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## **Historic Structure Report**

Conservation of Historic Building Materials Heritage Preservation Graduate Program Georgia State University

December 2008

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## I. INTRODUCTION

This historic structure report (HSR) for the Lyon house and farmland was compiled in fall 2008 by graduate students in the Georgia State University Heritage Preservation Program, under the guidance of instructors Richard Laub and Laura Drummond. The HSR is a primary step in the preservation process, providing historical context, architectural descriptions, conditions assessments, maintenance plans, and recommended treatments and uses for the nineteenth century building and site features. This document will serve the stewards of the Lyon property as a reference point for any and all projects suggested for the building and site. The HSR is a dynamic source that will facilitate the documentation of preservation practices applied to the property.

#### Project Team (Fig. I-1)

The project team included:

Amanda Brown Kimberly Burton Steven Busch Jennifer Corcoran Valerie DeWeerth Nancy Gadberry Thomas Lee Laura Lembas Charlie Miller Hilary Morrish Chris Mrozcka Maysyly Naolu Erin Parr Cameron Sexton Betsy Trope Lillie Ward



#### Fig. I-1. Lyon House project team.

Photographs of the Lyon House and property found in the HSR were taken by the project team in the fall of 2008, unless otherwise stated in the figure caption.

#### Acknowledgements

- Dave Butler, Greenspace Environment Manager of DeKalb County
- Richard Laub and Laura Drummond, course instructors
- Parinya Chukaew, architectural drawings and site maps
- Mary Ellen Higginbotham, Preservation/Design Consultant
- Eddy Anderson, Flat Rock Archives
- T.A. Bryant, III
- Johnny Waits
- Kelly Jordan, Arabia Alliance Chair
- Mr. George Lyon and Mrs. Betty Lyon

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#### I.1 Background

The Lyon house is exemplary in many ways and a unique property among the many historic structures acquired by DeKalb County. The house itself, built in the 1820s, has been owned and occupied by descendants of the Lyon family from the early nineteenth century until 2007. It is believed to be one of, if not the oldest, homestead in the county. DeKalb County bought the Lyon house and forty-eight surrounding acres to increase green space in the county, to provide a greater buffer zone to the Pole Bridge Water Treatment Plant and to preserve the historic context of the rural farmstead that once dominated the county's landscape. Information regarding rural farmsteads and vernacular architecture from this period is less widely available than that for more highstyle structures. The multiple outbuildings surrounding the house, including the privy, barn, smokehouse and sorghum mill, underscore the self-sufficiency necessitated by the remote location of the property. The scarcity of materials led to ingenious and resourceful solutions, as evidenced by the recycling of building materials for new construction or to repair existing structures. By authorizing the documentation of the Lyon House in an HSR, DeKalb County officials have taken an important step, recognizing the importance of preserving antebellum structures for posterity and documenting of the area's exponential development.

The methodologies followed by the members of the project team were systematically conducted to produce a document that may accurately describe the past, present and potential future of the Lyon house. The team, jointly and individually, visited the property to extensively analyze the site and buildings. On these site visits, the team employed tools such as photographs, measurements, plan and elevation drawings, room inventory sheets and other written descriptions to increase the understanding of the property's development. The physical investigation of the buildings and site followed mostly non-invasive practices, meaning that no materials were removed. Team members uncovered plywood over fireplace hearths, pulled back sections of carpet and flooring, and took paint samples to understand the development of the house. Further investigation, including the removal of historic materials, will potentially yield more

#### PART I: INTRODUCTION

information; however, such exploration should coincide with future repair projects, allowing a preservation professional to examine previously hidden areas.

In addition to site visits, traditional and non-traditional historical sources were consulted to expand and corroborate the physical evidence found at the Lyon House. Interviews with Lyon family members have provided a matchless perspective on the building's history. Written family histories and archival documentation rounded out the investigation of the building's development.

This HSR consists of an historical overview of the Lyon family and their property, followed by a developmental chronology of the two-story section of the house and nearby outbuildings. The following section of the HSR provides a physical description of the house and property. A discussion of the exterior and interior architectural features and finishes focuses on the main house, including floorplans and elevations for illustration.

In Part IV, the current condition of the building materials are assessed and analyzed for the exterior and interior of the main house as well as the outbuildings and landscape. Part IV presents the potential sources of decay and causes for deterioration on the building materials and finishes. This section is particularly important for understanding the issues that threaten the survival of the historic resource.

The next part outlines recommendations and treatments to mitigate deterioration around the property. Additionally, alternative adaptive use options are presented. Part V also offers a number of avenues for interpreting the house and site for the public.

An important component of the HSR is the maintenance plan, which will ensure the preservation of the Lyon house and property. Along with a cyclical maintenance program, a prioritized list of non-routine maintenance items is provided. This section of the HSR, in particular, should be updated as maintenance initiatives are met or as new issues arise.

Photos keyed to the sitemap and floor plans are included in appropriate sections. Finally, a number of appendices provide bibliographic resources, areas for further investigation, National Park Service publications and schedules of certain characterdefining architectural elements.

#### I.2 Executive Summary

#### **Project Identification**

The subject of this HSR is the Lyon House and farmstead, located at 4506 Lyons Road, Lithonia, Georgia in the Arabia Mountain Heritage Site in southeastern DeKalb County (Fig. I-2). The landscaping surrounding the house and the PATH park system<sup>1</sup> add a distinct element to the Lyon House context. As such, the broader setting of the property will be briefly addressed in the HSR, but the main focus is of the document is on the Lyon House, and identified outbuildings and immediate site features.

The house, which is currently vacant, is owned by DeKalb County.



Fig. I-2. Map of Georgia with DeKalb County highlighted. <u>http://www.epodunk.com/cgi-</u> <u>bin/genInfo.php?locIndex=7908</u>. Accessed November 3, 2008.

<sup>&</sup>lt;sup>1</sup> The PATH Foundation, established in 1991, has built more than 100 miles of scenic trails and linear parks throughout Georgia. PATH's Arabia Mountain Trail meanders through 2000 acres of protected parkland in southeastern DeKalb County. The trail runs along the eastern property line of the Lyon House.

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#### **Historical Summary**

The Lyon house and property were originally part of the Creek Nation. Joseph Emmanuel Lyon obtained the property through an Army Land Warrant in 1790 and the family moved there from South Carolina around 1800. The Lyon family continuously inhabited the land from around 1800 until 2007, when they relinquished the property to DeKalb County, having sold it to the county four years earlier. During the time of their occupation the family used the land as a self -sustaining farm, raising cows, hogs, cotton, muscadines (a type of grape), lemon, apple and pear trees, sorghum (for syrup) and bees (for honey). It is believed to be the area's oldest home, despite the fact that most of the original log cabin is no longer extant. Although the Lyon family has moved from the immediate area, descendants of the family's slaves still live in DeKalb County.

#### Architectural Summary

The Lyon house faces north and consists of a main house and rear ell. The main two-story house is one room wide and two rooms deep, a form typically known as an Ihouse. The single-story rear ell, situated perpendicular to the south façade of the main house, is two rooms deep and one room wide. Both the main house and rear ell are vernacular in style.

The landscape surrounding the Lyon house includes a number of outbuildings, most notably a privy, barn, mill, and sorghum boiler. Other features contributing to the historic character of the property include large trees, a granite retaining wall, and muscadine arbor.

#### **Recommendation Summary**

Based on observation of the house and property, the project team identified a number of features that require intervention of varying degrees, ranging from simple patchwork to replacement of structural members. As possibly the oldest extant house in DeKalb County, every effort should be made to retain the historic fabric of the Lyon house and property.

The project team recommends a treatment approach combining rehabilitation of the house and outbuildings for adaptive use and restoration of the landscape as a working farm.

#### PART I: INTRODUCTION

A structural engineer should be consulted regarding the foundation and structural system of the house. There is evidence of termite damage throughout the house—a full pest inspection should be conducted, followed by any necessary treatment. The roof system should be upgraded with the installation of flashing, chimney crickets, gutters, downspouts and splashguards. The project team recommends installation of new mechanical systems, including wiring, plumbing, and HVAC.

Several of the outbuildings have collapsed or deteriorated to the extent that rehabilitation is not feasible. The project team recommends salvaging the materials from those structures for reuse elsewhere on the property. The smokehouse, possibly constructed of recycled logs from the original house on the property, should be preserved, retaining the historic fabric. The sorghum boiler and mill should also be rehabilitated, as examples of historic agricultural activity on the site.

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## **II.1 Historical Background**

The Lyon property was originally part of the Creek Nation territory. Prior to the Lyon's occupancy of the property, there were Creek settlements on both sides of the South River, at the west edge of what became the Lyon property.<sup>1</sup> As the area became increasingly populated by white settlers, the Creek moved to the south bank of the river, where they coexisted with their white neighbors. Joseph Lyon's daughter in law, Elizabeth Lyon (1789–1829), reported to her granddaughter Martha Ann Tate Lyon ("Tate") (1853–1940),<sup>2</sup> "that when she would go for the cows in the afternoon she would see the Indians and be afraid. She'd push the cows home guickly as possible."<sup>3</sup> Encounters with the Creek were not uncommon, but, according to Tate, "when the Indians did come to the house, my folks would give them food and they would not molest anyone." <sup>4</sup> Johnson Field,<sup>5</sup> to the east of the house, was previously known as Fortification Field because a battle with the Creek was fought there. Many arrowheads have been found on the property; George L. Lyon, Jr. (1822–1895) reported "finding a place nearby where the Indians made their arrowheads. It was an area of Little Stone Mountain<sup>6</sup> across South River from the 'Grove."<sup>7</sup> Nearly a century later, George O. Lyon, Sr. (1902–1980), uncovered a Native American pipe, cut from gray fieldstone and polished, while he was plowing his fields.

The Lyon family acquired their property in an Army land warrant for services that Joseph Emmanuel Lyon (1754–1820) rendered during the Revolutionary War. Originally from England, Joseph E. Lyon came to America as part of the British Expeditionary Army. Initially, he served under Generals Sir William Howe and the Earl of Cornwallis. However, during the Battle of Germantown (Pennsylvania), October 4, 1777, Joseph was captured by American troops. He later took the Oath of Allegiance to the United States and joined the American forces. He subsequently served under Nathanial

<sup>&</sup>lt;sup>1</sup> Conversation with Johnny Waits, Flat Rock Slave Cemetery, October 28, 2008.

<sup>&</sup>lt;sup>2</sup> Tate's niece, Lucy Reagan Redwine (1889–?), helped compile the family history.

<sup>&</sup>lt;sup>3</sup> J. Wallace and Lucy Johnson, "Lyon Family History" (DeKalb County, GA: Parks, Bond and Greenspace Office, 1973) 3(C).

<sup>&</sup>lt;sup>4</sup> Johnson 3(C).

<sup>&</sup>lt;sup>5</sup> Believed to be named for Johnson Lyon, grandson of Joseph Emmanuel Lyon.

<sup>&</sup>lt;sup>6</sup> Also referred to as Pig Mountain by original settlers, and, currently, as Panola Mountain.

<sup>&</sup>lt;sup>7</sup> Johnson 3(C).

Greene, "the fighting Quaker," and Daniel Morgan at the Battle of Cowpens, January 17, 1781.<sup>8</sup> During the battle he was seriously injured and, due to loss of blood, was unable to leave the battlefield. Some hours later, according to the Morris Family Bible,<sup>9</sup> a passer-by saw that Joseph was alive and used his hat to bring Joseph water. This same person then carried Joseph home and cared for him until he was well. Although Joseph lost an arm as a result of his injuries, he did recover and then settled in South Carolina where he met his wife, Mary Ann Marshbank (1758–?).<sup>10</sup>

For his service during the war, Joseph received a land warrant of 100 acres in Georgia, which is where the Lyon property remains. This warrant, numbered 8689, was first recorded April 20, 1790 (Fig. 1); it was then registered in an Army Land Warrant book on February 25, 1800.<sup>11</sup> In 1973, at the time the family history was written, that same land "had been continuously owned and occupied by the Lyon descendants. [In fact, Joseph's] sons bought more land until at one time the [property] ran for two miles on the north bank of South River from Little Stone Mountain to Flat Shoals."<sup>12</sup>

Though Joseph E. Lyon died in 1830, the

No. 8680\_30 da glag & AP KER of de UNJJED JJAJEJ. or is the Saring 228. appointed by him to farry the Military Lands. you me hereby required to Survey for Josepho your feriever affergues of John Rad - a foldier in the late Now Se ho Hundred Anu of Land, in 4 appropriated for fatisfying the B Land das to the Tale Ar the United States, a this Warnant to the S 218 to the Set of Congress, of the ninth Dray of Given at the WAR-OFFSCE, this ntieth - Day of -. Inul 0. 2 in Ninel 2

Fig. II-1. Army Land Warrant number 8689, granting Joseph Emmanuel Lyon 100 acres of land for his service to America in the Revolutionary War. Issued on April 20, 1790.

family continued to farm the property. Since its acquisition, the property has been used as a self-sustaining farm, raising cows, cotton, muscadines, apple, pear, and lemon trees, as well as sorghum (for syrup) and bees (for honey). It is known that George Lyon owned 13 slaves at the time of the 1850 slave census and 17 slaves in 1860 (Figs. 2

<sup>9</sup> Johnson 1(A). J.E. Lyon's great-granddaughter married into the Morris family.

<sup>&</sup>lt;sup>8</sup> According to the family history, he fought with Greene and Francis Marion, though the Georgia Archives note that it was Morgan. Research confirms that Morgan did fight with Greene at the Battle of Cowpens. Scott Withrow, "The Battle of Cowpens." National Park Service. <u>http://www.nps.gov/archive/cowp/batlcowp.htm</u>.

<sup>&</sup>lt;sup>10</sup> Johnson 1(A).

<sup>&</sup>lt;sup>11</sup> "Lyon Family Property," [Lithonia, GA: Flat Rock Archives].

<sup>&</sup>lt;sup>12</sup> Johnson 1(A).

and 3).13

In 1860, it was also noted that he had 3 slave houses;<sup>14</sup> the family history states that they "stood on the knoll east of the house."<sup>15</sup> Descendants of the Lyon slaves still reside in the area, but have changed their name slightly, adding an "s," making it Lyons (Fig.4). It is believed that the Lyon family slaves were buried at the Flat Rock Slave Cemetery, which is located near what would have been the western boundary of the Lyon property.<sup>16</sup> Apparently, slaves from around the county used the graveyard for many decades. While most of the headstones are simply rocks, others are intricately carved and bear names seen on the headstones of white families buried at nearby Macedonia Baptist Church. There are over 250 burials believed to have taken place in the slave cemetery, located a short distance off Lyons Road.







<sup>&</sup>lt;sup>13</sup> It is unknown whether this is George Lyon, Jr., or Sr.; both were living on the property at this time.

<sup>&</sup>lt;sup>14</sup> "Lyon Family Property."

<sup>&</sup>lt;sup>15</sup> Johnson 3(C).

<sup>&</sup>lt;sup>16</sup> Conversation with Johnny Waits, Flat Rock Archives, October 28, 2008.

During the Civil War, the Lyon property was occupied by Joseph Emmanuel's son, George Lyon, Sr. (1787–1862), and his wife Elizabeth (1789–1829). Their son, George, Jr. (1822–1895), owned a cabinet-ware shop in downtown Atlanta, on the south side of Alabama Street across from the Georgia Rail Road Freight Depot.<sup>17</sup> In a letter to

Lyon family member J. Wallace Johnson, Franklin Garrett<sup>18</sup> noted that according to the 1859 Atlanta City Directory, the residence of George, Jr., was on "the west side of Butler Street between Wheat Street (now Auburn Avenue) and Houston Street," locating it "on or very close to the present location of Big Bethel Church."<sup>19</sup> In 1860, George, Jr., entered the Civil War as a private in Company I, 42nd Regiment, Fulton County, GA.<sup>20</sup> By the time the war was over, all of his brothers, as well as his father, had died. When he returned to Georgia, he and his wife Helen (1833–1922) (Fig. 5), along with their young children, moved back to the farm to help his mother, Elizabeth. Helen's mother, Nancy Ann Lumpkin Dupree Gathright



Fig. II-4. Hill Lyons. Former Lyon family slave. Date unknown.

Cook, was also widowed during the war and lived with them.<sup>21</sup> During his time on the property George, Jr., built a great deal of the family furniture; among the pieces still in use in 1973 were a walnut rocking chair, an oak chifforobe, a walnut dresser, a candle mold, a toilet chair, and "out back of the house in the midst of the original garden there still stands his three seated outhouse."<sup>22</sup>

The son of George Lyon, Jr., Wallace Kirk, is noted as the patriarch of the next generation of the family. He was raised on the property with Thee Lyon, son of Mary

<sup>&</sup>lt;sup>17</sup> Letter from Franklin Garrett to J. Wallace Johnson, 1973. Parks, Bond and Greenspace Office, DeKalb County, GA.

<sup>&</sup>lt;sup>18</sup> Atlanta historian and former director of the Atlanta Historical Society.

<sup>&</sup>lt;sup>19</sup> Franklin Garrett Letter.

<sup>&</sup>lt;sup>20</sup> Johnson 4(D).

<sup>&</sup>lt;sup>21</sup> Johnson 4(D).

<sup>&</sup>lt;sup>22</sup> Johnson 3(C).

Lyon, one of the family's former slaves.<sup>23</sup> Although he was the youngest of his brothers, he is the only one who stayed on the property. His brothers Joseph ("Joe") Emmanuel, Jr. (1862–1917), and Lemuel ("Lem") (1866–1957), eventually moved to Texas and New Mexico, respectively. Although the exact date of their relocation is not known, it can be surmised that they left after 1892. According to the family history, both Joe and Lem still lived on the property in 1892 when the family's original log cabin, which stood where the one-story section of the present house is located, was dismantled. The family history also notes that "the logs were salvaged to construct a crib in the pasture west of



Fig. II-5. George L. Lyon, Jr., grandson of Joseph Emmanuel Lyon, and his wife

the house."<sup>24</sup> When the logs of the crib began to deteriorate, they were used as fuel for making sorghum syrup.<sup>25</sup>

The family always made use of local resources to sustain their existence, though the efforts were sometimes hazardous and, in one instance, deadly. William ("Bill") Robinson, son of Harriet Lyon (1825–?) (Fig. 6) and cousin of Wallace Kirk, had a farm nearby. In 1924, when Wallace Kirk and his son, George Osmore Lyon, Sr. (1902–1980), were cutting a tree on Bill's farm for use on the Lyon property, the tree fell on Wallace and killed him instantly.<sup>26</sup> Upon his father's death, George Osmore, Sr., then twenty-two, became the next owner of the property.

The property had nearly passed out of Lyon hands two years earlier, in 1922, when Helen Lyon, Wallace's

mother, died. At her death, the property was sold at auction on the steps of the DeKalb County Courthouse and bought by her daughter Lucy/Loucy ("Lou") Reagan (1853–?),<sup>27</sup> who was married to Judge Edward Reagan of McDonough (1843–1926). Fortunately, the Judge decided the property should remain in the family, and advised Lou to sell the

<sup>&</sup>lt;sup>23</sup> Johnson 5(E).

<sup>&</sup>lt;sup>24</sup> Johnson 2(B).

<sup>&</sup>lt;sup>25</sup> Johnson 2(B).

<sup>&</sup>lt;sup>26</sup> Johnson 5(E).

<sup>&</sup>lt;sup>27</sup> Became Lucy Reagan Redwine after her second marriage.

land to Helen's grandson George Osmore Lyon, Sr., for \$100.00 more than she had just paid. One of the family's neighbors, Mr. South, who lived on Browns Mill Road, put up the money to buy the house and then allowed George Lyon to pay him back in installments.<sup>28</sup>

The property is accessed via Lyons Road, which was built in 1943. Prior to that date, the road to the property was only a "fair weather road...a deeply rutted trail [that] meandered through the woods to the front gate of the Lyon farm."<sup>29</sup> That spring, George O. Lyon was speaking with the manager of the First National Bank in Decatur, Claude Blount, who was also his cousin.<sup>30</sup> During the conversation, DeKalb Commissioner Scott Candler entered the bank. George asked his old friend "when [he] was 'going to build [him] an all weather road?" Candler allegedly replied: "George, I didn't realize you wanted a road. How 'bout tomorrow morning?"<sup>31</sup> The result was a wide,



Fig. II-6. Harriet Lyon, aunt of Wallace Kirk Lyon and sister of George Lyon, Jr.

straight road directly from Browns Mill Road to the Lyon farm.

At the time the family history was written in 1973, the authors noted that George Osmore Lyon was still actively farming the property. T.A. Bryant, III, a local resident and Bryant family slave descendant, born in 1922 in a neighboring house, knew the Lyon family. He recalled that his father T.A. Bryant, Jr., would take his hogs to George Lyon Sr. for breeding, and that the exchange of goods and services between neighbors was common--as with Bill Robinson and the South family.<sup>32</sup> The family sold the property to

<sup>&</sup>lt;sup>28</sup> Johnson 5(E).

<sup>&</sup>lt;sup>29</sup> Johnson 5(E).

<sup>&</sup>lt;sup>30</sup> It is not noted whether this was George Lyon, Jr., or Sr. Claude Blount was likely related through the marriage of Johnson Lyon (1818–1862) to Elizabeth Blount (noted as "Blunt" in the Lyon family tree). <sup>31</sup> Johnson 6(F).

<sup>&</sup>lt;sup>32</sup> Conversation with T.A. Bryant, III, local resident and member of the Flat Rock Archives, October 28, 2008.

DeKalb County in 2003 and moved off the property in 2007. They now live in Tennessee.

## Lyon Family Tree (for an extended family tree, see Appendix C)





## **II.2 Chronology and Development of Use**

This section traces the physical construction, modifications, and uses of the Lyon House from the nineteenth century to the present. Information provided by archival sources and family interviews are first discussed, and then presented in Timeline I. This is followed by an analysis of physical findings of the existing structure, which is then compared with the archival information. Finally, a chronology is provided in Timeline II. Research and observations of the Lyon House took place in the fall of 2008. Should more extensive investigations be done in the future, they will no doubt refine the conclusions in this section.

### Archival Information and Interviews

## Earliest date of construction:

Archival research yielded very little information about the earliest construction of the Lyon House. One 1972 article in *The Atlanta Journal* described materials used to build "the old farmhouse,"<sup>2</sup> but gave no date as to its construction. Another publication, the Lyon Family Property (hereafter LFP), indicated that "the first home built . . . was a two story log house (in) 1800,"<sup>3</sup> but cited no sources. It should be noted that the LFP also claimed that this two-story log house was disassembled in 1892. A feasibility study conducted for the Arabia Mountain Heritage Area contradicted this date, and suggested that the log house was actually constructed between 1822 and 1823.<sup>4</sup> The feasibility study based this suggestion on a land lottery held by DeKalb County in the 1820s. Recipients of that lottery were "Revolutionary War veterans,"<sup>5</sup> one of which was supposedly Joseph Emmanuel Lyon.

DeKalb County's land lottery was corroborated by research conducted at the DeKalb Historical Society, though attempts to find additional information about "the old farmhouse" or to confirm 1800 as the year of construction were not successful. Despite this, given the existence of the land lottery, a tentative range of construction is suggested. This range is 1800-1820s.

<sup>&</sup>lt;sup>2</sup> Dorothy Nix, "Lyon Farm Evokes Sense of the Past," *The Atlanta Journal*, 6/5/72, p. 16-A.

<sup>&</sup>lt;sup>3</sup> "Lyon Family Property" 1(A)

<sup>&</sup>lt;sup>4</sup> Arabia Mountain National Heritage Area, "Arabia Mountain National Heritage Area Feasibility Study" <u>http://www.arabiaalliance.org/mp\_doc\_feasibility.html</u>.

<sup>&</sup>lt;sup>5</sup> Feasibility Study.

### Structural Changes Over Time:

Archival information was supplemented by a podcast produced by the Arabia Mountain Heritage Area Alliance.<sup>6</sup> The podcast featured an interview with George Lyon, whose family lived in the house until 2006. He described farm life in and around his family home, and offered two important chronological details. He remembered a fire that began as a spark from the exterior (west) chimney located on the two-story main house, and extended to the main house roof. This fire destroyed all the wood shingles, and a new metal roof was installed. Based upon Mr. Lyon's birth date,<sup>7</sup> the fact that he said he was a teenager when the fire broke out, and assessment of the existing metal roof, the fire most likely occurred at some point between the late 1930s and the early 1940s. The metal roof was subsequently installed around the same time to replace the damage. Also, within the podcast, Mr. Lyon stated that electricity was first installed in the house on July 7, 1947.

During phone interviews conducted with Mr. Lyon on both November 4, and November 9, 2008,<sup>8</sup> he reiterated the roof fire, but detailed another one. One cold evening, when he was between fifteen and seventeen years old, his family put piglets into a basket and brought them into the kitchen (Room 107). The family placed the piglets in front of the fireplace to keep them warm. The morning after, the piglets had fallen through the kitchen to the basement below. At some point during the night, the basket possibly caught fire and burned a moon-shaped hole straight through the floor below. Again, based on Mr. Lyon's birth date, this second fire took place between 1938 and 1940. Logically, he agreed that the kitchen floor was repaired and possible replaced.

Other clues about structural changes to the house offered by Mr. Lyon involved the bathrooms. As best as he was able to recall, the main house first floor bathroom (Room 103) was installed while he was in service during World War II. The main house

19

<sup>&</sup>lt;sup>6</sup> www.arabiamountain.org

<sup>&</sup>lt;sup>7</sup> Mrs. Betty Lyon, Mr. Lyon's wife, confirmed this date as December 29, 1923, during a November 20, 2008, phone interview conducted by Maysyly Naolu.

<sup>&</sup>lt;sup>8</sup> The interviews were conducted via telephone by Maysyly Naolu. Unless otherwise indicated, information in "Structural Changes Over Time" was drawn from these interviews.

second floor bathroom (Room 204), however, was installed "after the War."

Finally, Mr. Lyon stated that even though he was told that the two-story main house was much older than the dining room and the kitchen, for as long as he remembered, the entire house always had its existing general structure. Therefore, the rear ell was most likely constructed before his birth. This included the two porches (west and east facades), the room configurations (with the exception of the two bathrooms (Rooms 103 and 204), Room 104, and Room 206), and the two floors. He indicated that his son-in-law and his daughter enlarged the smaller connecting door between the dining room (Room 106) and living room (Room 105) in 2000, replacing the door with a much larger opening. The walk-in closet (Room 206) was built between 1996 and 1998. Despite these minor alterations and Mr. Lyon's suggestion that new wood may have changed the look of walls, he held firm to his belief that the general structure of the house remained consistent during his eighty-four years.

#### Timeline I:

The following timeline for the construction chronology and structural changes to the Lyon House over time was derived using information provided by Mr. Lyon, as well as all previously listed sources:

٠	1800–1820s	Construction of the Joseph E. Lyon saddlebag log
		house
•	1892	Saddlebag log house disassembled
•	1892–1920's	Construction of rear ell
•	Late 1930s - Early 1940s	Fire destroyed wood shingles on roof of two-story
		main house
•	Late 1930s - Early 1940s	Installation of metal roof on main house
•	1938–1940	Fire in kitchen
•	1938–1940	Repair or replacement of kitchen floor
•	1940s	Bathroom installations, with the first floor bathroom
		installed first
•	1947	Installation of electricity
•	1996–1998	Construction of closet 206 in room 205

LYON HOUSE 

HISTORIC STRUCTURE REPORT

• 2000

Enlargement of walkway connecting rooms 105 and 106

#### **PHYSICAL FINDINGS:**

Observations made during site visits to the house revealed the following information.

#### Basement

The basement (Room 001) is the oldest extant part of the 2008 Lyon House. This room has one entrance on the south, and is partially in the ground. It has walls and a fireplace composed of large granite stones (Fig. II-7).



Fig. II-7 Basement Fireplace.



Fig. II-8.East basement wall (in crawl space). Note: wall is foundation for Room 107.

These stone walls also form the base foundation for Room 107 (Fig. II-8). The original floor was probably dirt, with the existing concrete added later.<sup>9</sup> Within the basement, hand-hewn and planed sills rest atop the granite walls and support the rear ell of the house. The floor joists on the basement ceiling show evidence of circular saw marks, indicating a later construction date than the sills. Attempts were made to find evidence within the basement of the 1938–1940 kitchen fire mentioned by Mr. Lyon during the

<sup>&</sup>lt;sup>9</sup> The concrete was likely poured in 1957, since this date was etched next to the drain in the basement.

phone interview, but none was found.

#### Main House (First Floor)

The first floor is currently comprised of Rooms 101, 102, 103, and 105. Rooms



Fig. II-9. Main house (north facade).

various locations on the first floor.

102 and 105 each have one fireplace (Fig. II-9). Materials used on this floor include tongue-and-groove wall paneling and floor boards, painted drywall, ceramic tiles, cut and wire nails, and aluminum windows.

Tracing the exact chronology of these rooms is difficult, yet a visual comparison of the wall paneling throughout the floor reveals a sequence. This sequence is further supported by the chair rail found in

The chair rail is unbroken inside the perimeter of Room 105, but is only extant on the north and west walls of Room 101, the west wall of Room 103 including inside the closet (through door D9), and three walls in Room 102 (north, south, and east). The chair rail is made from the same type of wood, has the same design, and the same aged appearance regardless of location. It was obviously installed at the same time and is probably original to the house. Therefore, following the chair rail pattern, the original main house first floor plan was a two-room (Rooms 102 and 105) hall-and-parlor house type. Wherever the chair rail is broken, changes were made to cause that break when walls were constructed to partition additional rooms.

The following is one possible sequence of structural changes for the first floor of the main house:

1. The first floor originally had only two rooms (102 and 105) following a halland-parlor floor plan, with a chair rail built to travel the entire perimeter of each room

- 2. A wall was added east of the front door (D5) to the back south wall to create a central hall (Room 101)
- A section (south end) of the southeast wall of Room 101 was moved east to form the southwest wall of Room 102, creating additional space for Room 103 to be constructed
- 4. The closets through doors D7 and D9 were added

See floorplans in II.3, p.29 for the proposed sequence of structural changes for the main house first floor.

This sequence of changes is supported by the appearance of the wall paneling (Fig. II-10). Wherever a change occurred (or a break in the chair rail appears), the paneling can be differentiated from the original wall paneling.



Fig. II-10. Room 102 (looking northwest). Note: closet wall added at a later date.

## Main House (Second Floor)

The second floor is comprised of a hall (Room 201), Rooms 202, 203 and 205, and a bathroom (Room 204). The building materials used on the first floor are evident here, as well. A staircase provides access from the first floor to the second floor.

This floor also has a chair rail. It appears on the north, south, and west walls of Room 205. The rail also appears on the east wall of the staircase, the east and south walls of Room 202, and the north, east, and south walls of Room 203. As with the first

floor, the original main house second floor plan was two rooms (Rooms 203 and 205) and changes are indicated by the absence of the chair rail. In addition, the east wall of Room 205 is the only wall on the second floor that extends through the ceiling and attaches to the floor joists of the attic. Therefore, this wall is believed to the only original interior wall on the second floor.

Following the same logic used for the first floor, the following sequence of structural changes is possible for the second floor:

- 1. It was originally built with only two rooms (203 and 205)
- 2. The staircase had a wall to the east, but no wall to the west
- 3. Rooms 202,204, and 201 were built

See floorplans in II.3, p. 29 for the proposed sequence of structural changes for the main house second floor.

As with the first floor, the changes on the second floor are supported by the appearance of the wall paneling.

#### Rear Ell:

Currently, the rear ell is comprised of Rooms 106, 107, and 104 (Fig. II-11). Also, Room 206, which is connected to room 205 in the main house, is located above Room 106. The attic (Room 207), which is connected to Room 206, is located above Room 107 (kitchen). Room 107 is located directly above the basement (Room 001). Both 106 and 107 have fireplaces that stand with their backs abutting sharing a chimney (Fig. II-12).

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Fig. II-11.West façade of rear ell. Note: saddlebag house type floor plan for ell, similar to original log cabin.



Fig. II-12. Room 106 south wall. Note: chimney also shared by Room 107.

The following construction sequence is possible:

- 1. The Joseph E. Lyon saddlebag log house was built, consisting of two rooms upstairs and a single-room basement
- 2. The log cabin was dismantled, but the basement (Room 101) was retained
- 3. Current Rooms 106 and 107 were built
- 4. Room 104 (laundry) was added after Room 103 was built
- 5. Room 206 (closet) was built
- 6. Connection to Room 207 (attic) was made

#### **Porches:**

The stairs for the porch on the west side of the rear ell are likely as old as the basement. Observing the stairs from under the west porch, the same granite stones and red clay mortar used to build the basement were used to build these stairs. They originally connected to an earlier porch, dating perhaps to the Joseph E. Lyon saddlebag log house. Currently, these stairs are covered with concrete.

The east porch was most likely built later than the rebuilt west porch. Attempts to verify the possible use of granite stones for the east stairs were unsuccessful.

The following construction sequence for the porches is possible:

- The west porch was built to allow access to the west entrance to the Joseph E. Lyon saddlebag log house
- The main entrance to the log house originally faced west, given the use of granite stones to build the stairs
- The west porch was likely dismantled when construction of the main house began, leaving only the granite stone stairs
- 4. The west porch was reconstructed when the rear ell was built
- 5. The east porch was built after the west porch
- 6. The foundations of the two porches were enclosed using CMUs
- 7. Overtime, repeated maintenance was done on both the porches

#### Roof:

Observations of the main house roof suggest that it was built before or around 1850. The construction style is braced frame with no ridge board. Though circular saw marks were evident on the rafters and the joists, slot mortise-and-tenon joints and wooden pegs were used to attach the rafters at the ridgeline. There is also evidence of a fire, as some of the rafters show burn marks. This confirms Mr. Lyon's detail of the roof fire.

## Comparison of observations and Timeline I:

Comparing observations of the current Lyon House against Timeline I, the following conclusions are drawn:

- Though a construction range of 1800 to 1820s is possible, it is not conclusive. The granite stones used to construct the basement and the stairs for the west porch suggest that they are the oldest extant structures, but the stones provide no specific date
- 2. The main house was likely built around 1850, given the construction characteristics of the main house roof
- 3. Following completion of the main house, the Joseph E. Lyon saddlebag log house was perhaps dismantled in 1892. No evidence was found to either confirm or dispute the year.

- 4. The west porch was dismantled, leaving only the original stairs built with granite stones
- Construction of the rear ell began after the dismantling of the saddlebag log house
- 6. The west porch was rebuilt with the rear ell
- 7. The east porch was built
- 8. There is evidence of a roof fire
- 9. There is no evidence of a kitchen fire
- 10. The two bathrooms and the laundry room are twentieth century additions. The lid covering the toilet tank in Room 204 shows a date of February 6, 1984
- 11. The Lyon House was wired for electricity in 1947
- 12. Other "remodeling" efforts include using CMUs to enclose the two porches, multiple paint layers, multiple layers of linoleum floor coverings, construction of a walk-in closet (Room) 206 on the second floor, and connection between this closet to Room 207
- 13. According to Mr. Lyon, his family enlarged the entrance between Rooms 105 and 106 in 2000. The current entrance does have standard, twentieth century wood trims, though the threshold is made from a larger and older piece of wood

#### **CONCLUSION:**

#### Timeline II:

The chronology for the Lyon House is as follows:

- ca. 1800–1820 Construction of the Joseph E. Lyon saddlebag log house
   1850 Construction of main house
- 1892 Dismantling of Joseph E. Lyon saddlebag log house
- 1892 Dismantling of west porch, leaving only stairs
- 1892–1920's Construction of rear ell
- 1892–1920's Reconstruction of west porch, and construction of the east porch

- ca. 1900–1920s Partitioning of rooms in the main house
- 1900–1950 Installation of shiplap siding
- Late 1930s Early 1940s Roof fire
- Late 1930s Early 1940s Installation of current metal roof
- 1940s Bathroom installations
- 1947 Installation of electricity
- 1950s Various remodeling projects
- 1950–2000 Installation of aluminum windows
- 1996–1998 Construction of closet (Room 206) in Room 205
- 2000 Enlargement of entrance connecting Rooms 105 and 106
- 2003 DeKalb County buys Lyon House
- 2006 Last family member leaves Lyon House<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> According to Mrs. Betty Lyon during a phone interview on November 20, 2008, this last family member was her grandson, Nathan Cook.

# II.3 Floorplans





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# PART II: DEVELOPMENTAL HISTORY

### PART II: DEVELOPMENTAL HISTORY



LYON HOUSE 
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### III.1 Site

The landscape of the Lyon property includes a retaining wall, some large trees, and a muscadine grape arbor. The retaining wall is made of granite blocks and separates the north and west lawn from the drive. The muscadine grape arbor is on the south side of the property. There are also several outbuildings on the property, including a smokehouse, a privy, a workshop, a small barn, a well, a syrup boiler, and a cane mill. Some of these buildings have collapsed or have been taken down by DeKalb County for safety purposes.

### III.1.a Landscape

The Lyon property consists of approximately 48 acres of gently rolling farmland .



Fig. III-1. Looking southeast from southeast of house on gravel path to outbuildings off immediate property.

Within the boundaries of the property is a house site of approximately 2.5 acres, located in the northeast quadrant of the property (Fig. III-1). Adjacent to this property, on the northeast side, is a 10-acre tract, currently owned by the Department of Transportation (DOT) that was originally part of the Lyon family holdings. Dividing the DOT property and the Lyon property is a segment of the PATH system. Located on the southwest side of the property is the South River (Fig. III-2).

The property was used primarily as a working farm from the early 1800s until early in the 1970s, thus bearing the marks of human activity in fields cleared of trees, which were used in the cultivation of corn, sorghum and cotton and the production of cows. The house site has many aged oak trees, located predominantly to the west, which provide shade for the house, and norway and red maple trees lining the retaining wall on the north (Figs. III-3 and III-4). Adjacent to the house on the south, are remnants of arbors upon which muscadine vines were cultivated. In addition, various types of fruit



trees, including apple, pear and lemon were grown on the property. The property is accessed from Lyons Road, which terminates at the site and directly feeds into the driveway that encircles the house. The house site is bordered on the north and west by a granite retaining wall, approximately 123' in

Fig. III-2. Aerial view of Lyon house and property. Photo provided by DeKalb County Greenspace Program)



Fig. III-3. Lyon property tree line viewed looking south on east side of property.

length, with a height ranging from  $5-\frac{1}{2}$ "-11" and width ranging from  $3-\frac{1}{2}$ "- 11". The retaining wall is constructed primarily from irregular fieldstones with some quartz boulders (Fig III-5). Pairs of cut granite columns, ranging in height from 28-1/2"-34" with concrete copings, measuring approximately 24" x 19" and 19" x 19", demarcate the entrance to the front yard on the north and the entrance to the side yard on the lower north side (Fig. III-6). Adjoining the granite retaining wall on the west side is a wall constructed of concrete masonry units (CMUs), fashioned in a semi circular pattern, surrounding an historic water oak tree (Fig. III-7). Continuing from the

CMU section is a 34' retaining wall constructed of a mixture of quartz and granite rubble,



Fig. III-4. Looking west. Maple trees along granite retaining wall on north side of property.



Fig. III-5. Retaining wall, looking west.

with a height ranging from 17"-21" and width ranging from 6"-12". The walkway to the front of the house is currently grass and the original west entrance is lawn area. A concrete walkway, located on the west side, leads from the driveway to the stairs outside the entrance to the kitchen.



Fig. III-6. Cut granite columns with concrete copings. North side of property, viewed looking east.



Fig. III-7. Looking east. CMU area of retaining wall; tree roots causing cracking.



Fig. III-8. Smokehouse, located east of the Lyon house.



Fig. III-9. East gable end and north facade of the smokehouse. Notice the ends of the two logs projecting from the north facade as well as the loose asphalt shingles and the



Fig. III-10. Close up of the smokehouse door when it was attached to the smokehouse. The metal hinges featured here were stolen between July and September of 2008. (Photo by J. Brinkman 2004)

#### III.1.b Outbuildings

#### A. Smokehouse (Figs. III-8-III-10)

The smokehouse is located slightly southeast of the main house. According to the Lyon Family History, this structure has always been used as a smokehouse. Evidence for this use of the structure includes the logs, running from the north to the south walls where meat was hung, and statements made by George Lyon that he personally smoked meat in the structure . Additional evidence includes boards nailed on the west façade, closing the gaps in between the logs. The numerous nail holes on all facades of the building suggest that at one time, the structure was covered in boards to keep the smoke inside. Presently, the structure is vacant and contains large amounts of garbage.

The smokehouse is rectangular in shape and sits upon a foundation of fieldstones, intermixed with bricks. The building is constructed of notched logs. Not all of the corners are notched in the same fashion, suggesting that logs have been replaced over the lifespan of the building. According to an interview with George Lyon, several logs on the east façade were replaced with chain saw cut logs when a large tree fell on the structure. On the north and south facades of the structure, the ends of two logs stick out of the structure. These log ends correspond to two logs that run across the interior of the structure. The smokehouse is a front gable structure with the door on

the west facade. The gable roof extends over the west façade to provide shelter for the door. The door is a batten door, constructed of three vertical planks held together by three horizontal boards. There are no windows. Horizontal wood boards have been placed on top of the logs to fill the gable ends. The roofing material is asphalt shingle placed atop plywood; the roof has overhanging eaves.

The interior of the structure is a single room with a dirt floor and one wood shelf attached to the south wall. The two wood logs whose ends are visible on the north and south facades are characteristic of a smokehouse and their presence corroborates statements made by George Lyon that the structure was used to dry meats. The framing members and wood sheathing of the roof are clearly visible from inside the structure. The rafters and purlins are constructed from dimensional lumber.



Fig. III-11. Taken south of the Lyon house looking east. The smokehouse (left), wood shed (center) and privy (far right) can be seen.



Fig. III-12. Close up of the wood shed, southeast of the Lyon house.

### B. Wood shed (Figs. III-11 and III-12)

To the southeast of the Lyon House, are the remains of a wood shed. According to a phone interview with George Lyon, this structure was used as a storehouse for wood and was never fully enclosed. All that remains of this structure are nine wide circular posts that have notches in the top. These posts are laid out in a nearly square 3 x 3 grid that measures 20'-9" x 20'-7". There is a horizontal board resting in each of the notches in a manner that allows three of the posts to be connected by a single board.



Fig. III-13. Looking south from the Lyon house. Notice the grape arbor in the foreground and the workshop behind it. (Photo by J. Brinkman 2004)



Fig. III-14. Southeast corner of the workshop. Notice the diagonal boards forming the "brace" in braced frame construction.



Fig. III-15. Door to the workshop on the west facade. Notice the metal construction with the wood braced frame.

These horizontal boards are the only indication that the structure might have had a roof on it at one time. On the east façade there are a few pieces of siding, indicating that that section of the wood shed was clad at one time.

### C. Workshop (Figs. III-13-III-15)

The workshop is located directly south of the Lyon House. The foundation of the structure is made of CMUs. It is a braced frame structure with board-and-batten siding. The structure has three doors and a side-gable roof. The main door to the structure is located on the north façade and consists of three panels of approximately the same size. The other two sets of doors are located on the east and west facades underneath the gable ends. Each set of doors is constructed out of vertical metal panels held in place by a wood bracing system on the

back. The hinges for each door in the set are on opposite ends so that the non-hinged sides of the doors meet together in the middle of the doorway.

There are two windows in the structure, located opposite of each other in the northwest and the southeast corners. Each window is nine-over-six although, the bottom pane in the northwest window clearly has been replaced. It overlaps the top pane so that a row of lights from each pane is touching. The roof is constructed of metal and features overhanging

eaves. On the west gable end, there is a square opening. There is a metal chimney on the north plane of the roof, corresponding to a boiler inside the structure.

The interior of the structure is set up as a workshop. There is a boiler on the north side of the structure, as well as workstations on the north and south sides. Currently the workshop is being used for storage; a variety of doors and windows are stored in the rafters. The floor of this structure is dirt. The original framing structure for the roof has been replaced with dimensional lumber.

### D. Single Pen (Figs. III-16-III-19)

The single pen is located southeast of the Lyon House and directly east of the workshop. According to an interview with George Lyon, this structure was used as a chicken coop. Currently, the structure is vacant. It has a CMU foundation and is clad in beveled siding. The siding on this structure has a unique feature; corner boards frame the southeast and northeast corners,. Corner boards are not present on the southwest or northwest corners of the structure. The doorway and windows of the structure are located on the south facade. The only remaining trace of the door is the frame. To the east of the doorframe are two window



Fig. III-16: Looking southeast from the Lyon House. The privy (center) and single pen (right) can be seen-Photo by J. Brinkman 2004



Fig. III-17. Interior of the single pen; notice the brace frame construction.



Fig. III-18. Northeast corner boards of the single pen.



Fig. III-19. Northwest corner of the single pen. Notice the lack of corner boards.



Fig. III-20: Looking southeast from the Lyon House. The privy (center) and single pen (right) can be seen-Photo by J. Brinkman 2004



Fig. III-21. Interior of the privy, east wall.

frames that do not contain any panes. The structure has a metal shed roof.

The interior of the structure is lined with pallets/racks that are constructed of dimensional lumber. Above the windows on the south facade are a series of pegs, possibly attachment points for shutters.

### E. Privy (Figs. III-20-III-22)

The privy is a rectangular structure measuring
4'-8" x 6'-11". It is constructed of board-and-batten siding with the sills placed directly on the ground. The entrance is on the west facade. The only windows are small diamond cut-outs on the north and south façades. Because of their size, these openings may have been more for ornamentation than ventilation. The structure has a shed roof covered with asphalt shingles. The roof has a unique feature—the asphalt shingles are nailed down over the front of the eaves. The interior of the structure is a single room and features a wood floor. On the east façade, there is space for up to three people to use the facility at one time.

### F. Unknown structure (Fig. III-23)

Prior to the commencement of this Historic Structures Report, the structure in question collapsed. It was rectangular in

shape and had beveled siding on the north facade. The roof material was metal. Because of the manner in which the structure collapsed, it is impossible to determine the type of roof or the type of siding on the west, east, and south facades.

### G. Barn (Figs. III-24 and III-25)

The barn on the Lyon property is a braced frame transverse crib barn. It has an open breezeway with four bays on the north facade and two bays on the south facade. The structure is supported by a pier foundation composed of stacked stones under each corner. On the east façade, the structure is clad in beveled siding that has been painted red, providing protection from ultraviolet radiation damage. The siding on the rest of the structure is unpainted. On the northwest corner of the barn, the beveled siding has been covered with metal sheets approximately 2' up from the sill plate. The barn has a frontfacing gable roof that is clad in metal. There is a lean-to on the south facade of the structure, constructed of four wood posts with a metal shed roof.

The interior of the barn is divided into two sections. The section on the north is divided into four pens, some of which appear



Fig. III-22. Close up of diamond cut window on north façade of privy.



Fig. III-23. Unknown structure, to the east of the Lyon House that has collapsed.



Fig. III-24. Looking west from the Lyon house, the east façade of the barn is visible. Notice how it is painted to protect it from ultraviolet light and solar radiation (unlike the east gable end of the smokehouse).



Fig. III-25. South façade of the barnseveral pieces of clapboard siding are missing as well as elements from the roof.



Fig. III-26. Looking southwest from the Lyon house. The collapsed garage is visible (center).

to have been used for hay storage. The doors to each of these pens consist of four vertical boards joined by a horizontal board at the top and bottom. The two doors on the south are of similar construction. The function of the two pens on the south remains uncertain. Although the entire barn is currently used for storage, dried ears of corn were found in the pens on the south side.

The interior of the barn shows a variety of construction methods, suggesting that as older parts fell into disrepair, they were replaced with whatever materials were on hand. This is evidenced by the fact that while the majority of the boards in the barn bear circular saw marks and wire nails, there are also some boards that appear to be handhewn with cut nails in them. The boards in the barn vary in size, ranging from over 1" wide to



Fig. III-27. Close up of the collapsed garage.

approximately 6" across. Members of the framing structure of the roof also appear to have been replaced over time. Several of the rafters and purlins have been replaced with dimensional lumber, while a majority of the collar beams appear to be small, hand-hewn tree logs.

### H. Garage (Figs. III-26 and III-27)

Prior to the commencement of this Historic Structures Report, the garage collapsed. Because of the manner in which the structure collapsed, the type of

siding on the structure is unknown. However, the remains of the structure indicate that it had a metal gable roof with horizontal siding under the gable eaves. The roof also had overhanging eaves.

### I. Small barn (Figs. III-28-III-30)

The small barn is located southwest of the Lyon House and is one of the oldest structures on the site. It is rectangular in shape, measuring 12'-6" x 28'-4". It has elements of braced frame construction and notched log construction. The foundation consists of hand-hewn logs that are stacked three logs high. The floorboards are 1' wide, un-sized and were cut with a reciprocating saw. The structure has a front-gable metal roof. In the east end of the gable roof, there is vertical siding. Although there are no doors or windows, access to the structure is gained through a doorway under the east gable end. The south and north facades are approximately 4' tall. The presence of a floor suggests that this structure was used for some type of storage, rather than for animals. On the south facade of the structure, there are the remains of a lean-to. This section of the barn does not appear to have had a floor and may have been used for animals.



Fig. III-28. Looking southwest from the Lyon house, the small barn is visible between the collapsed garage and the dumpster.



Fig III-29. Interior north wall of the small barn. Notice the braced frame members as well as the hand-hewn tree log acting as the plate.



Fig. III-30. Un-sized floor board from the small barn. The markings on the board indicate it was cut with a reciprocating saw; making it one of the oldest buildings



Fig. III-31. South facade of well house. Notice the wood post to the right-a post of the former structure covering the well hole.



Fig. III-32. Faucet surrounded by cement located west of the well structure.



Fig. III-33: Interior of well house

The interior of this structure is broken up into two pens that are nearly square, although there is no dividing wall between them. The interior of the structure is divided by two logs, stacked on top of one another, running from the north to south. The floor of this structure is a mixture of grass and hay. Some of the rafters and purlins in the roof framing system have been replaced with dimensional lumber.

### J. Well Structure (Figs. III-31-III-33)

The current well house is nearly square in shape, measuring 6' x 6'-1". The structure is constructed of CMUs and has no windows. The door, positioned on the south facade, is wood with a metal handle. The wood trim around the door measures 7-1/4". The structure has a shed roof covered with asphalt shingles. To the west of the structure, there is a faucet protruding from the ground. The faucet is attached to a pipe that projects approximately 1' above the ground. The pipe is encased in concrete that opens out into a bowl around the faucet.

There is evidence of an older well house surrounding the current structure, consisting of wood poles in a rectangular pattern around the well house. This structure is similar to that surrounding the boiler. The only part of the older structure around the well house that remains is the posts.

The interior of the well house has a dirt floor. The original well hole is located in the northeastern portion of the well house. It is not covered up and still has water in it. Next to the well hole is a modern sump pump.

### K. Sorghum Boiler (Figs. III-34 and III-35)

The boiler is a rectangular structure with the chimney located at the south end. The structure measures 3'-6-1/2" x 16', although the roof encompasses a wider area. The walls of each side of the boiler and the chimney are constructed of fieldstones held together with clay mortar, although some repairs have been made with portland cement. Near the ground, there are metal bars running in between the east and west facades of the structure. Above the metal bars is a wood structure used to guide the pan. On the northeast corner of the structure, there is a metal pan that guided the cane juice from the mill into the boiler's evaporator pan. In the northwest corner of the structure, unattached to the boiler, there is a metal sink lined with porcelain. There is a monitor roof over the boiler, resting upon four handhewn tree logs. Similar to a majority of the other outbuildings, the roof of the boiler structure is clad in metal.



Fig. III-34. Sorghum boiler.



Fig. III-35. Notice the break in the roof line of the sorghum boiler denoting the monitor form. Also notice the hand hewn tree trunk holding up the roof system.

### L. Cane Mill (Figs. III-36 and III-37)

The mill on the Lyon property was produced by Goldens Foundry and Machine Company of Columbus, GA. This company, which is still in business, has also historically been known as Golden Brothers Founders and Machinists. The mill on the

Lyon property, which sits upon a concrete base, is No. 27. There is fencing around the mill on the south side. The cane mill was used to crush the sorghum cane, which released juice that was then boiled into syrup.



Fig. III-36. Cane mill surrounded by vegetation.



Fig. III-37. Close up cane mill; model No. 27 Goldens Foundry and Machine Co, Columbus, GA.

### **III.2 Architectural Description**

### **III.2.a Introduction: Architectural Summary**

The Lyon house is comprised of two sections—a two-story main house and a rear ell. The main section of the house is two stories high, one room deep, and two rooms wide, a configuration commonly known as an I-house. The main façade of the house faces north. The rear ell is one story in height, two rooms deep, and one room wide. It is perpendicular to the south façade of the main house. There are two porches, one to the east and one to the west, which run the length of the rear ell. Below the south part of the rear ell is a basement that is constructed of granite. It consists of one room and features a fireplace on the north wall.

Both sections of the house are vernacular in style. The exterior of the house is covered in non-original shiplap novelty siding that is painted white. All windows and doors have been covered with plywood in order to secure the building. There are two exterior brick shouldered chimneys—one on the east façade and one on the west façade. The main house has a side-gabled roof, while the rear ell has a rear-gabled roof. Both roofs are covered with standing-seam galvanized steel. There is a continuous granite foundation on the north façade, while CMUs compose most of the foundations of the east and west facades. The south façade's foundation is a combination of granite and CMUs.



Fig. III-38. Overview of the foundation looking to the west. To the south is the granite wall of the basement (Room 001). To the west is the CMU foundation of the west porch.

#### **III.2.b Exterior**

### III.2.b.1 Foundation Base Foundation

The foundation of the Lyon house varies in age (Figs. III-38, III-39). On the majority of the south, west, and east facades the foundation is made of CMUs that date to the mid-twentieth century. The structural support system under the house consists primarily of granite piers. The

CMUs extend underneath the outer edge of the porches along both the west and east facades. On the south facade, the portion of the foundation supporting the rear ell is a continuation of the granite block construction found on the east, south, and north walls of the basement (Room 001). The granite portion of the south facade foundation has been painted gray to match the CMUs, thus blending it in with the rest



Fig. III-39. Overview of the foundation, looking northeast. To the west is a large granite block pier. To the east is a stacked granite pier that has been reinforced with a wooden block. At the far, east side is the CMU foundation of the eastern porch.

of the south elevation foundation. There are doors (D1 and D4) to the east and west of the basement entrance allowing access to the crawlspace.

Along the west and east facades beginning north of the chimneys and including the front of the house, the foundation is made of quarried granite blocks of irregular sizes. This granite foundation is believed to be original to the main house. A portion of the foundation north of the west façade's chimney has been infilled with portland cement. The chimneys on both the east and west facades have a stacked granite foundations.

### **Basement Foundation**

The basement (Room 001) is only accessible from the exterior through doors D3 and D4, located on the south facade of the house Between these two doors is a small entrance hall constructed of vertical boards with a poured concrete foundation and a dirt floor. The basement is thought to be the oldest portion of the house. Unlike the rest of the building, it is constructed out of large, roughly dressed granite blocks that are loosely mortared with red clay. Inside, these blocks are exposed. Smaller fieldstones have been used to fill in the spaces between the large blocks.



Fig. III-40. Looking west in Room 001 at window W3, which predates the porches.

On the west wall of the room is a casement window (W3) that is placed on its side and has been obstructed by the house's west porch (Fig. III-40). The window contains a screen with no glass and has been covered with plywood. The north wall features a fireplace that is also made of granite blocks (Fig. III-41).

The south wall contains the entrance to the basement as well as two six-over-six woodframed double-hung windows (W1 and W2) that



Fig. III-41. Looking north in Room 001 at the granite fireplace.

have been covered with plywood. W1 measures 44-1/2" x 26-1/4" while W2 measures 45-1/2" x 26-1/2". Portions of the granite wall have been infilled with CMUs and bricks (Fig. III-42). Both windows contain non-historic glass. The floor of the basement has been redone at some point during the twentieth century in concrete; a

drain has the date "1957" inscribed on it (Fig. III-43).

The joists supporting the room above the basement are circular sawn, dating them to a

period later than Room 001. The east sill of the house sits on the east wall of the basement and is hand-hewn. The sill sitting on the west wall of the basement is hand-hewn as well, but is joined to the main west sill at the northwest corner of the room.



Fig. III-42. Southwest wall of Room 001, showing brick and CMU infill in the granite wall.

### The north and south basement sills are also hand-hewn.

### **Main House Foundation**

The foundation for the main house supports Rooms 101-103, Room 105, and the second story of the house above these rooms. Room 104 is supported by the CMU foundation that also supports the east porch. The north sill of the main house runs along the quarried granite foundation as three separate pieces. Two pieces are hand-hewn; the third is circular sawn, indicating that it is a replacement. The three separate pieces are not connected, although they butt up against one another (Fig. III-44). The east sill is hand-hewn and is supported by the granite foundation between the north facade and the east chimney, and by CMUs south of the chimney. A slight offset between the CMU infill and east sill has been accommodated with a patching of portland cement. A rabbet joint connects



Fig. III-43. Close-up of the floor of Room 001, showing drain with the date "1957" inscribed on it.



Fig. III-44. View of the central north foundation showing abutment of sill pieces. The sill on the left is circular sawn; the sill on the right is hand-hewn, indicating that the left sill is a replacement.

the north and east sill under the main house. The granite foundation is not present along the west side of the main house, south of the chimney. The west sill of the main house is hand-hewn and supported on the northwest corner by a stacked granite pier. The main house has two south sills, joined by a half-lap joint and supported by three separate piers, each composed of a single block of quarried granite. The southwest sill is older than the southeast sill and is hand-hewn oak measuring 10" x 10". The southeast sill, a circular sawn replacement measuring 7" x 9-1/2", is comprised of two separate, circular sawn pieces connected by a lap joint at the point where the northwest corner of the east porch connects to the main house.

A 10" x 14" hand-hewn oak summer beam runs north-south, approximately aligned with the center line of the main house. The summer beam is supported by various large stones. An additional hand-hewn beam to support the northeast side of the



Fig. III-45. Looking west at the additional beam perpendicular to the summer beam. Mortise joint notches from prior use are visible.

main house runs east-west from the east chimney foundation to the summer beam. The additional beam is not connected to either the chimney or the summer beam, but is supported by several large stones. This beam supporting the northeast side of the main house has mortise joint notches cut into it. It is likely that this beam was previously part of the historic foundation, perhaps along the south sill where the circular sawn sills are now located (Fig. III-45).

The floor joists under the main house run northsouth and are 3-1/2" x 8" sash sawn. The main house flooring runs east-west; where it crosses the joists, the flooring has been planed to create a level surface. The flooring varies between 5-1/2" and 6-1/2" in width and is sash sawn.

# Rear Ell Foundation

The rear ell is comprised of Rooms 106 and 107. Before the main house was built, there was an original two-room log cabin sharing a common fireplace built above the basement. The south room, where Room 107 is now, is supported by the granite basement walls and hand-hewn sills. The north room, where Room 106 is now, is supported along its north wall by the basement wall and along its east, west, and south walls by hand-hewn sills. These original hand-hewn sills are still in place, supporting the rear ell. Historic west and east sills run along the granite foundation of the basement. Both the east and west sills are continuous, extending from the south elevation of the house to the south sill of the main house. The east sill does not connect with the south sill of the main house, but is supported on its north end by a hand-hewn pier. The west sill is connected to the south sill of the main house by a mortise-and-

tenon joint. A non-historic wood pier also supports this northwest sill. The east sill measures 6" x 7" and the northwest sill measures 5-1/2" x 8".

The floor joists under the main house ell run east-west and are circular sawn measuring  $2^{\circ} \times 7-1/2^{\circ}$ . The circular sawn flooring is 5° wide tongue-and-groove, laid atop the joists, running north-south.

### Porches

The west porch projects out from the west sill and is supported by both CMUs and wooden piers. A number of the piers are hand-hewn, suggesting that they were recycled from an earlier use. The east porch lacks the piers found on the west; it is instead supported by CMUs and a continuation of one of the main sills.



Fig. III-46. View of north façade, looking south.



Fig. III-47. Detail of the electric sconce light under the gabled portico, east of door (D5).

mounted east of the door (Fig. III-47).

## III.2.b.2 Facades North Façade

The north facade of the Lyon House measures approximately 36' x 18' (Fig. III-46). This elevation has two floors, one gabled portico, six windows (W7, W8, and W10 on the first floor and W18, W19, and W20 on the second floor), and one door (D5). The wall covering is 7" shiplap novelty siding, painted white.

The windows create three bays. Two bays (W7 and W18, and W8 and W19) are located east of the elevation, and one bay (W10 and W20) is located west of the elevation.

The door (D5) serves as the formal entrance into the house. One electric sconce, styled with metal and bubbled glass, is

The windows and door are positioned asymmetrically. The east windows (W7 and W18) are 3'-8" from the east corner board, while the west windows (W10 and W20) are 5'-7-1/2" from the west corner board. The door is centered under the portico, but the portico is located 16'-2-1/2" from the east corner board, but 16'-4-1/2" from the west corner board.

The gabled portico measures approximately 4' x 7'. It is partially supported north by two wood columns, each measuring 4" x 4", but with differing heights. The west column is 6'-5-1/2" tall, while the east column is 6'-1" tall. The portico is supported south by the walls of the house. Wire nails join the portico to the house. A concrete slab serves as the stoop. Measuring 1'-8" x 3'-1/2", it leads onto the floor of the concrete portico, which measures 4'-11"x 8'. The thickness of both the stoop and the floor is approximately 5". The stoop and the floor rest on a CMU foundation. The portico is covered by a standing-seam metal roof, with over-hanging eaves. The over-hang west of the roof is 5", while the east over-hang is 2".

The northwest sides of the west porch and the west porch stairs are visible from this façade.

### West Facade

The west facade (Fig. III-48) of the Lyons house features the two-story portion of the house to the north (See Appendix A for elevation). There are two windows on this



Fig. III-48. West facade.

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section of the home, one on the second floor (W21) flanking the chimney to the south, and one on the first floor (W11) on the north side of the chimney. There is also a door (D11) to the south of the chimney. All of these openings are currently covered in plywood. The chimney is built of historic antebellum brick (Fig. III-49), laid in a common bond in a 5-course sequence,

with soft, red clay, original mortar and a fieldstone foundation (Fig. III-49). The chimney appears to have been repointed at least once and is mostly covered in ivy at this time

and has a television antenna attached to the top (Fig. III-50). There are several areas on the chimney that are missing small bricks (Figs. III-51 and III-52), yet there is no mortar present, suggesting that there was no brick placed in this space. This is possibly due to these areas being used for the building of a scaffold during the construction of the chimney.

The one-story ell of the structure consists of Room 107 to the south, connected with Room 106 to the two-story portion of the house. This portion of the home has a double window (W12) in Room 106 and a door (D14) leading to Room 107. Both of these are covered in plywood (Fig. III-48). A CMU foundation supports the porch of the single-story ell, with wood supports under the exterior walls and a stone foundation under the south end of the ell (Fig. III-53).

Attached to the single-story ell of the house is a porch with a metal shed roof. A large portion of the west facade consists of a  $36'-6-1/2" \ge 6'-1"-6'-4"$  porch

covered by a metal roof (Fig. III-54). On the south end of the porch, there is a small sink that is full of potting soil with a medicine cabinet above it (Fig. III-55). Just north of the main steps to the porch, there is a small bench of recent construction, determined by the new appearance of the lumber, on the outside edge of the porch (Figs. III-48 and III-54). There is a supporting structure, possibly for a swing that is no long attached, just



Fig. III-49. West chimney covered in ivy. Notice the plywood over the first floor window (W11).



Fig. III-50. Foundation of the west chimney and the steps at the north end of the west porch.

north of the bench (Fig. III-56). This structure also appears to have been added recently, since the lumber used is not painted or as weathered as the rest of the porch. The deck



Fig. III-51. One of the missing bricks on the west chimney, south side of the chimney next to window W21.

of the porch has been covered in irregular boards measuring between 6" to 10+" in width. Approximately two-thirds of the way down the porch toward the north there is a large hole in the flooring of the porch (Fig. III-57). The north end of the porch appears to have original siding, as it is still painted and of a consistent width of 7-1/4". At the south end of the porch, the wood siding is not painted and appears to be newer as the boards are not weathered (Fig. III-58). The material used is tongue-and-groove. At the north end of the porch are the remains of wooden steps next to the



Fig. III-52. Another of the missing bricks on the west chimney, north side of the chimney, note the lack of mortar in the space.



Fig. III-53. Porch foundation (to the left) and the porch supports in the center – view facing north.

chimney, leading up to the porch (Fig. III-50). The main porch steps are constructed of fieldstones and rough granite with a concrete sheathing and plumbing pipes serving as a railing (Fig. III-59). This stairway does not appear at first to be historic; however, these steps do not appear to be a CMU and cement construction. From under the porch, the backside of the porch can be viewed. It appears that the steps may be constructed of granite blocks (Fig. III-60), which are also visible along the sides of

the steps, and covered by cement and paint (Figs. III-61 and III-62). The granite in the steps appears to be of the same type as that in the foundation of



Fig. III-54. West porch looking north. Notice the large hole in the porch.



Fig. III-55. Sink on the west porch, south end of the porch.

the basement (Room 001). At this time, it is believed that these steps are the original steps into the ca. 1850 log cabin. As there are no granite foundations supporting the porch, it is surmised that the original porch had an open foundation, possibly with granite piers. This might explain the window (W3) on the west side of Room 001 that is now under the porch (Fig. III-63).

The entire building appears to have been resided in the early twentieth century with a 7" novelty siding. The siding on the west facade appears to be in moderately good condition. There is evidence of another sheathing material, running vertically under the novelty siding (Fig. III-64), that can be seen in the damaged area of the porch.



Fig. III-56. Support for a swing. Notice the difference in the coloring of the wood and the lack of paint, indicating a newer construction.



Fig. III-57. Floor of the west porch. This is the south end of the porch where the floor appears to have been recently replaced.



Fig. III-58. Hole in the west porch. Notice the damage to the supporting structures.



Fig. III-59. Main steps up to the west porch.





Fig. III-60. Wide view of the granite steps from under the porch. Note the support to the right that separates the CMUs and the granite. It is believed that these are the original steps up to the log cabin (ca. 1850).

Fig. III-61. Close up of the side of the main stairs. Note the repointing of the stones.



Fig. III-62. Close up of the granite behind the main steps, viewed from under the porch.



Fig. III-63. Window (W3) in Room 001 on the west wall, looking out under the west porch.



Fig. III-64. Evidence of siding material under the existing siding. Viewed from the hole in the west porch.

### South Façade

The south facade (See Appendix A for elevation) is the rear of the house and includes the entrance to the basement (Room 001) through door D2 (Fig. III-65). To the east and west are the ends of both porches, though neither porch can be reached from this elevation. The entrance to Room 001 is at the center of the facade and is covered by a small portico with a front-facing gable that has asphalt shingles on its roof. The door (D2) is constructed out of large vertical boards. Immediately to the east and west of the entrance are two windows (W1 and W2) from Room 001 that have been covered with plywood. The foundation of this portion is constructed out of large, quarried granite blocks that have been



Fig. III-65. The south facade.



Fig. III-66. Detail of western section of south foundation, showing CMU and granite foundation.

painted gray. Some of the granite blocks have been infilled with CMUs. Underneath the porches are CMU walls (Fig. III-66). Centered within each CMU wall are doors that lead to the crawlspace under the house (D1 and D4). Above the entrance to the basement is a window (W14) located in the kitchen (Room 107) that has been covered with plywood.



Fig. III-67. Junction of main house and ell, showing hole in wall cladding.



Fig. III-68. East facade of the Lyon house.

The main house is clad in horizontal clapboard novelty siding. The siding has been pierced near the center of the roof in order to accommodate an electrical line. A mercury-vapor lamp fixture has been mounted to this portion of the facade as well. The porches are clad in vertical novelty siding.

The one-story ell section of the Lyon House is set back from the two-story section, creating a portion that is perpendicular to the east facade and faces south (Fig. III-67). This section rests on a continuous CMU foundation and features the same siding as the two-story section of the house. There are three windows on this section of the house, two arranged horizontally just below the roofline, and a single window below the east second-story window. There is a sizeable hole in the exterior wall cladding at the point where the shed porch roof of the one-story section of the house meets the two-story

section of the house. The interior wall assembly is

visible through this hole, and it appears that attempts were made at some point to cover it with shingles (Fig. III-67).

### East Façade

The east façade (See Appendix A for elevation) of the Lyon house is comprised of two sections: the two-story main house towards the north end of the house, and a one-story rear ell toward the south end of the house (Fig.



Fig. III-69. The east façade of the two-story portion of the Lyon house.

III-68). The two-story portion of the east facade is 18'-9" wide. Roughly the northern two-thirds of the foundation is composed of rough-cut granite blocks, while the remaining third of the foundation toward the south end of the building is composed of CMUs. Above the foundation is wooden shiplap novelty siding, extending into a gable that tops the twostory section of the house (Fig. III-69). Centered under the gable is an exterior chimney that is 5'-5" wide. The foundation of the chimney is rough-cut granite, while the main body of the chimney is composed of brick, laid in a common bond pattern.

The chimney is flanked on each side by windows, two on either side (W10 and W11) that correspond to the level of the first floor and two on each side (W18 and W19) that correspond to the level of the second floor. These windows have been covered with plywood to secure the house (Fig. III-70).

The east façade of the one-story rear ell

is 29'-11" in length and rests on a continuous CMU foundation (Fig. III-71). A metal shed roof runs the length of this one-story section, and covers a porch that is 7'-10" deep. A 5'-7-1/2" wide portion of the porch area next to the two-story section of the house has been enclosed for a closet, and there is a small window (W8) on the east-facing wall. The south-facing wall of this enclosure exhibits a



Fig. III-70. Intersection of the east and south façades of the main house.



Fig. III-71. One-story rear ell of Lyon house



Fig. III-72. East porch steps.

vertical wall-cladding pattern that is a departure from the shiplap novelty siding on the rest of the east façade. Access to the porch is provided by four poured concrete steps.



Fig. III-73. Detail of porch on east side of Lyon house.



Fig. III-74. Tree branch as porch support on east façade.

The raised sides of this stairway are comprised of CMUs topped by poured concrete coping blocks (Fig. III-72). The floor of the porch is wood, and the shed roof is supported by four wood supports (Fig. III-73). Three of these are dimensional lumber, but the southernmost support is a tree-limb (Fig. III-74). The openings on the wall at the rear of the porch are irregularly spaced, with a door (D8) next to the closet on the north end of the porch, a window (W7) to the left of that door, and a second door (D12) toward the south end of the porch.

### III.2.b.3 Roof

The two-story main house has a side-gabled roof covered with standing-seam, galvanized steel (Fig. III-75) (See Appendix A for elevation). The eaves extend past the cornice to avoid water runoff down the side of the house, but the roofing system does not include gutters. The roof structure consists of twenty pairs of rafters that are roughly 3" x 4". Each set of rafters is marked with a Roman numeral which would have been inscribed at the saw mill as a guide for construction when the lumber arrived at the site. The rafters are joined, through mortise-andtenon joints, at the ridgeline with a wooden peg (Fig. III-76). The south rafters are mortised and the north

rafters are tenoned. There is no ridge board present. The rafters are set 2' apart and have reciprocating saw marks. The ceiling joists are lap jointed over the sills at the north and south ends of the rafter with the joist matching up with the rafters. The ceiling joists

measure 6" x 3-1/2" and also have reciprocating saw marks. At the eighth joist from the access panel (going west to east), an original wall with tongue-and-groove vertical paneling extends into the attic (Fig. III-77). The panels measure 1" x 8-3/4". Studs holding up the exterior siding are let into the east and west sills with mortiseand-tenon. The studs measure 3-1/2" x 2" and are 17-1/2" on center. Between the rafters and the metal roof are purlins with circular saw marks. They are 1" x 4" and occur every 2'. The metal roofing is attached to the purlins. There is evidence of a fire on several rafters concentrated around the center of the house and to the west (Fig. III-78).

The one-story rear ell has a a Roman nu rear-facing gable with the flues of two interior brick chimneys visible (Fig. III-79). Extending from the main, rear-facing gable are two shed roofs, to the east and west, which cover two porches running the length of the one-story section of the house (Fig. III-80). All of these roofs are clad with standing-seam galvanized steel. As with the main house, the eaves extend past the cornice to avoid water runoff down the side of the house, but do not have gutters. The roof structure



Fig. III-75. North façade of the main house with side-gabled roof with standing-seam, galvanized steel roofing. Note the metal corrosion.



Fig. III-76. Rafters in the main house attic are connected at the ridgeline through mortise-and-tenon with a wooden peg. Each set of rafters is marked with a Roman numeral.



Fig. III-77. East wall of stairwell extends into the main house attic at the eighth ceiling joist from the access panel (going west to east). The wall is constructed of tongue-andgroove vertical panels. There appears to be some fire damage.



Fig. III-78. Fire damage to rafters in main house attic.



Fig. III-79. East and south facades. Rear ell has a rear-gabled roof with two interior chimneys. Shed roofs extend from just below the eaves to cover full-length porches on the east and west facades.



Fig. III-80. Attic (Room 207). Circular saw marks on rafters in rear ell roof.

of the rear ell, as seen from the attic (Room 207), is comprised of several pairs of rafters measuring 4" x 2", separated by 34-1/2". All have circular saw marks (Fig. III-81). The rafters are attached at the ridgeline with nails; instead of a ridge board there are two ridge purlins (Fig. III-82). Purlins continue to the sills to the north and the south between the rafters and metal roof. The purlins also have circular saw marks and measure 1" x 4". The ceiling joists match up with the rafters and are 33-1/2" in between. The ceiling joists also have circular saw marks and measure 2" x 6". The south sill appears to be hand-hewn and was probably recycled from another building (Fig. III-83). The porch roofs to the east and west are supported by several single rafters creating a lean-to shed roof just below the eaves of the rear ell addition's roof.

The rear ell has two interior chimneys, one located in the center and the other towards the south. The central chimney (Fig. III-84) extends from the basement, as a granite chimney, through the first floor into the attic and through the roof, as a brick chimney. This chimney measures 2'-9" x 2'. The south interior chimney is made of brick and is only visible in

the attic and from the exterior (Fig. III-85). This chimney, at one point, was probably attached to a pipe coming from a stove in the kitchen (Room 107) below. The chimney

measures 16-1/2" x 17". It is boxed in between two ceiling joists and two boards lying perpendicular to the joists, approximately 22" apart. There is metal over the joist that is used to transfer the weight of the chimney off the ceiling and onto the joist.



Fig. III-81. Attic (Room 207). Ridge purlins where rafters connect at ridgeline.



Fig. III-82. South beam in attic (Room 207) is hand-hewn and probably recycled from another building.



Fig.III-84. Attic (Room 207). South interior chimney. Notice that the chimney is boxed in to help defer the weight of the chimney from the ceiling.



Fig. III-83. Attic (Room 207). Central interior chimney. Notice the creosote buildup on the exterior of the chimney.



Fig. III-85. Attic (Room 207). Metal over joist to help defer chimney's weight from the ceiling to the support joist.

### **III.2.c Interior**

III.2.c.1 First Floor Room 101 (Hall)

Fig. III-86. Historic linoleum flooring, Room 101.

Room 101 is a rectangular room that would have been entered from the front door (D5) on the north side of the house. It is approximately 6' x 12' and has a ceiling height of 9'-1". There are two other doors in this room, D6 on the east, and D8 on the south.

Floor

There are three layers of flooring.

The first layer is carpeting which is laid

over historic linoleum that covers historic 6" tongue-and-groove boards (Fig.III-86). Walls

The 6" wide, horizontal wood paneling covers the north, east and west walls; cut



Fig. III-87. New wall cut around original north wall, Room 101.

nails and wire nails are visible. There is a gap where the east wall meets the north wall. The east wall is cut out around the trim on the north wall, indicating that it was added later and cut to fit around the north to form Room 102 (Fig. III-87). South wall paneling is non-historic, has a varnish coating, and the boards are smaller than the historic wall-boards. This wall was added when Room 103 was constructed. There is a one-bulb fixture with a pull-chain switch, mounted at 7'-3" on the east wall.

There is a 3-1/2" chair rail 2'-4" above the floor on the north and west walls, a 9-1/2" baseboard on the east, west and north walls, 3-1/2" wood trim around the stair entrance opening, 4-3/4" trim around door D5, and 4"
plain board trim around door D6. There is 3-1/2" shellacked trim around door D8, and 3-1/2" historic wood trim around the opening to Room 105. Doors and Windows

Door D5 is the historic front door to the house and is located on the north wall. It has three lights over two panels. The wood finish has been varnished (Fig. III-88). There are no windows in this room. Ceiling

There is 6" wide tongue-and-groove wood paneling with historic cut nails covering the ceiling in Room 101.



Fig III-88. Door D5, note varnished finish.

#### Room 102 (Bedroom #1)

Floor

Room 102 is an L-shaped room that is entered from Room 101 on the west. It is approximately 13' x 19' and has a ceiling height of 9'-3". There is one door in this room (D6), on the west wall. There are five windows: W4 on the south wall, W5 and W6 on the east, and W7 and W8 on the north. There is a fireplace centered on the east wall and a closet in the southwest corner.



Fig. III-89. Dark paint or stain on wood flooring, Room 102.

Flooring in Room 102 consists of four layers: carpet over two layers of historic linoleum, over 6" tongue-and-groove boards. Boards around the exterior of the room appear to have been stained a darker color (Fig. III-89). Walls



Fig. III-90. New paneling in closet (Room 102).



Fig. III-91. Mantel in Room 102



Fig. III-92. Detail of fireplace mantel, Room 102.

Walls are covered with 6" tongue-and-groove wood paneling. Paneling around the closet is not continuous with the rest of the room, indicating that the closet was added at a later date, probably ca. 1940, when the bathroom was added (Fig. III-90). West wall paneling varies in appearance from older, exterior walls. The west wall is newer, most likely early twentieth century, as evidenced by the lack of chair rail trim and the fact that this wall is cut out around the baseboard and chair rail trim where it joins the north exterior wall. The north, east, and south walls have 9-

> 1/2" baseboards with a 1'-6" solid wood panel above, topped by a 3-1/2" chair rail.

> There is a fireplace located on the east wall. The fireplace mantel is pine with a dark finish (Fig. III-91) and has a dentil detail and small circular cut out detail above (Fig. III-92). The finish of the mantel is darker than the wood paneling on the walls; paint analysis

suggests that the mantel was originally grained and later covered with a tinted varnish. The center of the mantel is decorated with reeding detail. The fireplace has a granite hearth, which is made up of two large stones. The hearth runs the width of the mantel and is approximately 1'-6" deep (Fig. III-93). The mantel is a vernacular mix of Georgian and Federal styles, suggestive of an installation date

ca. 1840. It was most likely purchased, rather than assembled by the homeowner or

builder, as the level of craftsmanship and detail exceeds that found elsewhere in the house. Doors and Windows

Door D6, a batten door, is located on the west wall. It varies in appearance from other doors in the house, consisting of wide (approximately 12"-14") planks (Fig. III-94). The hardware is located at a nonstandard height, approximately 4' above the floor. The metal plate on D6 is inscribed with the name Russwin (Fig. III-95), the name of the hardware company that is known today as Corbin Russwin. The presence of Russwin hardware indicates that it was produced in the early twentieth century. Door D7 is located in the southwest corner of the room and opens into a small closet.

Window W4 is located on the south wall. Windows W5 and W6 are on the east wall, on either side of the fireplace. Windows W7 and W8 are on the north wall. All windows are one-over-one, double-hung aluminum windows with double pane glass. These windows have been replaced and are not historic. They are all approximately 6'-10" x 2'-3". The openings of the original windows were most likely shorter than the current openings, as the current windowsill is located below the chair rail (sections of the window frame and chair rail appear to have been cut out). Historic



Fig. III-93. Granite hearth at fireplace, Room 102.



Fig. III-94. Door D6, note batten door with wide plank construction and mounting.

windows most likely had sills located directly over the chair rail. Ceiling

The ceiling material in Room 102 consists of 6" wide tongue-and-groove wood paneling with historic cut nails.



Fig. III-95. Hardware on door D6, note manufacturer name "Russwin".

There is a switch-operated bare bulb fixture located in the closet. No other lighting is present in Room 102.

#### Room 103 (Bathroom)

Room 103 is a rectangular shaped room that is entered from Room 101 on the north. It is approximately 9' x 6' and has a ceiling height of 8'-0" (Fig. III-96). There are two doors in this room, D8 on the north wall and D9, opening into the linen closet, on the west. There are no windows in this room. There is a linen closet located in the northwest corner of this room (approximately 2' x 3'). Plumbing fixtures include sink



Fig. III-96. Northeast corner, Room 103.



Fig. III-97. Vinyl tile and plywood subfloor, Room 103.

and cabinet, toilet (undated), and tub with shower.

Floor

The floor is covered with 9" x 9" multicolored vinyl tiles over a plywood subfloor. Some tiles have been removed around the toilet (Fig. III-97). Walls

On the north wall there is painted ceramic tile up to 4'-0" above the floor, above which is 5" painted wood paneling. The east wall is covered with a faux ceramic tile panel (one large panel, imprinted with 4" tile texture). The south wall has the same tile paneling over the bathtub and 6" painted wood paneling attached with wire nails around the laundry

entrance door. The west wall has historic 6" tongue-and-groove wood paneling. Within the linen closet, this paneling remains unpainted and cut nails are visible. The portion of the wall located outside the closet is painted a cream color. The exterior walls of the linen closet have non-historic 6" painted wood paneling.

The west wall of Room 103, including the portion located within the linen closet, has the same 3-1/2" chair rail and 9-1/2" baseboard as most other historic walls in the house. There is non-historic 4" wood trim at the ceiling.

One light is mounted over the vanity and is operated by a wall switch.

#### Doors and Windows

Door D8 is on the north side of the room and is a two-panel wood frame/plywood door. Door D9 opens onto the linen closet and is a hollow core wood door. Ceiling

Textured, painted drywall covers the ceiling. There is a modern ceiling fan with globe light fixture mounted in the center of the room. There is no vent or fan over the toilet or shower.

#### Room 104 (Laundry Room)

This room is a late twentieth century addition, and is not part of the main house. It was created by enclosing the exterior north end of the east porch, a conclusion supported by the fact that both the porch wall and house wall are visible through the

ceiling opening in the room. The room is rectangular in shape and measuring approximately 7' 10" x 5' 7-1/2". Floor

The floor consists of sheets of plywood covered with rolled vinyl in a pale yellow alternating brick pattern. The floor slopes toward the south (Fig. III-98). Walls

The walls of Room 104 are made of



Fig. III-98. Room 104 (Laundry Room) Vinyl flooring.

gypsum board nailed up against the studs, with nails puttied over and then painted white



Fig. III-99. Room 104 (Laundry Room). Gypsum board walls.



Fig. III-100. Room 104 (Laundry Room). Attic access.

(Fig. III-99). Doors and Windows

There is a window (W9) on the east wall, measuring approximately 2' x 3' and there is a fuse box on the north end of the east wall. The doorway measures 1' 10" in width.

#### Ceiling

The ceiling is comprised of gypsum board that has been nailed to the rafters, with nails puttied over and then painted white. In the ceiling directly in front of the entrance, there is a 3' x 3' square panel allowing access to the attic (Fig. III-100).

#### Room 105 (Living Room)

Room 105 is a rectangular room that

is entered

from either Room 101





Fig. III-101. View of closet below stairs in Room 105 (door open).

room: W10 on the north wall and W11 on the west wall to the north side of the fireplace. The fireplace is centered on the west wall (Fig. III-102).

#### Floor

There are three layers of flooring in Room 105; carpeting is laid over a modern subfloor, which consists of 4' x 8' pressboard panels. Below the subfloor there is historic 6" tongue-and-groove wood flooring. Walls

Horizontal 6" tongue-and-groove wood paneling is attached with cut nails on



Fig. III-102. Fireplace on west wall, Room 105.

all walls, with the exception of the east wall of the closet. This wall has vertical 9" tongue-and-groove wood paneling. There is some evidence of a gray-brown paint on the wainscot in the room, suggesting that the paneling was grained at some point.

On all walls except the stair closet, there is a 3-1/2" chair rail at 2'-2" above the floor. Baseboards are 9-1/2" high, and trim around doors, windows and cased openings is approximately 4" wide.

The fireplace mantel is decorative pine attached with cut nails. The finish of the

mantel is darker than the wood paneling on the walls; paint analysis suggests that the mantel was originally grained and later covered with a tinted varnish. The fireplace has a granite hearth, which is made up of two large stones. The hearth runs the width of the mantel and is approximately 1'-6" deep (Fig. III-103). The mantel is a vernacular mix of Georgian and Federal styles, suggestive of an installation date ca. 1840. It was most likely purchased, rather



Fig. III-103. Granite hearth at fireplace, Room 105.

than assembled by the homeowner or builder, as the level of craftsmanship and detail exceeds that found elsewhere in the house.

#### Ceiling

Tongue-and-groove wood paneling, 6" in width, covers the ceiling in Room 105. It is attached with historic cut nails. There are no overhead light fixtures in this room. Doors and Windows

Door D11 is located on the west wall. It is an historic, six-panel Federal style, popularly called "Cross-and-Bible." It was built entirely with mortise-and-tenon and peg construction (no nails) (Fig. III-104). The door-knob has a May 17, 1870, patent date and the handle is made of agateware (Fig. III-105). Door D10 is the entrance to the small closet under the stairs. It is not full height, measuring 2'-2" x 4'-5", and has face-mounted hinges (Fig. III-106). Originally, there was a door in the opening between Room 105 and 101. It was constructed with mortise-andtenon joinery (Fig. III-107).

Both windows are one-over-one, doublehung aluminum frames with double pane glass and are approximately 6'-10" x 2'-3". These windows have been replaced and are not historic. The openings of the original windows were most



Fig. III-104. Door D11, note Cross-and-Bible configuration.



Fig. III-105. Agateware doorknob on door D11.



Fig. III-106. Batten door D10, entrance to closet below stairs in Room 105.



likely shorter than the current openings as the current windowsill is located below the chair rail (sections of the window frame and chair rail appear to have been cut out). Historic windows most likely had sills located directly over the chair rail.

#### Room 106 (Dining Room)

Room 106 measures 14'-6" x 16'-2". Currently the room is being used to store the "relics" found around the house and yard (Fig. III-108). Floor

Fig. III-107. Mortise-and-tenon door, originally located between Rooms 105 and 101.

The floor rests on joists stretching from the sills and girders, with pine boards as the original



Fig. III-108. Room 106 contains the relics of the house.

flooring, The boards vary in width, ranging from 4-1/2" to 5-1/4". A plywood floor has been added on top of the pine boards, with pebbled green and cream strips of rolled vinyl attached with brass tacks (Fig. III-109).





The walls consist of 4" boards with tongue-and-groove assembly and are painted a tan color with cream or white window and door surrounds. The walls have been painted at least fourteen times and some layers could be primers. The first wall color was light ochre with a cream color on the wood trim and mantel. Creams and grays were popular wall and ceiling colors for the Lyon family throughout the years. Door and window trim was painted in



Fig. III-109. Room 106 plywood subfloor with rolled pebbled vinyl.



Fig. III-110. Room 106 fireplace.

various shades of tan, cream and green. The fireplace is against the south wall and has a brick veneer. The crudely constructed mantel, vernacular in design, consists of a wood board held up by an angled support at each end; the support on the left is missing. The woodburning stove, made by Sierra, stands in front of the hearth with the flue inserted up the chimney. The hearth is made out of twentieth century bricks. There are 4" horizontal boards

above the mantel that run the length of the mantel and are framed with vertical strips of molding (Fig. III-110). On each side of the fireplace, there are 9" vertical boards, unlike the horizontal ones in the rest of the room.

Windows and Doors

Windows W12 and W13 measure approximately 4'-5" x 2'-8 ½". The frames of windows W12 and W13 are 7" wide. The trim around the doors and windows is painted cream/white. The window (W13) on the east wall is modern aluminum, single, one-over-one; the west window (W12) is also modern aluminum, doubled within the frame, one-over-one. The east side door (D12) has three vertical lights in the top half; the lower half has three horizontal recessed panels with original, craftsman-style, hardware, a wood threshold, and 6-1/2" wood doorframes. The door (D13) to the left of the fireplace is of a board-and-batten design. These doors appear to be original to this 1900 addition



Fig. III-111 Room 106 ceiling boards running north to south.

connecting the kitchen to the earlier I-house. Ceilings

The ceiling is made up of 4" boards, running from north to south (Fig. III-111). The

height of the ceiling is 8'-8" and it is painted cream. The ceiling was not sampled for

previous paint colors. There is quarter round trim at the wall corners and the ceiling molding, with 6-1/2" baseboards. There is a modern brushed chrome ceiling fan with wood blades and three light fixtures projecting from underneath the fan (Fig. III-112).

#### Room 107 (Kitchen)

Room 107 measures 14'-6" x 16'-2". Floor

The kitchen floor is layered with a plywood subfloor that has been applied over the original pine flooring. Over the years, layers of linoleum and vinyl have been applied (Fig. III-113).

#### Walls

The walls are 4" tongue-and-groove horizontal boards, painted a tan color, with the door and window trim painted a cream color (Fig. III-114). These walls, like those in Room 106, have been painted at least fourteen times. The first ceiling and wall color was ochre and the window and door trim was painted a dark gray. The remaining color schemes were similar to those used in Room 106. Each corner of the room where the walls meet has a wood strip of shoe molding running from the ceiling to the floor.



Fig. III-112. Room 106. Brushed chrome fan with light fixtures.



Fig. III-113. Room 107, flooring in kitchen.



Fig. III-114. Room 107, tongue-andgroove boards on walls.

The baseboards and window surrounds measure 5-1/2". The north wall has been patched; large sheets of plywood have been inserted and painted covering the fireplace (Fig. III-115). These have been removed to reveal a whitewashed granite fireplace This was one of the fireplaces in the original saddlebag house. In the closet, entered

through door D15, the historic granite chimney is visible (Fig. III-116).

**Doors and Windows** 

The doorway leading into Room 107 from Room 106 is missing its door, though ghost marks from hinges remain on the frame. A door in the attic above Room 107 has a hook matching the latch that is still attached to the frame of the door (Fig. III-117). The hinges on the door correspond to the marks on the frame. The door has a string-operated latch. The only window in the kitchen is on the south wall (W14). It is two windows wide, one-overone and double paned, measuring approximately 3'-10" x 2'-1 ½". The trim is painted white and is 5-1/2" wide.

The west door (D14) is stained wood with three horizontal panels on the bottom half and three-over-three rectangular vertical lights on the upper half (Fig.III-118). The door appears to date to the early twentieth century, with original



Fig. III-115. Room 107, patch pulled away to reveal original board siding.



Fig. III-116. Room 107 fire place revealed, whitewashed granite hearth surround. One of the fireplaces of the original saddlebag house.



Fig. III-117. Door in attic was removed and placed in doorway between Room 106 and Room 107. Door hinges and hook match ghost marks and latch on doorframe.



Fig. III-118. Room 107. Door (D14) on west side.

hardware. The east door (D16) has a large, recessed panel on both the top and bottom half (Fig.III-119). The pantry has white painted vertical board walls with built-in shelves, and a board-and-batten door (D15) (Fig. III-120).

#### Ceiling

The ceiling is made up of 3" tongue-and-groove boards running north-south, painted green-blue with a modern ceiling fan in the center. The original ceiling color was an ochre shade. The height of the ceiling is 8'-9". Behind the fan in the center of the ceiling, there is a ghost mark of a rectangular unpainted area (Fig. III-121).



Fig. III-119. Room 107 Door (D16) on the east side.

A fixture has been removed and replaced with the fan. There was originally a stove in the southeast corner, below the location of the steel sheet patch. The brick flue where the stovepipe used to connect is above this steel sheet (Fig. III-122).



Fig. III-121. Room 107, ceiling.

Fig. III-120. Room 107. Board-andbatten door (D15)



Fig. III-122. Room 107, ceiling patch, where chimney or flue is subsiding.



Fig. III-123 Stairwell entrance to second floor.

## III.2.c.2 Interior—Second Floor Stairs and Second Floor Landing

The stairs to the second floor begin in Room 101 (Hall), through a doorframe to the west of the front door (D5), without any evidence of a door closing off the stairs from the first floor (Fig. III-123). The opening is trimmed with flat casing boards, outlined with a trim molding 3-1/2" from the inside edge. The inside

edge of the casing on the jambs and the head has a narrow edge beading. On the opposite side of the frame, as seen from inside the staircase, the casing jambs and head board also have a narrow edge beading, but no outlining offset decorative trim.

The staircase makes a turn to the left (south) as the stairs rise to the second floor. The first steps are wedge-shaped winders that make an

immediate 90degree turn within five steps from the

first floor. After the turn, nine more full-sized steps complete the rise of the staircase to the second floor (Fig. III-124). The width of the staircase, after the turn, is 2'-11". A very narrow, non-historic handrail is attached to the west wall with modern hardware. The handrail is angled to the top of the staircase, 30" above each tread. The lack of a handrail is a defining characteristic of an I-House staircase.



Fig. III-124 Stairwell viewed from the second floor.

#### Floors

The risers and treads of all the steps are 1" pine boards, 9-1/2" deep with a 7" riser on the non-winder treads. There is a rounded nosing protruding 1/2" forward of each riser. Dual stringers, visible from inside the cupboard behind door D10 in Room 105, below the treads and risers, support the staircase on the edge of each tread. Both

the risers and treads are face nailed into the stringers with narrow head cut nails. The stairs are presently covered with beige carpeting nailed into the treads (Fig. III-125).

#### Walls

The staircase is enclosed with walls on each side. Upon entering the staircase, the north wall on the righthand side is paneled in horizontal



Fig. III-125 Built in case on south wall of second floor landing.

unpainted pine planks (Figs. III-123 and III-124). The bottom portion of the wall has a chair rail matching the chair rail configuration to the right of the front door (D5) in Rooms 101 and 102. The chair rail is an historic and character-defining feature of the interior of the house. The continuation of the chair rail inside the staircase was not meant to be functional; it provides an artistic and design meaning when viewed from Room 102.

The west wall on the inside of the staircase is paneled in vertical, unpainted pine boards, 8-1/2" - 10" wide. The wall continues from the floorboards to the ceiling. The unpainted pine planks beginning at the second floor floorboards are 8-1/2" - 10", toenailed to the floor with cut nails. On the east wall, below the second floor floorboards, the paneling is unpainted horizontal pine boards. After passing the second floor level, the east wall continues up and through the ceiling. On this wall, there are a baseboard and a chair rail 22" above the floor that terminate at the casing of the doorjamb opening to Room 201. There is no door for this frame.

#### Ceiling

The ceiling boards of the staircase are unpainted pine,  $5-1/2^{\circ} - 6-1/4^{\circ}$  wide, running east and west.

#### Room 205 (Bedroom 4)

Room 205 is 12'-4" x 17'-10" (Fig. III-126). There is a notched-out storage closet



Fig. III-126 Room 205 (Bedroom 4).

or cupboard area in the northeast corner of the room. On the floor in the notch that comprises the landing over the staircase below, there is a 1" x 3" mortise in the floor and ghost markings that indicate the notch may have been a cupboard with door anchored in the mortise.

Floors

The floor is formed from unpainted pine boards, 5-1/2" - 6-1/4" wide, running in

an east-west direction, with each board spanning the full width of the room. The floors and walls of the notch are painted a dark umber color.

#### Walls

The walls are unpainted pine paneling, with 1/2" thick baseboards, 5-1/2" high, with a single bead at the top of the board, attached with cut nails running along the bottom of the south, west, and north walls (Fig. III-127). There is also a three-part chair rail (rail, rail support and decorative trim), 22" above the floor on the south, west, and north walls. The chair rail support is a 3" x 1/2" board directly below the embedded rail. A trim molding of the same design as that outlining the doorframes and the window casings is nailed between the chair rail and the support. The chair rail is the stool of the two windows on the west and north walls.

The east wall is the west wall of the staircase, made of 10-1/2" vertical tongue, is constructed of very dense grain quarter-sawn pine boards. There is no baseboard or chair rail on the wall. The wall makes a 90-degree turn on the floor landing in the northeast side of the room to form a small notch. Inside the notch along the east wall,

the wall around the stair is cut out to allow the baseboards and chair rail to continue through to the east wall of the staircase, indicating the addition of this wall after the original construction of the house. The south wall is constructed in the same manner as the west and north walls.



Fig. III-128 String activated wood latch. D17



Fig. III-129 Wood handle of Door D18.

#### Doors and Windows

The window openings for W15 in the west wall and W20 in the north wall contain double-sash aluminum windows. Door D17, from the staircase, is a board-and-batten style door. The interior side of the door has three cross-pieces that nail the vertical boards to make the batten door. The wood lock uses a wood latch-catch lifted by a string running through a hole above the lock to raise and lower the arm into a wood cradle on the jamb. The lock is on the interior side of the door; pulling the string on the stairwell landing will open the door (Fig. III-128).

Door D18, in the center of the wall, is of a similar design to D17 (Fig. III-129). It is a batten door of four vertical pine tongue-and-groove planks, with three cross pieces on the interior side and a wooden lock. The cross pieces are nailed using cut nails. The jambs of the door opening are historic wall studs of full dimensions. The head of the door opening is modern, reduced dimensional lumber. The cross pieces on the interior of the door were cut off using an electric circular saw to fit between the historic studs, indicating the door addition is non-historic. the materials and design of the door appear to be historic, though it is not from this location.

#### Ceiling

The ceiling is constructed of unpainted pine boards, 5-1/2" to 6-1/4" wide, running in the same east-west direction as the floorboards.

### Room 201 (Hall)



Fig. III-130 Room 201 (Hall) showing door frame at the far end of the hall.



Fig. III-131 Door frame to Room 201. Door is missing therefore not numbered.

Room 201 measures 3'-2" x 9'-10" (Fig. III-130).

Floors

The pine floorboards are 5-1/2" - 6 - 1/4" wide, running east-west down the length of the room.

#### Walls

The north wall is made of vertical, unpainted, tongue-and-groove pine boards, approximately 10" wide, forming a single board wall. The grain of these boards is very narrow, relatively free of knots and quartersawn, indicating that the tree was old growth timber. These wall-boards are toenailed to the floor on the inside of Room 202.

The south wall forms one of the walls of Room 204. This wall is constructed with varnished or shellacked, knotty pine, tongueand-groove boards, 5-1/2" wide. The wide

grain of the boards indicates that they are relatively new boards of second quality. Doors

The doorframe has a flat board casing outline with trim molding set 3-1/2" outside the inner edge of the casing. The inside edge of both sides of the casing on each jamb and the head have a narrow edge beading (Fig. III-131).

#### Ceiling

The ceiling boards are unpainted pine, 5-1/2" to 6-1/4" wide, running in an eastwest direction. The east end of the hall opens to Room 203.

#### Room 202 (Bedroom 3)

Room 202 is 10' x 9'-10" wide with one window in the north wall (Fig. III-132). There is no doorframe opening from Room 201.

#### Floors

The floor is formed with unpainted pine boards, 5-1/2" to 6-1/4" wide, running in an east-west direction, with each board spanning the full width of the room.

#### Walls

The west wall is made of unpainted, vertical, tongue-and-groove pine that runs from the floor up and through the ceiling, nailed to the ceiling joists in the attic (Fig. III-133). This indicates that the wall is historic and was not added after the house was built. There is a baseboard along this wall and a



Fig. III-132 Room 202 (Bedroom 3).



Fig. III-133 Vertical wall boards.

two-piece chair rail. In the northwest corner of the room there is a boxed-in corner constructed from two boards that run from the floor to the ceiling. Its function is undetermined but it matches a similar corner boxing in the south west corner of Room 204. The north wall of the room is paneled with horizontal, unpainted pine boards. There is a baseboard and a three-part chair rail 22" above the floor that forms the stool of the single window in that wall. The east wall of the room is one board thick, unpainted, vertical knotty pine boards, approximately 10" wide. The greater grain distances indicate more modern fast growth timber and non-historic material.

Doors and Windows

The doorjambs are made from full-sized lumber that shows no indication of hinges or a lock keeper being attached. On the floor between the door jambs is a handmade threshold nailed to the floor with a mixture of cut and wire nails. Thresholds are normally installed under doors to cover the change of direction in the floorboards that usually exists between rooms. However, on the ceiling directly above the threshold is a modern, glass, flush-mounted light fixture. There is no evidence of a headboard to complete the top of the doorframe installed under the light fixture.

The window casing is the same design as all of the windows: a 4" flat pine casing board surrounding the window opening with a trim molding on the outer edge of the casing. There is an aluminum sash window in the frame.

#### Ceiling

The ceiling boards are unpainted pine,  $5-1/2^{\circ} - 6-1/4^{\circ}$  wide, running in an east-west direction.

#### Room 204 (Bath 2)

Room 204 is a rectangular room, approximately 10' x 4' with a 7' ceiling. The



Fig. III-134. Room 204: West wall with shelves. The window and chair rail are on the south wall.

white painted room has one window, two remaining bathroom fixtures and a built-in two level shelf on the west wall (Fig. III-134). The pocket door to the room is missing.

#### Floor

The floor is presently covered with alternating green and beige, 10" square, linoleum tiles. Under the tiles, there are unpainted pine tongue-and-groove floorboards, 5-1/2" – 6-1/4" wide, running in an east-west direction the length of the room. The boards are face nailed to the underlying floor joists with machine-

made narrow headed cut nails. These boards are an integral part of the flooring for all the rooms on the second story and run under the walls of this room.

#### Walls

The white painted wall is toenailed into the floor-boards. The east wall of Room 204 is made from similar, vertical, second-quality, knotty, pine boards painted white. The west wall is made of vertical boards, and the tops of the boards of this wall are visible in the attic where they are nailed into an attic joist. As part of the historic wall, these boards are approximately 10" wide tongue-and-groove boards. Two of the last three vertical boards are not only tongue-and-groove, but are also beaded along the south edge. Since no other boards exhibit this characteristic decorative feature, it is likely that when this historic wall was constructed, there were not enough standard tongue-in-groove boards available, so these were used.

There is a corner box made from two boards in the southwest corner of the room, running floor to ceiling. The wood and the nails indicate it is historic, though its function is undetermined. There is an identical box built in the northwest corner of Room 202. In the original historic configuration of the second floor, there was only one room on the east side of the stairs on the second floor so both boxed corners would have been visible from anywhere in the room. It is unlikely that they were built for support, since the wall on the second floor east of the stairs and the stair landing was not load-bearing.

The south wall of Room 204 is an exterior wall with a window (Fig. III-134). The 4" wide window casing, trimmed with a mold set in 3 1/2" from the inner edge of the casing, matches the decorative features of all of the other second floor windows. There is a baseboard on this wall, and a single wainscoting board with 16" revealed until the chair rail, approximately 22" above the floor. This wall is painted white except for the area where the claw foot bathtub used to sit. This part of the wall is unpainted. The white paint on this wall reveals the hand plane marks on the boards. The sink sits on a wood cupboard with two doors; the white toilet is dated Feb 6, 1984. There is an overhead light with a glass bulb and a wall light switch and an electrical plug. Doors and Windows

There is no door for Room 204 though the design of the wall indicates that the door was a pocket-type, opening to the right on the inside of the room's north wall. The window is a one-over-one, double-hung, aluminum frame window.

#### Ceiling

The ceiling boards are 5-1/2" – 6-1/4" wide running in an east -west direction. Because the boards are painted white, they reveal a defining historic characteristic of all the ceiling boards--longitudinal marks from hand-planing rough-cut boards (Fig. III-135). Because of the lack of lights in the house and the natural color of the wood, these plane marks are only visible on the painted surfaces.



Fig. III-135. Ceiling boards in Room 205 showing hand-planing marks running longitudically along the length of the board.

#### Room 203 (Bedroom 2)

Room 203 is a rectangular room measuring 17' x 8', with a firebox and mantel on the outside wall, and a window on each side of the mantel (Fig. III-136). There is also a window in the middle of the shorter wall of the room. The floor is carpeted and the walls and ceiling are unpainted pine boards.



Fig. III-136. Room 203.

## Floor

The floor is covered with green wall-to-wall carpeting fixed to the floor on the outside edge with nailing strips. Under the carpet are two layers of decorated linoleum flooring over 5-1/2" - 6" pine boards that run east-west. The hearth in front of the mantel is covered with cement. There is a capped gas line coming through the wall on the south side of the mantel that was used to fuel the gas heater that sat on the hearth. Walls

The southeast and north walls are trimmed at the bottom with a 5-1/2" baseboard—a design feature common to all of the original walls on the second floor. Above the baseboard is a single board wainscoting that is revealed to be at least 16"

wide below the chair rail. The chair rail is of the 3 piece type- rail, rail support and trim, 22" from the floor, forming the stool of the window opening. The chair rail separates the top of the wainscoting board and the first horizontal paneling board. In the center of the east wall are a firebox and a mantel. The firebox opening is 35" x 31" and is brick lined. There is an iron camber under the top edge of the fireplace opening. The cheeks

measure 15" and the brick fire back is 21" wide (Fig. III-137). The mantel is white painted wood of a Federal design, based on the classical detailed columns on the jambs, columns in the frieze and a tall frieze. The tops of the columns in the frieze consist of a series of increasingly deep molding that forms a continuous bracket the width of the mantel, supporting the mantel.



Fig. III-137. Room 203 (Firebox).

There is a window on each side of the

fireplace on the east wall and one window in the center of both the north and south walls. Around the window openings, there are 4" wide flat board casings, trimmed with a trim inset 3-1/2" in from the inner edge of the casing. The stool of each window is the rail portion of the chair rail ensemble. This window opening feature matches those in all of the other window openings on the second floor.

There is a light switch for the overhead light inset into the west wall of the room, to the north of the opening doorframe. On the north and south walls, externally mounted conduits fastened to the baseboards provide a plug-in.

#### Doors and Windows

There is no door from Room 201 to Room 203. All four windows in this room are of a similar design to the others on the second floor; one-over-one, double hung aluminum frame windows. The windows are covered with vinyl venetian blinds.

#### Ceiling

The ceiling boards are 5-1/2" - 6-1/4" wide unpainted pine tongue-and-groove boards running in an east-west direction. An overhead light is mounted on the ceiling in



Fig. III-138. Room 206 (Closet).

the center of the room.

#### Room 206 (Closet).

Room 206 is rectangular, 11' x 9', with another door at the north of the room. The ceiling is 7' high, though it slopes off to the sides due to the steep pitch of the gable roof (Fig. III-138). Floor

The floor is one step down from the floor in Room 205 and is covered in green carpet. The wood flooring below is nonhistoric.

#### Walls

The east, west and south walls are paneled in modern mahogany paneling. The east and west walls are very low, at 3' above the floor. The doorway on the south wall to the attic above the kitchen is offset to the east. There is no casing or trim around the doorframe. The north wall of Room 206 where the entrance door is located is finished in novelty board that is very faded and appears not to have been painted. Because it is on the south wall of the house between the kitchen

and the main house, its unpainted state could indicate that the roof closing in the original or replacement kitchen was added after the novelty siding was applied to the building (Fig. III-139).



Fig. III-139. Unpainted exterior sheathing boards of the south wall, as shown from inside Room 206 looking north to Room 205.

Doors and Windows

The entrance door to Room 206 is D18, in the south wall of Room 205. It is of very similar design to D17, also in Room 205. D18 is a batten door of four vertical pine tongue-and-groove planks, fastened together with three cross pieces on the backside and a wooden string and latch lock. The cross pieces are nailed using cut nails. The end cross pieces on the back side of the door were cut off with an electric circular saw to fit between the existing studs used to frame the window. The doorway opening is non-historic; the door itself is historic, but from some other location in the house. The present opening for door D18 was originally constructed as a window opening in the south wall of the house. A defining characteristic of an "I" house is the placement of windows in mirrored positions in the front and rear walls of the second story to promote cooling. Ceiling

The ceiling of Room 206 is covered with modern sheet mahogany paneling. At the apex of the ceiling is an externally mounted uncovered florescent tube.

#### III.2.c.3 Systems

All utilities, including water, electricity, and natural gas, are presently disconnected and shut off. Electrical wires are exposed along walls and some are encased in metal conduits. Some of the plumbing and fixtures in the non-original but historic bathrooms (Rooms 103 and 204) of the main house have been replaced or removed; the bathtub is missing completely from the upstairs bathroom (Room 204).

At present, there is no HVAC system installed and no ductwork in place to move forced conditioned air throughout the building. Photographs reveal that the house was cooled by window-unit air conditioners. Capped gas lines present in many locations indicate that the house was likely heated by natural gas space heaters (See Fig. III-93). The wood-burning fireplaces were probably also used as a heating source.

## III.2.d Photo Key



LYON HOUSE 

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## PART III: BASEMENT FLOOR AND FOUNDATION PHOTO KEY



# PART III: 2ND FLOOR PHOTO KEY



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#### PART IV: CONDITIONS ASSESSMENT

This section will summarize the conditions of the materials and systems that comprise the house, outbuildings, and landscape of the Lyon property. The current conditions of various elements of the property will be described, along with an analysis of the cause of the condition. No invasive methods were used to determine the cause of damage or deterioration.

## **IV.1 Site**

**IV.1.a Landscape** 



Fig. IV-1. Abandoned farm equipment covered with vegetation.



Fig. IV-2. Vegetation encroaching on privy.

The condition of the landscape is generally fair. No significant erosion was noted and with the improvements made by the PATH Foundation, property adjacent to the site has been maintained.

Vegetation has generally been allowed to encroach upon the house and all outbuildings and, in some instances, has been neglected for an extended period of time (Fig. IV-1). Vines have grown into the mortar of the west facade chimney and have completely enveloped some outbuildings (Fig. IV-2).

Trees and shrubs have not been pruned or trimmed, resulting in damage to the house and foundation, and potentially irreversible damage to the plant material. Tree limbs that have fallen as a result of weather or deterioration of trees have not been removed (Fig. IV-3). On the north and west sides of the house, there are groupings of historic trees whose overall health is undeterminable without an arborist's inspection.

#### PART IV: CONDITIONS ASSESSMENT

The lawn is in poor condition with unhealthy grass, bare spots, unfilled animal holes and trenches, and fire ant infestation. Bird, wasp, hornet and dirt dauber nests are present in all buildings on the site.

Circulation patterns remain intact. The driveway encircling the house is in fair condition, with ruts and deterioration of gravel components consistent with its age. The concrete walkway on the west side of the house is in poor condition, with extensive spalling noted on the western portion, nearest to the driveway.

The granite retaining wall defining the house site on the north and west is covered with vegetation and organic matter from tree leaves and shows minimal erosion. Fence materials on the west side have deteriorated, but fence posts are in fair condition (Fig. IV-4).



Fig. IV-3. Looking west. Historic oak tree growing over barn.

View sheds from all orientations have been altered by the growth of the trees.

Few site furnishings are present on the property. A concrete bench in the west yard is in fair condition. Farm tools and machinery are located throughout the property; however, a complete inventory was not taken.



Fig. IV-4. Looking east. Overgrown vegetation in

#### **IV.1.b Outbuildings**

#### A. Smokehouse (Figs. IV-5-IV-7)

Overall, the smokehouse is in good condition. The boards in the east gable end



Fig. IV-5. Smokehouse located southeast of the Lyon House.

have been severely damaged by ultraviolet light and solar radiation to the point that the wood is starting to buckle. The west façade, not facing the sun, does not have this type of damage. In the east gable end, there are also boards missing. On the roof, shingles have become detached from the roof or are missing altogether. Additionally, the door to the

structure is no longer on its hinges. The northwest corner of the facade also shows damage from powderpost beetles and termites.



Fig. IV-6. Ultraviolet damage to the east gable end of the smokehouse. Notice that some of the boards have started to buckle and that others are missing.



Fig. IV-7. Deteriorating asphalt shingles on the north plane of the smokehouse roof

#### PART IV: CONDITIONS ASSESSMENT

#### B. Wood shed (Fig. IV-8)

There is no remaining roof system, doors or windows. The floor is grass.

### C. Workshop (Figs. IV-9 and IV-10)

The structure is in fair condition. It is surrounded by overgrown vegetation on all four sides. The vegetation on the north is so thick that it prevents the door on that facade from being used. The most significant problem with the structure is that a tree has fallen on the east façade,



Fig. IV-8. Taken south of the Lyon House looking east. The smokehouse (left), wood shed (center) and privy (far right) are visible.

damaging the door and roof. Sections of metal are also missing in various locations on the roof. Additionally, part of the foundation on the south facade is missing.



Fig. IV-9. Looking south from the Lyon House. The north and west facades of the workshop are visible.



Fig. IV-10. North facade of the workshop. Notice the encroaching trees on the east façade.

## D. Single pen (Figs. IV-11 and IV-12)

The single pen is in good condition. The most serious concern for the structure is the amount of vegetation that surrounds it. On the south façade, there is a large tree

#### PART IV: CONDITIONS ASSESSMENT

that prevents easy access into the structure. Additionally, several large fire anthills surround the structure.



Fig. IV-11. Looking southeast from the Lyon House, with the privy at center and single pen on the right. (Photo by J. Brinkman 2004)



Fig. IV-12. The south and east facades of the single pen. Notice the large amount of vegetation obscuring the windows and doorway on the south façade.



Fig. IV-13. North façade of the privy. Notice the overgrown vegetation surrounding the privy that is causing it to lean left. Also notice the dip in the roofline indicating the large hole in the shed roof.

## E. Privy (Fig. IV-13)

The privy is in poor condition. The structure is surrounded by overgrown vegetation and the east and north facades are covered by vines. It is likely that these vines are holding the structure together, preventing it from collapsing. However, the structure will not remain stable for long. The plant material on the privy is putting pressure on it, causing the structure to lean in an eastward direction. There is also a large hole in the northeast corner of the roof.

#### F. Unknown structure (Fig. IV-14)

Prior to the commencement of this Historic Structures Report, the structure in question collapsed. It was rectangular in shape and had beveled siding on the north facade. The west
and south facades are no longer extant. The roof material was metal. Because of the manner in which the structure collapsed, it is impossible to determine the type of roof or the type of siding on the east facade.

## G. Barn (Figs. IV-15 and IV-16)

The barn is in fair to poor condition. The majority of the west facade is missing, as well as portions of the south facade. The foundation pier in the southwest corner is also missing. Several sheets of metal on the north plane of the roof are missing or have come loose. The



Fig. IV-14. Unknown structure located east of the Lyon House, which collapsed prior to the commencement of the HSR.

structure is surrounded by overgrown vegetation and several large fire anthills.



Fig. IV-15. Looking west from the Lyon House, the east façade of the barn is visible.

This structure collapsed prior to the

H. Garage (Fig. IV-17)

project's team initial site visit.



Fig. IV-16. What remains of the west façade of the barn.



Fig. IV-17. Looking southwest from the Lyon House. Notice the garage, which collapsed prior to the commencement of the HSR.

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# I. Small barn (Fig. IV-18)

The small barn is in fair condition. Aside from the large amount of vegetation



Fig. IV-18. What remains of the east facade of the small barn.

surrounding the structure, the most significant condition issue is the missing west facade. The vertical siding under the east gable end is unprotected, leaving it susceptible to ultraviolet damage.

# J. Well structure (Fig. IV-19)

The condition of the well house is fair to good. There is a hole in the northwest corner of the roof. On all four facades of the structure there is mold growing on the CMUs, due to the large amount of vegetation surrounding the structure. There is a large amount of trash surrounding the structure on the north and east facades, including leftover asphalt roof shingles. Amongst the trash is a Fairbanks Morse scale that was produced in Chicago (model # G028439 or 38).



Fig. IV-19. Well structure surrounded by overgrown vegetation.

# K. Boiler (Figs. IV-20 and IV-21)

The boiler is in good condition. The wood truss system appears to have been knocked to one side and the copper evaporator pan was taken from the property

between July 1 and September 27, 2008. The metal pan in the northeast corner is rusting and the porcelain sink in the northwest corner is filled with forest debris.



Fig. IV-20. Sorghum boiler.



Fig. IV-21 Copper evaporator prior to it being stolen. Notice the portland cement patches visible on the chimney.

## L. Mill (Fig. IV-22)

Overall, the mill is in good condition. It has rust on it and vines growing around it. The mill was used to crush the sorghum cane, which was grown on the Lyon farm, releasing the cane juices. The juices were then taken to the boiler, where they were gradually boiled into sorghum syrup. Sorghum syrup was a common, all-purpose sweetener, which, since it was locally produced, was much less expensive than sugar or molasses.



Fig. IV-22. Cane mill surrounded by vegetation.

# **IV.2 House**

## **IV.2.a Exterior**

## **IV.2.a.1 Foundation**



Fig. IV-23. Termite damage to sill on north facade.

The most significant problem with the foundation occurs along the north facade. The north sill is collapsing due to termite damage compounded by the weight of the house. This is especially true near the main entrance to the house, which can no longer be used as a result of the damage (Fig. IV-23).



Fig. IV-24. Powderpost beetle damage to south sill.



Fig. IV-25. Looking east, showing damage to the summer beam.

The east, west, and south sills of the main house appear to be in good condition, but exhibit signs of powderpost beetle infestation (Fig. IV-24). Both the summer beam and additional beam supporting the northeast side of the main house, are sagging, split, and warped (Fig. IV-25). In addition, the summer beam displays signs of extensive termite damage. As mentioned in section III.2.a, the beam supporting the northeast portion of the house was most likely previously used as part of the foundation and was probably already deteriorated when placed in its present location. The foundation, sills, joists and flooring of the rear ell appear to be in good condition. The foundation shows no cracks and the mortar appears to be in good condition.

The granite blocks that make up the walls of the basement (Room 001) are mortared with red clay. The condition of the mortar varies—in some areas it is largely intact, but in others (such as the majority of the fireplace) it is completely absent. A number of the blocks are loose and may soon fall. Most noticeable is a block in the room's north chimney that has slipped from its original position and dangles above the floor (Fig. IV-26). Bolts holding plywood covers have pierced the frames of windows W1 and W2 on the south wall (Fig. IV-27).



Fig. IV-26. Looking north in Room 001 at the granite fireplace.



Fig. IV-27. Close-up of window W2 showing damage to frame due to bolted-on plywood.

## IV.2.a.2 Exterior-Facades

## North Façade

## Foundation

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The foundation appears to be stable; the structure maintains a consistent horizontal orientation when checked at various locations with a spirit level. But, the foundation is not water-proofed. The granite stones are exposed, with little to no mortar visible. Moss, lichens, and algae are clearly evident the entire width of the facade. Of greatest concern is the absence of the sill due to termite damage.

Unchecked water damage possibly contributed to the sill deterioration; capillary action from this damage negatively impacted adjacent boards, causing them to deteriorate, as well. The missing sill has also created an entry point for rodents and other pests to access the lower areas of the house.

## Walls

The paint is peeling, cracking, and discolored all over. The siding shows evidence of termite infestation, especially west of the door (D5), where termites created holes measuring 3' x 7", 7" x 3-1/2", and 7'-1/2" x 7'-1/2". Damage is also evident east of the door, including a series of termite chambers measuring 4" x 7", approximately 4" east of the portico stoop.

Closer to the ground, there are numerous missing boards. West of the door, especially immediately north of the northwest corner of the portico floor, the missing boards create an opening measuring approximately  $1' \times 6"$  at the widest point. This problem continues all along the lower portion of the facade. The lower ends of the



Figure IV-28 Door (D5) covered with plywood.

corner boards on the west and east edges of the facade are missing; the gap between the lowest end of the east corner board and the ground is approximately 6". Termite infestation combined with poor moisture control contributed to the partial or complete deterioration of these boards.

## Windows and Door

Wire nails and round-headed bolts hold sheets of plywood over all the windows ((W7, W8, and W10 on the first floor and W18, W19, and W20 on the second floor) and the door (D5), as part of the mothballing process (Fig. IV-28). Since the plywood has not been removed to assess the condition of the

windows and door, the extent of the damage cannot be determined. The nails and bolts have certainly caused irreversible damage to historic materials.

#### Portico

The paint on the gable has yellowed. The columns, floor, and stoop also show

discoloration, along with bubbles and cracks. The paint on the fascia has almost completely worn off, revealing cracked wood underneath. Unequal lengths of wood were used to construct this fascia; one gap on the west end shows jointed pieces of wood that were poorly sealed.

The columns are not straight, leaning approximately one to two degrees east. The west column has almost completely rotted away from its foundation; a hole is evident where the bottom of the column meets the floor of the portico. The east column has a similar problem, though not as extensive (Figs. IV-29 and IV-30).

The portico has detached from the wall of the house on the northwest side by approximately 5", severely compromising the stability of the structure.

The portico is covered by the same



Figure IV-29 Portico (North facade). Notice leaning columns.



Figure IV-30 Portico (North facade). Notice detachment from house.

standing-seam roof as the rest of the structure. Laid out unevenly, the roof provides coverage, but little protection against water seepage. No gutter system is evident, though over-hanging eaves west and east of the roof direct water away. The integrity of the paint on those sides remains relatively intact. Since no eaves hang over the front, water runs straight down the fascia boards. Flashing needs to be installed. Foliage

There is abundant vegetation along the north facade: three holly bushes grow adjacent to the wall, touching it at various locations; ivy climbs the northwestern-most corner of the facade (Fig.IV-31); and one relatively young tree grows approximately 15' north of the east side of the facade. This excess of vegetation, though part of the

historic nature of the property, not only generates, but retains, moisture, stimulating the



Figure IV-31 Northwest corner. Notice damage to boards above foundation, vines growing on wall, and overgrown shrub adjacent to house.



Fig. IV-32. West chimney covered in vines.

growth of mold, mildew, and rot.

As the tree matures, it will hang over the structure, and deposit not only leaves, twigs, and fruit, but also heavy branches; a strong wind or other adverse climatic conditions can cause branches (and the entire tree, itself) to break and fall on the roof, potentially creating the need for repairs or replacement. Roots from the tree can grow into and out of the structure. They can also grow under the structure, thereby de-stabilizing the foundation. West Facade

## Chimney

The chimney and its foundation are in good condition, although the mortar is deteriorated (Fig. IV-32 and IV-36), possibly due to splash back from rainwater runoff. The original mortar of soft red clay and the repointed mortar (Fig. IV-34 and IV-35) have deteriorated in many places due to regular weathering and climbing vines (Fig. IV-36). Most of the upper portion of the chimney is covered in climbing vines (Fig. IV-33), which prevents an accurate assessment of the condition of the bricks and mortar. The growth of the vines is severely damaging the mortar. A closer inspection of the top of the chimney after the removal of the vines is needed to assess the damage, as it is completely out of view.



Fig. IV-33. Top of the west chimney, note the television antenna.



Figs. IV-34 and IV-35. Deteriorated mortar on the west chimney.



## Porch

At the north end of the porch are the remains of wooden steps leading up to the porch next to the chimney (Fig. IV-36). The wood has deteriorated so badly that the steps are dangerous and completely unusable. The main stairs are in good condition; the mortar, stone and concrete are stable (Fig. IV-37). There are cracks in some of the mortar and it appears that, at some point, the stones



Fig. IV-36. Foundation of west chimney. Notice the missing mortar on the foundation and the bricks above. Also seen are the damaged north steps.

along the north and south sides of the steps were repointed with portland cement (Fig. IV-38).

The porch has severe wear along the edges of the flooring (Fig. IV-39), possibly due to water draining from the roof, since there are no gutters. The hole in the porch **106** 

(Fig. IV-40) appears to have been caused by severe termite damage and a leak in the roofing (Fig. IV-41) directly above the space, evidenced by numerous small holes and

rust. This has resulted in severe structural damage (Figs. IV-42 and IV-43) and access to the crawl space under the house. Termites and water have damaged the floorboards and supports in this area extensively. There is also damage around the bottom of each 4" x 4" post supporting the roof, which appears to be from water and age (Fig. IV-44). Some of these same posts are



Fig. IV-37. Main stairs to the west porch.

beginning to sag into the flooring (Fig. IV-45), as they were placed directly on the flooring with no structure supporting them from underneath. It appears that the termite infestation has been halted, although not repaired. Other areas of water damage are visible on the eaves and the sill of the porch (Fig. IV-43) along the CMUs, due to improper drainage from the roof.



Fig. IV-38. Close-up of the north side of the main stairs. Notice the repointing with portland cement.



Fig. IV-39. Deterioration at the edges of the porch due to water.



Fig. IV-40. Hole in the west porch due to water and termites.



Fig. IV-42. Damaged porch support due to termites.



Fig. IV-41. Roofing above the hole in the west porch. Note the rust and damaged wood supports. There are also several small holes in the material.



Fig. IV-43. Outside sill of the west porch damaged by water and possibly termites.



Fig. IV-44. Support on the north end of the west porch. Not the wear on the end of the post.



## **South Facade**

The main condition issue on this facade (Fig. IV-46) is a lack of



Fig. IV-45. Close up of one of the supports next to the hole in the west porch. Note the deterioration under the floor where the post is not supported.

paint, which has peeled off a large portion of the siding,

revealing bare wood that has turned gray due to ultraviolet radiation exposure. There is a hole in the siding where a mercury vapor light

Fig. IV-46. The south façade of the rear ell.

fixture is mounted. On the south façade of the Ihouse, the siding is damaged in several places (see fig. IV-47). The plywood mounted over the windows has caused damage to their frames, as noted in the sections for Rooms 001 and 107. The foundation is intact with no cracks. The mortar appears to be intact as well.



Fig. IV-47. The junction of the east façade with the south façade of the I-house, showing damage to the siding.

## East Facade

The continuous CMU foundation on the east facade is protected by a layer of gray paint, which appears to have provided some protection from moisture infiltration. There is no visible deterioration of the foundation (Fig. IV-48). Conversely, the wooden shiplap novelty siding is greatly threatened. The original white paint is in an advanced state of deterioration and is no longer protecting the wood. This is the case for the entire east façade, although the paint deterioration is less pronounced on the wall areas protected by the porch roof (Fig. IV-49). The wood floorboards of the porch are also in an advanced state of deterioration, and it is unclear whether they are presently structurally sound in a number of areas (Fig. IV-50). The window and door openings on the east facade of the house are covered with plywood for security purposes. This plywood is attached directly to the wood window frames with large metal bolts, resulting in large bore-holes (Fig. IV-51). The chimney on the east façade is also greatly deteriorated. A great deal of the mortar between the bricks is no longer present, and this situation has been exacerbated by birds



Fig. IV-48. CMU foundation on the east façade.



Fig. IV-49. Paint deterioration on the east façade



Fig. IV-50. Deterioration of wood floorboards on East Porch.

that created dozens of small holes in the mortar (Figs. IV-52 and IV-53). The integrity of the chimney was apparently of concern at some point in the past, as a layer of stucco or cement was applied over the brick toward the top portion of the chimney (Fig. IV-54).

Rainwater disposal problems associated with the roof have resulted in deterioration of a number of areas on the east facade. At the junction of the two-story section of the house with the one-story section of the house, there is severe deterioration of the wood wall cladding at both the level of the shed roof and just above the foundation (Fig. IV-55). The eaves on each portion of the east façade are badly deteriorated. On the two-story portion of the house, water infiltration has compromised the eaves to the point where wasps have been able to gain access and build nests. Additionally, there is rust staining as a result of water runoff from the metal roof in a number of places on the east façade (Fig. IV-56).



Fig. IV-51. Protective plywood panels that were mounted to window frames for security.



Fig. IV-52. Holes in east façade chimney created by birds.



Fig. IV-53. Detail of bird holes in east façade chimney.



Fig. IV-54. Repair work at top of east façade chimney.



Fig. IV-55. Hole in siding just above foundation.



Though the roof is showing signs of its age, overall it is in good condition. There is some exterior corrosion but this does not seem to be affecting the integrity of the roof yet. The roofing system lacks flashing where the rear ell gable meets the side of the twostory section of the house, and around the internal chimneys. From the attic, gaps can be seen between the metal roofing and the chimneys, the eaves, and the cornice, enabling water to penetrate the interior of the house. This is causing a moisture problem in some areas of the interior . Water damage and the resulting rot can be seen around the south interior chimney (Figs. IV-57 and IV-58). This rot is causing the metal supports over the joist to fail and put the full weight of the chimney on the ceiling. The roof also lacks a drainage system to



Fig. IV-56. Rust stains caused by runoff from metal roof.



Fig. IV-57. Attic (Room 207). Lack of chimney crickets around the south internal chimney has caused the wood around the chimney to rot. The two metal bars and the joist are used to defer the weight of the chimney from the ceiling to the joist. However, the rot has caused this system to fail and the weight of the chimney now rests on the ceiling.



Fig. IV-58. Attic (Room 207). Rot and water damage around the south interior chimney affects the ceiling joists and the wood that forms the ceiling.



Fig. IV-59. Attic (Room 207). Buildup of creosote on the exterior bricks of central interior chimney. This buildup suggests that there is a crack or opening in the flue.

carry rainwater away from the house and its foundation.

The central interior chimney, as seen from the attic (Room 207), has a buildup of creosote on the exterior brick (Fig. IV-59). As creosote typically builds up in the interior flue of a chimney, exterior buildup suggests that there is a crack or opening in the flue. This buildup is not only extremely flammable but will, over time, deteriorate the historic bricks.

There is no evidence of wood damage from termites, powderpost beetles, carpenter ants, or bees.



Fig. IV-60. Example of damage to wood frames, Room 105, a result of measures taken to secure the house openings.

## **IV.2.b Interior**

IV.2.b.1 First Floor Room 101 (Hall) Floor

The room slopes down toward the north side of the house due to complete failure of the north sill caused by extensive termite damage. Walls

Severe termite damage is present around the entrance door and around the wood frame at

the stairway entrance. Termite damage is present on the east wall at the baseboard. All trim on the windows and doors is damaged due to measures taken to secure the house's openings (Fig.IV-60). Large holes have been created by the bolts used to attach plywood to the window and door openings.

Doors and Windows

Door D5 and the surrounding trim have been varnished in a way that does not resemble finishes elsewhere in the house. In addition, there are marks in the finish along the top of the door. D5 does not open due to the deflected frame and floor caused by the collapse of the north sill.

## Room 102 (Bedroom #1)

## Floor

The floor of Room 102 slopes down toward the north side of the house due to termite damage to the foundation. There are gaps (approximately 1/2" wide) opening to the outside between the floor and the wall.

## Walls

There is water damage on the south wall near the ceiling, possibly due to a plumbing leak on the second floor or water intrusion through the exterior siding.

Interior trim is worn and chipped in some areas, but is generally intact and in good condition. All trim at windows and doors is damaged due to measures taken to secure the house's openings. Large holes have been created by the bolts used to attach plywood to the window and door openings (Fig. IV-60). Some termite damage is present on north wall baseboards.

The fireplace mantel is in fair condition with some termite damage evident on the top, right side. The fireplace opening has been filled with rocks and rubble and covered over with plywood.



Fig.IV-61. Water damage at ceiling and upper walls, Room 102.



Fig. IV-62. Water damage on plywood subfloor, Room 103.

## Ceiling

Water damage is present on the ceiling near the south wall, possibly due to a plumbing leak on the second floor or water intrusion through the exterior siding (Fig. IV-61).

## Room 103 (Bathroom)

Floor

The vinyl flooring is in poor condition and has been partially



Fig. IV-63. Mildew at tub-tile panel intersection, Room 103.

removed. Water damage is evident near the east wall (Fig. IV-62).

Walls

Excessive mildew is present on the walls and in the tub area (Fig. IV-63).

## Additional features

The plumbing fixtures appear to be in poor condition and of low quality.

## Room 104 (Laundry Room)

The condition of the laundry room is poor.

## Floor

The floor slopes toward the south side of the room. There is termite damage to the sill on the south façade of the room.



Fig.IV-64. Room 104 . Moisture around fuse box.

Walls

There is mildew on the walls and ceiling, a clear sign of a moisture problem due to a leak in the roof. There is significant danger because the fuse box is located in this room (Fig. IV-64).

## Ceiling

Where the entryway frame meets the ceiling, there is bowing and separation. The wood frame at the ceiling is separating from the gypsum board that is bulging in a convex manner. This is a further sign of a moisture problem (Fig. IV-65).



Room 105 (Living Room)

Fig. IV-65. Room 104. Ceiling above entranceway.

The floor of Room 105 slopes down toward the north side of the house. There is a difference of approximately 2" in ceiling height from the south side of the room to the north. This is due to the deterioration of the underlying wood structure, caused by termite damage.

## Walls

Floor

Termite damage is present on the north wall paneling near the baseboard.

Interior trim is worn and chipped in some areas, but is generally intact and in good condition. All window and door trim is damaged due to measures taken to secure the house's openings. Large holes have been created by the bolts used to attach plywood to the window and door openings (Fig. IV-60).

The fireplace mantel is in fair condition, although small pieces of wood trim are missing (Fig. IV-66). The fireplace opening has been filled with rocks and rubble and covered over with plywood.



Fig. IV-66. Missing wood trim at fireplace mantel, Room 105.



Fig. IV-67. Door D11, note Cross-and-Bible configuration.



Fig. IV-68. Room 106. Northeast corner has missing shoe mold.



Fig. IV-69. Room 106. Northwest corner has moisture damage and missing shoe molding.

## Doors and Windows

Door D11 has a missing panel that has been covered over with plastic (Fig. IV-67).

## Room 106

The present condition is fair overall.

### Floor

The floor slopes toward the northwest due to termite damage in the support beam of the north facade. Several bricks have separated from the mortar and have been loosely repositioned on the west side of the hearth, which is composed of modern bricks.

#### Walls

In the northeast corner of the room there are warped boards that could indicate a moisture problem. Approximately 2' of quarter round trim in the northeast corner is missing due to the moisture problem and has fallen away from where the wall meets the ceiling (Fig. IV-68). The paint on the tongue-and-groove boards is peeling and flaking. The quarter round trim on the northwest wall also has a strip that measures approximately 1'-5" missing in that corner where the wall meets the ceiling (Fig. IV-69). The fireplace mantel on the south wall is missing its right side support.

## Ceiling

The ceiling is sagging in both the northeast and northwest corners and the boards themselves are bowing, with paint peeling, indicating a moisture problem.

# Room 107

The present condition of Room 107 is fair. Many of the historic elements were

compromised when the house was boarded up for security purposes. The window molding has substantial holes drilled through it in order to accommodate the screws and bolts.

Floor

The floor slopes toward the north end where there is termite damage to the support beams of the north façade. Walls

There is a substantial accumulation of soot and ashes in the north fireplace. The north wall above the fireplace on the east side has smoke marks.

## Ceiling

The southeast corner of the ceiling has a bulging piece of sheet metal as a patch. One end of this patch has green paint peeling and falling off in strips, exposing rotting wood, indicating a serious moisture and structural problem. The brick flue or chimney is behind this patch and it appears that the chimney's supports, steel and wood are deteriorating. The bricks are now resting on the



Fig. IV-70. Room 107, ceiling patch, where chimney or flue is subsiding.



Fig. IV-71. Chimney flue in attic (Room 207) rests on a piece of sheet metal used to patch the ceiling in the kitchen (Room 107) below.

ceiling that cannot sustain the weight of the chimney (Figs. IV-70 and IV-71).

Windows and Doors

The windows have been boarded up, sustaining some damage to the sills in the process. The door on the west side (D14) has a late twentieth century door lock that has been fixed into the door below the original door knob; pieces of plywood and a screw have been drilled into the original door frame. (Fig. IV-72) There are rat droppings throughout Room 107.



Fig. IV-72. Room 107, (W14).

# IV.2.b.2 Second Floor

## General

The electrical plugs, switches and light fixtures have numerous apparent deficiencies in most of the rooms. The lack of electrical service in the building does not make it possible to check the safety and operation of any of these fixtures.

Since the water service was turned off it was not possible to determine if there

were leaks in the system and if all of the turn off valves worked to stop the flow of water to disconnected features.

All of the rooms contain discarded belongings—clothing, bedding and small pieces of furniture.

In each room, there are holes drilled through the walls of the window trim to attach the plywood window covers that are presently being used to seal the building. These are not sealed from the outside to prevent water damage or access to the inside by insects.

There is no central heating/cooling source on this floor.

## Stairway and Stair Landing

The bottom two stairs are collapsing as a result of termite damage to the stairs and the underlying floor structure supports (Fig. IV-73).

The shelves of the bookcase attached to the south wall of the stair landing are loose and unstable.

## Room 205 (Bedroom 4)

There is termite damage in the northeast corner of the room. The damage to the paneling is visible from the baseboard to at least 6' above the floor (Fig. IV-74).



Fig. IV-73. Stairwell entrance to second floor.

The paneling on the north and east walls has begun to separate where the walls join as a result of termite damage.

The paneling and wainscoting at the seam between the west wall and the north wall have begun to separate. This is due to the failure of the timber structure in the northeast corner of the room, down to the termite damaged beams and posts in the



Fig. IV-74. Termite damage to paneling, Room 205.

vicinity of door D15 on the first floor.

There is a  $6^{\circ} \times 6^{\circ}$  spot in the floor near window W20 that has termite damage.

There are water stains to the unpainted paneling on the north wall to the east of window W20.

## Room 201 (Hall)

The carpet along the hall is torn and irreparably soiled.

There are electrical switch boxes and exposed wires running from the walls to the ceiling. The grounding and serviceability of these wires is questionable.

## Room 202 (Bedroom 3)

There is termite damage along the seam where the north and east walls of the



Fig. IV-75. Termite damage to northwest corner Room 203.

room meet, continuing from the foundation under the porch and front door up the vertical supporting posts to the second floor (Fig. IV-75).

The carpet on the floor is torn, and irreparably soiled by animal waste.

## Room 204 (Bath 2)

The bathtub is missing.

The hot and cold water connections that serve the bathtub are severed.

A portion of the wainscoting of the south wall where the bathtub was located is



Fig. IV-76. Unpainted wainscoting in Room 204.

not painted white (Fig. IV-76).

The toilet bowl is badly stained.

## Room 203 (Bedroom 2)

There are electrical plugs on conduits and other wires running from the baseboard exposed on the floor. The grounding and serviceability of these wires is questionable.

There is a natural gas line coming through the southeast wall by the fireplace hearth that appears not to be properly capped.

Mortar is missing between many of the bricks in the firebox (Fig. IV-77).

There is a hole in the inside of the chimney on the north side of the flue, caused by disintegrating mortar and falling rocks/bricks.

There are pieces of bricks, mortar, animal waste and other refuse in the hearth that have fallen down the flue.

Light from the outside can be seen through the top of the east wall over windows W15 and W116.



Fig. IV-77. Room 203. Firebox.

The carpeting is torn, irreversibly stained, and contains animal waste.

The linoleum flooring layers below the carpet are torn.

## Room 206 (Closet)

The carpet is torn, irreversibly stained and contains animal waste.

## IV.2.b.3 Systems

The mechanical, plumbing, and electrical systems of the Lyon house are currently inadequate for adaptive use of the house. Electrical wires are exposed along walls and some are encased in metal conduits. The current electrical fuse box is outdated and could pose a safety hazard. The box is located in Room 104, the laundry room, which shows signs of significant water damage, compounding the safety hazard.

# IV.2.c Photo Key







# PART IV: BASEMENT FLOOR AND FOUNDATION PHOTO KEY

LYON HOUSE 
HISTORIC STRUCTURE REPORT



LYON HOUSE 
■ HISTORIC STRUCTURE REPORT

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# **V. TREATMENT**

# V.1.a Treatment Philosophy

The preferred treatment for the Lyon house and property is a combination of rehabilitation and restoration. According to the *Secretary of the Interior's Standards for the Treatment of Historic Properties*:

**Rehabilitation** emphasizes the retention and repair of historic materials, though some latitude is provided for replacement. Focus on the preservation of those materials, features, finishes, spaces, and spatial relationships that give a property its historic character.

**Restoration** focuses on the retention of materials from the most significant time in a property's history, while permitting removal of materials from other periods.

The Lyon house and property can be divided into three separate work projects, worked either concurrently or individually: the house, the outbuildings and the landscape/agricultural site. The treatment objective for the house and outbuildings is the identification and maximum retention of historic fabric, interpretation of its history and rehabilitation for adaptive use. The treatment objective for the landscape/agricultural site is restoration of a working farm in a limited capacity with community involvement.

# V.1.b Treatment Recommendations

The following are specific recommendations for treatment of the Lyon house and property to accomplish the objectives of identification and maximum retention of historic fabric, interpretation of its history and rehabilitation for adaptive use.

## Landscape

Eradicate all fire ant hills Repair granite retaining wall to the north and south of the house Retain arborist for inspection of historic trees Identify, inventory and date historic trees based on arborist's inspection Remove diseased trees identified through arborist's inspection Regrade driveway

## PART V: TREATMENT AND USE

Repair two pairs of granite columns to the west of the house
Clean fence rows on northwest elevation
Prepare community garden boundaries northwest of house adjacent to fence
Brush-hog fields and all overgrown vegetation on all sides
Remove non-native or invasive plant material from site, particularly around foundation of house, chimneys and outbuildings
Remove all non-native plants from west informal garden
Inventory all farm equipment and determine condition for use and secure in a location preferably close to the Lyon House or on the property
Establish area for site visitor parking, causing least disruption to historic site
Commission a Cultural Landscape Report

## Outbuildings

## A - Smokehouse

Replace missing boards in east gable end

Repair damaged boards in east gable end

Reattach loose shingles

Replace missing shingles

Reattach door

Remove wasp nests in southeast end of rafters

Remove dirt dauber nest on horizontal beams

Remove all elements not related to smokehouse activity

## B - Wood shed

No recommendations

## C – Workshop

Remove vegetation from door on north façade Remove debris from fallen trees Repair door and corresponding roof section on east façade

## PART V: TREATMENT AND USE

Replace all missing roof segments Inspect slope of ground south façade for proper drainage Stabilize foundation on south façade

## D – Single pen

Repair hole in roof Remove tree from south façade Remove vegetation from south façade Treat anthill surrounding structure

## E – Privy

- Take apart the structure, taking care to document the original construction and label individual components
- Document and preserve any archaeological resources that might have been disturbed in the process of dismantling the structure
- Rebuild the privy according to traditional building techniques, replacing deteriorated materials with in-kind materials
- Relocate the privy a few feet away from the original foundation so as to not

## F – Unknown structure

Disassemble remaining structure

Inventory and store materials for use in rehabilitation of other structures on site

## G – Barn

Reconstruct west façade with salvaged material from site Remove vegetation from structure Replace missing metal panels on roof

## H – Garage

Disassemble remaining structure

## PART V: TREATMENT AND USE

Inspect and inventory materials that are salvageable for other rehabilitation areas of site

Remove all materials from site that are not salvage material for other structures

## I – Smaller barn

Remove fallen lean-to on south façade

Remove vegetation

Stabilize Floorboards

## J – Well house

Repair hole in southwest corner of roof

Investigate and document the evidence of former structure located adjacent to well

house

Remove trash and asphalt roofing material located in rear

Secure scale manufactured by Fairbanks Morse of Chicago

Remove surrounding trees for free access to structure

## K – Sorghum boiler

Remove debris from interior Research proper reconstruction of boiler Repair to operating condition Remove portland cement on chimney Repoint with lime-based mortar

## L – Mill

Remove vegetation from structure Install pathway connecting sorghum boiler and mill

## Main House

## Foundation

Engage structural engineer to evaluate foundation

- Inspect foundation for deterioration not detectable through visual observation
- Treat entire perimeter for termites and powderpost beetles

Repair granite on north facade

Replace north sill

Strengthen sagging, split and warped summer beam and additional beam supporting northeast façade, using wood epoxies

## Façades (all)

Clean siding Repaint using historically appropriate color Repair damaged siding, if possible Replace missing siding with appropriate material Stabilize the foundation, making sure to prevent future water damage Remove the plywood covering all windows and the door Repair bore holes resulting from application of plywood Determine extent of damage resulting from inappropriate mothballing Remove vegetation Repaint CMUs in places where gray paint is worn

## West Façade

Analyze the mortar on the west chimney Repoint with the appropriate material Repair west porch to secure the crawl space Replace the supporting structures under the porch, flooring Replace roofing materials directly over the porch Replace deteriorated roof supports Remove small steps next to the chimney leading up to the porch

## East Façade

Repair two holes in wall cladding near junction of the two-story and one-story sections of the house

Remove rust staining on porch steps

Seal cracks in porch

Assess wood floorboards of the porch to determine structural soundness

Repair and/or replace wood floorboards of porch

Repaint wood floorboards of porch

# North Façade

Remove remaining pieces of the sill without damaging adjacent boards Replace the sill Stabilize and realign the portico Provide additional support to the portico by adding columns Replace the portico roof, making sure to properly align the over-hanging eaves Cover all holes left from roofing the portico to prevent water damage

# South Façade

Determine structural stability of the portico Remove mercury-vapor light fixture and repair damage to siding

# **Roo**f

Install gutters, downspouts and splashguards

Install flashing where rear ell gable meets the side of the two-story section of the house

Install chimney crickets at intersections of internal chimneys and metal roofing Make sure flashing, chimney cricket, gutter, and fastening material is compatible with the galvanized steel roof

Investigate metal corrosion to determine appropriate repair technique
#### Systems

Replace electrical service to current building code requirements

Replace electrical and/or gas service to accommodate central HVAC

- Repair/replace plumbing lines to accommodate interior and exterior shut off valves
  - and upgraded fixtures in compliance with current building code requirements

# **East Chimney**

Examine to assure that it is structurally sound.

- Inspect the granite blocks at the foundation that may have been subject to shifting
- Repoint lost mortar with new mortar that is visually and structurally compatible with the historic mortar
- Examine the stucco or concrete that was applied over the bricks on the upper portion of the chimney to determine whether or not it is desirable to maintain the application or not

### West Chimney

Install cap/covering for top opening Cut the vines climbing up the chimney at root Remove vines and all other vegetation subsequent to its dying Remove antenna attached to the chimney

# Interior Chimney Rooms 106 and 107

Inspect both interior chimneys for structural soundness

- Consult with chimney sweep and structural engineer about possible crack in central interior chimney
- Clean creosote off exterior historic bricks of central chimney by gentlest means possible
- Replace and secure supports of south chimney
- Reinforce supporting beams with structural steel of south chimney
- Cap chimneys (or cover with wire mesh) to keep out debris and wildlife

#### Basement

Replace clay mortar in granite walls with stable but visually similar substitute Reset loose stone in granite mantel Repair holes in the frames of windows W1 and W2

#### **Interior - Overall**

Remove all plywood, bolts and blocking from windows and exterior doors Repair holes left from bolts with compatible material Repair interior and exterior molding and trim Determine window replacement through more invasive investigations, historic photo documentation. Through analyzing the inventory of windows on the Lyon property, the most appropriate replacement would utilize double hung windows. Additionally, the configuration of the window lights would be 9/9 on the first floor and 6/6 on the second.

### Room 101

#### Floor

Remove carpet and tack strips Inspect historic linoleum for salvage Document color and pattern of linoleum for historic significance and for dating Remove, repair and replace historic tongue-and-groove wood flooring Repair subfloor

#### Door

Remove varnish from Door D5 and surrounding molding Refinish Door D5 and surrounding molding

Room 102

Floor

Remove carpet and tack strips

Inspect historic linoleum for salvage

Document color and pattern of linoleum for historic significance and for dating

Remove, repair and replace historic tongue-and-groove wood flooring

Repair subfloor

#### Walls

Repair water damage on south wall Identify source of water intrusion Remove mold and rotted materials Repair wood members as appropriate from invasive tests

### Firebox

Remove firebox opening cover

Remove rubble from fireplace

Clean and inspect chimney

### Ceiling

Repair moisture damage near south wall

# Room 103

### Floor

Remove vinyl flooring Remove subfloor Inspect for structural stability Install historically appropriate new flooring

## Walls

Remove linen closet walls – D9 Repair walls surrounding former D9 space Remove faux tile paneling on east and south walls Remove ceramic tile on north wall

# Other

Remove plumbing fixtures
Repair damage from moisture if discovered during invasive tests
Replace refurbished or new fixtures as determined by inspection and in compliance with current building code and accessibility requirements
Fill door opening on south wall with compatible material
Repair wall finishes

# Room 104

Remove this addition

Coordinate repairs with Room 103

Professional removal of the fuse box

Repair termite damage to supporting sill if appropriate based on structural report

# Room 105

Floor

Remove carpet and tack strips Remove plywood subfloor Inspect historic linoleum for salvage, if present under subfloor Document color and pattern of linoleum for historic significance and for dating Remove, repair and replace historic tongue-and-groove wood flooring Repair subfloor

# Walls

Remove firebox opening cover Remove rubble from fireplace

Clean and inspect chimney

Door

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Replace missing panel on D11 with material compatible with existing panels in wood species, grain and finish

# **Room 106**

### Floor

Remove vinyl floor

Remove plywood subfloor

Repair and refinish historic wood flooring

Repair termite damage on support beam supporting north wall

# Ceiling

Repair moisture damage on north side of room

# Mantel

Replace east side of mantel by replication of form of existing west side of mantel,

using material compatible with existing material in wood species, grain and finish

# Room 107

### Floor

Remove vinyl floor Remove plywood subfloor Repair historic wood flooring Repair and refinish historic wood flooring

# Door

Remove twentieth century lock on D14

Repair circular hole

Install hinges and latch part removed from door salvaged from attic

#### Windows

Remove aluminum windows

Install double-hung, period appropriate windows

### Firebox

Remove shelf above firebox opening Repair and refinish wood paneling

Remove rubble from fireplace

Clean and inspect chimney

# Room 201

Floor

Remove carpet and tack strips

# Room 202

#### Floor

Remove carpet and tack strips

## Window

Remove aluminum window Install double-hung, period appropriate window

# Wall

Repair structural timber supports behind paneling

# Room 203

## Floor

Remove carpet and tack strips Remove linoleum

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#### Wall

Cap gas line Repair wall with compatible material Remove paint on the wallboards above the mantel Remove modern, unpainted wood shelving/gun-rack supports Remove the metal shower curtain support

#### Windows

Remove aluminum windows Install double-hung, period appropriate windows

#### Firebox

Repair the mortar loss in bricks with matching lime-based mortar Repair hole in flue using replacement rocks and lime-based mortar

### **Room 204**

### Floor

Remove linoleum and other flooring

Remove plumbing fixtures

Repair damage from moisture if discovered during invasive tests

Replace refurbished or new fixtures as determined by inspection and in compliance with current building code and accessibility requirements

### Window

Remove aluminum window Install double-hung, period appropriate window

### Wall

Remove paint from north and west walls

# Ceiling

Remove paint

# **Room 205**

## Wall

Repair structural timber supports behind paneling

Replace damaged paneling

### Windows

Remove aluminum windows Install double-hung, period appropriate windows

# Room 206

Floor

Remove carpet and tack strips

# Walls

Remove clothing rods

# Room 207

# Floors

Insulate to height of joists and then install decking over joists

Stairway and stairway landing

# Floor

Remove carpet and tack strips Repair termite damage to timber framing Replace timber framing that is terminally damaged

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Walls

Remove non-historic shelves

Entire property, including interior of house, foundation and outbuildings

Inspect and treat for termite, powderpost beetle and pest infestations in all outbuildings, interior of house, foundation and porches

# V.1.d Alternative Treatment – Mothballing

As an alternative to beginning the rehabilitation and restoration projects for the Lyon house and property immediately, DeKalb County might choose to temporarily close up the house to protect it from the elements and to discourage vandalism. This alternative may be employed while approvals for the project are pending and/or funding is approved and secured. Referred to as "mothballing," this procedure is briefly outlined below; detailed guidance is available in *National Park Service Preservation Brief 31*, a copy of which is included in Appendix ??.

The three main priorities in mothballing buildings are:

- 1) protection from sudden loss
- 2) addressing moisture penetration and
- 3) controlling interior humidity levels after house is secured.

Below are the major steps and selected, specific items to consider in successfully mothballing a building:

Structurally stabilize the building

Exterminate or control pests (termites/rodents/other-Note: rural location will lead to additional pests)

Install screens to guard against entry Remove nests from eaves

Protect exterior from moisture penetration

- Roof should be watertight
- Install gutters/downspouts/splashbacks
- Repair wood siding
- Inspect grading to ensure proper water run-off
- Remove vegetation from foundation
- Windows protected using plywood panel infill, installed using long carriage bolts anchored into horizontal wooden bracing on the inside face of the window

Doors protected using plywood panels screwed into place (not nailed)

Secure from vandalism and natural disasters

Notify police and fire departments of status of property Install smoke detectors and alarm system Install security lighting

Provide adequate ventilation Leave interior doors open Check building every three months for interior dampness

Systems-secure and/or modify all for long-term closure of building

Develop and implement a maintenance and monitoring plan Overall cleaning of interior Remove trash and prior occupant's belongings Protect historic fabric such as doors, windows and artifacts by inventory, removal and storage in secure place.

# V.2 Use

The availability of the resource to the public as a cultural artifact is dependent upon several factors, including funding and the proposed intent of DeKalb County. Due to financial constraints, Dave Butler, the Greenspace Environment Manager, is most interested in mothballing the house and interpreting the farm area. Interpretation of the house and site will likely be limited due to the remote location, and therefore, lower demand for guided tours. Its close proximity to the PATH trail system would make the Lyon house an ideal rest station, with restrooms and a gift shop with drinks and snacks available for hikers and cyclists. The mechanical and structural systems will need to be upgraded to accommodate these facilities.

Economic conditions have encouraged corporations to stay closer to home for conferences, retreats and meetings. Atlanta is home to many large corporations and a source of potential revenue for the Lyon house and property. These alternatives would generate revenue, utilize the house and justify upgrades to systems including HVAC, electrical, plumbing, security lighting, water, sewer, etc.

## V.2.a Interpretation of Landscape

The Lyon landscape, consisting of approximately 48 acres, may be divided into three distinct areas of interpretation (Fig. V-1):

1) House site—area within the boundaries of the circular driveway.

2) Outbuilding site—area outside the driveway; bordered on the east by PATH, on the south by east/west dirt road, on the west by tree line on ridge above pond, and on the north by property line.

3) Agricultural site—area south of east/west dirt road.

The entire site, taken as a whole, may be interpreted as an historic rural vernacular landscape and is worthy of a formal, commissioned Cultural Landscape Report. Within each area of interpretation, the manner in which the land has been modified by human activity, occupancy or intervention may be related to the history of the Lyon family and the activities historically performed on this property and adapted for use in contemporary life.



Fig. V-1 Lyon House and property, highlighting landscape interpretative site areas. (Photo: Google Earth)

In order to provide additional security for the Lyon house and the site, it is recommended that DeKalb County consider employing an onsite caretaker. The adaptive use of the house could accommodate several people residing on the second floor, while leaving the first floor open for visitation during specific hours. A retired individual, with a background in gardening/agriculture and/or history would be ideally suited for such a position. In addition to security tasks, the caretaker could assist with the development of a community garden, provide interpretations of the landscape to visitors, and coordinate the maintenance of the grounds.

The site also lends itself to further exploration by landscape, historic preservation and archaeology students. Coordination with local colleges and universities could create targeted internship programs that could include documentation of the site for Historic American Landscapes Survey, documentation of the house for Historic American Buildings Survey and archaeological field schools (Fig. V-2).

In conjunction with using the house as a conference/meeting space, a portion of



Fig. V-2. Looking north. Lyon property landscape northwest side of property.

the agricultural site could be used as a site for team building, nature enthusiasts, field days and educational programs for school children. The house and site can be leased separately or together. Other "for profit" activities that could be considered are:

1) Annual farm-days celebrations.

2) Leasing the fields for the production of hay (a traditional Lyon use); the hay could be harvested in period appropriate methods, and the public could participate during "farm days." The hay could be sold to Little Creek Farm, another DeKalb County Greenspace Program.

3) Similar initiatives could be employed with other

"crops."

4) The production of syrup from sorghum grown on the property could be demonstrated.

DeKalb County could partner with the PATH Foundation to integrate the Lyon property into their "facilities," using the site as a stopping point for users of PATH for refreshment, relaxation and relief. Users would have available light refreshments and snacks. In this scenario, the landscape would be used as a picnic type facility, outdoor resting spot, place to secure bike for hiking, passive touring of house and landscape.



Fig. V-3. Lyon House and property with view of potential kitchen garden area.

The following are specific development activities, by interpretation area, which would assist in the overall experience of visitors to the Lyon house and property.

House site (Fig. V-3)

Establish kitchen garden area using historic plant materials—produce for canning,

medicinal herbs and common flowers.

Replant shrubs common in rural areas.

Outbuilding site (Fig. V-4)

Establish walking path beginning at mill site and terminating at smokehouse, connecting all outbuildings.

Install weather-proof interpretive

signage, including photographs, at



Fig. V-4. Lyon house and property. Outbuilding landscape site.

each outbuilding, describing historic activity,

- Develop podcast for inclusion on Arabia Heritage website, coordinating the outbuilding site with the historic activity, for independent walking tour.
- Develop walking tour mini-map with written descriptions of outbuilding, architectural descriptions and historic use.

Establish community garden site in northwest area of outbuilding site.

Locate public restroom facilities in

either reconstructed outbuilding or new, compatible building accessible by PATH users as well as visitors to the Lyon property.

Agricultural site (Fig. V-5)

Establish working farm simulating, on a small scale, the crops grown by the Lyon family, including cotton, corn, sorghum and hay.



Fig. V-5. Looking northwest. Lyon property agricultural site on northwest elevation of property.

#### V.2.b Interpretation of Interior

The interpretation of the interior of the house could be self-guided, following panels mounted throughout the rooms with text and photographs, recounting the history of the Lyon family and describing their daily lives on the farm. The many artifacts currently located in Room 106 and farm equipment used by the family would be on display as visual aids, illustrating farm life in this rural area.

Due to the remote location of their property, the Lyon family reused and recycled, wasting little; tools, buildings, and equipment were rebuilt and repaired, not discarded. An example of this recycling is the smokehouse, which was made of material from the original log cabin that originally stood on the foundations of rooms 106, 107 and 001. When the log cabin was dismantled, the timbers were used to build the smokehouse.

Since the site is a designated Heritage Area, the County is eligible for federal assistance and matching funds; along with additional grants, this could fund a full-time staff coordinator, and make possible more interpretive options. The coordinator could have an office in the house and supplement the staff with interns and volunteers. Potential activities include living history enactments, such as blacksmithing demonstrations, civil war reenactments, and educational programs for school groups (particularly with the nearby Murphey Candler Elementary School; programs with schools generate a surprisingly large amount of revenue). Much of this depends on the area's eventual demand for these resources.

Kelly Jordan, Chief of the Arabia Mountain Heritage Area Alliance, hopes to have Panola State Park manage the Lyon property in conjunction with the 1822 Parker House, interpreting them as early pioneer homes. The Lyon property has been vandalized several times, highlighting the need for an onsite property manager. There is some concern about the public perception of an onsite manager receiving free accommodation. Options that might mitigate this perception include stationing a Panola State Park Ranger on the property or hiring a Master's or doctoral student in Heritage Preservation. A few local colleges and university might provide a student to live onsite and conduct workshops for Preservation students. The student could provide by-thebook preservation care for the house and hands-on training for other students. The

house would be open to the public, with students giving tours and describing the various projects on which they are working. Vandalism due to vacancy would no longer be a problem and the house would be an educational resource for all, from elementary to doctoral students, to retirees, tourists and recreational visitors.

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#### PART VI: MAINTENANCE PLAN

The purpose of this section is to provide a program of ongoing care for the Lyon House and site. Frequently, maintenance is an undervalued element in the effective preservation of an historic site, although the diligent execution of a regular system of care can prevent building failures and the loss of historic elements.

In designing a maintenance program, it is also important to consider the resources available to execute the plan. Care of historic properties is specialized; insufficient direction and guidance on their proper maintenance will likely result in damage. Work should be supervised by personnel familiar with historic preservation practices. Otherwise, detailed instructions should be provided to the maintenance staff, including acceptable types of tools and cleaning solutions, inspection checklists that enumerate what is to be inspected and how the inspection is to be carried out, and proper instruction on care of landscape elements such as pruning and trimming.

# **VI.1 Priority Issues**

Commission a structural engineering report to evaluate the extent of the damage to the foundation from termites and the ability to repair and stabilize.

Structurally stabilize the building.

Establish an annual contract to conduct quarterly inspections regarding a professional termite treatment for the house, foundation and outbuildings.

Exterminate or control pests (rodents/wasps/dirt daubers/fire ants/other—Note: rural location will lead to additional pests).

Remove trash and prior occupant's belongings.

Remove carpet from all rooms in the house.

Clean entire interior of house, exercising care for health considerations due to

# PART VI: MAINTENANCE PLAN

rodent/other pest infestations.

Remove any flammable liquids.

Repair roof, addressing issues with flashing, addition of chimney crickets and metal corrosion.

Install gutters/downspouts/splashbacks.

Determine source of moisture intrusion in multiple areas of house, including first floor ceiling, foundation and bathrooms.

Secure professional inspection of all systems including electrical, gas, heating and air, water and sewage (septic tank should be serviced).

Caulk siding.

Paint exterior cladding with period appropriate color.

Paint deteriorated sections of gray paint on foundation.

Remove vegetation from foundation areas, outbuildings.

Analyze soil grade at foundation of house.

Chimneys

Cut vegetation on west elevation chimney at roots and allow it time to perish before removing.

Repoint mortar, after conducting mortar analysis.

Repair siding to secure building from moisture and pests.

# **VI.2 Cyclical Maintenance**

# **Maintenance Philosophy**

"Stave off decay by daily care" (William Morris)

Maintenance is not optional in the care of historic fabric. The implementation of a routine, cyclical maintenance plan is crucial in the battle to decelerate the rate of deterioration of a resource. Deferred maintenance is equivalent to neglect. **Preventing** damage is essential to avoiding costly repairs or the irreversible loss of historic fabric.

# Maintenance Precautions for Historic Building Materials

- Always use the gentlest method possible to clean/repair/restore
- Repair rather than replace whenever possible
- Use extreme care when cleaning products containing abrasives, acids, ammonia or solvents
- Never saturate wood with water
- Use non-metallic containers for water or liquids
- Always place clean towels under containers with liquids
- Always use pads under feet of ladders and never lean ladder directly against walls or woodwork

Never sandblast

Avoid scraping except when appropriate, such as the removal of paint

Do not assume that repairs cannot be made when maintenance has failed

# **Cyclical Maintenance Timetable**

Maintenance activities are divided into different "cycles:" monthly, quarterly, biannually and annually. In addition, certain functions, such as professional inspections, should be performed on a longer interval commensurate with value/expense evaluations. Initial activities upon engagement for maintenance:

Notify fire and police of property status – vacant/under rehab/hours of operation Engage arborist to inspect all trees and establish rehabilitation of historic trees Secure termite inspection/treatment plan General interior cleaning and removal of dirt, trash and flammable liquids Professional inspection and testing of all existing equipment and systems – heating, a/c, electrical, security, smoke alarms, water and sewage Professional inspection of plumbing for leaks Inspect house and site for rainwater disposal from ground and high points

Monthly/Quarterly Activities

Inspect roof, gutters, attic following (preferably during) severe weather event Open house for air circulation for several hours On-site walking inspection for intrusion, vandalism, pests and damage Inspect for pest intrusion Mowing/trimming as required, more frequently during growing season Check light bulbs, battery packs and monitoring equipment Check all entrances, windows, doors, service entrances for damage or breakage

**Bi-Annual Activities** 

General site clean up – pruning/trimming Fertilize lawns Inspect gutters, downspouts and splashblocks Inspect for pests – attic, basement, crawlspace, under plumbing Inspect interior and exterior for mold, mildew and moisture Clean out storm drains

#### **Annual Activities**

Renew contracts for inspections/equipment, HVAC/utilities/security
Roof inspection – missing or damaged shingles, tree branches, leaves, pest damage, moisture and mold
Termite inspection and treatment
Inspect and clean ventilation systems
Exterior material spot repair
Exterior stain removal from bird droppings/pollution
Clean chimney/fireplace; inspect covers
Exterior/interior paint touch-up
Update building file for maintenance/repairs performed
Septic tank inspection, if applicable

### Long Term Activities

Professional historic structure inspection and documentation, including structural, systems, and identifying patterns of decay and failure

Maintenance Equipment, Tools and Supplies

### Equipment

Ladders – should have permanent built-in protection against damaging floors and walls. If not, use protective non-abrasive pads
Vacuum cleaner – ensure wheels do not scratch or mar floors or furnishings
Mops/brooms – do not clean wood floors with broom
Lawn equipment properly maintained with sharp blades

Supplies - Cleaning

# PART VI: MAINTENANCE PLAN

Sponges – generally cellulose

Containers/pails - non-metallic, one-piece molded polyethylene

- Gloves cotton for uncleaned metal; rubber for substances beyond normal ph of skin
- Soaps relatively free of additives and neutral ph

Detergents – non-ionic

Abrasives – volcanic ash, sand, talc or borax should NEVER be used (Some commercially available cleaners use these as additives to boost cleaning potential)

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# **APPENDIX A**

**PLANS AND DRAWINGS** 





LYON HOUSE 

HISTORIC STRUCTURE REPORT

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BASEMENT FLOOR PLAN


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# APPENDIX B FURTHER INVESTIGATION

- **1. DEVELOPMENTAL HISTORY**
- 2. ARCHAEOLOGY

#### 1. Developmental History

#### History

Areas of further research that could be pursued regarding the history of the Lyon property include confirming the location of the former slave cabins. Based on the 1860 Slave Census, it is known that three existed in that year; by 1973, they had long since deteriorated. According to the Lyon Family History, they were located east of the house, though the precise location has yet to be discovered.

The exact location of Johnson, or "Fortification," Field also remains unknown. Like the slave cabins, it was located east of the house. Based on information in the Family History, the field is potentially rich in archaeological resources—arrowheads and a stone pipe were reportedly found there. Records of the 1922 auction of the Lyon property have not been found. The auction would have taken place late in that year, following the death of Helen Lyon in June. Confirmation of the auction would verify the family's account of the event and further substantiate the history of the property.

Finally, and perhaps most significantly, it would be useful to confirm the actual date of construction of the original log cabin on the property. Although the Lyon family acquired the land in1790, a definitive date regarding their move from South Carolina to Georgia remains undetermined.

#### Chronology and Use

Future investigations of the Lyon House that will refine the Chronology and Use conclusions drawn in the Fall of 2008 include:

- 1. A systematic study of all the nails, wood, stones, and other building materials
- 2. A more thorough analysis of all paint and linoleum layers
- 3. A thorough investigation of all the mantels
- 4. Determining the earliest availability of circular saws in the area
- 5. Locating earliest (and subsequent) local lumberyards or hardware stores that the family frequented
- 6. If possible, researching the inventories of those businesses to determine popular items requested by local customers

- 7. Researching advertisements put out by those businesses
- Conducting oral interviews of all living family members, being careful to ask specific chronology and use questions
- 9. If possible, ask family members to walk through the house and point out specific changes and/or additions
- 10. If financially feasible, engage the services of professionals to help determine chronology and use for the house

Before any investigation takes place, remove all furniture, clutter, and debris from the house. Also, provide plenty of light.

### 2. Archaeology

For thousands of years, the Arabia mountain region has been a hub of human activity, the evidence of which may still be present in a variety of remains. Archaeological resources, including both artifacts (objects made or modified by humans) and features (soil stains), provide valuable information about the past. The archaeological resources of the site may provide additional insight into the existing structures and the historic activities of the residents.

The original house on the Lyon property was constructed around 1800. Prior to that time, the area was occupied by members of the Creek Nation. The Lyon family frequently found artifacts around the property, particularly in the area of the South River, including arrowheads and other stone objects. The family owned slaves who lived, according to some sources, in the basement of the existing house. By 1860, the Lyon slaves resided in houses to the east of the main house. Descendants of the family's slaves still live in the area—interviews with them could yield information about unknown residential structures and landscape usage.

It is important that contractors and workers at the site be aware of potential archaeological resources.

If an archaeological investigation is conducted, the following is recommended:

#### PART VIII: APPENDIX B

- Consult an archaeologist to determine an appropriate course of action and budget.
- Complete the investigation prior to undertaking treatment of the house and site.
- Suggested field methods include: systematic surface and subsurface investigations, metal detector survey, short interval shovel testing
- Catalog any artifacts discovered during work on the site and contact the Historic Preservation Division of the Georgia Department of Natural Resources before continuing work.

Areas to consider for future investigation include:

- Areas adjacent to banks of the South River, reportedly the site of Creek stone tool-making activity.
- Workshop building and surrounding area—could provide insight into industrial activities that took place on the property.
- Privy—latrines provide valuable information regarding dietary patterns, whether they change over time, and if they correspond to regional patterns.
- Well and the surrounding area.
- Basement—according to the Lyon Family History, this area once housed the family's slaves. A concrete floor was added to the basement, probably in the 1950s. If the existing concrete is removed, this could provide more information about the slaves residing on the property.
- Interviews with the descendants of the family's slaves could provide information about unknown residential structures and historic landscape usage.

# APPENDIX C FURTHER READING

### PART VIII: APPENDIX C

The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving Rehabilitating, Restoring & Reconstructing Historic Buildings (included).

National Park Service Preservation Briefs (Brief #31 is included) 01: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings

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04: Roofing for Historic Buildings

06: Dangers of Abrasive Cleaning to Historic Buildings

10: Exterior Paint Problems on Historic Woodwork

<u>17</u>: **Architectural Character** - Identifying the Visual Aspects of Historic Buildings as an <u>Aid to Preserving Their Character</u>

20: The Preservation of Historic Barns

24: Heating, Ventilating, and Cooling Historic Buildings: Problems and Recommended Approaches

26: The Preservation and Repair of Historic Log Buildings

31: Mothballing Historic Buildings

32: Making Historic Properties Accessible

PART VIII: APPENDIX C

<u>36: Protecting **Cultural Landscapes**: Planning, Treatment and Management of Historic Landscapes</u>

# APPPENDIX D TECHNICAL REPORTS



## Lyon Plantation House

#### Lithonia, Georgia

#### **Preliminary Finishes Analysis**

November 5, 2008 By Maryellen Higginbotham Preservation/Design Consultant

## Introduction

This preliminary finishes analysis of the Lyon Plantation House in Lithonia, Georgia, has been conducted in conjunction with a Georgia State University, Conservation of Historic Building Materials student study of the Lyon Plantation buildings. Analysis findings were presented and discussed at the November 5, 2008 class meeting. The Lyon Plantation House, constructed before 1860 and modified with a single story extension in 1892, was the home of Lyon Family members for over one hundred and seventy years.

The exterior of the I-house and the 1892 south wing has been re-sided and all windows have been replaced during the twentieth-century. Windows and all but one door are presently covered with plywood.

The house and remaining acreage were purchased in 2004 by Dekalb County to become part of the Arabia Mountain National HeritageArea. The role of the house in this project has not been determined.

## Scope of Work

Exterior and interior spaces of the house were examined October 25, 2008 during a class field experience. Samples were taken from the east wing siding and the northeast corner board. A cratering technique for paint analysis was demonstrated on the east wing siding.

Interior analysis was conducted in Room 102, Room 105, Room 106, Room 107, and Room 203. Paint samples were taken by students and consultant in multiple areas in each room. Students have participated in microscopic analysis of some of these samples in class.

No wallpaper fragments or tacking patterns were found.

## Findings

The replacement exterior siding of the Lyon House has been painted at least nine times and the paint condition is poor. The paint colors found were grey, cream, and white. The first color found was medium grey and the last color was light grey.

Interior wide board walls of the main house appear to have never been painted, however the wainscot in Room 105 shows evidence of graining. Mantels in Room 102 and Room 105 were originally grained and have multiple layers of tinted varnish. The mantel in Room 203 was

originally grained and has at least six layers of grey and cream paint. Wallboards directly over the mantel in Room 203 also have six layers of grey and cream paint.

Rooms 106 and Room 107 are located in the one story 1892 extension and their walls are constructed of four-inch wide boards. Room 106 has been used as a dining room and painted at least fourteen times [some of the layers could be primers]. The first wall color was light ochre with a cream color on the wood trim and mantel. Creams and greys were popular wall and ceiling colors for the Lyon's family over the years. Door and window trim was painted in various shades of tan, cream and green. The current wall color is tan and the window and door surrounds are a cream color. The ceiling in Room 106 was not sampled.

Room 107 has been used as a kitchen and was also painted at least fourteen times. The first ceiling and wall color was ochre and the window and door trim was a dark gray. Remaining color schemes were similar to those used in Room 106. Current Room 107 scheme is tan walls, cream trim, and a dark green ceiling.

The role of the house in the Arabia Mountain Heritage Project would determine the need for additional paint research.

## Additional Comments

The stylish, yet vernacular, first floor mantels have arched openings in the Georgian style and the scale, tri-part division, and reeding design of the Federal style. The tri-part division of Federal style mantels, shelf, frieze, and pilasters, replicate the entablature and columns of classical architecture. The difference in carpentry skill exhibited in the house construction and the mantels in the Lyon Plantation House suggests that the mantels were purchased rather than constructed on site. The combination of Georgia and Federal style elements and a review of other Georgia interiors with similar style combinations suggest an installation date prior to 1840.

The second floor mantel does not have an arched opening but does exhibit the scale and tri-part division of a Federal style mantel. It is of note that the later painting of the wallboards above the mantel replicates the overmantel design of the Georgian style.

Room 106 in the 1892 addition has a vernacular mantel design of flat board posts, plain shelf, and simple brackets. However, an overmantel design has been created by the placement of the horizontal and vertical sheathing.

The scale of the fireplace opening in the basement room is not indicative of an open hearth-cooking fireplace.

At least five patterns of linoleum were found on the floors in the Lyon Plantation House and in multiple rooms. Linoleum, a composite material of linseed oil, cork dust, wood fiber, tree resins, ground limestone, and pigments, was the invention of the Englishman, Fredrick Walton in the 1860s. The "golden age" of linoleum is said to be 1900-1930. Linoleum was most likely a practical and decorative floor covering in the Lyon House during the twentieth century.

# APPENDIX E SCHEDULES

Trim type	Location	Notes
Door casing trim	<ul> <li>Historic interior door casings</li> <li>1. West door frame from stairs to Hall 201. South jamb missing.</li> <li>2. Door frame on stairs E &amp; W side</li> <li>3. Door frame D11: W side (E side not observed)</li> <li>4. Door frame between Living Room 105 and Hall 101: E side</li> <li>5. Door frame head D17 W side (likely removed from south eastern jamb of Item #1 above).</li> <li>6. Door frame head W side: (no door) Bedroom 2 203 to Hall 201</li> </ul>	
Trim Variants 1,2 &3	Chair rails, interior window trim, interior door trim 1. D11, D5. 2. Staircase opening W side, 3. Door frame W side between Hall 201 and staircase 4. W11,W10, W8, W7, W6, W5, W4, W15, W 16, W17, W18, W19, W20, W21,	- The trim profile is the same in each variant. The dimensions of the wood stock makes the measurements different
Soffit trim	-N & S facades of the two-story "I" house between the top siding board and soffit board	-The back profile is estimated since no trim was removed.
Fascia trim	-N and S facades of the two-story "I" house at the top of the fascia board under the roof edge	-No profile taken due to the interference of roof edge fascia trim is deteriorated on upper edge due to decay

## Lyon House - Trim Schedule

## PART VIII: APPENDIX E











# APPENDIX F GLOSSARY

### PART VIII: APPENDIX F

**Asphalt shingle-** a composition shingle having an asphalt impregnated felt base, surfaced on the weather side with colored mineral granules embedded in a hot asphaltic coating.

Batten door- a door constructed by nailing boards (battens) together in various ways.

**Beam-** a rigid structural member designed to carry and transfer transverse loads across space to supporting elements.

**Beveled siding-** a type of siding that consists of boards that are thicker on one edge than the other; the bottom (thick) edge of one board overlaps the top (thin) edge of the board below.

**Board-and-batten siding-** a siding consisting of long vertical boards and thin strips, or battens; the battens are used to conceal the gaps between the siding boards.

**Bolt-** a threaded metal pin or rod, usually having a head at one end, designed to be inserted through holes in assembled parts and secured by a mating nut.

**Braced frame construction-** a framing system involving the use of corner posts and bracing.

**Chair rail-** a horizontal molding on an interior wall for preventing the backs of chairs from rubbing against and damaging the wall surface.

**Cricket-** a small roof for diverting rainwater around a projection, as a chimney, on a sloping roof.

**Concrete Masonry Unit (CMU)-** a precast masonry unit of portland cement, fine aggregate, and water, molded into various shapes.

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**Collar beam-** a horizontal member that connects two opposite rafters at a level well above the top plate.

**Dentil-** any of a series of closely spaced, small, rectangular blocks forming a molding.

Dimension lumber- yard lumber from 2-4" thick and 2" or more wide.

Doorframe- the frame of a doorway, consisting of two jambs and a head or lintel.

Eaves- the overhanging lower edge of a roof.

Ell or El- an extension that is at right angles to the length of a building

Façade- the front of a building or any of its sides facing a public way or space.

**Flashing-** pieces of sheet metal or other thin, impervious material installed to prevent the passage of water into a structure from any angle or joint.

Flue- an incombustible passage or duct for smoke in a chimney.

**Frame-** a skeletal structure of relatively slender members designed to give shape and support to a building or other construction.

**Gable roof-** a roof sloping downward in two parts from a central ridge, so as to form a gable at each end.

**Handrail-** a rail providing a handhold and serving as a support at the side of a stair or platform.

**Joist** – any of a series of small, parallel beams for supporting floors, ceilings, or flat roofs.

Light- a pane of glass, window, or compartment of a window.

**Linoleum-** a resilient covering formed by coating burlap or canvas with heated linseed oil, powdered cork, and rosin, and adding pigments to achieve the desired color and patterns. Linoleum should only be used on a subfloor suspended above grade.

**Mortar**– a plastic mixture of lime or cement, or a combination of both, with sand and water, used as a bonding agent in masonry construction.

**Mortise joint-** any of various joints between two members made by housing a tenon in a mortise. Also called a mortise-and-tenon joint.

**Mercury vapor lamp-** a high intensity discharge lamp producing light by means of an electric discharge in mercury vapor.

**Monitor roof-** a raised section of a roof, usually straddling a ridge; has openings, louvers, or windows along the sides to admit light or air.

**Novelty siding-** siding composed of boards narrowed along the upper edges to fit into rabbets or grooves in the lower edges, laid horizontally with their backs against the sheathing or studs of the wall.

**Pier-** a vertical supporting structure, as a section of wall between two openings or one supporting the end of an arch or lintel.

### PART VIII: APPENDIX F

**Plywood-** a wood panel product made by bonding veneers together under heat and pressure, usually with the grain at right angles to each other and symmetrical around the center ply.

**Porch-** an exterior appendage to a building forming a covered approach or vestibule to a doorway.

**Portico-** a porch having a roof supported by columns, often leading to the entrance of a building.

Purlin- horizontal members in the roof frame that run on top of, or between, rafters.

**Rafter-** the sloping members of a roof upon which a roof covering is placed. Rafters are given specific names, largely according to their location and use.

Riser- the vertical face of a stairstep.

Sconce- a decorative wall bracket for candles or other lights.

Shed roof- a roof having a single slope.

**Sheetrock-** trademark for a brand of gypsum board.

Shellac- a spirit varnish made by dissolving purified lac flakes in denatured alcohol.

Sill- the lowest horizontal member of a frame structure.

**Stucco-** a coarse plaster composed of portland or masonry cement, sand, and hydrated lime, mixed with water and applied in a plastic state to form a hard covering for exterior walls.

### PART VIII: APPENDIX F

**Subfloor-** a base for a finish floor, consisting of boards, plywood, or other structural sheathing laid over and fixed to the floor joists.

Summer beam – a heavy timber serving as a principal beam or girder.

**Tongue-and-groove-** a joint made by fitting a raised area or tongue on the edge of one member into a corresponding groove in the edge of another member to produce a flush surface.

**Tread-** the horizontal upper surface of a step in a stair, on which the foot is placed.

**Vernacular architecture**- a style of architecture exemplifying the commonest building techniques, based on the forms and materials of a particular historic period, region, or group of people.

Vinyl- any of various tough, flexible plastics made from polyvinyl resin.

Winder- a more or less wedge-shaped stair step for changing directions.

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