Jean Lafitte National Historical Park and Preserve

Chalmette National Cemetery

Superintendent's Lodge

Historic Structure Report

June 2006

Historical Architecture, Cultural Resources Division

Southeast Regional Office

National Park Service



The historic structure report presented here exists in two formats. A traditional, printed version is available for study at the park, the Southeastern Regional Office of the NPS (SERO), and at a variety of other repositories. For more widespread access, the historic structure report also exists in a web- based format through ParkNet, the website of the National Park Service. Please visit www.nps.gov for more information.

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2006
Historic Structure Report
Superintendent's Lodge
Chalmette National Cemetery
Jean Lafitte National Historical Park
New Orleans, Louisiana
LCS#: 064956

Cover image: Lodge, c. 1950s, from JELA Collection

Jean Lafitte National Historical Park and Preserve

Chalmette National Cemetery

Superintendent's Lodge

Historic Structure Report

Approved by: _____ 8-23-06

Superintendent — Date

Jean Lafitte National Historical Park and Preserve

Recommended by: _____ 8-30-06

Chief, Cultural Resources — Date

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Recommended by: _____ 9-8-06

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Cultural Resource Stewardship & Partnership

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Approved by: _____ 9/11/06

Regional Director — Date

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Foreword

We are pleased to make available this historic structure report, part of our ongoing effort to provide comprehensive documentation for the historic structures and 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 staff at Jean Lafitte National Historical Park and Preserve, including acting superintendent Paul Hartwig, for their assistance throughout the process. Special thanks to Allison Peña, Brian Strack, David Muth, Kathy Lang, Nancy Walters, Lorene Walter, and Linell Holly. We hope that this study of the Superintendent's Lodge at Chalmette National Cemetery will prove valuable to park management in ongoing efforts to preserve the building and to everyone in understanding and interpreting this unique resource.

Dan Scheidt, Chief
Cultural Resources Division
Southeast Regional Office
June 2006

Management Summary

Built by the War Department in 1929, the Superintendent's Lodge at Chalmette National Cemetery (hereafter referred to as Lodge) is the fourth superintendent's residence to have served the cemetery since its founding in 1864. Occupied as a residence until 1979, the building was used as administrative offices until it was vacated as a result of flooding during Hurricane Katrina in September 2005. Greene's 1985 Historic Resource Study and Risk's 1999 Cultural Landscape Report for the Chalmette Unit of Jean Lafitte National Historical Park and Preserve have provided most of the background historical information. Additional archival materials, including historic photographs, building plans and specifications, and other material in the park's archives have also informed this report.

Construction of a new lodge for the superintendent at Chalmette National Cemetery was a direct result of the 1928 levee improvements that necessitated removal of the old lodge. Using an American Four Square design, plans and specifications for the new building (see Appendix A) were complete by the middle of December 1928, and the new house was completed the following year at a cost of $9,224.20. Major alterations and additions in 1934, 1951, 1952, and 1965 brought the house to its current configuration.

Significance

The Lodge is a contributing building in the Chalmette Unit of Jean Lafitte NHP Historic District and is significant for its associations with



FIGURE 1. View of Chalmette Cemetery Superintendent's Lodge, February 2006.

the cemetery and battlefield park. According to the National Register nomination, the Lodge as well as its contemporaneous garage, which is now used as a maintenance building,

> typify government buildings erected in national cemeteries during the early decades of the twentieth century. The structures have changed little and possess integrity of location, design, materials, and workmanship and embody the characteristics of the construction of national cemetery buildings of the 1920s and 1930s.

Summary of Recommendations

Repairs

- Replace all HVAC, electrical, and plumbing
- Repair plaster walls and ceilings
- Reconstruct east chimney
- Repair roofing
- Replace gutters with 6” or larger gutters
- Install permanent drainage system from downspouts
- Reinstall original doors and windows

Additions

- Remove additions on first floor of back porch
- Preserve sleeping porch, but remove added closets
- Replace aluminum windows with wood sash to match original

FIGURE 2. Map of Chalmette unit of Jean Lafitte National Historical Park. The Lodge is located near the cemetery entrance at upper right in this image.



- Reinstate wall between Rooms 101 and 104 if that would benefit the park's use of the building

Improvements for Accessibility and for Fire Protection

- Remove laundry room, powder room, and chimney from first floor of back porch
- Close powder room door
- Widen back door and door between Rooms 103 and 104 to provide handicapped access
- Remove closets and chimney from sleeping porch
- Install ramp to back porch along southwest side of house
- Install fire detection and suppression systems

Administrative Data

Locational Data

Building Name: Superintendent's Lodge

Location: Chalmette National Cemetery, Arabi, Louisiana

LCS Number: 064956

Related Studies

Greene, Jerome *A. Historic Resource Study, Chalmette Unit, Jean Lafitte National Historical Park and Preserve*. United States Department of the Interior, National Park Service, September 1985.

Risk, Kevin. *Chalmette Battlefield and Chalmette National Cemetery Cultural Landscape Report*. Cultural Resources Stewardship Division, National Park Service, Southeast Regional Office, August 1999.

Cultural Resource Data

National Register of Historic Places: The park was administratively listed on the National Register of Historic Places on October 15, 1966. The confirmating documentation was completed and accepted by the Keeper on July 6, 1987. The Lodge is a contributing structure.

Period of Significance: 1920s and 1930s.

Proposed Treatment: Rehabilitation.

Historical Background and Context

Built in 1929, the Superintendent's Lodge at Chalmette National Cemetery is the fourth superintendent's residence to have served the cemetery since its founding in 1864. Occupied as a residence until 1980, the building was used as administrative offices until it was vacated as a result of flooding during Hurricane Katrina in September 2005. This section of the HSR is intended to provided an historical context for understanding the building.

Chalmette National Cemetery

National cemeteries in the United States began with President Abraham Lincoln's signing of the Congressional Act of July 17, 1862, among the provisions of which was authorization for the President "to purchase cemetery grounds ... to be used as a national cemetery for soldiers who shall have died in the service of the country." By the end of that year, fourteen such cemeteries were established, and thirteen more were added by 1867, one of which was at Chalmette.[1]

Located on the site of the Battle of New Orleans, which occured in January 1815, Chalmette National Cemetery had its origins on May 2, 1864, when the City of New Orleans ceded 8.6 acres to the Federal government for use as a National Cemetery. Protected from the river by a levee and measuring 250' by 1500', the site had been used for bivouacking troops and later as a refugee camp for freed slaves, during which time some burials were made on the site. After acquiring the property, the Federal government transformed the site by eliminating Civil War fortifications, removing buildings, and establishing the formal layout for Monument Cemetery, as it was first called. In January 1867, the city ceded an additional five acres to the Federal government,

1. Although land for a cemetery was deeded to the government in 1864, Chalmette National Cemetery appears not to have been formally established until 1867.

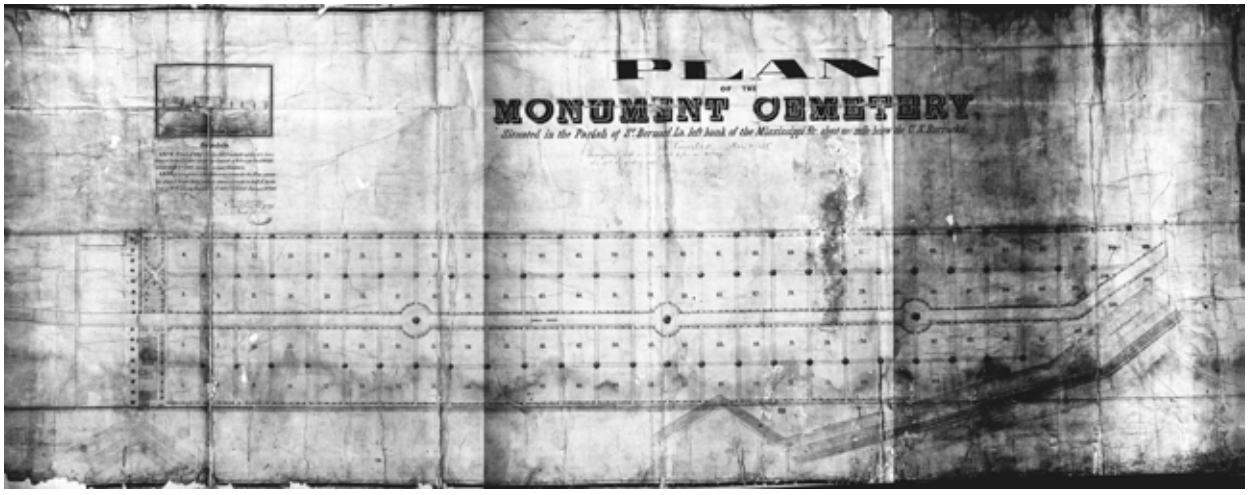


FIGURE 3. "Plan of Monument Cemetery," 1867, showing the cemetery's original layout. The original superintendent's residence is in the lower left corner in this image. (JELA Coll.)

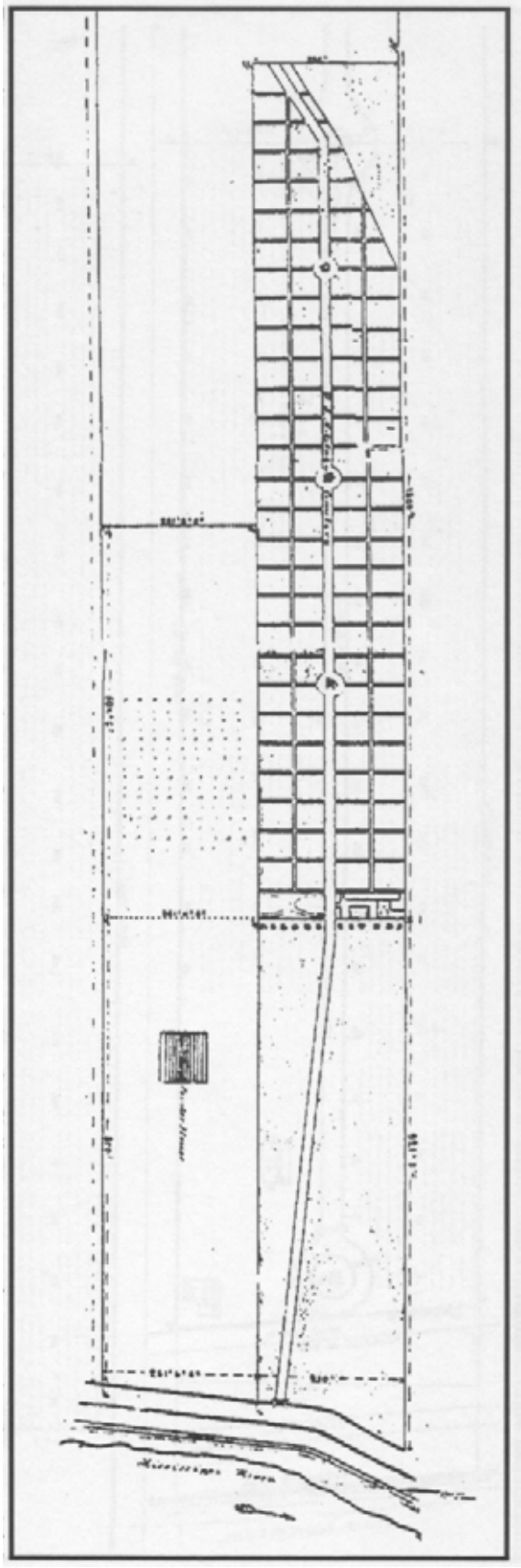


FIGURE 4. 1872 plat of Chalmette National

which extended the cemetery to the river.[2] By 1868 much of the initial work was complete and there had been some 12,500 burials. Captain Charles Bernard, the cemetery's first superintendent, described the cemetery at that time as being

> laid out in the shape of a rectangle, or right angles parallelogram, having a frontage of 250 feet on the Mississippi River, and is 2,317 feet in depth. An avenue 16 feet wide and 2,317 feet long, with six (6) circles forty (40) feet in diameter at regular intervals, divides the Cemetery into two equal parts. This avenue is shelled and is perfectly smooth and hard; a neat brick drain running the entire length of the Cemetery has been built on each side. The ground is laid out in squares and walks, the latter are four (4) feet wide and are shelled; the squares are each 54- 1/2 by 48 feet and are made to contain 96 graves. In the centre of the Cemetery and within the third circle from the entrance a terraced mound has been raised and a handsome flag staff erected.

Construction of the brick walls surrounding the cemetery began in 1873, and in 1886 a new shell-surfaced road was constructed from Jackson Barracks to the River Road at the front (south side) of the cemetery. In 1892, the cemetery walls were extended to the new roadway, and the cemetery's iron entrance gates were relocated to the new southern edge of the cemetery.

The cemetery is oriented on an axis that is more or less north- northeast by south- southwest. For descriptive purposes the river end of the cemetery will be considered its "south" end.

Around 1905, an old proposal by the New Orleans Terminal Company to close the River Road finally came to fruition. The cemetery boundary was extended fifty feet to the north and a new entrance road from the St. Bernard Highway was created, with the transfer of property occurring in 1910. The following year, the present gates were constructed and the brick walls were extended to enclose the cemetery addition.

In the spring of 1927, the worst flood ever to strike the Mississippi Valley inundated 27,000 square miles of land in six states and left some 700,000

2. See "Plan of the Monument Cemetery," 1867, JELA Coll.

people homeless. In response to the disaster, Congress passed the Flood Control Act of 1928, which placed responsibility for flood control in the hands of the Federal government and authorized construction of numerous dams, diversions, and over a thousand miles of levees along the river and its tributaries. Among the flood- control measures authorized by the 1928 act was an expansion of the levee in front of Chalmette Cemetery. The work reduced the cemetery's length by some two hundred feet and necessitated relocation of 572 graves and construction of a new Superintendent's Lodge, all of which was accomplished in 1929.

In August 1933, by Executive Order of the President, administration of Chalmette Monument and Grounds was transferred from the War Department to the National Park Service. Six years later, Chalmette Monument became Chalmette National Battlefield Historical Park. At the same time, administration of the cemetery itself was also transferred from the War Department to the National

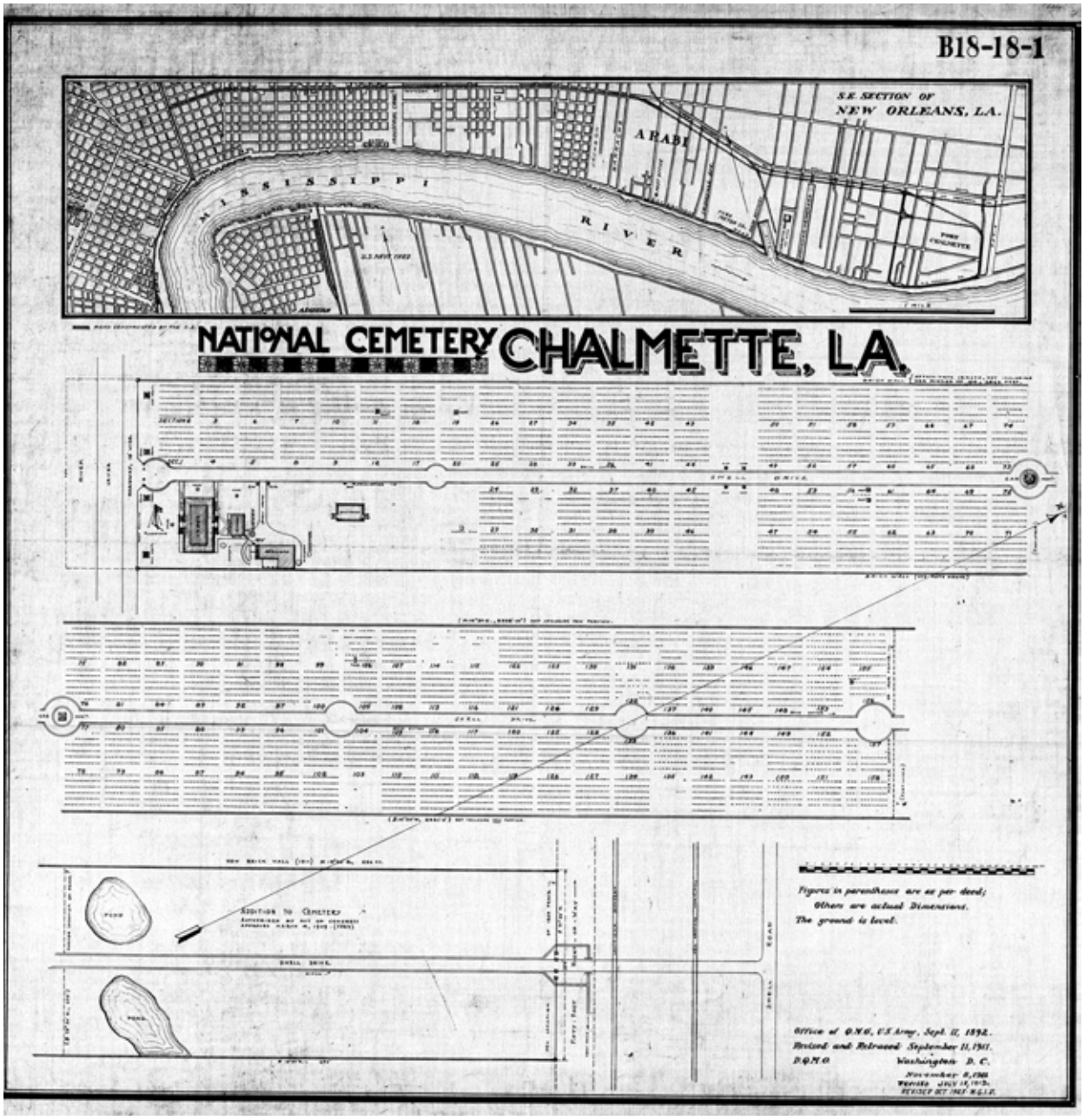


FIGURE 5. Plan of Chalmette Cemetery, originally drawn in 1892 and revised in 1911, 1912, and 1925. (JELA Coll.)

Park Service, and the cemetery became part of the park. In 1945 the cemetery was officially closed for burials, although according to the site's Historic Resource Study "occasional exceptions. . . have permitted burials of veterans and war casualties."[3]

Caretaker, Custodians, and Superintendents

Only a few of the nineteenth and earlytwentieth century cemetery superintendents at Chalmette have been identified, but beginning with NPS administration in 1933, there is a more- or- less complete list of managers in charge of the cemetery.[4] The title given the NPS managers varied, beginning with "caretaker," the assignation of the Chalmette manager under War Department and early NPS administration. By World War II and continuing into the late 1940s, managers at small parks were given the title "custodian." After about 1949, managers at all parks, large or small, were given the title of "superintendent."

Caretaker

The Federal census survey in April 1930 shows John W. Shiffler as cemetery caretaker at that time, but the length of his tenure at the cemetery has not been established. While not certain, it is quite possible that Shiffler and his family were the first residents of the Lodge when it was finished, probably in the summer or fall of 1929. Both Shiffler and his wife, May, were Kansas natives, born in 1878 and 1886 respectively. They were married around 1909, probably in Kansas, and had at least two sons, Meyer, born in Kansas about 1910, and Henry, born in Kansas about 1913.[5] Nothing else is known about this family, except for John Shiffler's death in New Orleans in April 1939[6] and his wife's death in Kansas in January 1964.[7]

In 1932, the War Department appointed Frank Godwin as "caretaker" at Chalmette Monument and Grounds Battlefield Site. He remained as caretaker when site administration was transferred to the NPS in 1933 and continued in that position until Chalmette Battlefield National Military Park was established as an independent unit of the NPS in 1942.

Custodian

In 1942, NPS historian Olaf T. Hagen was named the first superintendent for Chalmette Battlefield National Historical Park, although the position was recharacterized as "custodian" the following year. This was not a demotion for Hagen but rather was a designation given by the NPS to managers of small parks, a practice that continued until the late 1940s. Hagen continued as custodian at Chalmette until he was replaced by another "custodian" in 1944. Replacing Hagen was Clarence L. Johnson, another NPS historian. He served at Chalmette until 1949, but no details of his life and career have been documented.

Superintendents

In 1949, Chalmette Battlefield NHP got its first superintendent, Russell Gibbs, who served in that position until 1954. Like his predecessor's, Gibbs' life and career have not been documented, except for his service as superintendent at Moore's Creek National Battlefield from 1964 to 1969.

The career of Lyle Linch, who served as Chalmette superintendent from 1954 to 1964, is better documented. Linch graduated from the University of Iowa with a degree in biology in 1936 and went to work for the Park Service in 1938. After a brief stint at the Lincoln Memorial in Washington, D. C., he served as a park ranger at Natchez Trace Parkway, Rocky Mountain National Park, Badlands National Monument and Jewel Cave National Monument before being appointed superintendent at Pipestone National Monument in Minnesota in 1948. There he

3. Jerome Greene, *Historic Resource Study, Chalmette Unit, Jean Lafitte Natioinal Historical Park and Preserve* (NPS, 1985), Chpt. 13, p. 14, at <http://www.cr.nps.gov/history/online_books/jela/hrs.htm>, accessed April 21, 2006.
4. Harold P. Danz, *Historic Listing of National Park Service Officials* (DOI, 1991), accessed at <http://www.cr.nps.gov/history/online_books/tolson/histlist.htm> on March 14, 2006.
5. 1930 Federal Census, Louisiana, St. Bernard Parish, Chalmette P. O., Police Jury Ward 3. Facsimile of original census page accessed at <www.ancestry.com> on March 13, 2006.
6. New Orleans, Louisiana Death Records Index, 1804-1949, Vol. 212, p. 1051, accessed at <www.ancestry.com> on March 13, 2006.
7. Social Security Death Index Record, accessed at <www.ancestry.com> on March 13, 2006.

quickly made a name for himself and did much to put the park on a sound footing. "Despite his myriad accomplishments," according to Rothman and Holder's 1992 administrative history of the park, "Linch became a controversial figure within the agency" and was "remembered as a character."[8] He also, they believed,

> had a flair for the dramatic and at times exceeded the bounds of acceptable decorum for agency personnel. While he aggressively promoted the monument and its features, his projects sometimes lacked objectivity and substantiation. Regional officials spent considerable energy keeping abreast of Linch's activities and reining him in. . . . Linch's claims that he discovered Egyptian hieroglyphics at Pipestone and his formation of an Ankh society were of particular annoyance. Regional office supervisors strongly recommended that Linch adhere to the information of respectable scientists and refrain from the "commercialized" and "gaudy" kind of presentation that characterized private sites . . . . [but] Linch's often idiosyncratic presentations continued intermittently.

Partly because of living conditions at Pipestone, Linch was requesting transfer as early as 1961, and in July 1964 his request was finally granted when he was transferred to Chalmette Battlefield National Historical Park. Whether or not his tenure at Chalmette was as colorful as that of his tenure at Pipestone has not been documented.

The next two superintendents served less than two years each, beginning with Courtland Reid who replaced Linch in 1964. In 1965 Reid was replaced by Robert R. Jacobson. His successor, Arthur Hehr, served from 1967 to 1974.

In August 1974, Lionel Bienvenu, who had served as superintendent of Pea Ridge National Military Park in Arkansas since 1967, was named superintendent at Chalmette Battlefield NHP. In 1978, Chalmette became part of the new Jean Lafitte NHP and Preserve and in November of that year, Bienvenu was named acting superintendent. In January 1979, he was replaced by the new park's permanent superintendent, James L. Isenogle. Bienvenu, who became Chief of Interpretation for the new park, was the last resident of the Lodge, which underwent rehabilitation as administrative headquarters for the newly-formed park. Later superintendents, including Isenogle, did not reside at the Lodge.



FIGURE 6. The Lodge at Fort Donaldson National Cemetery, built to the Second-Empire design Meigs used through the 1870s. (Brian Coffey, NPS-SER0-CRD, 2004)

Isenogle, who began working with the NPS in 1957 and came to the park from the Midwest Regional Office, supervised Jean Lafitte NHP and Preserve in its formative years. He retired from the NPS in 1987. When he died in 1994, the U. S. Senate passed a resolution honoring his work at Jean Lafitte NHP.[9] Three superintendents have served the park since Isenogle's retirement: Ann Belkov (1987- 1990), Robert Belous (1991- 1996), and Geraldine Smith (1996- 2006).

Early Lodges

Operated under the jurisdiction of the War Department until after World War II, all but a handful of the national cemeteries had an on- site residence for the cemetery superintendent. Gen. Montgomery C. Meigs (1816- 1892), civil engineer and Quartermaster General for the Army during and after the Civil War, directed the initial development of national cemeteries and, among other things, designed "lodges," as the residences were generally designated, for many cemeteries.

8. Hal K. Rothman and Daniel J. Holder, Managing the Sacred and the Secular: An Administrative History of Pipestone National Monument (NPS, Midwest Region, 1992), accessed at <http://www.nps.gov/pipe/adhi/adhi4.htm> on March 13, 2006.

9. Congressional Record, S8445.

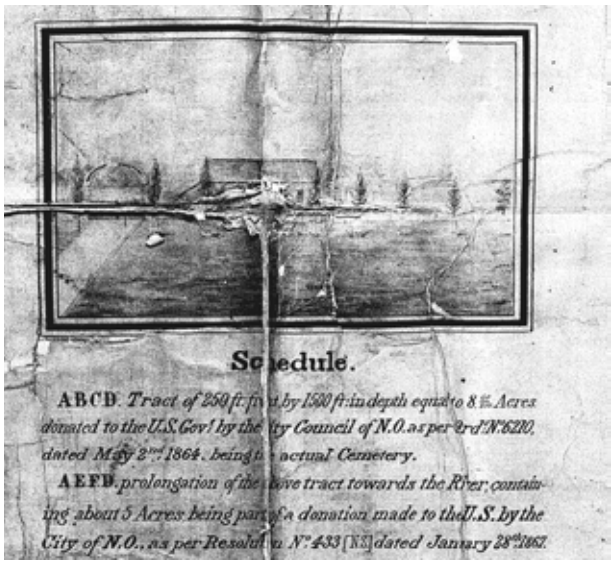


FIGURE 7. Cemetery gates and the first superintendent's residence as depicted on the 1867 "Plan of the Monument Cemetery. (JELA Coll.)

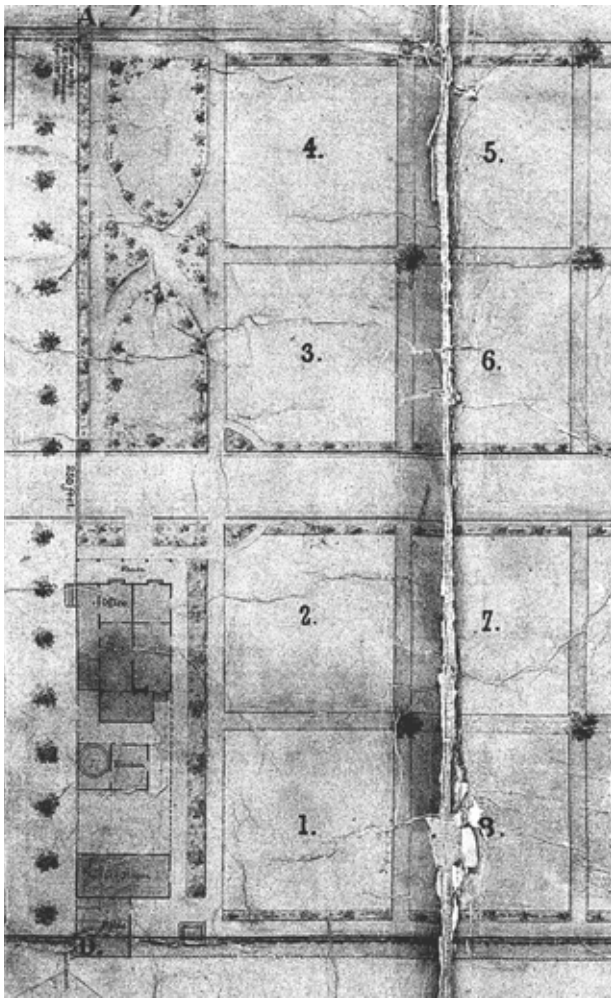


FIGURE 8. Plan of of south end of cemetery, showing first lodge and its outbuildings, as depicted on the 1867 "Plan of the Monument Cemetery." (JELA Coll.)

Some sources have suggested that a single, standardized design was used for all cemetery lodges[10], but typical of government architecture, the design of the War Department's cemetery lodges were in fact standardized but, nevertheless, tended to follow prevailing architectural trends.[11] So, while some fifty- five Meigs- designed lodges were built between about 1870 and 1900, they were not all in the same style. The Second- Empire design that Meigs used in the 1870s was replaced in the 1880s with a simplified Victorian design, and by the time the last lodges were built just prior to the Great Depression, a variety of other styles had been employed.

The First Lodge

The first superintendent's residence at Chalmette was a one- story or story- and- a- half, wood-framed building that appears to have pre- dated establishment of the cemetery. Located at the southeast corner of the cemetery adjacent to the cemetery gates, the building included the cemetery office. Just to the east of the house was a detached kitchen, flanked by what appears to be a large circular cistern. An L- shaped building to the east of that contained a stable and storage room. What may have been a privy appears to be shown just north of the stable. The house may not have been in good condition, however, and it was abandoned by February 1869 when the Deputy Quartermaster General wrote that "the old building recently occupied by the Super of the National Cemetery at Chalmette" would be sold at auction. Three months later, "the old frame building in front of the National Cemetery" was gone.

The Second Lodge

By December 1868, "a permanent lodge of brick. . . [had] been erected near the front gate," according to a report by the Adjutant General, who had recently toured the cemetery. No images of this structure have been found, but written descriptions and its plan (see Figure 9) show that its construction did not use the Second- Empire design that Meigs

10. E.g., see <http://www.cem.va.gov/nchp/alexandriava.htm>, accessed 2 March 2006.
11. The design of the U.S. Life-Saving Service's numerous stations, for example, illustrates the use of standardized designs that evolved along with the evolution of architectural fashion. See Cape Lookout Life-Saving Station Historic Structure Report (NPS, Southeast Regional Office, 2004).

began using around 1870 (see Figure 6). A February 1871 report, quoted by Greene, noted that

> [t]he lodge is a new brick structure containing three rooms, having projecting roof and piazza all around. There is a cistern attached to it. The privy and out- houses are arranged with better taste than usual at the cemeteries. The stable is outside of the fence, in front of the southeast corner of the cemetery.[12]

That description of a piazza "all around" the building is contradicted by two subsequent reports, also quoted by Greene. According to Greene, Superintendent P. P. Carroll's annual report for 1873

> mentioned that the superintendent's lodge consisted of three rooms of equal size. At each end of this structure was [sic] built ground galleys six feet wide and twenty feet long with balustrades placed around them. The back part of the lodge was enclosed with a six- and- one- half- foot- high lattice fence.

The most- detailed description of the second lodge at Chalmette is taken from the 1874 annual report on the cemetery:

> The lodge is situated near the main entrance. It is a one- story brick building, 51 by 21 feet, containing three rooms, with a piazza on the east and west sides, the roof projecting over the piazzas. The lodge is not convenient nor ornamental, and is rendered more unsightly by having a kitchen partitioned off on the back piazza. One of the new style of lodges would be much more appropriate here. There are some handsome flower- beds about the lodge; also four gun- monuments set in masonry.

That same year, according to Greene, the Superintendent "complained that the superintendent's lodge was damp and unfit for habitation." As a result construction of a new lodge was ordered.

The Third Lodge

Unfortunately for the superintendent, construction of a new lodge did not get underway until 1880, with a new building apparently completed by the end of that year. It is assumed that the old building was demolished, but the fact that the old building was brick and similar in plan and dimension to the new building suggests the possibility that the second lodge was expanded to two stories and remodeled to create the third lodge. In any case, Greene notes that it was "specifically designed to meet climatic conditions of the Mississippi delta area." Specifications for the building, which can be found in

12. For all quoted material regarding the cemetery lodges, see Greene, Chapter 13, referenced at <http://www.cr.nps.gov/history/online_books/jela/hrs13.htm>, 7 March 2006.

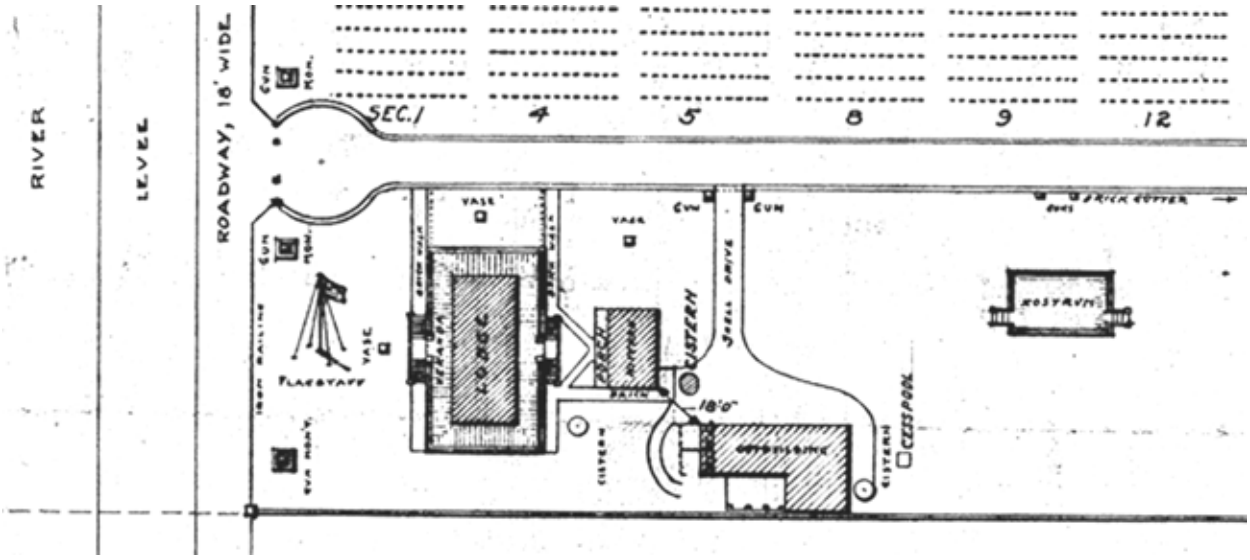


FIGURE 9. Detail from 1892 War Department map of Chalmette National Cemetery, revised in 1925, showinig location and plan of 1880 lodge, adjacent outbuildings, and the nearby Rostrum at the southeast corner of cemetery. (JELA Coll.)

Appendix B of Greene's report, described this third lodge at Chalmette:

> The building, 52 feet 1 inch long by 20 feet 7 inches wide, to be of brick, two stories in height; each story to be subdivided into two rooms and a central hall, and each to be 11 feet 7 inches clear in height; the whole to be surrounded by a porch 10 feet wide and one story in height.

As with the previous lodges, there was a seperate detached kitchen located behind the main residence and, just beyond, an "outbuilding," which almost certainly included a stable. Adjacent to all three buildings were cisterns, which would have collected rainwater through gutters from the roofs of the buildings. No privy is depicted on the cemetery plan, perhaps because there were indoor bathrooms by that time, but there was a cesspool shown just north of the outbuilding.

The Fourth Lodge

As noted above, construction of the fourth, and present, Lodge was the direct result of levee improvements that the Army Corps of Engineers began in 1928.[13] Design and construction of the new lodge fell to the Construction Division of the Army Quartermasters Corp at Jeffersonville, Indiana, one of several depots around the country which, prior to World War II, provided the War Department with most of its barracks, quarters, hospitals, roads, and other structures. Details of design and construction of this lodge will be presented in the following section of this report.

Construction of this Lodge also included construction of a brick garage and utility building just west of the house. This combination of uses in a single structure is probably what led to the National Register nomination mistakenly identifying two separate buildings, a "maintenance building" and a "carriage house. . . presently used as a garage."In

13. In 1887 a new road was built from Jackson Barracks to the main entrance at the south end of the cemetery. Five years later, the cemetery walls were extended to the new road, and according to Risk, the 1880 Lodge was replaced at that time. However, Greene does not document a new lodge in 1892, and no photograph, mention, or other description of this lodge has been located. Given the building depicted in the 1911 map in Figure 5, it is most likely that the supposition of an 1892 lodge is incorrect and that the levee work in 1929 led to demolition of the 1880 lodge, the specifications for which were included as Appendix B in the park's historic resource study.



FIGURE 10. Aerial view northeast of Chalmette Cemetery in 1960, with levee in foreground and St. Bernard Highway running across the upper portion of this image. (JELA Coll.)

fact, they are the same building, although the building may have had later alterations and additions, historic or otherwise. In addition, the garage and maintenance building was probably never used as a carriage house, at least not in the usual sense of that term, although caissons, wagons, or other horse-drawn vehicles that could have been used in military funerals might have been kept there along with maintenance vehicles and the superintendent's automobile.

Significance

The Superintendent's Lodge is a contributing building in the Chalmette Unit of Jean Lafitte NHP Historic District and is significant for its associations with the cemetery and battlefield park. The park was administratively listed on the National Register of Historic Places on October 15, 1966. The confirming documentation was completed and accepted by the Keeper on July 6, 1987. According to the National Register nomination, the cemetery lodge and the adjacent maintenance building

> typify government buildings erected in national cemeteries during the early decades of the twentieth century. The structures have changed little and possess integrity of location, design, materials, and workmanship and embody the characteristics of the construction of national cemetery buildings of the 1920s and 1930s.

Chronology of Development and Use

As noted in the historical overview, construction of a new lodge for the superintendent at Chalmette National Cemetery was a direct result of the 1928 levee improvements that necessitated removal of the old lodge. Plans and specifications were complete by the middle of December 1928, and the new house was completed the following year. Major alterations and additions in 1934, 1951, 1952, and 1965 brought the house to its current configuration. The building ceased to be used as a residence in 1979 when it was adapted as administrative headquarters for the Chalmette Unit of the newly created Jean Lafitte National Historical Park and Preserve.

Design and Construction

On December 12, 1928, the construction division of the War Department's Quartermaster Corps at Jeffersonville, Indiana, completed plans and specifications for the new lodge at Chalmette Cemetery (see Appendix A). Presumably, these were put out for bidding shortly after that time. The builder has not yet been identified, but subsequent NPS reports on the building (see Appendix B) state that it was completed in 1929 at a cost of $9,224.20.

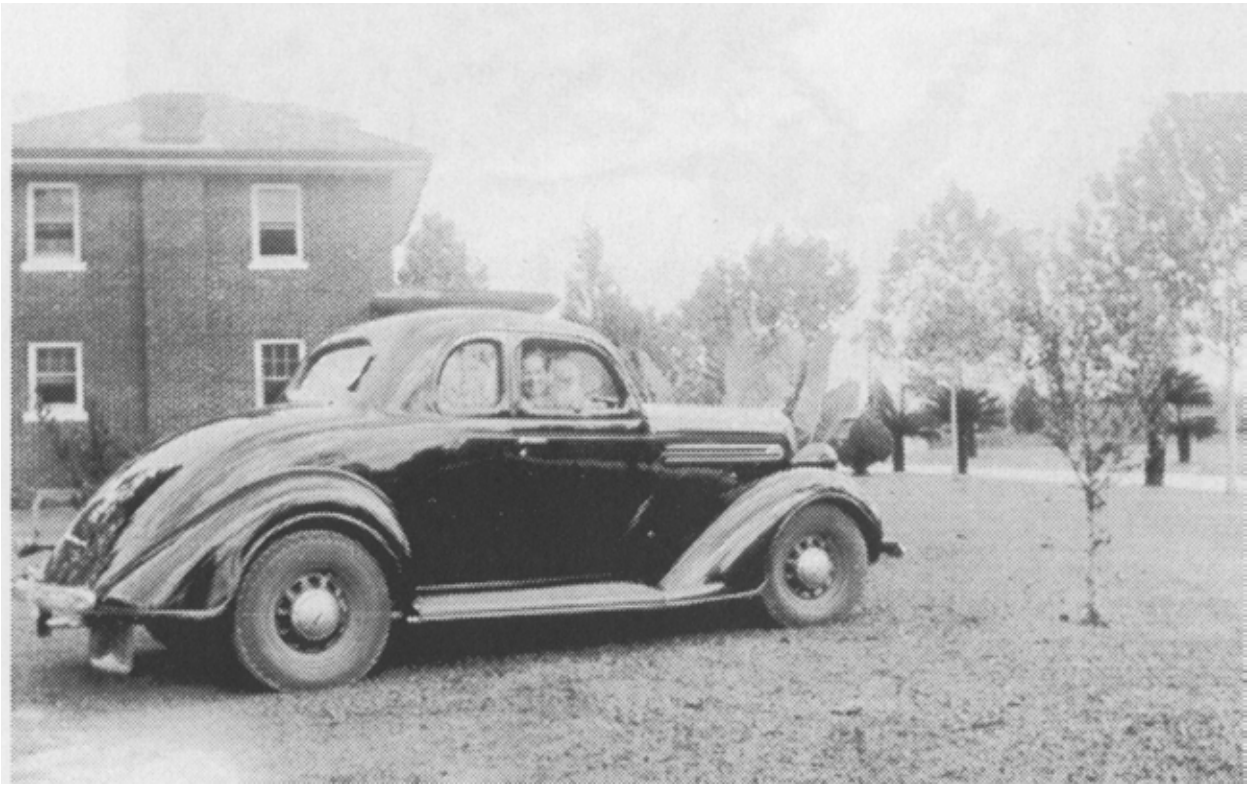


FIGURE 11. The earliest known image of the Chalmette Cemetery lodge, c. 1937. Note the chimney on the southeast side of the house, although it appears to have already lost part of its stack by the time this image was made. (From Risk's Cultural Landscape Report)

American Four-Square

The actual designer of the Chalmette lodge is not known, but whoever it was simply adapted a basic plan that, by the late 1920s, had been replicated across the country tens of thousands of times over the preceding twenty- five years. A vernacular building type generally referred to as American Four- Square, the design was particularly suitable for prefabrication and mail- order sale by Sears, Montgomery- Ward, Alladin and others.

Typical of the style were the simple box shape, two or two- and- a- half stories with four main rooms on each floor, a hipped or pyramidal roof with wide eaves, often a large central dormer, and a full- width porch with wide stairs. Four- Square houses were built in brick, stone, stucco, concrete block, and wood and, although architectural details were typically restrained, theyoften incorporated stylistic details that relate them to the eclectic styles of the early twentieth century, especially Craftsman, Renaissance Revival, Mission, Tudor, and Colonial Revival.



FIGURE 12. A 1929 American Four-Square design offered by Sears.

Construction Changes

No completion report on the building's construction has been located and the plans and specifications included several alternates that were to be included in the contractor's proposals. Nevertheless, in spite of subsequent alterations to the building, building investigation in the course of the present report suggest that the building was constructed more or less as specified and make it possible to determine which of the major alternates were chosen.

The most significant of the alternates concerned the masonry walls of the house, which could be constructed entirely of brick or, alternatively, using a hollow, terra- cotta "backup tile" with a veneer of face brick.[14] Probably for reasons of cost, the alternate was used, and the walls were constructed using hollow tile and a brick veneer, a method of construction that was widely used in the 1920s. It is not known if construction utilized "brick- sized tile" or "heavy galvanized wall ties," which were the alternatives allowed by the specifications, to bond the brick veneer and the tiles. As specified, the interior face of the tile was covered with an asphalt- based waterproofing prior to installation of the plaster.

Proposals were also to have included an alternate for a deduction "in case all painting and varnishing of the interior woodwork and floors is [sic] omitted." Although painting and varnishing must have occurred, who completed that work is not known.

The original plans show a back porch spanning only half the rear of the house, but the specifications called for contractors to submit proposals with alternates for a full- length back porch as well as for no porch at all. Since there is no evidence to suggest that the existing porch was an addition and no construction joint or other physical evidence to indicate it was ever lengthened, it is assumed that the present back porch was part of the building's original construction.

Specifications for the roof stated that "#1 rigid asbestos shingles, blue gray, slate- colored, or emerald green" would be used, and that "light gray will not be acceptable." Which of these colors was used

14. See Thomas C. Jester, *Twentieth Century Building Materials* (McGraw-Hill, 1995), pp. 150-155, for a history of this modern building material.

has not been documented, since the existing asbestos roof covering dates to 1957.

Flashing, gutters, and downspouts were specified as 16 oz. copper, with ogee gutters and rectangular downspouts. The latter were removed in 1993, but historic photographs document their existence.

A note on the first sheet of the plans states "ALL PORCH COLUMNS. C. I. [i.e., cast iron] COLS FROM OLD LODGE FURNISHED BY GOV. TO BE SET BY CONTRACTOR." Whether for economy, aesthetics, or other reasons, the twelve columns used for the porches were apparently salvaged from the previous lodge that had been constructed in 1880.

Of some interest is the specification of plaster board for walls and ceilings in the lodge. Sometimes known as "rock lath," plaster board represents a sort of transition between traditional plaster on wood lath and modern drywall. Much less labor-intensive to install than wood lath, plaster board could be quickly installed as a base for a traditional plaster finish. Developed in the early 1900s, plaster board did not come into wide- spread use until the 1920s, but by the late 1930s, it had almost entirely replaced wood lath for plaster walls and ceilings. In the early 1950s, conventional sheets of gypsum drywall eliminated plaster entirely except for certain speciality applications.

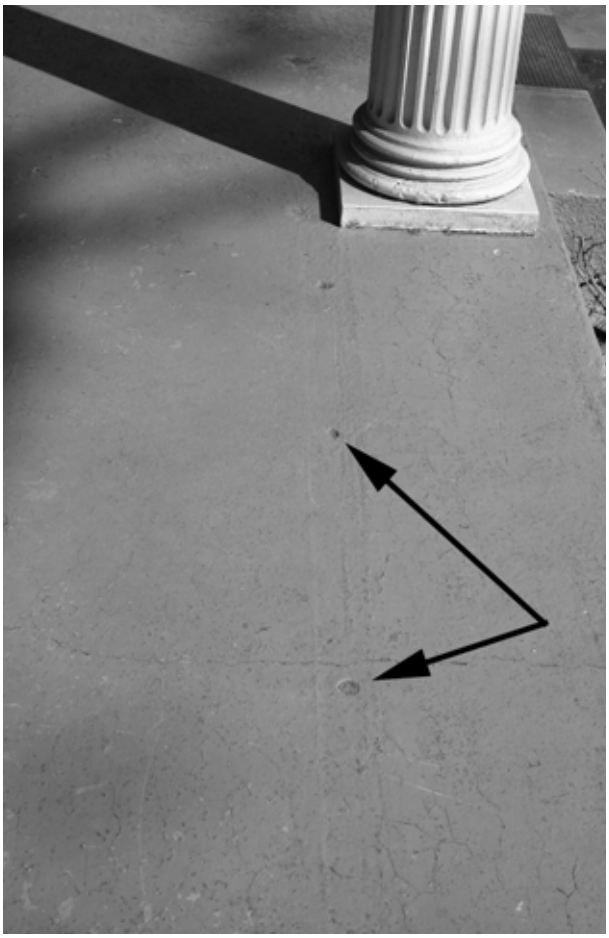


FIGURE 13. View of front porch floor with arrows indicating where screen framing was attached to the floor.

War Department Alterations, 1929-1949

Prior to World War II, there were four major changes to the house, each of which would have added to the building's livability. Physical evidence for all of these alterations can be observed in the present building, and NPS documents provide dates and construction costs.

Front Porch Screening, 1931

It must have been immediately clear that an unscreened porch was of limited utility in an environment like that at Chalmette, and in 1931, the front porch was screened at a cost of $165. Framing for the screening was set behind the columns, following a line that is still evident on the floor of the present porch. The front porch screening was removed around 1979 when the residence was rehabilitated for offices.

Sleeping Porch, 1934

In the first three or four decades of the twentieth century, "sleeping porches" were wildly popular throughout the country, either as an original feature or as a later addition. Typically located on the second floor and at the side or rear of the house, sleeping porches might be simple screened enclosures or they could have screened and movable sash.

Sleeping porches were almost never heated, which was often the case with bedrooms prior to the wide- spread use of central heating. Sleeping porches, or "TB rooms," as they were sometime called, were a response to the widely- held belief that fresh air, especially while sleeping, was critical to recovery from tuberculosis and other diseases and for maintenance of good health in general. In

particular it was felt that sleeping in a heated space was detrimental to one's health, a notion that formed the premise for director Leslie Pierce's 1929 film "Sleeping Porch," a comedy the plot of which revolves around a wife's efforts to get her husband to use their unheated sleeping porch. While health considerations helped popularize sleeping porches initially, the comfort of cool nighttime breezes was reason enough to maintain a sleeping porch in the south.

No doubt, providing a cooler place to sleep was the primary reason for construction of a sleeping porch above the back porch at the Chalmette lodge, a project that was completed in 1934 at a cost of $295.33. Plans (see Appendix A) but no specifications survive for this addition, and it appears there were some changes during construction. Most significantly, only one pair of casement windows, not the two that were specified, was used at each end of the porch, and slightly narrower sash than shown on the plans were used across the back side of the porch. An analysis of painted finishes or of the framing of the sleeping porch would be necessary to confirm these assumptions. However, the existing siding on the sleeping porch is not the same as that used on the 1965 laundry room addition to the back porch, an addition which is contemporaneous with the aluminum windows that replaced most of the original sleeping porch sash and some on the main block of the house around that same time.

The interior walls and ceiling of the sleeping porch were finished with panels of wallboard with joints covered by strips of wood lattice. Manufactured from wood fiber or other cellulose material, wallboard began to be mass- produced in the 1910s and was initially marketed as a replacement for paneled and plaster walls. The Beaver Board Company, the Homosote Company, and Mason Fiber Company (later the Masonite Company) were the most prominent of early manufacturers of this product. In 1920, the Celotex Company made the first wallboard using bagasse, the fibrous residue from pressed sugar cane.[15] Under the depressed economic conditions of the 1930s, wallboard was widely used as an



FIGURE 15. View of Chalmette Lodge in the 1950s. (JELA Coll.)

inexpensive finish material, especially in secondary rooms or previously unfinished spaces like attics and basements.

Back Porch Screening, 1936

While the screened front porch provided the caretaker and his family with a comfortable place to relax, its southern orientation would have been less than ideal in summer, and in 1936 the decision was made to screen the back porch as well. Almost always in shade, it would have also provided more comfort for the utilitarian chores generally consigned to a back porch. Although most if not all of that screening was removed when the northwest end of the porch was enclosed in 1965, physical evidence for the screening survives on the floor of the present porch.

1937 Central Heating

Somewhat surprisingly, the Chalmette lodge was apparently built without central heating, depending entirely on the single fire place in the living room and wood- burning stoves in the kitchen, office, and one of the upstairs bedrooms. In 1937, however, the decision was made to install a central, coal- fired, steam- heating system.

Installation of this system, which cost $1,987.26, included construction of a brick chimney for the boiler that a steam- heating system required. The boiler itself was apparently installed in a basement that was created under the dining room. One of the crawl space vents was replaced by the present top-hinged door that must have been installed for delivery of coal to the boiler room. While a basement in an environment with a high water table like the one at Chalmette may not seem feasible, NPS documents (see Appendix B) clearly refer to a "basement" and there is no other place in which a boiler could have been located. The system was removed in the early 1950s and the only evidence today for its existence is the chimney rising at the rear of the house, the brick walls of the basement, and perhaps a dozen holes in the floors where steam pipes were run. Although there is no documentation, the basement must have been filled to the original grade after the boiler was removed. Little additional work on the house appears to have been accomplished prior to transfer of the cemetery from the War

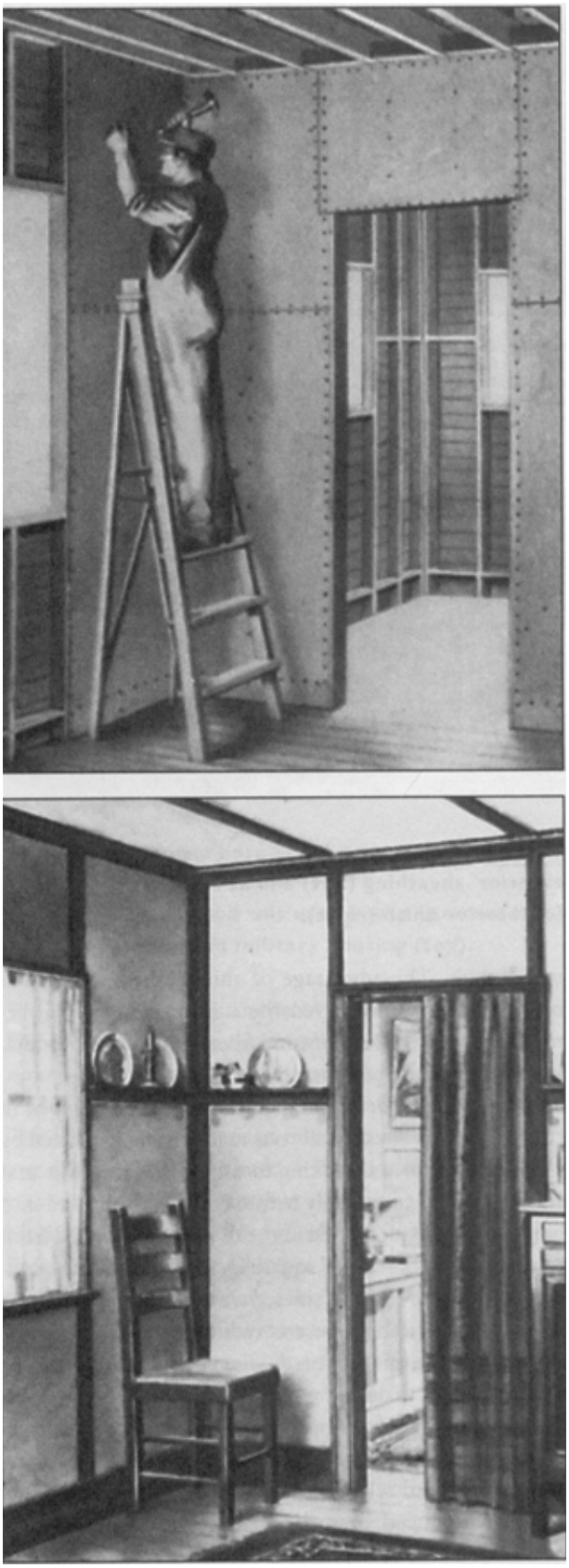


FIGURE 14. An advertisement from the 1912 Beaver Board catalog, showing how wallboard could be used to finish a room. (From Jester, p. 123).

15. See Jester, pp. 120-125 for more on the history of this modern building material.



FIGURE 16. View of Lodge in 1950s (JELA Coll.)



FIGURE 17. View of Lodge, c. 2004. (NPS, SERO-CRD)

Department to the National Park Service in 1949, although the exterior woodwork was probably painted during that period.

NPS Modifications, 1949-1979

Under NPS management, the Chalmette lodge underwent a number of modifications as it continued in use as a residence for the superintendent. These modifications included changes to the original floor plan, the addition of a half bath, a new heating system and, later, air- conditioning, as well as enclosure of half of the back porch.

Floor Plan

The first NPS modification occurred in February 1951 when most of the wall between the living room (101) and dining room (104) was removed, at a cost of $184.00. The rooms were originally separated by a wall with a large cased opening about six feet wide. A reflection of the increased informality of American interiors after World War II, this alteration combined the two rooms into a single large space that probably functioned as a sort of "family room," as was typical of many post- war residences. The most clear physical evidence for this alteration is in the slight irregularities in the flooring that covered the areas where the wall was removed.

"Wash Room"

In June 1952, a half bath was added by enclosing a small part of the back porch and creating a new door opening from the passage between the kitchen (103) and dining room (104). With part of the space occupied by the 1937 chimney stack, there was room only for a toilet and a wall- hung sink. The chimney was furred out and, along with the walls, covered with wallboard, similar to what had been used in finishing the sleeping porch in 1934. Cost of creating this "wash room" was given as $283.00.

Floor Furnaces

In February 1954, the steam- heating system, then less than twenty years old, was replaced by a pair of gas- fired floor furnaces. The old boiler, radiators, and steam pipes were entirely removed, and the basement was probably filled at the same time. Large floor openings were created to accommodate the floor furnaces. The one in the dining room

(Room 104) measures 22- 3/4" by 42- 1/2" and, according to park records, held a 65,000 BTU furnace. The opening in the office (Room 102) is 22' by 31- 1/2" and held a 35000BTU furnace. In order for the furnaces to heat most of the house (the sleeping porch remained unheated), registers were cut through the floors in the second- floor bedrooms, allowing hot air to rise into those rooms from the floor furnaces on the first floor. Later documents mention the presence of a wall furnace, which may have been contemporaneous with the floor furnaces, but its location has not been documented.

Hurricanes

Two major hurricanes struck Louisiana in the two decades after World War II. The first was Hurricane Audrey, one of the deadliest storms in U. S. history. It struck Cameron Parish in western Louisiana in June 1957 but caused significant damage in the New Orleans area. The second major storm was Hurricane Betsy, which scored a direct hit on New Orleans in September 1965 and precipitated damage and loss of life that the city would not see again until Katrina devastated the city in 2005.

The nature of the damage that might have occurred at Chalmette during these storms has not been documented, but it was probably damage from Hurricane Audrey that necessitated installation of a new roof on the Chalmette lodge in 1957. The new roofing was also cement- asbestos shingles, but instead of the original "American Method" installation, the "Dutch- lap" method was used, with shingles applied to overlap adjacent shingles. That roof covering remains on the house today. New awnings were installed on the house in 1958, perhaps to replace awnings damaged during Audrey.

1965 Rehabilitation

After Superintendent Linch's retirement in 1964, the Lodge underwent significant rehabilitation in the spring of 1965. The work included four main components: enclosure of part of the back porch for a laundry room, installation of closets in the sleeping



FIGURE 18. View of the Lodge, c. 2004. (NPS, SERO-CRD)

porch, remodeling of the second- floor bathroom, and rewiring of the house to allow installation of window- mounted air- conditioning units.

Three contractors appear to have been involved with executing the work (see documents in Appendix B). Ed Bell, contractor for Pelican Remodelers on Ursuline Avenue in New Orleans, apparently submitted the winning bid for enclosing the back porch and installing closets in the sleeping porch. His lump- sum quotation amounted to $790.00 and the completed work was accepted on April 23, 1965.

Rene Dauterive Plumbing and Heating Company of Arabi, Louisiana, was apparently chosen to run new supply and waste lines for the utility room and to replace the supply lines to the upstairs bathroom and to the kitchen. The half- bath supply lines were not replaced. In addition, Dauterive's proposal included replacement of the original lavatory in the second- floor bathroom with a "new vanity lavatory... to be selected by the superintendent." Cost of the proposed work was put at $255.43.

The final component of the 1965 rehabilitation of the residence was the addition of a number of electrical outlets throughout the house, the extent of which probably required an upgrade in the electrical service to the house. Accomplished by F & S Electric of Chalmette, Louisiana, at a cost of $324.00, the work included the addition of 220 volt receptacles in the living room, dining room, and the two front bedrooms on the second floor. A 220 volt outlet had probably already been added in the office (Room 102), and all of these outlets were intended to power window- mounted air- conditioning units.

Central Air-Conditioning

In 1972, the decision was made to install a new central air- conditioning system in the house. The work included removal of the old floor and wall furnaces and installation of a double- zoned system served by an Arkla Servel Chiller and two furnaces, one located in the crawl space beneath the office (Room 102) and the other in the attic above the stair hall. Ducts were run to new registers that would provide heating and cooling for all major rooms. For the first



FIGURE 19. View of Lodge after Katrina, fall 2005. (NPS, SERO-CRD.)

time, the sleeping porch would cease to be an unheated space. The work was completed by Louisiana Gas Service Company in February 1973 at a cost of $3,865.00.

Aluminum Windows

It is not clear when the existing aluminum- framed windows were installed in the house, but at some point all of the casement sash across the rear of the sleeping porch as well as the double- hung sash in the two pairs of windows at the front of the second floor were replaced with the present aluminum windows. The character of these windows suggests that they could have been installed as early as the 1965 rehabilitation or as late as the adaptation of the building for administrative offices in 1979.

Recent Alterations

In October 1978, Congressional legislation incorporated Chalmette Battlefield and National Cemetery into the new Jean Lafitte National Historical Park and Preserve. Creation of the new park brought a need for administrative offices that coincided with the NPS move away from on- site housing for superintendents. As a result, the Chalmette lodge ceased to be used as a residence in 1978 and was adapted for administrative offices for the Chalmette unit of the new park. Among the changes that occurred at that time were replacement of all of the historic light fixtures in the house and removal of the screening on both porches.

In 1988 the built- up roof over the sleeping porch and the asphalt shingles on the front porch were replaced.[16] In 1993 the gutters and downspouts were replaced.

Katrina

Hurricane Katrina devastated Louisiana and the central Gulf Coast on August 29, 2005. Storm surge from the east inundated Chalmette, and water rose

16. Denver Technical Information Center files, JELA 467 80015.



FIGURE 20. View of garage after Katrina. (JELA Coll.)



FIGURE 21. View of Rooms 101 and 104 in the Lodge after Katrina. Arrow denotes high-water line. (JELA Coll.)

as high as five feet inside the Lodge. In addition, the east chimney collapsed onto the roof. Stabilization of the building after the storm included removal of ruined mechanical equipment and all plumbing fixtures on the first floor. In limited areas, the plaster walls were removed to facilitate drying of wall cavities. Some sash were replaced with temporary louvers, also to facilitate drying.

Chalmette Cemetery Superintendent's Lodge Chronology	
1928	Flood Control act passed
1928, December 12	"Plans of Superintendent's Lodge" completed by unknown architect at Army Quartermaster's Deport in Jeffersonville, Indiana
1929	Lodge constructed
1931	Front porch screened
1934	Sleeping porch added at second floor
1936	Rear porch screened
1937	"Basement" and steam heating system installed
1949, October 2	Building transferred to NPS from War Department
1951, February	Wall between living room and dining room (101 and 104) removed
1952, June	First floor half bath installed
1954, February	Floor furnaces installed, steam heating system removed
1957	New roof installed (Hurricane Audrey in June)
1958	New awnings installed
1965, April	Southwest end of rear porch enclosed, closets constructed in sleeping porch
1973, January	New central heating and air-conditioning system installed; floor furnaces, wall furnace, and five window air-conditioners removed
1978, October	Chalmette National Historical Park legislatively incorporated into Jean Lafitte NHP and Preserve
1979, January	Superintendent Bienvenu retires
1979	Lodge rehabilitated for administrative offices for JELA
1988	Front porch and sleeping porch re-roofed
1993	Aluminum gutters and downspouts installed
2005, Aug 29	Hurricane Katrina floods Chalmette

Physical Description

Located just inside the main gates to Chalmette National Cemetery and facing in a generally southeasterly direction, the Lodge was built by the War Department in 1929 as a residence for the cemetery's superintendent. With masonry exterior walls, the building's rectangular plan, two- story height, full- width porch, and dormered hipped roof are defining features of the American Four- Square, a type of residential building that was wildly popular from the 1890s through the 1920s. Fluted, cast- iron columns with Corinthian capitals were salvaged from the original 1880 superintendent's residence and relate the house to the Classical Revival. Known as the Superintendent's Lodge, the house includes intact additions from 1934, 1952, and 1965 and continued to serve as a residence until the 1980s when it was rehabilitated for administrative offices. Flooded to a depth of eight feet in September 2005, the building underwent emergency stabilization but remained vacant in February 2006. This physical description is based on a survey and non-

Floor plans of the existing building and typical molding profiles may be found at the end of this section.



FIGURE 24. View of entrance to Chalmette National Cemetery. (NPS, 2006)

destructive building investigation conducted on February 16- 17, 2006. Unless otherwise noted, all photography in this section is by the author.

Associated Site Features

Set back about 40' from the western side of the road that bisects the cemetery, the house occupies a level site within the cemetery walls that includes a contemporaneous garage and maintenance building and a modern maintenance shed. The eastern corner of the garage was badly damaged by a falling tree during Hurricane Katrina, but the building has been temporarily repaired and stabilized until permanent repairs can be made. Although a number of them were felled by the recent hurricane, mature sycamores and sago palms still dot the site, and some shrubbery remains on the southwest side of the building.

Around the front porch of the Lodge, there are remnants of the brick- lined flower beds that are visible in historic photographs. In addition to the unpaved driveway cut south of the house, there is a 47"- wide concrete walkway from the cemetery road to the front steps, and 34"- wide concrete walks lead from the front and rear steps to the unpaved parking area in front of the maintenance building.

Structure

The house has a reinforced- concrete foundation and load- bearing exterior walls that are structural clay tile. Roof, floors, ceilings, interior partitions, and the rear additions are all wood- framed.

Foundation

The original specifications for construction called for a continuous reinforced- concrete foundation around the perimeter of the building and three reinforced concrete piers, 12" by 12" in plan, spaced along the center of the house from side to side. The porches, too, were to be supported on piers, but with a continuous curtain wall between the piers. Although measurements were not taken, field observations are consistent with construction specifications.

The foundation walls rise about 16" above grade, are 12" thick, and were specified to be set on spread footings, 9" thick and 3'- 6" wide. Footings for piers were also to be 9" thick but only 3'- 0" wide. The top



FIGURE 25. View west of maintenance building. (NPS, 2006)



FIGURE 26. View west of Lodge. (NPS, 2006)



FIGURE 27. View east of Lodge. (NPS, 2006)

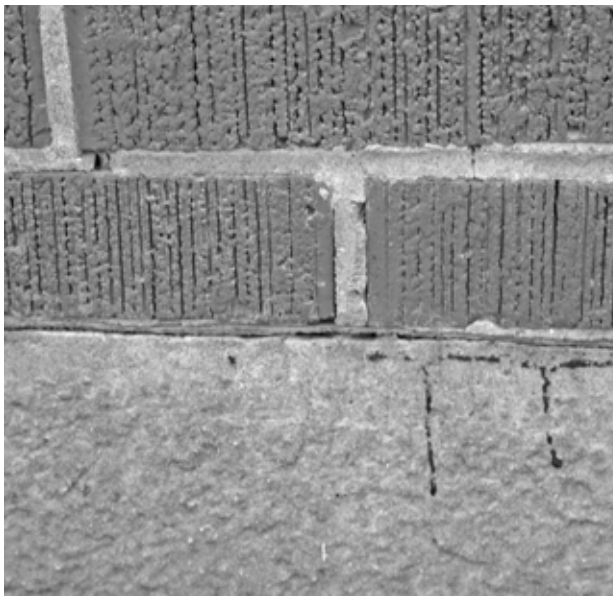


FIGURE 28. View of juncture of brick veneer wall and concrete foundation, with damp-proof course visible.



FIGURE 29. View of typical porch foundation vent.



FIGURE 30. View of altered foundation opening on northeast side of house.

of all footings was to be 4'- 0" below grade unless "suitable bearing" could not be found. The above-grade portions of the foundation received a rough, "dash finish" as specified. The top of the foundation was "damp- proofed" with an unidentified water-proofing paint and asphalt "composition" shingles embedded in mortar.

To provide ventilation of the crawl space under the house, the foundation for the house itself was built with five large openings, three on the northeast side and two on the southwest side. Each opening is around 18" high by 30" long and was originally covered with wooden lattice. These openings are now covered with wood- framed screens, except for the opening near the rear of the northeast side where the opening was reduced in size and a cast- iron, top- hinged door was installed when the building's first central heating system was installed in the 1930s. In addition, cast- iron grills measuring around 10" by 12" cover a pair of openings in the foundation under the front porch and another pair under the rear porch.

In 1937, a steam heating system was installed in the house. A third chimney, which will be described below, was built along with a brick enclosure of the north quadrant of the crawl space, where an area approximately 8' by 17' has been enclosed by a brick wall that extends to the bottom of the floor joists. Referred to in some documents as a "basement", it was apparently filled when the steam system was replaced in the 1950s and is now no more than a crawl space.

Existing Condition. Although the foundation could not be directly observed below grade, the above-grade portions appear to be in excellent condition, with no cracking or other signs of differential settlement. One of the metal ventilation grills in the rear foundation is missing, and the remaining grills and the top- hinged crawl- space- access door are rusting.

Exterior Walls

The exterior walls of the house are constructed of hollow, clay tile. Tiles were specified as 8" by 5" by 12" on the first story and 4" by 5" by 12" on the second. Only the former dimension could be directly confirmed in the present building, but the walls' thickness at the second floor suggest that the latter dimension is accurate as well. After completion but

before application of interior finishes, the interior face of the clay tiles was coated with an asphalt-based waterproofing paint.

The exterior walls are veneered with brick, which is presumably anchored to the tile by galvanized-metal wall ties, since there are no header courses. Face brick are machine- made, hard- fired, "cherry red" in color, and scored vertically on each end and on the outside face. Brick measure 2- 1/4" by 3- 3/4" by 8" and are laid up in a running bond using a dark- gray, Portland- cement mortar with simple concave joints. Flat, soldier arches over 3" angle cast- iron lintels form all window openings, while the three original door openings are formed by shallow rowlock arches without the cast- iron lintel. All original windows and door openings have 4"-thick cast- stone sills.

Existing Condition. As with the foundation, there are no signs of cracking or differential settlement in the exterior walls of the house. In the limited areas in which the clay tile could be observed, interior water- proofing appears to remain intact and in good condition. There has been some minor repointing of the brick veneer, and much of the dark- gray color of the mortar has been lost as lime has leached to the service.

Wood Framing

Roof, floors, and interior partitions are all wood-framed using standard- dimensional lumber. Framing material was specified as short- leaf pine, which is what was probably used.

Joists. Floor joists are typically 1- 5/8" by 9- 1/4" (nominal 2" by 10") set on centers 16" apart and, according to the specifications, bridged every 8' with 1" by 3" cross- bridging. Joists are decked with 7/8"- thick boards, laid on the diagonal and specified to be no more than 8" wide. Joists were let into pockets in the masonry walls, and the specifications called for second- floor joists to be "fire cut," i.e., joist ends cut at an angle so that in case of fire the joists might fall out of the masonry walls without causing collapse of the wall itself. Finally, the specifications called for "every sixth joist to be anchored with strong wrought iron hangers securely built into brickwork." Neither the fire- cut ends nor the wrought- iron hangers could be observed in the present building.



FIGURE 31. View of wood-framed window with typical cast-iron angle-iron lintel and cast-stone sill.



FIGURE 32. View of water-proofed interior face of structural clay tile walls behind plaster-board walls.



FIGURE 33. View of attic framing.



FIGURE 34. View of typical column capitals.



FIGURE 35. View of typical column plinths.



FIGURE 36. View southwest on front porch.

Studs and Plates. Studs are typically 1- 5/8" by 3- 1/2" (nominal 2" by 4") on 16" centers. To accommodate sanitary waste lines, the southeast (front) wall of the kitchen was framed with 1- 5/8" by 5- 1/2" studs. Sole plates are also nominally 2" by 4", and top plates are composed of doubled 2" by 4" members. The specifications called for approximately 2" of concrete mortar to be placed between the studs at the bottom of all walls to form a fire stop, but it is not clear if this was done in all locations. Wooden fire stops, 2" by 4" (nominal dimension), were also specified, are visible in the kitchen, and were probably placed between studs half- way up all wood-framed walls.

Rafters. Rafters are 1- 5/8" by 7- 3/8" (nominally 2" by 8") on 16" centers with a 3/4" by 9- 1/4" (nominally 1" by 10") ridge board. The roof is stiffened by the use of 3/4" by 7- 1/2" (nominally 1" by 8") collar beams connecting each pair of full rafters. Decking uses the same material as the collar beams.

Additions. The three additions at the rear of the house are conventionally framed using standard-dimensioned 2" by 4" studs and sole and top plates. Rafters for the sleeping porch are 2" by 6" (nominal dimension). The bathroom and sleeping porch roof and wall framing are sheathed, apparently with 1" by 8" (nominal dimension) material; on the 1965 addition, framing is not sheathed.

Existing Condition. Framing appears to be in mostly good condition. The exceptions are the additions on the back porch where the sole plate for the 1965 addition is almost completely rotted away and there is some termite damage in the northeast wall of the 1952 bathroom addition. There is also likely damage to the outer ends of the rafters for the sleeping porch roof. In addition, only a small fraction of the floor joists could be examined, and it is likely, given the framing's proximity to the ground, that other, probably minor damage, may be discovered.

Porches

The house was constructed with full- width, hipped- roof, one- story porches at front and rear. Both porches were screened in the 1930s, but screening was removed in the 1980s, although some if not all of the screened panels for the front porch

are reportedly in storage at the nearby Beauregard House. A sleeping porch was added as a second floor to the rear porch in 1934, and the rear porch is now partially enclosed with other additions dating to 1952 and 1965.

Both of the original porches were built on reinforced- concrete slabs, 5" thick, set on a continuous concrete foundation. The front porch has three concrete steps to the ground, each about 5" high, 12" deep, and 7' long, although the rise of the lowest step has been reduced to only 3" by the thickness of the concrete walkway to the road. Two steps descend from the rear porch, each around 48" wide. Both porches have low- pitched wood- framed roofs set on 8" boxed headers around the outside perimeters of the porches. The headers are supported by cast- iron columns that the original construction drawings indicate were salvaged from "the old lodge," which was probably the lodge that was built in 1882. Columns are fluted, 10' high with Corinthian capitals, and are set on 16" x 16" x 2" cast- iron plinths. There are six columns on each porch, with columns paired at each corner. Large, scrolled, cast- iron consoles are placed at the junction of the boxed ceiling headers and the brick walls of the house. The porch ceilings are finished with 3- 1/4"- wide, double- beaded, tongue- and- groove boards. A simple 1" quarter round trims the juncture of the ceiling and the outside header.

Existing Condition. Except for the alterations to the rear porch and damage to the rear porch's soffit, which will be discussed below, the porches remain in reasonably good condition. Some rusting of the columns is evident, but the floor slab and ceiling remain in good condition. The additions to the rear porch were constructed in a way that does not impact the columns or headers and appear to have done only minimal damage to the ceiling boards.

Exterior Features

In addition to the brick veneer cladding the exterior walls and the various components of the porches, the exterior of the house has a number of wooden elements, including windows and doors, soffit, and fascia. The exterior of the three additions at the rear of the house are also finished in wood siding.



FIGURE 37. A typical 6/1 window.



FIGURE 38. One of the surviving pairs of original sleeping porch windows.

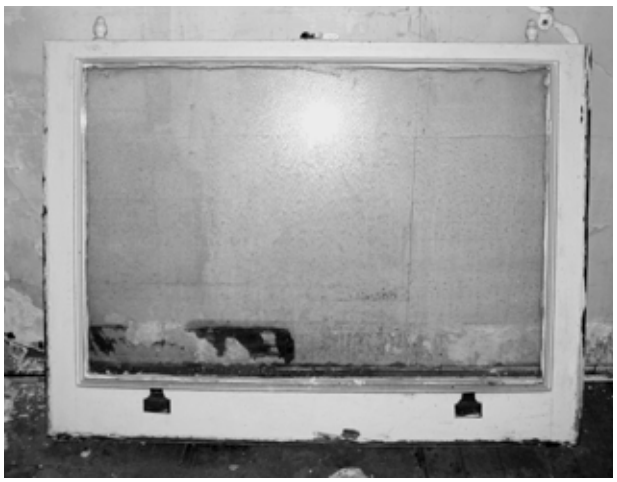


FIGURE 39. Original sash, with hardware and turned wooden bumpers intact.



FIGURE 40. One of the original front doors.



FIGURE 41. View of one front door.

Windows and Doors

Original windows are, with one exception, double-hung, the exception being a fixed, single- light sash, 14" wide and 20" high, which lights the closet between the two front bedrooms on the second floor. Stiles and rails are all 2- 1/4" thick, and each of the lower sash of the double- hung windows has a pair of unusual turned bumpers, 7/8" by 1- 1/4", mounted on the top rail to prevent the sash from lodging in the top channel when the sash is raised. All of the double- hung windows have plain brass sash locks with pairs of thumb lifts on the bottom rail of the lower sash. Historic photographs show wood- framed screens at the windows, but only the pairs of hooks from which they were hung remain at the windows. A second pair of hooks or brackets is also present at most of the windows. Located near the top corners of the window frames, these hooks may have held storm sash, but that has not been confirmed.

First- floor windows include two large openings on the front of the house, both 3'- 8" by 4'- 8" with 8/1 sash; one window on the southwest side and one window on the northwest side which are 2'- 8" by 4'- 8" with 6/1 sash; paired windows on the northeast side which are each 2'- 4" by 4'- 8" with 6/1 sash; two windows flanking the northeast chimney which are 2'- 2" by 4'- 8" with 4/1 sash; and two windows on the northwest and southwest sides that are 2'- 8" by 3'- 8" with 6/1 sash.

On the front at the second floor, there were originally two pairs of 2- 4" by 4'- 4" windows with 6/1 sash, but these have now been replaced with aluminum windows similar to those on the sleeping porch. The remainder of the second floor windows are original, 2'- 8" by 4'- 4" with 6/1 sash. The small 3- light horizontal sash that was originally installed in the attic dormer has apparently been removed.

The second- floor sleeping porch was originally constructed with ten pairs of six- light casement windows, 1"- 9" by 4'- 0" by 1- 3/8", mounted on 3" butt hinges. The eight pairs of windows across the rear of the porch have since been replaced with 1/1 aluminum windows, but the original pair of windows at each end of the porch remain intact.

Lighting the small half bath that was added on the back porch in the 1950s is a single window, originally hung with 3- light, top- hinged sash, 15" by 30" x 1- 3/

8", although the sash is now detached from the frame. In the 1960s addition that infilled the west end of the back porch is a single aluminum window, 2'- 7" by 3'- 0", similar to the aluminum windows added in the second- floor sleeping porch.

The house was constructed with three exterior doors, with two opening to the front porch and one to the rear porch. All three doors are 2'- 9" by 6'- 8" by 1- 3/4", each with six 12" by 12- 3/4" lights above a single molded panel in the lower half of the door. In addition, each door has a bottom- hinged transom, 14- 1/2" high, screened on the exterior. Doors are hung with three, 4- 1/2" by 4- 1/2", three- knuckle, butt hinges. Entrance locksets include a mortise lock as well as a separate keyed deadbolt that was probably added at a later date.

Existing Condition. Windows and doors are in mostly good condition, although built- up paint and broken sash rope have rendered some sash inoperable, and a few panes of glass are broken.



FIGURE 42. Typical entry lockset.

Eaves

Eaves on the main block of the house are 24" wide and are boxed with a horizontal soffit finished with 3- 1/4"- wide, double- beaded, tongue- and- groove boards like those used for the porch ceilings. Three-inch bed molding trims the soffit to the wall of the house. Fascia is a plain 1" by 8" (nominal dimension). Eaves on the original porches differ slightly from those on the main block of the house. Porch eaves are around 16" wide and are boxed to the rafters. Instead of bed molding, they are trimmed with a 2- 1/2" cyma recta crown molding. Like the eaves on the main block of the house, they are finished with 3- 1/4"- wide, double- beaded, tongue- and- groove boards.

The eaves of the sleeping porch that was added in 1934 are also boxed with horizontal soffits, finished with plain 1" by 8" (nominal dimensions) boards. The soffit is trimmed to the wall by a 2" double-ogee crown molding.

Existing Condition. Eaves are in good condition except on the back porch. There, an eight- foot section near the middle of the porch has been severely damaged by water penetration, probably through faulty flashing around a plumbing vent stack that penetrates the eaves at that location.



FIGURE 43. View of southeast corner of eaves on main block.



FIGURE 44. View of front porch eave and console.



FIGURE 45. View of southwest end of sleeping porch..



FIGURE 46. View of added bathroom.

Siding

The only siding on the original house is on the walls of the dormer. It is clad with 1" by 6" (nominal dimension) lapped siding, installed with mitered corners. The three wood- framed additions at the rear of the house are finished with wood siding and trim. The sleeping porch (1934) and the bathroom (1952) are finished with a similar drop siding. The siding is around 3/4" by 5- 1/2", with a rabbet along the lower edge. Each board is molded to appear as two 2- 1/4"- wide laps of siding, each with the outer edge rounded.

On the sleeping porch, siding is butted to corner boards that are around 3- 1/2" wide and is topped on the sides by an 1" by 6"- 8" wide frieze board that is cut to slope with the pitch of the roof. The frieze is trimmed to the soffit with a 3" crown molding. On the front of the sleeping porch, the frieze continues as a 6" (nominal dimension) header for the window openings. Window openings on the sleeping porch are cased with 1" by 6" (nominal dimension) boards and have a 1- 1/2"- thick sill. At the bathroom addition, the siding is laid over 1" by 8" (nominal dimension) sheathing and is butted to 2- 3/4"- wide corner boards. Siding is run to the porch ceiling without a frieze and is trimmed with quarter- round. On the 1965 addition, siding is installed directly against the studs with only asphalt paper sheathing the framing. Although the siding resembles that used on the earlier additions, the siding on the 1965 addition actually consists of individual boards around 1/2" by 3- 1/2" that are lapped with a 2- 1/2" to 3" reveal. Siding is butted to corner boards and window and door casing that are 1" by 2- 1/2".

Existing Condition. While the siding appears to be in good condition except for deteriorating paint, removal of a run of siding on the northeast side of the bathroom revealed significant termite damage between the sheathing and the siding. The 1965 siding remains in good condition, and because of its elevation, the sleeping porch may not have suffered damage.

Roofing

As noted above, the rafters are decked with 1" by 6" tongue- and- groove boards, which is probably overlaid with "slater's felt" as called for in the original specifications.[17] All of the original flashing around the chimney, dormer, and front porch roof is copper. The original cement- asbestos roofing was

apparently replaced in 1957 using a similar material. The original specifications called for shingles installed in the "American Method," but the present roofing on the main block of the house uses rectangular cement- asbestos shingles laid in a "Dutch-lap" method, where shingles are applied to overlap adjacent shingles in each course as well as the course below.[18] The shingles were manufactured to resemble slate and appear to have originally been the blue- gray or slate- gray color specified in the contract documents. Ridge caps were specified as cement- asbestos as well.

Roofing on the front porch is asphalt shingle, which probably replaced an earlier cement- asbestos roof. The pent roof between the back porch and the sleeping porch is metal. The roof of the sleeping porch was not investigated, but the plans for its construction in 1934 called for a tar- and- gravel roof. Considering the extremely shallow slope of the sleeping porch roof, that or something similar must still be the roof covering.

The existing aluminum, ogee or K- style rain gutters were installed in 1993 and may have replaced the original copper gutters specified for the original building.

Existing Condition. The surviving cement- asbestos roof covering appears in good condition but significant damage was done to the northeast shed of the main roof when the chimney collapsed in the 2005 storm. All of the ridge cap is also missing from the north ridge of the roof. The other roofs appear to be functioning, although the pent roof at the rear porch is rusting. The condition of the tar- and- gravel roof of the sleeping porch was not examined. Gutters are in fair condition, but appear to be undersized. Along with temporary repairs to the roof in the fall of 2005, temporary extensions were added to the downspouts to keep run- off away from the house.

The Plaque

Bolted to the front of the house between the two doors is a large bronze plaque cast with Lincoln's

17. "Slater's felt" is an asphalt-impregnated building paper used as an underlayment for slate, asphalt-shingle, and other kinds of roofing.
18. See <http://www.usace.army.mil/usace-docs/armytm/tm5-617/chap7.pdf>, accessed March 2, 2006.



FIGURE 47. View of southwest shed of main roof.



FIGURE 48. View of front dormer and capped chimney.

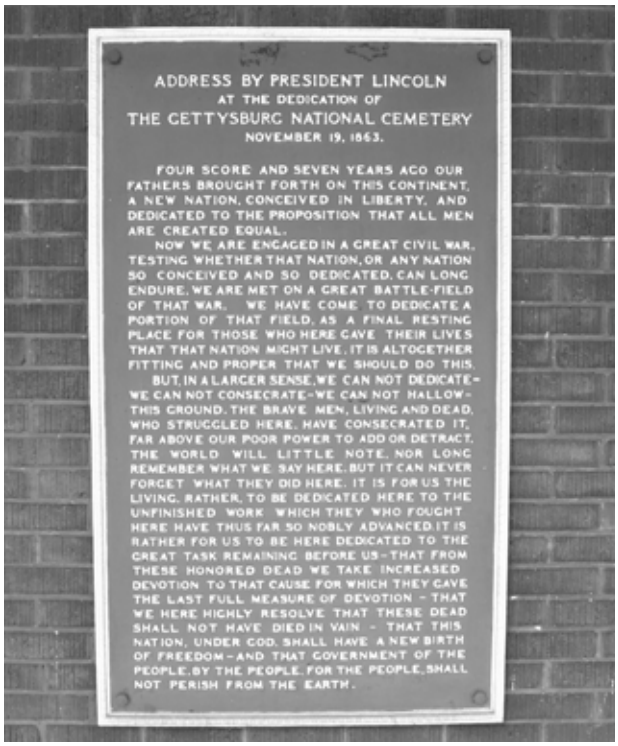


FIGURE 49. View of plaque of Gettysburg Address on front porch.



FIGURE 50. View of northeast chimney.



FIGURE 51. View of southwest chimney.

Gettysburg Address. Measuring around 3' by 4- 1/2', its installation was part of the building's original specifications. Because Lincoln's speech was made on the occasion of the dedication of the country's first national cemetery, its text is often displayed at national cemeteries.

Chimneys

The house has three brick chimneys, but none of them is intact above the roofs. The principal chimney, located on the northeast side of the house, was destroyed during the recent hurricane. It has two flues which originally served the living room fireplace and a wood- burning stove in Room 201. Five feet wide at its base, this chimney corbels to about 44" at the height of the first floor window lintels before rising through the eaves and the roof. Originally rising some 7- 1/2' above the roof, the upper portion of this chimney was largely destroyed during the recent hurricane. The cast- stone coping which measures 4" by 21" by 46"and originally capped the chimney, is now leaning against the front porch. The chimney has been temporarily capped just above the roof line, and brick from the chimney are piled near the northeast end of the porch.

The chimney on the southwest side of the house is also an original chimney, but the stack above the roof was removed as early as the 1940s or early 1950s. Forty- two inches wide, this chimney also has two flues, which originally served wood- burning stoves in Rooms 102 and 103.

The third chimney is located near the center of the rear of the house and was installed in 1937 to serve a boiler for a steam- heating system that was installed at the same time. The chimney measures about 1'- 6' by 2'- 6" and rises through the added first- floor bathroom and through the sleeping porch but no longer extends through the roof.

Existing Condition. The living room fireplace, in addition to the three chimneys, is in good condition, but only the northeast chimney stack still runs through the roof.

Interior

The house is divided into eight main rooms, plus a stair hall, one and a half bathrooms, and a utility room. The interior of the house contains about 832

square feet on the first floor and around 970 square feet on the second floor, for a total of just under 1600 square feet for the entire structure. Ceilings are at nine feet on the first floor and at 8'- 3" on the second floor.

Floors

In the main block of the house, flooring is tongue-and- groove laid over a diagonal subfloor. On the first floor, flooring is 3/4" by 2- 1/4" oak, while on the second floor it is 3/4" by 3- 1/4" pine. In the two added rooms on the back porch (105 and 106), the original concrete slab forms the floor for both rooms. The sleeping porch flooring is also pine but only 3/4" by 2- 3/8" wide.

At some point after construction, the kitchen (Room 103) flooring was covered with sheets of vinyl floor covering and/or vinyl or rubber tiles, but all of this material has been removed. In the second- floor bathroom (Room 203) the original floor was apparently wood, but it was covered with 9" by 9" rubber or vinyl tile, probably in the 1960s, much of which remains intact. That tile was later covered with sheet vinyl floor covering, which has been partially removed.

Existing Condition. In spite of flooding, the flooring remains in surprisingly good condition, with only minimal cupping and with buckled flooring only in one or two isolated locations. It is unclear, however, how much permanent discoloration has occurred due to water damage. Mastics from rubber or vinyl floor coverings cover much of the flooring in Rooms 103 and 206, although the vinyl floor covering itself has been removed. In room 203, sheet vinyl was installed over 9" by 9" vinyl tiles, much of which remains intact, although in poor condition. Remnants of carpet backing adhere to the flooring in Rooms 101, 102, and 104. The flooring in Rooms 201, 202, 204, and 205 remains in good condition.

Three generations of heating systems have left a variety of holes in all of the flooring except in the sleeping porch. Near a window in each of the main rooms on the first floor is a pair of round holes about 2- 1/2" in diameter through which steam or hot- water heating pipes were run. On the second floor, there is only one such hole in each main room (not including the sleeping porch). Larger openings that may have accommodated floor furnaces were cut into the floors in Rooms 102 and 104. The open-



FIGURE 52. Oak flooring at location of former wall between Rooms 101 and 104.



FIGURE 53. Oak flooring in Room 103 with mastic from vinyl floor coverings.



FIGURE 54. Pine floor in Room 202.



FIGURE 55. View of scored plaster wainscot in Room 103.



FIGURE 56. View of wall in Room 103 with rock lath in adjacent room exposed.

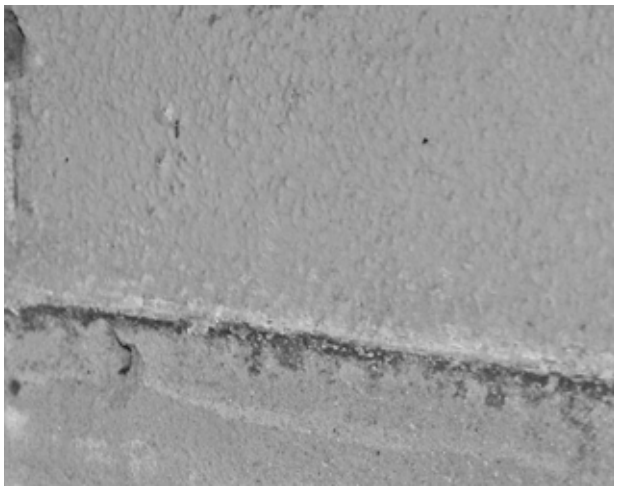


FIGURE 57. View of original sand-finished plaster in Room 103.

ing in Room 104 is around 23" by 42" and the opening in Room 102 is around 22" by 31". Probably contemporaneous with these openings are the openings through the first- floor ceilings to the second floor, which are around 14" by 16". Finally there are more-recent openings in the floor of the main first- floor rooms that are around 6" by 12" and were also created for heating registers.

Walls and Ceilings

The original plaster walls and ceilings remain mostly intact except in the kitchen where much of the southeast wall has been removed. Plaster is installed throughout using plaster board or "rock lath," with each board 16" wide and probably 32" long. Plaster was originally sand- finished, but most of that texture has been obscured by subsequent coats of paint.

In Room 103, the former kitchen, and Room 203, the upstairs bathroom, a chair rail demarcates a wainscot that is about 43" high in the kitchen and about 46" in the bathroom. In both rooms, the wainscot is composed of "Keene plaster," an extremely hard, dense plaster that was often used in kitchens and baths. In the kitchen, the plaster wainscot is scored to resemble 6" by 6" tiles, and in the bathroom it is scored to resemble 3" by 6" tiles.

In the added sleeping porch (Room 206), original walls and ceilings are 3/4"- thick sheets of fiber board, with 1/4" by 1- 5/8" lattice strips covering the joint between boards. The same material was also used in Room 105 when it was constructed in 1952, but there the ceiling is formed by the original tongue- and- groove porch ceiling. In Room 106 and in the closets in Room 206, all of which were created in 1965, 1/2" drywall was used on the walls.

Existing Condition. In spite of flooding, most of the surviving interior plaster remains sound. Most plaster has been removed from the southeast wall of Room 103, and there is significant ceiling damage in Room 205. All of the fiberboard in Room 105 and all drywall in Room 106 were removed during stabilization after the flood. Fiberboard remains mostly intact in Room 206, except for some holes punched in the back wall and a panel of the ceiling which has been removed. Painted finishes on all surfaces are in fair to poor condition, with significant peeling and flaking in the kitchen and bathroom.

Interior Doors

Original interior doors and the door to Room 105 are pine with five, horizontal, raised, cross panels. Principal door openings in the house are 2'- 8" by 6'- 8"; secondary openings including closet doors are 2'- 6" by 6'- 8".

Hardware is brass, nickel plated in Room 203. Interior doors are hung with a pair of 3- 1/2", three-knuckle, butt hinges and fitted with a mortise lock. Knobs and rosettes are round as are the separate keyhole escutcheons. Most interior doors also had door stops, many of which remain in place although most have lost the original rubber tip. The stops are brass in an unusual floor- mounted, L- shaped design.

The door to the sleeping porch, which was added in 1934, is much like the original front doors, but originally with six- lights above a pair of horizontal raised panels, instead of the single panel found in the entrance doors.

A modern, hollow- core, flush door replaces the original door between Rooms 101 and 102 and were also used for the door openings created with Room 106.

Existing Condition. As noted above, one of the original five- panel doors appears to have been replaced, and the swinging door that was originally in the opening between Rooms 103 and 104 is missing entirely, except for its two pivots. All of the other doors appear to be accounted for, although some were removed from their openings during stabilization in 2005. In addition, the doors from the hall (Room 204) into Rooms 201 and 205 have been damaged, apparently during a burglary. The lock stile of the door to Room 205 has been badly damaged, with a large section of the stile missing. The lock jamb of the door to Room 201 has suffered similar damage.



FIGURE 58. View of typical original five-panel interior door.

Moldings

The original specifications called for all interior wood trim to be pine and, although all of the woodwork is now painted (except for flooring), it is likely that woodwork is as specified. Most of the original material remains intact and in good condition. (Molding profiles may be found at the end of this "Physical Description.") Rooms 103 and 203, which were respectively the kitchen and the original bath-



FIGURE 59. View of typical original interior door hardware.



FIGURE 60. View of typical door stop, minus some sort of rubber feature that would have filled the hole.



FIGURE 61. View of staircase in Room 101.



FIGURE 62. View of typical window casing and stool.

room, tongue- and- groove flooring may have been covered by asphalt or rubber tile or linoleum at an early date, and if a baseboard was ever present, there is no evidence now for its existence. Instead a flexible, 4"- wide, rubber, wall base was used in this room.

An 8"- wide molded baseboard is present in all rooms except Rooms 103, 105, 106, 203, and 206. In set- on, rubber base, commonly used with resilient floor coverings, was used. In Room 206 the baseboard is a plain 3/4" by 3- 1/2" board. Any baseboard that existed in Rooms 105 and 106 was removed along with the wall coverings during stabilization after the flood.

Original windows and doors throughout the house use the same 4- 1/2"- wide, molded casing on both head and side jambs, with mitered corners. Windows on the first floor have a stool that is 1- 1/4" by 7- 3/8", a 4- 1/2" apron molded like the baseboards, and 3/4" cove molding at the joint between the two. Second- floor windows are finished in a similar manner but, because of the thinner walls, the stool is only 3- 1/4" wide. Window stop is 1/2" by 1- 1/8" with a rounded outside face.

Room 102 has a chair rail that appears to be original. It is set about 34" above the floor and measures 3/4' by 1- 1/2". Rooms 103 and 204 also have 3- 3/4"- wide chair rails that appear to be original.

Existing Condition. Moldings are generally in good condition. Shoe molding is missing in rooms where carpet or other floor coverings have been installed. The chair rail in Room 103 is missing on the northwest (rear) and southeast walls. The original chair rail on the northwest wall of Room 203 has been replaced with a smaller rail in a profile that differs from the original.

Staircase

A flight of stairs with closed risers 7- 1/2" high ascends in a straight run to the second floor from the southwest side of Room 101. With a full stringer against the wall, the first six steps are open on the opposite side to Room 101. Treads are 10- 1/2" by 37"with a tread return that extends the lower six stairs to 42". Each tread is trimmed to the riser by 3/4" cove molding. A paneled newel post is located at the foot of the stairs and on both sides of the top of the stairs on the second floor. Each post is 5- 1/2"

square and is surmounted by a large turned finial. The main newel post measures 68" from the floor to the top of the finial; the second floor posts rise 44". At the open stairs in Room 101 and around the stairwell at Room 204 a simple bannister runs from the newel posts to the walls. The railing is a plain 1" by 4" board skirted by 1" by 6" boards (both nominal dimensions) with a single 1- 1/2" by 1- 1/2" baluster at each step in Room 101 and with balusters on 9- 1/2" centers around the second- floor stairwell. A modern round handrailing has been added to the wall along the staircase.

Existing Condition. The staircase is in good condition. The only significant damage is the loss of part of the finial on one of the second- floor newel posts.

Utilities

The house was wired for electricity and had running water and indoor plumbing. When first constructed, it did not have a central heating system.

Electrical System

The house was originally wired with BX armored cable, but nearly all elements of that system are no longer extant. Most of the present wiring in the house, including all of the surface- mounted wiring, dates to renovations in 1965 and 1980, but the entire system is now presumed ruined by the flood. None of the light fixtures remain in the house. The service panel and meter are all mounted on the exterior at the north corner of the house.



FIGURE 63. View of electrical service at north corner of house.

Plumbing System

The cast- iron waste lines and vent stacks and most of the galvanized- steel water lines serving the original kitchen (Room 103) and bathroom (Room 203) date to 1929. The galvanized supply and cast- iron waste lines for the half bath (Room 105) date to 1952. No sink or other fixtures have survived in Rooms 103 or 105. The sink, tub, and toilet in Room 203 date to 1965.

Heating System

The house was originally heated by the fireplace in Room 101 and stoves in Rooms 102, 103, 201, and 202. Only the flues remain in place where there were stoves, but the fireplace remains intact and, at least until the chimney was destroyed during the recent



FIGURE 64. View of original switch box and BX electrical cable, abandoned in 1965.



FIGURE 65. View of shower in Room 203.



FIGURE 67. View of original stove flue in south corner of Room 103.



FIGURE 66. View of fireplace in Room 101.

hurricane, apparently in working order. The brick mantle measures about 60" wide by 53" to the bottom of the mantle shelf, which is supported by a trio of brick corbels. The shelf itself is 2- 1/2" by 11" by 64" with a 5- 1/2"- high backboard above the shelf and trimmed by 2- 1/4" cyma- recta crown molding. A brick hearth laid in a herringbone pattern extends 15" into the room.

Ducts and registers from a modern HVAC system that was first installed in 1973 remain in the house, but the furnace, condenser and other mechanical parts of the system are missing on the first floor. The furnace for the second floor remains in place in the attic.

Existing Condition. Although some components might be suitable for re- use, most of the building's mechanical and electrical systems are either missing or in poor condition.

The Rooms

The house was built with two front entrances, one into the Living Room (Room 101) of the Superintendent's private residence, and the other into his Office (Room 102), which was designated as such on the original plans for the building. Behind the Living Room was a Dining Room (Room 104) with a swinging door into the Kitchen (Room 103), which also connected to the Office. In 1951 the Living Room and Dining Room were more or less combined by removing the common wall between the two. In 1952. a small half bath or "powder room" (Room 105) was constructed on the back porch, with a new door opening from the passage between the Kitchen and the Dining Room. In 1965, the western end of the back porch was enclosed to create a Laundry or Utility Room (Room 106).

The second floor originally consisted of a Stair Hall (Room 204), a Bathroom (Room 203), and three Bedrooms (Room 201, 202, and 204), with the size of Room 202 indicating that it was used as a master bedroom. Only the two front bedrooms had closets. In 1934 house originally had four main rooms on each floor, plus a stair hall, bath, and three closets. A sleeping porch was added in 1934, a half bath in 1952, and a utility or laundry room in 1965.

Living Room (101) and Dining Room (104)



FIGURE 68. View south (above) and north (below), showing Rooms 101 and 104.

Office (Room 103)



FIGURE 69. View north (above), west (lower left), and east (lower right) in Room 102.,

Kitchen (103)



FIGURE 70. View north (above) and south (below) in Room 103.

"Powder Room" (105)



FIGURE 71. View northeast (left) and north (right) in Room 105. The odd framing visible in the right-hand image was probably to accommodate a wall-hung toilet tank.

Laundry or Utility Room (106)



FIGURE 72. View west (left) and east (right) in Room 106.

Stair Hall (204)



FIGURE 73. View west (upper left), southeast down staircase (upper right), and east (below).

Master Bedroom (202)



FIGURE 74. View south in Room 202.

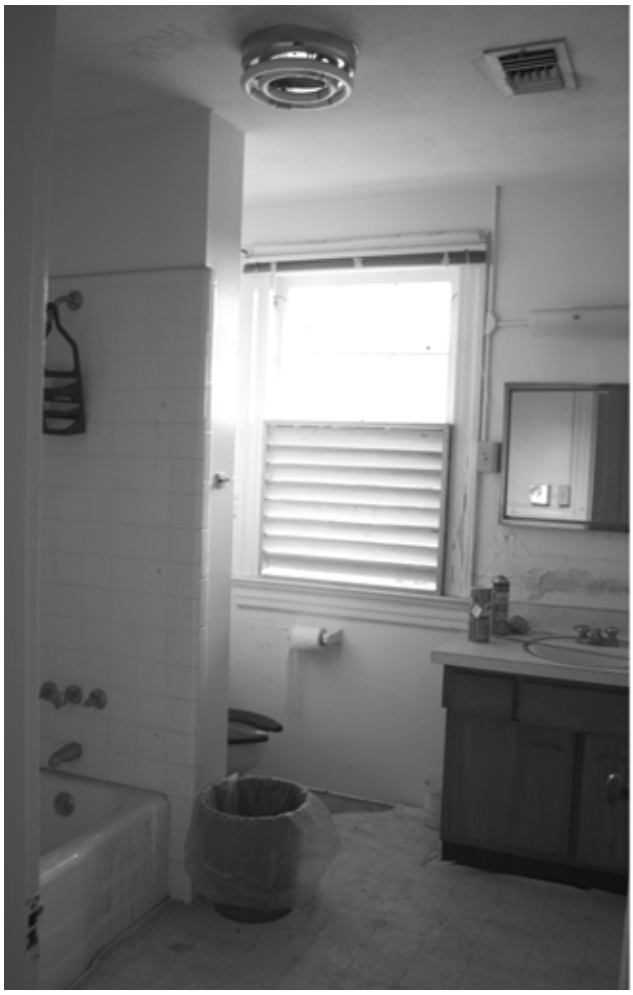


FIGURE 75. View north in Room 202.

Front Bedroom (201)



Bathroom (Room 203)





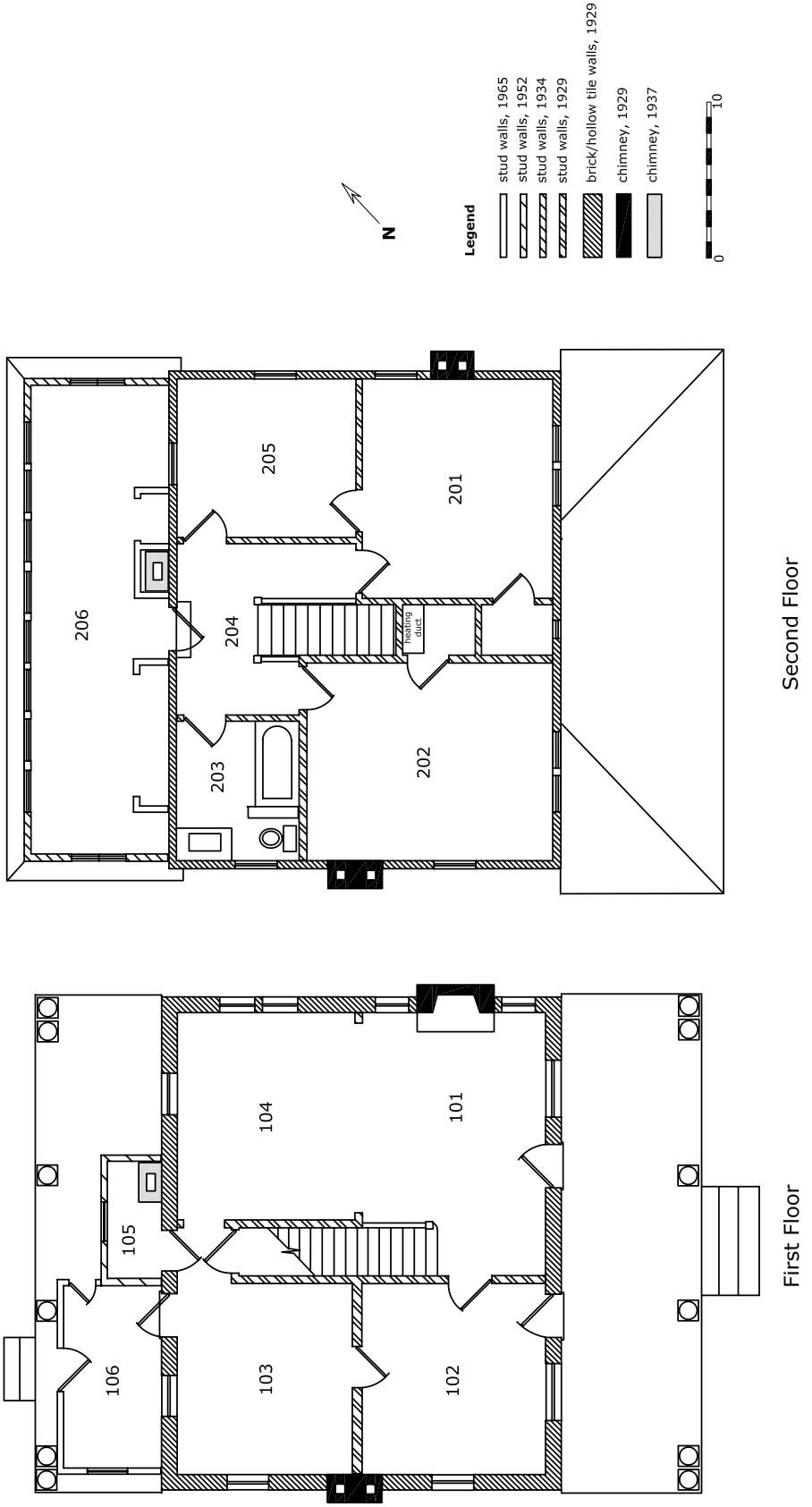
Back Bedroom (Room 205)



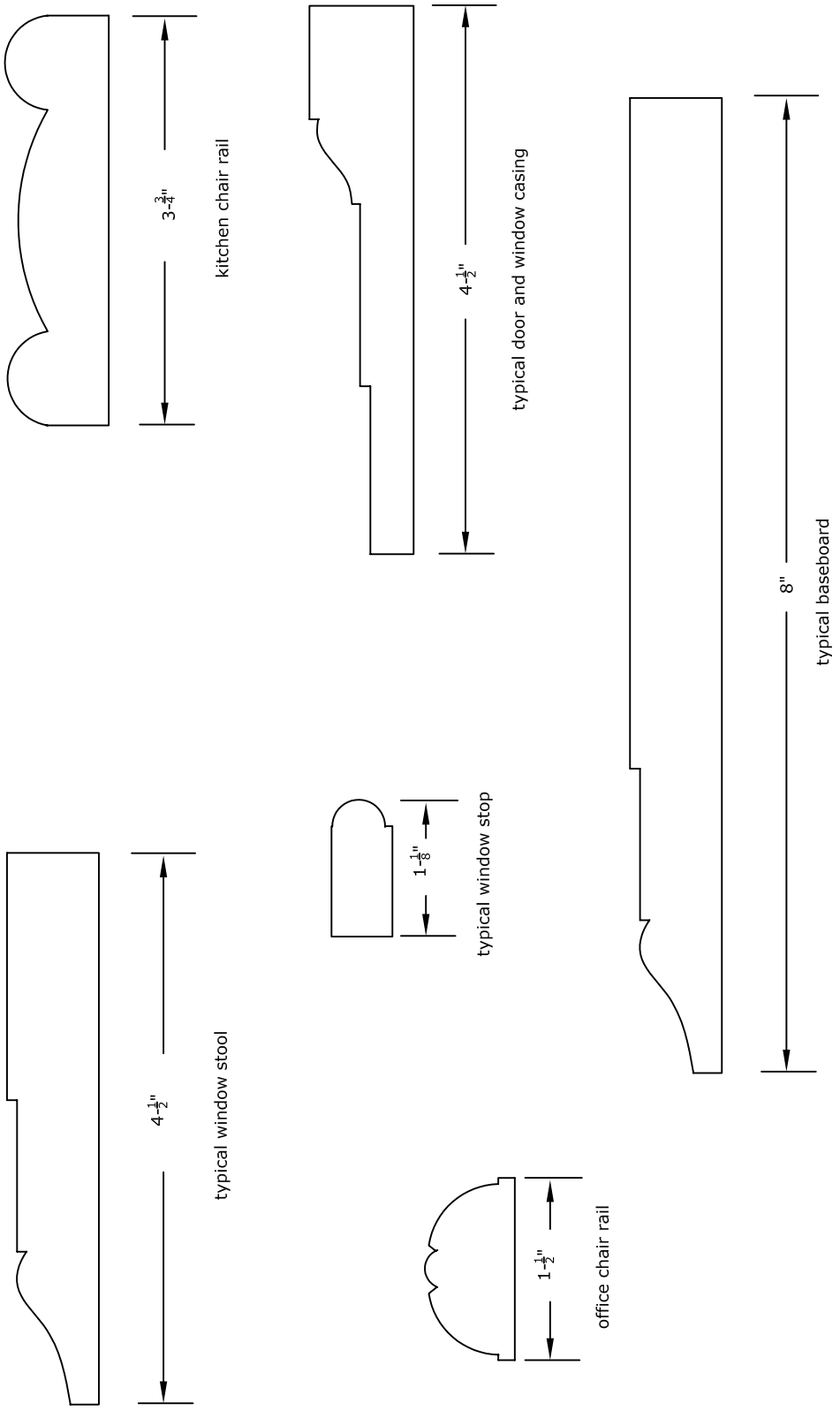
Sleeping Porch (Room 206)



Floor Plans


N
Legend
stud walls, 1965
stud walls, 1952
stud walls, 1934
stud walls, 1929
brick/hollow tile walls, 1929
chimney, 1929
chimney, 1937
0
10
206
205
204
heating duct
203
201
202
Second Floor
106
105
104
103
101
102
First Floor

Typical Molding Profiles



Treatment and Use

Built in 1929, the Superintendent's Lodge at Chalmette Cemetery is a National Register property significant for its associations with the cemetery and an excellent example of War Department architecture in our national cemeteries in the 1920s and 1930s. The purpose of the present HSR has been not only to document the building's history but also to provide recommendations for treatment and use after it was damaged by Hurricane Katrina in 2005.

Requirements for Treatment and Use

Good stewardship of an historic structure requires careful control over treatment and use, beginning with basic, common- sense guidelines. The building must be carefully monitored, particularly after storms or heavy rains, and should be thoroughly inspected at least once a year. Data documenting the building's condition should be recorded and analyzed to determine any necessary treatment or changes in use. Any ground disturbance around the building should always be cleared or monitored by an archeologist.

Any work on the Lodge, including routine maintenance, should be done by qualified people in conformance with approved plans and specifications or work procedures. All maintenance personnel who work in, on, or around the building should be given appropriate training, and the entire park staff should be made aware of the significance of the Lodge and the major threats to its preservation, which are inappropriate treatments, insects, and water- induced mold and rot.

Legal Requirements

A number of laws and regulations circumscribe treatment and use of the Lodge and the other historic structures in our national parks. In addition to protecting the cultural resource, these requirements also address issues of human safety, fire protection, energy conservation, abatement of hazardous materials, and handicapped accessibility.

National Historic Preservation Act. The National Historic Preservation Act of 1966 as amended (NHPA) mandates Federal protection of significant cultural resources. In implementing the act, a number of laws and authorities have been established that are binding on the NPS. A routine step in the park's planning process for the treatment of historic structures is compliance with Section 106 of NHPA, which requires Federal agencies "to take into account the effect" of any undertaking involving National Register properties. To satisfy the requirements of Section 106, regulations have been promulgated (36 CFR Part 800,"Protection of Historic Properties") that require, among other things, consultation with local governments, State Historic Preservation Officers, Indian tribal representatives, and others with an interest in the property.

In 1995, in an effort to expedite the review process, a programmatic agreement was made between the Advisory Council and the NPS that allows for a categorical exclusion of some activities from the full Section 106 review process. These excluded activities are limited to routine repairs and maintenance that do not alter the appearance of the historic structure or involve widespread or total replacement of historic features or materials.

Americans With Disabilities Act of 1990. The Americans With Disabilities Act of 1990 (ADA) establishes comprehensive civil rights protection for disabled Americans, both in employment and in their right to free, unaided access to public buildings. While people with restricted mobility have most frequently benefited from ADA, protection also extends to those with other disabilities. This would include visitors with impaired vision or hear-

ing, for whom printed tour scripts and audio tours allow interpretation of the site.

Requirements for full compliance with ADA regulations are extensive and easiest to apply to new construction. Full compliance for historic buildings is more difficult and sometimes would require significant alterations to the historic character of the property. Where that is the case, ADA authorizes a process for arriving at alternatives to full compliance that can preserve historic character while maximizing a disabled visitor's access to the historic building.

International Building Code. Building codes are generally applicable to all buildings whether they are historic or not. As a matter of policy, the NPS is guided by the International Building Code, which includes this statement regarding codes and historic buildings:

> 3406.1 Historic Buildings: The provisions of this code related to the construction, repair, alteration, addition, restoration and movement of structures, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the building official to not constitute *a distinct life safety hazard* [emphasis added].

Threats to public health and safety should always be eliminated, but because this is an historic building, alternatives to full code compliance are always sought where compliance would needlessly compromise the integrity of the historic building.

NFPA Code 914. The National Fire Protection Association (NFPA) has promulgated codes for historic buildings, most notably NFPA 909, "Code for the Protection of Cultural Resources Properties - Museums, Libraries, and Places of Worship," and NFPA 914, "Code for Fire Protection of Historic Structures." If the building is rewired and a sprinkler system installed, fire protection will revolve around fire *prevention* through prohibiting storage of flammable materials and smoking inside the building.

DOI and NPS Policies and Regulations

NPS policy requires planning for the protection of cultural resources "whether or not they relate to the specific authorizing legislation or interpretive programs of the parks in which they lie." Thus, the Lodge should be understood in its own cultural context and managed in light of its own values so that it may be preserved unimpaired for the enjoyment of present and future generations.[19]

In addition to Director's Order (DO) 28, "Cultural Resource Management Guideline," which has guided development of this historic structure report, the Secretary of the Interior and the Director of the National Park Service have issued other policies and regulations that circumscribe treatment of historic buildings. DO- 58, for example, requires installation of systems for fire detection and suppression whenever a building is undergoing rehabilitation.

Secretary's Standards. The Secretary of the Interior's *Standards for the Treatment of Historic Properties* have established a framework in which to plan and execute treatment of historic structures. Guidelines for interpreting the *Standards* have been issued, and the NPS has also published forty- two *Preservation Briefs* that provide detailed direction for appropriate treatment of a variety of materials, features, and conditions found in historic buildings.

Regardless of treatment approach, the *Standards* put a high priority on preservation of existing historic *materials* and not just the architectural form and style. Replacement of a column, for instance, even when replacement is "in kind," diminishes the authenticity of the building, if for no other reason than the elimination of the evidence of the passage of time. The *Standards* also require that any alterations, additions, or other modifications be reversible, i.e., designed and constructed in such a way that they can be removed or reversed in the future without the loss of existing historic materials, features, or character.

General Management Policies. Finally, the NPS General Management Policies (2001) guide overall management of historic buildings in the parks, especially Chapter 5 "Cultural Resource Management." Based upon the authority of some nineteen Acts of Congress and many more Executive orders and regulations, these policies require

> planning to ensure that management processes for making decisions and setting priorities

19. "Cultural Resource Management Guidelines," (1997), p. 1

> integrate information about cultural resources, and provide for consultation and collaboration with outside entities; and stewardship to ensure that cultural resources are preserved and protected, receive appropriate treatments (including maintenance), and are made available for public understanding and enjoyment.[20]

Section 5.3.5, "Treatment of Cultural Resources," provides specific directives, including a directive that "the preservation of cultural resources in their existing states will always receive first consideration." The section also states that

> treatments entailing greater intervention will not proceed without the consideration of interpretive alternatives. The appearance and condition of resources before treatment, and changes made during treatment, will be documented. Such documentation will be shared with any appropriate state or tribal historic preservation office or certified local government, and added to the park museum cataloging system. Pending treatment decisions reached through the planning process, all resources will be protected and preserved in their existing states.[21]

Ultimate Treatment and Use

The Chalmette Battlefield and Cemetery Visitors Center was heavily damaged by the hurricane and flooding in 2005 and had to be razed. The Lodge, too, suffered damage, mostly from flooding, and is now vacant.

Use

One of the primary concerns in the preservation of historic buildings is use. An unused building is much less likely to attract the attention (and consequent funding) necessary to insure its continued preservation. On the other hand, a poorly conceived program of use can lead to significant loss of historic material and compromise of historic character.

Park administration suffers from a severe lack of office space until the visitors center can be rebuilt, and even when a new visitors center is completed, use of the Lodge for administrative offices will probably be necessary. Current plans call for a return of the park's interpretive staff to their pre-Katrina offices in the Lodge. Use of part of the building for exhibits or other visitor contact has also been proposed.

Treatment

Recommended treatment is rehabilitation of the existing building, which was adapted for office use twenty- five years ago. Essentially this approach would restore the building to its pre- Katrina condition, but due to the poor condition of and lack of utility for the post- WWII additions to the back porch, they would be removed.

Alternatives for Treatment and Use

Historic structure reports typically consider and evaluate alternative uses and treatments for the historic structure. Emphasis is on preserving extant historic material and resolving conflicts, especially those that might result between the mandate to preserve and the necessity for use.

Use

Historically used as a residence, the Lodge has been used for administrative offices for the last twenty-five years. Because it was designed for residential use, a return to residential occupancy remains an option that would have the least impact on the building's historic character. The Lodge could provide accommodations for official park visitors, or the park might even consider an on- site cemetery superintendent or caretaker. In either case, additional park staff would probably be necessary.

The house might also be restored, with recreated historic interiors, and operated as a house museum. For over a hundred years, a resident superintendent was always present and although the present Lodge represents only the second quarter of the twentieth century, it provides an opportunity for interpreting the entire historic period. Such an approach to use of the Lodge would, however, be expensive to support and would also be well outside the present interpretive focus of the park.

Treatment

20. NPS General Management Policies (2001), p. 50.
21. NPS General Management Policies (2001), p. 56

The quality of the architecture of the Lodge dictates careful consideration of any treatment in order that its well- preserved historic character not be compromised. Approaches to treatment are invariably tied to a proposed plan for use, and so each of the alternative uses outlined above would generate its own set of treatment recommendations. If the Lodge were to be used as a residence, either full- or part- time, rehabilitation would focus on issues of life safety and the comfort and convenience of residents. If, on the other hand, the Lodge were to be restored for interpretation, restrictions on alterations or additions would be much greater, and attention would be given to replicating missing features and recreating historic painted and wallpapered finishes.

Recommendations for Treatment

Rehabilitation of the Chalmette Lodge for continued office use is the recommended treatment for the house. This approach would repair storm damage and would also give the park the opportunity to remove some badly deteriorated, modern additions to the building. In addition, the extent of required rehabilitation will make it possible to improve handicapped accessibility and fire protection.

Repairs

Much of the recommended treatment of the Lodge involves repair of storm damage, and most of these treatments are necessary if the building is to continue to be used. Certainly all of the building's systems- - - HVAC, plumbing, and electrical- - - will need near total replacement. Plumbing waste lines and portions of the HVAC ductwork might be reused but most other components of the building's systems will need to be replaced.

Because most of the interior walls and ceilings are plaster and because the flooding was not of long duration, the condition of walls and ceilings remains relatively good. Areas of water damage are present in the lower three or four feet of the walls on the first floor and in isolated areas of the second floor ceilings. These can all be easily repaired.

The chimney collapsed onto the roof during the hurricane. Although its as- built condition was apparently never recorded, photographs indicate that the chimney was constructed according to the original plans. It can be reconstructed based on modern, pre- Katrina photographs and the original plans, utilizing as many of the historic brick as possible.

The roof covering was also damaged during the hurricane. Some of the roofing tiles were shattered by the falling chimney. The ridge cap is missing from the north hip of the roof and part of the west hip. Replacement roofing shingles may be difficult to locate. Although the existing roofing is not historic, it closely resembles the historic roofing and every effort should be made to preserve it.

Downspouts are of insufficient length to drain runoff from the roof rapidly away from the house, and it appears that the existing gutters, which date to 1993, are smaller than the original gutters and may be subject to overflow during heavy rains. Although the site may remain somewhat poorly drained, replacement of the gutters with 6" or larger ogee gutters and installation of a permanent drainage system from the downspouts would help eliminate excessive dampness under the house.

A number of doors are off their hinges, and several sash have been replaced with ventilating louvers. Doors and sash should be reinstalled as part of repairs to storm damage. The swinging door between Rooms 103 and 104 was probably removed when the house was adapted for office use and may have been discarded. If it can be located, it should be reinstalled.

Modern Additions

Both of the non- historic additions on the first floor of the back porch have been gutted and are in poor condition. The old laundry room, which was added in 1965, was not well- built and suffers from a variety of damage, including rotting of virtually all of the walls' sole plates. With no need for a laundry room, it should simply be removed rather than expending resources on repair and rehabilitation.

There is evidence of significant termite damage to the half bath, which was added in 1952, but the exact extent of the damage is not clear and may be limited to the bath, since damage is not readily apparent elsewhere. Because of its small size, which prohibits making it handicapped accessible, the half bath could be removed.

The sleeping porch is an historic addition to the Lodge. Built in 1934 to War Department plans (see Appendix A), the structure dates to a time in our nation's history when relatively few buildings were being constructed. Although it underwent alterations in 1965 that were not sympathetic to its historic character, the structure retains most of its historic features and materials except across the rear elevation, where the original casement windows were replaced with aluminum. According to the National Register nomination, the Lodge and the adjacent maintenance building "embody the characteristics of the construction of national cemetery buildings of the 1920s and 1930s,"and for that reason, the sleeping porch contributes to the historical significance of the Chalmette Lodge and should be preserved. The clothes closets that were added to the sleeping porch in the 1960s are missing their doors, and unless they are deemed necessary, the closets should be removed.

Aluminum windows were added across the rear of the sleeping porch and in the two pair of windows on the front of the second floor in the 1960s or 1970s. Most of these are in fair condition, although some with dysfunctional or damaged screens. Replacement of these aluminum windows with wooden sash that replicate the original might be considered, thereby reversing one of the more unsympathetic modern alterations to the building.

Another modern alteration that might be considered for reversal is the missing wall between Rooms 101 and 104 and the chimney from the old steam-heating plant. Although there are no known photographs of the original wall, physical evidence suggests that it was built according to the original plans. There would be little if any conjecture required for its reconstruction, if that would benefit the park's use of the building.

There is no compelling reason to remove the chimney at the back of the house that was added in 1937 to service the steam heating system. Removal of the chimney, which no longer rises through the roof, would leave a hole in the concrete back porch floor as well as in the wooden floor of the sleeping porch, and repairs would always be visible. Although it is not a highly significant feature, it does relate to the period of significance and so should probably be preserved.

Improvements for Accessibility and for Fire Protection

NPS policy dictates that improvements in handicapped accessibility and fire protection must be made to buildings undergoing the sort of extensive rehabilitation now necessary for the Superintendent's Lodge. Both of these sorts of improvements will require alterations to the existing building.

Handicapped Access

After the back porch additions are removed, two kinds of alterations will greatly improve handicapped access to the building, but the nature of the building will make full accessibility difficult without major alterations and/or additions to the house. The first and easiest to accomplish is construction of a ramp on the southwest side of the house leading to the southwest end of the back porch. Accommodating the relatively high threshold from the porch floor to inside the house would require a shallow wooden ramp on the porch itself.

The second accessibility concern is the doors. All of the doorways, both exterior and interior, are too narrow (2'- 9") to meet ADA requirements. Widening either of the front doorways is an unacceptable alternative since that would seriously compromise the character of the building, and while widening the back door would require alterations to the masonry walls which would be difficult to reverse, that is still probably the best solution. Brick should be carefully dismantled and stored along with the historic door, frame, and trim. A new door should replicate the historic design but with modern accessible hardware. None of the interior doors are accessible either, but by widening the doorway between Rooms 103 and 104, where the door itself is missing, most of the first floor would be made accessible.

Full accessibility, including an accessible restroom, does not seem feasible at this time. An elevator could be added and the second floor bathroom altered for accessibility, or a new restroom could be added on the back porch or perhaps in the kitchen (Room 103), but both of these alternatives would be expensive and would greatly alter the historic character of the interior. The existing accessible bathroom in the carriage house could be used; however, employees would have to leave the building to use the restroom and this does not seem to be a viable long- term solution.

Fire Protection

Director's Order 58 requires that all NPS structures that undergo rehabilitation must have comprehensive systems for fire detection and suppression. Because of the extent of necessary repairs and the need to replace the building's mechanical and electrical systems, simultaneously installing systems for fire detection and suppression is recommended.

Summary of Recommendations

See plan on following page for locations of recommended alterations.

Repairs

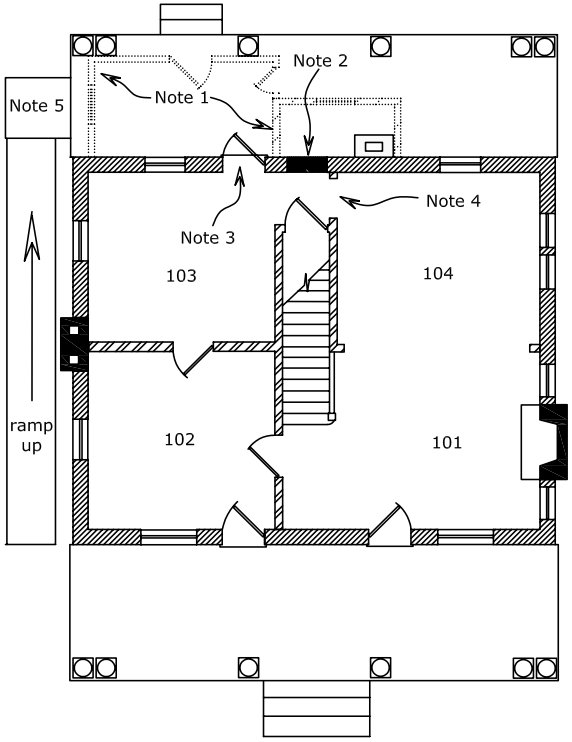
- Replace all HVAC, electrical, and plumbing
- Repair plaster walls and ceilings
- Reconstruct east chimney
- Repair roofing
- Replace gutters with 6" or larger gutters
- Install permanent drainage system from downspouts
- Reinstall original doors and windows

Additions

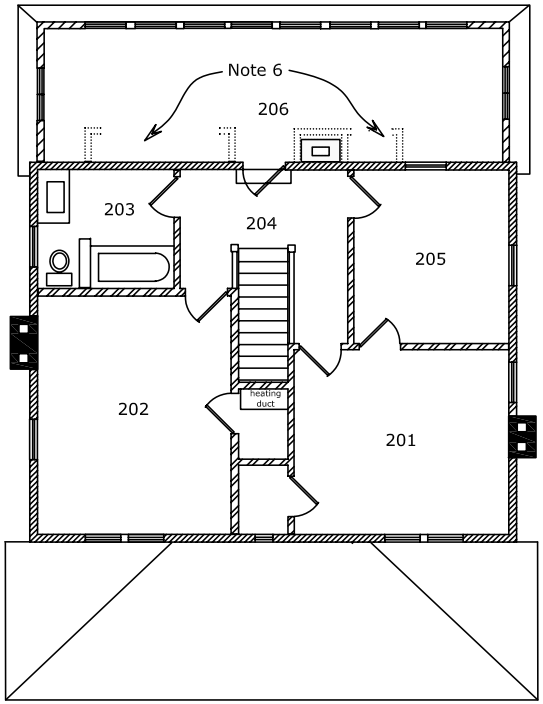
- Remove wood- framed additions on first floor of back porch
- Preserve 1937 chimney
- Preserve sleeping porch, but remove added closets
- Replace aluminum windows with wood sash to match original
- Reinstate wall between Rooms 101 and 104 if that would benefit the park's use of the building

Improvements for Accessibility and for Fire Protection

- Remove laundry room, half bath, and chimney from first floor of back porch
- Close opening for half bath door
- Widen back door and door between Rooms 103 and 104 to provide handicapped access
- Remove closets and chimney from sleeping porch
- Install ramp to back porch along southwest side of house
- Install fire detection and suppression systems

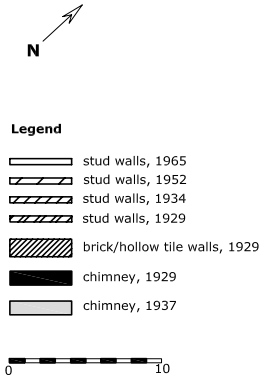


First Floor



Second Floor

NOTES
1. Remove wood-framed additions at first floor of back porch and restore original finishes
2. Close door opening
3. Widen door opening to 36" and install new door
4. Widen door opening to 36"
5. Construct ramp to rear porch
6. Remove closets and chimney in sleeping porch



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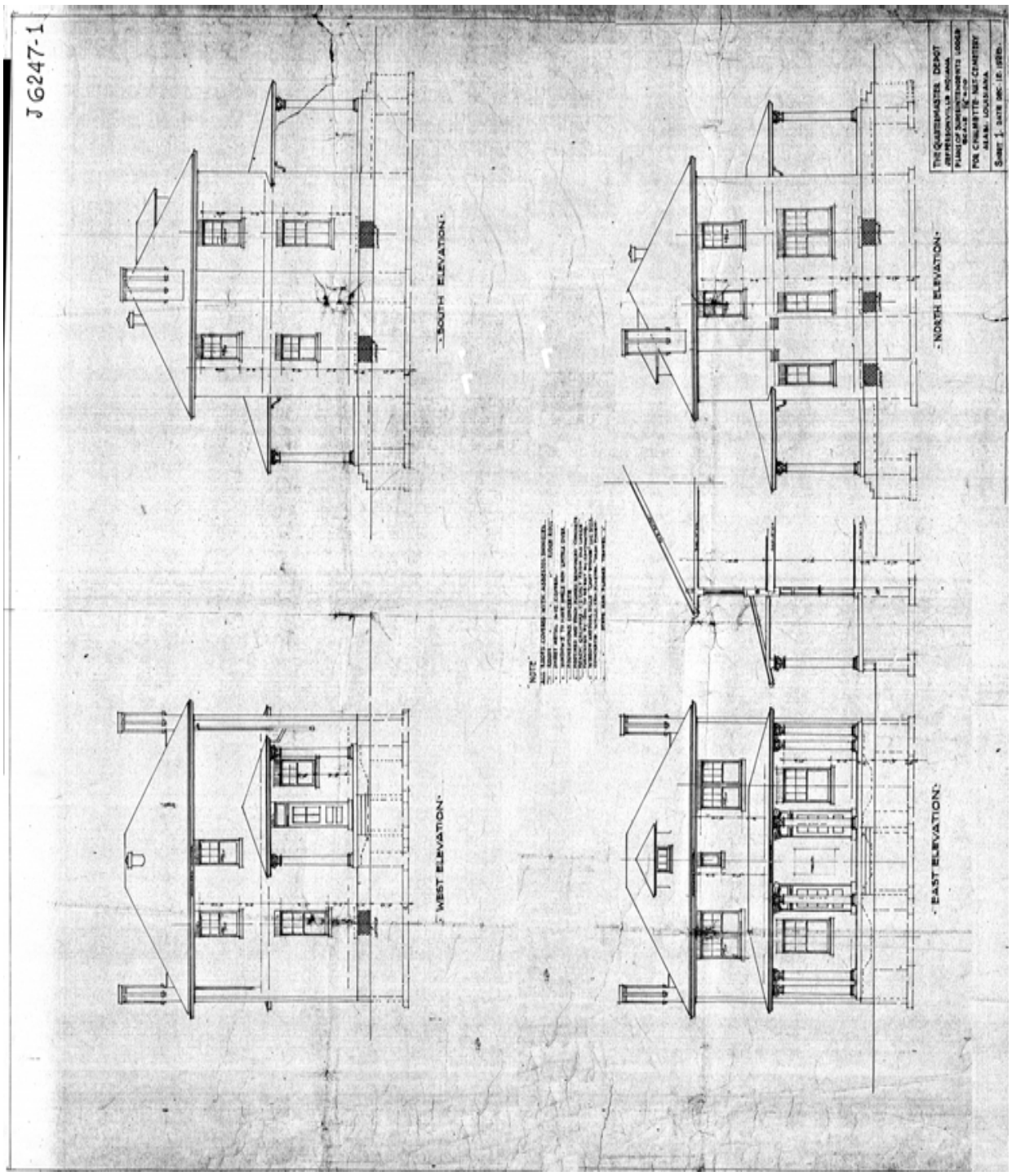
Risk, Kevin. *Chalmette Battlefield and Chalmette National Cemetery Cultural Landscape Report*. Cultural Resources Stewardship Division, National Park Service, Southeast Regional Office, August 1999.

Rothman, Hal K., and Daniel J. Holder. *Managing the Sacred and the Secular: An Administrative History of Pipestone National Monument*. NPS, Midwest Region, 1992.

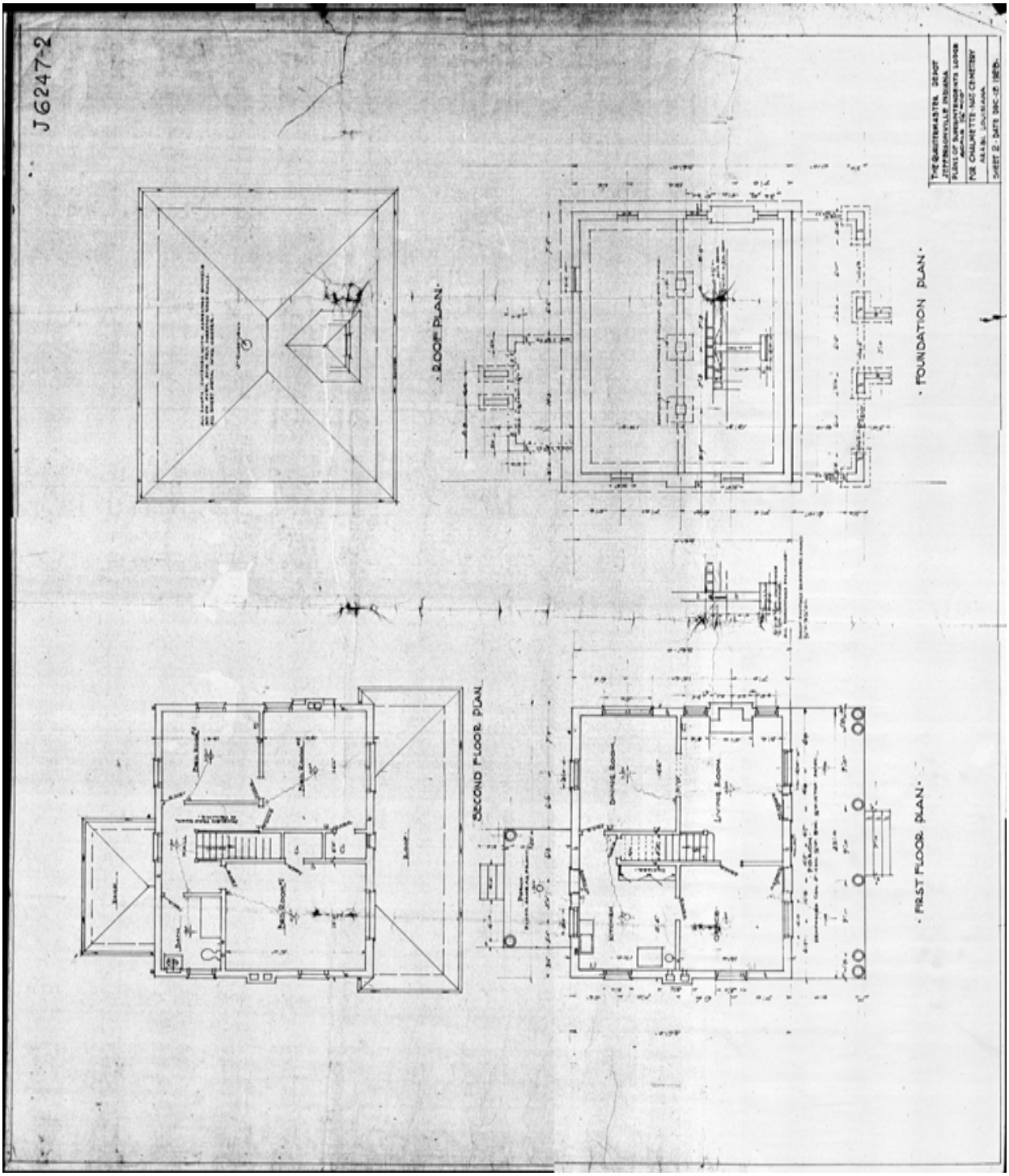
Appendix A

War Department Documents

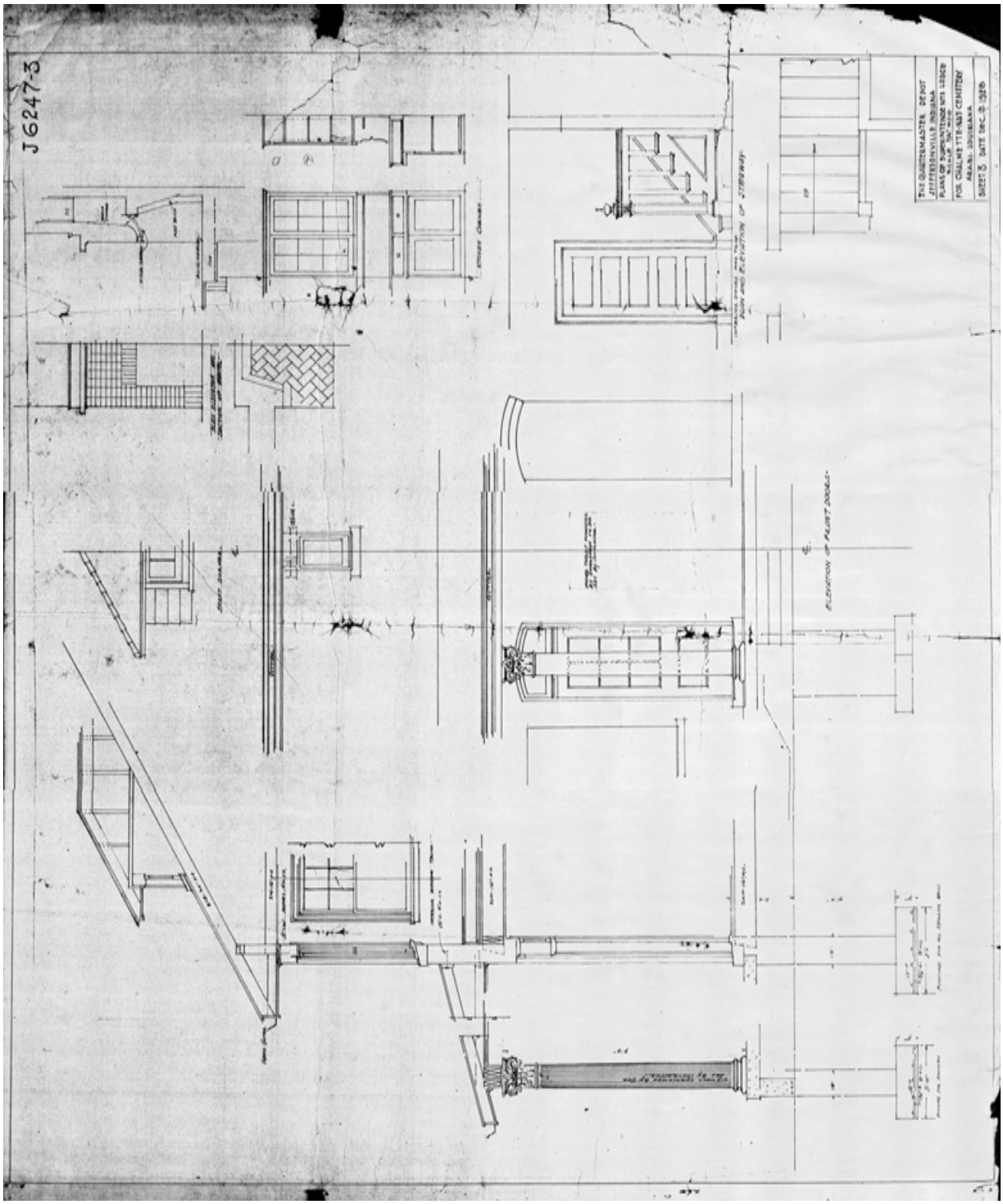
1928 Plans, Sheet 1



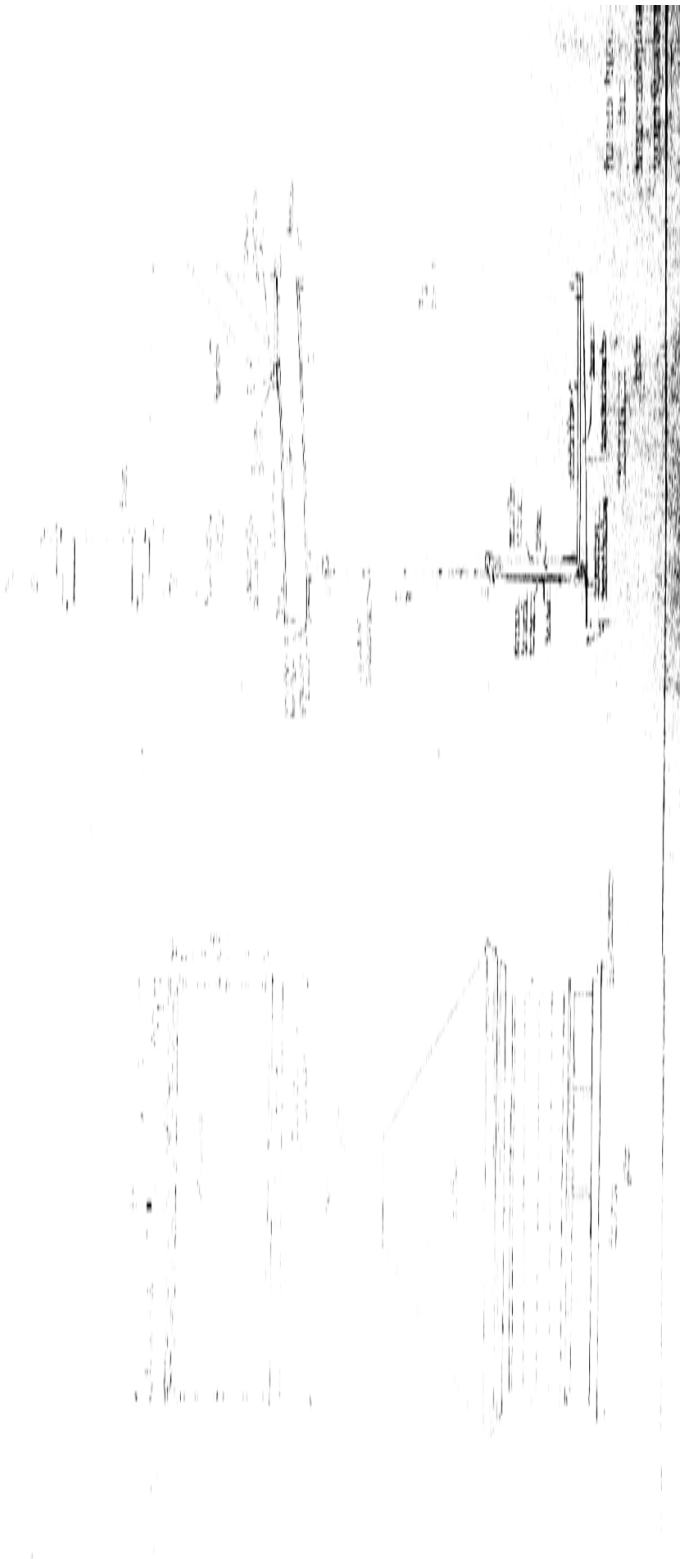
1928 Plans, Sheet 2



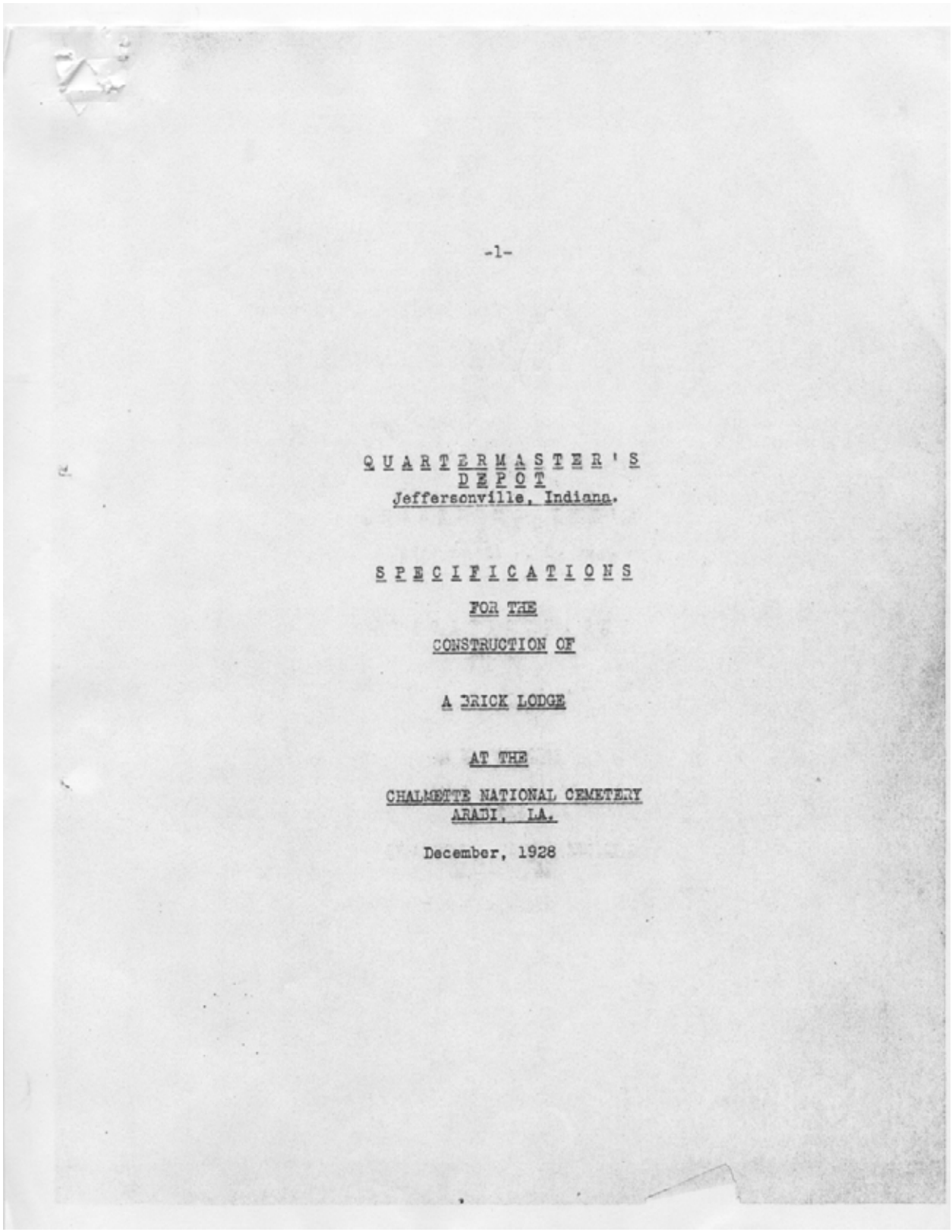
1928 Plans, Sheet 3



Sleeping Porch Plans, 1934



Original Specifications, 1928



-1-

QUARTERMASTER'S
DEPOT
Jeffersonville, Indiana.

SPECIFICATIONS

FOR THE

CONSTRUCTION OF

A BRICK LODGE

AT THE

CHALMETTE NATIONAL CEMETERY
ARABI, LA.

December, 1928

GENERAL CONDITIONS

1. Description of Work:- The work shall consist of performing all labor, furnishing all necessary equipment and material, and constructing a Lodge for the Superintendent at the Chalmette National Cemetery, Arabi, La., all as shown by drawings J-6247-(1, 2, 3 and 4), and as described in these specifications.

2. Abbreviations:- The following abbreviations are used in these specifications:- U.S. for United States; Q.M.G. for Quartermaster General; U.S.A. in C., for United States Agent in Charge.

3. Bond:- The performance bond required in support of the contract shall be executed upon the Standard Government Form by the Contractor as principal and by a qualified Surety Company or by two responsible persons as sureties. The amount of bond shall be 50% of the consideration of the contract. Besides being security for the faithful performance of the contract, the bond shall also secure the prompt and full payment by the Contractor to all persons, firms or corporations who furnished labor or material in the prosecution of the work under the contract.

4. Liquidated Damages:- If the contractor delays the completion of the work under the contract beyond the time for completion as stated in the contract, then the Contractor shall pay to the U.S. as fixed, agreed and liquidated damages the amount of Ten Dollars ($10.00) for each calendar day of delay until the work is completed or accepted, subject to the provisions of Article 9 of the Standard Form of Government Contract.

5. Patents:- The Contractor shall hold and save the Government, its officers, agents, servants, and employees, harmless from liability of any nature or kind for or on account of the use of any patented or unpatented invention, article, or appliance furnished or used in the performance of this contract, excepting patented articles required by the Government in its specifications, the use of which the Contractor does not control.

6. Water:- Contractor must make his own provision for water supply

7. Sanitation:- The Contractor shall instruct his employees to use the existing sanitary conveniences designated by the U.S. Agent in Charge, and the Contractor must obey and enforce all sanitary and health requirements of the U.S. Agent in Charge, or other competent authority.

8. Protection of Material and Work:- The Contractor shall before leaving off work, and at all times, carefully and properly protect all materials of every description, both before and after being used on the job, and all work performed by him, and provide any special protection from weather deemed necessary by the U.S. Agent in Charge, without additional cost to the U.S. Partial payments under the contract will not relieve the Contractor of responsibility.

Smoking will not be permitted in the building. The Contractor shall provide workmen in building with spittoons which must be kept filled with clean sand.

9. Liability for Damages:- The Contractor will be held responsible for all damage to the work under construction, whether from fire, water, high winds or other causes, during performance and until final completion and acceptance, even though partial payments may have been made under the contract. He will be held answerable for all damages that may occur to persons, property, animals, or vehicles from want of proper shoring, bracing, lighting, watching, boarding or inclosing, and for any accident arising from defective scaffolding or apparatus, or any negligence on the part of himself or his employees.

10. Site and Grades:- The location of the work and grades will be indicated by the U.S. Agent in Charge, and all building operations must be confined to the limits designated by the U.S. Agent in Charge.

11. Use of Roadways:- Contractors must use only the established roadways and such temporary roadways as may be authorized by the U.S. Agent in Charge. When it is necessary to cross curbing or sidewalks, secure bridges must be constructed over same, and at completion of all work bridges must be removed, damaged roads, curbing and sidewalks repaired, and all left in perfect condition. Hauling will be by way of north entrance unless otherwise authorized.

12. Control and Access to Work:- The work is entirely under the control of the U.S. Agent in Charge, and he or his authorized representatives, shall have access to same at all times. The U.S. Agent in Charge may require the Contractor to dismiss such workmen as he deems to be incompetent or careless.

13. Character of Work and Mechanics:- The work shall be executed in the best and most workmanlike manner, in strict accordance with the drawings and specifications, by qualified, careful and efficient mechanics.

14. Superintendence by Contractor:- The Contractor shall give his personal superintendence to the work, or have a competent foreman or superintendent, satisfactory to the U. S. Agent in Charge, on the job

at all times during the progress of the work, with authority to act for him.

15. Interpretation of Contract:- Unless otherwise specifically set forth, the Contractor shall furnish all materials, labor, etc., necessary to fully complete the work according to the true intent and meaning of the drawings and specifications, of which intent and meaning the U.S. Agent in Charge shall be the interpreter. Except when otherwise indicated, no local terms or classifications will be considered in the interpretation of the contract or the specifications forming a part thereof.

16. Drawings and Specifications Cooperative:- The drawings and specifications shall be considered as cooperative and work and material called for by one and not mentioned in the other shall be done or furnished in as faithful and thorough a manner as though fully covered by both.

17. Complete Work Required:- It is intended that the drawings and specifications shall include everything requisite and necessary to properly finish the entire work, notwithstanding every item necessarily involved is not particularly mentioned; all work when finished shall be delivered in a complete and undamaged state.

18. Discrepancies:- Where no figures or memoranda are given, the drawings shall be accurately followed according to scale. In any case of discrepancy in the figures or drawings, the matter shall be immediately submitted to the U.S. Agent in Charge, without whose decision said discrepancy shall not be adjusted by the Contractor, save only at his own risk; and in the settlement of any complications arising from such adjustment the Contractor shall bear all extra expense involved. In case of difference between drawings and specifications, the specifications shall govern.

19. Details:- Additional detail drawings will be furnished, if required, of such portions of the work as The Q.M.G. may desire to explain more fully. Where detail drawings are furnished, they will govern in as far as regards methods of construction not described or made clear by the specification. All drawings on a scale of three-eights of an inch to one foot, or larger, will be considered detail drawings.

20. Ownership of Drawings:- All drawings, specifications and memorandums relating to the work are the property of the U.S., and are to be carefully used and returned to the U.S. Agent in Charge at completion or cessation from any cause of the work.

21. Quality of Materials:- Except it be otherwise specified, all materials shall be of the best quality of their respective kinds. Where two or more varieties of materials are specified, for any purpose, it shall be optional with the Contractor which is used, but in any one building

the same material must be used throughout for that particular purpose. In all cases where an article is mentioned in the specifications in connection with the words "best quality", "approved quality", or "equal to", the U.S. Agent in Charge shall decide what is the best quality and most suitable articles to use.

22. Samples, Etc:- In addition to samples submitted as part of bid, if any, and when required by the U.S. Agent in Charge, the Contractor shall furnish him in advance with samples of the material he proposes to use on the work, and samples so furnished must, after having been approved, be adhered to. Samples of cement, lime, plaster and similar materials will be taken from material delivered on the ground for use, and such material must be delivered at least ten days before it is required for use. The Contractor will be held responsible for all delays caused by rejection by the U.S. Agent in Charge of materials of any kind which are found unfit for use or do not conform to samples furnished. The Contractor shall furnish the names of the manufacturers of mechanical appliances of every description, together with rated capacities and other necessary information to the U.S. Agent in Charge, for his written approval before ordering or purchasing any of the above equipment. Where any particular brand or manufactured article is specified, it is to be regarded as a standard. Another brand or make, equally as good in the opinion of the U.S. Agent in Charge, will be accepted.

23. Laying Out Work:- The Contractor must lay out his own work; he shall be responsible for measurements; he must exercise proper precaution to verify the figures before laying out the work and will be held responsible for any errors therein that otherwise might have been avoided. He shall promptly inform the U.S. Agent in Charge of any errors or discrepancies he may discover in the drawings and specifications, in order that the proper corrections may be made and understood. The work must be carried on systematically and so managed at all times as to secure rapid progress and avoid annoyance and inconvenience.

24. Assistance:- The Contractor shall render assistance to other mechanics on the work in every way in which his special work can be of service, and such assistance must be given promptly and thoroughly, without additional charge. He and his employees must work in harmony with other contractors on the premises and in such order and places as may be required by the U.S. Agent in Charge.

25. Cleaning Away Rubbish:- The Contractor is to clean away whenever directed by the U.S. Agent in Charge, the dirt and rubbish resulting from his operations, and at completion shall remove all rubbish from the building and premises, delivering same to the U.S. in a clean and perfect condition.

26. Extras:- No charge for any extra work or material will be allowed unless the same has been ordered in writing by the U.S. Agent in Charge, and the price stated in such order.

27. Inspection and Acceptance - or Rejection of Work:- The Contractor must understand that the materials delivered and labor furnished by him at any and all times during the progress of the work, and prior to final acceptance of and payment for the same, shall be subject to the inspection of the U.S. Agent in Charge, or other authorized agent of the U.S., with the full right to accept or reject any part thereof; and that he must, at his own expense, within a reasonable time, remedy any defective or unsatisfactory materials or work; and that in event of his failure to do so, after notice, the U.S. Agent in Charge shall have the full right to have the same done, and to deduct the cost thereof from any money due the Contractor. All condemned materials must be at once removed from the reservation.

EXCAVATING, ETC.

28. Scope of Work:- The work under this heading shall consist of all excavating, backfilling, etc., required in connection with the construction of the building and utilities shown on the drawings.

29. Excavating Generally:- Do all excavating of every description and of whatever substances encountered, to the dimensions and levels shown on drawings for all footings, foundations, floors, trenches, etc. All excavated material not required for filling and grading shall be removed from the premises. Excavation generally shall be confined as nearly as possible within the limits of the structure. Surface soil shall be retained for topping as hereinafter specified.

30. Excavations for footings of all descriptions shall be carried down to the depths and levels shown on drawings. However, should suitable bearings not be encountered at the levels shown on drawings, they shall be carried to such levels as may be necessary and approved by the U.S. Agent in Charge. Authorized increase or decrease in amount of excavation shall be paid for by or credited to the U.S. as per amount mentioned for excavating under "Unit Prices" of bid.

31. Care shall be taken not to excavate beyond the depths shown on drawings, as no backfilling under footings will be permitted, and any excess below the levels shown shall be filled with concrete at the expense of the Contractor. The excavations for footings shall be properly leveled off and cleared of all loose earth to the end that footings shall rest on compact undisturbed bottom. Excavations shall

be maintained in good order during the progress of the work, and, if necessary, sheet piling shall be resorted to and maintained in position until their removal is authorized by the U.S. Agent in Charge.

32. Backfilling:- When directed by the U.S. Agent in Charge, all trenches and excavated portions against walls, etc., shall be filled with earth in 1 ft. layers, thoroughly wetted and tamped.

33. REMOVAL AND PROTECTION OF TREES:- All trees, the retention of which would interfere with building operations, shall be removed; trees in the immediate vicinity which it is desirable to retain shall be protected from damage by boxing; trees shall be kept free of guy ropes. The consent of the U.S. Agent in Charge shall be obtained prior to the removal of any trees.

34. Grading:-
(NOTE: The grading of the grounds about the building or building-site is not included in this contract.

MASON'S MATERIALS

35. General:- The following standard requirements for material shall apply to all work of contract, except where distinctly otherwise specified.

36. Sand:- Sand shall be clean, hard, sharp, siliceous, free from loam, silt, or other impurities and composed of grains of varying sizes, which will pass a 1/4" mesh screen. Sand for mortar and finished cement floors shall be well screened and shall be approved of by the U.S. Agent in Charge.

37. Gravel or Stone:- Gravel or broken stone shall be free from clay, loam, or organic matter, and shall be run of the bank or crusher, double screened from 1-1/2" to 1/2".

38. Cement:- Cement shall be Portland cement complying with latest specifications of the American Society for Testing Materials and shall be delivered to the work in the original bags or barrels plainly marked with name of brand and manufacturer and until used shall be protected from rain and dampness. Defective cement, or cement showing partial set or caking, shall not be used.

39. Lime:- All lime shall be best quality, fat, well-burned and fresh lump quality or mill hydrated of an approved established brand. Same conditions as to protection from dampness shall apply for lime as previously specified for cement.

40. Water: All water used for masonry work of every kind shall be clean and fresh, and free from vegetable, sewage or organic matter.

CONCRETE WORK

41. General:- The following standard requirements for concrete shall apply to all work of contract, except as distinctly otherwise specified.

42. Forms:- All necessary forms, centering, cores, moulds, etc., shall be rigidly built of well-seasoned, sound, good quality lumber, and shall conform to the shape, lines and dimensions of the concrete as shown or figured on the drawings. Lumber for forms of exposed concrete shall be matched and dressed to a uniform thickness, and shall be free from loose knots or other material defects. Joints in forms shall be horizontal or vertical. Lumber once used in forms shall have nails withdrawn and surfaces to be in contact with concrete thoroughly cleaned before being re-used.

43. The use of wood forms for work called for herein is not obligatory. The Contractor shall have the option of using steel forms subject to the approval of the U.S.Agent in Charge.

44. Design:- Forms shall be substantial and sufficiently tight to prevent leakage of mortar; they shall be properly braced or tied together so as to maintain position and shape.

45. Workmanship:- Wire ties will be permitted only on light and unimportant work; they shall not be used through surfaces where discoloration would be objectionable. Forms shall be set to line and grade and so constructed and secured as to produce true lines. Special care shall be used to prevent bulging.

46. Removal:- Forms shall not be disturbed until the concrete has adequately hardened.

47. Place in forms all wall ties, anchors, sleeves, inserts, etc., and see that all conduits, floor drains, etc., are in proper position as required or hereinafter specified.

48. Unit of Measure:- The unit of measure shall be the cubic foot. Ninety four (94) pounds of Portland cement (one bag or 1/4 bbl.) shall be considered as one (1) cubic foot.

49. Measurement of Aggregates:- The method of measurement shall be such as to secure the specified proportions in each batch. The aggregate shall be measured separately by volume. In volume measurement, the fine aggregate and the coarse aggregate shall be measured loose, as thrown into the measuring device, and struck off. The water shall be so measured as to insure the desired quantity in successive batches.

50. Proportions: Concrete shall be mixed in the following proportions, except where specifically otherwise called for:

> Concrete shall be composed of one (1) part Portland cement, two and one-half (2½) parts sand, and five (5) parts of 1/2" to 1½" screened gravel or crushed stone, plus 10 lbs. hydrated lime to each bag of cement.

NOTE:- Variations in the grading of the aggregates on which the proportions are based may be made for the purpose of obtaining a denser or more workable mix when approved by the U.S.Agent in Charge, but no claim shall be made for extra compensation therefor.

51. Consistency:- The total quantity of water used shall not exceed 8-1/4 gallons per sack of cement. In measuring the water, allowance must be made for the moisture in the sand and aggregate. The proportions of aggregate to cement for concrete of the water-cement ratios specified shall be such as to produce concrete that can be puddled readily into the corners and angles of forms without excessive spading and without segregation or undue accumulation of water or laitance on the surface. It is desirable to reduce the proportion of water specified to the minimum that will give the workability defined.

52. Strength:- The expected minimum ultimate compressive strength of concrete shall be 1500 pounds per square inch after 28 days.

53. Machine Mixing:- The mixing of concrete, unless otherwise authorized, by the U.S.Agent in Charge, shall be done in a batch mixer of approved type which will insure a uniform distribution of the materials throughout the mass, so that the mixture is uniform in color and homogeneous. The entire contents of the drum shall be discharged before recharging. The mixer shall be cleaned at frequent intervals while in use. The volume of the mixed material per batch shall not exceed the manufacturer's capacity of the mixer.

54. Time of Mixing:- The mixing of each batch shall continue not less than 1½ minutes after all the materials are in the mixer, during which time the mixer shall rotate at a peripheral speed of about 200 ft. per minute.

55. Hand-Mixing:- When hand-mixing is authorized by the U.S.Agent in Charge, it shall be done on a watertight platform. The cement and fine aggregate shall first be mixed dry until the whole is of a uniform

color. The water and coarse aggregate shall then be added and the entire mass turned at least three (3) times, or until a homogeneous mixture of the required consistency is obtained.

56. Retempering:- The retempering of concrete or mortar which has been allowed to stand longer than thirty minutes, that is, remixing with or without additional cement, aggregate, or water, will not be permitted.

57. Depositing - General:- Before beginning a run of concrete, hardened concrete and foreign materials shall be removed from the ~~insides~~ inner surfaces of the mixing and conveying equipment, and, before depositing concrete, debris shall be removed from the space to be occupied by the concrete.

58. Compacting:- Concrete during and immediately after depositing, shall be thoroughly compacted by means of suitable tools. The concrete shall be thoroughly worked around embedded fixtures, and into the corners of the forms.

59. Removal of Water:- Water shall be removed from excavations before concrete is deposited. Any flow of water into the excavation shall be diverted through proper side-drains to a sump, or be removed by other approved methods which will avoid washing the freshly deposited concrete. Water vent pipes and drains shall be filled by grouting, or otherwise, after the concrete has thoroughly hardened.

60. Protection:- Exposed surfaces of concrete shall be protected from premature drying for a period of at least seven (7) days after being deposited.

61. Temperature of Concrete:- Concrete when deposited shall have a temperature of not less than 40° Fahr., nor more than 120° Fahr. In freezing weather suitable means shall be provided for maintaining the concrete at a temperature of at least 50° Fahr. for not less than 72 hours after placing, or until the concrete has thoroughly hardened. The methods of heating the materials and protecting the concrete shall be approved by the U.S.Agent in Charge. Salt, chemicals, or other foreign materials shall not be mixed with the concrete for the purpose of preventing freezing, unless approved by the U.S.Agent in Charge.

62. Depositing Continuously:- Concrete shall be deposited continuously and as rapidly as practicable until the unit of operation is completed.

63. Bonding:- Before depositing new concrete on or against concrete which has set, the surface of the set concrete shall be roughened as required by the U.S.Agent in Charge, thoroughly cleaned of foreign matter and laitance, and saturated with water. The new concrete placed in contact with hardened or partly hardened concrete, shall contain an

excess of mortar to insure bond. To insure this excess mortar at the junction of the hardened and the newly deposited concrete, the cleaned and saturated surfaces of the hardened concrete, including vertical and inclined surfaces, shall first be slushed with a coating of neat cement grout against which the new concrete shall be placed before the grout has attained its initial set.

64. Concrete Walls, etc:- The footings, foundation walls and porch piers shall be constructed of concrete, of the sizes marked and as shown.

65. Finish for Concrete:- All exposed surfaces of concrete walls, on exterior of building only, shall be given a dash finish. Porch floors and steps shall be given smooth finish as hereinafter specified.

66. Concrete Porch Floors:- Construct porch floors of reinforced concrete, as shown in detail. Concrete to be composed of one part Portland cement, two parts sand, and four parts stone or gravel of quality specified under Mason's Materials, also the cement hardener as herein specified in par. 70. Concrete to be laid 4½" thick, and, while green, be surfaced with a 1/2" integral finish composed of one part Portland cement to two parts well-screened coarse sand, troweled to a smooth, hard surface. If fine or "Lake Shore" sand is used the proportion for finish shall be 1 part cement to 1 part sand. (See drawings for reinforcement of concrete).

Build into each end of porch one small iron ventillator. Centering of forms under porch floors shall not be struck until the concrete has been in place at least seven days, and during this time the concrete will be kept covered with wet sand or other approved covering, to protect it from sun and keep it damp until thoroughly set.

NOTE: PARAGRAPHS 67, 68 and 69 relate to tile floor, which is not to be included in this contract.

70. Cement Hardener:- The one part cement and two parts sand finish for the cement finished floor, stair treads, door sills, etc., shall be tempered with a 3% solution of calcium chloride; this solution shall be proportioned by weight and shall be thoroughly agitated in suitable containers before mixing with the aggregate.

71. Concrete Steps, etc.:- Steps shall be constructed of concrete as shown; the treads and platforms shall have integral cement finish put on as hereinbefore specified for floors.

MORTAR

72. Mortar for Brick Work:- Mortar for brick work shall be composed of one part lump lime to three parts clean, sharp sand, and tempered as used with one part cement to four parts of lime mortar. To the mortar for face brick will be added approved black mortar color to the amount of 100 lbs. per thousand brick.

BRICKWORK

73. Chimneys:- Build chimneys and flues as indicated on drawings of hard, red brick. Leave openings for stove pipe holes where required or directed; all flues to be independent of one another; brick partitions, where shown, to be four inches thick and to extend to top of chimney; all spaces around flue linings to be filled with mortar. The top of chimneys are to have 4" cast stone (concrete) caps. Build into fireplace a combined cast iron lintel and damper equal and similar to the Covert throat damper No. 548 and a cast iron ash door, as shown.

74. Flues:- All flue linings in chimneys to be of fire clay, to start nine-inches below thimble or at fireplace and extend to top of chimney, the bottom of each smoke flue to be tightly closed. Circular

opening to be provided for smoke pipe in kitchen and in other rooms, as directed.

75 Fireplace:- Construct in living room brick fireplace, as shown in detail on sheet No. 3 of drawing. Bricks are to be standard pressed brick, dark red in color for hearth and tapestry for front, as shown. The work is to be laid up carefully in white cement mortar and the joints made as indicated on drawing. Unusual care must be exercised in this work and only experienced labor used. Lining and back of fireplace to be of a good quality of fire brick.

76. Piers and Columns:- Foundation piers for rear porch shall be of concrete as specified for foundation walls. Columns of porches will be cast iron and be furnished by the Government, of proper length, and be delivered at the building site without expense to the contractor. They shall be set by the contractor.

77. Outside Walls - Brick:- All outside walls above foundation line (or bottom of first floor joist line) except where otherwise noted on drawings, will be constructed of brick. All exposed brick shall be first quality, hard burned, cherry red face brick, rug texture or vertical scored on exposed edge or end, or may be smooth texture if approved. Between bricks of the same range in price, the selection of the shade and texture shall be left to the Officer in Charge. Care is to be exercised that edges and corners of exposed bricks are not chipped or broken. Bricks for backing up shall be of good quality medium hard common brick, either red or of any other color commonly used in the vicinity. Build into inner course 3/8" wooden lath or other suitable strips at proper locations for nailing the furring strips.

78. Outside Walls - Brick & Tile (ALTERNATE) - Proposals will be considered providing for construction of outside walls of face brick with backing of dense, hard 8" x 5" x 12" backup tile, instead of brick, laid in mortar as specified for brickwork, (for the first story, and backing tile 4" x 5" x 12" for second story). A sufficient number of brick size tile (or of common brick) shall be included for properly bonding the brickwork and tile; or these shall be securely tied together in approved manner with heavy galvanized wall ties. When mortar has become thoroughly dry, cover the inside surface of all tile walls with one coat approved waterproofing paint, manufactured especially for this purpose. Tile must be laid perfectly plumb and true to line on inside face to provide even surface to receive plaster which will be applied directly to the tile, without furring.

79. Laying:- Brick work shall be laid in common bond, every sixth course being a Flemish header course. Brick to be well wetted just before laying and laid with flushed solid joints, leaving no empty spaces in the walls. All exposed joints to be concaved and be of uniform thickness, approximately 3/8 inch. Brick walls when completed shall be plumb, true and straight, and all angles, pilasters and reveals of doors and windows shall be clean-cut and true. A workmanlike job in every particular will be required. The figures given for dimensions of brickwork may be changed if necessary to conform to the dimensions of brick used.

80. Cast Stone:- All window and door sills shall be of best quality standard design Cast Stone (pre-cast concrete), sand finish and seasoned. Sills shall have washes, seats and drips.

81. Cleaning:- All exposed brickwork shall be thoroughly cleaned at completion, and all broken or defective work made good.

82. Damp Course:- Top of concrete foundation walls shall be damp-proofed with a coat of approved waterproofing paint. Build into the walls at top of foundation, or where directed, a damp course formed of two courses of slate or composition shingles bedded in mortar.

83. (Relates to Ceiling Height - not applicable in this instance).

MISCELLANEOUS IRON AND STEEL

84. General:- Where structural steel or iron is required by drawings, same shall include all structural shapes and all other fittings and pieces called for or required for the complete and substantial execution of this work, as shown or reasonably implied.

85. Steel:- All material not otherwise shown or specified, shall be Acid or Basic Open Hearth Steel, possessing the chemical and physical properties of Medium Rivet Steel, as required by the most recent specifications for Structural Steel for Buildings as adopted by the American Society for Testing Materials.

86. Lintels:- All square head openings in masonry walls shall have angle or channel iron lintels of sizes shown on drawings.

87. Coal Chute:- Not included.

88. Masons' and Carpenters' Building Iron:- Furnish all anchors, straps, hangers, plates, bolts, and all other iron or steel work of whatever description required.

PAINTING OF IRON & STEEL WORK
(Protective Coating)

89. General:- All structural and ornamental iron and steel work, except as otherwise specified, shall be cleaned and painted with a shop coat of red lead, well brushed out over surfaces and worked into all cracks and corners.

ROOFING, SHEET METAL, ETC.

90. General:- Roof construction, or any section thereof, shall be entirely completed, vent lines extended through and all flashings and roof drains, etc., properly secured in position before roofing felt is laid.

91. Roofer shall examine all parts of the roof and shall see that the roof decks are smooth, firm, dry and free from loose material; also that all flashing is installed before proceeding with roofing.

92. Roofing Felt:- Under asbestos on roof, lay an approved slater's felt, weighing not less than 30 pounds per square. Felt shall be laid horizontally and be lapped 4", and turned over ridges with a lap of 12" and well secured with large headed 7/8" coppered roofing nails, spaced no more than 5" apart. Extend felt under all vertical flashings and up 6" above roofing line.

93. Asbestos Roof, Etc:- The pitched roofs as shown shall be covered with #1 rigid asbestos shingles, blue-gray, slate-colored, or emerald green. Light gray will not be acceptable. The shade, for shingles in the same range of price, will be left to the selection of the Officer in Charge. Bidders shall state in their proposals the manufacturer, brand, and size of the asbestos shingles which they propose to furnish and shall submit sample thereof upon request. The shingles will be rectangular, either 8" x 16" or 9" x 18" (approximate dimensions). They shall be machine punched, laid in the best manner, American method, with 1" minimum head laps and each shingle nailed with at least two large-headed #11 gauge, 1-1/4" copper slating nails. All courses shall be straight and even, the ridges made tight. Shingles shall project 1" over cornices. Ridges shall be of asbestos put on with ridge roll clips and coppered nails in an approved manner in accordance with the specifications of the manufacturer.

94. (DOES NOT APPLY)

95. Tin Roof: (DOES NOT APPLY)

96. Ventilators:- Install, where shown, one ventilator, 15", Globe pattern, made of 16-oz. Copper, all work properly flashed.

97. Kitchen Range:- The range and necessary stovepipe in kitchen to be furnished by the Government, but will be properly set on a sheet of #26 galv. iron, extend 2" at sides of stove and 12" in front, and connected to smoke flue by the contractor.

98. Metal Flashings, Etc. All flashings and counterflashings shall be of 16 oz. soft copper, and shall be of ample extent for the purpose intended. Flashings shall be furnished wherever shown on the drawings, mentioned in the specifications and to the extent required for first-class work and to insure watertight construction throughout.

99. Gutters:- Gutters as shown to be copped as specified for flashing. Throat between gutter and downspouts to be of copper. Copper to be securely fastened in place by heavy, copper nails and angle clips formed of 16 oz. hard copper as shown by detail.

100. Outside Conductors or Downspouts:- Unless otherwise noted, outside conductors shall be rectangular, of sizes shown, of 16 oz. hard copper. All shall be properly connected to gutters using goose neck connections where offsets occur. Conductors shall stand free from walls, erected straight and plumb and secured with approved adjustable brass conductor fastenings, conductors to have heads as shown of 16 oz. copper, discharge end of downspouts to have elbows to turn water away from walls, connections to gutters shall bemade with long sweeps, as shown on details.

101. Strainers:- Furnish and set approved dome-shaped #14 copper wire basket strainers, 1-1/4" mesh, at all conductor openings.

DRAIN PIPES

102. Area Drain:- Not included in this contract.

103. General:- Go over the interior work with the officer in charge to see that all pipes, studding, grounds, etc. are right before commencing work.

104. Plastering:- All walls and ceilings in first and second story to be plastered with an approved brand of quick setting wall plaster, three coat work to be finished with approved sanded wall plaster to which nothing shall be added but water and must be applied in accordance with manufacturer's directions. This plaster will be applied over tile walls without furring and on all partitions and ceilings over approved plaster board or metal lath where same is specified. Brick walls to be furred and covered with plasterboard before plastering.

105. Plaster Board:- Cover all partitions, ceilings, and interior brick walls except basement, with approved 1/4" or 3/8" plaster board in sheets approximately 32 x 36" or other standard dimensions, applied as specified below. See that the furring strips on ceilings are properly leveled before plaster board is put on. Plaster board will be securely nailed on all bearings with 3d common nails (4d nails if board 3/8" thick) spaced not over 6-inches apart. Lay all sheets in parallel courses following the direction of studding, furring or joists. Start each alternate course with half sheet (32 x 18" if 32 x 36" sheets are used) so as to break joints at right angles to studding on walls (horizontally) and at right angles to joists or furring on ceilings. The last sheet in each course shall be cut to exactly fit space. Break joints between walls and ceilings so that a vertical joint on the wall will not meet a ceiling joint. Perpendicular joints on opposite sides of partitions must not be on same stud. Space sheets 1/4" apart at all horizontal or other joints which do not come on studs. Joints coming on studs or joists may be butted tight or come as will, but joints must not exceed 1/4". Do not wet boards before plastering.

NOTE: Plaster board may be of other standard size sheets placed to break joints as indicated.

106. Metal Lathing:- Chimney breasts to be covered with approved perforated steel lathing bent at right angles to fit corners and securely fastened on.

107. Corner Beads:- All projecting plaster corners, full height of story, to be protected with approved heavy steel corner beads put on plumb, true and straight, and securely fastened in place with iron nails or iron straps and nails, or other approved fastenings; all corners and fastenings for same to be heavily galvanized.

108. All walls must be true, plumb and out of wind. The finish coat will be flush with the grounds set by the carpenter. None but skilled mechanics will be employed on this work who have had previous experience with the class and kind of material selected. Finished walls must show a continuous unbroken surface of even color shade. Fill in between all studs in each story at bottom

of same with two inches of mortar before putting up wall board to form fire stop. All openings in buildings to be closed during the progress of plastering, and until it is dry.

109. Plastering to extend down to the under floor and come out even with face of grounds. Patch up where necessary when wood trim is in place, also around pipes and other places where required to make the work complete. Walls in bathroom, to four feet above floor, to be finished with Keen cement, white, marked off in 3" x 6" blocks. Run molding at top of cement finish. Kitchen to be similarly finished to 3 ft. 6 inches above floor.

110. Outside Plaster:- (This item does not apply).

CARPENTRY WORK

111. General:- Do all necessary woodwork and cutting for pipes of all kinds, leaving pockets properly secured with screws in all floors over pipes, where necessary. Care must be taken not to cut off or weaken supporting timbers, properly protect all openings from the weather, when directed. All mouldings, architraves and other work of like nature, will conform to drawings, or as directed. All plastering to be finished, and the building thoroughly dried before any of the interior finish or fittings are brought into the building.

112. Framing:- All dimension or other lumber (except where otherwise specified) shall be best quality short leaf pine, sound, bright and well seasoned, straight grained, square edged and without wane, and shall be free from through or round shakes which show on the surface; large, unsound, loose or hollow knots, worm and knot holes.

113. All must be properly framed, according to plans and detail drawings,

No portion of framing to be placed within two inches of brick work of chimneys. All framing must be done with a view to prevent any great shrinkage or unusual settlement from affecting the plastering or finished work. Rafters to be thoroughly spiked to bearings and the whole work done in a first class manner. Wherever necessary to prevent unequal settling, stud partitions will be trussed.

114. All framing timbers to be of sizes and placed as shown in details or as hereinafter specified. Joists to be sized to width and bridged every eight feet with 1 x 3-inch cross bridging, nailed with 10-penny nails, two at each end; joists of second floor to be fire cut, supported in brick wall as shown; every sixth joist to be anchored with strong wrought iron anchors securely built into brickwork; W.I. Hangers to be used if walls are tile; all joists to be placed with crowning edge up. All headers and tail joists to be hung in steel hangers. (See Iron Work). Joists to be double under all partitions running parallel with them, and not supported below, and trimmers and headers to be double around all openings and spiked together. All studs except where 2 x 6" or 2" x 3" are indicated will be 2" x 4". All studs will be spaced 16-inches on centers - carefully straightened, double at and trussed over all openings; all door openings to have double studding to the full height of the story, and securely spiked together without splicing; bridge studs once in height in each story with 2 x 4-inch pieces cut in. All partitions not parallel with joists to have two-inch caps and sills for full width of studs. Partitions in second story coming over those below will rest directly on the caps of same and will not have sills.

115. Each pair of roof rafters to be tied together, as shown, by a 1-inch by 8-inch collar beam. Ridge 1 x 10 inches.

116. Grounds:- Put suitable grounds around all openings, base-boards, etc., and wherever required; spike suitable blocks in all corners where necessary to secure good nailing for baseboards and other finish. Plastering grounds to be full thickness of plaster-board and plaster. (Do not place grounds or nailing strips over plasterboard.

117. Furring:- Furr all brick walls with 7/8 x 2" strips, 16-inches on centers; where necessary for door and window finish and projections; for plumbing, plastering, and for everything necessary to carry out the design.

118. Under Floors:- Under floors for first and second stories to be of good quality 7/8" boards not over eight-inches wide, dressed one side and on edges, laid diagonally, close together, dressed side up, securely nailed at each bearing, and not to come within 1/2" of any masonry work; butt joints to be cut diagonally and over joists only.

second floor to extend between studs to back of roof sheathing.

119. Roof Boarding, Etc.:- Cover all roofs and outside of studding where walls are of frame construction with 7/8" T. & G. boards not more than eight inches wide, dressed on one side, laid diagonally, dressed side out, tightly strained and securely nailed to each bearing.

120. Exterior Finish:- All exterior finish, except where otherwise specified, for windows, doors, jambs, cornices, porches, etc., to be of best quality thoroughly seasoned and thoroughly dried long leaf Georgia pine, cypress, or white pine satisfactory to the officer in charge, hand finished and primed as soon as put up. The finish will be of a grade equal to the following: A board eight inches in width and twelve feet in length, to be free from shakes, to have no loose knots, and not more than three sound ones, none over 1/2" diameter; other dimensions to have no greater proportion of defects.

121. Door and Window Frames:- Frames for outside doors to be of clear, long leaf Georgia pine, cypress or white pine, 1-3/4" thick, double rabbeted. All window frames in first and second story to be of wood used in exterior finish. Cut pockets in pulley stiles, secured with screws. Frames for all inside doors to be 1-3/8" white pine.

122. Outside Blinds:- Blinds not required.

123. Sash:- Sash to be made in first class manner of best quality kiln dried western white pine or of cypress, and to be 1-3/4" thick.

124. Upper Floors:- Upper floors of first story to be laid at completion of other inside work and to be 7/8" T. & G. kiln dried, edge grain, long leaf, yellow pine or plain white oak, showing not over 3-1/4" face, free from blued sap stains, pitch pockets, knots or other imperfections; upper floors for second story to be standard No. 1 quality short leaf pine, tightly driven up and blind nailed at bearings; all floors planed and scraped smooth at finish. Butt joints of floor, where necessary, to be cut over joists only, care being taken to have even color in joining. A beveled, mitered border to be placed around hearth projecting 3/16" above floor.

125. Inside Finish:- All the inside finish to be for painting, and will be of best quality local pine lumber, free from all blued sap stains, pitch pockets, knots or other imperfections, as described for exterior finish. All lumber used for inside finish will be thoroughly kiln dried, hand smoothed and sand-papered and worked as per detail drawings; put on in a thorough and workmanlike manner on one length where possible. All nails will be set and left smooth for painter.

126. Shelving, etc:- Each closet, except linen closet, to have a shelf supported on 2-1/2 inch cleats. Linen closet to have 6 shelves. Put in each closet, linen closet excepted, eight hooks screwed to three inch strips before being put up and the strips screwed firmly to wall. Securely screw to wall in bathroom, where directed, 7/0 x 3" hook strip with two hooks; hooks to be set ten inches on centers. Fit up kitchen dresser, as shown, with lower and upper paneled doors, upper doors to have glazed panels, properly moulded in, below to have raised wood panels.

126-A. Medicine Cabinet:- Build into partition wall of bathroom where directed, a medicine cabinet approximately 2 ft. high, 10 inches wide, of wood used in inside finish. Door to be filled with mercury backed plate glass mirror. Cabinet to have two wood shelves 1/2" thick. Door hung on 2-1/2 x 2" loose pin butts and fitted with cupboard turn.

127. Doors:- All doors to be of size and thickness shown by drawings, and of similar designs. The designs need not be identical, but stock designs similar to those shown will be allowed. All inside doors to be blind tenoned, wedged and glued ~~xixk~~ with five raised cross panels; to be of white pine with solid stiles and rails. Doors from living room and office on to front porch will be of design shown, or similar approved design, glazed with selected clear, double strength glass, bedded on putty and held in place by wood molding. Exterior rear door as shown. Transoms where indicated on plans.

Thresholds, double beveled, wooden, for all outside doors directed.

NOTE: Slight variations in the length or width of doors, windows and frames will be allowed if necessary, to bring them to the nearest regular stock sizes, the variations not to exceed 4 per cent unless approved by the Officer in Charge.

128. Stairs:- Build in the most substantial and workmanlike manner, as shown on drawings, the stairs from first to second floor. Stairs to be framed on 2 x 12-inch carriages not more than eighteen inches apart, with 1-1/0" treads and 7/5" risers. Treads and risers to be tongued and grooved together, each riser into tread above and tread into riser back of it, and both housed into wall string and securely wedged. Balusters to be dove-tailed into ends of treads and floor of landing, and the nosing on end to be nailed on. Hand rail of approved ~~xxxxxxx~~ hardwood to be secured to newels and together at joints by wrought iron hand rail screws and bolts. Newels to be built up as shown. Treads to be of clear, white oak. Risers and base to be of wood specified for inside finish.

128a. Stock Designs:- The woodwork designs shown on plans or referred to in these specifications are intended to indicate the general design and quality but not to require that woodwork of identical designs be furnished. Any similar stock designs of equal quality and with slight variation in dimensions to bring them to the nearest stock sizes, will be accepted in lieu of the designs shown or referred to for doors, windows, architraves, balusters and other woodwork trim.

HARDWARE

129. General:- Hardware required under this specification shall conform to U.S.Army Q.M.C. Standard Specification No. 81-39, A copy of these specifications may be seen at the office of the U.S.A. in C., and the Contractor may obtain a copy by applying to the Q.M.G., Washington, D.C. The Contractor shall furnish all finishing hardware, as shown, as specified, and as obviously necessary to complete the building. Each item of hardware shall be packed separately, complete with all trimmings, screws, etc., and shall be clearly labeled and numbered.

130. Hardware Samples:- Samples of all the different items of "Finishing" hardware required for proposed work shall be submitted to the U.S.A. in C., for his approval before any hardware is delivered and applied. After samples are approved, they shall be installed on the work and a record kept of their location. Whenever the weight of any article is specified, it shall mean weight exclusive of screws, washers, etc.

131. Material and Finish:- All hardware, except where otherwise specified, shall be of wrought bronze with dull brass finish No. U.S. 4; and lacquered. All hardware in bathroom to be nickel plated finish No. U.S.14. Springs for bolts and latches of exterior doors shall be of properly tempered bronze and of suitable size. Screws of same material and finish, and of suitable size shall be furnished for all hardware. Screws for strike plates, butts, etc., shall be countersunk flathead, and for all other hardware shall be oval headed.

132. Doors:- Provide the following hardware: All inside doors, except bathroom and swinging door, to have locks, Type 4A; and to have two butts 3-1/2"x 3-1/2", type 2005. Bathroom lock, Type 17A, turn knob for inside, nickel plated. Two butts 3-1/2" x 3-1/2", Type 2005, nickel-plated. Swing door hinge, Type 2334, with push plates, Type ~~461x~~ 461A. All other inside doors to have knobs, Type 211B; Roses, Type 330; Key Plates, Type 350.

Exterior two front doors have locks Type 88; butts three, 4-1/2" x 4-1/2", Type 2001. Knobs, type 210D; Roses Type 330A; Turn knobs on inside and escutcheons, Type 300, on outside; outside rear door to have lock, Type 22A; [illegible] Knob, Type 210D; Rose, Type 330A; Key Plate, Type 350.

Secure in proper position on floor, at exterior doors, door stops, Type 1341; and back of all inside doors, door stops of Type 1340.

133. Windows:- Sash in box frames to be hung with best braided cotton sash cord, equal to A quality Silver Lake No.8, with proper cast iron weights to balance same.

Frames to have pulleys, Type 1248. Sash to be provided with fasteners, Type 1139A. Lifts, two for each lower sash, Type 1201, weights 1701.

134. Dresser:- Each pair of doors to be hung on 2-1/2 by 2-1/2 inch loose pin, ball tip butts, Type 2017A, and secured by one spring elbow catch, Type 1080 and cupboard turns, Type 1062D and drawer pulls, Type 1297.

Metal shelf supports.

135. Hooks:- Hooks in kitchen and closets, Type 1162D, those in bathroom to be nickel plated, Type 1162 A.

136. Glazing:- (General) The Contractor shall furnish and set all glass for all windows and doors, required to completely finish the work shown on drawings or specified.

137. Setting:- All glass shall be bedded in putty, except where bead stops are specified. Glass shall be secured with glazier's points and puttied.

138. Glass:- All glass shall be best quality American, double thick glass.

139. Protection and Cleaning:- Protect all glass from injury during building work and replace broken lights without charge. Leave all glass whole and washed perfectly clean at completion of building.

PAINTING, ETC.

140. Painting:- All materials and labor to be furnished by the contractor, and to be of the best of their respective kinds. All materials to be brought to the building in original packages. All putty stopping to be neatly done, and knots and discolorations to be killed with shellac. All colors to be selected by the officer in charge.

All outside wood and metal work, except shingles, to be painted three coats of paint made of pure, white lead of approved quality, mixed with pure, raw linseed oil, last coat to be one-third zinc white. Door and window frames to be primed before setting in walls. Putty of sash to be neatly painted. All sash to have the rabbet primed before being glazed.

All woodwork on inside, second story (excepting floors), to have two good coats inside white paint of approved manufacture and one coat approved white enamel.

All inside woodwork, first story, except floors, office, kitchen and stair treads, to be filled with an approved paste filler and given one coat of varnish equal to "Elastica" No. 2 or Pratt & Lambert's No.38 Preservative rubbed down with sand paper, then apply a final coat of flattening varnish equal to "Flattine".

Office and Kitchen woodword to be given the same treatment except that an oil filling stain (light oak) shall be used for the filler.

All floors and stair treads, to be thoroughly cleaned and given two coats floor varnish equal to Pratt & Lambert's No. 61.

141. General:- Under this heading the Contractor will be required to furnish all fixtures, and other material required, and to install in the building the fixtures as listed below. All water pipes, both hot and cold, vent and soil pipes, as shown or required. The water service line and soil pipe to be extended 5 feet outside walls of building, beyond this point water and sewer connections will be provided by others.

Reference in this section of the specifications to pages, figures, etc., means pages, figures, etc., in the U.S. Army Specifications for Plumbing Fixtures (for land use), No. 83-6, January 5, 1927, (except where special fixtures and fittings are called for), and which include U.S. Army Quartermaster Specifications, Nos. 81-2A, 81-12, 81-20, 83-4 and 83-5A, all of which are a part of this specification; copies of which may be seen at the office of the U.S. Agent in Charge.

142. Kind and Quality of Material:- All material, appliances and fixtures furnished must be in strict accordance with the specification requirements in each case and of the best quality and grade.

Especial attention is called to the fact that within 15 days after the date of acceptance of bid, the Contractor must submit to the Officer in Charge, a complete list of the following material (no consideration will be given to partial lists submitted from time to time), giving the names and address of manufacturer and also, when so required for proper identification, the catalog number and trade name:

MATERIAL	NAME AND ADDRESS OF MANUFACTURER	CATALOG NO. AND TRADE NAME
Plumbing fixtures		
Water Closet Seats		

In the event the Contractor fails to comply with any of the requirements of the preceding paragraphs relative to material, appliances and fixtures, i.e:

(1) Fails to submit within 15 days after the date of acceptance of bid the list of material, etc., in accordance with the above schedule.
(2) Names appliance not strictly in accordance with specifications requirements, or not of the best quality and grade.
(3) Fails to name a manufacturer satisfactory to the U.S.A. in C., who makes a complete line of plumbing fixtures in accordance with the specifications -

Then the officer in charge reserves the right to select a full line of material and appliances, which selection shall be final and binding upon the Contractor and the work must be installed on that basis without change in the contract price.

The plumbing fixtures must, in general, be the product of one manufacturer and must be in strict accordance with this specification. The term "manufacturer" as used in this paragraph is to be understood as applying to the company of established reputation in that line that assembles the plumbing outfits from products of their own manufacture and assumes the responsibility of certain fixtures or minor products in said outfits which are not manufactured by them.

The plumbing work shall be performed in harmony with the other work on the building and at such times as may be directed by the officer in charge.

The General Contractor shall do all necessary cutting or alterations of structural work required for the plumbing, subject to the approval of the officer in charge.

The plans show location of all fixtures. All branches to fixtures shall be of sizes as hereinafter specified. The Contractor, before proceeding with the work shall prepare and submit drawings of the proposed arrangement of water, soil and vent pipes to the officer in charge for approval.

143. Excavating:- The Contractor shall furnish all labor for the purpose of excavating for all pipes. Trenches shall be dug to uniform width, necessary to accommodate the various pipes; the bottom of trenches shall be tamped hard where necessary, and graded so as to secure all available fall to the lowest point required. Where trenches are to receive sewer, soil and drain pipes, they shall be dug out under each hub to give solid bearing for pipe, and so that the proper joints can be made.

After the pipes have been placed in a uniform position in the various trenches, tested, inspected and approved by the officer in charge, the trenches shall be filled, flooded where possible and thoroughly tamped so as to prevent settling.

NOTE: (Excavating for pipes not required except for a distance of 5 feet from foundation wall)

144. Cast Iron Pipe:- (See U.S. Army Spec. No.83-4). All soil lines, vents and stacks shall be extra heavy cast iron pipe and fittings.

All fittings for cast iron pipe (see U.S.Army Spec. No. 83-4)to be cast iron of corresponding quality and weight.

All changes in pipe size on soil, waste and drain lines must be made with reducing fittings, or recessed reducers. Cast iron pipe shall not be coated with asphalt. "Y" fittings and 1/8 or 1/16 bends to be used where possible.

All joints between cast iron pipe to be made with a picked oakum gasket and pig lead; joint to be run at one pouring and calked solid, flush with the hub.

145. Soil, Waste, Vent and Drain Piping:- Horizontal soil and waste pipes in the building shall be given a grade of 1/4-inch per foot where possible, but in no case less than 1/8-inch per foot. All vertical soil and waste stacks shall be extended full size to and above the roof line as vents. Vertical vent pipes may be connected

into one main vent riser above the fixtures vented. Horizontal waste lines receiving the discharge from two or more fixtures shall be provided with end vents.

146. Flashing Connections:- Openings in roof for vent pipes shall be provided with roof flanges. (See Detail No.5, Figure 1).

147. Branch Connections:- Size of extra heavy C.I. soil pipe branches from the various fixtures shall be as follows:

Water Closets	4"
Lavatories	2"
Bath Tub	2"
Sink	2"

148. Cleanouts:- Rodding ~~xx~~ holes or clean-outs with cast brass plugs shall be installed on ends of soil pipe where required. A heavy cast iron fitting with heavy cast ~~xxxx~~ brass screw plug and brass ferrule, same size, as pipe, shall be placed at bottom of vertical soil and vent pipe. (See Fig. 1 - Detail No.4).

149. Water Pipe:- (See U.S.Army Spec. No.81-12). All water supply shall be galvanized mild steel, standard weight and thickness.

Fittings on all water pipe (except the portions specified to be N.P. brass) shall be galvanized cast iron or galvanized malleable iron, standard beaded pattern.

150. Water Supply System, Valves, Etc:- The water service pipe will extend five feet outside building, at location indicated by officer in charge, and be plugged. Provide and install all hot and cold water connections to boiler and fixtures. On main water supply, inside of building wall, provide gate valve. A drain connected with glove valve with 3/4" hose nipple, shall be installed on supply on building side of gate valve.

The water supply to bathroom shall be fitted with gate valves, placed in accessible positions. Such valves must control all the fixtures in bathroom. Stop cocks will not be permitted. All G.I. water pipe used inside building to be 3/4-inch except branches to fixtures and boiler which will be 1/2-inch.

Hot water supply to bathroom to have ~~xxx~~ circulating pipe run back to hot water tank in kitchen.

151. Pipe Hangers, Supports, Etc:- Vertical pipes shall have heavy wrought iron clamps or collars for supports; all hangers shall be of a size proportionate to the weight of pipe supported.

Pipe sleeves or metal thimbles shall be furnished and located for all pipes passing through concrete or masonry.

152. Floor, Wall and Ceiling Plates:- All exposed pipe which pass through floors, walls or ceilings shall be fitted with plates.

(see Section 17, Par. (a) and (b). Plates on N.P. pipe to be N.P. brass.

153. Type of Fixtures:- The following schedule indicates the type of fixtures required:

Attention is directed to the reference in the first paragraph of description of fixtures, as shown in figures in the plumbing fixtures specifications.

WATER CLOSETS:	No. 48 VL, Figure 5.
LAVATORIES:	No. 21 R C I B - Fig. 13, waste to wall.
BATH TUB:	No. 60 F, Fig. 14.
KITCHEN SINK:	No. 52 CIR, Fig. 13.
HOT WATER TANK:	Standard G.I. 30 gal. Tested to 100 lbs. Tank to be furnished with G.I. stand.
ACCESSORIES:	Furnish and install, near water closet, a paper holder, Fig. 25 - No.9. Towel Rack, Fig. 24, Detail 6. Tumbler Holder, Fig. 24, Detail 3.

154. Tests for Plumbing and Drainage System:- The entire system of soil, waste and vent piping in building must be tested with water or air, as directed, and proved tight to the satisfaction of the U.S.A. in C., before connection is made to sewer, trenches backfilled, piping covered, or fixtures connected.

155. Water Tests:- If tests are made with water, the connections from building to sewer and the drainage system below floors or ground level shall be filled with water to top of a vertical section of pipe 10' high (except for terra cotta pipe), and the water allowed to stand for at least 30 minutes for inspection, after which, if the lines prove tight, the water is to be drawn off, immediate connection made to sewer and trenches backfilled. The soil, waste and drain and vent piping above the floor to ground level must have the openings plugged where necessary and the piping system above filled with water to the level of the top of vent pipes and allowed to stand for at least 30 minutes for inspection, after which, if the lines prove tight, the water is to be drawn off and the fixtures connected. Each vertical stack above the first floor or ground level with its branch waste and vent pipes may be tested separately.

156. Air Tests:- If in freezing weather tests are made with air, a pressure of not less than 10 pounds per square inch, equal to 20" of mercury must be applied with a force pump and said pressure maintained at least 15 minutes without leakage. A mercury column gauge must be used in making the air tests. Testing instruments must be furnished by the Contractor.

157. Tests on Water Supply System in Building:- At completion of this

work the domestic water supply system must be tested to a hydrostatic pressure of 100 pounds to the square inch and proved tight at this pressure.

Water piping, in any way concealed by structural work, must be tested to above pressure and proved tight before pipes are concealed. The test pump and gauge must be provided by the Contractor.

Contractor must clean away all surplus earth and other rubbish resulting from the work and leave the site clean and in as good condition as existed before the work was begun.

NOTE: This proposal covers water and sewer system inside the building and to a point five feet outside of building. Extension or connection beyond that point will be provided for by others.

HEATING

HEATING SYSTEM not included, and paragraphs 158 to 186 (pages 28-32) covering Heating are omitted.

HEATING SYSTEM not included, and paragraphs 158 xxx to 186 (pages 28-32) covering Heating, are omitted.

ELECTRIC WORK

187. Rules: The latest regulations of the National Electric Code shall be considered as included in these specifications and all requirements shall be fully met. All materials used in carrying out these specifications shall be fully approved by the National Board of Fire Underwriters and by the contracting officer, Copies of National Electric Code may be obtained on application to Underwriter Laboratories, 25 City Hall Place, New York, N.Y.

188. Scope of Work:- The contractor shall furnish all labor and material necessary for a complete electric system in the building, including entrance wiring, main switches, branch cut-outs, cabinets, circuit wiring, outlets, lamp drops, etc. with exception of furnishing the lamps and fixtures. The lamps and lighting fixtures will be furnished by the Government, and be installed by the Contractor.

189. Cutting and Repairing:- The contractor shall do all cutting necessary for the proper installation of his work and shall repair any damage done by himself or his workmen, employing the services of the contractor whose work has been damaged when so directed by the officer in charge.

190. Guarantee and Test:- The contractor shall guarantee to make good any defects which may develop within one year from date of final acceptance, which may be due to defective materials or workmanship. The installation shall be free from grounds, short circuits and other defects. All wiring must be connected thru switches to furnish energy to ~~xxx~~ outlets as shown on plans. Final tests will be made in the presence of the contracting officer, or his authorized representative.

191. BX Cable:- All wiring inside the building shall be installed in best quality standard BX cable, firmly secured in place and securely fastened to all outlet boxes in best approved manner. Cable deformed or crushed in any way shall not be installed and must be removed from the building without delay. Cables shall be installed in a neat and workmanliko manner whether they will be concealed or exposed. No wires shall be installed until all work which might cause damage to the wires, cables or conduits has been completed. Cables or conduits must be kept at least six inches from hot water pipes, steam pipes and flues. All cables on this installation shall be concealed within the walls and ceilings of the buildings, except where walls or ceilings are unfinished. It shall be incumbent upon the contractor to exercise the necessary precaution to prevent the accumulation of water, dirt or concrete in the conduits during the execution of the work. Cables in which water or other foreign material has been permitted to accumulate, shall be thoroughly cleaned or the cable run replaced if such accumulation cannot be removed by methods approved by the officer in charge. The wiring shall be brought into the building by standard rigid iron conduit installed in approved method.

192. Grounding:- The conduit installation in the building shall be effectively grounded by firmly attaching an approved clamp to the nearest conduit and connecting it by a rubber covered wire to the water service near the point of entry.

193. Main Switches:- Contractor shall furnish and install standard slate base, front connected, fusible, 30 ampere, knife switch in building. Switch shall be mounted in steel cabinet located in an accessible location with reference to service entrance, appearance and meter reading. Main switch will be supplied with two fuses having the same rating as the capacity of the switches.

194. Service Connections:- Contractor will provide overhead service from Power Company line, to be brought in from the rear of the lodge. This work may be done by contractor or by Power Company at the expense of the contractor. All wire, cable, duct, manholes, transformer and other material must conform to the standards of the Power Company.

195. Watt Hour Meters:- All necessary provisions for installation of meter to conform to requirement of the local electric company must be made by the contractor.

196. Cabinets:- Cabinets shall be furnished and installed of sufficient size to accommodate main switches, panel cut-outs and wiring pertaining thereto. Cabinets shall be of the surface type. They shall be steel, at least #12, U.S.Standard Gauge, fitted with plain steel door having hinges of a neat and substantial design, snap latch.

197. Panel Cut-Outs:- Protection for branch circuits shall be afforded by installation of double branch, porcelain base, panel cut-outs. They shall be of the approved type, securely fastened to back of cabinet in such a manner that removal or replacement can readily be made from the front; ten ampere fuses shall be furnished and installed in all branch panels.

198. Outlets:- Boxes to match the conduit, of a type to suit the conditions for each outlet, shall be installed in a rigid and satisfactory manner, either by wood screws on wood, or expansion shields on masonry. Fixture outlet boxes on ceilings shall be 4" square or octagonal, fitted with open cover to come flush with finished surface. Outlets intended for fixtures requiring studs shall have these furnished and installed.

199. Wall Switches:- Wall switches shall be of the toggle type, installed where shown on plans and shall be set flush and provided with brass beveled edge cover plate finished to match surrounding hardware where installed on finished walls and in an approved [illegible] fitting having an approved cover plate matching the conduit and fitting where installed on unfinished walls. All switches shall be

of rugged construction and designed to withstand hard service. They shall be indicating so as to show whether they are open or closed. The construction shall be such that it will be impossible to receive a shock from the switch after it has been installed. Where two or more switches are mounted together, they shall be installed within a single fitting or box having cover plate extending over all switches. When installed on finished walls, cover plate shall be brass with beveled edge finished to match the surrounding hardware.

200. Wall Receptables or Convenience Outlets:- Where receptacles are shown on plans, they shall be installed on walls about 12" above the floor, unless otherwise directed. Each outlet shall be for 660 Watts, fitted with twin conveniences outlet having a "T" slot which will accommodate standard caps having either parallel blade or blades in alignment. Receptacles shall be provided with two hole, brass beveled edge cover plate finished to match surrounding hardware when installed on finished walls and in an approved fitting having approved cover plate matching the conduit and fitting when installed on unfinished walls. Seven (7) of these wall receptacles shall be installed, one each in rooms or locations designated.

201. Branch Circuits:- No wire smaller than #12 B & S gauge shall be used in circuit wiring. Single pole switches shall be cut into the ungrounded side of circuit wiring.

202. Conductors:- Conductors shall be continuous from outlet to outlet and no splice shall e made except in outlet boxes. Conductors will be rubber covered N.E.C. standard and shall be delivered on the job in new coils bearing the approved stamp of the Underwriters Laboratories. Conductors shall be of sufficient length at outlets to make connections to apparatus without straining connections. Splices shall be made both mechanically and electrically perfect, properly soldered and the requisite amount of rubber and friction tape shall then be applied.

203. Door Bell:- One electric door bell of approved make, to be placed in kitchen where directed and connected with front office door. Push button to match hardware.

204. Setting Tablet:- The bronze Lincoln Tablet furnished by the Government, to be set by Contractor, being neatly and securely attached to the front face of wall where shown by use of bronze bolts and approved expansion bolt shields. The bronze bolts to be furnished by the Government.

PROPOSALS

Bidders will submit proposals as follows:

(a) For the Lodge complete as specified with outside walls above foundation built of brick (See par. 77 of these specifications).

(b) For the Lodge complete as specified with outside walls above foundation built of face brick and hollow tile (See par. 78 of these specifications).

(c) Amount to deduct from (a) or (b) in case all painting and varnishing of the interior woodwork and floors is omitted.

(d) Amount to add to (a) or (b) in case the length of the rear porch is increased ten (10) feet, the additional porch column being furnished by the Government.

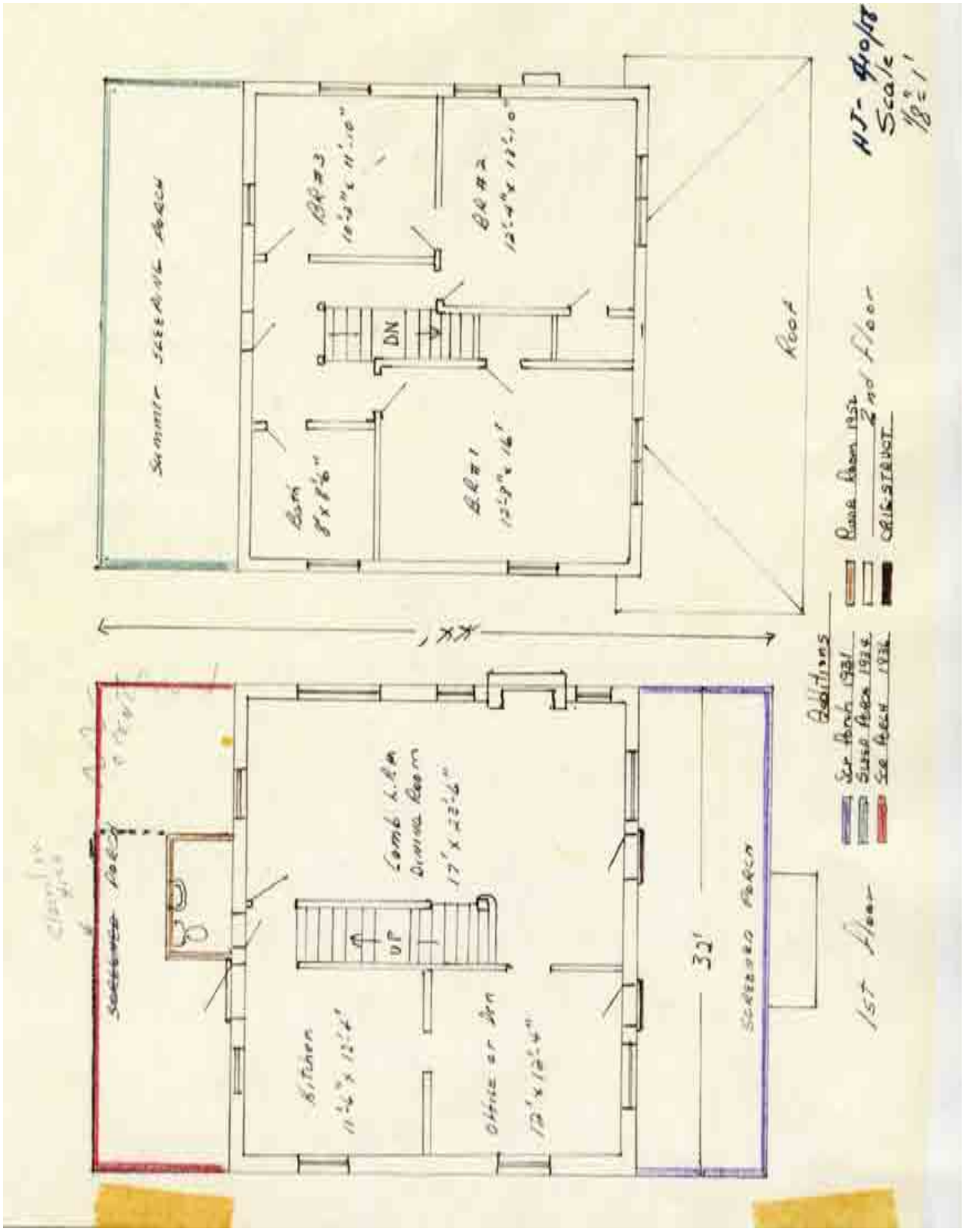
(e) Amount to deduct from (a) or (b) in case the entire rear porch is omitted.

Appendix B

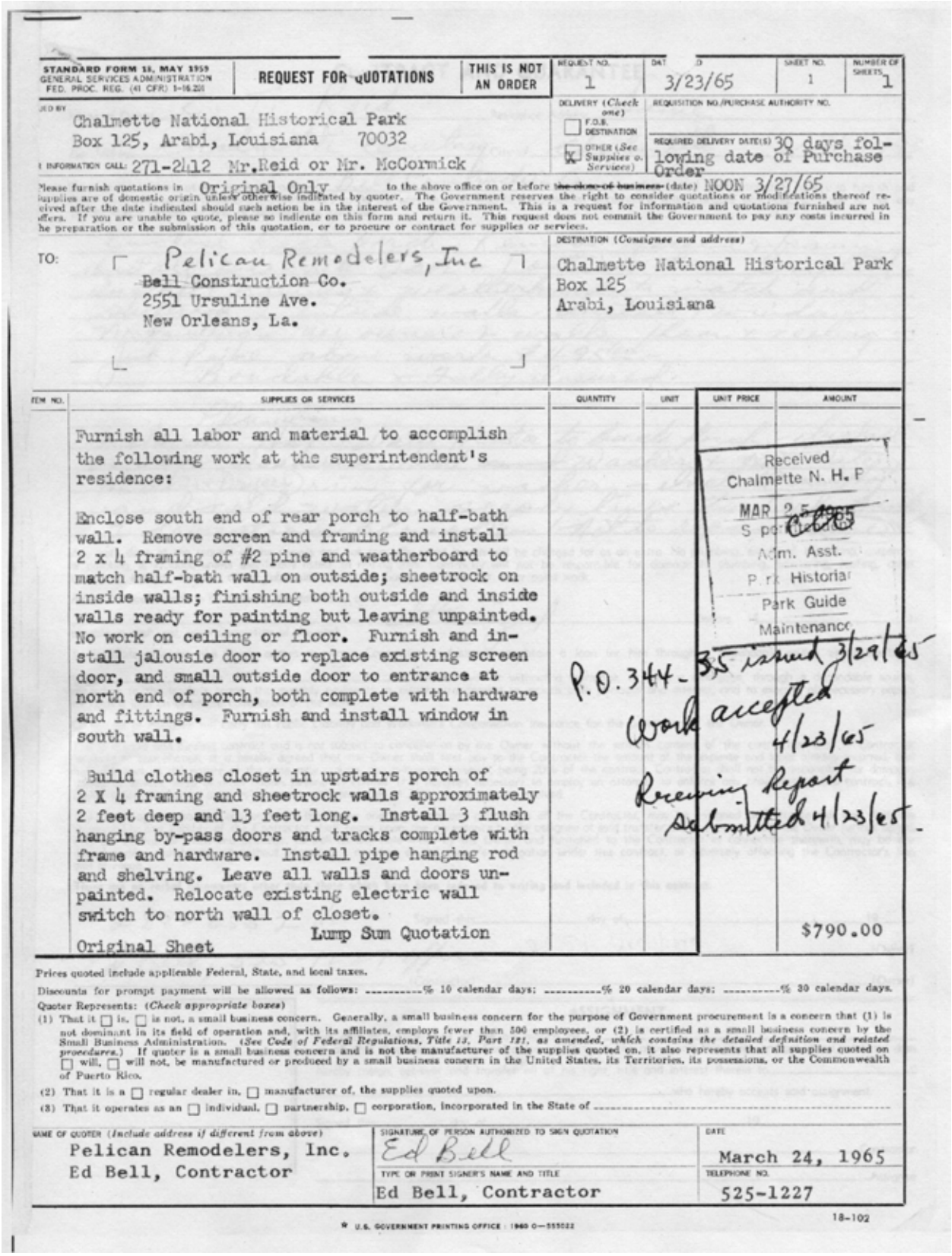
National Park Service Documents

Building Inventory, 1949

Building Plan, 1949



Utility Room, etc., 1965



STANDARD FORM 18, MAY 1959
GENERAL SERVICES ADMINISTRATION
FED. PROC. REG. (41 CFR) 1-16.201

REQUEST FOR QUOTATIONS | THIS IS NOT AN ORDER

REQUEST NO.	DATE	SHEET NO.	NUMBER OF SHEETS
1	3/23/65	1	1

ISSUED BY
Chalmette National Historical Park
Box 125, Arabi, Louisiana 70032

FOR INFORMATION CALL: 271-2112 Mr. Reid or Mr. McCormick

DELIVERY (Check one): ☐ F.O.B. DESTINATION ☒ OTHER (See Supplies or Services)

REQUISITION NO./PURCHASE AUTHORITY NO.

REQUIRED DELIVERY DATE(S): 30 days following date of Purchase Order

Please furnish quotations in Original Only to the above office on or before ~~the close of business~~ (date) NOON 3/27/65

Supplies are of domestic origin unless otherwise indicated by quoter. The Government reserves the right to consider quotations or modifications thereof received after the date indicated should such action be in the interest of the Government. This is a request for information and quotations furnished are not offers. If you are unable to quote, please so indicate on this form and return it. This request does not commit the Government to pay any costs incurred in the preparation or the submission of this quotation, or to procure or contract for supplies or services.

TO:
Pelican Remodelers, Inc
~~Bell~~ Construction Co.
2551 Ursuline Ave.
New Orleans, La.

DESTINATION (Consignee and address)
Chalmette National Historical Park
Box 125
Arabi, Louisiana

ITEM NO.	SUPPLIES OR SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Furnish all labor and material to accomplish the following work at the superintendent's residence: Enclose south end of rear porch to half-bath wall. Remove screen and framing and install 2 x 4 framing of #2 pine and weatherboard to match half-bath wall on outside; sheetrock on inside walls; finishing both outside and inside walls ready for painting but leaving unpainted. No work on ceiling or floor. Furnish and install jalousie door to replace existing screen door, and small outside door to entrance at north end of porch, both complete with hardware and fittings. Furnish and install window in south wall. Build clothes closet in upstairs porch of 2 X 4 framing and sheetrock walls approximately 2 feet deep and 13 feet long. Install 3 flush hanging by-pass doors and tracks complete with frame and hardware. Install pipe hanging rod and shelving. Leave all walls and doors unpainted. Relocate existing electric wall switch to north wall of closet. Lump Sum Quotation Original Sheet				$790.00

Received
Chalmette N. H. P
MAR 25 1965
S pt.
Adm. Asst.
P rk Historian
Park Guide
Maintenance

P.O. 344-35 issued 3/29/65
Work accepted 4/23/65
Receiving Report submitted 4/23/65

Prices quoted include applicable Federal, State, and local taxes.

Discounts for prompt payment will be allowed as follows: ----------% 10 calendar days; ----------% 20 calendar days; ----------% 30 calendar days.

Quoter Represents: (Check appropriate boxes)

(1) That it ☐ is, ☐ is not, a small business concern. Generally, a small business concern for the purpose of Government procurement is a concern that (1) is not dominant in its field of operation and, with its affiliates, employs fewer than 500 employees, or (2) is certified as a small business concern by the Small Business Administration. (See *Code of Federal Regulations, Title 13, Part 121, as amended, which contains the detailed definition and related procedures.*) If quoter is a small business concern and is not the manufacturer of the supplies quoted on, it also represents that all supplies quoted on ☐ will, ☐ will not, be manufactured or produced by a small business concern in the United States, its Territories, its possessions, or the Commonwealth of Puerto Rico.

(2) That it is a ☐ regular dealer in, ☐ manufacturer of, the supplies quoted upon.

(3) That it operates as an ☐ individual, ☐ partnership, ☐ corporation, incorporated in the State of ----------

NAME OF QUOTER (Include address if different from above)	SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION	DATE
Pelican Remodelers, Inc. Ed Bell, Contractor	Ed Bell TYPE OR PRINT SIGNER'S NAME AND TITLE Ed Bell, Contractor	March 24, 1965 TELEPHONE NO. 525-1227

18-102

★ U.S. GOVERNMENT PRINTING OFFICE : 1960 O—555032

Wiring, 1965

STANDARD FORM 18, MAY 1959
GENERAL SERVICES ADMINISTRATION
FED. PROC. REG. (41 CFR) 1-16.201

REQUEST FOR QUOTATIONS — THIS IS NOT AN ORDER

REQUEST NO.	DATE ISSUED	SHEET NO.	NUMBER OF SHEETS
1	3/20/65	1	1

ISSUED BY
Chalmette National Historical Park
Box 125 Arabi, Louisiana 70032

FOR INFORMATION CALL: 271-2412 Mr. Reid or Mr. McCormick

DELIVERY (Check one)
☐ F.O.B. DESTINATION
☒ OTHER (See Supplies or Services)

REQUISITION NO./PURCHASE AUTHORITY NO.

REQUIRED DELIVERY DATE(S): 30 days following date of Purchase Order

Please furnish quotations in **Original Only** to the above office on or before the close of business (date) 3/19/65
Supplies are of domestic origin unless otherwise indicated by quoter. The Government reserves the right to consider quotations or modifications thereof received after the date indicated should such action be in the interest of the Government. This is a request for information and quotations furnished are not offers. If you are unable to quote, please so indicate on this form and return it. This request does not commit the Government to pay any costs incurred in the preparation or the submission of this quotation, or to procure or contract for supplies or services.

TO:
F & S Electric
63 Jones Drive
Chalmette, Louisiana

DESTINATION (Consignee and address)
Chalmette National Historical Park
Box 125
Arabi, Louisiana

ITEM NO.	SUPPLIES OR SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Furnish all supplies, materials, and labor to accomplish the following electrical work in the Park residence. Locations of outlets will be at direction of Park Superintendent.				
1	20 - circuit meter loop W.P.				
1	220 volt line and plug to window in living room				
2	110 volt lines and plugs in living room				
1	220 volt line and plug to window in dining room				
1	110 volt line and plug to dining room				
1	220 volt line and plug to window in small bedroom				
3	110 volt lines and plugs to small bedroom				
1	220 volt line and plug to window in large bedroom				
4	110 volt lines and plugs to large bedroom				
1	220 volt line and plug to dryer on back porch				
1	110 volt line and plug to washer on back porch				
1	220 volt line to water heater on back porch and connect heater when moved from present location				
1	110 volt single circuit to upstairs bath room and furnish and install 1800 watt combination light-heater-fan, NuTone or equal				
1	220 volt line and plug to locker room in Utility building.				
2	110 volt lines and plugs to upstairs den				
	Lump Sum of Costs and Expenses				$324.00

Received
Chalmette N. H. P.
MAR 15 1965
Superintendent
Admin. Asst.
Park Historian
Park Guide
Maintenance

P.O. 344-34
issued 3/24/65
to F&S Elec.
Work completed 4/22/65
Completion Report submitted 4/24/65

Prices quoted include applicable Federal, State, and local taxes.
Discounts for prompt payment will be allowed as follows: _____% 10 calendar days; _____% 20 calendar days; _____% 30 calendar days.
Quoter Represents: *(Check appropriate boxes)*
(1) That it ☐ is, ☐ is not, a small business concern. Generally, a small business concern for the purpose of Government procurement is a concern that (1) is not dominant in its field of operation and, with its affiliates, employs fewer than 500 employees, or (2) is certified as a small business concern by the Small Business Administration. *(See Code of Federal Regulations, Title 13, Part 121, as amended, which contains the detailed definition and related procedures.)* If quoter is a small business concern and is not the manufacturer of the supplies quoted on, it also represents that all supplies quoted on ☐ will, ☐ will not, be manufactured or produced by a small business concern in the United States, its Territories, its possessions, or the Commonwealth of Puerto Rico.
(2) That it is a ☐ regular dealer in, ☐ manufacturer of, the supplies quoted upon.
(3) That it operates as an ☐ individual, ☐ partnership, ☐ corporation incorporated in the State of _____

NAME OF QUOTER (Include address if different from above)	SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION	DATE
F & S Electric Inc 633 W Goodchildren St	George Smith Pres.	3-15-65
	TYPE OR PRINT SIGNER'S NAME AND TITLE GEORGE SMITH	TELEPHONE NO. 271-1673

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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