches, and applying “old fashioned cranes and other utensils.” The exterior of the chimneys were to be covered by copper wire screening that would keep birds and squirrels from entering the

chimneys. Another recommendation included “relaying the old brick floors at their original levels,” opening up interior doors, making general repairs, and furnishing all missing hardware of old patterns approved by the Quartermaster Corps, and restoring the painted panels above the doors on the south elevation. Again, the QMC urged that the work be undertaken with a sensitivity to the resource. “Your particular attention is directed to the necessity of taking effective means to insure that all of the work herein described is a ‘restoration.’ Every effort must be made to insure that any new work, such as the reflooring or wall finish, has an antique appearance so as to perfectly match the balance of the house. The success of the job will depend on the new work being indistinguishable.”⁴⁰

Actual work on the South Dependency appears to have begun sometime in September or October 1929. Early in the project, Colonel Bash wrote to Charle Moore, Fine Arts Commission Chairman, seeking advice on whether to restore the panels above the doors on the south elevation.⁴¹ According to Bash, the paintings (a spread eagle over the east and west doors and a white horse above the center room—all reportedly done by G.W.P. Custis) were still visible, “although much faded and weatherworn.” Moore quickly responded with a recommendation that the panels be painted.⁴²

In December 1929, Colonel Bash wrote that a decision had been made to remove the modern plastered ceilings in the east and west rooms. In the west room, an attic floor would be reinstalled supported on round oak timbers and reachable by a steep, inclined ladder with flat treads and risers in the southwest corner. In contrast there would be no attic in the east room. The ceiling rafters were to be exposed with old tie beams remaining and “latter added tie beams removed.” This work required relocation of the new fire detection tubing system which had already been installed along the existing plaster ceiling.⁴³

In April 1930, Bash wrote a memo attaching the cost of \$1,500.00 to the work to be done in the South Dependency and the summer kitchen. Five hundred dollars was to be spent on guard grating for both buildings.⁴⁴ Some of this steel grating would be installed on the doorways of the South Dependency. During opening hours, when the wood doors were left open, the grates would allow visitors to see, but not enter, into the rooms. By November 1930, the grates were still not in place and the South Dependency had yet to be furnished.⁴⁵

During the winter of 1930-31, the QMC returned to the question of how to treat the painted panels above the doors. They were “faded” and “practically invisible;” their restoration considered “practically impossible.” Against the wishes of the Fine Arts Commission, which hoped to avert any attempt to restore the works, a young portrait painter from Washington, DC, Albert Nelson Davis, was hired to try to clean, paint cracks, and restore the background of the paintings. If his work was deemed acceptable, he would be promoted to work on Custis’ murals in the Mansion hall.⁴⁶ Before Davis set to work, a March 1931 newspaper article claimed that the paintings were “badly defaced, making it necessary for the artist to draw for the most part on his imagination.”⁴⁷ There is no confirmation that Davis completed work on the panels. Photographs taken in 1957, however, show the elements in the paintings with much greater prominence, a result of either Davis’ work or the work of a later NPS painter.

There are conflicting reports about when the work on the dependencies was completed. March and September 1931 Quarterly Reports state that “Remodeling of mansion and outbuildings [was] in progress.” It appears that the outbuildings may have been completed by December when only



Figure 19. South Dependency, southeast elevation, 1931. Taken toward the end of the QMC restoration, the photograph reveals that the exterior of the building was largely unchanged as a result of the new work.

continuing work on the mansion is mentioned. By June 1932, no work on any of the buildings was identified in the monthly reports.⁴⁸ Other sources, however, indicate that the restoration work was finished in March 1930.⁴⁹ A photograph of the east and south elevations dated 1931, does not show any ongoing work around the exterior (Figure 19). Yet along the west corner of the south elevation, a stack of bricks suggests that work is continuing nearby or perhaps within the building. The photograph does show extensive ivy coverage along both the south and east elevations. From this, it can be inferred that the restoration project did not include significant work (if any) on the rough cast wall finish in these areas.

The QMC left little explanation for the restoration decisions they made between 1928 and 1931. Much of what is known of the end result has been obtained through notes, drawings, and photographs that followed the restoration (particularly those compiled by the National Park Service when they undertook their own restoration 30 years later). Other information has been obtained by recent physical investigations undertaken for this report. Photographs of the north elevation from 1959, compared with photographs taken in 1928 before the restoration work took place, suggest that the doors on each of the rooms were not changed during the QMC restoration.

Photographs from 1957 show doors with vertical planks with two horizontal members on the back side upon which strap hinges were affixed. (Though the doors may have preceded the QMC restoration, the strap hinges would likely have been among the iron hardware fabricated for the restoration.) Each wood door had four glass lites in the upper half.

It is not clear whether any of the rough cast stucco was repaired at this time. One would expect that the finish, especially on the north elevation where moisture had exposed the brick wall beneath, would have been patched as part of the restoration. A photograph from 1932, however, shows the north elevation changed little from photographs taken before the restoration work. The QMC restoration also did not include reconstruction of the wood cornices above the doors.

The QMC filled in both interior door openings returning the building to three distinct and unconnected rooms. They plastered around the openings with a hard cement based plaster that today is easily distinguishable from earlier layers. It is likely that the basket weave patterned brick floor present in 1958 in each of the three rooms was initially installed by the QMC during their restoration (floors have been relayed several times since). Those used for the floor may have been among the load of “old brick” obtained in 1930 by the Quartermaster General from the Seven Pines National Cemetery in Richmond, Virginia that was to be used in the Mansion basement and other locations.⁵⁰

In the east and west rooms, the QMC removed plaster finish and claimed to have uncovered five pairs of infilled joist pockets along the east and west walls. They placed new floor joists in each of the pockets that supported a plank loft floor. The replacement joists were roughly hewn, rounded on the sides and bottom, and flat on top. They narrowed to squared ends that sat in the pockets. Fireplaces were boxed out with wood sleepers running parallel to the fireplace face and center floor joists were mortise and tenoned to the sleeper, which, in turn, was connected to joists flanking the north and south sides of the fireplaces. Ships ladders connected ground levels with the loft spaces. Undersides of the loft floor planks, the joists, and the ladder were all whitewashed. The QMC patched areas of deteriorated plaster on the walls and fireplaces, and a whitewash finish was applied. It appears that neither fireplace was significantly altered during the QMC restoration, though the east room firebox was partially rebuilt. In keeping with the oral histories from the Gray family and Jim Parks, the east room was interpreted as a store-room (Figure 20). A number of spinning wheels, benches, and farming implements were arranged around the room with tools hanging on the walls.



Figure 20. Infilled door opening in center room. This passage had been cut after 1860 to permit the Gray family full use of the three rooms

The west room was interpreted as “Selina’s Room”, a slave quarters, (Figure 21). The loft arrangement was identical to that in the east room. The only difference being that the ship’s ladder in the west room was located in the southwest corner of the room, running parallel to the south wall and directly in front of the west window. As with the east room, it appears that the fireplace and chimney predate the work done by the QMC. The room was furnished with two beds, a cradle, a rocker, chairs, a table, and iron fireplace cooking utensils.

Consistent with the oral history provided by the Gray daughters, the center room was interpreted as a smokehouse (Figure 22). Joists were placed in pockets that the QMC uncovered along the east and west walls. The joists were roughly hewn, rounded on the sides and bottom, and flat on top. Carved wooden hooks holding replica hams and meats were nailed to the joists. An additional wood member was secured immediately below the pockets along both the east and west walls from which pieces of replica meats were hung. Before the QMC work was complete, the Quartermaster Supply Officer, Charles G. Mortimer, had proposed that “a simulated hickory wood, dead fire be built in the hole in the center of this room, in order that it might represent what the room is intended for.”⁵¹ Cur-



Figure 21. South Dependency, west room, the QMC restoration of "Selina's Room" as it appeared in 1938.



Figure 22. South Dependency, center room, the QMC 1938 interpretation of the center room as a smokehouse with meat hanging above a brazier.



Figure 23. South Dependency, east room, the QMC restoration of store room as it appeared in 1938.

rent archeological investigation revealed evidence of such a twentieth century pit. A round metal brazier was used to indicate the smokehouse function. For at least part of time between the 1930s and the 1960s, this room was interpreted by the QMC and open for viewing.

In July 1933, Executive Order #6228 transferred Arlington House from the War Department to the Department of the Interior. Before the transfer had taken place, the QMC planned to repaint and repair the dependencies and the Mansion. Frequent repainting had been anticipated when the restoration was underway. It was assumed that the paint applied to "rebuilt walls and similar surfaces" would not prove to be durable or long-term. Painting and repairs to the exterior walls of the outbuildings were included in the cost estimate. This work was made necessary by "certain deterioration in joints, woodwork, etc., which require new putty stoppings and repairs to plaster and woodwork, also repairs to down spouts, gutters, etc."⁵² In October 1933, specifications were written for the South Dependency that called for applying two coats of paint to the exterior woodwork.⁵³

Later that year, day-to-day operation of Arlington came under control of the National Park Service. Department of the Interior Assistant Historian Elbert Cox met with Colonel Mortimer and L.M. Leisenring to learn details of the restoration that had been completed just a few years previous. According to Cox, Mortimer "could tell me only generally the historical background or justification for the various improvements, but said that each item was a part of the general plan for the restoration of Arlington which L.M. Leisenring, architect in the office of the Quartermaster General, had made and which had been approved by the Fine Arts Commission and then by the Quartermas-

ter General.” Leisenring “very generously spent an hour or more telling me what he had done, and the basis for his plans for the restoration and improvement at Arlington. It seems that no thorough or complete study of or search for full historical data on Arlington has been made. Leisenring has studied the problem, has gathered the available data, and as a result of his studies and his thoughts on the problem has drawn up plans. In my opinion before having had a chance to go into the matter with any degree of thoroughness, Leisenring has worked with considerable feeling toward a faithful and appropriate treatment of his problem.”⁵⁴

1934-1956

By 1936, the National Park Service had begun its own series of repairs to the South Dependency. An inspection that year noted that there was “quite a bit of pointing up that should be done around the doors of the old slave quarters . . .”⁵⁵ The following year, minor repairs were made to the South Dependency roof, though their nature and extent were not specified.⁵⁶ Also in 1937, Herman Van Cott, an NPS artist from the museum division, “retouched” the three paintings above the doors of the south building. A monthly report mentioned that “the work was carefully done so that the antique appearance of the painting might be preserved.”⁵⁷ It is unknown whether Van Cott was repairing work done by Andrew Davis, the painter hired by the QMC in 1931, or was doing work that was intended for Davis but never undertaken during the QMC restoration.

A photograph of the northwest corner of the South Dependency, taken from the road behind Arlington looking southeast, shows the buildings appearance in 1938 (Figure 24). It had two chimneys, metal wire grates in front of the open doors, limited ivy coverage on north elevation, and a stucco finish on the stone foundation. Most interesting, the lower three feet of the north elevation brick wall, directly above the foundation is missing the rough cast finish. This condition suggests either that the restoration did not include work on the rough cast exterior finish and that the spalled finish is a result of many years of rising damp and wear, or that the rising damp was so severe that just seven years after the restoration was complete, the finish had already failed in these areas.



Figure 24. 1938 photograph of northwest corner of the South Dependency.

Around the same period, an assistant chief of the Horticulture and Maintenance Division voiced concern about the profusion of vines on the facade. “Both the wisteria and trumpet vine have been allowed to grow up between the hanging gutter and the shingle and because the gutter was the only support for the vines, all the trimming had been done above it. This has created large terminal knots that are destructive to the gutter and shingles and has made it impossible to eliminate the heavy work

from the walls or really “train the vines.” The gardener suggested that eyelets be placed at five foot by five foot intervals along the wall and copper wire threaded through the eyelets to form a support frame for the vines. Evidence of such eyelets still exists on the building.

1957-1964

Never content with the QMC restoration of 1927-32, the NPS undertook their own program of restoration beginning in 1957. Starting in August of that year, they began to compile historical information on the South Dependency and draw up a list of tasks that would be included in the project. Though activity at the North Dependency involved major restoration and reinterpretation, the aim of work on the south building was directed more toward repair and maintenance. A weekly inspection report from August 28, 1957 noted that:

The slaves quarters are in need of repair of soffit of cornice caused by allowing ivy to grow into roof. All ivy should be cut away from wood at least 6" and also prevented from growing into stone. The wood replaced is to be treated with 5% pentachlorophenol. Inspection of ends of rafters is imperative. The entire brick and stone work is in need of pointing up as the pebble dash cement finish of 37 years ago is no longer protected and should be removed and a new surface to match the mansion applied. The entire south wall should be pointed up and restored first and this would help to determine original condition. The fireplace in the west end is in need of repair and others should be investigated.⁸⁸

The following month, “Report No. 2” noted that “documentary, pictographic, and archeological” evidence was being gathered to aid in the restoration. It also remarked that the condition of the servant quarters (the South Dependency) gave it priority over the North Dependency. By the time the report was submitted, measured drawings had been made of the South Dependency, ivy had been removed from the façade, and samples of exterior plaster had been submitted to the FBI for material and color analysis. Photos, letters, descriptions, and personal reminiscences were assembled for reference, and an appointment was made to again interview L.M. Leisenring about the QMC restoration. The work plan specified in the report called for:

- 1) All rotted woodwork on exterior to be replaced with good seasoned timber of same kind, if possible. Replace outlookers where needed and restore soffit
- 2) Exterior wall should be repointed, deteriorated brick replaced with good old Arlington brick stored at the Mansion. The rough cast stucco which shows in Brady photographs should be matched and replaced where necessary.
- 3) Plaster over stone foundation should be removed and the stonework repointed. No plaster covered this foundation at time of Lee occupancy.
- 4) Roof leaks should be checked and repaired. Slate roof is historically accurate.
- 5) Window sashes should be repaired and if necessary window panes, which are badly broken, replaced with old glass
- 6) Air leaks around roof should be repaired
- 7) Six, six panel doors, identical with those shown in Brady photograph archive (CN – 969) should be found and replaced at the servant quarter doors. Present doors are historically inaccurate and should be removed. Proper hardware for doors should be located. The door frames examined to establish the side from which doors were originally hinged.
- 8) Steps in east and west rooms should be repaired.
- 9) Fireplaces in east and west rooms should be repaired and placed in operating condition.

- 10) Heat and humidity control should be installed so as not to detract from the original appearance of the structure, and still guarantee protection of valuable exhibit specimens and people.
- 11) Paintings over the quarter doors should be examined and treated by an expert to guarantee the preservation
- 12) Wood and plaster samples from interior should be studied to establish original finish on interior. Wood from outside should be examined to establish original color. Brady photos indicate possibility of a color other than white.
- 13) Each room should be carefully examined to establish any evidence of structural change. Shelf lines may be located in the store room. Evidence of smoke should be found in smoke house. Examination of paint and plaster finishes as well as brick and bond should help establish when doors were cut and blocked between the center room and two end rooms. This archeological investigation can be completed while exterior work continues.
- 14) When work is completed documentary, pictographic, and archeological evidence will be combined and placed in the repair and restoration log at the mansion.
- 15) Interior walls should be returned as nearly as possible to their appearance in 1861.⁵⁹

This report shows the National Park Service's general determination to return the building to its appearance immediately prior to the Civil War. Unfortunately, any information about the history of the South Dependency that the NPS obtained from the investigations described above (paint and plaster analysis, indications of shelf lines, etc.) has not survived.

A third report, dating to September 1957, noted that all the vines had been removed from the exterior; plans had been prepared and details were still forthcoming; historical background was collected to restore to 1861; footing construction at south wall had yet to be studied; investigation had revealed that the storehouse stairs were "terminated;" the fireplace in Selina's room required repair; and the historians had asked that all fireplaces be put in working order and made fire safe. The report also contained details of the proposed work, including orders to:

- 1) sandblast all loose pebbled aggregate parging from entire outside, point up with Portland cement, restore pebbled parging and paint with cement base paint; color to be approved by historian.
- 2) restore all rotted wood, replacing with wood treated with 5% pentachlorophenol.
- 3) flashing to be installed at all sills. Parge all walls 10" below grade.
- 4) make new stairs for storehouse similar to stairs in Selina Gray's room; soak wood with 5% pentachlorophenol.
- 5) near Selina Gray's room [illegible] all artifacts. Remove all plaster from south wall. Rebuild fireplace with damper and install terra cotta lining in chimney according to detailed drawings to be made.⁶⁰

The building exterior was photographed on September 30, 1957 by National Park Service photographer Abbie Rowe. The images show the building suffering from deferred maintenance. Areas of rough cast were missing from the lower third of the north elevation, an area corresponding to the areas missing finish in photographs taken even before the QMC restoration (Figures 22, 23, and 24). The finish was also missing from the lower portions of the east, west, and south elevations. The parged foundation was particularly deteriorated on all elevations. These conditions reveal that the problem of rising damp was not localized but widespread throughout the entire structure. Though

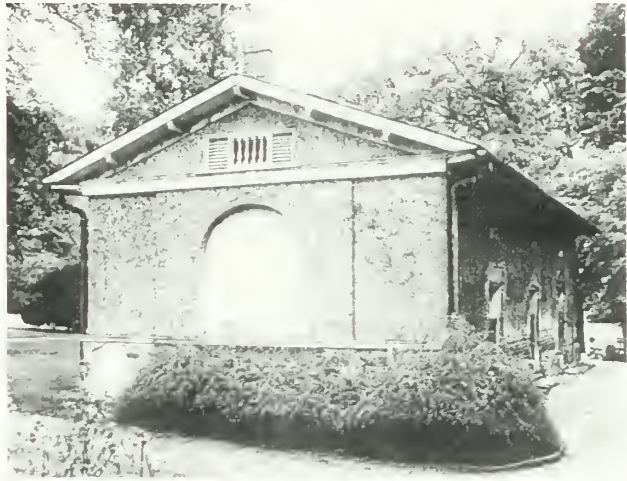


Figure 25 (top left). Southwest corner, 1957, exterior conditions before the NPS restoration. Note deterioration of rough cast along lower third of facade. Metal gates across the doorways allowed visitors a view into each of the rooms.

Figure 26 (top right). Northeast corner, 1957, exterior conditions before the NPS restoration.



Figure 27 (left). Southwest corner, 1957, exterior conditions before the NPS restoration. Note the poor condition of the foundation and areas of stucco and rough cast which can be largely attributed to moisture issues.

active vegetation had been removed, the remains of dead vines were visible on the upper surfaces. Metal gates covered each of the door openings on the north elevation, allowing visitors to look into the interpreted rooms. Rowe also took detail photographs of the painted panels above the doors on the north elevation, showing them to be in fair condition. The paintings on the panels were quite clear.

Also on September 30, Agnes Downey, the Arlington historian, wrote a lengthy letter to several other NPS officials discussing proposals for new uses of the South Dependency rooms. She stated that money was now available for badly needed repairs to the dependencies and main house and described the South Dependency's current function. The west room (Selina's room) was interpreted as "a typical quarter room," with reproduction and period furnishings. The center room was a smoke-house with imitation meats, and the east room was a store room with spinning wheels and cobbler's benches. She also discussed the steps NPS would take in documenting and investigating the building to determine historic functions, features, and materials and stated that after the restoration was complete, temperature and humidity controls—to protect both artifacts and the building structure—would be established in an inconspicuous manner.

Downey devoted the remainder of her letter to proposed uses and treatments for the various rooms. She suggested that although the exterior and interior should be restored to the period of significance, the building should be used temporarily as a place "for the collection of admission, short orientation talks, a guard office and a concessionaire's shop." A turnstile admission gate and guard house with a post and rail fence could be constructed near the west room to control entrance to the courtyard and collect admission fees. Under this plan, Selina's room would be used for orientation and as a place for tour groups to be greeted and introduced to Arlington. The center room would be converted for use as a guard office, and closed to the public. This would free up the bathroom in the north wing of the mansion (then used as a guard office) for interpretation as the only indoor bath in the house. The east room, after a restoration that would include installing new (period) shelving and returning the fireplace to an operating condition, would be used as a concessionaire's shop with storage in the loft area above. The uses Ms. Downey suggested were to be considered temporary, until the NPS constructed another building that would provide concession, guard and orientation space. At that time, the South Dependency would be ready to house original and period objects.⁶¹

In a 1957 December monthly report, Downey stated that "...Paint reconnaissance in the mansion and South Servants Quarters in consultation with Mr. Roberts and Mr. Swartz was begun and stopped before completion. In connection with this detailed plan for the future of the South Servant's Quarters was submitted to staff and tabled." No explanation is provided for why the paint study was preempted and no further mention was made about proposed reconfiguration of uses.⁶²

Much of the restoration activity appears to have taken place between March and June 1959. Descriptions of some of the day to day work was included in three documents: 1) notes taken by project contractor Sidney V. Young & Sons, 2) a "progress report" filed by park historian Paul Swartz, and 3) photographs taken by NPS staff. The following is a breakdown of the daily progress made by the restoration team during March and part of April, according to the contractor's notes:

March 12: Taking up old brick floors and stacking outside.

March 13: Taking up old brick floors. Taking off old fascia for sample.

March 16: Removing old plaster from walls and some old woodwork from outside.

March 17: Removing soffit and outriggers from south side.

March 18: Removing old roof along edges for mill company. Took old slate off and stacked up on job

March 19: Exposing rafters, joists for inspection, taking off old plaster.

March 20: Remove old plaster from rooms.

March 22: Making trim for inside of doors, wiring up inside. Putting gutters on buildings. Finishing 2nd coat of paint outside. Patching outside plaster.

March 24: Taking down chimney at east end of building.

March 25: Repairing ditch line from man hole. Wiring controls for heat and cooling.

Matching outside plaster stucco. Installing large air ducts in ceiling.

March 25: Removing old fireplace.

March 26: Putting outriggers on side of building.

March 27: Extended hangers on roof rafters, replacing old ones.

March 30: Priming new wood for job.

March 31: Putting new soffit on west side of building. Cleaning old plaster off wall in east room.

- April 1: Starting to put fascia on.
- April 2: Putting up fascia board on north side.
- April 3: Putting mould around outriggers. Put three sheathing boards on roof. Tearing plaster off of rooms on east end. Wood preservatives on all roof boards.
- April 6: Cutting mould around the outriggers. Cutting plaster off inside wall.
- April 7: Putting soffit on south side. Built chimney on east end of building.
- April 8: Putting outriggers and soffit on also fascia board.
- April 9: Finished fascia soffit on south side. Dug for man hole for new electric service.
- April 10: Working on west end of building, furring lower poured concrete base for electric man hole.
- April 13: Putting fascia around louver on west end. Dig ditch for electric pipe from man hole to building.

Additional work listed in the notes included plastering around the north and east wall in Selina's Room, removing the floor from both the center and east rooms, and removing the center portion of the east room ceiling. The notes also indicate that when plaster was removed from portions of the south wall in Selina's Room, there was "evidence of former window under existing." No further information was provided. The contractor mentioned that the contract was for \$20,000 and covered 100 days.⁶³

Paul Swartz provided a list almost as complete as that written up by Sidney V. Young & Sons. He also noted that work began on March 12, 1959 when the brick floor from the three rooms was removed. His list of the work undertaken between March 16-20, included:

I) Exterior

A) North Side.

- 1) Three murals over doors protected by plywood covering.
- 2) Soffit boards under eaves removed exposing old brick

B) East Side - water table removed.

C) South

- 1) Soffit boards removed showing recessed brickwork. Brickwork consists of irregular sized pieces laid in unskilled manner.
- 2) Shoring made to support two sagging arches on west end.
- 3) Water table removed exposing irregular construction including insertion of wooden pieces between courses of brick.

D) West

- 1) Window frame removed.
- 2) Fascia boards removed. Three courses of brick under top fascia stand out from wall. Demolition of roof begun.

II) Interior

A) Selina's Room

- 1) Plaster removed from north and east walls. Plaster partly removed from south wall uncovered evidence of former window under existing window. This evidence accounts for the strange brickwork exposed on the exterior wall which was used to fill the former window.

- 2) Boards removed from center of ceiling. Remaining ceiling to be used as scaffold for work on chimney and roof.
- B) Smoke curing room – no work done since removal of brick flooring.
- C) Store room – center portion of ceiling removed.⁶⁴

Various photographs indicate that work continued beyond April 1959. The first images of the restoration date from March 26, 1959 (Figure 28). They show the soffits and fascia board removed from the north and south elevations; wood molding and the vents and spindles removed from upper portion of the west elevation; wood molding removed from portions of the south and east elevation; and most of the stucco removed from the foundation. In areas beneath the arches on the south elevation where the finish had been removed, there is an interesting inconsistency in the brick work. Two rows of bricks that are larger than the typical size found in the building are set above wood planks and below two courses of normal sized brick. This pattern is seen at the bottom of all four arched openings.

Exterior photographs taken on April 24, 1959, show continued work on the South Dependency. Scaffolding was up along the east and west elevations; some of the wood molding along the west elevation had been replaced; and the remaining finish was stripped off the stone foundation. The wood arch containing vents and spindles below the west cave had been reinstalled. Work was completed on the soffits and fascia; the roof had been recovered with roofing felt; and the west chimney was in the process of reconstruction. Areas on the south elevation directly above some of the arches also had rough east finish removed. At the time of the photograph, these areas had a smooth stucco finish and were awaiting application of the final rough east coat. Another image taken the same day shows workers making repairs beneath the eaves of the west elevation.

Much of the interior work was also ongoing, as indicated from photographs of the east, center, and west rooms from April 24, 1959. The west room photographs show the QMC loft removed, and exposed loft joist pockets and much of the plaster removed from the walls (Figure 27). A faint outline of a possible infill window opening is visible below a window on the south elevation. The fireplace has a plaster finish above where the QMC loft had been positioned, a finish that stopped at the late nineteenth century roof joists. The fireplace itself is intact, though areas where the QMC rebuilt part of the firebox are clearly visible and contrast with older construction further up the chimney. An area of deteriorated



Figure 28. South Dependency, north elevation, showing NPS restoration underway. Note removal of roof sheathing, soffits, cave outriggers, and other wood moldings, March 26, 1959.



Figure 29 (left). West room, west wall, April 24, 1959 showing NPS restoration work in progress. Note the lower portion of the fireplace partially rebuilt by the QMC in 1929. Most of the upper chimney is original to the structure. The QMC restoration loft is removed exposing the joist pockets that the QMC asserted were original. Also note the plaster and lath marks above that date to the post-Civil War era when the QMC removed the historic loft and converted the space to a single level.



Figure 30 (above). Center room, April 24, 1959 showing removal of QMC smokehouse exhibit during NPS restoration. The 1880s roof structure is seen above and sections of original plaster are visible on the walls.

brickwork immediately to the north of the fireplace is visible. This area would be rebuilt and infilled with brick later in the restoration program. The infilled door to the center room—opened for the Gray family sometime after the Lee's departure—is clearly visible on the east wall.

All of the joists, boards, and hooks from which the replica meats were hung were removed from the center room by April 24 (Figure 28). The brick floor and some of the wall plaster had also been removed. Also by this time, photographs show that the fireplace and chimney (known to predate the QMC restoration) in the east room had been demolished and replaced by a square chimney. This feature, however, was clearly built only to support the chimney that would be exposed above the roofline. No firebox or even stovepipe hole was built into the chimney. Other photographs show plaster removed from all the wall surfaces.

A month later, another set of exterior photographs show the cement tile roof and gutters completed; two chimneys rebuilt; all woodwork reinstalled or replaced; cracks patched in the recessed arches;

and a first layer of stucco applied over normally rough east areas where the brick had been exposed. The number of outriggers beneath the east and west caves were increased from five to eight, apparently to correspond with the Civil War-era photographs. Also, areas of the foundation had been repointed. Interior photographs of the west room show repairs to the firebox and the rebuilt brick areas around the old joist pockets (with space left for the NPS loft floor) and the beginning of replastering.



Figure 31. Southwest corner, June 1959 showing exterior following NPS restoration, including new door cornices, repaired roughcast and woodwork, and repointed masonry foundation.

Photographs from June 15 and 29, 1959 show the completion of exterior work on the South Dependency (Figure 29). The final coat of rough east finish was applied in all the patched areas and the foundation was repointed. Cornices were inserted approximately 4" above each of the doors on the north elevation with restoration pebble dash stucco between the top of the door and the cornice. In the west room, the NPS loft ceiling was installed and plasterers were finishing up work on the walls and ceiling. Curiously, these photographs show that sometime between May 29 and June 29, the newly rebuilt chimney on the roof above the east room was removed. No discussion or explanation is provided in the written record for this change in the restoration plan. The single chimney configuration survives on the South Dependency to the present.



1960-2004

In 1963, all three rooms in the South Dependency were on public display: Selina's room, the center meat curing room, and the store room. The doorways to the east and center rooms still utilized metal gates in order to provide public viewing and air movement inside. Selina's room had a wood frame and glass panels set a few feet into the room that provided viewing and security.

Figure 32. Center room looking north, 2003, showing interior used as storage space with the remnants of the NPS 1950s smokehouse interpretation, including the plaster, beams, hanging hooks, and replica meat. Note also NPS door assembly with inner restoration door and outer viewing door with plexiglass light dating to the 1960s.



Figure 33. West room looking north, 2003, showing NPS restoration of space as "Selina's Room." The primary distinctions between this NPS interpretation (essentially dating to 1959) and the QMC's version of 30 years previous was the finished plaster ceiling, modified fireplace, and entrance door seen here.

The National Park Service explored alternate door treatments that could accomplish the following: allow for public viewing inside; provide a secured separation of the public from the furnishings inside; permit temperature and humidity control; and would not be visually obtrusive from the outside.

Another problem that they faced is that unless the rooms were heated, the furnishings would still be subject to condensation and occurrences of frost. Closing the rooms entirely throughout the winter was also contemplated.⁶⁵ Architects were assigned to research "invisible glass" that could be used as viewing panels, a type that would not be reflective and would not show "fingerprints, hair oil, and lipstick" as the glass on Selina's room apparently did.⁶⁶ Sometime before 1966, wood panel doors were installed on each of the three rooms. Further into the door opening, a secondary interior door with a viewing panel was installed in the same jamb space. This door was used during opening hours to allow a view into the interior.⁶⁷

By 2002, the east room was used as exhibit space. It had furred out gypsum board walls and a plaster ceiling about 11'-6" above the brick floor. The center room was used for storage and the west room continued as the interpreted "Selina's room" (Figures 30 and 31). Recently the National Park Service raised the grade on the north side of the building eliminating the stone steps in order to improve accessibility to the rooms.

End Notes

¹ Elizabeth Randolph Calvert (1833-1911) "Childhood days at Arlington Mixed with After Memories" (1845) written in 1875, page 6 (granddaughter of Mary Randolph and a cousin of Mrs. Lee) catalogue #2514, original document in C-L Mansion – ARHO files.

² "The foundations of the two remaining outbuildings, flanking the old western carriage entrance, are of quarry stone." . . . as are those of the two wings pointing to the possibility that they were constructed at the same time as the wings dated at 1803-1804. (L.M. Leisenring, 1945, page 14) Nelligan in his book stated, "That the outbuildings and the stable had stone foundations like those under the service wing of the mansion would indicate that they were probably built at the same time as the latter." Murray H. Nelligan, *Arlington House. The Story of the Robert E. Lee Memorial*. Burke, Virginia: Chatelaine Press, 147.

³ When plaster and rough cast was removed from this elevation during the 1958-9 restoration, National Park Service investigators indicated that the brick areas beneath the current horizontally-oriented three light window showed what appeared to be infilled areas. They concluded that the current configuration was not original and that a different window opening existed prior to the current form. Photos from the 1860s, however, show a similar configuration to that which existed in the 1950s, indicating that major changes, if any, to the fenestration along the south elevation occurred prior to the Civil War era.

⁴ Hartford Insurance Company, Hartford, Conn., Insurance application of Robert E. Lee. Lee states that both of the slave quarters were "covered with wood." October 17, 1859.

⁵ Murray Nelligan, *The Robert E. Lee Memorial*, 336-340.

⁶ R.E. Lee to Mrs. Anna M. Fitzhugh, Arlington, November 22, 1857; id. to G.W.C. Lee, Baltimore, January 17, 1858; id. to id. Arlington, May 17, 1858, Duke MSS – cited in: Joseph C. Robert "Lee the Farmer." *Journal of Southern History* Vol. 3, Issue 4 (November 1937), 431.

⁷ Alexandria County Land Tax Books, 1857-1861 (MSS., Virginia State Library) cited in: Joseph C. Robert "Lee the Farmer." *Journal of Southern History* Vol. 3, Issue 4 (November 1937) p. 436.

⁸ Hartford Insurance Company of Hartford, CT, Insurance application of Robert E. Lee, Lee called the building "a one story brick store house." October 17, 1859.

⁹ The Gray sisters, going by their married names Emma Syphax, Sarah Wilson, Annie Baker, and Ada Thompson, were interviewed by the Quartermaster General office in the late 1920s. The eldest daughter was seventeen when the Lee families left Arlington at the dawn of the Civil War. Photocopied typewritten material about the QMG interviews – undated, authors' files.

¹⁰ L.M. Leisenring, 1945, 14) – ARHO files.

¹¹ September 23, 2003 meeting notes from George Fore, architectural conservator, at on-site inspection.

¹² Ibid.

¹³ Annual Report of the Secretary of War, 1865 (Washington, DC), Government Printing Office, 1866, I, 257. Quoted in Nelligan, 444.

¹⁴ April 1869 – MR (132) (Thompson R. East, Superintendent) – ARHO files.

¹⁵ December 1870 – MR (132) (E.H. Harner, Superintendent) – ARHO files.

¹⁶ See MRs for August, September, and October 1871 – ARHO files.

¹⁷ September 1884 – MR (131) "One of the outbuildings connected with the mansion, mentioned in the last report as being in bad condition, has been covered with a new slate roof by direction of the Depot Quartermaster." – ARHO files.

¹⁸ August 1884 – MR (131).

¹⁹ September 1884 – MR (131) "One of the buildings connected with the Mansion, mentioned in

the last report as being in bad condition, has been covered with a new slate roof by direction of the Depot Quartermaster.” – ARHO files.

²⁰ May 26, 1885 – Letter from William H. Owen to Lt. Col. R.N. Batchelder, Depot QMG in charge of National Cemeteries.

²¹ September 3, 1885–Quartermaster General files specification list – ARHO Files. Though the specifications include mention of accompanying plans and a map, a 1984 notation by historian C.W. Snell stated that, “The maps and plan according the specifications could not be found.” No record of the plans or map were located among the Quartermaster General files at the National Archives.

²² QMG letter–Sept 14, 1885 – ARHO files.

²³ “Historic Memories of Arlington National Cemetery, by David H. Rhodes. Landscape Gardener at Arlington from April 14, 1873 to March, 1930.” – ARHO files.

²⁴ The current inaccessibility of the east room attic limits the above description to the roof system above the west room and part of the center room.

²⁵ March 31, 1903–MR (box 1037) Record Group 92, General Document File 1800-1914, File No. 85106, Box 1037–ARHO files.

²⁶ December 24, 1904 – Map showing proposed extension of water main and location of fire hydrants at Arlington National Cemetery Depot QM office – ARHO files.

²⁷ April 6, 1906 –Public poster and circular inviting paint bids File No. 213212– ARHO files.

²⁸ May 12, 1906–“QMG authorizes expenditure of \$55.00 for furnishing and putting [in] place guttering on two sets of servants quarters now used as tool houses at Arlington National Cemetery.” OQMG Doc. File 1890-1914, Doc. File No. 213212 – ARHO files.

²⁹ November 15, 1923 – Letter from Gilbert Rodier to Brigadier General John P. Knight, assistant Quartermaster General R.G. 92, Entry 1891, Box 66, File 600.13, letter; C.W. Snell, 1982, 152 – ARHO files.

³⁰ *Architectural Forum* Vol. 40, No. 3 (March 1924), 89-96.

³¹ July 9, 1925 – letter gives cost estimate for restoring AH “a) structural changes and repairs, painting, etc., to the Lee Mansion and the two adjacent dependent buildings generally described as the summer kitchen and the slaves quarters–\$60,000.00; b) refurbishing these buildings - \$100,000.00 (+ \$92,000.00 for new buildings.)”– Master Data File 1924-29 – ARHO files.

³² October 26, 1925 New York Times, Master Data File 1924-29 – ARHO files.

³³ December 27, 1926 – RG92/Entry 1891/Office of QG Geographic File 1922-1935/Box 67/File 600.3

³⁴ Ibid.

³⁵ Letter from Colonel L.H. Bash of the QMC R.G. 92, Entry 1891, Box 67m File 293, Lt. Col. Charles G. Mortimer was the depot quartermaster supply officer who had been supervising the work on Arlington House and outbuildings since August 1, 1928; C.W. Snell, 1982, 173. The committee included a retired general, a War Department architect, Fine Arts Commissioners and representatives of Quartermaster Corps.

³⁶ August 1, 1928 – Correspondence to Quartermaster Supply Officer, Washington General Depot, Washington, DC on the subject of the Restoration of Lee Mansion, Arlington Cemetery, Virginia (Luther Morris Leisenring collection).

³⁷ December 11, 1928 – Correspondence from construction service to QM General – File No. RG 92, entry 1891, Box 67, File 600.3 – ARHO files.

³⁸ April 18, 1929 –War Department, Office of QG, Report from L.M. Leisenring to QG, Subject:

Restoration of Arlington Mansion, ARHO files.

³⁹ Restoration General, n.d. – ARHO files.

⁴⁰ May 29, 1929 War Department, Office of QG, Report from L.H. Bash, Col. QMC, Assistant, – ARHO files.

⁴¹ November 15, 1929 – QM 600.3 C-E (Arlington Mansion) – ARHO files.

⁴² November 19, 1929 – Correspondence from Charles Moore, Chairman of the Commission of Fine Arts to L.H. Bash, Brigadier General, QMC, Assistant.

⁴³ December 18, 1929 – Brigadier General. L. H. Bash, letter to Quartermaster Supply Officer Re: restoration of interior to slaves quarters and summer kitchen – Record Group No. 92 – Office of the Quartermaster General, box 66, folder 600.3, Office of the Quartermaster General Geographical File, 1922-1935. The “modern ceiling” referred to in the Bash letter was added by the Army, sometime after they took control of Arlington in the nineteenth century.

⁴⁴ April 9, 1930 – Correspondence from L.H. Bash, Brig. General, QMC, Assistant to the QMSC, Washington General Depot.

⁴⁵ Record Group No. 92 – Office of the Quartermaster General, Entry 1891, Office of the Quartermaster General Geographical File, 1922-1935, Box No. 6, File No. 600.3 – ARHO files

⁴⁶ March 23, 1931 – Correspondence from Brig. Gen L. H. Bash, Assistant Quartermaster General To Commanding Office, Washington Quartermaster Depot.

⁴⁷ The article does not indicate from what newspaper it was clipped. Record Group No. 92 – Office of the Quartermaster General, Entry 1891, Office of the Quartermaster General Geographical File, 1922-1935, Box No. 67, File No. 600.3 – ARHO files.

⁴⁸ See quarterly reports in ARHO files.

⁴⁹ October 20, 1933 – letter stating restoration of buildings completed in March 1930. Letter from Mortimer to H.R. Owen, DOI, Master Data File 1924-29, ARHO files.

⁵⁰ April 18, 1930 – Correspondence from Lt. Col. Chas. C. Mortimer to Col. P.W. Guiney.

⁵¹ December 23, 1930 – Correspondence from Lt. Col. Chas. C. Mortimer to Mr. William Gutshall, Arlington National Cemetery.

⁵² September 29, 1933 – Correspondence from Mortimer to the Quartermaster General, War Department. Snell, 1983 page 10 – ARHO Files.

⁵³ October 1933 - Specifications for Painting the Arlington Mansion, Slave Quarters, and Well House in the Arlington National Cemetery Fort Myer, Virginia.

⁵⁴ November 15, 1933 – Correspondence from Elbert Cox, Assistant Historian, DOI to Mr. Chatelain – ARHO files.

⁵⁵ May 1, 1936 – B.C. Garfiner, Chief, Administrative and Protective Division, Report on Inspection of Lee Mansion, Descriptive and Architectural Files– ARHO gray binder.

⁵⁶ June 4, 1937 – MR (1936) letter from Mr. Garrett wrote ARHO files.

⁵⁷ July 7, 1937 – MR for June 1936, (220) – ARHO files.

⁵⁸ Aug. 28, 1957 – Regular Weekly Inspection Report No. 1 - Mr. Quinn and Mr. Roberts (Mr. Schwartz was absent) – ARHO files .

⁵⁹ September 25, 1957 – Report No. 2 – ARHO files.

⁶⁰ September __, 1957 – Report No. __ (date and report number illegible) – ARHO files.

⁶¹ September 30, 1957 – Use of SSQ at the Custis-Lee Mansion – Agnes M. Downey, historian, letter to Mr. T. Sutton Jett, Chief, Division of Public Use and Interpretation; Mr. Randle B. Truett, Chief, N.M and H.S.; Mr. Drew Chick, Chief, Division of Interpretation– ARHO files.

⁶² November 15 - December 15, 1957 – Monthly Report - Agnes M. Downey, Park Historian.

⁶³ Contractor's notes, Sidney V. Young & Sons, 5302 Park Road S.E., Washington, DC– ARHO files.

⁶⁴ Weeks ending March 13 & March 20, 1959 - Progress Report – Custis-Lee Mansion – SSQ – Paul C. Swartz, Park Historian, copy to Mr. McClure, Mr. Kahler, Mr. Haussmann, Mr. Truett, ARHO files.

⁶⁵ September 23, 1963 - National Capital Region Memo – ARHO files.

⁶⁶ July 19, 1966 – memo – ARHO files.

⁶⁷ July 19, 1966 – memo – ARHO files.

Part IC

*Physical Description/
Conditional Assessment*



(top) North elevation.
(center left) South elevation.
(Bottom left) West elevation.
(Bottom right) East elevation, 2004.

General Condition

Since the 1958-59 rehabilitation, the National Park Service has taken reasonable care of the South Dependency. While the systems (including mechanical and electrical) need to be updated, most of the recent maintenance work has focused appropriately on keeping the building weathertight.

The roof requires regular attention because of the premature failure of so many clay tiles; the recent repairs are of a much better quality than earlier efforts to seal or patch broken tiles.

Excessive moisture within the walls has been a long-standing problem which undoubtedly confronted even Robert E. Lee. A holistic approach to improving site drainage and ventilation, and reducing moisture penetration is beyond the scope of day to day maintenance. It is a problem that should be addressed before repairing the stucco and/or plaster on the masonry walls.

The regular painting of exterior woodwork has helped minimize decay. Various wooden elements have been replaced over time, including some during the late 1950s rehabilitation. A number of the replacements tend to lack traditional detailing, such as drip edges on window sills, and constitute higher maintenance items than necessary. Some replacement elements are contributing to the moisture problems.

As long as any deferred maintenance does not contribute to moisture or safety problems, it is not anticipated that the buildings will suffer in the immediate future. Care should be taken, however, to address any immediate maintenance needs involving mid-nineteenth century building fabric, especially woodwork.

Regular roof, gutter, and drain maintenance should continue to be a priority. Electrical service should be inspected and corrected as needed.

Site

The Arlington House, the Robert E. Lee Memorial site, includes a centrally located yard, enclosed by the main house on the east, a dependency on the south, and another on the north. An opening on the west side of the site provides access to Sheridan Road, which descends the hillside to the lower portions of the cemetery north and east of Arlington House (Figure 1). A circular bed, filled with a horizontally branching deodar cedar and a large boxwood, marks the center of the yard. The ground plane, outside the planting bed, is covered with a river gravel, clay, and sand mixture called bankum.

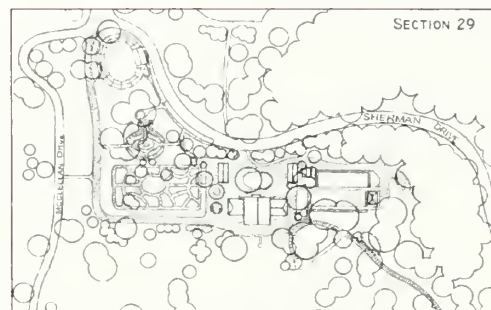


Figure 1. Schematic drawing of site.

The yard side (north) and east of the South Dependency is bankum and slopes from south to north. The surface functions as a combination walkway and service road. The area adjacent to the west



Figure 2. West elevation showing grade and grass ground cover.



Figure 3. South elevation showing the problematic grade slope and an underground drain cover.

and south facades of the building is covered with dirt and grass (Figures 2 and 3). The grade on the south, immediate to the building, slopes away from the building, however, four feet out, the grade changes and slopes back towards the building, from south to north. A depressed area where the two grade changes meet is above the underground drains which were installed primarily to carry away the water runoff from the roof and the lawn on the west side which slopes toward the building.

Ponding water following heavy rains has been an ongoing problem and has been partially addressed in the past through the addition of gutters, underground drains, changes to grade, and varying paving materials. Rising damp and deterioration of the rough cast finish on the exterior walls indicate continuing problems.

Recommendations: The grade on the south elevation needs to be corrected. The four foot slope away from the building is insufficient to address the water migration from the south lawn and garden. The ground surface on the south should be regraded, banking the surface drainage farther away from the building. An exploratory trench should be dug along the foundation to determine how moisture is penetrating and migrating. Additional underground drains may be needed to redirect the moisture. Larger gutters and an additional downspout would improve the roof drainage and reduce water ponding in times of heavy rain.

Masonry - structure

The South Dependency is a masonry structure with four exterior and two interior load bearing walls. The building is primarily brick, 8"-9" thick (two wythes), surmounting an 18" thick rubble stone

foundation. The foundation walls are pointed with a brushed joint, flush with the outside surface of the stone. The brick portion of the walls has a painted stucco finish.

Stone

The stones on the exterior face of the foundation walls vary in size but are coursed with a distinctive horizontal pattern and joints are pointed in a brushed joint. Four different mortars are identifiable ranging from early soft, warm toned ones with high lime content to more contemporary hard, gray mortars with high Portland cement content. The ledge where the foundation meets the stucco finish is not properly sloped with mortar (Figure 4). As a result, water collects and seeps into the wall through open joints.

In general the foundation appears to be in reasonably sound condition for its age. However, the joints, originally flush and tight with the outer surface of the stone, have deteriorated in areas, allowing water to be absorbed into the walls.

Deficiencies: There have been some structural repairs over the years on the South Dependency. It is evident from photographs and physical inspection that some deflection in the west wall has occurred, probably as a result of early settlement. Recent movement of a serious nature is not apparent. Mortar has leached out of areas of the stonework and in other areas the joints are no longer tight.

Recommendations: The exposed ledge of the foundation wall should be covered with mortar and sloped to shed water away from the wall. Deteriorated mortar joints and areas of inappropriate repairs should be hand raked and repointed using a proper mortar for the building. These joints should be tooled flat and recessed approximately 1/8" from the stone surface. In conjunction with the exploration of the drainage problems around the building, it is suggested that at the southeast corner of the wall a small trench be opened to examine the condition of the footings. Based on the findings, further work may be necessary.

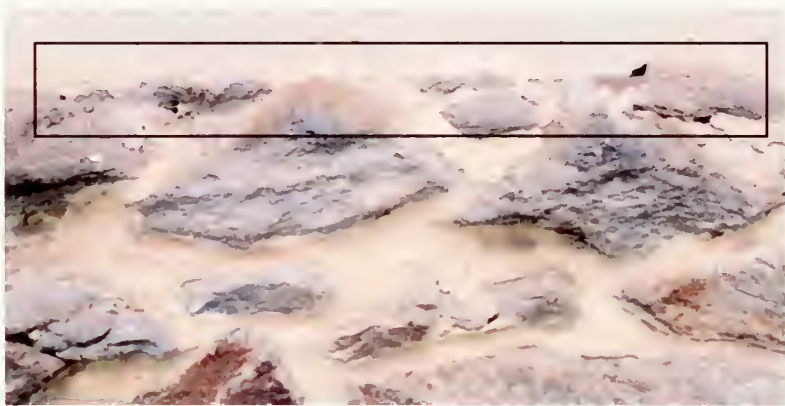


Figure 4. The exposed ledge of the foundation wall should be covered with mortar with a slope away from the building.

Brick

Early records reveal that the brick used to construct many of the buildings at Arlington were made on site. Many were not fired, only air-dried, making them soft and sponge-like when wet. The brick portions of the walls of the South Dependency were laid in an uneven coursing and with varying joint widths. They are soft, porous, and irregular in form suggesting that the brick wall was never intended to be exposed for a long period of time. Unlike the North Dependency where the exterior brick walls were first painted, those on the South Dependency show no evidence of a coating under the smooth stucco. It appears these walls were parged with stucco early on.

In the attic, past repairs have occurred to the west gable portion of the brick, north of the chimney flue. Some brick in the gable wall of the attic was removed when an old HVAC system was installed. The QMC also undertook some repairs to the east wall in the 1928.

Deficiencies: The brick walls are in generally good condition. Some repointing is needed although not widespread. Some repairs are needed in the west gable within the attic.

Recommendations: Undertake selective repointing. Remove old air ducts around the attic chimney. Repair masonry wall in locations as needed.

Masonry - brick chimney (exterior portion)

One brick chimney is extant on the west end of the building (Figure 5). It was rebuilt in 1958-59 from a combination of older soft bricks and newer sewer bricks with a smooth finish. The flue is infilled at the top with cement and is capped with copper sheeting. Tar has been used to seal the chimney flashing to the masonry.



Figure 5. West chimney rebuilt in 1958-59 is currently sealed and capped.



Figure 6. Tar seals to the tile roof have failed in a number of locations allowing water to infiltrate.

Deficiencies: Tar seals have failed allowing water to infiltrate (Figure 6).

Recommendations: The restoration calls for the rebuilding of the chimneys above the roof. However, if this work is not timely, stabilization of the existing chimney is advised. Remove tar and properly reseal. Reopen flue to assist in the needed ventilation of the building. Install chimney cap on a raised frame to allow air movement below while protecting from direct rain infiltration and pests.



Figure 7. Counterbalanced rafter design roof construction without a ridge board dates to the 1880s.



Figure 8. Outrigger formed from continuous ceiling rafters that cantilevered past the bearing walls.

Roofing - structure

The roof structure in the South Dependency was accessible for inspection in the west room and only partially in the center room. Much of the current roof framing in the building, with the exception of the 1958 era reinforcements, appears to date to the 1880s. Counterbalanced rafters and ceiling joists, with 1"x 6" chords and ties at alternating rafters, form the 12/5 pitch roof structure (Figure 7).

Thirteen of the eave outriggers are original and were formed from continuous ceiling joists that cantilevered past the bearing walls. Others were replicated in 1958 by butting new outriggers to the square cut of the ceiling joist at the edge of the bearing wall (Figure 8). These newer outriggers are fastened to the ceiling joist with a 1"x 5" plate on each face in the attic of the west room. Pairs of vertical chords were added on each side of the roof rafters, connecting them to the new modillions.

The earliest rafters are oak with a wane edge (quarter round on one side) and whitewash finish. The majority of the rafters date to the 1880s and are poplar, roughly 3" x 4" in size. The more recent rafters are smooth surfaced and probably date to 1958-9. All rafters rest directly on the wall plate, which surmounts the masonry walls (*see Appendix B*). Nails and friction between the rough cuts of the ends of the rafters connect the rudimentary trusses. (*Also see interior descriptions for center and west room for sheathing, rafter, and joist details visible in those locations.*)

Deficiencies: Deflection occurs at two points along the ridge—crowning at 18'-8" and 30'-2" in from the west roof edge. These deflections were caused by long term loading on the timber members from the weight of the clay tile shingles.

Recommendation: NPS engineer, Louis Teran, surveyed the structure and concluded that the rafters appeared to have sufficient strength, capable of carrying the existing loads, provided the moisture content of the interior plenum is maintained with little variation from existing conditions (*see Appendix G*). The restoration plan calls for the creation of a false assembly of skip sheathing roof lath to be installed above the exposed joists and rafters in the center room. This would create a false underside to replicate the appearance of a mid-nineteenth century roof while retaining the existing roof structure and sheathing (*see Part IIA, page 4*). The clay tiles would be replaced with lighter weight wood shingles.



Figure 9. Delamination, chipping, crazing, and structural failure of shingles are widespread.



Figure 10. A variety of temporary repairs have been made in an effort to keep a weather seal.

Roofing - sheathing

The roof is sheathed with solid wood planking of varying widths (wider boards may be pre-Civil War), an underlayment of 15# felt paper (double thickness in some areas) and clay shingles – Ludowici model 126 fired clay tile shingles. These shingles date to 1958-59. The dimensions of the tiles are 9/16" to 5/8" thick, 15" to 15 1/4" long and 5 1/4" to 8 1/4" wide. The general exposure is 6 1/4" and the colors are random, ranging from dark gray to a reddish brown. The ridge is finished with a "Boston" cap sealed with tar. Numerous temporary repairs have been made (Figures 9 and 10). These repairs include tar used to fill gap between shingles separating at ridge, caulk, and tar on broken pieces, and copper and aluminum sleeves slipped under broken and/or missing shingles.

Deficiencies: Delamination, chipping, crazing, and structural failure of shingles is widespread—approximately 1/3 are delaminating and 5-10% are cracked, with some retention of vegetation.

Recommendation: The South Dependency's roof structural system and plank sheathing date primarily to the 1880s. Though not as old as the period of significance, these features do possess a secondary significance. Analysis by an NPS engineer recently determined that the system and sheathing are sound and need not be replaced. The clay tiles should be removed and replaced with high quality yellow cedar shingles, taper sawn, not wider than 7", 18-20" long, vertical grain with about a 5 1/2" exposure. The shingle butts wood shingles should be about 1/2" thick and taper to a pointed thin end. In order to provide the appropriate roof ventilation, wood nailing strips (skip lathe) should be installed on top of existing sheathing. A comb at the roof ridge should extend from the north slope out over the south slope 4"-5" (*see Appendix F*). Copper flashing should be used under capping shingles at ridge and solder flashing rather than caulk at chimney.

Eaves

The painted wood eave boards on the South Dependency (white) are a combination of bead board (south) and tongue and groove (west).

Deficiencies: The beadboard is a later replacement, not appropriate for the period of significance. The existing eave detail where the board meets in a seam at the edge of the roof is not typical for nineteenth century construction (Figure 11). Moreover, it is a poor detail that will allow water to wick up and lead to wood rot (*see Appendix F*).

Recommendation: The bead board material should be replaced with tongue and groove boards and detailed as seen in Appendix F.

Gutters and downspouts

Five inch copper half-round gutters with copper hangers and straps (spaced about 2'-0" apart) are currently hung on the north and south edges of the roof. One box drop downspout serves the east corners of both the north and south elevations feeding



Figure 11. Eave boards on south elevation are bead board. The size of the gutter troughs are not adequate to accommodate heavy rains.

into a below ground drain. Six support straps are missing from the south side and five are missing from the north. The gutters are in generally good condition.

Deficiencies: The size of the half-rounds is not sufficient to handle heavy rainfall and the underground drain runs too close to the south elevation (Figure 11). The overspill and ponding water wicks up the walls, causing moisture problems that affect the plaster and stucco.

Recommendation: Despite the fact that gutters did not exist on the building in the nineteenth century, the severity of moisture problems provides a strong case for their continued use. If gutters are to remain, the 5" half-round troughs should be replaced with 6" members and a second downspout added to the west end of the north and south elevations. Both the new downspouts and the replacement downspouts should be round drops rather than box drops. The downspouts should remain connected to the underground drain. The underground drain loops should be relocated a further distance from the building foundation, especially since they may periodically become clogged with debris.

Exterior wall finishes

The exterior walls above the exposed stone water table of the South Dependency are finished with several different stucco textures. The primary surface is rough cast, consisting of a thick topcoat of rendering with a pebble aggregate. In some areas, the aggregate has been pressed into the cement. In others, it was applied as on the North Dependency but later sand blasted, giving the wall a more exposed aggregate look. The recessed ornamental niches on the east, south, and west elevations are finished in a skim coat stucco with a smooth, "cork float" finish.

Stucco - smooth

The recessed ornamented niches on the east, south, and west elevations are finished with the painted skim-coat stucco. Various patches of smooth stucco of varying mixes have been applied to the recessed niches over the years (Figure 12). Three different applications have been identified thus far. The earliest smooth stucco is a soft render of pure white binder above a yellow base coat integrated with small pieces of lime (shells) and tiny stones. Coatings include a white oil base under a medium yellow distemper topped by a layer of rose tan with a mottle of *tera cotta*. This mix is primarily



Figure 12. Within the wall niches of the south elevation, top coatings of beige and orange paint are visible.



Figure 13. Efflorescence is visible on the east elevation stucco within the recessed areas.

found in more protected areas (*see Appendix E, Section 1*). A brownish matrix with a high sand content and no aggregate was used for patching as well as one with a similar matrix but small stone aggregate. Below the skirtboards is a restoration stucco used by the NPS—one with a light beige render and small aggregate. The NPS also used a hard, gray Portland cement with tiny aggregate for patching random areas in the more recent years.

Deficiencies: The smooth stucco has delaminated in certain sections. Areas of various patching exist which do not match in texture, color or hardness (*see Appendix E, Section 1*). Numerous cracks are present especially in the center bay. Areas have separated from the back wall. Efflorescence is visible on the east elevation (Figure 13).

Recommendation: The stucco should be sounded for areas of adhesion failure and dead sections removed by hand. Stucco patches of hard Portland cement and inappropriate surface texture should also be removed. Every effort should be made to preserve as much historic fabric as possible and the services of a plaster/stucco conservator should be utilized. Since the stucco will be painted, previous patches do not need to have exact color match. A somewhat plastic patching mix should be determined, using a white mason's mortar, sand from the Potomac River and a river aggregate. Significant cracks can be reclosed by cutting the joints out, and cleaning and floating in repairs with a cork float, using the same patching mix described above.

Interior corners should be repaired using a dovetail joint and not a V-cut joint; use *Plaster Weld*, diluted with 50% water to allow for better bonding. Flat areas of stucco with solid bonding to the underlying brick can be skim coated as needed.

Stucco - rough cast

The primary finish on the exterior of the South Dependency is a rough cast stucco, characterized by a thick coat of matrix with exposed stone aggregate. Rough cast is produced by mixing a cementing composition with coarse stones and then literally throwing the material on the wall (Figure 14). Rough cast is more forgiving

than smooth renders and does not reveal cracks as easily. Its open-textured surface, with many exposed aggregate, does not shrink much by comparison with smooth renders.

At least five distinct rough cast finishes have been identified. It is especially significant that one of these five rough cast finishes that comprises the current stucco finish on the South Dependency appears to be both original and in some quantity. It is applied directly to uncoated bricks (*see Appendix E, Section 1*). Its matrix is composed of a pure white binder of lime with a brown base coat with

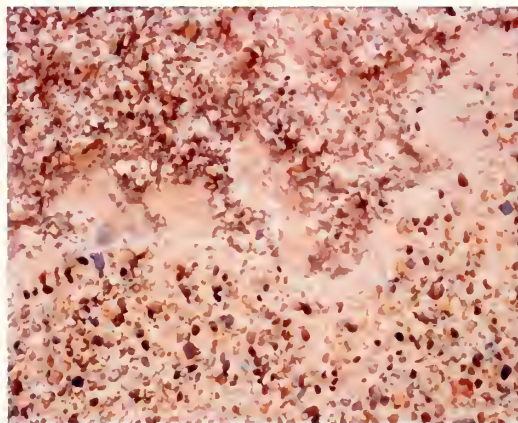


Figure 14. Rough cast is produced by mixing a cementing composition or matrix with aggregate/stones. It is applied by literally throwing the material on the wall. At least four distinct rough cast finishes have been identified.



Figure 15. Three different applications of rough cast stucco: 1. The Army's brown 1929 restoration mix, 2. The 1958 NPS restoration mix and 3. A gray repair mix applied more recently by NPS.

coarse stones mixed in. The stucco has been coated with three layers of pigment which include a glossy white oil base coat, under a layer of medium yellow tan distemper and a coating of red tan distemper. This stucco which would have existed c. 1860 and before is still found in the more protected areas of the building.

A second stucco mix with a darker brown colored matrix and an aggregate that includes chunks of brick clinkers is found in areas just below the fascia board. The QMC's 1928 rough cast has a medium brown matrix with a light under layer contains small round, regular aggregate. The fourth mix is the NPS's 1958 restoration rough cast with a light beige matrix, and with small and medium sized, round aggregate (Figure 15). A gray matrix with medium aggregate was used to patch areas on the south elevation and of unknown recent vintage.

Deficiencies: Surface repairs point to ongoing problems of rising damp and backsplash from heavy rains.

Recommendations: A plaster/stucco conservator should undertake any work on the stucco. The rough cast should be sounded for delamination followed by the careful removal of dead patches, as well as those containing the Portland matrix; a rough cast stucco that matches the original should be used for repairs; and a lime paint coat should be applied to match the historic finish. As with the smooth stucco, emphasis should be placed on preserving as much historic rough cast stucco as possible. The use of rough cast on the building is quite significant as this is one of the earliest such applications in American architecture and unlike the Mansion, areas of the historic rough cast have survived in place. Later repairs that are sound, yet differ in color, may be retained. Because the aggregate in many areas has been aggressively exposed through sandblasting, a thick paint application that is permeable to moisture could be applied to recapture the historic appearance. A test should be undertaken to establish whether one or more coatings will be necessary. The desired effect is to match more closely the surviving historic finish on the building.

Where stucco abuts horizontal wood trim or features, such as the window heads and skirtboard, copper flashing should be set up beneath rough cast finish and angled to lay flat on these wood elements. This will provide a more permanent weather seal and protection for the wood. A couple inches of finish will need to be removed and reapplied when the "bridging flashing" is inserted. Where historic stucco has survived in these areas and is sound, bridge flashing is not recommended.

Should it be necessary to clean the stucco surface of the building in the future, it is recommended that a study of available techniques be performed at that time and that only the gentlest means possible be utilized. Frequent cleaning should not be undertaken.

Openings

There are currently eleven openings in the South Dependency building: three door openings spaced across the north facade; four window openings span the upper wall of the south elevation, and in the attic (single vents in each of the gable ends) and two on the south side.



Figure 16. Windows opening into the west room (SD5 and SD6).



Figure 17. Window openings into east room (SD9 and SD10)

Windows (south elevation only)

One long, narrow, horizontal window opening with a painted wood frame is set within each of the recessed arches of the two outer bays at the east and west ends of the wall (Figures 16 and 17). Two vertical supports (modillions) with a beaded molding divide each window opening into thirds (8"x10"). The ears of the sill extend to the abutting arch wall on the east but have been cut shorter on the west ends (Figure 18). The four 4-light, painted wood sash pivot inward, hinged at the top with inappropriate reproduction strap iron hinges. Note that the muntins do not line up with the two vertical supports of the frame providing both structural support and some additional security in the case of the store room. The three easterly window sash are painted shut (SD5, SD6, and SD9). The one on the west end (SD10) is operable. Some of the glazing is cylinder glass while others are modern replacements or reproduction glass.

The window sash in the western-most bay (SD5) has round pegs, not square, and is clearly a replacement. The original manner of operation of the south elevation windows has not been established. One possibility is that these sash were hinged at the top of the window opening. Another possibility is that they were not hinged but rather lifted out when ventilation was desired and secured in place by turn screws located at each horizontal ends.

Deficiencies: The window sills are not correctly detailed. Either they have been modified or replaced over time. The ends of the sills have been reduced in length. Fragments of wood that were once the



Figures 18 (left). The ears of the window sills extend to the abutting arch wall on the east but have been cut shorter on the west ends. Blocks of wood, presumed to be once the ends of these pieces, are extant in the abutting walls of various openings. Figure 19 (right). Edges and ends of indow sills and frames are exposed to the elements in many locations.

ends of these sills are extant in the abutting walls of various openings. Edges and ends of sills and frames are exposed in many locations (Figure 19). Some sash are not operable.

Recommendations: All windows should be restored to working condition to allow for better ventilation within the building. Simple butterfly hinges should be installed at the top of the sash for convenience (*see Appendix F*). The exterior portion of the sill should be restored, extending the sill in length and width. This can be accomplished through addition of a wood face piece secured with epoxy to the existing sills. The top face of the sill will need regular painting as part of a good maintenance program. A ¼" drip cut should be incorporated at the bottom of the sill extension.

Doors and hardware

Three wood paneled viewing doors with large glass panes were constructed and installed in the South Dependency by the NPS in the 1960s. (Drawings for the door assembly are included in the 1960s set of construction drawings in the appendix of this report.) These doors and frames remain extant in the exterior openings on the north elevation. The center and west doors are hinged on the east. The door opening into the east room is hinged on the west. A full paneled wood door is set behind the glass paneled exterior door in the center room. The door jambs were oversized to accommodate a double door solution to site security and visitor viewing. The doors are painted white.

At present, the door hardware includes metal handles and dead bolt locks (Figure 20). All three doors are hinged with twentieth century butt hinges.

Recommendations:

The restoration plans calls for the replacement of the doors and removal of the extended door jamb (*see Appendix F*). Additional investigation is needed to verify the exact height of the threshold. Until that work is possible, the existing hardware needs to be tightened and resecured. (*See North Dependency HSR for details on door replacement.*)

Attic vent openings

The gable ends contain attic vent openings, one on the east and one on the west end. The opening on the east is supported by a spanning wood lintel. The opening on the east is rectilinear and infilled with a tri-partite decorative wood grill, closed in the mid section and open on the two end sections (Figure 21). The center section of the grill has five turned spindles backed by a painted board. The flanking sections are slatted with painted wood louvers. The opening on the west is arched and also infilled with a tri-partite decorative wood grill, closed in the mid section and open on the two ends. As on the east, the center section of the grill has five turned spindles mounted in front of a painted, tongue-and-groove backboard. Many of these elements date to the period of significance (*see Appendix E, Section 2*).

Two rectangular vent openings in the center bay on the south elevation flank a spindled wood feature and open into the center room of the South Dependency (Figure 22). These openings contain painted



Figure 20. Current door hardware includes metal handles and dead bolt locks.



Figure 21. Attic vent on east end needs to be cleaned and painted



Figure 22. Two rectangular vent openings in the center bay on the south elevation open into the center room and flank a spindled wood feature.

wood louvers that provide ventilation to the smoke house. Many of these elements date to the period of significance (*see Appendix E, Section 2*).

Deficiencies: The attic vents are generally in good condition. On the south elevation, the vent assembly is loose from the wall, probably as a result of previous ivy encroachment.

Recommendations: Clean, strip, and paint as needed. Carefully resecure and align attic vent on south elevation.

Wood trim

Numerous pieces of wood trim articulate the South Dependency. These include outriggers, fascia boards, bed molding, door hoods, skirt boards, column capitals, vents, and spindles. Many of the elements making up the decorative vents within the upper sections of the two gabled end as well as the center bay of the south elevation were found to date within the period of significance.

The NPS did replace various wood members in their 1958-59 restoration campaign, including decorative elements and ones with profile shapes at joints and ends. These were not carefully duplicated. The painted trim elements that were identified as original mostly end at least 1" back from building corners and have a return underneath leaving no exposed cut ends. (Early craftsmanship is evident in some of the building details.) Later replacement members lack those details (*see Appendix E: Field Notes, Section 2*).



Figure 23 (left). The original configuration for the wood skirtboard that extends the length of the building on the south is a three-piece construct consisting of (A) a simple sill plate, (B) an apron with a molded drip edge, and (C) a molded trim piece set up into the back of the apron to seal and cap.



Figure 24 (right). Sections of the early skirtboard configuration remain however there are many areas where the lower piece is missing as shown in the circled areas.

South elevation

Wood trim on the south elevation includes outriggers, frieze boards, bed molding, skirt boards, column capitals, vents, and spindles. All pieces have an outer coat of white paint. The fascia board, replaced by the NPS in the 1950s, is deteriorated. The original configuration for the wood skirt board that extends the length of the building on the south is a three-piece construction consisting of a simple sill plate, an apron with a molded drip edge, and a molded trim piece set up into the back of the apron to seal and cap the feature. Sections of the early skirtboard configuration remain; however, there are many areas where the lower piece is missing (Figures 23 and 24). A horizontal skirt board to run low within the two recessed semi-circular arches and within the central rectilinear niches may be missing. The 1958 photographs, showing stucco removed from the lower portion of the west arched bay, reveal the presence of a wood nailer strip near the bottom of the stone foundation wall. A wood skirt board may have been intended to be attached to this nailer, continuing the horizontal lines shown by like elements on the east and west elevations (Figure 25). However, it is not shown in the Civil War photographs and may have been removed by then due to deterioration or was never installed. Stucco needs to be selectively removed at this location and the presence of nail holes confirmed in the nailing strip before undertaking restoration of this feature.

V-jointed soffit boards on this elevation have replaced the more typical beaded or butted boards (with a flush joint) which originally existed. They are replacement elements dating to the 1950s NPS restoration. Most of the existing skirt boards are also replacements probably dating to this time as well. They appear to have been installed with a 3-degree bevel to drain water, although warping and deflection have resulted in the inadequate shedding of water in areas. There is no proper return on the underside of the skirtboard.

The upper section of the center bay has wood framework that is pegged together surrounding a series of six hand-lathed spindles (irregular in their profiles), backed by a beaded board (Figure 26). The framework, vents and spindles are pre-Civil War features and have multiple layers of primarily white paint. The beaded board appears to have a sand paint on one of the lowest layers. The capital on the



Figure 25. The 1958 photographs, showing stucco removed from lower portion of west arched bay, reveal the presence of a wood nailer strip near the bottom of the stone foundation wall.



Figure 26. The upper section of the center bay has historic wood framework that is pegged together surrounding a series of six hand-lathed spindles (irregular in their profiles), backed by a beaded board (with an early sand paint coating).

easternmost pilaster is partially cut off and incorrectly detailed. The frieze board above the engaged columns is pulled away from the wall plane.

Deficiencies: Replacement members typically do not duplicate the originals and in some cases will have a shortened life expectancy because they are not constructed or finished to shed moisture.

Recommendations: Pieces that are not replicative of the original details should be replaced. The historic upper assembly in the center bay needs to be resecured. Removal and reinstallation of this assembly should only be undertaken if absolutely necessary. Historic woodwork should be repaired as needed rather than replaced (*see Appendix E: Field Notes, Section: 2*).

North elevation

Wood trim on the east elevation includes outriggers, frieze boards, and bed molding. All pieces are coated with white paint. Three wood exterior doors exist evenly spaced across the façade and raised slightly above grade. They are surmounted by door pediments of molded wood and in-framed painted panels. The profile and location of the pediments (set within rough cast), seems to match the configuration seen in 1860s photographs and early twentieth century photographs (Figure 27). Although the evidence is not conclusive, it appears that these pediments are appropriate in design and placement. The molding profile seen in the wood frame surrounding the painted panels is different than any other used on the building and probably a replacement. Some outriggers have been replaced over time.



Figure 28. The header is missing from above the attic ventilation unit, west wall.



Figure 27. The location of the door pediments seems to match that which appears in the 1860s photographs.

Deficiencies: Replacement members often do not duplicate the originals and in some cases have a lesser life expectancy because they are not constructed or finished to shed moisture.

Recommendations: Wood trim that is not replicative of the original details should be replaced with ones that match the historic appearance. The painted panels should be examined by a paint conservator to help establish date of frame and underlying paint (*see Appendix E: Field Notes, Section: 2*).

West elevation

Wood trim on the west elevation includes outriggers, frieze board, bed molding, skirt board, column capitals, vents, and spindles. A series of six hand-lathed wood spindles (irregular in their profiles)

are centered between two louvered vents and surrounded by an arched pegged frame set above the frieze board. Molded trim crowns the frieze board and projects out just below the ventilating unit. The skirt board is detailed correctly and may be an original piece of wood trim. All pieces are coated with white paint.

Deficiencies: The wood header over the arched opening/vent is missing.

Recommendations: A header should be installed over the arch. The vents should be repainted (*see Appendix E: Field Notes, Section: 2*).

East elevation

Wood trim on the east elevation includes outriggers, frieze board, bed molding, skirt board, column capitals, vents, and spindles. A series of six hand lathed wood spindles (irregular in their profiles) is centered between two louvered vents and surrounded by a pegged frame set above the frieze board. Molded trim crowns the frieze board and projects out just below the ventilating unit. All pieces are coated with white paint.

Deficiencies: The attic vents are in need of careful cleaning and maintenance. Eave outriggers have been reconfigured, and possibly replaced, at least twice. The fascia board, replaced by the NPS in the late 1950s, is deteriorated. The wood sill below the attic vent projects out too far. The skirt board is raised and not detailed correctly. The projecting sill is incorrectly sized, extending out too far. A replacement plank skirt board (dating to 1958-59 or later) at the base rests on the top of the foundation wall and has no profile detailing.

Recommendations: The skirt board should be replaced with one matching the detailed skirt board on the west. Clean attic vents. Relocate outriggers to historic locations (*see Appendix E: Field Notes, Section: 2*).

Interiors

East room

Historical accounts describe the east room as a storehouse. The interior space measures 16'-0" x 18'-0" with a ceiling height of 11'-6". Access to the room during this study was limited as it contained exhibit materials. Behind the panels, the masonry walls are covered with 1950s NPS plaster except for the east wall which has been furred out and drywalled. The south wall has been coated with a sealant and then painted white. The plaster and coatings are peeling as a result of water migration in the wall. The entry door jamb has been enlarged, doubled in width, boxed in with wood, and painted white. The exterior-most piece is older than the interior piece. The brick floor is of two types—pavers with a shellac or other dark accretion and sewer brick. Both have low absorption levels, are abrasion resistant, and present a reasonable approximation of a mid-nineteenth century floor. Evidence of the historic fireplace on the east wall was not found due to access limitations. Physical examination of the windows on the interior was also not possible as they are walled off from the inside.

Deficiencies: Access to this room for physical investigations was extremely limited. Rising damp should be addressed in this room.



Figure 29. The space is currently used as exhibit space.

Recommendations: The treatment plan calls for the restoration of this room to a mid-nineteenth century storeroom with features similar to those found in the west room of the building (*see Part IIA, page 11*). Many questions remain as to the location and size of features such as the fireplace and ships ladder, wall and floor treatments, etc. due to the limited access allowed during our study. If the restoration plans are not timely, stabilization of this room is advised. Water management and ventilation issues should be addressed. Windows should be uncovered and made operable and utilized to better ventilate the space. A more efficient gutter and exterior drainage system is needed. (*see "gutters" and "Site" for necessary drainage work*). Loose plaster should be removed and replaced to match the historic. Where plaster has failed, stonework should be examined for the integrity of mortar joints and repaired as needed. Plaster walls should be sounded for areas of adhesion failure. When removing loose plaster, care should be taken to preserve in place all sound historic plaster beneath. The door and door jamb should be replaced with ones to match the 1860s appearance.

Note: Water migration in the wall has been a long-term problem. Excavating the foundation along the exterior to permit repointing as necessary is one of a number of corrective measures that may be necessary in the future. Since the plaster deterioration was a "historic" condition, the appearance could be considered part of the interpretative presentation. If such an approach was taken, it would require ongoing monitoring and periodic repair work.

Center room

The interior space of the center room measures 10'-6" x 18'-0". The traditional view that this room was constructed as a smokehouse and later converted to living quarters with a loft appears to be accurate. The pre-1860 louvred windows high on the south wall were used in conjunction with the curing and storage of meat. Plaster covers the masonry walls except in areas where removal has been required for investigatory purposes (Figure 30). Although the finish plaster coat on the lower walls appears to date from the 1950s, that on the upper walls on the east and west is historic. It is also there that accumulations of soot and oils appear, probably dating back to the room's early use as a smokehouse. The south wall shows widespread areas of plaster damage due to rising damp and efflorescence. The ceiling is unfinished, exposing a solid roof sheathing and wooden enclosures for



Figure 30. Southwest corner showing evidence of the nineteenth century opening in the west wall which postdates 1860.



Figure 31. South wall showing historic vents and center niche.

mechanical ducts. Some of the roof sheathing members are vertical sawn while others are circular sawn. The solid sheathing was probably added at the same time that the slate roof was installed.

The original surface of the floor was probably earthen, consistent with its use as a smokehouse. Two firepits/hearths were identified during the recent archeological study, one laden with charcoal above a basin shaped feature with a random lining of weather worn stones. Archeologists noted that the areas around the older pit appears to be undisturbed pointing to an early dirt floor. A 1929 directive orders the relaying of old brick floors at their original levels, so we also know that brick was there before the Army did their restoration. QMC records also indicate that at one time the floors in this building may have been cement. When they restored the space, the QMC used a basket-weave brick pattern. In 1958, NPS relaid the floor in common running bond pattern as it is today.

The entry door jamb has been enlarged, doubled in width, boxed in with wood, and painted white. The exterior-most piece of the jamb is older than the interior piece.

Deficiencies: The walls in this room show signs of rising damp.

Recommendations: The treatment plan calls for the restoration of this space as a mid nineteenth century smoke room. This includes the creation of a false assembly of skip sheathing roof lath to be installed above the exposed joists and rafters in the center room. This would re-establish the underside appearance of a mid-nineteenth century roof while retaining the existing late nineteenth century roof system. The plan also calls for restoration of the historic plaster, the three center beams for hanging meats and the firepit/hearth (*see Part 2A, page 10*). Areas with early plaster should be consolidated by applying a bonding agent such as a Plasterweld mixture of 1/2 resinous emulsion to 1/2 water. The surface should first be carefully cleaned with air from a no-pressure airhose followed by the application of Plasterweld with a soft brush. If NPS decides to keep also a portion of the original plaster on the lower walls exposed for interpretation purposes, a perforated frame with a plexiglass sheet can be affixed to the wall for protection of the original plaster. The installation should allow for air flow between the plaster face and the plexiglass. If the restoration work proposed is not timely,



Figure 32. West room, southeast corner, 2003



Figure 33. West room, north end of room, 2003

stabilization of the space is advised. This would include water management and ventilation issues. The south wall vents should be made operable and utilized to improve air flow in the room. A more efficient roof gutter and exterior drainage system will help (*see "Gutters" and "Site" for necessary drainage work*). Loose plaster should be removed and replaced to match historic. Where plaster has failed, examine stonework for integrity of mortar joints and repair as needed. Walls need to be re-pointed in some lower areas. When removing loose plaster, care should be taken to protect fragments of sound historic plaster. The door and door jamb should be replaced with ones to match the 1860s appearance. The 1959 channels boxed out to permit mechanical ductwork near the eaves and ridge should be removed.

West room

The west room is known primarily as a living quarters for Selina Gray and her family. The interior space of the east room measures 16'-0" x 18'-0" with a ceiling height of 11'-6". The walls and ceiling in the west room are plaster with a lime wash coating, applied by NPS in 1958-59. Changes have occurred to the ceiling and loft levels over time. The lower portion of the walls show widespread areas of plaster damage due to rising damp and efflorescence.

A ship's ladder stands in the southeast corner, provides access to the upper attic space through a wood trap door (Figure 33). The brick fireplace on the west wall, measuring 6'-7" in width, is coated with plaster and white lime paint. The front wall steps in 1" on the vertical plane of the brick fireplace wall. The firebox measures 3'-9" x 2'-4" and is bridged with a flat jack arch lintel and finished with squared sides.

The entry door has two wood panels in the lower half and is glazed on the upper portion to allow visitors to view the interior of the room without entering. The door jamb has been enlarged, doubled in width, boxed in with wood, and painted white (Figure 34). The exterior-most piece of the jamb is older than the interior piece. Two 4-light wood windows are extant on the south wall. They are fastened on top with H hinges, a twentieth century colonial revival hinge produced by the QMC for their restoration program. The room is currently used as interpretive space.

The brick in the floor is of two types – paver bricks with a shellac coating or other dark accretion and



Figure 34 (above). West room, top of lower attic floor level, the location of which is based upon joist pockets the Army identified as original.



Figure 35 (right). West room, upper floor level of the attic, located on top of the sill plate.

sewer brick. Both have low absorption levels, are abrasion resistant and present a reasonable approximation of a mid-nineteenth century floor.

Deficiencies: There is clear evidence the walls in the room suffer from rising damp.

Recommendations: The treatment plan calls for the restoration of this room, improving upon its current interpretation and appearance by applying new insights gathered during the recent research (see *Part 2A, page 7*). If the work proposed is not timely, stabilization of the space is advisable. This includes water management and ventilation issues. Windows should be made operable and utilized to better ventilate the space. A more efficient gutter and exterior drainage system will help (see “*Gutters*” and “*Site*” for drainage work that is needed). The front wall of the fireplace should be made flush, removing the step-in. The door and door jamb should be replaced with ones to match the 1860s appearance. The H hinges should be removed from the windows and replaced by regular butt hinges (see *Appendix F*).

West room attic

The west room attic has two floor levels. The lower floor level is set on top of the sill plate and ten brick courses below the upper level. It utilizes the joist pockets the Army identified as being original (Figures 35 and 36). On the west wall on either side of the fireplace and at the same height of the loft floor level, the brickwork has been rebuilt, dating to the 1958-59 restoration. The chimney position may have been shifted at one point, possibly to install sheet metal ductwork. Plaster remains on some areas of the south and west wall, and along the fireplace which could date to the period when the loft was removed and the interior space opened to a single story. Areas on the upper west wall show whitewash on brick that predates the newer roof rafters.

Deficiencies: N/A

Recommendations: The treatment plan does not call for restoration work to be done in this area. No immediate work is needed.

Mechanicals

Lighting

There is minimum lighting in all three rooms, provided in most cases by portable fixtures. New lighting has been installed in the center room after the architectural investigation in order to establish a temporary First-aid station.

Recommendations: Lighting needs should be established to reflect the proposed use plan for the room

Plumbing

There is no plumbing service in the building.

Recommendations: No plumbing service needed unless required for future fire suppression system.

Fire

There are remnants of a fire detection system in the building. It's operability is unknown. There is no fire suppression system.

Recommendations: A contemporary fire detection system should be installed and tested on a periodic basis. New suppression system should also be installed.

Mechanical

A forced air HVAC system is located in the attic over the west room. Model #TWE030C1 40B0; 200-230 volts, 60 hertz, dated January 2001.

Recommendations: New systems may be installed as part of the restoration plan. No immediate work is necessary.

Electrical

A subpanel providing service from the main house is located in the east room.

Recommendations: Existing services should be inspected and repairs should be made as necessary to insure safety.

Water

There is no separate water service. None is required unless needed for a future fire suppression system.

Part IIA

Ultimate Treatment and Use

Overview of Treatment Plan

There is sufficient evidence to restore the South Dependency exterior and the center and west ground-level interior rooms to their appearance immediately prior to the Civil War. Loft spaces should not be restored or open to the public because of difficult access issues and the intent to retain the 1880s roof structure. The Ultimate Treatment Plan will help the National Park Service interpret the daily life and history of Arlington's African-American slave community. It reconciles information gathered from archival research, and a program of inspection and physical investigation along with material testing and analysis. Evidence gleaned from the recent physical, archeological, and paint studies revealed that extensive restoration work will not be necessary to bring the South Dependency exterior back to its 1860s appearance. The addition of modern HVAC system, as well as plans for addressing accessibility, security, and moisture control concerns are discussed in Part IIB: Requirements for Treatment.

The interior of the west room, also known as "Selina's Room," should continue to be interpreted as the Gray family quarters as it existed in the mid-nineteenth century. The current room appearance is the result of a 1960s NPS restoration. This room will require some restoration and repair work so that the space better represents the period of significance. The center room can be restored to reflect its historic use as a smokehouse with open rafters and a firepit, while the east room could be restored to its historic function as a store room. Additional physical investigation of the interior of the store-room will be required since the loft was inaccessible to the investigation team and a new exhibit occupying the ground floor room precluded physical investigation during the time of our study.

Exterior

Walls, Finish, and Trim

The exterior of the South Dependency exhibits a high degree of historic integrity. Civil War era photographs taken by Andrew Russell show how parts of the east, west, and south elevations appeared during the 1860s. Wood moldings and the horizontal windows on the south elevation are clearly visible as are alternating areas of roughcast and smooth stucco, and an exposed stone masonry foundation. There are no known mid-nineteenth century photographs of the north elevation.

The recent physical investigation, along with mortar examination and paint stratigraphy analysis, confirmed that the majority of the material found on the South Dependency exterior walls today is the same as that visible in Russell's photographs. Surviving historic material includes large areas of the rough cast and smooth stucco finish, the exposed masonry foundation, most of the outriggers on the south and north elevations, and most wood trim members, wood vents and wood spindles on the east, west, and south elevations. Because no physical evidence survives regarding the original dimensions of the three entrance cornices on the north elevation, these features (dating to the 1960s) should be repaired and retained as best estimates of the original configuration. See Appendix E: Field Notes, Section 1 for annotated exterior elevation drawings that identify the various finishes and features.

The Treatment Plan calls for the preservation and restoration of all elements identified as dating to the period of significance. Other features, including the remaining outriggers, some of the trim

pieces and patched areas of rough cast and stucco, date to the late nineteenth and twentieth centuries. Where these match original features they should be retained; where inappropriate, they should be replaced. An example of the latter are the soffits on the underside of the north and south eaves. The current soffit boards date to the NPS restoration and have V-grooved joints. They should be replaced with tongue and groove flush boards with no visible joints that more accurately depict their historic configuration (as seen on the North Dependency soffits).

The stucco should be sounded for areas of adhesion failure and dead sections removed by hand under careful supervision of the stucco/plaster conservator. Areas of delaminated, deteriorated, or inappropriately patched rough cast and smooth stucco should be replaced with new material that replicates adjacent historic areas. The south wall is especially in need of smooth stucco repairs. Because so much of the stucco dates to the period of significance, a trained conservator rather than a general contractor should be used for the stucco work. The foundation should be repointed with a soft, lime mortar leaving a flat-tooled joint with a 1/8" recess (*see Part IC, page 5*).

Should it be necessary to clean the stucco surfaces of the building in the future, it is recommended that a study of available techniques be performed at that time. A paint conservator should also be called in to study the existing coatings and to determine the best contemporary coatings to be utilized in repainting the building.

Roof

The South Dependency's roof structural system and plank sheathing date primarily to the 1880s. Though not as old as the period of significance, these features do possess a secondary significance. Analysis by an NPS engineer in 2003 determined that the system and sheathing are sound and need not be replaced.

The existing structural system and sheathing can be retained and concealed from public view in the east and probably west rooms above the restoration lofts. Taking into account these factors and its relative importance, the Treatment Plan does not include replacing the 1880s roof structure. In the center room, where the existing joists, rafters, and sheathing would be exposed to the public, the circa 1860 features can be recreated without altering the 1880 roof structure. Rafters and joists should remain in place and a false assembly of skip sheathing roofing lath and standard short lap, machine cut wood shingles should be installed below the existing sheathing. The shingles should be the same as used on the top of the roof replacing the current cement tile roof. This false underside will replicate the appearance of a mid-nineteenth century roof from the center room interior while allowing for retention of the existing system. The 1959 NPS channel boxes to permit mechanical ductwork near the eaves and ridge should be removed.

The current cement tile roof dates to the NPS restoration in the late 1950s (when it replaced a slate roof dating to the 1880s). The large number of cracked, crazed, and delaminated tiles indicate that the tiles have reached the end of their service life and should be replaced. Barring any additional information about the South Dependency's historic roof covering revealed during the upcoming restoration work, the new roof should be based on known mid-nineteenth century examples of shallow pitched roofs found along the Potomac region and evidence gleaned from the Civil War photographs of the building. The shingles should be taper sawn, not wider than 7", 18-20" long, vertical grain,

with about a 5-1/2" exposure. The Treatment Plan calls for the replacement shingles to be high-quality yellow cedar shingles. For durability and performance, the shingles should be sawn from the British Columbia area of Canada. Shingles will be secured with galvanized roofing nails to wood roofing lath applied directly atop the existing 1880s plank sheathing with no intervening roofing felt paper.

The South Dependency did not feature gutters until the beginning of the twentieth century. However, in an effort to mitigate the well-documented moisture problems this building has experienced over its history, it will be necessary to replace the existing gutters (dating to the 1960s) with new, larger capacity gutters and an additional round downspout at the opposite end of the existing. This treatment is discussed in Part IIC: Requirements for Treatment of this report.

Chimneys

The west room chimney should be rebuilt above the roofline to more closely match its historic appearance, make it more weathertight and allow ventilation to the interior. The fireplace and chimney should be reconstructed in the east room. It should be based on evidence gathered from further investigation of the east room, as well as surviving historic features of the west room fireplace. The reconstructed chimneys should include a single course drip edge immediately above the shingle roof line and a double course top edge. Both chimneys should be opened to increase air circulation in the rooms below while screened and covered for protection against rain.

Doors

The three doors currently located on the south elevation date to the NPS restoration and should be replaced. Because no historic photograph of the South Dependency's north elevation survived, new doors should be produced based on those visible in the 1860s photographs of the North Dependency. As is discussed in the North Dependency HSR, a number of factors indicate that one or more of the doors visible in the Civil War photographs were not original to the dependency but were of earlier construction, reused from another structure. The raised panels seen in the Uncle Joe photograph appears to be an earlier door; the quality of construction and high style appearance of the doors and jambs are not typical of a dependency.

During the future restoration program, a careful inspection of the area above the door openings at the east and west rooms should be made to determine if any historic lintels survive or if there is any other evidence of a change in door height.

The reproduction doors, jambs, headers, and sills on the South Dependency will match that specified for the North Dependency. The Ultimate Treatment Plan calls for using the North Dependency center room door frame (as seen in the 1864 photograph) as the basis for the three openings on the South Dependency, while the the door to the east room (as seen in the 1864 Army photograph and the Uncle Joe photograph)



Figure 1. Photograph of Uncle Joe taken in front of the North Dependency.

should be the basis for all three of the South Dependency reproduction doors. Each replacement door should match the original raised panel door's dimensions and materials. See Appendix F for detailed drawings of the reproduction door, doorjambs, header, and sill.

The existing door jambs should be removed and replaced with replicas made to fit the existing rough masonry openings. If, after the existing jambs are removed, close inspection reveals that the openings have been significantly altered from their original dimensions, the new jambs and doors should be adjusted to reflect this revised understanding. New information about the historic opening may also be obtained by additional archeological investigation outside the north elevation doorways. Such investigation may reveal the historic grade and position of the door opening as it existed during the period of significance. Historic door and door frame dimensions may require modest alteration to accommodate current code and accessibility requirements. Changes to the historic door configuration are discussed in Part IIB: Requirements for Treatment.

Door Pediments

Because no mid-nineteenth century photographs of the north elevation survive, the definite presence and character of the original door pediments is not known. The 1864 Russell photos show cornices above the North Dependency doors. The existing cornices on the South Dependency date to the 1959 NPS restoration. Installed with rough cast stucco between them and the doors, these features are not in keeping with typical historic door or window cornices that featured a flat architrave panel between the opening and the projecting cornice moldings. Barring any additional evidence revealed during the future restoration program, the cornices should be modified in the same manner as that identified for the North Dependency.

Painted Panels

The framed stucco panels above the north elevation doors were purportedly painted originally by George Washington Parke Custis. They were severely deteriorated and "almost invisible" by 1929 when the QMC decided to restore them. Photographs of the panels taken in 1957, prior to the NPS work on the South Dependency, shows the paintings in better condition than in the 1920s, indicating that the QMC carried through with the restoration or replaced them altogether. At present, the images on the panels are again severely deteriorated. The Treatment Plan recommends securing the services of a qualified paint conservator to examine the painted panels, identify any surviving historic material, and assess the potential for restoration, if appropriate.

Windows

An 1864 photograph showing the South Dependency's south elevation confirms the existence of horizontally-oriented windows during the period of significance in the same locations as the existing windows. Recent paint stratigraphy analysis and physical investigation indicate, however, that the current window sash and frames are not likely original to the structure. The appearance of the existing windows is similar enough to those in the Civil War era photo to preclude their replacement with new windows. Only those areas of the sash and frame that have cracked, chipped and delaminated paint will be stripped, and in those locations only stripped to the uppermost sound layer. At friction points where accumulated layers of paint have rendered the windows inoperable, sufficient paint should be removed to ensure the windows' free operation. After necessary stripping, sanding, and preparation, the sash and frame should be repainted with a sand additive to imitate the exterior sur-

face of stone. The sills will need to be extended on the exterior to match historic detailing and restore the original function of the sills as drip edges.

Exterior Treatment Summary

- Replace existing 1960s cement tile roof with new wood shingle roof to match 1860s appearance
- In center room, install false underside of wood shingle roof to existing underside of 1880s sheathing
- Rebuild the east chimney and west chimney above the roof level
- Rebuild chimney in east room
- Rebuild fireplace in east room
- Repoint stone foundation using appropriate soft, lime-sand masonry mortar
- Use the services of a material conservator experienced in historic stucco to conserve deteriorated historic stucco where possible
- Remove deteriorated and delaminated historic smooth and rough east stucco that is beyond repair, and inappropriately patched stucco finish on all elevations. Replace with new material that matches oldest adjacent historic material in appearance and composition
- Paint finish in accordance with results of investigation prior to work
- Replicate doors from 1860s based on drawing provided in Appendix F
- Window sash and frames should be stripped of deteriorated paint to sound paint surface; paint finish in accordance with results of investigation prior to work; replace existing hardware with new, reproduction hardware
- Reestablish original appearance and drip function of window sills by adding material to vertical face of sills
- Replace inappropriate plank watertable on east elevation with two piece molding to match that on west elevation
- Replace deteriorated fascia board on gable ends and other trim as shown in drawing in Appendix F
- Replace soffits beneath north and south eaves with flush boards
- Resecure the vent/niche assembly in the center of the south elevation
- Secure the services of a paint conservator to examine painted panels above door
- Re-establish historic grade where possible; otherwise recontour grade to improve drainage away from building

Interior West Room

The treatment plan calls for restoration of the west room, also known as “Selina’s Room,” and improving upon its current interpretation and appearance by applying new insights gathered during the recent research project. Although the west room was not accessible for significant physical investigation, important evidence regarding its historic configuration was gathered through archival research, examination of the adjacent (center) room, and archeological and paint studies.

Loft

Investigation of the beam pockets in the center room revealed that the pockets are contiguous to the west room and original to the building’s construction. While they supported meat hanging beams in

the center room, they were likely the means to support loft floor joists in the west room. The existence of a loft above the east room is also consistent with oral histories of the Gray sisters, former slaves that lived in the room during their youth in the 1860s. Limited access to the space during the recent physical investigation prevented a conclusive determination of the exact position and type of ceiling that existed historically. At the outset of the future restoration program, select areas of the existing 1959 NPS plaster should be removed along the upper edges of the main room walls, especially along the east and west walls and on the fireplace breast. Investigators should look for surviving pockets, ghosts of the original loft ceiling and floor, any nailing blocks or other indications of the original loft's position and character. Surviving evidence may reveal whether the original main room ceiling had exposed timbers or a plaster finish.

Should no further understanding of the original loft configuration be revealed during this limited exploration, the current joists (dating to the 1959 NPS restoration) should be left in their current position. Barring any additional information about the historic ceiling finish, the Treatment Plan calls for removing the smooth 1959 plaster ceiling, and installing a new wood lath and plaster ceiling onto the existing joists. The plaster ceiling should not be overly finished but consistent with the results that would have been achieved by a relatively unskilled journeyman plasterer. This finish would match that of the kitchen in the North Dependency.

The existing wall plaster, applied by NPS in 1959, is too smooth and its excessive thickness is pronounced along the south wall. The plaster should be removed from the south wall down to any historic plaster and refinished. Plaster on the other walls can be repaired and skimmed coated in a cruder manner to more closely match the historic appearance. Complete removal is not recommended.

Floor Level

Recent archeological investigations revealed that the historic floor was .85 inches below the current brick floor (which dates to the 1959 NPS restoration and has been relaid at least once since then). A hard pan surface within the fireplace was also found, a feature consistent with the heat signature of a dirt hearth. The position of this hearth and its relationship to the other strata discovered during the investigation indicate that historically, the room had a dirt floor.

Since the floor in this room during the period of significance was dirt, the current brick floor and subsequent layers of dirt should be carefully removed by hand under the supervision of an historic preservation specialist. Some infill dirt should remain above the historical level to protect potential archeological artifacts buried below.

Fireplace

Visual examination of the chimney, both above and below the current loft level, suggests that significant portions date to the period of significance. The firebox has been altered and rebuilt at least twice in 1929 (as evidenced by the pattern of newer bricks seen in 1959 NPS pre-restoration photographs, and in 1959 as part of the NPS restoration). Its dimensions were also altered by changes in the floor height which shortened the overall height of the opening.

When the 1959 NPS plaster is selectively removed as part of the future restoration work, additional

evidence of the historic fireplace's configuration may be revealed. The outer wythe of brick from the lower portion of the fireplace face (dating to either the QMC or NPS restoration) should be removed to search for evidence of key bricks and other signs of the fireplace's historic configuration.

If no additional information is revealed, the firebox will be kept square and the opening adjusted to make the flue draw properly. When properly constructed, the flue to firebox ratio should be approximately 10%. With the historic flue in the west room measuring about 7" by 17", the firebox would ideally have measured about 1,190 square inches for proper draw. To achieve this and remain within the known historic measurements of the fireplace during the period of significance, the box opening will be approximately 36" wide with plastered sides and about 36" high (+/- an inch or two) from the finished surface of the floor. Historically the back wall of the firebox would also have been plastered with a roughcast finish.

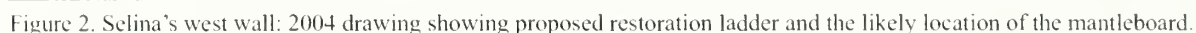
The current chimney steps in about 1", approximately 4' up from the current floor level. This ledge appears to date to the 1929 restoration and reconstruction of the fireplace and survived the 1959 NPS restoration. As it is not a feature that was historic to the building, it will be removed as part of the current restoration.

During the upcoming restoration program, when the existing plaster layer is removed, the fireplace breast should be examined for nailing blocks or other evidence of a simple wood mantle. Because of past alterations to the chimney face (more appropriately known as a "fireboard"), evidence will not likely be forthcoming, yet it is recommended that this once common feature be provided. See Appendix F for detailed drawings and typical examples.

Ladder

No evidence of a built-in stair has been found to date, lending support to the ships ladder approach to accessing the loft area. In 1929, the Gray daughters recalled that the South Dependency's west end was divided into "a room at floor level and an attic reached by a steep stair."⁸ In response, the QMC in 1929 and the NPS in 1959 fabricated heavy, open tread ships ladders. A study of other such features dating from the same period, however, suggests that a more accurate replication of a nineteenth century ships ladder can be produced.

The stairs would have been steep, closed carriage with dadoed treads and no risers, much like those currently in place. However, the dimensions of the current ships ladder (dating to 1959) are much too heavy. The restoration stairs will be set at a steep angle, have treads about 1 1/16" thick, projecting past the edge of the closed stringers approximately 1' at the top edge with a small hand-planed chamfer at the front corner. The tread will be set into two dados that are stopped just before the back side of the carriages. Carriages should fit snugly inside two joists and be nailed to joists. Appendix F provides a detailed description and typical examples of a more accurate nineteenth century ships ladder as used in residential buildings. If additional information about the historic location is not revealed by future investigation of the space, the Treatment Plan calls for running the stairs in the same direction and angle as currently exists (south to north ending at a hatchway where the southside of the chimney intersects the west wall).



Nothing is known about the appearance or characteristics of the hatchway to the west room's upper level loft. In fact, there is no conclusive evidence that the opening in the main level's ceiling, reached by way of the ship's ladder, was ever covered. Yet some type of hinged door or hatch is likely to have covered the opening and is definitely advisable for the current restoration program (which does not include a finished loft). Absent any hard evidence, the hatch would most appropriately be a board and batten door, probably three or four hand planed boards with 1/4" beads facing down, tongue and grooved with two battens, both beveled on the up side. The battens could have been screwed or clinch-nailed together. Two cast iron slim line butts should be attached so that the hatch door can swing up toward and against the gable brick wall. The hatchway opening would be lined with hand-planed lumber beaded at the lower edge, probably a half bead. See Appendix F for drawings of the proposed loft hatchway.

The existing H-hinges are reproduction Colonial Revival hardware dating to the 1929 QMC restoration. The existing window's earlier hinge pocket, however, is still discernable on the interior sash and frame. The pockets reveal the the early use of regular fixed-pin cast iron butt hinges. See Appendix F for drawings and size information. One of the windows in the west room has a wood turn latch that functions as a basic lock securing the sash closed. A similar feature can be replicated on the other windows.

At present there is no means to secure the South Dependency's windows in an open position. A common method during the mid-nineteenth century in such buildings was to use a wood stick or narrow board, to prop the window open. However, this solution is too hazardous for today's use. Thus, a more secure method should be employed utilizing a hook (with safety latch) and eye arrangement. The hook is to be anchored into the plaster lath or ceiling joist while the hook eye is secured to the lower rail of the sash. See Appendix F for a drawing of the proposed window hook treatment.

West Room Treatment Summary

- Selectively remove 1950s NPS plaster at east and west walls and fireplace breast to confirm current loft position and determine whether evidence of the original ceiling finish survives.
- If no new evidence is revealed, retain joists in their current position, remove the current plaster ceiling from the joists and install a new wood lath and plaster ceiling.
- Consolidate historic plaster finish exposed during investigation where necessary. In areas where the plaster is severely delaminated, remove layer to a sound substrate.
- Repair plaster areas where needed and skim coat the existing walls to historic appearance
- Remove select areas of 1959 plaster and select areas of later fireplace alterations to determine historic dimensions and configuration of the firebox. If no additional information is revealed, firebox should be kept square and the dimensions of the opening altered to approximately 36" wide and 36" high; cover the firebox sides and back wall with roughcast plaster.
- Rebuild the chimney breast removing the step in the vertical plane; install a reproduction fireboard/mantleboard according to drawings provided in Appendix F.
- Fabricate and install ships ladder and hatchway according to drawings provided in Appendix F.
- Replace existing strap hinges with a fixed-pin cast-iron butt hinges appropriate to period.
- Remove brick floor to reveal historic floor level. Some infill dirt should remain above the historical level to protect potential archeological artifacts. Work requires close supervision.
- Install hook (with safety latch) and eye arrangement to hold open sash according to drawings in Appendix F.
- Paint finish in accordance with results of investigation prior to work.

Interior Center Room

The Ultimate Treatment Plan calls for restoring the center room (currently storage space and a first aid station) to its historic use as a "smoke house" and food storage room. Both twentieth century restorations interpreted this space as a "smoke house" in essentially the same fashion. The room is currently not open to the public. Recent archeological investigation, paint and finish stratigraphy analysis, and recent physical investigation have revealed that the QMC and NPS restorations were not far from the mark. Restoration should include removing the 1959 NPS ventilation duct work along the roof peak, and north and south walls.

Beams

Historically, the space featured three beams set into pockets approximately 8' 6" up the east and west walls. The historic pockets survive and are located roughly in the center third of the room. Two additional joists, one each along the north and south wall, were added sometime after original construction, probably when the space was converted to living quarters for the Gray family after 1860 or in 1929 as part of the QMC interpretation of the room. The post-1860 loft was accessed by a ships ladder in the northeast corner. A joist pocket in the north wall helps define where the ladder hatch to the loft existed. The original roughly finished beams were used to support hanging meat during the smoking process. When this process was completed, smoke would likely have been vented through the pair of louvered vents on the upper south wall.

The three sets of center beams should be reinstalled in the historic pockets. Each beam should have a combination of sash saw marks on at least two sides with hewn marks on the other one or two sides.

As it is not known how the meats were hung from the beams during the period of significance, two typical treatments are equally appropriate: hand made “J” hooks or cut nails, nailed randomly down the beam. See Appendix F for drawings of appropriate hanging hooks.

Walls

Further evidence that the space was used for smoke curing meat came from examination of the paint and finish stratigraphy found on the walls. A thick accumulation of soot and oil is visible on areas of original plaster located on the upper parts of the east and west walls, and under magnification, in areas of original plaster lower on the walls that had been concealed behind the 1959 NPS finish.

The Treatment Plan includes carefully removing NPS plaster from the wall surfaces of the center room. When the later layers are removed, all wall surfaces should be closely examined for surviving evidence (plaster and finish remnants, partition ghosts on the brick, nailing blocks) that may provide additional information about the historic configuration and appearance of the space. Historic plaster that is beyond repair should be removed to a sound substrate. Areas of minor deterioration or delamination should be consolidated. NPS officials may consider affixing a plexiglas cover, allowing for necessary ventilation, to protect the original material from abrasion. In all other areas, the 1964 gypsum plaster should be removed and a thin, single coat of lime plaster applied to exposed areas of brick to match the historic material. Finally, the entire wall surface should be painted with a thin-white limewash.

Floor

The room’s historic function as a smoke room was confirmed by the archeological investigation that uncovered a basin-shaped hearth filled with charcoal and water worn stones carved into an otherwise undisturbed layer of subsoil. The stones may have functioned as a partial lining for the hearth. Civil War and post-Civil War era artifacts were identified in the strata immediately above this original layer.

The Treatment Plan calls for returning the center room floor to its historic position and appearance. Some infill dirt above the historic position is advisable to protect any remaining archeological materials. All layers above that containing the original hearth will be removed and the original hearth will be excavated and interpreted.

Center Room Treatment Summary

- Remove areas of 1959 plaster from wall surfaces; examine original surfaces below for any further evidence of historic features and finishes.
- Consolidate historic plaster finish where necessary, in areas where the historic plaster is severely delaminated, remove layer to a sound substrate.
- Patch areas of exposed brick with a thin single-coat lime-based plaster to match adjacent historic finish.
- Install false underside of wood shingle roof to existing underside of 1880s sheathing.
- Remove existing brick floor and excavate to historic level of earth floor as indicated by archeological report, retaining or installing some infilled dirt above to protect any remaining archeological evidence.
- Recreate basin-shaped hearth above remains of historic hearth.

- Reinstall three reproduction center beams with hanging hooks in existing original pockets based on description in "Beams" section (page 95).
- Install new reproduction door, that include a reproduction lock as shown in the Uncle Joe photograph.

Interior East Room

The South Dependency's east room was currently used as an interpretive exhibit space at the time of the investigation. The current ceiling is positioned 11' 6-1/4" above the floor. As the room was inaccessible for indepth physical investigation during the recent study, information on its historic appearance is less well known. Oral histories and limited documentary information indicate that during the period of significance, the space was used as a storeroom, kept under lock and key. The room had a fireplace on the east wall. Archeological investigation of the area in front of the former fireplace was inconclusive as the ground had been heavily disturbed by modern utility trenches and the insertion (in 1929) of a concrete pad beneath the reconstructed fireplace. The center three historic beam pockets in the center room extend through to the east room, suggesting that the east room either had beams for hanging stored items or that there might have been a loft. Further examination of the east and west wall at the ends may reveal additional historic beam pockets, providing further evidence of a loft as in the west room.

During the future restoration of the South Dependency, all exhibit materials will be relocated, the existing stud wall on the east end select areas of the ceiling and twentieth century plaster layers carefully removed to examine any surviving historic finish or features beneath. Of particular assistance in the restoration will be a pattern of sheared key bricks along the east wall that may reveal the original fireplace's dimensions and characteristics; areas around the original pockets and ceiling/loft line that would indicate the loft's original position and whether the ceiling beneath was finished; any original joists or rafters in the loft that provide further understanding of the original roof system; and any plaster and paint remnants that suggest how the walls were finished during the period of significance. New findings from this future investigation should be incorporated in the treatment plan.

Should the future investigation reveal no additional information about the space, the east room will be restored as a storeroom with the same loft, ships ladder, fireplace, plaster, and floor treatment planned for the west room. Unlike the west room, where the current ceiling is at the same approximate position as the historic loft, restoring the east room will require repositioning a new loft ceiling in accordance with surviving joist pockets. Depending upon the park's needs at the time of the work, the room will either be interpreted as a storeroom with appropriate reproduction shelves, furnishings, and provisions, or the interior will be left unfurnished and provide space for separate exhibits and displays.

East Room Treatment Summary

- Remove existing exhibit material including display boxes and wall panels.
- Remove stud wall on east and ceiling.
- Carefully remove select areas of twentieth century plaster to examine surviving historic material beneath.
- Consolidate historic plaster finish where necessary; in areas where the historic plaster is beyond repair, remove layer to a sound substrate.

- Patch areas of exposed brick with a thin, single-coat lime-based plaster to match adjacent historic finish.
- Paint finish in accordance with results of investigation prior to work.
- Remove brick floor and investigate for evidence of earlier floor levels and materials. If no further information is revealed, install a dirt floor similar to that in the center and west room.
- Rebuild fireplace on the east wall. This rebuilt fireplace will include a chimney extending up beyond the roof plane, returning the South Dependency to its original, two-chimney configuration.
- If no further information is revealed, recreate historic loft ceiling at position of historic pockets, finish the ceiling with wood lath and plaster.
- Furnish the interior with reproduction shelving and provisions to replicate its nineteenth century function as a storehouse, or leave the interior unfurnished to provide exhibit and display space.
- Provide for ships ladder to loft; install new loft based on results of further investigation.
- Install new hardware to match that specified for the west room.
- Provide new hatch for loft.
- Leave loft area without access to public.
- Undertake work on windows as described for those in the west room.

Part IIB

Requirements for Treatment

Requirements for treatment

Accessibility Issues Concerning Proposed Work to the Arlington House Dependencies

From the initial planning for the North and South Dependencies, the National Park Service (NPS) sought opportunities to expand its interpretation of plantation life at Arlington and the experience of the African-American slaves of Robert E. Lee at his family residence. A precursory examination of records concerning the two dependencies suggested that considerable change had occurred over the years to these two structures and that little historic fabric probably remained. Assuming only the vestiges of the original structures survived, making the buildings fully accessible on the principal floors was not considered problematic.

As the research and physical investigation of the structures expanded, two surprising developments emerged. First, physical investigation and a more indepth study of available records and historical photographs presented a fascinating picture of two buildings that retained considerable historic integrity. The exterior of both buildings retained their original walls and fenestration except for the window openings on the lower level, north elevation of the North Dependency. The most altered openings had been the entrance doors on the North Dependency which were changed during the military restoration but returned to their historic location during the NPS work in the 1960s. The exterior masonry walls were largely intact, dating to their early nineteenth century construction, and most remarkable, the majority of the prominent rough cast stucco on both dependencies dated at least to the 1850s. Not only is this a very early use of such a wall finish in the U.S., unlike the mansion's foundation where the original rough cast stucco finish was long since removed, the historic treatment on the dependencies, complete with evidence of early paint, had survived.

Plan A. How to provide for public accessibility to the center and east rooms of the South Dependency.

The center room had an original grade level similar to Selina's Room. Archeological investigation uncovered former fire pits in the center of the room, including one that probably represented the first restoration efforts undertaken by the military and an earlier layer that dates to the period of significance when the space was used as a smoke room for meats. For this room, a consensus was reached at the park planning meeting to provide for full public access. This can easily be achieved by some reworking of the existing, raised, outside entrance level created by NPS in the 1990s and replacing the non-historic interior brick floor with dirt fill, at a level filled to the height of the historic door threshold. The fire pit can be recreated at a higher floor level, thus avoiding further disruption to the existing archeological evidence. The interior floor level will thus be the same as it currently exists and would not visually affect any spatial qualities of this room nor disturb surviving historic artifacts in the ground.

As for the east room of the South Dependency which historically was a store room, the existing brick floor could be retained at its current level. Although this is undoubtedly above the historic floor level, the current archeological investigation along with the research undertaken by the HSR team has shown that the original floor level has been greatly disturbed. Current plans call for this room to be used for displays, similar to its current function, while revealing the c1860 architectural appearance of the room. The exterior grade up to the door has been changed by the National Park Service in recent years and some additional modification is necessary for accessibility.

Plan B. How to restore the original floor level within the west room of the South Dependency. Selina's Room has been treated appropriately for many years as perhaps the most historically important of all the rooms in the two dependencies. In addition, it appears that the room is the least disturbed of all the interior spaces. Portions of the fireplace are original and recent archeological investigation led to the exciting discovery of the pre-Civil War occupancy level for the floor, complete with period artifacts. Having established for the first time that this room had a dirt rather than a brick floor during Selina's occupancy, it also became clear that entrance into the room from the outside included a step up onto the door threshold and then a step down onto the inside direct floor.

Through meetings with NPS staff, the decision was made to treat this room as a museum exhibit, depicting the quarters of Selina's family at the time of Robert E. Lee's residency at Arlington. There was consensus that the appropriate way to accommodate public access was to provide an accessible entrance from the outside and provide for a platform viewing area on the inside. The platform would be raised above the historic floor level and would control public access within the space. This would allow the exhibit within the room to reflect the importance to Arlington history of the African-American family that lived there. It would also permit the dirt floor level to be returned closer to the original level without greatly disturbing the historic artifacts and debris that remain in the ground. Some infill dirt should remain above the historical level to protect potential archeological artifacts. Furthermore, it will allow the fireplace hearth to be returned to its historic appearance while retaining surviving original fabric. The entrance from the outside and the platform would be fully accessible. The upper sleeping loft would not be on display as this area is not being restored.

Moisture Control

Both the South and North Dependencies have long suffered from moisture problems. Even in the Civil War era photographs, it is apparent that the buildings exhibited serious rising damp. Over the years, moisture rising in the walls through capillary action has led to decay of interior and exterior finishes at varying heights on the walls, starting at the ground and working up; the breakdown of mortar joints in the same areas of finish decay; and the deterioration of various wood members. While wood decay as a result of excessive moisture in the walls, is not currently a major problem, finishes and mortar joints remain high priority issues. Besides the normal reasons for undertaking moisture control measures, the importance of preserving and maintaining the highly significant sections of the historic stucco cannot be over emphasized.

To help ameliorate the moisture problems in the South Dependencies, a number of corrective steps should be taken along with long-term monitoring.

Exterior

- 1) A study should be made of the current drain system around the building to ascertain its effectiveness especially in times of heavy rain. Consideration should be made of moving drain openings further away from the building and appropriate steps taken so when drains are partially clogged or overwhelmed by heavy rain, ponding will not occur immediately in and around the building.
- 2) The grade along the south elevation should be re-contoured to slope away from the building. Currently, the lawn on the south side slopes toward the south wall of the building so as to utilizing the same drain openings as the building gutters. The ground slopes away from the building only for a very short distance. This helps to account for why the south wall incurs

the heaviest damage from rising damp.

3) Areas of deteriorated mortar joints along the foundation, such as in the southwest corner, should be repointed, matching the historic tooling and mortar.

4) The beveled mortar edge along the water table should be correctly re-established.

5) The size of the gutter should be increased from 5 to 6 inches, and one additional down spout with a cleanout should be added on both the north and south elevations, connected to the underground drain.

6) The stucco finish should be selectively repaired where needed to help keep out unwanted moisture.

7) The stucco should be painted to restore the historic appearance of the walls and also serve as a moisture control; the finish should be compatible with existing paint finishes on the building and designed to be breathable.

8) Drip line should be recreated for the existing sills as described earlier in this report.

9) Flashing should be carefully retrofitted to certain exterior wood trim to help shed water from the junction with the stucco; where damage to historic stucco will occur as a result of retrofit, alternate treatments such as caulk should be used.

10) Vehicle parking along the east façade presents not only risks from impact damage but also effects drainage when the ground is moist. Parking adjacent to the building should be avoided. On the north facade, vehicles should be deterred from passing close by to avoid splashing of rainwater onto the building.

Interior

1) It is our understanding that NPS intends to run HVAC services to the building from a plant located away from the main house and that the temperature will only be moderated in periods of more extreme times of either hot or cold weather. Such an approach is important because any attempt to bring full climate control to the interior of the South Dependency will likely have the long-term effect of encouraging more rising damp. In the event a decision is made to utilize the east room for a gift shop or other purposes that requires greater comfort level, the impact of the HVAC usage should be carefully monitored in regards to moisture in the walls. This can be done through use of a moisture meter and mapping of the masonry walls to record readings over time.

2) If the new HVAC system utilizes a fan unit in the building, the fan should be regularly utilized to enhance air movement and to aid in moisture management.

3) Sometime over the past 50 years, the NPS applied a thick very hard plaster to certain



Figure 1. Center room, east and south walls show evidence of rising damp.

interior wall surfaces. This treatment was intended to control moisture damage to interior finish. The west room of the South Dependency was in use as an exhibit room, limiting our investigation. However, judging from the two window reveals and the condition of the plaster, it seems that this thick coating of hard plaster was executed at least on the south wall of the west room. Since the thick hard plaster tends to further trap moisture and also promotes further capillary action, it is recommended that the plaster be carefully removed from the south wall of the west room and the center room. Special care should be taken so as not to damage historic plaster or other physical evidence of historic finishes that exists beneath. An added benefit of removing the hard plaster from the south wall of the west room is that it will permit the restoration of the wall detail/window trim around the historic window openings. The south wall should then receive a thin plaster coating and a finish to recreate the historic appearance. Such a treatment should not be designed nor considered a permanent corrective solution. It is expected that flaking, cracking and other signs of gradual failure will occur; such conditions should be accepted in order to best present what the appearance and conditions of the 1860 building to the public. This was a part of the living and working conditions of the life of household slaves at Arlington. Simply put, the interiors of this building were seasonally damp and unpleasant. Decisions regarding what to do with the south wall of the east room depend upon further investigation, since the room was not accessible during our investigation.

- 4) The reintroduction of dirt floors in the west and center room will require monitoring as to potential moisture impact.
- 5) The finish of the interior wall should both recreate the historic white-wash finish and be breathable at the same time.
- 6) Improved ventilation is important to moisture management. To this regard, the fireplace chimney in the west room should be reopened and a compatible rainwater cap installed at the top. The fireplace in the west room should be reconstructed with a compatible rainwater cap. The open chimneys will promote natural updrafts and air movement within the rooms. Similarly, windows should be viewed as functional, providing seasonal ventilation while monitored for security.
- 7) In general, a moisture monitoring program should be established that utilized both visual observations and techniques such as wall mapping utilizing a moisture meter.

HVAC

Decisions regarding any HVAC installation are beyond the scope of this report. It is our understanding that a physical plant is being designed by others to supply the needs of both the Mansion and the North and South Dependencies. Based on our investigation, some special precautions are still worth noting:

- 1) Both the North and South Dependencies are quite special historic resources and, for their age and historic function, contain a considerable degree of historic integrity. Special care should be taken not to damage historic fabric or finishes.
- 2) Due to the long-term moisture problems associated with the dependencies, considerations regarding the treatment and operation of the HVAC should take into account the recommendations in this report concerning moisture management.

Security and Fire Protection

Decisions regarding security and fire protection are beyond the scope of this report. It is our understanding that both the security and fire protection systems are being designed by others as part of a central system for the Mansion.

Part IIC

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Virginia Historical Society, Richmond, VA

Documentation found and reviewed

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Eleanor Calvert's reminiscences
Markie Williams' journal
Architectural Forum, March 1924
1929 interviews with former slaves – Jim Parks and Gray girls
1930 interview with former landscape gardener, David H. Rhodes
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Appendix A

National Park Service

List of Classified Structures

Arlington House, South Servants' Quarters



Identification:

Preferred Structure Name

Arlington House, South Servants' Quarters

Preferred Number

AHQS

Other Structure Name(s):

Other Structure Name(s)

1. Smoke house, storage room, and slave quarters

Park

Arlington House, The Robert E. Lee Memorial

Park Design

3300

Historic District:

Historic District

No records.

Common Name

Virginia

Structure County

Arlington

Region

National Capital

Intersecting Street

George Washington Memorial Parkway

UPRIS

011956

Historical Significance:

National Register Status

Entered - Documented

National Register Date

10/15/1966

National Historic Landmark

No

Significance Category

Contributing

Significance Statement

This structure is significant as part of the 1804 design by George Hadfield for the site. The structure housed a smokehouse, a storeroom, and slave quarters. On 5 October 2002, the exhibit on slavery opened to the public.

Construction Period:

Construction Period

Chronology:

		Begin		End		Designer	
Physical Event		Begin Year	AD/BC	End Year	AD/BC	Designer	Occupation
1.	Built	1804	AD	1817	AD	Structure built	Other
2.	Designed	1804	AD	1804	AD	Hatfield, George	Architect
3.	Preserved	1933	AD	1933	AD	Transferred by War Dept to NPS	Other
4.	Rehabilitated	2002	AD	2002	AD	Rehabilitated as slavery exhibit	Other

Function and Use:

Primary Historic Function

Primary Current Use

Structure Contains Museum Collections?

Other Functions or Uses:

Other Function(s) or Use(s) Historic or Current		
1.	Agricultural Outbuilding	Historic
2.	GENERAL STORAGE	Historic

Physical Description:

Structure Type

Volume

Square Feet

Material(s):

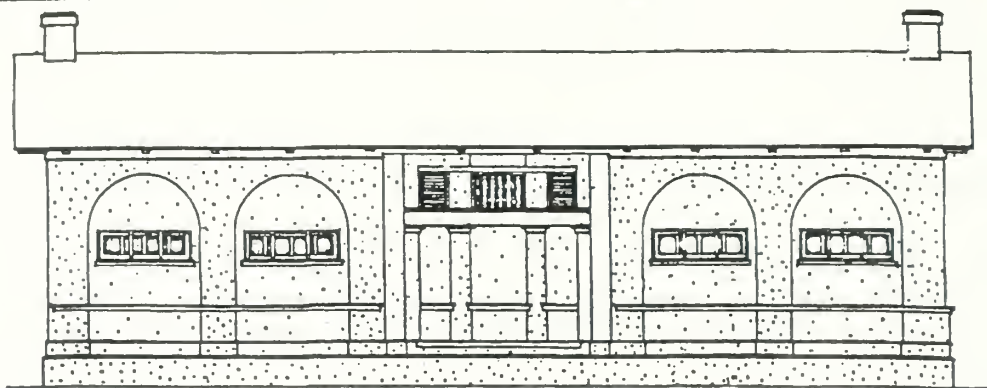
Building		
2,000 - 20,000 cubic feet		
800		
Structural Component(s) Material(s)		
1.	Other	Stucco
2.	Roof	Slate
3.	Foundation	Stone
4.	Walls	Brick
5.	Framing	Wood

Short Physical Description

West of the main house's south wing, this dependency is a single-story stuccoed brick structure on a stone foundation. It measures approximately 20'-x-40' and has three unconnected rooms reached by three doors to the courtyard. Pilasters and arches define the openings and the gable ends.

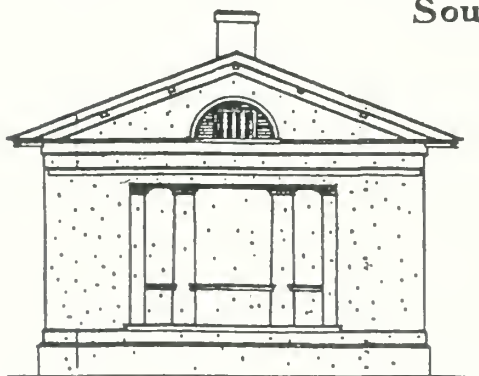
Appendix B

Historic Drawings

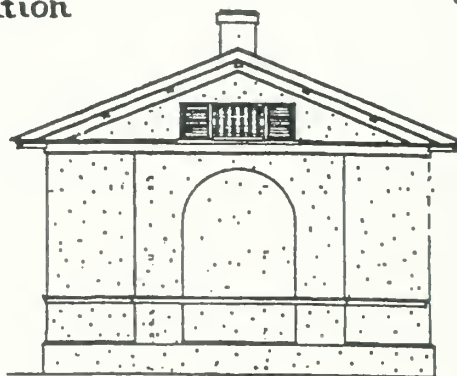


South Elevation

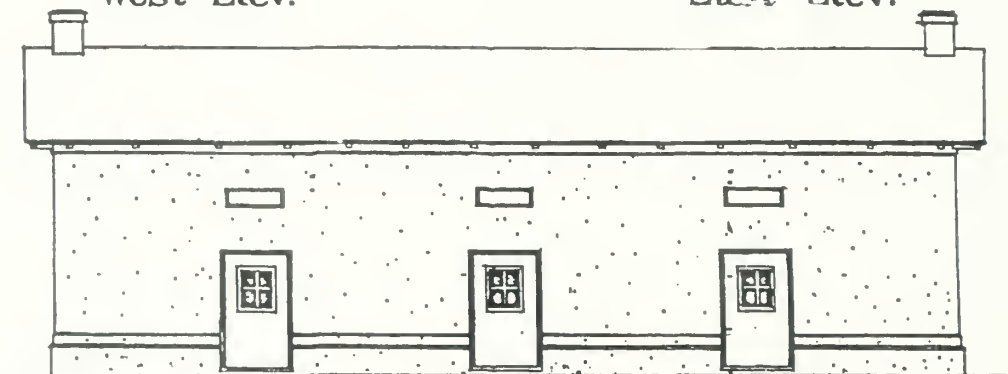
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West Elev.



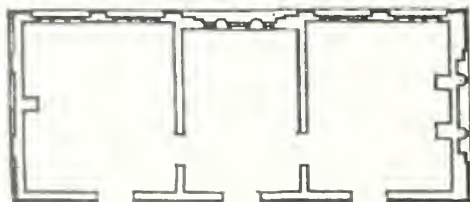
East Elev.



North Elevation

Scale: $\frac{1}{8}'' = 1'-0''$
Actual Scale $\frac{1}{4}'' = 1'-0''$

Slave Quarters
in rear of the Mansion



Plan Scale: $\frac{1}{16}'' = 1'-0''$
Actual Scale $\frac{1}{8}'' = 1'-0''$

CUSTIS-LEE MANSION - ARLINGTON NATIONAL CEMETERY

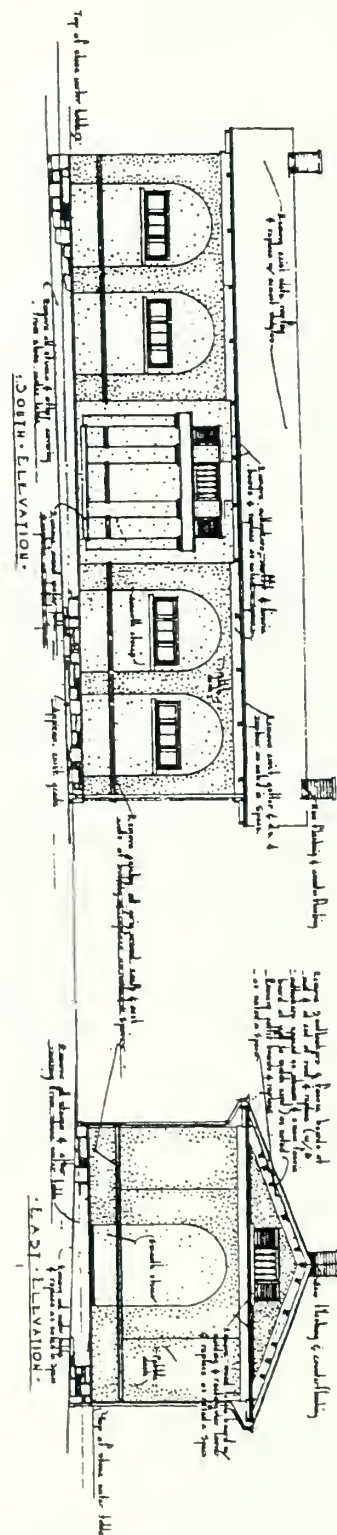
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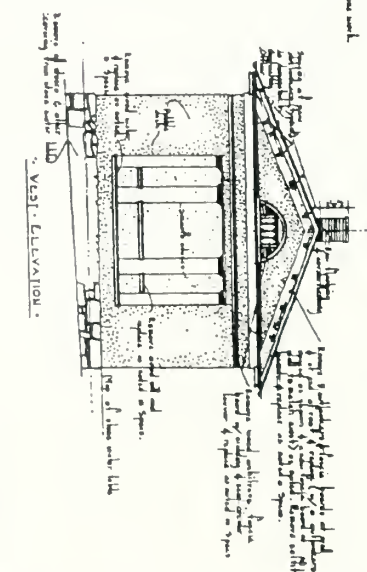
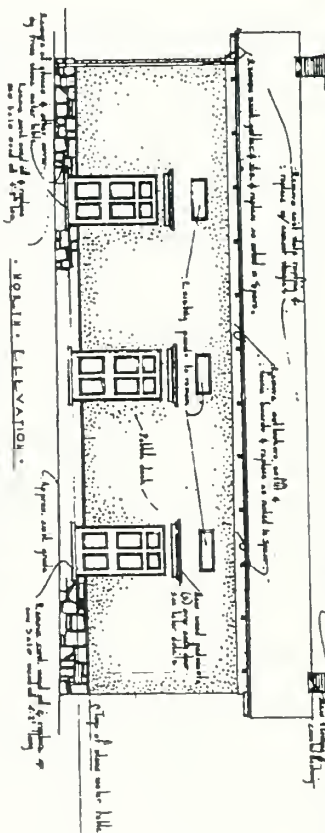
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این نقشه برای مقاصد طراحی و ساخت و ساز است و نباید برای مقاصد دیگری استفاده شود.



LEGEND
 MATERIALS
 CONCRETE
 BRICK
 STONE
 GLASS
 METAL



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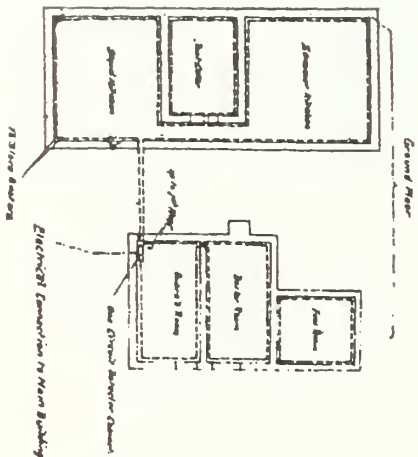
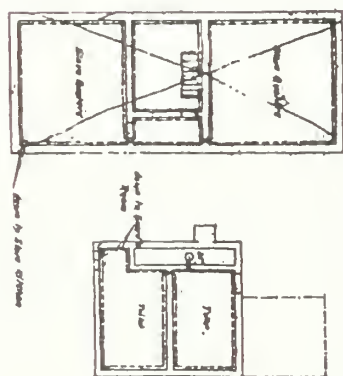
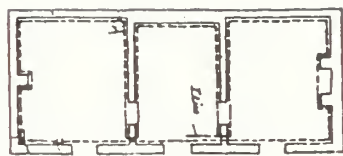
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06-30-16



— STATE QUARTERS —
 Electrical connection
 to main building

Electrical connection
 to State Quarters

Ground floor plan
 to main building

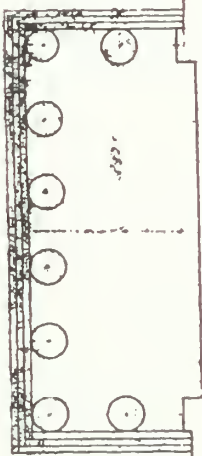
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— Arlington Mansion —

— Arlington National Cemetery —

— Virginia —

Legend
 --- State Quarters
 --- Electrical connection



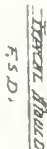
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 performed and preliminary building
 permit, construction

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94	2011	...
95	2012	...
96	2013	...
97	2014	...
98	2015	...
99	2016	...
100	2017	...

2.3-60

FILE COPY 2.3-60

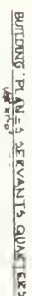
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CENTER OF CIRCLE

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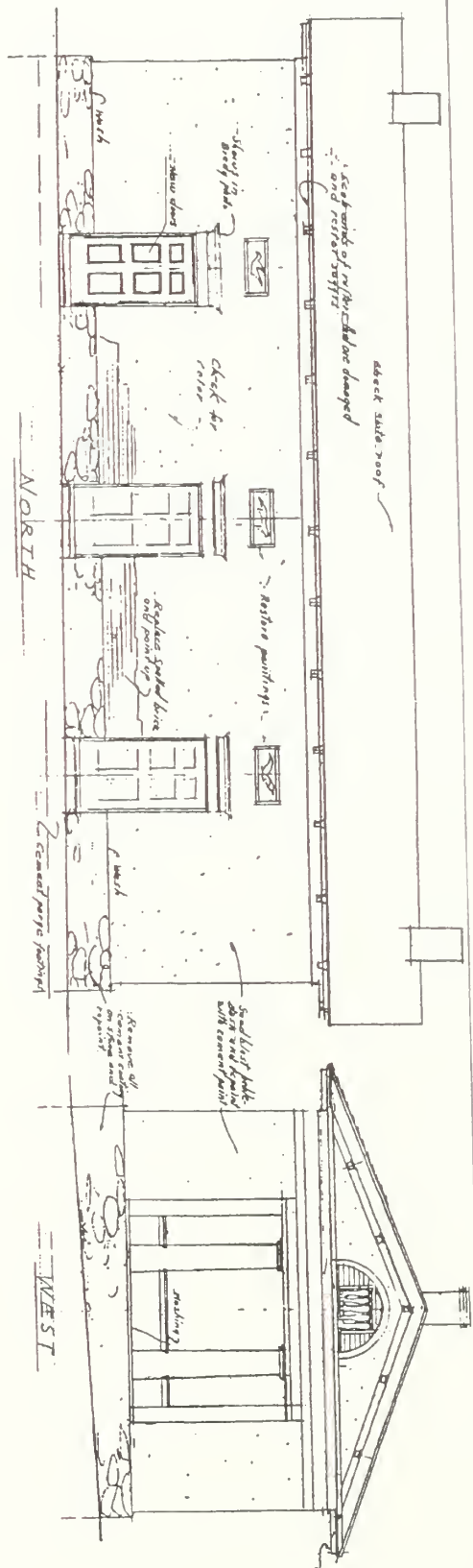
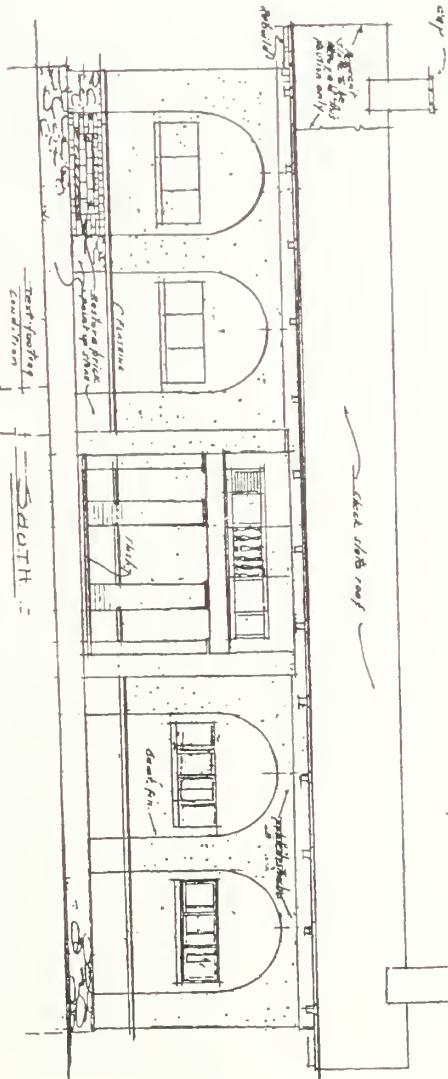
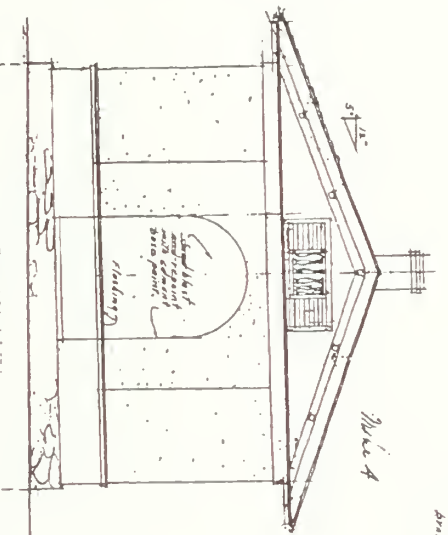
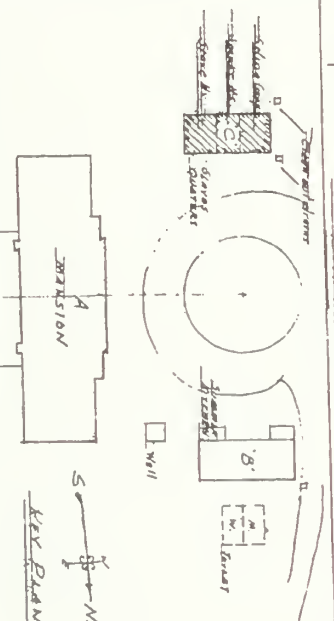
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2-3-113

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	LANDSCAPE ARCHITECT	REGIONAL OFFICE WASHINGTON OFFICE	FORESTRY	REGIONAL OFFICE WASHINGTON OFFICE	NATURAL HISTORY	REGIONAL OFFICE WASHINGTON OFFICE	SAFETY	REGIONAL OFFICE WASHINGTON OFFICE
CHECKED BY	ENGINEER	REGIONAL OFFICE WASHINGTON OFFICE	HISTORY	REGIONAL OFFICE WASHINGTON OFFICE	CONCESSIONS	REGIONAL OFFICE WASHINGTON OFFICE	U. S. PUBLIC HEALTH SERVICE	

BASIC DATA Measurements taken at job.



RECOMMENDATIONS

1. Remove all debris from site.
2. Remove all debris from site.
3. Remove all debris from site.
4. Remove all debris from site.
5. Remove all debris from site.

RECOMMENDED	DATE	RECOMMENDED	DATE
RECOMMENDED	DATE	RECOMMENDED	DATE
RECOMMENDED	DATE	RECOMMENDED	DATE

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL BUREAU OF LAND MANAGEMENT
NATIONAL SYSTEM OF PUBLIC LANDS
REVENUE TO SLAVE QUARTERS
EDDISTS-TELEMANSON

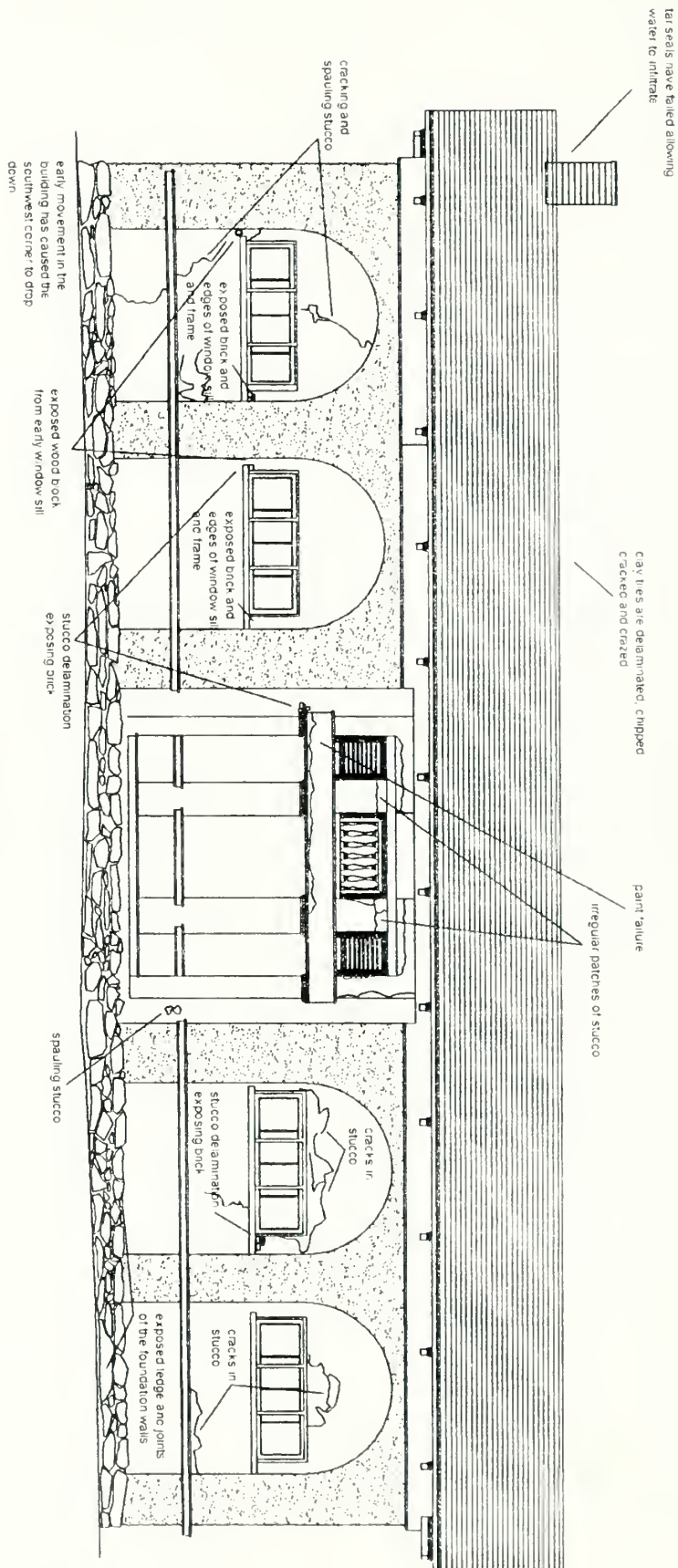
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WASHINGTON
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N.C.P.
DATE

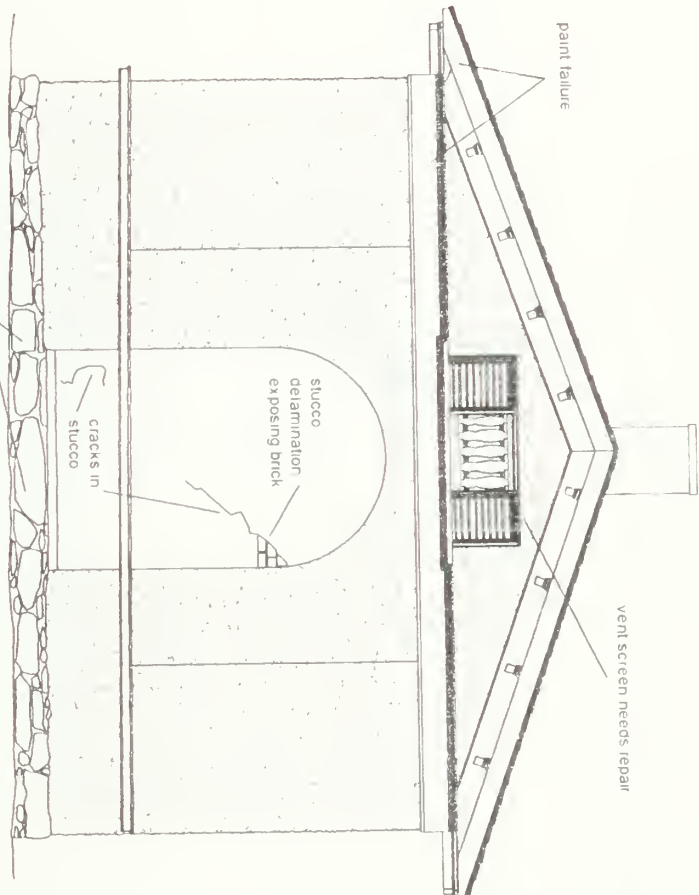
Appendix C

Existing Conditions

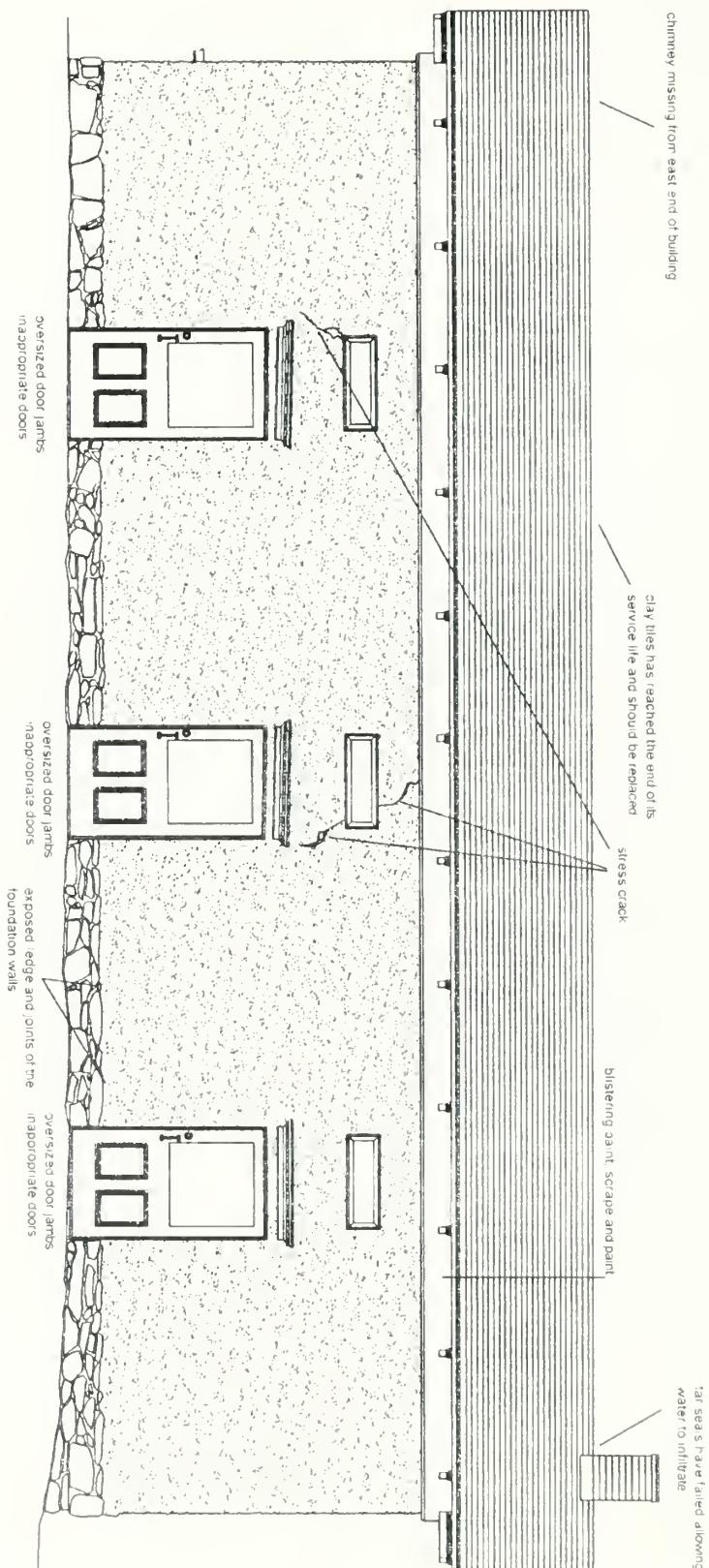
Historic Structure Report
Arlington House --- South Dependency
The Robert E. Lee Memorial
Arlington Virginia

South Dependency
north elevation





South Dependency
east elevation



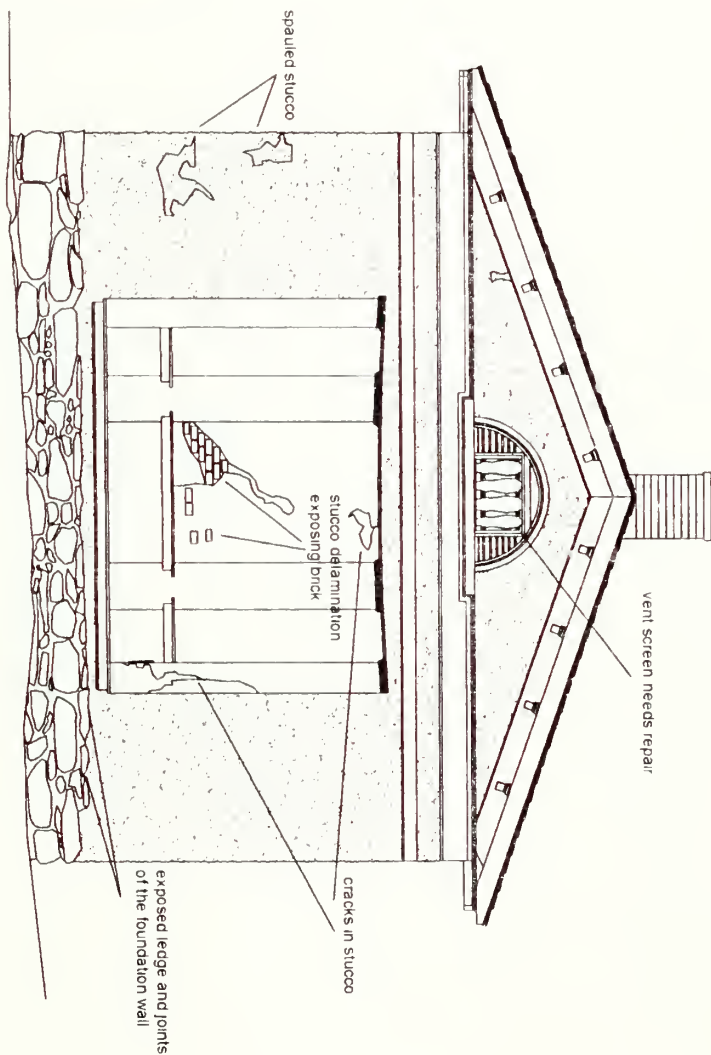
South Dependency
south elevation

Historic Structure Report
Arlington House --- South Dependency
The Robert E. Lee Memorial
Arlington Virginia



Prepared by National Park Service,
Technical Preservation Services
C. Fisher, C. Randl and K. Staveteig

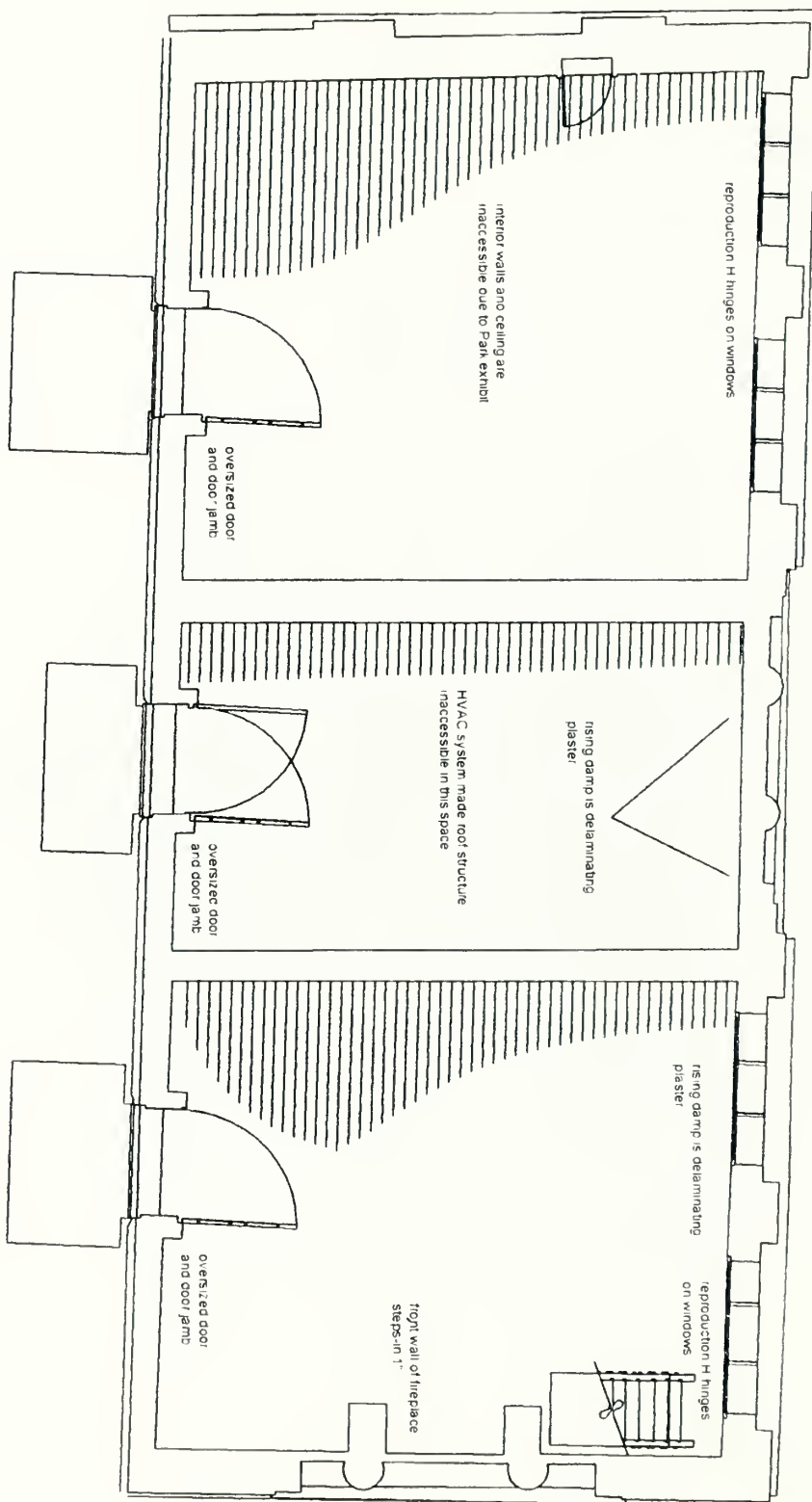
South Dependency
west elevation



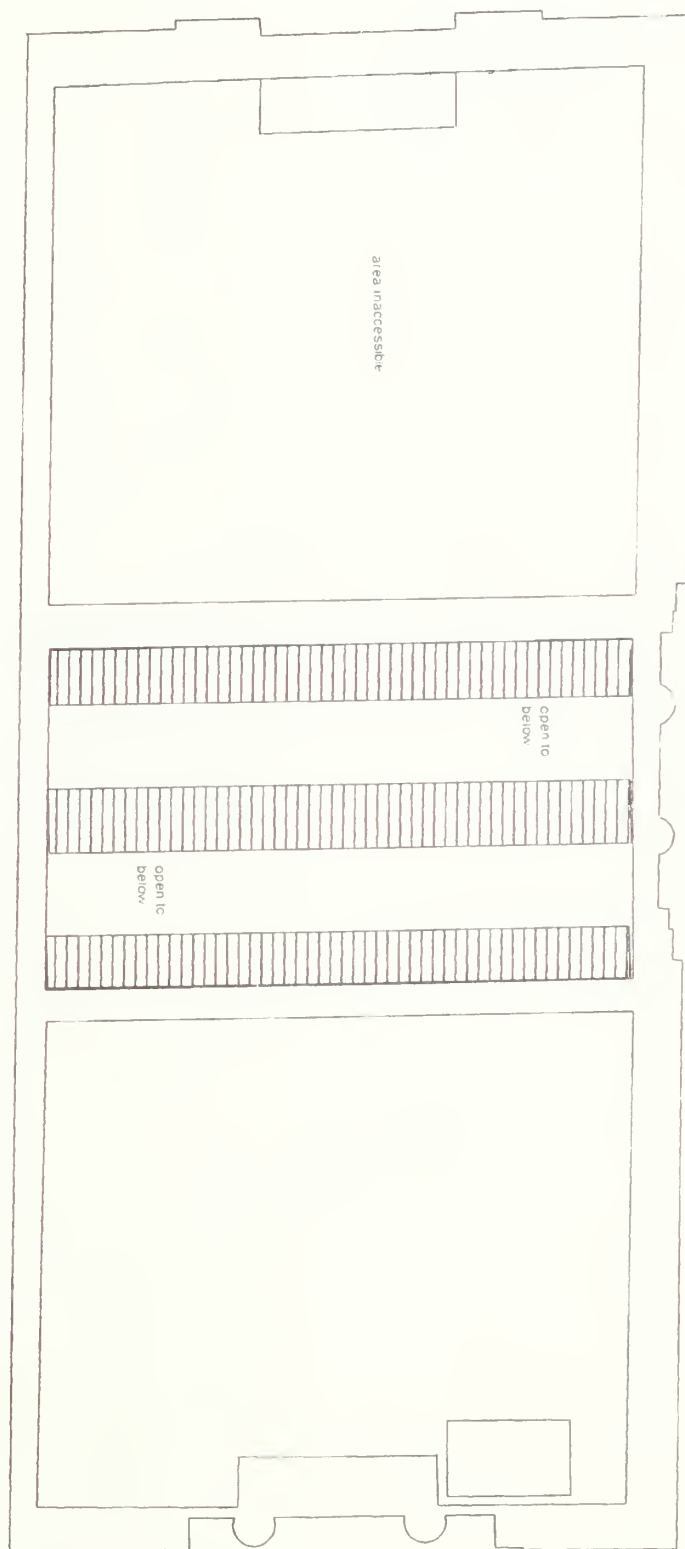
Historic Structure Report
Arlington House --- South Dependency
The Robert E. Lee Memorial
Arlington Virginia

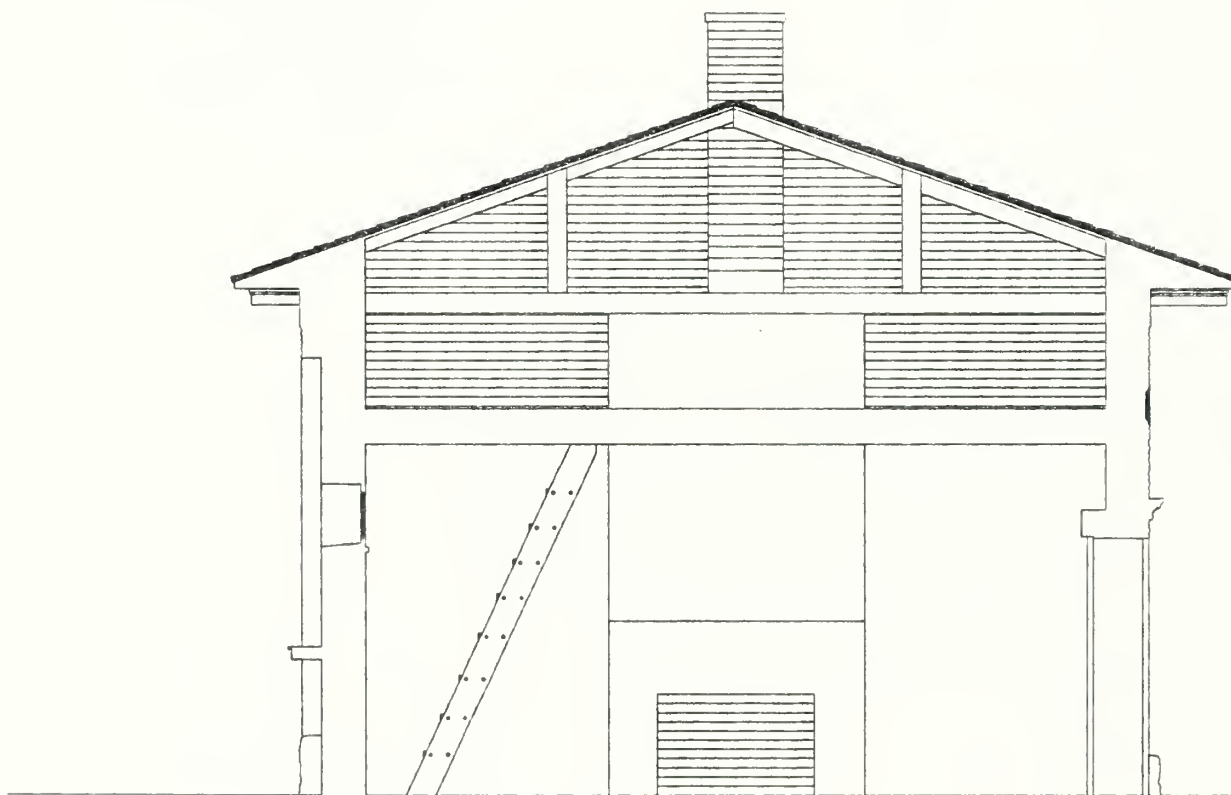
Prepared by National Park Service,
Technical Preservation Services
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South Dependency
lower floor



South Dependency
upper floor





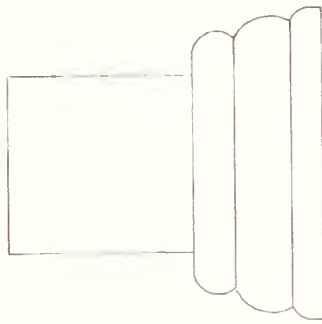
South Dependency
west elevation



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C. Fisher, C. Randl and K. Staveteig

Historic Structure Report
Arlington House --- South Dependency
The Robert E. Lee Memorial
Arlington Virginia

Existing
Conditioins
2003



typical outrigger

Appendix D

Material testing

MEMORANDUM

TO: Project Manager, Matthew Virta, GWMP Cultural Resource Manager
Project File, Arlington House Slave Quarters Historic Structures Report
Physical History and Condition Assessment,
Arlington House: The Robert E. Lee Memorial
George Washington Memorial Parkway (GWMP)

FROM: Architectural Historian, Kaaren Staveteig, TPS

SUBJECT: For purposes of testing and analysis, 19 samples, approximately 3" diameter, were taken from specific locations along the exterior and interior walls of the South Dependency building. A schematic plan was provided showing approximate locations of these samplings. Mortar, stucco, rough cast and some paint samples were evaluated using the facilities at the conservation lab in Lowell, MA under the direction of Peggy Albee, manager of the Historic Architecture Program, NER/NPS. Mortar analysis information and testing results

November 2002

LOCATION OF SAMPLES - 11/2002

sample	type	location
A-8	mortar	S, attic, north side of chimney
B-4	stucco	S, north elevation in niche, 12" below fascia, 54" east from arch, surround
B-5	s	S, north side of southern engaged column, west elevation
B-7	s	S, east elevation within niche, 55" above bisecting shelf, 89" from north corner
C-13	roughcast	S, 299" from east corner, 33 1/2" below fascia, north elevation

DESCRIPTION OF SAMPLES - 11/2009

sample	type	description
A-8	mortar	soft brown beige with small white lime inclusions, wood fibers
B-4	stucco	soft, warm grey with black, red and brown inclusions, small white lime inclusions, tan and orange coating on one side
B-5	s	soft, grey with beige veins, some botanical growth (dried) at underside, small white lime inclusions
B-7	s	stratified brown beige with gray top coat and yellow/amber paint chips; large white lime inclusions
C-13	roughcast	soft brown beige substrate with 1/2" top layer of white matrix, clean pebbles and biological growth, white lime inclusions in substrate

MORTAR SAMPLES

parts/volume 11/02

	A-8
sand	8.5
lime	1
lines	0.5
cement	
gypsum	
ratio	8.5/1

STUCCO ANALYSIS

parts /volume - 11/02

	B-4	B-5	B-7
sand	6	7	7.5
lime	1	1	1.5
lines	3	2+	1
cement			
gypsum			
ratio	6/1	7/1	5/1

B4 - 12" below fascia, 52" E
from arch surround

B5 - 3" below wood entablature, 6" from N side of S engaged column

B6 - on N side of S

B7 - 55" above bisecting wood shelf, 89" from N corner

engaged column, 55" - 59" from bisecting wood shelf

C10 - 7" below peak, 40" south of 2nd outrigger

C14 - 85" from N corner, 45" above bisecting wood shelf

Too hard to penetrate

C13 - 299" from E corner, 33-1/2" below fascia

C12 - 33" E of west corner, immediately below fascia

C11 - 6" from N corner, 28" above foundation

C8 - 48" from N corner, immediately below fascia

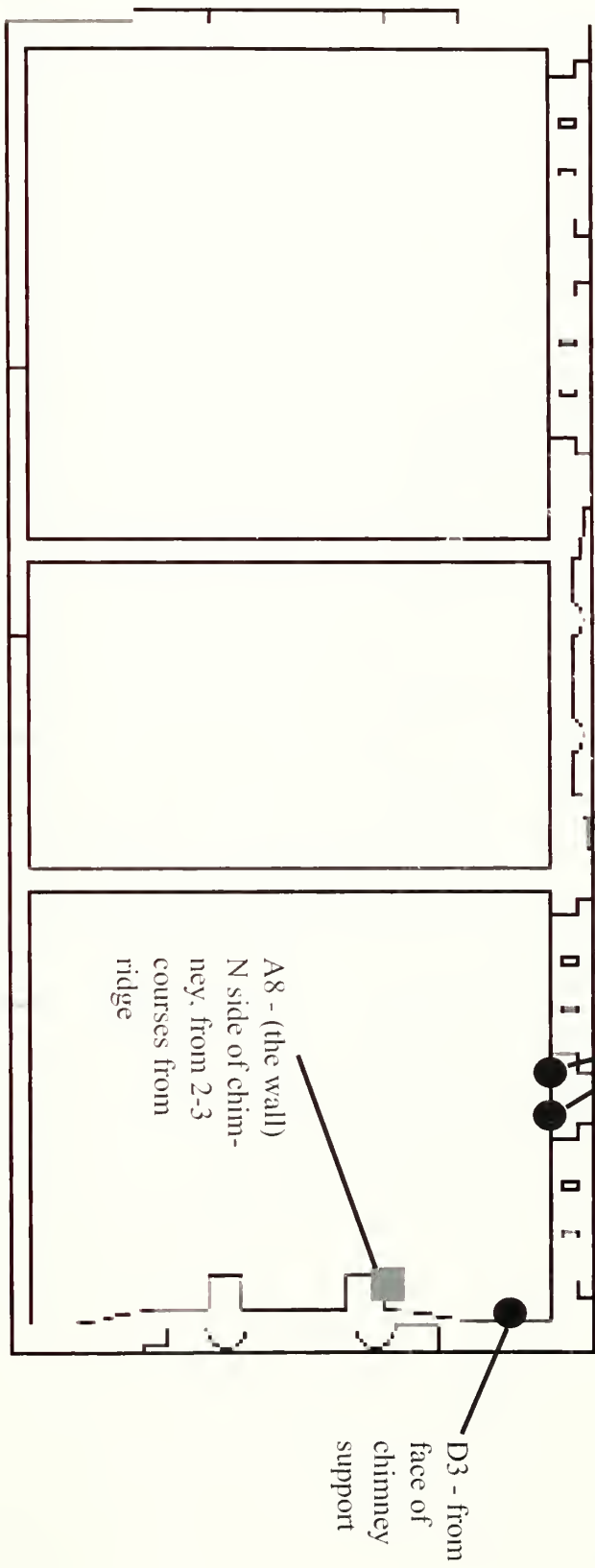
C9 - immediately below

South Slave Quarters

ground level

- location of intended mortar sample (A)
- stucco samples (B)
- rough cast samples (C)

D1 and D2 - both at 24" off floor,
80" from E edge of attic opening



South Slave Quarters

attic level

■ mortar samples (A)

● plaster samples (D)

South Dependency

ROUGH CAST SAMPLES

C8—later repair, SSQ

C9—oldest, SSQ

C10—oldest, SSQ

C11—1960s

C12—later repair

*C13—patch or orig, over center door, SSQ—soft, greyish blue stucco-like, small white lime inclusions, orange/tan coating on surface, small aggregate, scored on surface

C14—1920s, SSQ (rebuilt wall?)

STUCCO SAMPLES

*B4—early, south—soft, warm grey with black, red and brown inclusions, small white lime inclusions, tan and orange coating on one side

*B5—early, west—soft, grey with beige veins, some botanical growth (dried) at underside, small white lime inclusions; flakes of paint (amber over yellow) on outer surface.

B6—early, west

*B7—1920s, east—stratified brown beige with gray top coat and yellow/amber paint chips, white lime inclusions.

*tested in lab

MORTAR SAMPLES

1. undisturbed east wall, center room

2. door infill at lintel

PAINT SAMPLES

1. outrigger in NW corner

2. south wall ledge board (oldest?)

3. back board behind balustrade feature

4. baluster, back side south elevation

5. upper wall, center room, (linseed residue)

6. upper wall, center room, (without linseed)

7. attic, paint on plaster, gray paint on west elevation





8. attic, paint on plaster, blue paint on north elevation







Appendix E

Field Notes

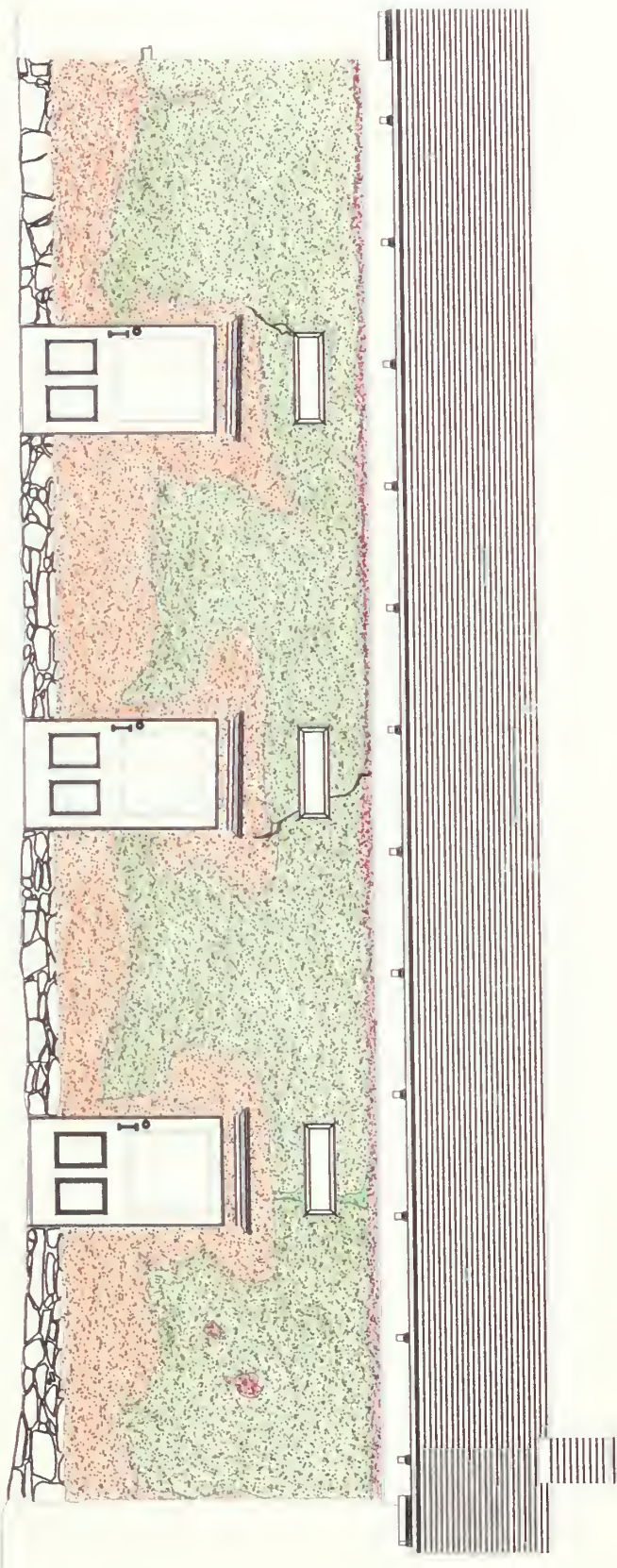
1. Exterior Finishes

Stucco on the South Dependency, color key:

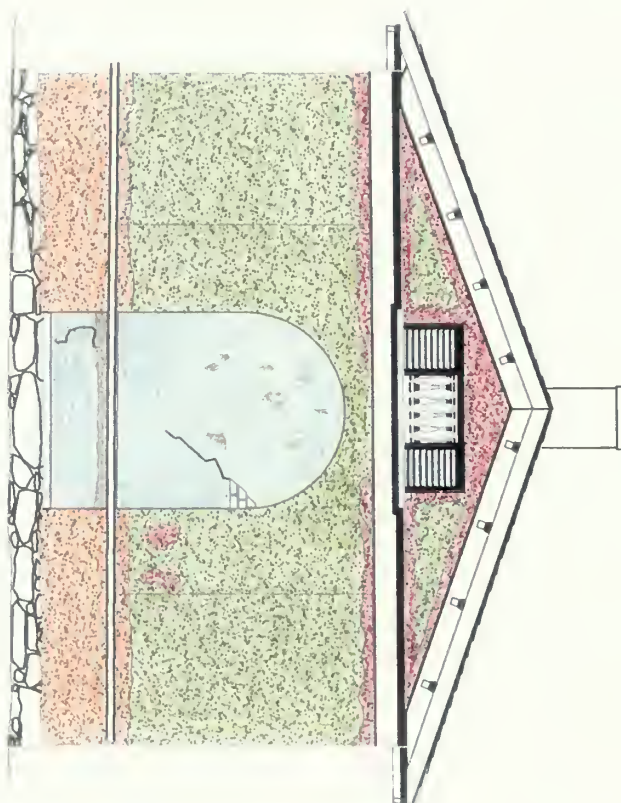
-  oldest roughcast stucco (whitish body with small to medium aggregate)
-  Army restoration roughcast (medium brown matrix with small, round aggregate, some pieces of brick klinkers)
-  NPS restoration roughcast (light beige render with small and medium aggregate)
-  post NPS restoration roughcast (grey matrix with high content of portland cement, medium aggregate)

-  oldest smooth stucco (soft, light beige matrix with small pieces of lime shells and tiny stones)
-  pre Army smooth stucco (darker brown mix with high sand content with no aggregate)
-  Army restoration smooth stucco (brownish mix with high sand content and small, round aggregate)
-  NPS restoration smooth stucco (light beige render with high sand content)
-  post NPS restoration smooth stucco (brownish matrix with high sand content and tiny stones)
-  post NPS restoration smooth stucco (grey matrix, high portland cement content)





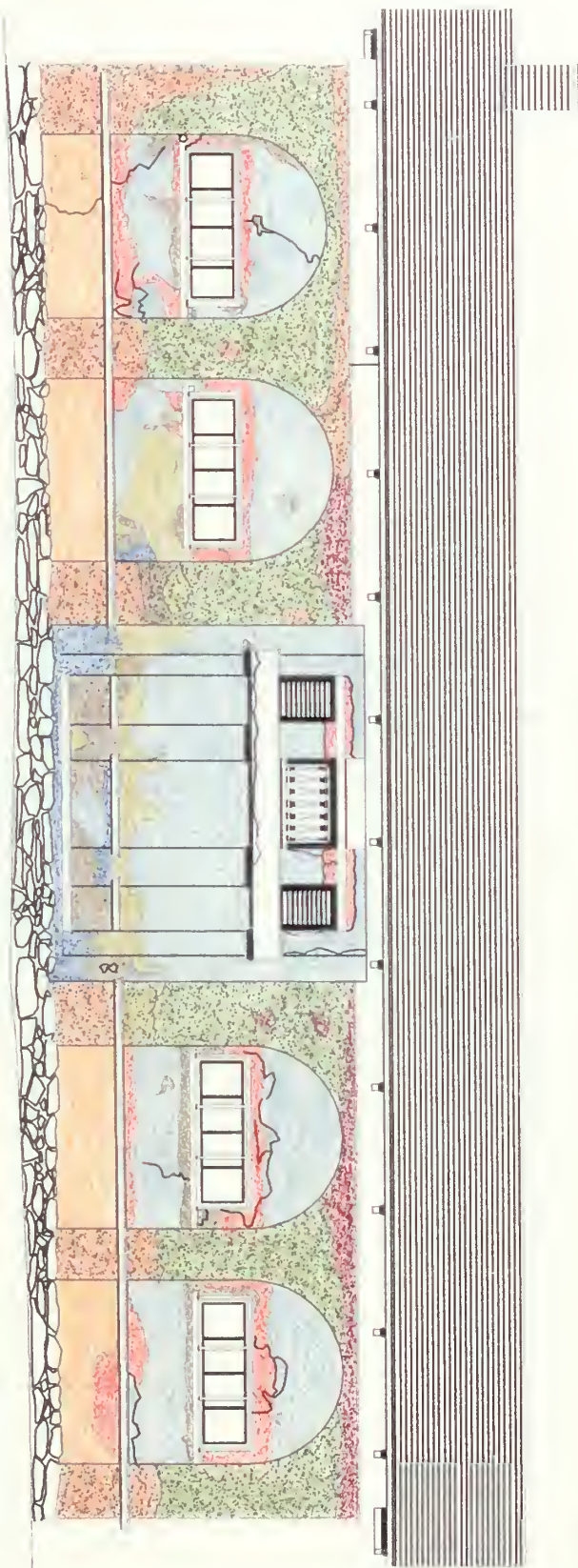
South Dependency
north elevation

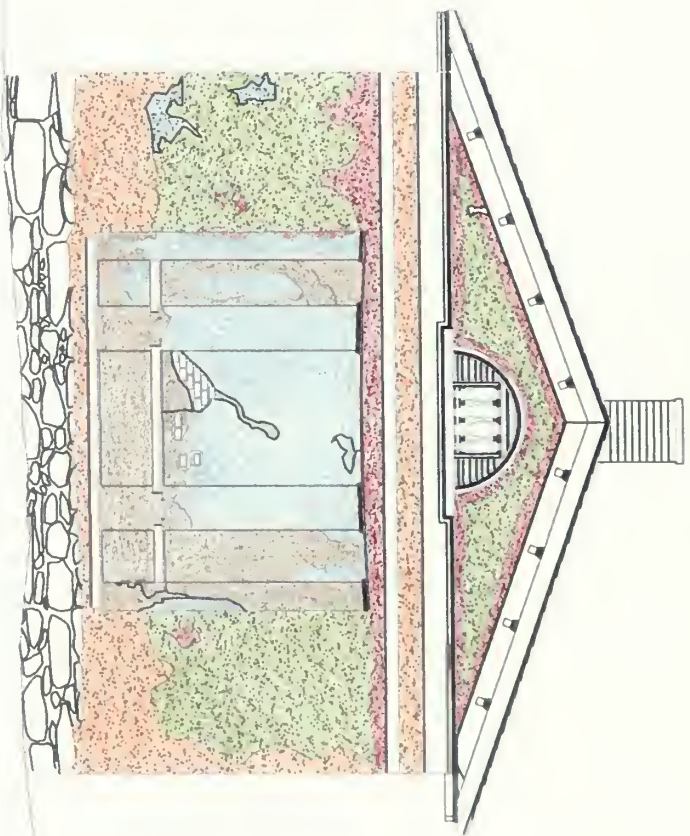


South Dependency
east elevation



South Dependency
south elevation





South Dependency
west elevation



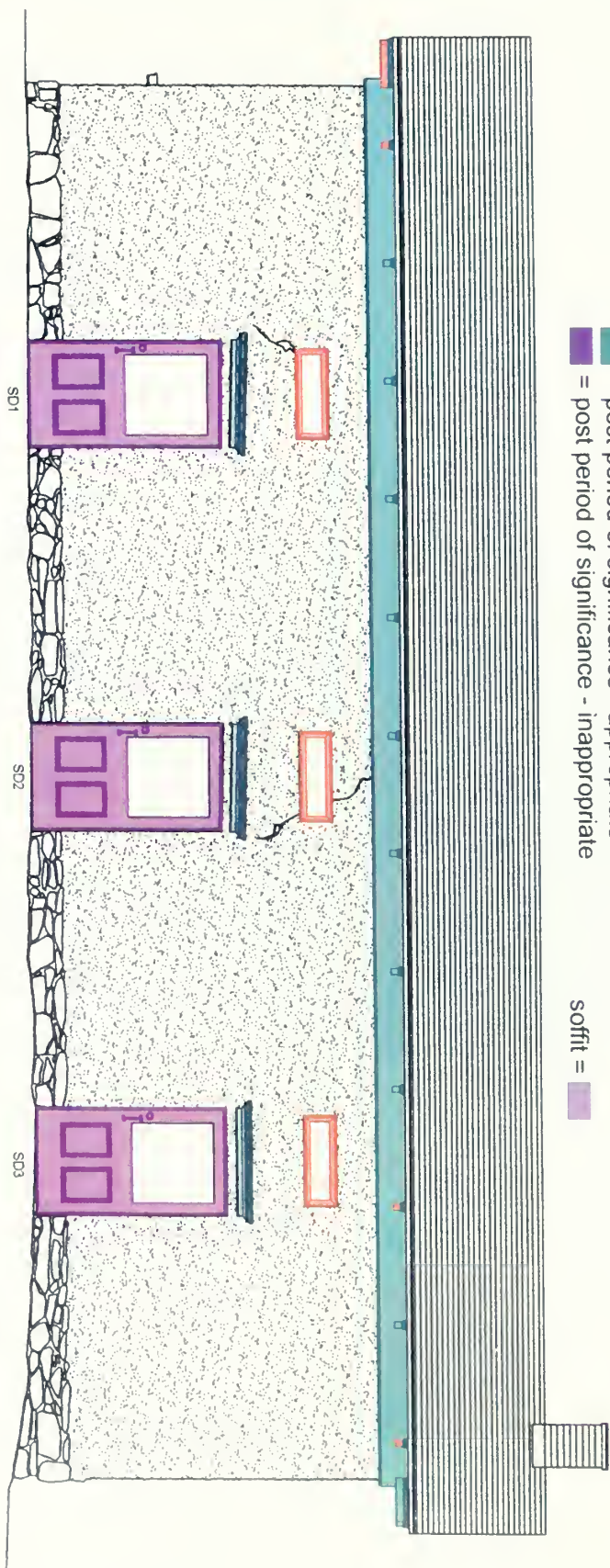
Appendix E

Field Notes

2. Exterior Woodwork

key
■ = period of significance
■ = post period of significance - appropriate
■ = post period of significance - inappropriate

soffit = ■



South Dependency
north elevation

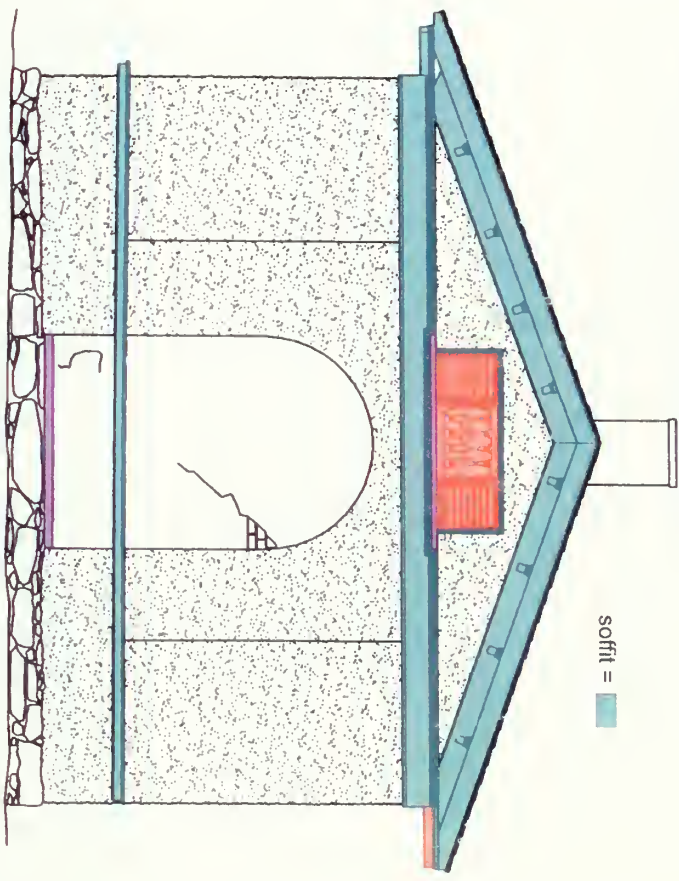


Prepared by National Park Service,
Technical Preservation Services
C. Fisher, C. Randl and K. Staveteig

key

- = period of significance - appropriate
- = post period of significance - inappropriate
- = post period of significance - inappropriate

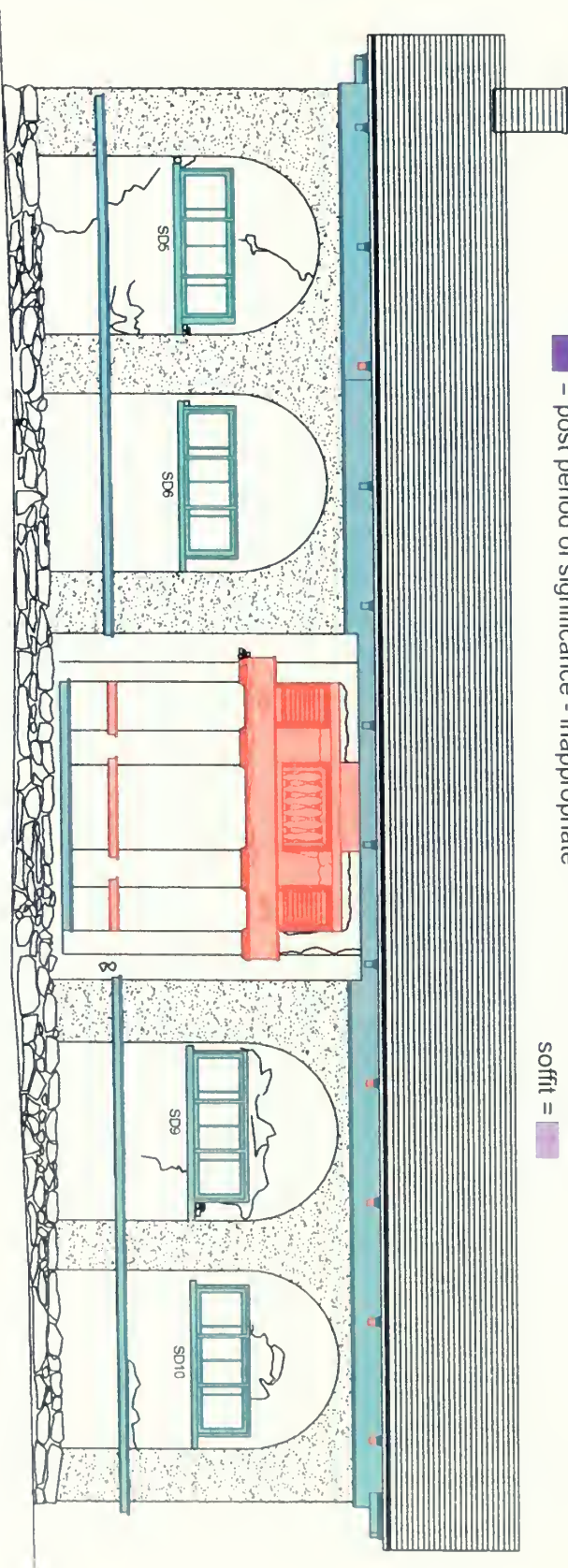
soffit = ■



South Dependency
east elevation

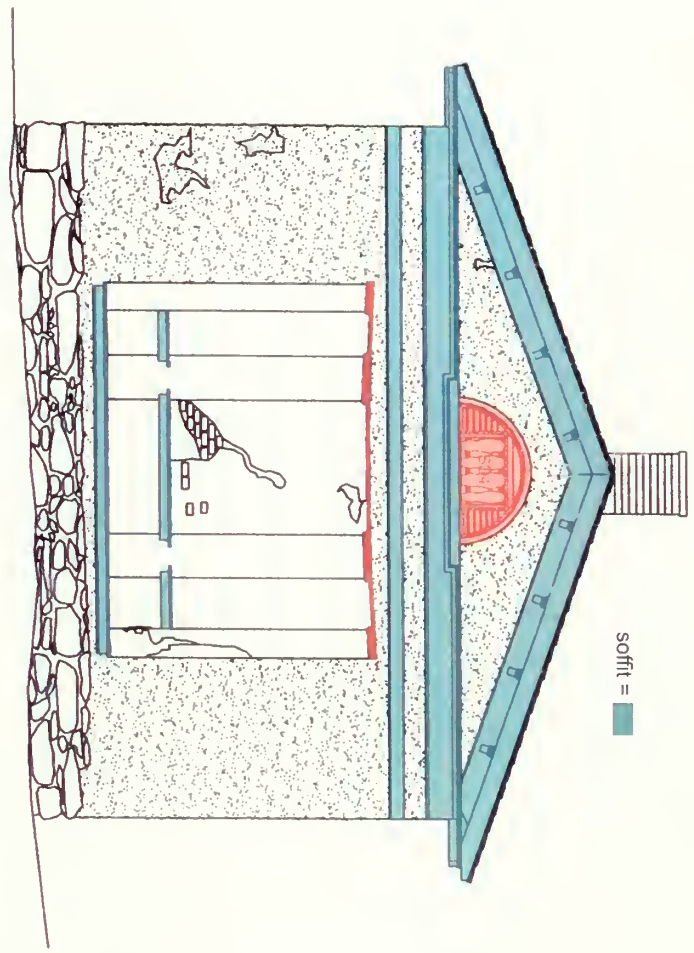
key
■ = period of significance
■ = post period of significance - appropriate
■ = post period of significance - inappropriate

soffit = ■



South Dependency
south elevation

- key
- = period of significance
 - = post period of significance - appropriate
 - = post period of significance - inappropriate



South Dependency
west elevation



Appendix E

Field Notes

3. Architectural and Finishes Survey



South Dependency, North Elevation



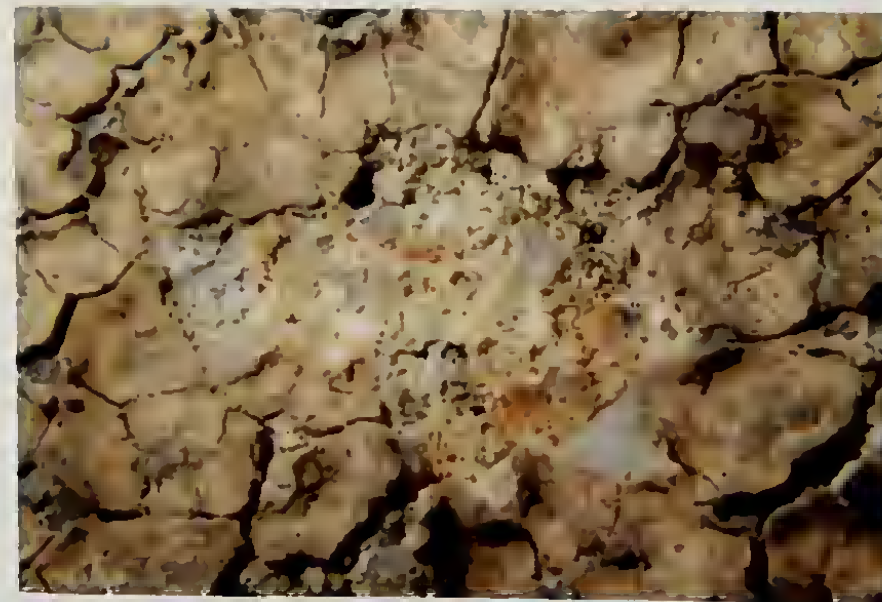
South Dependency, East Elevation



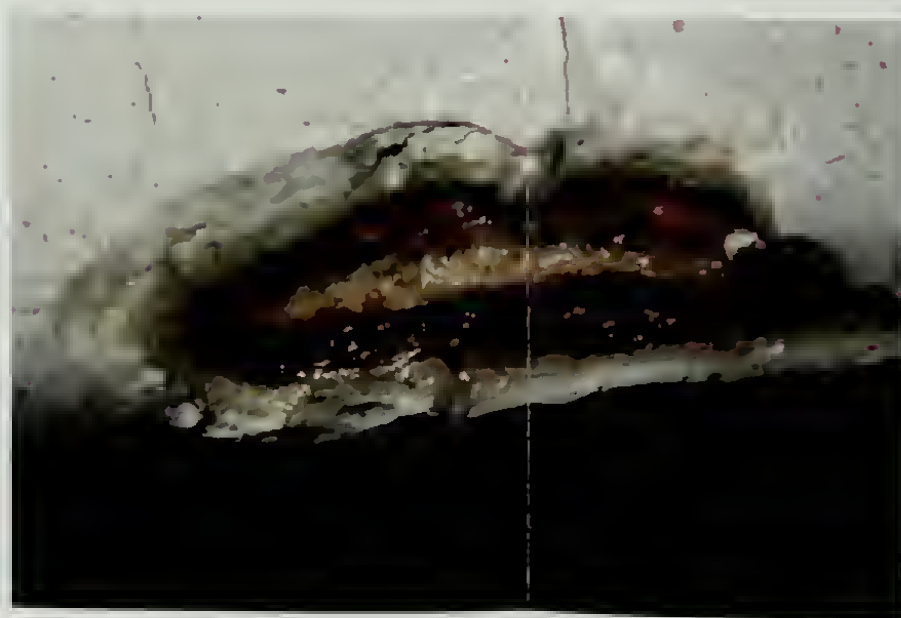
South Dependency, South Elevation



South Dependency, West Elevation



South Dependency, micrograph of finishes on pebble-dash stucco



South Dependency, micrograph of finishes on west elevation column capital

South Dependency
Exterior

Arlington House Dependencies
Arlington, Virginia
Architectural and Finishes Survey

George Fore, Architectural Conservator
George T. Fore and Associates
Raleigh, NC



South Dependency, Center Room: The tradition that the center room was constructed as a 'smokehouse' and was later converted into living quarters with sleeping loft appears to be accurate. The louvered windows high on the south elevation are functional for the curing and storage of meat. The fitted windows were closed during the smoking process and could be opened for ventilation. Typically, smoke houses did not have chimneys or draft vents; the curing process depended on the smoke being quite thick. The smoke was produced by smoldering and not an open fire, thus only a central hearth area, or depression, was required. Another feature of this room are the joist pockets in the east and west elevations. These locate the joists for hanging the meats. The original pockets are distinguished by the masonry laid around the joists as the brick walls were constructed. The later pockets against the north and south elevations were clearly cut into masonry. This occurred when a floor was installed over the open joists to form an upper level.



South Dependency, Center Room: The thick accumulation of soot and oils on the upper walls appears to be the remnant of the center room's use as a smoke chamber for curing meats.



South Dependency
Center Room

Arlington House Dependencies
Arlington, Virginia
Architectural and Finishes Survey

George Fore, Architectural Conservator
George T. Fore and Associates
Raleigh, NC

Appendix E

Field Notes

4. Interior

PROGRESS PRINT
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John Volz, Architect
Texas License No: 8405

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INTERIOR RESTORATION OF NORTH &
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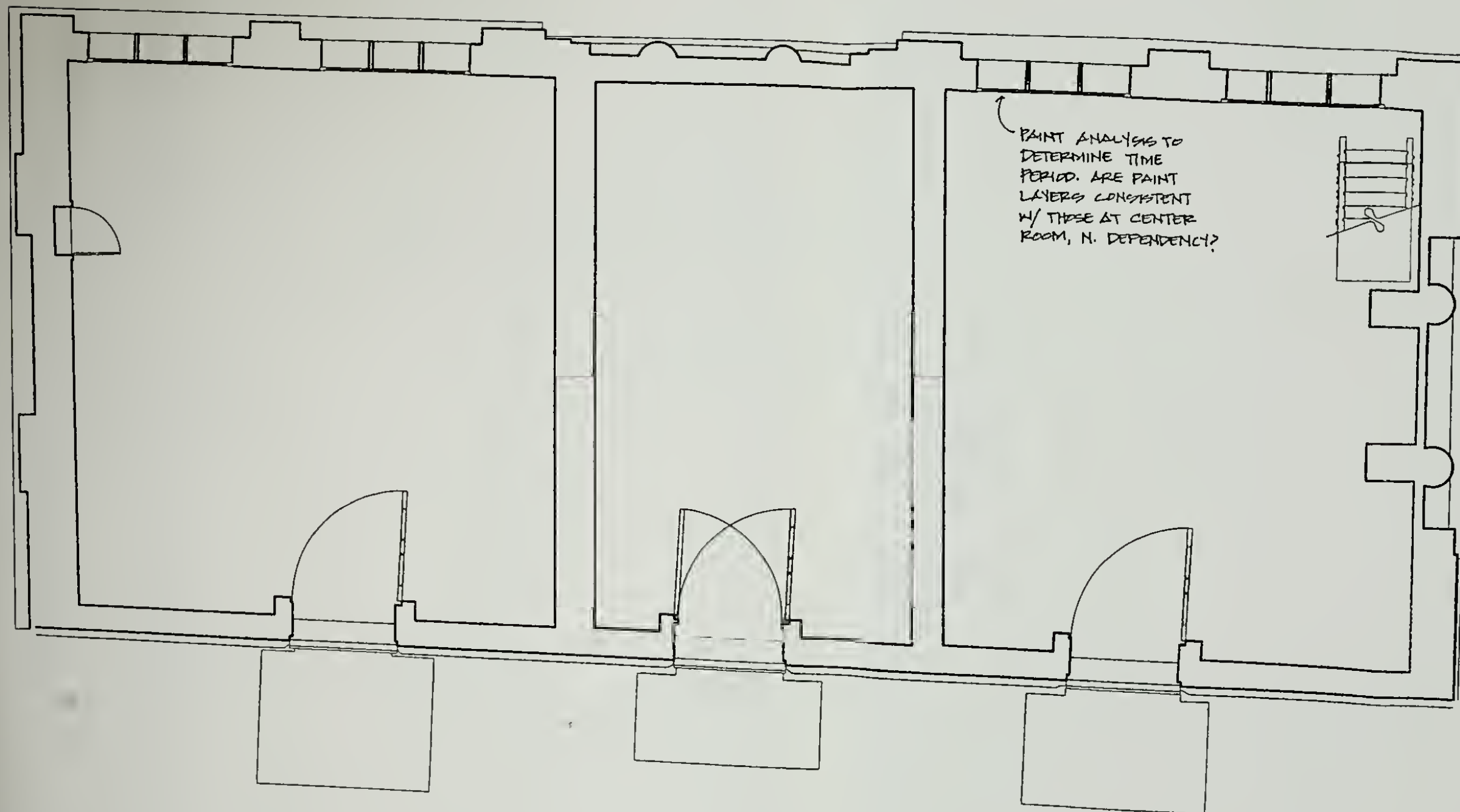
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SHEET NO:

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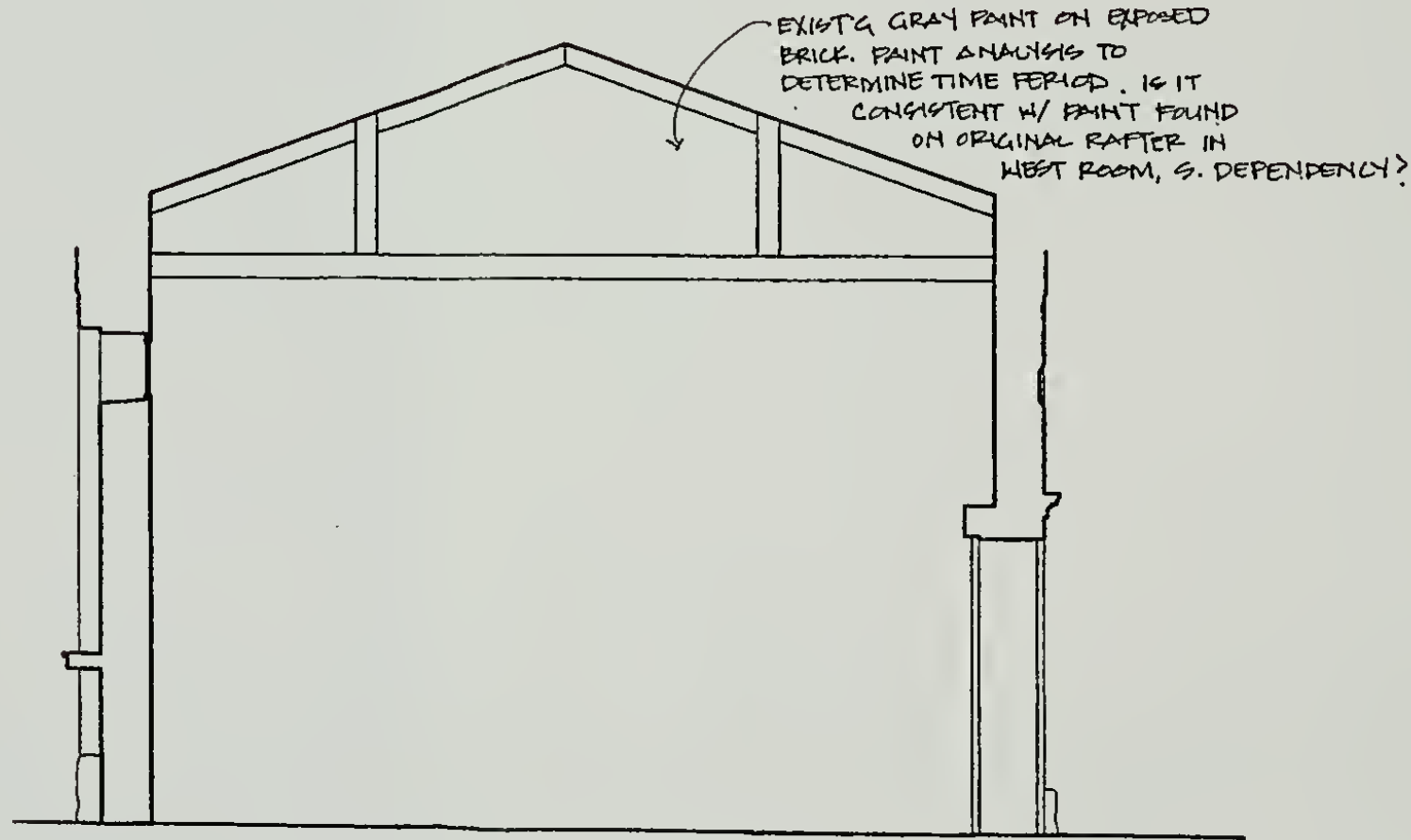
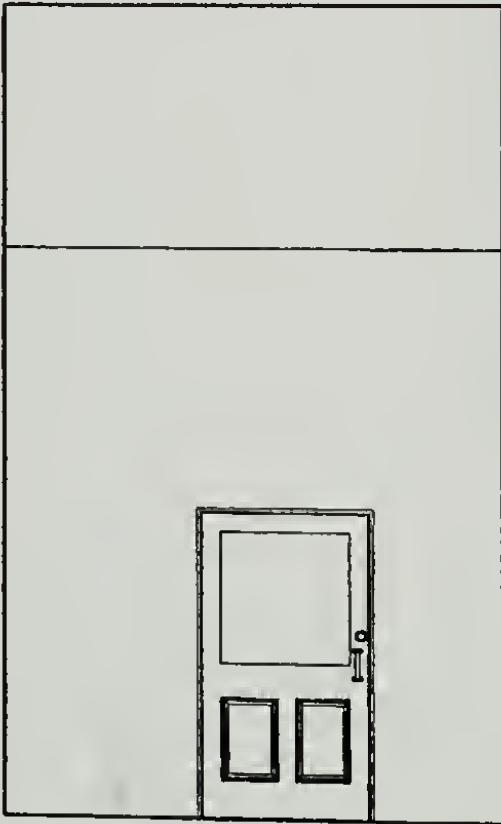
SHEET NAME:



1 SOUTH DEPENDENCY
FLOOR PLAN

SCALE 1/4" = 1'-0"





1 SOUTH DEPENDENCY, CENTER ROOM
NORTH AND WEST INTERIOR ELEVATIONS

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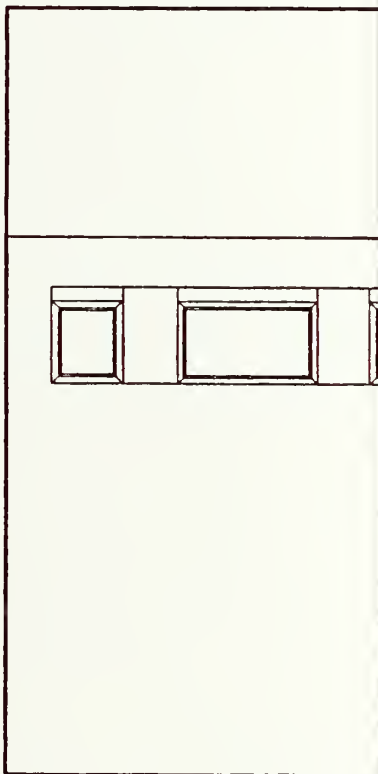
PROJECT NO: 014-02

DATE: 05/12/03

REV:

SHEET NO:
EXISTING ELEVATIONS

SHEET NAME:



1

SOUTH DEPENDENCY, CENTER
SOUTH AND EAST INTERIOR

SCALE 1/4" = 1'

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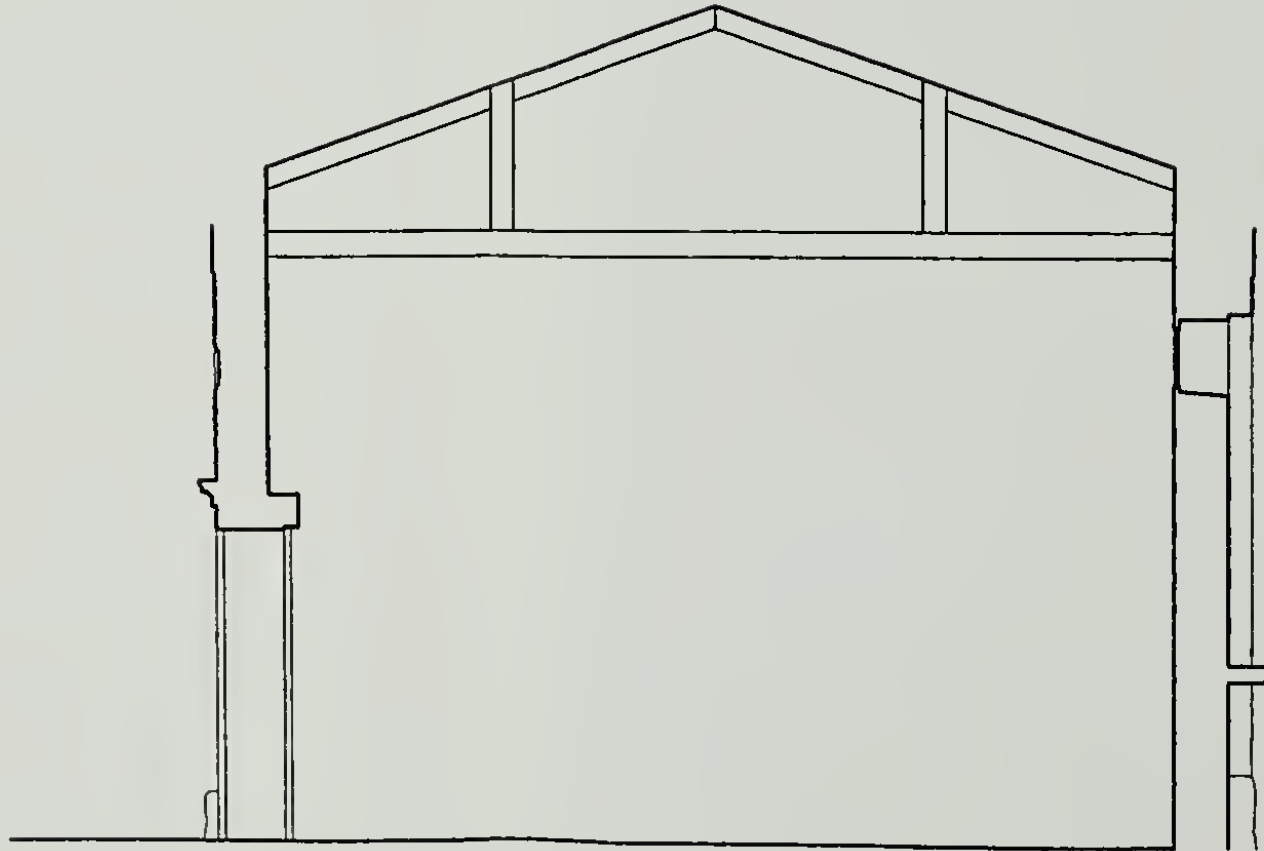
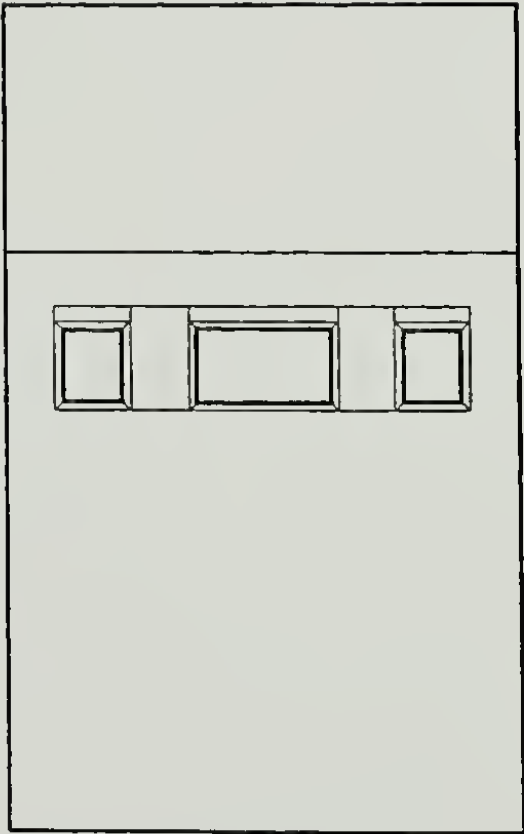
DATE: 05/12/03

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SHEET NO:

EXISTING ELEVATIONS

SHEET NAME:



1 SOUTH DEPENDENCY, CENTER ROOM
SOUTH AND EAST INTERIOR ELEVATIONS
SCALE 1/8" = 1'-0"

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PROJECT NO: 014-02

DATE: 05/12/03

REV:

SHEET NO:
EXISTING ELEVATIONS

SHEET NAME:

Appendix F

Supplemental Drawings

Arlington House, North and South Dependency Chimneys

By Doug Reed, June 17, 2004

The following pages are blurred, digitalized blown up scans from very clear copies of photos taken during the Civil War and provided to me by Kaaren Staveteig. Under a 30x loupe lense, it is fairly easy to see details that were missed in less clear copies of the photos.

The purpose of this review was to try and better establish the chimney configurations and sizes.

The following page, page 2, is a view North showing the south elevation of the north dependency. Under the loupe lense a careful review of the east end of the roof of the north dependency showed the chimney yet in place above the roofline. The modules making up the chimney cap were too large to be bricks. They appeared to be somewhat irregular, though the surfaces had to be chisel faced since the vertical surfaces appeared to be plumb.

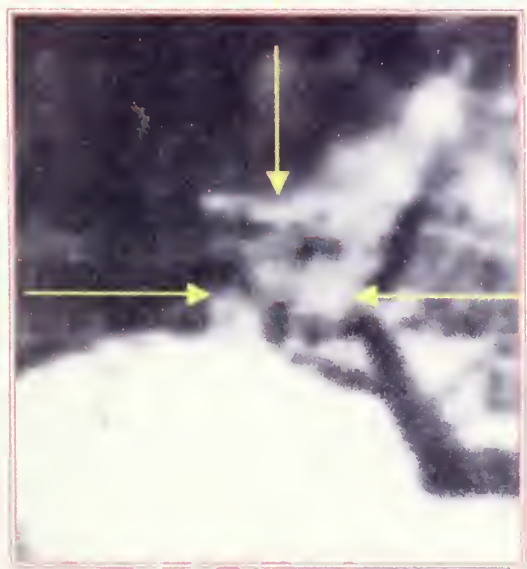
On page 3 is a view of the rear of Arlington House dated June 28, 1864. On the right side of the picture is the west end of the south dependency and above its roof is a chimney. The chimney had the same characteristics of modular construction at the cap too large to be bricks and with what appeared to be irregular shapes. The chimney seen above the south dependency did not belong to the low wing addition to the main house since the page 2 photo clearly shows that chimney was built of bricks with a corbelled brick cap.

The chimney above the south dependency roof appeared to be the west end south dependency chimney servicing Selina's brick chimney system rising through the building. The play of light and shadow on the shaft of the short chimney indicated there was likely stucco on the shaft. What we may be seeing in the two photos were brick chimney shafts, stuccoed over to match the rest of the building finish scheme. The caps appeared to be a single corbel layer of some decorative module perhaps such as stone, but also perhaps a decorative fired clay product fairly large in size. I can say the cap units were projecting at least 1" over the shaft and were four inches thick or about the same thickness as two courses of bricks.

If you can find a microscope for viewing the chimneys under a higher magnification, the details may reveal themselves as to the cap materials.

See sheet page 4 for recommendations on the chimneys, sizes and caps.

No widths of chimneys are given since widths would have varied per use and size of firebox, and number of fireboxes.



As blurred as it may be, we are looking at a chimney with stucco on the exterior shaft. The large cap modules are cut stone or a fired clay product and were likely stuccoed as well.

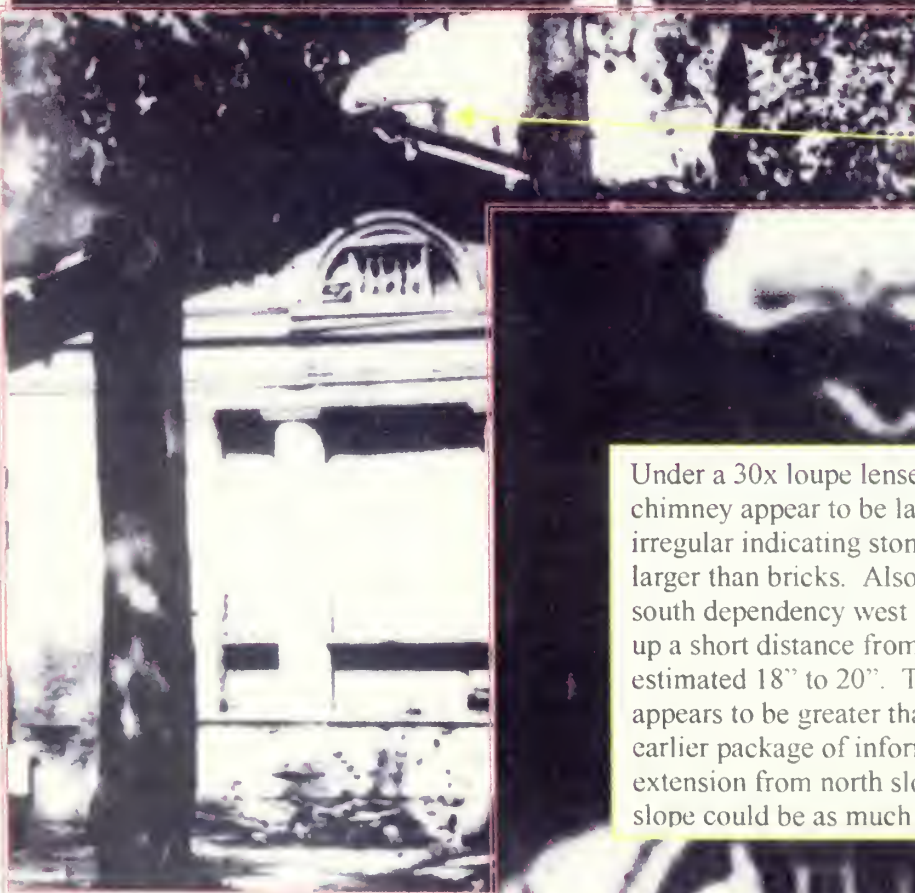
Review a clear photo under a 30x loupe lens and you can see the chimney once you find it. It is visible through the tree limbs and leaves.

I am going to say the rise off the peak is about 18".

In my earlier package of information I called the roof extension at 3" and with a loupe lens on a clear photograph you can clearly see the north slope comb at the peak of the roof clearly larger than three inches. I would push the comb out to minimum of 4" and it could go to six inches



South Dependency Chimney

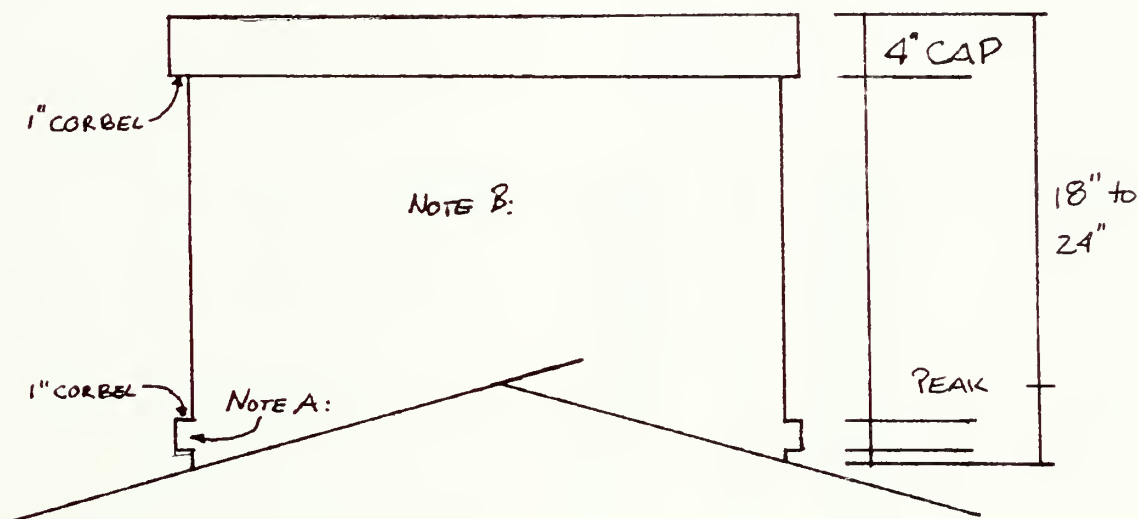


Under a 30x loupe lense, the modules of the chimney appear to be large and somewhat irregular indicating stone. They are definitely larger than bricks. Also, the chimney is the south dependency west chimney projecting up a short distance from the peak, an estimated 18" to 20". The peak combing appears to be greater than 3" called for in my earlier package of information. The extension from north slope out over south slope could be as much as 4 to 5".

C:\Documents and Settings\Douglass Reed\My Document showing chimneys.doc

DOUG REED JUNE 17, 2004 ARLINGTON HOUSE

DEPENDENCY CHIMNEYS ABOVE ROOF



NOTE A: DRIP EXTENSIONS OCCUR ONLY ON SLOPE SIDES ONLY. 1 COURSE OF BRICK CLOSEST TO ROOF SLOPE EXTENDS OUT 1". ALLOWED ENDS OF SHINGLES TO TUCK UP UNDER BRICK COURSE FOR MORE PROTECTION AGAINST PRECIPITATE WEATHER.

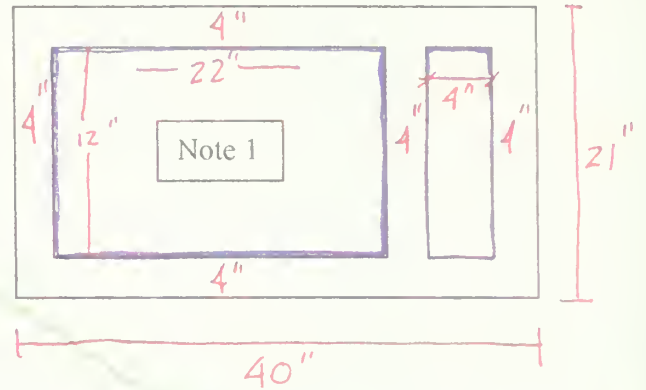
NOTE B: COVER ENTIRE CHIMNEY ABOVE ROOF IN STUCCO TO MATCH MAIN BODY OF BUILDINGS. THIS WAS USUALLY DONE AFTER SHINGLES WERE APPLIED.

Arlington House

Configuration for East chimney North Dependency

Large flue with 22" x 12" dimensions with firebox opening of 54" wide to 48" high will have a draw ratio of 10.2%

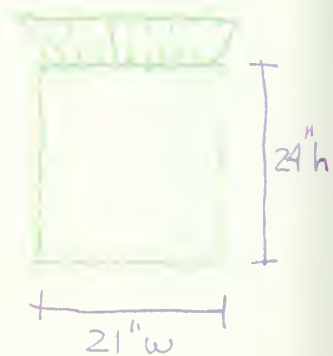
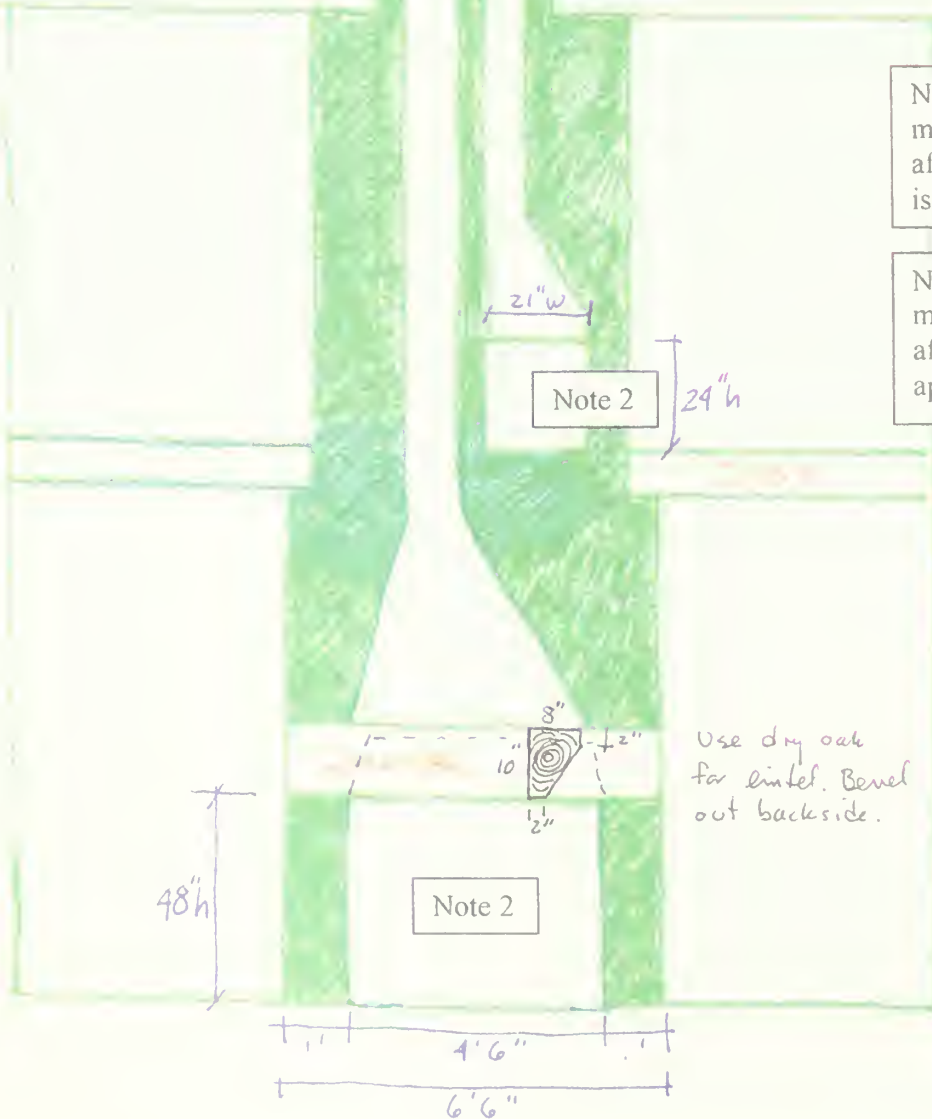
Small flue with 4" x 12" dimensions with firebox opening of 21" wide to 24" high will have a draw ratio of 9.52%



Line flues with 1/2" refractory parging.

Note 1: Flue opening measurements are figured after 1/2" refractory parging is applied to all flue walls.

Note 2: Firebox opening measurements are figured after plaster has been applied to all cheek walls.



by D.C. Reed
June 17, 2004

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March 21, 2004

Arlington House – Dependencies

Exterior Doors

There is one good photograph of a slave sitting in a doorway believed to be the North Dependency, east door position (ND3). The details of the door, jamb and sill visible in the photograph clearly show a much older door than the dates of the dependencies. The style of the door and jamb indicate late 18th or early 19th century construction. The quality of construction and high style appearance are out of place on a slave or support building.

Another telltale clue seen in the photo indicates the door, jambs and sill as well as the decorative backbands were reused, salvaged components from another location, presumably the main house. The pieces were removed from a larger, grander building, saved for reuse and installed in the dependencies when they were built. The manner in which the sill was attached to the jambs and the mitered corner of the backband piece on the lower right jamb clearly indicates the pieces are not in their original locations.

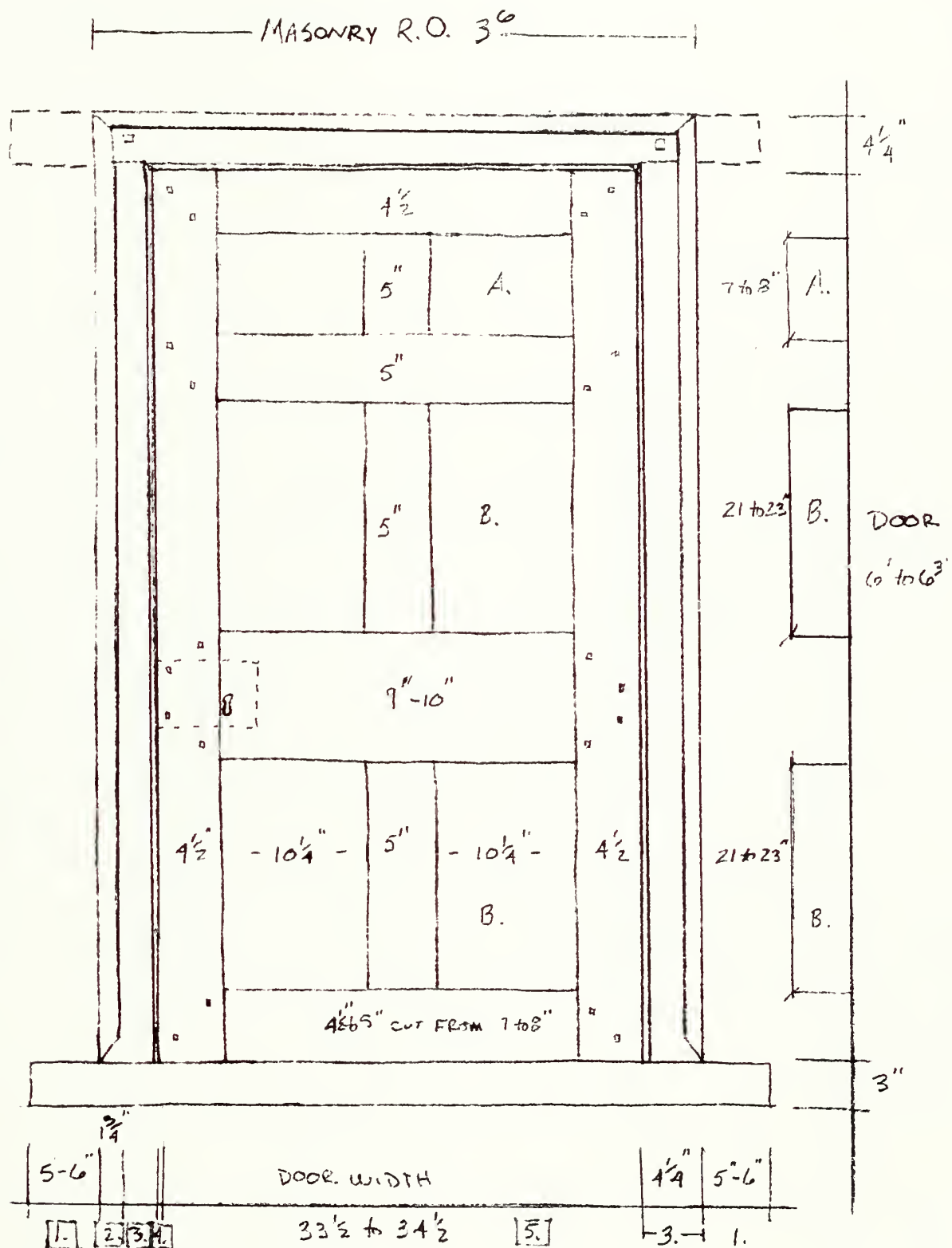
I recommend the doors, jambs, headers and sills be built to be as close to that which is seen in the slave photo. There was a major remodeling of the main house and there were enough doors and jambs remaining to be salvaged and reused on the newer dependencies. The door and jamb components of any house were expensive and the salvage and reuse of these elements was common. The heavy post type jambs should be built and located per the attached sketches. The sill seen in the photo and all the other sills were likely altered since it appeared the doors were shortened and therefore the jamb set had to be shortened in height as well. The north dependency doors were roughly 6' 8 ½" to 10 ½" high. The south dependency door heights were anywhere from 3" to 8" shorter than its opposing neighbor.

All existing doorjambs should be removed and replaced with faithful replicas made to fit the existing masonry rough openings. All masonry rough openings should be investigated to see if the original door openings have ever been altered. If not, make wood jambs and doors to fit existing openings. If the openings have been altered, make new jambs and doors to fit adjusted and restored to original masonry openings. I also recommend the poorly connected sills be replicated to show all things were indeed not perfect.

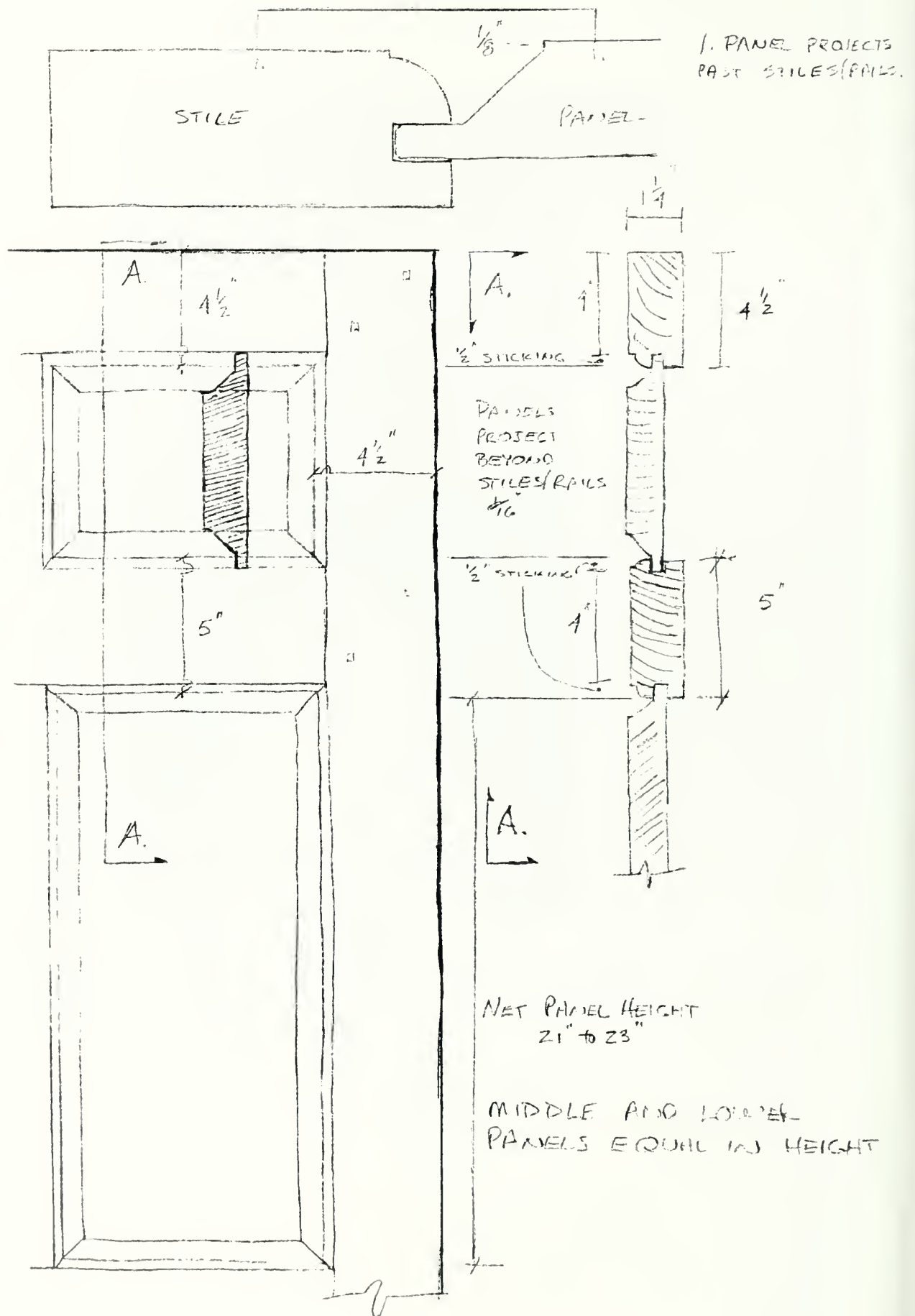
Hardware can be early sheet iron box locks, keyed. They can be stock locks (no knob sets) or box locks with knob sets. Hinges were clearly 4" narrow butts, cast iron, 5 knuckle four screws per leaf butt hinges. Use only straight slot flat head wood screws set flush or slightly sunk below the surface of the butt hinges.



Bright wing is
a key in this
to a stone
back inside
the knobs.



1. MASONRY EARS
2. BACKBANDS 1 3/8" to 1 3/4" WIDE
3. SINGLE FIELD JAMB 4 1/2" WIDE
4. FULL ROUND BEAD 3/4" to 7/8"
5. DOOR WIDTH



ARLINGTON HOUSE 3

BACK BAND
PERVERSED OGEE

HEAVY IN SIZE

3/4" MU-78"

JAWB
4 1/4" x 4 1/4"

MASSACHUSETTS

CASING

1" x 3 5/8"

DOOR

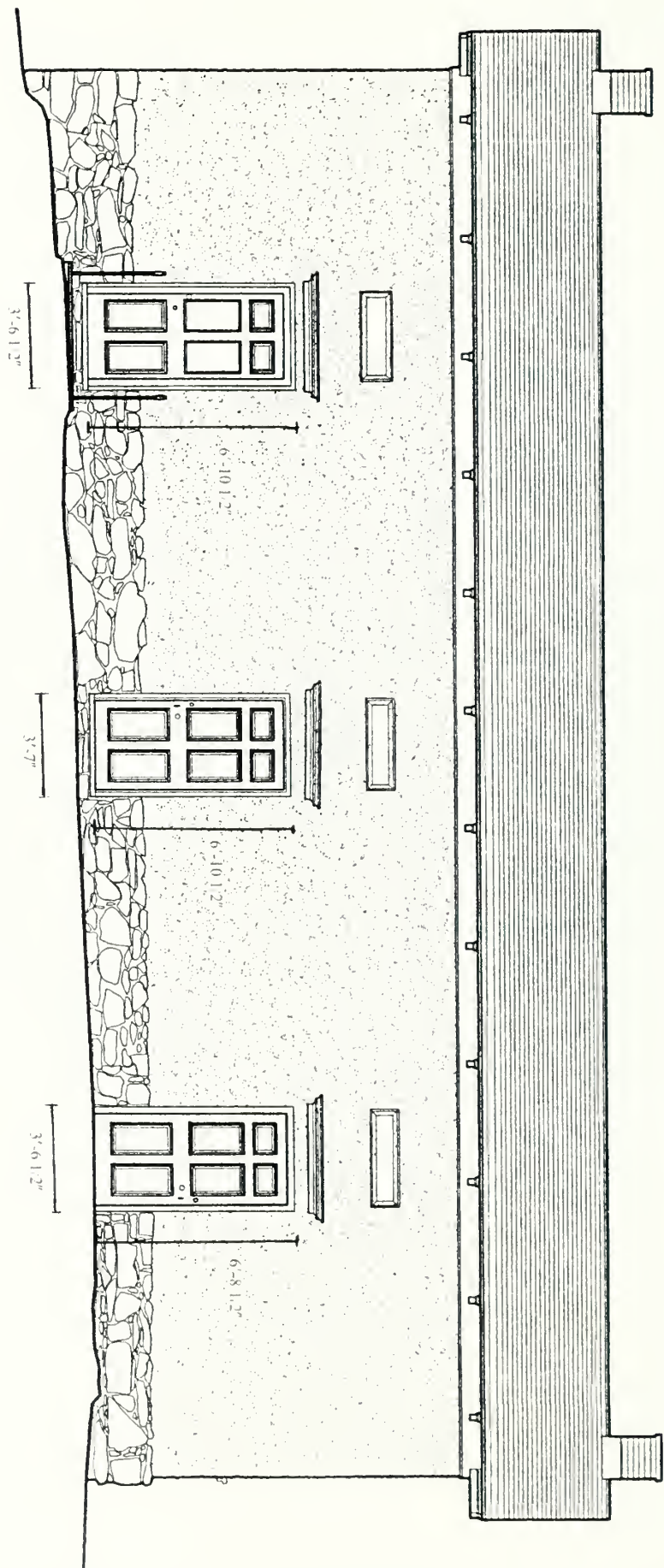
 $\frac{1}{2}$

14

$\frac{1}{2}$ " BEAD

PLASTER (or ROUGH CAST)

ca. 1802 3 or 4 KNUCKLE
BLACKSMITH MADE BUTTS
1 1/2" LEAF 3 or 4 SCREWS
3 1/2" to 4" LONG. FIXED P.W.



SOUTH ELEVATION
NORTH QUARTERS

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March 21, 2004

Arlington House – Dependencies

Wood Roofing

It was not the practice of builders during the 19th century to solid sheath a roof that received wood shingles. Certainly there were exceptions, but the vast majority of the wood shingles roofs were applied over skip sheathing roof lath spaced at a predetermined exposure. Skip lathing was made from a variety of woods, both hard and soft species. However, the roofing “lath” (the proper term) usually measured 1 1/8” x 2 1/4”. The lath were fastened to each rafter they crossed with an 8d cut or hand made nail.

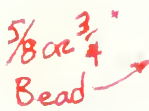
Wood roofing south of the Potomac River was typically set at a shallower pitch than the roofing slopes North of the Potomac River. The shallow sloped roofs such as those used at the Arlington House dependencies precluded the use of long shingles (also known today as double bevel shingles). The long shingle needed a steep slope to shed water successfully.

The standard short lap wood shingle was short, narrow and lapped at the lower half. The average widths of the standard lapped shingles were 5” to 6” wide rarely exceeding 7” wide. The length of the lapped shingles ranged from 14” to 24” long with the typical lengths measuring from 18” to 20”. Tapered smooth on both sides of the shingles with a draw knife, the shingle butts were about 1/2” thick and tapered to a pointed thin end. The shingles were laid with side laps of from 1 1/4” to 1 1/2”. The exposures of the shingles were laid usually at 5 1/2” for shallow sloped roofs. It is also possible there were two different exposures for the different slopes of the roofs. The south exposure could have been 5 1/2” to 6” while the north slopes of the dependencies could have been from 5 to 5 1/2”.

With no hard evidence to gauge the original shingle widths, exposures and side laps, I recommend the following: Use a high quality yellow cedar shingle, sawn, from the British Columbia area of Canada. The shingles should be taper sawn, not wider than 7”, 18” to 20” long, vertical grain and all shingles should be applied with 5d and 6d where appropriate galvanized cut nails. I recommend that you do not specify fire retardant treatment. I also recommend that you do not interlace roofing felt paper of any type or weight between the rows of shingles.

A hand-drawn diagram of a rectangular prism (box) in perspective. A red arrow points to one of the edges of the prism. The word "EXHIBIT" is written in the background.

- 1



1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

WIRLINGTON HOUSE DEPENDENCIES
TYPICAL EARLY DETAILS

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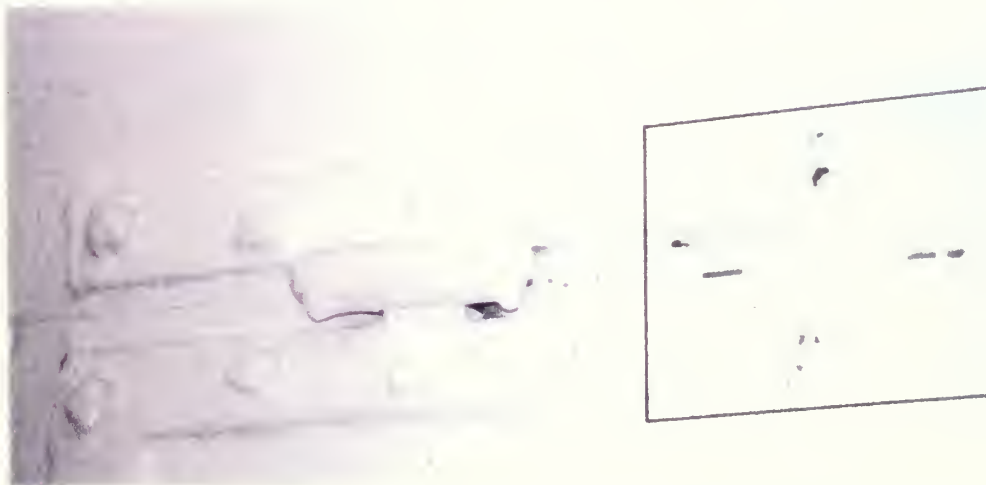
March 3, 2004

Arlington House

Selina's Rear Window
Hinge Type



South Window in Selina's Room.



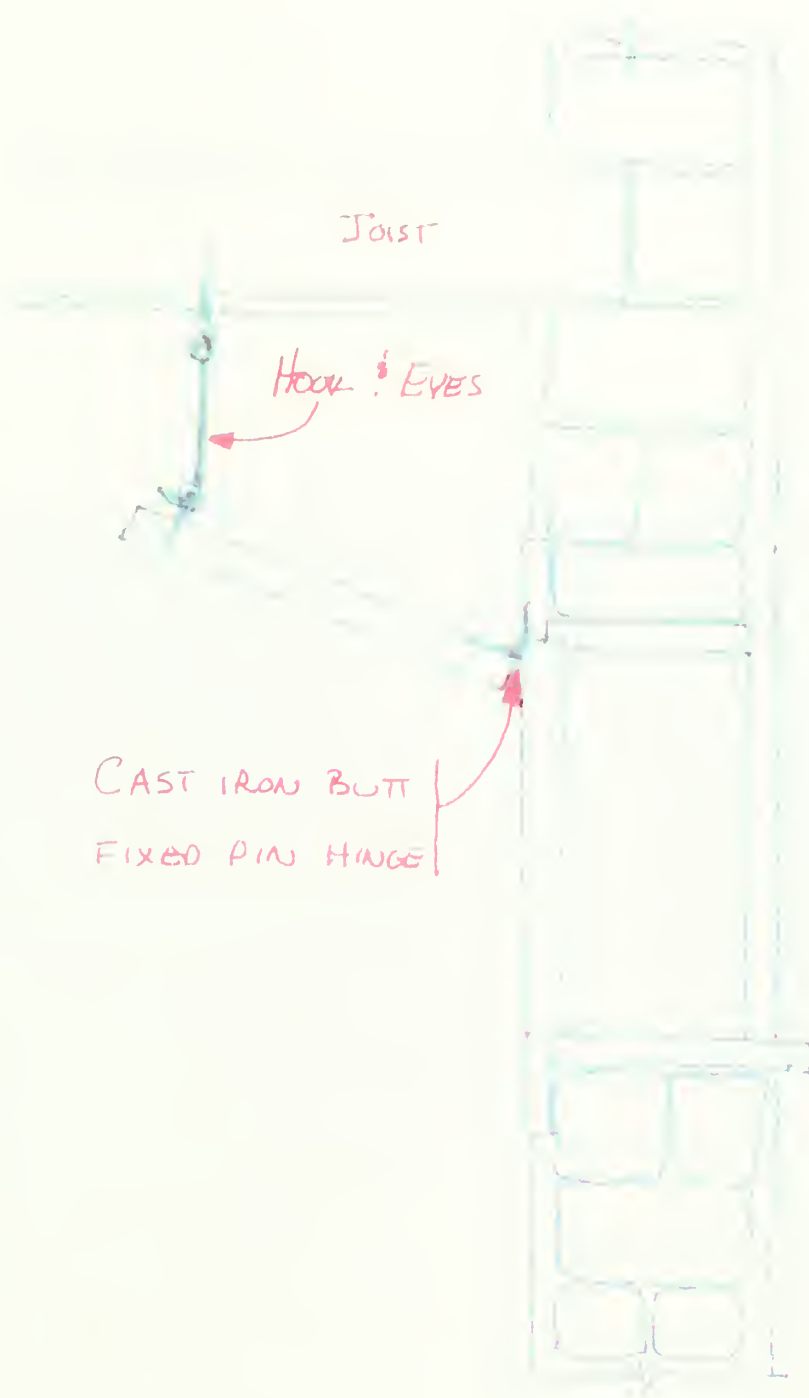
The existing H hinge is a 20th century colonial revival hinge. The original hinge pocket is outlined in the black box. A regular butt hinge was used. The measurements are visible in the old mortise and a fixed pin, cast iron butt hinge as close to the dimension of the mortise should be purchased and installed for use on the rear south sash of the south dependency.

A good source for a decent cast iron reproduction hinge can be purchased from Antique Hardware and Home. Their web site is www.antiquehardware.com. In their catalogue coded 8642 on page 32 they list their cast iron hinges. They make two sizes: one is 9CIA 2 ½" H X 2" W at 16.95 each; the second size is 9CIB 3 ½" H X 2 1/8" W at 18.95 each. These are black cast iron tight pin hinges and one of them should fit the bill.

Method for holding open the sash

The method for fixing the window open for use during the warm months was not determined. A typical method was to use a stick, a dimensioned sawn piece of small wood, to prop the window open. However, the stick method can be hazardous when the window blows. If a gust of wind blows directly against the window and pushes the window up just enough to allow the stick to fall, the sash can crash into the frame and break glass, hit someone on the head or hurt some fingers.

Another very common method was to fashion out of wire, heavy gauge such as #9 or perhaps a bit smaller, a hook and eye arrangement. The hook could be screwed into plaster lath if a center of a lath is found or better yet the ceiling joists. A hook eye was attached to the sash. When Selina wanted a breeze, all she had to do was open the sash and hook it to the overhead hook and leave it hang.



Section of Roof Truss

VIEW = 10°

SECTION OF ROOF TRUSS
 SHOWING THE JOIST
 AND THE BUTT
 AND THE HINGE

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March 3, 2004

South dependency: Selina's Fireplace and Fireboard



There was some discussion that the original working floor level was below the level of the existing brick. I find this hard to believe, but should this information be correct, the opening of the box, while near its original upper opening height, would have been another 2-1/2" +/- in height making the overall opening to flue ratio 6.78% making the current firebox flue system almost inoperable. The flue to firebox opening ratio should be between 8.75% to 1 or 12% maximum with the optimum ratio being 10% for a perfect draw. Simply stated, the flue at its narrowest constriction should be about 10% of the firebox opening size. Any draw ratio smaller than 8.75% or larger than 12% and the chances are the chimney will not draw causing a smoky interior. It was not at all unusual for a kitchen or cooking fireplace to be a smoker since they almost always had square box corners along the back wall of the box, but they did understand ratios between openings and flues.

The original flue size was approximately 7" by 17" as best we could determine the sizes the day we visited the site. This would dictate a firebox opening of 1,190 SI (square inches) for a perfect 10% draw.

In the photo above there is clearly evidence the box may have been widened by one of the earlier restorations. If so, the width would be narrower by 8" making the net width of the box opening only 37" brick to brick and 36" if the side jambs were plastered as they probably were.

If the box were 36" wide with plastered side jambs and 34" tall the box opening to flue ratio would be 9.7% and would work very well for the draw. If the box were 36" high, the ratio would still be nearly 9.2% and would have adequate draw. This was not a primary cooking fireplace and the size is odd for a small room-heating firebox in which some small amounts of personal cooking may have occurred.

Lacking any further definitive evidence from archaeological evidence that the sides of the box were splayed, I recommend the box be kept square and the opening adjusted to make the flue draw properly. I would not go any lower than a 9% draw. My best guess would be the box opening should be about 36" wide with plastered sides and about 36" high or lower by an inch or two from whatever the finished surface of the floor will be.

The back wall of the firebox would also have been plastered, but I recommend you not plaster the back wall if you intend to use the firebox for heating or cooking purposes. If the box will never be used, it is appropriate to plaster the entire box in a roughcast type plaster pattern.

The front wall would not have a step in the vertical plane of the wall. It would be straight up and equal to the upper plane of the masonry stack.

A mantel more appropriately known in the period of use as a "fireboard" was usually present and I have drawn one with the appropriate details. If there is no evidence uncovered during the exploration of the fire breast, and there probably will not be any, you will have to decide whether you want this item installed or not. There most likely was a fireboard.

Refer to the accompanying drawing for more details.

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March 4, 2004

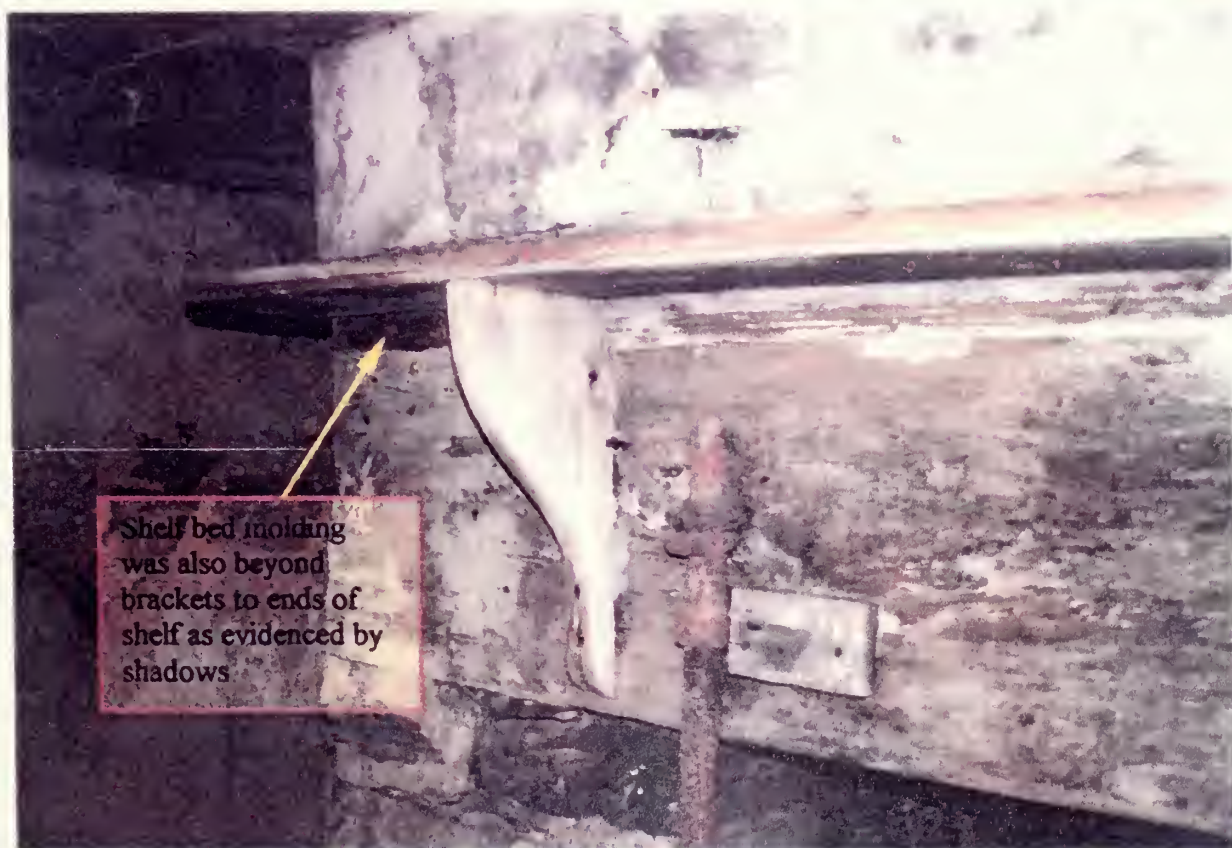
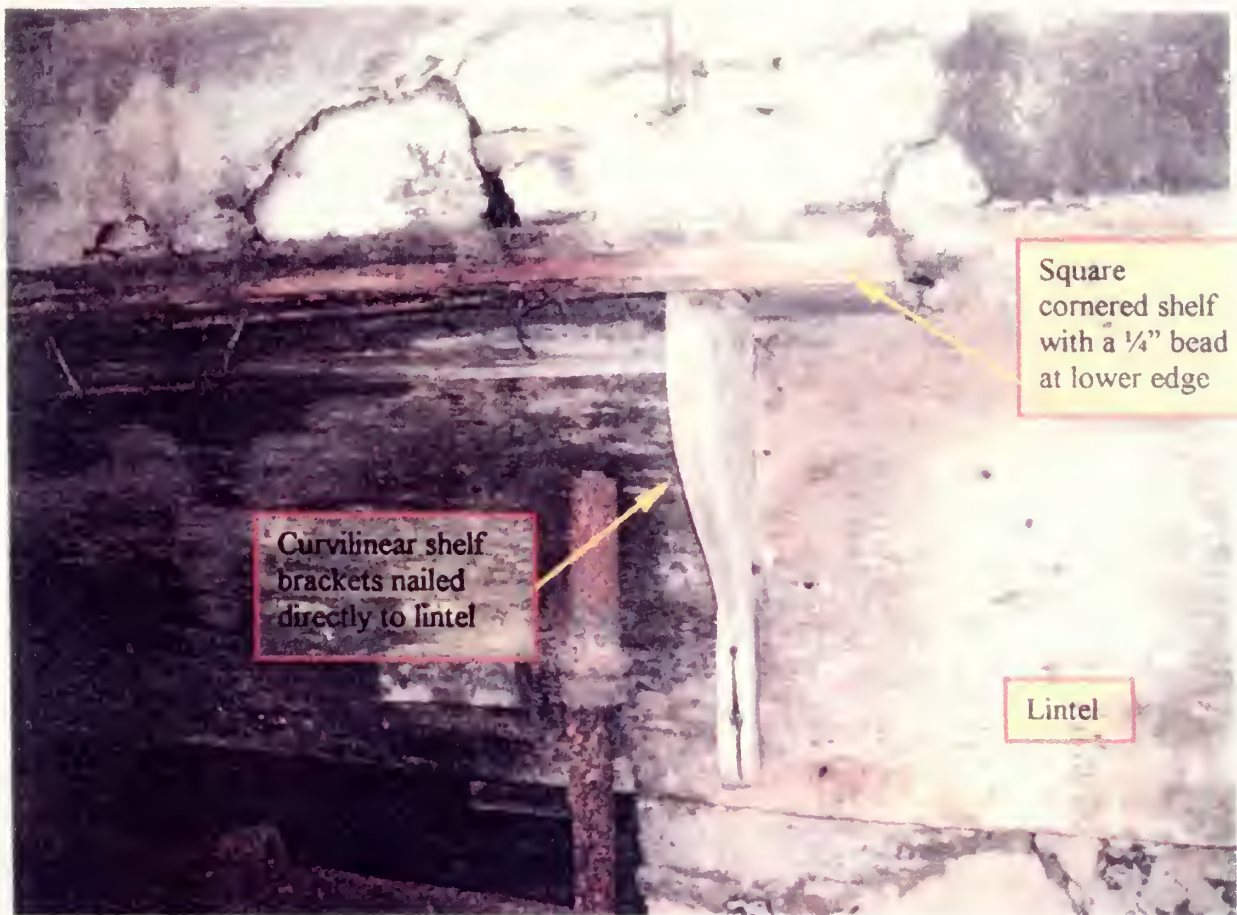
**Arlington House - Associative Details
South Dependency**

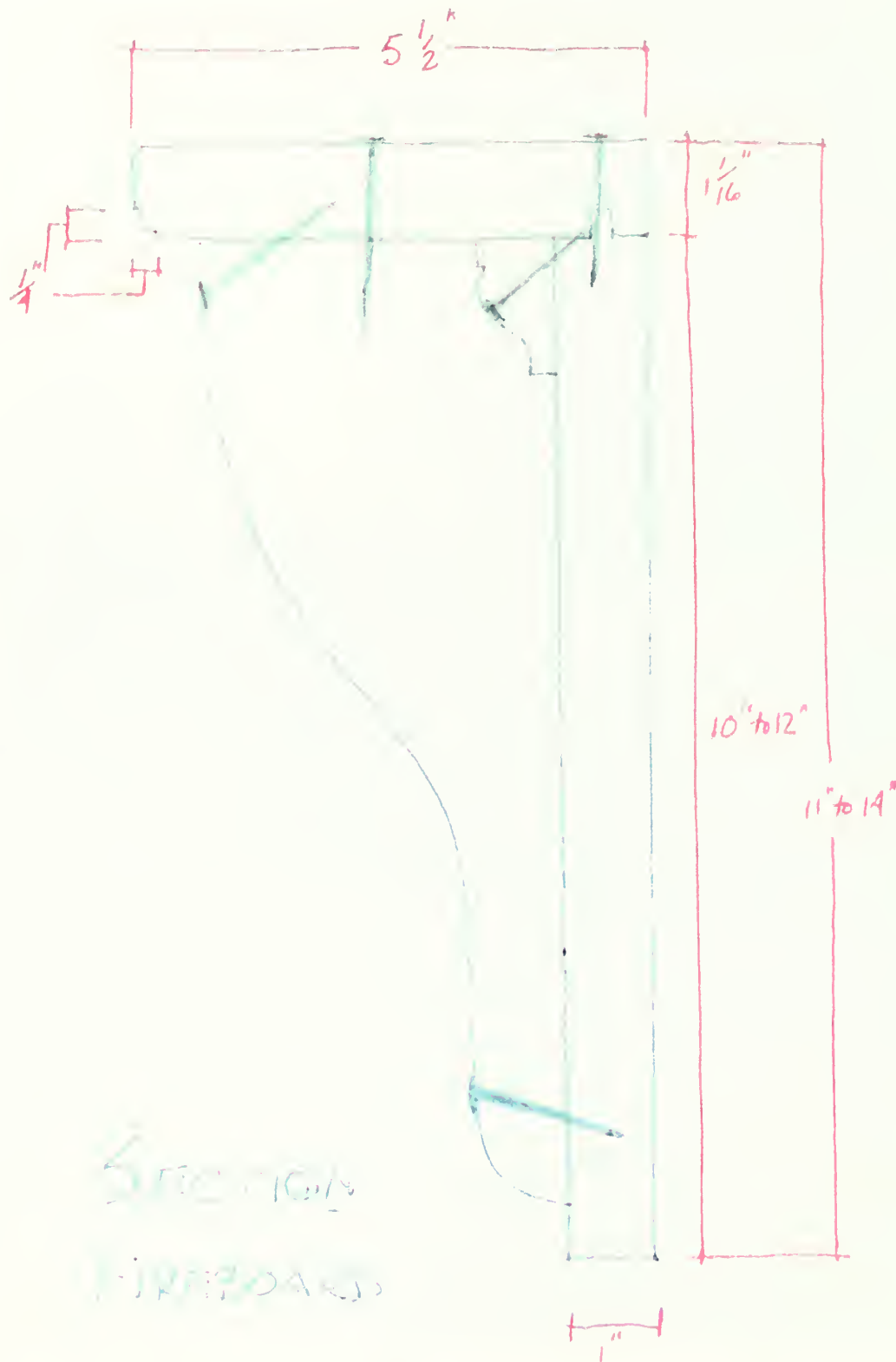
**Selina's Room
Fireboard**

Details from Hollyday Spring House Fireboard, Washington County, MD ca. late 18th c.



The Hollyday fireboard was placed directly on the face of a finely hewn firebox opening lintel. There were two curvilinear brackets for the square cornered shelf. Between the two brackets there was a molded bed molding to help support the long fireboard.





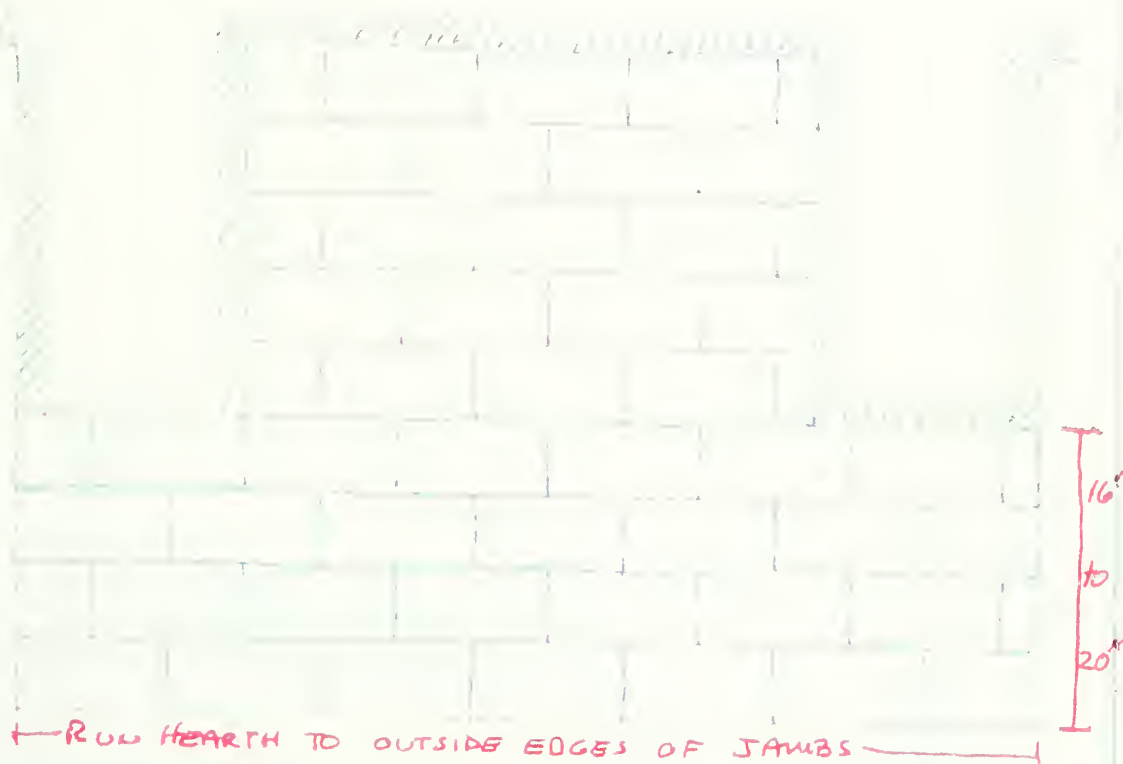
SECTION
FIREPROOF

ACQUININ HOUSE, SOUTH DEPARTMENT
SECONDARY RM, PROPOSED FIREWALL

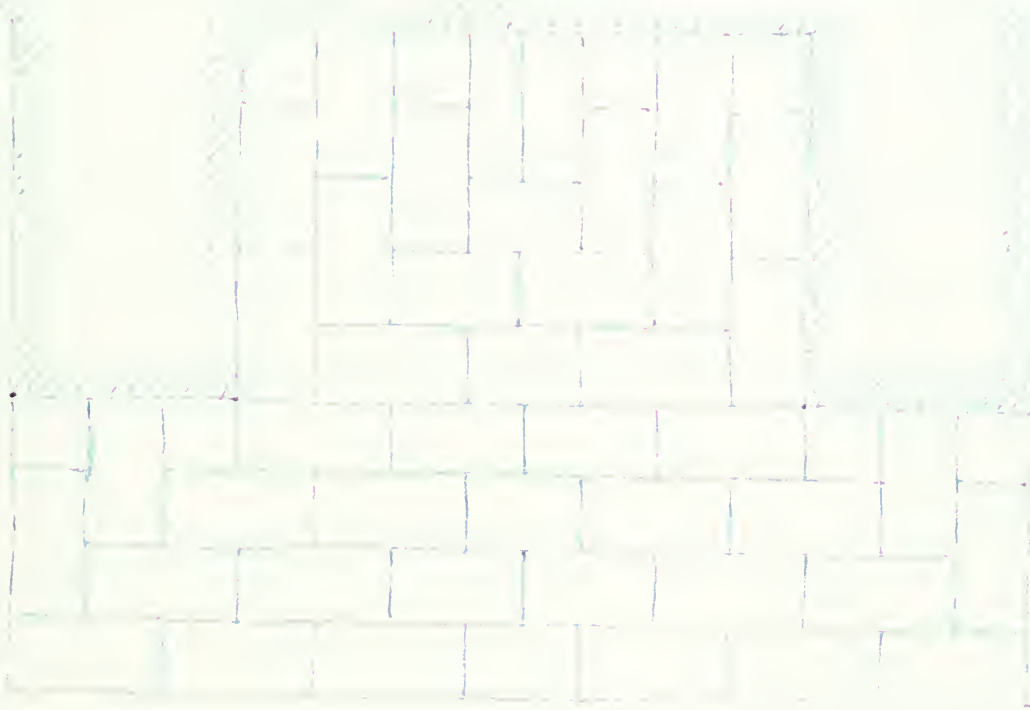
DEPARTMENT OF
HUMAN SERVICES
WASHINGTON, DC
14-000000-0000

DATE: 10/1/85
BY: [signature]

POSSIBLE HEARTH PATTERNS



RENDERED AND BUILT



RENDERED AND BUILT

ALUMINUM TRIM, DUTCH DOOR
 ALUMINUM TRIM, DUTCH DOOR

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March 3, 2004

South Dependency: Selina's room stair and hatchway to loft

Selina's hatchway, absent any hard evidence, would most appropriately be a board and batten door, probably three or four hand planed boards with $\frac{1}{4}$ " beads facing down, tongue and grooved with two battens, both beveled on the up side. The battens could have been either screwed or clinch nailed together. Most likely the hatch door was fastened with two cast iron slim line butts to swing up toward and against the gable brick wall. The hatchway opening was lined with hand planed lumber beaded at the lower



edge, probably a $\frac{1}{2}$ " bead, not a full bead but a bead along the lower inside edge.

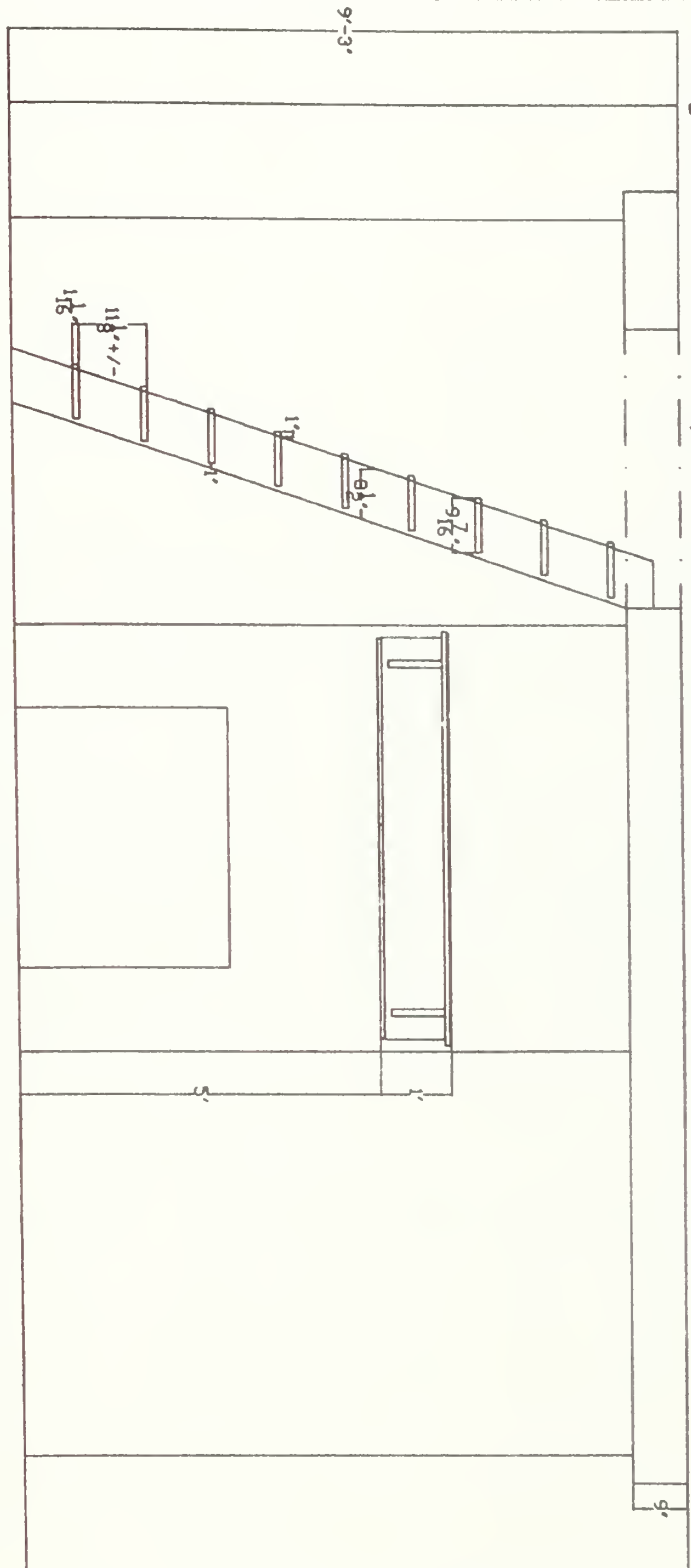


The stairs would have been steep, closed carriage with dadoed treads, no risers much like the one currently in place. However, the dimensions of the one currently in place are much too heavy. The closed carriages may have been as thick as $1 \frac{1}{8}$ ", more typically 1". The dados would not have plowed all the way through to the backside of the carriage. Rather the dado would have been cut from the forward, front edge of the carriage and stop before reaching the back edge. The dado depth would have been $\frac{1}{2}$ ". The hand planed treads would have been smoothed on the top and maybe left in the rough sawn condition on the bottom (typical). The front of the tread would have projected at the top edge $\frac{3}{4}$ " to 1" beyond the front edge of the carriage and the tread would have had ears that extended and slightly beveled back to each outside edge of the carriage. The entire affair would have been fastened with one operation cut nails. At the mid rise of the back edge of the two carriages there would have been a small stabilizer bar of wood measuring $\frac{3}{4}$ " x $1 \frac{1}{4}$ ". The ends would have been let into the back edges of the two carriages and joined with a half dovetail notch and fastened with one thin cut brad in each joint.

Recommendation: Run the stairs in the same direction and angle as the current set. Change the sizes of the components. Refer to the attached associative details and drawing for more information.

C:\Documents and Settings\Douglass Reed\My Documents\Clients\Arlington House 2002\Associative Details\Selinas stair details.doc

Arlington House, South Dependency, Selina's Room: Stairs, Mantelboard and Firebox



Stairs and Hatchway: The stairs will be set at a steep angle, treads 11/16" thick, projecting past edge of closed stringers 1" at top edge with a small hand planed chamfer at front corner. Let the tread into two dados and stop dados before reaching the back side of carriages. Carriages should fit snugly inside two joists and be nailed to joists.

Mantel Board: The fireboard should be between 12 and 14" high and set roughly at 5' to 6' A.F.F. to the top edge of the board. There should be two small curvilinear brackets and a small 1/2" to 3/4" bead at the bottom edge. The fireboard should be set to the brick prior to plastering the breast of the chimney. The top shelf should project past the fireboard face 5" and be 1" to 1 1/16" thick and hand planed with a top edge chamfer. The lower edge bead should be returned at the corners.

Firebox and Flue: The firebox should be centered somewhere around a 10% draw ratio to the size of the original flue, which measures approximately 7' x 17' for a total of 119 square inches. The firebox should be as close to 190 square inches in the opening. The firebox and breast should be plastered in a rough manner known as rough cast. The roughcast plastering was not done by skilled personnel.

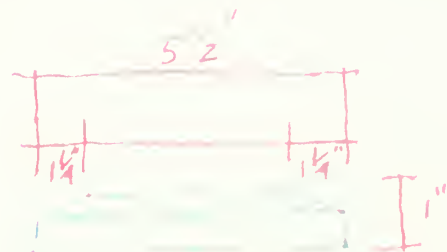
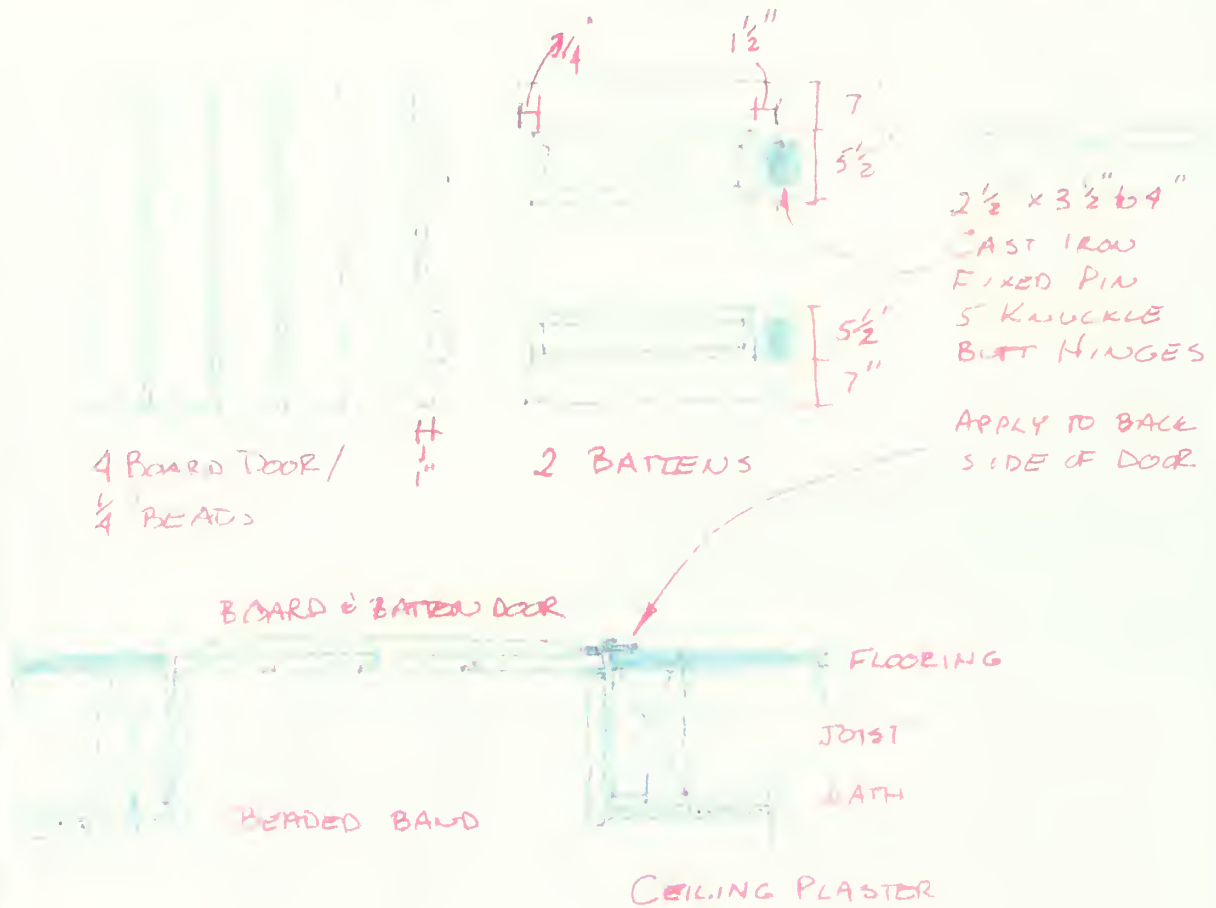
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Hand-drawn sketch of a door assembly showing components and dimensions.



BATTEN PROFILE

SCREEN PATTERN

FEAT HEAD, STRAIGHT SLOT

#12 x 1 3/4" WOOD SCREWS

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March 4, 2004

**Arlington House - Associative Details
South Dependency**

**Selina's Room
Stairs to loft**

Andrew Jackson's First Hermitage, Nashville, TN, stair details

D C Reed took the photos below during the study of the log house Andrew and his wife Rachael Jackson lived in from ca. 1803 to 1821. The photos show the style of a rather typical stair leading to a loft or attic where there was room for a straight run stairs. I believe there is ample room for a straight run stairs in Selina's room in the South Dependency of the Arlington House.

The angle of these close carriage straight run stairs varied greatly to fit the circumstance from house to house. The 5'10" of run space for the stairs in Selina's room is plenty considering the stairs were often placed near or next to the wall and one had simply to climb over the side of the stairs to access the stairs. Refer to the photos below to see that Jackson's stairs were very close to the wall. These original ca. 1803 stairs were made completely of black walnut. Note the stabilizer bar in the backside fastened in place with small brads. The half dovetailed ends of the bar to the closed stringers were a nice detail.

The following six images were removed from the report written entirely by Doug Reed,

The First Hermitage and Alfred's Cabin – Vol. II. A partial Historic Structures Report prepared for The Hermitage, April 1999 – April 2000.

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March 3, 2004

Arlington House – Associative Details
South Dependency

Selina's Room
Stairs to loft

Details from Webb Cabin, ca 1843, Caroline County, MD



Only the upper portion of the original loft stairs remains. The lower platform and two stairs were missing.

The steep angle of the stairs was approximately 60 degrees. The rise from tread to tread was 11".

The total rise from floor to loft was 8'3". There were only eight treads between the two floors.



The treads were dadoed into the closed carriages.



Image 4.85 WC. Ladder stairs located in northwest bedroom R103 against south wall. Made of black walnut expertly hand planed smooth by a master craftsman and nailed together with hand wrought, rose head, spoon bit nails dated 1802-1803. Originally the bottom edge of the stairs touched the east log wall. During the 1979 restoration, the little stairs was reset a few inches west of its original location.



Image 4.86 WC. Ladder stairs, lower half showing each tread nailed once at each end near front edge of stringer. Treads were nosed out over front edge of stringers.



Image 4.87 WC. Underneath side of top tread at south end the split wood revealed a spoon bit nail end used to fasten the stringers to the treads. The treads were set into a recessed dado for support.



Image 4.88 WC. West Cabin, attic stairs, spoon bit end of hand wrought nail sticking under top tread. Nail dated 1802-1803.



Image 4.89 WC. Back side of ladder/stairs located in northeast bedroom R103. Just above the fourth tread up from floor was a stabilizer bar to keep the lower edges of the stringers sturdy. The top ends of the stringers were originally down lower, flush with the tops of the attic joists.



Image 4.90 WC. On the backside of the ladder/stairs was a stabilizer bar. A close up view of the north end of the bar with a delicately cut half dovetail notch into side of stringer. Each end of the stabilizer bar was nailed with two small brads. Note too that the tread dado does not extend through the width of the closed stringer. The back of the treads stopped in the dado prior to reaching the backside of the stair carriage.

DOUGLASS C. REED

35 East Irvin Avenue
Hagerstown, Maryland 21742
Phone (301) 665-9217
Fax (301) 791-7881
Email – dcraigreed@aol.com

March 1, 2004

Arlington House - South Dependency

Smoke Room Meat Hanging Beams

There were three meat hanging beams spaced over half the depth in roughly the center third of the center room of the south dependency. The pair of opposing pockets where the original center and south set of beams were located were in good enough condition to measure the sizes of the beam-ends. The east beam had only one measurable pocket.

In the center and south beams, the measurements from one end to the other varies by as much as 3 ¾". There is far too much variance from one end to the other to indicate dimensioned lumber. There is no way to determine the manufacturing marks of the timber, or even if the entire lengths of the timbers were even flattened down the full lengths of the beams. It is possible three large poles were squared in the ends and left in the round. However, this would be unlikely and not typical of such estates and their support buildings.

The varying sizes of the beam pockets indicated the beams were used to hang meats and were not dimensioned lumber meant for a floor or other type of structure. The varying sizes of the beams also indicated that any scantling that came to hand was used for the meat hanging beams regardless of its relative size one to the other and/or the manufacturing methods used to produce the beams.

There were three ways the beams could have been manufactured:

1. The beams could have been left in the round with just the ends squared.
2. The beams could have been hewn on two or four sides and the ends squared.
3. The beams could have been sawn all four sides. I believe this was likely the case or possibly with one maybe two hewn sides and the rest sawn.

Most of the remaining original scantling in the dependencies exhibited all methods described above. There are sash frame sawn scantling pieces, hewn sides and wane edges. The one hewn side of a scantling piece was from a tree being felled and hewn all four sides in the forest before being transported to a sawmill. Then the hewn timber was mounted on a sash frame sawmill and cut into smaller semi-dimensioned pieces of rough light frame timber known as scantling. It is likely three poor quality pieces were left over and selected for the meat hanging beams used in the meat house.

If this was the case, all four side sawn beams would be appropriate as well as one or two sides at a right angle to each other could be hewn and the other two or three sides sawn. Poor quality beams should be used, possibly exhibiting some wane edges, large knots and varying sizes.



3122104

WAVE EDGE



CUT NAIL FASTENER

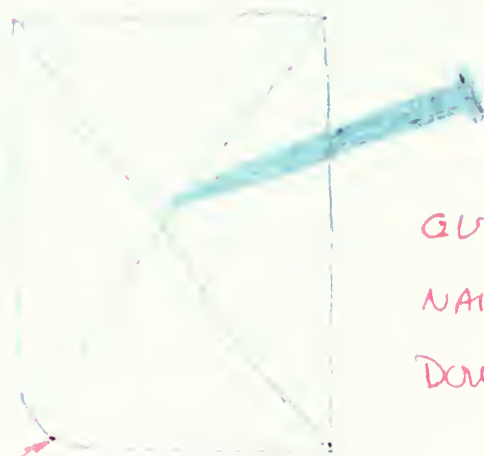
HAND MADE "J" Hook

REGULARLY SPACED

6" to 8" down BEAM

OPTION 1

OPTION 2



WAVE EDGE

GUT NAILS

NAILED RANDOMLY

DOWN BEAM

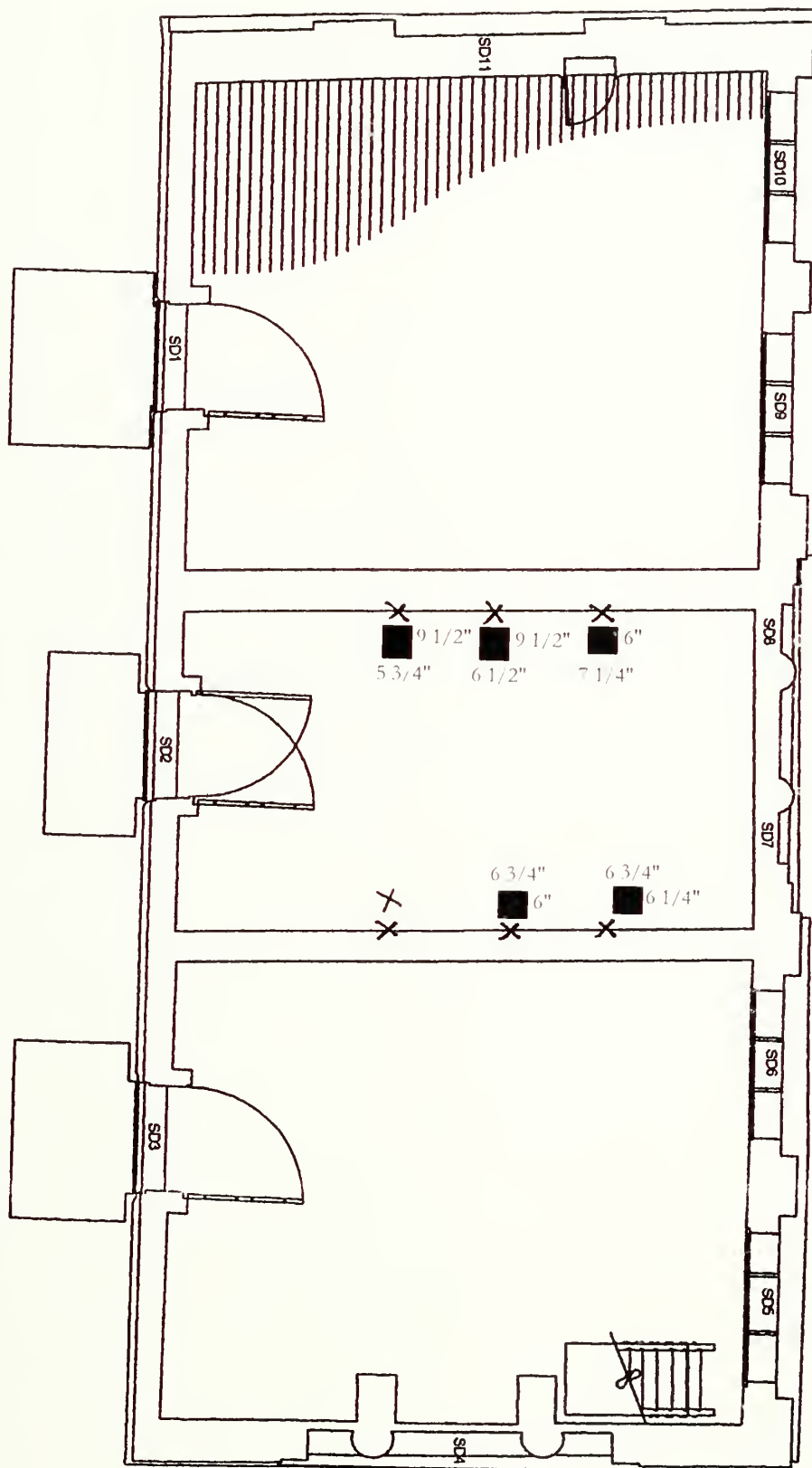
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1900-1901

De la



Appendix G

NPS Engineers Report

SITE VISIT REPORT

Date: December 20, 2002

To: Chuck Fisher

Cc: Kaaren Staveteig

Tim Buehner

Richard Foster

From: Luis Teran

Re: ARHO Slave Quarters (South) Site Visit

Date of Visit: 12/17/2002

1.0 Background and Physical Data

The Slave's Quarters building is a small rectangular structure that is located behind the Arlington House. The walls of the structure are at least two brick wythes. The roof framing consist of rough-cut timber rafters at about 24" on center, and ceiling joists at every other roof rafter. The roof sheathing consists of planks tightly laid over the roof rafters.

We observed the connection detail between the rafters and the ceiling/ties joist (See attached sketch and photographs). At the site, Chuck Fisher noted that the roof has a heavy cement-like tile and that the roof diaphragm has deflected along the ridge of the roof.

2.0 Assessment and Opinions

From this limited site visit, we were able to observe the roof framing and the connection between ceiling joists and roof rafters. The ceiling joists act as tension ties between the front and back walls. The rafters bear on top of the sheathing of the soffit and presumably nailed from the top of the rafter (not verified).

The original eave outriggers were probably formed from continuous ceiling joists that cantilevered past the bearing walls. Due to weather exposure, the outriggers may have rotted. Later construction repaired or restored the eaves by attaching new outriggers that butt to the square cut of the ceiling joist at the bearing wall's edge. The new outriggers are fastened to the ceiling joist with $\pm 1 \times 5$ lumber plates on each face. During the same repair period, pairs of vertical wood plates were added on each side of the roof rafters, connecting them to the new outriggers. This arrangement completes a rudimentary truss formed by the roof rafters and the ceiling joist. Nails and friction between the rough cuts of the ends of the rafters connect the rudimentary trusses.

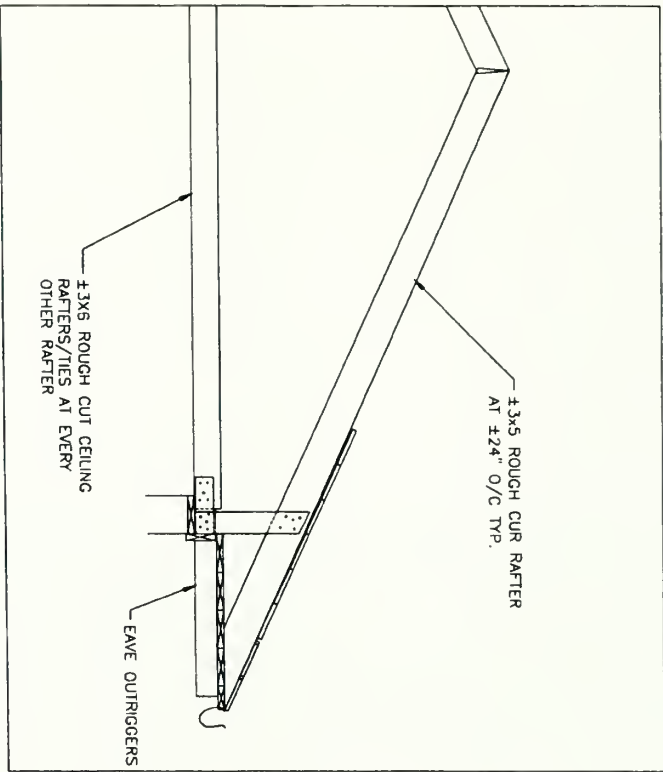
During this site visit, no actual measurements were taken to determine the moisture content of the wood framing or the air. The interior plenum appeared dry. This state is ideal for wood framing as it prevents rot. The timber framing appears to be in excellent condition.

Based on this visual inspection, and without the benefit of testing, it is our opinion that the rafters appear to have sufficient strength and are capable of carrying the existing loads provided the moisture content of the interior plenum be maintained with little or no variations. Changing the roof covering from cement tile to wood shakes will reduce the dead load and improve the capacity of the rafters to carry live (snow) loads. However, environmental conditions may change and moisture may fluctuate. These environmental changes may alter the dimension of the timber members, which will readjust by creeping, creaking and dislodging some of the fasteners (nails, pegs, etc). As long as the changes are not severe, the timbers will remain stable and not lose strength. We recommend that changes be kept to a minimum during reconstruction.

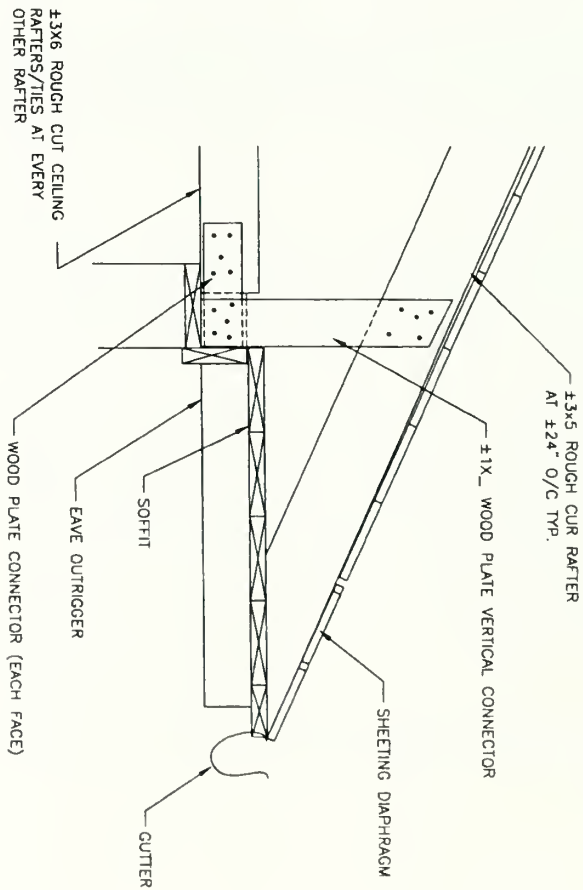
We also recommend engaging a professional structural engineer during construction to assess the health of the structure, and to provide small non-intrusive repairs as needed.

The deflection, noted by Chuck Fisher, appears to be the result of the creep effect, caused by long term loading on timber members. We do not recommend, (without a structural evaluation) taking-out this deflection during tile roof replacement, because other members may get overloaded. Unless the timbers are replaced with new ones, natural deformations due to creep should be left alone.

Please do not hesitate to call us at 703- 419- 6420 for any questions on this brief report or any other structural questions



1 ROOF FRAMING
S1S1 N.T.S.



2 HEEL DETAIL
S1S1 N.T.S.

| | |
|--|-----------|
| DATE OF SHEET | 12/18/03 |
| PROJECT NO. | 12/18/03 |
| DESIGNER | 12/18/03 |
| CHECKED | 12/18/03 |
| DATE | 12/18/03 |
| SCALE | 1/4" = 1' |
| <p>ARLINGTON HOUSE
DEPENDENCIES
ROOF FRAMING</p> <p>GEORGE WASHINGTON MEMORIAL PARKWAY
ARLINGTON HOUSE</p> | |
| NO. | 1 |



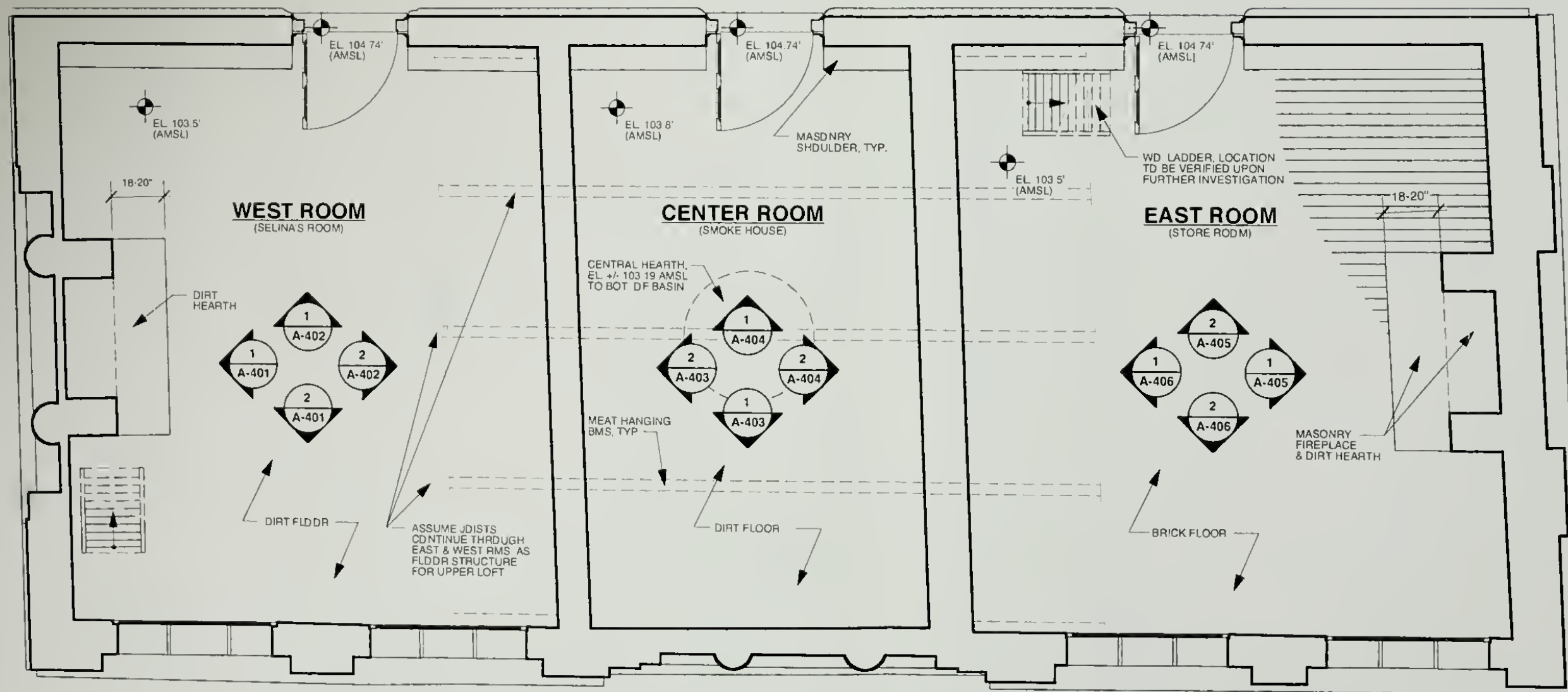


Appendix H

*Period and
Rehabilitation Drawings*

GENERAL NOTES

- INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.



**SOUTH DEPENDENCY
FLOOR PLAN - 1860**

SCALE 1/4" = 1'-0"



**PROGRESS PRINT
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**VOLZ &
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PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
FLOOR PLAN - 1860

SHEET NO:

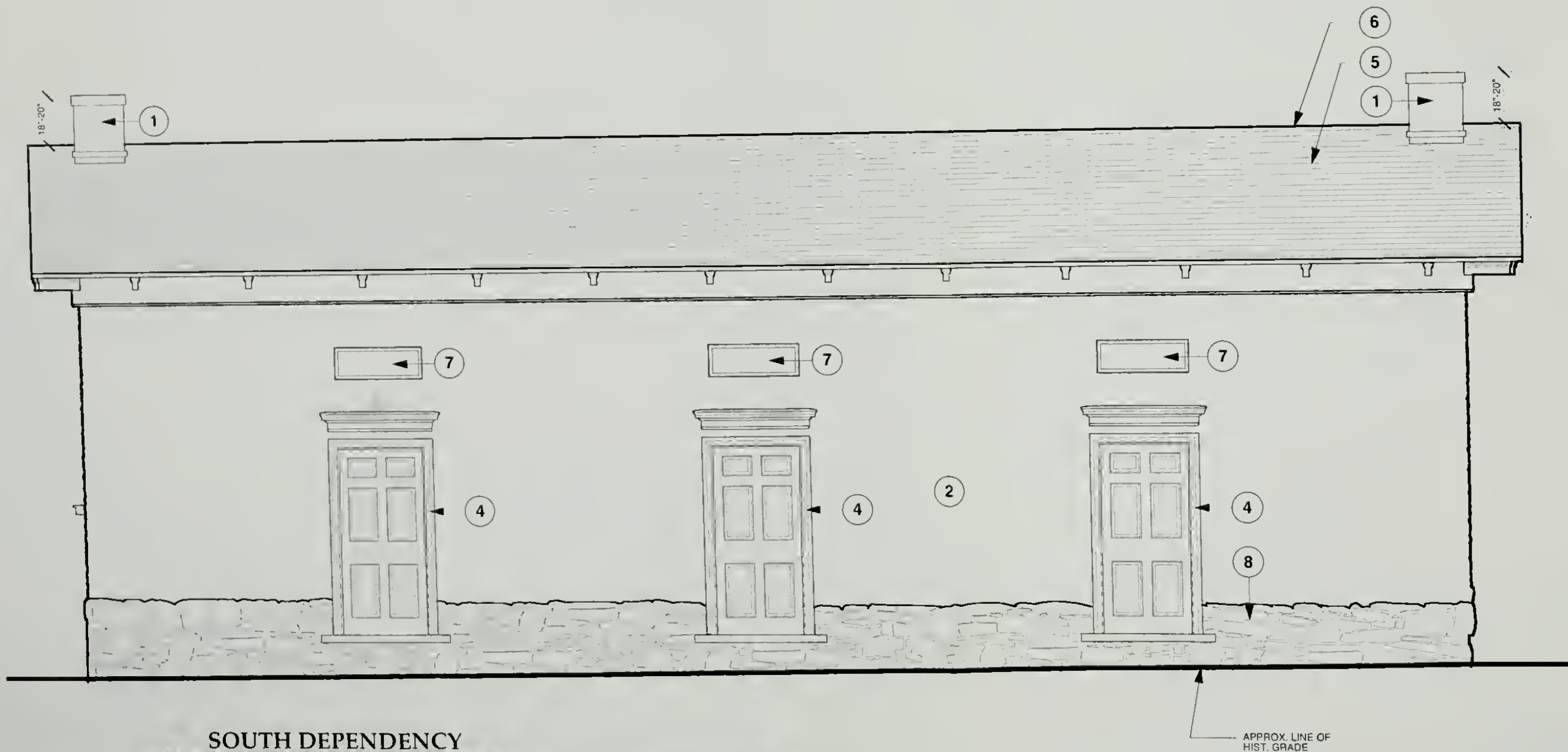
A-101

GENERAL NOTES

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ELEVATION KEY NOTES:

1. BRICK CHIMNEY & MASONRY CAP WITH STUCCO FINISH.
2. ROUGH CAST STUCCO FINISH, PAINTED.
3. SMOOTH STUCCO FINISH, PAINTED.
4. BEADED ARCHITRAVE W/ MOLDED BACK BAND.
5. WOOD SHINGLE ON WOOD LATH.
6. 4" TO 6" RIDGE COMB.
7. DECORATIVE PAINTED PANEL.
8. RUBBLE STONE BASE.



**SOUTH DEPENDENCY
NORTH ELEVATION - 1860**

SCALE 1/4" = 1'-0"

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PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
NORTH ELEVATION - 1860

SHEET NO:

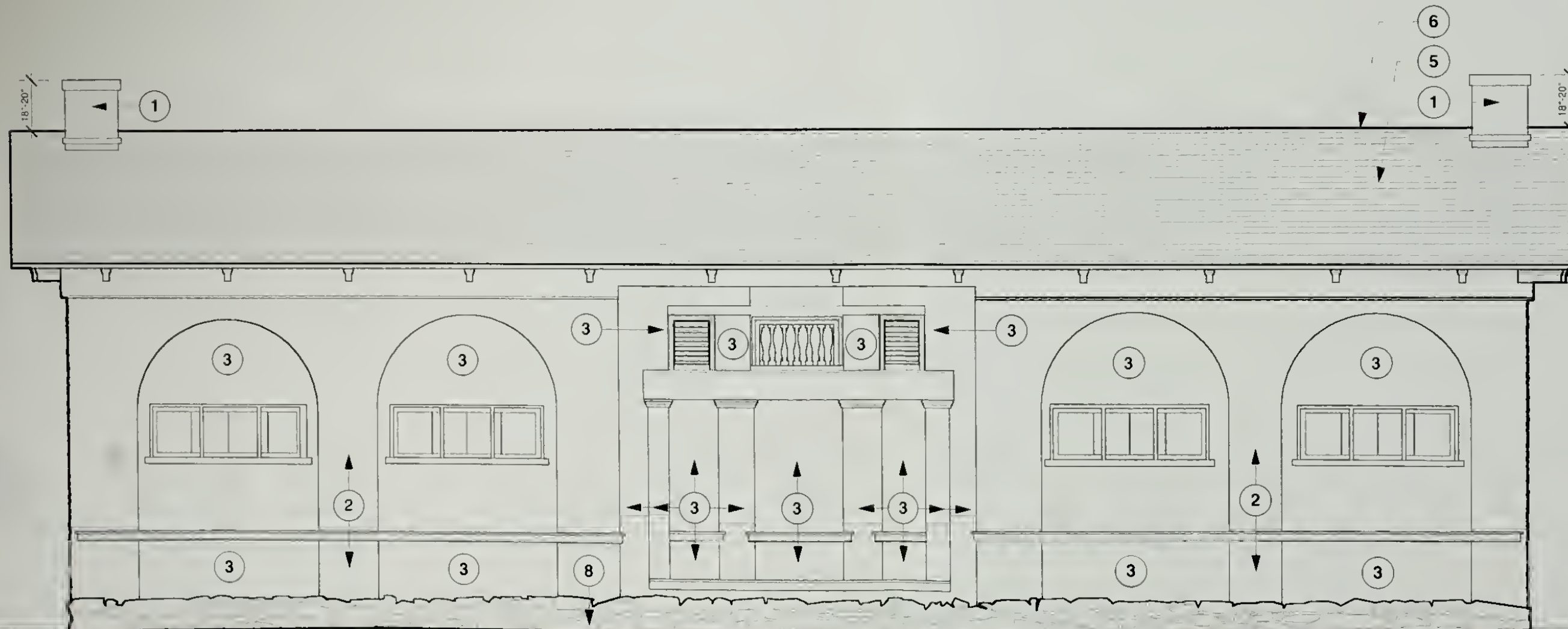
A-201

GENERAL NOTES

- A. INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
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3. SMOOTH STUCCO FINISH, PAINTED.
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5. WOOD SHINGLE ON WOOD LATH.
6. 4" TO 6" RIDGE COMB.
7. DECORATIVE PAINTED PANEL.
8. RUBBLE STONE BASE.



**SOUTH DEPENDENCY
SOUTH ELEVATION - 1860**

SCALE 1/4" = 1'-0"

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PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
SOUTH ELEVATION - 1860

SHEET NO:

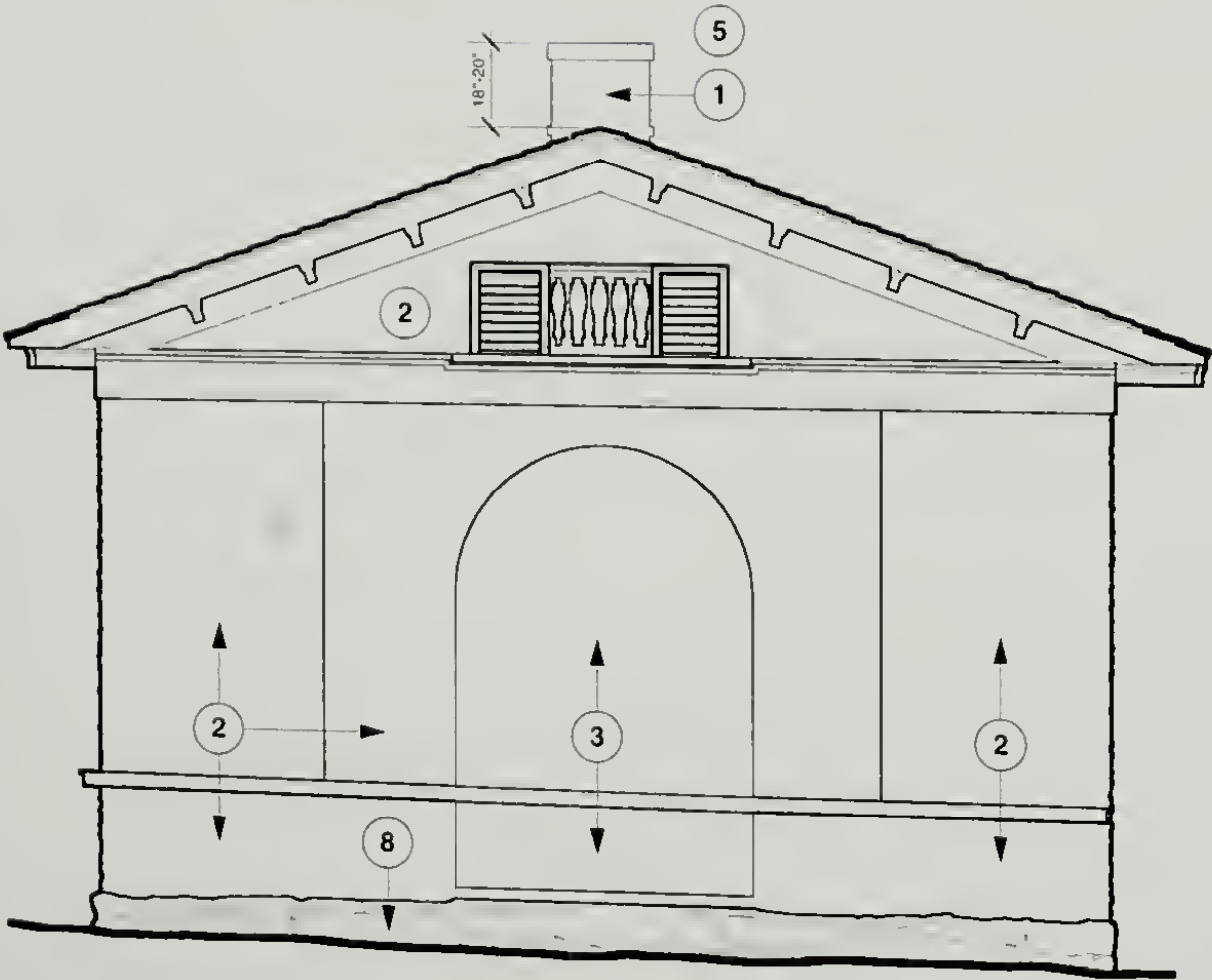
A-202

GENERAL NOTES

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3. SMOOTH STUCCO FINSH, PAINTED.
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5. WOOD SHINGLE ON WOOD LATH.
6. 4" TO 6" RIDGE COMB.
7. DECORATIVE PAINTED PANEL.
8. RUBBLE STONE BASE.



**1 SOUTH DEPENDENCY
EAST ELEVATION - 1860**

SCALE 1/4" = 1'-0"

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PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
EAST ELEVATION - 1860

SHEET NO:

A-203

GENERAL NOTES

- A. INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- B. ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.

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3. SMOOTH STUCCO FINSH, PAINTED.
4. BEADED ARCHITRAVE W/ MOLDED BACK BAND.
5. WOOD SHINGLE ON WOOD LATH.
6. 4" TO 6" RIDGE COMB.
7. DECORATIVE PAINTED PANEL.
8. RUBBLE STONE BASE.



SOUTH DEPENDENCY
WEST ELEVATION - 1860

SCALE 1/4" = 1'-0"

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PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:

SOUTH DEPENDENCY
WEST ELEVATION - 1860

SHEET NO:

A-204

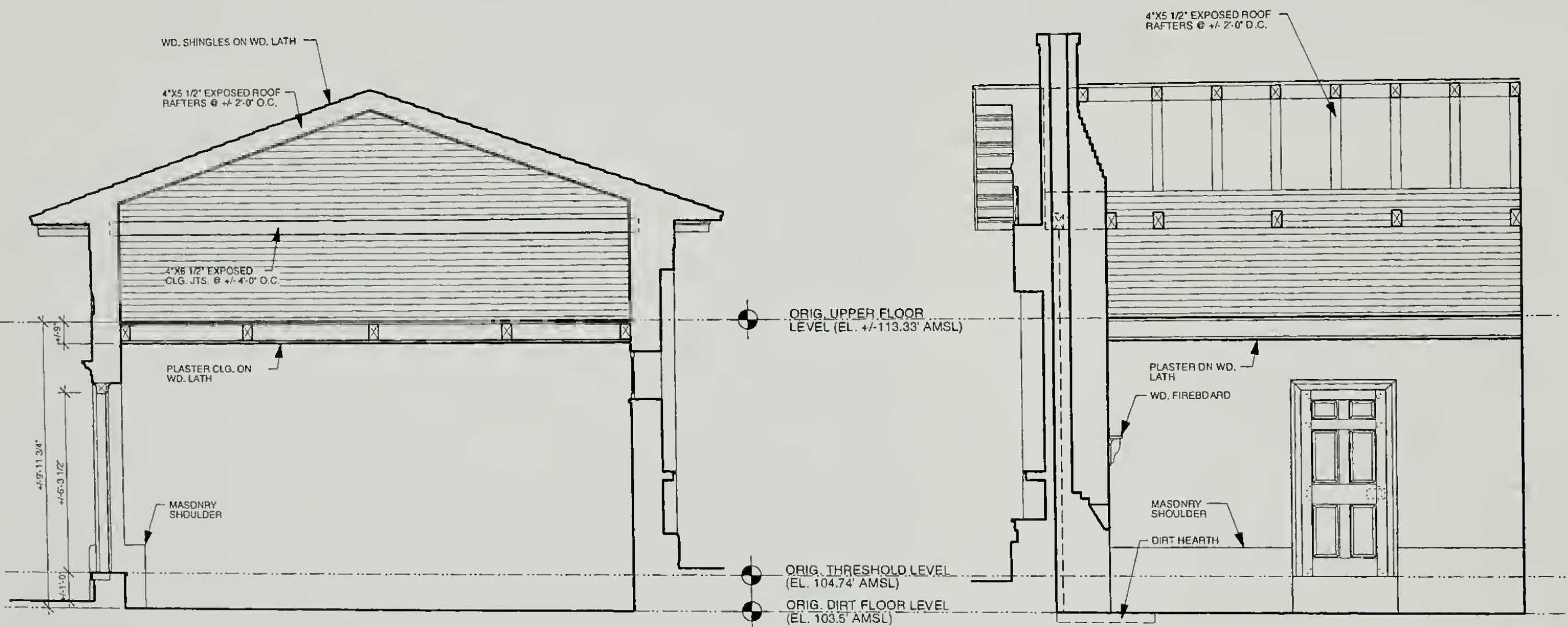
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| | |
|-------------|--|
| PROJECT NO: | 014-02 |
| DATE: | 10/01/04 |
| REV: | |
| SHEET NAME: | SOUTH DEPENDENCY
WEST RM, INT. ELEV. - 1860 |
| SHEET NO: | |

A-402



1 SOUTH DEPENDENCY, WEST ROOM (SELINA'S ROOM)
EAST INTERIOR ELEVATION - 1860
SCALE 1/4\"=1'-0"

2 SOUTH DEPENDENCY, WEST ROOM (SELINA'S ROOM)
NORTH INTERIOR ELEVATION - 1860
SCALE 1/4\"=1'-0"

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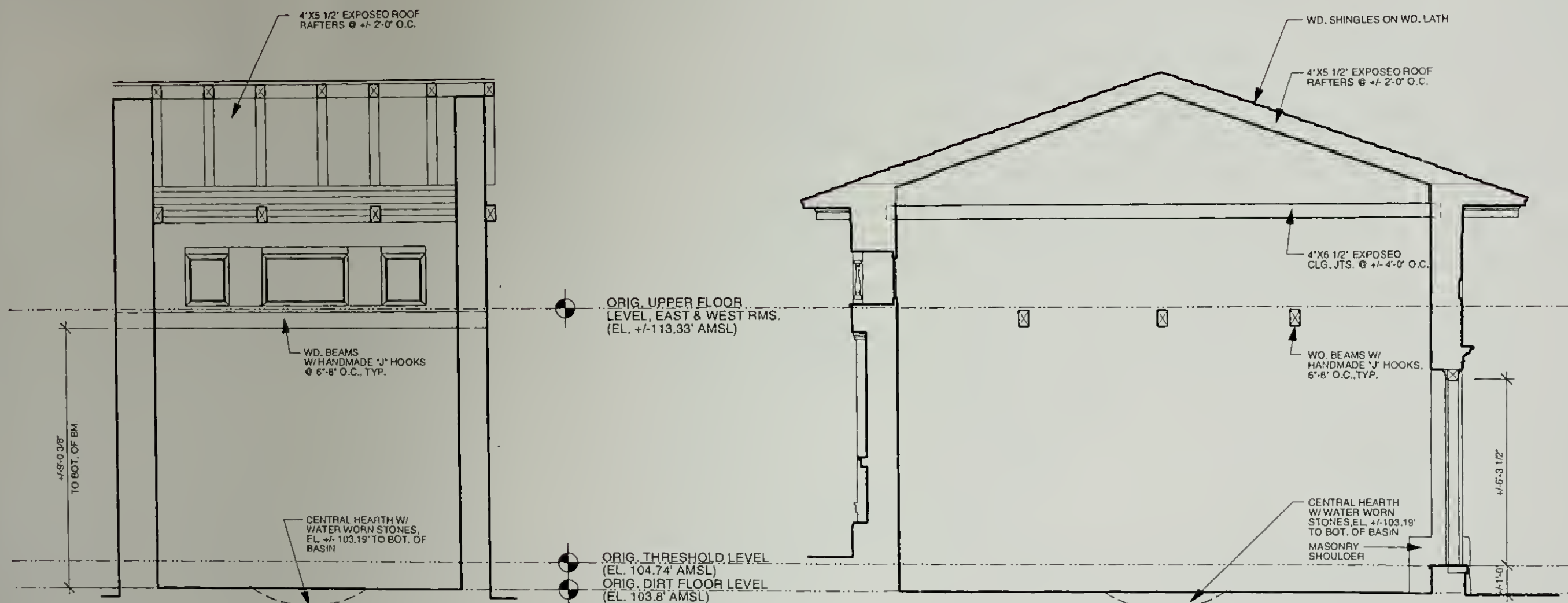
DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
CENTER RM, INT. ELEV. - 1860

SHEET NO:

A-403



1 SOUTH DEPENDENCY, CENTER ROOM (SMOKE HOUSE)
SOUTH INTERIOR ELEVATION - 1860
SCALE 1/4" = 1'-0"

2 SOUTH DEPENDENCY, CENTER ROOM (SMOKE HOUSE)
WEST INTERIOR ELEVATION - 1860
SCALE 1/4" = 1'-0"

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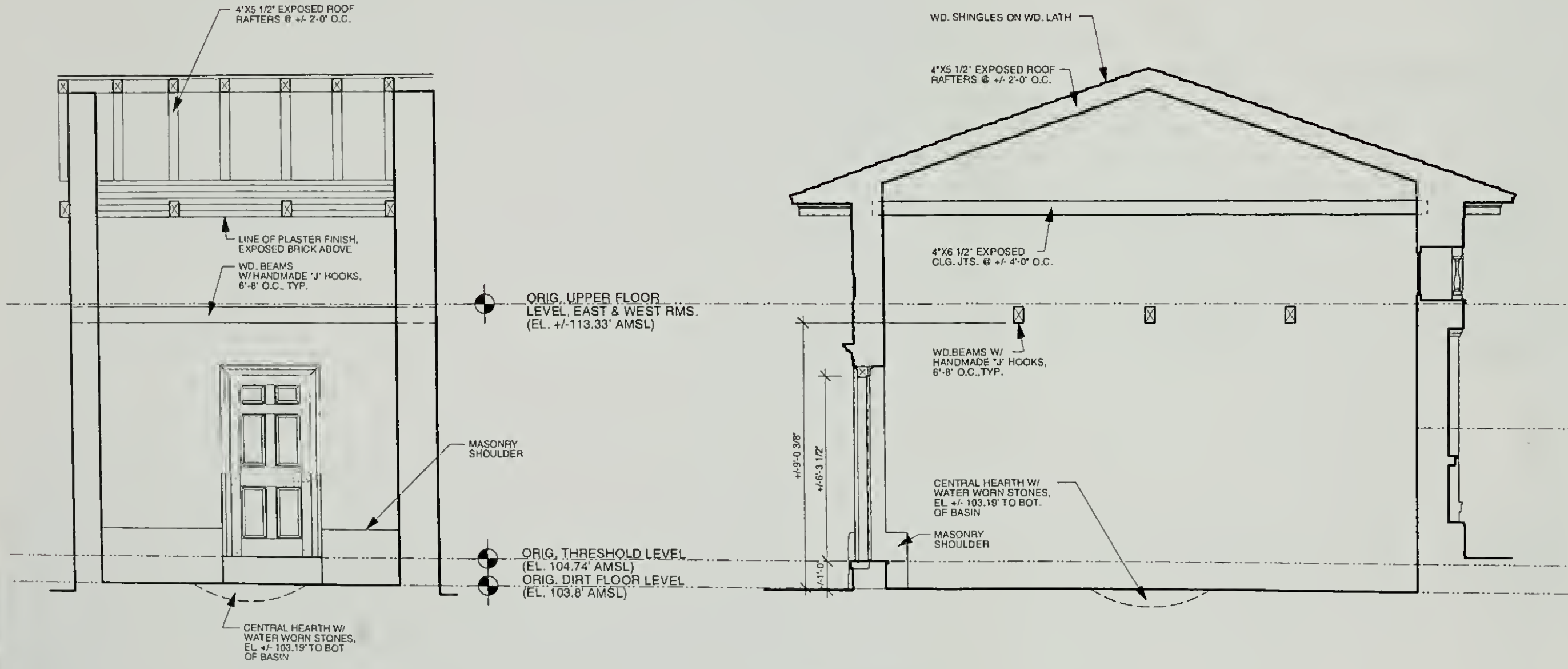
DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
CENTER RM, INT. ELEV. - 1860

SHEET NO:

A-404



1 SOUTH DEPENDENCY, CENTER ROOM (SMOKE HOUSE)
NORTH INTERIOR ELEVATION - 1860
SCALE 1/4"=1'-0"

2 SOUTH DEPENDENCY, CENTER ROOM (SMOKE HOUSE)
EAST INTERIOR ELEVATION - 1860
SCALE 1/4"=1'-0"

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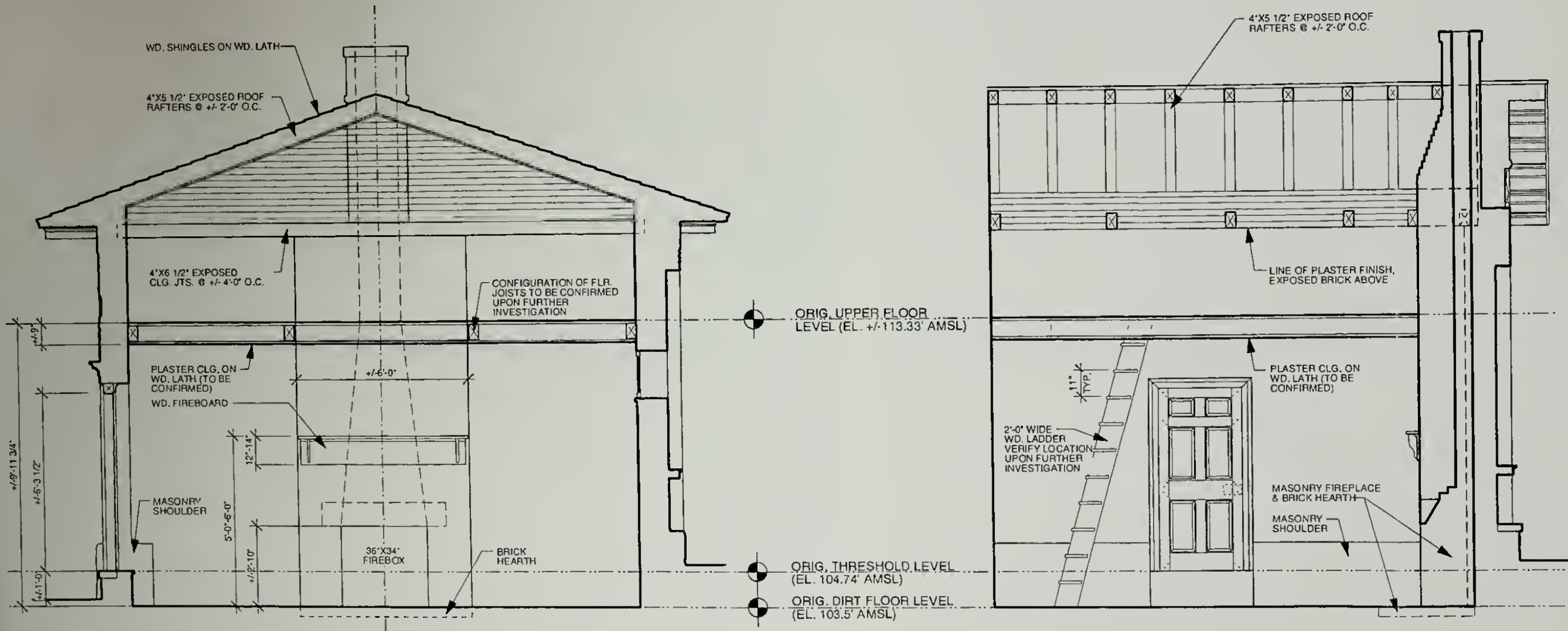
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REV:

SHEET NAME:
SOUTH DEPENDENCY
EAST RM, INT. ELEV. - 1860

SHEET NO:

A-405



1 SOUTH DEPENDENCY, EAST ROOM (STORE ROOM)
EAST INTERIOR ELEVATION - 1860

SCALE 1/4"=1'-0"

2 SOUTH DEPENDENCY, EAST ROOM (STORE ROOM)
NORTH INTERIOR ELEVATION - 1860

SCALE 1/4"=1'-0"

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PROJECT NO: 014-02

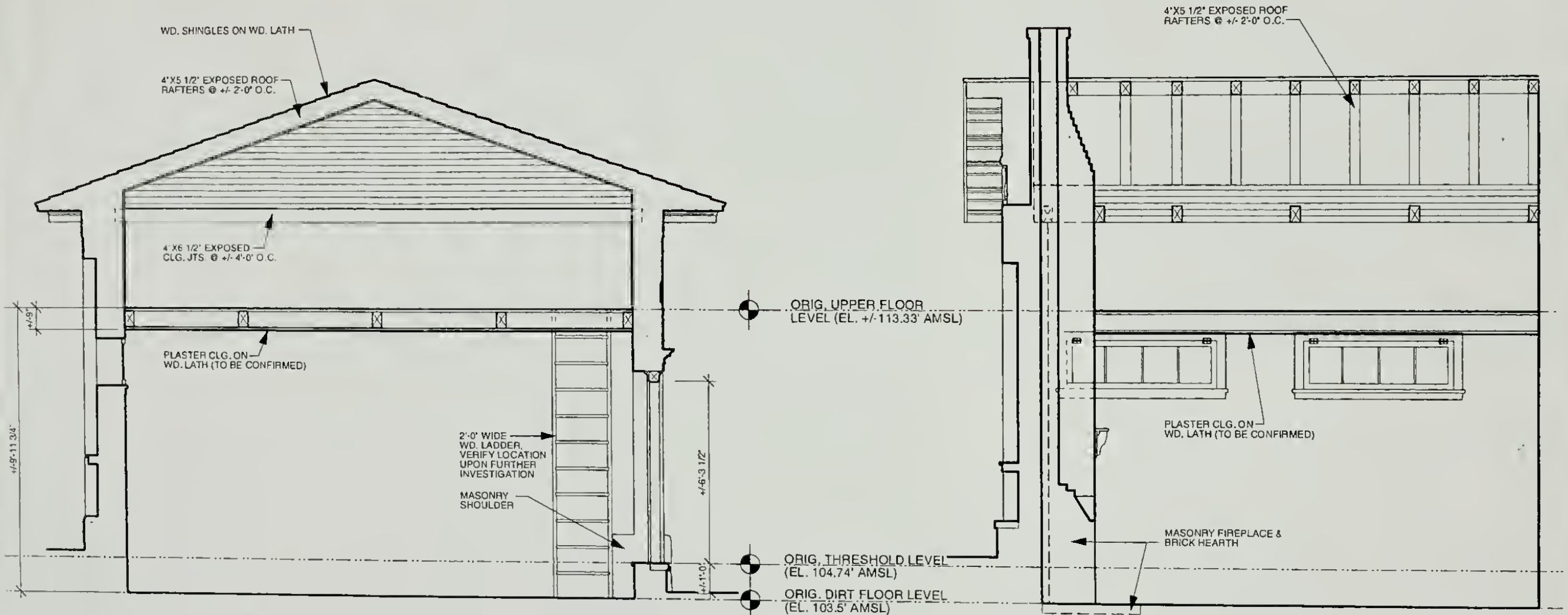
DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
EAST RM, INT. ELEV. - 1860

SHEET NO:

A-406

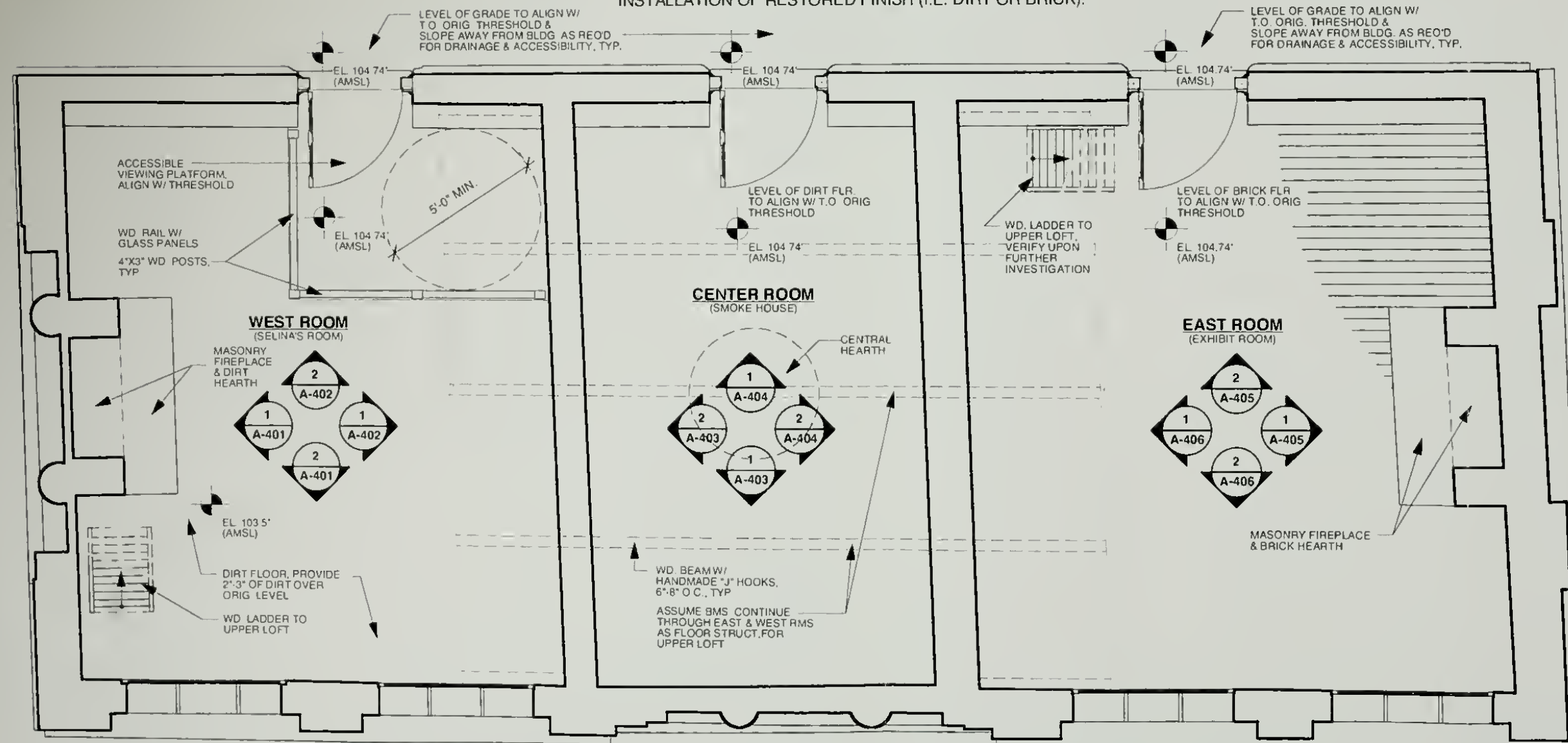


1 SOUTH DEPENDENCY, EAST ROOM (STORE ROOM)
WEST INTERIOR ELEVATION - 1860
SCALE 1/4"=1'-0"

2 SOUTH DEPENDENCY, EAST ROOM (STORE ROOM)
SOUTH INTERIOR ELEVATION - 1860
SCALE 1/4"=1'-0"

GENERAL NOTES

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- TO PROTECT HISTORIC ARTIFACTS FROM BECOMING DISTURBED, ORIGINAL FLOOR LEVELS INDICATED SHOULD BE EXCAVATED CLOSE TO THEIR HISTORIC GRADES & THEN COVERED W/ A PROTECTIVE COVERING PRIOR TO INSTALLATION OF RESTORED FINISH (I.E. DIRT OR BRICK).
- LOFT OF EAST ROOM TO BE CONFIRMED BASED ON FUTURE ARCHITECTURAL INVESTIGATION.
- PROTECT ORIG. EXTERIOR STUCCO FOR CONSERVATION & REPAIR.
- PROTECT ORIG. INTERIOR PLASTER FOR CONSERVATION.
- PROTECT DECORATIVE PANELS ABOVE EXTERIOR DOORS FOR INVESTIGATION & CONSERVATION.
- DRAWINGS ARE FOR DESIGN ONLY. ALL EXIST. STRUCTURAL MEMBERS SCHEDULED TO BE RETAINED & NEW STRUCTURAL ELEMENTS TO BE INCORPORATED INTO THE WORK ARE REQUIRED TO BE DESIGNED BY A STRUCTURAL ENGINEER.



**SOUTH DEPENDENCY
FLOOR PLAN - 2004**

1

SCALE 1/4" = 1'-0"



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PROJECT NO: 014-02

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REV:

SHEET NAME:
SOUTH DEPENDENCY
FLOOR PLAN - 2004

SHEET NO:

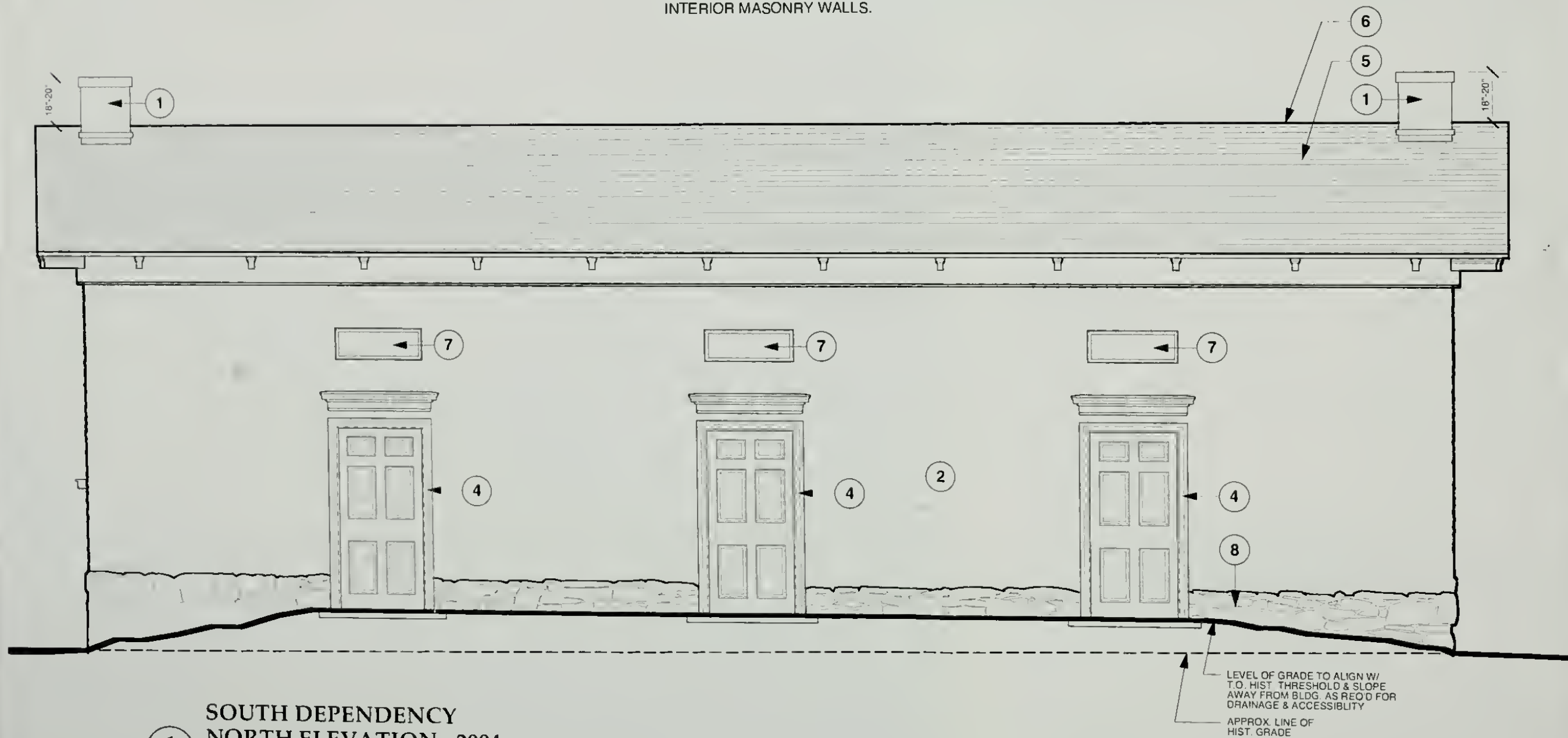
A-101

GENERAL NOTES

- INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.
- TO PROTECT HISTORIC ARTIFACTS FROM BECOMING DISTURBED, ORIGINAL FLOOR LEVELS INDICATED SHOULD BE EXCAVATED CLOSE TO THEIR HISTORIC GRADES & THEN COVERED W/ A PROTECTIVE COVERING PRIOR TO INSTALLATION OF RESTORED FINISH (I.E. DIRT OR BRICK).
- REGRADE AROUND BUILDING TO IMPROVE DRAINAGE. IMPROVE VENTILATION IN BUILDING. MONITOR RISING DAMP ESPECIALLY ALONG SOUTH ELEVATION AND INTERIOR MASONRY WALLS.

ELEVATION KEY NOTES:

- BRICK CHIMNEY & MASONRY CAP WITH STUCCO FINISH.
- ROUGH CAST STUCCO FINISH, PAINTED. PROTECT ORIG. STUCCO FOR INVESTIGATION & CONSERVATION.
- SMOOTH STUCCO FINISH, PAINTED.
- BEADED ARCHITRAVE W/ MOLDED BACK BAND.
- WOOD SHINGLE ON WOOD LATH, RETAIN WOOD SHEATHING.
- 4" TO 6" RIDGE COMB.
- DECORATIVE PAINTED PANEL, PROTECT FOR INVESTIGATION & CONSERVATION.
- RUBBLE STONE BASE.



**SOUTH DEPENDENCY
NORTH ELEVATION - 2004**

SCALE 1/4" = 1'-0"

PROGRESS PRINT NOT FOR CONSTRUCTION

John Volz, Architect
Texas License No: 8405

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VOLZ &
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:

**SOUTH DEPENDENCY
NORTH ELEVATION - 2004**

SHEET NO:

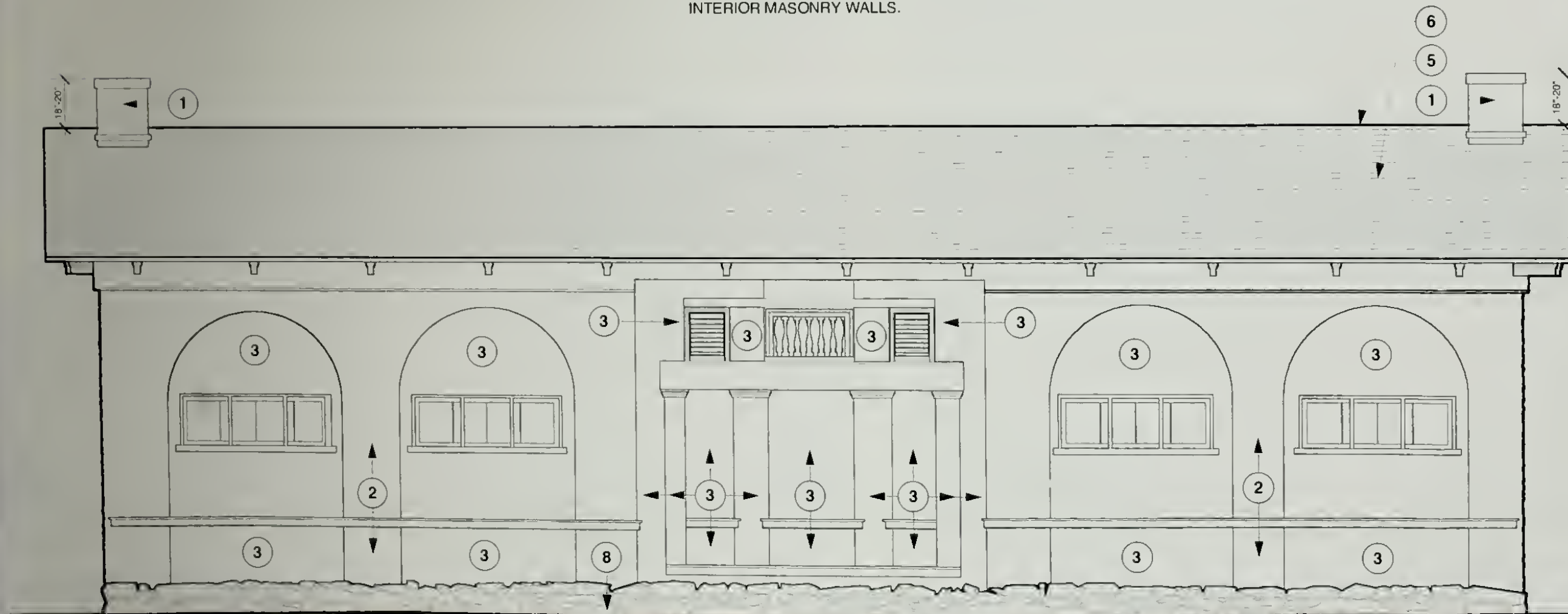
A-201

GENERAL NOTES

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- RUBBLE STONE BASE.



**SOUTH DEPENDENCY
SOUTH ELEVATION - 2004**

SCALE 1/4" = 1'-0"

**PROGRESS PRINT
NOT FOR CONSTRUCTION**

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Texas License No: 8405

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**VOLZ &
ASSOCIATES, INC.**



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:

**SOUTH DEPENDENCY
SOUTH ELEVATION - 2004**

SHEET NO.

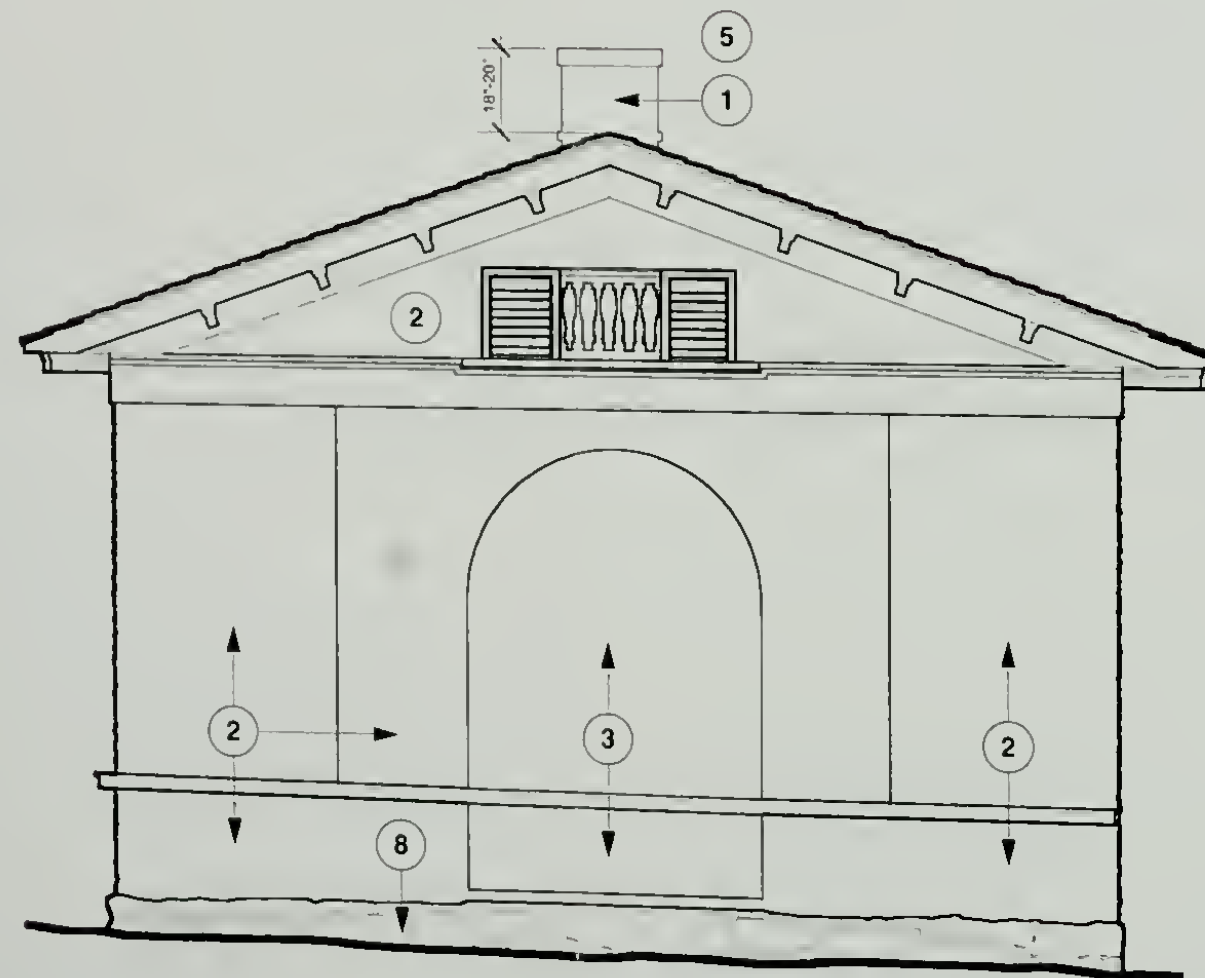
A-202

GENERAL NOTES

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- RUBBLE STONE BASE.



1 SOUTH DEPENDENCY
EAST ELEVATION - 2004

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

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PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
EAST ELEVATION - 2004

SHEET NO:

A-203

GENERAL NOTES

- INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
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- 4" TO 6" RIDGE COMB.
- DECORATIVE PAINTED PANEL, PROTECT FOR INVESTIGATION & CONSERVATION.
- RUBBLE STONE BASE.



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(512) 476-0455 Fax (512) 476-2198

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PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
WEST ELEVATION - 2004

SHEET NO:

A-204

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VOLZ &
ASSOCIATES, INC.



PROJECT NO: 014-02

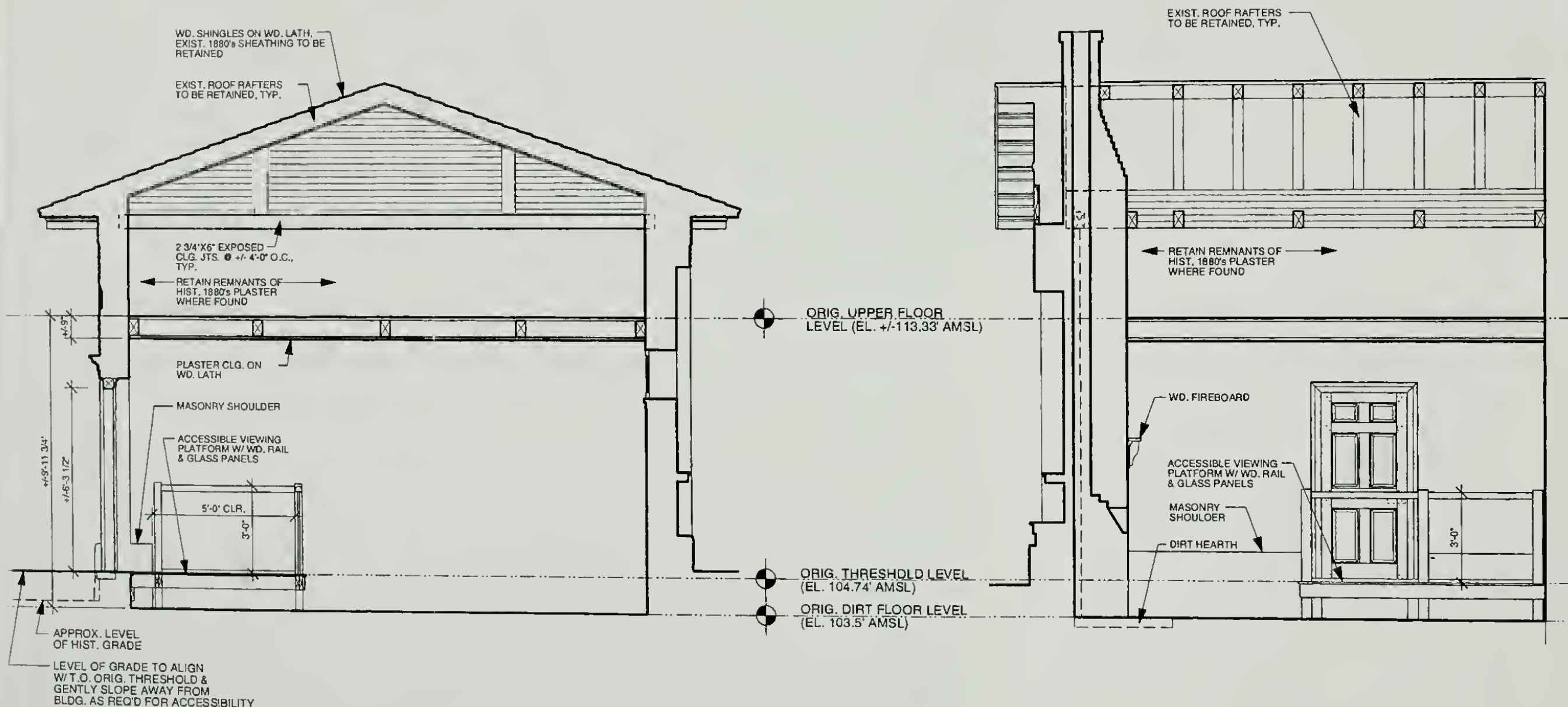
DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
WEST RM, INT. ELEV. - 2004

SHEET NO:

A-402



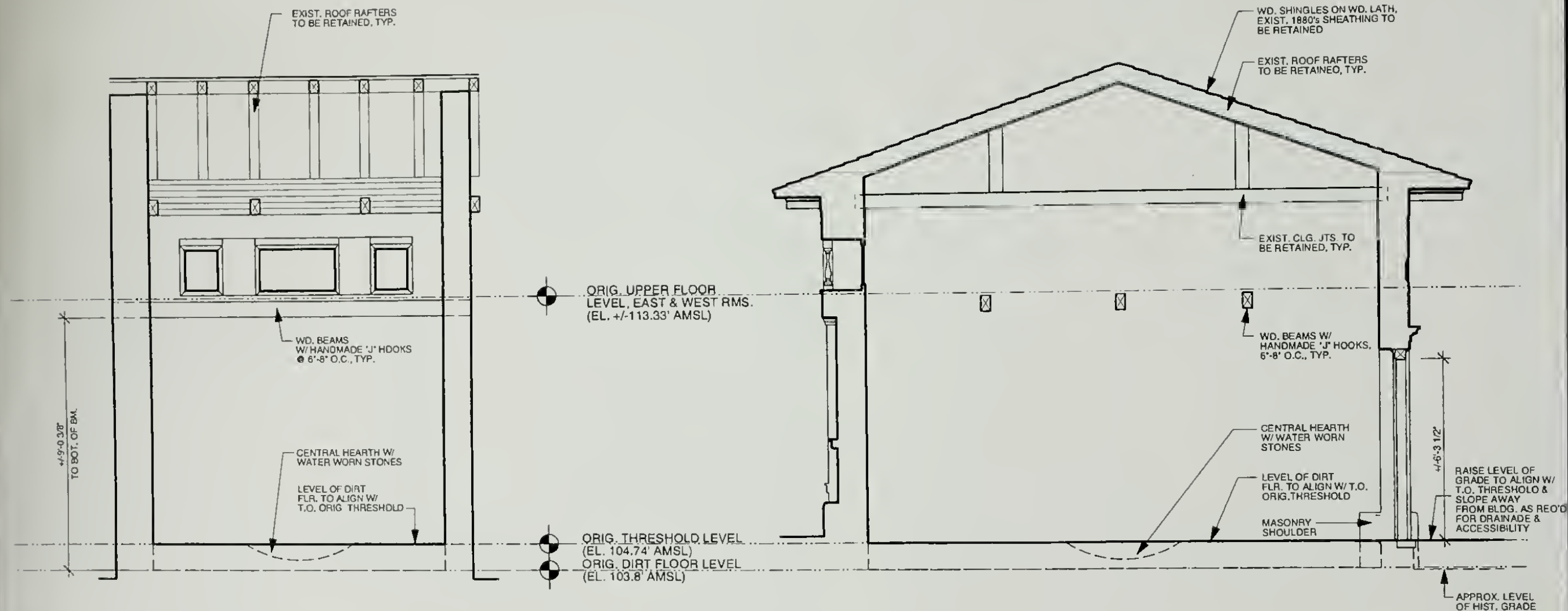
① SOUTH DEPENDENCY, WEST ROOM (SELINA'S ROOM)
EAST INTERIOR ELEVATION - 2004

SCALE 1/4" = 1'-0"

② SOUTH DEPENDENCY, WEST ROOM (SELINA'S ROOM)
NORTH INTERIOR ELEVATION - 2004

SCALE 1/4" = 1'-0"

NOTE: FOR TREATMENT OF CEILING
IN CENTER ROOM SEE ULTIMATE
TREATMENT SECTION OF HSR



1 SOUTH DEPENDENCY, CENTER ROOM (SMOKE HOUSE)
SOUTH INTERIOR ELEVATION - 2004
SCALE 1/4" = 1'-0"

2 SOUTH DEPENDENCY, CENTER ROOM (SMOKE HOUSE)
WEST INTERIOR ELEVATION - 2004
SCALE 1/4" = 1'-0"

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VOLZ &
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

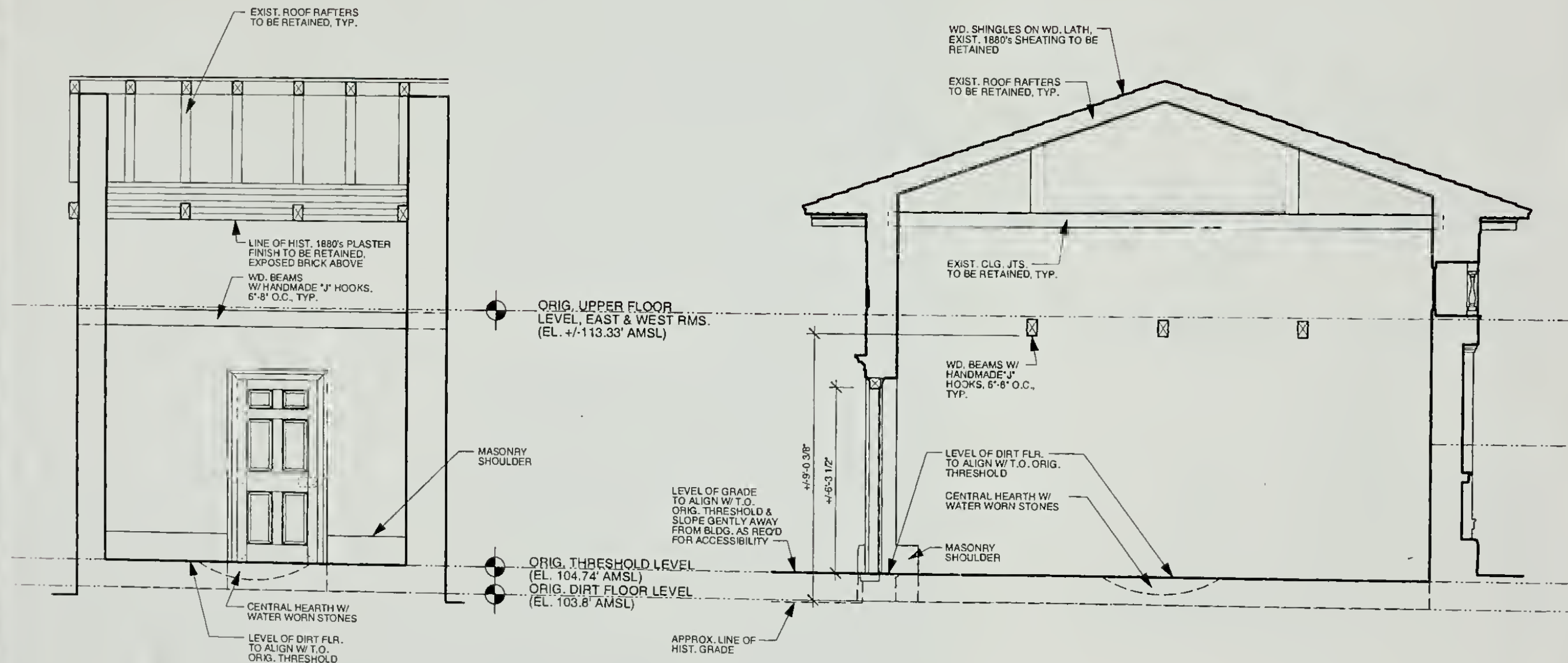
REV:

SHEET NAME:
SOUTH DEPENDENCY
CENTER RM, INT. ELEV. - 2004

SHEET NO:

A-403

NOTE: FOR TREATMENT OF CEILING
IN CENTER ROOM SEE ULTIMATE
TREATMENT SECTION OF HSR



1 SOUTH DEPENDENCY, CENTER ROOM
NORTH INTERIOR ELEVATION - 2004
SCALE 1/4"=1'-0"

2 SOUTH DEPENDENCY, CENTER ROOM
EAST INTERIOR ELEVATION - 2004
SCALE 1/4"=1'-0"

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PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
CENTER RM, INT. ELEV. - 2004

SHEET NO:

A-404

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PROJECT NO: 014-02

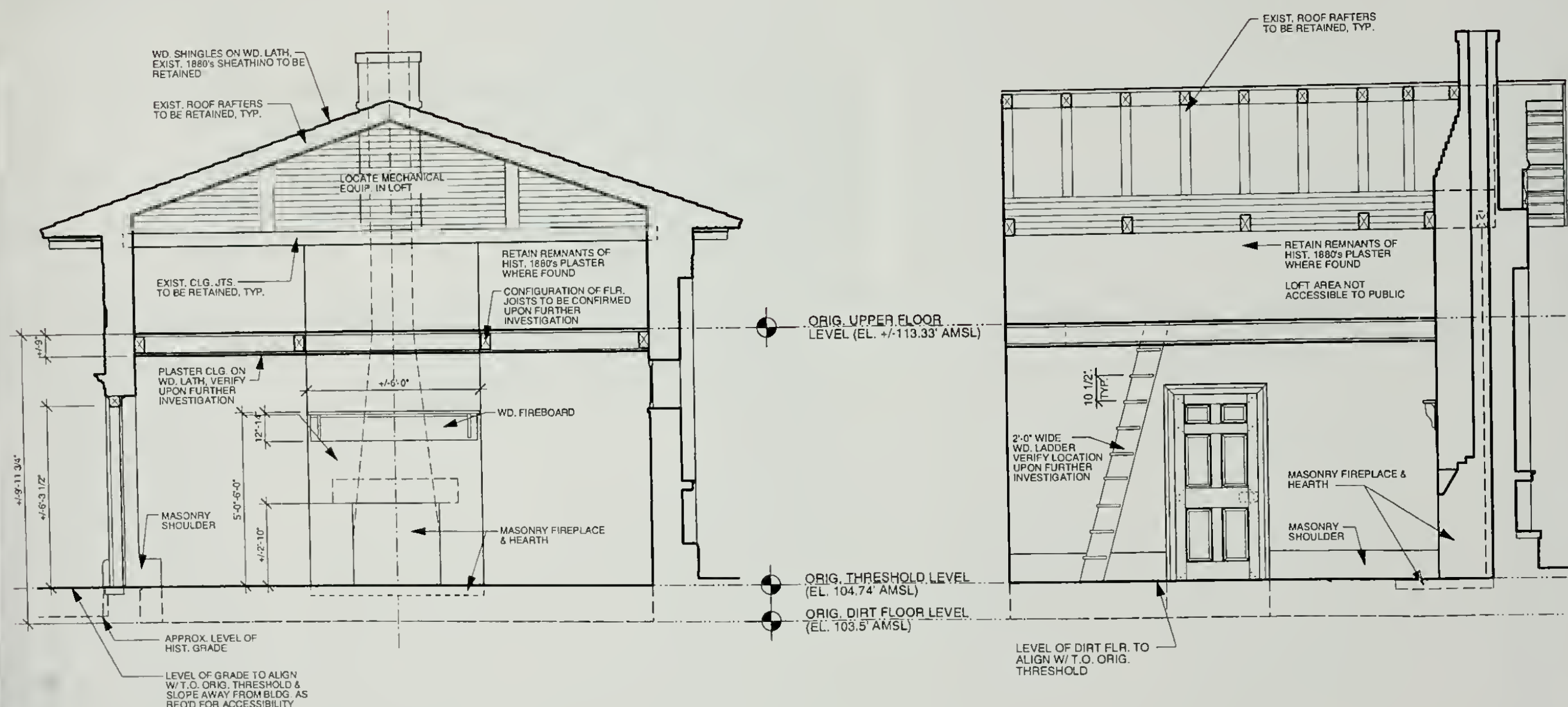
DATE: 10/01/04

REV:

SHEET NAME:
SOUTH DEPENDENCY
EAST RM, INT. ELEV. - 2004

SHEET NO:

A-405

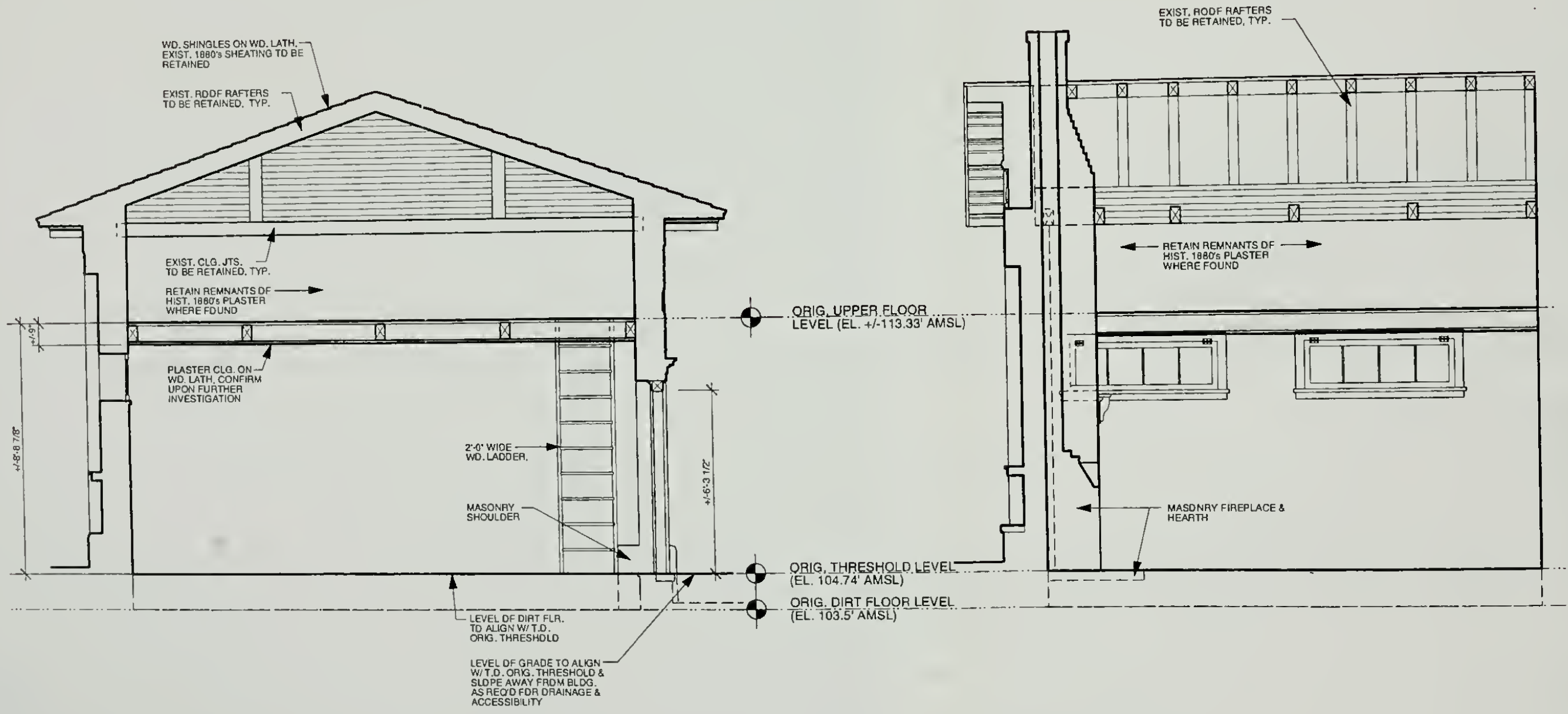


1 SOUTH DEPENDENCY, EAST ROOM
EAST INTERIOR ELEVATION - 2004

SCALE 1/4" = 1'-0"

2 SOUTH DEPENDENCY, EAST ROOM
NORTH INTERIOR ELEVATION - 2004

SCALE 1/4" = 1'-0"



1 SOUTH DEPENDENCY, EAST ROOM
WEST INTERIOR ELEVATION - 2004
SCALE 1/4"=1'-0"

2 SOUTH DEPENDENCY, EAST ROOM
SOUTH INTERIOR ELEVATION - 2004
SCALE 1/4"=1'-0"

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|-------------|--|
| PROJECT NO: | 014-02 |
| DATE: | 10/01/04 |
| REV: | |
| SHEET NAME: | SOUTH DEPENDENCY
EAST RM, INT. ELEV. - 2004 |
| SHEET NO: | |

A-406



