National Park Service
U.S. Department of the Interior

Tuskegee Institute National Historic Site
Alabama

The Oaks

Condition Assessment Report

Cultural Resources, Partnerships and Science Division

Southeast Region

The Oaks

Tuskegee Institute National Historic Site

Alabama

Condition Assessment Report

Prepared by:
Panamerican Consultants, Inc.
2390 Clinton Street
Buffalo, New York 14227

Wiss, Janney, Elstner Associates, Inc.
330 Pfingsten Road
Northbrook, Illinois 60062

WFT Architects, PA
770 North State Street
Jackson, Mississippi 39202

Prepared for:
National Park Service
Southeast Regional Office
100 Alabama Street SW
Atlanta, Georgia 30303

Cultural Resources, Partnerships and Science Division
Southeast Regional Office
National Park Service
100 Alabama Street, SW
Atlanta, Georgia 30303
(404) 507-5787

About the front cover: Detail of the front gable at The Oaks, view looking south, December 2016.

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Approved by: Raquel M Griego 6/7/2019
Superintendent, Tuskegee Institute National Historic Site Date

Recommended by: (ACTING) 8/20/2019
Chief, Cultural Resources, Partnerships and Science Division, Southeast Region Date

Recommended by: 9/16/19
Deputy Regional Director, Southeast Region Date

Approved by: 10/1/19
Regional Director, Southeast Region Date

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Project Team

National Park Service – Southeast Regional Office

Celinda Hicks, Contracting Officer
Jessica Kelly, Historical Architect and Contracting Officer's Representative
Paul Hatchett, Historical Architect and Contracting Officer's Representative (former)

National Park Service – Tuskegee Institute National Historic Site

Raquel Krieger, Acting Superintendent
Barbara Tagger, Acting Superintendent (former)
Sandra Taylor, Superintendent (former)
Robyn Harris, Museum Specialist
Shirley Baxter, Park Ranger
Anthony Bates, Acting Chief of Interpretation

Panamerican Consultants, Inc.

Kelly Nolte, Project Manager / Historian
Christine Longiaru, Architectural Historian
Mark Steinback, Editor

Wiss, Janney, Elstner Associates, Inc.

Deborah Slaton, Historian / Conservator
Mike Ford, Historical Architect
Tim Crowe, Historical Structural Engineer
Tim Penich, Historical Architect

WFT Architects, PA

Wayne F. Timmer, Historical Architect
Wes Harp, Historical Architect

Foreword

We are pleased to make available this Condition Assessment Report, part of our ongoing effort to provide comprehensive documentation for the historic structures and cultural landscapes of National Park Service units in the Southeast Region. A number of individuals contributed to the successful completion of this work; but we would particularly like to thank the Project Team who authored the report. The authors would like to thank the staff at the Tuskegee Institute National Historic Site who assisted with the project, including Museum Specialist Robyn Harris, then Superintendent Sandra Taylor, and Acting Superintendent Barbara Tagger, the Park staff who assisted with the inspection of historic structures, and Historical Architect Jessica Kelly of the Southeast Regional Office for their assistance. We hope that this study will prove valuable to park management in ongoing efforts to preserve the historic structure and to everyone in understanding and interpreting this unique resource.

Julie Ernstein, Acting Chief
Cultural Resources, Partnerships and Science Division
Southeast Regional Office
2019

The Oaks Condition Assessment

Introduction and Methodology

At the request of the National Park Service (NPS), Panamerican Consultants, Inc. and its subconsultants, Wiss, Janney, Elstner Associates, Inc. (WJE) and WFT Architects, PA (WFTA), have developed this Condition Assessment for The Oaks on the campus of Tuskegee Institute National Historic Site. The condition assessment addresses the exterior and interior of the building, and has been prepared to identify the scope and location of needed repairs and to develop general treatment recommendations and preliminary budgets.

Field work for the condition assessment was conducted in December 2016, in conjunction with work carried out concurrently by the Panamerican project team in support of Historic Structure Reports for The Oaks and the George Washington Carver Museum at Tuskegee Institute National Historic Site. The field survey was performed by WJE and WFTA project team members and documented with field notes, sketches, and photographs. Investigative openings and materials testing were not part of the scope of services; however, where openings were already present in existing construction, these locations were used to review otherwise concealed conditions.

Condition assessment drawings were prepared by the project team to organize and present condition information gathered during field work. These drawings, which include a site plan, floor plans, roof plan, and elevations, are based on measured drawings developed by the project team in support of the Historic Structure Report currently in progress. Treatment recommendations are identified by a key system in the narrative that follows, and the same key information is noted on the condition assessment drawings to indicate locations of the recommended treatments.

Preliminary estimated budgets for implementing recommended treatments have also been developed by the project team and are provided in Appendix B.

Background

The Oaks, as part of Tuskegee Institute National Historic Site, is significant for its association with the life and work of Booker T. Washington, the contributions of Margaret Murray Washington to the women's program, and David Williston's campus planning. The three-story Queen Anne-style house with basement was constructed on two parcels of land fronting Montgomery Road that were acquired by Washington from H.C. Ferguson in 1889 and 1893.[1]

Upon completion in 1900, The Oaks was a three-story structure, square in plan, with a single-story ell extending south from the east side of the south elevation.[2] A large hip roof with metal-shingled gables on each face was located over the main three-story portion of the house, while a gable roof covered the south ell. A covered porch at the first floor wrapped the north, west, and south sides of the main house. On the north side of the house, the roof over the porch extended east, forming a porte-cochère. Two porches were

1. Denver Service Center, *Historic Structure* Report*, The Oaks, Tuskegee National Historic Site, Tuskegee, Alabama* (Denver, Colorado: National Park Service, Historic Preservation Branch, Southeast / Southwest Team, 1980), Landscape Data Section, 49.
2. "Ell" is an architectural term for an extension or wing on a building.

present at the second floor: one at the northwest corner of the house, and another near the center of the south elevation. The Oaks was the first house in Macon County to have steam heating and electric lights.[3]

Robert Robinson Taylor is the architect of The Oaks. He was then the head of architectural and mechanical instruction at Tuskegee Institute. Although Taylor is not listed on the faculty roster for the school year 1899–1900, as he was absent from Tuskegee from 1899 to 1902, The Oaks was already designed and under construction at that time. During the period of his absence from Tuskegee, Taylor was working as an architect in Cleveland, Ohio, so he would not have supervised the construction of Washington's house.[4] As with other campus buildings, the house was built by students using brick fabricated at the Institute.[5]

Robert R. Taylor was born in Wilmington, North Carolina, to Henry Taylor, the son of a white slave-holding father and a black mother. Henry Taylor was a prosperous contractor and ship builder. After his early education and some time in his father's business, Robert Taylor entered the Massachusetts Institute of Technology (MIT) in Boston, which stressed the practical applications of learned material.[6] Robert Taylor appears to have been the first African American to attend MIT.[7]

Taylor's grades and schoolwork at MIT were exemplary, and he was awarded the Elisha Thatcher Loring Scholarship for two consecutive terms (1890–1891 and 1891–1892).[8] Taylor's work at MIT brought him to the attention of Booker T. Washington, principal of Tuskegee Institute. Washington had met Taylor several times while visiting MIT and discussed with Taylor the possibility of further developing the new industrial program at Tuskegee, as well as directing the construction program for new buildings at the school.[9]

Taylor arrived at Tuskegee in late 1892 and, except for the brief period from 1899 to 1902 when he worked in Cleveland, spent his entire career at Tuskegee Institute.[10] He developed the mechanical and architectural program, generally called the "industrial" or "industrial arts" program at the school, and shaped the look and feel of the campus by designing and overseeing the construction of many of the initial buildings. Taylor embraced Washington's ideals of dignified labor, but was also influential in helping Washington to understand that manual labor alone was not enough; Tuskegee also needed to produce individuals who could plan and manage the labor. Washington often presented Taylor as a model to others, pointing out his selflessness, leadership, and hard work.[11]

In addition to teaching classes, supervising students, directing programs, and serving for a period as Vice Principal of the Institute, Taylor designed and

3. National Park Service, *American Visionaries: Legends of Tuskegee: Booker T. Washington – The Oaks,* last modified January 18, 2007, https://www.nps.gov/museum/exhibits/tuskegee/btwoaks.htm.
4. *Historic Structure Report*, 10. While the 1980 *Historic Structure Report* posits that the years Taylor was away from the school likely represented a sabbatical to work on The Oaks, Clarence Williams, in *From 'Tech' to Tuskegee, The Life of Robert Robinson Taylor, 1864–1942,* suggests otherwise. In his well-researched article on Taylor, Williams reported that Taylor was away from Tuskegee for two years between 1898 and 1902, because he was in Cleveland working on his own and with the architectural firm of Charles W. Hopkinson. Taylor's unexplained absence caused a rift with Washington. Washington, however, quickly realized his need for Taylor and began to woo him back. Taylor returned in 1902 and resumed his generally good relationship with Washington. While this does not negate Taylor designing The Oaks, it seems to suggest that Taylor did not oversee its construction.
5. Ibid., 8.
6. Clarence G. Williams, *From 'Tech' to Tuskegee, The Life of Robert Robinson Taylor, 1864-1942* MIT Libraries online, last modified January 13, 1998, http://libraries.mit.edu/archives/mithistory/blacks-at-mit/taylor.html.
7. Williams, n.p.
8. Ibid.
9. Ibid.
10. See Footnote 4 for a discussion of Taylor's leaving between 1899 and 1902.
11. Williams, n.p.

superintended the construction of more than twenty buildings on the campus, including the design of The Oaks.[12] In support of Washington's goal of using the design and construction of buildings as learning laboratories for students, Taylor's campus buildings used materials that Tuskegee manufactured—bricks and lumber.

History of The Oaks

Before the Washington family moved into The Oaks, they lived in a small, rental cottage owned by Tuskegee Institute. According to William Henry Baldwin Jr., a Tuskegee Board member and supporter of Washington and the Institute,:

> Mrs. Walter Baker gave to his [sic] children the sum of $3,000, and Mrs. Baker's friends thought that it would be well for the children to have this money invested in a house. Mr. Washington therefore arranged to build a house for the use of his own family, to give up the house belonging to the Institute for a library, and, further, to provide that the construction of the house should be made by the students of the Institute.
>
> There is another side to this also. Few know the enormous physical and mental work that Mr. and Mrs. Washington have been doing for many years. It is imperative that if we expect Booker Washington to live and do good work for many more years, he must have comfortable surroundings. The pressure of his work during the last few years has told [sic] much on his health and we are anxious for him to be comfortably cared for, so that his health may be preserved for many years.[13]

After Washington and the school became better known, especially after his appearance at the Atlanta Exposition of 1895, it became fashionable to visit the celebrated principal and his school. The Washingtons entertained Institute faculty and staff, visiting black educators, businessmen, and farmers sponsored by the school. Politicians, journalists, and agents of the school frequently met with Washington in his house. During Board of Trustees meetings, the family home served as a base of entertainment, and when President William McKinley visited the school in 1898, the student corps was reviewed next to the presidential cottage. The president's visit also may have been a factor in the construction of a house for Washington.[14] Tuskegee publications described the house and the many visitors and supporters:

> . . . Mr. Washington has recently moved into a brick house built just across the main road from the school ground. The building of this house was largely made possible by the kindness of friends of the school in the North. It enables the principal to entertain, more conveniently than he could do in his former residence, many of the guests whom the Institutes' reputation attracts to Tuskegee as interested visitors.
>
> . . . the gift of two Brooklyn friends enabled him to erect on his own lot, just opposite the school-ground, his present handsome brick residence, where he dispenses a generous hospitality to the school's guests and to teachers of the Institute.[15]

Construction of the house began in 1899. The Queen Anne style chosen for the residence is different from the Neoclassical styles of the campus buildings. Aware of the way in which his house might be perceived, Washington wrote in 1908 for a *New Century* magazine article, ". . . the best evidence of the progress which the race has made since emancipation is in the character and quality of the homes which they are building for themselves."[16]

12. Booker Conley, *Buildings at Tuskegee University* (Tuskegee, Alabama: Tuskegee University Archives, circa 1995), 1–5.
13. William Henry Baldwin Jr. to William P. Bancroft, April 6, 1899, quoted in *Historic Structure Report*, 8.
14. *Historic Structure Report,* 16.
15. Max Bennett Thrasher, *Tuskegee, Its Work and Its People* (Boston: Small, Maynard & Company, 1900), 43, and Booker T. Washington, ed., *Tuskegee and its People: Their Ideals and Achievements* (New York: D. Appleton and Company, 1906), 42, both quoted in *Historic Structure Report*, 17.
16. Booker T. Washington, "Negro Homes," *New Century Magazine*, May 1908, 71.

Students enrolled in the Architectural and Mechanical Drawing School helped create the plans for the house. Further, the house was constructed using student labor as training for the various departments within the school.[17]

An article in the April 28, 1906, issue of *The Tuskegee Student* listed the departments and schools at the Institute, which provides an idea of the type of services that students could have offered during the construction of the Washington home. The largest department at the school at this time was the Industrial Department, which consisted of the Mechanical Industries Department, the Agricultural School, and Industries for Girls. Thirty-seven different trades were taught in these departments, including carpentry, foundry, plumbing, electrical lighting, steam fitting, plastering, tinsmithing, brick making, saw milling, landscape gardening, and shrub and tree propagation and planting. Students learning these trades would be involved extensively in the construction of Washington's home.[18]

The bricks for The Oaks were made at the Institute and probably laid by students attending one of the school's programs. After 1882, with the size of the student population stabilizing, Washington had begun to think about constructing "permanent" buildings constructed of brick. Toward this end he requested money from a benefactor, who gave him $200 for the construction of a brickyard. The brickyard was intended to serve three purposes: provide brick for the construction of Tuskegee Institute buildings; provide a supply of brick for the towns-people to buy; and provide training to students in the art of making bricks, thereby learning an important trade.[19]

Washington soon discovered that brick making was not the simple task he had thought it was. The making of bricks required hard, dirty, physical labor, and standing in a mud pit with mud up to a person's knees was not an attractive task for the students.[20] Additionally, designing and constructing a kiln proved problematic. Washington built three kilns that did not properly function before finally designing and building a working kiln. Students initially made bricks by hand, before a brick molding machine was developed. Despite the early problems, the brick-making program proved to be successful.

The students also made furniture. It is likely that rugs, draperies, and curtains for The Oaks were made by the Girls Industrial School. After the Washingtons moved in, students kept the house in constant repair.

In addition to the building, the three-acre lot on which the house was sited was landscaped. Grass lawns, shrubbery, trees, and a picket fence were added to the front yard. A carriage drive was added diagonally across the site, leading to the porte-cochère. A front sidewalk with two trees planted between the walk and the street was also added. The rear of the lot was enclosed within a tall paling fence and featured flower beds. The remainder of the lot was kept for gardening and animal husbandry. Washington created a plan of rotation for his garden crops and spent many hours with his chickens and crops.[21]

Washington, his third wife, Margaret Murray Washington, then Director of Industries for Girls at the Institute, and his two sons, Booker T. Jr., and Ernest Davidson, and daughter, Portia Marshall, moved into the house in the summer of 1900 (Figure 1). Work on the house was completed in September of that year.[22]

17. John W. Jenkins, *Historic Resource Study: Tuskegee Institute National Historic Site, Tuskegee, Alabama* (Denver, Colorado, National Park Service, Denver Service Center, 1977), 33–34.
18. *Historic Structure Report*, 22.
19. Jenkins, 31.
20. Booker T. Washington, *Up from Slavery: An Autobiography* (Garden City, NY: Doubleday & Company, Inc., 1901), 111, cited in Jenkins, 32.
21. *Historic Structure Report*, 12–13.
22. Ibid., 11.

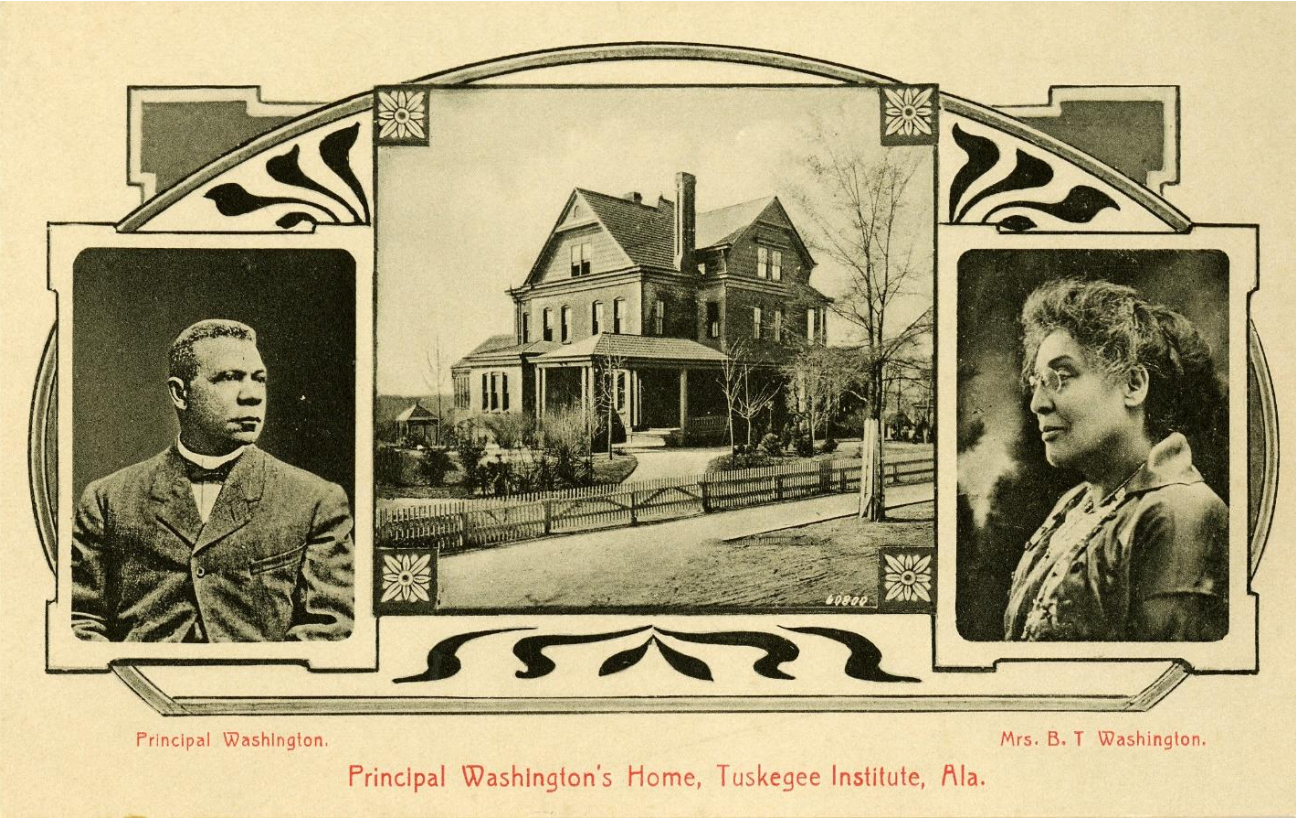


FIGURE 1. Booker T. Washington and his wife, Margaret Murray Washington, with a view of The Oaks. (Source: Library of Congress)

Washington's house, even during his lifetime, was known as "The Oaks." It has been assumed that The Oaks was named for the two large oak trees growing between the sidewalk and the street, Old Montgomery Road, in front of the house. However, when Washington built the house, there were no oak trees, or trees of any sort, on the lot. It is not clear whether Washington named the house The Oaks, or if it simply came to be called The Oaks while he occupied it.

The Oaks fulfilled a dual role, as the ceremonial and entertainment center for the Institute and as the Washington family home. While Washington spent much of his day working at the Institute, he began and ended each day at home behind the desk in his study. The Oaks came to symbolize his important role in the Institute. Washington's biographer Louis Harlan noted:

> . . . from his big house (in the plantation sense), 'The Oaks,' Washington ran his school without delegation of authority and with infinite attention to detail . . . each morning he toured the campus on horseback (on his favorite, "Dexter"), and noted . . . evidence of every student waste or neglect. It all went into his little red notebook, from which flowed a thousand memoranda reminding errant faculty members of their high duty.[23]

In 1906, Tuskegee Institute celebrated its twenty-fifth anniversary with parades, music, oratory, and a remarkable gathering of supporters that included Harvard President Charles Eliot, industrialist-philanthropist Andrew Carnegie, Secretary of War William H. Taft, and US President Theodore Roosevelt. The reception for this gathering was at The Oaks. The following year, The Oaks hosted the wedding of Portia Washington to William Sidney Pittman, an architect and teacher at the school. The event was recorded in *The New York Age*, one of the most influential black newspapers of its time. The Electrical Department of the school strung colored lights in the trees,

23. Louis R. Harland, "Booker T. Washington in Biographical Perspective," *American Historical Review* (October 1970), 1582, quoted in *Historic Structure Report*, 16.

throughout the shrubs, and across the grounds; the interior of the house was filled with colored lights, grasses, ferns, and white roses as decoration. A large white canopy was erected in the front room, under which the couple was married.[24]

The Oaks and its site underwent various changes during the years in which Booker T. Washington resided there. At some point during this period (1900–1915), the carriage house, barn, summer house, and well-cover shed were constructed.[25] In 1900, vegetable gardens were created. By 1902, the dining room was completed, with construction matching the original portion of the house.[26] Sometime prior to 1905, radiant heating was installed.[27] Also in 1905, a rustic gazebo was constructed following the landscape plan for the house that had been developed by David A. Williston.[28] In 1906, the bathrooms were painted.[29]

Sometime before 1908, a conservatory was added to the east of the dining room. The conservatory was later removed, possibly during the 1950s.[30] In 1908, artist E.W. Borman painted a series of frieze murals after the picture rails were lowered in the major front rooms. (Murals may have been planned for rooms on the second story, since these picture rails were also lowered.)[31] The murals were completed after a Washington family trip to Europe, and may have been inspired by this trip. In the same year, wires were installed on the exterior of the house to allow vines to cover the porches.[32]

Between 1910 and 1915, the roof was removed from the one-story kitchen wing and a second story was added. The roof was reused on the addition. This change necessitated several other alterations including removal of the south dormer of the main roof to connect the roof of the ell with the main roof. A new doorway was constructed leading into the newly created attic; the south window of the rear stair hall was removed and the opening filled and finished to match the adjacent walls; a new porch was built west of the den that Washington used as a home office; and an enclosed room was built as an entry from the rear main second floor hall and the new den.[33]

By 1915, the summer house and gazebo had been removed from the site.[34]

After a particularly long and arduous speaking tour, Washington was hospitalized in New York City in 1915 with what may have been kidney failure.[35] Although seriously ill, he was determined to return home.[36] On November 14, 1915, Booker T. Washington died at The Oaks. His funeral was held three days later and included a procession from The Oaks to the chapel.[37]

Washington left The Oaks to his wife, Margaret Murray Washington, who lived in the house until her death in 1925. Upon her death, ownership of the house was to be equally divided among his three children, Portia Washington Pittman, Booker T. Washington Jr., and Ernest D.

24. "Pittman-Washington Wedding, Chief Social Event of Year at Tuskegee Institute." *The New York Age,* November 7, 1907, quoted in *Historic Structure Report*, 18.
25. *Historic Structure Report*, 50.
26. Denver Service Center, *Structural and Roof Evaluation at Tuskegee National Monument for Booker T. Washington The Oaks* (Denver, Colorado: National Park Service, Southeast / Southwest Team, 1977), 4.
27. *Historic Structure Report*, 82.
28. Ibid., 13–14.
29. Ibid., 17.
30. Ibid., 81.
31. Ibid., 82.
32. Ibid., 15.
33. Ibid., 82.
34. Ibid., 50.
35. A front-page *New York Times* announcement on the death of Washington attributed his death to "hardening of the arteries following a nervous breakdown" and in the same article to Bright's Disease, chronic inflammation of the kidneys ("Dr. B.T. Washington, Negro Leader, Dead," *New York Times*, November 15, 1915).
36. National Park Service, *American Visionaries: Legends of Tuskegee: Booker T. Washington – The Oaks*.
37. Kenneth M. Hamilton, "Taps: The Funeral in Tuskegee." *Booker T. Washington in American Memory* (Urbana: University of Illinois Press, 2017), 69–95.

Washington.[38] In 1925, a two-car garage was built at the site.[39]

Tuskegee Institute purchased The Oaks in 1929. Several changes were made to the building at that time, including installation of a radiant heating system and modifications to the electrical system, changing the light fixtures to metal incandescent fixtures, and installation of baseboard outlets, with the existing fixtures retained in the den, foyer, and porch ceilings. (Based on available archival documentation, it is not known whether the fixtures retained in 1929 were original.) Also in 1929, the exterior trim paint color was changed from dark brown to white, with pastel green porch ceilings, matching other Institute buildings.[40] The fireplaces in the study, parlor, and dining room were completely rebuilt. Two of the original mantels were demolished during this work and a third was moved to the trunk room on the third floor.[41]

In the same year, the first-floor porches and steps were replaced with concrete inlaid with red tile. Supporting piers were replaced with a brick masonry wall except in the rear of the building. The upper front porch floor was covered with tar paper, and sheet metal was placed over the inside face of the parapet walls.[42]

The school auctioned off all of the furniture, including the Tuskegee-made furniture except for the furniture in the study, Washington's den, and a few of the bedrooms. The den was kept as it was during Washington's lifetime. For the next ten years, the house was used by the Tuskegee Institute women's club, later becoming a student services building. Eventually, foreign students and the alumni offices shared the space. The den, which Booker T. Washington used as his private office, was maintained throughout the years as a tribute in his honor.[43]

In 1957, Tuskegee Institute converted the property into administrative offices. During this period, changes to The Oaks included installation of a telephone system; installation of a bathroom and shower in the room above the foyer; permanent closure of three bathroom doors; stripping and refinishing of all wood finish floors; conversion of the guest room closet into a reception area (including removal of the north and east walls, removal of the doorway to the guest room, refinishing of the wall, and installation of a reception desk); construction of a partition between the dining room and adjacent addition; addition of shelves to closets and reversal of door swings; and replacement of the painted pressed-metal shingle roof and the standing seam metal roof with an unpainted aluminum shingle roof, and replacement of gutters and downspouts.[44]

Also in 1957, Washington's den was extensively renovated. The window opening to the west porch was removed and replaced with a door and transom. At the same time, the lower rear porches were enclosed and converted to storage rooms, and the second floor, west porch off the den was enclosed with casement windows instead of screens.[45]

In the same year, asphalt paving was installed at the porte-cochère.[46]

In 1959, the interior of The Oaks underwent significant changes when Institute administration offices were moved into the building. During this remodeling, however, the study was still preserved in memory of Washington.[47]

During the early 1970s, The Oaks was included in the Sears, Roebuck and Company "Great American Homes" exterior paint advertising campaign, prior to its acquisition by the National Park Service. This successful advertising campaign featured great historic American homes belonging to such people as Theodore Roosevelt, Nathan Hale, "Buffalo" Bill Cody, and Booker T.

38. *Historic Structure Report*, 19.
39. Ibid.
40. Ibid., 82.
41. Ibid., 83.
42. Ibid., 83–84.
43. Ibid.
44. Ibid.
45. Ibid.
46. Ibid, 50.
47. Ibid.

Washington that had been painted using Sears exterior paint. Sears painted the homes in exchange for the privilege of using a photograph of the house in advertising.[48] The exact date The Oaks was painted is not known.

In 1974, the National Park Service acquired The Oaks. Since that time, several rehabilitation, restoration, and repair projects have been undertaken. Based on discussion with the Park, limited archival documentation is available to indicate the scope of these projects.[49] In particular, physical evidence of The Oaks preservation project designed by the Denver Service Center of the National Park Service in 1979 was documented in the Historic Structure Report concurrently prepared by the authors of this Condition Assessment Report.

Supplemental steel beams and columns were installed as part of structural repairs performed in the 1990s to address sagging of the floor at the second-floor stair landing. Based on discussion with the park, no archival documentation of these repairs is available.[50] Physical evidence of the repairs was documented as part of the Condition Assessment Report and is described below.

Significance

The historic campus district of Tuskegee Institute was designated a National Historic Landmark (NHL) on June 23, 1965, and administratively listed in the National Register of Historic Places on October 15, 1966. It was established as a National Historic Site in 1974.[51] The National Historic Site comprises seventy-four acres, including The Oaks, the home of Booker T. Washington; the George Washington Carver Museum; Grey Columns, an antebellum mansion; and the fifty-acre original campus, which includes thirteen buildings.[52] The Oaks was administratively listed on the National Register of Historic Places in 1966 as a contributing feature to the nationally-significant Tuskegee Institute NHL Historic District (NRIS ID #66000151).[53] The historic district's Period of Significance was administratively determined to extend from 1875-1899.[54]

A Consensus Determination of Eligibility (DOE) was prepared in 2012, seeking concurrence on the landscape features associated with The Oaks (as well as the George Washington Carver Museum) for listing in the National Park Service List of Classified Structures (LCS). The DOE noted that Tuskegee Institute National Historic Site meets National Register Criteria A and B. The site is nationally significant for its association with the education of African Americans in the nineteenth and twentieth centuries, and with Booker T. Washington and George Washington Carver. The DOE specifically noted that Tuskegee Institute "played a significant role in the education of formerly enslaved people in the Reconstruction era and continued to be an important educational institution for African Americans through the twentieth century."[55]

The suggested Period of Significance for The Oaks is 1899-1929, beginning with construction and ending with incorporation of the building and site into the larger campus of Tuskegee Institute,

48. Allan Jaklich, "How the Sears Campaign Evolved," *Chicago Tribune,* October 26, 1970, accessed April 1, 2017. http://www.archives.chicagotribune.com/197010/26/page/70/article/advertising-marketing.
49. Correspondence by the authors with Robyn Green-Harris, Museum Specialist, Tuskegee Institute National Historic Site / Tuskegee Airmen National Historic Site, April 2018.
50. Ibid.
51. National Park Service, *Tuskegee Institute National Historic Site / Tuskegee Airmen National Historic Site, Tuskegee, Alabama, Foundation Document* (May 2016).
52. Bethany Serafine and Rudy Evenson. Consensus Determination of Eligibility for Landscape Features at The Oaks and George Washington Carver Museum, Tuskegee Institute NHS. Atlanta: National Park Service, Southeast Regional Office, 2012.
53. Horace J. Sheely, Jr., National Survey of Historic Sites and Buildings: Tuskegee Institute (N.P.: National Park Service, 1965).
54. National Register Nomination Form can be found at https://npgallery.nps.gov/NRHP/GetAsset/92274853-819a-42f2-8771-ba896c5b4a2f.
55. Serafine and Evenson.

where it served as a gathering space and dormitory for the Institute. Period of Significance is the length of time when a property was associated with important events, activities, or persons, or attained the characteristics which qualify it for listing in the National Register. The suggested Period of Significance encompasses Booker T. Washington's life, the Washington family occupancy of The Oaks, the structure's transfer to the Institute in 1925, and the alterations made to the building and grounds by the Institute as they incorporated The Oaks into the larger campus.

The Tuskegee Institute National Historic Site, a unit of the national park system that lies entirely within the larger Tuskegee Institute NHL Historic District, was established by Public Law 95-625 in 1974. The Oaks is a contributing feature of the national historic site. A National Register nomination form has never been completed for the Tuskegee Institute National Historic Site, nor for The Oaks as an individually listed property. However, the Tuskegee Institute National Historic Site meets National Register Criterion A, B, and C for its association with a major event, the education of African Americans in the nineteenth and twentieth centuries; significant individuals in US history, specifically Booker T. Washington and George Washington Carver; and an architecturally significant property, due to its association with architect Robert Taylor and the Queen-Anne architectural style and features.

By suggesting 1899-1929 as the period of significance for The Oaks, the structure will reflect the interpretation intentions of the park managers, including the contributions of Booker T. Washington until his time of death in 1915 and Margaret Murray Washington and the Washington family until her time of death in 1925, at which point the Washington descendants sold The Oaks to the Institute. The Period of Significance additionally includes all development and alterations of architectural features undertaken by the Institute to integrate the building and site into a larger campus plan that was completed in 1929.

Following its construction in 1899, The Oaks was improved by the Washingtons through a series of additions and removals including, the addition of a carriage house, barn, summer house, and well cover shed (date of construction unknown); vegetable gardens (1900); dining room addition (1902); radiant heating added, subsequent damage to woodwork (prior to 1905); gazebo constructed, from the landscape plans of David Williston (1905); painting of bathrooms (1906); conservatory constructed, east of the dining room (prior to 1908); painted murals in the major front rooms (1908); second-story added above kitchen wing, roof was re-used (1910-1915), addition of new second-floor porch west of the den (1910-1915); removal of summer house and gazebo (1915); two-car garage added (1925). The Institute initiated development of a landscape design under the leadership of David Williston by 1920 which was completed after the deaths of both Booker T. Washington and Margaret Murray Washington.

Following sale of The Oaks to Tuskegee Institute by the Washington children in 1925, the Institute initiated the following changes in 1929: installation of radiant heating system; changes to electrical system including new metal incandescent lighting fixtures, historic fixtures were retained in the den, foyer, veranda, and porch, and baseboard outlets installed; exterior trim paint was changed for conformity with other institute buildings; fireplaces were rebuilt in the study, parlor, and dining room, two original mantels destroyed and the third was relocated to the trunk room on the third floor; and renovation of the porches including replacement of first floor wood porches and steps with concrete and inlaid tile, replacement of supporting piers with brick masonry base wall, overlay of tar paper on the upper front porch, and sheet metal placed on the inner parapet walls. The Institute's alterations are contributing to The Oaks, and highlight the structure's continued use even after the prominent Washington family moved on, and it is the long term goal of park managers to interpret the house's evolution.

The management and interpretation of the house will be guided by both the 1925 and 1929 time periods. Specifically, the exterior of the structure will interpret features present in 1929, meaning

inclusion of the extant concrete porch. The structure's interior will be managed as 1925, reflecting the Washington family presence, with the exception of the third floor to be managed as 1929 to highlight the structure's evolution from a family dwelling to offices and dormitories for the Institute's use.

Condition Assessment and Recommendations

Site

The Oaks property is located approximately 60 feet south of Old Montgomery Road (Figure 2 and Figure 3). The prominent brick residence sits atop a high point within a square lawn precinct dotted with mature shade and evergreen trees and shrub plantings. Porches edge the house to the primary porch entrance at the west end of the north elevation and to the rear entrances at the east end of the south elevation. A concrete paver and gravel driveway extends into the eastern side of the property, where it forms a tear-drop-shaped turn around that passes through a porte-cochère. The portion of the drive that extends from the road to the porte-cochère is paved with concrete pavers. A spur of the driveway continues around the house to the south. The edges of the spur road are defined by concrete valley gutters. The spur road ends in a small parking area southwest of the house.

Old Montgomery Road is edged by a public walk. The walk leading to the front entrance of the house arises from the sidewalk. It measures 6 feet in width. The secondary concrete sidewalk that leads around the north, west, and south elevations is narrower, and measures approximately 4 feet in width. The secondary sidewalk that extends from the gravel drive at the east end of the north elevation to the main porch entrance, where it intersects the larger sidewalk, is also 4 feet wide. It continues to wrap around the west and south elevation of the house, approximately 8 feet from the building footprint. At the south entrance to the house, the sidewalk is semicircular in plan and provides access to the building, while also connecting to the gravel spur road.

Turf lawn, mature trees, and foundation plantings edge the house to the north. The gravel driveway, turf lawn, and widely spaced plantings edge the house to the east. Beyond the house precinct is a large asphalt-paved parking area used by visitors to the property. Adjacent to the surface lot to the east is the Ford Motor Company Library. To the south, the house is edged by the extension of the gravel driveway, an extension of the concrete walk that provides access to the front of the house, and turf lawn with tree plantings generally located in the southeast and southwest corners of the lawn. Beyond the lawn is a large overflow parking area. The terrain descends to the south, helping to screen views of the parking area from the house precinct of The Oaks. A brick retaining wall that extends east-west separates the parking area from the rest of the property. To the west, turf lawn edges the house. It too is punctuated by tree and shrub plantings. The lawn is edged by a gravel parking area accessed from Old Montgomery Road. The parking area is located approximately 50 feet from the house.

A site plan is provided in Figure 2, and overall views of the house are provided in Figure 3 through Figure 7.

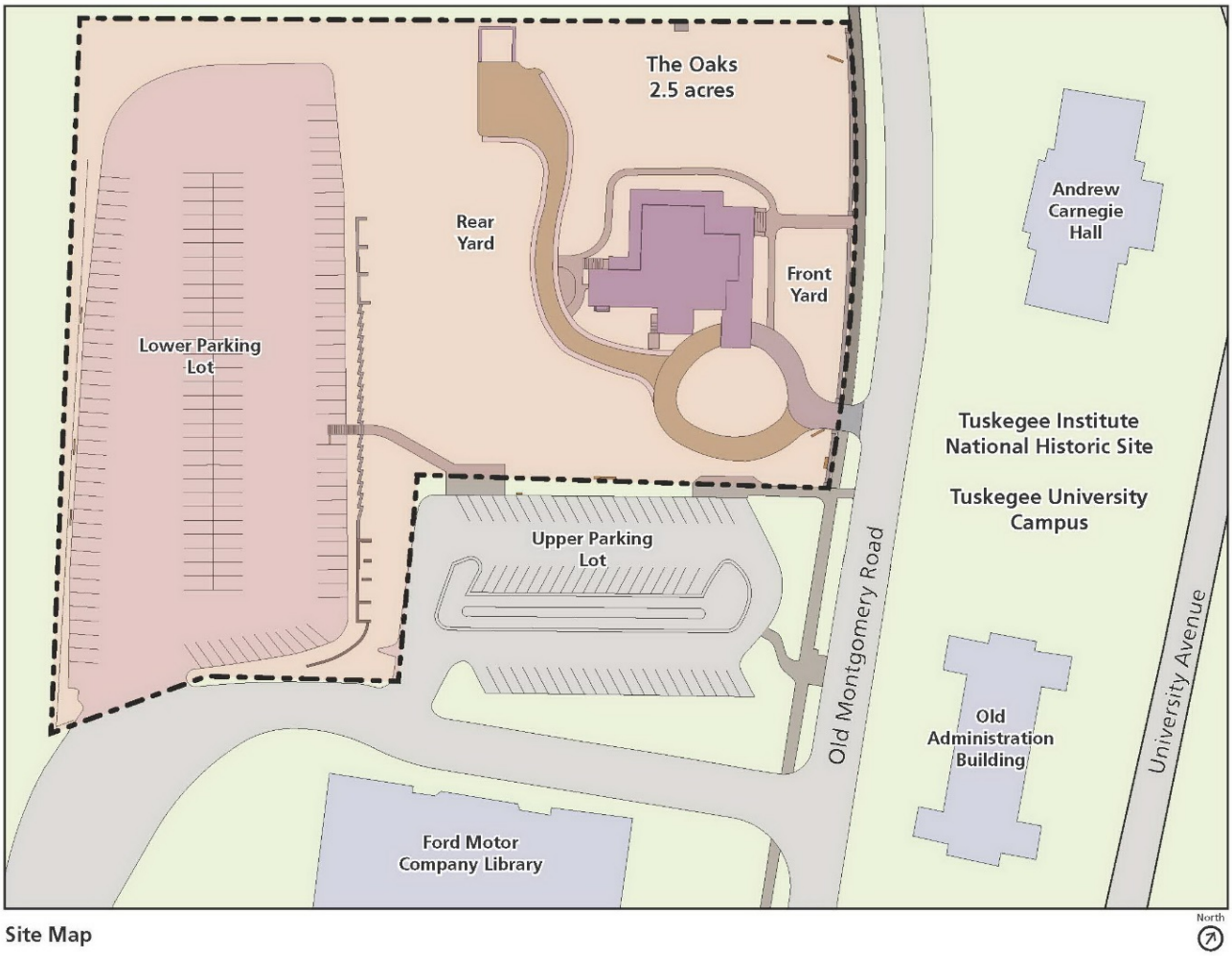


FIGURE 2. Site Plan of The Oaks. (Source: WLA and NPS, *Cultural Landscape Report*, 2017)

FIGURE 3. The Oaks, looking southeast. (Source: All photographs by authors unless otherwise noted.)

FIGURE 4. The Oaks, looking southwest.

FIGURE 5. The Oaks, west elevation, looking east.

FIGURE 6. The Oaks, west and south elevations, looking northeast.

FIGURE 7. The Oaks, south elevation, looking north.

Condition Assessment

- The public walk that extends along the northwestern edge of The Oaks property at Old Montgomery Road is surfaced with hard-packed earth and the remnants of former concrete paving material (Figure 8). The uneven surface of the earthen walk and the concrete sections present a trip hazard.

- The gravel parking area to the west of the house is not well defined (Figure 9). The gravel surfacing is uneven, with sections that are heavily mixed with earth. Grass is also growing through portions of the paved surface. The lack of definition, uneven surfacing, and mix of materials presents an appearance that is not consistent with the importance of the adjacent historic property.

- Overhead electrical lines and poles located within the parking area are also visually intrusive.

- The tree plantings north of the house have been mulched with a red-colored material. The red color is visually intrusive and not consistent with maintaining the property's historic appearance.

- Garden edging used to define mulch beds extends above the surrounding grade and is visually intrusive. Fill could be used to raise the grade slightly to meet the edging and render it less visible.

- There are several bare patches in the lawn (Figure 10).

- The gravel driveway is surfaced with rounded pea gravel which does not compact due to a lack of edges that promote binding (Figure 11). It is very difficult to walk on the gravel due to a lack of a firm surface. Crushed brownstone that can be compacted could be considered as an alternate surfacing material.

- Vegetative growth is emerging within the gravel driveway and on the concrete gutter along the margin.

FIGURE 8. The public walk along Old Montgomery Road.

FIGURE 9. View of the site from the east, with the gravel parking area in the foreground.

FIGURE 10. The walk along Old Montgomery Road, showing the brick retaining wall, red mulch in beds, and turf lawn with bare areas.

- The stump of a former tree edges the driveway. Consideration should be given to removing the stump, and potentially replacing the tree if it is determined to have been a historic feature of the property.

FIGURE 11. The gravel driveway surfaced with rounded pea gravel.

- Pieces of broken stone or concrete are present within the driveway and present a trip hazard.

- Foundation plantings are maintained in a heavily clipped form. Most appear to be in declining condition. The health of these plantings should be evaluated. Plantings in poor condition should be replaced. Future pruning treatment should be reconsidered based on historic images that illustrate the character of foundation plantings during the historic period of significance identified for the property.

- The brick wall that edges the property to the north along the public walk is in need of repair (refer to Figure 10 and Figure 12). Individual brick are missing and others are chipped. Mortar in the joints is deteriorated and prior repair efforts are failing.

- The evergreens that mark the sidewalk entrance into the property are in decline and require evaluation by an arborist to determine appropriate treatment (Figure 13).

- Vegetation is growing in the concrete paver section of the entrance drive into the property from Old Montgomery Road.

- The asphalt parking area to the south of the house has been patched (Figure 14). The patches are highly visible.

FIGURE 12. The brick wall that edges the property to the north.

FIGURE 13. The Oaks, south elevation. Note the declining evergreens and planting beds.

FIGURE 14. The asphalt parking area to the south of the house.

Exterior Walls – Masonry

The first- and second-floor walls of the house, the support walls for the main wrap-around porch, and the chimneys are constructed of clay brick masonry. Individual brick units measure approximately 2-1/4 inches by 8 inches. The walls are laid in an American bond pattern with 1/2-inch mortar joints (Figure 15). The joints are pointed with pink mortar with a concave profile.

FIGURE 15. Typical brick exterior wall.

The building has a five-course, corbelled brick watertable that projects approximately 2 inches and wraps around the lower portion of the south wing at approximately the bottom of the first-floor level. The east addition has a similar corbelled watertable consisting of four courses of brick. However, as the elements appear to be the same height, it appears that a larger brick was used for the addition. This distinction is noticeable at the joint where the south wing meets the east addition (Figure 16).

FIGURE 16. The corner where the dining room addition abuts the main structure.

Window wells are located along the east elevation. The wells are brick, extend below grade, and create a space around each basement window unit. The tops of the brick walls at each well are clad with a cementitious parge coating.

Masonry openings for windows and doors typically have segmental arch openings consisting of a single brick soldier course. Some openings have a double course of arched brick and two openings have a flat relieving arch. Window sills typically consist of a single course of projecting brick.

At the wrap-around porch, voids in the brick masonry form a decorative diamond-shaped pattern that serve as vents to the crawl space below (Figure 17). The pattern consists of nine brick header-sized voids separated by a stretcher brick.

The chimneys have decorative brickwork consisting of corbelled brick bands across the top of the chimney, as well as inset vertical courses of brick that accentuate the vertical nature of the chimneys (Figure 18).

FIGURE 17. Diamond-shaped brick detailing found on the north elevation.

FIGURE 18. Typical brick chimney with corbelled brick details.

Condition Assessment

Cracking and spalling of brick was observed at the parge-coated coping units at brick masonry walls within the window wells (Figure 19). The top three courses of brick are corbelled and project beyond the face of the wall, forming a coping for the wall that is covered with a cementitious parge coating. The parge coating is cracked and a few of the brick units at the base course have spalled. Spalling has typically resulted in loss of the projecting portion of the brick.

- Open, eroded, and deteriorated mortar joints were observed at the field of wall and at chimneys (Figure 20 and Figure 21). Eroded mortar joints were typically recessed 1/2 inch beyond the face of the brick. The erosion was most pronounced near entrances and at corners of the building adjacent to downspouts. Evidence of previous localized repointing was observed. At both the field of wall and chimneys, the repointing mortar was typically pink in color and was struck flush with the brick (Figure 22).

- Cracked and open mortar joints were observed at the brick masonry porch walls (Figure 23 and Figure 24). The distress consisted of a cracked mortar joint at the first bed joint below the concrete patio slab and cracked mortar joints extending from corners and decorative openings in the wall. The joint distress often had a stepped pattern and appeared wet. The area of distress was

typically accompanied by biological growth and efflorescence.

- Spalled brick was located in the field of wall as well as at corners and along edges of building features (Figure 25). Spalling was most pronounced at the first-floor level at the east end of the south elevation. The spalling consisted of full-face spalling of the fired face of multiple brick units. Spalling was also observed at corners and edges of the building, specifically at door openings and chimneys.

- Extensive accumulation of efflorescence was observed along the lower four courses of brick at the base of the north wall of the porch foundation (Figure 26). The efflorescence was visible from the crawl space and covered the face of the brick.

- Efflorescence and moisture staining were observed at the northwest corner of the brick masonry porch wall (Figure 27 and Figure 28). The efflorescence consisted of white staining at the top of the brick wall below the concrete porch slab, and was most pronounced at the side of the wall facing the crawl space.

FIGURE 19. Spalling of the brick and cementitious parge coating at the light well walls.

FIGURE 20. Eroded mortar joints at the field of the wall.

FIGURE 21. Deteriorated mortar joints and evidence of previous repointing efforts visible at the chimney.

FIGURE 22. Evidence of previous mortar repointing in the field of wall.

FIGURE 23. Step cracking, open joints, and evidence of water infiltration at the porch walls.

FIGURE 26. Accumulation of efflorescence at base courses of the porch walls.

FIGURE 24. Step cracking and efflorescence at the porch walls.

FIGURE 27. Moisture staining at porch walls.

FIGURE 25. Face spalling of brick.

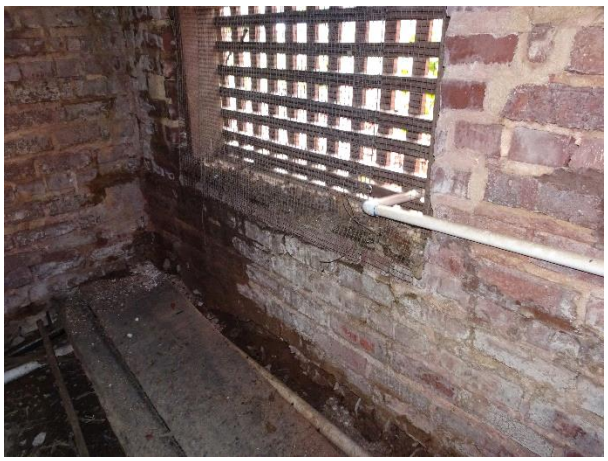


FIGURE 28. Evidence of moisture infiltration at northwest corner of porch.

Recommendations

EWM1. Masonry walls should be rebuilt where the brick is displaced. Existing brick should be reused, matching the pattern of existing masonry. Masonry should be repointed where mortar joints are open but no displacement is observed. Consideration should be given to installation of a sheet-metal flashing with drip edge at the mortar joint below the concrete porch slab. The drip edge flashing will divert water from the porch away from the foundation walls and reduce the moisture-related distress.

EWM2. Cracked and spalled cementitious parge coating at the window well walls should be removed and repairs performed to the underlying brick. As part of repairs, consideration should be given to installation of a through-wall flashing below the brick coping.

EWM3. At sections of the wall where eroded mortar joints are observed, such as corners of the building and adjacent to downspouts, mortar joints should be cut out to a depth of 2-1/2 times the width of the joint or until sound mortar is encountered and repointed. The downspout should be temporarily removed to permit installation of repairs, and then reinstalled. New mortar should be applied in 1/4-inch lifts with a mortar mix appropriate to the original masonry, and matching the appearance of the original mortar.

EWM4. Spalled brick units in the field of the wall and at corners that are severely deteriorated should be removed. At some locations, it may be possible to salvage the original brick, clean to remove mortar, and reinstall with the brick turned to expose the undamaged opposite face. Trial repairs, however, are needed to determine whether the unexposed face of the brick matches the originally exposed face, and also whether removal, cleaning to remove mortar, and reinstallation can be implemented without further damage to the brick. Replacement brick should match existing in color, texture, and size.

Exterior Walls – Concrete

The main wrap-around porch is constructed on a non-original concrete slab with concrete beams that sit on the surrounding masonry walls.

Condition Assessment

- Cracked and spalled concrete was observed at the edge of the concrete bond beam below the concrete porch slab (Figure 29). The cracking extended horizontally, approximately 3 inches above the bottom edge of the bond beam. At spalled areas, the reinforcing bar was exposed to view and observed to be corroded. The reinforcing bar was noted as having a cover of approximately 1 inch (Figure 30 and Figure 31). Previous patch repairs had been performed at some concrete spalls but appear to have failed. Moisture staining was also visible and appeared to be originating from the bed joint below the concrete porch slab (Figure 32).

FIGURE 29. Spalled concrete bond beam at porch wall.

FIGURE 30. Spalled concrete bond beam at porch wall.

FIGURE 31. Spalled concrete bond beam at porch wall.

FIGURE 32. Moisture staining and evidence of moisture infiltration at concrete bond beam.

FIGURE 33. Spalling and cracking of concrete at northwest corner of porch.

- Cracked and spalled concrete was observed at some locations at the northwest corner of the porch slab. The slab had vertical cracks that extended through the concrete. There was biological growth associated with some of the spalled areas (Figure 33). The distress was located above areas where brick distress was observed.

Recommendations

EWC1. Spalled and deteriorated concrete at the porch floor slab and support beams should be removed to a depth of 3/4 inch beyond the reinforcing steel. The exposed concrete and reinforcing bar within the repair area should be prepared to remove corrosion and roughen the surface. Reinforcing steel should be inspected and repaired or supplemented steel installed as necessary. Reinforcing steel should be painted with a corrosion-inhibiting coating. Formwork should be provided and repair concrete installed to match the existing.

EWC2. Cracks that are wider than 1/32 inch at the porch floor should be monitored over time. If cracks are found to be stable, repair using a cementitious crack fill material. Hairline cracks do not require repair.

Exterior Walls – Pressed Sheet Metal

The four end gables on the building as well as the perimeter wall of the second-floor balcony are clad with pressed sheet metal (Figure 34). The sheet metal has a repetitive pattern consisting of pointed shingles. The shingles are approximately 8 inches wide and 9 inches tall, and staggered 4 inches so the center of a shingle aligns with the break between units below. The sheet metal is painted mauve. The sheet-metal cladding is original except for the bottom row on the gable ends, which were replaced during work performed in 1999.

FIGURE 34. Pressed sheet-metal cladding at end gable.

Condition Assessment

- Cracked and peeling paint was observed at the pressed sheet-metal cladding panels (Figure 35). The distress consisted of localized areas where the paint appeared to have cracks or was flaking. For the pressed sheet metal, the distress was most pronounced on the north elevation.

- Mild corrosion was observed along the bottom edge of the pressed sheet-metal wall cladding. The corrosion was evident through cracks in the paint.

FIGURE 35. Peeling paint at pressed sheet-metal cladding.

Recommendations

EWS1. Conduct research and finishes analysis to determine appropriate historic colors for repainting.

EWS2. Existing paint should be removed using a chemical coating removal system with containment (e.g., paper covering); the coating removal system used should be the gentlest effective system. Trial repairs should be conducted to determine the extent of paint removal required to obtain a sound surface appropriate for repairs and the new paint coating. If complete removal of existing coating is required, samples of existing coating should be retained in the park archives for color analysis and record purposes. (Finishes analysis should be conducted prior to repainting to determine appropriate historic colors.)

EWS3. Corrosion should be removed and the sheet metal repaired with matching sheet metal patches as necessary.

EWS4. Sheet metal should be primed and painted with a rust-inhibitive coating system.

Exterior Walls – Porches

There are three porches on The Oaks: the main wrap-around porch, a second-floor balcony porch, and a two-story, screened-in porch (refer to floor plans in Appendix A). The main wrap-around porch is one story in height and wraps around the north, west, and south elevations (Figure 36). It has a brick masonry foundation with a non-original concrete slab floor. A gable roof is located along the north portion of the porch and extends to form a porte-cochère at the northeast corner of the building. The west span of the porch has a hip roof. The porch has a clay tile floor, wood balustrade, bead board ceiling, and boxed columns clad with wood that support the roof structure. Stairs from grade at the east and north elevations provide access to the porch.

FIGURE 36. The Oaks, north elevation, looking southeast.

The balcony is located on the second floor at the northwest corner of the building (Figure 37). The porch has a raised wood floor, wood-framed walls clad with pressed sheet metal on the exterior face, and vertical wood boards at the interior face. Boxed columns clad with wood support the roof.

FIGURE 37. The Oaks, west elevation, looking east. Note the second-floor balcony at the left.

A two-story screened-in porch with an L-shaped plan is located at the interior corner between the main portion of the building and the south wing (Figure 38). The porch is wood-framed and has vertically-oriented wood board siding. Wood-framed screen openings are located at the first-and second-floor levels. Wood-framed screen doors at the west and south elevations provide access to the first-floor level. The porch has wood-framed floors and shed roofs at each leg of the building. The second floor of the porch is partially enclosed by walls clad with shiplap siding.

FIGURE 38. The Oaks, south elevation, looking north showing the two-story, screened-in porch.

Condition Assessment

- Missing wood cladding boards were observed at the south porch enclosure (Figure 39). The missing tongue-and-groove boards were located adjacent to a downspout. The remaining wood members exhibit some indications of moisture-related distress.

- A gap was observed between the wood-framed shed roof canopy over the south entrance and the brick masonry wall (Figure 40). The gap was located at the top of the roof framing and increased toward the top, indicating that the roof structure was rotating outward. The gap was approximately 2 inches wide at the top.

- Open joints and displacement were observed between bead board ceiling panels at the balcony and porch. In distress conditions were localized. The paint coating exhibits tears at locations of open joints.

- Evidence of previous patch repairs was observed at the east end of the south elevation (Figure 41). The repairs included infill of missing brick masonry with a tinted mortar patch. The patch appears to be located where an electrical service box was previously removed.

- Biological growth was observed at the balcony floor boards and soffit (Figure 42). The growth consisted of splotchy areas of light green and black discoloration on the boards.

- Deteriorated wood was observed at the base and at the cladding of approximately half of the wood porch columns (Figure 43). The wood at the columns was friable. At some locations, previous repairs had been performed with wood dutchman.

- Debonded and deteriorated coatings were observed at most of the wood porch framing members (Figure 44). Many of the porch columns had been previously repaired and resurfaced with a thin coating that appears to be stucco or a similar finish material. It appears that the intent of the coating was to smooth the surface of the columns prior to repainting. Most of the coating has cracked and debonded, and the underlying wood is exposed.

- Blistered and peeling paint was observed at wood porch columns. At many locations, the paint is debonded from the wood substrate (Figure 45). The underlying wood appeared to be deteriorated when probed. Throughout the porch, there is evidence of previous paint coatings that were not completely removed when the wood was repainted (Figure 46).

- Biological growth was observed at the underside of the bead board porch ceiling (Figure 47). The growth consisted of dark-colored spots on the wood.

- One of the wood porch columns at the east end of the porch is displaced (Figure 48). The bottom of the wood column has shifted approximately 1 inch to the northwest and is no longer centered on its concrete base.

FIGURE 39. Missing wood cladding at south two-story porch.

FIGURE 40. Displaced roof framing over south entrance.

FIGURE 41. Previous cementitious patch repair at abandoned utility openings.

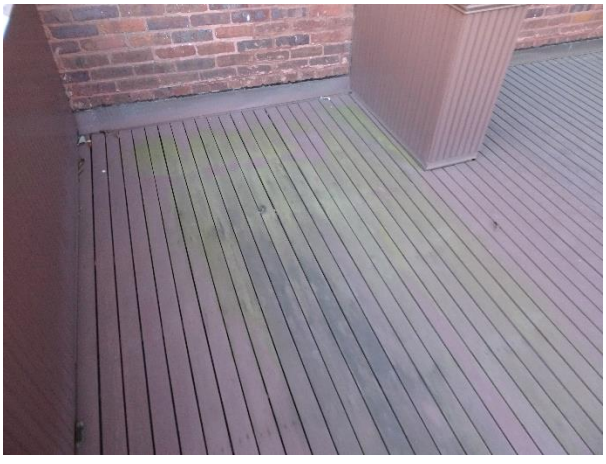


FIGURE 42. Biological growth at second-floor balcony deck.

FIGURE 43. Deteriorated wood at base of columns.

FIGURE 44. Debonded paint and plaster coating at columns.

FIGURE 45. Blistering paint at wood porch members.

FIGURE 46. Previous paint coatings at wood porch members were not completely removed prior to repainting.

FIGURE 47. Dark spots of biological growth on face of ceiling boards at porch.

FIGURE 48. Tilted and displaced porch column.

Recommendations

EWP1. The cause of the observed displacement at the top of the canopy roof structure should be investigated. If necessary, supplemental anchorage or bracing should be installed.

EWP2. Decayed portions of wood columns, soffits, trim, and decorative elements should be removed and new wood dutchman units installed. As part of the repairs, previous coating repairs should be removed and the condition of the wood assessed. The dutchman units should match the existing wood in profile and should be primed and painted to match existing wood.

EWP3. In areas of painted wood that experience heavy mildew or organic growth, the wood surface should be washed with a biocide and repainted using alkyd-based paints. For difficult areas where mildew recurs rapidly, consideration could be given to stripping the surface to bare wood and repainting using alkyd-based paints containing anti-microbial additives.

EWP4. Displaced non-structural porch column should be reset so that they are plumb and rest squarely on the setting block. Repair or replace wood as required.

EWP5. At locations where loss of paint and mild surface corrosion are observed, the wood or metal surface should be scraped, corrosion removed, and the wood or metal spot primed and painted to match the original color scheme, using alkyd-based paints formulated for the substrate.

EWP6. Replace deteriorated or missing wood cladding with wood dutchman units or new wood members to match the existing wood in profile, and primed and painted to match existing wood.

Windows and Exterior Doors

All windows on the building are wood-framed double-hung units with single-pane glazing. Most of the windows have segmental arch openings and brick sills.

The most common window configuration is a two-over-two double-hung window (Figure 49). The windows measure approximately 39 inches wide and 85 inches tall. Slight variations exist in the window dimensions, whether or not the sill is flush, and/or if there is a one-course or two-course brick arch (Figure 50).

Other window types found on the building include both single and paired one-over-one double-hung windows located at the wrap-around porch; paired two-over-two double-hung windows located at end gables; triple one-over-one double-hung window units arranged to imitate a Diocletian window at the first floor of the east elevation; six-over-six double-hung windows at the basement level of the east elevation; and fixed elliptical windows at the return walls of the north projecting bay.

FIGURE 49. Typical masonry window.

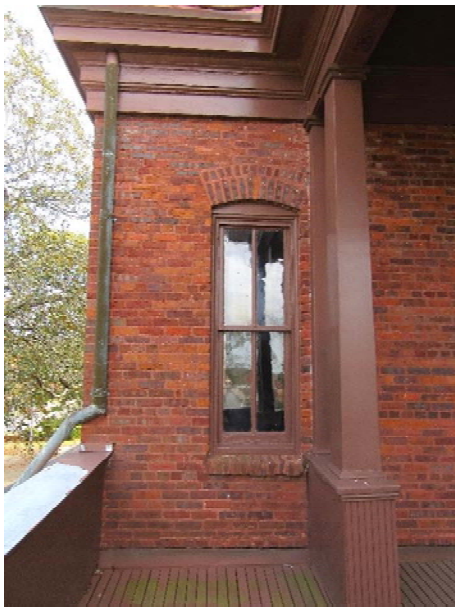


FIGURE 50. Typical masonry window unit showing variation in overall window dimensions and sill extension.

Typical door openings on the building have segmental arch openings and feature single-leaf wood-framed hinge doors with single-light transom (Figure 51). The doors are set back in the opening so that they are flush with the interior face of the wall. While all of the doors have multiple recessed panels, the configuration varies. Many of the doors also have glass panels at the top portion of the door.

At the west end of the north elevation is the main entrance door (Figure 52). The wood-framed double door has a segmental arch opening, sidelights, and a two-light transom. Other features of the main entrance include decorative trim that defines the framing elements between window and door units.

Other door types include wood-framed screen doors and non-original multi-panel doors with transom at the two-story screen porch; a multi-panel wood door with flat relieving arch and awning roof at the center of the south elevation; and a multi-panel door with segmental arch opening, glazing panel, and awning located at the east wing addition (Figure 53).

FIGURE 51. Typical side door with four solid panels.

FIGURE 52. Main entrance door on the north elevation.

FIGURE 53. Door with awning at east wing addition.

Condition Assessment

- Cracked and open mortar joints were observed above the door opening at the east end of the south elevation (Figure 54). The opening has a flat arch brick opening. Some mortar joints between the flat arch brick are cracked and many appear to have been recently repaired. The crack joints extend in a stepped pattern approximately five courses above the opening.

- Missing screen stops were observed at one first-floor screen door on the southwest porch. The anchorage for the screen was exposed to view.

- A cracked recessed wood panel was observed at one door leaf (Figure 55). The hairline crack extends vertically through the panel.

- Peeling paint was observed at all windows and doors (Figure 56). Deteriorated and missing glazing putty was also observed. At some locations, the underlying wood is exposed to view.

- Broken and loose glass units were observed at a few window units, notably at the three basement window units on the east elevation (Figure 57). At these locations, many of the wood muntins are deteriorated and the glazing putty has fallen out. Many of the glass units are loose, displaced, or cracked. Cracked glass was also observed at a couple first-floor windows.

- Mild surface corrosion was observed at the handrail at the south entrance to the east wing (Figure 58). The paint at the handrail has peeled, and the exposed metal handrail has surface corrosion.

FIGURE 54. Cracking and open mortar joints above flat arch opening.

FIGURE 57. Broken and displaced glass at basement windows.

FIGURE 55. Vertical crack in recessed panel.

FIGURE 58. Surface corrosion and paint loss at metal handrail.

FIGURE 56. Peeling paint at door and window framing members.

Recommendations

WED1. The cracked and displaced brick masonry flat arch above the door opening at the east end of the south elevation should be removed and salvaged to permit inspection of the condition, and repair, as needed, of the underlying structure. Following repair, the brick masonry at the lintel should be reinstalled to match the original coursing and plane of the wall. Mortar joints between the reset brick units should match the historic joint width, and mortar should match the existing historic mortar in color, texture, strength, and joint tooling profile.

WED2. Deteriorated and missing window and door components, such as missing screen stops, cracked recessed door panels, and broken glass lights, should be removed. Severely deteriorated wood elements should be replaced with new dutchman units or replacement components to match the original. Broken glass lights should be replaced with new glazing to match the original.

WED3. Deteriorated wood door framing should be repaired or replaced. As part of repairs, the deteriorated portions of the frame should be removed and repaired with new wood dutchman units and epoxy. The frames should be adjusted and joinery reinforced so that frames are square.

Roof

The building has multiple wood-framed roof forms including a main east-west gable roof with cross gables that extend from the north- and south-facing slopes. The cross gables are associated with the north projecting bay, south wing, and a gable bay on the south elevation. A hip roof extension is located at the northwest corner of the building and covers the second floor balcony.

Almost all of the roof areas have non-original, unpainted aluminum pressed sheet-metal panels laid on top of roofing felt. The pressed sheet-metal panels have a ridged pattern that gives them a brushed appearance (Figure 59). The panels have an exposed face of 12-1/2 inches and a 1/2-inch raised lip at the downslope end. Valleys are lined with aluminum sheet metal. Chimneys and roof terminations into brick have copper flashing regletted into mortar joints and are sealed with sealant. At the corner of the two-story screen porch, there is a standing seam metal panel roof (Figure 60).

FIGURE 59. Detail of pressed sheet-metal roofing with grooved pattern, giving the appearance of a wood shingle.

FIGURE 60. Typical roofing material, plus the standing seam panel and aluminum roof vent.

The perimeter of the roof has a projecting cornice with integral gutter. The gutter measures approximately 6 inches wide and 4 inches deep but varies depending on location on the building. Copper downspouts extend from outlets in the integral gutter system.

There are numerous chimneys on the building. Four of the chimneys have a similar appearance and appear original to the structure. These chimneys have ornate brickwork which includes horizontal corbelled brick bands that wrap around the top of the chimney and an inset vertical course of brick that accentuates the vertical lines of the chimney. The chimneys are each capped with sheet metal. A non-original brick chimney, which appears to have been rebuilt, is located at the south wing of the building.

Condition Assessment

- Blocked, damaged, and backed-up downspouts were observed at many roof locations (Figure 61). Some of the gutters also contained large amounts of debris (Figure 62). At one location at the west elevation of the projecting south bay, the gutter near the downspout overflowed with water, which flowed onto the adjacent cornice ledge (Figure 63). There were small branches in the gutter. At this location, the sheet-metal roof cladding adjacent to the gutter has deformed and separated from the gutter liner and flashing (Figure 64).
- Reverse-lapped shingles were observed at the gable roof over the north porch and at the east wing (Figure 65). The shingles at the ridges are lapped in the opposite direction as the flow of water. Water at these locations has the potential to infiltrate the roof system at the reverse lap of the shingles.
- Gaps were observed between the gutter liner and the sheet-metal roof cladding on the porch (Figure 66). Where observed, the gutter liner appeared to have been deformed and was outboard of the bent edge of the sheet metal roof cladding. There was a 1/8-inch-wide gap along the flashing to roof cladding interface.
- A large open joint was observed at the roof-to-wall interface (Figure 67). The gap between the roof materials was approximately 1 inch wide. The large opening is a potential source of water infiltration. Further investigation is required to determine the condition of underlying flashing, if present.
- Deformed and damaged sheet-metal shingles were observed at a few areas of the roof, including near gutters and at the field of the main building roof (Figure 68 and Figure 69). Damaged shingles at the low end of the roof slope, adjacent to gutters and downspout outlets, were warped and curled and had become displaced from the supporting edge cleat. At the field of roof, the deterioration consisted of warping and buckling of sheet metal along the bottom edge of the shingles.

FIGURE 61. Damaged downspout.

FIGURE 62. Debris and organic matter block a gutter.

FIGURE 63. Gutter overflowing with water. Note branches in the gutter.

FIGURE 64. Deformed and damaged roofing adjacent to overflowing gutter.

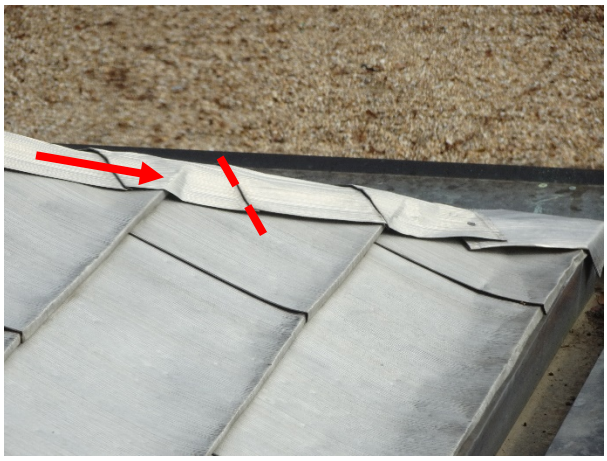


FIGURE 65. Roof ridge with reverse-lapped shingles. Arrow shows desired direction of water flow away from building. The seams between the panels (dashed line) would allow water to enter the seam.

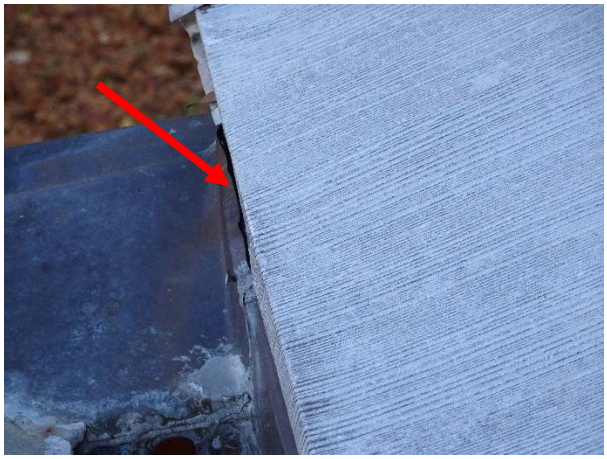


FIGURE 66. Gap between the copper flashing and the roof cladding.

FIGURE 67. Gap at interface between the sheet-metal roof and wall cladding.

FIGURE 68. Damaged sheet-metal roof cladding near gutter.

FIGURE 69. Bowed and displaced sheet metal at field of roof.

FIGURE 70. Moisture staining at wood sheathing.

- Moisture staining was observed at roof sheathing boards and joists at the southwest wing of the building (Figure 70). The moisture staining was concentrated at sheathing boards near wood rafters as well as at the bottom of rafters adjacent to the southwest chimney (Figure 71). The staining does not appear to be active.

- Previous repairs were performed at the south end of the southeast wing roof (Figure 72). It appears that the repairs included installation of new cantilevered wood kickers to supplement the existing kickers. Deteriorated wood was observed at the end of wood door and window framing members. The wood was soft when probed and had checks that extended from the end of the wood framing member. At one location, the bottom of a door framing member had deteriorated and was no longer present. The paint at the deteriorated wood framing was cracked.

- Loose and detached copper straps were observed at some of the downspouts (Figure 73). The failure consisted of the fastener head slipping through the anchor hole in the strap. The downspout was displaced outward approximately 2 inches from the building.

- Deteriorated sealant was observed at the roof flashing (Figure 74). The sealant at the joint between the roof flashing and the brick masonry wall is deteriorated. It appears that sealant repairs were installed over previously existing failed sealant.

- Corrosion of sheet-metal flashing was observed at roof dormers, chimneys, and access hatches (Figure 75). The flashing was noted to have surface corrosion and staining that extended onto the adjacent metal roof cladding.

- Peeling paint was observed at sheet-metal roof flashing and copings and pressed metal siding. At the sheet-metal copings, the paint peeled away and the sheet metal was exposed.

FIGURE 71. Moisture staining at roof rafters.

FIGURE 72. Replaced structural kickers at south wing roof.

FIGURE 73. Damaged and dislodged downspout strap.

FIGURE 74. Deteriorated sealant at regletted flashing joint.

FIGURE 75. Corrosion staining at interface of flashing with roof cladding.

Recommendations

ROOF1. Repairs were recently performed at the roof framing of the south wing. Evidence suggests moisture infiltration at the roof and sagging of the wood kickers at the cornice and gutter. The interior of the roof should be monitored for moisture infiltration and displacement of the wood kickers.

ROOF2. All gutters and downspouts should be cleaned and routed to remove debris and blockages. Non-corroding metal drain strainers should be installed at the head of downspouts to restrict debris from entering the downspout. Routine seasonal maintenance is required to keep the gutter and downspout free of debris.

ROOF3. Where loose, existing copper downspout straps should be removed and replaced with new copper straps anchored into mortar joint or wood framing members.

ROOF4. Deteriorated sealant should be removed at the edge of roof flashing. The joint should be cleaned of sealant residue and new sealant installed.

ROOF5. Ridge shingles should be removed and reset so that they are lapped away from the building and in the direction of water flow.

ROOF6. Visible gaps and deformations in the roof assembly should be addressed by replacing deformed sheet-metal shingles or rebuilding select portions of the roof assembly to address gaps in the roofing or flashing.

Interior Finishes – Walls and Ceilings

Exterior walls from the basement to the top of the second story are load-bearing brick masonry and finished with plaster on the interior. The exterior walls on the third floor and interior partitions on all three floors are wood framed and finished with plaster over wood lath. Plaster walls are painted except where wood paneling or a wood wainscot was used, or ceramic tile was applied in bathrooms and had been restored in recent projects to match the historic finishes (Figure 76 and Figure 77).

Throughout the house, settlement and structural deficiencies noted above have led to cracks in the plaster. Although major and minor plaster repairs were included in the 1980, 1999, and 2007 rehabilitation and repair projects, there is plaster damage throughout the house. It is not pervasive and much of it is minor; however, the amount of minor damage is considerable. There are locations where the damage is serious because it compromises the integrity of the plaster and its appearance and, in some places, the damage has adversely affected other historic materials (refer to Condition Assessment below).

A wood picture rail occurs in most rooms. Plaster walls above the rail are typically painted with the ceiling color and have crown molding. The crown is typically stained to match the dark color of the trim and baseboards except on the lower floor where it was painted a gold color and lowered to accommodate the installation of a frieze mural in 1908 (Figure 78).

FIGURE 76. Historic photograph of the study, 1906. (Source: Library of Congress, Carol M. Highsmith Archive, Washington, D.C.)

FIGURE 77. Historic photograph of the dining room, 1906. (Source: Library of Congress, Carol M. Highsmith Archive, Washington, D.C.)

FIGURE 78. Overall view of the study.

FIGURE 79. Overall view of the front hall.

Throughout the lower floor, walls are painted dark red with ceilings painted cream (Figure 79, Figure 80, and Figure 81). The red color with white ceiling continues at the halls on the second floor (Figure 82), but the bedrooms are painted unique colors such as dark blue in Margaret's and the boy's bedrooms, light blue in Booker T. Washington's bedroom, and yellow in Portia's bedroom (Figure 83, Figure 84, and Figure 85). The hall and bedrooms on the third floor are painted dark red, similar to the first floor, with the exception of the north bedroom which is a lighter yellow (Figure 86).

Rooms at the rear (south) of the house, such as the guest bedroom, kitchen, and breakfast room on the first floor and the den on the second floor, are painted yellow with a dark wood wainscot, with the exception of the guest bedroom. The dark wainscot wraps the stair enclosures and continues throughout the main halls.

Bathrooms are typically painted white or light colors above a white tile wainscot and mosaic tile floor (Figure 87). Decorative tile work is unique to each bathroom (Figure 88).

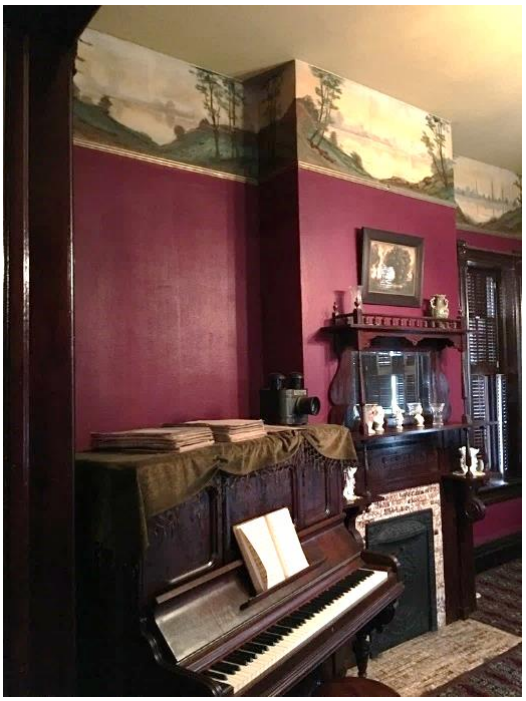


FIGURE 80. Overall view of the parlor.

FIGURE 81. Overall view of the dining room and dining room addition.

FIGURE 84. Overall view of Booker T. Washington's bedroom.

FIGURE 82. Overall view of the second-floor front hall.

FIGURE 85. Overall view of Portia's bedroom.

FIGURE 83. Overall view of Margaret Washington's bedroom.

FIGURE 86. Overall view of the third-floor bedroom.

FIGURE 87. Ceramic tile in the bathroom.

FIGURE 88. Detail of tile wainscot cap.

Ceilings throughout the home consist primarily of plaster applied over wood lath. Anomalies include the narrow-board wooden ceiling in the first floor kitchen and Booker T. Washington's private study on the second floor.

Closet / trunk rooms on the third floor are finished with beaded boards at walls and ceilings.

Condition Assessment

- Some linear and hairline cracks can be seen in plaster wall finishes (Figure 89, Figure 90, Figure 91, Figure 92, and Figure 93). Most cracks occur at the corners of some doors and windows, particularly windows that have experienced distress because of moisture intrusion and air infiltration. Cracks are also visible on walls affected by sagging or deflection of floor joists. Except where these cracks are associated with delamination of the plaster, they are not considered significant.
- Water stains and plaster degradation are evident on interior walls and ceilings abutting exterior walls where roof flashing and deteriorated gutters allow water penetration (Figure 94, Figure 95, Figure 96, Figure 97, Figure 98, and Figure 99).

FIGURE 89. Detail of plaster cracking.

FIGURE 90. Plaster cracking at sliding door pocket (dining room).

FIGURE 92. Detail of plaster cracking at outside corner of closet projection.

FIGURE 91. Paint damage at dining room.

FIGURE 93. Detail of plaster cracking at sides of door frame.

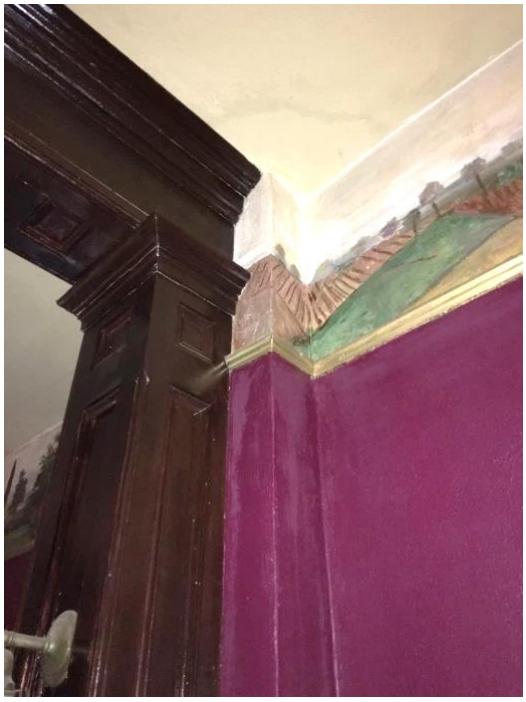


FIGURE 94. Paint damage at dining room addition.

FIGURE 95. Plaster damage from water at second-floor front hall.

FIGURE 96. Water damage at ceiling.

FIGURE 97. Detail of plaster damage at ceiling.

FIGURE 98. Detail of water damage at ceiling, Margaret Washington's bedroom.

FIGURE 99. Second-floor shower (Room 203) - plaster damage at ceiling.

- Mildew or other biological staining was observed in the third-floor bathroom, at the wall adjacent to the attic space (Figure 100).

  Wainscots and wood paneling are in good condition except for the effects of prolonged

wear-and-tear. The dark brown finish becomes scratched, chipped, and worn, and the varnish loses its sheen. (Refer to condition assessment and treatment recommendations at section "Interior Finishes – Woodwork and Trim" below.)

FIGURE 100. Mold / mildew stain at third-floor wall surfaces.

- Ceramic wall tile in the first-floor guest bathroom was observed to have cracks and some loss of original grout. Damage to the tile is apparent, perhaps due to past structural problems (Figure 101 and Figure 102). Similar issues were observed in the second-floor boys' bathroom. B.T. Washington's bathroom appears to be in remarkably good condition.

FIGURE 101. Detail of wall tile at bathroom.

FIGURE 102. Detail at tile wall base.

- Plaster on the ceiling in shower room and an area near the north wall in Margaret Washington's bedroom has deteriorated substantially, most likely due to roof and gutter problems.

- Wooden ceilings in the breakfast room and kitchen on the first floor and the den on the second floor appear sound and in very good condition.

- The third-floor bathroom is finished with a textured wall panel wainscot that exhibits significant delamination of paint coatings (Figure 103). The partitions separating the bathroom from the third-floor hall may have been installed during the use of the building as administrative offices during the period of significance.

- The first-floor guest room closet has been renovated to house security and fire alarm panels. It is also observed to be used as a storage space (Figure 104). Plaster was repaired in the closet with wire lath but has been removed in several areas to provide access for conduit and loose wiring. A sheet-metal panel used to close the vertical, three-story chase was observed to be displaced (Figure 105). Openings for conduit at the floor and ceiling were not sealed to provide separation between the floors (Figure 106).

FIGURE 103. Lavatory and painted wainscot in the third-floor bathroom.

FIGURE 104. Plaster damage in the guest room closet.

FIGURE 105. Electrical chase panel in the guest room closet.

FIGURE 106. Conduit penetration in the guest room closet floor.

Recommendations

WLCL1. Stained, loose, cracked, and blistered paint should be removed, sanded as needed to prepare the surface, primed, and repainted.

WLCL2. Minor cracks and deterioration in plaster finishes should be repaired in place by filling cracks or damaged areas replaced with compatible new material.

WLCL3. Moderate deterioration of the plaster should be repaired in place by applying a compatible new plaster finish coat.

WLCL4. Heavily deteriorated plaster should be removed and replaced with a three-coat plaster system matching the original texture and finish.

WLCL5. Areas of loose or deteriorated grout should be removed and replaced with new material to match existing original materials. Tile should be thoroughly cleaned.

WLCL6. Further investigation is recommended to date the construction of partitions in the third-floor bathroom. Pressed wainscot panels should be removed to provide access to the wall cavity. If plaster lath, plumbing, and framing members are confirmed to date after the period of significance and evidence exists that the hall was originally open to the paired south windows, it is recommended that the bathroom be restored to the condition of the third-floor hall during the period of significance, reflecting the evolution of the home from Washington occupancy to Institute ownership.

WLCL7. Wall surfaces should be patched to match adjacent surfaces in the guest room closet, currently in use as a security, alarm and electrical panel closet. Penetrations through the floor and ceiling should be patched with appropriate assemblies to prevent air circulation between adjacent floors and the crawl space / basement level.

Interior Finishes – Murals

One of the defining features of The Oaks is a series of murals painted as a frieze above the picture rail in the parlor, study, and dining rooms. At these rooms, the original picture rail was lowered and painted gold when the murals were painted by the European artist E.W. Borman in 1908. The landscape theme of the murals varies in each room. The parlor mural is the most subtly developed and complex and bears the artist's signature "E.W. Borman – 08" (Figure 107). The painting in the parlor consists of a wooded foreground with a misty body of water and distant landscape beyond (Figure 108). The mural frieze in the study consists of a similarly misty body of water and distant shoreline, but depicts a rocky, treeless foreground with man-made objects such as roads, boats, windmills, and a lighthouse (Figure 109). Some elements in the study mural have a gestural character. The dining room mural depicts a foreground of agricultural fields with a distant hazy mountain range (Figure 110 and Figure 111). The dining room addition continues the agricultural theme of the dining room, depicting geometric crop rows with wide irrigation streams (Figure 112).

FIGURE 107. Detail of frieze mural in the parlor with signature of artist, "E.W. Borman – 08."

FIGURE 108. Frieze mural in the parlor.

FIGURE 109. Detail of frieze mural in the study.

FIGURE 110. Detail of mural at dining room.

FIGURE 111. Detail of frieze mural, dining room (left) and dining room addition (right).

FIGURE 112. Detail of frieze mural at dining room addition.

Condition Assessment

- Water damage due to roof and flashing failures at the single-story addition was observed to be affecting the plaster and murals in the dining room extension (Figure 113).

- Portions of the murals appear to have been retouched, possibly to repair areas of water damage to the plaster substrate (Figure 114). Rendering of foreground objects, such as tree canopies, and linework, such as fence rows and furrows, do not appear consistent with the treatment of similar elements in the other murals. These repairs appear to be most prevalent in the dining room addition and portions of the dining room. Retouched areas were not noted in the study and parlor.

  Cracks in plaster walls were observed to have extended through the mural. At some

locations, the murals appear to have been retouched to conceal the cracks. Three stages of repair were noted: retouched cracks which remain closed and are not visible within the mural (Figure 115); cracks which have been retouched but are visible due to inconsistent or unstable retouching (Figure 116); and cracks which are more recent than the conservation work or that were not treated (Figure 117).

FIGURE 113. Frieze mural at dining room addition, affected by water staining.

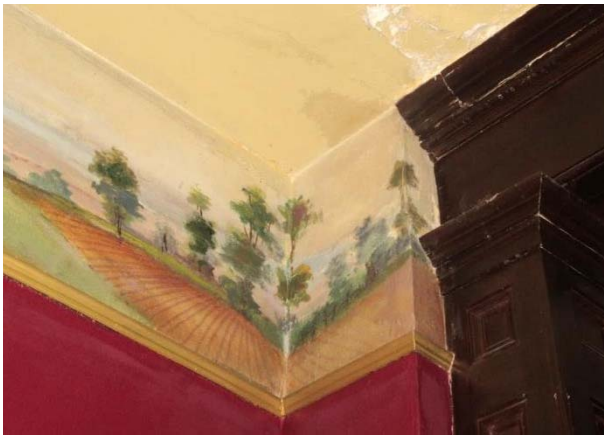


FIGURE 114. Detail of frieze mural at dining room addition.

FIGURE 115. Previously repaired crack at mural where retouched paint is not visible.

FIGURE 116. Previously repaired crack at mural where retouched paint is visible.

FIGURE 117. Visible plaster crack with no apparent repair or retouching.

Recommendations

MURL1. Following repair to roof leaks at the single-story addition, and treatment of plaster cracks at adjacent wall areas as described above, a conservator should be consulted to assess the stability of the original paintings and subsequent repair efforts. A conservation plan should be established prior to initiating repairs to plaster within the murals.

Interior Finishes – Floors

Existing original wood floors are finished with 1/4-inch-thick hardwood parquet flooring. The field strips are laid in a diagonal pattern and finished with a nearly clear stain. A decorative 10-inch border pattern occurs at rooms where the flooring is exposed as the finished surface. The patterns are unique to each room and consist of stained color and geometric patterns (Figure 118). The flooring was installed with face nails which are visible in the field and decorative borders (Figure 119). A similar orthogonal pattern strip flooring with no border was noted at the entry vestibule, where carpet could be lifted to expose the wood flooring (Figure 120). A quarter-round trim bead terminates the flooring where wood flooring is exposed. There is no bead at carpeted rooms. The kitchen, breakfast room, and pantry have 1-1/2-inch-wide strip flooring installed perpendicular to the walls, with no border. The third-floor rooms are finished with a wider, pine tongue-and-groove flooring.

FIGURE 118. Decorative parquet border.

FIGURE 119. Parquet border at second floor.

At the first floor, the original wood parquet floor is covered with a wall-to-wall broadloom carpet with a decorative pattern (Figure 121). The carpet is protected by a dark red broadloom carpet runner at traffic areas accessible to the public (Figure 122). The carpet runner continues up both stairs to the second floor where it is installed directly above the wood strip flooring in the hall areas (Figure 123).

Traffic access to the rooms is prevented by stanchions with retractable barriers across the doorways. Stair treads on the upper floors are solid oak with no runner (Figure 124).

Previously-implemented repairs were observed at the structural framing at the top of the stairs extending from the first to the second floor. The repairs included installation of pressure-treated 4x4 posts and laminated wood veneer lumber beams sistered to the floor framing around the stair opening and supported by the posts. One of the laminated wood beams is oriented north–south and supports the structure at the top of the stair landing. The second beam is oriented east–west and aligns with the wall to the south of the stair opening.

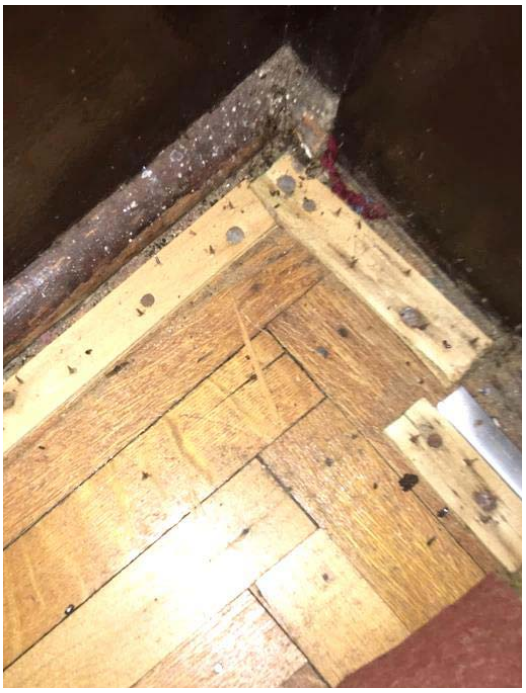


FIGURE 120. Original wood flooring below carpet at vestibule.

FIGURE 121. Typical wall-to-wall and traffic area carpets on the first floor.

FIGURE 122. Wall-to-wall carpet on the first floor.

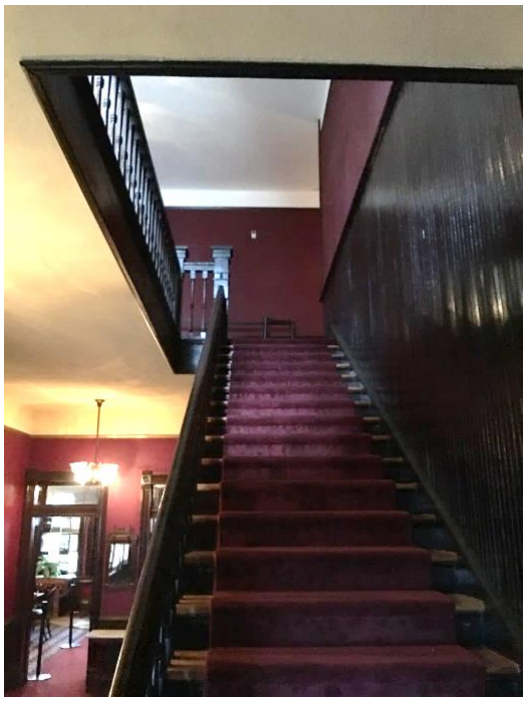


FIGURE 123. Carpet runner at stair from first to second floor.

FIGURE 124. Stair from second to third floor.

FIGURE 125. Moisture damage at floor and base.

Condition Assessment

- Generally, the wood parquet and strip flooring is in very good condition where it is visible. In 1957, the floors were apparently severely stripped and refinished, leaving the original parquet badly scored and gouged. The current condition of flooring under wall-to-wall carpet is unknown.

- Isolated areas of moisture damage were observed in the wood parquet flooring and adjacent baseboards (Figure 125).

- Wood strip flooring in the kitchen, breakfast room, and pantry was observed to have separations between the members which could be a result of moisture damage (Figure 126). The strip flooring at these areas did not appear to have face nails, as was found at other spaces. The flooring may have been installed recently as a glue-down system. Additional investigation is recommended to determine the cause of the separations and the extent of possible damage to the subfloor.

- Discoloration due to moisture damage was observed in the pine tongue-and-groove flooring on the third floor (Figure 127).

FIGURE 126. Separations at wood floor in pantry.

- Carpet in traffic areas and runners on stairs is soiled and worn (Figure 128).

- Ceramic tile flooring in the bathrooms was observed to have cracks and loose tile due to sagging or deflection of the underlying floor structure, particularly at the guest bathroom

on the first floor and boys' bathroom on the second floor (Figure 129 and Figure 130).

- In the first-floor bathroom, gaps were observed between the tile perimeter and the adjacent base and thresholds (Figure 131). This condition was also observed from the basement below, where daylight gaps were observed to the bathroom above.

- The flooring on the third-floor bathroom consists of a non-historic sheet vinyl on plywood (Figure 132). The flooring was observed to be in poor condition, torn, and partially missing. Where it could be observed, the plywood subfloor appeared to be in serviceable condition.

- In general, the tile at fireplace hearths is in excellent condition. Where the first floor hearths could be observed from the basement level below, it was noted that the installation typically consists of an arched masonry subfloor supporting the tile mudbed. The arched masonry is shored by wood strips supported by the adjacent floor joists (Figure 133). In the guest bedroom, the wood strips were not present and the masonry substrate did not appear stable (Figure 134).

FIGURE 127. Third-floor hall, discoloration from moisture on wood strip flooring.

FIGURE 128. Carpet runner in traffic areas.

FIGURE 129. Cracks in mosaic floor tile at bathroom.

FIGURE 130. Detail of floor tile in the boys' bathroom.

FIGURE 131. Tile damage at door frame.

FIGURE 132. Deteriorated linoleum floor in the third-floor bathroom.

FIGURE 133. Typical masonry infill with wood slats shoring at underside of hearth.

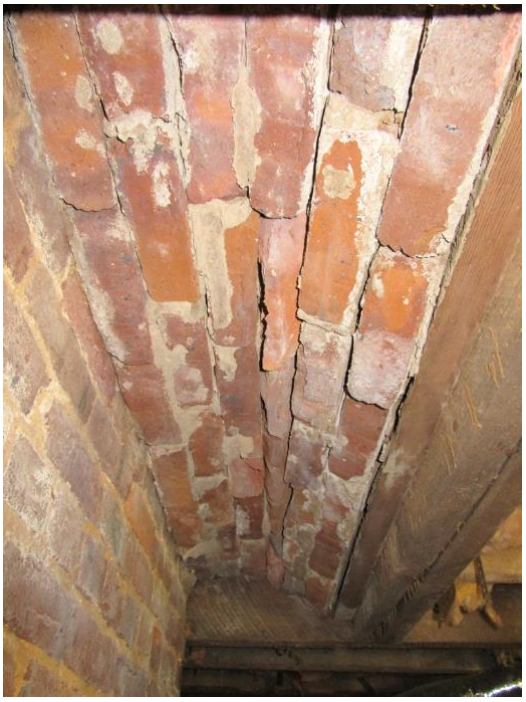


FIGURE 134. Masonry infill at underside of hearth in the guest bedroom.

Recommendations

FLRS1. Parquet flooring does not normally have a thick wear layer and cannot be refinished more than one or two times before it has to be replaced. In heavy traffic areas like the first floor and second-floor halls, carpet should be provided to protect the wood flooring.

FLRS2. Areas of isolated moisture damage at parquet floors should be repaired on a case-by-case basis. Where individual elements were damaged by moisture to the extent that they cannot be restored to their original condition by cleaning, lightly sanding, and refinishing, they should be replaced to match the existing material.

FLRS3. Tongue-and-groove flooring at the third floor should be refinished where moisture damage is evident. Consideration should be given to extending the flooring at the third-floor hall to the southwest corner of the room if a determination is made to remove the non-historic bathroom.

FLRS4. Wall-to-wall carpets are in serviceable condition and should be cleaned. Consideration could be given to installing loose laid carpets, narrower than the room perimeter, at the lower floor rooms. This installation, similar to that seen in the historic photograph of the dining room (refer to Figure 65), would allow the original decorative borders to be visible, where they are present. Also, it would allow for the installation of stained wood diffuser nozzles that would be less visually intrusive than the currently installed white plastic nozzles.

FLRS5. Protective traffic carpet runners at stairs and halls are worn and should be replaced.

FLRS6. Mosaic floor tiles should be cleaned, beginning with the gentlest means possible. Cleaning methods should be evaluated in an inconspicuous location prior to proceeding. The floor should be sounded and checked for loose tiles and grout. Loose tiles should be re-laid, and minor damage to tiles should be repaired, maintaining the original tile. Loose grout should be carefully removed and replaced to match the existing adjacent material. Where tile is missing or severely damaged, it should be carefully replaced to match the existing tile and maintain the integrity of the adjacent sound tile. Where gaps at the perimeter of the mudbed are noted, the substrate should be repaired to maintain an airtight condition to the floor or crawl space below and the tile re-laid to extend below perimeter base or threshold elements.

FLRS7. The arched masonry substrate supporting the tile at each hearth should be evaluated for structural stability and shored as required from the floor below. Work should be performed carefully and without impact that might cause the tile to de-bond from the mudbed or grout.

Interior Finishes – Woodwork and Trim

Interior wood trim, moldings, and woodwork are consistent throughout the house and consist of a profiled wood base, wainscots, and picture rail. Wood wainscots occur in the first- and second-floor halls; the kitchen, breakfast room, and pantry on the first floor; the second-floor den; and throughout the finished rooms on the third floor. The second-floor hall wainscot continues into the rear stair, extending the full height of the wall at the first-floor level. Wainscots typically consist of a vertically-oriented beaded panel with a simple chair rail. Halls on the first- and second-floor exhibit a built-up chair rail. The rising wall of the first-floor main stair is paneled with a book-matched diagonal pattern set in raised rails.

Woodwork and trim throughout the house is typically finished with dark brown, high gloss varnish. Exceptions include the picture rail at murals and the guest bedroom which are painted gold.

Wood ceilings occur in the kitchen on the first floor and the den on the second floor. The kitchen ceiling is stained to match the trim and the den ceiling is painted white. Both have a stained crown mold. The crown mold in the kitchen is a simple single ogee. At the den, the crown mold consists of a two-piece assembly.

Door and window casings are consistent throughout the main rooms of the house, with some variation in the dining room addition and the south ell. Interior door frames typically have transoms matching the height of the taller, paired, sliding door frames (Figure 135 and Figure 136).

The only built-in cabinetry is an original china cabinet on the west wall of the pantry (Figure 137). Most of the current interior louvered wood shutters are not original, but date to 1980. However, they are replications of the original interior louvered shutters that were removed during renovation projects prior to NPS stewardship of The Oaks. The design of and locations for the current shutters were included in

the drawings by the Denver Service Center of the NPS for the 1979 preservation project for The Oaks. Installation procedures required removing "plugs" in the window jambs where the hinges of the original shutters were attached and mounting the new shutter hinges at those locations.

FIGURE 135. Typical door casing with transom.

FIGURE 136. Typical sliding door casing.

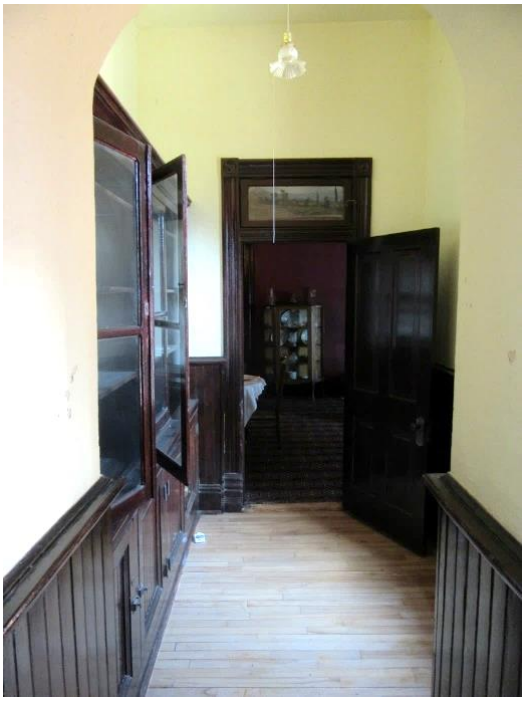


FIGURE 137. Overall view of pantry with built-in cabinets and wainscot.

FIGURE 138. Typical stained wood interior at third-floor trunk storage rooms.

The interior of the trunk room on the third floor is finished with beaded paneling on the walls and the underside of roof joists. The paneling is stained a lighter color than the typical dark varnish.

Similarly finished, boxed platforms are constructed at the perimeter (Figure 138).

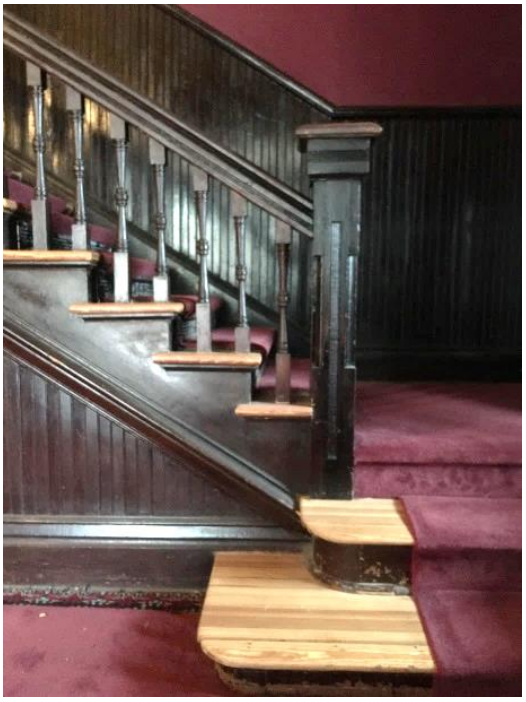


FIGURE 139. Main stair at first floor.

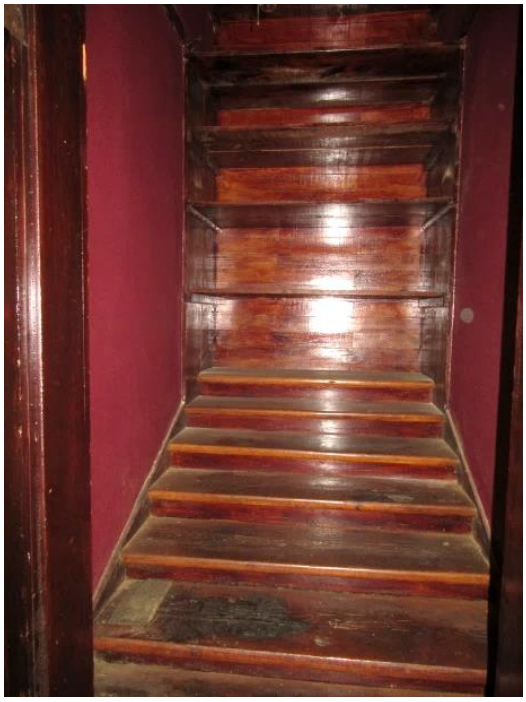


FIGURE 140. Shelving infill at second floor stair.

Stairs. Both interior stairs are constructed of wood and trimmed with wood. An open handrail on the north side of the main stair starts with a square newel post at the landing (Figure 139). The rail is supported by two square-top, turned balusters at each tread. The stair to the third floor is virtually identical to the stair below it.

The partially enclosed U-shaped, rear stair is tucked into the southeast corner of the house between the dining room and the ell. It runs from the basement to the second floor, although it was probably designed to go to the third floor because a partial segment of the stair is concealed in an adjacent closet on the second floor (Figure 140).

Fireplaces. In 1979, after the National Park Service acquired the property, the fireplace mantels were restored to their original, 1929 appearance. The most elaborate mantels are in the parlor and in Margaret Washington's bedroom on the second floor. Both have over-mantels that frame rectangular mirrors and mantel shelves supported by delicate turned spindles (Figure 141 and Figure 142). A distinctive feature of the parlor mantel is the carved face board beneath the mantel shelf, which has an alternating flower motif. The other six original mantels in the house are less ornate.

All of the fireplaces were designed to burn coal and retain cast-iron registers and covers. The hearths and firebox surrounds are tiled.

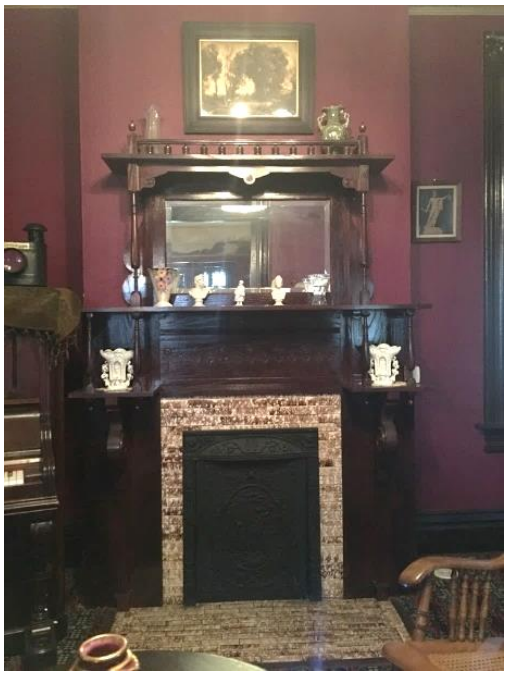


FIGURE 141. Detail at parlor fireplace.

FIGURE 142. Detail of fireplace in Margaret Washington's bedroom.

Condition Assessment

- As noted above, the majority of woodwork and wood trim is in good condition except for the effects of prolonged wear-and-tear. The dark brown finish is scratched, chipped, and worn, and the varnish has lost its sheen. This is more of a concern about appearance than the durability of most wooden elements. Baseboards, handrails, chair rails, and stairs are particularly susceptible (Figure 143, Figure 144, Figure 145, and Figure 146).

- Mantels should be considered important features of the house. They are in excellent condition (Figure 147).

- Paint and varnish on window sash and stools is peeling and delaminating, exposing the wood components to deterioration (Figure 148).

- Wood shutters are in serviceable condition. Missing or broken hardware and knobs are the main problem preventing normal operation.

FIGURE 143. Wood wainscot and paneling at foyer.

FIGURE 144. Paint deterioration at stair risers.

FIGURE 145. General wear and tear at wood base.

FIGURE 146. Common damage to balustrade rail and newel post on the third floor.

- Moisture damage to wood paneling was observed at the wainscot and base in the kitchen (Figure 149).

- Termite damage was observed at the stair treads in the basement (Figure 150).

FIGURE 147. Detail of fireplace in the den.

FIGURE 148. Paint delamination at window stool.

FIGURE 149. Deterioration due to moisture damage in the kitchen.

- At the stair leading to the basement from the first floor, a hole in the wainscot is covered with a sheet-metal panel (Figure 151). The purpose of the panel, whether a temporary repair or required system access, was not apparent.

FIGURE 150. Termite damage at basement stair.

FIGURE 151. Sheet-metal closure at rear hall stair.

Recommendations

TRIM1. Inspect, clean, and spot finish minor defects, scuffs, scrapes, gauges, etc. to match adjacent varnished surfaces.

TRIM2. Replace damaged or missing wood trim elements with dutchman members of matching profile. Scarf joints and finish to match existing adjacent surfaces.

TRIM3. Repair wood shutters and hardware to operable condition.

TRIM4. Replace termite damaged stair treads and plank flooring with solid wood material to match existing profile. Treat surrounding wood to eliminate termites.

TRIM5. Remove sheet-metal cover and install beaded panel to match existing. If required for access, provide a removable panel to match the adjacent wainscot with a minimal joint and concealed hardware.

Interior Finishes – Doors and Hardware

Interior stile and rail doors are wood with four raised panels. Door openings with transoms on the first floor include doors into the study and dining room from the front hall, the guest bedroom door and closet door, the breakfast room door from the rear porch, and the pantry door. Second-floor openings with transoms include the door into Booker T. Washington's bathroom and the door for the closet in the boys' bedroom.

There are two pairs of sliding pocket doors in the parlor: one pair centered in the south wall, which opens to the front hall, and another in the east wall, which opens to the study. A third pair of sliding pocket doors in the south wall of the study opens to the dining room.

Much of the hardware throughout the house appears to be original or at least from the period of significance. However, there are a number of lockset and latches of different designs representing different periods of The Oaks' history. A majority of original and older locks do not have keys. Some of the historic hardware was repaired with contemporary components or was abandoned in place and replaced with modern hardware. The original hardware appears to be brass or bronze; although, the finishes are worn, dull and tarnished.

Condition Assessment

- Several existing interior doors were refinished during the rehabilitation project in 1979, but

more recent repairs and refinishing was not documented. In general, interior doors are in good condition except where damaged due to the installation of non-period hardware, locks, etc., or where heavy use has resulted in damage to the stile edge at the latch side.

- The inactive leaf of the front entry door was observed to have a split stile at the head flushbolt (Figure 152). This split is likely due to the sustained, daily use of locking the door for public access. Consideration should be given to replacement of the stile with a reinforced member to receive the original flushbolt. If the original flushbolt is not strong enough to secure the door, consideration could be given to providing a second, reinforcing flushbolt within the door.

FIGURE 152. Flushbolt at head of inactive leaf at entry. Stile is split from heavy use.

- Hardware throughout the house is a combination of original, old, and recent components. Most of it is in fair to poor condition and does not function properly. Some original hardware, such as knobbed latchsets on passage doors and ornamented hardware on sliding doors, remains and is suitable for restoration (Figure 153, Figure 154, and Figure 155). Several locations were noted where portions of original hardware had been removed or replaced with non-original components (Figure 157) or where hardware was missing completely (Figure 158). Some doors were observed to have non-original hardware; replacement of non-original hardware with new, historically appropriate hardware is recommended. Where previous installation of non-original hardware resulted in damage to the wood door or door frame, localized repair or limited replacement is recommended to match the original appearance (Figure 159).

- Transom operator hardware remains in some locations (Figure 160).

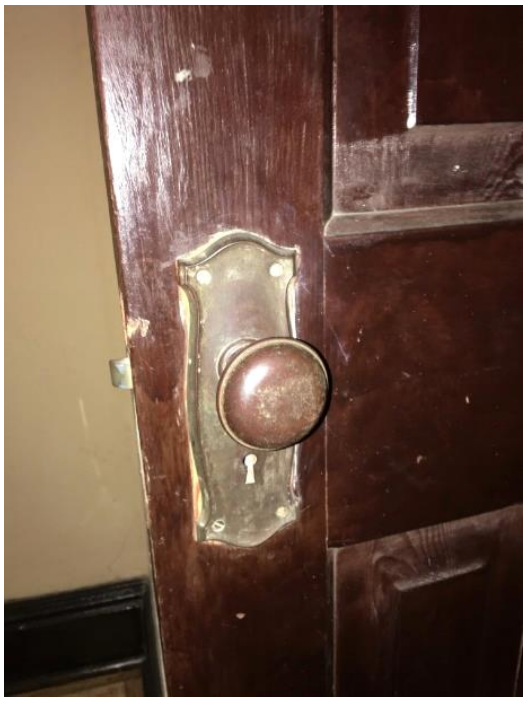


FIGURE 153. Detail at latchset.

FIGURE 154. Detail at latchset.

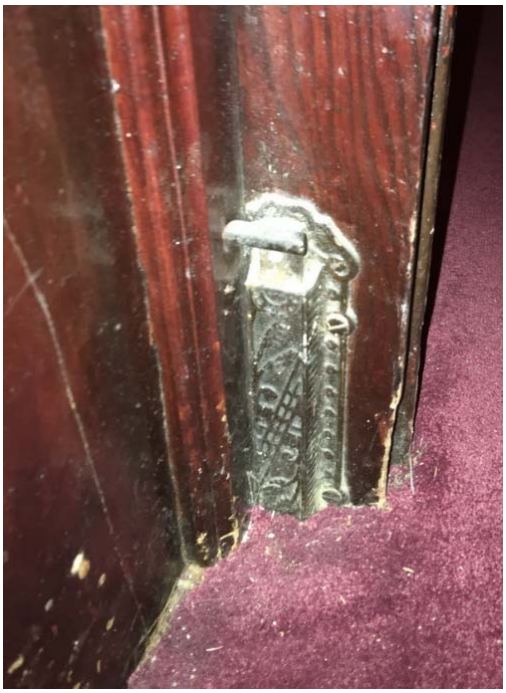


FIGURE 156. Typical flushbolt at sliding door.

FIGURE 155. Detail at pocket door hardware.

FIGURE 157. Non-original hardware.

FIGURE 158. Door at rear stair, hardware missing.

FIGURE 159. Detail of hardware on the third floor.

FIGURE 160. Transom with operator hardware.

Recommendations

IDRS1. Refurbish existing interior latchset hardware.

IDRS2. Refurbish sliding door hardware, including pulls, operator, and flushbolts.

IDRS3. Provide new historically appropriate hardware.

IDRS4. Repair doors, if possible, or replace, if required, where damaged from installation of non-original hardware components.

IDRS5. Repair stile at entry door. Evaluate historic flushbolt for stability at inactive leaf of primary entry door. Augment with additional concealed flushbolt hardware to secure door in frame.

Attic and Basement

The attic space is open to attic rooms on the third floor and houses heating, ventilation, and air-conditioning (HVAC) units serving the upper floors (Figure 161).

FIGURE 161. Missing insulation at attic side of third-floor wall.

FIGURE 162. Overall view of basement and washtub.

A portion of the basement was originally finished as a service room with wash equipment. Concrete stands for equipment remain (Figure 162). A mechanical crawl space is accessed through the finished basement space and houses HVAC equipment serving the first floor, the fire riser, and primary electrical panels. The mechanical space is open to crawl spaces at the perimeter where insulated ducts are run to floor diffusers serving the lower floor.

Condition Assessment

- The third-floor rooms are insulated with fiberglass batt insulation installed between wood studs at walls and in between ceiling joists above. Insulation was observed to be loose, settled, or missing in many locations.
- Stick-framed ladders provide access to mechanical equipment at the upper levels.
- Attics are ventilated through small decorative louvers on the gable ends. No ridge vent was noted.
- The finished basement space does not appear to have been renovated for many decades. The date of the last renovation is not known. Paint was observed to be peeling at most walls and wood ceilings. Woodwork, including trim, doors, and frames, was observed to be deteriorated.
- The first-floor level is insulated with fiberglass insulation suspended between the floor joists. Insulation was observed to be displaced from the joists at several locations (Figure 163 and Figure 164). No mesh or other support was observed to support the insulation.
- Termite damage was noted at several locations in the wood framing at the basement (Figure 165).

FIGURE 163. Mechanical crawl space / basement, insulation displaced at floor joists.

FIGURE 164. Overall view of mechanical crawl space / basement.

FIGURE 165. Termite damage at basement framing.

Recommendations

ATTC1. Reinstall and support batt insulation at third-floor walls.

ATTC2. Evaluate compliance of ladders used for staff access to equipment at the attic level, and provide modifications as required to meet applicable regulations.

ATTC3. Evaluate ventilation capacity of attic per code requirements. Additional ventilation capacity may be required.

BMT1. The finished basement spaces could be restored for interpretative use.

BMT2. Reinstall displaced batt insulation, and provide adequate support such as chicken-wire or prefabricated support for batt insulation installed between wood joists.

BMT3. Replace termite damaged wood framing members throughout basement. Provide termite treatment as required.

Structural Systems

The building has a load-bearing clay brick masonry structure with wood-framed floors and roof structure.

The building has two-story load-bearing perimeter walls. The perimeter walls are approximately 20 inches thick at the base and taper to 13 inches thick at the top of the wall. The basement / crawl space contains a network of interior load-bearing masonry walls, arranged perpendicular to each other, which define eight separate rooms. The interior load-bearing walls are approximately 16 inches thick. The walls have joist pockets that support the wood floor framing.

A second brick masonry wall extends along the north, west, and south elevations of the building and supports the concrete floor slab for the main wrap-around porch. The masonry wall for the porch foundation is approximately 8 inches thick and has brick masonry piers, each measuring 12 inches square, which support concrete beams cast into the concrete floor slab.

The first-floor framing consists of 2x12 joists spaced 18 inches on center. The joists have wood

bridging at the midspan and support a 1-inch-thick subfloor. Fiberglass batt insulation has been installed at the joist pockets. At the crawl space wall that separates the dining room from the rest of the building, there are two steel columns. The columns appear to support an encased beam that spans across the first floor opening to the dining room.

Non-original supplemental framing is present at two of the crawl space rooms at the southwest corner of the building. The supplemental framing is located below a first-floor bathroom and the main stair. It consists of steel I-beams that span perpendicular to the joists. The beams are supported by steel jacks. Some of the joists are sistered with new wood members.

The perimeter load-bearing walls support the second- and third-floor framing. Both floors are constructed of 2x10 joists that support a wood subfloor and finish floor, each 1 inch thick. Supplemental steel beams and columns were installed as part of structural repairs performed in the 1990s to address sagging of the floor at the second-floor stair landing. The third-floor ceiling is constructed of 2x6 ceiling joists spaced 13 inches on center.

The main roof has a 45-degree slope and is constructed of 2x6 rafters spaced 30 inches on center. The roof has 1x12 wood sheathing, although lower portions of the roof have narrower sheathing boards. At the center of the roof, where the main gable and cross gables intersect, there is box framing consisting of doubled 2x8s that connect the roof structures.

Along the edge of the roof are 2x6 wood kickers, spaced 42 inches on center. The kickers are set in pockets in the masonry wall and support the wood-framed projecting cornice and gutter system.

The porches and one-story east wing addition each have separate wood-framed roof structures. The north elevation of the main porch has a gable roof; the west elevation of the porch has a hip roof; the two-story screened porch has shed roofs; and the east wing addition has a hip roof.

Condition Assessment

- Termite damage was observed at a few localized areas at the first-floor joists on the south end of the building. The damage was primarily located at the end of the joists along the top edge. The wood was observed to be soft and friable when probed.

- Loose brick and open mortar joints were observed between arched structural framing for the first floor. At some locations, individual brick could be shifted by hand.

- Cracking and spalling was observed at the underside of the concrete porch slab and beams. At the northwest corner of the porch, cracking consisted of 1/4-inch-wide cracks that extended perpendicular across the slab. Spalling was located at the beams. The location of the spalls was consistent with an embedded reinforcing bar. Where spalled, the reinforcing bar was exposed to view and observed to be corroded. At one beam, the spall extended onto the portion of the beam that bears on a brick pier foundation.

Recommendations

SS1. At structural members with termite damage, the wood should be treated to eliminate termites. Supplemental structural members should be installed to reinforce the existing structure as needed.

SS2. Where loose brick units exist at structural brick floor arches, brick should be reset as needed, and mortar should be installed at the joints. Brick units that are damaged should be replaced with matching brick.

SS3. Refer to Recommendation EWC1 for repair of the spalled concrete porch slab and support beams.

Other Exterior Conditions

Condition Assessment

- Pest infestations such as mud dauber nests were observed in the crawl space under the porch and at screen door openings. The nests were typically small and observed at only a few locations.

Recommendations

OTH1. The building should be inspected and treated regularly for termites and other insect pests that are endemic in the region.

OTH2. Insect nests should be removed from the exterior walls regularly.

Accessibility

The porch and first-floor level of the house are accessible by an electric chair lift at the porte-cochère. No accessibility features, such as bathroom facilities, vertical access, or door hardware, have been added to the house.

Condition Assessment

- There is no Architectural Barriers Act (ABA)-compliant route from the sidewalk or parking areas to the chair lift.
- The operation of the chair lift could not be observed at the time of the site visit. The disconnect serving the chair lift was observed to be open at the time of the site visit.
- The second and third floors of the house are currently not accessible.
- Accessible signage is not provided.
- There is no grip rail at the rear stair (Figure 166).

Recommendations

ACCS1. Provide ABA-compliant route from sidewalk at parking area to chair lift.

ACCS2. Provide repairs at chair lift.

ACCS3. Evaluate provisions for handicapped visitors to the site. Develop plans for accommodating visitors with special needs including access to the porch, experience of the upper floors, signage, etc.

ACCS4. If access to the upper floors is provided to interpretive spaces, consider provision of a compliant grip rail at the rear stair.

FIGURE 166. Overall view of rear stair from second-floor landing.

Heating, Ventilation, and Air Conditioning Systems

The current Unico high-velocity heating and air conditioning system was installed in 2007. The current system has an air-handling unit in the crawl space under the house that serves the first floor (Figure 167) and two air-handling units in the attic above the third floor (Figure 168). Three heat pumps connected to the air handlers are in the crawl space under the south porch (Figure 169). Two variable refrigerant flow (VRF) ductless split system heat pumps were also added to the first floor kitchen and breakfast room (Figure 170). The temperature in the attic space is maintained by electric heaters (Figure 171).

FIGURE 167. Air-handling unit in crawl space.

FIGURE 168. Air-handling unit at attic.

FIGURE 169. Condensing units at porch crawl space.

FIGURE 170. Wall-mounted VRF unit at breakfast room.

FIGURE 171. Electric heater at attic.

Condition Assessment

- The current high-velocity heat pump system by Unico and the VRF ductless split systems installed in 2007 are reportedly operating well.

- High velocity diffuser nozzles that supply conditioned air are installed in the floors throughout the first floor and in ceilings on the upper floors. Nozzles in the ceilings are provided in a light color which typically matches the light-colored ceilings. Similarly, wooden nozzles are provided in the guest bedroom to match the exposed wood floor (Figure 172). In the carpeted rooms on the first floor, the floor nozzles are white plastic and are visually distracting in contrast to the patterned carpet (Figure 173). In some locations, furniture has been installed over the nozzles which could result in damage to the

furniture or surrounding finishes, and air flow will be altered which could adversely affect interior climate control (Figure 174).

FIGURE 172. Typical Unico distribution nozzle in the parquet floor.

FIGURE 173. Typical Unico distribution nozzle in the carpet floor.

FIGURE 174. HVAC distribution nozzle located below furniture and table cloth.

FIGURE 175. Return air grilles on stair risers.

FIGURE 176. Return grille at rear hall.

- The previous HVAC system serving the first floor appears to have been served by a return air plenum located beneath the stair. Metal return grilles remain in the lower risers of the stair. The paint on the grilles is worn, exposing the base metal (Figure 175). It is assumed that the grilles are not currently in use. A large, white return grille, serving the current equipment, is located on the east side of the main stair wall. The location of the grille and the finish contrast with the dark color of the surrounding wall (Figure 176).

FIGURE 177. Condensate drains from air-handling units and runs on surface of gable infill, spilling into gutter. Pipe disconnected.

- Condensate drains serving the attic HVAC units were observed to be routed through the metal wall panels and down to the copper gutter with PVC (polyvinyl chloride) pipe (Figure 177). The pipe was observed to be disconnected at the gutter.

Recommendations

HVAC1. Replace white, floor-mounted diffusers with custom color diffusers to match surrounding floor finish. Consideration should be given to installing carpets stopping short of the walls, refinishing the wood floors at the perimeter, and installing wood grain nozzles similar to those at the guest bedroom.

HVAC2. The return air grilles at the stairs should be painted if required for the current HVAC system. If not required for the current system, they should be removed and the stair risers replaced with stained wood panels matching the risers above.

HVAC3. Consideration should be given to providing a custom color or alternate return air grille at the rear hall.

HVAC4. The PVC condensate drain lines exiting the south gables should be repaired and re-routed, if required, to ensure positive drainage to the downspouts.

Plumbing Systems

Currently, the plumbing systems in the house are non-functional. Bathrooms retain some historic fixtures but have not been updated since the overall renovation of the house (Figure 178 and Figure 179).

FIGURE 178. Overall view of Portia's shower.

FIGURE 179. Overall view of the second-floor bathroom (Room 210).

Condition Assessment

- The third-floor bathroom is in very poor condition.
- Although some fixtures in the bathrooms may be historic, some elements such as faucets, trims, and toilet seats exhibit significant wear or deterioration.

Recommendations

PLMB1. Provide period appropriate fixtures where appropriate. Replace worn or damaged elements as required to serve interpretive purposes.

PLMB2. Consider removal of third-floor bathroom to return the hall to the original, open configuration.

Fire Protection and Fire Alarm Systems

The Oaks has a fire-detection and alarm system tied to the fire-suppression (sprinkler) system. Hard-wired smoke and fire detectors are positioned in the attic, on ceilings on the third floor, and in crawl spaces under the house (Figure 180). The sprinkler standpipe originates under the house and rises vertically through the west bedroom on the third floor to the attic (Figure 181 and Figure 182). Crawl spaces are also sprinklered. The fire-alarm and security-control panels are located in the guest room closet on the first floor (Figure 183). An alarm pull station and a strobe light are mounted on the wall next to the stair on the each floor (Figure 184). Security devices consist of contacts at doors, wall-mounted cameras, and motion sensors (Figure 185).

FIGURE 180. Smoke detector and security camera at dining room.

FIGURE 181. Fire standpipe and riser at basement.

FIGURE 182. Electrical panel and sprinkler standpipe at west bedroom.

FIGURE 183. Fire-alarm control panel at guest room closet.

FIGURE 184. Typical alarm pull station (bottom) and strobe (top).

FIGURE 185. Typical security motion sensor.

Condition Assessment

- The fire-alarm and fire-suppression (sprinkler) systems were upgraded in 2007 and should be inspected and tested periodically for proper operation and compliance with current life safety codes.
- A few inoperable smoke and fire sensors were observed in the crawl space and at the basement (Figure 186).
- No emergency exit signage or emergency lighting was noted.

- At some locations, replaced devices exposed older layers of paint where new paint was not continued behind the previous device (Figure 187).

- Wiring to some devices had been installed through walls in closets. Cable penetrations through walls were made without faceplates and were patched but not painted (Figure 188).

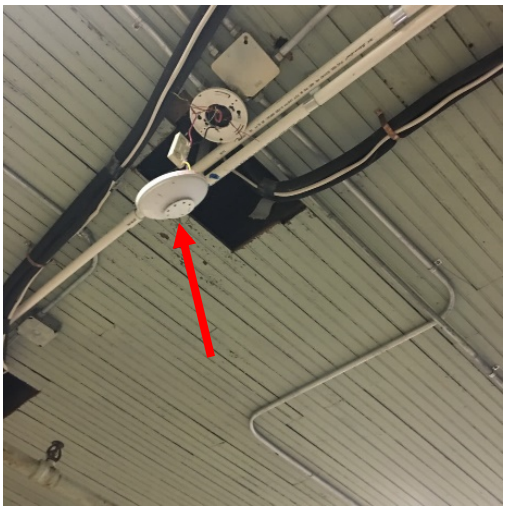


FIGURE 186. Disconnected smoke and fire detectors at basement.

FIGURE 187. Paint incomplete where device has been replaced.

FIGURE 188. Wall penetration at low voltage wiring in closet.

Recommendations

FIRE1. Remove inoperable and obsolete devices and associated conduit. Patch finishes to match existing adjacent surfaces.

FIRE2. Consider replacement of surface-mounted strobes and other wall-mounted devices with concealed devices similar to those manufactured by Concealite Life Safety Products.

FIRE3. Consider installation of concealed emergency lighting devices and appropriate egress signage.

FIRE4. Tie-in paint coatings behind new devices.

FIRE5. Consider re-routing cabling to concealed locations within walls. Where necessary to penetrate finished walls, provide adequate face plates, escutcheons, or wall protection.

Electrical Systems

When the Washingtons moved into The Oaks in 1900, the house probably had only a rudimentary electrical system. At that time, it would have been illuminated by a combination of gas and incandescent lights, but there were no electrical outlets.[56] In 1929, the Institute upgraded the electrical system and light fixtures and put some receptacles in the baseboards. Additional

56. *Historic Structure Report*.

receptacles were added in 1957, and the first and second floors got new fluorescent light fixtures and telephone and intercom buzzer systems when the house was converted to administrative offices. Since then, under National Park Service ownership, the electrical system was updated in 1979 for the new heating and air-conditioning system. New wiring was run for ceiling fixtures throughout the house, and a few receptacles were added on the third floor. The latest electrical upgrades were done in 2007 and included three-phase service and new panels in the crawl space and in the west bedroom on the third floor. Additional power was necessary for the new mechanical systems. Additional receptacles, telephone and data outlets, and ceiling lights were again added to the third floor. There is also an emergency generator on the west side of the house, but there is currently no information to verify when it was installed.

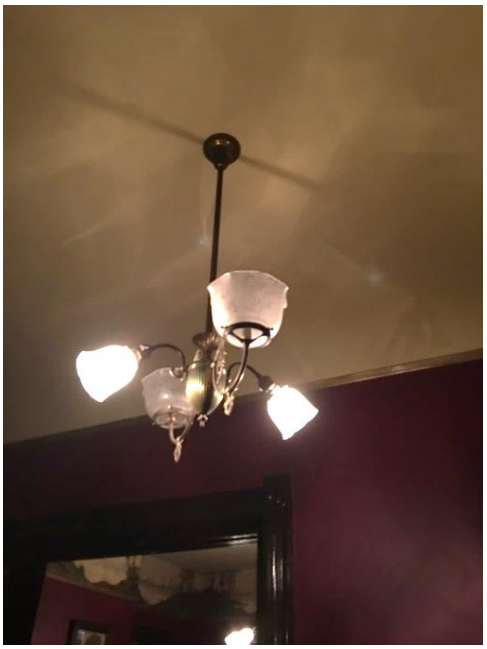


FIGURE 189. Reproduction gas-electric fixture in the foyer.

FIGURE 190. Period gas-electric fixture.

Condition Assessment

- Light fixtures in the house consist of reproduction electric or gas-electric fixtures similar to those found in the original home (Figure 189 through Figure 192).
- Electric sconces occur at the pilasters between the dining room and dining room addition (Figure 193).
- Small pendant fixtures with delicate reflectors occur in the pantry and entry vestibule (Figure 194).
- A brass task-light on an articulated arm is suspended from the ceiling in the second-floor den (Figure 195).

FIGURE 191. Non-original light fixture in the dining room addition.

FIGURE 192. Non-original light fixture in the dining room.

FIGURE 193. Typical wall sconce in the dining room.

FIGURE 194. Pendant fixture.

FIGURE 195. Task light in the second-floor den.

FIGURE 196. Light fixture in the third-floor bedroom.

- Ceiling-mounted fixtures on the third floor consist of surface-mounted decorative fixtures (Figure 196).
- The primary electrical panel is located in the basement mechanical space (Figure 197). A subpanel feeding third-floor equipment is located in the west bedroom (Figure 198).
- Open junction boxes and make-up panels were observed in the basement (Figure 199 through Figure 201).
- Power receptacles were observed on the third floor and at the kitchen and breakfast room on the first floor. The first-floor receptacles are fed from surface-mounted wire-mold fed through the floor from the basement (Figure 202 and Figure 203).

FIGURE 197. Electrical panels at crawl space.

FIGURE 198. Electrical sub-panel in west bedroom.

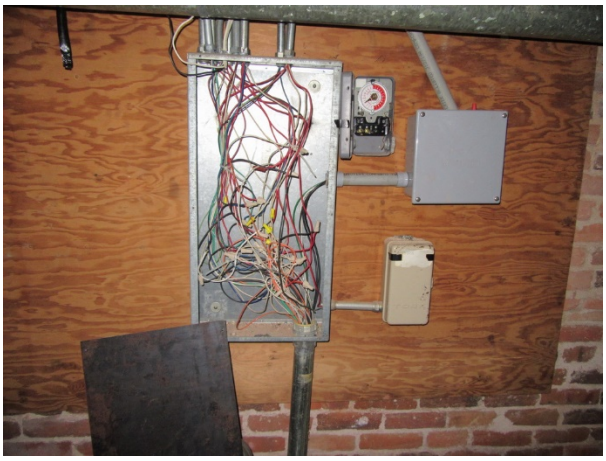


FIGURE 199. Open make-up box in basement.

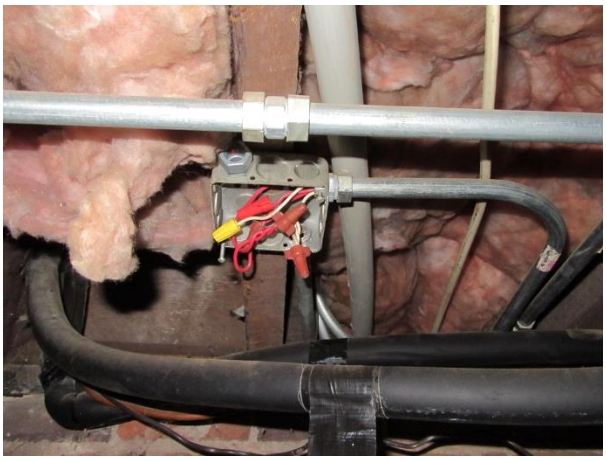


FIGURE 200. Open junction box in basement.

FIGURE 201. Open junction box and panel at telephone backboard, basement.

Recommendations

ELEC1. Cover plates are required at all junction boxes and panels.

ELEC2. Consideration should be given to the provision of power receptacles at each floor for cleaning and maintenance purposes. Receptacles should be concealed at baseboards with recessed wiring.

ELEC3. Surface-mounted wire-mold should be removed if the kitchen space is considered for interpretive functions. The floor penetration of the cabling should be re-worked to provide a sealed condition.

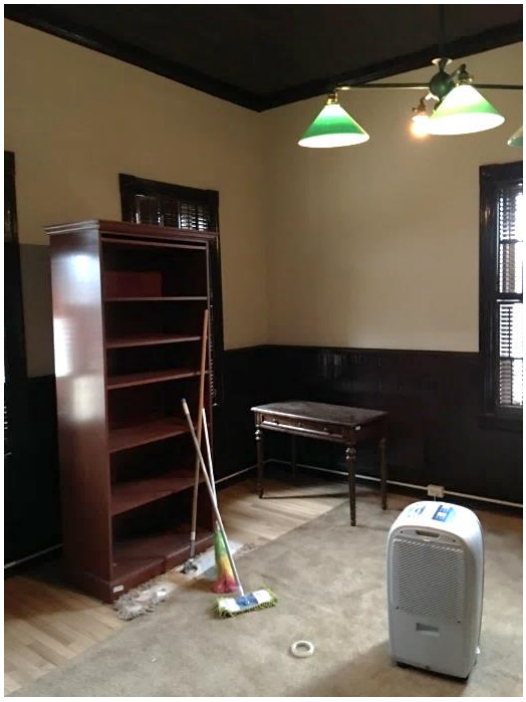


FIGURE 202. Overall view of kitchen with surface-applied conduit at baseboards.

FIGURE 203. Detail of surface-applied conduit at floor penetration.

Bibliography

Conley, Booker. *Buildings at Tuskegee University.* Tuskegee, Alabama: Tuskegee University Archives, circa 1995.

Denver Service Center. *Historic Structure Report, The Oaks, Tuskegee National Historic Site, Tuskegee, Alabama*. Denver, Colorado: National Park Service, Historic Preservation Branch, Southeast / Southwest Team, 1980.

_____. *Structural and Roof Evaluation at Tuskegee National Monument for Booker T. Washington The Oaks.* Denver, Colorado: National Park Service, Southeast / Southwest Team, 1977.

Hamilton, Kenneth M. "Taps: The Funeral in Tuskegee." In *Booker T. Washington in American Memory*. Urbana: University of Illinois Press, 2017.

Harland, Louis R. "Booker T. Washington in Biographical Perspective," *American Historical Review,* October 1970.

Hartrampf, Inc. *Renovation of the Home of Booker T. Washington, Tuskegee National Historic Site, 90% Completion Specification*. Atlanta: Hartrampf, Inc., 2007.

Historic American Buildings Survey. *The Oaks (AL-877)*. Washington, D.C.: Library of Congress, 1980. Accessed April 5, 2016, https://www.loc.gov/item/al0339/.

Jaklich, Allan. "How the Sears Campaign Evolved." Chicago Tribune. October 26, 1970. Accessed April 1, 2017, http://www.archives.chicagotribune.com/197010/26/page/70/article/advertising-marketing.

Jenkins, John W. *Historic Resource Study, Tuskegee Institute National Historic Site, Tuskegee, Alabama.* (Draft report – never published). Denver, Colorado: National Park Service, Denver Service Center, Historic Preservation Team, 1977.

National Park Service. *American Visionaries Legends of Tuskegee: Booker T. Washington*. Last modifed January 18, 2007, https://www.nps.gov/museum/exhibits/tuskegee/btwoverview.htm.

_____. *Tuskegee Institute National Historic Site / Tuskegee Airmen National Historic Site, Tuskegee, Alabama, Foundation Document.* N.P.: National Park Service. 2016.

The New York Times. "Dr. B.T. Washington, Negro Leader, Dead." November 15, 1915.

Serafine, Bethany, and Rudy Evenson. Consensus Determination of Eligibility for Landscape Features at The Oaks and George Washington Carver Museum, Tuskegee Institute NHS. Atlanta: National Park Service, Southeast Regional Office, 2012.

Thrasher, Max Bennett. *Tuskegee, Its Work and Its People.* Boston: Small, Maynard & Company, 1900.

Washington, Booker T. *Up From Slavery: An Autobiography*. Garden City, NY: Doubleday & Company, Inc., 1901. Electronic Edition, University of North Carolina at Chapel Hill, 1997. Accessed June 23, 2017, http://docsouth.unc.edu/fpn/washington/washing.html.

_____. *An Autobiography. The Story of My Life and Work.* 1st Edition 1901. Documenting the American South, Electronic Edition, 1999. Accessed May 24, 2017, http://docsouth.unc.edu/neh/washstory/menu.html.

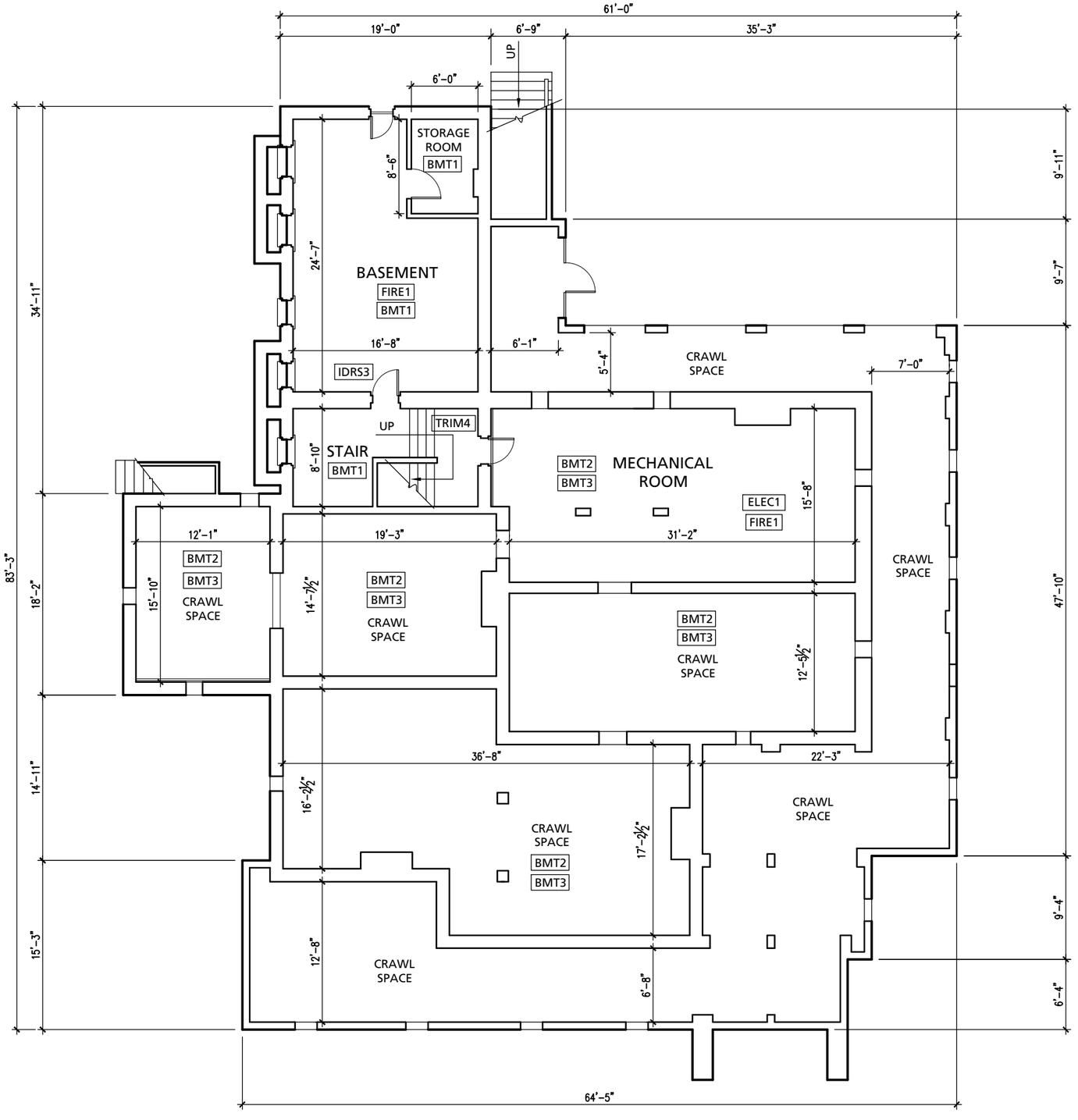
_____. *Tuskegee and Its People: Their Ideals and Achievements.* New York: D. Appleton and Company, 1906.

_____. "Negro Homes," *New Century Magazine*, May 1908.

Williams, Clarence G. "From 'Tech' to Tuskegee: The Life of Robert Robinson 1868–1942." Blacks at MIT History Project. Boston: MIT Institute Archives. Last modified January 13, 1998, accessed May 25, 2017. https://libraries.mit.edu/archives/mithistory/blacks-at-mit/taylor.html.

WLA Studio. *The Oaks, Tuskegee Institute National Historic Site, Cultural Landscape Report.* Np: WLA Studio, 2017.

Appendix A: Condition Assessment Drawings



BASEMENT FLOOR PLAN

0 1 2 4 8

SCALE IN FEET
3/32" = 1'–0"

NORTH

DRAWN BY: WJE / WFT, APRIL 2018

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SOUTHEAST REGIONAL OFFICE

TUSKEGEE

THE OAKS
TUSKEGEE INSTITUTE NATIONAL HISTORIC SITE
ALABAMA

CONDITION ASSESSMENT REPORT

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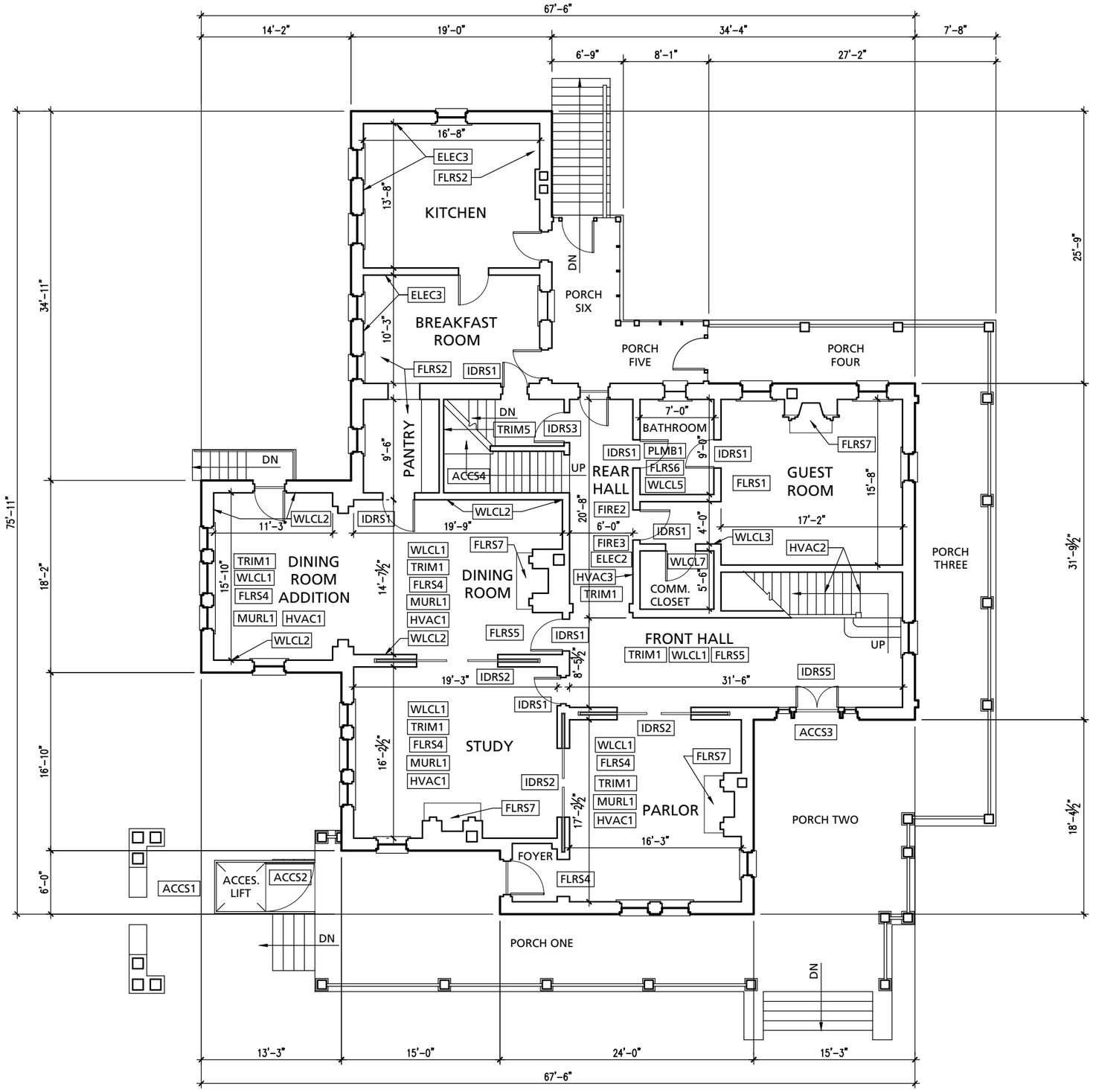

FIRST FLOOR PLAN

SCALE IN FEET
3/32" = 1'-0"

NORTH

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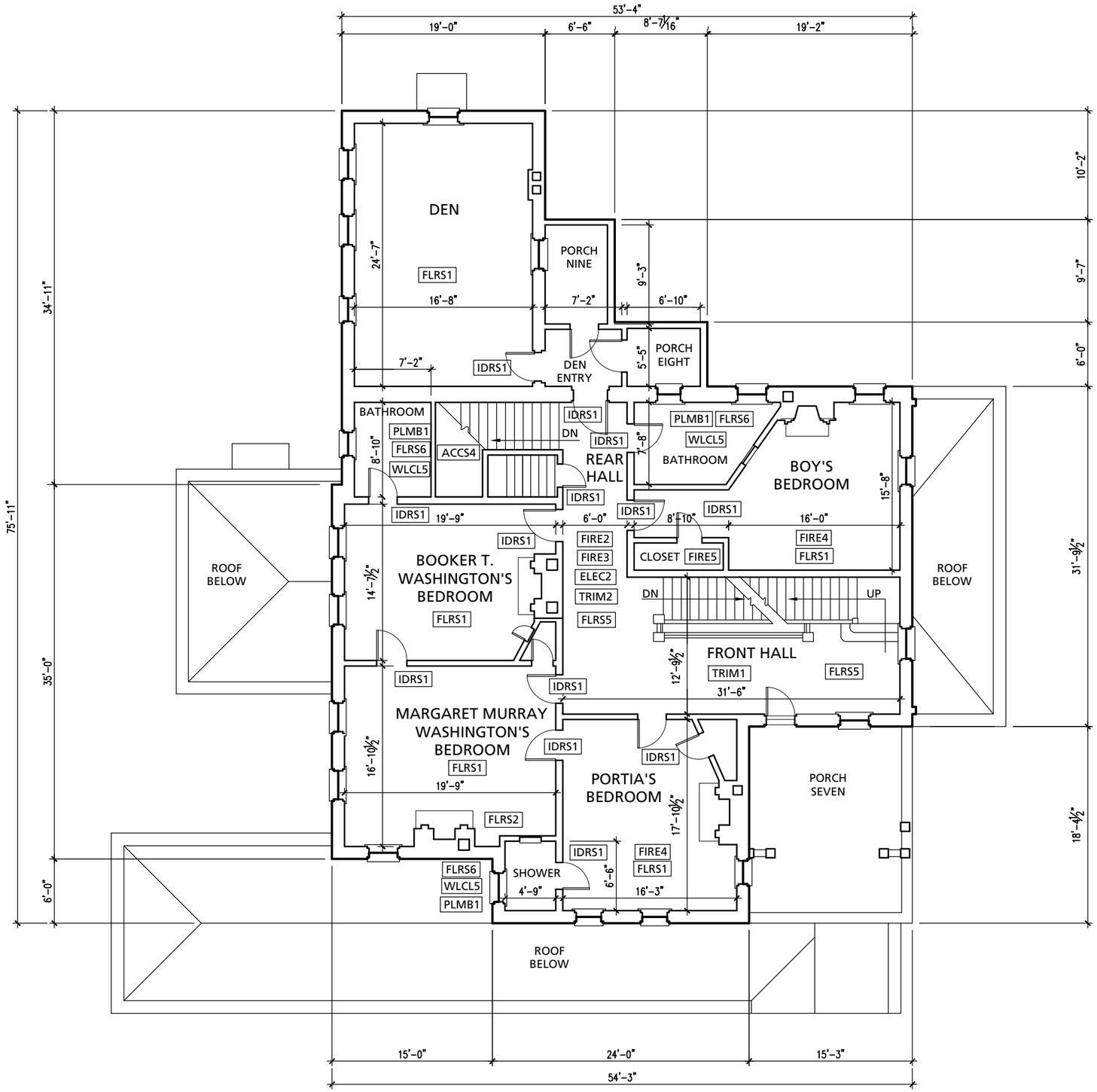

SECOND FLOOR PLAN

0 1 2 4 8

SCALE IN FEET
3/32" = 1'-0"

NORTH

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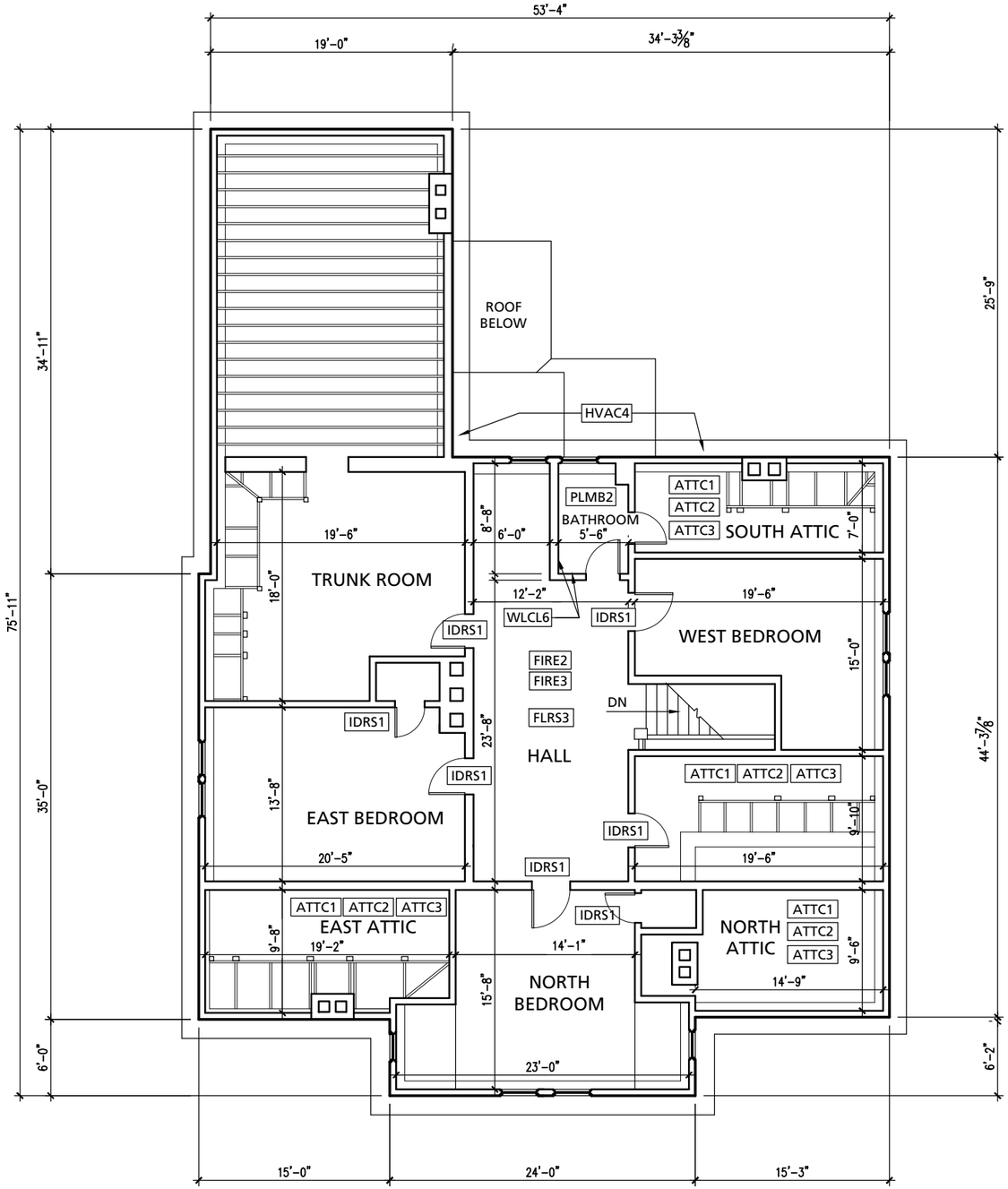

THIRD FLOOR PLAN

0 1 2 4 8

SCALE IN FEET
3/32" = 1'-0"

NORTH

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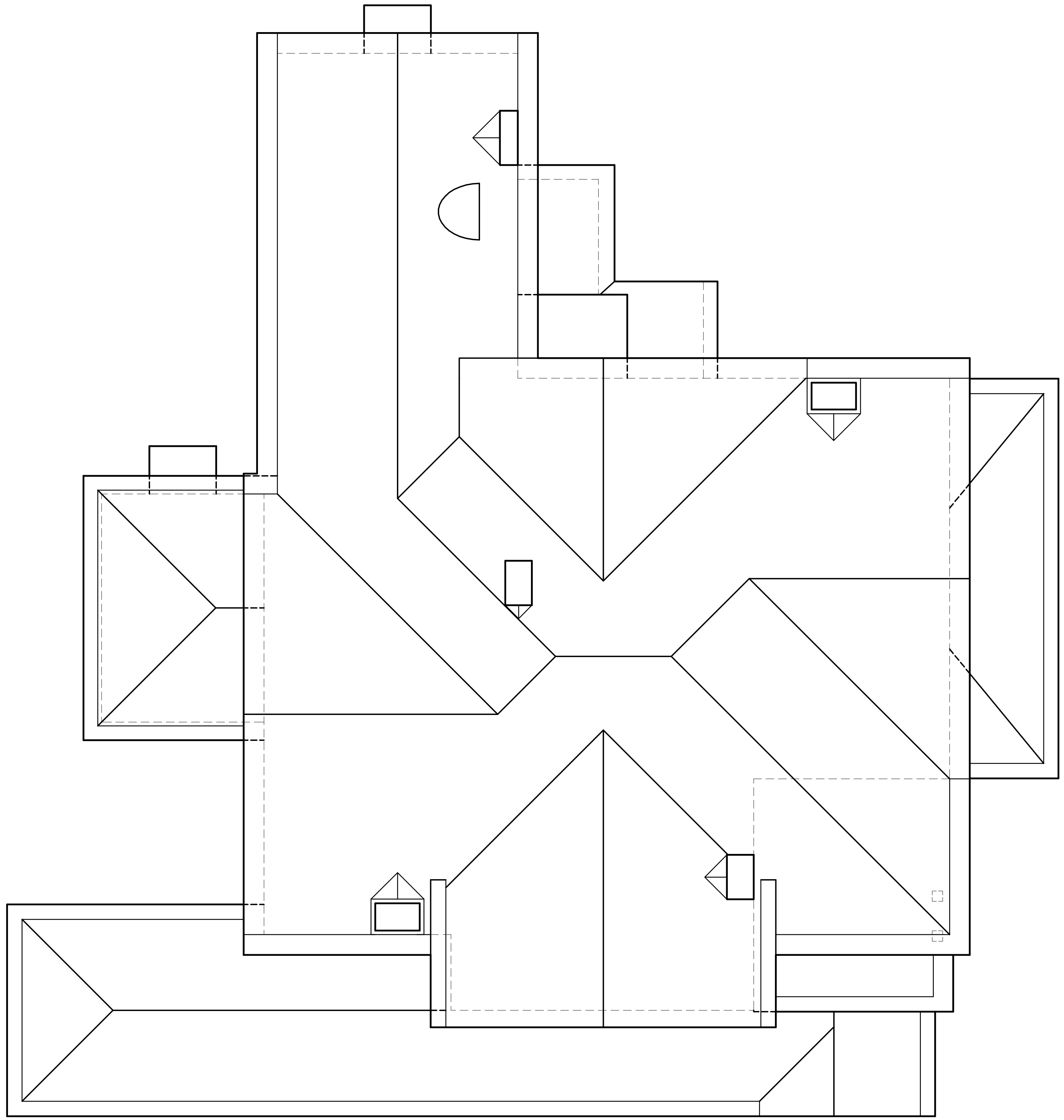

ROOF PLAN

0 1 2 4 8
SCALE IN FEET
3/32" = 1'-0"

NORTH

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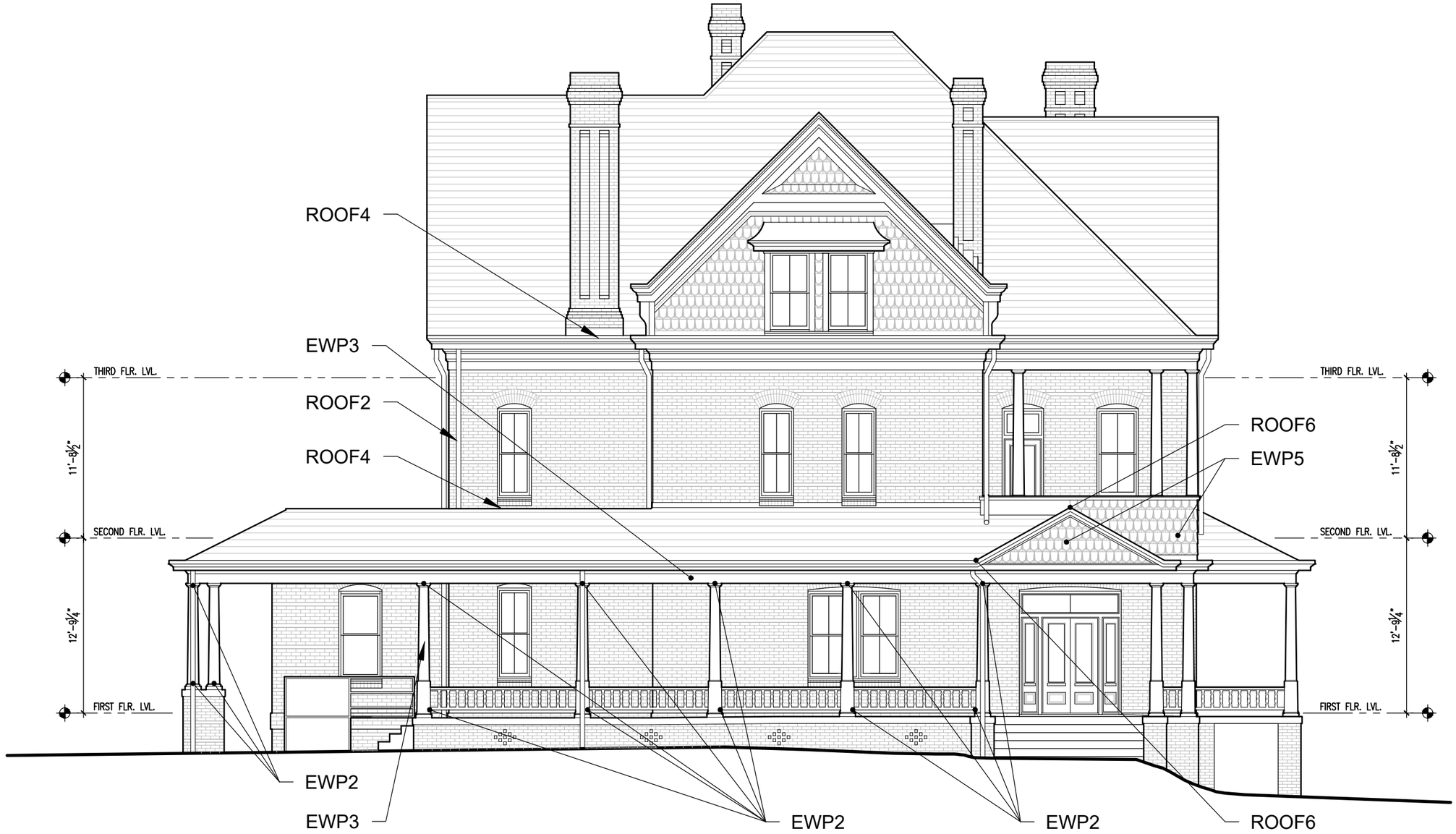

NORTH ELEVATION

0 1 2 4 8

SCALE IN FEET
1/8" = 1'-0"

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CONDITION ASSESSMENT REPORT

SHEET 6 OF 9

WEST ELEVATION

0 1 2 4 8

SCALE IN FEET
1/8" = 1'-0"

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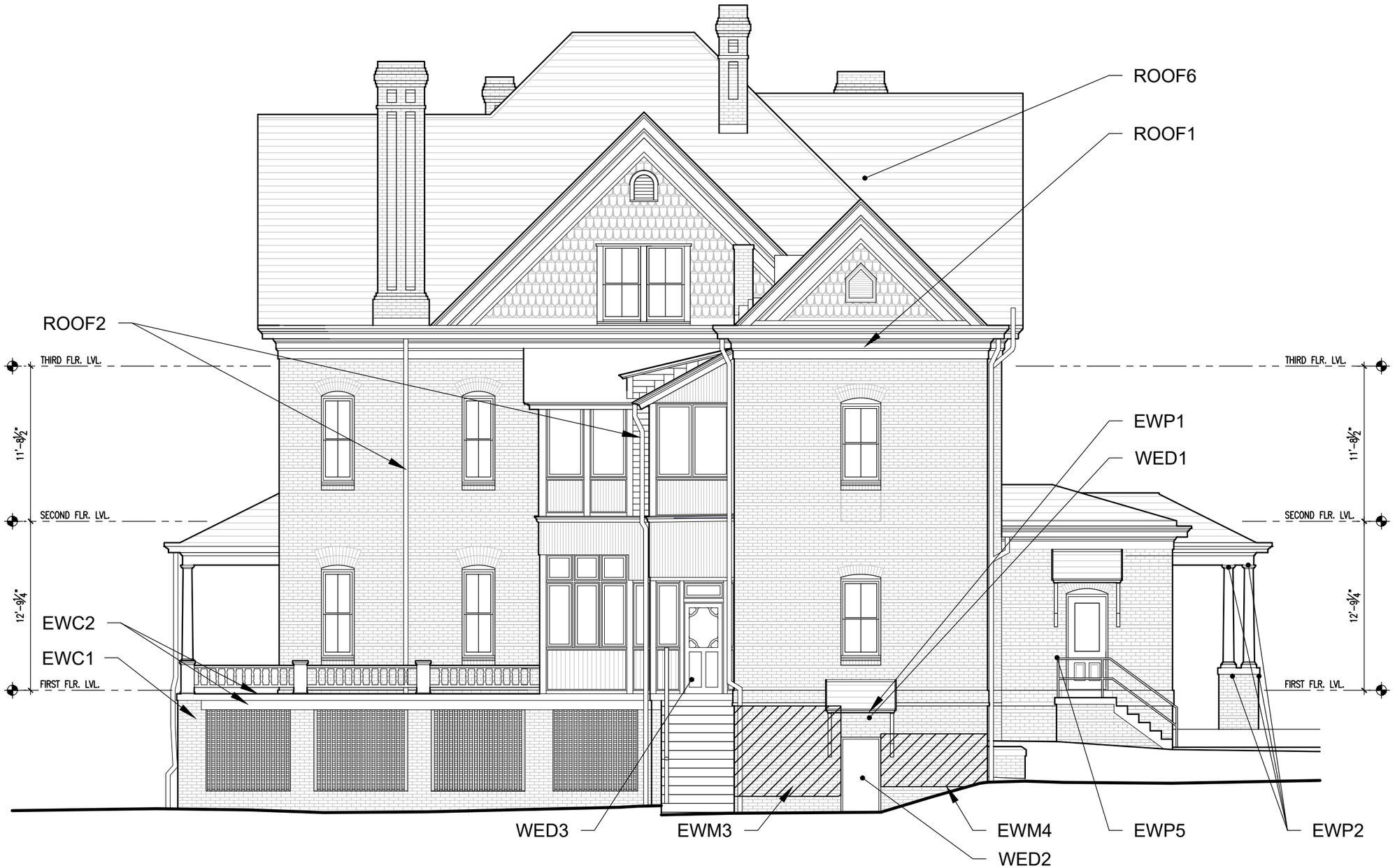

SOUTH ELEVATION

0 1 2 4 8

SCALE IN FEET
1/8" = 1'-0"

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CONDITION ASSESSMENT REPORT

SHEET 8 OF 9

EAST ELEVATION

0 1 2 4 8

SCALE IN FEET
1/8" = 1'-0"

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CONDITION ASSESSMENT REPORT

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Appendix B: Cost Estimate

The following opinion of probable costs has been developed from the recommendation outlines above. This cost information is based on projects of similar scope and size and is intended for preliminary budget planning, with the understanding that refined cost estimates will be prepared following further assessment and development of repair recommendations. The quantities for repairs are based on a limited field condition assessment. Quantities and locations for repair will require verification during repair development. This estimate assumes that all recommendations will be performed as one project under a single contract.

Item	*Factor*	*Subtotals*
Site Work		$2,000
Concrete		$7,250
Masonry		$44,450
Metals		$26,750
Woods, Plastics, and Composities (Exterior)		$32,500
Thermal and Moisture Protection		$3,400
Openings (Exterior)		$9,800
Subtotal (Exterior)		**$126,150**
Interior Finishes		$105,150
Interior Doors and Hardware		$18,150
HVAC & Plumbing		$9,100
Fire Protection and Security		$14,100
Electrical		$6,000
Subtotal (Interior)		**$152,500**
Subtotal (Construction Cost)		**$278,650**
General Conditions (scaffolding, etc.)	20%	$55,730
Construction Contingency	25%	$69,663
Contractor Overhead and Profit	15%	$41,798
Subtotal		**$445,840**
Design Contingency	25%	$111,460
TOTAL		**$557,300**

National Park Service
U.S. Department of the Interior

The Oaks
Tuskegee Institute National Historic Site
1212 West Montgomery Road
Tuskegee Institute, Alabama 36088

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