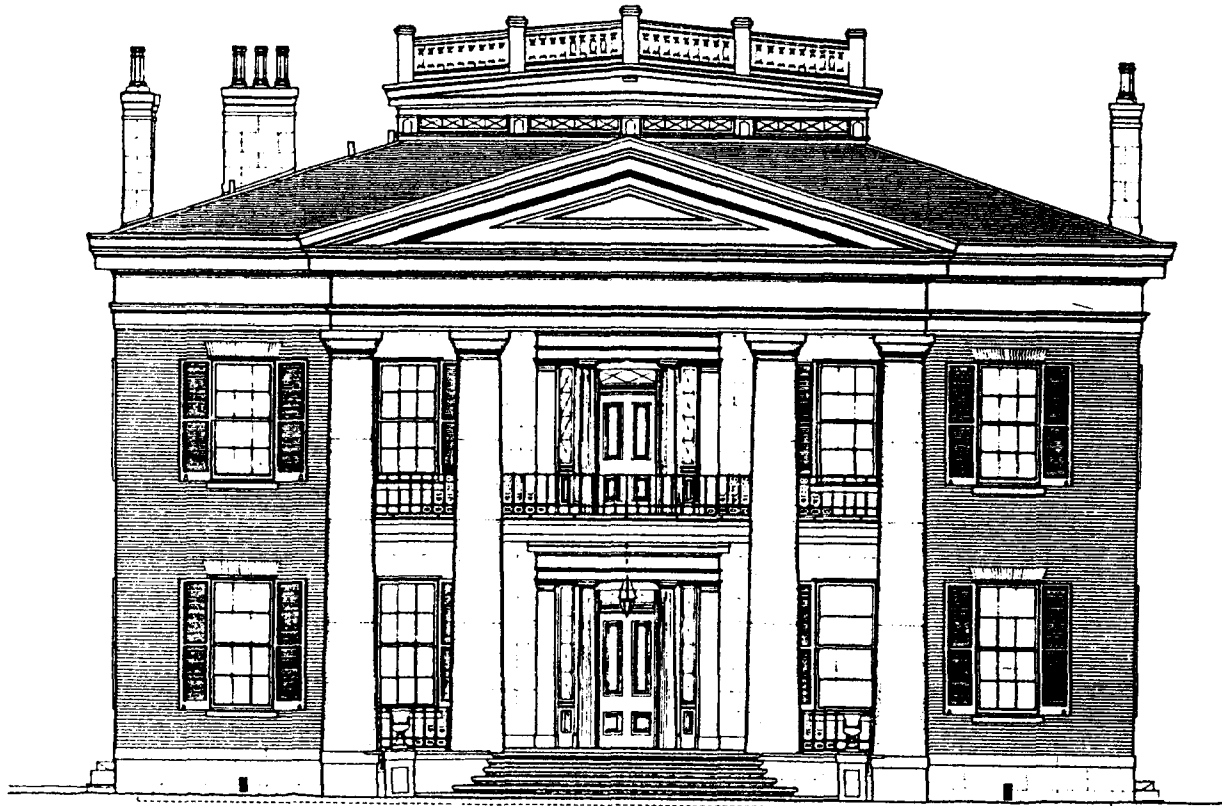


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Vol. 3 of 3



**MELROSE ESTATE
NATCHEZ NATIONAL HISTORICAL PARK**

NATCHEZ, MISSISSIPPI

**HISTORIC STRUCTURES REPORT
VOLUME III
APPENDIX**

ANN BEHA ASSOCIATES

BOSTON, MASSACHUSETTS

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8.2 Glossary of Terms

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GLOSSARY OF TERMS

Sources used for defining the following words were: *A Visual Dictionary of Architecture* by Francis Ching; *The Penguin Dictionary of Architecture*, 3rd edition, by John Fleming, Hugh Honour, and Nikolaus Pevsner; and *Webster's New Collegiate Dictionary*, 2nd edition.

Acroterion: Strictly, a pedestal at the corners or peak of a roof to support an ornament. More usually, the ornament itself.

All-stretcher Bond (vs. *running Bond*): In masonry, a bond in which bricks or stones are laid lengthwise; all courses are laid as stretchers with the vertical joints of one course falling midway between those of its adjacent course.

Ambient (temperature): The temperature of the surrounding air.

Anta: A pilaster of which the base and capital do not conform with the order used elsewhere on the building; it is usually placed at the ends of the projecting walls of a temple portico. If there are columns between the *antae* they are called columns *in antis*; the portico and temple itself may also be called *in antis*.

Anthemion: Ornament reminiscent of a honeysuckle flower alternating with palm leaves or palmettes, common in ancient Greek and Roman architecture.

Arabesque: A complex and ornate design that employs flowers, foliage, and, sometimes, animal and geometric figures to produce an intricate pattern of interlaced lines.

Architrave: In the classical orders, the lowest member of the entablature; the beam that spans from column-to-column, resting directly upon their capitals.

Chamfered: An oblique surface produced by beveling an edge or corner, usually at a 45° angle, as the edge of a board or masonry surface.

Cornice: The third and uppermost division of an entablature, resting on the frieze.

Dutchman: A small piece or wedge inserted as filler to stop an opening. A small piece of material used to cover a defect, such as to hide a badly made joint.

Egg and Dart: An ornamental motif for enriching an ovolo or echinus, consisting of a closely set, alternating series of oval and pointed forms.

Entablature: In classical architecture, the elaborated beam member carried by the columns, horizontally divided into architrave, frieze, and cornice. The proportions and detailing are different for each order, and strictly prescribed.

Frieze: The middle horizontal member of the classical entablature, above the architrave and below the cornice.

Mastic: Any heavy-bonded, dough-like adhesive compound. A sealant with putty-like properties.

Monitor: A raised section of a roof, usually straddling a ridge; has openings, louvers, or windows along the sides to admit light or air.

Newel Cap: The terminal feature of a newel post, often molded or turned in a decorative manner.

Newel Post: A post supporting one end of a handrail at the top or bottom of a flight of stairs.

Ogee Molding (reverse): A double curve, formed by the union of a convex and concave line, resembling an S-shape. A molding having such a shape.

Ovolo Molding: A convex molding, less than a semi-circle in profile, usually a quarter of a circle or approximately a quarter-ellipse in profile.

Palmette: A stylized palm leaf shape used as a decorative element in classical art and architecture.

Patterae (Patera): A small, flat, circular or oval ornament in classical architecture, often decorated with Acanthus leaves or rose petals.

Petrographic Examination: A laboratory determination of the mineralogical and chemical character of rocks; by extension, an analysis of the constituents of concrete, yielding the approximate cement content.

Plinth: A square or rectangular base for column, pilaster, or door framing. A recognizable base of an external wall, or the base courses of a building collectively, if so treated as to give the appearance of a platform.

Punkah: A fan suspended from the ceiling and operated by pulling a chord.

Springline: The level at which an arch springs from its supports. The bottom stone of the arch, resting on the impost of each side, can thus be called a springer.

Stair Stringer: In a stair, an inclined board that supports the end of the steps.

Stiles (door): The upright structural members of a frame, as at the outer edge of a door or window sash.

Tetrastyle: Having four columns on one or each front.

Trompe l'oeil: A drawing or painting in which objects are rendered in extremely fine detail to emphasize the illusion of tactile and spatial qualities.





8.3 List of Repositories



LIST OF REPOSITORIES

Adams County Courthouse
Office of the Chancery Clerk
Natchez, Mississippi

Adams County Courthouse
Office of the Circuit Clerk
Natchez, Mississippi

Judge George Armstrong Library
Natchez, Mississippi

Alma Kellogg Carpenter Collection
The Elms
Natchez, Mississippi

Chicago Historical Society
Chicago, Illinois

Department of the Interior
National Park Service
Natchez National Historical Park
Natchez, Mississippi

Historic Natchez Foundation
Natchez, Mississippi

Jordan, Kaiser, and Sessions, Engineers
Natchez, Mississippi

Louisiana State University
The Louisiana and Lower Mississippi Valley Collections
Baton Rouge, Louisiana

Mississippi Department of Archives and History
Special Collections
Jackson, Mississippi

University of Mississippi
Special Collections
Oxford, Mississippi

City of Natchez
Minute Books
Natchez, Mississippi

Natchez City Cemetery
Natchez, Mississippi

New York Public Library
Special Collections
New York, NY

Norman and Gandy Collections
Dr. and Mrs. Thomas H. Gandy
Myrtle Bank
Natchez, Mississippi

The University of North Carolina at Chapel Hill
The Southern Historical Collection
Chapel Hill, North Carolina

Special Collections
Northeast Louisiana University
Monroe, Louisiana

Margaret Westley Collection
Edelweiss
Natchez, Mississippi

8.4 Research Notes



Appendix

Education at Melrose during McMurren Period:

References to the name Madame St. Omer and Mrs. Brown in McMurren family correspondence refer to sisters Victorine St. Omer and Aglae Maria Brown. Aglae Maria Brown was a teacher of the McMurren children. Either Victorine St. Omer and/or her husband were also teachers. Mrs. McMurren described Madame St. Omer as having "lost her reason" and having set "out to visit the graveyard" in a letter dated September 7, 1853 (Mary Louisa McMurren to Frances E. Conner, 26 August 1853, Series 1, Folder 2:15, 7 September 1853, Series 1, Folder 2:16, and 10 September 1850, Conner Papers, LSU, NATC). Dr. Joseph Buck Stratton noted the yellow fever deaths of a Mr. St. Omer Sr. on August 15 and a Mr. St. Omer Jr. on August 19 (Joseph Buck Stratton, diary, LSU, typescript HNF, 137-38). The deaths of her husband and son apparently caused Victorine St. Omer's loss of reason.

About a month before the deaths of the St. Omers, Aglae Maria Brown had advertised the opening of her "Select French School in the house formerly occupied by Dr. C. H. Dubs (*Natchez The Daily Courier*, 10 August 1853)." This house still stands at 506 High Street and is listed in the National Register as the Tillman House (Tillman House site file, National Register nomination and chain of title, HNF). Aglae Brown, who left two children, died in 1856 (Adams County, Office of the Chancery Clerk, Final Record Book A:131).

Motion Pictures at Melrose during Kelly Period:

Heart of Maryland--1920

Freedom Road (television movie), Zev Braun Productions, 1978

Love's Savage Fury (television movie), Twentieth Century Fox, 1979

Beulah Land, (television mini-series), Columbia Pictures, 1980

Mistress of Paradise and *The Dark Secret of Black Bayou* (two titles--television movie), Lorimar, 1981

(Information on 1970s and 80s films furnished by the Mississippi Film Office in Jackson, Natchez Convention and Visitors Bureau, and John and Betty Callon)

African American families associated with Melrose during Kelly and Callon periods:

Alexander

Marian Kelly Ferry recalls that Louis Alexander and Ed Barland wired Melrose (Marian Kelly Ferry, 1976 interview). Louis Alexander did most of the outside work after Ed Barland died, retired, or left, but he was not as skilled as Ed Barland (MKF, 1996 interview)

Barland

Ed Barland has been described as the "overseer" at Melrose (MKF, 1976 interview). She stated that he and Louis Alexander wired Melrose in the 1920s and that her father had sent Ed Barland to Chicago to train as a mechanic, primarily to care for the Kelly automobiles, the pump in the smoke house, and the other machinery at Melrose. Ed Barland was still living at Melrose in 1921-22, when he and Louis Alexander wired Melrose (MKF, 1976 and 1996 interviews).

The author informally interviewed Edna Barland Smoot, Ed Barland's daughter, before her death in the 1980s. She grew up at Melrose and believed that her family came to live at Melrose due to some association with George Malin Davis before his death. Her husband Earl Smoot (446-7594) is still alive and lives below the bluff at the northern end of the Magnolia Vale estate. Earl Smoot needs to be interviewed to see if any of Edna Barland Smoot's siblings are still alive and might have memories of Melrose. Earl Smoot may also have knowledge about Melrose.

Ed Barland was probably the great-grandson of William Barland, an affluent Spanish and territorial period landowner, whose last will and testament records his relationship with a former slave by whom he fathered his only children. Some of the Barland descendants became prominent free African Americans and others passed as white (Barland research file, HNF). Marian Kelly Ferry noted the tradition that he was descended from a white man (MKF, 1996 interview).

Carter

Milton Carter ran the truck farm at Melrose during the Kelly Period (Fred Page, 1995 interview).

Doherty

James Doherty recorded as pouring milk into pans, which were placed in dairy troughs, and mowing grass (Page, 1995 interview).

Fisher

A photograph of Joe Fisher, taken at Melrose between 1901 and 1910 is labeled Joe Fisher, carpenter (MDAH)

Foster

Norm Foster cut hay at Melrose (Page, 1995 interview). Nels Foster recorded as doing mowing at Melrose (Page, 1995 interview)

Gordan

Robert Gordan went to Cleveland, Ohio, to learn to be an auto mechanic so he could work on Mr. Kelly's Ford car. He worked as a chauffeur for Mr. Kelly. Robert Gordan's wife was Lucille Foulles. The Gordans lived on or adjacent to Melrose and their daughter Anna Ruth Gordan Davis played with Marian Ferry. Anna Ruth Gordan Davis and Marian Kelly Ferry would be about the same age. Anna Ruth Gordan Davis stated that the house she was born in was no longer there. The 1908 survey map doesn't record any other houses on the Melrose property, and no record of any other such houses exists. It is possible that Anna Ruth Davis Gordan did not recognize one of the two slave cabins as her early childhood residence or that she possibly lived off the Melrose property (Anna Gordan Davis, interviewed by John S. Callon, at Melrose, 21 February 1990, HNF). Fred Page mentioned in an interview that Marian Kelly Ferry told him that she played with an African-American child who was her age and who lived in one of the two slaves cabins (Page, 1995 interview). Mrs. Ferry recalls the child she played with as Mary Williams (MKF, 1996 interview). Mrs. Anna Gordan Davis stated that her family left Natchez in 1922 and she had not been to Natchez since 1929 (*The Natchez Democrat*, 22 February 1990). The value of the Gordan information is questionable, since it is not substantiated in any other sources.

Jackson

Anna Jackson is probably the Anna mentioned as a cook by Fred Page (Page, 1995) and by her full name in a reference to the burial places of Alice Sims and Jane Johnson (Page, 1995).

Johnson

According to Marian Kelly Ferry, Jane Johnson was purchased as a child by her great-grandmother Elizabeth Shunk (written by MKF on the back of a color photo of Jane Johnson taken not long before her death; this photo was framed and formerly hung in the dining portion of the kitchen building during the Callon period (author). Jane Johnson lived to be 103 and died in 1946, indicating that she was born about 1843 (MKF, 1976 interview). She lived in the three-room slave cabin (MKF, 1990 interview). Marian Kelly Ferry and Fred Page indicate that Jane Johnson was the guiding force behind the operation of Melrose and its rehabilitation by Ethel Kelly (MKF, 1976 and 1990 interviews). Photographs of Jane Johnson at Melrose have been identified by Marian Kelly Ferry.

Charlie Johnson is recorded as working at Melrose during the Kelly period by Fred Page (1995 interview).

McGuffie

Willie McGuffie is recorded as having mowed grass at Melrose (Page, 1995 interview)

Mock

Johnnie Mock was the butler before Fred Page. Johnnie Mock lived in town (MKF 1996 interview)

Sims

Marian Kelly Ferry does not seem to have been as close to Alice Sims as to Jane Johnson (assumption by author). Alice Sims lived to be 96 (MKF, 1976 interview). Alice Sims's bedroom was over the dairy room in the dairy building (MKF, 1990 interview). Marian Kelly Ferry identified photographs of Alice Sims, who appears to have American Indian as well as African ancestry. Alice Sims may have been more involved with chickens and gardens, since Marian Kelly Ferry referred to the area south of the three-room slave cabin as "Aunt Alice's barnyard" (MKF, 1996 interview).

Vessel

Before Fred Page arrived at Melrose, the Kelly family cook was Zeretha Vessel. Zeretha Vessel was the granddaughter of Charles Vessel, slave at Monmouth before the Civil War. On June 8, 1862, Louisa Lovell wrote to her husband Joseph: "When you come, if you would like, I can give you Charles. He is now quite a young man....and I think would soon learn to be a very nice valet....(Quitman Papers, SHC, UNC, furnished by Robert May to author with no further documentation)." Charles Vessel Sr. died in 1911 and is buried in the Natchez City Cemetery (Natchez City Cemetery, tombstone). He attained the rank of colonel in the Union Army and is listed as "butler for General Quitman" in the muster roles (Ronald L. F. Davis, *The Black Experience in Natchez 1720-1880: Special History Study* (n.p.: Eastern National Park and Monument Association, 1994), 156. After the Civil War, he returned to Monmouth. His son was Charles Vessel Jr. who was a jockey in Natchez in the 1920s. Charles Vessel Jr was born and reared at Monmouth. Zeretha Vessel was the daughter of Charles Jr and she too lived at Monmouth. Zeretha Vessel's son Sidney Logan was born at Monmouth in 1919, not long before the Quitman descendants sold the house. Sidney Logan is a retired doctor who now lives in Los Angeles. Sidney Logan has stated that he always visited Ethel Kelly when he returned to Natchez for visits. He recalled that he was once a little tardy in making a visit to Melrose, and that Ethel Kelly showed up at his house to visit him before he returned to California (Sidney Logan, interviewed by the author, in Los Angeles, October 30, 1996).

Williams

Marian Kelly Ferry remembers playing with an African-American child named Mary Williams who lived at Melrose (Marian Kelly Ferry, 1976, 1990, and 1996 interview). Mary Williams was the sister of Bob Lee Williams who died about 1994 or 1995. Edna Barland Smoot, who also lived at Melrose as a child, directed the author to Bob Lee Williams for information about Melrose. Mr. Williams acknowledged having grown up at Melrose but was unable to provide much information due to ill health following a stroke; he has since died. Other brothers or sisters of Bob Lee Williams might be able to provide additional information and should be located. According to Marian Kelly Ferry, Mary Williams was six or eight months older and was her primary playmate until she was twelve years old. Mary's father was George Screws who worked as superintendent of Melrose. George's wife Celie worked as a cook at Melrose. The Screws/Williams family lived in the two-room slave cabin, which Mrs. Ferry remembers as not having a porch in the 1930s (MKF, 1990 and 1996 interviews).

Animals at Melrose during Kelly Period:

Dogs named Shervee and Fatima pictured in front of the dairy at Melrose during Kelly rehabilitation (MDAH)

The Kellys had Great Danes at Melrose when they first arrived (Fred Page, 1996 interview and photographs of Great Danes (NATC)

Mrs. Kelly had guinea hens at Melrose, which she prized as watchdogs, but she eventually got rid of them for making too much noise (MKF, 1996 interview)

Kellys had mules, jersey cows, chickens, turkeys, ducks, geese, and horses (MKF, 1976 and 1996 interviews and Page, 1995 interview)

Jane Johnson kept horses at Melrose (Page, 1995 interview)

Additional McMurrin Family Information:

Griffith

William Griffith, son of Theodosia Turner and William Griffith, visited Melrose in 1849, and his aunt Eliza Quitman described him as "fat and lazy as ever" and noted that he had formed a partnership with Sam Walker in the practice of law in New Orleans (Eliza Quitman to Henry Quitman, 17 September 1849, Quitman Papers, MDAH, microfilm, HNF). Sam Walker was the husband of Eliza Baker Walker, daughter of Looe and Eliza Baker and first cousin to Eliza Quitman and Mary Louisa McMurrin (see Melrose Developmental History).

Additional Information on Houses Associated with the McMurrin family:

Roselawn

Roselawn was owned during the early twentieth century by the Kaiser family, who operated a dairy on the property; the Kaiser family acquired the house from Lemuel Conner. Mrs. F. L. Smith, 305 High Street, Natchez, was a Kaiser before her marriage. Mrs. Smith stated that the existing Roselawn house has stood since the early twentieth century and that if an earlier house burned, it probably burned prior to 1900. Mrs. Smith said that the existing house was standing when her father bought Roselawn in the early 1900s. Mrs. Smith claims that the existing house was built by a Mr. Cartmell. Research into the Cartmell family found the existence of a Charles H. Cartmell, who has a tombstone in the Natchez City Cemetery. City Sexton records (City of Natchez Sexton Records, Armstrong Library, alphabetized computer print-out, HNF) record his death on June 15, 1908 at the age of 63 years. Mr. Cartmell's obituary newspaper has yet to be checked for any references to a building career or to any houses he might have built.

Daily Life at Melrose during Kelly Period:

Servants left every day at 3:00 p.m. (MKF, 1990 interview)
Wednesday was the day to clean lamps. (MKF, 1990 interview)
Marian had two baby nurses named Annie--old Annie and new Annie as they were called (MKF, 1990 interview)
No housekeeping done on Sunday (MKF, 1996 interview)
Family always ate in the dining room, even if only one person, and the main meal was served in the middle of day. The Kelly family heated leftovers for dinner because the servants left at 3:00 p.m. (MKF, 1990 interview)
Sunday dinner was always roasted chicken, creamed onions, canned peas, and custard with ladyfingers and meringue (MKF, 1996 interview)
Ethel Kelly rented rooms to overnight visitors during Pilgrimage in the 1950s (Page, 1995 interview)
Ethel Kelly loved football games and was one of the "football girls," which included Alma Kellogg, Kate Don Brandon, Rebecca Benoist, and Lalie Adams. They were given a special parking place at the Martin School stadium. The "football girls" continued to attend high school football games well into the 1960s. They were once incensed when a sign was put in front of their special parking place that read "Grand Old Ladies of Football," because they said that they were not grand old ladies; they were the football girls (Alma Kellogg Carpenter, The Elms, interviewed by author, at Natchez, June 1, 1996).
Kellys were Presbyterians; Ethel Kelly was very religious and the family attended three services on Sunday (MKF, 1996 interview).
Although most of Ethel Kelly's friends left the Natchez Garden Club for the Pilgrimage Garden Club during the garden club split, Ethel Kelly was one of the few homeowners who remained loyal to the Natchez Garden Club. She

Daily Life at Melrose during Kelly period (continued)

thought a percentage of the proceeds from Pilgrimage should be used for garden club projects (Alma Carpenter, 1996 interview).

Marian Kelly Ferry attended school in Natchez through high school graduation. This was unusual for her family, who sent their children to boarding school for high school (MKF, 1990 interview).

Marian Kelly Ferry's first boyfriend was the late Tom Reed of Natchez (MKF, 1990 interview). Tom Reed remembers being intimidated by the house and that they visited in the library when he came to call (author).

Daily Life at Melrose during Callon Period:

Marian Kelly Ferry sold Melrose to John and Betty Callon without openly advertising the house. She had received inquiries and met with some other potential purchasers as well. She expressed concern about one particular purchaser who had commented on how nice it would be to have a swimming pool in the rear courtyard. She apparently more or less selected the Callons as the purchasers (author).

John and Betty Callon were both reared in the Natchez area, although John Callon's roots in Natchez go much deeper than his wife's. John Callon is descended from some of the oldest and most prominent families in Natchez, including the families of Rev. Benjamin Chase and scholar B. L. C. Wailes. The Callon surname came from a Union soldier who was stationed as a guard at The Elms during the Civil War and married Miss Nannie Thornhill, whose family then resided in the house (author, John Callon, and Matilda Gresham's *Life of Walter Gresham*).

John Callon grew up in the country on a plantation known as Clover Hill. Like many in Natchez, he had great lineage and little wealth. He was one of four brothers that included Ben Chase Callon, Sim Callon, and June Callon. Ben Chase Callon was a prominent attorney and judge; June Callon was a planter and county supervisor, and John and Sim worked in the oil business and founded Callon Petroleum Company, now a publicly traded company. All four Callon boys were successful. In his final years, Ben Chase Callon lived in the two-room kitchen building, which had been renovated for use as a guest house (author).

John and Betty Callon have five children--three daughters, Cameron, Carol, and Anna and two sons, Chase and Cane. The children were all more or less grown when their parents moved into Melrose in 1978. Cameron's husband Tommy Harrison, a former school teacher, worked as the manager of Melrose until he died of cancer. Their son Cane and his wife Susan assumed the management roles after the death of Tommy Harrison until the house was acquired by the National Park Service (author).

Daily Life at Melrose during Callon period (continued):

John and Betty Callon had furnished their previous house in English and American furniture in the Chippendale, Queen Anne, and federal styles. Some of the furniture they had in their former house was given to their children when they moved into Melrose and some was relegated to the dependency buildings (author).

Although Melrose had been open every spring since 1932, except during the illness and death of Ethel Kelly, the Callons were the first to open the house on a daily basis. Even the master bedroom could be seen during most of the hours that the house was open to the public. Guides who worked for the Callons on a daily basis included Fred Page, Betty Callon's sister Robin Allen, and Mary Gunning. Betty Callon's long time cook, Barbara [ask Fred Page for last name] continued to work at Melrose. Also working at Melrose were Clarence Brown and James {ask NNHP for last name} (author).

John and Betty Callon had long been a favorite host and hostess in Natchez, and their entertainments became grander in scale and number after they moved into Melrose. The Callons also generously shared Melrose with the entire Natchez community. Few, if any, who asked to use the great house were denied. The Callons hosted city parties, economic development prospects, fund-raisers for the Humane Society, manufacturers of the Historic Natchez Collection, and many others. They also made Melrose available to the film industry when it came to Natchez in search of locations (author).

In addition to opening the house on a daily basis, the Callons also eventually began operating Melrose as a bed-and-breakfast. They rented only two rooms in the main house, since those rooms had to share a bathroom. They also rented the upstairs of the dairy and kitchen buildings as suites with sitting room, bedroom, and bathroom. Clarence Brown, who now works for the National Park Service, cooked breakfast for the overnight guests. Breakfast was served in the kitchen building and on the gallery of the building, when necessary or desired (author).

The Callons decided to sell Melrose in the mid-1980s after the devastating oil bust. Obviously, money played a part in the decision to sell the house, but the Callons could easily have sub-divided the Melrose acreage into quarter or half-acre building lots and realized a small fortune. John Callon indicated that he would have eventually sold the house regardless, because he would not have wanted Melrose divided into five pieces for his five children at his or Betty's death. Nor, he stated, could he leave Melrose to one child and equally compensate the other four (author).

Daily Life at Melrose during Callon Period (continued):

Betty Callon is one of the best cooks in Natchez, and she often spent her afternoons in the kitchen building preparing dinner for John and other guests as well. The majority of their dinner parties were informal affairs held in the kitchen building with guests having drinks and talking while Betty put the finishing touches on the meal. Dinner was eaten in the dining room in the kitchen building. At one dinner party in the kitchen, which included Marian Kelly Ferry, Marian noted that she had never eaten in that building and she considered it a treat (author).

Betty Callon did not like "receiving" at Pilgrimage and could often be found during Pilgrimage, when the house was on tour, in the kitchen frying chicken or doing other kind of kitchen work to prepare lunch for Melrose hostesses. Tourists almost always ask to see the owner of a historic house when the house is on tour, and they would be much amazed to learn that the woman at the stove in the kitchen building was the owner of Melrose (author).

John Callon likes roses, and the rose beds near the kitchen building were one of his hobbies. He also plays the piano and enjoyed Mr. Kelly's grand piano. John would entertain even if Betty were out of town. One cold winter night, John had a small dinner party in the kitchen building when Betty was out of town. He built a fire in the fireplace and hosted a small dinner party. Guests were Brent Bourland, Ron Miller, and Mimi Miller. A bed-and-breakfast guest arrived about 9:00 p.m. and was asked to sit at the table and share dessert. John served the meal alone, and, while we were eating dessert with the guests, he went into the kitchen to wash the dishes. It soon became apparent to us that that the bed-and-breakfast guests thought they were enjoying dessert with the Melrose hired help who were socializing at the end of the day. The guests were amazed to learn that the man who cooked, served the dinner, and washed the dishes in the kitchen was the owner of the house (author).

Fred Page had numerous jobs at Melrose during the Callon period. He continued working as the butler, but he served principally as a tour guide. The author has also seen Fred Page mop floors and clean at Melrose; he simply did what had to be done. At night, he was often at Melrose when the house was used for formal entertaining and he usually greeted guests and fixed their drinks. Sometimes he also helped with informal entertaining as well. Betty and John Callon commented that the National Park Service would have to hire Fred Page to keep Melrose working, since he was the only one who understood the mechanical systems and he could also open every piece of furniture that required a key whether there was a key or not. The Callons also stated that they knew that Fred Page, in his heart, continued to work for Ethel Kelly, although he kept any criticisms of the Callons to himself and was a team player during their ownership of Melrose (author). When Marian Kelly Ferry made her annual visits to Natchez, the Callons encouraged Fred Page to pick her up at the airport and to be available to help her during her Natchez visits. Fred Page's knowledge of Melrose and its history (Kelly and Callon periods) is astounding. He was more than Ethel Kelly's

Fred Page (continued)

employee; he was also her friend and was and is today a vital player in the preservation and interpretation of Melrose (author).

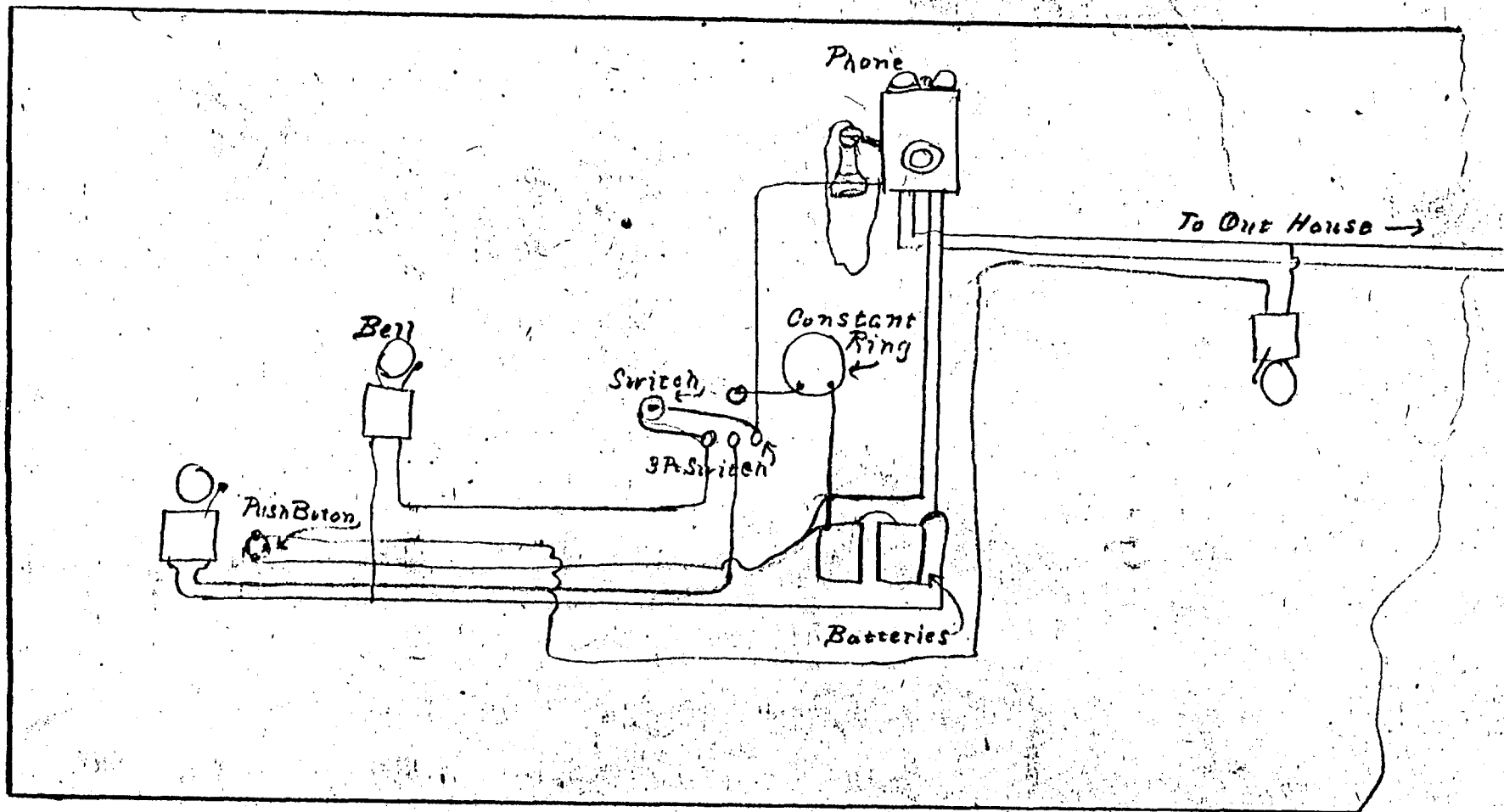


8.5 Historical Documents:

**Sketch by George M. D. Kelly
(Showing wiring for telephone and call bell system)
National Register Inventory Form
1994-1995 Attendance Records**



G. M. D. Kelly





Form 10-300
(Rev. 6-72)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

| |
|-----------------------|
| STATE: Mississippi |
| COUNTY: Adams |
| FOR NPS USE ONLY |
| ENTRY DATE |

(Type all entries complete applicable sections)

1. NAME

COMMON:

AND/OR HISTORIC:
Melrose

2. LOCATION

STREET AND NUMBER:
Melrose Avenue

CITY OR TOWN:
Natchez

CONGRESSIONAL DISTRICT:
4

STATE: Mississippi

CODE: 28

COUNTY: Adams

CODE: 001

3. CLASSIFICATION

| CATEGORY (Check One) | OWNERSHIP | STATUS | ACCESSIBLE TO THE PUBLIC |
|---|---|---|--|
| <input type="checkbox"/> District <input type="checkbox"/> Site <input type="checkbox"/> Object <input checked="" type="checkbox"/> Building <input type="checkbox"/> Structure | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private <input type="checkbox"/> Both | <input checked="" type="checkbox"/> Occupied <input type="checkbox"/> Unoccupied <input type="checkbox"/> Preservation work In progress <input type="checkbox"/> In Process <input type="checkbox"/> Being Considered | Yes: <input checked="" type="checkbox"/> Restricted <input type="checkbox"/> Unrestricted <input type="checkbox"/> No |

PRESENT USE (Check One or More as Appropriate)

| | | | | |
|--|-------------------------------------|---|--|-----------------------------------|
| <input type="checkbox"/> Agricultural | <input type="checkbox"/> Government | <input type="checkbox"/> Park | <input type="checkbox"/> Transportation | <input type="checkbox"/> Comments |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Industrial | <input checked="" type="checkbox"/> Private Residence | <input type="checkbox"/> Other (Specify) | |
| <input type="checkbox"/> Educational | <input type="checkbox"/> Military | <input type="checkbox"/> Religious | | |
| <input type="checkbox"/> Entertainment | <input type="checkbox"/> Museum | <input type="checkbox"/> Scientific | | |

4. OWNER OF PROPERTY

OWNER'S NAME:
Estate of George Malin Davis Kelly

STREET AND NUMBER:
Melrose

CITY OR TOWN:
Natchez

STATE:
Mississippi

CODE:
28

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC:
Office of the Chancery Clerk

STREET AND NUMBER:
Adams County Courthouse

CITY OR TOWN:
Natchez

STATE:
Mississippi

CODE:
28

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:
Historic American Buildings Survey (2 photos)

DATE OF SURVEY:
1934

DEPOSITORY FOR SURVEY RECORDS:
Division of Prints and Photographs

STREET AND NUMBER:
Library of Congress

CITY OR TOWN:
Washington

STATE:
D. C.

CODE:
11

STATE: Mississippi

COUNTY: Adams

ENTRY NUMBER

FOR NPS USE ONLY

DATE

SEE INSTRUCTIONS

SIGNIFICANCE

PERIOD (Check One or More as Appropriate)

- Pre-Columbian
- 15th Century
- 16th Century
- 17th Century
- 18th Century
- 19th Century
- 20th Century

SPECIFIC DATE(S) (If Applicable and Known) 1845

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

- | | | | |
|--|--------------------------------------|---|--|
| <input type="checkbox"/> Aboriginal | <input type="checkbox"/> Education | <input type="checkbox"/> Political | <input type="checkbox"/> Urban Planning |
| <input type="checkbox"/> Prehistoric | <input type="checkbox"/> Engineering | <input type="checkbox"/> Religion/Phi- | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Historic | <input type="checkbox"/> Industry | losophy | _____ |
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Invention | <input type="checkbox"/> Science | _____ |
| <input checked="" type="checkbox"/> Architecture | <input type="checkbox"/> Landscape | <input type="checkbox"/> Sculpture | _____ |
| <input type="checkbox"/> Art | Architecture | <input type="checkbox"/> Social/Human- | _____ |
| <input type="checkbox"/> Commerce | <input type="checkbox"/> Literature | itarian | _____ |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Military | <input type="checkbox"/> Theater | _____ |
| <input type="checkbox"/> Conservation | <input type="checkbox"/> Music | <input type="checkbox"/> Transportation | _____ |

STATEMENT OF SIGNIFICANCE

In a community of magnificent mansions, Melrose is remarkable for the perfection of its design and the integrity of its maintenance and surroundings. Its detached kitchen is still used, having never been replaced by alterations or additions to the main house. Built in 1845, its ownership has been in only two families; its furnishings have never been dispersed. The lawns and outbuildings complete a complex designed and executed as a whole and never compromised by unsympathetic accretions or encroachments.

SEE INSTRUCTIONS

| | | | | |
|---|---|---|--|---|
| DESCRIPTION | | | | |
| CONDITION | (Check One) <input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Deteriorated <input type="checkbox"/> Ruins <input type="checkbox"/> Unexposed | | | |
| | <table border="1"> <tr> <td>(Check One) <input type="checkbox"/> Altered</td> <td>(Check One) <input checked="" type="checkbox"/> Unaltered</td> <td>(Check One) <input type="checkbox"/> Moved</td> <td>(Check One) <input type="checkbox"/> Original Site</td> </tr> </table> | (Check One) <input type="checkbox"/> Altered | (Check One) <input checked="" type="checkbox"/> Unaltered | (Check One) <input type="checkbox"/> Moved |
| (Check One) <input type="checkbox"/> Altered | (Check One) <input checked="" type="checkbox"/> Unaltered | (Check One) <input type="checkbox"/> Moved | (Check One) <input type="checkbox"/> Original Site | |

DESCRIBE THE PRESENT AND ORIGINAL (If known) PHYSICAL APPEARANCE

Melrose, though not innovative, is a highly successful attempt at perfecting the Natchez plantation mansion created at Auburn and Arlington 25 or 30 years before. The dimensions are somewhat larger and the construction more solid. The Doric tetrastyle portico is modified by the broad spacing of the center columns; the iron railings are notable for their delicacy. The rear gallery is incorporated in the design and the hip roof is crowned with a balustrade.

Fluted Ionic columns frame the broad interior openings which have carved sunbursts in the transom space. Wood mouldings, despite their large scale and simple profiles, do not appear ponderous. Plaster cornices are of Spartan simplicity and the dark marble mantels are simply carved. The Grecian purity of the architectural setting contrasts sharply with the ornate Victorian furniture; bronze chandeliers, gold-framed mirrors and heavy draperies. A carved mahogany punkah is prominent in the dining room.

Melrose is most remarkable for the quality of the preservation and maintenance of the house, outbuildings and grounds. To the rear of the house is a symmetrical service yard; a two-story kitchen, latticed octagonal cistern house and square brick privy on the left are balanced by a two-story dairy and identical cistern house and privy on the right. Slave cabins, a barn, carriage house, and poultry house are more distant. The approach drive skirts the great, shaded lawns at the front.

Built in 1845 for attorney John T. McMurren, Melrose was his until 1865 when it was sold, with most of its furnishings, to George Malin Davis. Vacant through a quarter-century, the house in 1901 became the home of Davis' grandson, George M. D. Kelly, and his bride, a spirited lady who has lived there for 73 years.

SEE INSTRUCTIONS

U.S. G.P.O.
July 1969

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

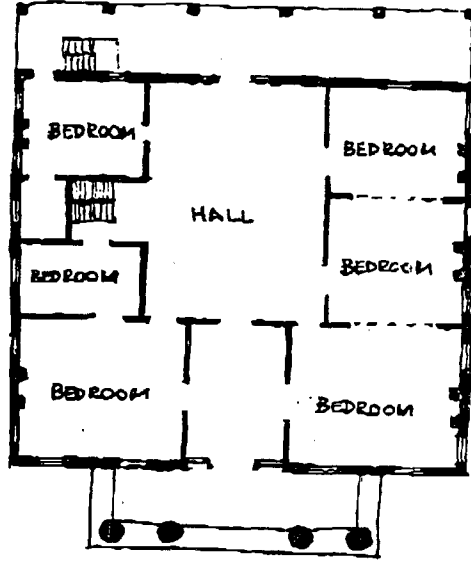
| | |
|----------------------|------|
| STATE Mississippi | |
| COUNTY Adams | |
| FOR NPS USE ONLY | |
| ENTRY NUMBER | DATE |
| | |



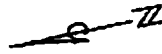
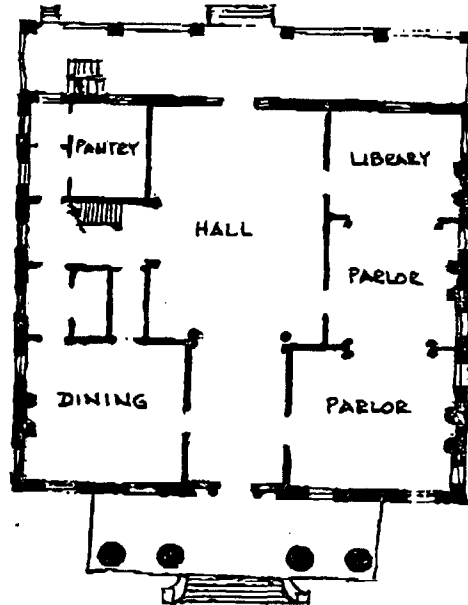
(Number all entries)

Plans of Melrose
Natchez, Mississippi

Second floor



First floor



FOR BIBLIOGRAPHICAL REFERENCES

10. GEOGRAPHICAL DATA

| LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY | | | LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES | | | |
|--|----------|---------|---|---------|---------|---------|
| CORNER | LATITUDE | | LONGITUDE | | | |
| | Degrees | Minutes | Seconds | Degrees | Minutes | Seconds |
| NW | 31° | 32' | 41½" | 91° | 23' | 05" |
| NE | 31° | 32' | 41½" | 91° | 22' | 41½" |
| SE | 31° | 32' | 22" | 91° | 22' | 46" |
| SW | 31° | 32' | 21" | 91° | 23' | 09" |

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: **56.1 acres**

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

| STATE: | CODE | COUNTY | CODE |
|--------|------|--------|------|
| | | | |
| | | | |
| | | | |
| | | | |

11. FORM PREPARED BY

NAME AND TITLE:
Paul Goeldner, Architect, Historic Sites Survey

ORGANIZATION: **Division of Historic and Architectural Surveys, National Park Service** DATE: **1/7/74**

STREET AND NUMBER:
1100 L Street NW

CITY OR TOWN: **Washington** STATE: **District of Columbia** CODE:

12. STATE LIAISON OFFICER CERTIFICATION NATIONAL REGISTER VERIFICATION

| | |
|--|--|
| <p>As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:</p> <p>National <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/></p> <p>Name _____</p> <p>Title _____</p> <p>Date _____</p> | <p>I hereby certify that this property is included in the National Register.</p> <p>_____ Director, Office of Archeology and Historic Preservation</p> <p>Date _____</p> <p>ATTEST:</p> <p>_____ Keeper of The National Register</p> <p>Date _____</p> |
|--|--|

SEE INSTRUCTIONS



ATTENDANCE RECORDS

MAY - 1994

Daily Monthly

| | | REG | U-17 | GA | C | BT | OV | TOTALS | | CASH | | | | | |
|---|----|-----|------|----|----|----|-----|--------|-----|------|---|----|-------|-----|-------|
| S | 1 | 30 | 30 | 2 | 2 | 14 | 14 | 0 | 0 | 0 | 0 | 46 | 46 | 152 | 152 |
| M | 2 | 17 | 47 | 0 | 2 | 9 | 23 | 1 | 0 | 0 | 0 | 27 | 73 | 86 | 238 |
| T | 3 | 6 | 53 | 0 | 2 | 12 | 35 | 0 | 0 | 0 | 0 | 18 | 91 | 48 | 286 |
| W | 4 | 10 | 63 | 0 | 2 | 18 | 53 | 0 | 0 | 0 | 0 | 28 | 119 | 76 | 362 |
| T | 5 | 14 | 77 | 0 | 2 | 14 | 67 | 1 | 0 | 0 | 0 | 29 | 148 | 84 | 446 |
| F | 6 | 12 | 89 | 0 | 2 | 11 | 78 | 30 | (1) | 0 | 0 | 53 | 201 | 70 | 516 |
| S | 7 | 32 | 121 | 0 | 2 | 7 | 85 | 4 | 0 | 0 | 0 | 43 | 244 | 142 | 658 |
| S | 8 | 27 | 148 | 0 | 2 | 13 | 98 | 1 | 0 | 0 | 0 | 41 | 285 | 134 | 792 |
| M | 9 | 17 | 165 | 0 | 2 | 36 | 134 | 0 | (1) | 0 | 0 | 53 | 338 | 140 | 932 |
| T | 10 | 14 | 179 | 0 | 2 | 5 | 139 | 2 | 0 | 0 | 0 | 21 | 359 | 66 | 998 |
| W | 11 | 18 | 197 | 0 | 2 | 30 | 169 | 0 | 0 | 0 | 0 | 48 | 407 | 132 | 1,130 |
| T | 12 | 16 | 213 | 0 | 2 | 7 | 176 | 0 | (1) | 0 | 0 | 23 | 430 | 78 | 1,208 |
| F | 13 | 8 | 221 | 0 | 2 | 24 | 200 | 0 | 0 | 0 | 0 | 32 | 462 | 80 | 1,288 |
| S | 14 | 28 | 249 | 0 | 2 | 16 | 216 | 20 | 0 | 0 | 0 | 64 | 526 | 144 | 1,432 |
| | 15 | 33 | 282 | 2 | 4 | 8 | 224 | 4 | 0 | 0 | 0 | 47 | 573 | 156 | 1,588 |
| M | 16 | 29 | 311 | 2 | 6 | 6 | 230 | 23 | (1) | 0 | 0 | 60 | 633 | 132 | 1,720 |
| T | 17 | 22 | 333 | 3 | 9 | 13 | 243 | 0 | 0 | 0 | 0 | 38 | 661 | 120 | 1,840 |
| W | 18 | 22 | 355 | 1 | 10 | 16 | 259 | 2 | 0 | 0 | 0 | 41 | 702 | 122 | 1,962 |
| T | 19 | 10 | 365 | 0 | 10 | 10 | 269 | 0 | 0 | 0 | 0 | 20 | 722 | 60 | 2,022 |
| F | 20 | 16 | 381 | 5 | 15 | 11 | 280 | 23 | (1) | 0 | 0 | 55 | 777 | 96 | 2,118 |
| S | 21 | 27 | 408 | 1 | 16 | 2 | 282 | 0 | 0 | 0 | 0 | 30 | 807 | 114 | 2,232 |
| S | 22 | 33 | 441 | 0 | 16 | 16 | 298 | 2 | 0 | 0 | 0 | 51 | 858 | 164 | 2,396 |
| M | 23 | 22 | 463 | 1 | 17 | 11 | 309 | 1 | 0 | 0 | 0 | 35 | 893 | 112 | 2,508 |
| T | 24 | 22 | 485 | 5 | 22 | 12 | 321 | 0 | 0 | 0 | 0 | 39 | 932 | 122 | 2,630 |
| W | 25 | 20 | 505 | 0 | 22 | 16 | 337 | 0 | 0 | 0 | 0 | 36 | 968 | 112 | 2,742 |
| T | 26 | 28 | 533 | 0 | 22 | 8 | 345 | 2 | 0 | 0 | 0 | 38 | 1,006 | 128 | 2,870 |
| F | 27 | 37 | 570 | 4 | 26 | 8 | 353 | 0 | 0 | 0 | 0 | 49 | 1,055 | 172 | 3,042 |
| S | 28 | 39 | 609 | 0 | 26 | 4 | 357 | 2 | 0 | 0 | 0 | 45 | 1,100 | 164 | 3,206 |
| S | 29 | 76 | 685 | 5 | 31 | 13 | 370 | 2 | 0 | 0 | 0 | 96 | 1,196 | 340 | 3,546 |
| M | 30 | 44 | 729 | 5 | 36 | 4 | 374 | 23 | (1) | 0 | 0 | 86 | 1,285 | 194 | 3,740 |
| | 31 | 27 | 756 | 1 | 37 | 13 | 387 | 0 | 0 | 0 | 0 | 41 | 1,326 | 136 | 3,876 |

overage
\$4.00

JULY - 1994

| | | REG | | U-17 | | GA | | C BT | | OV | | TOTALS | | CASH | |
|---|----|-----|-------|------|-----|----|-----|------|---|----|----|--------|-------|------|-------|
| F | 1 | 23 | 23 | 1 | 1 | 8 | 8 | 0 | 0 | 0 | 0 | 32 | 32 | 110 | 110 |
| S | 2 | 36 | 59 | 3 | 4 | 7 | 15 | 3 | 0 | 0 | 0 | 49 | 81 | 164 | 274 |
| S | 3 | 87 | 146 | 18 | 22 | 9 | 24 | 0 | 0 | 0 | 0 | 104 | 185 | 402 | 676 |
| M | 4 | 48 | 294 | 2 | 24 | 4 | 28 | 1 | 0 | 10 | 10 | 65 | 250 | 236 | 912 |
| T | 5 | 38 | 332 | 14 | 38 | 3 | 31 | 2 | 0 | 0 | 10 | 57 | 307 | 186 | 1,098 |
| W | 6 | 26 | 358 | 1 | 39 | 9 | 40 | 0 | 0 | 0 | 10 | 36 | 343 | 124 | 1,222 |
| T | 7 | 41 | 399 | 14 | 53 | 3 | 43 | 0 | 0 | 0 | 10 | 58 | 401 | 198 | 1,420 |
| F | 8 | 35 | 434 | 6 | 59 | 0 | 43 | 3 | 0 | 0 | 10 | 44 | 445 | 152 | 1,572 |
| S | 9 | 20 | 454 | 2 | 61 | 6 | 49 | 0 | 0 | 0 | 10 | 28 | 473 | 96 | 1,668 |
| S | 10 | 30 | 484 | 1 | 62 | 3 | 52 | 0 | 0 | 0 | 10 | 34 | 507 | 128 | 1,796 |
| M | 11 | 6 | 490 | 3 | 65 | 2 | 54 | 2 | 0 | 0 | 10 | 13 | 520 | 34 | 1,830 |
| T | 12 | 19 | 509 | 8 | 73 | 5 | 59 | 1 | 0 | 0 | 10 | 33 | 553 | 102 | 1,932 |
| W | 13 | 16 | 525 | 7 | 80 | 3 | 62 | 1 | 0 | 0 | 10 | 27 | 580 | 84 | 2,016 |
| T | 14 | 21 | 546 | 4 | 84 | 3 | 65 | 0 | 0 | 0 | 10 | 28 | 608 | 98 | 2,045 |
| F | 15 | 27 | 573 | 13 | 97 | 6 | 71 | 12 | 1 | 0 | 10 | 58 | 666 | 146 | 2,191 |
| S | 16 | 52 | 625 | 21 | 118 | 4 | 75 | 26 | 0 | 0 | 10 | 103 | 769 | 258 | 2,449 |
| S | 17 | 34 | 659 | 5 | 123 | 8 | 83 | 2 | 0 | 0 | 10 | 49 | 818 | 162 | 2,611 |
| M | 18 | 26 | 685 | 10 | 133 | 3 | 86 | 1 | 0 | 0 | 10 | 40 | 858 | 130 | 2,741 |
| T | 19 | 32 | 717 | 13 | 146 | 9 | 95 | 2 | 0 | 0 | 10 | 56 | 914 | 172 | 2,913 |
| W | 20 | 24 | 741 | 4 | 150 | 9 | 104 | 1 | 0 | 0 | 10 | 38 | 958 | 122 | 3,035 |
| T | 21 | 29 | 770 | 6 | 156 | 1 | 105 | 2 | 0 | 0 | 10 | 38 | 996 | 130 | 3,165 |
| F | 22 | 26 | 796 | 3 | 159 | 5 | 110 | 5 | 0 | 0 | 10 | 39 | 1,035 | 120 | 3,285 |
| S | 23 | 38 | 834 | 30 | 189 | 11 | 121 | 1 | 0 | 0 | 10 | 80 | 1,115 | 234 | 3,519 |
| S | 24 | 43 | 877 | 5 | 194 | 19 | 140 | 1 | 0 | 0 | 10 | 68 | 1,183 | 220 | 3,739 |
| M | 25 | 22 | 899 | 0 | 194 | 5 | 145 | 0 | 0 | 0 | 10 | 27 | 1,210 | 98 | 3,837 |
| T | 26 | 36 | 935 | 16 | 210 | 1 | 146 | 1 | 0 | 0 | 10 | 54 | 1,264 | 178 | 4,015 |
| W | 27 | 11 | 946 | 4 | 214 | 5 | 151 | 0 | 0 | 0 | 10 | 20 | 1,284 | 62 | 4,077 |
| T | 28 | 35 | 1,081 | 5 | 219 | 7 | 158 | 1 | 0 | 0 | 10 | 48 | 1,332 | 164 | 4,241 |
| F | 29 | 19 | 1,100 | 4 | 223 | 10 | 168 | 0 | 0 | 0 | 10 | 33 | 1,365 | 104 | 4,345 |
| S | 30 | 48 | 1,148 | 7 | 230 | 12 | 180 | 0 | 0 | 0 | 10 | 67 | 1,432 | 230 | 4,575 |
| S | 31 | 36 | 1,184 | 14 | 244 | 4 | 184 | 0 | 0 | 0 | 10 | 54 | 1,486 | 180 | 4,755 |

AUGUST - 1994

| | | REG | | U-17 | | GA | | C BT | | OV | | TOTALS | | CASH | | |
|---|----|---------------------|-----|------|-----|----|-----|------|-----|----|---|--------|-----|------|-------|---|
| M | 1 | 27 | 27 | 1 | 1 | 8 | 8 | 1 | 0 | 0 | 0 | 37 | 37 | 126 | 126 | |
| T | 2 | 36 | 63 | 16 | 17 | 5 | 13 | 4 | 0 | 0 | 0 | 61 | 98 | 186 | 312 | |
| W | 3 | 19 | 82 | 9 | 26 | 5 | 18 | 2 | 0 | 0 | 0 | 35 | 133 | 104 | 416 | |
| T | 4 | 37 | 119 | 6 | 32 | 7 | 25 | 2 | 0 | 0 | 0 | 52 | 185 | 174 | 590 | |
| F | 5 | 27 | 146 | 9 | 41 | 5 | 30 | 2 | 0 | 0 | 0 | 43 | 228 | 136 | 726 | |
| S | 6 | 38 | 184 | 1 | 42 | 2 | 32 | 2 | 0 | 0 | 0 | 43 | 271 | 158 | 884 | |
| S | 7 | 49 | 233 | 10 | 52 | 11 | 43 | 5 | 0 | 0 | 0 | 75 | 346 | 238 | 1,122 | |
| M | 8 | 26 | 259 | 5 | 57 | 2 | 45 | 0 | 0 | 0 | 0 | 33 | 379 | 118 | 1,240 | |
| T | 9 | 29 | 288 | 8 | 65 | 10 | 55 | 0 | 0 | 0 | 0 | 47 | 426 | 152 | 1,392 | |
| W | 10 | 11 | 299 | 7 | 72 | 2 | 57 | 1 | 0 | 0 | 0 | 21 | 447 | 62 | 1,454 | |
| T | 11 | 27 | 326 | 0 | 72 | 10 | 67 | 0 | (1) | 0 | 0 | 37 | 484 | 128 | 1,582 | |
| F | 12 | 15 | 341 | 2 | 74 | 3 | 70 | 0 | 0 | 0 | 0 | 20 | 504 | 70 | 1,652 | |
| S | 13 | 47 | 388 | 7 | 81 | 10 | 80 | 0 | 0 | 0 | 0 | 64 | 568 | 222 | 1,874 | |
| S | 14 | 46 | 434 | 6 | 87 | 6 | 86 | 0 | 0 | 0 | 0 | 58 | 626 | 208 | 2,082 | |
| M | 15 | 13 | 447 | 0 | 87 | 0 | 86 | 0 | 0 | 0 | 0 | 13 | 639 | 52 | 2,134 | |
| T | 16 | 8 | 455 | 2 | 89 | 3 | 89 | 0 | 0 | 0 | 0 | 13 | 652 | 42 | 2,176 | |
| W | 17 | 21 | 476 | 7 | 96 | 5 | 94 | 2 | 0 | 0 | 0 | 35 | 687 | 108 | 2,284 | |
| T | 18 | 7 | 483 | 3 | 99 | 2 | 96 | 0 | 0 | 0 | 0 | 12 | 699 | 38 | 2,322 | |
| F | 19 | 22 | 505 | 5 | 104 | 4 | 100 | 0 | 0 | 0 | 0 | 31 | 730 | 106 | 2,428 | |
| S | 20 | 21 | 526 | 3 | 107 | 6 | 106 | 0 | 0 | 0 | 0 | 30 | 760 | 102 | 2,530 | |
| S | 21 | 15 | 541 | 2 | 109 | 0 | 106 | 0 | 0 | 0 | 0 | 17 | 777 | 64 | 2,594 | |
| M | 22 | 12 | 553 | 7 | 116 | 0 | 106 | 0 | 0 | 0 | 0 | 19 | 796 | 62 | 2,656 | |
| T | 23 | 10 | 563 | 0 | 116 | 0 | 106 | 30 | (1) | 0 | 0 | 40 | 836 | 40 | 2,696 | |
| W | 24 | 13 | 576 | 3 | 119 | 4 | 110 | 0 | 0 | 0 | 0 | 20 | 856 | 66 | 2,762 | |
| T | 25 | F R E E * T O U R S | | | | | | 0 | 0 | 0 | 0 | 0 | 11 | 867 | — | — |
| F | 26 | 10 | 586 | 4 | 123 | 12 | 122 | 0 | 0 | 0 | 0 | 26 | 893 | 72 | 2,834 | |
| S | 27 | 5 | 591 | 0 | 123 | 2 | 124 | 0 | 0 | 0 | 0 | 7 | 900 | 24 | 2,858 | |
| S | 28 | 11 | 602 | 0 | 123 | 3 | 127 | 0 | 0 | 0 | 0 | 14 | 914 | 50 | 2,908 | |
| M | 29 | 11 | 613 | 0 | 123 | 1 | 128 | 0 | 0 | 0 | 0 | 12 | 926 | 46 | 2,954 | |
| T | 30 | 3 | 616 | 0 | 123 | 7 | 135 | 0 | 0 | 0 | 0 | 10 | 936 | 26 | 2,980 | |
| W | 31 | 8 | 624 | 0 | 123 | 0 | 135 | 0 | 0 | 0 | 0 | 8 | 944 | 32 | 3,012 | |

PICRAMMASE

OCTOBER - 1994

| | | REG | U-17 | GA | C | BT | OV | TOTALS | | CASH | | | | | | |
|---|----|-----|------|----|----|----|-----|--------|-----|------|----|----|-------|-------------------|-------|-----|
| S | 1 | 30 | 30 | 3 | 3 | 14 | 14 | 1 | 0 | 0 | 0 | 48 | 48 | 154 | 154 | |
| S | 2 | 26 | 56 | 2 | 5 | 16 | 30 | 17 | 0 | 0 | 0 | 61 | 109 | 140 | 294 | |
| M | 3 | 15 | 71 | 0 | 5 | 18 | 48 | 3 | 0 | 0 | 0 | 36 | 145 | 96 | 390 | |
| T | 4 | 11 | 82 | 2 | 7 | 11 | 59 | 2 | 2 | 0 | 0 | 62 | 207 | 70 | 460 | |
| W | 5 | 24 | 106 | 0 | 7 | 14 | 73 | 0 | 0 | 0 | 0 | 38 | 245 | 124 | 584 | |
| T | 6 | 28 | 134 | 0 | 7 | 12 | 85 | 0 | 0 | 0 | 0 | 40 | 285 | 136 | 720 | |
| F | 7 | 22 | 156 | 0 | 7 | 10 | 95 | 0 | 0 | 0 | 0 | 32 | 317 | 108 | 828 | |
| S | 8 | 37 | 193 | 1 | 8 | 14 | 109 | 0 | 0 | 0 | 0 | 52 | 369 | 178 | 1,006 | |
| S | 9 | 46 | 239 | 8 | 16 | 5 | 114 | 4 | 0 | 0 | 0 | 63 | 432 | 210 | 1,216 | |
| M | 10 | 25 | 264 | 0 | 16 | 14 | 128 | 0 | 0 | 0 | 0 | 39 | 471 | 128 | 1,344 | |
| T | 11 | 24 | 288 | 0 | 16 | 11 | 139 | 2 | 0 | 0 | 0 | 37 | 508 | 118 | 1,462 | |
| W | 12 | 22 | 310 | 2 | 18 | 12 | 151 | 1 | 0 | 0 | 0 | 37 | 545 | 116 | 1,578 | |
| T | 13 | 29 | 339 | 0 | 18 | 44 | 195 | 1 | (1) | 22 | 22 | 96 | 641 | 283 ²⁰ | 1,861 | .20 |
| F | 14 | 17 | 356 | 2 | 20 | 29 | 224 | 1 | 0 | 0 | 22 | 49 | 690 | 130 | 1,991 | .20 |
| S | 15 | 40 | 396 | 10 | 30 | 11 | 235 | 3 | 0 | 0 | 22 | 64 | 754 | 202 | 2,193 | .20 |
| S | 16 | 43 | 439 | 7 | 37 | 8 | 243 | 3 | 0 | 0 | 22 | 61 | 815 | 202 | 2,395 | .20 |
| M | 17 | 22 | 461 | 2 | 39 | 17 | 260 | 1 | 0 | 0 | 22 | 42 | 857 | 126 | 2,521 | .20 |
| T | 18 | 29 | 490 | 0 | 39 | 29 | 289 | 2 | (1) | 0 | 22 | 60 | 917 | 174 | 2,695 | .20 |
| W | 19 | 18 | 508 | 0 | 39 | 11 | 300 | 48 | (3) | 0 | 22 | 77 | 994 | 94 | 2,789 | .20 |
| T | 20 | 19 | 527 | 0 | 39 | 15 | 315 | 0 | (1) | 0 | 22 | 34 | 1,028 | 106 | 2,895 | .20 |
| F | 21 | 30 | 557 | 4 | 43 | 38 | 353 | 0 | (1) | 0 | 22 | 72 | 1,100 | 204 | 3,099 | .20 |
| S | 22 | 31 | 588 | 5 | 48 | 63 | 416 | 0 | (1) | 0 | 22 | 99 | 1,199 | 260 | 3,359 | .20 |
| S | 23 | 11 | 599 | 1 | 49 | 12 | 428 | 0 | 0 | 0 | 22 | 24 | 1,223 | 70 | 3,429 | .20 |
| M | 24 | 16 | 615 | 1 | 50 | 6 | 434 | 1 | 0 | 0 | 22 | 24 | 1,247 | 78 | 3,507 | .20 |
| T | 25 | 6 | 621 | 0 | 50 | 12 | 446 | 0 | 0 | 0 | 22 | 18 | 1,265 | 48 | 3,555 | .20 |
| W | 26 | 13 | 634 | 2 | 52 | 27 | 473 | 0 | 0 | 0 | 22 | 42 | 1,307 | 110 | 3,665 | .20 |
| T | 27 | 20 | 654 | 0 | 52 | 30 | 503 | 0 | 0 | 0 | 22 | 50 | 1,357 | 140 | 3,805 | .20 |
| F | 28 | 7 | 661 | 0 | 52 | 2 | 505 | 0 | 0 | 0 | 22 | 9 | 1,366 | 32 | 3,837 | .20 |
| S | 29 | 30 | 691 | 0 | 52 | 10 | 515 | 3 | 0 | 0 | 22 | 43 | 1,409 | 140 | 3,977 | .20 |
| S | 30 | 30 | 721 | 2 | 54 | 0 | 515 | 1 | 0 | 0 | 22 | 33 | 1,442 | 124 | 4,101 | .20 |
| M | 31 | 2 | 723 | 0 | 54 | 10 | 525 | 0 | 0 | 0 | 22 | 12 | 1,454 | 28 | 4,129 | .20 |

NOVEMBER - 1994

| | | REG | | U-17 | | GA | | C BT | | OV | | TOTALS | | CASH | |
|---|----|-----|-----|------|----|----|-----|------|-----|----|---|--------|-----|------|-------|
| T | 1 | 5 | 5 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 8 | 8 | 26 | 26 |
| W | 2 | 6 | 11 | 0 | 0 | 4 | 7 | 0 | 0 | 0 | 0 | 10 | 18 | 32 | 58 |
| T | 3 | 11 | 22 | 0 | 0 | 10 | 17 | 0 | 0 | 0 | 0 | 21 | 39 | 64 | 122 |
| F | 4 | 9 | 31 | 0 | 0 | 12 | 29 | 0 | 0 | 0 | 0 | 21 | 60 | 60 | 182 |
| S | 5 | 14 | 45 | 2 | 2 | 13 | 42 | 0 | 0 | 0 | 0 | 29 | 89 | 86 | 268 |
| S | 6 | 27 | 72 | 0 | 2 | 8 | 50 | 3 | 0 | 0 | 0 | 38 | 127 | 124 | 392 |
| M | 7 | 10 | 82 | 0 | 2 | 12 | 62 | 0 | 0 | 0 | 0 | 22 | 149 | 64 | 456 |
| T | 8 | 4 | 86 | 0 | 2 | 4 | 66 | 0 | 0 | 0 | 0 | 8 | 157 | 24 | 480 |
| W | 9 | 4 | 90 | 0 | 2 | 11 | 77 | 0 | 0 | 0 | 0 | 15 | 172 | 38 | 518 |
| T | 10 | 3 | 93 | 0 | 2 | 1 | 78 | 0 | 0 | 0 | 0 | 4 | 176 | 14 | 532 |
| F | 11 | 9 | 102 | 3 | 5 | 13 | 91 | 0 | 0 | 0 | 0 | 25 | 201 | 68 | 600 |
| S | 12 | 25 | 127 | 5 | 10 | 8 | 99 | 0 | 0 | 0 | 0 | 38 | 239 | 126 | 726 |
| S | 13 | 40 | 167 | 2 | 12 | 1 | 100 | 9 | 0 | 0 | 0 | 52 | 291 | 166 | 892 |
| M | 14 | 7 | 174 | 0 | 12 | 2 | 102 | 63 | 0 | 0 | 0 | 72 | 363 | 32 | 924 |
| T | 15 | 9 | 183 | 0 | 12 | 5 | 107 | 0 | 0 | 0 | 0 | 14 | 377 | 46 | 970 |
| W | 16 | 5 | 188 | 0 | 12 | 6 | 113 | 0 | 0 | 0 | 0 | 11 | 388 | 32 | 1,002 |
| T | 17 | 6 | 194 | 0 | 12 | 0 | 113 | 0 | 0 | 0 | 0 | 6 | 394 | 24 | 1,026 |
| F | 18 | 7 | 201 | 0 | 12 | 10 | 123 | 0 | 0 | 0 | 0 | 17 | 411 | 48 | 1,074 |
| S | 19 | 21 | 222 | 2 | 14 | 2 | 125 | 1 | (1) | 0 | 0 | 26 | 437 | 92 | 1,166 |
| S | 20 | 22 | 244 | 8 | 22 | 2 | 127 | 0 | 0 | 0 | 0 | 32 | 469 | 108 | 1,274 |
| M | 21 | 16 | 260 | 1 | 23 | 7 | 134 | 0 | 0 | 0 | 0 | 24 | 493 | 80 | 1,354 |
| T | 22 | 14 | 274 | 4 | 27 | 3 | 137 | 0 | 0 | 0 | 0 | 21 | 514 | 70 | 1,424 |
| W | 23 | 5 | 279 | 2 | 29 | 4 | 141 | 3 | 0 | 0 | 0 | 14 | 528 | 32 | 1,456 |
| T | 24 | 15 | 294 | 1 | 30 | 2 | 143 | 1 | 0 | 0 | 0 | 19 | 547 | 66 | 1,522 |
| F | 25 | 33 | 327 | 9 | 39 | 8 | 151 | 1 | 0 | 0 | 0 | 51 | 598 | 166 | 1,688 |
| S | 26 | 33 | 360 | 6 | 45 | 0 | 151 | 0 | 0 | 0 | 0 | 39 | 637 | 144 | 1,832 |
| S | 27 | 19 | 379 | 6 | 45 | 5 | 156 | 1 | 0 | 0 | 0 | 25 | 662 | 86 | 1,918 |
| M | 28 | 5 | 384 | 0 | 45 | 1 | 157 | 0 | 0 | 0 | 0 | 6 | 668 | 22 | 1,940 |
| T | 29 | 9 | 393 | 0 | 45 | 1 | 158 | 0 | 0 | 0 | 0 | 10 | 678 | 38 | 1,978 |
| W | 30 | 2 | 395 | 0 | 45 | 4 | 162 | 0 | 0 | 0 | 0 | 6 | 684 | 16 | 1,994 |

DECEMBER - 1994

| | REG | U-17 | GA | C | BT | OV | TOTALS | | CASH | | | | | |
|------|-----|------|----|----|----|----|--------|-----|------|---|-----|-----|-----|-------|
| T 1 | 1 | 1 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 4 | 4 | 10 | 10 |
| F 2 | 5 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 10 | 22 | 32 |
| S 3 | 21 | 27 | 2 | 3 | 6 | 9 | 0 | 0 | 0 | 0 | 29 | 39 | 100 | 132 |
| S 4 | 5 | 32 | 0 | 3 | 2 | 11 | 0 | 0 | 0 | 0 | 7 | 46 | 24 | 156 |
| M 5 | 2 | 34 | 0 | 3 | 4 | 15 | 110 | (2) | 0 | 0 | 116 | 162 | 16 | 172 |
| T 6 | 4 | 38 | 0 | 3 | 0 | 15 | 0 | (1) | 0 | 0 | 4 | 166 | 16 | 188 |
| W 7 | 6 | 44 | 0 | 3 | 3 | 18 | 0 | 0 | 0 | 0 | 9 | 175 | 30 | 218 |
| T 8 | 0 | 44 | 0 | 3 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 175 | 0 | 218 |
| F 9 | 2 | 46 | 0 | 3 | 2 | 20 | 0 | 0 | 0 | 0 | 4 | 179 | 12 | 230 |
| S 10 | 18 | 64 | 0 | 3 | 2 | 22 | 0 | 0 | 0 | 0 | 20 | 199 | 76 | 306 |
| S 11 | 2 | 66 | 0 | 3 | 0 | 24 | 0 | 0 | 0 | 0 | 2 | 201 | 8 | 314 |
| M 12 | 2 | 68 | 0 | 3 | 0 | 24 | 0 | 0 | 0 | 0 | 2 | 203 | 8 | 322 |
| T 13 | 4 | 72 | 0 | 3 | 0 | 24 | 2 | 0 | 0 | 0 | 6 | 209 | 16 | 338 |
| W 14 | 6 | 78 | 0 | 3 | 2 | 26 | 0 | 0 | 0 | 0 | 8 | 217 | 28 | 366 |
| T 15 | 4 | 82 | 0 | 3 | 0 | 26 | 0 | 0 | 0 | 0 | 4 | 221 | 16 | 382 |
| F 16 | 7 | 89 | 0 | 3 | 3 | 29 | 0 | 0 | 0 | 0 | 10 | 231 | 34 | 416 |
| S 17 | 15 | 104 | 2 | 5 | 7 | 36 | 0 | 0 | 0 | 0 | 24 | 255 | 78 | 494 |
| S 18 | 14 | 118 | 0 | 5 | 1 | 37 | 3 | 0 | 0 | 0 | 18 | 273 | 58 | 552 |
| M 19 | 5 | 123 | 1 | 6 | 1 | 38 | 1 | 0 | 0 | 0 | 8 | 281 | 24 | 576 |
| T 20 | 11 | 134 | 3 | 9 | 2 | 40 | 0 | 0 | 0 | 0 | 16 | 297 | 54 | 630 |
| W 21 | 4 | 138 | 2 | 11 | 3 | 43 | 0 | 0 | 0 | 0 | 9 | 306 | 26 | 656 |
| T 22 | 9 | 147 | 0 | 11 | 2 | 45 | 0 | 0 | 0 | 0 | 11 | 317 | 40 | 696 |
| F 23 | — | F | R | E | E | — | 24 | D | A | Y | 24 | 341 | 0 | 696 |
| S 24 | — | F | R | E | E | — | 32 | D | A | Y | 32 | 373 | 0 | 696 |
| S 25 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| M 26 | 15 | 162 | 0 | 11 | 6 | 51 | 4 | 0 | 0 | 0 | 25 | 398 | 72 | 768 |
| T 27 | 25 | 187 | 3 | 14 | 7 | 58 | 0 | 0 | 0 | 0 | 35 | 433 | 120 | 888 |
| W 28 | 42 | 229 | 5 | 19 | 12 | 70 | 2 | 0 | 0 | 0 | 61 | 494 | 202 | 1,090 |
| T 29 | 46 | 275 | 9 | 28 | 13 | 83 | 1 | 0 | 0 | 0 | 69 | 563 | 228 | 1,318 |
| F 30 | 21 | 296 | 4 | 32 | 1 | 84 | 0 | 0 | 0 | 0 | 26 | 589 | 94 | 1,412 |
| S 31 | 26 | 322 | 1 | 33 | 5 | 89 | 0 | 0 | 0 | 0 | 32 | 621 | 116 | 1,528 |

JANUARY - 1995

| | | REG | U-17 | GA | C | BT | OV | TOTALS | | CASH | | | |
|---|----|-----|------|----|----|----|-----|--------|---|------|-----|-----|-------|
| S | 1 | 32 | 32 | 7 | 7 | 0 | 0 | 0 | 0 | 39 | 39 | 142 | 142 |
| M | 2 | 7 | 39 | 1 | 8 | 8 | 8 | 1 | 0 | 17 | 56 | 46 | 188 |
| T | 3 | 4 | 43 | 3 | 11 | 0 | 0 | 0 | 0 | 7 | 63 | 22 | 210 |
| W | 4 | 7 | 50 | 0 | 11 | 2 | 10 | 0 | 0 | 9 | 72 | 32 | 242 |
| T | 5 | 4 | 54 | 0 | 11 | 2 | 12 | 0 | 0 | 6 | 78 | 20 | 262 |
| F | 6 | 4 | 58 | 0 | 11 | 0 | 0 | 0 | 0 | 4 | 82 | 16 | 278 |
| S | 7 | 24 | 82 | 6 | 17 | 7 | 19 | 0 | 0 | 37 | 119 | 122 | 400 |
| S | 8 | 10 | 92 | 2 | 19 | 2 | 21 | 0 | 0 | 14 | 133 | 48 | 448 |
| M | 9 | 5 | 97 | 2 | 21 | 5 | 26 | 29 | 0 | 41 | 174 | 34 | 482 |
| T | 10 | 4 | 101 | 0 | 21 | 0 | 26 | 0 | 0 | 4 | 178 | 16 | 498 |
| W | 11 | 1 | 102 | 0 | 21 | 2 | 28 | 0 | 0 | 3 | 181 | 8 | 506 |
| T | 12 | 3 | 105 | 0 | 21 | 0 | 28 | 0 | 0 | 3 | 184 | 12 | 518 |
| F | 13 | 8 | 113 | 1 | 22 | 2 | 30 | 0 | 0 | 11 | 195 | 38 | 556 |
| S | 14 | 4 | 117 | 3 | 25 | 0 | 30 | 0 | 0 | 7 | 202 | 22 | 578 |
| S | 15 | 15 | 132 | 2 | 27 | 3 | 33 | 2 | 0 | 22 | 224 | 70 | 648 |
| M | 16 | 9 | 141 | 2 | 29 | 9 | 42 | 0 | 0 | 20 | 244 | 58 | 706 |
| T | 17 | 8 | 149 | 0 | 29 | 5 | 47 | 2 | 0 | 15 | 259 | 42 | 748 |
| W | 18 | 2 | 151 | 0 | 29 | 2 | 49 | 0 | 0 | 4 | 263 | 12 | 760 |
| T | 19 | 5 | 156 | 0 | 29 | 8 | 57 | 0 | 0 | 13 | 276 | 36 | 796 |
| F | 20 | 3 | 159 | 0 | 29 | 4 | 61 | 0 | 0 | 7 | 283 | 20 | 816 |
| S | 21 | 10 | 169 | 1 | 30 | 4 | 65 | 0 | 0 | 17 | 300 | 50 | 866 |
| S | 22 | 16 | 185 | 5 | 35 | 8 | 73 | 0 | 0 | 29 | 329 | 90 | 956 |
| M | 23 | 2 | 187 | 0 | 35 | 2 | 75 | 40 | 0 | 44 | 473 | 12 | 968 |
| T | 24 | 4 | 191 | 0 | 35 | 5 | 80 | 0 | 0 | 9 | 482 | 26 | 994 |
| W | 25 | 6 | 197 | 1 | 36 | 4 | 84 | 0 | 0 | 11 | 493 | 34 | 1,028 |
| T | 26 | 5 | 202 | 0 | 36 | 6 | 90 | 0 | 0 | 11 | 504 | 32 | 1,060 |
| F | 27 | 5 | 207 | 0 | 36 | 1 | 91 | 0 | 0 | 6 | 510 | 22 | 1,082 |
| S | 28 | 22 | 229 | 1 | 37 | 3 | 94 | 0 | 0 | 26 | 536 | 96 | 1,178 |
| S | 29 | 4 | 233 | 1 | 38 | 0 | 94 | 1 | 0 | 6 | 542 | 18 | 1,196 |
| M | 30 | 0 | 233 | 0 | 38 | 5 | 99 | 0 | 0 | 5 | 547 | 10 | 1,206 |
| T | 31 | 0 | 233 | 0 | 38 | 2 | 101 | 0 | 0 | 2 | 549 | 4 | 1,210 |

FEBRUARY - 1995

| | REG | U-17 | GA | C | BT | OV | TOTALS | CASH |
|------|-----|------|----|-----|----|-----|--------|------|
| W 1 | 0 | 0 | 6 | 6 | 0 | 0 | 6 | 12 |
| T 2 | 8 | 8 | 4 | 10 | 0 | 0 | 12 | 40 |
| F 3 | 12 | 20 | 10 | 20 | 50 | (1) | 73 | 70 |
| S 4 | 21 | 41 | 8 | 28 | 0 | 0 | 29 | 100 |
| S 5 | 21 | 62 | 6 | 34 | 0 | 0 | 28 | 100 |
| M 6 | 2 | 64 | 13 | 47 | 80 | (2) | 95 | 34 |
| T 7 | 4 | 68 | 5 | 52 | 0 | 0 | 9 | 252 |
| W 8 | 0 | 68 | 6 | 58 | 2 | 0 | 8 | 12 |
| T 9 | 0 | 68 | 10 | 68 | 0 | 0 | 10 | 20 |
| F 10 | 11 | 79 | 10 | 78 | 0 | 0 | 21 | 64 |
| S 11 | 10 | 89 | 12 | 90 | 0 | 0 | 22 | 64 |
| S 12 | 12 | 101 | 0 | 90 | 0 | 0 | 12 | 48 |
| M 13 | 10 | 111 | 8 | 98 | 0 | 0 | 18 | 56 |
| T 14 | 2 | 113 | 2 | 100 | 0 | 0 | 6 | 16 |
| W 15 | 0 | 113 | 10 | 110 | 0 | 0 | 10 | 20 |
| T 16 | 2 | 115 | 6 | 116 | 0 | 0 | 8 | 20 |
| F 17 | 5 | 120 | 4 | 120 | 50 | 0 | 59 | 28 |
| S 18 | 13 | 133 | 8 | 128 | 1 | 0 | 24 | 72 |
| S 19 | 17 | 150 | 11 | 139 | 4 | 0 | 33 | 92 |
| M 20 | 2 | 152 | 3 | 142 | 78 | (2) | 83 | 14 |
| T 21 | 15 | 167 | 15 | 157 | 30 | (1) | 60 | 90 |
| W 22 | 12 | 179 | 14 | 171 | 0 | 0 | 26 | 76 |
| T 23 | 6 | 185 | 2 | 173 | 0 | 0 | 8 | 28 |
| F 24 | 7 | 192 | 6 | 179 | 0 | 0 | 15 | 44 |
| S 25 | 17 | 209 | 7 | 186 | 0 | 0 | 25 | 84 |
| S 26 | 27 | 236 | 3 | 189 | 0 | 0 | 35 | 118 |
| M 27 | 6 | 242 | 9 | 198 | 0 | 0 | 15 | 42 |
| T 28 | 5 | 247 | 2 | 200 | 0 | 0 | 9 | 28 |

* \$ 2.00
OVERAGE
02105195

P. U. Hammett

MARCH - 1995

| | | REG | | U-17 | | GA | | C BT | | OV | | TOTALS | | CASH | |
|---|----|-----|-------|------|-----|----|-----|------|-----|----|----|--------|-------|--------|----------|
| W | 1 | 4 | 4 | 0 | 0 | 16 | 16 | 1 | 0 | 0 | 0 | 21 | 21 | 48 | 48 |
| T | 2 | 13 | 17 | 2 | 2 | 23 | 39 | 6 | 0 | 0 | 0 | 44 | 65 | 102 | 150 |
| F | 3 | 4 | 21 | 0 | 2 | 16 | 55 | 0 | (1) | 8 | 8 | 20 | 85 | 76.80 | 226.80 |
| S | 4 | 32 | 53 | 0 | 2 | 10 | 65 | 0 | 0 | 0 | 8 | 42 | 127 | 148 | 374.80 |
| S | 5 | 14 | 67 | 0 | 2 | 15 | 80 | 0 | 0 | 0 | 8 | 29 | 156 | 86 | 460.80 |
| M | 6 | 31 | 98 | 0 | 2 | 20 | 100 | 7 | 0 | 0 | 8 | 58 | 214 | 164 | 624.80 |
| T | 7 | 28 | 126 | 1 | 3 | 10 | 110 | 0 | 0 | 0 | 8 | 49 | 263 | 134 | 758.80 |
| W | 8 | 21 | 147 | 6 | 9 | 13 | 123 | 0 | 0 | 0 | 8 | 40 | 303 | 122 | 880.80 |
| T | 9 | 18 | 165 | 2 | 11 | 13 | 136 | 31 | 0 | 0 | 8 | 64 | 367 | 102 | 982.80 |
| F | 10 | 19 | 184 | 2 | 13 | 19 | 155 | 0 | 0 | 0 | 8 | 40 | 407 | 118 | 1,100.80 |
| S | 11 | 53 | 237 | 6 | 19 | 20 | 175 | 4 | 0 | 0 | 8 | 83 | 490 | 264 | 1,364.80 |
| S | 12 | 56 | 293 | 6 | 25 | 11 | 186 | 4 | 0 | 0 | 8 | 77 | 567 | 258 | 1,622.80 |
| M | 13 | 36 | 329 | 12 | 37 | 23 | 209 | 0 | 0 | 0 | 8 | 71 | 638 | 214 | 1,836.80 |
| T | 14 | 44 | 373 | 8 | 45 | 42 | 251 | 2 | 0 | 0 | 8 | 94 | 732 | 276 | 2,112.80 |
| W | 15 | 47 | 420 | 8 | 53 | 27 | 278 | 0 | 0 | 0 | 8 | 82 | 814 | 258 | 2,370.80 |
| T | 16 | 31 | 451 | 8 | 61 | 21 | 299 | 7 | (2) | 0 | 8 | 67 | 881 | 182 | 2,552.80 |
| F | 17 | 38 | 489 | 6 | 67 | 55 | 354 | 3 | (1) | 0 | 8 | 99 | 980 | 274 | 2,826.80 |
| S | 18 | 68 | 557 | 49 | 116 | 21 | 375 | 2 | (1) | 38 | 46 | 198 | 1,178 | 548.80 | 3,375.60 |
| S | 19 | 67 | 624 | 11 | 127 | 25 | 400 | 2 | 0 | 0 | 46 | 105 | 1,283 | 340 | 3,715.60 |
| M | 20 | 23 | 647 | 2 | 129 | 23 | 423 | 2 | (1) | 0 | 46 | 50 | 1,333 | 142 | 3,857.60 |
| T | 21 | 56 | 703 | 0 | 129 | 34 | 457 | 1 | 0 | 0 | 46 | 91 | 1,424 | 292 | 4,149.60 |
| W | 22 | 53 | 756 | 4 | 133 | 40 | 497 | 0 | 0 | 0 | 46 | 97 | 1,521 | 300 | 4,449.60 |
| T | 23 | 32 | 788 | 1 | 134 | 20 | 517 | 45 | (2) | 0 | 46 | 98 | 1,619 | 170 | 4,619.60 |
| F | 24 | 26 | 814 | 3 | 137 | 26 | 543 | 2 | 0 | 0 | 46 | 57 | 1,676 | 162 | 4,781.60 |
| S | 25 | 62 | 876 | 4 | 141 | 74 | 617 | 1 | (1) | 0 | 46 | 141 | 1,817 | 404 | 5,185.60 |
| S | 26 | 58 | 934 | 3 | 144 | 39 | 656 | 1 | (1) | 0 | 46 | 101 | 1,918 | 316 | 5,501.60 |
| M | 27 | 24 | 958 | 4 | 148 | 33 | 689 | 0 | (2) | 0 | 46 | 61 | 1,979 | 170 | 5,671.60 |
| T | 28 | 28 | 986 | 4 | 152 | 30 | 719 | 0 | (2) | 0 | 46 | 62 | 2,041 | 180 | 5,857.60 |
| W | 29 | 37 | 1,023 | 5 | 157 | 19 | 738 | 1 | 0 | 0 | 46 | 62 | 2,103 | 196 | 6,047.60 |
| T | 30 | 41 | 1,064 | 4 | 161 | 56 | 794 | 0 | 0 | 0 | 46 | 101 | 2,204 | 285 | 6,332.60 |
| F | 31 | 34 | 1,098 | 2 | 163 | 42 | 836 | 5 | (1) | 0 | 46 | 83 | 2,287 | 224 | 6,556.60 |

\$ 1.00 OVERAGE
03/30/95

* 03/03/95
8 X \$3.20
\$ 24.80

APRIL - 1995

| | REG | U-17 | GA | C | BT | OV | TOTALS | CASH | | | | |
|------|-----|------|----|----|----|-----|--------|-------|----|-------|-----|-------|
| S 1 | 51 | 51 | 8 | 8 | 30 | 30 | 2 (1) | 0 0 | 91 | 91 | 280 | 280 |
| S 2 | 35 | 86 | 1 | 9 | 20 | 50 | 0 (1) | 0 0 | 86 | 177 | 182 | 462 |
| M 3 | 20 | 106 | 1 | 10 | 18 | 68 | 0 0 | 0 0 | 39 | 216 | 118 | 580 |
| T 4 | 17 | 123 | 1 | 11 | 16 | 84 | 0 (1) | 0 0 | 34 | 250 | 102 | 682 |
| W 5 | 5 | 128 | 0 | 11 | 24 | 108 | 0 0 | 0 0 | 29 | 279 | 68 | 750 |
| T 6 | 19 | 147 | 0 | 11 | 18 | 126 | 0 0 | 0 0 | 37 | 316 | 112 | 862 |
| F 7 | 13 | 160 | 1 | 12 | 9 | 135 | 5 0 | 0 0 | 28 | 344 | 72 | 934 |
| S 8 | 22 | 182 | 1 | 13 | 22 | 157 | 0 0 | 0 0 | 45 | 389 | 134 | 1,068 |
| S 9 | 23 | 205 | 2 | 15 | 12 | 169 | 2 0 | 0 0 | 39 | 428 | 120 | 1,188 |
| M 10 | 17 | 222 | 3 | 18 | 6 | 175 | 0 0 | 0 0 | 26 | 454 | 86 | 1,274 |
| T 11 | 16 | 238 | 3 | 21 | 11 | 186 | 47 (1) | 0 0 | 77 | 531 | 92 | 1,366 |
| W 12 | 38 | 276 | 1 | 22 | 14 | 200 | 20 (1) | 0 0 | 73 | 604 | 182 | 1,548 |
| T 13 | 27 | 303 | 5 | 27 | 21 | 221 | 0 0 | 0 0 | 53 | 657 | 160 | 1,708 |
| F 14 | 22 | 325 | 2 | 29 | 7 | 228 | 0 0 | 0 0 | 31 | 688 | 106 | 1,814 |
| S 15 | 59 | 384 | 7 | 36 | 10 | 238 | 5 0 | 0 0 | 81 | 769 | 270 | 2,084 |
| S 16 | 25 | 409 | 5 | 41 | 10 | 268 | 0 0 | 0 0 | 40 | 809 | 130 | 2,214 |
| M 17 | 12 | 421 | 1 | 42 | 13 | 281 | 3 0 | 0 0 | 29 | 838 | 76 | 2,290 |
| T 18 | 17 | 438 | 0 | 42 | 20 | 301 | 0 0 | 0 0 | 37 | 875 | 108 | 2,398 |
| W 19 | 20 | 458 | 5 | 47 | 12 | 313 | 3 0 | 0 0 | 40 | 915 | 114 | 2,512 |
| T 20 | 21 | 479 | 0 | 47 | 8 | 321 | 0 0 | 0 0 | 29 | 944 | 100 | 2,612 |
| F 21 | 26 | 505 | 1 | 48 | 19 | 340 | 0 0 | 0 0 | 46 | 990 | 144 | 2,756 |
| S 22 | 34 | 539 | 1 | 49 | 13 | 353 | 5 0 | 0 0 | 53 | 1,043 | 164 | 2,920 |
| S 23 | 17 | 556 | 0 | 49 | 10 | 363 | 2 0 | 0 0 | 29 | 1,072 | 88 | 3,008 |
| M 24 | 18 | 574 | 0 | 49 | 11 | 374 | 16 (1) | 0 0 | 45 | 1,117 | 94 | 3,112 |
| T 25 | 21 | 595 | 1 | 50 | 19 | 393 | 0 0 | 0 0 | 41 | 1,158 | 124 | 3,236 |
| W 26 | 15 | 610 | 0 | 50 | 12 | 405 | 0 (1) | 19 19 | 66 | 1,224 | 224 | 3,460 |
| T 27 | 22 | 632 | 1 | 51 | 5 | 410 | 0 0 | 0 19 | 28 | 1,252 | 100 | 3,560 |
| F 28 | 6 | 638 | 0 | 51 | 8 | 418 | 0 0 | 0 19 | 14 | 1,266 | 40 | 3,600 |
| S 29 | 39 | 677 | 0 | 51 | 15 | 433 | 2 0 | 0 19 | 56 | 1,322 | 192 | 3,792 |
| S 30 | 51 | 728 | 4 | 55 | 16 | 449 | 5 0 | 0 19 | 76 | 1,398 | 244 | 4,036 |
| 31 | | | | | | | | | | | | |

.40
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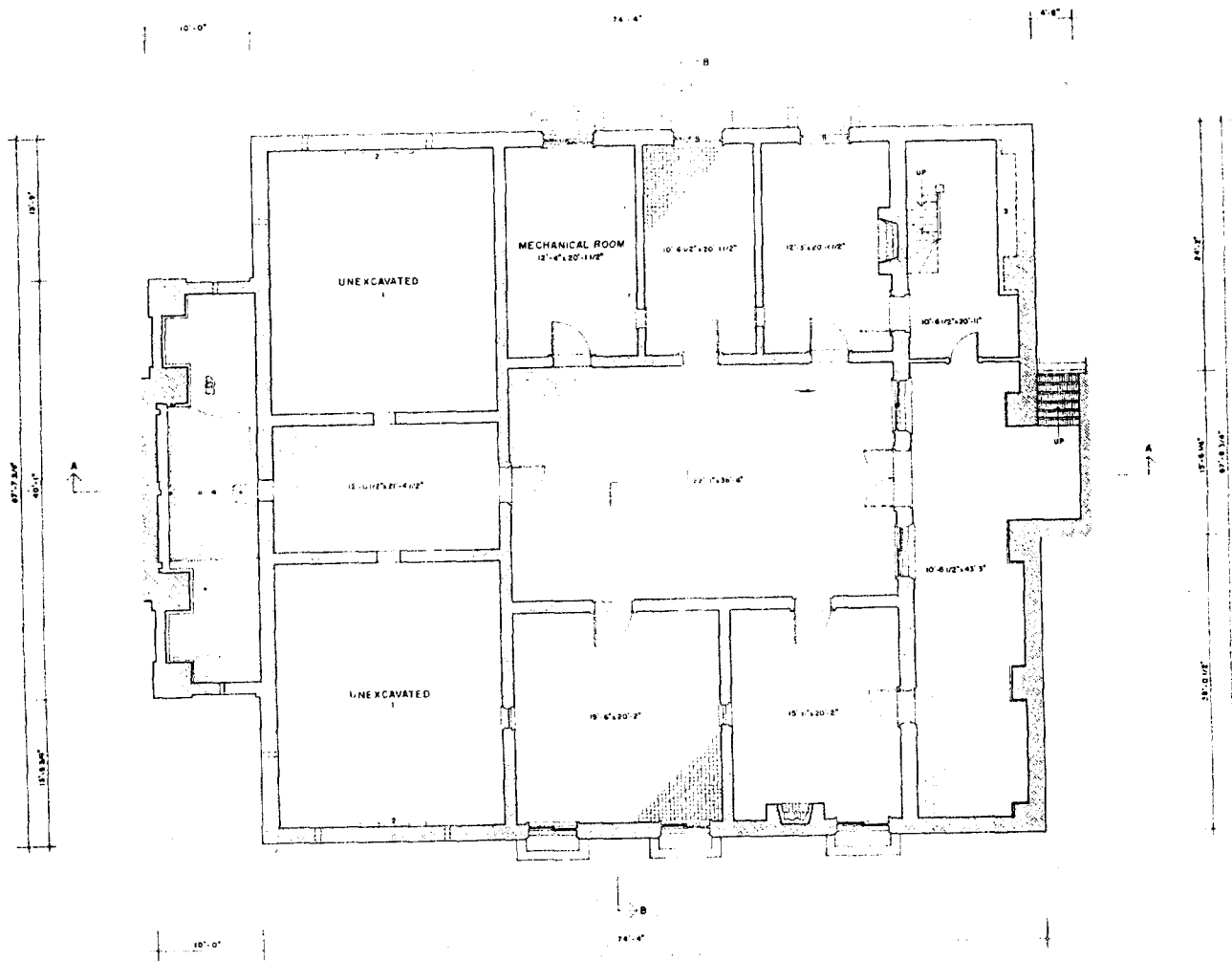
\$ 3.60
39
\$142.40



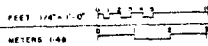
8.6 Drawings



ON MICROFILM

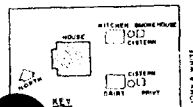


BASEMENT FLOOR PLAN

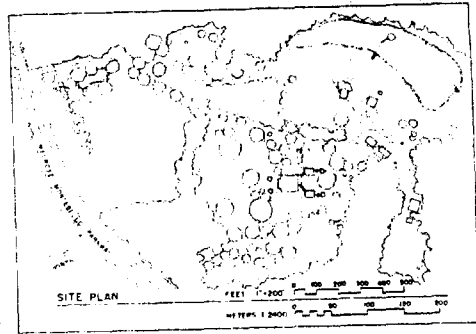
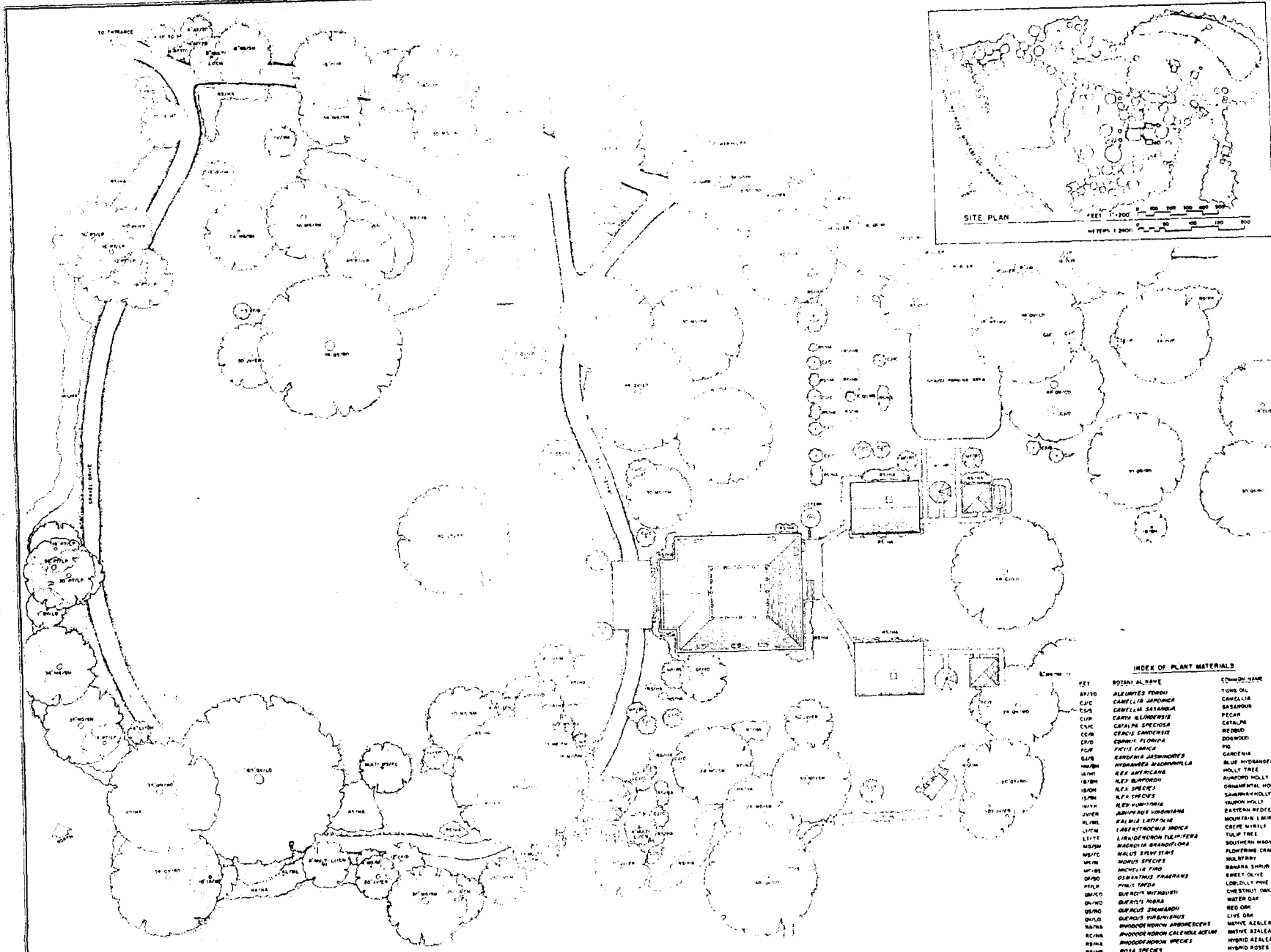


- MATERIALS**
- 1 FLOORS: CONCRETE AND BRICK WITH CEMENT WASH
 - 2 WALLS: BRICK
 - 3 CEILING: EXPOSED WOODEN STRUCTURE

- NOTES**
- 1 UNEXCAVATED AREAS CURTAIN MECHANICAL DUCTWORK
 - 2 FIREPLACE SUPPORTS IN UNEXCAVATED AREAS ARE APPROXIMATE, HAVING BEEN LOCATED BY NUMBERS
 - 3 ELECTRICAL PANELS WITH ASSUMPTION THAT BRICK PIERS EXIST BEHIND IDENTICAL TO OPPOSITE END
 - 4 AREA UNDER FRONT PORCH PARTIALLY EXCAVATED EARTH



MISSISSIPPI
 ADAMS COUNTY
 MELROSE - MAIN HOUSE
 MELROSE - FRONT PORCH
 MISSISSIPPI ARCHIVE INC.
 10101 KENNEDY AVENUE
 NEW ORLEANS, LOUISIANA 70114
 TEL: (504) 885-9140
 FAX: (504) 885-9141
 WWW.MISSISSIPPIARCHIVE.COM



SITE PLAN
 FEET 1" = 20'
 METERS 1:200

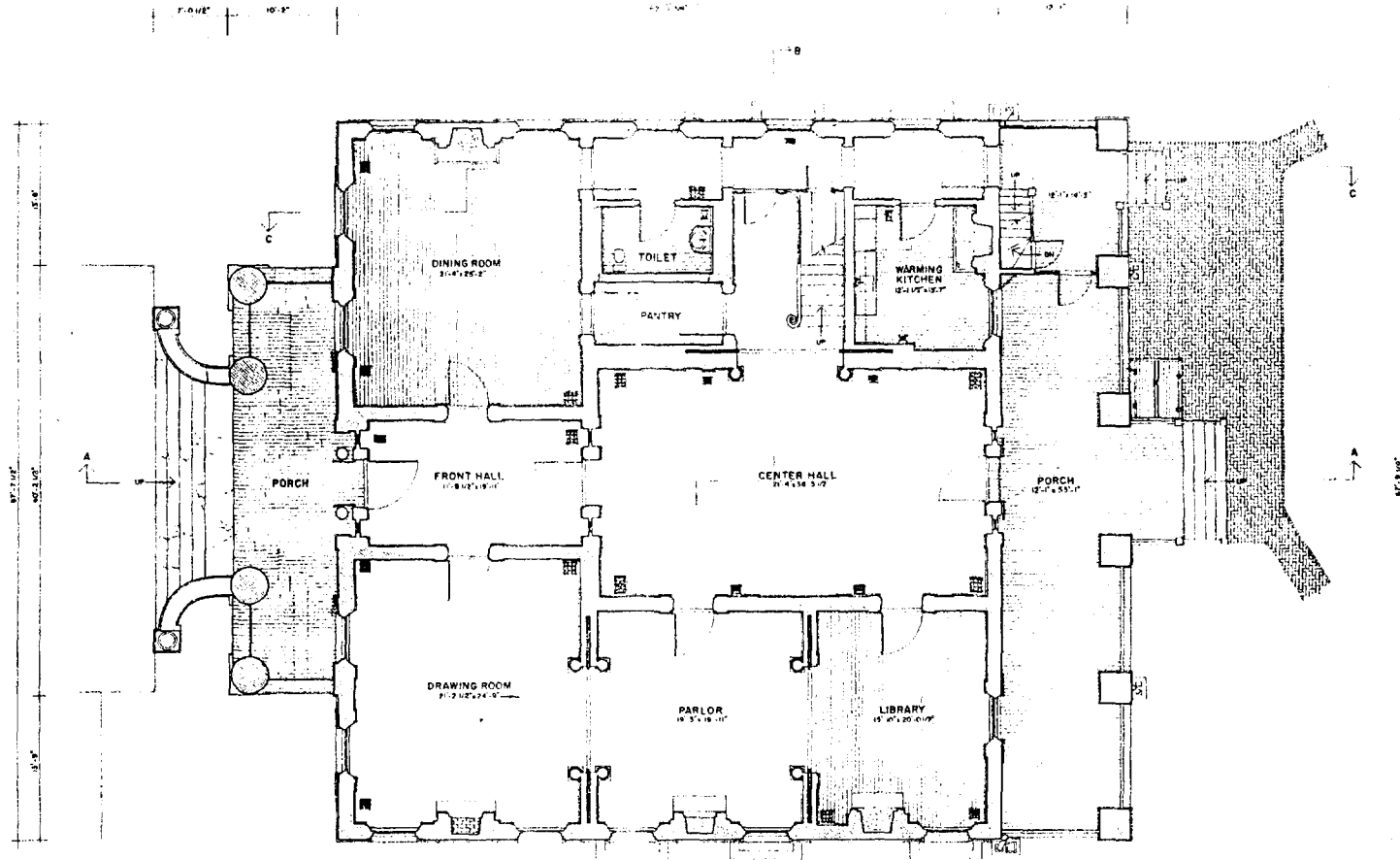
SITE PLANS ADAPTED FROM TOPOGRAPHIC MAPS 1076 AND 1077 BY JORDAN, WATER AND SEXTONS, CIVIL ENGINEERS.
 SITE PLANS BY WILLIAM GARDNER & BONDAREFF ARCHITECT AND FIELD PHOTO DATA

INDEX OF PLANT MATERIALS

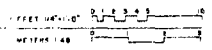
| FEET | BOTANY ACRONYM | COMMON NAME |
|------|------------------------|------------------------|
| AP70 | ALBERTUS PRUNI | YUPE OIL |
| CJC | CAMELLIA JAPONICA | CAMELLIA |
| CS | CAMELLIA SATSUKANA | SASANQUA |
| CSF | CANTIA KLEODORIS | PECAN |
| CSK | CATALPA SPECIOSA | CATALPA |
| CSM | CFRATA LINDLERSIS | REEMO |
| CSN | CONYCE FLORIDA | DOGWOOD |
| CSO | PICTA CAROLINA | PG |
| CSQ | GARDNERIA JACQUINDES | GARDNERIA |
| CSR | HYDRANGEA MACROPHYLLA | BLUE HYDRANGEA |
| CSU | REX AMERICANA | HOLLY TREE |
| CSV | REX BURBONENSIS | ALBINO HOLLY |
| CSW | REX SPECIES | ORNAMENTAL HOLLY |
| CSX | REX SPECIES | SAMMISH HOLLY |
| CSY | REX SPECIES | TAMM HOLLY |
| CSZ | REX SPECIES | EASTERN REDCEDAR |
| CSAA | ABUTILON THYRSIFLORUM | MOUNTAIN LIME |
| CSAB | KALMIA LATIFOLIA | CREW PINE |
| CSAC | LAGERSTRONGIA INDICA | TULIP TREE |
| CSAD | LIPODENDRON TULIPIFERA | SOUTHERN MAGNOLIA |
| CSAE | MAGNOLIA GRANDIFLORA | PULFRIE CHAMPNEY |
| CSAF | MALES STEVENSII | MULBERRY |
| CSAG | MORUS SPECIES | BANANA SHRUB |
| CSAH | MYRTILLIS FIDO | SWEET OLIVE |
| CSAI | OSYRIS FRAGRANS | LOBLOLLY PINE |
| CSAJ | PIRUS CAROLINA | CHESTNUT OAK |
| CSAK | QUERCUS MITISIMILI | WATER OAK |
| CSAL | QUERCUS ROSEA | RED OAK |
| CSAM | QUERCUS STIMULANS | LIVE OAK |
| CSAN | QUERCUS FURCIFORMIS | NATIVE AZALEA (PINK) |
| CSAO | QUERCUS MOYNIANUS | NATIVE AZALEA (ORANGE) |
| CSAP | QUERCUS MOYNIANUS | HYBRID AZALEA |
| CSAQ | ROSA SPECIES | HYBRID ROSE |
| CSAR | ROSA SPECIES | YELLOW TREE |
| CSAS | SAPINDUS STYBIERODUS | YEW |
| CSAT | TAXUS SPECIES | WISTERIA VINE |
| CSAV | WISTERIA SINENSIS | |

MISSISSIPPI
 EDWARDS COUNTY
MELROSE
 WATCHEE
 MELROSE MONTELEONE PARKWAY
 PROJECT 1932
 WATCHEE NATIONAL HISTORICAL PARK
 1932

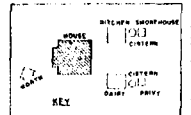
339/25905
 2 OF 2



FIRST FLOOR PLAN



MATERIALS
 FLOORS WOODEN BIRCH, CARPET, FLOOR CLOTH
 WALLS PLASTER
 CEILING PLASTER



AND L. E. RICHMOND
 ARCHITECTS
 1001 N. GARDEN ST.
 MEMPHIS, TENN.

MELROSE - MAIN HOUSE
 NATCHES

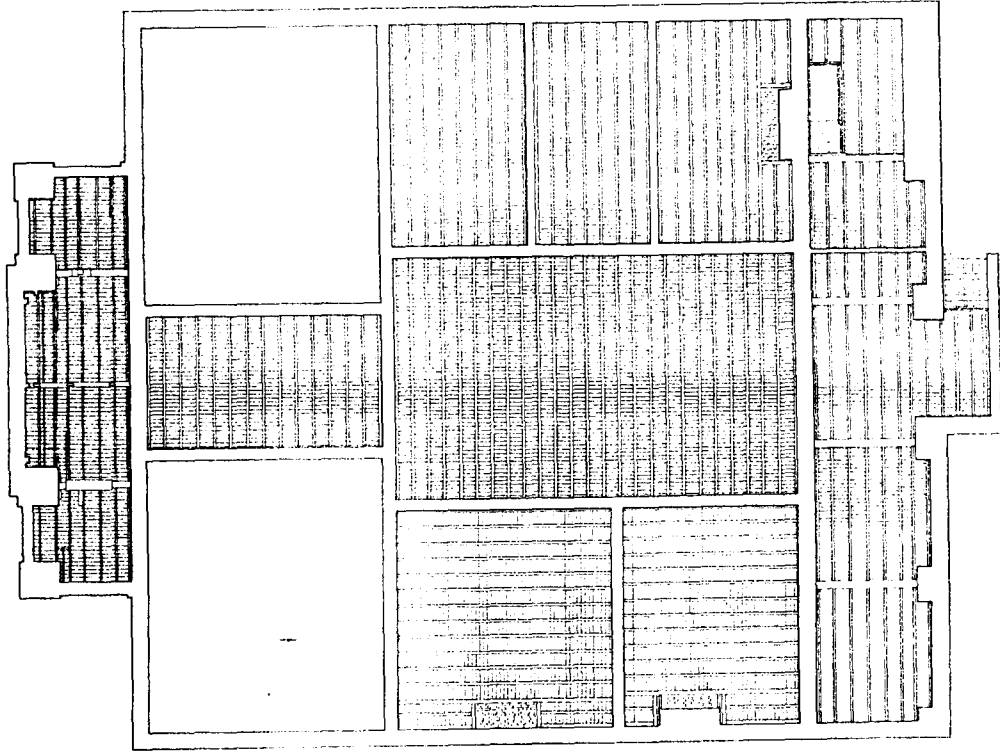
IBOWS COUNTY

MISSISSIPPI

PLANNED BY
 HISTORIC ARCHITECTURE
 NATIONAL SURVEY
 INC. U.S.A.

339/25900
 3 OF 22

CW MICROFILM



BASEMENT REFLECTED CEILING PLAN

FEET 0 1 2 3 4 5
 METERS 0 1 2

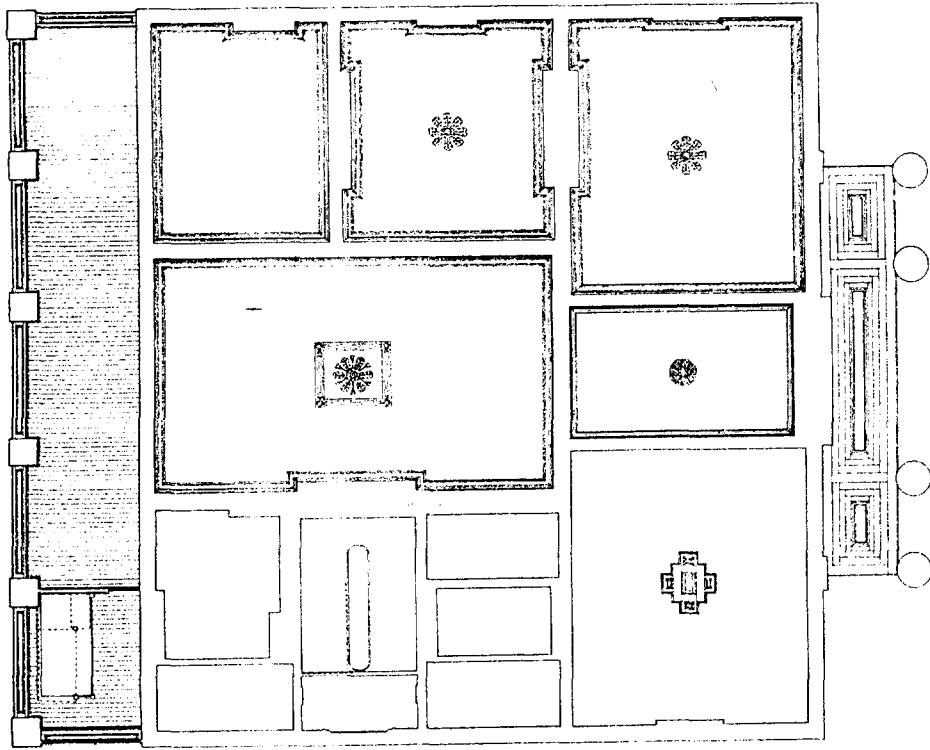


DESIGNED BY: JAMES L. SMITH, ARCHITECT, L.P.
 PROJECT NO. 339/25900
 DATE: 11/11/22

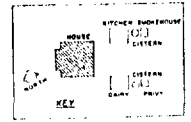
MELROSE - MAIN HOUSE
 MISSISSIPPI

JANUS CORP.

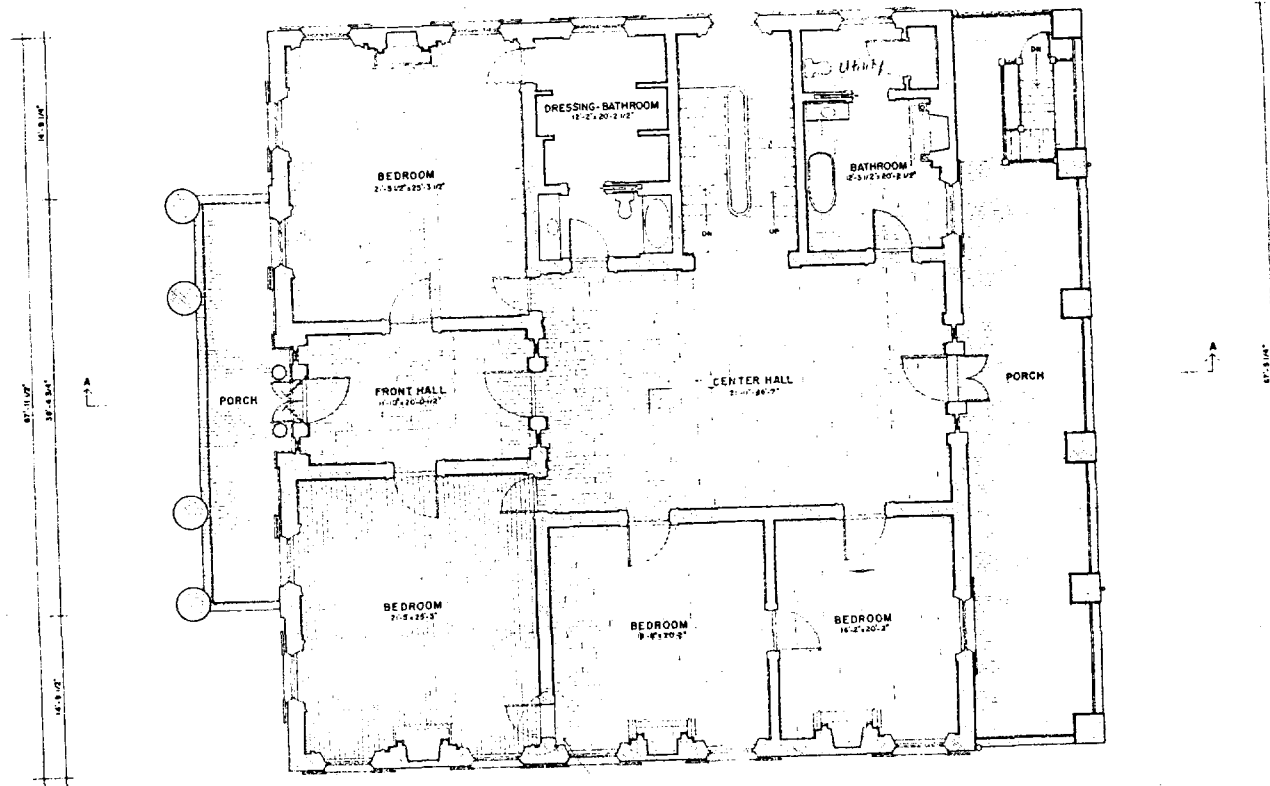
2 OF 22
 339/25900



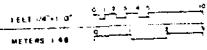
FIRST FLOOR REFLECTED CEILING PLAN



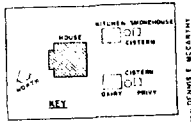
MELROSE RECORDING STUDIO, 1001 N. GULF BLVD., SUITE 100, METairie, LA 70002
 ARCHITECT: GUSTIN J. PELIERSON
 PROJECT: MELROSE - MAIN HOUSE
 SHEET: 4 OF 22
 DATE: 04/22/08
 MISSISSIPPI
 JORDAN COUNTY
 MISSISSIPPI
 STATE OF MISSISSIPPI
 REGISTERED PROFESSIONAL ARCHITECT
 GUSTIN J. PELIERSON
 NO. 10017
 MISSISSIPPI
 STATE OF MISSISSIPPI
 REGISTERED PROFESSIONAL ARCHITECT
 GUSTIN J. PELIERSON
 NO. 10017
 MISSISSIPPI



SECOND FLOOR PLAN

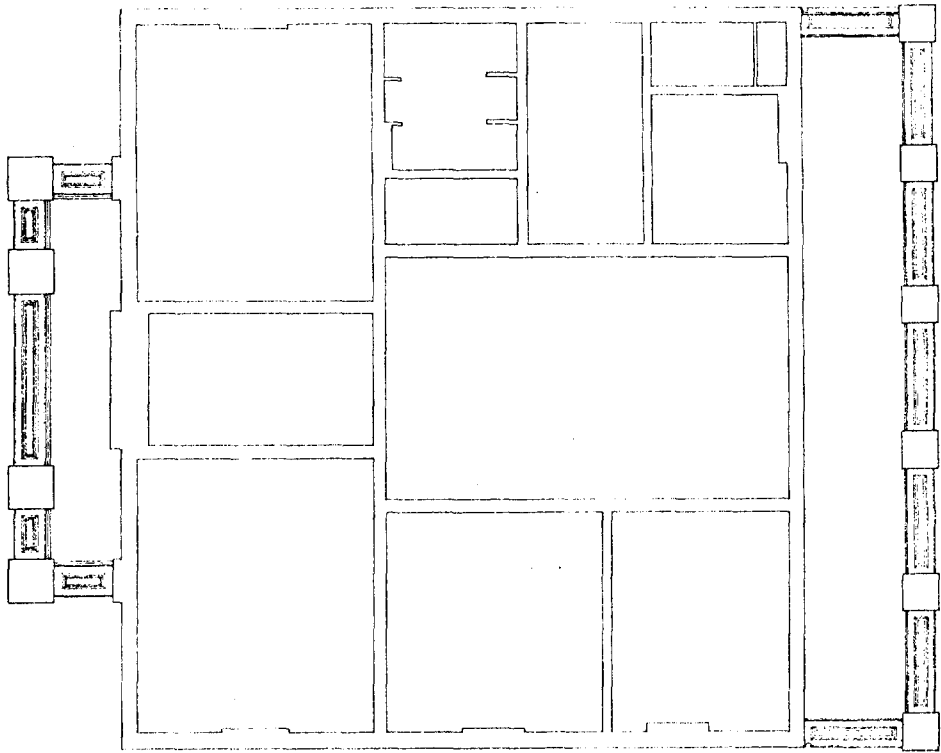


WALLS
 FLOORS WOODEN BOARDS, CARPET
 WALLS PLASTER
 CEILINGS PLASTER



339/25900
6 OF 22

339/25900
6 OF 22



SECOND FLOOR REFLECTED CEILING PLAN

FEET SCALE 1/8" = 1'-0"
METERS 1:48



MELROSE SHEDHOUSE
1017
COTTAGE
MELROSE NATIONAL HISTORICAL PARK
MELROSE, CALIFORNIA

MELROSE - MONTEREYO PARKWAY
MELROSE, CALIFORNIA

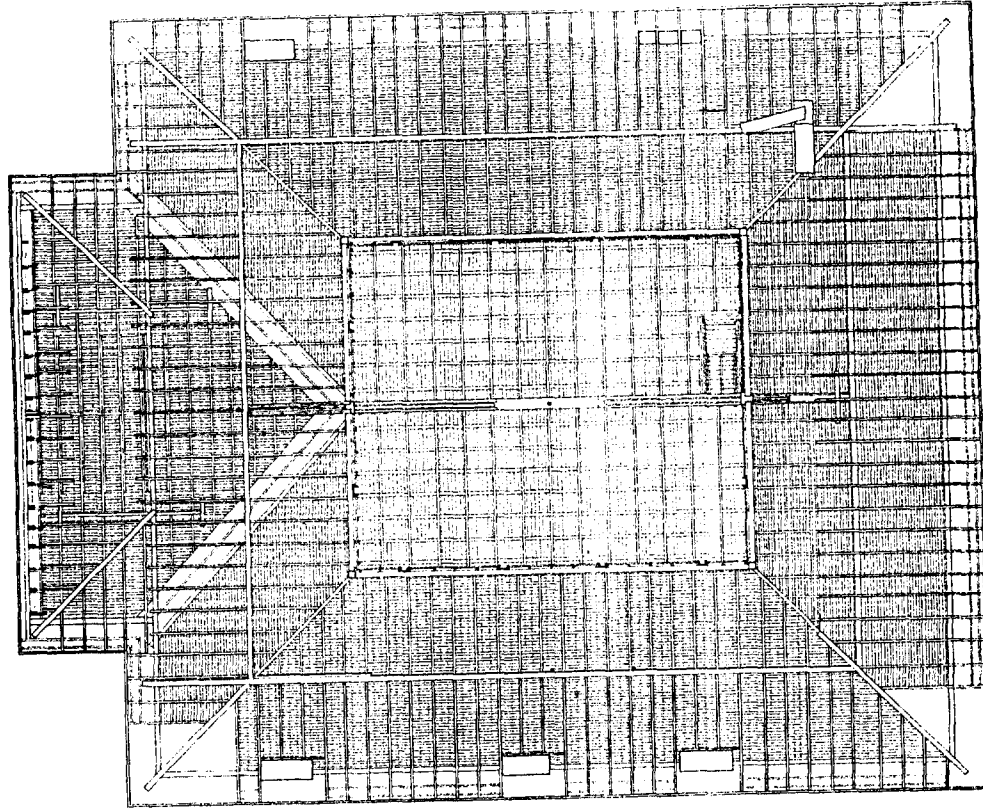
MELROSE - MAIN HOUSE
MELROSE, CALIFORNIA

MELROSE
MELROSE, CALIFORNIA

6 22

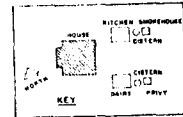
MELROSE, CALIFORNIA
MELROSE SHEDHOUSE
MELROSE BARN
MELROSE GARAGE

339/25900
8 OF 22



REFLECTED ATTIC CEILING PLAN

FEET SCALE 0 1 2 3 4 5
METERS 0 1 2 3 4 5



GENERAL CONTRACTOR
MELROSE ALCOHOL PROJECT #20
MELROSE NATIONAL HISTORICAL PARK
MELROSE, MISSISSIPPI

MELROSE - MAIN HOUSE
MATCH SET

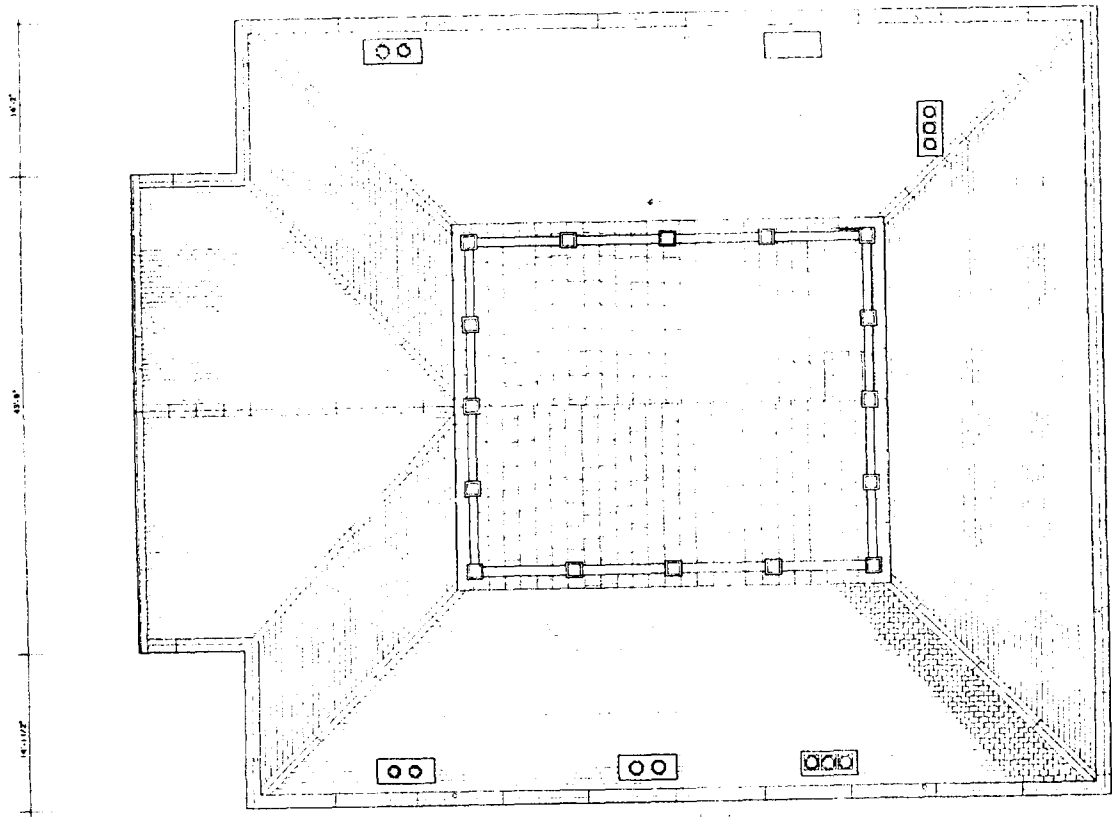
ORANGE COUNTY
MISSISSIPPI

22

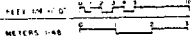
ARCHITECT
MELROSE PROJECT #20
MELROSE, MISSISSIPPI

339/25900
9 OF 22

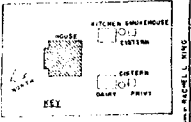
1 - CA MICHIGAN



ROOF PLAN

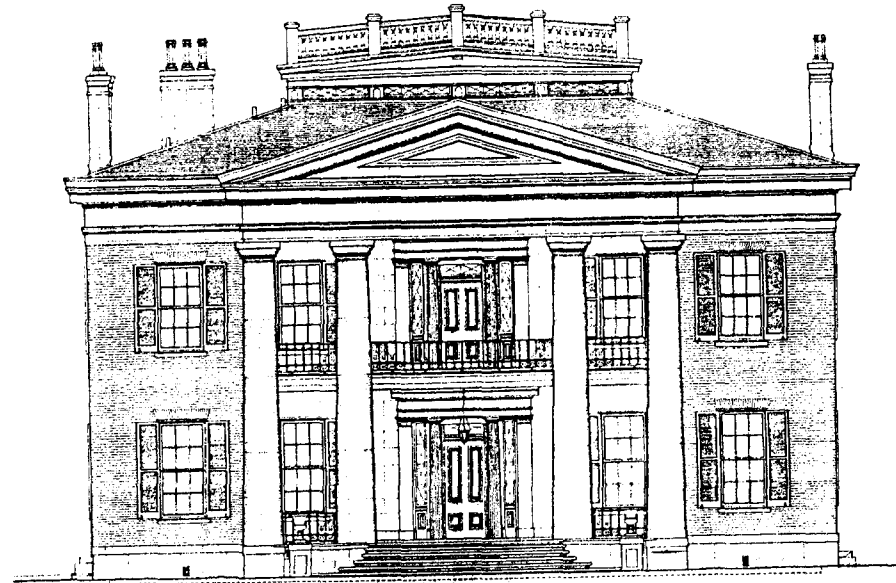


MATERIALS
 SLATE SHINGLES
 METAL ROOFING ON CUPOLA

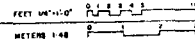


RECORDED AND INDEXED IN
 COUNTY RECORDS
 MICHIGAN
 9 22
 1 - MEL ROSE - MONTICELLO PARKWAY
 MEL ROSE - MAIN HOUSE
 BIRDA COUNTY
 MATCHED SHINGLES
 HOUSE SYSTEM
 CUPOLA
 SKYLIGHT
 CEL
 RACELL, INC.
 15400 RECORDS PROJECT 1972
 15400 RECORDS PROJECT 1972
 15400 RECORDS PROJECT 1972

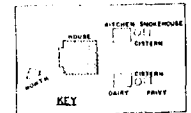
339/25900
10 OF 22



NORTHWEST ELEVATION



MATERIALS
 FOUNDATION BRICK
 WALLS STUCCO ON BRICK AND BRICK
 COLUMNS STUCCO ON BRICK
 ROOFING SLATE SHINGLES



UNIVERSITY MICROFILMS INTERNATIONAL
 300 N ZEEB RD
 ANN ARBOR MI 48106
 1-800-541-0600

MEL ROSE - MAIN HOUSE
 WATCHER

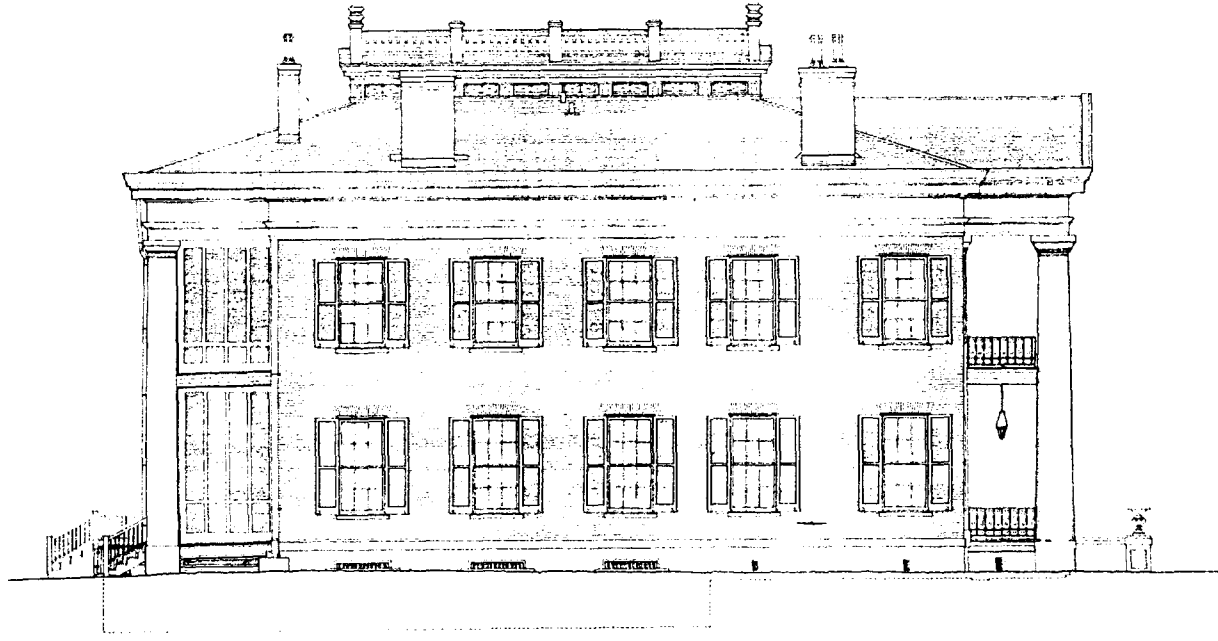
DOANE COUNTY
 MISSISSIPPI

10 22

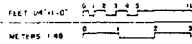
THE TOPICAL ARCHIVE
 NASHVILLE TN 37203
 615.259.4444

339/25900
11 OF 22

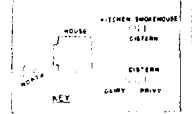
339/25900



NORTHEAST ELEVATION



- | | |
|-----------|-----------------|
| MATERIALS | BRICK |
| PAINTWORK | BRICK |
| WALLS | STUCCO ON BRICK |
| COLUMNS | SLATE SHINGLES |
| ROOFING | |



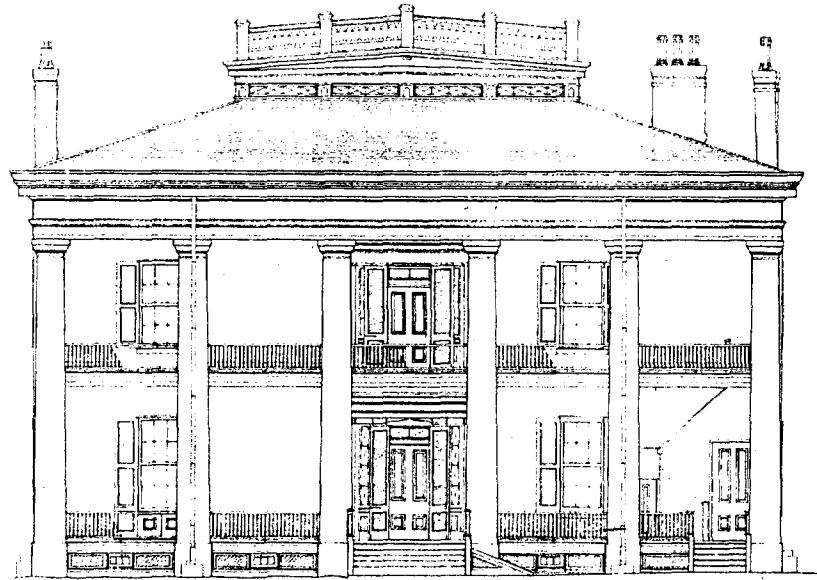
ARCHITECT: JAMES H. HARRIS
ARCHITECTS: HARRIS & HARRIS
1000 W. BROADWAY, NEW YORK, N.Y. 10014
TELEPHONE: (212) 255-1234

MELROSE - MAIN HOUSE
ARCHITECT: JAMES HARRIS
ARCHITECTS: HARRIS & HARRIS
1000 W. BROADWAY, NEW YORK, N.Y. 10014
TELEPHONE: (212) 255-1234

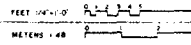
DATE: 11-22-22
SCALE: AS SHOWN
DRAWN BY: J.H.H.

339/25900
12 OF 22

001 11/10/2011



SOUTHEAST ELEVATION



MATERIALS
 FOUNDATION BRICK
 WALLS STUCCO ON BRICK
 COLUMNING STUCCO ON BRICK
 ROOFING SLATE SHINGLES



RECALL NAME
 RECORDING PROJECT #32
 MATCHET NATIONAL HISTORICAL PARK
 MATCHET, MISSISSIPPI

MELROSE - MAIN HOUSE
 MATCHET, MISSISSIPPI

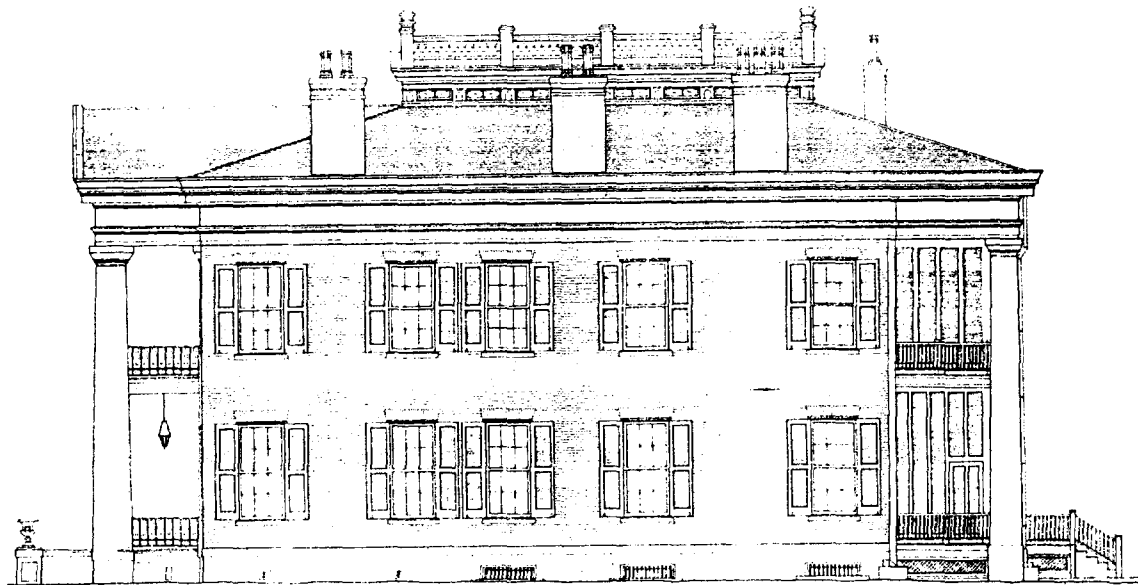
MISSISSIPPI

ADAMS COUNTY

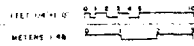
12 32

MISSISSIPPI
 MATCHET NATIONAL HISTORICAL PARK

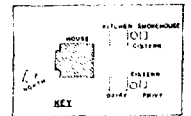
339/25900
13 OF 22



SOUTHWEST ELEVATION



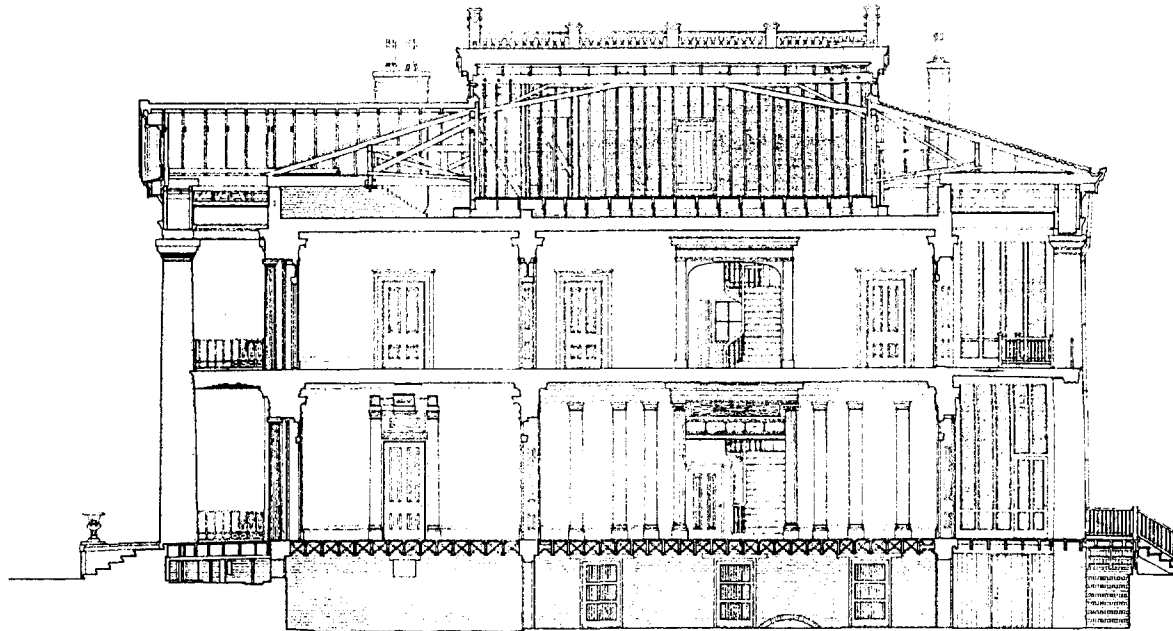
MATERIALS
FOUNDATION BRICK
WALLS BRICK
COLUMNS STUCCO OVER BRICK
ROOFING SLATE SHINGLES



339/25900
13 OF 22
MELROSE MAIN HOUSE
ADAMS COUNTY MISSISSIPPI
MELROSE MAIN HOUSE
ADAMS COUNTY MISSISSIPPI
MELROSE MAIN HOUSE
ADAMS COUNTY MISSISSIPPI

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14 OF 22

CAN MICHIGAN



SECTION A-A

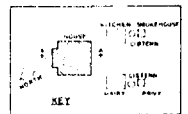
FEET 1/4" = 1'-0"
METERS 1:48

| | | STRUCTURE | FINISH |
|----------|--------------|--------------------|---------------------------------|
| FLOORING | BASEMENT | CONCRETE | BRICK AND CONCRETE |
| | FIRST FLOOR | WOODEN | WOODEN BOARDS, CARPET, FLOORING |
| | SECOND FLOOR | WOODEN | WOODEN BOARDS |
| WALLS | BASEMENT | LOAD BEARING BRICK | BRICK |
| | FIRST FLOOR | LOAD BEARING BRICK | PLASTER |
| | SECOND FLOOR | WOODEN | PLASTER |
| CEILING | BASEMENT | WOODEN | EXPOSED STRUCTURE |
| | FIRST FLOOR | WOODEN | PLASTER |
| | SECOND FLOOR | WOODEN | PLASTER |
| | ATTIC | WOODEN | EXPOSED STRUCTURE |

NOTE
GRADE APPROXIMATELY 2' BELOW FIRST FLOOR
AT SECTION CUT

| | |
|----------------------|--------|
| ROOF FLOOR | 57'-0" |
| ATTIC FLOOR | 59'-3" |
| SECOND FLOOR CEILING | 36'-0" |
| SECOND FLOOR | 21'-5" |
| FIRST FLOOR CEILING | 22'-5" |
| FIRST FLOOR | 7'-0" |
| BOTTOM OF JOIST | 6'-7" |
| BASEMENT FLOOR | 0'-0" |

KITCHEN



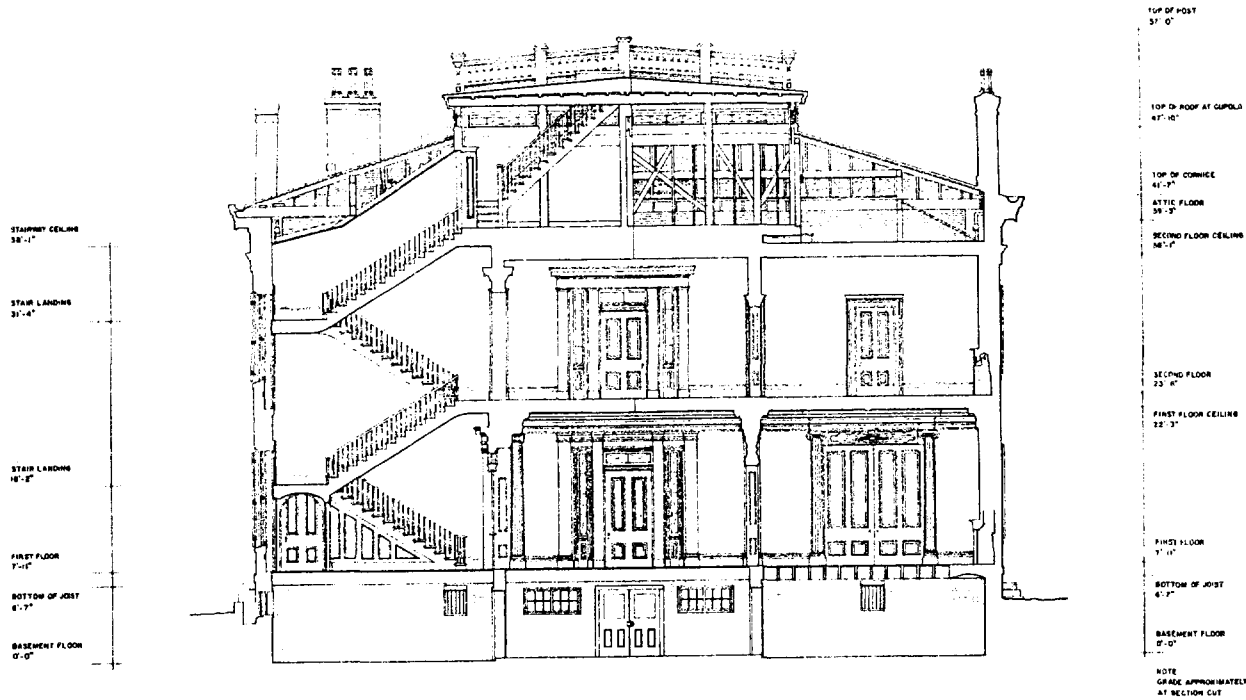
339/25900
14 OF 22
SERIES E. MCCARTHY ARCHITECTURAL ARCHITECTS
MATCH SET NATIONAL HISTORICAL PARK
ARCHITECTURAL RECORDS DIVISION
WASHINGTON, D.C.

1. WEST ESTATE, MONTICELLO PARKWAY
MONTICELLO, VIRGINIA

MELROSE - MAIN HOUSE
MATCH SET

MICHIGAN

SCALE: 1/4" = 1'-0"
DRAWING NUMBER: 339/25900-14



STAIRWAY CEILING
38'-4"

STAIR LANDING
31'-4"

STAIR LANDING
48'-8"

FIRST FLOOR
7'-6"

BOTTOM OF JOIST
6'-7"

BASEMENT FLOOR
0'-0"

TOP OF POST
37'-0"

TOP OF ROOF AT CUPOLA
47'-10"

TOP OF CORNICE
41'-3"

ATTIC FLOOR
38'-3"

SECOND FLOOR CEILING
36'-7"

SECOND FLOOR
22'-0"

FIRST FLOOR CEILING
22'-3"

FIRST FLOOR
7'-6"

BOTTOM OF JOIST
6'-7"

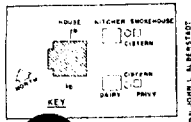
BASEMENT FLOOR
0'-0"

NOTE
GRADE APPROXIMATELY 3' BELOW FIRST FLOOR
AT SECTION CUT

SECTION B-B

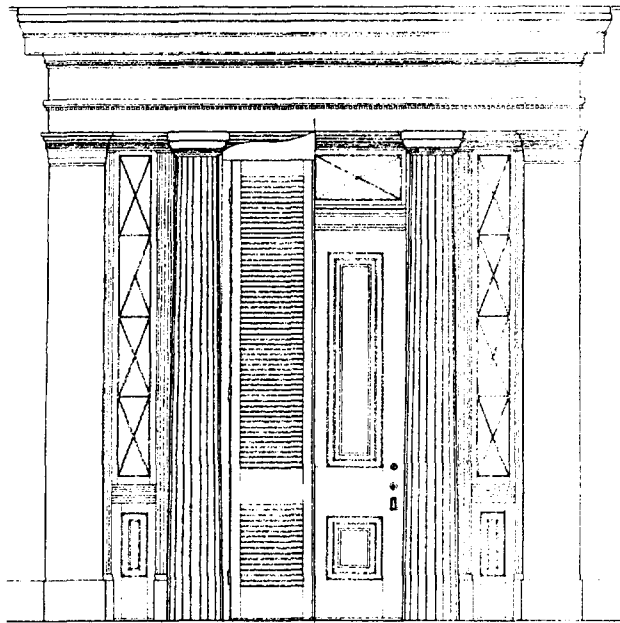
FEET 1/4" = 1'-0"
METERS 1:48

| | MATERIALS | | |
|----------|--------------|--------------------|-------------------------------|
| | FINISH | STRUCTURE | FOUNDATION |
| FLOORING | BASEMENT | WOODEN | WOODEN |
| | FIRST FLOOR | WOODEN | WOODEN |
| | SECOND FLOOR | WOODEN | WOODEN |
| | ATTIC | WOODEN | WOODEN |
| WALLS | BASEMENT | LOAD BEARING BRICK | BRICK |
| | FIRST FLOOR | LOAD BEARING BRICK | PLASTER |
| | SECOND FLOOR | LOAD BEARING BRICK | PLASTER |
| | ATTIC | WOODEN | PLASTER AND EXPOSED STRUCTURE |
| CEILING | BASEMENT | WOODEN | EXPOSED STRUCTURE |
| | FIRST FLOOR | WOODEN | PLASTER |
| | SECOND FLOOR | WOODEN | PLASTER |
| | ATTIC | WOODEN | EXPOSED STRUCTURE |

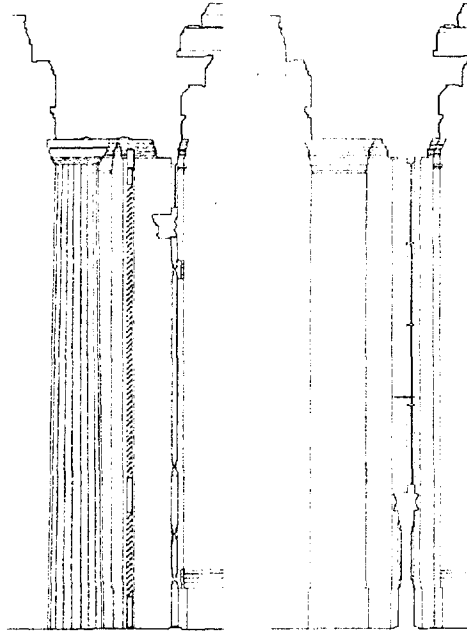


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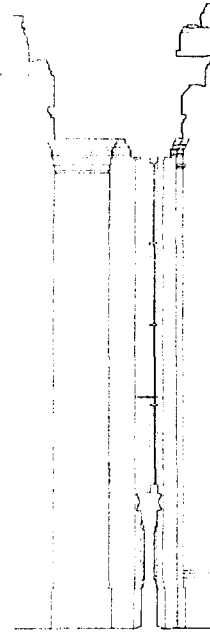
DATE PLOTTED: 11/17/11



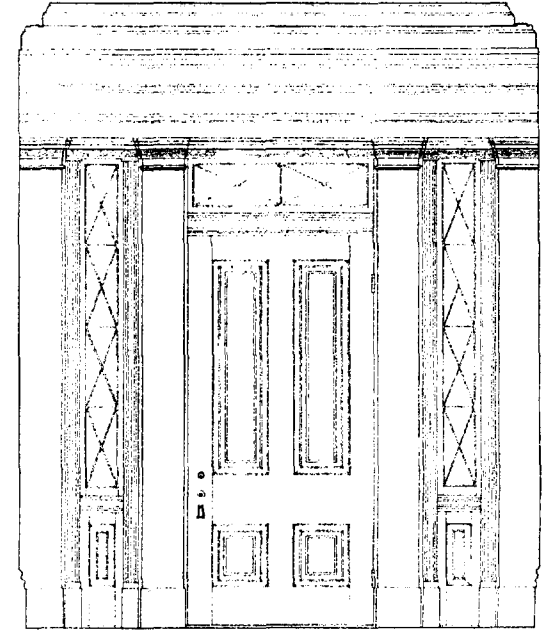
EXTERIOR ELEVATION



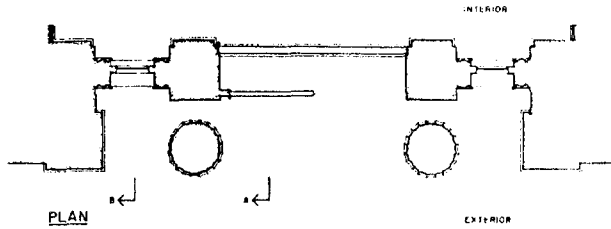
SECTION A



SECTION B



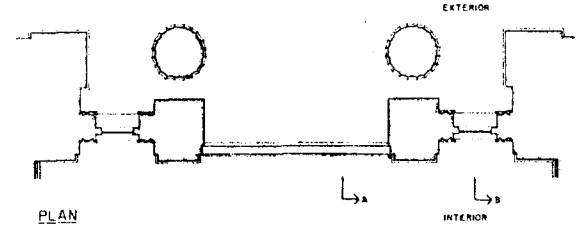
INTERIOR ELEVATION



PLAN

INTERIOR

EXTERIOR



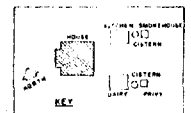
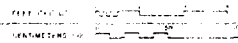
PLAN

EXTERIOR

INTERIOR

NORTHWEST ENTRANCE DOOR

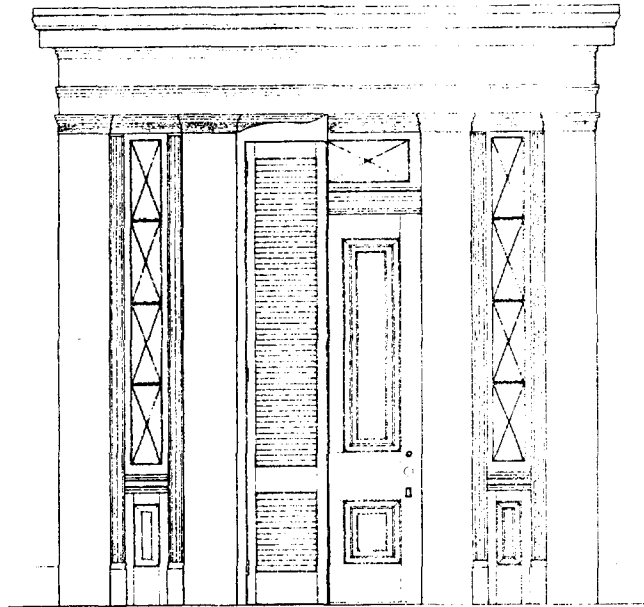
FIRST FLOOR



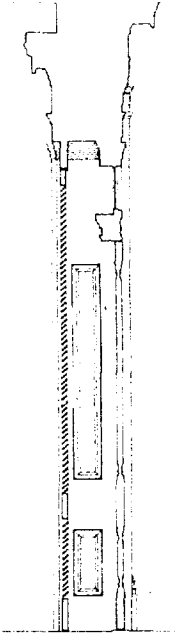
MELROSE - MAIN HOUSE
MAYHEW
ADAMS COUNTY
MISSISSIPPI
MELROSE-MONTEBELLO PARKWAY
MELROSE, MISSISSIPPI
HISTORIC ARCHITECTURAL SURVEY
NOV 22 16 22

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17 OF 22

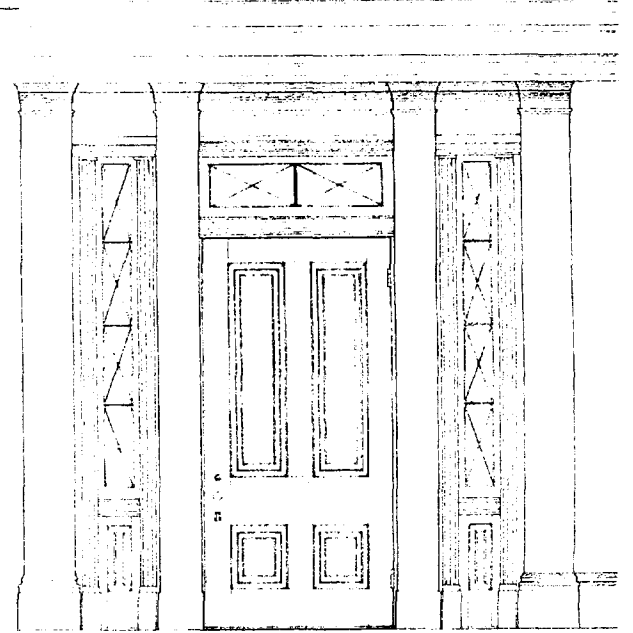
10/1/2011



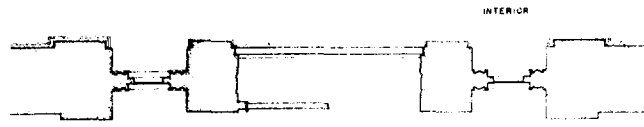
EXTERIOR ELEVATION



SECTION



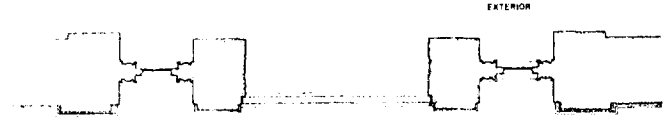
INTERIOR ELEVATION



PLAN

INTERIOR

EXTERIOR



PLAN

EXTERIOR

INTERIOR

SOUTHEAST ENTRANCE DOOR
FIRST FLOOR

SCALE: 1/4" = 1'-0"
CENTIMETERS: 1:20



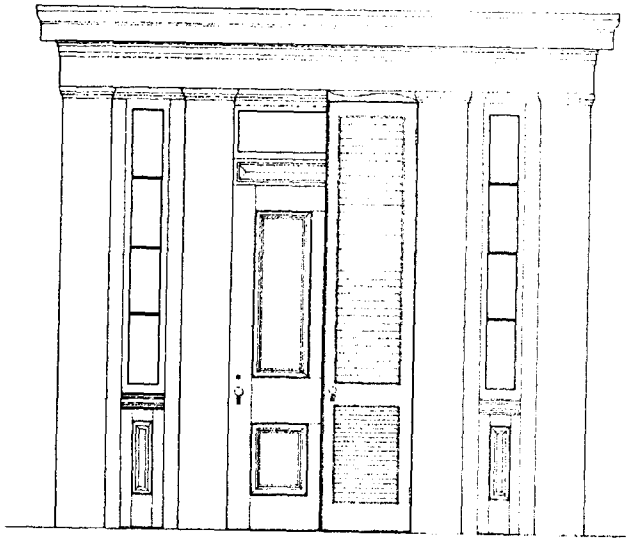
RECHILL, AND ASSOCIATES
ARCHITECTS
1000 N. GULF BLVD., SUITE 100
MEMPHIS, TN 38103
TEL: 901.725.1111
FAX: 901.725.1112
WWW.RECHILL.COM

MELROSE - MAIN HOUSE
BOONVILLE, MISSISSIPPI

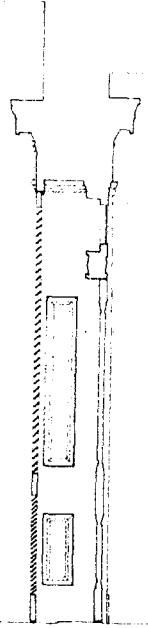
DATE: 10/1/2011
DRAWING NO.: 339/25900
SHEET NO.: 17 OF 22

339/25900
18 OF 22

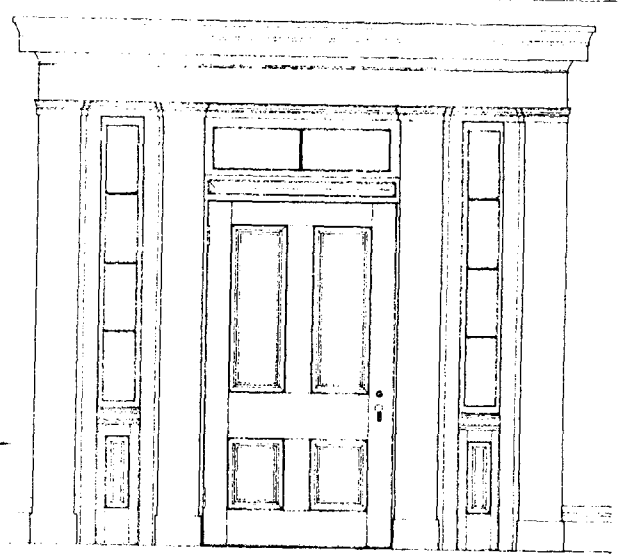
SOUTH ELEVATION



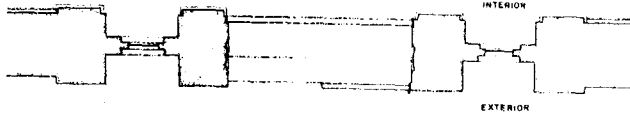
EXTERIOR ELEVATION



SECTION



INTERIOR ELEVATION

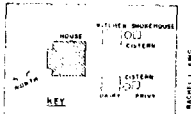
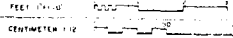


PLAN



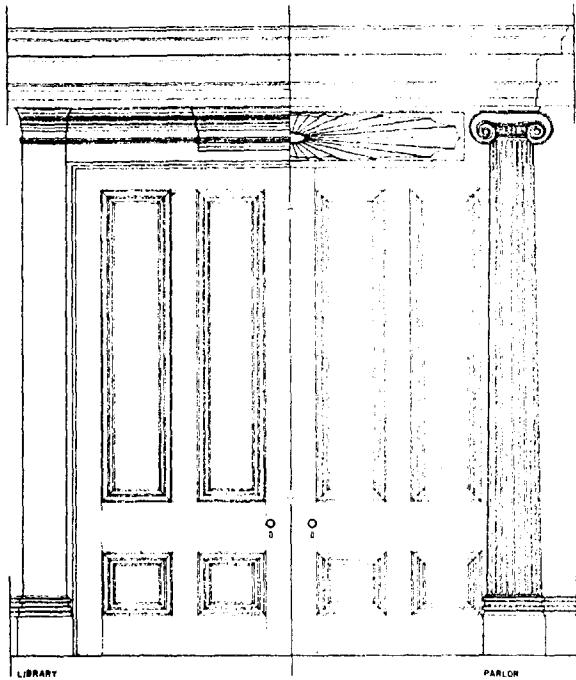
PLAN

SOUTHEAST ENTRANCE DOOR
SECOND FLOOR

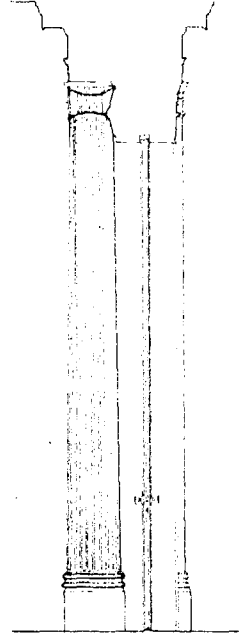


PROJECT: MELROSE - MAIN HOUSE
 ARCHITECT: MELROSE ARCHITECTS, P.A.
 PROJECT NO: 339/25900
 DATE: 05/18/22
 SHEET NO: 18 OF 22
 DRAWN BY: M.S.G.

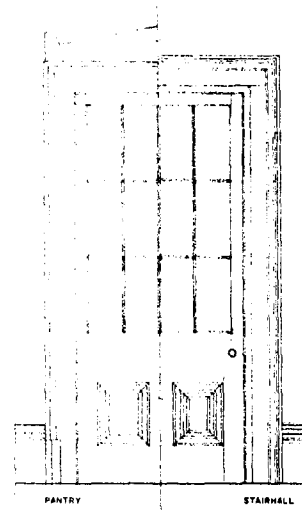
339/25900
19 OF 22



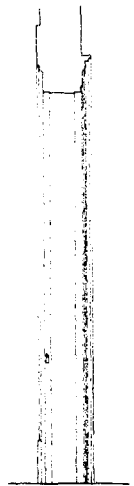
ELEVATION



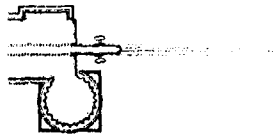
SECTION



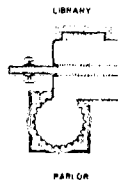
ELEVATION



SECTION

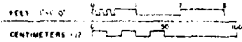


PLAN

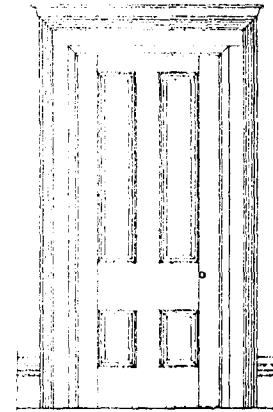


PARLOR

DOOR DETAILS



PLAN



ELEVATION

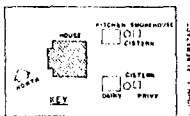


SECTION



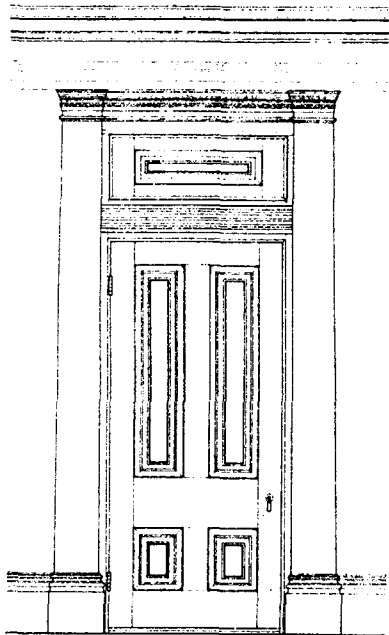
PLAN

TYPICAL DOOR
SECOND FLOOR

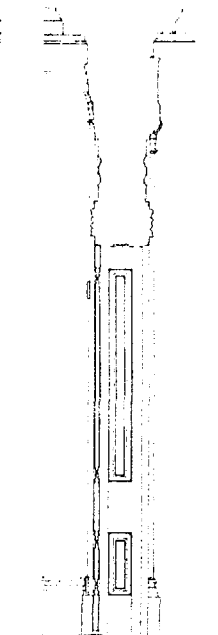


MISSISSIPPI ARCHITECTURAL SOCIETY
MEMBERSHIP LIST
MEMBERSHIP YEAR
MEMBERSHIP TYPE
MEMBERSHIP STATUS
MEMBERSHIP NUMBER
MEMBERSHIP NAME
MEMBERSHIP ADDRESS
MEMBERSHIP CITY
MEMBERSHIP STATE
MEMBERSHIP ZIP
MEMBERSHIP PHONE
MEMBERSHIP FAX
MEMBERSHIP EMAIL
MEMBERSHIP COMMENTS

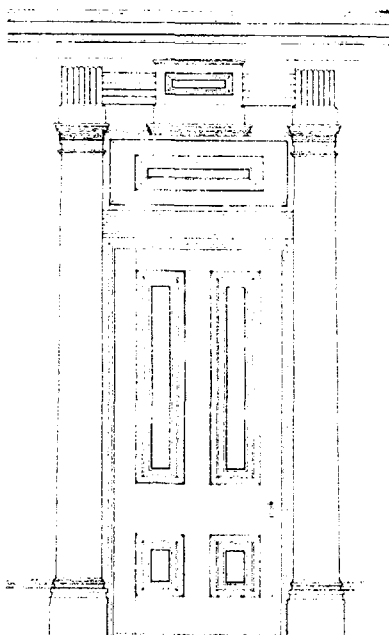
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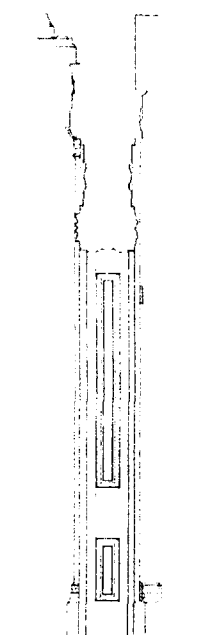
ELEVATION - DRAWING ROOM



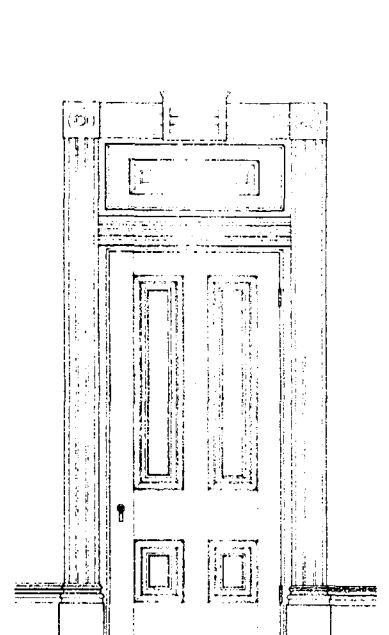
DRAWING ROOM SECTION FRONT HALL



ELEVATION - FRONT HALL

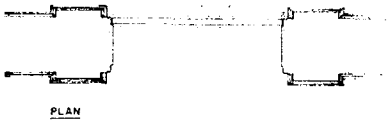


FRONT HALL SECTION DINING ROOM

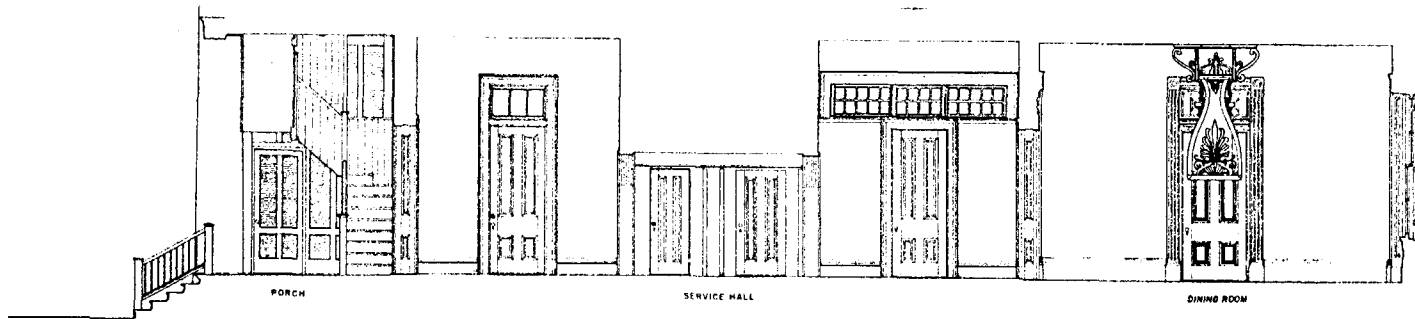
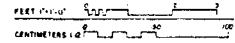


ELEVATION - DINING ROOM

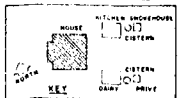
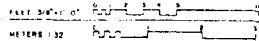
DOOR DETAILS



PLAN

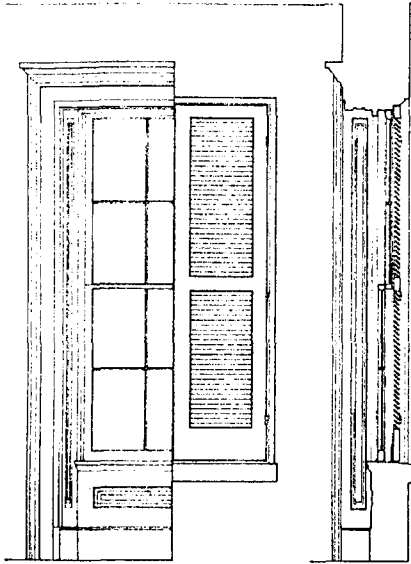


SECTION-ELEVATION C-C



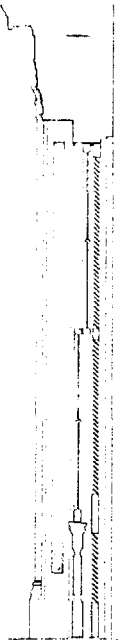
MELROSE - MAIN HOUSE
MISSISSIPPI
EDWARDS COUNTY
ARCHITECTS
LAWRENCE & NEUBAUER, ANALIST & PETERSON
MEMPHIS NATIONAL ARCHITECTURAL FIRM
MEMPHIS, TENNESSEE
DATE: 20 22
DRAWING NUMBER: 339/25900
SCALE: 1/8" = 1'-0"

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21 OF 22

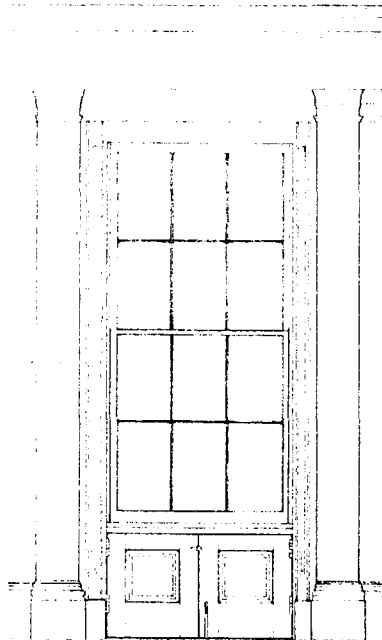


ELEVATION

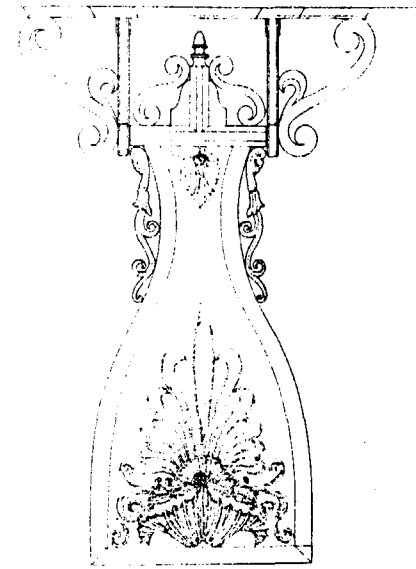
SECTION



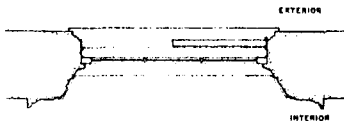
SECTION



ELEVATION



CAST-IRON MANTLEPIECE



PLAN

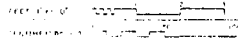
WINDOW



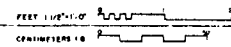
PLAN

JIB DOOR LIBRARY

DETAILS



PUNKAH DINING ROOM



WELDON WINTERFELD ARCHITECTS
1000 W. MONTELEONE AVENUE
HOUSTON, TEXAS 77002
TEL. 774-2222

MELROSE - MAIN HOUSE
BIBBES COUNTY
MISSISSIPPI

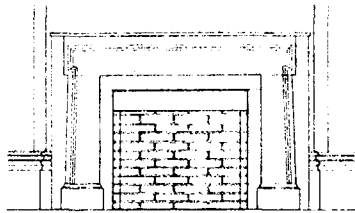
MISSISSIPPI

21 OF 22

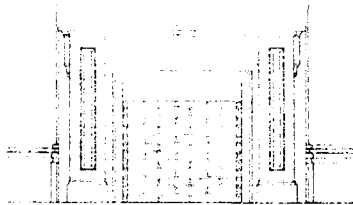
WELDON WINTERFELD ARCHITECTS
HOUSTON, TEXAS 77002
TEL. 774-2222

339/25900
22 OF 22

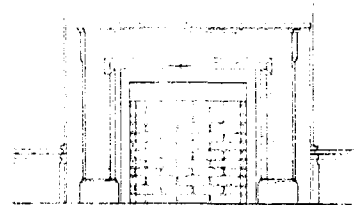
CHAS. H. HARRIS



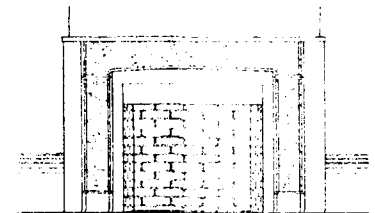
ELEVATION



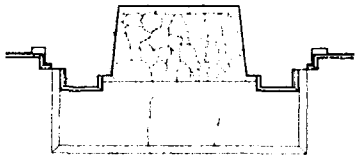
ELEVATION



ELEVATION

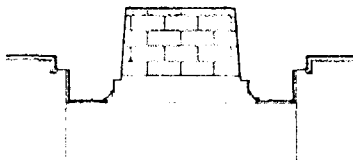


ELEVATION



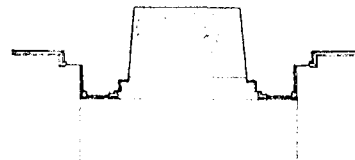
PLAN

DINING ROOM



PLAN

DRAWING ROOM



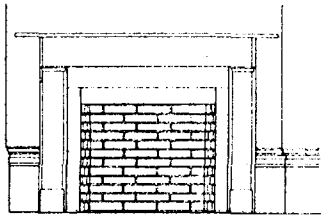
PLAN

PARLOR



PLAN

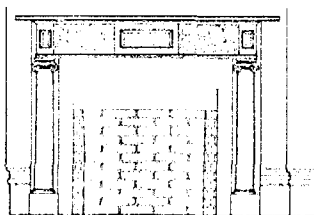
LIBRARY



ELEVATION

PLAN

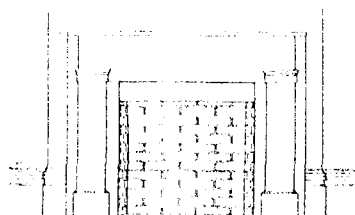
WARMING KITCHEN



ELEVATION

PLAN

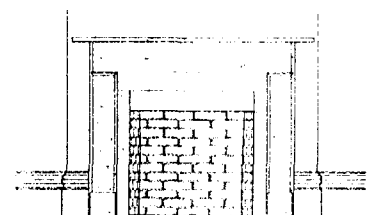
BATHROOM



ELEVATION

PLAN

NORTHWEST BEDROOM
SOUTHWEST BEDROOM SIMILAR

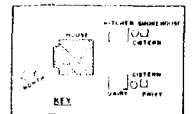
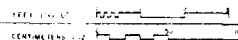


ELEVATION

PLAN

SOUTHEAST BEDROOM
CENTER BEDROOM SIMILAR

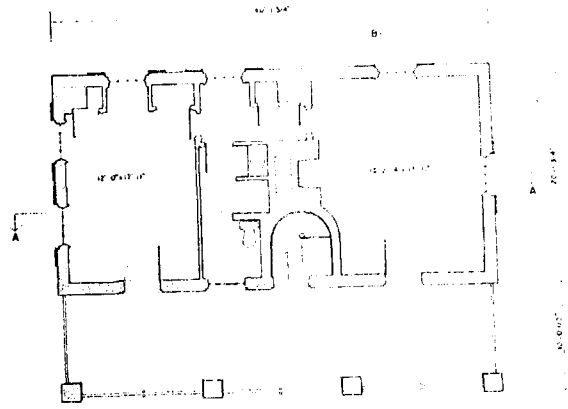
FIREPLACES



CHAS. H. HARRIS ARCHITECT

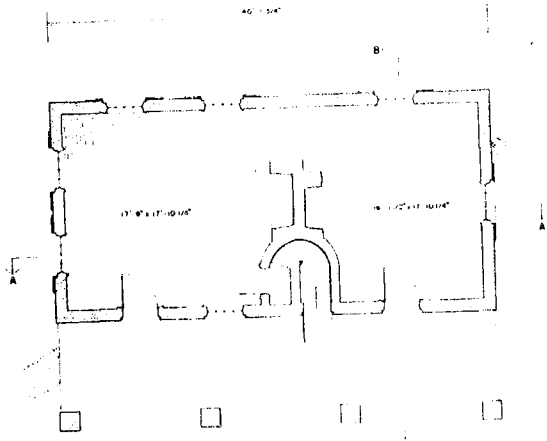
MELROSE - MAIN HOUSE
MELROSE-MONTELEONE PARKWAY
ADAMS COUNTY, MISSISSIPPI

NO. 22 OF 22
CHAS. H. HARRIS ARCHITECT
P.O. BOX 100
MEMPHIS, TENN.



SECOND FLOOR PLAN

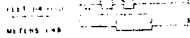
MATERIALS
FLOORS RANDOM WIDTH WOODEN BOARDS
WALLS PLASTER
CEILING PLASTER



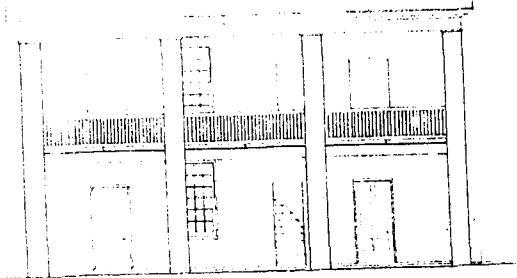
FIRST FLOOR PLAN

MATERIALS
FLOORS CURVED AND WOODEN BOARDS
WALLS LADDER
CEILING PLASTER

KITCHEN DEPENDENCY

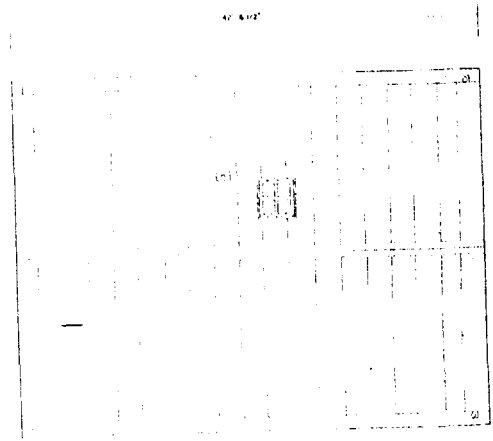


MELROSE



SOUTHEAST ELEVATION

MATERIALS
FOUNDATION BRICK
WALLS STUCCO OVER BRICK
ROOFING METAL

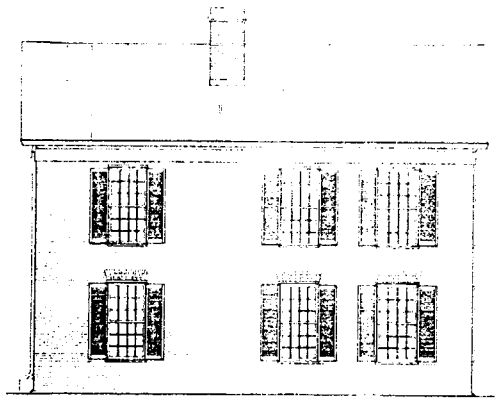


ROOF PLAN



ROOF PLAN

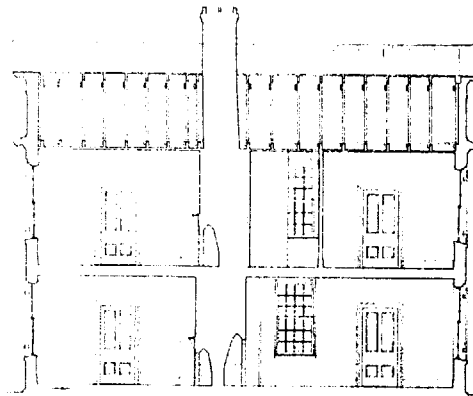
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NORTHEAST ELEVATION

MATERIALS
FOUNDATION
WALLS
ROOFING

BRICK
METAL



SECTION A-A

MATERIALS
FLOORS
WALLS
CEILING

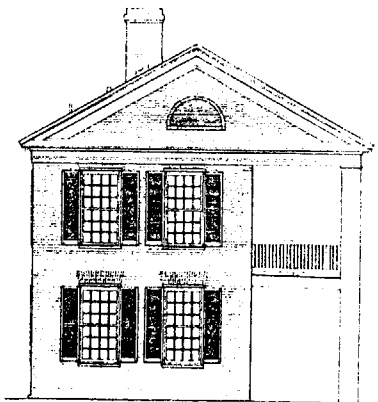
BRICK AND WOODEN BOARDS
PLASTER
PLASTER

ROOF
5'-6 1/2"

SECOND FLOOR
8'-0"

FIRST FLOOR CEILING
8'-10 3/4"

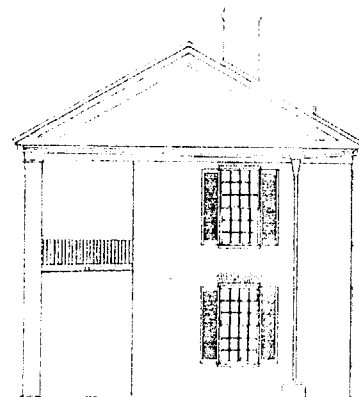
FIRST FLOOR
0'-0"



NORTHWEST ELEVATION

MATERIALS
FOUNDATION
WALLS
COLUMNS
ROOFING

BRICK
STONE AND BRICK
METAL



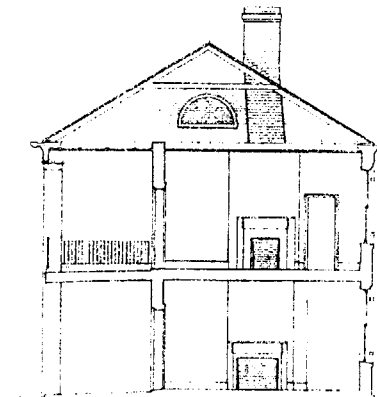
SOUTHEAST ELEVATION

MATERIALS
FOUNDATION
WALLS
COLUMNS
ROOFING

BRICK
STONE AND BRICK
METAL

KITCHEN DEPENDENCY

FEET 1/8" = 1'-0"
METERS 1:48



SECTION B-B

MATERIALS
FLOORS
WALLS
CEILING

BRICK AND WOODEN BOARDS
PLASTER
PLASTER

ROOF
5'-6 1/2"

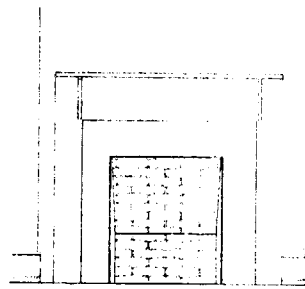
SECOND FLOOR
8'-0"

FIRST FLOOR CEILING
8'-10 3/4"

FIRST FLOOR
0'-0"



MISSISSIPPI
 ADAMS COUNTY
 MELROSE - KITCHEN
 NATIONAL HISTORICAL PARK
 PROJECT NUMBER: 339/25901



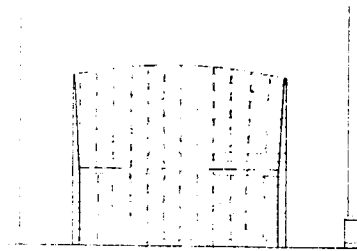
ELEVATION



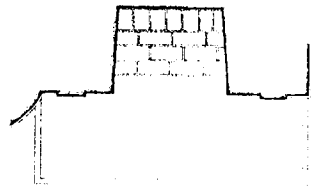
SECTION



SECTION



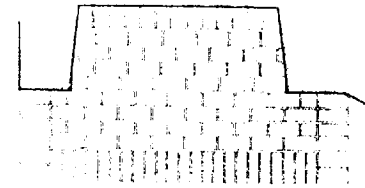
ELEVATION



PLAN

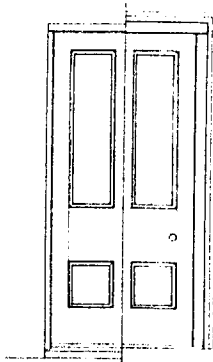
NORTHEAST ROOM
SECOND FLOOR

FIREPLACE DETAILS

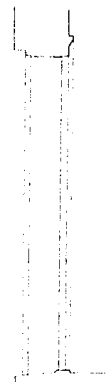


PLAN

NORTHWEST ROOM
FIRST FLOOR



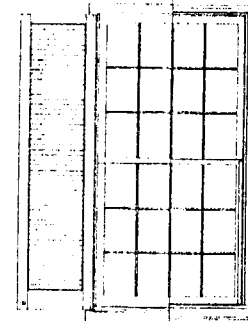
ELEVATION



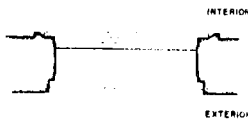
SECTION



SECTION



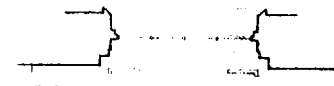
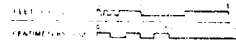
ELEVATION



PLAN

EXTERIOR DOOR

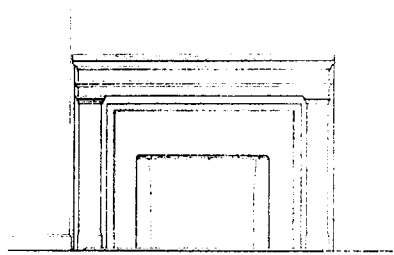
KITCHEN DEPENDENCY



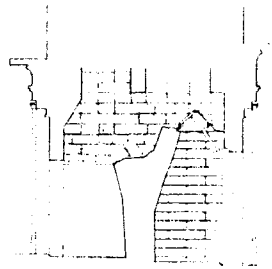
PLAN

WINDOW

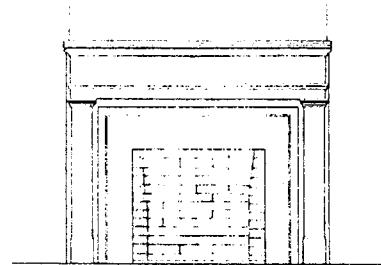




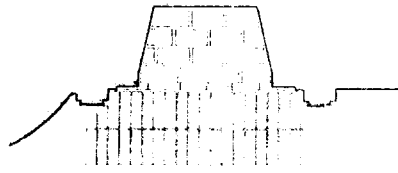
ELEVATION



SECTION



ELEVATION

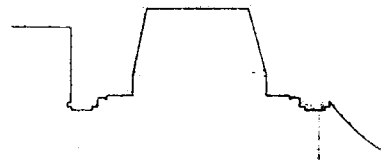


PLAN

NORTHWEST ROOM
FIRST FLOOR

SOUTHEAST ROOM
FIRST FLOOR

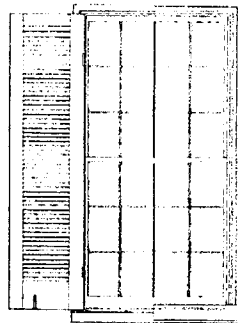
FIREPLACE DETAILS



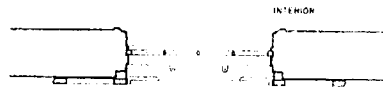
PLAN



SECTION

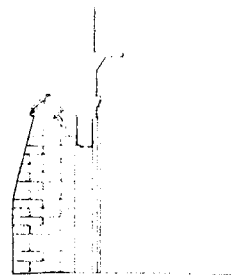


ELEVATION



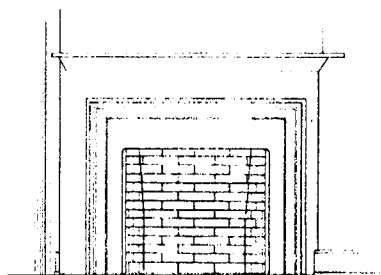
PLAN

WINDOW

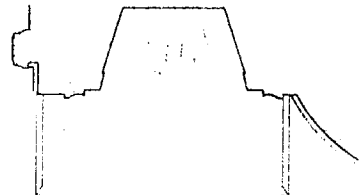


SECTION

SOUTHEAST ROOM
SECOND FLOOR

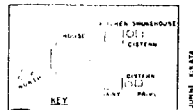
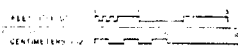


ELEVATION



PLAN

DAIRY DEPENDENCY



DAIRY DEPENDENCY
NATIONAL HISTORICAL PARK
ADAMS COUNTY
MISSISSIPPI

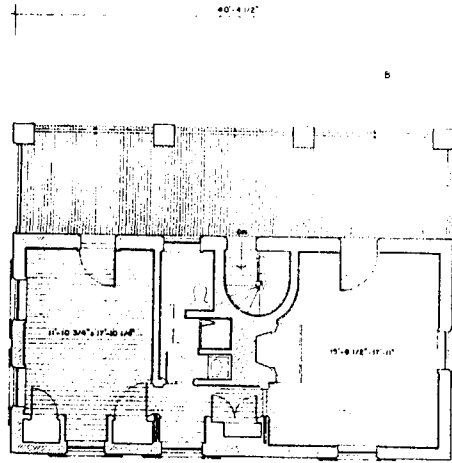
MEL ROSE - DAIRY

MISSISSIPPI

HISTORIC AMERICAN
PHOTOGRAPHY
U.S.G.P.

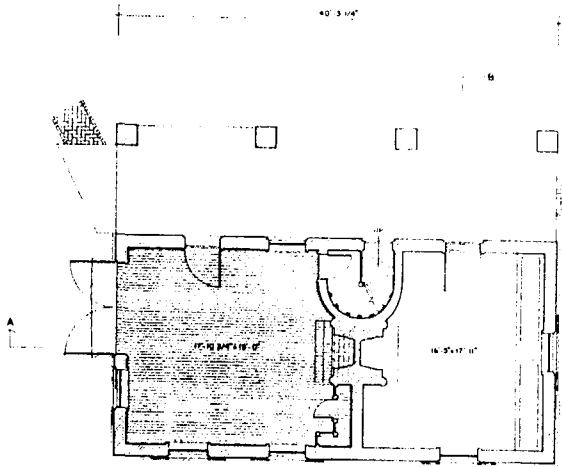
3 3

339/25902
1 OF 3



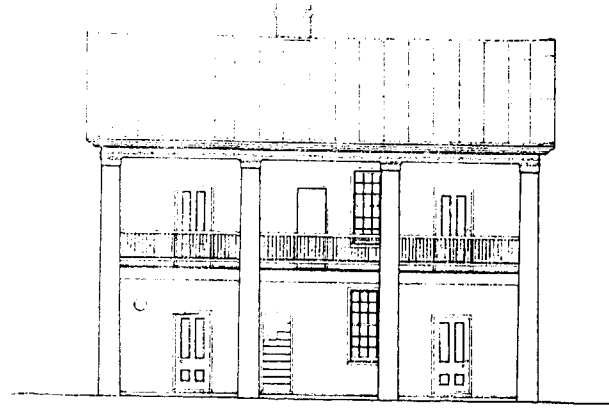
SECOND FLOOR PLAN

MATERIALS
FLOORING RANDOM WIDTH WOOD PARQUET
WALLS PLASTER
CEILING PLASTER



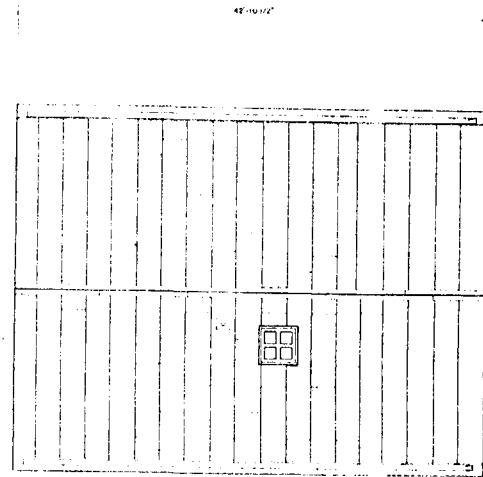
FIRST FLOOR PLAN

MATERIALS
FLOORING CONCRETE AND WOODEN BOARD
WALLS PLASTER
CEILING PLASTER



NORTHEAST ELEVATION

MATERIALS
FOUNDATION BRICK
WALLS STUCCO OVER BRICK
ROOFING METAL

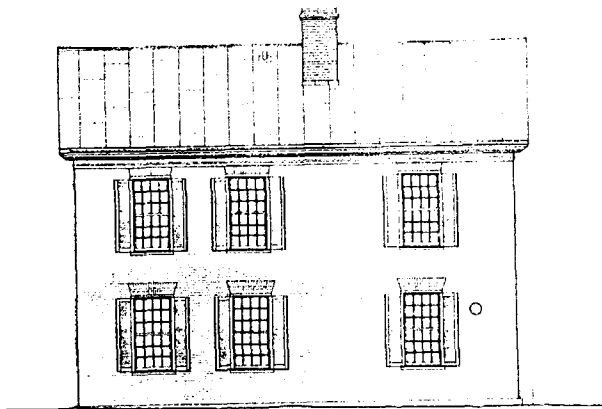


ROOF PLAN

DAIRY DEPENDENCY



DATE: 11/15/50
DRAWN BY: J. W. BROWN
CHECKED BY: J. W. BROWN
PROJECT: MELROSE - DAIRY
LOCATION: ADAMS COUNTY, MISSOURI
SCALE: AS SHOWN
JOB NO.: 339/25902



SOUTHWEST ELEVATION

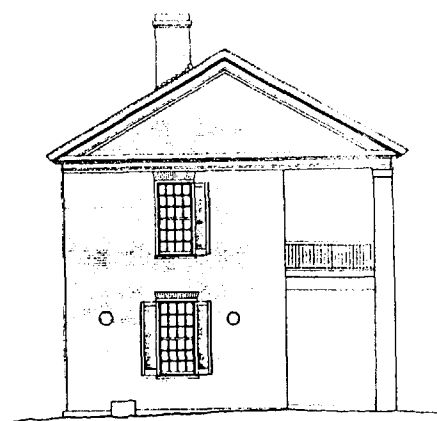
MATERIALS
FOUNDATION BRICK
WALLS BRICK
ROOFING METAL



SECTION A-A

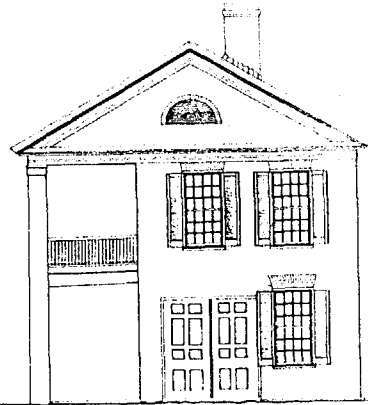
MATERIALS
FLOORS LAMINATE AND WOODEN BOARD
WALLS PLASTER
CEILING PLASTER

ROOF 22' 0"
SECOND FLOOR CEILING 22' 0"
SECOND FLOOR 11' 0"
FIRST FLOOR CEILING 10' 3 1/4"
FIRST FLOOR 0' 0"



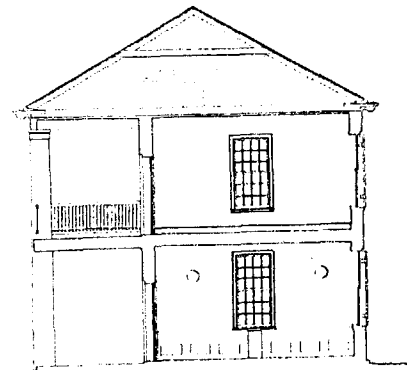
SOUTHEAST ELEVATION

MATERIALS
FOUNDATION BRICK
WALLS BRICK
COLUMNS BRICK
ROOFING METAL



NORTHWEST ELEVATION

MATERIALS
FOUNDATION BRICK
WALLS BRICK
COLUMNS BRICK
ROOFING METAL



SECTION B-B

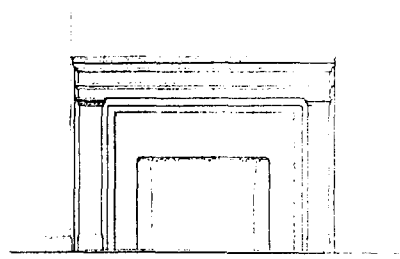
MATERIALS
FLOORS CONCRETE AND WOODEN BOARD
WALLS PLASTER
CEILING PLASTER

ROOF 22' 7 3/4"
SECOND FLOOR CEILING 22' 0"
SECOND FLOOR 11' 0"
FIRST FLOOR CEILING 10' 3 1/4"
FIRST FLOOR 0' 0"

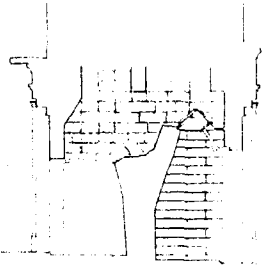
DAIRY DEPENDENCY

FEET 1/8" = 1'-0"
METERS 1:40

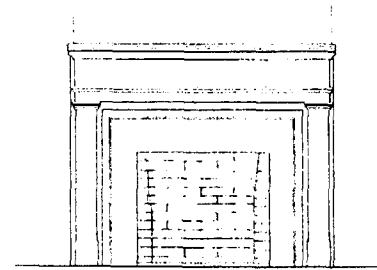




ELEVATION



SECTION



ELEVATION

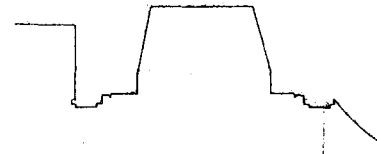


PLAN

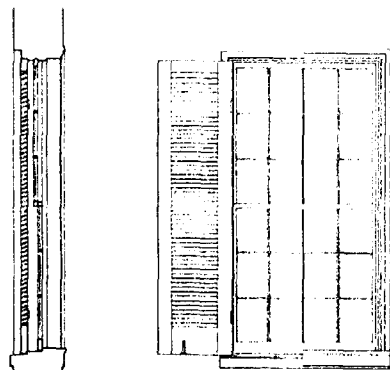
NORTHWEST ROOM
FIRST FLOOR

SOUTHEAST ROOM
FIRST FLOOR

FIREPLACE DETAILS

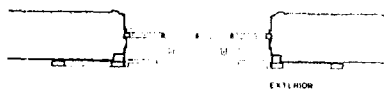


PLAN



SECTION

ELEVATION



PLAN

WINDOW

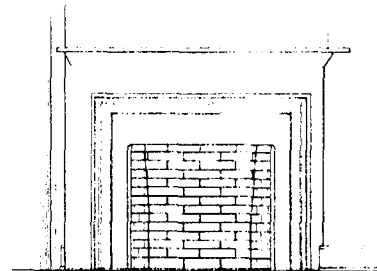


DAIRY DEPENDENCY

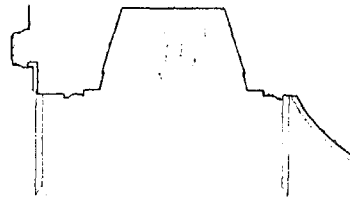


SECTION

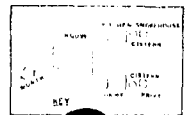
SOUTHEAST ROOM
SECOND FLOOR



ELEVATION



PLAN



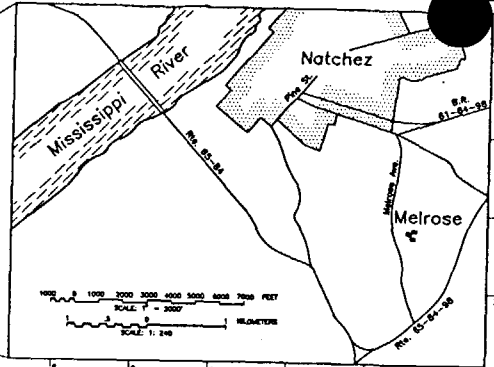
PROJECT: MELROSE DAIRY
ARCHITECT: JAMES EARL RAY
DATE: 1972

MELROSE - DAIRY

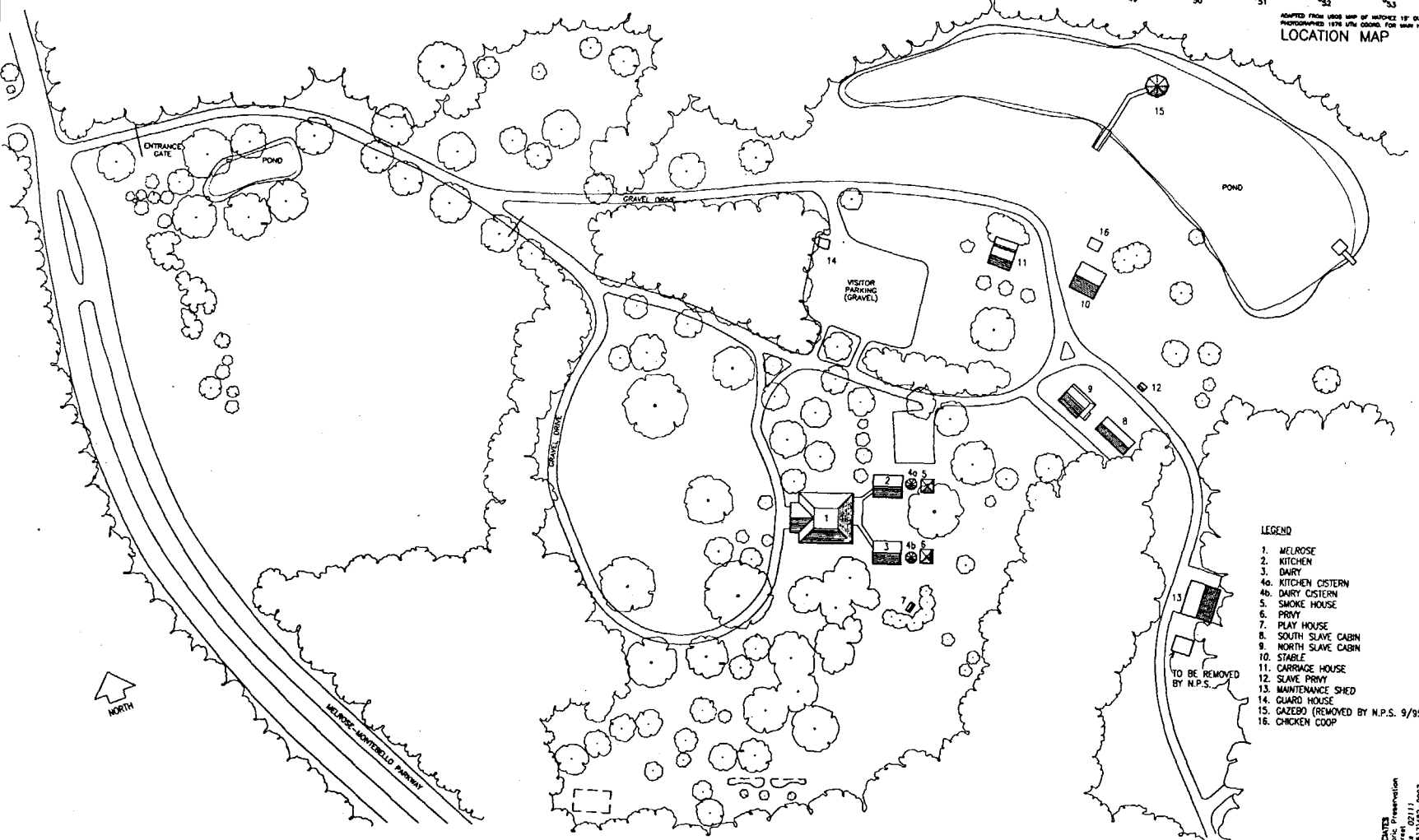
MELROSE

MELROSE

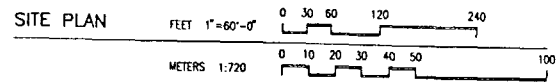
MISSISSIPPI



ADAPTED FROM LAND MAP OF NATCHEZ 18' QUADRANT 1943
 PHOTOGRAPHED 1978 BY GORDON FOR W&A HOUSE 13-03-300-340718
LOCATION MAP



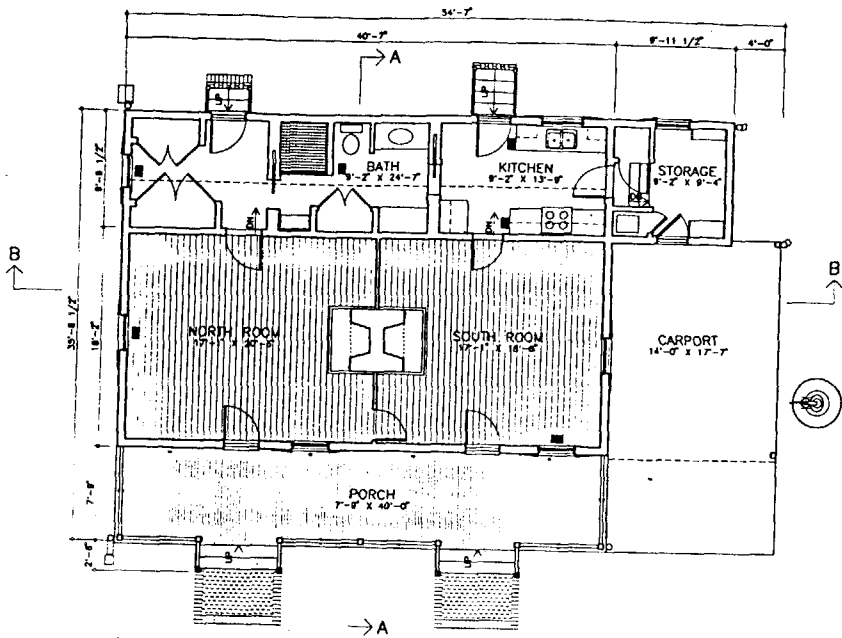
- LEGEND**
- 1. MELROSE
 - 2. KITCHEN
 - 3. DAIRY
 - 4a. KITCHEN CISTERN
 - 4b. DAIRY CISTERN
 - 5. SMOKE HOUSE
 - 6. PRIVY
 - 7. PLAY HOUSE
 - 8. SOUTH SLAVE CABIN
 - 9. NORTH SLAVE CABIN
 - 10. STABLE
 - 11. CARRIAGE HOUSE
 - 12. SLAVE PRIVY
 - 13. MAINTENANCE SHED
 - 14. GUARD HOUSE
 - 15. CAZERO (REMOVED BY N.P.S. 9/95)
 - 16. CHICKEN COOP
- TO BE REMOVED BY N.P.S.



JANE BISH ASSOCIATES
 Architecture, Planning, Historic Preservation
 3000 Westbank Drive, Suite 201
 Baton Rouge, Louisiana 70815
 Tel: (817) 338-3000, Fax: (817) 482-8087

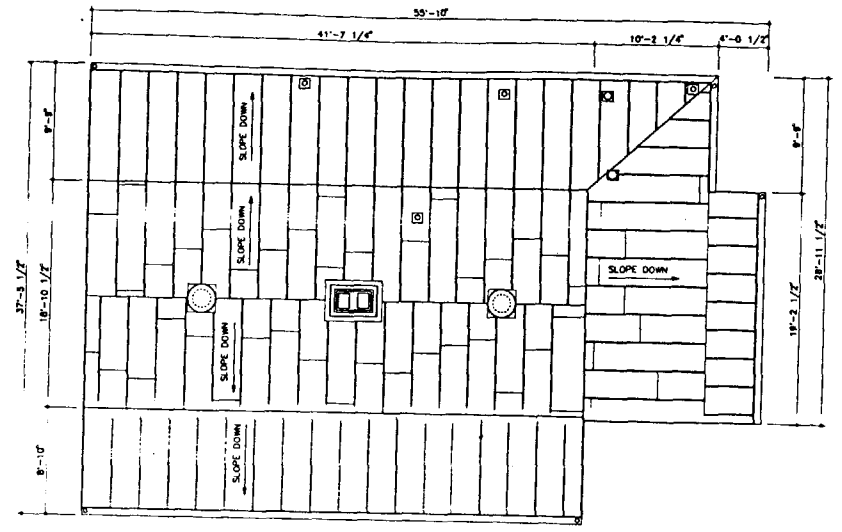
RICHARD BETHUNE & ASSOCIATES
 Architects and Planners
 48 Westmore St., Suite 300
 Baton Rouge, Louisiana 70801
 Tel: (504) 383-8038, Fax: (504) 383-0037

MISSISSIPPI
 NATCHEZ, ADAM COUNTY, MISSISSIPPI
 MELROSE
 MELROSE-MONTEBELLO PARKWAY
 MELROSE PLANTATION
 PHOTOGRAPHED BY GORDON FOR W&A HOUSE 13-03-300-340718

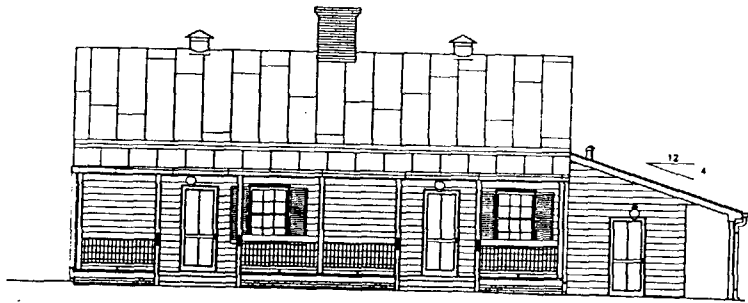


FIRST FLOOR PLAN

MATERIALS
 FLOOR: WOOD, CARPET, LINOLEUM, TILE
 WALLS: PLASTER
 CEILING: PLASTER

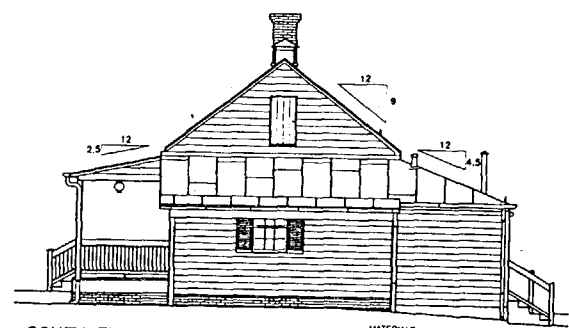


ROOF PLAN



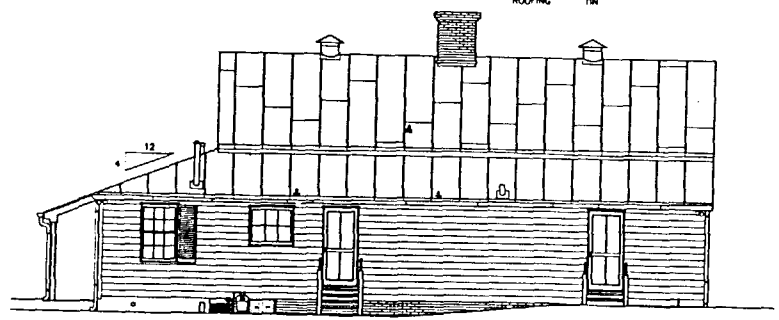
WEST ELEVATION

MATERIALS
 FOUNDATION: BRICK, CONCRETE & CONCRETE BLOCK
 WALLS: WOOD SIDING
 ROOFING: TIN



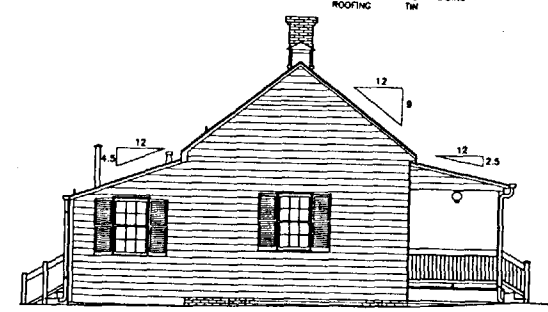
SOUTH ELEVATION

MATERIALS
 FOUNDATION: BRICK, CONCRETE & CONCRETE BLOCK
 WALLS: WOOD SIDING
 ROOFING: TIN



EAST ELEVATION

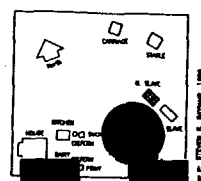
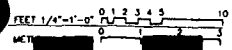
MATERIALS
 FOUNDATION: BRICK, CONCRETE & CONCRETE BLOCK
 WALLS: WOOD SIDING
 ROOFING: TIN

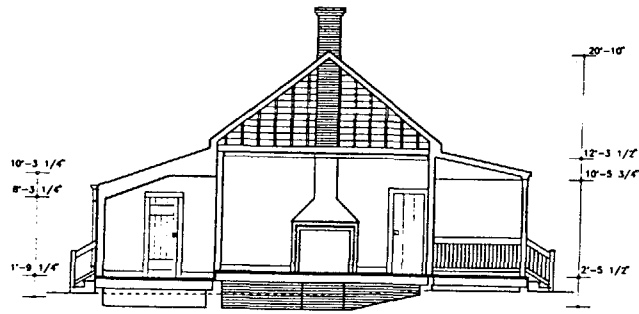


NORTH ELEVATION

MATERIALS
 FOUNDATION: BRICK, CONCRETE & CONCRETE BLOCK
 WALLS: WOOD SIDING
 ROOFING: TIN

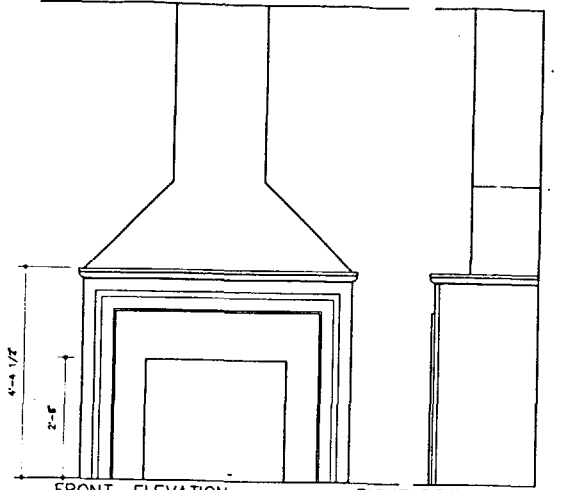
NORTH SLAVE CABIN



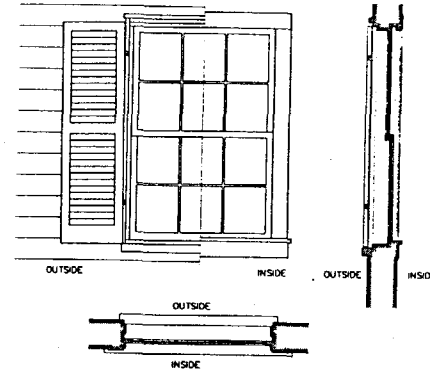


SECTION A-A

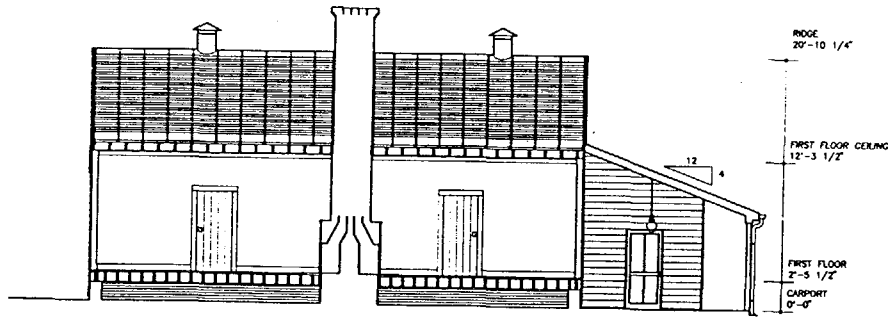
MATERIALS
FLOOR WOOD, CARPET, LINOLEUM, TILE
WALLS GYPSUM BOARD
CEILING GYPSUM BOARD



FRONT ELEVATION RIGHT SIDE ELEVATION
FIREPLACE

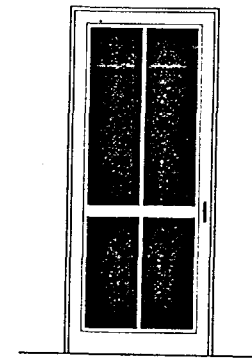


WINDOW ELEVATION

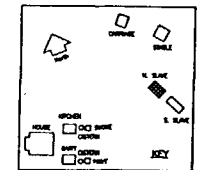
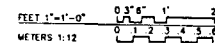
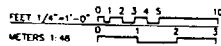


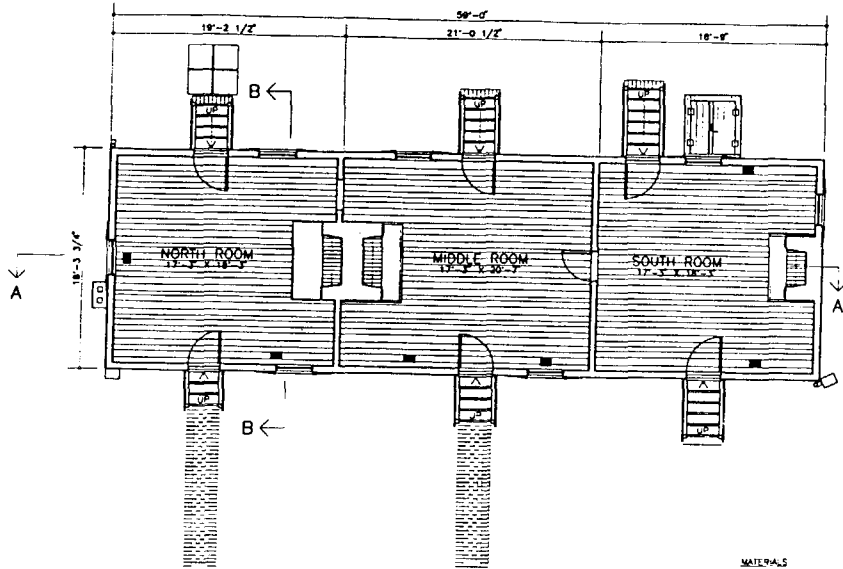
SECTION B-B

MATERIALS
FLOOR WOOD, CARPET, LINOLEUM, TILE
WALLS GYPSUM BOARD
CEILING GYPSUM BOARD



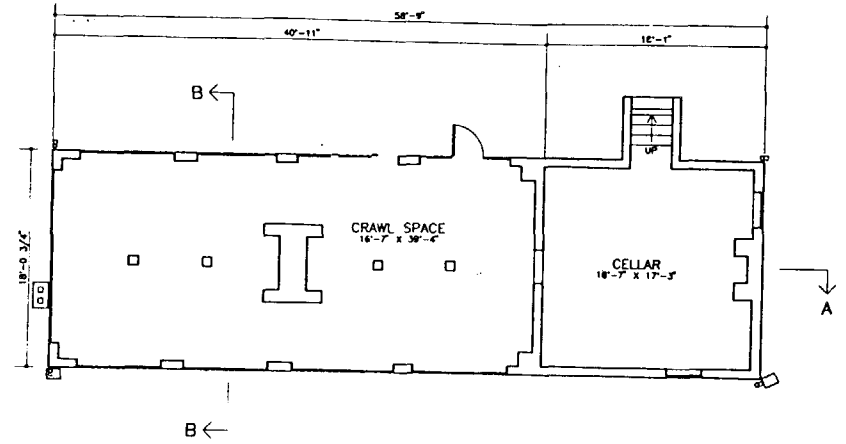
DOOR ELEVATION





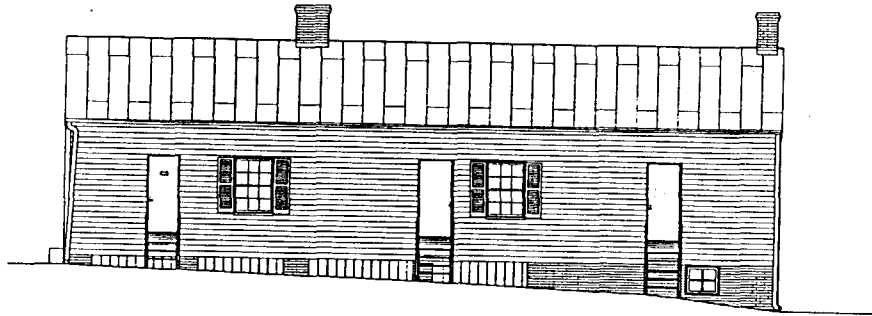
MAIN FLOOR PLAN

MATERIALS
FLOOR: WOOD
WALLS: PLASTER
CEILING: PLASTER



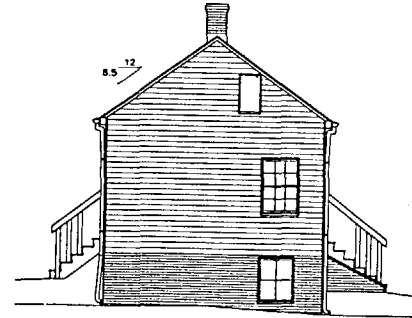
CRAWL SPACE / CELLAR FLOOR PLAN

MATERIALS
FLOOR: DIRT
WALLS: BRICK
CEILING: EXPOSED WOOD STRUCTURE



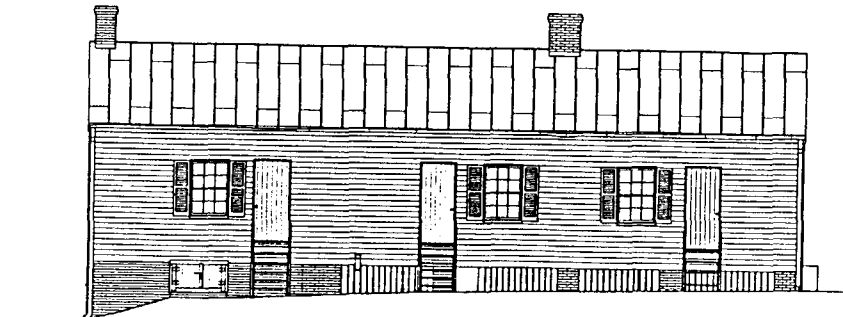
WEST ELEVATION

MATERIALS
FOUNDATION: BRICK
WALLS: WOOD SIDING
ROOFING: TIN



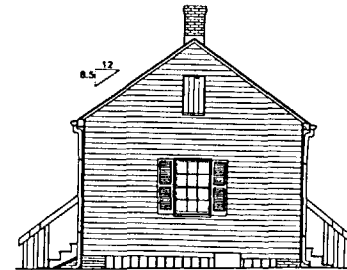
SOUTH ELEVATION

MATERIALS
FOUNDATION: BRICK
WALLS: WOOD SIDING
ROOFING: TIN



EAST ELEVATION

MATERIALS
FOUNDATION: BRICK
WALLS: WOOD SIDING
ROOFING: TIN

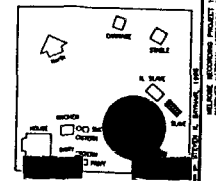


NORTH ELEVATION

MATERIALS
FOUNDATION: BRICK
WALLS: WOOD SIDING
ROOFING: TIN

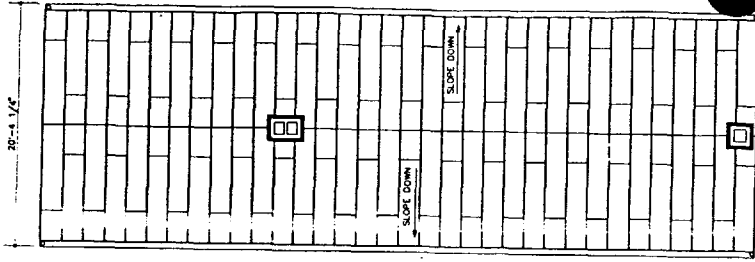
SOUTH SLAVE CABIN

FEET 1/4"=1'-0"
METERS 1:48

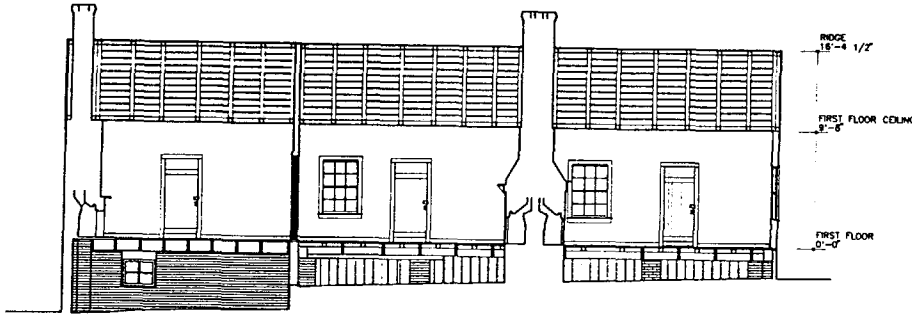


MELROSE - MONTELELO PARKWAY
 MELROSE - SOUTH SLAVE CABIN
 MELROSE - JONES COUNTY - MISSISSIPPI
 10
 3
 18
 10
 24
 22
 20
 18
 16
 14
 12
 10
 8
 6
 4
 2
 0

C:\PROJECTS\339\25904

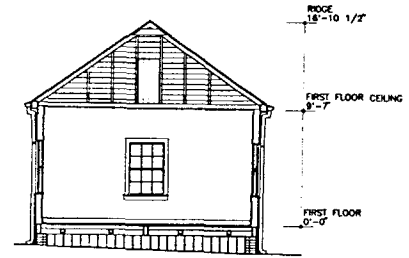


ROOF PLAN



SECTION A-A

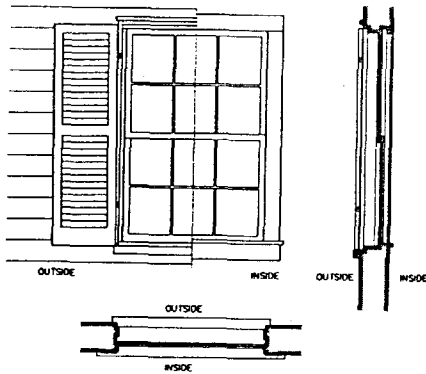
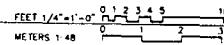
MATERIALS
FLOOR WOOD
WALLS PLASTER
CEILING PLASTER



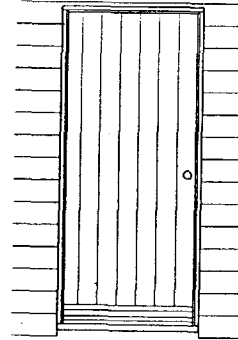
SECTION B-B

MATERIALS
FLOOR WOOD
WALLS PLASTER
CEILING PLASTER

SOUTH SLAVE CABIN

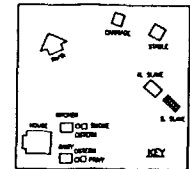
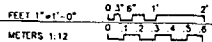


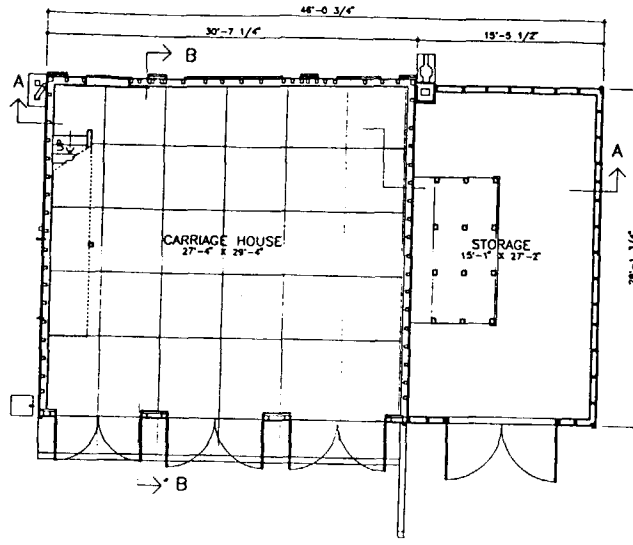
WINDOW ELEVATION



DOOR ELEVATION

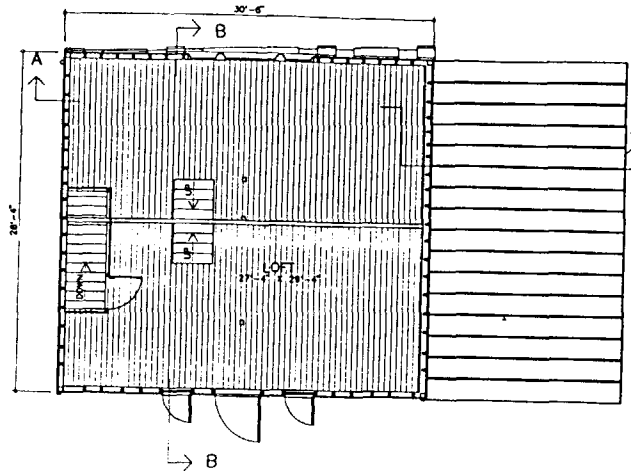
SOUTH SLAVE DETAILS





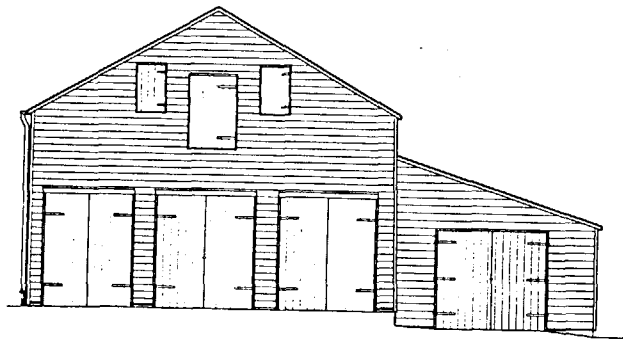
FIRST FLOOR PLAN

MATERIALS
FLOORS CONCRETE
WALLS EXPOSED WOOD STRUCTURE
CEILING EXPOSED WOOD STRUCTURE



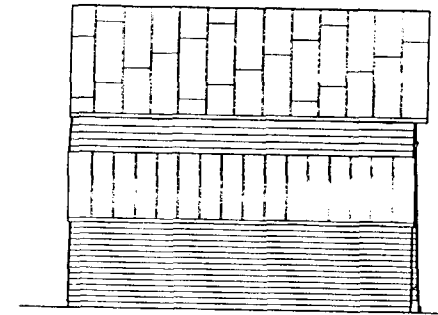
SECOND FLOOR PLAN

MATERIALS
FLOORS WOOD
WALLS EXPOSED WOOD STRUCTURE
CEILING EXPOSED WOOD STRUCTURE



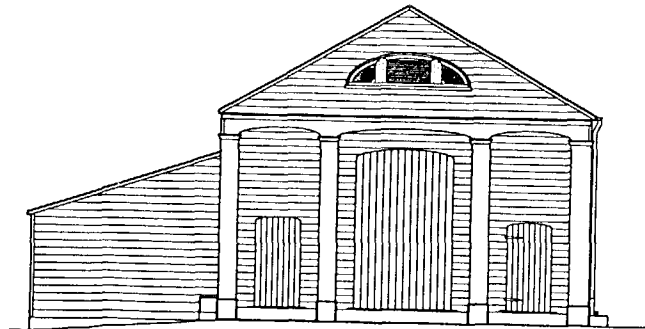
WEST ELEVATION

MATERIALS
FOUNDATION CONCRETE
WALLS WOOD SIDING
ROOFING TIN



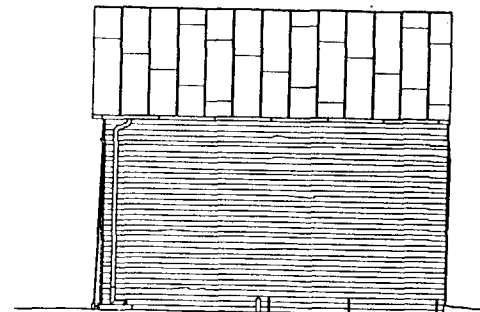
SOUTH ELEVATION

MATERIALS
FOUNDATION CONCRETE
WALLS WOOD SIDING
ROOFING TIN



EAST ELEVATION

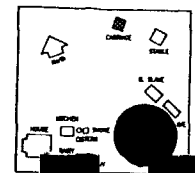
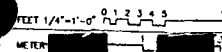
MATERIALS
FOUNDATION CONCRETE
WALLS WOOD SIDING
ROOFING TIN

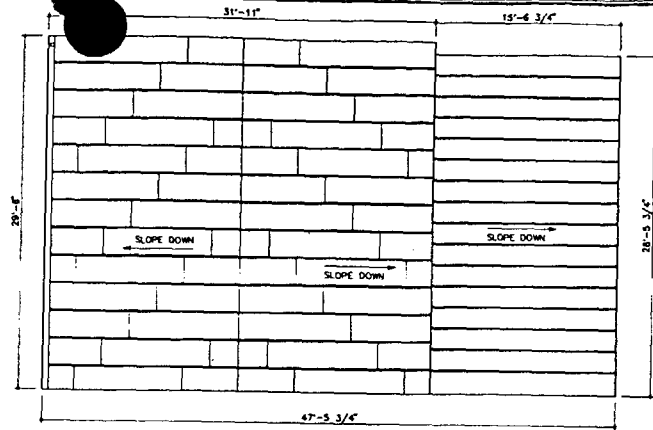


NORTH ELEVATION

MATERIALS
FOUNDATION CONCRETE
WALLS WOOD SIDING
ROOFING TIN

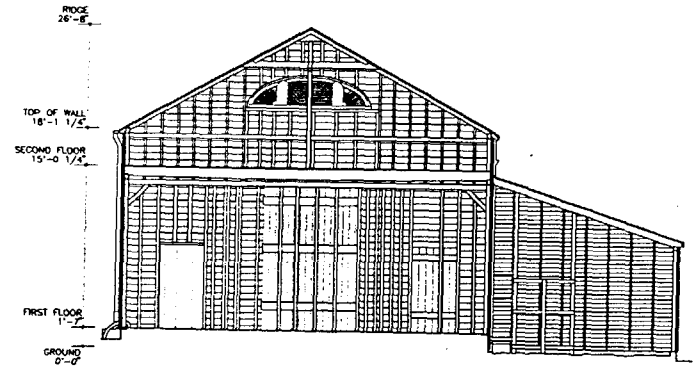
CARRIAGE HOUSE





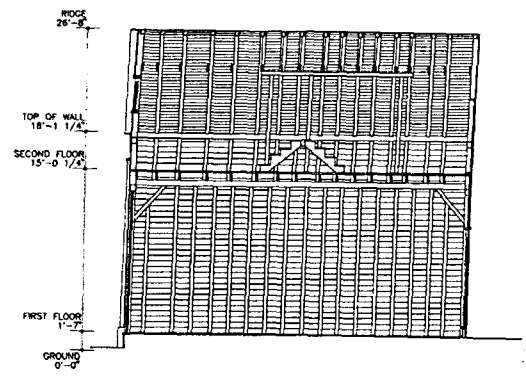
ROOF PLAN

FEET 1/4"=1'-0" 0 1 2 3 4 5 10
METERS 1:40 0 1 2 3



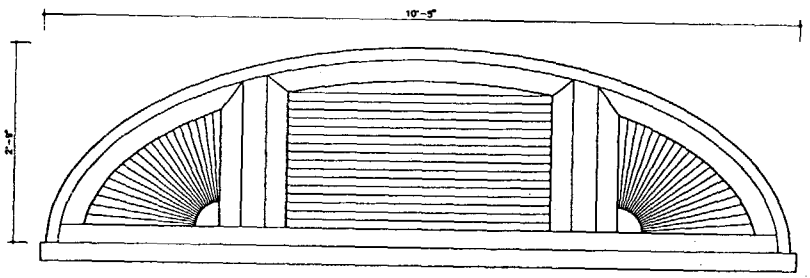
BUILDING SECTION

MATERIALS
FLOORS CONCRETE, WOOD
WALLS EXPOSED WOOD STRUCTURE
CEILING EXPOSED WOOD STRUCTURE



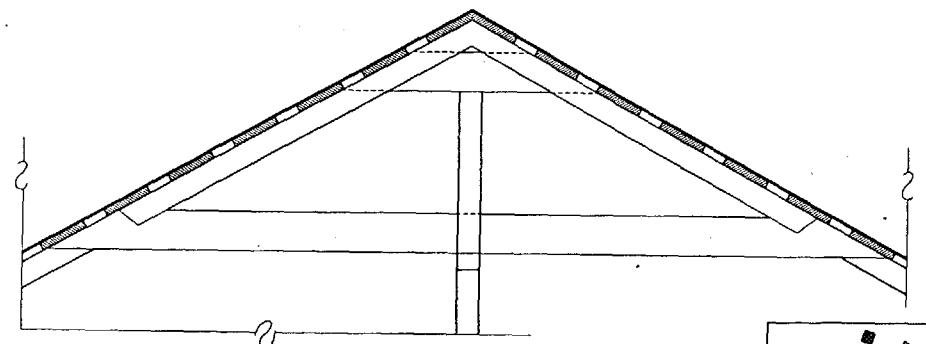
BUILDING SECTION

MATERIALS
FLOORS CONCRETE, WOOD
WALLS EXPOSED WOOD STRUCTURE
CEILING EXPOSED WOOD STRUCTURE



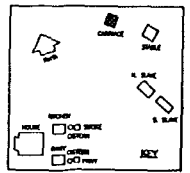
GABLE VENT DETAIL

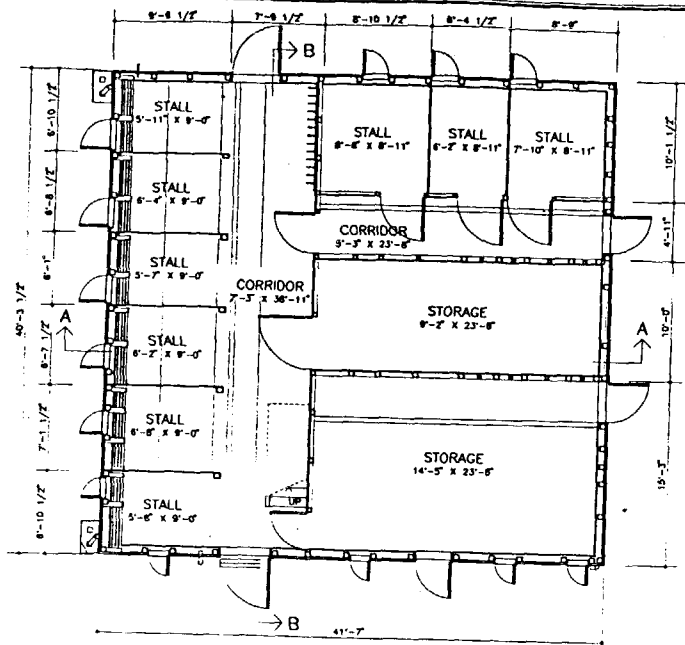
FEET 1-1/2"=1'-0" 0 2 4 6 8 10 12" 2 FEET
METERS 1:8 0 0.1 0.2 0.3 0.4 0.5 METERS



GABLE FRAMING DETAIL

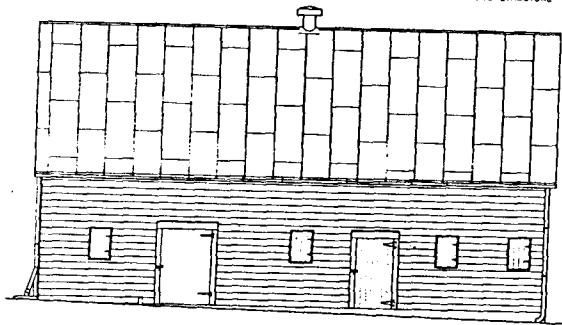
FEET 1-1/2"=1'-0" 0 2 4 6 8 10 12" 2 FEET
METERS 1:8 0 0.1 0.2 0.3 0.4 0.5 METERS





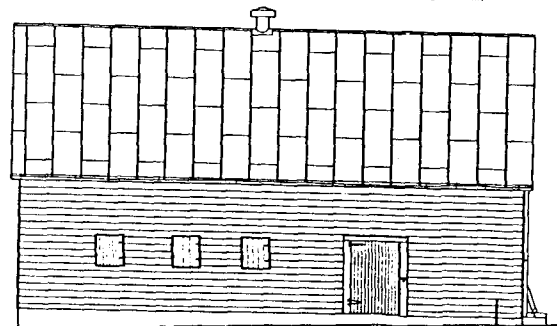
PLAN

MATERIALS
FLOORS CONCRETE
WALLS EXPOSED WOOD STRUCTURE
CEILING EXPOSED WOOD STRUCTURE



WEST ELEVATION

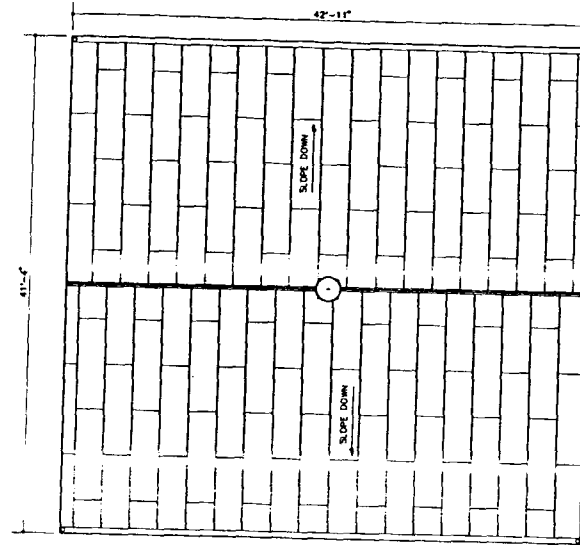
MATERIALS
FOUNDATION CONCRETE
WALLS WOOD SIDING
ROOFING TIN



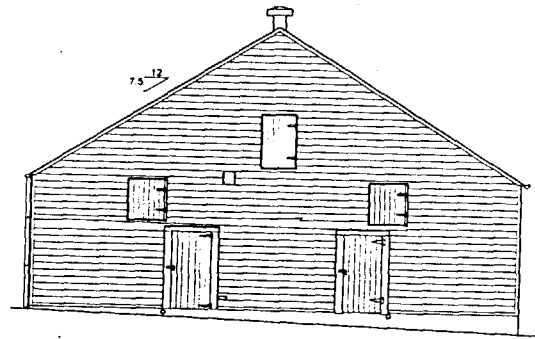
EAST ELEVATION

MATERIALS
FOUNDATION CONCRETE
WALLS WOOD SIDING
ROOFING TIN

STABLE

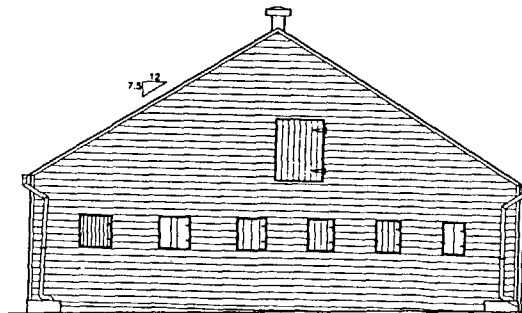


ROOF PLAN



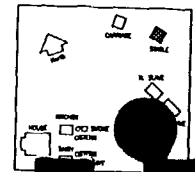
SOUTH ELEVATION

MATERIALS
FOUNDATION CONCRETE
WALLS WOOD SIDING
ROOFING TIN

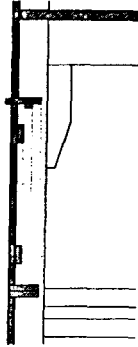


NORTH ELEVATION

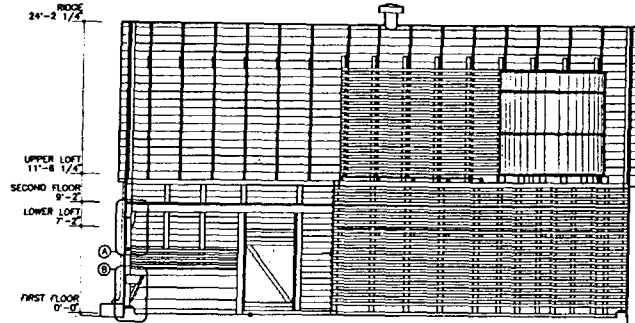
MATERIALS
FOUNDATION CONCRETE
WALLS WOOD SIDING
ROOFING TIN



CIVIL ARCHITECTURE

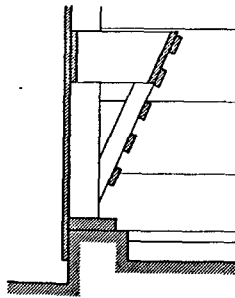


DETAIL "A" WINDOW OPENING
FEET 1-1/2"=1'-0" 0 1 2 3 4 5 10
METERS 1:48 0 1 2 3

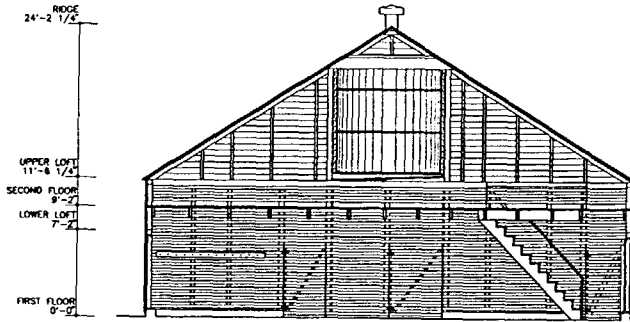


SECTION A-A
FEET 1/4"=1'-0" 0 1 2 3 4 5 10
METERS 1:48 0 1 2 3

MATERIALS
FLOORS CONCRETE
WALLS EXPOSED WOOD STRUCTURE
CEILING EXPOSED WOOD STRUCTURE

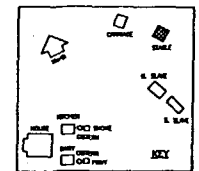


DETAIL "B" HAY CRIB
FEET 1-1/2"=1'-0" 0 1 2 3 4 5 10
METERS 1:48 0 1 2 3



SECTION B-B
FEET 1/4"=1'-0" 0 1 2 3 4 5 10
METERS 1:48 0 1 2 3

MATERIALS
FLOORS CONCRETE
WALLS EXPOSED WOOD STRUCTURE
CEILING EXPOSED WOOD STRUCTURE



STABLE SECTIONS AND DETAILS

MELROSE - STABLE

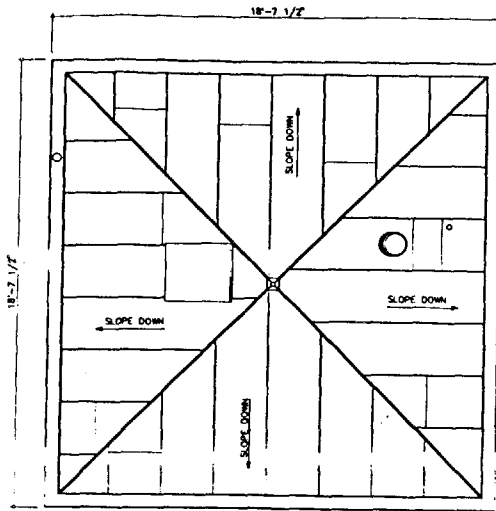
1 MELROSE - MONTEFIELD DRIVEWAY

SCALE: 1/4"=1'-0" (SEE NOTE)
DATE: 10/15/10
DRAWN BY: J. L. ...

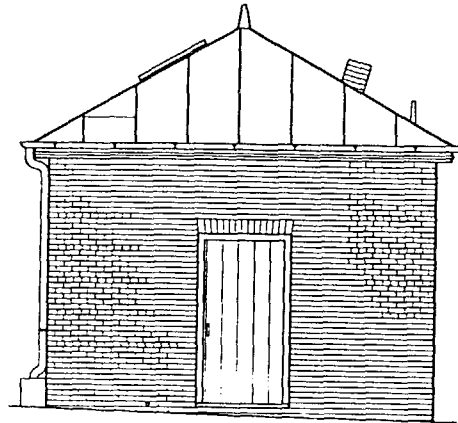
NATCHEZ, ADAM COUNTY, MISSISSIPPI
SCALE: 1/4"=1'-0" (SEE NOTE)
DATE: 10/15/10
DRAWN BY: J. L. ...

HISTORIC AMERICAN
BUILDINGS SURVEY

339/25904
9 OF 10

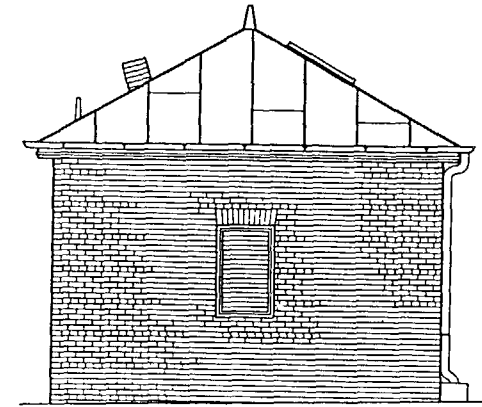


ROOF PLAN



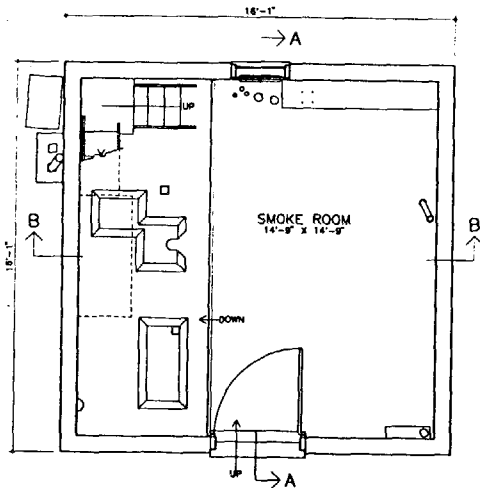
SOUTH ELEVATION

MATERIALS
FOUNDATION BRICK
WALLS BRICK
ROOFING TIN



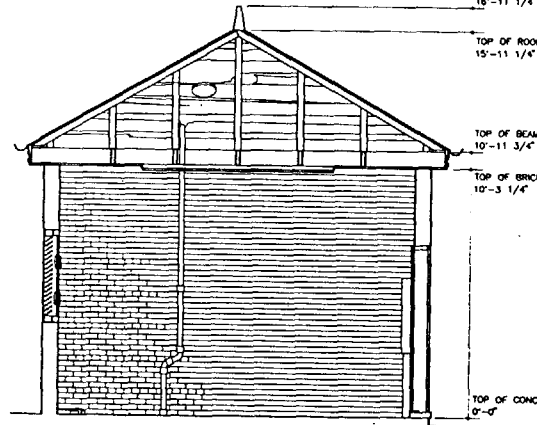
NORTH ELEVATION

MATERIALS
FOUNDATION BRICK
WALLS BRICK
ROOFING TIN



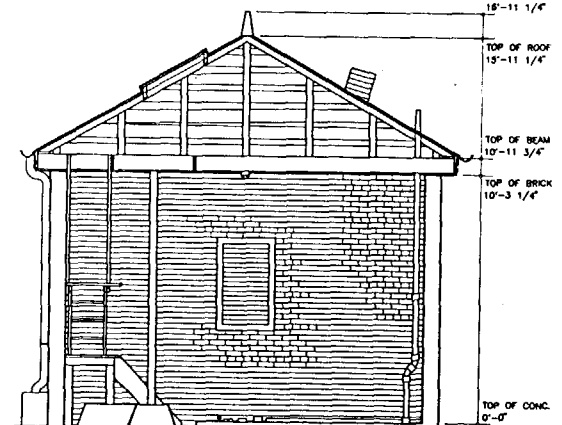
PLAN

MATERIALS
FLOOR CONCRETE
WALLS BRICK
ROOFING BRICK
EXPOSED WOOD STRUCTURE



SECTION A-A

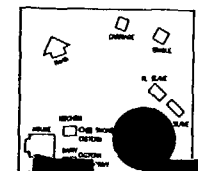
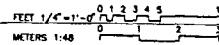
MATERIALS
FLOOR CONCRETE
WALLS BRICK
ROOFING BRICK
EXPOSED WOOD STRUCTURE



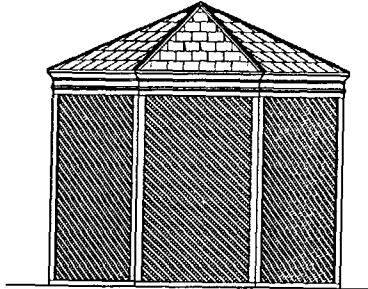
SECTION B-B

MATERIALS
FLOOR CONCRETE
WALLS BRICK
ROOFING BRICK
EXPOSED WOOD STRUCTURE

SMOKE HOUSE

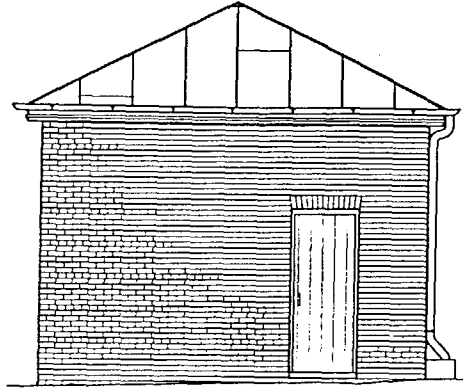


MATCH: 1044 COUNTY, MISSISSIPPI
 HISTORIC AMERICAN BUILDINGS SURVEY
 MELROSE - SMOKE HOUSE
 1 - MELROSE-MONTGOMERY HIGHWAY



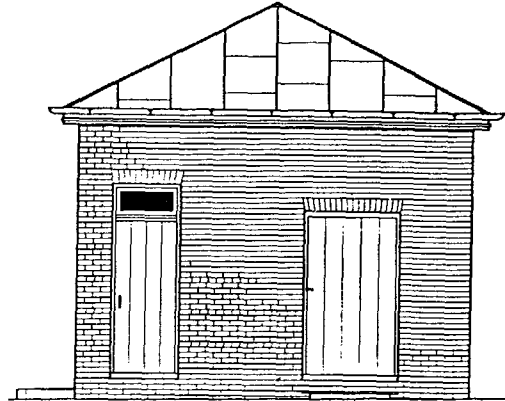
TYPICAL CISTERN ELEVATION

MATERIALS
FOUNDATION BRICK
WALLS WOOD LATTICE
ROOFING STAMPED TIN



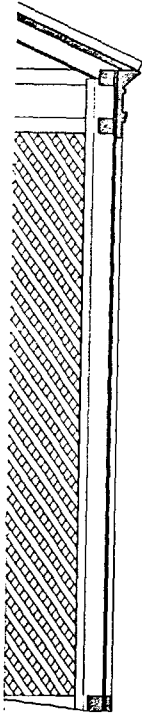
NORTH PRIVY ELEVATION

MATERIALS
FOUNDATION BRICK
WALLS BRICK
ROOFING TIN



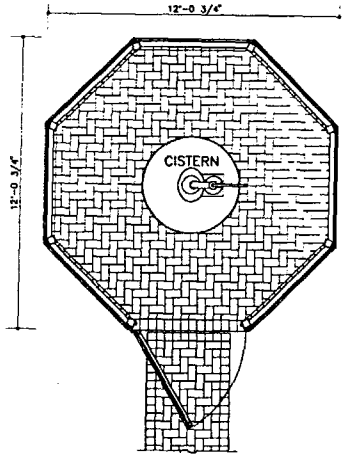
EAST PRIVY ELEVATION

MATERIALS
FOUNDATION BRICK
WALLS BRICK
ROOFING TIN



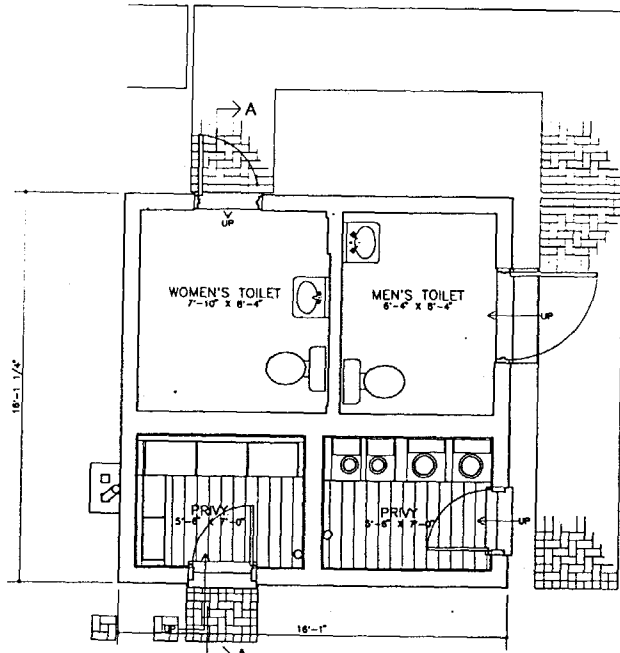
TYPICAL WALL SECTION

FEET 1-1/2"=1'-0"
METERS 1:200



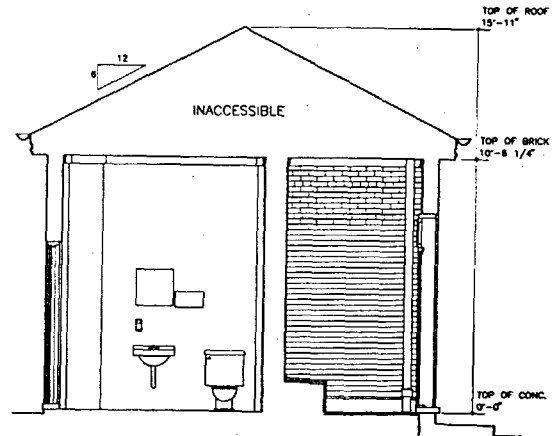
PLAN OF CISTERN

MATERIALS
FLOOR BRICK
WALLS WOOD LATTICE
CEILING EXPOSED WOOD STRUCTURE



PLAN OF PRIVY

MATERIALS
FLOOR CONCRETE, WOOD
WALLS BRICK, GYPSUM BOARD
CEILING PLASTER

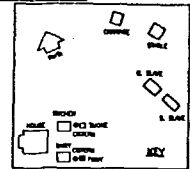


PRIVY SECTION A-A

MATERIALS
FLOOR CONCRETE, WOOD
WALLS BRICK, GYPSUM BOARD
CEILING PLASTER

CISTERN AND PRIVY

FEET 1/2"=1'-0"
METERS 1:24







**8.7 National Park Service
Maintenance Task Directives**



ERS 1/8/91
K Cordell 1/8
PTL 1/9

H4217 (SER-OCR)

JAN 10 1991

Memorandum

To: Superintendent, Natchez National Historical Park
Through: Superintendent, Natchez Trace Parkway
From: Deputy Associate Regional Director, Cultural Resources,
Southeast Region
Subject: Section 106 Clearance for preservation maintenance work
at Melrose Plantation House and outbuildings

We are pleased to inform you that Section 106 compliance procedures have been completed for the above project under the Programmatic Agreement (PA). A copy of the completed XXX Form is enclosed.

You are free to proceed with the project if funds are available and all other requirements have been met.

Paul B Hartwig

Enclosure

bcc:

SER-PC
Chief, OHA
Chief, OSC

EKFoppes: mbm 1/8/91: melrose



United States Department of the Interior

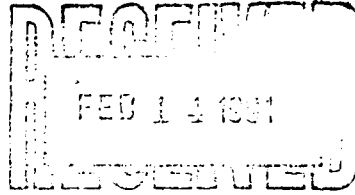
NATIONAL PARK SERVICE
SOUTHEAST REGIONAL OFFICE

75 Spring Street, S.W.
Atlanta, Georgia 30303



IN REPLY REFER TO:

H30 (SER-OHA)



06 FEB 1991

Memorandum

To: Superintendent, Natchez Trace Parkway
2/11/91

Through: Deputy Associate Regional Director, Cultural Resources,
Southeast Region *Jan Martiny*

From: Chief, Historic Architecture Division, Cultural
Resources, Southeast Region

Subject: Task Directive for Preservation Maintenance and
Stabilization of Historic Structures

We are pleased to make the following proposal for preservation maintenance and stabilization of the main house and associated outbuildings at Melrose Plantation.

The intent of the project is to improve the structural integrity and weather resistance of the buildings.

The majority of the work will be done by the regional preservation crew. However, it is understood that the park wants to send one employee to the Dunwoody shop to assist the preservation crew with the millwork on the balusters and shutters. This experience will help provide the employee with skills he needed to perform preservation work at the park. He will also assist the preservation crew onsite.

The park will allow the preservation crew to use the Carriage House for storage and shop work. The preservation crew will prime all work that is associated with woodwork repairs. It is understood that the park will complete all exterior finish painting. Minor repairs listed in the XXX report such as steps repair, scraping of metal roof, and painting of metal roofs will be done by park staff.

Listed below are the repairs the preservation crew will complete:

1. Melrose Main House:

- A. Roof: Repair broken and missing roof slate. Materials / MAN 100
will be provided by the park.
- B. Balusters: Damaged balusters and three rail sections will be removed from the site, rebuilt or repaired, then returned to the site and reinstalled.
- C. Gutters: Remove patching material from joints, clean and resolder. Prime all areas that have been repaired. / MAN 20
- D. Chimneys: Repair cracks and delaminated stucco at two chimneys above the roof line. The repairs will cover approximately 250 square feet.
- E. Exterior brick: Repoint brick masonry between windows at first and second floor level. The work will effect approximately 250 linear feet on front and side elevations.
- F. Shutters: Repair eight pairs of wood shutters. / MAN 300
- G. Wall stucco: Repair approximately 35 square feet of entrance stair wing walls. Scratch all plaster joints and fill with plaster and resurface with new plaster to match original fabric.

2. Dairy Dependency:

- A. Brick walls: Remove approximately 25 deteriorated brick from rear and side walls. Install new brick and repoint. Repoint approximately 100 square feet of deteriorated mortar joints.
- B. Shutters: Repair 11 pairs of wood shutters and hardware. Broken, missing, or badly deteriorated hardware will be replace in a manner that matches original fabric.
- C. Fascia boards: Replace 3 linear feet at gable ends.
- D. Gutter: Remove patching material and resolder. Prime all repaired areas.

- E. Porch: Remove approximately 50 square feet of tongue-and-groove flooring at second floor level. Inspect structural framing for water damage, make necessary repairs, and relay flooring.

3. Kitchen Dependency:

- A. Porch: Remove approximately 50 square feet of tongue-and-groove flooring at second floor level. Inspect framing for water damage, make necessary repairs, and relay flooring.
- B. Shutters: Repair 12 pairs of wood shutters and hardware. Any hardware repair will be done in a manner that will match original fabric. Repairs will be made at the Dunwoody shop.
- C. Fascia boards: Replace 3 linear feet at gable ends.
- D. Porch skirting: Repair 3 linear feet.
- E. Plaster: Repair approximately 4 square feet of porch ceiling at first floor level and 5 square feet of porch ceiling. Plaster that has been repaired will be primed.

4. Masonry structure containing HVAC system:

- A. Gutters: Replace 3 linear feet of 6 inch half round metal gutter and 90 corner section. Gutter repair will be primed.
- B. Brick wall: Repoint 25 square feet of masonry near base of the structure at south elevation.
- C. Doors: Replace sill timber and adjust door frame.

5. Masonry Privy:

- A. Brick wall: Masonry above entrance door is structurally unsound and will be dismantled. A new steel lintel will be installed. Brick will be relaid and repointed within this area. There is approximately 20 square feet of repointing needed in other areas on the south elevation.

6. Slave Cabin No. 1:

- A. Shutters: Repair six sets of wood shutters and hardware. Hardware to be replaced in a manner that will match original fabric.
- B. Gutters: Replace 10 foot section of 6 inch, half-round metal gutter at the rear of structure. The new section of the gutter will be primed.
- C. Exterior trim and siding: Reattach 15 square feet of lap siding. Repair 5 square feet of skirt board at corner of the porch at the west elevation.
- D. Brick wall: Reinstall 3 square feet of brick foundation wall at the rear of the building.

*Repair
Diversity*

7. Slave Cabin No. 2:

- A. Gutters: Replace 15 foot section of 6 inch half round metal gutter on the south elevation. Prime all new and repaired areas.
- B. Shutters: Repair six sets of wood shutters and hardware. Reconstruct one complete unit.
- C. Brick wall: Repair 5 square feet of foundation wall at bulkhead entrance, north elevation.
- D. Siding: Repair 2 square feet of horizontal lap siding at gable end, west elevation.

*Repair
Diversity*

Total estimated cost for this project is \$49,800.00. Major cost categories are outlined below:

| | |
|-----------------------|-------------|
| Labor..... | \$24,400.00 |
| Materials..... | 1,570.00 |
| Equipment Rental..... | 1,200.00 |
| Overhead..... | 9,959.00 |
| Per diem..... | 12,667.00 |
| Total..... | \$49,800.00 |

We propose to start the project on or about February 4, 1991. Due to other commitments by the masons we plan to set a completion date of July 31, 1991.

Earl Gillespie Head of OHA Field Services, will coordinate this project with you. Every effort will be made to ensure that the specified work is done to preservation standards within proposed budget and project schedule. Unforeseen conditions which may result in changes of scope, cost, or project duration will be brought to your attention as soon as we are aware of them. Any changes you may wish to make should be brought to Mr. Gillespie's attention. All substantial changes are to be agreed to in writing by you, and the OHA Division Chief.

Please complete and return with this task directive, the enclosed 10-239 approving a transfer of the above funds to the Historic Architecture Division. We look forward to working with you on this project.

Earl Gillespie

I concur with this task directive.

St. K. Johnson

Superintendent

02-21-91
Date

Enclosure

Mitchell 3/5/91

H4217 (SER-OCR)

MAR 05 1991

National Historical Park

Memorandum

To: Superintendent, Natchez ~~Town~~ ~~Parish~~

From: **ACTING** Deputy Associate Regional Director, Cultural Resources, Southeast Region

Subject: XXX Form to install interim detection for fire and intrusion at Melrose

Thank you for submitting the above XXX Form, which we are returning to you. The Regional Curator has stated that a complete security assessment and a scope of work will be worked out with the assistance of the Historic Architect. A new XXX Form should then be submitted. We look forward to hearing from you again on this project for Melrose.

/s/ Kirk A. Cordell

Enclosure

bcc:

Chief, OHA
Curator
SER-O

RLMitchell: mbm 3/4/91: melrose1



United States Department of the Interior

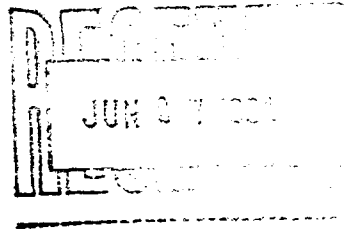
NATIONAL PARK SERVICE
SOUTHEAST REGIONAL OFFICE

75 Spring Street, S.W.
Atlanta, Georgia 30303



IN REPLY REFER TO:

H30 (SER-OHA)



JUN 28 1991

Memorandum

To: Superintendent, Natchez National Historic Site

Through: Deputy Associate Regional Director, Cultural Resources,
Southeast Region *[Signature]*

From: Chief, Historic Architecture Division, Cultural
Resources, Southeast Region

Subject: Task Directive for Preservation Maintenance and
Stabilization of Historic Structures, Natchez National
Historic Site, Phase Two

We are pleased to make the following proposal for additional preservation maintenance and stabilization work on the Main House and associated outbuildings at Melrose Plantation.

The intent of the project is to improve the structural integrity and the weather resistance of the buildings.

The park will allow the crew to use the Carriage House for storage and shop work. The preservation crew will prime all work that is used for woodwork repairs. Listed below are the repairs the preservation crew will complete:

1. Melrose House

- A. The preservation crew will provide the park with 75 pieces of porch decking to have on hand for future needs. These pieces will be milled at the Dunwoody shop in Atlanta.
- B. The rear elevation steps on the main floor will be replaced or repaired as needed.
- C. Approximately 10 lineal feet of deteriorated soffit board on the north elevation will be replaced.
- D. An additional three sections of deteriorated balusters and rails on the roof section will be scraped, repaired, primed, and painted with one finish coat.

- E. A supply of 200 bricks matching the historic fabric in color, texture, and dimension will be ordered and delivered to Melrose for current and future needs.
- F. An area of wall consisting of approximately 100 damaged bricks will be dismantled and relaid.

2. Dairy House

- A. An additional 30 lineal feet of fascia board will be milled at the Dunwoody shop and delivered to Melrose for future needs.
- B. Approximately 20 lineal feet of gutter will be repaired or replaced.

3. Privy Building

- A. Two sections of masonry above doors at the north and east elevations are unsound and unsafe and will be relaid.

4. Carriage House

- A. The entrance doors will be taken down and repaired. All new and existing woodwork will be primed prior to reinstallation.
- B. The false front columns will be repaired and primed.
- C. Siding repairs will be made as needed.
- D. The tin roof at the north elevation will be repaired as needed.
- E. All corner boards will be repaired and primed.

The total estimated cost for this project is \$35,000. The major cost categories are outlined below.

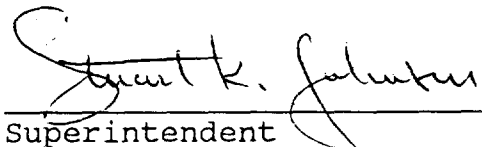
| | |
|--------------------------|---------------------|
| Labor..... | \$13,600.00 |
| Materials..... | 3,500.00 |
| Travel and Per Diem..... | 11,500.00 |
| Rental Expense..... | 2,000.00 |
| Overhead..... | 4,400.00 |
| Total..... | \$35,000.00 |

Earl Gillespie, Head of OHA Field Services, will coordinate this project with you. Every effort will be made to insure that the specified work is done to preservation standards within proposed budget and project schedule. Unforeseen conditions that may effect changes in the original scope, cost, or duration of this project will be brought to your attention as soon as we are aware of them. Any changes you wish to make should be brought to Mr. Gillespie's attention. All substantial changes are to be agreed to in writing by you and the OHA division chief.

Please complete and return with this task directive the enclosed 10-239 approving a transfer of the above funds to the Historic Architecture Division. We look forward to working with you on this project.

 ACTING
CHIEF

I concur with this task directive.



Superintendent

06-27-91

Date

Enclosure

Capps 9/4/91
JABrown
9/14

NATC-91-03

SEP 05 1991

Memorandum

To: Superintendent, Natchez National Historical Park

From: Deputy Associate Regional Director, Cultural Resources,
Southeast Region

Subject: Section 106 Clearance, installation of three phase
electrical power to the Carriage House at Melrose

We are pleased to enclose a letter from the Advisory Council on Historic Preservation concurring in our determination of no adverse effect on the above proposal. A copy of the completed XXX Form is enclosed. Please note that additional requirements for mounting the power box on nonhistoric fabrics, bringing the power up through the cement floor rather than the wall, and archeological monitoring of the ground disturbance have been added to the XXX Form.

This completes the procedures for compliance with the National Historic Preservation Act; therefore, you are free to proceed with the project when the additional requirement added to the XXX Form has been met, funds are available and all other requirements have been met.

Paul B Hartwig

Enclosure

bcc:

SER-PC
Chief, OHA
Chief, OSC

MACapps: mbm 9/4/91: natc9103

Capps 11/20/91
K. Cabell 11/20

NATC-91-04

NOV 20 1991 ✓

Memorandum

To: Superintendent, Natchez National Historical Park

From: Deputy Associate Regional Director, Cultural Resources,
Southeast Region

Subject: Section 106 Clearance, installation of underground
telephone cables at Melrose ✓

We are pleased to enclose a letter from the Advisory Council on
Historic Preservation, concurring in our determination of no
adverse effect on the above proposal.

This completes the procedures for compliance with the National
Historic Preservation Act; therefore, you are free to proceed
with the project when funds are available and all other
requirements have been met.

(sgd) Paul B Hartwig

Enclosure

bcc:

Chief, OHA
Chief, OSC
SER-PC

MCapps/ptl 11/19/91: NATC9104

GPS 11/20/91
K. Coble 11/20

NATC-91-05

NOV 20 1991

Memorandum

To: Superintendent, Natchez National Historical Park
From: Deputy Associate Regional Director, Cultural Resources,
Southeast Region
Subject: Section 106 Clearance, construction of Bally Building
for curatorial storage ✓

We are pleased to enclose a letter from the Advisory Council on
Historic Preservation, concurring in our determination of no
adverse effect on the above proposal.

This completes the procedures for compliance with the National
Historic Preservation Act; therefore, you are free to proceed
with the project when funds are available and all other
requirements have been met.

(sgd) Paul B Hartwig

Enclosure

bcc:

Chief, OHA
Chief, OSC
SER-PC

MCapps/pt1 11/19/91: NATC9105

Copy
11/24/91

NATC-92-01

DEC 2 1991

Memorandum

To: Superintendent, Natchez National Historical Park
From: **ACTING** Deputy Associate Regional Director, Cultural Resources,
Southeast Region
Subject: Section 106 Clearance for installation of new lock and
key system in historic buildings ✓

We are pleased to inform you that Section 106 compliance procedures have been completed for the above project under the Programmatic Agreement (PA). This project has been cleared under exclusion C1k. A copy of the completed XXX Form is enclosed. Please note the additional requirement that the museum collection storage areas must be keyed separately to minimize access.

You are free to proceed with the project if funds are available and all other requirements have been met.

/S/ KIRK A. CORDELL

Enclosure

cc: Mississippi SHPO
bcc:

SER-PC
Chief, OHA
Chief, OSC

MACapps/ptl 11/26/91: NATC9201

Capps 3/18/92
Rehm 3/18/92

NATC-92-03

MAR 18 1992

Memorandum

To: Superintendent, Natchez National Historical Park

From: Deputy Associate Regional Director, Cultural Resources,
Southeast Region

Subject: Section 106 Clearance for Erecting a Security Fence
Around the Bally Building and Maintenance Area at
Melrose ✓

We are pleased to inform you that Section 106 compliance procedures have been completed for the above project under the Programmatic Agreement (PA). This project has been cleared under exclusion Clh. A copy of the completed XXX Form is enclosed.

You are free to proceed with the project if funds are available and all other requirements have been met.

/s/ Karen G. Rehm

Enclosure

bcc:

SER-PC
Chief, OHA
Chief, OSC

MACapps:jc:3/17/92

CLPA

Rehm 3/18/92

NATC-92-04

MAR 18 1992

Memorandum

To: Superintendent, Natchez National Historical Park

From: ~~ACTING~~ Deputy Associate Regional Director, Cultural Resources,
 /s/ Karen G. Behm Southeast Region

Subject: Section 106 Clearance for Repairing and Painting
 Melrose Mansion ✓

We are pleased to inform you that Section 106 compliance procedures have been completed for the above project under the Programmatic Agreement (PA). This project has been cleared under exclusion Cla. A copy of the completed XXX Form is enclosed.

You are free to proceed with the project if funds are available and all other requirements have been met.

/s/ Karen G. Behm

Enclosure

bcc:

SER-PC
 Chief, OHA
 Chief, OSC

MACapps:jc:3/17/92

CLPA



United States Department of the Interior

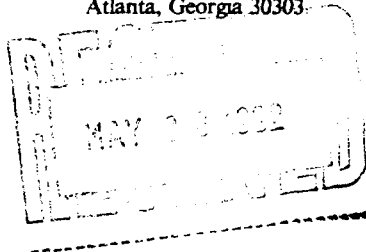


NATIONAL PARK SERVICE SOUTHEAST REGIONAL OFFICE

75 Spring Street, S.W.
Atlanta, Georgia 30303

IN REPLY REFER TO:

H30 (SER-OHA)



MAY 1 1992

Memorandum

To: Superintendent, Natchez National Historical Park

Through: Deputy Associate Regional Director, Cultural Resources,
Southeast Region *[Signature]*

From: Acting Chief, Historic Architecture Division, Cultural
Resources, Southeast Region

Subject: Task Directive for preservation maintenance work
at the Melrose Site

We are pleased to make the following proposal for preservation maintenance work on the main house and the dairy house. The intent of the project is to repair or replace-in-kind deteriorated fabric and to adapt a corner of the Dairy House for HVAC unit installation.

To better organize and track the work of this project, activities have been divided into the following work elements:

Melrose Mansion

1. Cellar door: remove all deteriorated wood framing and replace-in-kind. The preservation crew will prime all work that is associated with woodwork repairs. The finish paint coat will be applied by park personnel or by contract.
2. Rear galleries: repair or replace approximately 12 deteriorated spindles. Rusted nails at the bottoms of the remaining spindles will be replaced or set in farther and puttied over (which ever methods does the least damage to the historic fabric). Replace approximately ten feet of deteriorated skirt boards, and repair deteriorated crown molding at the top of skirt boards where needed.

[Faint handwritten notes and signatures at the bottom of the page.]

As discussed with you during our site visit, we recommended that the paint contract include recaulking the porch decking and this item is not included in our estimate.

4. Steps at rear gallery (Ground level): Repair or replace -in-kind deteriorated rails, steps and newel posts. Install a center stringer on side stairs. Pitch treads slightly to allow water run off. Replace approximately ten feet of deteriorated skirt boards, and repair deteriorated crown molding at the top of skirt boards where needed.
5. Front galleries: Wire brush and prime base plates on iron rails. Install approximately 100 stainless steel screws. Replace approximately 60 feet of nosing on steps.

Dairy House

1. Plaster repairs in end room: Remove approximately 500 square feet of deteriorated plaster and install new plaster and lime finish.
2. Frame up corner of room for HVAC system. Apply sheetrock, tape and finish.

Total estimated cost for this project is \$32,700. Major cost categories are outlined below:

| | |
|----------------|----------|
| Labor..... | \$20,138 |
| Materials..... | 1,734 |
| Per diem..... | 10,828 |
| Total..... | \$32,700 |

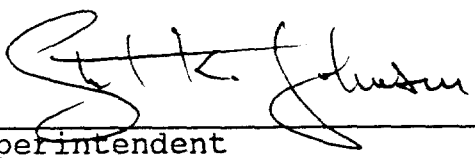
We propose to start the project on or about May 4, 1992 with initial material procurement and millwork to be done from the Dunwoody shop. Once on site, we anticipate being able to use the shop equipment at the carriage house and will work closely with your maintenance staff on the set up and use of this new shop equipment. Estimated completion date is June 26, 1992.

Mike Doelger, Head of OHA Field Services, will coordinate this project with you. Every effort will be made to ensure that the specified work is done to preservation standards within proposed budget and project schedule. Unforeseen conditions which may result in changes of scope, cost, or project duration will be brought to your attention as soon as we are aware of them. Any changes you may wish to make should be brought to Mr. Doelger's attention. All substantial changes are to be agreed to in writing by you and the OHA Division Chief.

Please complete and return with this task directive, the enclosed 10-239 approving a transfer of the \$31,700 to the Historic Architecture Division. We look forward to working with you on this project.

 *OHA
Division
Chief*

I concur with this task directive.



Superintendent

05/11/92
Date

Enc: 10-239



United States Department of the Interior

NATIONAL PARK SERVICE
SOUTHEAST REGIONAL OFFICE

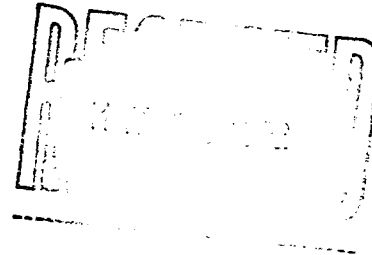
75 Spring Street, S.W.
Atlanta, Georgia 30303



IN REPLY REFER TO:

MAY 05 1992

H30 (SER-OHA)



Memorandum

To: Superintendent, Natchez National Historical Park

Through: Deputy Associate Regional Director, Cultural Resources,
Southeast Region

From: Acting Chief, Historic Architecture Division, Cultural
Resources, Southeast Region

Subject: Task Directive for preservation maintenance work
at the Melrose Site ✓

We are pleased to make the following proposal for preservation maintenance work on the main house and the dairy house. The intent of the project is to repair or replace-in-kind deteriorated fabric and to adapt a corner of the Dairy House for HVAC unit installation.

To better organize and track the work of this project, activities have been divided into the following work elements:

Melrose Mansion

1. Cellar door: remove all deteriorated wood framing and replace-in-kind. The preservation crew will prime all work that is associated with woodwork repairs. The finish paint coat will be applied by park personnel or by contract.
2. Rear galleries: repair or replace approximately 12 deteriorated spindles. Rusted nails at the bottoms of the remaining spindles will be replaced or set in farther and puttied over (whichever methods does the least damage to the historic fabric). Replace approximately ten feet of deteriorated skirt boards, and repair deteriorated crown molding at the top of skirt boards where needed.



MAY-11-92 MON 11:50 P.01
PAGES 3
NOTE
OK

all galleries: Scrape off deteriorated paint
* rds (approximately 18 inches back), set end
* over, sand bare wood and prime. Repair or
* deteriorated deck boards at the top of the
* ps.

* with you during our site visit, we recommended
* t contract include recaulking the porch decking
* A is not included in our estimate.

- 4. Steps at rear gallery (Ground level). Repair or replace -in-kind deteriorated rails, steps and newel posts. Install a center stringer on side stairs. Pitch treads slightly to allow water run off.
- 5. Front galleries: Wire brush and prime base plates on iron rails. Install approximately 100 stainless steel screws. Front galleries: replace approximately 60 feet of nosing on steps.

Dairy House

- 1. Plaster repairs in end room: Remove approximately 500 square feet of deteriorated plaster and install new plaster and lime finish.
- 2. Frame up corner of room for HVAC system. Apply sheetrock, tape and finish.

Total estimated cost for this project is \$32,700. Major cost categories are outlined below:

| | |
|----------------|----------|
| Labor..... | \$20,138 |
| Materials..... | 1,734 |
| Per diem..... | 10,828 |
| Total..... | \$32,700 |

We propose to start the project on or about May 4, 1992 with initial material procurement and millwork to be done from the Dunwoody shop. Once on site, we anticipate being able to use the shop equipment at the carriage house and will work closely with your maintenance staff on the set up and use of this new shop equipment. Estimated completion date is June 26, 1992.



Capps 5/22/92
K. Cordell 5/22

NATC-92-02

MAY 26 1992

Memorandum

To: Superintendent, Natchez National Historical Park

From: Deputy Associate Regional Director, Cultural Resources,
Southeast Region

Subject: Section 106 Clearance, Installation of an HVAC Unit,
Electrical Outlets and Repair Work on the Dairy
Building at Melrose Estate ✓

We are pleased to enclose a letter from the Advisory Council on Historic Preservation, concurring in our determination of no adverse effect on the above proposal. A copy of the approved XXX is enclosed. Please note the additional requirements that have been added.

This completes the procedures for compliance with the National Historic Preservation Act; therefore, you are free to proceed with the project when funds are available and all other requirements have been met.

Paul B. Hartwig

Enclosure

bcc:

SER-PC
Chief, OHA
Chief, OSC

MACapps:mc:5/22/92



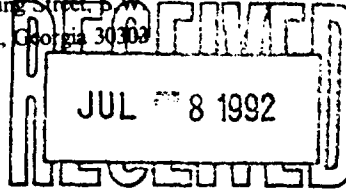
United States Department of the Interior

NATIONAL PARK SERVICE
SOUTHEAST REGIONAL OFFICE

75 Spring Street, S.W.
Atlanta, Georgia 30303



IN REPLY REFER TO:



JUL 06 1992

H30 (SER-OHA)

Memorandum

To: Superintendent, Natchez National Historical Park

Through: *AKM* Deputy Associate Regional Director, Cultural Resources
Southeast Region *K Cordell 7-2-92*

From: Acting Chief, Historic Architecture Division, Cultural Resources, Southeast Region

Subject: Modification No. 1, Task Directive for Preservation Maintenance Work at Melrose Site

We are pleased to make the following proposal for task directive modifications to preservation maintenance work on the main house and the dairy house. The intent of the project is to repair or replace-in-kind deteriorated fabric and to adapt a corner of the Dairy House for HVAC unit installation.

As discussed during a June 25 on-site visit with Rene Cote, Historical Architect, and Mike Doelger, Supervisory Exhibit Specialist, the following work elements are being proposed as additions to the original task directive.

Melrose Mansion

1. Rear gallery (ground level): Deteriorated sill timber revealed during skirt board repairs will be repaired with a half-lapped splice using laminated pressure treated lumber. A new ledger board will be installed to carry ends of floor joists.
2. Front gallery (ground level): A kneewall will be constructed and installed to support three deteriorated floor joists which will be reinforced using sister boards of treated lumber. The ends of an existing 4 x 6 floor joist header beam will be supported using a timber post and the framing of the entry hatchway.

- 3. Approximately eight running feet of deteriorated porch decking across the front center of the porch will be replaced with short deck boards staggered between the second and third floor joists. This is proposed as a temporary measure as it is recommended that all new decking be installed in the near future.

Total estimated cost for this project is \$2,500. Major cost categories are outlined below:

| | |
|----------------|--------------|
| Labor..... | \$ 1,265 |
| Materials..... | 463 |
| Per diem..... | 772 |
| Total..... | \$ 2,500 |

We propose to blend in this additional work with project work already being done. Estimated completion date is July 16, 1992.

Mike Doelger, Head of OHA Field Services, will coordinate this project with you. Every effort will be made to ensure that the specified work is done to preservation standards within proposed budget and project schedule. Unforeseen conditions which may result in changes of scope, cost, or project duration will be brought to your attention as soon as we are aware of them. Any changes you may wish to make should be brought to Mr. Doelger's attention. All substantial changes are to be agreed to in writing by you, and the OHA Division Chief.

Please complete and return with this task directive, the enclosed 10-239 approving a transfer of the \$2,500 to the Historic Architecture Division. We look forward to working with you on this project.



I concur with this task directive.

Stuart K. Johnson
Superintendent

07-08-92
Date

JUL 24 1992

H30 (SER-OHA)

Memorandum

To: Superintendent, Natchez National Historical Site

From: Supervisory Exhibit Specialist, Historic Architecture Division, Southeast Region

Subject: Bi-weekly report of repairs to Melrose Galleries and Dairy House and Johnson Dependency

Substantial progress was made towards completing the repair work at Melrose. We completed the structural work under the front porch and repaired approximately 3'x8' of decking (staggered joints). We built temporary stairs to the 2nd floor of the W.J. Dependency, and removed the plaster ceiling on the first floor left room. The Park maintenance staff cooperated fully by removing most of the debris and plaster from the 2nd floor. We removed the flooring and joints on the first floor. We were not able to salvage very much of the flooring for use on the 2nd floor. Some work was done on the iron railings.

A safety meeting was held on 7/13/92 at the W.J. Dependency regarding the use of hard hats and safety equipment during demolition.

Project status by work items from task directive:

% Completed

Melrose Galleries

| | |
|--------------------|------|
| 1. Cellar door | 100% |
| 2. Rear Galleries | 70% |
| 3. Porch decking | 50% |
| 4. Rear steps | 99% |
| 5. Front Galleries | 85% |

Modification No.1

| | |
|--|------|
| 6. Rear Galley structural repairs | 100% |
| 7. Front gallery structural repairs | 99% |
| 8. Front gallery porch decking replacement | 85% |

Dairy House

- | | |
|-----------------|------|
| 1. Plaster work | 100% |
| 2. Framing | 90% |

Dependency

- | | |
|----------------------------------|------|
| 1. Temporary stairs | 95% |
| 2. Removal of first floor joists | 100% |

cc: SERO, Hartwig
SERO, Cote

ORDER FOR SUPPLIES OR SERVICES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

| | | | |
|------------------------------|--------------------------|---------------------------------|------------------------------|
| 1. DATE OF ORDER 08/07/92 | 2. CONTRACT NO. (If any) | 3. ORDER NO. 1443PX557092450 | 4. REQUISITION/REFERENCE NO. |
|------------------------------|--------------------------|---------------------------------|------------------------------|

| | |
|--|--|
| 5. ISSUING OFFICE (Address correspondence to) NATCHEZ TRACE PARKWAY R.R. 1, NT-143 TUPELO, MS 38801 | 6. SHIP TO: (Consignee and address, ZIP Code) NATCHEZ NATIONAL HISTORICAL PARK #1 MELROSE, MONTEBELLO PARKWAY NATCHEZ, MS 39121 SHIP VIA: BEST WAY PREPAID |
|--|--|

| | |
|--|---|
| 7. TO: CONTRACTOR (Name, address and ZIP Code) SMITH PAINTING & CONTRACTING 652 WEST 4TH STREET HATTIESBURG, MS 39401 | 8. TYPE OF ORDER <input type="checkbox"/> A. PURCHASE — Reference your _____ <small>Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheets, if any, including delivery as indicated. This purchase is negotiated under authority of FAX 13</small> <input type="checkbox"/> B. DELIVERY — Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract. |
|--|---|

| | |
|---|--------------------------------------|
| 9. ACCOUNTING AND APPROPRIATION DATA 5565-1450-301-255R | 10. REQUISITIONING OFFICE C11 |
| 11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> SMALL <input type="checkbox"/> OTHER THAN SMALL <input type="checkbox"/> DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED | |

| | | | |
|---|-------------------------------|--|------------------------------|
| 12. F.O.B. POINT DESTINATION | 14. GOVERNMENT B/L NO. N/A | 15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 9/10/92 | 16. DISCOUNT TERMS NET/30 |
| 13. PLACE OF INSPECTION AND ACCEPTANCE NATCHEZ, MS | | | |

17. SCHEDULE (See reverse for Rejections)

| ITEM NO. (A) | SUPPLIES OR SERVICES (B) | QUANTITY ORDERED (C) | UNIT (D) | UNIT PRICE (E) | AMOUNT (F) | QUANTITY ACCEPTED (G) |
|---|--|----------------------|----------|----------------|------------|-----------------------|
| | FURNISH ALL MATERIALS, LABOR AND SUPPLIES NECESSARY TO PAINT FRONT AND REAR PORCHES OF MELROSE MANSION..TO INCLUDE ALL SURFACE PREPARATION, PAINTING AND FINISHING WORK AS WELL AS PRIMING AND FINISH COATS FOR THE EXTERIOR SURFACES. | 1 | JOB | 14790.00 | 14,790.00 | |
| | WORK MUST BE COMPLETED ACCORDING TO ATTACHED SPECIFICATIONS AND RFC5570-92-18 WORK TO INCLUDE ALL ALTERNATES. | | | | | |
| | BID ALTERNATE REAR ELEVATION (COMPLETE DESCRIPTION OF WORK SECTION 09900 PAGE 1 | 1 | JOB | 1960.00 | 1,960.00 | |
| | BID ALTERNATE FRONT ELEVATION (COMPLETE DESCRIPTION OF WORK SECTION 09900 PAGE 2 | 1 | JOB | 4060.00 | 4,060.00 | |
| PLEASE NOTIFY STUART JOHNSON, MELROSE, @ 442.4047 WHEN YOU ARE READY TO PROCEED | | | | | | |
| Quotes: Landers Painting--\$36,155.00 Engineers Estimate - \$21,000.00 | | | | | | |

| | | | |
|--|---------------------------|-----------------|---------------------------|
| 18. SHIPPING POINT | 19. GROSS SHIPPING WEIGHT | 20. INVOICE NO. | 17(H). TOT. (Cont. pages) |
| 21. MAIL INVOICE TO: (Include ZIP Code) SAME AS 5 | | | 20,910.00 |

| | |
|---|---|
| 22. UNITED STATES OF AMERICA BY (Signature) | 23. NAME (Typed) SEU46 MILDRED H. COGGINS TITLE: CONTRACTING/ORDERING OFFICER |
|---|---|

U.S. Department of Labor



GENERAL WAGE DECISION NO. MS91-16

Supersedes General Wage Decision No. MS90-16

State: MISSISSIPPI

County(ies): ADAMS, AMITE, FRANKLIN, JEFFERSON, LAWRENCE, LINCOLN,
PIKE, WALTHALL, AND WILKINSON

Construction Type: Residential

Construction Description: RESIDENTIAL CONSTRUCTION consisting of single family homes and apartments up to and including 4 stories.

| Modification Record: No. | Publication Date | Page No.(s) |
|-----------------------------|------------------|-------------|
|-----------------------------|------------------|-------------|

NATCHEZ NATIONAL HISTORICAL PARK
NATCHEZ, MS

PROJECT SUMMARY

Location: Melrose Estate
1 Melrose-Montebello Parkway
Natchez, MS 39120

Contact: Superintendent, Natchez National Historical Park
P.O. Box 1208; Natchez, MS 39121
601-442-7047

Project Description: This primary project includes all surface preparation, painting and finishing work as well as priming and finish coats for the exterior surfaces of the front and rear elevation porch areas of the Melrose mansion. This work must be accomplished according to the enclosed specifications. The project also includes two bid alternates for additional painting work. All prospective bidders must make an on-site inspection prior to submitting a bid. The Melrose mansion, built ca. 1845, is an extremely significant historic structure, and the successful bidder must exercise great care not to damage the original features of this building.

PART 1: GENERAL

1-1 DESCRIPTION: The work of this section consists of all painting and finishing work, including surface preparation, priming and finish coats for the following:

Exterior surfaces including front and rear elevation porch areas:

1. Rear elevation first floor including stairs from ground level to first floor, handrails, balusters, bulkhead door and trim, lattice work and trim below first floor porch, window sash and trim below first floor porch, porch flooring, porch stair walls, stairs and trim connecting first and second floors, ceiling boards, porch skirt boards, louvered partition walls and louvered door, all rear door trim with the exception of grained doors. Do not paint grained doors.

2. Rear elevation second floor including porch flooring, coffered porch ceiling between porch columns, louvered partition walls, porch handrails and balusters, skirt boards and miscellaneous trim, all rear door trim with the exception of grained doors. Do not paint grained doors.

3. Front elevation first floor including porch flooring, ornamental metal handrail and baluster, lattice work and trim below porch floor, porch skirt boards, coffered porch ceiling, all millwork associated with the front door including louvered door, columns, sidelites, transom, soffits, cornice and miscellaneous trim. Do not paint grained front door.

4. Front elevation second floor including porch flooring, skirt boards, ornamental handrail and baluster, coffered porch ceiling between columns, all millwork associated with door including (louvered door, columns, sidelines, transom, soffits, cornice and miscellaneous trim). Do not paint grained front door.

BID ALTERNATE REAR ELEVATION:

A. Remove metal shutter dogs attached to window sills. Fabricate, shop prime and install new shutter dogs. Apply (2) coats finish paint to shutter dogs.

B. Prepare and apply two (2) coats finish paint to window shutters. Prepare, prime, and apply (2) two coats finish paint to metal shutter hinges.

C. Prepare, prime, reglaze window sash, apply 2 coats finish paint to sash and window trim.

D. Prepare, prime, and apply 2 coats finish paint to exterior elevation pediment above second floor porch including cornices, fascias, soffits and all miscellaneous trim.

BID ALTERNATE FRONT ELEVATION:

A. Remove metal shutter dogs attached to window sills, fabricate, shop prime and install new shutter dogs. Apply 2 coats finish paint to shutter dogs.

B. Prepare and apply 2 coats finish paint to window shutters. Prepare, prime, and apply 2 coats finish paint to metal shutter hinges.

C. Prepare, prime, reglaze window sash, apply 2 coats finish paint to sash and window trim.

D. Prepare, prime, and apply 2 coats finish paint to exterior elevation pediment above second floor porch including cornices, fascias, soffits and all miscellaneous trim.

1-2 SUBMITTALS: Submit three 12 inch square sample boards of each color in each paint type called for.

1-3 DELIVERY, STORAGE, AND HANDLING:

A. All materials required for painting, and finishing shall be delivered to the job site in original containers with labels intact and seals unbroken.

B. Store in a suitable location and comply with health and safety regulations.

C. All oily rags, waste, etc., and all flammable cleaning compounds shall be removed from the job site.

1-4 ENVIRONMENTAL REQUIREMENTS

A. Comply with manufacturer's recommendations as to environmental conditions under which coating and coating systems can be applied.

B. Do not apply paint in areas where dust is being generated.

1-5 PROTECTION: Cover or otherwise protect finished work of other trades and surfaces not being painted.

PART 2: MATERIALS

2-1 PAINT AND FINISH PRODUCTS: Highest quality available standard brand, as distributed by a nationally known manufacturer. Paint products shall be fresh and well ground; shall not settle readily, cake, or thicken in consistency; and shall have easy application properties. Other painting materials not specifically described such as linseed oil, turpentine, mineral spirits, miscellaneous thinners, varnish, shellac, etc., shall be the highest quality of an approved manufacturer.

2-2 FILLING COMPOUNDS: Shall be "DAP 33", or approved equal.

2-3 MATERIAL FINISHES: Products specified shall be Pittsburgh Paints (PPG) and Glidden (GL), or approved equal.

A. Exterior Wood Surfaces shall match existing colors:

1. 1st Coat: P.P.G., Sun-proof Oil Type Exterior Primer, 1-870 Chalk-resistant.

2. 2nd and 3rd Coats: PPG, Sun-Proof Oil Type House and Trim Paint (Linseed-soya oil modified alkyd), 1-110 chalk resistant, oil sheen gloss.

B. Exterior exposed metal trim:

1. 1st Coat: PPG, Inhibitive Metal primer, Interior-Exterior White 6.212 (epoxy ester resin).

2. 2nd and 3rd Coats: PPG, Sun-Proof Oil Type House and Trim Paint (linseed-soya oil modified alkyd), 1-110 chalk resistant white, oil sheen gloss.

PART 3: EXECUTION

3-1 GENERAL REQUIREMENTS:

A. All surfaces shall be free of foreign matter, voids, and blemishes before applying primer and finish material.

B. All surfaces shall be broom clean before painting is started. All surfaces shall be dry.

C. Back-prime all wood components in accordance with manufacturer's printed recommendations.

3-2 SURFACE PREPARATION

A. Wood: Sandpaper to a smooth even surface, then dust off. After priming coat has dried, putty all nail holes, cracks, open joints, and other defects with filling compound. Putty all frame and sill connections and all metered door frames and window frame joints.

B. Metal: Remove dirt and grease with mineral spirits. Remove rust, mill scale, and defective surface material using scraper, sandpaper, or wire brush, if necessary.

C. Exterior Wood: Wash all exterior wood surfaces with a trisodium phosphate and water solution as recommended by manufacturer to eliminate and prevent the growth of mildew.

3-3 APPLICATION

A. All paint shall be applied in accordance with the manufacturer's recommendations unless otherwise directed. Spray application shall not be permitted.

B. All coats shall be thoroughly dried before applying succeeding coats with sanding between coats where necessary. Comply with the manufacturer's recommendations for drying time between succeeding coats.

C. Protect hardware, accessory device plates, and similar items.

D. Protect the work of other trades against damage, injury, or soiling. Use drop cloths of adequate size to protect work being finished and surrounding areas.

3-4 GENERAL APPLICATION: Secure approval of each coat prior to proceeding with the next.

A. Workmanship: Apply paint evenly without runs, sags, or other defects. Each coat shall be thoroughly worked into the material being coated at an average rate of coverage recommended. Cover all surfaces completely to provide uniform color and appearance. All parts of moldings, trim, ornaments, edges, and millwork shall be left clean and true to details without undue amount of paint or other finish adjoining other materials or colors sharp and clean, and without overlapping. Spray application methods shall not be used.

B. Drying Time: Minimum time shall be as recommended. Do not apply succeeding coats until the undercoat is thoroughly dry.

Capps 10/8/92
Rehm 10/8/92
PTL 10/9/92

NATC-92-06

OCT 9 1992

Memorandum

To: Superintendent, Natchez National Historical Park
From: Deputy Associate Regional Director, Cultural Resources,
Southeast Region
Subject: Section 106 Clearance, Construction of a New
Maintenance Facility at Melrose Estate ✓

We are pleased to enclose a letter from the Advisory Council on
Historic Preservation concurring in our determination of no
adverse effect on the above proposal. A copy of the approved XXX
is enclosed. Please note the additional requirement for
archeological investigation prior to construction. This
completes the procedures for compliance with the National
Historic Preservation Act; therefore, you are free to proceed
with the project when funds are available and all other
requirements have been met.

Enclosure

bcc:

SER-PC
Chief, SEAC

MACapps:mc:10/8/92

Capps 3/31/93
Rehm 3/31/93
PTL 4/1

NATC-93-05

APR 1 1993

Memorandum

To: Superintendent, Natchez National Historical Park
From: Deputy Associate Regional Director, Cultural Resources,
Southeast Region
Subject: Section 106 Clearance, replace rotted wood around
windows of kitchen and dairy building at Melrose ✓

We are pleased to inform you that Section 106 compliance procedures have been completed for the above project under the Programmatic Agreement (PA). This project has been cleared under exclusion C1a. A copy of the completed XXX form is enclosed. You are free to proceed with the project if funds are available and all other requirements have been met.

(sgd) Paul B Hartwig

Enclosure

bcc:

Chief, OHA

MACapps:mc:3/31/93

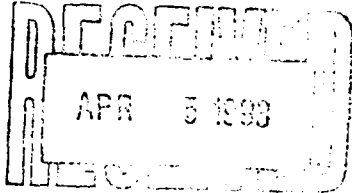


United States Department of the Interior



NATIONAL PARK SERVICE
Southeast Regional Office
75 Spring Street, S.W.
Atlanta, Georgia 30303

IN REPLY REFER TO:
NATC-93-05



APR 1 1993

NATCHEZ NHP

- Supt. _____
- AC Of _____
- Ch. ISVS _____
- Curat. _____
- Maint. _____
- FILE _____

ACTION BY _____

Memorandum

To: Superintendent, Natchez National Historical Park

From: Deputy Associate Regional Director, Cultural Resources, Southeast Region

Subject: Section 106 Clearance, replace rotted wood around windows of kitchen and dairy building at Melrose ✓

We are pleased to inform you that Section 106 compliance procedures have been completed for the above project under the Programmatic Agreement (PA). This project has been cleared under exclusion 1a. A copy of the completed XXX form is enclosed. You are free to proceed with the project if funds are available and all other requirements have been met.

Enclosure

XXX FORM

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON CULTURAL RESOURCES
Southeast Regional Office
(Attach continuation sheets as necessary)

A. Originating Office

1. **Park:** Natchez National Historical Park
2. **Description of proposed action:**
 Implementing action included in plan under PMOA
 Other PMOA action _____
 Section 106 action not under PMOA
3. **Cultural resources affected by proposed action (name and LCS number, if applicable):**
 - 1) Dairy Building, Melrose Estate
 - 2) Kitchen Building, Melrose Estate
4. **Describe present condition of cultural resource(s):**

The overall condition of both structures is good. However, the first floor gallery ceilings and exterior wood window surfaces on both buildings are exhibiting various stages of deterioration.

5. **Describe proposed action and explain why the action is needed:**

Proposed action is to repair and repaint all exterior window frames and sashes on both structures. All exterior wood surfaces exhibit damage or deterioration including peeling paint, rotted sills, and rusted or missing shutter holdbacks.

These actions are required to provide adequate protection of remaining historic fabric.

6. In affecting cultural resources the proposed action will (check as many as apply):

- Destroy historic fabric.
- Remove historic fabric.
- Replace historic fabric in kind.
- Replace missing historic fabric.
- Add nonhistoric elements to a historic structure.
- Remove nonhistoric elements from a historic structure.
- Alter historic terrain, groundcover, or vegetation.
- Introduce nonhistoric elements (visible, audible, or atmospheric) into a historic setting or environment.
- Reintroduce historic elements in a historic setting or environment.
- Remove historic elements from a historic environment.
- Remove nonhistoric elements from a historic environment.
- Disturb, destroy, impair, or render inaccessible archeological (surface or subsurface) resources.
- Possibly disturb currently unidentified archeological resources or historic fabric.
- Incur gradual deterioration of historic fabric, terrain, or setting.
- Other (describe briefly):

Describe the indicated effect(s) concisely:

The proposed action will remove all deteriorated paint from window frames and sashes to either the next sound layer or to the wood. All parts of the sashes (bottom and meeting rails, top rails, muntin, etc.) appear to be in good condition and require only a compatible paint coat and reglazing around lights. The majority of the sills, however, exhibit extensive deterioration. Where possible, repairs will be made by piecing-in, patching, or otherwise reinforcing the wood. Those sills too deteriorated to repair will be replaced in kind.

Proposed action also includes removal of rusted or broken shutter holdbacks and replacement in kind.

7. Is the proposed action limited to preservation maintenance? Yes () No (X).

8. Identify any important relationships between the proposed action as it affects cultural resources and pertinent NPS management policies, standards, and guidelines:

This project meets the policy on "Standards for Managing Historic and Prehistoric Structures (Including Ruins)" in NPS-28, Chapter 3, pp. 4-7.

9. Is the proposed action included in any approved plan(s)? If there is no approved plan authorizing this action, so state.

There are no approved plans at the present time, although the GMP will soon be available.


10. Describe any measures planned to minimize or lessen the loss or impairment of historic fabric, setting, integrity, or data:

The proposed action involves only repair and repainting of materials and limited replacement of deteriorated or missing parts. All serviceable window hardware will be reused.

11. Identify supporting study data and date(s) of preparation (attach if feasible):

See attached photographs.

12. Prepared by:


Thom Rosenblum

Title: Museum Curator

- 13.



Acting Park Superintendent

3/12/93
Date

Additional requirements of the proposed action:

Regional approval of proposed action including additional requirements.

(X) The proposed action, including any additional requirements stated above, meets all conditions in B.1 and 2, or is an Energy Management Project meeting only conditions in B.1, and therefore, satisfies the requirements of Section 106.



Deputy Associate Regional Director,
Cultural Resources
for the Regional Director

APR 1 1993
Date

Capps 4/8/93

NATC-93-06

APR 9 1993

Memorandum

To: Superintendent, Natchez National Historical Park

From: ~~for~~ Deputy Associate Regional Director, Cultural Resources,
Southeast Region

Subject: Section 106 Clearance, replace deteriorated floorboards
in slave quarters ✓

We are pleased to inform you that Section 106 compliance procedures have been completed for the above project under the Programmatic Agreement (PA). This project has been cleared under exclusions C1a. A copy of the completed XXX form is enclosed. You are free to proceed with the project if funds are available and all other requirements have been met.

/s/ Kirk A. Cordell

Enclosure

MACapps:mc:4/8/93

Capps 5/7/93

NATC-93-08

MAY 11 1993

Memorandum

To: Superintendent, Natchez National Historical Park

From: ~~ACTING~~ Deputy Associate Regional Director, Cultural Resources,
Southeast Region

Subject: Section 106 Clearance, stabilize first story gallery
ceiling in kitchen building at Melrose ✓

We are pleased to inform you that Section 106 compliance procedures have been completed for the above project under the Programmatic Agreement (PA). This project has been cleared under exclusion 1a. A copy of the completed XXX form is enclosed. You are free to proceed with the project if funds are available and all other requirements have been met.

/s/ Kirk A. Cordell

Enclosure

bcc:

Chief, OHA

MACapps:mc:5/7/93

Capps 6/10/93
Return 6/10/93

NATC-93-11

JUN 11 1993

Memorandum

To: Superintendent, Natchez National Historical Park

From: Deputy Associate Regional Director, Cultural Resources,
Southeast Region

Subject: Section 106 Clearance, replace non-historic gates at
Melrose

We are pleased to inform you that Section 106 compliance procedures have been completed for the above project under the Programmatic Agreement (PA). This project has been cleared under exclusion 1a. A copy of the completed XXX form is enclosed. You are free to proceed with the project if funds are available and all other requirements have been met.

(sgd) Paul B Hartwig

Enclosure

bcc:

Chief, OHA

MACapps:mc:6/10/93

Thom



United States Department of the Interior



NATIONAL PARK SERVICE
NATCHEZ NATIONAL HISTORICAL PARK
P.O. BOX 1208
NATCHEZ, MISSISSIPPI 39121

IN REPLY REFER TO:

H4217 (NATC)

November 26, 1993

Memorandum

To: Deputy Associate Regional Director, Cultural Resources
Southeast Region

From: Superintendent

Subject: XXX (106) to Replaster Ceiling at Melrose, Main House, Room 202

Subject form is attached with photograph and sample of fallen plaster.

Bob Dodson

Enclosure

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON CULTURAL RESOURCES

A. ORIGINATING OFFICE

1. Park: NATCHEZ NATIONAL HISTORICAL PARK Park district (optional) MELROSE

2. Work/Project Description:

a. Project name REPLASTER CEILING park project #(s) _____

b. Describe project and area of potential effects (as defined in 36 CFR Part 800.2(c)); explain why work/project is needed.

SEE ATTACHED SCOPE OF WORK

3. Has the area of potential effects been surveyed to identify cultural resources?

No

Yes Source or Reference _____

Check here if no known cultural resources will be affected. (If area has been disturbed in the past, please explain or attach additional sheets to describe nature, extent, and intensity of disturbance.)

4. Affected Resource(s):

Name and number(s): MAIN HOUSE, ROOM 202 location: MELROSE ESTATE NR status: 7

Name and number(s): _____ location: _____ NR status: _____

(REPEAT FOR EACH AFFECTED RESOURCE)

5. The proposed action will: (Check as many as apply.)

Destroy, remove, or alter features/elements from a historic structure

Replace historic features/elements in kind

Add nonhistoric features/elements to a historic structure

Alter or remove features/elements of a historic setting or environment (inc. terrain)

Add nonhistoric features/elements (inc. visual, audible, or atmospheric) to a historic setting or cultural landscape

Disturb, destroy, or make archeological resources inaccessible, or alter terrain

Potentially affect presently unidentified cultural resources

Begin or contribute to deterioration of historic fabric, terrain, setting, landscape elements, or archeological or ethnographic resources

Involve a real property transaction (exchange, sale, or lease of land or structures)

(OPTIONAL) Meet criteria for Programmatic Exclusion C.1 ___ in the 1990 Servicewide Programmatic Agreement for Section 106 compliance.

Other (please specify) Remove nonhistoric material that obscures and damages character defining interior finish.

6. Measures to prevent or minimize loss or impairment of historic/prehistoric fabric, setting, integrity, or data:

Missing and deteriorated plaster will be replaced in kind, or with a compatible substitute. Ceiling will be repainted to match existing color.

7. Supporting Study Data: (attach if feasible; if action is in a plan, give name and project or page number):

NONE

Attachments: [] Maps [] Archeological Clearance, if applicable [] Drawings [] Specifications

[X] Photographs [X] Scope of Work [] Site plan [] List of Materials [X] Samples

[X] Other Floor Plan, Second floor of Main House, Melrose Estate.

2. b. SCOPE OF WORK

On or about November 15, 1993, a section of ceiling, approximately six feet by nine feet, collapsed in room 202, Main House, Melrose Estate, National Historic Landmark (NRHP #74002253). This ceiling is composed of sand plaster (a mixture of sand, lime, cement, and water). Sometime in the 1970's, the entire ceiling was covered with a thick vinyl cloth (sample enclosed). Covering the vinyl is a thin coat of plaster. Originally designed as a means of covering numerous fractures in a plaster ceiling, the vinyl also acts as a moisture barrier preventing the ceiling from "breathing".

The proposed action would remove all of the remaining vinyl sheeting from the ceiling and any remaining plaster that has lost its integrity. During this action the four stereo speakers installed 1976 - 1982 would also be removed. Missing and removed plaster would be replaced in kind. The ceiling will then be painted to match existing colors.

9. Prepared by Thom Rosenblum Date 11/24/93

Title Museum Curator Telephone 601 446-5790

10. I certify that the proposed work conforms to NPS Management Policies and NPS-28.

Signature of Superintendent *Robert Johnson*
Date 11/24/93

B. REGIONAL ASSESSMENT

RECOMMENDED ASSESSMENT OF EFFECT (completed by Regional compliance coordinator):

 No Effect No Adverse Effect Adverse Effect

COMPLIANCE REQUIREMENTS--PLEASE INDICATE WHICH OF THE FOLLOWING APPLIES.

- 1. STANDARD 36 CFR PART 800 CONSULTATION
Consultation under 36 CFR Part 800 has been carried out subsequent to preparation of this XXX form.
- 2. PROGRAMMATIC EXCLUSION
The above action meets all conditions for a programmatic exclusion under Stipulation C.1 or C.2 of the 1990 Servicewide PA.
APPLICABLE EXCLUSION(s): C.1 [specify a-m] or C.2 addition.
- 3. PLAN-RELATED UNDERTAKING
Consultation about the proposed undertaking was completed in the context of a plan review process, in accordance with the 1990 Servicewide PA, Stipulation E or F, and 36 CFR Part 800. (If Stipulation F of the 1990 PA applied to this case, please so note.)
- 4. MOA-RELATED UNDERTAKING
Consultation about the proposed action was conducted in development of a Memorandum of Agreement or Programmatic Agreement approved by NPS, the SHPO and the Advisory Council.

Contingent upon stipulations developed in the consultation process or listed above, requirements for Section 106 compliance have been met.

STIPULATIONS/CONDITIONS:

Signed _____ Date _____
Regional Compliance Coordinator

Approved _____ Date _____
Regional Director

C. REGIONAL CULTURAL RESOURCES SPECIALISTS REVIEW

REGIONAL CONTROL# _____ IDLCS# _____ IDCLI# _____ CSI/ARI# _____

I have reviewed this proposal for conformity with requirements for the Section 106 process, with the 1990 Servicewide Programmatic Agreement (if applicable), and applicable parts of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, NPS Management Policies, and NPS-28. I have stated any additional stipulations that should apply, and I concur in the recommended assessment of effect above.

SIGNED:

REGIONAL ARCHEOLOGIST _____ Date _____

Comments: _____

REGIONAL HISTORICAL LANDSCAPE ARCHITECT* _____ Date _____

Comments: _____

REGIONAL CURATOR _____ Date _____

Comments: _____

REGIONAL ETHNOGRAPHER* _____ Date _____

Comments: _____

REGIONAL HISTORIAN _____ Date _____

Comments: _____

REGIONAL HISTORICAL ARCHITECT _____ Date _____

Comments: _____

OTHER _____ Date _____

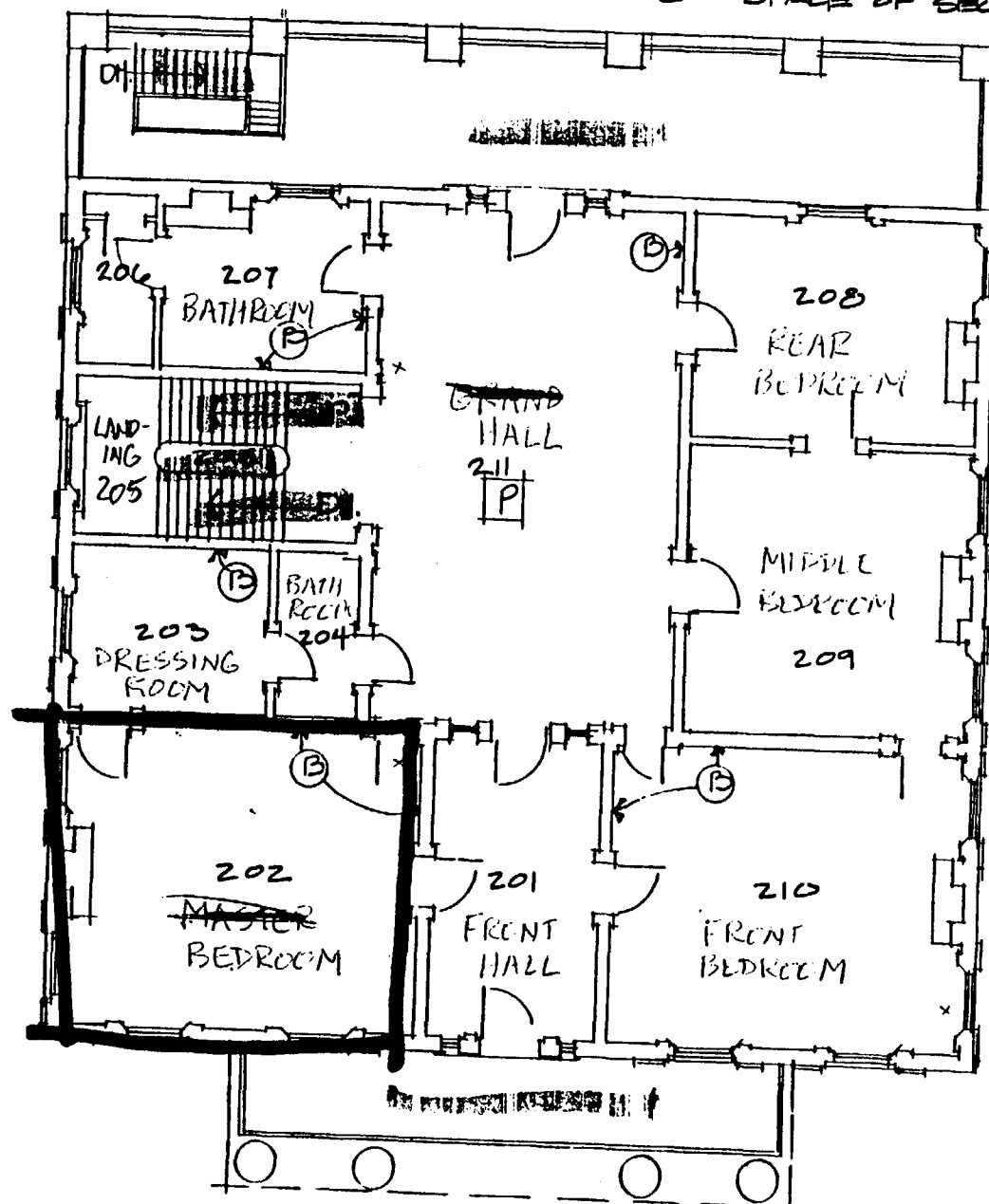
Comments: _____

* Regions without a Regional historical landscape architect or ethnographer leave these lines blank.

BEARING WALL

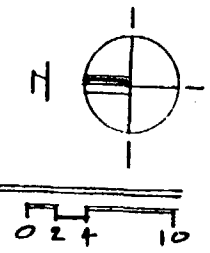
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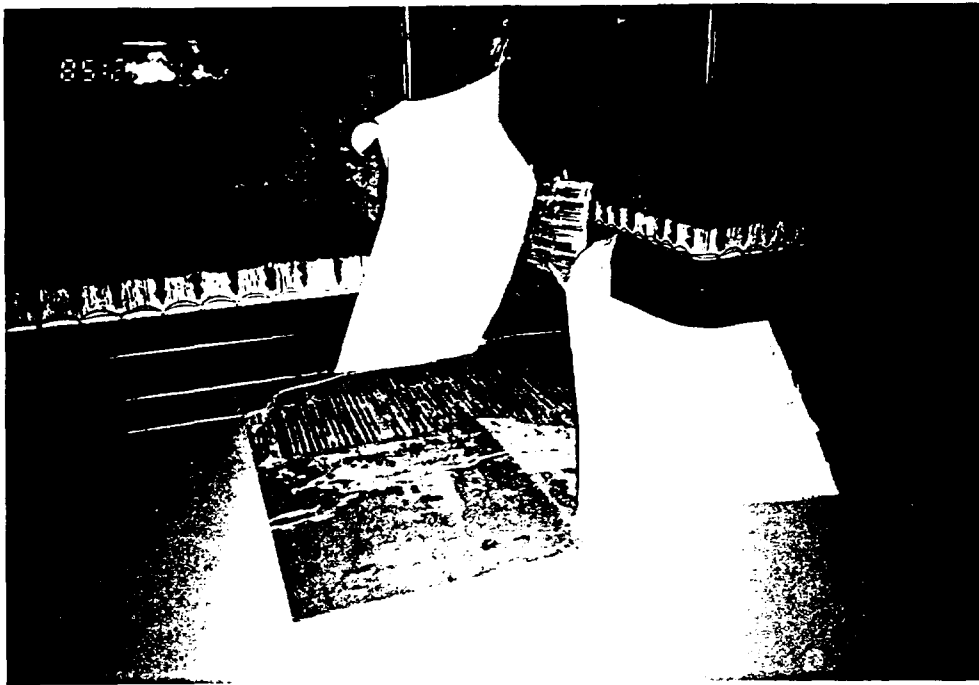
S SPACE OF SECONDARY CONCERN



2ND FLOOR

SCALE







IN REPLY REFER TO:

Thomas H. K. H.
United States Department of the Interior

NATIONAL PARK SERVICE

Southeast Regional Office
75 Spring Street, S.W.
Atlanta, Georgia 30303

NATC-95-04

AUG 10 1995

Memorandum

To: Superintendent, Natchez National Historical Park
From: Superintendent, Gulf Coast System Support Office
Subject: Section 106 Clearance, Handicap Lift at Melrose Plantation ✓

On June 26, 1995, we submitted summary documentation regarding the proposed undertaking to the Advisory Council on Historic Preservation. According to 36 CFR 800.5(d)(2): "If the Advisory Council does not object . . . within 30 days . . . the Agency Official is not required to take any further steps in the Section 106 process." As the Advisory Council has not objected within 30 days, we consider our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800 to be completed. Therefore, we are pleased to inform you that the above project has been cleared. A copy of the completed XXX Form is enclosed.

You are free to proceed with the project if funds are available and all other requirements have been met.

Frank L. Stapp

Enclosure





United States Department of the Interior



NATIONAL PARK SERVICE

Southeast Regional Office
75 Spring Street, S.W.
Atlanta, Georgia 30303

IN REPLY REFER TO:

H30 (SER-OHA)

MAR 04 1995

Ms. Betsy Sandidge
Ann Beha Associates
33 Kingston Street
Boston, Massachusetts 02111

Dear Ms. Sandidge:

Enclosed is a copy of the 106 package (scope of work, plans and photos of the location) for the Melrose Main House Handicap lift. This is to inform the parties involved in the preparation of the Historic Structure Report that the Main House accessibility will be addressed this year.

Sincerely,

Richard W. Ramsden
Chief, Historic Architecture Division
Southeast Region

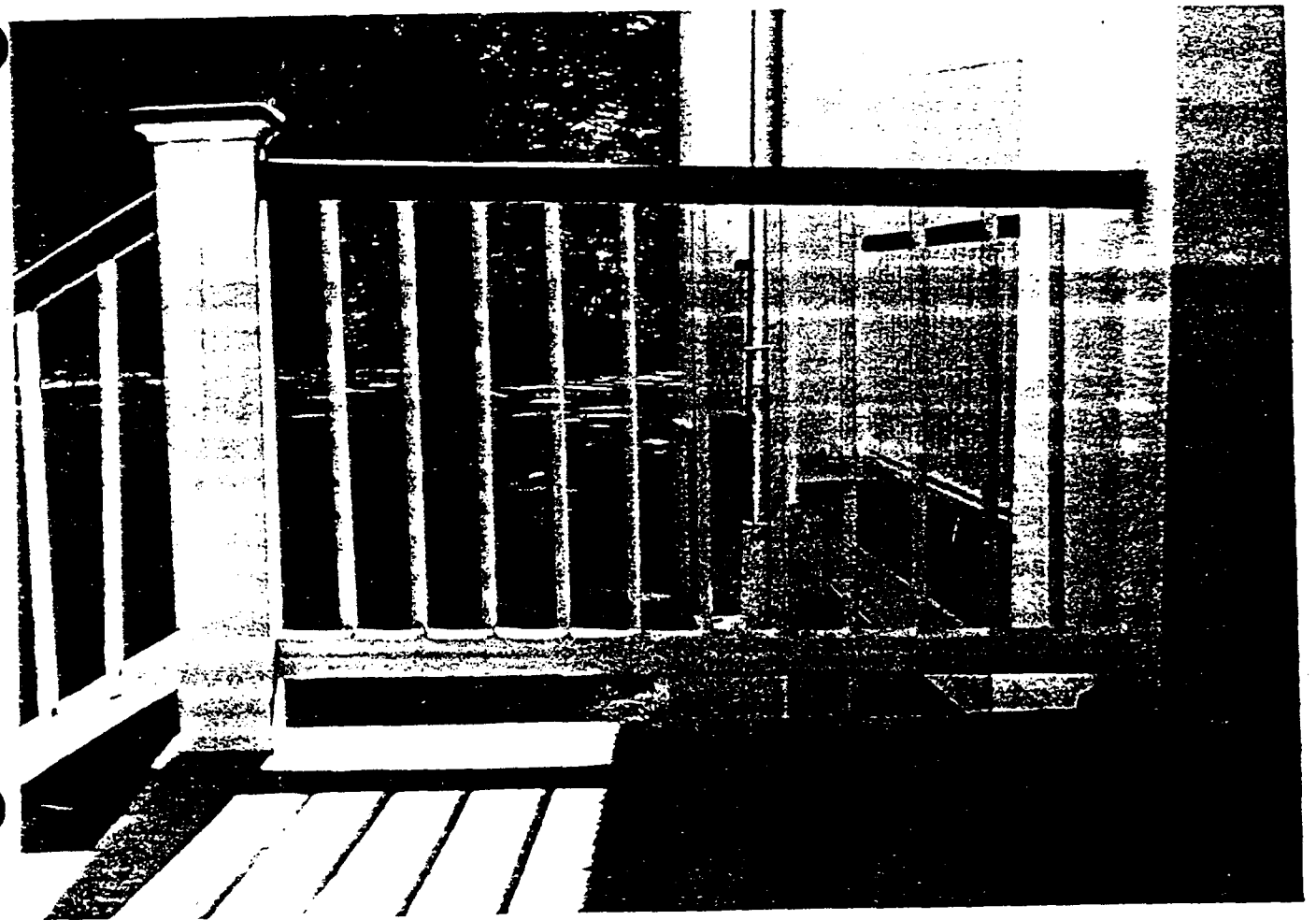
SCOPE OF WORK
INSTALLATION OF WHEELCHAIR LIFT, MAIN HOUSE, MELROSE

In order to bring NATC into compliance with NPS Special Directive 83-3, Accessibility for Disabled Persons, the park intends to install a wheelchair lift providing unrestricted access to the first floor of the Main House, Melrose Estate. The proposed lift will be installed at the rear of the structure, adjacent to the southern elevation of the first floor center staircase providing access from the lift platform to the staircase landing.

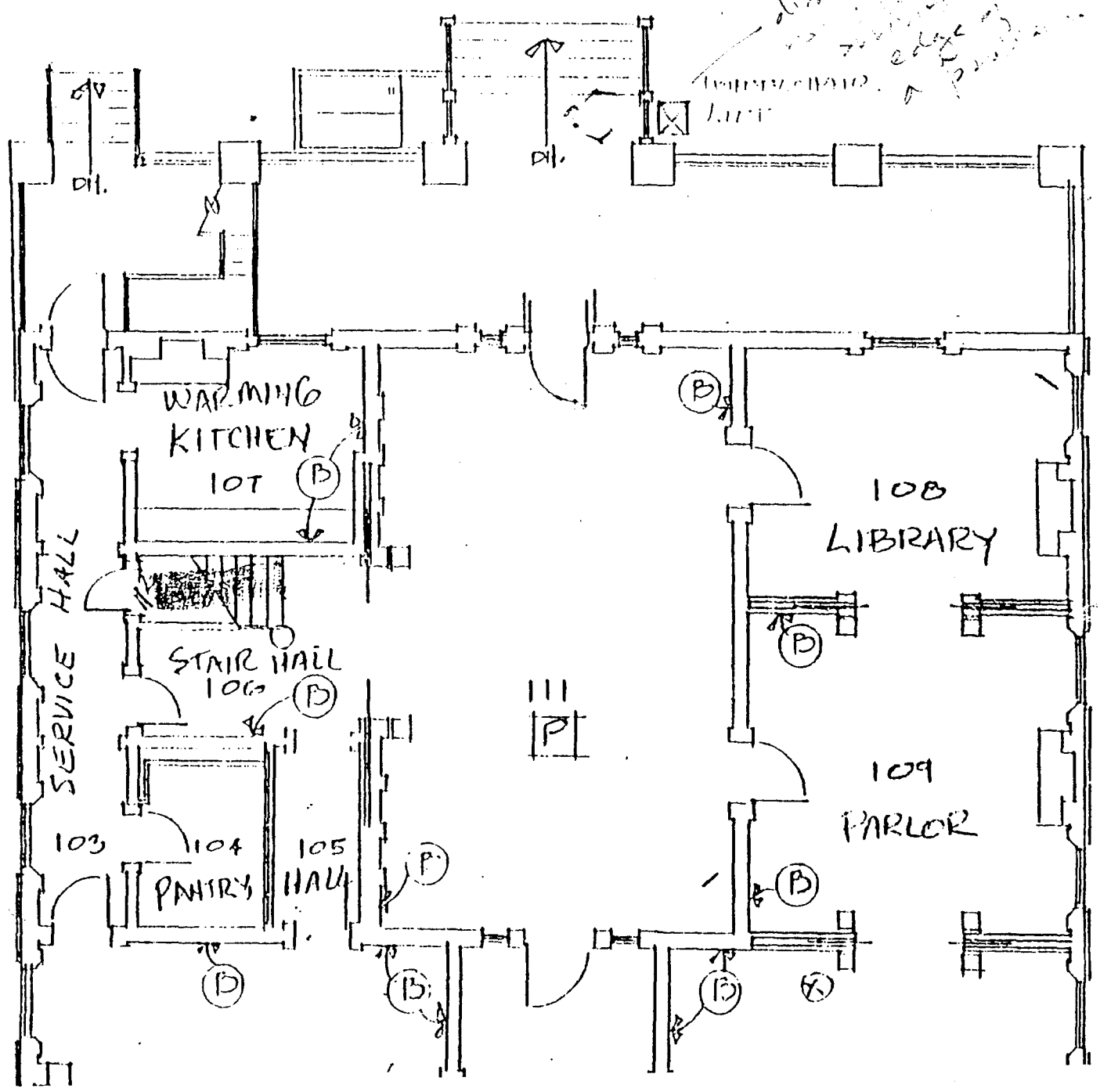
The site has been selected for the following reasons: 1) it is accessible from the park visitor center by an existing brick walk; 2) the site will require a fairly low platform rise of 38.5 inches; 3) the width of the staircase landing at the point of access is 50 inches providing ample room to maneuver a wheelchair; 4) Since the landing balustrades are not anchored in the porch columns, the feature may be removed with minimal damage of historic material; and 5) the site will have a minimal adverse visual impact on the structure.

The project will require excavation of a pit of approximately ten feet to accommodate the lift apparatus. Drainage will be accomplished by either a sump pump or gravity feed into an existing cistern drain. Conduit will be routed from the basement through the basement wall to the apparatus. The balustrade will be removed, and anchors affixed to the porch column and staircase post which will be used to resecure the balustrade. The balustrade could then be easily removed when the lift is in operation and replaced and secured afterwards. To provide space to maneuver a wheelchair at grade level the area around the lift will be surfaced with brick. The pan of the lift platform will also be surfaced with brick to provide minimal visual intrusion when the lift is not in operation.

*Excavation to be done @
excavation site.*







disposition of the edge of the plan
LIFT

SERVICE HALL

WARMING KITCHEN
107

STAIR HALL
106

103

PANTRY
104

HALL
105

108
LIBRARY

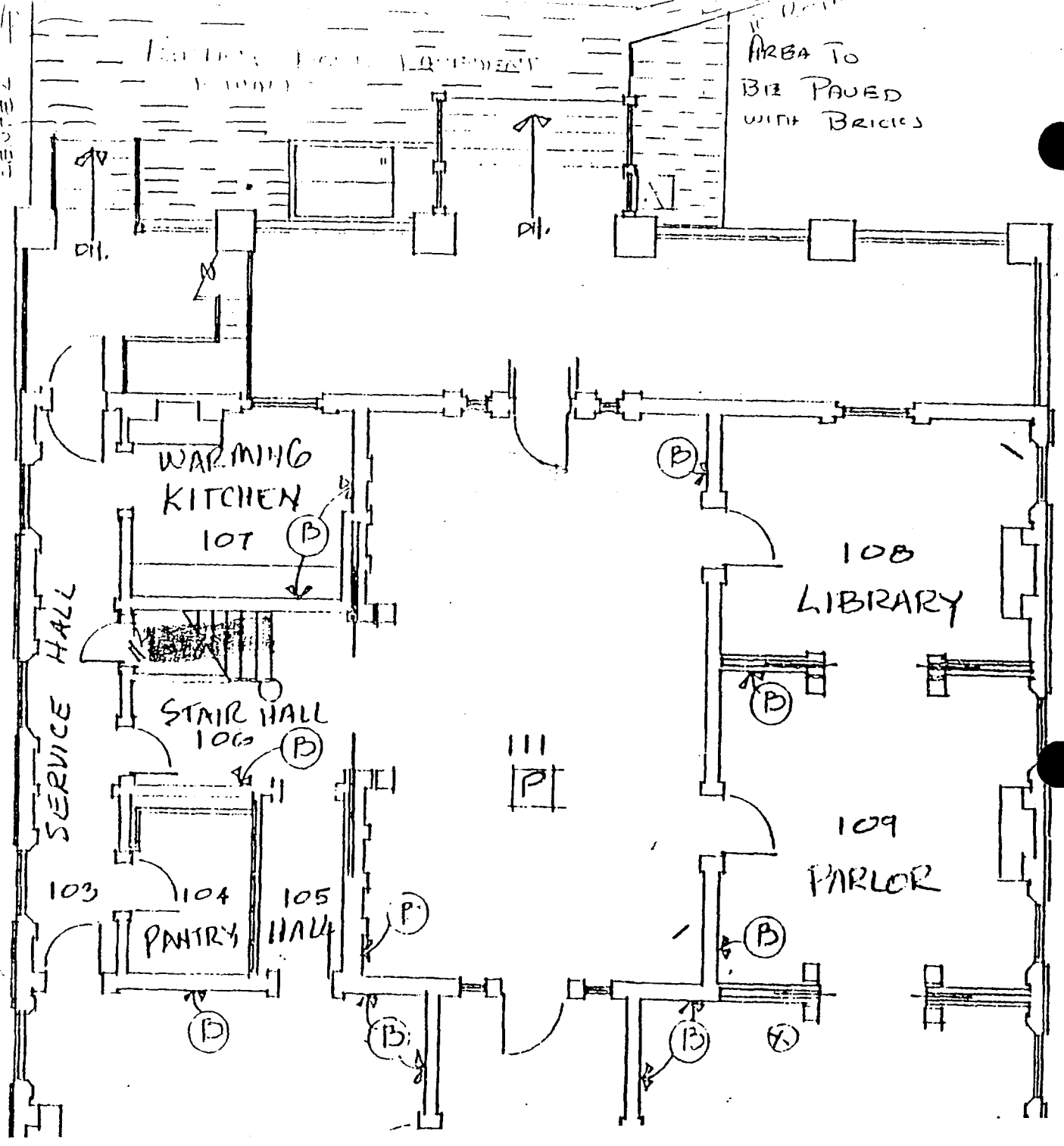
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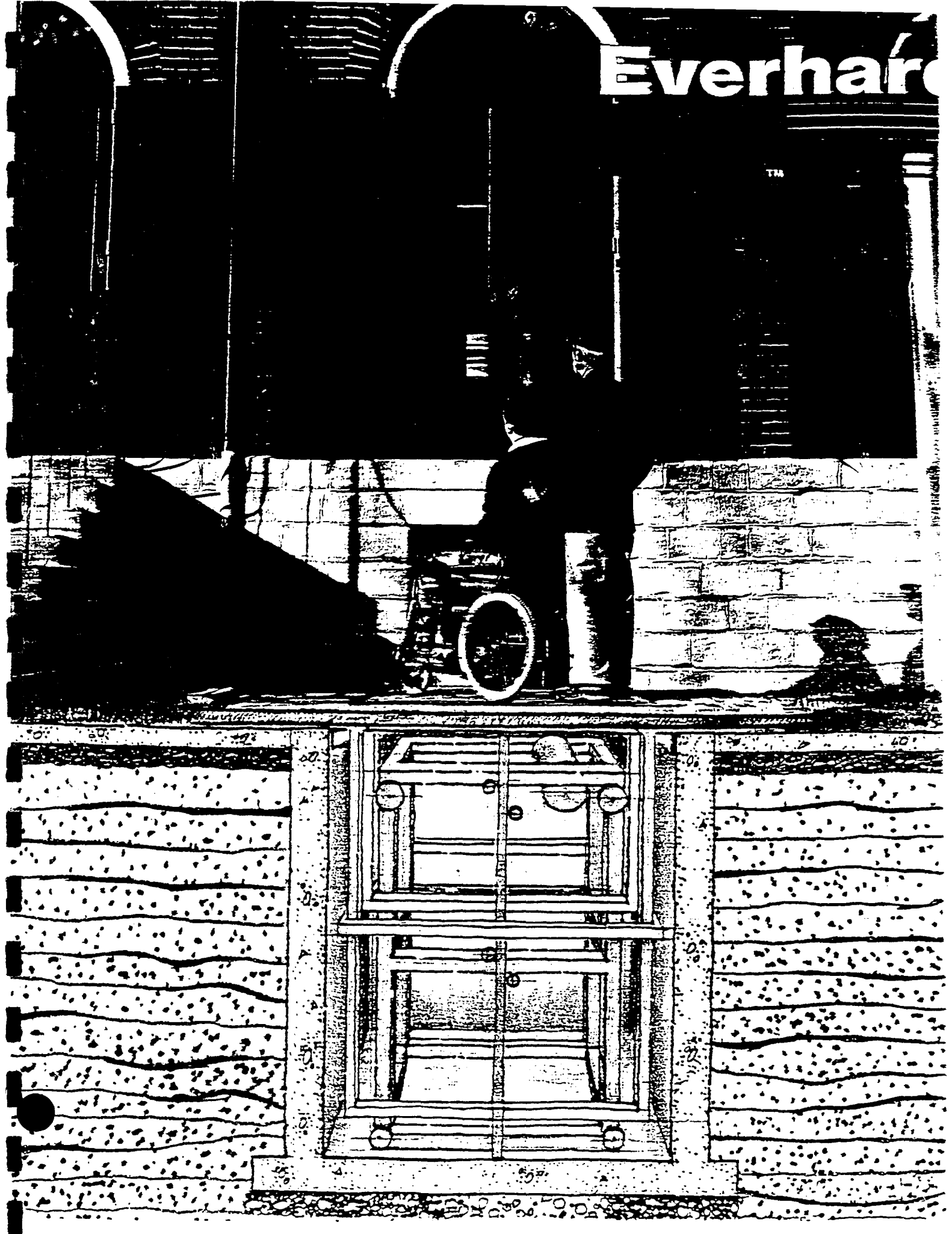
REAR PORCH
W.C.

TO SERVICE
LEVEL



Everhard

TM



DRAFT

To: Superintendent, Natchez National Historic Site

From: Historical Architect, Historic Architecture Division,
Southeast Regional Office

Through: Chief, Historic Architecture Division, Southeast Regional
Office

Subject: Melrose Ceiling Covering Analysis

Ross Hunt and I met with Jack Lawrence of Wallpaper Atlanta on 1/13/94. Mr. Lawrence was of great assistance in identifying the ceiling covering type and the adhesive used in this installation. The analysis is as follows:

CEILING COVERING: canvas liner with scrim backing, approximate weight 15 oz per linear yard.

ADHESIVE INGREDIENTS: wheat, not fit for human consumption
clay (bonding agent)
mercury (trace amount)
mildew inhibitor

The adhesive is water soluble and can best be removed with a commercial wall paper stripper. We experimented with a product called DIF WALLPAPER STRIPPER manufactured by ZINSSER CORPORATION. Mr. Lawrence recommended scoring the painted canvas liner ceiling covering to ensure penetration of the stripper. The scoring could be accomplished with a razor blade or a tool called a paper tiger. He emphasized that this should be done cautiously to minimize damage to underlying plaster. I would like to recommend that Ross oversee this operation. Because the ceiling covering was applied to mask damaged plaster we can expect some loss of the historic plaster but hopefully through careful removal this can be minimized.



**8.8 Structural Calculations
Data Sheets**



ROBERT SILMAN ASSOCIATES, P.C.
CONSULTING ENGINEERS
 88 UNIVERSITY PLACE, NEW YORK, N.Y. 10003

PROJECT Melrose JOB NO. 5060.01 PAGE 1/23
 SUBJECT _____ BY EPM DATE 6/12/96

1st floor joists - check of f_b & Δ_{max} → **CENTRAL HALL**

JOISTS: $2\frac{1}{2}'' \times 14\frac{1}{2}'' @ 18'' o/c$, span = 22'

$$S_{xx} = \frac{1}{6} (2.5) (14.5)^2 = 87.60 \text{ in}^3$$

$$I_{xx} = \frac{1}{12} (2.5) (14.5)^3 = 635.1 \text{ in}^4$$

to keep Δ_{max} to minimum, use guideline $\frac{L}{240}$,

because there is no plaster being supported by these 1st floor joists (i.e., in basement).

$$\frac{L}{240} = \frac{22 \times 12}{240} = 1.1'' \rightarrow \text{say } 1''$$

N.B. Basement central space is air-conditioned.

$$\Delta_{max} = \frac{5 \left(\overset{\text{plf}}{x/12} \right) (22 \times 12)^4}{384 (1,440,000) (635.1)} = 1.0''$$

$$\therefore x = 173.5 \text{ plf} \rightarrow \equiv (173.5 \text{ PLF}) \left(\frac{12}{18} \right) = 116 \text{ PSF}$$

no plaster loads $\therefore DL = 36 - 10 = 26 \text{ PSF}$ (see notes, p. 1B/ from 2nd floor joists)

$$\begin{array}{r} 116 \\ -26 \\ \hline 90 \text{ PSF} \end{array}$$

w/ $U = 100 \text{ PSF}$:

check f_b : $M_{max} = \frac{1}{8} \left(\frac{100+26}{\text{PSF}} \right) \left(\frac{18}{12} \right) (22)^2 = 11,434.5 \text{ ft-lb}$

$$f_b = \frac{11,434.5 \text{ ft-lb} \left(\frac{12}{1} \right)}{87.60 \text{ in}^3} = 1566 \text{ psi} \leftarrow \text{high, but ok for repetitive members.}$$

$$f_v = \frac{3 \left(\frac{1}{2} (126) (18/12) (22') \right)}{2 (2.5) (14.5)} = 86 \text{ psi} \checkmark$$

**ROBERT SILMAN
ASSOCIATES, P.C.**

CONSULTING ENGINEERS

88 UNIVERSITY PLACE, NEW YORK, N.Y. 10003

PROJECT Melrose

JOB NO. 5060.01

PAGE 7/23

SUBJECT

BY EPM

DATE 6/12/82

1st floor joists - check of f_b & Δ_{max}

ROOMS NORTH OF CENTRAL HALL

JOISTS : $2\frac{1}{2}'' \times 13\frac{7}{8}'' @ 17''/c$, span = 21.5'

$$S_{xx} = \frac{1}{6} (2.5) (13.875)^2 = 80.2 \text{ in}^3$$

$$I_{xx} = \frac{1}{12} (2.5) (13.875)^3 = 556.5 \text{ in}^4$$

$$\Delta_{max} = \frac{L}{240} = \frac{21.5 \times 12}{240} = 1.075'' \approx 1''$$

$$\Delta_{max} = \frac{5 \cdot \left(\frac{x}{12}\right)^4 (21.5 \times 12)^4}{384 (1,440,000) (556.5)} = 166.7 \text{ PLF}$$

$$\times \frac{12}{17} = 117.6 \text{ PSF}$$

$$- 26 \text{ PSF DL}$$

$$= 91.6 \text{ PSF}$$

w/ LL = 100 PSF:

$$M_{max} = \frac{1}{8} (100 + 26) \left(\frac{17}{12}\right) (21.5)^2$$

check f_b :

$$= 10,314 \text{ \#}$$

$$f_b = \frac{10,314 (12)}{80.2 \text{ in}^3} = 1543 \text{ psi}$$

↑ allow. LL for 1st floor north rooms.

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PROJECT Melrose
SUBJECT _____

JOB NO. 5060.01 PAGE 3/23
BY EPM DATE 6/12/95

1st floor joists - Check of f_b & Δ_{max} → ROOMS EAST OF CENTRAL HALL.

JOISTS: $2\frac{1}{2}'' \times 13\frac{1}{2}'' @ 18''/c$, span = 20.5'
 $\hookrightarrow S = \frac{1}{6}(2.5)(13.5)^2 = 75.9 \text{ in}^3$

Extra load on these joists: 10 PSF of mechanical equipment hanging from joists → includes more than just ductwork.

DL = 36 PSF

$$\Delta_{max} = \frac{L}{240} = \frac{20.5 \times 12}{240} = 1.025'' \approx 1.0''$$

$$\Delta_{max} = \frac{5 \left(\overset{\text{plf}}{\times \frac{1}{12}} \right) (20.5 \times 12)^4}{384 (1,440,000) (75.9 \text{ in}^3)} \rightarrow \overset{\text{plf}}{200} \times \frac{12}{18}$$

$$= 132.8 \text{ PSF}$$

$$- 36 \text{ PSF DL}$$

$$96.8 \text{ PSF LL}$$

OK

w/ LL = 100 & DL = 36:

$$M_{max} = \frac{1}{8} (100 + 36) \left(\frac{18}{12} \right) (20.5)^2$$

$$= 10,716 \text{ ft}\cdot\text{lb}$$

$$f_b = \frac{10,716 (12^3)}{75.9 \text{ in}^3} = 1694 \text{ psi}$$

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PROJECT Melrose JOB NO. 5060.01 PAGE 4/21
SUBJECT _____ BY EPM DATE 6/22/77

1st floor joists - check of f_b & Δ_{max}

ROOMS WEST OF CENTRAL HALL

(span direction is L to ROOMS
EAST OF CENTRAL HALL)

JOISTS: $2\frac{5}{8}'' \times 14'' @ 17\frac{1}{2}''$, span $\approx 20'$

$$S_{xx} = \frac{1}{6} (2.625)(14)^2 = 85.75 \text{ in}^3$$

$$I_{xx} = \frac{1}{12} (2.625)(14)^3 = 600.75 \text{ in}^4$$

w/ $DL = 26 \text{ PSF}$; $\Delta_{max} = \frac{L}{240} = \left(\frac{20(12)}{240} \right) = 1.0''$

$$\Delta_{max} = \frac{5 \left(\frac{x}{12} \right)^4 (20 \times 12)^4}{384 (1,440,000) (600)} = 1.0$$

$$\therefore x = \frac{240 p_f}{\frac{12}{17}} = 169.4 \text{ PSF}$$

143 PSF \therefore ok for L
w.r.t. Δ_{max}

w/ $LL = 100$ & $DL = 26$:

$$M_{max} = \frac{1}{8} (100 + 26) \left(\frac{17}{12} \right) (20')^2 = 8925 \text{ ft}\cdot\text{lb}$$

$$f_b = \frac{8925 (12 \text{ in}^3)}{85.75} = 1250 \text{ psi} \quad \checkmark$$

PROJECT Melrose

JOB NO. 5060.01

PAGE 5/23
 DATE 6/12/95

SUBJECT

BY EPM

2nd floor joists - check of f_b & Δ_{max} → **CENTRAL HALL**

w/ DL = 36 PSF

Joints = 2 5/8" x 13" @ 16" o/c

↳ see calcs on following page for S_{xx} & I_{xx}

LL = 40 PSF → minimal

76 PSF → $w = 76 (10/12) = 101.33$ PLF

use $E = 1.44 \times 10^6$ ← for drier wood (air conditioning keeps the relative humidity lower than ambient outside air).

$$M_{max} = \frac{1}{8} (101.33) (22')^2 = 6130.6 \text{ \#}$$

$$f_b = \frac{6130.6 (12)}{73.94} = 995 \text{ psi} < F_b = 1,500 \text{ psi (from USDA Wood Handbook)}$$

$$\Delta_{max} = \frac{5 (101.33/12) (22 \times 12)^4}{384 (1,440,000) (480.6)} = 0.77" \approx \frac{L}{342}$$

↑
 is this good enough for plaster. YES.

$$V = R_{n \text{ max}} = \frac{1}{2} (22') (101.33 \text{ PLF}) = 1115 \text{ \#}$$

$$f_v = \frac{3V}{2bd} = \frac{3 (1115 \text{ \#})}{2 (2.625") (13")} = 49 \text{ psi} < F_v$$

Melrose

2ND FLOOR (only):

6
10/23

$$S_{xx} = \frac{1}{6} (2.625) (13)^2 = 73.94 \text{ in}^3$$

$$I_{xx} = \frac{1}{12} (2.625) (13)^3 = 480.6 \text{ in}^4$$

$$\text{span} = 22'$$

$$\text{DL} = \frac{1}{8} \text{ Floor } \frac{1.5}{12} (40) = 5 \text{ PSF}$$

$$\text{JOISTS + sandst} \quad 8 \text{ PSF}$$

$$\frac{3}{4}'' \text{ BOARDS \& NAILERS} \quad 5 \text{ PSF}$$

$$\frac{3}{4}'' \text{ "Plaster" atop} \quad 8 \text{ PSF}$$

$$1'' \text{ Plaster \& lath} \quad 10 \text{ PSF}$$

$$\underline{36 \text{ PSF}}$$

$$w = \frac{16}{12} (36 + 100) = 182 \text{ PLF}$$

NO PARTITION LOADS (IN GENERAL)

NO HVAC LOADS

$$\text{LL} = 100 \text{ PSF (for main room)}$$

for Baldcy press per USDA Wood Handbook

$$E_{\text{min}} = 1.18 \times 10^6 \text{ psi} \quad 9\% \text{ moisture}$$

$$E_{\text{max}} = 1.44 \times 10^6 \text{ psi} \quad 12\% \text{ moisture}$$

$$M_{\text{max}} = \frac{1}{8} (182) (22')^2 = 11,011 \text{ \#} = 132,132 \text{ \#}$$

$$f_b = \frac{132,132}{73.94} = 1787 \text{ psi}$$

$$\Delta_{\text{max}} = \frac{5 (182/12) (22 \times 12)^4}{384 (1,180,000) (480.6)} = 1.69'' \quad \text{w/ } \frac{E}{E_{\text{min}}}$$

$$\text{w/ } E = E_{\text{max}}, \Delta_{\text{max}} = 1.38'' \quad (E = 1.44 \times 10^6 \text{ psi})$$

In Main Hall on 2nd Floor (cont.)

$$\Delta_{max} = \frac{5 \left(\frac{180}{12} \right) (22 \times 12)^4}{384 (1,200,000) (4806)} = 1.65'' \leftarrow \text{v. high}$$

$$= \frac{L}{100} \leftarrow \text{too high for the plaster ceiling below.}$$

to keep deflection to $\frac{L}{300}$ for plaster ceilings,
 what would be max. allowable LL?

$$\frac{L}{300} = \frac{22' \times 12''}{300} = 0.73''$$

$$\frac{5 \left(\frac{x}{12} \right) (22 \times 12)^4}{384 (1,200,000) (4806)} = 0.73''$$

$$x = 80.2 \text{ pcf} \equiv 60 \text{ PSF (DL+LL)} \leftarrow \text{available}$$

$$- 36 \text{ PSF (DL)}$$

$$= 24 \text{ PSF (LL)}$$

Area of 2nd floor Hall $\approx 22^2 = 484 \text{ SF}$

$$\times 24 \text{ PSF}$$

$$= 11,616 \text{ \#}$$

$$= 200 \text{ \# / person}$$

$$= 58 \text{ people}$$

w/ $E = 1.44 \times 10^6 \text{ psi}$, then $x = 95.85 \text{ pcf}$, w/ joints = $16''/c$, DL+LL = $95.85 \left(\frac{12}{16} \right)$

avail

$$= 72 \text{ pcf}$$

$$- 36 \text{ DL}$$

$$= 36 \text{ pcf}$$

LL cap

+ furniture
 cuts mostly in
 shear at
 ends of beams
 \therefore fewer people

* = "unfactored" / 23
5/25/95

Older Values (NDS ^{WOOD} ~~HANDBOOK~~) NDS values (1991)

Douglas-Fir
 $F_{b, min} = 3,600 \text{ psi}^*$
 $E_{min} = 1,180,000 \text{ psi}$
 $F_{c_{II}, min} = 2,540 \text{ psi}^*$

$F_b \approx 1,100 \text{ psi}$ ($\div \sim 3$)
 $E \approx 1,700,000 \text{ psi}$
 $F_{c_{II}} \approx 1,400 \text{ psi}$ ($\div \sim 2$)

Eastern White Pine
 $F_{b, min} = 3,000 \text{ psi}^*$
 $E_{min} = 990 \text{ psi}$
 $F_{c_{II}, min} = 2,040 \text{ psi}^*$

$F_b \approx 1,250 \text{ psi}$ ($\div \sim 3$)
 $E \approx 1,100,000 \text{ psi}$
 $F_{c_{II}} \approx 1000 \text{ psi}$ ($\div \sim 2$)

Southern [Yellow] Pine
(Mixed)
 $F_{b, min} = 3,900 \text{ psi}^*$
 $E_{min} = 1,390,000 \text{ psi}$
 $F_{c_{II}, min} = 2,500 \text{ psi}^*$

$F_b \approx 1,200 \text{ psi}$ ($\div \sim 3$)
 $E \approx 1,400,000 \text{ psi}$
 $F_{c_{II}} \approx 1500 \text{ psi}$ ($\div \sim 2$)

VALUES for

BALD CYPRESS

$F_{b, min} = 4,200 \text{ psi}^*$
 $E_{min} = 1,180,000 \text{ psi}$
 $F_{c_{II}, min} = 3,100 \text{ psi}^*$

$\div 3$ use
 $= 1,400 \text{ psi}$
 $\div 2$ use
 $= 1,550 \text{ psi}$

VALUES for strengths for WOOD H.

$1,900 \text{ psi}$
 $1,200,000 \text{ psi}$
 $1,450 \text{ psi}$
 $F_v = 150 \text{ psi}$
 $F_{c_{\perp}} = 220 \text{ psi}$

use these values when analyzing Melrose & Wm. Johnson

TABLE 12.—Strength properties of some commercially important woods grown in the United States
[Results of tests on small, clear specimens in the green and air-dry condition.]

| Common and botanical names of species (1) | Moisture content (2) | Specific gravity (3) | Static bending | | | | | Impact bending—height of drop causing complete failure (50-pound hammer) (9) | Compression—parallel to grain | | Compression perpendicular to grain—fiber stress at proportional limit (12) | Shear parallel to grain—maximum shearing strength (13) | Tension perpendicular to grain—maximum tensile strength (14) | Hardness—load required to embed a 0.444-inch ball to 1/2 its diameter | |
|--|-------------------------|-------------------------|---|--------------------|-------------------|---------------------------|-------------------------|---|--|-----------------------------------|---|---|---|---|--------------|
| | | | Fiber stress at proportional limit (4) | Modulus of— (5) | | Work to— (7) | | | Fiber stress at proportional limit (10) | Maximum crushing strength (11) | | | | End (15) | Side (16) |
| | | | | Rupture (5) | Elasticity (6) | Proportional limit (7) | Maximum load (8) | | | | | | | | |
| HARDWOODS | | | | | | | | | | | | | | | |
| Alder, red (<i>Alnus rubra</i>)..... | 98 | 0.37 | P. s. i. 3,800 | P. s. i. 6,500 | 1,170 | 0.70 | In.-Lb. per cu. in. 8.0 | 22 | P. s. i. 2,620 | P. s. i. 2,900 | P. s. i. 310 | P. s. i. 770 | P. s. i. 390 | Lb. 550 | Lb. 440 |
| Ash: | 12 | .41 | 6,900 | 9,800 | 1,380 | 1.85 | 8.4 | 20 | 4,530 | 5,320 | 540 | 1,080 | 420 | 980 | 590 |
| Black (<i>Frazinus nigra</i>)..... | 85 | .45 | 2,600 | 6,000 | 1,040 | .41 | 12.1 | 33 | 1,690 | 2,300 | 430 | 860 | 490 | 590 | 520 |
| Green (<i>F. pennsylvanica</i>)..... | 12 | .49 | 7,200 | 12,800 | 1,600 | 1.57 | 14.9 | 35 | 4,520 | 5,970 | 940 | 1,570 | 700 | 1,150 | 850 |
| Oregon (<i>F. latifolia</i>)..... | 48 | .53 | 5,300 | 9,500 | 1,400 | 1.14 | 11.8 | 35 | 3,560 | 4,200 | 910 | 1,260 | 590 | 960 | 870 |
| White (<i>F. americana</i>)..... | 12 | .56 | 8,900 | 14,100 | 1,660 | 2.72 | 13.4 | 32 | 5,120 | 7,080 | 1,620 | 1,910 | 700 | 1,630 | 1,200 |
| Aspen, quaking (<i>Populus tremuloides</i>)..... | 48 | .50 | 4,200 | 7,600 | 1,130 | .92 | 12.2 | 39 | 2,760 | 3,510 | 650 | 1,190 | 500 | 850 | 790 |
| Basswood, American (<i>Tilia americana</i>)..... | 12 | .55 | 5,100 | 9,600 | 1,460 | 1.04 | 16.6 | 38 | 3,190 | 3,990 | 810 | 1,380 | 590 | 1,010 | 960 |
| Beech, American (<i>Fagus grandifolia</i>)..... | 12 | .60 | 8,900 | 15,400 | 1,770 | 2.60 | 17.6 | 43 | 5,790 | 7,410 | 1,410 | 1,950 | 940 | 1,720 | 1,320 |
| Birch: | 94 | .35 | 3,200 | 5,100 | 860 | .69 | 6.4 | 22 | 1,670 | 2,140 | 220 | 660 | 230 | 280 | 300 |
| Paper (<i>Betula papyrifera</i>)..... | 12 | .38 | 5,600 | 8,400 | 1,180 | 1.53 | 7.6 | 21 | 3,040 | 4,250 | 460 | 850 | 260 | 310 | 350 |
| | 105 | .32 | 2,700 | 5,000 | 1,040 | .40 | 5.3 | 16 | 1,690 | 2,220 | 210 | 600 | 280 | 290 | 250 |
| | 12 | .37 | 5,900 | 8,700 | 1,460 | 1.37 | 7.2 | 16 | 3,800 | 4,730 | 450 | 890 | 350 | 520 | 410 |
| | 54 | .56 | 4,300 | 8,600 | 1,380 | .85 | 11.9 | 43 | 2,550 | 3,550 | 670 | 1,290 | 720 | 870 | 850 |
| | 12 | .64 | 8,700 | 14,900 | 1,720 | 2.63 | 15.1 | 41 | 4,880 | 7,300 | 1,250 | 2,010 | 1,010 | 1,990 | 1,300 |

| | | | | | | | | | | | | | | | |
|---|-----|-----|--------|--------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Sweet (<i>B. lenta</i>)..... | 53 | .60 | 4,800 | 9,400 | 1,650 | .94 | 15.7 | 48 | 2,680 | 3,740 | 580 | 1,240 | 430 | 1,070 | 970 |
| Yellow (<i>B. alleghaniensis</i>)..... | 12 | .65 | 10,100 | 16,900 | 2,170 | 2.72 | 18.0 | 47 | 6,330 | 8,540 | 1,340 | 2,240 | 950 | 1,960 | 1,470 |
| Butternut (<i>Juglans cinerea</i>)..... | 67 | .55 | 4,200 | 8,300 | 1,500 | .70 | 16.1 | 48 | 2,620 | 3,380 | 530 | 1,110 | 430 | 810 | 780 |
| Cherry, black (<i>Prunus serotina</i>)..... | 12 | .62 | 10,100 | 16,800 | 2,010 | 2.89 | 20.8 | 55 | 6,130 | 8,170 | 1,190 | 1,980 | 920 | 1,480 | 1,260 |
| Chestnut, American (<i>Castanea dentata</i>)..... | 104 | .36 | 2,900 | 5,400 | 970 | .52 | 8.2 | 24 | 2,020 | 2,420 | 270 | 760 | 430 | 410 | 390 |
| Cottonwood: | 12 | .38 | 5,700 | 8,100 | 1,180 | 1.59 | 8.2 | 24 | 4,200 | 5,110 | 570 | 1,170 | 440 | 570 | 490 |
| Black (<i>Populus trichocarpa</i>)..... | 55 | .47 | 4,200 | 8,000 | 1,310 | .80 | 12.8 | 33 | 2,940 | 3,540 | 440 | 1,130 | 570 | 750 | 660 |
| Eastern (<i>P. deltoides</i>)..... | 12 | .50 | 9,000 | 12,300 | 1,490 | 3.11 | 11.4 | 29 | 5,960 | 7,110 | 850 | 1,700 | 560 | 1,470 | 950 |
| Cucumbertree (<i>Magnolia acuminata</i>)..... | 122 | .40 | 3,100 | 5,600 | 930 | .59 | 7.0 | 24 | 2,080 | 2,470 | 380 | 800 | 440 | 530 | 420 |
| Elm: | 12 | .43 | 6,100 | 8,600 | 1,230 | 1.78 | 6.5 | 19 | 3,780 | 5,320 | 760 | 1,080 | 460 | 720 | 540 |
| American (<i>Ulmus americana</i>)..... | 132 | .32 | 2,900 | 4,800 | 1,070 | .44 | 5.0 | 20 | 1,760 | 2,160 | 200 | 600 | 270 | 280 | 250 |
| Cedar (<i>U. crassifolia</i>)..... | 12 | .35 | 5,300 | 8,300 | 1,260 | 1.25 | 6.7 | 22 | 3,270 | 4,420 | 370 | 1,020 | 330 | 540 | 350 |
| Rock (<i>U. thomasi</i>)..... | 111 | .37 | 2,900 | 5,300 | 1,010 | .49 | 7.3 | 21 | 1,740 | 2,280 | 240 | 680 | 410 | 380 | 340 |
| Slippery (<i>U. rubra</i>)..... | 12 | .40 | 5,700 | 8,600 | 1,370 | 1.39 | 7.4 | 20 | 3,490 | 4,910 | 470 | 930 | 580 | 580 | 430 |
| Hackberry (<i>Celtis occidentalis</i>)..... | 80 | .44 | 4,200 | 7,400 | 1,560 | .66 | 10.0 | 30 | 2,810 | 3,140 | 410 | 990 | 440 | 600 | 520 |
| Hickory, pecan: | 12 | .48 | 8,000 | 12,300 | 1,820 | 1.98 | 12.2 | 35 | 4,840 | 6,310 | 710 | 1,340 | 660 | 950 | 700 |
| Bitternut (<i>Carya cordiformis</i>)..... | 89 | .46 | 3,900 | 7,200 | 1,110 | .81 | 11.8 | 38 | 1,920 | 2,910 | 440 | 1,000 | 590 | 680 | 620 |
| Nutmeg (<i>C. myristiciformis</i>)..... | 12 | .50 | 7,600 | 11,800 | 1,340 | 2.53 | 13.0 | 39 | 4,030 | 5,520 | 850 | 1,510 | 660 | 1,110 | 830 |
| Pecan (<i>C. illinoensis</i>)..... | 60 | .59 | 3,900 | 9,200 | 1,170 | .75 | 20.0 | 60 | 2,350 | 3,730 | 600 | 1,320 | 690 | 1,160 | 1,100 |
| Water (<i>C. aquatica</i>)..... | 12 | .64 | 5,700 | 13,600 | 1,480 | 1.24 | 18.6 | 59 | 2,600 | 6,020 | 950 | 2,240 | 1,220 | 1,640 | 1,320 |
| | 48 | .57 | 4,600 | 9,500 | 1,190 | 1.05 | 19.8 | 54 | 2,970 | 3,780 | 750 | 1,270 | 640 | 960 | 940 |
| | 12 | .63 | 8,000 | 14,800 | 1,540 | 2.45 | 19.2 | 56 | 4,700 | 7,050 | 1,520 | 1,920 | 1,510 | 1,320 | 1,140 |
| | 85 | .48 | 4,000 | 8,000 | 1,230 | .82 | 15.4 | 47 | 2,790 | 3,320 | 510 | 1,110 | 640 | 750 | 660 |
| | 12 | .53 | 7,700 | 13,000 | 1,490 | 2.35 | 16.9 | 45 | 4,760 | 6,360 | 1,010 | 1,630 | 530 | 1,120 | 860 |
| | 59 | .60 | 4,000 | 9,200 | 1,210 | .81 | 21.7 | 73 | 1,960 | 3,700 | 630 | 1,300 | 850 | 1,100 | 1,140 |
| | 12 | .66 | 6,800 | 14,800 | 1,650 | 1.36 | 23.1 | 69 | 2,920 | 6,780 | 1,020 | 2,370 | 1,210 | 1,850 | 1,540 |
| | 65 | .49 | 2,900 | 6,500 | 950 | .58 | 14.5 | 48 | 2,070 | 2,650 | 490 | 1,070 | 630 | 760 | 700 |
| | 12 | .53 | 5,900 | 11,000 | 1,190 | 1.72 | 12.8 | 43 | 3,710 | 5,440 | 1,100 | 1,590 | 580 | 1,110 | 880 |
| | 66 | .80 | 5,500 | 10,300 | 1,400 | 1.22 | 20.0 | 66 | 4,330 | 4,570 | 990 | 1,240 | ----- | ----- | ----- |
| | 12 | .66 | 9,300 | 17,100 | 1,790 | 2.73 | 18.2 | 64 | ----- | 9,040 | 2,070 | ----- | ----- | ----- | ----- |
| | 74 | .58 | 4,900 | 9,100 | 1,290 | 1.06 | 22.8 | 54 | 3,620 | 3,980 | 940 | 1,030 | ----- | ----- | ----- |
| | 12 | .60 | 8,100 | 16,600 | 1,700 | 2.04 | 25.1 | ----- | ----- | 6,910 | 1,930 | ----- | ----- | ----- | ----- |
| | 63 | .60 | 5,200 | 9,900 | 1,370 | 1.18 | 14.6 | 53 | 3,100 | 3,990 | 960 | 1,480 | 680 | 1,270 | 1,310 |
| | 12 | .66 | 9,100 | 13,700 | 1,730 | 2.81 | 13.8 | 44 | 5,180 | 7,850 | 2,130 | 2,080 | 1,930 | 1,930 | 1,820 |
| | 80 | .61 | 6,000 | 10,700 | 1,660 | 1.29 | 18.8 | 56 | 3,240 | 4,660 | 1,090 | 1,440 | ----- | ----- | ----- |
| | 12 | .62 | 10,200 | 17,800 | 2,020 | 2.88 | 19.3 | 58 | 5,400 | 8,600 | 1,910 | ----- | ----- | ----- | ----- |

See footnotes at end of table.

TABLE 12.—Strength properties of some commercially important woods grown in the United States—Continued

[Results of tests on small, clear specimens in the green and air-dry condition¹]

| Common and botanical names of species (1) | Mol- ture content (2) | Specific gravity ² (3) | Static bending | | | | | Impact bend- ing— height of drop causing com- plete failure (50- pound ham- mer) (9) | Compression parallel to grain | | Com- pression perpen- dicular to grain— fiber stress at propor- tional limit (12) | Sheer parallel to grain— maxi- mum shear- ing strength (13) | Tension perpen- dicular to grain— maxi- mum tensile strength (14) | Hardness—load required to em- bed a 0.444-inch ball to 1/2 its diameter | |
|--|--------------------------------|---|---|--------------|-------------------|----------------------------|---------------------------|---|--|---|--|---|---|---|-------|
| | | | Fiber stress at propor- tional limit (4) | Modulus of— | | Work to— | | | Fiber stress at propor- tional limit (10) | Maxi- mum crush- ing strength (11) | | | | End | Side |
| | | | | Rupt- ure | Elasti- city | Proport- ional limit | Maxi- mum load | | | | | | | | |
| HARDWOODS—continued | | | | | | | | | | | | | | | |
| Hickory, true: | Pd | | P. s. f. | P. s. f. | 1,000 p. s. f. | In.-Lb. per cu. in. | In.-Lb. per cu. in. | In. | P. s. f. | P. s. f. | P. s. f. | P. s. f. | P. s. f. | | |
| Mockernut (<i>Carya tomentosa</i>) | 59 | .64 | 6,300 | 11,100 | 1,570 | 1.38 | 26.1 | 88 | 3,900 | 4,480 | 1,000 | 1,280 | | | |
| Pignut (<i>C. glabra</i>) | 12 | .72 | 11,900 | 19,200 | 2,220 | 3.41 | 22.6 | 77 | 3,950 | 4,810 | 1,140 | 1,370 | | | |
| Shagbark (<i>C. ovata</i>) | 54 | .66 | 6,200 | 11,700 | 1,650 | 1.34 | 31.7 | 89 | 3,430 | 4,580 | 1,040 | 1,520 | | | |
| Shellbark (<i>C. laciniosa</i>) | 12 | .75 | 11,300 | 20,100 | 2,260 | 3.23 | 30.4 | 74 | 2,740 | 3,920 | 1,000 | 1,190 | | | |
| Honeylocust (<i>Gleditsia triacanthos</i>) | 60 | .64 | 5,900 | 11,000 | 1,570 | 1.28 | 23.7 | 74 | 3,320 | 4,420 | 1,420 | 1,660 | 930 | 1,440 | 1,390 |
| Locust, black (<i>Robinia pseudoacacia</i>) | 12 | .72 | 10,700 | 20,200 | 2,160 | 3.01 | 25.8 | 67 | 4,750 | 5,520 | 2,280 | 2,250 | 900 | 1,860 | 1,580 |
| Magnolia, southern (<i>Magnolia grandiflora</i>) | 61 | .82 | 5,600 | 10,500 | 1,340 | 1.36 | 28.9 | 104 | 2,160 | 2,700 | 570 | 1,040 | 610 | 780 | 740 |
| Maple: | 63 | .60 | 8,900 | 18,100 | 1,890 | 2.29 | 23.6 | 88 | 4,600 | 6,680 | 1,250 | 1,820 | 740 | 1,280 | 1,020 |
| Bigleaf (<i>Acer macrophyllum</i>) | 12 | .69 | 8,900 | 18,100 | 1,890 | 2.29 | 23.6 | 88 | 2,800 | 3,270 | 740 | 1,130 | 720 | 940 | 840 |
| Black (<i>A. nigrum</i>) | 65 | .52 | 4,100 | 7,900 | 1,330 | .70 | 12.8 | 48 | 2,360 | 3,000 | 750 | 1,180 | 670 | 1,700 | 1,180 |
| Red (<i>A. rubrum</i>) | 12 | .57 | 8,300 | 13,300 | 1,620 | 2.39 | 12.5 | 40 | 2,360 | 3,280 | 500 | 1,150 | 780 | 700 | |
| Silver (<i>A. saccharinum</i>) | 63 | .49 | 3,800 | 7,700 | 1,390 | .71 | 11.4 | 32 | 4,650 | 6,540 | 1,240 | 1,850 | 1,430 | 950 | |
| | 12 | .54 | 8,700 | 13,400 | 1,640 | 2.84 | 12.5 | 32 | | | | | | | |
| Sugar (<i>A. saccharum</i>) | 66 | .44 | 3,100 | 5,800 | 940 | .61 | 11.0 | 29 | 1,930 | 2,490 | 460 | 1,050 | 560 | 670 | 590 |
| Oak, red: | 12 | .47 | 6,200 | 8,900 | 1,140 | 1.90 | 8.3 | 25 | 4,360 | 5,220 | 910 | 1,480 | 500 | 1,140 | 700 |
| Black (<i>Quercus velutina</i>) | 58 | .56 | 5,100 | 9,400 | 1,550 | 1.03 | 13.3 | 40 | 2,850 | 4,020 | 800 | 1,460 | | 1,070 | 970 |
| Cherrybark (<i>Q. falcata</i> var. <i>pagodaeifolia</i>) | 12 | .63 | 9,500 | 15,800 | 1,830 | 2.76 | 16.5 | 39 | 5,390 | 7,830 | 1,810 | 2,330 | | 1,840 | 1,450 |
| Laurel (<i>Q. laurifolia</i>) | 80 | .56 | 4,600 | 8,200 | 1,180 | 1.02 | 12.2 | 40 | 2,720 | 3,470 | 870 | 1,220 | | 1,000 | 1,060 |
| Northern red (<i>Q. rubra</i>) | 12 | .61 | 7,900 | 13,900 | 1,640 | 2.15 | 13.7 | 41 | 4,750 | 6,520 | 1,150 | 1,910 | | 1,380 | 1,210 |
| Pin (<i>Q. palustris</i>) | 78 | .61 | 6,500 | 10,800 | 1,790 | 1.32 | 14.7 | 54 | 3,820 | 4,620 | 940 | 1,320 | 800 | 1,270 | 1,240 |
| Scarlet (<i>Q. coccoloba</i>) | 12 | .68 | 11,200 | 18,100 | 2,280 | 3.09 | 18.3 | 49 | 6,350 | 8,740 | 1,540 | 2,000 | 840 | 1,570 | 1,480 |
| Southern red (<i>Q. falcata</i>) | 84 | .56 | 4,500 | 7,900 | 1,390 | .86 | 11.2 | 39 | 2,650 | 3,170 | 710 | 1,180 | 770 | 1,020 | 1,000 |
| Water (<i>Q. nigra</i>) | 12 | .63 | 7,700 | 12,600 | 1,690 | 2.02 | 11.8 | 39 | 4,640 | 6,980 | 1,310 | 1,830 | 790 | 1,230 | 1,210 |
| Willow (<i>Q. phellos</i>) | 80 | .56 | 4,100 | 8,300 | 1,350 | .73 | 13.2 | 44 | 2,360 | 3,440 | 760 | 1,210 | 750 | 1,060 | 1,000 |
| Bur (<i>Quercus macrocarpa</i>) | 12 | .63 | 8,500 | 14,300 | 1,820 | 2.33 | 14.5 | 43 | 4,580 | 6,760 | 1,250 | 1,780 | 800 | 1,580 | 1,290 |
| Chestnut (<i>Q. prinus</i>) | 75 | .58 | 4,000 | 8,300 | 1,320 | .71 | 14.0 | 48 | 3,680 | 5,000 | 880 | 1,290 | 800 | 1,000 | 1,070 |
| Overcup (<i>Q. lyrata</i>) | 12 | .63 | 8,000 | 14,300 | 1,730 | 2.22 | 14.8 | 45 | 4,620 | 6,820 | 1,260 | 2,080 | 1,050 | 1,600 | 1,510 |
| Swamp chestnut (<i>Q. michauxii</i>) | 65 | .60 | 4,500 | 10,400 | 1,480 | .81 | 15.0 | 54 | 2,840 | 4,090 | 1,030 | 1,410 | 700 | 1,170 | 1,200 |
| White (<i>Q. alba</i>) | 12 | .67 | 9,700 | 17,400 | 1,910 | 2.92 | 20.5 | 53 | 5,550 | 8,330 | 1,380 | 1,890 | 870 | 1,690 | 1,400 |
| | 90 | .52 | 4,200 | 8,900 | 1,140 | .93 | 8.0 | 29 | 2,220 | 3,030 | 680 | 930 | 480 | 910 | 860 |
| | 12 | .59 | 6,000 | 10,900 | 1,490 | 1.44 | 9.4 | 26 | 2,910 | 6,090 | 1,080 | 1,390 | 510 | 1,020 | 1,060 |
| | 81 | .56 | 5,600 | 8,900 | 1,550 | 1.14 | 11.1 | 39 | 3,220 | 3,740 | 770 | 1,240 | 820 | 1,050 | 1,010 |
| | 12 | .63 | 8,900 | 15,400 | 2,020 | 2.24 | 21.5 | 44 | 3,960 | 6,770 | 1,260 | 2,020 | 920 | 1,400 | 1,190 |
| | 94 | .56 | 4,400 | 7,400 | 1,290 | .88 | 8.8 | 35 | 2,340 | 3,000 | 750 | 1,180 | 760 | 1,020 | 980 |
| | 12 | .69 | 9,300 | 14,500 | 1,900 | 2.61 | 14.6 | 42 | 4,380 | 7,040 | 1,400 | 1,850 | | 1,420 | 1,460 |
| | 70 | .58 | 3,600 | 7,200 | 880 | .89 | 10.7 | 44 | 2,380 | 3,290 | 840 | 1,350 | 800 | 1,160 | 1,110 |
| | 12 | .64 | 6,400 | 10,300 | 1,030 | 2.37 | 9.8 | 29 | 3,580 | 6,060 | 1,450 | 1,820 | 680 | 1,410 | 1,370 |
| | 72 | .57 | 4,600 | 8,000 | 1,370 | .90 | 9.4 | 35 | 2,890 | 3,520 | 660 | 1,210 | 690 | 970 | 890 |
| | 12 | .66 | 9,000 | 13,300 | 1,590 | 2.88 | 11.0 | 40 | 4,420 | 6,830 | 1,040 | 1,490 | | 1,250 | 1,130 |
| | 83 | .57 | 4,000 | 8,000 | 1,150 | .79 | 12.6 | 44 | 2,270 | 3,370 | 540 | 1,320 | 730 | 1,010 | 960 |
| | 12 | .63 | 5,500 | 12,600 | 1,420 | 1.20 | 15.7 | 38 | 2,610 | 6,200 | 810 | 2,000 | 946 | 1,410 | 1,190 |
| | 69 | .60 | 5,000 | 8,100 | 1,090 | 1.31 | 11.0 | 44 | 2,840 | 3,450 | 1,060 | 1,280 | 790 | 1,160 | 1,130 |
| | 12 | .67 | 7,600 | 13,200 | 1,510 | 2.25 | 13.2 | 46 | 3,700 | 6,600 | 1,760 | 1,840 | 780 | 1,350 | 1,360 |
| | 76 | .60 | 4,800 | 8,500 | 1,350 | 1.00 | 12.8 | 45 | 3,000 | 3,540 | 710 | 1,260 | 670 | 1,100 | 1,110 |
| | 12 | .67 | 7,300 | 13,900 | 1,770 | 1.68 | 12.0 | 41 | 4,400 | 7,270 | 1,370 | 1,990 | 660 | 1,290 | 1,240 |
| | 74 | .64 | 5,400 | 9,900 | 1,590 | 1.05 | 14.5 | 50 | 3,580 | 4,360 | 940 | 1,300 | 880 | 1,200 | 1,110 |
| | 12 | .72 | 10,200 | 17,700 | 2,050 | 2.88 | 19.2 | 49 | 5,830 | 8,600 | 1,470 | 2,000 | 830 | 1,680 | 1,610 |
| | 68 | .60 | 4,700 | 8,300 | 1,250 | 1.08 | 11.6 | 42 | 3,090 | 3,560 | 830 | 1,250 | 770 | 1,120 | 1,060 |
| | 12 | .68 | 8,200 | 15,200 | 1,780 | 2.27 | 14.8 | 37 | 4,760 | 7,440 | 1,320 | 2,000 | 800 | 1,520 | 1,360 |

See footnotes at end of table.

10/23

TABLE 12.—Strength properties of some commercially important woods grown in the United States—Continued

[Results of tests on small, clear specimens in the green and air-dry condition ¹]

| Common and botanical names of species | Moisture content | Specific gravity | Static bending | | | | | Impact bending—height of drop causing complete failure (50-pound hammer) | Compression parallel to grain | | Compression perpendicular to grain—fiber stress at proportional limit | Shear parallel to grain—maximum shearing strength | Tension perpendicular to grain—maximum tensile strength | Hardness—load required to embed a 0.444-inch ball to 1/2 its diameter | |
|---|------------------|------------------|------------------------------------|-------------|----------------|---------------------|---------------------|--|------------------------------------|---------------------------|---|---|---|---|-------|
| | | | Fiber stress at proportional limit | Modulus of— | | Work to— | | | Fiber stress at proportional limit | Maximum crushing strength | | | | End | Side |
| | | | | Rupture | Elasticity | Proportional limit | Maximum load |  |  |  |  |  |  |  |  | (10) | (11) | (15) | (16) |
| (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | |
| HARDWOODS—continued | | | | | | | | | | | | | | | |
| | Pct. | | P. s. i. | P. s. i. | 1,000 p. s. i. | In.-Lb. per cu. in. | In.-Lb. per cu. in. | In. | P. s. i. | P. s. i. | P. s. i. | P. s. i. | P. s. i. | Lb. | Lb. |
| Sugarberry (<i>Celtis laevis</i>)..... | 62 | 0.47 | 3,200 | 6,600 | 810 | 0.78 | 12.0 | 33 | 1,990 | 2,800 | 580 | 1,050 | 660 | 840 | 740 |
| ..... | 12 | .51 | 8,200 | 9,900 | 1,140 | 2.18 | 11.2 | 36 | 3,970 | 5,620 | 1,240 | 1,280 | 1,280 | 1,280 | 960 |
| Sweetgum (<i>Liquidambar styraciflua</i>)..... | 115 | .46 | 3,500 | 7,100 | 1,200 | .60 | 10.1 | 36 | 2,040 | 3,040 | 380 | 996 | 540 | 670 | 600 |
| ..... | 12 | .52 | 6,600 | 12,500 | 1,640 | 1.59 | 11.9 | 32 | 3,670 | 6,320 | 660 | 1,600 | 760 | 1,080 | 850 |
| Sycamore, American (<i>Plantanus occidentalis</i>)..... | 83 | .46 | 3,300 | 6,500 | 1,060 | .60 | 7.5 | 26 | 2,400 | 2,920 | 450 | 1,000 | 630 | 700 | 610 |
| ..... | 12 | .49 | 6,400 | 10,000 | 1,420 | 1.66 | 8.5 | 26 | 3,710 | 5,380 | 860 | 1,470 | 720 | 920 | 770 |
| Tupelo: | | | | | | | | | | | | | | | |
| Black (<i>Nyssa sylvatica</i>)..... | 55 | .46 | 4,000 | 7,000 | 1,030 | .91 | 8.0 | 30 | 2,490 | 3,040 | 600 | 1,100 | 570 | 790 | 640 |
| ..... | 12 | .50 | 7,300 | 9,600 | 1,200 | 2.54 | 6.2 | 22 | 3,470 | 5,520 | 1,150 | 1,340 | 500 | 1,240 | 810 |
| Water (<i>N. aquatica</i>)..... | 97 | .46 | 4,200 | 7,300 | 1,050 | .98 | 8.3 | 30 | 2,660 | 3,370 | 590 | 1,190 | 600 | 800 | 710 |
| ..... | 12 | .50 | 7,200 | 9,600 | 1,260 | 2.41 | 6.9 | 23 | 4,280 | 5,920 | 1,070 | 1,590 | 700 | 1,200 | 880 |
| Walnut, black (<i>Juglans nigra</i>)..... | 81 | .51 | 5,400 | 9,500 | 1,420 | 1.16 | 14.6 | 37 | 3,520 | 4,300 | 600 | 1,220 | 570 | 960 | 900 |
| ..... | 12 | .55 | 10,500 | 14,600 | 1,680 | 3.70 | 10.7 | 34 | 5,780 | 7,580 | 1,250 | 1,370 | 690 | 1,050 | 1,010 |
| Yellow-poplar (<i>Liriodendron tulipifera</i>)..... | 83 | .40 | 3,400 | 6,000 | 1,220 | .55 | 7.5 | 26 | 2,070 | 2,660 | 300 | 790 | 510 | 480 | 440 |
| ..... | 12 | .42 | 6,200 | 10,100 | 1,580 | 1.39 | 8.8 | 24 | 3,730 | 5,540 | 560 | 1,190 | 540 | 670 | 540 |
| SOFTWOODS | | | | | | | | | | | | | | | |
| Baldcypress (<i>Taxodium distichum</i>)..... | 91 | .42 | 4,200 | 6,600 | 1,190 | .91 | 6.6 | 25 | 3,100 | 3,580 | 500 | 810 | 300 | 440 | 390 |
| ..... | 12 | .46 | 7,200 | 10,600 | 1,440 | 2.15 | 8.2 | 24 | 4,740 | 6,360 | 900 | 1,000 | 270 | 660 | 510 |

Cedar:
 Alaska- (*Chamaecyparis nootkatensis*)
 Atlantic white- (*C. thyoides*)
 Eastern redcedar (*Juniperus virginiana*)
 Incense- (*Libocedrus decurrens*)
 Northern white- (*Thuja occidentalis*)
 Port-Orford- (*Chamaecyparis lawsoniana*)
 Western redcedar (*Thuja plicata*)
 Douglas-fir:
 Coast type (*Pseudotsuga menziesii*)
 Intermediate type (*P. menziesii*)
 Rocky Mountain type (*P. menziesii* var. *glauca*)
 Fir:
 Balsam (*A. balsamea*)
 California red (*A. magnifica*)
 Grand (*A. grandis*)
 Noble (*A. procera*)
 Pacific silver (*A. amabilis*)
 White (*A. concolor*)
 Hemlock:
 Eastern (*Tsuga canadensis*)
 Western (*T. heterophylla*)

| | | | | | | | | | | | | | | | |
|---|-----|-----|-------|--------|-------|------|------|----|-------|-------|-----|-------|-----|-----|-----|
| Cedar: | 38 | .42 | 3,800 | 6,400 | 1,140 | .77 | 9.2 | 27 | 2,500 | 3,050 | 430 | 840 | 330 | 540 | 440 |
| Alaska- (<i>Chamaecyparis nootkatensis</i>)..... | 12 | .44 | 7,100 | 11,100 | 1,420 | 2.06 | 10.4 | 29 | 5,210 | 6,310 | 770 | 1,130 | 360 | 790 | 580 |
| ..... | 55 | .31 | 2,500 | 4,700 | 750 | .51 | 5.9 | 18 | 1,660 | 2,390 | 300 | 690 | 180 | 400 | 290 |
| Atlantic white- (<i>C. thyoides</i>)..... | 12 | .32 | 4,800 | 6,800 | 930 | 1.46 | 4.1 | 13 | 2,740 | 4,700 | 500 | 800 | 220 | 520 | 330 |
| ..... | 35 | .44 | 3,400 | 7,000 | 850 | 1.08 | 15.0 | 35 | 2,540 | 3,570 | 600 | 1,010 | 330 | 760 | 650 |
| Eastern redcedar (<i>Juniperus virginiana</i>)..... | 12 | .47 | 3,800 | 5,800 | 880 | 1.01 | 8.3 | 22 | 6,020 | 1,140 | 900 | 900 | 900 | 900 | |
| ..... | 108 | .35 | 3,900 | 6,200 | 840 | .94 | 6.4 | 17 | 2,940 | 3,150 | 460 | 830 | 280 | 570 | 390 |
| Incense- (<i>Libocedrus decurrens</i>)..... | 12 | .37 | 5,900 | 8,000 | 1,040 | 1.67 | 5.4 | 17 | 4,760 | 5,200 | 730 | 880 | 270 | 830 | 470 |
| ..... | 55 | .29 | 2,600 | 4,200 | 640 | .60 | 5.7 | 15 | 1,490 | 1,990 | 290 | 620 | 240 | 320 | 230 |
| Northern white- (<i>Thuja occidentalis</i>)..... | 12 | .31 | 4,900 | 6,500 | 800 | 1.72 | 4.8 | 12 | 2,630 | 3,960 | 380 | 850 | 240 | 450 | 320 |
| ..... | 43 | .40 | 4,000 | 6,200 | 1,420 | .65 | 7.4 | 21 | 2,770 | 3,130 | 350 | 830 | 180 | 460 | 400 |
| Port-Orford- (<i>Chamaecyparis lawsoniana</i>)..... | 12 | .42 | 7,700 | 11,300 | 1,730 | 1.97 | 9.1 | 28 | 5,890 | 6,470 | 760 | 1,080 | 400 | 730 | 560 |
| ..... | 37 | .31 | 3,200 | 5,100 | 920 | .63 | 5.0 | 17 | 2,470 | 2,750 | 340 | 710 | 230 | 430 | 270 |
| Western redcedar (<i>Thuja plicata</i>)..... | 12 | .33 | 5,300 | 7,700 | 1,120 | 1.44 | 5.8 | 17 | 4,360 | 5,020 | 610 | 860 | 220 | 660 | 350 |
| Douglas-fir: | | | | | | | | | | | | | | | |
| Coast type (<i>Pseudotsuga menziesii</i>)..... | 38 | .45 | 4,500 | 7,600 | 1,570 | .75 | 7.6 | 26 | 3,130 | 3,850 | 440 | 930 | 300 | 570 | 500 |
| ..... | 12 | .48 | 7,800 | 12,200 | 1,950 | 1.77 | 9.8 | 31 | 5,850 | 7,430 | 870 | 1,160 | 340 | 900 | 710 |
| Intermediate type (<i>P. menziesii</i>)..... | 48 | .41 | 3,800 | 6,800 | 1,360 | .63 | 6.6 | 22 | 2,570 | 3,300 | 480 | 840 | 300 | 510 | 450 |
| ..... | 12 | .44 | 7,400 | 11,200 | 1,640 | 1.87 | 8.8 | 27 | 5,540 | 6,720 | 920 | 1,130 | 340 | 710 | 600 |
| Rocky Mountain type (<i>P. menziesii</i> var. <i>glauca</i>)..... | 38 | .40 | 3,800 | 6,400 | 1,180 | .65 | 6.8 | 20 | 2,540 | 3,000 | 450 | 880 | 350 | 450 | 400 |
| ..... | 12 | .43 | 6,300 | 9,800 | 1,400 | 1.60 | 6.4 | 26 | 4,660 | 6,060 | 820 | 1,070 | 330 | 740 | 630 |
| Fir: | | | | | | | | | | | | | | | |
| Balsam (<i>A. balsamea</i>)..... | 117 | .34 | 3,000 | 4,900 | 960 | .52 | 4.7 | 16 | 2,080 | 2,400 | 210 | 610 | 180 | 290 | 290 |
| ..... | 12 | .36 | 5,200 | 7,600 | 1,230 | 1.23 | 5.1 | 20 | 3,970 | 4,530 | 380 | 710 | 180 | 510 | 400 |
| California red (<i>A. magnifica</i>)..... | 116 | .37 | 3,400 | 6,000 | 1,210 | .59 | 6.4 | 21 | 2,350 | 2,850 | 360 | 800 | 380 | 430 | 360 |
| ..... | 12 | .39 | 6,300 | 10,800 | 1,540 | 1.48 | 8.9 | 24 | 4,220 | 5,650 | 650 | 1,090 | 390 | 880 | 500 |
| Grand (<i>A. grandis</i>)..... | 94 | .37 | 3,600 | 6,100 | 1,300 | .58 | 5.6 | 22 | 2,640 | 3,020 | 340 | 760 | 240 | 420 | 360 |
| ..... | 12 | .40 | 5,800 | 9,300 | 1,630 | 1.22 | 7.5 | 28 | 4,420 | 5,430 | 620 | 930 | 240 | 660 | 490 |
| Noble (<i>A. procera</i>)..... | 36 | .35 | 3,600 | 5,800 | 1,270 | .61 | 6.0 | 19 | 2,420 | 2,740 | 340 | 750 | 230 | 330 | 290 |
| ..... | 12 | .38 | 6,600 | 10,000 | 1,580 | 1.59 | 8.8 | 23 | 4,960 | 5,550 | 640 | 980 | 220 | 690 | 410 |
| Pacific silver (<i>A. amabilis</i>)..... | 66 | .35 | 3,500 | 5,700 | 1,260 | .60 | 6.0 | 21 | 2,380 | 2,670 | 290 | 670 | 240 | 360 | 310 |
| ..... | 12 | .38 | 6,200 | 9,400 | 1,530 | 1.40 | 9.3 | 24 | 4,660 | 5,550 | 490 | 1,050 | 620 | 820 | 430 |
| White (<i>A. concolor</i>)..... | 115 | .35 | 3,800 | 5,700 | 1,080 | .84 | 5.1 | 22 | 2,390 | 2,710 | 370 | 750 | 290 | 380 | 330 |
| ..... | 12 | .37 | 6,500 | 9,300 | 1,380 | 1.72 | 6.7 | 17 | 3,590 | 5,350 | 600 | 930 | 260 | 730 | 440 |
| Hemlock: | | | | | | | | | | | | | | | |
| Eastern (<i>Tsuga canadensis</i>)..... | 111 | .38 | 3,800 | 6,400 | 1,070 | .76 | 6.7 | 21 | 2,600 | 3,080 | 440 | 850 | 230 | 500 | 400 |
| ..... | 12 | .40 | 6,100 | 8,900 | 1,200 | 1.79 | 6.8 | 21 | 4,020 | 5,410 | 800 | 1,060 | 810 | 810 | 500 |
| Western (<i>T. heterophylla</i>)..... | 74 | .38 | 3,400 | 6,100 | 1,220 | .57 | 6.8 | 22 | 2,480 | 2,990 | 390 | 810 | 310 | 520 | 430 |
| ..... | 12 | .42 | 6,800 | 10,190 | 1,490 | 1.82 | 7.5 | 26 | 5,340 | 6,210 | 680 | 1,170 | 310 | 940 | 580 |

See footnotes at end of table.

TABLE 12.—Strength properties of some commercially important woods grown in the United States—Continued
 [Results of tests on small, clear specimens in the green and air-dry condition]

12/23

Today's value
 M. N. S.

F_b 2,175 psi

F_c 11,000 psi

F_c 11,000 psi

F_b 12,000 psi (adjusted)
 F_c 4,000 psi
 F_c 11,000 psi (green)

F_{min} = 3,900 psi

F_{min} = 1,390,000 psi

F_c min = 2,500 psi

| Common and botanical names of species (1) | Moisture content (2) | Specific gravity (3) | Static bending | | | | | Impact bending—height of drop causing complete failure (50-pound hammer) (9) | Compression parallel to grain | | Compression perpendicular to grain—fiber stress at proportional limit (12) | Shear parallel to grain—maximum shear strength (13) | Tension perpendicular to grain—maximum tensile strength (14) | Hardness—load required to embed a 0.444-inch ball to 1/4 its diameter | |
|---|-------------------------|-------------------------|---|--------------------|-------------------|---------------------------|---------------------|---|--|-----------------------------------|---|--|---|---|--------------|
| | | | Fiber stress at proportional limit (4) | Modulus of— (5) | | Work to— (7) | | | Fiber stress at proportional limit (10) | Maximum crushing strength (11) | | | | End (15) | Side (16) |
| | | | | Rupture (5) | Elasticity (6) | Proportional limit (7) | Maximum load (8) |  |  |  |  |  |  |  |  | P. s. i. (10) | P. s. i. (11) |
| SOFTWOODS—continued | | | | | | | | | | | | | | | |
| Larch, western (<i>Larix occidentalis</i>) | 58 12 | 0.51 .55 | 4,600 8,300 | 8,200 13,900 | 1,530 1,960 | 0.81 1.99 | 10.3 12.6 | 29 35 | 3,010 5,620 | 3,990 8,110 | 420 980 | 900 1,410 | 330 430 | 580 1,120 | 510 830 |
| Pine, Eastern white (<i>Pinus strobus</i>) | 73 12 | .34 .35 | 3,000 5,700 | 4,900 8,600 | 990 1,240 | .53 1.61 | 5.2 6.8 | 17 18 | 2,040 3,670 | 2,440 4,800 | 260 510 | 680 900 | 250 310 | 300 480 | 290 380 |
| Jack (<i>P. banksiana</i>) | 60 12 | .40 .43 | 3,400 5,800 | 6,000 9,900 | 1,070 1,350 | .63 1.43 | 7.2 8.3 | 26 27 | 2,360 3,550 | 2,950 5,660 | 310 600 | 750 1,170 | 360 420 | 440 800 | 400 570 |
| Lodgepole (<i>P. contorta</i>) | 65 12 | .38 .41 | 3,000 6,700 | 5,500 9,400 | 1,080 1,340 | .49 1.97 | 5.6 6.8 | 20 20 | 2,110 4,310 | 2,610 5,370 | 600 750 | 1,170 880 | 420 290 | 570 530 | 770 480 |
| Ponderosa (<i>P. ponderosa</i>) | 91 12 | .38 .40 | 3,100 6,300 | 5,000 9,200 | 970 1,260 | .59 1.85 | 5.1 6.6 | 20 17 | 2,070 4,060 | 2,400 5,270 | 360 740 | 680 1,160 | 300 400 | 310 550 | 310 450 |
| Red (<i>P. resinosa</i>) | 92 12 | .41 .44 | 3,200 7,000 | 5,800 11,000 | 1,280 1,630 | .46 1.77 | 6.1 9.9 | 26 26 | 2,160 4,160 | 2,730 6,070 | 280 650 | 690 1,210 | 300 480 | 340 740 | 360 560 |
| Pine, southern yellow: | | | | | | | | | | | | | | | |
| Loblolly (<i>P. taeda</i>) | 81 12 | .47 .51 | 4,100 7,800 | 7,300 12,800 | 1,410 1,800 | .68 1.92 | 8.2 10.4 | 30 30 | 2,550 4,820 | 3,490 7,080 | 480 980 | 850 1,370 | 260 470 | 420 750 | 450 690 |
| Longleaf (<i>P. palustris</i>) | 63 12 | .54 .58 | 5,200 9,300 | 8,700 14,700 | 1,600 1,990 | .95 2.44 | 8.9 11.8 | 35 34 | 3,430 6,150 | 4,300 8,440 | 590 1,190 | 1,040 1,500 | 330 470 | 590 920 | 590 870 |
| Shortleaf (<i>P. echinata</i>) | 81 12 | .46 .51 | 3,900 7,700 | 7,300 12,800 | 1,390 1,760 | .63 1.93 | 8.2 11.0 | 30 33 | 2,500 5,090 | 3,430 7,070 | 440 1,000 | 850 1,310 | 320 470 | 410 750 | 440 690 |
| Slash (<i>P. Elliottii</i>) | 66 12 | .56 .61 | 5,100 9,800 | 8,900 15,900 | 1,580 2,060 | 1.02 2.76 | 9.5 12.6 | 36 36 | 3,040 6,280 | 4,340 9,100 | 680 1,390 | 1,000 1,730 | 400 570 | 600 1,080 | 630 1,010 |
| Pine: | | | | | | | | | | | | | | | |
| Sugar (<i>P. Lambertiana</i>) | 137 12 | .35 .36 | 3,400 5,700 | 5,100 8,000 | 940 1,200 | .70 1.53 | 5.4 5.5 | 17 18 | 2,330 4,140 | 2,530 4,770 | 350 590 | 680 1,050 | 270 350 | 320 530 | 310 380 |
| Virginia (<i>P. virginiana</i>) | 88 12 | .45 .48 | 4,000 7,100 | 7,300 13,000 | 1,220 1,520 | .75 1.86 | 10.9 13.7 | 34 32 | 2,500 3,820 | 3,420 6,710 | 390 910 | 890 1,350 | 400 380 | 580 980 | 540 740 |
| Western white (<i>P. monticola</i>) | 54 12 | .36 .38 | 3,400 6,200 | 5,200 9,500 | 1,170 1,510 | .56 1.47 | 5.0 8.8 | 19 23 | 2,430 4,480 | 2,650 5,620 | 290 540 | 640 850 | 260 440 | 310 440 | 310 470 |
| Redwood, old-growth (<i>Sequoia sempervirens</i>) | 112 12 | .38 .40 | 4,800 6,900 | 7,500 10,000 | 1,180 1,340 | 1.18 2.04 | 7.4 6.9 | 21 19 | 3,700 4,560 | 4,200 6,150 | 520 860 | 800 940 | 260 240 | 570 790 | 410 480 |
| Spruce: | | | | | | | | | | | | | | | |
| Black (<i>Picea mariana</i>) | 38 12 | .38 .40 | 2,900 5,800 | 5,400 10,300 | 1,060 1,530 | .45 1.34 | 7.4 10.5 | 24 23 | 1,540 4,520 | 2,570 5,320 | 180 650 | 660 1,030 | 100 240 | 430 700 | 370 520 |
| Englemann (<i>P. engelmannii</i>) | 80 12 | .32 .34 | 2,600 5,500 | 4,500 8,700 | 960 1,280 | .42 1.24 | 5.1 6.4 | 16 18 | 1,850 3,580 | 2,190 4,770 | 250 540 | 590 1,030 | 240 350 | 310 560 | 260 350 |
| Red (<i>P. rubens</i>) | 43 12 | .38 .41 | 3,400 6,800 | 5,800 10,200 | 1,190 1,520 | .58 1.73 | 6.9 8.4 | 18 25 | 2,380 4,610 | 2,650 5,890 | 340 580 | 760 1,080 | 220 350 | 410 640 | 350 490 |
| Sitka (<i>P. sitchensis</i>) | 42 12 | .37 .40 | 3,300 6,700 | 5,700 10,200 | 1,230 1,570 | .53 1.62 | 6.3 9.4 | 24 25 | 2,240 4,780 | 2,670 5,610 | 340 710 | 760 1,150 | 250 370 | 430 730 | 350 510 |
| White (<i>P. glauca</i>) | 50 12 | .37 .40 | 3,300 6,500 | 5,600 9,800 | 1,070 1,340 | .60 1.76 | 6.0 7.7 | 22 20 | 2,130 3,700 | 2,570 5,470 | 290 570 | 690 1,080 | 220 360 | 350 610 | 320 480 |
| Tamarack (<i>Larix laricina</i>) | 52 12 | .49 .53 | 4,200 8,000 | 7,200 11,600 | 1,240 1,640 | .84 2.19 | 7.2 7.1 | 28 23 | 2,930 4,780 | 3,480 7,160 | 480 990 | 860 1,280 | 260 400 | 380 670 | 380 590 |

1 The values in the first line for each species are from tests of green material; those in the second line are from tests of seasoned material adjusted to an average air-dry condition of 12-percent moisture content.
 2 Based on weight when oven-dry and volume when green or at 12-percent moisture content.

Specific Gravity, Column 3

Specific gravity is the ratio of the weight of a given volume of wood to that of an equal volume of water at a standard temperature. Since the weight of wood in a given volume changes with the shrinkage and swelling caused by changes in moisture content, specific gravity is an indefinite quantity unless the conditions under which it is obtained are specified. The 2 specific gravity values presented for each species are based on the weight of the wood when oven-dry and its volume when green and at 12-percent moisture content.

Static Bending, Columns 4, 5, 6, 7, and 8***Fiber Stress at Proportional Limit***

The fiber stress at proportional limit in static bending or flexure is the computed stress in the wood specimen at which the strain (or deflection) becomes no longer proportional to the stress (or load). It is therefore the stress in the specimen at which the load-deflection curve departs from a straight line.

Modulus of Rupture

The modulus of rupture is a measure of the ability of a beam to support a slowly applied load for a short time. It is an accepted criterion of strength, although it is not a true stress, since the formula by which it is computed is only valid to the proportional limit.

Modulus of Elasticity

The modulus of elasticity of wood is a measure of its stiffness or rigidity. For a beam, the modulus of elasticity is a measure of its resistance to deflection. The modulus of elasticity as determined from bending tests includes deflection due to shear distortion. The moduli of elasticity in compression parallel to grain may be taken as 10 percent higher than the figures in column 6.

Work in Bending to Proportional Limit

Work to proportional limit in static bending is a measure of the energy absorbed by a beam when it is stressed to the proportional limit. It is a comparative property that indicates the ability of the wood to absorb shock without permanent damage.

Work in Bending to Maximum Load

Work to maximum load in static bending represents the ability of the timber to absorb shock with some permanent deformation and more or less injury to the timber. It is a measure of the combined strength and toughness of wood under bending stresses.

Impact Bending, Column 9***Height of Drop Causing Complete Failure***

In the impact bending test, a hammer of given weight is dropped upon a beam from successively increased heights until complete rupture occurs. The height of the maximum drop, or the drop that causes failure, is a comparative figure representing the ability of wood to absorb shocks that cause stresses beyond the proportional limit. This ability of wood is important in tool handles, baseball bats, and other articles subjected to frequent shocks.

Compression Parallel to Grain, Columns 10 and 11***Fiber Stress at Proportional Limit***

The fiber stress at proportional limit in compression parallel to the grain is the stress in the specimen at the limit of proportionality between stress and strain. It is the stress at which the stress-strain curve for compression specimens having a ratio of length to least dimension of less than 11 departs from a straight line.

Maximum Crushing Strength

The maximum crushing strength is the maximum stress sustained by a compression specimen having a ratio of length to least dimension of less than 11 under a load slowly applied parallel to the grain. This property permits evaluation of the strength of posts or short blocks.

Compression Perpendicular to Grain, Column 12***Fiber Stress at Proportional Limit***

The fiber stress at proportional limit in compression perpendicular to the grain is the maximum across-the-grain stress of a few minutes' duration that can be applied through a plate covering only a portion of a timber surface without causing injury to the timber.

Shearing Strength Parallel to Grain, Column 13

Shearing strength is a measure of the ability of timber to resist slipping of one part upon another along the grain.

Tensile Strength Perpendicular to Grain, Column 14

Tensile strength perpendicular to the grain is a measure of the resistance of wood to forces acting across the grain that tend to split a member.

Hardness, Columns 15 and 16

Hardness represents the resistance of wood to wear and marring. Values are presented for end-grain surfaces and side-grain surfaces (average of radial and tangential values). It is measured by the load required to imbed a 0.444-inch ball to one-half its diameter in the wood.

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Derivation of basic stresses involves consideration of a number of factors representing the various circumstances that affect the adequacy of structural lumber. Some of these factors are well understood or can be accurately evaluated from available data; others are definable only in the light of engineering judgment and experience. It is therefore not possible to arrive at basic stresses by mathematical calculation alone. Experience and judgment, backed by pertinent test data, must be employed to formulate basic stresses that are applicable to certain specific conditions. With these specific conditions defined, means may be suggested by which the stress values can be adjusted by the engineer to meet other circumstances of design that may be encountered.

TABLE 25.—Basic stresses for clear lumber under long-time service at full design load,¹ for use in determining working stresses according to grade of lumber and other applicable factors

| SOFTWOOD LUMBER | | | | | |
|--|---|--------------------------|---|--|----------------------------------|
| Species ² | Extreme fiber in bending or tension parallel to grain | Maximum horizontal shear | Compression perpendicular to grain ³ | Compression parallel to grain L/d=11 or less | Modulus of elasticity in bending |
| (1) | (2) | (3) | (4) | (5) | (6) |
| | <i>P. s. i.</i> | <i>P. s. i.</i> | <i>P. s. i.</i> | <i>P. s. i.</i> | <i>1,000 p. s. i.</i> |
| Huldecypress (cypress)..... | 1,000 | 150 | 220 | 1,450 | 1,200 |
| Cedar: | | | | | |
| Alaska..... | 1,000 | 130 | 185 | 1,050 | 1,200 |
| Atlantic white- (southern whitecedar) and northern white..... | 1,100 | 100 | 130 | 750 | 800 |
| Port-Orford..... | 1,000 | 130 | 185 | 1,200 | 1,500 |
| Western redcedar..... | 1,300 | 120 | 145 | 950 | 1,000 |
| Douglas-fir: | | | | | |
| Coast type..... | 2,200 | 130 | 235 | 1,450 | 1,000 |
| Coast type, close-grained..... | 2,350 | 130 | 250 | 1,550 | 1,000 |
| Rocky Mountain type..... | 1,000 | 120 | 205 | 1,050 | 1,200 |
| All types, dense..... | 2,550 | 130 | 275 | 1,700 | 1,000 |
| Fir: | | | | | |
| Balsam..... | 1,300 | 100 | 110 | 950 | 1,000 |
| California red, grand, noble, and white..... | 1,600 | 100 | 220 | 950 | 1,100 |
| Hemlock: | | | | | |
| Eastern..... | 1,000 | 100 | 220 | 950 | 1,100 |
| Western (west coast hemlock)..... | 1,000 | 110 | 220 | 1,200 | 1,400 |
| Larch, western..... | 2,200 | 130 | 245 | 1,450 | 1,500 |
| Pine: | | | | | |
| Eastern white (northern white), ponderosa, sugar, and western white (Idaho white)..... | 1,300 | 120 | 185 | 1,000 | 1,000 |
| Jack..... | 1,000 | 120 | 160 | 1,050 | 1,100 |
| Lodgepole..... | 1,300 | 90 | 160 | 950 | 1,000 |
| Red (Norway pine)..... | 1,000 | 120 | 160 | 1,050 | 1,200 |
| Southern yellow..... | 2,200 | 160 | 245 | 1,450 | 1,000 |
| Dense..... | 2,550 | 100 | 275 | 1,700 | 1,000 |
| Redwood..... | 1,750 | 100 | 185 | 1,350 | 1,200 |
| Close-grained..... | 1,900 | 100 | 195 | 1,450 | 1,200 |
| Spruce: | | | | | |
| Englemann..... | 1,100 | 100 | 130 | 800 | 800 |
| Red, white, and Sitka..... | 1,000 | 120 | 185 | 1,050 | 1,200 |
| Tamarack..... | 1,750 | 140 | 220 | 1,350 | 1,300 |

TABLE 25.—Basic stresses for clear lumber under long-time service at full design load,¹ for use in determining working stresses according to grade of lumber and other applicable factors—Continued

| HARDWOOD LUMBER | | | | | |
|--|---|--------------------------|---|--|----------------------------------|
| Species ² | Extreme fiber in bending or tension parallel to grain | Maximum horizontal shear | Compression perpendicular to grain ³ | Compression parallel to grain L/d=11 or less | Modulus of elasticity in bending |
| (1) | (2) | (3) | (4) | (5) | (6) |
| | <i>P. s. i.</i> | <i>P. s. i.</i> | <i>P. s. i.</i> | <i>P. s. i.</i> | <i>1,000 p. s. i.</i> |
| Ash: | | | | | |
| Black..... | 1,450 | 130 | 220 | 850 | 1,100 |
| Commercial white..... | 2,050 | 185 | 365 | 1,450 | 1,500 |
| Aspen, bigtooth and quaking..... | 1,300 | 100 | 110 | 800 | 800 |
| Beech, American..... | 2,200 | 185 | 365 | 1,000 | 1,600 |
| Birch, sweet and yellow..... | 2,200 | 185 | 365 | 1,000 | 1,600 |
| Cottonwood, eastern..... | 1,100 | 90 | 110 | 800 | 1,000 |
| Elm: | | | | | |
| American and slippery (soft elm)..... | 1,600 | 150 | 185 | 1,050 | 1,200 |
| Rock..... | 2,200 | 185 | 365 | 1,600 | 1,300 |
| Hickory, true and pecan..... | 2,800 | 205 | 440 | 2,000 | 1,800 |
| Maple, black and sugar (hard maple)..... | 2,200 | 185 | 365 | 1,600 | 1,600 |
| Oak, commercial red and white..... | 2,050 | 185 | 365 | 1,350 | 1,500 |
| Sweetgum (gum, red gum, sap gum)..... | 1,600 | 150 | 220 | 1,050 | 1,200 |
| Tupelo, black (black gum) and water..... | 1,600 | 150 | 220 | 1,050 | 1,200 |
| Yellow-poplar (poplar)..... | 1,450 | 130 | 100 | 1,050 | 1,200 |

¹ These stresses are based on the strength of green lumber and are applicable, with certain adjustments, to lumber of any degree of seasoning or lumber used under any conditions of duration of load.
² Species names approved by U. S. Forest Service. Commercial designations are shown in parentheses.
³ Values given in previous editions of this handbook presumed some drying and were therefore at a higher level than these for green lumber.

The following basic principles were assumed in arriving at the values in table 25: (1) Each structural member to carry its own load; (2) consideration of lower range of strength values (7); (3) competent design and fabrication (3); (4) reliable stress grading; (5) supervision to prevent gross overloading; (6) adequate maintenance; and (7) a reasonable factor of safety.

The basic stress for a species is multiplied by the strength ratio appropriate for a stress grade to give the working stress for structural design with that grade of the species. Grade strength ratios are determined from the size of knots or other strength-reducing features permitted by the rules of the grade, evaluated in accordance with tables 20 to 24. Strength ratios for use in evaluating working stresses from the basic stresses in bending, tension parallel to grain, and compression parallel to grain (columns 2 and 5, table 25) are obtained from tables 20, 21, 22, and 23. Strength ratios for use in evaluating working stresses from the basic stresses in shear (column 3, table 25) are obtained from table 24. Strength in compression perpendicular to grain and modulus of elasticity (columns 4 and 6, table 25) are but little affected by grade, and a strength ratio of 100 percent is assumed for all grades; in other words, the basic stress is also the working stress for use in design.

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ROOF FRAMING - check of f_b & Δ_{max} - MAIN "FLAT" ROOF

↑ almost flat roof

Rafters = $2\frac{1}{2}" \times 10\frac{1}{2}" @ 32" o/c$

Span = $15'4" = 15.33'$ say $15.5'$ (max)

$S_{xx} = \frac{1}{6} (2.5") (10.5")^2 = 45.9 \text{ in}^3$
 $I_{xx} = \frac{1}{12} (2.5") (10.5")^3 = 241.1 \text{ in}^4$

| | | | |
|--------------|------------|---|------------------|
| <u>LOADS</u> | <u>DL:</u> | Roofing Boards & Tin Roof | 5 PSF |
| | | Joists & ^{Sub Roofing} ABOVE RAFTERS | 5 PSF |
| | | RAFTERS (32" o/c) | 5 PSF |
| | <u>LL:</u> | | 20 PSF (MINIMUM) |
| | | $\Sigma =$ | 35 PSF |

$w = 35 \text{ PSF} \left(\frac{32}{12}\right) = 93.3 \text{ PLF}$

$M_{max} = \frac{1}{8} (93.3) (15.5)^2 = 2802' \#$

$f_b = \frac{2802' \# (12 \frac{1}{2})}{45.9 \text{ in}^3} = 732.5 \text{ psi} \checkmark$

$\Delta_{max} = \frac{5 (93.3/12) (15.5 \times 12)^4}{384 (1,180,000) (241.1)} = 0.4" \equiv \frac{L}{430} \checkmark$

↑ used lower E because attic is not air conditioned & therefore moisture content will be higher.

ROOF FRAMING - check of f_b & Δ_{max} - SIDE "SLOPED" ROOFS

Rafter = $2\frac{3}{4}" \times 6" @ 25" / c$ $\rightarrow S_{xx} = \frac{1}{6} (2.75)(6)^2 = 16.5 \text{ in}^3$
 $I_{xx} = \frac{1}{12} (2.75)(6)^3 = 49.5 \text{ in}^4$

Span = $9' 8" \rightarrow$ say $10'$

| | | | |
|--------------|------------|---------------------------|--------------------------------------|
| <u>LOADS</u> | <u>DL:</u> | Slate | 7 PSF |
| | | Roofing Boards & Tin Roof | 5 PSF |
| | | Rafters | 5 PSF |
| | <u>W:</u> | | 20 PSF |
| | | | $\Sigma = \frac{37}{37} \text{ PSF}$ |

$w = \frac{37}{30} \text{ PSF} \left(\frac{25}{12} \right) = \frac{77.1}{62.5} \text{ PLF}$

$\therefore M_{max} = \frac{1}{8} \left(\frac{77.1}{62.5} \right) (10')^2 = \frac{903.75}{781.25} \text{ #}$

$\therefore f_b = \frac{903.75 \text{ #}}{16.5 \text{ in}^3} \left(\frac{12}{1} \right) = \frac{700}{568} \text{ psi} \checkmark$

$\Delta_{max} = \frac{5 \left(\frac{77.1}{62.5} / 12 \right) (10 \times 12')^4}{384 (1,100,000) (49.5)} = \frac{0.29''}{500} = \frac{1}{404} \text{ ok} \checkmark$

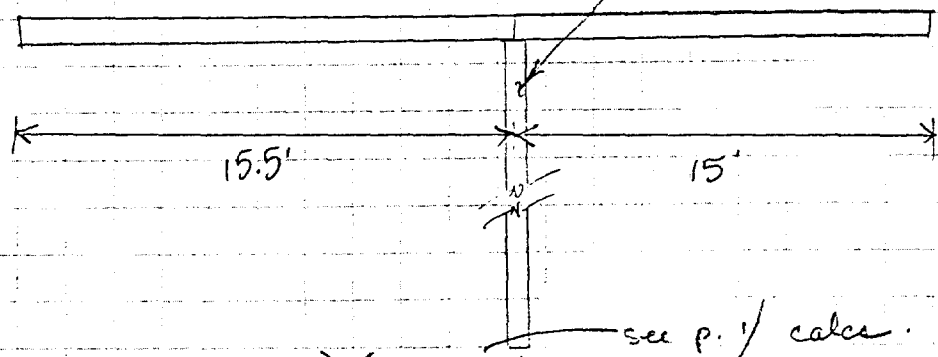
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ROOF FRAMING - PARTITION SUPPORTING HALF OF "FLAT" ROOF.

WALL IS TAKING ROOF LOADS
 ↳ wall is $2\frac{3}{4}'' \times 4'' @ 16'' \text{ o/c studs}$

Tributary loads taken by this wall:



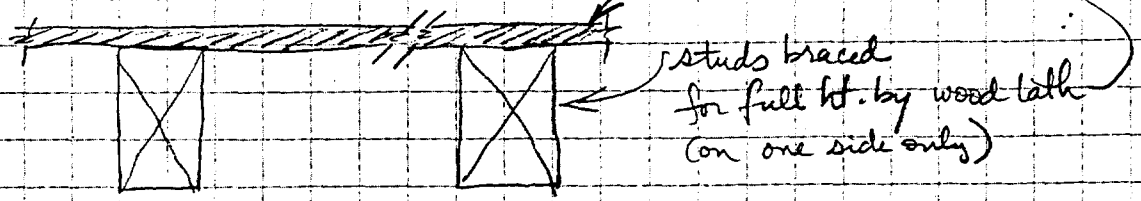
$$W = \frac{1}{2}(15.5' + 15')(35 \text{ PSF})$$

$$= 534 \text{ plf}$$

if studs are at $16'' \text{ o/c} \therefore \text{load per stud} = \frac{16}{12}(534) = 712 \#$

$$f_a = \frac{712}{(2.75)(4)} = 65 \text{ psi}$$

Ht. of stud wall = 10.5'



PARTIAL PLAN
 N.T.S.

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ROOF FRAMING - PARTITION (CONT.)

load factors for wood columns: C_D, C_M, C_E, C_F, C_P
 $\underbrace{0.9}$ $\underbrace{1.15}$

use $F_c = 1550 \text{ psi}$, see p. 3/ of SPS/PS 2nd floor joint calcs)
 per N.D.S.: $\therefore F_c^* = (1550)(0.9)(1.15) = 1,604.25$
 use $F_c^* = 1600 \text{ psi}$.

$$C_p = \frac{1 + (F_{CE}/F_c^*)}{2c}$$

$$l_c = \frac{10.5'(12')(1.0)}{d \quad 4''}$$

$$= 31.5$$

$$\sqrt{\left[\frac{1 + (F_{CE}/F_c^*)}{2c} \right]^2 - \frac{F_{CE}/F_c^*}{c}}$$

where:

$$F_{CE} = \frac{K_{CE} \cdot E'}{(l_c/d)^2}$$

$$K_{CE} = 0.3$$

$$E' = 1,180,000 \text{ psi}$$

$c = 0.8$ for sawn lumber

$$\therefore F_{CE} = \frac{(0.3)(1,180,000)}{(31.5)^2} = 356.7$$

$$F_{CE}/F_c^* = \frac{356.7}{1600} = 0.22$$

$$\therefore C_p = \frac{1 + 0.22}{2(0.8)} \sqrt{\left[\frac{1 + 0.22}{2(0.8)} \right]^2 - \frac{0.22}{0.8}}$$

$$\therefore C_p = 0.20$$

$$\therefore F_c' = F_c^* \cdot 0.20 = (1600 \text{ psi})(0.2) = 320 \text{ psi}$$

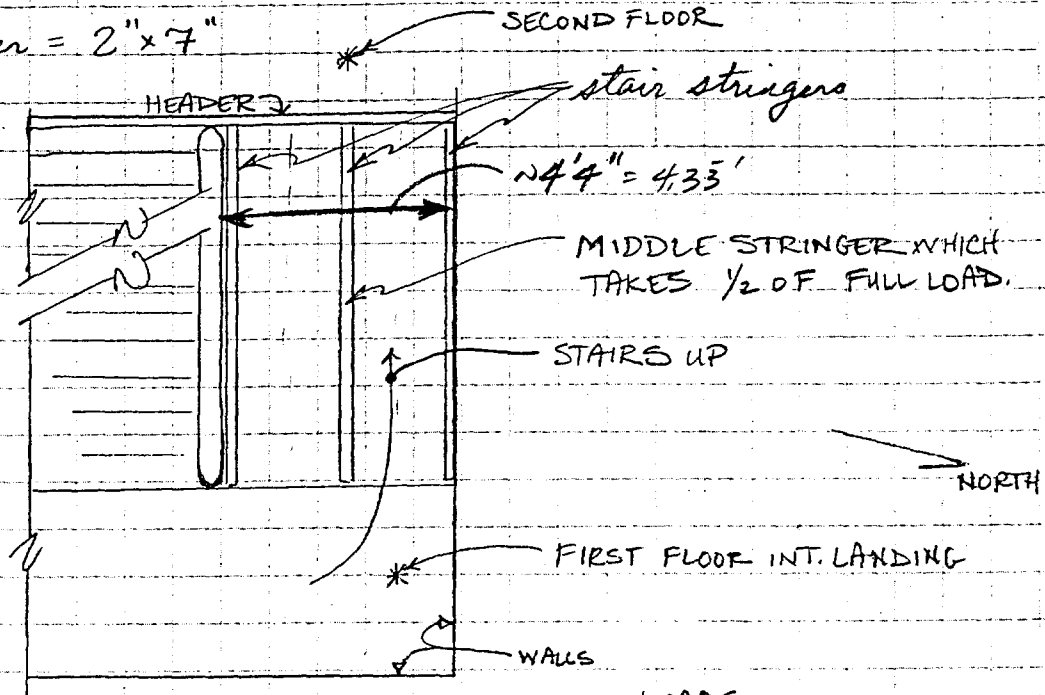
$$\therefore f_a = 65 \text{ psi} < F_c' \quad \checkmark$$

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MAIN STAIR-STRINGERS - FIRSTTH INT. LANDING TO SECOND FLOOR

size of stringer = 2" x 7"



PARTIAL PLAN - MAIN STAIR
 N.T.S.

LOADS:

| | |
|------------------------|--------------------|
| DL = STRINGERS | 5 PSF |
| FLOORING | 5 PSF |
| PLASTER & LATH | 10 PSF |
| RAILING | 2 PSF |
| | <u>22 PSF</u> |
| ideal → LL = | 100 PSF |
| ↳ But see what happens | <u>Σ = 122 PSF</u> |

Span of stringers $\cong 13'$ say 13.5'

$$w = \frac{1}{2} (4.33') (122 \text{ PSF}) = 264 \text{ PLF}$$

for 2" x 7" (min size → at notches):

$$S_{xx} = \frac{1}{6} (2) (7)^2 = 16.33 \text{ in}^3$$

$$I_{xx} = \frac{1}{12} (2) (7)^3 = 57.2 \text{ in}^4$$

$$M_{max} = \frac{1}{8} \left(\frac{264}{\text{PLF}} \right) (13.5')^2 = 6,014' \#$$

$$\therefore f_b = \frac{6,014' \# (12''/1')}{(16.33)} = 4419 \text{ psi} \leftarrow \text{too high}$$

↳ see following page for follow up calcs.

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MAIN STAIR-STRINGERS - (CONT.)

w/ Plaster, use $\Delta_{max} = \frac{L}{360} = \frac{12.0'(12")}{360} = 0.40"$ in plan area, this equals the span

$\Delta_{max} = \frac{5 (x/12) (12 \times 12)^4}{384 (1,440,000) (57.2 \text{ in}^4)} = 0.40"$ *w in plf

$\therefore x = 70.62 \text{ PLF}$

w/ uniform width for trib. area = $\frac{4.33'}{2} = 2.1'$

$\therefore x = \frac{70.62 \text{ PLF}}{2.1'} = 35.0 \text{ PSF}$

available LL $\rightarrow 20.0 \text{ PSF}$ cap. -15 PSF \leftarrow

DL Revised Loads:

| | |
|-----------|-------|
| Stringers | 3 PSF |
| Flooring | 3 PSF |
| Plaster | 9 PSF |
| Lathe | 15 |

Calculate Δ_{max} & f_b w/ span, $l = 12'$ & $LL = 40 \text{ PSF}$:

"Center" Stringer: $M_{max} = \frac{1}{8} (110) (12')^2 = 1980 \text{ \#}$
 $W = 2' (15 \text{ PSF} + 40 \text{ PSF}) = 110 \text{ plf}$

$f_b = \frac{1980 (12)}{(16.33 \text{ in}^3)} = 1455 \text{ psi} < 1900 \checkmark$

resulting $\Delta_{max} = \frac{5 (110/12) (12 \times 12)^4}{384 (1,440,000) (57.2)} = 0.162" = \frac{L}{230}$

$f_v = \frac{3 \left[\frac{1}{2} (110 \text{ plf}) (12') \right]}{2 (2") (7")} = 70 \text{ psi}$

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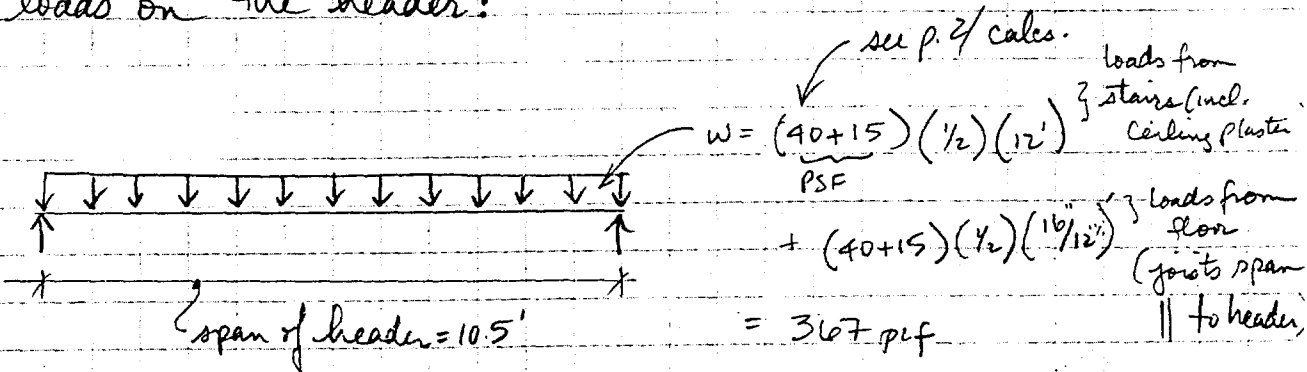
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MAIN STAIR - HEADER @ 2ND FLOOR

↳ size = $3\frac{1}{8} \times 13$ → $S = \frac{1}{6} (3.125) (13)^2 = 88.0 \text{ in}^3$
 $I_{xx} = \frac{1}{12} (3.125) (13)^3 = 572 \text{ in}^4$

loads on the header:



$M_{max} = \frac{1}{8} (367) (10.5')^2 = 5057.7 \text{ ft}\cdot\text{lb}$

$f_b = \frac{5057.7 (12)}{88.0} = 689 \text{ psi} \checkmark$

$\Delta_{max} = \frac{5 (367/12) (10.5')^4}{384 (1,440,000) (572)} = 0.12 \text{ in} \approx \frac{L}{1000} \checkmark$

$f_v = \frac{3 \left[(\frac{1}{2}) (367) (10.5') \right]}{2 (3.125) (13)} = 71 \text{ psi}$

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PORTICO FLOOR - JOISTS - check of f_b & Δ_{max} SOUTH PORTICO

JOISTS: $2\frac{1}{2}'' \times 9\frac{1}{2}'' @ 17\frac{1}{2}''/c$, span = 14.0'

$$S_{xx} = \frac{1}{6} (2.5'') (9.5'')^2 = 37.6 \text{ in}^3$$

$$I_{xx} = \frac{1}{12} (2.5'') (9.5'')^3 = 178.6 \text{ in}^4$$

loads: $DL = \frac{1}{8}'' \text{ FLOOR} = 5 \text{ PSF}$
 JOISTS 8 PSF

$LL = \frac{100 \text{ PSF}}{113 \text{ PSF}}$

$$M_{max} = \frac{1}{8} (113) \left(\frac{17}{12}\right) (14.0')^2 = 3,922 \text{ ft-lb}$$

$$f_b = \frac{3,922 (12)}{37.6 \text{ in}^3} = 1250 \text{ psi } \checkmark$$

check Δ_{max} of joists:

$$\Delta_{max} = \frac{5 (113 \text{ PL}/12) \left(\frac{17}{12}\right) (14 \times 12)^4}{384 (1,440,000) (178.6)} = 0.53'' \approx \frac{L}{312}$$

$$f_v = \frac{3 \left(\frac{1}{2} (113) \left(\frac{17}{12}\right) (14')\right)}{2 (2.5'') (9.5'')} = 70.7 \text{ psi } \checkmark$$

PORTICO FLOOR - GIRDERS - check of f_b & Δ_{max} SOUTH PORTICO

GIRDERS: $9\frac{1}{2}" \times 8"$ \rightarrow span = 10.5'
 depth width trib. width = $\frac{1}{2}(39') = 19.5'$

$\therefore \left. \begin{matrix} DL = 5 \\ LL = 100 \end{matrix} \right\} \text{ see p. 1 of these calcs}$

$\Sigma = 113 \text{ PSF}$

$w = 113 \text{ PSF} \times 19.5' = 2203.5 \text{ PLF}$

$S_{xx} = \frac{1}{6}(8)(9.5)^2 = 120.33 \text{ in}^3$

$I_{xx} = \frac{1}{12}(8)(9.5)^3 = 571.6 \text{ in}^4$

$M_{max} = \frac{1}{8}(2203.5 \text{ PLF})(10.5')^2 = 30,367' \#$

$\therefore f_b = \frac{30,367(12)}{120.33} = 3,028 \text{ psi} \leftarrow \text{too high}$

w/ $LL = 100$ & $DL = 13$

$\Delta_{max} = \frac{5(2203.5)(10.5 \times 12)^4}{384(1,440,000)(571.6)} = 0.73" = \frac{L}{172}$

Therefore, use lower LL.

w/ $LL = 50$ & $DL = 13$ $w = (63)(19.5') = 1228.5 \text{ plf}$

$\Delta_{max} = \frac{5(1228.5/12)(10.5 \times 12)^4}{384(1,440,000)(571.6)} = 0.4" = \frac{L}{308}$

$M_{max} = \frac{1}{8}(1228.5)(10.5)^2 = 16,930' \#$

$f_b = \frac{16,930(12)}{120.33}$

$f_b \approx 1800$, $LL \approx 55 \text{ - } 60 \text{ psf}$

$= 1688 \text{ psi}$



8.9 Cost Estimate





THE MELROSE PLANTATION
NATCHEZ, MISSISSIPPI

TYPE 'C' ESTIMATE
E79-115.4

Client

Ann Beha Associates
33 Kingston Street
Boston, Massachusetts 02111

March 15, 1996

Construction Consultants

Hanscomb Associates, Inc.
1175 Peachtree Street, NE
Suite 1650
Atlanta, Georgia 30309

BASIS OF ESTIMATE

This estimate was produced from Schematic Documents received from Ann Beha Associates on February 21, 1996, as well as conversations with the architect and engineers. Any design and engineering changes and/or additions produced subsequent to these documents are not included in this estimate. The documents include:

- Melrose Estate Historic Structures Report 2-14-96
- HABS drawings 1992/1995 Sheet 1 thru Sheet 10
- ABA drawings 2-14-96 Sheet 1 thru Sheet 22

This estimate is based upon the measurement of quantities where possible. For the remainder, parametric measurements were used in conjunction with references from similar projects recently estimated by Hanscomb Associates Inc.

BASIS FOR PRICING

Pricing shown reflects probable construction costs obtainable in the Natchez, Mississippi area, on the date of this statement of probable costs. The intention of this estimate is to reflect fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the construction work for all subcontractors, as well as the general contractor; that is to mean 6 to 7 bids. If less bids are received, bid results can be expected to be higher.

Please note that no allowance for escalation beyond present time, has been incorporated into this estimate.

Subcontractor's markups have been included in each line item unit price. These markups cover the cost of field overhead, home office overhead and profit. These markups can range from 15% to 25% of the cost for that particular item of work.

General Contractor's Overhead and Profit used is 20%. This is a compound rate to cover jobsite general condition's, home office overhead, profit and bond.

A 20% Design and Pricing Contingency has been added to the summary sheet to cover a reasonable number of unknown requirements or design elements not anticipated or detailed at this stage of development. As the design develops further, this contingency will be reduced on subsequent estimates. At the final Construction Document phase estimate, it will be eliminated.

No construction contingency has been added to the summary sheet to try to anticipate change orders which normally occur after the project is under construction. The construction contingency will not be part of the construction bid amount, but should be included as part of the total construction budget.

No Phasing Contingency has been added to the summary sheet to cover the cost of temporary partitions, multiple mobilizations and demobilizations, additional cost of labor for work done other than during normal working hours,

as well as other costs incurred during a phased renovation project.

PROJECT DESCRIPTION

The project consists of renovation and modification of the Melrose Estate. The site has eleven buildings with varying degrees of work required.

- The Main House wood structure with brick enclosure
- The Kitchen wood structure with brick enclosure
- The Dairy wood structure with brick enclosure
- The Carriage House wood frame and siding
- The Stable wood frame and siding
- Slave Quarters (North & South) wood frame and siding
- Privy brick walls
- Smokehouse brick walls
- Cistern Houses (North & South) wood lattice walls

ITEMS EXCLUDED FROM THIS ESTIMATE

Items which are not in this estimate include, but are not limited to:

- Land acquisition and real estate fees
- Professional fees and Testing
- Owner furnished items
- Telephone equipment and cabling
- Items marked on plans as N.I.C.
- Asbestos or lead abatement costs

ITEMS AFFECTING THE COST ESTIMATE

Items which may change the estimated construction cost include, but are not limited to:

- Modifications to the scope of work included in this estimate
- Unforeseen subsurface conditions
- Special Phasing requirements
- Restrictive technical specifications
- Non-competitive bid conditions
- Sole source specifications of materials or products
- Bids delayed beyond the projected schedule

STATEMENT OF PROBABLE COST

Hanscomb Associates has no control over the cost of labor and materials, the general contractor's or any subcontractor's method of determining prices, or competitive bidding and market conditions. This opinion of probable cost of construction is made on the basis of experience, qualifications, and best judgement of a professional construction consultant familiar with the construction industry. Hanscomb Associates cannot and does not guarantee that proposals, bids or actual construction costs will not vary from this or subsequent cost estimates.

Hanscomb's staff of professional cost consultants has prepared this estimate in accordance with generally accepted principles and practices. This staff

is available to discuss its contents with any interested party.

RECOMMENDATIONS FOR COST CONTROL

Hanscomb Associates recommends that the owner, architect and engineers carefully review this document, including line item descriptions, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation, and markups. If the project is over budget, or if there are unresolved budgeting issues, alternative systems/schemes should be evaluated before proceeding into the final design phase.

Requests for modifications of any apparent errors or omissions to this document must be made to Hanscomb within ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

It is recommended that a final update estimate be produced by Hanscomb Associates, using bid documents as well as all addenda, to determine overall cost changes which may have occurred since the preparation of this estimate. The final update estimate will address changes and additions to the documents as well as addenda issued during the bidding process. Hanscomb cannot reconcile bid results to any estimate not produced from bid documents including all addenda.

INCLUSIONS AND ASSUMPTIONS

01. See attached report for work scope and assumptions.

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Fri 15 Mar 1996
Eff. Date 03/15/96

Hanscomb Associates, Inc.
PROJECT 791154: MELROSE ESTATE RENOVATION

TIME 12:48:44

TYPE 'C' ESTIMATE

SUMMARY PAGE 1

** PROJECT DIRECT SUMMARY - BIDITEM **

| | QUANTITY UOM | UNIT COST | TOTAL COST |
|---------------------------------|--------------|-----------|------------|
| 01 MAIN HOUSE | 14750.00 SF | 16.11 | 237,567 |
| 02 KITCHEN | 2000.00 SF | 19.91 | 39,818 |
| 03 DAIRY | 2036.00 SF | 18.22 | 37,104 |
| 04 CARRIAGE HOUSE | 1320.00 SF | 37.86 | 49,970 |
| 05 STABLE | 1695.00 SF | 21.14 | 35,826 |
| 06 NORTH SLAVE QUARTERS | 1405.00 SF | 16.45 | 23,117 |
| 07 SOUTH SLAVE QUARTERS | 1450.00 SF | 18.85 | 27,328 |
| 08 PRIVY | 262.00 SF | 48.67 | 12,753 |
| 09 SMOKEHOUSE | 1055.00 SF | 7.66 | 8,079 |
| 10 NORTH & SOUTH CISTERN HOUSES | 250.00 SF | 29.11 | 7,277 |
| TOTAL MELROSE ESTATE RENOVATION | | | 478,838 |
| CONTRACTOR'S OVERHEAD & FEE 20% | | | 95,768 |
| SUBTOTAL | | | 574,606 |
| DESIGN CONTINGENCY 20% | | | 114,921 |
| TOTAL INCL OWNER COSTS | | | 689,527 |

| | QUANTITY UOM | UNIT COST | TOTAL COST |
|---------------------------------|--------------|-----------|------------|
| ----- | | | |
| 01 MAIN HOUSE | | | |
| 01 01 SELECTIVE DEMOLITION | 14750.00 SF | 0.36 | 5,376 |
| 01 02 SITEWORK | 14750.00 SF | 0.55 | 8,150 |
| 01 03 MASONRY | 14750.00 SF | 0.81 | 11,985 |
| 01 04 ROUGH CARPENTRY | 14750.00 SF | 0.88 | 13,004 |
| 01 05 FINISH CARPENTRY | 14750.00 SF | 0.53 | 7,846 |
| 01 06 DOORS & WINDOWS | 14750.00 SF | 0.92 | 13,548 |
| 01 07 ROOFING & GUTTERS | 14750.00 SF | 3.86 | 56,904 |
| 01 08 STUCCO & PLASTER | 14750.00 SF | 0.87 | 12,880 |
| 01 09 PAINT | 14750.00 SF | 3.19 | 47,112 |
| 01 10 FLOORING | 14750.00 SF | 0.40 | 5,940 |
| 01 11 MECHANICAL | 14750.00 SF | 2.39 | 35,229 |
| 01 12 ELECTRICAL | 14750.00 SF | 0.36 | 5,344 |
| 01 13 INSPECTION | 14750.00 SF | 0.97 | 14,250 |
| | | | ----- |
| TOTAL MAIN HOUSE | 14750.00 SF | 16.11 | 237,567 |
| | | | ----- |
| CONTRACTOR'S OVERHEAD & FEE 20% | | 3.22 | 47,513 |
| | | | ----- |
| SUBTOTAL | | 19.33 | 285,080 |
| DESIGN CONTINGENCY 20% | | 3.87 | 57,017 |
| | | | ----- |
| TOTAL INCL OWNER COSTS | | 23.19 | 342,097 |
| | | | ----- |
| 02 KITCHEN | | | |
| 02 01 SELECTIVE DEMOLITION | 2000.00 SF | 0.25 | 500 |
| 02 02 MASONRY | 2000.00 SF | 0.22 | 438 |
| 02 03 ROUGH CARPENTRY | 2000.00 SF | 0.58 | 1,160 |
| 02 04 FINISH CARPENTRY | 2000.00 SF | 2.45 | 4,895 |
| 02 05 DOORS & WINDOWS | 2000.00 SF | 4.48 | 8,968 |
| 02 06 ROOFING AND GUTTERS | 2000.00 SF | 8.21 | 16,420 |
| 02 07 FINISHES | 2000.00 SF | 3.20 | 6,406 |
| 02 08 MECHANICAL | 2000.00 SF | 0.38 | 753 |
| 02 09 ELECTRICAL | 2000.00 SF | 0.14 | 279 |
| | | | ----- |
| TOTAL KITCHEN | 2000.00 SF | 19.91 | 39,818 |
| | | | ----- |
| CONTRACTOR'S OVERHEAD & FEE 20% | | 3.98 | 7,964 |
| | | | ----- |
| SUBTOTAL | | 23.89 | 47,781 |
| DESIGN CONTINGENCY 20% | | 4.78 | 9,556 |
| | | | ----- |
| TOTAL INCL OWNER COSTS | | 28.67 | 57,337 |
| | | | ----- |
| 03 DAIRY | | | |

** PROJECT DIRECT SUMMARY - UN11 **

| | QUANTITY UOM | UNIT COST | TOTAL COST |
|---------------------------------|--------------|-----------|------------|
| 03 01 SELECTIVE DEMOLITION | 2036.00 SF | 0.48 | 975 |
| 03 02 MASONRY | 2036.00 SF | 3.78 | 7,688 |
| 03 03 ROUGH CARPENTRY | 2036.00 SF | 1.63 | 3,310 |
| 03 04 FINISH CARPENTRY | 2036.00 SF | 0.52 | 1,060 |
| 03 05 DOORS & WINDOWS | 2036.00 SF | 2.11 | 4,297 |
| 03 06 ROOFING AND GUTTERS | 2036.00 SF | 6.92 | 14,083 |
| 03 07 FINISHES | 2036.00 SF | 2.54 | 5,174 |
| 03 08 MECHANICAL | 2036.00 SF | 0.06 | 118 |
| 03 09 ELECTRICAL | 2036.00 SF | 0.20 | 400 |
| TOTAL DAIRY | 2036.00 SF | 18.22 | 37,104 |
| CONTRACTOR'S OVERHEAD & FEE 20% | | 3.64 | 7,421 |
| SUBTOTAL | | 21.87 | 44,525 |
| DESIGN CONTINGENCY 20% | | 4.37 | 8,905 |
| TOTAL INCL OWNER COSTS | | 26.24 | 53,430 |
| 04 CARRIAGE HOUSE | | | |
| 04 01 ROUGH CARPENTRY | 1320.00 SF | 2.12 | 2,800 |
| 04 02 FINISH CARPENTRY | 1320.00 SF | 3.46 | 4,573 |
| 04 03 ROOFING AND GUTTERS | 1320.00 SF | 8.44 | 11,140 |
| 04 04 FINISHES | 1320.00 SF | 12.85 | 16,964 |
| 04 05 MECHANICAL | 1320.00 SF | 8.30 | 10,957 |
| 04 06 ELECTRICAL | 1320.00 SF | 2.68 | 3,536 |
| TOTAL CARRIAGE HOUSE | 1320.00 SF | 37.86 | 49,970 |
| CONTRACTOR'S OVERHEAD & FEE 20% | | 7.57 | 9,994 |
| SUBTOTAL | | 45.43 | 59,964 |
| DESIGN CONTINGENCY 20% | | 9.09 | 11,993 |
| TOTAL INCL OWNER COSTS | | 54.51 | 71,956 |
| 05 STABLE | | | |
| 05 01 ROUGH CARPENTRY | 1695.00 SF | 3.73 | 6,321 |
| 05 02 FINISH CARPENTRY | 1695.00 SF | 3.60 | 6,103 |
| 05 03 DOORS & WINDOWS | 1695.00 SF | 0.61 | 1,030 |
| 05 04 ROOFING AND GUTTERS | 1695.00 SF | 11.80 | 19,993 |
| 05 05 FINISHES | 1695.00 SF | 1.40 | 2,380 |
| TOTAL STABLE | 1695.00 SF | 21.14 | 35,826 |
| CONTRACTOR'S OVERHEAD & FEE 20% | | 4.23 | 7,165 |

** PROJECT DIRECT SUMMARY - UN11 **

| | QUANTITY UOM | UNIT COST | TOTAL COST |
|---------------------------------|--------------|-----------|------------|
| ----- | | | |
| SUBTOTAL | | 25.36 | 42,991 |
| DESIGN CONTINGENCY 20% | | 5.07 | 8,598 |
| ----- | | | |
| TOTAL INCL OWNER COSTS | | 30.44 | 51,590 |
| | | | |
| 06 NORTH SLAVE QUARTERS | | | |
| 06 01 SELECTIVE DEMOLITION | 1405.00 SF | 0.95 | 1,339 |
| 06 02 SITEWORK | 1405.00 SF | 0.71 | 1,000 |
| 06 03 MASONRY | 1405.00 SF | 0.12 | 175 |
| 06 04 FINISH CARPENTRY | 1405.00 SF | 0.65 | 911 |
| 06 05 ROOFING & GUTTERS | 1405.00 SF | 12.06 | 16,946 |
| 06 06 FINISHES | 1405.00 SF | 1.66 | 2,333 |
| 06 07 MECHANICAL | 1405.00 SF | 0.29 | 413 |
| ----- | | | |
| TOTAL NORTH SLAVE QUARTERS | 1405.00 SF | 16.45 | 23,117 |
| | | | |
| CONTRACTOR'S OVERHEAD & FEE 20% | | 3.29 | 4,623 |
| ----- | | | |
| SUBTOTAL | | 19.74 | 27,740 |
| DESIGN CONTINGENCY 20% | | 3.95 | 5,540 |
| ----- | | | |
| TOTAL INCL OWNER COSTS | | 23.69 | 33,289 |
| | | | |
| 07 SOUTH SLAVE QUARTERS | | | |
| 07 01 SITEWORK | 1450.00 SF | 0.77 | 1,114 |
| 07 02 MASONRY | 1450.00 SF | 2.14 | 3,107 |
| 07 03 ROUGH CARPENTRY | 1450.00 SF | 0.45 | 648 |
| 07 04 FINISH CARPENTRY | 1450.00 SF | 2.37 | 3,436 |
| 07 05 ROOFING AND GUTTERS | 1450.00 SF | 11.04 | 16,003 |
| 07 06 FINISHES | 1450.00 SF | 1.35 | 1,956 |
| 07 07 MECHANICAL | 1450.00 SF | 0.28 | 413 |
| 07 08 ELECTRICAL | 1450.00 SF | 0.45 | 651 |
| ----- | | | |
| TOTAL SOUTH SLAVE QUARTERS | 1450.00 SF | 18.85 | 27,328 |
| | | | |
| CONTRACTOR'S OVERHEAD & FEE 20% | | 3.77 | 5,466 |
| ----- | | | |
| SUBTOTAL | | 22.62 | 32,794 |
| DESIGN CONTINGENCY 20% | | 4.52 | 6,559 |
| ----- | | | |
| TOTAL INCL OWNER COSTS | | 27.14 | 39,353 |
| | | | |
| 08 PRIVY | | | |
| 08 01 SITEWORK | 262.00 SF | 3.82 | 1,000 |

| | QUANTITY UOM | UNIT COST | TOTAL COST |
|------------------------------------|--------------|-----------|------------|
| 08 02 MASONRY | 262.00 SF | 26.15 | 6,851 |
| 08 03 FINISH CARPENTRY | 262.00 SF | 0.08 | 20 |
| 08 04 ROOFING AND GUTTERS | 262.00 SF | 13.26 | 3,475 |
| 08 05 DOORS & WINDOWS | 262.00 SF | 0.92 | 240 |
| 08 06 FINISHES | 262.00 SF | 4.45 | 1,166 |
| TOTAL PRIVY | 262.00 SF | 48.67 | 12,753 |
| CONTRACTOR'S OVERHEAD & FEE 20% | | 9.73 | 2,551 |
| SUBTOTAL | | 58.41 | 15,303 |
| DESIGN CONTINGENCY 20% | | 11.68 | 3,061 |
| TOTAL INCL OWNER COSTS | | 70.09 | 18,364 |
| 09 SMOKEHOUSE | | | |
| 09 01 SELECTIVE DEMOLITION | 1055.00 SF | 1.02 | 1,076 |
| 09 02 SITEWORK | 1055.00 SF | 0.10 | 102 |
| 09 03 MASONRY | 1055.00 SF | 1.76 | 1,854 |
| 09 04 FINISH CARPENTRY | 1055.00 SF | 0.02 | 20 |
| 09 05 ROOFING & GUTTERS | 1055.00 SF | 4.31 | 4,543 |
| 09 06 FINISHES | 1055.00 SF | 0.46 | 484 |
| TOTAL SMOKEHOUSE | 1055.00 SF | 7.66 | 8,079 |
| CONTRACTOR'S OVERHEAD & FEE 20% | | 1.53 | 1,616 |
| SUBTOTAL | | 9.19 | 9,694 |
| DESIGN CONTINGENCY 20% | | 1.84 | 1,939 |
| TOTAL INCL OWNER COSTS | | 11.03 | 11,633 |
| 10 NORTH & SOUTH CISTERN HOUSES | | | |
| 10 01 SITEWORK | 250.00 SF | 6.00 | 1,500 |
| 10 02 ROUGH CARPENTRY | 250.00 SF | 0.85 | 212 |
| 10 03 FINISH CARPENTRY | 250.00 SF | 15.81 | 3,952 |
| 10 04 PAINT | 250.00 SF | 6.45 | 1,613 |
| TOTAL NORTH & SOUTH CISTERN HOUSES | 250.00 SF | 29.11 | 7,277 |
| CONTRACTOR'S OVERHEAD & FEE 20% | | 5.82 | 1,455 |
| SUBTOTAL | | 34.93 | 8,733 |
| DESIGN CONTINGENCY 20% | | 6.99 | 1,747 |
| TOTAL INCL OWNER COSTS | | 41.92 | 10,479 |

| SELECTIVE DEMOLITION | QUANTY UOM | UNIT COST | TOTAL COST |
|----------------------------------|------------|-----------|------------|
| ----- | | | |
| MAIN HOUSE | | | |
| SELECTIVE DEMOLITION | | | |
| REMOVE CLOSET PARTITIONS | 81.00 SF | 2.50 | 203 |
| REMOVE CURTAIN TRACKS | 20.00 LF | 1.25 | 25 |
| REMOVE CLOSET | 54.00 SF | 2.75 | 149 |
| REMOVE PAINT FROM INTERIOR WALLS | 1.00 LS | 5000.00 | 5,000 |
| | | | ----- |
| TOTAL SELECTIVE DEMOLITION | 14750 SF | 0.36 | 5,376 |
| SITework | | | |
| REMOVE BRICK PATIOS & WALKS | 1.00 LS | 5000.00 | 5,000 |
| NEW DRAINAGE SYSTEM TO BUILDING | 300.00 LF | 10.50 | 3,150 |
| | | | ----- |
| TOTAL SITework | 14750 SF | 0.55 | 8,150 |
| MASONRY | | | |
| RAKE & REPOINT MORTAR JOINTS | 3215.00 SF | 3.65 | 11,735 |
| ALLOWANCE FOR NEW COAL GRATE | 1.00 EA | 250.00 | 250 |
| | | | ----- |
| TOTAL MASONRY | 14750 SF | 0.81 | 11,985 |
| ROUGH CARPENTRY | | | |
| REMOVE RUST FROM PIPE COLUMNS | 4.00 EA | 100.00 | 400 |
| PAINT TO COLUMNS | 4.00 EA | 75.00 | 300 |
| PREPARE WEST FACADE FOR PAINT | 406.00 SF | 0.95 | 386 |
| MILDEW INHIBITOR TO WEST FACADE | 406.00 SF | 1.00 | 406 |
| NEW BEARING SUPPORTS TO COLUMNS | 4.00 EA | 75.00 | 300 |
| TEMPORARY SHORING TO EAST PORCH | 875.00 SF | 6.00 | 5,250 |
| REPLACE ROTTEN FLOOR JOISTS | 7.00 EA | 100.00 | 700 |
| REPLACE STEPS AT STAIRCASE | 4.00 EA | 80.00 | 320 |
| REMOVE ROTTEN ROOF WOOD FRAMING | 30.00 SF | 3.50 | 105 |
| REPAIRS TO VALLEY RAFTERS | 4.00 EA | 175.00 | 700 |
| REMOVE & REPLACE SUBROOFING | 30.00 SF | 3.75 | 113 |
| REMOVE & REPLACE COPPER FLASHING | 30.00 SF | 15.00 | 450 |
| REMOVE & REPLACE ROOFING FELT | 30.00 SF | 2.50 | 75 |
| ALLOW FOR STAIR REINFORCEMENT | 1.00 LS | 3500.00 | 3,500 |
| | | | ----- |
| TOTAL ROUGH CARPENTRY | 14750 SF | 0.88 | 13,004 |
| FINISH CARPENTRY | | | |
| REPAIR BALUSTRADES AT CLERESTORY | 24.00 LF | 22.00 | 528 |
| REPLACE ROTTEN BALUSTERS & RAILS | 70.00 LF | 40.00 | 2,800 |
| REPAIR JOINTS TO COLUMN BASES | 5.00 EA | 35.00 | 175 |
| REMOVE OLD PAINT FROM BALUSTRADE | 140.00 LF | 0.95 | 133 |
| ALLOW FOR REPLACEMENT MATERIALS | 1.00 LS | 4000.00 | 4,000 |
| PAINT TO BALUSTRADE | 140.00 LF | 1.50 | 210 |

| FINISH CARPENTRY | QUANTY UOM | UNIT COST | TOTAL COST |
|----------------------------------|------------|-----------|------------|
| ----- | | | |
| TOTAL FINISH CARPENTRY | 14750 SF | 0.53 | 7,846 |
| ----- | | | |
| DOORS & WINDOWS | | | |
| REMOVE WINDOW SCREEN TRACKS | 140.00 LF | 1.25 | 175 |
| RESTORE WOOD PEDIMENT - 2ND FLR | 1.00 EA | 500.00 | 500 |
| CAULKING TO FRAMES | 286.00 LF | 4.80 | 1,373 |
| REPLACE/REPAIR WOOD SHUTTERS | 8.00 EA | 100.00 | 800 |
| REPLACE/REPAIR SHUTTER HINGES | 16.00 EA | 250.00 | 4,000 |
| REPAIR OPERABLE WINDOWS | 16.00 EA | 350.00 | 5,600 |
| UV FILTERS TO WINDOWS | 11.00 EA | 100.00 | 1,100 |
| TOTAL DOORS & WINDOWS | 14750 SF | 0.92 | 13,548 |
| ----- | | | |
| ROOFING & GUTTERS | | | |
| REMOVE ROOFING SLATES | 4700.00 SF | 0.55 | 2,585 |
| ADD FOR SALVAGING 'PURPLE' TYPE | 1175.00 SF | 0.55 | 646 |
| NEW SLATES TO ROOF | 3525.00 SF | 7.50 | 26,438 |
| REMOVE & REPLACE FELT TO ROOF | 4700.00 SF | 1.20 | 5,640 |
| REMOVE & REPLACE COPPER FLASHING | 425.00 LF | 12.00 | 5,100 |
| REMOVE & REPLACE CLERESTORY ROOF | 1400.00 SF | 9.30 | 13,020 |
| NEW FLASHING TO ALL PENETRATIONS | 75.00 SF | 9.00 | 675 |
| REMOVE & REPLACE COPPER GUTTERS | 150.00 LF | 12.00 | 1,800 |
| ALLOW FOR REPAIR TO EXTG GUTTERS | 1.00 LS | 1000.00 | 1,000 |
| TOTAL ROOFING & GUTTERS | 14750 SF | 3.86 | 56,904 |
| ----- | | | |
| STUCCO & PLASTER | | | |
| REMOVE/REPLACE STUCCO TO CHIMNEY | 60.00 SF | 5.50 | 330 |
| ALLOW FOR REPAIR TO EXTG WALLS | 1.00 LS | 3000.00 | 3,000 |
| REMOVE EXTG CEILING COVERINGS | 7000.00 SF | 0.65 | 4,550 |
| REPAIR EXISTING CEILING PLASTER | 1.00 LS | 5000.00 | 5,000 |
| TOTAL STUCCO & PLASTER | 14750 SF | 0.87 | 12,880 |
| ----- | | | |
| PAINT | | | |
| REPAINT ALL PAINTED SURFACES | 30175 SF | 1.05 | 31,684 |
| GRAIN INTERIOR & EXTERIOR DOORS | 42.00 EA | 75.00 | 3,150 |
| DESCALE & PAINT A/C PLATES | 2.00 EA | 50.00 | 100 |
| RESTORE MARBLE FINISH AT GALLERY | 1340.00 SF | 4.50 | 6,030 |
| SCRAPE & REPAINT STAIRS | 1340.00 SF | 0.95 | 1,273 |
| SCRAPE/TREAT ENTABLATURE | 300.00 LF | 1.25 | 375 |
| SCRAPE/PAINT WINDOWS & FRAMES | 16.00 EA | 125.00 | 2,000 |
| RESTORE INTERIOR WOODWORK | 1.00 LS | 2500.00 | 2,500 |
| TOTAL PAINT | 14750 SF | 3.19 | 47,112 |
| ----- | | | |

| FLOORING | | QUANTITY UOM | UNIT COST | TOTAL COST |
|--------------------|----------------------------------|--------------|-----------|------------|
| FLOORING | | | | |
| | CONSERVATION STUDY - FLOORCLOTHS | 1.00 LS | 1500.00 | 1,500 |
| | REPAIR WOOD FLOORS | 60.00 SF | 4.00 | 240 |
| | CLEAN/RESTORE WOOD FLOORS | 7000.00 SF | 0.60 | 4,200 |
| | TOTAL FLOORING | 14750 SF | 0.40 | 5,940 |
| MECHANICAL | | | | |
| PLUMBING | | | | |
| | REMOVE PLUMBING FIXTURES | 6.00 EA | 58.79 | 353 |
| | TOTAL PLUMBING | 14750 SF | 0.02 | 353 |
| HVAC | | | | |
| | RELOCATE THERMOSTATS | 1.00 LS | 1500.00 | 1,500 |
| | NEW HUMIDISTATS | 2.00 EA | 208.81 | 418 |
| | REWORK HVAC FOR REHEAT | 1.00 LS | 6000.00 | 6,000 |
| | REPLACE LARGE GRILLES | 17.00 EA | 91.36 | 1,553 |
| | REPLACE CONDENSER | 2.00 EA | 4372.90 | 8,746 |
| | REPLACE FILTRATION SYSTEM | 1.00 EA | 1000.00 | 1,000 |
| | INSTALL RETURN AIR GRILLE | 1.00 EA | 112.63 | 113 |
| | INSTALL FLEX CONNECTIONS | 1.00 LS | 631.21 | 631 |
| | VAPOR BARRIER 6 MILS | 12.00 CSF | 13.80 | 166 |
| | TOTAL HVAC | 14750 SF | 1.36 | 20,126 |
| FIRE PROTECTION | | | | |
| | SPRINKLER SYSTEM | 14750 SF | 1.00 | 14,750 |
| | TOTAL FIRE PROTECTION | 14750 SF | 1.00 | 14,750 |
| | TOTAL MECHANICAL | 14750 SF | 2.39 | 35,229 |
| ELECTRICAL | | | | |
| LIGHTING AND POWER | | | | |
| | HISTORICAL LIGHTING ON EMERGENCY | 1.00 LS | 1496.81 | 1,497 |
| | SECURITY LIGHTING | 1.00 LS | 2128.81 | 2,129 |
| | EMERGENCY EXIT SIGNS | 1.00 LS | 851.82 | 852 |
| | TOTAL LIGHTING AND POWER | 14750 SF | 0.30 | 4,477 |

Fri 15 Mar 1996
Eff. Date 03/15/96
DETAILED ESTIMATE

Hanscomb Associates, Inc.
PROJECT 791154: MELROSE ESTATE RENOVATION
TYPE 'C' ESTIMATE
01. MAIN HOUSE

TIME 12:48:44
DETAIL PAGE 4

| ELECTRICAL | | QUANTY UOM | UNIT COST | TOTAL COST |
|--------------------|---------------------------------|------------|-----------|------------|
| ----- | | | | |
| SPECIAL ELECTRICAL | | | | |
| | REMOVE STEREO SPEAKERS | 44.00 EA | 19.70 | 867 |
| | TOTAL SPECIAL ELECTRICAL | 14750 SF | 0.06 | 867 |
| | TOTAL ELECTRICAL | 14750 SF | 0.36 | 5,344 |
| ----- | | | | |
| INSPECTION | | | | |
| | ASSESS FOAM INSULATION TO WALLS | 1.00 LS | 5000.00 | 5,000 |
| | ASSESS EFFLORESCENCE ACTIVITY | 1.00 LS | 3500.00 | 3,500 |
| | ASSESS RISING DAMP ACTIVITY | 1.00 LS | 3750.00 | 3,750 |
| | ASSESS STAIR FRAMING MEMBERS | 1.00 LS | 1000.00 | 1,000 |
| | ASSESS MAIN STAIRWAY STRINGERS | 1.00 LS | 1000.00 | 1,000 |
| | TOTAL INSPECTION | 14750 SF | 0.97 | 14,250 |
| | TOTAL MAIN HOUSE | 14750 SF | 16.11 | 237,567 |
| ----- | | | | |

| SELECTIVE DEMOLITION | QUANTITY UOM | UNIT COST | TOTAL COST |
|----------------------------------|--------------|-----------|------------|
| KITCHEN | | | |
| SELECTIVE DEMOLITION | | | |
| REMOVE NON-PERIOD CABINetry | 1.00 LS | 500.00 | 500 |
| TOTAL SELECTIVE DEMOLITION | 2000.00 SF | 0.25 | 500 |
| MASONRY | | | |
| RAKE & REPOINT MORTAR JOINTS | 120.00 SF | 3.65 | 438 |
| TOTAL MASONRY | 2000.00 SF | 0.22 | 438 |
| ROUGH CARPENTRY | | | |
| REMOVE EXTG CEILING COVERINGS | 400.00 SF | 0.65 | 260 |
| MINOR REPAIR TO SOFFIT STRUCTURE | 400.00 SF | 2.25 | 900 |
| TOTAL ROUGH CARPENTRY | 2000.00 SF | 0.58 | 1,160 |
| FINISH CARPENTRY | | | |
| REPAIR SECOND FLOOR DECK | 800.00 SF | 2.65 | 2,120 |
| RESTORE INTERIOR PARTITIONS | 250.00 SF | 5.50 | 1,375 |
| PLASTER TO FIRST FLOOR CEILING | 400.00 SF | 3.50 | 1,400 |
| TOTAL FINISH CARPENTRY | 2000.00 SF | 2.45 | 4,895 |
| DOORS & WINDOWS | | | |
| CAULKING TO DOOR FRAMES | 160.00 LF | 4.80 | 768 |
| CAULKING TO WINDOWS | 14.00 EA | 105.00 | 1,470 |
| REPAIRS TO WINDOWS & FRAMES | 5.00 EA | 120.00 | 600 |
| REPLACE/REPAIR WOOD SHUTTERS | 1.00 EA | 100.00 | 100 |
| REMOVE WINDOW & FRAME | 2.00 EA | 15.00 | 30 |
| HISTORIC REPLICa DOOR & FRAME | 2.00 EA | 2000.00 | 4,000 |
| HISTORIC REPLICa HARDWARE | 2.00 EA | 1000.00 | 2,000 |
| TOTAL DOORS & WINDOWS | 2000.00 SF | 4.48 | 8,968 |
| ROOFING AND GUTTERS | | | |
| REMOVE & REPLACE GABLE WALL | 115.00 SF | 11.50 | 1,323 |
| REMOVE & REPLACE WOOD SHINGLES | 1585.00 SF | 7.00 | 11,095 |
| REMOVE & REPLACE FELT UNDERLAY | 1585.00 SF | 1.20 | 1,902 |
| NEW ROOF FLASHING | 150.00 LF | 9.00 | 1,350 |
| ALLOW FOR GUTTER REPAIR | 1.00 LS | 750.00 | 750 |
| TOTAL ROOFING AND GUTTERS | 2000.00 SF | 8.21 | 16,420 |

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Eff. Date 03/15/96
DETAILED ESTIMATE

Hanscomb Associates, Inc.
PROJECT 791154: MELROSE ESTATE RENOVATION
TYPE 'C' ESTIMATE
02. KITCHEN

TIME 12:48:44
DETAIL PAGE 6

| FINISHES | QUANTY UOM | UNIT COST | TOTAL COST |
|----------------------------------|------------|-----------|------------|
| FINISHES | | | |
| SCRAPE & REPAINT INTERIOR WALLS | 2700.00 SF | 0.95 | 2,565 |
| PAINT TO DOORS AND FRAMES | 6.00 EA | 65.00 | 390 |
| SCRAPE & REPAINT TRIM | 210.00 SF | 1.05 | 221 |
| SCRAPE & RESEAL FLOORS | 1200.00 SF | 0.65 | 780 |
| CONCRETE TO FIRST FLOOR | 700.00 SF | 3.50 | 2,450 |
| TOTAL FINISHES | 2000.00 SF | 3.20 | 6,406 |
| MECHANICAL | | | |
| PLUMBING | | | |
| REMOVE PLUMBING FIXTURES | 2.00 EA | 58.79 | 118 |
| ADD SINK W/ PIPING | 1.00 EA | 635.17 | 635 |
| TOTAL PLUMBING | 2000.00 SF | 0.38 | 753 |
| TOTAL MECHANICAL | 2000.00 SF | 0.38 | 753 |
| ELECTRICAL | | | |
| LIGHTING AND POWER | | | |
| REMOVE & REINSTALL PENDANT LIGHT | 2.00 EA | 39.41 | 79 |
| ADDITIONAL NEW LIGHTS | 1.00 LS | 200.00 | 200 |
| TOTAL LIGHTING AND POWER | 2000.00 SF | 0.14 | 279 |
| TOTAL ELECTRICAL | 2000.00 SF | 0.14 | 279 |
| TOTAL KITCHEN | 2000.00 SF | 19.91 | 39,818 |

| SELECTIVE DEMOLITION | QUANTY UOM | UNIT COST | TOTAL COST |
|-----------------------------------|------------|-----------|------------|
| DAIRY | | | |
| SELECTIVE DEMOLITION | | | |
| REMOVE PARTITIONS | 170.00 SF | 2.50 | 425 |
| REMOVE NON-PERIOD CABINETRY | 1.00 LS | 500.00 | 500 |
| REMOVE GARAGE DOORS | 1.00 PR | 35.00 | 35 |
| REMOVE WINDOW & FRAME * | 1.00 EA | 15.00 | 15 |
| TOTAL SELECTIVE DEMOLITION | 2036.00 SF | 0.48 | 975 |
| MASONRY | | | |
| RAKE & REPOINT MORTAR JOINTS | 100.00 SF | 3.65 | 365 |
| MASONRY & PLASTER TO EXTER WALLS | 476.00 SF | 12.50 | 5,950 |
| REPLACE SPALLED INTERIOR PLASTER | 289.00 SF | 4.75 | 1,373 |
| TOTAL MASONRY | 2036.00 SF | 3.78 | 7,688 |
| ROUGH CARPENTRY | | | |
| REMOVE/REPLACE PORCH CEILINGS | 400.00 SF | 4.15 | 1,660 |
| MINOR REPAIR TO SOFFIT STRUCTURE | 400.00 SF | 2.25 | 900 |
| TREATMENT TO WOOD SECTIONS | 1.00 LS | 750.00 | 750 |
| TOTAL ROUGH CARPENTRY | 2036.00 SF | 1.63 | 3,310 |
| FINISH CARPENTRY | | | |
| REPAIR SECOND FLOOR DECK | 400.00 SF | 2.65 | 1,060 |
| TOTAL FINISH CARPENTRY | 2036.00 SF | 0.52 | 1,060 |
| DOORS & WINDOWS | | | |
| CAULKING TO DOOR FRAMES | 90.00 LF | 4.80 | 432 |
| CAULKING TO WINDOWS | 13.00 EA | 105.00 | 1,365 |
| REPAIRS TO WINDOWS & FRAMES | 5.00 EA | 120.00 | 600 |
| REPLACE/REPAIR WOOD SHUTTERS | 4.00 EA | 100.00 | 400 |
| HISTORIC REPLICIA WINDOW & SASH * | 1.00 EA | 1500.00 | 1,500 |
| TOTAL DOORS & WINDOWS | 2036.00 SF | 2.11 | 4,297 |
| ROOFING AND GUTTERS | | | |
| REMOVE & REPLACE GABLE WALL | 115.00 SF | 11.50 | 1,323 |
| REMOVE & REPLACE WOOD SHINGLES | 1300.00 SF | 7.00 | 9,100 |
| REMOVE & REPLACE FELT UNDERLAY | 1300.00 SF | 1.20 | 1,560 |
| NEW ROOF FLASHING | 150.00 LF | 9.00 | 1,350 |
| ALLOW FOR GUTTER REPAIR | 1.00 LS | 750.00 | 750 |

Fri 15 Mar 1996
Eff. Date 03/15/96
DETAILED ESTIMATE

Hanscomb Associates, Inc.
PROJECT 791154: MELROSE ESTATE RENOVATION
TYPE 'C' ESTIMATE
03. DAIRY

TIME 12:48:44
DETAIL PAGE 8

| ROOFING AND GUTTERS | QUANTY UOM | UNIT COST | TOTAL COST |
|---------------------------------|------------|-----------|------------|
| ----- | | | |
| TOTAL ROOFING AND GUTTERS | 2036.00 SF | 6.92 | 14,083 |
| ----- | | | |
| FINISHES | | | |
| SCRAPE & REPAINT INTERIOR WALLS | 2890.00 SF | 0.95 | 2,746 |
| PAINT TO DOORS AND FRAMES | 4.00 EA | 65.00 | 260 |
| SCRAPE & REPAINT TRIM | 220.00 SF | 1.05 | 231 |
| SCRAPE & RESEAL FLOORS | 1500.00 SF | 0.65 | 975 |
| CONCRETE TO FIRST FLOOR | 275.00 SF | 3.50 | 963 |
| TOTAL FINISHES | 2036.00 SF | 2.54 | 5,174 |
| ----- | | | |
| MECHANICAL | | | |
| PLUMBING | | | |
| REMOVE PLUMBING FIXTURES | 2.00 EA | 58.79 | 118 |
| TOTAL PLUMBING | 2036.00 SF | 0.06 | 118 |
| ----- | | | |
| TOTAL MECHANICAL | 2036.00 SF | 0.06 | 118 |
| ----- | | | |
| ELECTRICAL | | | |
| ADDITIONAL LIGHTING | 1.00 LS | 250.00 | 250 |
| ADDITIONAL POWER OUTLETS | 1.00 LS | 150.00 | 150 |
| TOTAL ELECTRICAL | 2036.00 SF | 0.20 | 400 |
| ----- | | | |
| TOTAL DAIRY | 2036.00 SF | 18.22 | 37,104 |

| ROUGH CARPENTRY | | QUANTITY UOM | UNIT COST | TOTAL COST |
|---------------------|---------------------------------|--------------|-----------|------------|
| CARRIAGE HOUSE | | | | |
| ROUGH CARPENTRY | | | | |
| | TEMPORARY SHORING TO STRUCTURE | 800.00 SF | 3.50 | 2,800 |
| | TOTAL ROUGH CARPENTRY | 1320.00 SF | 2.12 | 2,800 |
| FINISH CARPENTRY | | | | |
| | REMOVE & REPLACE WOOD SIDING | 490.00 SF | 5.25 | 2,573 |
| | ALLOW FOR WALL INSULATION | 1.00 LS | 2000.00 | 2,000 |
| | TOTAL FINISH CARPENTRY | 1320.00 SF | 3.46 | 4,573 |
| ROOFING AND GUTTERS | | | | |
| | REMOVE & REPLACE WOOD SHINGLES | 1250.00 SF | 7.00 | 8,750 |
| | REMOVE & REPLACE FELT UNDERLAY | 1250.00 SF | 1.20 | 1,500 |
| | NEW ROOF FLASHING | 60.00 LF | 9.00 | 540 |
| | NEW COPPER GUTTERS & DOWNSPOUTS | 35.00 LF | 10.00 | 350 |
| | TOTAL ROOFING AND GUTTERS | 1320.00 SF | 8.44 | 11,140 |
| FINISHES | | | | |
| | SCRAPE & REPAINT EXTERIOR WALLS | 2385.00 SF | 1.05 | 2,504 |
| | CLEAN INTERIOR WALL SURFACES | 72300 SF | 0.20 | 14,460 |
| | TOTAL FINISHES | 1320.00 SF | 12.85 | 16,964 |
| MECHANICAL | | | | |
| PLUMBING | | | | |
| | PLUMBING FOR RESTROOMS | 1.00 LS | 4864.23 | 4,864 |
| | TOTAL PLUMBING | 1320.00 SF | 3.69 | 4,864 |
| HVAC | | | | |
| | HEATING AND COOLING | 1.00 LS | 6092.45 | 6,092 |
| | TOTAL HVAC | 1320.00 SF | 4.62 | 6,092 |
| | TOTAL MECHANICAL | 1320.00 SF | 8.30 | 10,957 |

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DETAILED ESTIMATE

Hanscomb Associates, Inc.
PROJECT 791154: MELROSE ESTATE RENOVATION
TYPE 'C' ESTIMATE
04. CARRIAGE HOUSE

TIME 12:48:44
DETAIL PAGE 10

| ELECTRICAL | | QUANTITY UOM | UNIT COST | TOTAL COST |
|--------------------------|--------------------------------|--------------|-----------|------------|
| ELECTRICAL | | | | |
| SERVICE AND DISTRIBUTION | | | | |
| | UPGRADE SERVICE | 1.00 LS | 896.28 | 896 |
| | TOTAL SERVICE AND DISTRIBUTION | 1320.00 SF | 0.68 | 896 |
| LIGHTING AND POWER | | | | |
| | REWORK LIGHTING AND POWER | 1320.00 SF | 2.00 | 2,640 |
| | TOTAL LIGHTING AND POWER | 1320.00 SF | 2.00 | 2,640 |
| | TOTAL ELECTRICAL | 1320.00 SF | 2.68 | 3,536 |
| | TOTAL CARRIAGE HOUSE | 1320.00 SF | 37.86 | 49,970 |

| ROUGH CARPENTRY | QUANTITY | UOM | UNIT COST | TOTAL COST |
|----------------------------------|----------------|-----------|--------------|---------------|
| STABLE | | | | |
| ROUGH CARPENTRY | | | | |
| REPAIR/REPLACE WOOD-STUD FRAMING | 600.00 | SF | 1.75 | 1,050 |
| REPAIR ROOF DECKING | 2065.00 | SF | 2.50 | 5,163 |
| REPAIR SOFFIT | 48.00 | SF | 2.25 | 108 |
| TOTAL ROUGH CARPENTRY | 1695.00 | SF | 3.73 | 6,321 |
| FINISH CARPENTRY | | | | |
| REMOVE & REPLACE WOOD SIDING | 1135.00 | SF | 5.25 | 5,959 |
| REMOVE/REPLACE CORNICES & TRIM | 115.00 | LF | 1.25 | 144 |
| TOTAL FINISH CARPENTRY | 1695.00 | SF | 3.60 | 6,103 |
| DOORS & WINDOWS | | | | |
| MINOR REPAIRS TO DOORS & FRAMES | 68.00 | SF | 12.50 | 850 |
| REMOVE NON-PERIOD WINDOWS | 12.00 | EA | 15.00 | 180 |
| TOTAL DOORS & WINDOWS | 1695.00 | SF | 0.61 | 1,030 |
| ROOFING AND GUTTERS | | | | |
| REMOVE & REPLACE WOOD SHINGLES | 2064.00 | SF | 7.00 | 14,448 |
| REMOVE & REPLACE FELT TO ROOF | 2064.00 | SF | 1.20 | 2,477 |
| NEW COPPER GUTTER & DOWNSPOUT | 110.00 | LF | 10.00 | 1,100 |
| REMOVE & REPLACE COPPER FLASHING | 164.00 | LF | 12.00 | 1,968 |
| TOTAL ROOFING AND GUTTERS | 1695.00 | SF | 11.80 | 19,993 |
| FINISHES | | | | |
| SCRAPE & REPAINT EXTERIOR WALLS | 2267.00 | SF | 1.05 | 2,380 |
| TOTAL FINISHES | 1695.00 | SF | 1.40 | 2,380 |
| TOTAL STABLE | 1695.00 | SF | 21.14 | 35,826 |

| SELECTIVE DEMOLITION | QUANTY UOM | UNIT COST | TOTAL COST |
|----------------------------------|------------|-----------|------------|
| ----- | | | |
| NORTH SLAVE QUARTERS | | | |
| SELECTIVE DEMOLITION | | | |
| REMOVE WEST PORCH | 3100.00 CF | 0.20 | 620 |
| REMOVE EAST SHED ADDITION | 1000.00 CF | 0.18 | 180 |
| REMOVE CARPORT | 2462.00 CF | 0.16 | 394 |
| REMOVE BRICK FOUNDATION 1.5' HGT | 83.00 LF | 1.75 | 145 |
| TOTAL SELECTIVE DEMOLITION | 1405.00 SF | 0.95 | 1,339 |
| ----- | | | |
| SITWORK | | | |
| ALLOWANCE FOR SITE GRADING | 1.00 LS | 1000.00 | 1,000 |
| TOTAL SITWORK | 1405.00 SF | 0.71 | 1,000 |
| ----- | | | |
| MASONRY | | | |
| RAKE & REPOINT MORTAR JOINTS | 48.00 SF | 3.65 | 175 |
| TOTAL MASONRY | 1405.00 SF | 0.12 | 175 |
| ----- | | | |
| FINISH CARPENTRY | | | |
| REPAIR WOOD SIDING AND TRIM | 405.00 SF | 2.25 | 911 |
| TOTAL FINISH CARPENTRY | 1405.00 SF | 0.65 | 911 |
| ----- | | | |
| ROOFING & GUTTERS | | | |
| REMOVE & REPLACE WOOD SHINGLES | 1470.00 SF | 7.00 | 10,290 |
| REMOVE & REPLACE FELT UNDERLAY | 1470.00 SF | 1.20 | 1,764 |
| NEW ROOF FLASHING | 338.00 LF | 9.00 | 3,042 |
| NEW COPPER GUTTERS & DOWNSPOUTS | 185.00 LF | 10.00 | 1,850 |
| TOTAL ROOFING & GUTTERS | 1405.00 SF | 12.06 | 16,946 |
| ----- | | | |
| FINISHES | | | |
| SCRAPE & REPAINT INTERIOR WALLS | 665.00 SF | 0.95 | 632 |
| SCRAPE & REPAINT EXTERIOR WALLS | 1620.00 SF | 1.05 | 1,701 |
| TOTAL FINISHES | 1405.00 SF | 1.66 | 2,333 |

Fri 15 Mar 1996
Eff. Date 03/15/96
DETAILED ESTIMATE

Hanscomb Associates, Inc.
PROJECT 791154: MELROSE ESTATE RENOVATION
TYPE 'C' ESTIMATE
06. NORTH SLAVE QUARTERS

TIME 12:48:44
DETAIL PAGE 13

| MECHANICAL | | QUANTY UOM | UNIT COST | TOTAL COST |
|------------|----------------------------|------------|-----------|------------|
| MECHANICAL | | | | |
| HVAC | | | | |
| | NEW ATTIC VENTS | 2.00 EA | 206.49 | 413 |
| | TOTAL HVAC | 1405.00 SF | 0.29 | 413 |
| | TOTAL MECHANICAL | 1405.00 SF | 0.29 | 413 |
| | TOTAL NORTH SLAVE QUARTERS | 1405.00 SF | 16.45 | 23,117 |

| SITWORK | | QUANTY UOM | UNIT COST | TOTAL COST |
|----------------------|----------------------------------|------------|-----------|------------|
| SOUTH SLAVE QUARTERS | | | | |
| SITWORK | | | | |
| | ALLOWANCE FOR SITE GRADING | 1.00 LS | 1000.00 | 1,000 |
| | REMOVE UNDERFLOOR INSULATION | 286.00 SF | 0.40 | 114 |
| | TOTAL SITWORK | 1450.00 SF | 0.77 | 1,114 |
| MASONRY | | | | |
| | RAKE & REPOINT MORTAR JOINTS | 406.00 SF | 3.65 | 1,482 |
| | MASONRY & PLASTER TO EXTER WALLS | 130.00 SF | 12.50 | 1,625 |
| | TOTAL MASONRY | 1450.00 SF | 2.14 | 3,107 |
| ROUGH CARPENTRY | | | | |
| | PERMANENT SHORING TO WOOD POSTS | 4.00 EA | 150.00 | 600 |
| | REMOVE & REPLACE FLOORBOARDS | 18.00 SF | 2.65 | 48 |
| | TOTAL ROUGH CARPENTRY | 1450.00 SF | 0.45 | 648 |
| FINISH CARPENTRY | | | | |
| | REMOVE & REPLACE WOOD SIDING | 652.00 SF | 5.25 | 3,423 |
| | REMOVE/REPLACE CORNICES & TRIM | 10.00 LF | 1.25 | 13 |
| | TOTAL FINISH CARPENTRY | 1450.00 SF | 2.37 | 3,436 |
| ROOFING AND GUTTERS | | | | |
| | REMOVE & REPLACE WOOD SHINGLES | 1416.00 SF | 7.00 | 9,912 |
| | REMOVE & REPLACE FELT UNDERLAY | 1416.00 SF | 1.20 | 1,699 |
| | NEW ROOF FLASHING | 288.00 LF | 9.00 | 2,592 |
| | NEW COPPER GUTTERS & DOWNSPOUTS | 180.00 LF | 10.00 | 1,800 |
| | TOTAL ROOFING AND GUTTERS | 1450.00 SF | 11.04 | 16,003 |
| FINISHES | | | | |
| | SCRAPE & REPAINT EXTERIOR WALLS | 1863.00 SF | 1.05 | 1,956 |
| | TOTAL FINISHES | 1450.00 SF | 1.35 | 1,956 |

| MECHANICAL | | QUANTY UOM | UNIT COST | TOTAL COST |
|--------------------------|--------------------------------|------------|-----------|------------|
| MECHANICAL | | | | |
| HVAC | | | | |
| | NEW ATTIC VENTS | 2.00 EA | 206.49 | 413 |
| | TOTAL HVAC | 1450.00 SF | 0.28 | 413 |
| | TOTAL MECHANICAL | 1450.00 SF | 0.28 | 413 |
| ELECTRICAL | | | | |
| SERVICE AND DISTRIBUTION | | | | |
| | RELOCATE PANELBOARD | 1.00 EA | 651.19 | 651 |
| | TOTAL SERVICE AND DISTRIBUTION | 1450.00 SF | 0.45 | 651 |
| | TOTAL ELECTRICAL | 1450.00 SF | 0.45 | 651 |
| | TOTAL SOUTH SLAVE QUARTERS | 1450.00 SF | 18.85 | 27,328 |

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Eff. Date 03/15/96
DETAILED ESTIMATE

Hanscomb Associates, Inc.
PROJECT 791154: MELROSE ESTATE RENOVATION
TYPE 'C' ESTIMATE
08. PRIVY

TIME 12:48:44
DETAIL PAGE 16

| SITWORK | QUANTITY | UOM | UNIT COST | TOTAL COST |
|----------------------------------|----------|-----|-----------|------------|
| PRIVY | | | | |
| SITWORK | | | | |
| ALLOWANCE FOR SITE GRADING | 1.00 | LS | 1000.00 | 1,000 |
| TOTAL SITWORK | 262.00 | SF | 3.82 | 1,000 |
| MASONRY | | | | |
| RAKE & REPOINT MORTAR JOINTS | 594.00 | SF | 3.65 | 2,168 |
| MASONRY TO EXTERIOR WALLS | 446.00 | SF | 10.50 | 4,683 |
| TOTAL MASONRY | 262.00 | SF | 26.15 | 6,851 |
| FINISH CARPENTRY | | | | |
| REMOVE/REPLACE WOOD FASCIA | 16.00 | LF | 1.25 | 20 |
| TOTAL FINISH CARPENTRY | 262.00 | SF | 0.08 | 20 |
| ROOFING AND GUTTERS | | | | |
| REMOVE & REPLACE WOOD SHINGLES | 256.00 | SF | 7.00 | 1,792 |
| REMOVE & REPLACE FELT UNDERLAY | 256.00 | SF | 1.20 | 307 |
| NEW ROOF FLASHING | 64.00 | LF | 9.00 | 576 |
| NEW COPPER GUTTERS & DOWNSPOUTS | 80.00 | LF | 10.00 | 800 |
| TOTAL ROOFING AND GUTTERS | 262.00 | SF | 13.26 | 3,475 |
| DOORS & WINDOWS | | | | |
| REPAIRS TO WINDOWS & FRAMES | 2.00 | EA | 120.00 | 240 |
| TOTAL DOORS & WINDOWS | 262.00 | SF | 0.92 | 240 |
| FINISHES | | | | |
| REPLACE SPALLED INTERIOR PLASTER | 229.00 | SF | 4.75 | 1,088 |
| SCRAPE & RESEAL SEATS | 121.00 | SF | 0.65 | 79 |
| TOTAL FINISHES | 262.00 | SF | 4.45 | 1,166 |
| TOTAL PRIVY | 262.00 | SF | 48.67 | 12,753 |

| SELECTIVE DEMOLITION | QUANTY UOM | UNIT COST | TOTAL COST |
|---------------------------------|------------|-----------|------------|
| SMOKEHOUSE | | | |
| SELECTIVE DEMOLITION | | | |
| REMOVE PUMP & WOOD STRUCTURE | 1.00 LS | 500.00 | 500 |
| REMOVE CONCRETE FLOORING | 256.00 SF | 2.25 | 576 |
| TOTAL SELECTIVE DEMOLITION | 1055.00 SF | 1.02 | 1,076 |
| SITWORK | | | |
| REMOVE BRICK WALKS | 120.00 SF | 0.85 | 102 |
| TOTAL SITWORK | 1055.00 SF | 0.10 | 102 |
| MASONRY | | | |
| RAKE & REPOINT MORTAR JOINTS | 131.00 SF | 3.65 | 478 |
| MASONRY TO EXTERIOR WALLS | 131.00 SF | 10.50 | 1,376 |
| TOTAL MASONRY | 1055.00 SF | 1.76 | 1,854 |
| FINISH CARPENTRY | | | |
| REMOVE/REPLACE WOOD FASCIA | 16.00 LF | 1.25 | 20 |
| TOTAL FINISH CARPENTRY | 1055.00 SF | 0.02 | 20 |
| ROOFING & GUTTERS | | | |
| REMOVE & REPLACE WOOD SHINGLES | 354.00 SF | 7.00 | 2,478 |
| REMOVE & REPLACE FELT UNDERLAY | 354.00 SF | 1.20 | 425 |
| NEW ROOF FLASHING | 130.00 LF | 9.00 | 1,170 |
| NEW COPPER GUTTERS & DOWNSPOUTS | 47.00 LF | 10.00 | 470 |
| TOTAL ROOFING & GUTTERS | 1055.00 SF | 4.31 | 4,543 |
| FINISHES | | | |
| SCRAPE & REPAINT EXTERIOR WALLS | 461.00 SF | 1.05 | 484 |
| TOTAL FINISHES | 1055.00 SF | 0.46 | 484 |
| TOTAL SMOKEHOUSE | 1055.00 SF | 7.66 | 8,079 |

Fri 15 Mar 1996
Eff. Date 03/15/96
DETAILED ESTIMATE

Hanscomb Associates, Inc.
PROJECT 791154: MELROSE ESTATE RENOVATION
TYPE 'C' ESTIMATE
10. NORTH & SOUTH CISTERN HOUSES

TIME 12:48:44
DETAIL PAGE 18

| SITWORK | | QUANTY UOM | UNIT COST | TOTAL COST |
|------------------------------|------------------------------------|------------|-----------|------------|
| NORTH & SOUTH CISTERN HOUSES | | | | |
| SITWORK | | | | |
| | ALLOW FOR FLOOR RECONSTRUCTION | 1.00 LS | 1500.00 | 1,500 |
| | TOTAL SITWORK | 250.00 SF | 6.00 | 1,500 |
| ROUGH CARPENTRY | | | | |
| | REPLACE WOOD FRAMING MEMBERS | 64.00 LF | 1.75 | 112 |
| | REPLACE WOOD FLOOR SKIRT | 80.00 LF | 1.25 | 100 |
| | TOTAL ROUGH CARPENTRY | 250.00 SF | 0.85 | 212 |
| FINISH CARPENTRY | | | | |
| | REPLACE WALL LATTICE | 1536.00 SF | 2.15 | 3,302 |
| | HISTORIC REPLIC A FRAME | 1.00 EA | 250.00 | 250 |
| | HISTORIC REPLIC A HARDWARE | 1.00 EA | 400.00 | 400 |
| | TOTAL FINISH CARPENTRY | 250.00 SF | 15.81 | 3,952 |
| PAIN T | | | | |
| | SCRAPE & REPAINT EXTERIOR WOOD | 1536.00 SF | 1.05 | 1,613 |
| | TOTAL PAINT | 250.00 SF | 6.45 | 1,613 |
| | TOTAL NORTH & SOUTH CISTERN HOUSES | 250.00 SF | 29.11 | 7,277 |
| | TOTAL MELROSE ESTATE RENOVATION | | | 478,838 |





8.10 Building Assessment Documents



BUILDING ASSESSMENT SURVEY

A. Main House

STORIES:
DESCRIPTION:

CONSTRUCTION DATE:

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|----------------------------|---|--|
| MAIN HOUSE EXTERIOR | | |
| Roof | | |
| Widow's walk | Metal-standing seam roof, seams at 18" o.c. | Metal roof runs underneath wood balustrade. Metal roof is in fair condition, but is difficult to assess due to the paint. Mastic is cracking at the roof vents. Condensate from the AHU is leaking on the roof and is not be directed away properly. Support plates are rusting and hose connections to AHU's are rusting. <i>Remove and replace mastic. Repair condensate drains from AHU's. Replace hose connections at AHU's. Scrape rust from AHU supports, prime with rust proof primer, repaint with rustproof paint.</i> |
| Balustrade at Widow's Walk | Wood turned balusters, painted with square corner and intermediate posts. | Peeling paint on balustrade, dry rot on some balusters, large gouge and checks at the NE corner. Flashing at posts is not continuous (only at the uphill side). <i>Scrape, repaint (waterproof) and replace rotted balusters. Provide proper flashing at main support posts.</i> |
| Main Roof | Slate tile, various colors | Previous repair work of slate has not matched original color. Broken tiles on 20% of roof. <i>Remove all slate. Salvage original slates in good condition and re-install on a selected section of the roof. Install new slate to match on the remainder of the roof..</i> |
| Flashing | Galvanized painted metal at ridge and valleys. | Galvanized metal is worn away and rusting. <i>Replace flashing with lead-coated copper.</i> |
| | Chimney flashing. | Flashing is not consistent at chimneys. <i>Remove rusted and deteriorated flashing. Replace with new, properly flash all around each chimney.</i> |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|------------------|--|---|
| Gutters/Drainage | Copper gutters/Copper Downspouts | Gutters in fair condition. <i>Remove deteriorated gutters and down spouts. Secure all connections of existing downspouts to building. Examine all drain leaders and gutters for blockage and leaks. Replace as necessary.</i> |
| Eaves | Wood, painted. | Joints are popping open. Roughness and sunken areas in wood fascia. Joints have been previously repaired with caulking. Metal has been repaired but work is uneven. <i>Clean out earlier caulking. Properly consolidate wood areas, and fill. Remove metal that is worn, replace with new. Prepare joints properly and seal. Paint all surfaces.</i> |
| Chimneys | Clay Chimney caps. Brick chimney with stucco finish. | Fair. Chipping, spotting and cracking in stucco finish. Discoloration and spalling on southwest elevation. <i>Patch and repair stucco. Repaint chimneys to restoration period color..</i> |
| Walls | | |
| Northwest | Brick with stucco base. | Generally good condition. Efflorescence towards each corner, right and left sides at 2nd level. Small crack along mortar joint below window sill, right side. Mortar gone in places in header above window, 2nd floor left side. <i>Determine cause of efflorescence, treat, and clean brick. Fill cracks with mortar.</i> |
| | Columns are Stuccoed | Spalling of plaster finish at base of columns. <i>Patch spalled area. Paint to match restoration period color.</i> |
| (North)East | Brick with stucco base. | Fair. Series of diagonal cracks below each window. See Drawings. <i>Fill cracks at joints with mortar.</i> |
| South(East) | Scored stucco over brick, wood balustrade. | Mildew on walls and ceiling. Uneven paint and open joint at fascia of second floor balcony. Nails rusting on fascia of first floor balcony. Lattice at basement level, center left is rotting, may be due to carpenter bee infestation. <i>Remove mildew, treat area with a mildew inhibitor and repaint. Fill joints, sand smooth and repaint. Treat rusting nails with sealer, repaint. Remove pest infestation, repair lattice work to match existing.</i> |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|---------------------------|-----------------------------------|--|
| | Column/Stucco over brick | Spalling on columns and base, staining on right center column. <i>Patch spalled areas, paint to match existing.</i> |
| (South)West | Brick with a stucco base. | Mortar is missing in some areas, diagonal crack from top of window header to bottom of window sill, 2nd floor. Brick is darkened in area appears to be mold. Rust stains on white stucco base. Moisture damage to top of column south end. Some cracking in stucco base, north end. <i>Repoint mortar where necessary. Clean brick, clean rust stains from stucco base. Prep window latches, prime and paint. Remove damaged areas from top of column, patch and paint to match existing.</i> |
| Foundation | Brick with stucco finish at grade | Good. Minor cracks and stains, see wall sections for repairs. |
| Galleries North and South | | |
| Ceiling | Stucco | Good. Mildew buildup. <i>Clean with mildew inhibitor, paint with mildew inhibiting paint.</i> |
| Walls | Stucco and Rubblestone | Fair at corners, missing joints. Cracking and flaking at walls and columns. <i>Patch and repair stucco. Repaint with mildew inhibiting paint.</i> |
| Floor | Wood, Painted | Good. Minor peeling paint. Carpenter Bee infestation below south porch at stairs. <i>Remove pest infestation. Repair damaged wood elements (see structural report). Scrape and repaint porches, both north and south.</i> |
| Trim | Wood | Fair. / <i>Scrape and repaint.</i> |
| Doors | Wood, grained with side lights. | Good condition. Some flaking of varnished finish on doors. Glass in fair shape, some cracking. Muntin bars missing on 2nd floor, south side. <i>Replace broken panes with glass to match original. Replace missing muntin bars to match. Carefully remove peeling varnish from doors. Have expert finisher regrain doors to match original pattern. Finish doors with new exterior varnish finish.</i> |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|------------------|---|--|
| Windows | Wood sash and frame, 6-over-6, wood shutters, with steel hardware, brick header. | |
| | North | Crack over far right window in NE elevation. Open joint between frame and brick opening. <i>Fill joint with sealant.</i> |
| | East | Good condition. |
| | South | Good condition. |
| | West | Loose wood on sill, left side. Rot in shutters, first floor, left side. Miscellaneous rotting in sills and shutters. <i>Remove rotten areas, consolidate, sand smooth, repaint.</i> |
| Site Drainage | | Generally good. |
| Vegetation | | Refer to Cultural Landscape Report. |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|-------------------------------|--|--|
| MAIN HOUSE | | |
| INTERIOR • FIRST FLOOR | | |
| Center Hall | | |
| Ceiling | Canvas cloth plastered over existing plaster ceiling. Decorative plaster detail in center of room. Wood moldings and trim. | Good condition. Speakers installed in the 1970's. |
| Walls | | |
| North | Plaster with wood pilasters, painted. | Good condition. Opening of joints at crown molding throughout space. <i>Fill open joints, sand smooth and paint</i> |
| East | Plaster with wood pilasters, painted. | Good condition. Large hole in center of wall. <i>Fill hole, sand smooth, paint.</i> |
| South | Plaster with wood Pilasters, Door with two sidelights. | Crack in left corner, vertical. Joints opening in wood panels below sidelights at doors. <i>Fill crack in wall, sand smooth, paint to match existing. Fill open wood joints, sand smooth and paint to match.</i> |
| West | Plaster with wood pilasters, painted. | Minor cracking at joints at all pilasters. Vertical crack in column, right side of stair, at base in flute. <i>Fill cracks, sand smooth, paint to match existing.</i> |
| Floors | Wood subfloor. Painted floor cloth in decorative pattern. | Finish Good. Floor cloth was repaired in the 1970's. Repair work is not consistent with original floor. Edges curling in corners and at seams near exterior walls. Floor cloth lifting in some areas. <i>Have conservator assess condition of floor cloth and recommend appropriate treatment. Keep floor cloth protected from pedestrian traffic and UV.</i> |
| Lighting | Pendants in main hall. | Good condition. Originally was a gas fixture, has been electrified. |
| Front Hall | | |
| Ceiling | Canvas Cloth over existing plaster, painted Decorative plaster detail center of ceiling. | Good condition, cracks in wood molding. <i>Patch cracks, sand smooth and paint.</i> |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|------------------|--|--|
| Walls | | |
| North | Wood Paneling at main entry, painted. Door with two sidelights. | Joints opening at wood joints, cracking in wood near base and above entry door. <i>Fill cracks, sand smooth, paint.</i> |
| East | Wallpaper on plaster, wood crown moldings, | Water damage to wallpaper both sides of opening to Drawing Room. |
| South | Wood Paneling at main entry, painted. Door with two sidelights. | Good condition. |
| West | Wallpaper on plaster, wood crown moldings, wood base, painted.. | Water damage on west wall. <i>Clean wallpaper, or remove and replace with historically appropriate treatment. Fill any crack in wood trim, sand smooth and repaint.</i> |
| Floors | Painted canvas floor cloth. | Good condition, was repaired and painting infilled in the 1970's. Had also been previously varnished. Varnish has been removed. Edges curling at corners and seams. <i>Secure floor cloth to floor with appropriate adhesive. Clean with gentle soap and water. Protect floor cloth from UV and pedestrian traffic.</i> |
| Doors | Painted wood grain four panel. Sidelights on each side. | Open joints at wood paneling either side of door and at transom above door. Varnish peeling slightly on door. <i>Fill open joints, sand smooth, repaint.</i> |
| Lighting | Central light fixture, not historic. | Good condition. Look for original fixtures to replace non-historic fixture. |
| Dining Room | | |
| Ceiling | Canvas cloth with plaster, ornamental plaster in center at Punkah. | Good condition. Punkah in center of room has crack but is structurally sound. Speakers added in the 1970's. <i>Remove speakers and canvas, patch, sand smooth, repaint.</i> |
| Walls | Painted plaster, wood crown molding, wood panels below window sills, wood baseboard. | Good. Window sill areas and paneling below windows sills appear to have moisture infiltration. Joints are open, wood is bowing out from wall surface. Paint flaking in southwest corner of room. <i>Determine cause of infiltration of moisture. Alleviate moisture problem. Fill joints and cracks, sand smooth and repaint.</i> |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|------------------------|---|--|
| Fireplace | Marble mantel and surround, marble hearth | Some cracking in hearth. Surround and mantle in good condition. |
| Floor | Wood, Cypress, clear finish. Area rug over. | Finish Good. Area rug is not original to the building. <i>Based on Historic Furnishing Report, replace area rug.</i> |
| Windows | Wood double hung, wood sash and frame. 6 over 6. Plexiglas storm windows for UV protection mounted on the interior. Exterior wood shutter for shading control | Good condition. Some moisture damage. See notes under walls for wood paneling below windows. <i>Scrape existing paint from windows, sand smooth, recaulk window panes as necessary. Prime window and repaint.</i> |
| Doors | Wood-four panel, grained. | Good condition. |
| Lighting | Original double sconces. | Good condition. |
| Butler's Pantry | | |
| Ceiling | Plaster, painted | Minor cracking, |
| Walls | Plaster, painted with wood trims, baseboard. | Good condition. East wall not accessible due to China Hutch. |
| Floor | Wood subfloor with carpet. | Good. Wood subfloor not accessible. |
| Windows | Transom window, wood sash and frame, painted, slider | Good condition. Back of window opening infilled on toilet room side. Transom infilled during Callon ownership |
| Doors | Wood-four panel, grained | Good. |
| China Hutch | Wood w/ hinged glass doors. | Good condition. |
| Back Corridor | | |
| Ceiling | Plaster, painted, arched ceiling. | Hairline cracks across barrel vault. Smoke detector located over door to warming kitchen. <i>Patch cracks, sand smooth, repaint.</i> |
| Walls | Plaster, painted, wood trim, and baseboard. | Good. Wood joints opening in arches. Mildew above door on south walls. |
| Floor | Cypress wood subfloor, carpet. | Good. |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|------------------------|---|--|
| Windows | Wood sash, frame, 6 over 6. No storm windows this area. | Good condition. Inside of frame needs filling at screw holes. Repaint after filling, sanding screw holes. Some repainting of sash required due to minor moisture damage. |
| Doors | Wood four panel, grained. | Good. Minor cracking in door trim at south door. North door in good condition. |
| Lighting | | Not noted. |
| Warming Kitchen | | |
| Ceiling | Plaster ceiling, painted | Good condition. Smoke detector located in ceiling centered in front of door to back corridor. |
| Lighting | | Minimal |
| Walls | Wallpaper, multi-patterned. | Good condition. Installed during the Callon ownership. |
| | Wood painted cabinets | Good. Probably installed during the Callon ownership. |
| Floor | Wood | Good condition. Painted. |
| Fireplace | Marble mantel, brick liner, marble hearth. | Good. Cracked hearth. |
| Toilet Room | | |
| Ceiling | Plaster, painted | Good. |
| Lighting | Center surface mounted incandescent fixture. | Good, functioning, non-historic. |
| Walls | Wallpaper | Good. New sheet rock wall on west side. Installed to hide plumbing for new bathroom. Installed in the 1970's by the Callons. |
| Floors | Wood stained. | Good condition. |
| Doors | Wood, four panel, grained. | Good condition. |
| Windows | Transom window to Butler's pantry. This has been covered by new west wall. | Good condition. |
| Drawing Room | | |
| Ceiling | Cloth covered plaster over historic plaster ceiling. Ornamental plaster medallion in center of ceiling. | Good condition. Speakers added in the 1970's (see reflected ceiling plan, first floor for locations.) Smoke detector located in front of opening to Front Hall. |
| Lighting | Chandelier, originally gas, modified to electricity. | Good condition. (original ?) |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|------------------|--|--|
| Walls | Plaster with wood trims and molding. | Good condition. Crack in crown molding center of opening to Parlor. Open joint at Northwest corner of crown mold and wall. <i>Fill crack in wood trim, sand smooth, paint to match existing. Caulk joint between wall and wood crown molding.</i> |
| Windows | Wood, double hung, 6 over 6 sash, wood frame, painted. Decorative metal cornice at top of window. Wood trim and wall finish below window. Plexiglas storm windows on the west elevation. | Good to fair. Window sash in good condition. Frames in good condition. Wood panels below windows are bowing outward on the north and west elevations. The westerly window on the north elevation is experiencing cracking in the baseboard and bowing in the wall panel. Ropes are broken on the easterly window on the north elevation. Storm windows are not provided on the north elevation. <i>Determine cause of moisture buildup behind wood panels. Alleviate moisture behind wall panels. Fill cracks, ease bowed areas, sand smooth and repaint. Replace broken ropes at double hung windows. Provide storm windows(?).</i> |
| Doors | Wood, four panel, grained. Double sliding doors between Drawing room and Parlor. | Good condition. Doors were regrained in the 1970's by the Callons. |
| Floor | Wood, cypress. Carpet covering. | Good Condition. Carpet not original. |
| Fireplace | Marble, with brick fire box, marble hearth. | Some cracking. / <i>Repair and clean marble..</i> |
| Parlor | | |
| Ceiling | Plaster, with plaster medallion in center of ceiling for light fixture. | Good condition. Speakers installed in the Callon ownership. Smoke detector located center of door to center hall. <i>Remove speakers. Patch openings. Paint ceiling per paint analysis.</i> |
| | Wood cornice and trim | Good condition. Minor cracking in wood trim. <i>Fill cracks, sand smooth, paint..</i> |
| Lighting | Center chandelier. Originally gas, modified for electricity. | Good condition. |
| Walls | Plaster, painted. | Good. Minor cracking in southeast corner. <i>Fill crack, sand smooth, paint.</i> |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|------------------|--|--|
| Windows | Wood, 6 over 6 sash. wood panels below windows. Plexiglas storm windows. | Good condition. |
| Doors | Wood, four panel, double sliding into the library. Grained. | Good condition. |
| Library | | |
| Ceiling | Plaster with cloth over existing plaster ceiling. | Good conditions. Speakers installed by the Callons. <i>Remove speakers, enclose opening, sand smooth, paint.</i> |
| | Wood trim and crown molding, painted. | Good condition. |
| Lighting | | Lighting in this room would have been provided by loose table lamps. |
| Walls | Plaster, painted., wood baseboard. | Fair condition, some cracking at joints. Cracking in chimney plaster. Northwest corner feels damp. Previous cracks have been patched. Cracking at pilaster in southwest corner. Horizontal cracks in wood baseboard near jib door in south wall <i>Repair cracks in plaster. Determine the source of dampness in northwest corner.</i> |
| Windows | Wood, 6 over 6, painted. Storm windows (?) | Good condition. Wood panel below window on west side, bowing out from wall, slight opening of joints.. <i>Scrape old paint, sand smooth, repaint.</i> |
| Doors | Wood, four panel, grained. Double sliding doors to Parlor. Single door to Center Hall. | Good condition. Original hardware in place. |
| Floors | Wood, cypress. Loose rugs over. | Good condition. Slight water damage at base of jig window. |
| North Porch | | |
| Ceiling | Wood, painted, first floor. Plaster, painted second floor. | Good. Heavy buildup of mildew. Second floor, repair patched area in center of ceiling. |
| Walls | Plaster, painted. | Mildew buildup on second floor. |
| Floors | Wood, painted. First and second floor. | Joints opening up, paint peeling, nails exposed wood grain at end boards. |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|----------------------------|---|---|
| Floors <i>continued...</i> | | <i>Scrape and remove painted finish. Seal joints, treat wood for any rot if evident. caulk nails, repaint.</i> |
| Windows | Transom above doors, sidelights to doors, both floors. Wood frame and sash. | Muntin bar missing on first floor, left side of door. Wood panel at base of windows, has joints opening. |
| Doors | Wood, four panel, grained. | Varnish peeling on first floor. <i>Remove varnish, check for graining to be intact. Refinish door.</i> |
| Columns | Plaster, Wood. Painted. Stucco, painted | Deterioration of wood column at base on first floor on either side of entry door. Rusting at base of stuccoed column, right side of door. Heavy buildup of mildew on columns on second floor. |
| Balustrades | Wrought iron, painted. | Rusting, Urns- rusted <i>Remove rust, prime with rust inhibiting primer, repaint.</i> |
| Stairs | Brick with stucco finish. | Joints opening at connection of stair to low wall on each side of stair. Miscellaneous cracking throughout treads. |
| South Porch | | |
| Ceiling | Wood, painted, first floor. Plaster, painted, second floor. | Good. Moisture buildup. |
| Walls | Stucco, painted, scored joints. | Good condition, minor spalling. |
| Floors | Wood decking, painted | Paint peeling., joints opening between boards, nails exposed. Wood exposed. <i>Scrape old paint, caulk joints, treat for any moisture damage., Caulk nails. prime with moisture inhibitor. Paint..</i> |
| Windows | Wood, 6 over 6 sash, painted. | Good. |
| Doors | Wood, four panel, grained. original hardware. | Good. |
| Basement | | |
| Ceiling | Open wood joists and flooring, | Good, mildew buildup. |
| Walls | Brick, whitewashed. | Good. |
| Flooring | | |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|--------------------------------|--|--|
| MAIN HOUSE | | |
| INTERIOR • SECOND FLOOR | | |
| Center Hall | | |
| Ceiling | Plaster, painted. | Good. Speakers were added in the 1970's. Return air grilles are mounted near the south wall. <i>Remove speakers, patch hole, finish to match existing. Clean</i> |
| Walls | Plaster, painted | Good condition, nail holes in west wall. <i>Fill nail holes in west wall. Sand smooth, paint wall</i> |
| Lighting | Candleboards above door. | Good. Lighting would have been supplied by lamps. |
| Flooring | Wood, cypress. | Floor boards removed on east side for structural probe. Water damage adjacent to door to Bathroom, Southeast corner. <i>Replace floor board to match existing. Stain water damaged area to match existing.</i> |
| Doors | Wood, four panel, grained. Transom window over door, sidelights each side. | Good. Joints opening in wood panels below sidelights. <i>Fill joints with caulking, sand smooth and repaint.</i> |
| Windows | Wood, transom over door and sidelights. Painted.. | Good condition. |
| Front Hall | | |
| Ceiling | Plaster with cloth applied existing plaster finish.. Painted finish. | Diagonal cracks in center of ceiling. Moisture infiltration in southeast corner. Return air vent centered in front of door to Center Hall. Supply vent centered in front of door to North Porch. <i>Patch and repair cracks in center of ceiling. Moisture damage in southeast corner may be from AHU leak that occurred in bedroom. Refer to mechanical report for relocating of mechanical vents.</i> |
| | Wood crown molding, painted | |
| Walls | Plaster, painted with wood pilasters and baseboard. | Plaster peeling on west wall. Crack in plaster adjacent to door to Northeast bedroom left side. Cracking in corners on north wall at pilasters. Mildew above door on south side. |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|-------------------|---|---|
| Floor | Wood plank, cypress. | Good condition. |
| Doors | Wood, four panel, grained. Transom above, sidelights either side. | Good condition. |
| Windows | Wood transom and sidelights, painted. | Diagonal muntin bar missing on first floor. See notes on exterior porches. <i>Replace missing muntin bar. Fill any open joints. Repaint to match existing.</i> |
| Northeast Bedroom | | |
| Ceiling | Cloth over existing plaster, plastered and painted. | Water damage in Southwest corner. Hole in ceiling. Two supply grilles and one return air grille near damaged area. <i>Relath damaged area, Replaster, fill in joints, sand smooth, paint ceiling. Refer to mechanical report for air grilles.</i> |
| | Glazing | Poor. Extensive missing glass, areas covered with plastic sheets. <i>Replace.</i> |
| Walls | Plaster painted(?) | Good condition, room was never on air conditioning system. Minor mildew below windows on east side. |
| Windows | Wood, 6 over 6, painted, wood panels below windows. No storm windows on this walls. | Good condition. <i>Repainting required.</i> |
| Doors | Wood, four panel, grained. Original hardware. | Good. |
| Fireplace | Marble mantel and hearth. | Cracks in hearth. See floor plans. |
| Dressing/Bathroom | | |
| Ceiling | Plaster with cloth over existing plaster ceiling. | Good. Room currently houses Museum collections. |
| | Wood Crown molding. | Good. |
| Walls | Plaster with wallpaper. | Good.. |
| Doors | Wood, four panel, grained, original hardware. | Good. |
| Floors | Wood, plank, cypress. | Good. |
| Windows | Wood, Double Hung, 6 over 6 sash, painted. | Good. Repaint window sash and frames. |

| LOCATION/ELEMENTS | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|--------------------------|--|---|
| Stairwell | | |
| Floor/Stair | Wood, with carpet runner. | Minor structural problems under second floor landing refer to structural report. Carpet is circa 1970's, remove and replace with appropriate period of significance runner. Cracking in wood trim at curve in stair at intermediate landing.. |
| Ceilings | Plaster, painted | Cracking over intermediate landing from second floor to attic. Cracks along corners of walls and ceiling on first floor ceiling. <i>Patch and repair cracks in ceiling, paint.</i> |
| Balustrade | Wood handrail with natural finish, painted spindles. | Good. |
| Doors | Wood, painted, two panel door. | Good. |
| Walls | Plaster, painted. Wood baseboard and trim. | Cracking on north wall of first floor. Open joint between wood trim and plaster wall left of stair to back corridor. Plaster damaged on north wall of stairwell. Wall cracking on north and south wall of stair wall at attic level. |
| Bathroom | | |
| Ceilings | Plaster, cloth over existing plaster, painted. | Good |
| Walls | Plaster, wallpaper | Good |
| Floors | Wood plank, cypress. | Good. |
| Windows | Wood, double hung, 6 over 6, painted. No storm windows. | Window frames in good condition. Paint peeling on window sill. <i>Scrape paint, sand smooth, repaint.</i> |
| Doors | Wood, four panel, grained. Pocket door between bathing room toilet room. | Door to closet in toilet room was installed in the 1970's. |
| Fireplace | Marble mantel from Choctaw. Marble hearth. | Good condition. Hearth has some cracking. |
| Southwest Bedroom | | |
| Ceilings | Plaster, painted | Diagonal crack from doorway to west center bedroom. Speakers installed in each corner in the 1970's. Air supply grilles, one in the northwest corner and one in the southwest corner. Smoke detector centered at doorway to Center Hall. <i>Patch and repair cracks in ceiling. Repaint.</i> |

| LOCATION/ELEMENTS | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|----------------------------|--|--|
| Walls | Plaster, wallpapered. | Fair condition. Appears to have water infiltration in this room. Wallpaper pulling out in the northeast corner. Loose wallpaper on the north wall left side of door. Water stained and loosened wallpaper in the southwest corner. Plaster is also becoming loosened here. <i>Remove wallpaper if not historically significant. Patch and repair plaster walls.</i> |
| Floors | Wood plank, cypress. | Good, some water damage from humidifiers |
| Doors | Wood, four panel, grained. | Good. |
| Windows | Wood, 6 over 6, double hung, painted. | Good. |
| Fireplace | Marble mantle, marble hearth. | Good some cracking in hearth. |
| Bedroom-Center West | | |
| Ceilings | Plaster, painted | Some diagonal cracks in the north end. Four speakers installed during the 1970's. Air supply and return grilles along the west wall. Cracking around the outside of south grille. |
| Walls | Plaster, wallpapered. | Poor condition. Heavy mildew damage on all walls. Tear in wallpaper on north wall. Hole in wall right side of door on north wall. Cracking in wallpaper in southwest corner. Wallpaper open at all joints in corners. <i>Remove wallpaper if non-historic. Properly prepare wall for finish, either wallpaper or painted per period of significance.</i> |
| Doors | Wood, four panel, grained. | Good. |
| Windows | Wood, 6 over 6, double hung, painted. Storms(?) | Good. Minor paint peeling. No mildew. <i>Scrape old paint, prepare surface, repaint.</i> |
| Fireplace | Marble mantel, marble hearth. | Cracks in marble hearth. |
| Floors | Wood plank, cypress. | Water damage in southwest corner and northwest corner from humidifiers. <i>Stain to match existing flooring.</i> |
| Northwest Bedroom | | |
| Ceiling | Plaster, painted. | Diagonal cracks in ceiling from fireplace outward into room. Four speakers added in each corner in the 1970's. Supply and return grilles along the north wall, one in each corner. |

| LOCATION/ELEMENTS | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|-----------------------------|---|---|
| Ceiling <i>continued...</i> | | Smoke detector center in front of door to the Front Hall. <i>Repair cracks in ceiling, paint.</i> |
| Walls | Plaster, wallpaper. | Good. |
| Fireplace | Marble mantel and hearth. | Cracks in hearth. |
| Floors | Wood plank, cypress. | Water damage in northwest corner and at south wall by connecting door. Damage due to humidifiers. <i>Strip and refinish floor.</i> |
| Windows | Wood, double hung, 6 over 6, painted. Plexiglas storm windows. | Mildew behind sash on north windows. Windows on west side in good condition. |
| Doors | Wood, four panel, grained. original hardware. | Good condition. Wall section removed during paint analysis. <i>Patch and repair wall at door trim.</i> |
| MAIN HOUSE | | |
| ATTIC | | |
| Ceiling | Open wood framing, painted in center section. | Good. |
| Walls | Plaster, painted, exposed lath and studs back side. | Good. Some diagonal cracks in stucco walls, north and west walls. Clerestory controls located in walls. |
| Floors | Wood, plank, unfinished, plywood floor in mechanical room. | Good. Minor water damage. |
| Windows | Clerestories. | Good. Operable clerestory windows no longer operable. |
| Doors. | Wood, two panel, painted. to stair, Plank door interior. | Good. |
| Stair | Wood | Service stair to roof deck. |
| Cistern | Lead lined wood tub. | Lead sagging but good evidence of historic plumbing system. |

BUILDING ASSESSMENT SURVEY**B. Kitchen Dependency**

STORIES: 2

CONSTRUCTION DATE: 1845

DESCRIPTION: *Shingle style carriage house and barn. Original east wing and ice house missing.*

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|-------------------------|---|---|
| KITCHEN EXTERIOR | | |
| Roof | | |
| | Standing seam metal roof. | Some sagging of roof framing members. Paint flaking in places. Nails protruding at gutter. Metal gutter uneven, some open seams. <i>Refer to structural analysis for condition of roof framing.</i> |
| Chimneys | Brick | Good, open joints. <i>Repoint.</i> |
| Gutters/ Drainage | Galvanized Gutters | Fair. Nails protruding at gutter, run is uneven, some open seams. <i>Consider long term replacement with copper.</i> |
| Walls | | |
| North | Brick on three sides, stucco on the west elevation. | Repointing took place in the 1970's. This is evident in the elevations. Loose mortar, first floor level between two windows right side on northeast elevation. Discoloration of brick above concrete foundation on Northwest elevation-possible rising damp. Plaster is spalling on second floor northwest elevation. |
| East | | |
| South | | Stucco finish. Moisture appears to be penetrating stucco causing it to bubble out from walls and columns. <i>Relieve moisture buildup. Drainage may not be adequate off of second floor balcony.</i> |
| West | | |
| Doors | Wood, four panel. | Good. |
| Windows | Wood, 12 over 12 sash, double hung, painted. | Windows repaired by Park Service in . |
| | West elevation | Good. |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|---|--|--|
| Windows <i>continued...</i> | South Elevation East Elevation North Elevation | Broken shutter on left side. Wood sill on second floor is rotting. Damage on frame on first floor window, left side. Window painted shut same location. Windows on first floor, right side, rot pockets in window sills. Glazing held in with Sills and frames - fair. Damage on windows on first floor. |
| Porches | Wood deck with wood basustrade, plaster ceilings. Concrete slab on ground level. | Drainage problems are causing first floor ceiling to pull loose from framing. Repair rot in fascia of balcony. <i>Reroute drainage to either side of porch. Replace rotted framing, Restore plaster ceiling.</i> |
| KITCHEN INTERIOR ♦ FIRST FLOOR | | |
| Ceiling | Plaster, painted | Good. <i>Patch any cracking and repaint.</i> |
| Walls | Plaster, painted. | Good. Wall below window is cold, moisture behind. Plaster is pulling away from the wall-north side. <i>Patch any cracking and repaint.</i> |
| Floors | Brick installed in the 1970's | Good. |
| Windows | Wood, 12 over 12 sash, double hung, painted. | Good. Cracking at frame on south side. Refer to exterior notes for windows. |
| Door | Wood, four panel, painted. | Good. |
| Fireplaces | Brick fireboxes, no mantel in kitchen, wood mantel in gift store. Brick hearths | Good condition. |
| HVAC | None | |
| Plumbing | Full kitchen and bath added in the 1970's. | Good Condition. |
| Lighting | Overhead incandescent and fluorescent. | Fair. <i>/Replace with upgrade.</i> |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|--|--|--|
| KITCHEN INTERIOR • SECOND FLOOR | | |
| Ceiling | Plaster, painted. | Good. <i>Patch minor cracks and repaint.</i> |
| Walls | Plaster, painted. | Good. <i>Patch minor cracks and repaint.</i> |
| Floors | Wood, plank. | Good. Carpets over original floors. Evidence of original partitions. Refinish floors. |
| Fireplace | Brick firebox, concrete hearth, wood mantel. | Good. Fireplace in north room filled in by new bathroom. |
| Doors | Wood, four panel, painted. | Good. |
| Windows | Wood double hung, 12 over 12, painted. | Fair. See notes on exterior work. |



BUILDING ASSESSMENT SURVEY

C. Dairy Dependency

STORIES:
DESCRIPTION:

CONSTRUCTION DATE:

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|------------------------|--------------------------------|---|
| DAIRY EXTERIOR | | |
| Roof | | |
| | Metal standing seam | Mastic along ridge line. Deflection along ridge line at south end. Rough edges at gutter line, nails poking through. Flashing at chimney looks worn. <i>Remove mastic and caulk properly, replace ridgeline flashing if necessary. Investigate deflection at ridge line for structural defects. Replace gutters if necessary. Replace flashing at chimney.</i> |
| Gutters and Downspouts | Galvanized metal, painted. | Metal edge at eave is uneven. Gutter discontinuous on the north elevation. Gutter appears uneven on the west elevation. <i>Replace.</i> |
| Walls | | |
| East | Stucco. | Good condition. |
| South | Brick. | Bricks deteriorating in lower right hand corner. Mortar missing in lintel over window, second floor. Wood cracking at top of column at eave. <i>Remove and replace deteriorated bricks, repoint as necessary. Fill cracking wood.</i> |
| West | Brick. | Mortar gone in places, left side at 2nd floor line. Brick discolored below 2nd floor window, left side. Previous brick repair evident in elevation, right side. <i>Clean bricks with an approved method. Repoint where necessary.</i> |
| North | Brick. | |
| Windows | Wood, double hung with storms. | Fair. Windows repaired c. 1983. |

| LOCATION/ELEMENT | MATERIAL | CONDITIONS/RECOMMENDATIONS |
|---|---------------------------------|--|
| DAIRY INTERIOR • FIRST FLOOR | | |
| Ceiling | Plaster | Good. |
| | Living room 1x1 dropped tile | Fair. / <i>Consider long term replacement.</i> |
| Walls | Plaster | Good. |
| | Living room - wood paneling | Fair. Some cracking due to paint over varnish. / <i>Consider long term strip and paint.</i> |
| Fireplace | Brick | Good. Some settling evident. |
| Kitchen | | Good. New cabinets c. 1989. One original cabinet remains. |
| Bathroom | | Good. Added in rear hall. |
| Ceiling | Plaster | Fair. Intact. |
| Walls | Concrete | Fair. Past water damage at W. and S. side. |
| Bulkhead and porch | Wood | Fair. Evidence of water leaks, bulkhead replaced 1980's / <i>Monitor and repair.</i> |

**8.11 National Historic Landmark
Condition Assessment Report**



NATIONAL HISTORIC LANDMARK CONDITION ASSESSMENT REPORT

MELROSE
NATCHEZ, MISSISSIPPI

Dates of Inspection and
Condition Assessment Report: 1989, 1991

Inspected and Compiled by:
National Register Programs Division
Southeast Region, National Park Service
Atlanta, Georgia 30303

Prepared for:

Natchez Trace Parkway
Natchez National Historical Park
P. O. Box 1086
Natchez, Mississippi 39120

Preservation Assistance Division
National Park Service
Washington, DC 20013

National Register Programs Division
Southeast Region, National Park Service
Atlanta, Georgia 30303

NATIONAL PARK SERVICE

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PROJECT STATEMENT

As part of its initiative to provide technical assistance to National Historic Landmarks, the National Park Service is coordinating the preparation of in-depth condition assessment reports on selected threatened historic properties. These planning reports are uniform in format and provide current, precise information on the physical condition of each landmark structure inspected. This information will assist present owners and potential buyers in evaluating the technical and economic feasibility of rehabilitating landmarks while preserving those qualities which led to their designation. The information will also be used by the National Park Service to report to Congress more accurately on the status of America's threatened National Historic Landmarks.

The condition assessment is based on a comprehensive field inspection conducted by a team of professional architects and/or engineers who prepare a report assessing the findings of the inspection and recommending, where necessary, appropriate repair and historic preservation treatments consistent with the Secretary of the Interior's STANDARDS FOR HISTORIC PRESERVATION PROJECTS. A condition assessment report consists of the following information:

- 1) Administrative Data - Information on the history and significance of the building, its location and size, and other background data.
- 2) Inventory Data - Information on architectural and engineering items, describing the major building elements, ranking the historic significance of each of these elements, determining the condition of the elements, and identifying the priority of each of the work needs.
- 3) Inspection Data - Information on deficiencies identified through the inventory process, describing and proposing corrective action.
- 4) Management Cost Summary - A one page matrix of estimated costs for all recommended work. The matrix gives a clear picture of the approximate costs to correct the identified deficiencies.
- 5) Graphic Data - A site sketch and simple drawings of existing floor plans indicating room use, bearing walls and historical development of the building form. Color photocopies of exterior and representative interior photographs of the building are also provided.

DEFINITIONS

CONDITION

An element is evaluated as Good when:

- the element is intact, structurally sound and performing its intended purpose
- there are few or no cosmetic imperfections
- the element needs no repair and only minor or routine maintenance

An element is evaluated as Fair when:

- there are early signs of wear, failure, or deterioration, though the element is generally structurally sound and performing its intended purpose
- there is failure of a sub-component of the element
- replacement of up to 25% of the element or replacement of a defective sub-component is required.

An element is evaluated as Poor when:

- the element is no longer performing its intended purpose
- the element is missing
- deterioration or damage affects more than 25% of the element and cannot be adjusted or repaired
- the element shows signs of imminent failure or breakdown
- the element requires major repair or replacement

TREATMENT RATINGS

Preservation: Defined as the act or process of applying measures to sustain the existing form, integrity, and material of a building or structure.

Element: Defined as the basic component or issue on which the program collects information for inventory use. An element may be an architectural feature, structural component, engineering system or a functional requirement.

1. PRESERVE

Statement of Importance:

- the element is associated with those qualities for which the property was designated an NHL and dates from this period (s) of significance, or
- the element is highly distinctive architecturally and dates to the NHL's period (s) of significance, and
- the level of damage or deterioration is such that it is still feasible to preserve.

Condition: Poor to good - Preserve

2. PRESERVE WHEREVER POSSIBLE - IF TOO DETERIORATED TO SAVE, MUST BE REPLACED IN-KIND

Statement of Importance:

- the element has acquired significance in its own right or makes an important contribution to other historic periods or levels of significance identified for the property, or
- the element makes a significant contribution either to the property's historic appearance or as an integral part of the buildings historic construction, or
- the element meets "1" level criteria except that preservation is not feasible.

Condition: Fair to good - Preserve
Poor - Replace

Note Exception: If the element is antiquated and no longer serves a functioning role, retain it, insitu, as an historic artifact, wherever possible.

3. PRESERVE WHEREVER POSSIBLE - IF TOO DETERIORATED TO SAVE, ELEMENT MUST BE REPLACED WITH COMPATIBLE MATERIAL AND DESIGN.

Statement of Importance:

- the element contributes to the historic appearance of the building and dates either to the period (s) of historic significance or represents later, sensitive repair or replacement work, or - the element dates to the historic period (s) of significance of the building and represents a substantial amount of historic fabric.

Condition: Fair to good - Preserve
Poor - Replace

4. PRESERVE WHERE THERE IS NO COMPELLING REASON FOR REMOVAL; UNDERTAKE ALL NECESSARY ALTERATION WORK AS SENSITIVELY AS POSSIBLE, INCLUDING ANY DEMOLITION WORK.

Statement of Importance:

- the element dates to the historic period (s) of significance of the building or is a later, sensitive repair, but does not represent a substantial amount of historic fabric, is not distinctive, nor does it make any measurable contribution to the building's historic appearance or system of construction.

Condition: Fair to good - Preserve
Poor - Alter/Replace

5. REMOVE/ALTER/REPLACE; UNDERTAKE ALL SUCH NEW WORK AS SENSITIVELY AS POSSIBLE.

Statement of Importance:

- the element is not significant and through design or condition detracts from the historic appearance of the building, or
- the element is a poor design and/or construction detail which contributes to the deterioration of the landmark, or
- the element creates a serious code violation which can not be mitigated. (In cases where mitigation is not possible, removal or alteration of the element may, in some cases, take precedence over higher ratings normally assigned to the element.)

Condition: Poor to good - Remove/Replace

6. SPECIFIED TREATMENT IS NOT REQUIRED, HOWEVER, IF ANY WORK IS DONE ON THIS ELEMENT IT SHOULD BE SYMPATHETIC TO THE HISTORIC QUALITIES OF THE LANDMARK.

Statement of Importance:

- the element has no historic value.

PRIORITY

A Critical deficiency of an element exists where:

- there is advanced deterioration which has resulted in the failure of the building element or will result in the failure of the building element if not corrected within two years, and/or
- there is accelerated deterioration of adjacent or related building materials as a result of the element's deficiency, and/or
- there is a threat to the health and/or safety of the user, and/or
- there is a failure to meet a legislative requirement.

A Serious deficiency of an element exists where:

- there is deterioration which, if not corrected within 2-5 years, will result in the failure of the building element, and/or
- a threat to the health and/or safety of the user may occur within 2-5 years if the deterioration is not corrected, and/or
- there is deterioration of adjacent or related building materials and/or systems as a result of the element's deficiency.

A Minor deficiency of an element exists where:

- standard preventive maintenance practices and building conservation methods have not been followed, and/or
- there is a reduced life expectancy of affected or related building materials and/or systems, and/or
- there is a condition with long-term impact beyond 5 years.

WORK RECOMMENDATIONS

Within the inventory section of the building report, each time a priority has been cited, i.e. critical, serious or minor, a work recommendation will appear in the back of the report.

Occasionally, several related deficient elements can be grouped together under one work recommendation. When this happens, the description of each of the affected elements refers the reader to that element where the work recommendation appears and no priorities are cited for the cross-referenced elements.

COST ESTIMATES

The cost figures included in the work recommendations are estimates to be used for the planning of future work. They can be based on the inspector's own records, cost data provided by the owner or standard cost estimating guides by RS Means, but they are only estimates. Costs for architect's or engineers fees or other contingencies are not included.

LIST OF SYMBOLS AND ABBREVIATIONS

ARO - Alaska Regional Office/NPS
bedrm or BR - bedroom
bldg - building
bm - beam
bmt - basement
btwn - between
clg - ceiling
dbl - double
dine or DR - dining room
E - east
elev - elevation
exist - existing
fdn - foundation
ftg - footing
FL or FLR - floor
galv - galvanized
gyp bd - gypsum board
kit - kitchen
LF - linear feet
LR - living room
MARO - Mid-Atlantic Regional Office/NPS
mtl - metal
N - north
NPS - National Park Service
oc - on center
orig - original
reqd - required
rm - room
RMRO - Rocky Mountain Regional Office/NPS

S - south
SERO - Southeast Regional Office/NPS
SF - square feet
SY - square yard
sgl - single
sht mtl - sheet metal
sm - small
stl - steel
T+G - tongue and groove
typ - typical
UBC - Uniform Building Code
W - west
WASO - Washington Office/Preservation Assistance Division/NPS
WRO - Western Regional Office/NPS
wd - wood
wdo - window

Symbols

"+" - and
"/" - period
"-" - coma

GENERAL INFORMATION -----

LANDMARK INFORMATION

NHL LISTING: Individual
DATE LISTED: 1974
ESTABLISHED BOUNDARIES: Yes
ACREAGE: 80 acres
ARCHEOLOGICAL RESOURCES ON SITE:
 ABOVE GROUND: No
 BELOW GROUND: Unknown
OTHER HISTORIC BUILDINGS ON SITE:
 Melrose, Main House

OTHER BUILDINGS ON SITE:
 Dairy, Kitchen, Carriage House,
 Slave Quarters(2), Barn, and Others

BUILDING HISTORY

DATE OF CONSTRUCTION: 1845
ARCHITECT: Jacob Byers
HISTORIC FUNCTION: Residence
YEARS MODIFIED/MODIFICATION:
 1976-1978-Interior restoration
 @1901-1910-General restoration

MARKETING INFORMATION

PERCENT OCCUPIED: 100%
ASSESSED VALUE:
 LAND..... N/A
 BUILDING.. 85,610
 DATE..... 1988
PROPERTY TAX RATE. 84,940
APPRAISAL:
 LAND..... N/A
 BUILDING.. N/A
 DATE.....
 SOURCE....
 ADDRESS.

PHONE...

IS BUILDING ON MARKET? No
ASKING PRICE:
FEASIBILITY STUDIES: No
DEED RESTRICTIONS: Pres. Easement
ZONING CLASSIFICATION:
HISTORIC PRESERVATION ZONING RESTRICTIONS:
ARCHITECTURAL REVIEW BOARD JURISDICTION:
PROXIMITY TO RAPID TRANSIT: N/A
PROXIMITY TO MASS TRANSIT: 4 miles
PROXIMITY TO MAJOR HWYS: 2 mi to U. S. 61
PROXIMITY TO OTHER DEVELOPMENTS: Adjoining
PROXIMITY TO CBD: 1 mi
NUMBER OF PREVIOUS OWNERS: 3
LOCAL COST FACTOR:

SIGNIFICANCE

NHL PERIOD OF SIGNIFICANCE: 19th Century
AREA OF SIGNIFICANCE: Architecture

NHL THEME: Architecture
OTHER PERIODS OF SIGNIFICANCE:
STATE HISTORIC LISTING:
 MS SHPO holds a Preservation Easement
LOCAL HISTORIC LISTING:

PAST FEDERAL INVOLVEMENT/FUNDING:
 None

PAST STATE INVOLVEMENT/FUNDING:
 None

LOCATION INFORMATION

LOCATION: Natchez, Mississippi
COUNTY: Adams
COUNTY CODE: 001
US CONGRESSIONAL DISTRICT: 4
STATE LEGISLATIVE DISTRICT:
UTM COORDINATES: 15.653300.3491080

OPERATIONS INFORMATION

Open to the Public
SEASON: All Year
HOURS: 8:30 A.M.- 5:00 P.M.
AVERAGE OPERATING COSTS
YEARS..... 1989
ELECTRICAL..... 15470
GAS..... 5100
OIL..... N/A
COAL..... N/A
WATER/SEWER.... 1800
INSURANCE..... 6012
PROPERTY TAXES: 10099.67

BUILDING CODE INFORMATION

APPLICABLE CODES:
 Southeastern
 Building Code

HISTORIC PRESERVATION CLAUSE: Yes
OCCUPANCY CLASSIFICATION: Residential
OCCUPANT LOAD: N/A
HAZARD OF CONTENTS: N/A
SEISMIC ZONE: One

BUILDING INVENTORY

| ELEMENT | DESCRIPTION | RATING | QUANTITY | CONDITION | PRIORITY |
|---|---|--------|----------|-----------|----------|
| SITE | | | | | |
| 1 PEDESTRIAN ACCESS:WALKWAY | Brick paths-herringbone+basket weave patterns/Paths exist from all periods-modern paths laid to resemble historic | 1/3 | 500 LF | FAIR | SERIOUS |
| 2 VEHICULAR ACCESS:PARKING | 2 designated lots-N of main house/Pea gravel-chain+post decorative fence | 4 | 1500 LF | FAIR | |
| 3 VEHICULAR ACCESS:DRIVEWAY | Compact pea gravel-all vehicular roads throughout | 4 | | FAIR | |
| NOTE: Concrete pad+historic stone carriage block-E facade of main house | | | | | |
| 4 LANDSCAPING:FLORA | Large variety of mature plant material from all periods | 1/3 | | FAIR | |
| NOTE: Specimens include crepe myrtles+azaleas+orchards+perennial borders+indigenous trees+shrubs | | | | | |
| 5 LANDSCAPING:FENCES/WALLS | Decorative iron gates to orchards (1 pr) purported to be from Cherokee-another Natchez antebellum residence | 1/3 | 3 PR | GOOD | |
| NOTE: Wood-pickets+arched header gates adjacent to parking lot (2pr) Wood gates have cast iron gravity hinged closures | | | | | |
| 6 LANDSCAPING:PLAN | Formal beds+landscaped vistas with lawns S+E/Service buildings+barns+servant housing W | 1/3 | | FAIR | |
| NOTE: Vehicular access+parking N Lake with contemporary gazebo NW of main house-historic site of lake-enlarged and cleaned ca 1978 | | | | | |
| 7 LANDSCAPING:GRADE | Flat to rolling terrain | | | | |
| 8 UTILITY SERVICE:HYDRANTS | In ground-steel plate cover-NW main house (not labeled)/Hydrant N main house | 4 | 2 EA | GOOD | |
| 9 SITE:GENERAL 1 | Full complement of extant historic service structures-symmetrically located behind the main house | 1 | | GOOD | |
| NOTE: Exceptionally significant | | | | | |

BUILDING INVENTORY-----

| ELEMENT ----- | DESCRIPTION ----- | RATING ----- | QUANTITY ----- | CONDITION ----- | PRIORITY ----- |
|--|---|-----------------|-------------------|--------------------|-------------------|
| EXTERIOR ENVELOPE | | | | | |
| 11 FOUNDATION:WALLS 1 | Scored stucco over brick/Projecting water course-1 1/2"x9"/Elevation 32" from finished grade | 1 | 262 LF | GOOD | |
| 14 FOUNDATION:PIERS 1 | Gallery piers-W facade-solid masonry-3' sq-80" high-painted white | 1 | 6 EA | FAIR | MINOR |
| NOTE: Brick retaining walls span piers 62" high 2 piers hidden behind plywood walls | | | | | |
| 17 FOUNDATION:OPENINGS | Infilled openings under gallery-108"x22" (6)/Pair of 6 light-sliding windows-56"x25"-wd grills-(8)-N+S+W-main house | 1 | 14 EA | GOOD | |
| 18 FOUNDATION:GENERAL | Recessed foundation window well-61"x16"-central drain-masonry walls-N+S facades | 1 | 6 EA | POOR | SERIO |
| 19 WALLS:STRUCTURE 1 | Solid load bearing masonry-hard-fired brick-16" thick | 1 | 262 LF | GOOD | |
| 22 WALLS:CAVITY 1 | Solid masonry-16" thick | 1 | 262 LF | GOOD | |
| 25 WALLS:INSULATION | Solid masonry-R value intrinsic with material | | | | |
| 26 WALLS:SURFACE MATERIAL 1 | Hard-fired brick-narrow tooled mortar joints-running bond | 1 | 3700 SF | FAIR | MINOR |
| 27 WALLS:SURFACE MATERIAL 2 | Troweled stucco on brick-scored pattern-rear gallery+front portico | 1 | 2070 SF | GOOD | |
| NOTE: Historic photograph extant showing front portico sand painted to resemble scored-cut stone | | | | | |
| 29 WALLS:FINISH 1 | Hard-fired face brick | 1 | 3700 SF | GOOD | |
| 30 WALLS:FINISH 2 | White paint on stucco | 1 | 2070 SF | GOOD | |
| 33 OPENINGS:MAIN DOOR | Inverted cross door-50"x106"-grained oak (present graining ca 1978)-1st+2nd floors front portico+rear gallery | 1 | 4 | GOOD | |

BUILDING INVENTORY

| ELEMENT | DESCRIPTION | RATING | QUANTITY | CONDITION | PRIORITY |
|--|--|--------|----------|-----------|----------|
| EXTERIOR ENVELOPE | | | | | |
| 34 OPENINGS:MAIN DOOR TRIM | Classically detailed-heavy entablature+ transom+sidelights+engaged pilasters+ flanking Doric columns | 1 | 4 | GOOD | |
| NOTE: No plynths-1st+2nd floor-front portico Rear gallery doors similar with engaged pilasters instead of columns | | | | | |
| 35 OPENINGS:OTHER DOORS | Service door-4 panels-46"x106"-grained-NE corner/Cellar doors-1"x4" T+G-painted grey | 1 | 3 | GOOD | |
| NOTE: Basement stair door-2 panel-grained (34"x69") | | | | | |
| 36 OPENINGS:OTHER DOOR TRIM | Service door-narrow board molding/Cellar drs-sawn lumber/Basement stair-integral with stair framing | 1 | 3 | GOOD | |
| 37 OPENINGS:WINDOW FRAME 1 | Monumental-8'10"x4'2"-wood frame inset within brick facade-1st floor | 1 | 16 EA | GOOD | |
| 38 OPENINGS:WINDOW SASH 1 | 6 over 6-wood-narrow profile muntins | 1 | 16 PR | GOOD | |
| 39 OPENINGS:WINDOW TRIM 1 | See element #51 | | | | |
| 40 OPENINGS:WINDOW FRAME 2 | Monumental-7'10"x4'2"-wood frame inset within brick facade-2nd floor | 1 | 16 EA | GOOD | |
| 41 OPENINGS:WINDOW SASH 2 | 6 over 6-wood-narrow profile muntins | 1 | 16 PR | GOOD | |
| 42 OPENINGS:WINDOW TRIM 2 | See element #51 | | | | |
| 43 OPENINGS:WINDOW FRAME 3 | Operable clerestory-hinged at header-1'1"x6'3"-(8)+1'1"x3'3"-(16)-attic | 1 | 24 EA | GOOD | |
| 44 OPENINGS:WINDOW SASH 3 | Interior inset cross muntins | 1 | 24 EA | GOOD | |
| 45 OPENINGS:WINDOW TRIM 3 | Simple sawn wood trim | 1 | 24 EA | GOOD | |
| 46 OPENINGS:GLAZING | Glazing extant from all periods | 1 | | GOOD | |

BUILDING INVENTORY

| ELEMENT | DESCRIPTION | RATING | QUANTITY | CONDITION | PRIORITY |
|---|---|--------|----------|-----------|----------|
| EXTERIOR ENVELOPE | | | | | |
| 47 OPENINGS:STORMS | None | | | | |
| 48 OPENINGS:SCREENS | Operable screens-inset between interior surround+sash-early 20th century | 1 | 32 EA | GOOD | |
| 49 OPENINGS:SHUTTERS/BLINDS | 3 panel(3'x7'5")louvered screen+door-rear gallery/Operable-louvered shutters on 1st+2nd flr windows | 1 | 69 EA | GOOD | |
| NOTE: Sprung steel shutter stops-(32pr) | | | | | |
| 50 OPENINGS:HARDWARE | Silver plated doorknob+doorbell pull+ lock cover-front door/All other doors porcelain | 1 | | GOOD | |
| NOTE: Hardware replated ca 1978 | | | | | |
| 51 OPENINGS:WDO LINTELS/SILLS | Flat brick arched lintels/Heavy wd-sills (5"x5 1/2") with routed drip | 1 | 64 EA | GOOD | |
| NOTE: See work element #26 | | | | | |
| 53 FEATURES:STAIRS 1 | Service stairs-wood-access both floors-concealed by wood screen-rear gallery | 1 | 1 | GOOD | |
| 55 FEATURES:PORCHES 1 | Monumental two-story-Greek Revival-portico/4 Doric columns-brick+stucco | 1 | 1 | GOOD | |
| NOTE: 6 deep-concrete steps-elliptical masonry sides+cast metal planting urns | | | | | |
| 56 FEATURES:PORCHES 2 | Two gallery-6 square masonry columns-wd pickets+railings between columns | 1 | 1 | GOOD | |
| NOTE: Wood decking-painted+contemporary carpet runner at entrance Wood steps to grade-lattice infill | | | | | |
| 58 FEATURES:BALCONY | Second floor balcony-front facade-wood decking+acanthus pattern-cast iron railing+deep wood covered ceiling | 1 | 440 SF | GOOD | |

BUILDING INVENTORY-----

| ELEMENT ----- | DESCRIPTION ----- | RATING ----- | QUANTITY ----- | CONDITION | PRIORITY |
|-----------------------------|---|-----------------|-------------------|-----------|----------|
| EXTERIOR ENVELOPE | | | | | |
| 60 FEATURES:ORNAMENTATION 1 | Decorative iron lantern above front door-frosted glass insets | 1 | 1 | GOOD | |
| 62 FEATURES:CHIMNEYS 1 | Masonry chimneys-stuccoed+scored+ainted 5 functional+1 false/Painted terra cotta barrel chimney caps | 1 | 6 EA | FAIR | MINOR |
| 65 ROOF:CORNICE | Heavy-projecting entablature-wood+stucco band-painted white | 1 | 300 LF | GOOD | |
| 69 ROOF:PARAPET/BALUSTRADE | Decorative posts (5 ea facade)+balustrade above gable roof-clerestory | 1 | 96 LF | FAIR | MINOR |
| 71 ROOF:SURFACE MATERIAL 1 | Standing seam metal-aluminum paint finish-clerestory | 1 | 350 SF | FAIR | MINOR |
| 72 ROOF:SURFACE MATERIAL 2 | Grey slate-metal flashing-perimeter roof abutting clerestory | 1 | 6000 SF | FAIR | MINOR |
| 74 ROOF:VENTS/OPENINGS | Roof access-standing seam metal-projecting hip hatch-3'5"x4'5"-standing lip-clerestory | 1 | 1 EA | GOOD | |
| 75 ROOF:FLASHING | Galvanized metal-chimneys | 4 | 100 LF | GOOD | |
| 76 ROOF:DRAINAGE | Internal gutters-metal lined | 1 | 287 LF | FAIR | MINOR |
| 77 ROOF:DECKING/SHEATHING 1 | Decking-4 1/2"x1" T+G pine/Purlins-2 1/2"x4" pine-25"oc-clerestory | 1 | 350 SF | GOOD | |
| 78 ROOF:DECKING/SHEATHING 2 | Decking-1"x8"-pine/Purlins-2"x4"-pine-7" oc-slate roof support | 1 | 6000 SF | GOOD | |
| 80 ROOF:STRUCTURE 1 | Rafters-8 1/2"x2 1/2"-pine-31"oc/Collar beam-bolted-14"x16"-pine support columns at corners-clerestory | 1 | | GOOD | |
| 81 ROOF:STRUCTURE 2 | Rafters-2 1/2"x5" rough sawn pine-2'oc/6'x12" intermediate support-pine-1"x8" decking-2"x4" furring strips-7"oc | 1 | | GOOD | |

BUILDING INVENTORY-----

| ELEMENT ----- | DESCRIPTION ----- | RATING ----- | QUANTITY ----- | CONDITION ----- | PRIORITY ----- |
|---|---|-----------------|-------------------|--------------------|-------------------|
| INTERIOR ENVELOPE | | | | | |
| 87 WALLS:MATERIAL 1 | Plaster-Rms #101 through 110+201 through 210+301+302/Rm #104 contemporary drywall | 1/4 | 15000 SF | GOOD | |
| 88 WALLS:MATERIAL 2 | Exposed structural masonry-Rms #01 through 09 | 1 | 4500 SF | FAIR | MINOR |
| 90 WALLS:FINISH 1 | Paint-Rm #01 through 09+103+106+108+109+110+111+201+205+211+301+302 | 4 | 11500 SF | GOOD | |
| 91 WALLS:FINISH 2 | Paint with wallpaper border-Rms #102+103+105 | 4 | 1200 SF | GOOD | |
| 92 WALLS:FINISH 3 | Wallpaper-Rms #101+104+107+202+203+204+206+207+208+209+210 | 4 | 6800 SF | GOOD | |
| NOTE: Zuber scenic wallpaper-Rm #101-circa 1978 | | | | | |
| 93 WALLS:TRIM 1 | Deep running plaster cornice-Rms #101+108+109+110+111 | 1 | 600 LF | GOOD | |
| 94 WALLS:TRIM 2 | Baseboards-wood-typ 16"deep-1st floor+14" deep-2nd | 1 | 1500 LF | GOOD | |
| 95 WALLS:TRIM 3 | Engaged pilasters+sidelights+transoms-Rms #101+201 | 1 | 2 EA | GOOD | |
| 96 WALLS:STRUCTURE 1 | Solid load bearing masonry/Typ 15" thick 1st+2nd flr | 1 | 19500 SF | GOOD | |
| 97 WALLS:STRUCTURE 2 | Wood frame construction-clerestory | 1 | 130 LF | GOOD | |
| 99 WALLS:FIREPLACES 1 | Marble fireplace surround-Rms #102+107+108+109+110+202+207+208+209+210 | 1/3 | 10 EA | GOOD | |
| 100 WALLS:FIREPLACES 2 | Wood fire surround Rm #04 | 1 | 1 EA | GOOD | |
| 101 WALLS:GENERAL | Reproduction papers+borders in excellent state of repair-circa 1980/Minor moisture damage Rm #208 | 1 | | GOOD | MINOR |

NOTE: Matching wallpaper exists at house for repair Rm #208

BUILDING INVENTORY-----

| ELEMENT ----- | DESCRIPTION ----- | RATING ----- | QUANTITY ----- | CONDITION ----- | PRIORITY ----- |
|---|--|-----------------|-------------------|--------------------|-------------------|
| INTERIOR ENVELOPE | | | | | |
| 102 OPENINGS:DOORS 1 | Greek Revival 4 raised panel-cypress wd-grained oak finish/Rm #203+207 pocket+transom/Masonry walls have paneled jambs | 1 | 25 EA | GOOD | |
| NOTE: Existing finish-circa 1978-mimics historic oak graining/Typical height-9' 1st flr+7'11"-2nd flr | | | | | |
| 103 OPENINGS:DOOR TRIM 1 | Deep molded trim (10") with projecting entablature (14")-painted white-typ/Greek Revival entablature Rms #101+102 | 1 | 25 EA | GOOD | |
| 104 OPENINGS:DOORS 2 | Sliding-4 panel-pocket doors-cypress wd-grained oak finish/Located between Rms #108+109-109+110-106+111 | 1 | 3 PR | GOOD | |
| NOTE: Existing finish-circa 1978-matches historic graining | | | | | |
| 105 OPENINGS:DOOR TRIM 2 | Heavy entablature-stylized Greek sunburst motif located above each side of sliding doors | 1 | 6 EA | GOOD | |
| 106 OPENINGS:DOORS 3 | Wd lattice-41 1/2"x72"-Rms #01+02+03+04+07+08/Paired glazed doors-32 1/2"x72"-between Rms #06+09 | 1 | 10 EA | GOOD | |
| 107 OPENINGS:DOOR TRIM 3 | Simple detailed wood trim | 1 | | GOOD | |
| 108 OPENINGS:WINDOW TRIM 1 | Heavy wd trim similar to doors-wd panel with inset to baseboard-projecting entablature-painted white-1st+2nd flrs | 1 | 31 EA | GOOD | |
| 110 OPENINGS:WINDOW TRIM 3 | Recessed wall packet for operable clerestory sash-simple construction-painted white | 1 | | GOOD | |
| 111 OPENINGS:GENERAL | Interior screens-adapted to fit frames-early 20th century-painted white-1st+2nd floors | 1 | 31 EA | GOOD | |
| 112 CEILINGS:MATERIAL 1 | Plaster on lath-1st floor+2nd floor+Rm #302 | 1 | 17000 SF | GOOD | |

NOTE: Exposed structural members of first floor-basement

BUILDING INVENTORY

| ELEMENT | DESCRIPTION | RATING | QUANTITY | CONDITION | PRIORITY |
|---|--|--------|----------|-----------|----------|
| INTERIOR ENVELOPE | | | | | |
| 115 CEILINGS:FINISH 1 | Smooth trowled finish coat-plaster-painted | 1 | 21000 SF | GOOD | |
| 118 CEILINGS:TRIM 1 | Acanthus leaf medallion-Rm #101/Punkah+ coffered mounting base Rm #102/Detailed medallions Rm #108+109+110+111 | 1 | 6 EA | GOOD | |
| 121 CEILINGS:STRUCTURE 1 | See element #128 | | | | |
| 125 FLOORS:MATERIAL/FINISH 1 | Brick+concrete-basement | 1/4 | 3000 SF | FAIR | |
| NOTE: Brick was installed by Mr. Kelly | | | | | |
| 126 FLOORS:MATERIAL/FINISH 2 | Pine-random length/Exposed wood floors have had a contemporary finish-circa 1978 | 1 | 8400 SF | GOOD | |
| 127 FLOORS:MATERIAL/FINISH 3 | Contemporary wall to wall carpeting Rms #203+204 | 4 | 800 SF | GOOD | |
| 128 FLOORS:STRUCTURE 1 | Painted canvas floorcloths-Rms #101+111 Floorcloth substantially restored-circa 1978 | 1 | 1300 SF | GOOD | |
| NOTE: SHOULD NOT HAVE HEAVY PEDESTRIAN TRAFFIC WITHOUT PROTECTION | | | | | |
| 140 INTERIOR:GENERAL 1 | 1st floor typ silverplated brass doorknobs+key covers/2nd flr typ porcelain doorknobs | 1/4 | | GOOD | |
| NOTE: All door hardware resilvered circa 1978 | | | | | |
| FIRE/LIFE SAFETY | | | | | |
| 143 EGRESS:LIGHTING/SIGNS | Halogen-pole mounted-visitor's parking/ Incandescent-N eaves of kitchen bldg (4)-Parking lot | 4 | 6 EA | GOOD | |
| NOTE: Pole mounted-NE corner main house | | | | | |

BUILDING INVENTORY-----

| ELEMENT ----- | DESCRIPTION ----- | RATING ----- | QUANTITY ----- | CONDITION ----- | PRIORITY ----- |
|---|--|-----------------|-------------------|--------------------|-------------------|
| FIRE/LIFE SAFETY | | | | | |
| 144 EGRESS:PATH | Brick pavers-gravel | | | | |
| NOTE: See element #1 | | | | | |
| 147 EGRESS:STAIRS/HANDRAILS 1 | Historic handrails at gallery+steps-structurally sound+adequate | | | | |
| 150 EGRESS:DOORS/HARDWARE | Historic hardware extant/Panic hardware to be determined by occupants | | | | |
| 151 DETECTION:INTRUSION DET SYS | none-security system needed to protect collection | | | | CRITICAL |
| 152 DETECTION:FIRE DETECTION SYS | Ceiling mounted heat+smoke sensors-phone relay to police+fire/Smoke-dictograph model #55/Dialer-dictograph model #G850 | 4 | 1 | GOOD | |
| 154 EXTINGUISHING:EXTINGUISHERS | Dry chemical class 2-A-10-BC-basement/ Dry chemical class 10-A-80-BC-attic | 4 | 2 | GOOD | |
| NOTE: Extinguishers should be mounted on wall | | | | | |
| 155 EXTINGUISHING:STAND PIPES | See element #8 | | | | |
| 156 EXTINGUISHING:SPRINKLERS | None | | | | CRITICAL |
| HANDICAPPED ACCESSIBILITY | | | | | |
| 161 ACCESSIBILITY:PLAN | None | | | | CRITICAL |
| 162 EXTERIOR:DESIGNATED PARKING | None | | | | CRITICAL |
| 163 EXTERIOR:ACCESSIBLE ENTRY | None | | | | CRITICAL |
| 164 INTERIOR:RESTROOMS | None-existing 1st flr powder room does not meet needs of NPS or handicapped standards | | | | |
| NOTE: Cost+work pending development of location of facility | | | | | |

BUILDING INVENTORY

| ELEMENT ----- | DESCRIPTION ----- | RATING ----- | QUANTITY ----- | CONDITION ----- | PRIORITY ----- |
|---|--|-----------------|-------------------|--------------------|-------------------|
| PUBLIC HEALTH | | | | | |
| 168 WATER TREATMENT:DOMESTIC WATER | City supplied water-meter located at front entrance gate-line parallel with entrance road | | | | |
| 169 WATER TREATMENT:WASTE WATER | City sewer connected at NE corner of basement | | | | |
| HEATING/VENTILATION & AIR CONDITIONING | | | | | |
| 172 HEATING:EQUIPMENT 1 | Gas fired heating plant-Cleaver Brooks-500,000 BTU/hr-120 volt-60 cycle-located in smokehouse | 6 | 1 | GOOD | |
| NOTE: Provides heat for main house+kitchen+dairy | | | | | |
| 173 HEATING:EQUIPMENT 2 | Heat exchangers in attic+basement convert hot water to forced air duct system | 6 | 1 | GOOD | |
| 174 HEATING:PIPING NETWORK | Insulated piping from smokehouse to NE corner of Main house buried in 4' trench routed to heat exchangers in bmt+attic | 6 | | GOOD | |
| 175 HEATING:BOILERS | Self contained electric boiler provides heat for Rms #202+203+204/Model #RA15-located in basement | 6 | 1 | GOOD | |
| 176 HEATING:GENERAL | Steam humidifiers-Armstrong Machine Works-located at main trunk lines | 6 | | GOOD | |
| 177 COOLING:EQUIPMENT 1 | Cooling compressor unit-Carrier Model #06E-located N of smokehouse/Pipe network located in 4' utility trench | 6 | | GOOD | |
| NOTE: Utility trench to main house+kitchen+dairy Coils located in attic+basement transfer chilled air by duct work | | | | | |
| 179 COOLING:PIPING NETWORK | Insulated piping-styrofoam+aluminum from smokehouse to exchangers in basement+attic | 6 | | GOOD | |

BUILDING INVENTORY-----

| ELEMENT ----- | DESCRIPTION ----- | RATING ----- | QUANTITY ----- | CONDITION ----- | PRIORITY ----- |
|--|---|-----------------|-------------------|--------------------|-------------------|
| HEATING/VENTILATION & AIR CONDITIONING | | | | | |
| 180 COOLING:GENERAL | Thermostat+humidity controls located in Rms #103 (closet)+206 (closet)+203 | 6 | 3 EA | GOOD | |
| 183 VENTILATION:DUCT WORK | Galvanized metal-internal rigid insulation | 6 | | GOOD | |
| 185 HVAC:DECORATIVE FEATURES | Floor grills from early 20th century heating system-1st floor | 2 | | GOOD | |
| PLUMBING/UTILITY | | | | | |
| 187 WATER:PIPING NETWORK | Rigid copper with soldered fittings | 4 | | GOOD | |
| 188 WATER:EQUIPMENT | Historic wooden reservoir-lead lined with copper overflow to exterior-NW corner of attic | 1 | | GOOD | |
| NOTE: Early 20th century pump+compressor located in smokehouse | | | | | |
| 189 WATER:HOT WATER HEATING | Electric water heater-240v-A.O.Smith-30gal/Rm #05(1)+Rm #02(1) | 6 | 2 | GOOD | |
| 190 WATER:FIXTURES 1 | Utility sink-bmt/Tank commode+pedestal sink-Rm #104/Recessed kitchen sink-#107 Free standing bathtub+recessed sink-#207 | 6 | 10 EA | GOOD | |
| NOTE: Tank commode-Rm #206/Shower tub-commode-sink in vanity-Rm #204 | | | | | |
| 192 WASTEWATER:PIPING NETWORK | Cast iron | 6 | | GOOD | |
| ELECTRICAL | | | | | |
| 197 INCOMING SERVICE:TRANSFORMER | Pole hung transformer with meters-separate meter+panel for dependencies-SW corner Visitor's parking | 6 | | GOOD | |
| 198 INCOMING SERVICE:SERVICE LINES | Underground-conduit from transformer to main house/Disconnect at 400 amp 240 volt-main house | 6 | | GOOD | |

BUILDING INVENTORY

PRISON

| ELEMENT | DESCRIPTION | RATING | QUANTITY | CONDITION | PRIORITY |
|------------------------------------|--|--------|----------|-----------|----------|
| ELECTRICAL | | | | | |
| 200 INCOMING SERVICE:MAIN DIST PNL | Rm #05-NW corner of basement | | | | |
| 201 MAIN DISTR PNL:ACCESS/MARKING | Circuit breaker panel-General Electric/ All rooms designated by breakers | | | | |
| 204 NETWORK:CONDUCTORS/RACEWAY | Conduit-rigid+flexible-both galvanized+ black pipe | 6 | | GOOD | |
| 205 NETWORK:LIGHTING TYPE 1 | Range of historic+original+reproduction light fixtures (gas/oil) converted to electrical use | 1/4 | | GOOD | |
| 207 ELECTRICAL:GENERAL 1 | System upgraded to code-circa 1980 | | | | |

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WORK RECOMMENDATIONS-----
by Priority

| CATEGORY ELEMENT RATING ----- | DEFICIENCY & CODE ----- | RECOMMENDATION JUSTIFICATION ----- | QUANTITY ----- | MAT LABOR +MARKUP ----- |
|---|---|---|-------------------|----------------------------------|
| CRITICAL | | | | |
| 151 FIRE/LIFE SAFETY DETECTION:INTRUSION DET SYS PRIORITY: CRITICAL RATING: SOURCE: dsc | No security for very valuable artifact collection | Install security system as prescribed by NPS conservators | 1 SY | 36000 0 7200 ===== |
| | | | | \$ 43200 |
| 156 FIRE/LIFE SAFETY EXTINGUISHING:SPRINKLERS PRIORITY: CRITICAL RATING: SOURCE: dsc | No fire suppression system for entire house | Install system as recommended by NPS conservators | 1 SY | 60000 0 12000 ===== |
| | | | | \$ 72000 |
| 161 HANDICAPPED ACCESSIBILITY ACCESSIBILITY:PLAN PRIORITY: CRITICAL RATING: SOURCE: arch | Architectural barriers prevent handicapped access | Develop comprehensive access- ibility plan | 1 | 0 5000 1000 ===== |
| | | | | \$ 6000 |
| 162 HANDICAPPED ACCESSIBILITY EXTERIOR:DESIGNATED PARKING PRIORITY: CRITICAL RATING: SOURCE: arch | No designated parking | Provide handicapped parking to ANSI standards | 4 UN | 2000 2000 800 ===== |
| | | | | \$ 4800 |
| 163 HANDICAPPED ACCESSIBILITY EXTERIOR:ACCESSIBLE ENTRY PRIORITY: CRITICAL RATING: SOURCE: dsc | No provisions for handicapped accessibility to first floor | Provide handicapped lift at E facade gallery | 1 | 20000 0 4000 ===== |
| | | | | \$ 24000 |
| SERIOUS | | | | |
| 1 SITE PEDESTRIAN ACCESS:WALKWAY PRIORITY: SERIOUS RATING: 1/3 SOURCE: arch | Brick paths are too uneven for handicapped maneuverability | Remove existing pavers-relay in historic patterns-complying with ANSI standards | 40 % | 500 2000 500 ===== |
| | | | | \$ 3000 |

WORK RECOMMENDATIONS
by Priority

| CATEGORY ELEMENT RATING ----- | DEFICIENCY & CODE ----- | RECOMMENDATION JUSTIFICATION ----- | QUANTITY ----- | MAT LABOR +MARKUP |
|--|--|---|-------------------|-----------------------------|
| SERIOUS | | | | |
| 18 EXTERIOR ENVELOPE FOUNDATION:GENERAL PRIORITY: SERIOUS RATING: 1 SOURCE: arch | Moisture infiltration at window wells causing masonry+ mortar deterioration on interior basement perimeter | Determine points of moisture intrusion-check drains-repair+ seal-repoint+repair masonry | 6 | 500 1000 300 ===== |
| | | | | \$ 1800 |
| MINOR | | | | |
| 14 EXTERIOR ENVELOPE FOUNDATION:PIERS 1 PRIORITY: MINOR RATING: 1 SOURCE: arch | Scaling brick+mortar at tops of pier | Check incoming moisture from gallery/Repair masonry-repoint-paint | 10 SF | 100 500 120 ===== |
| | | | | \$ 720 |
| 26 EXTERIOR ENVELOPE WALLS:SURFACE MATERIAL 1 PRIORITY: MINOR RATING: 1 SOURCE: arch | Crack in masonry SW corner | Monitor crack for active movement/If no longer active-patch with appropriate mortar | 20 LF | 10 ===== |
| | | | | \$ 60 |
| 62 EXTERIOR ENVELOPE FEATURES:CHIMNEYS 1 PRIORITY: MINOR RATING: 1 SOURCE: arch | Cracks at stucco surface-center chimney-S | Remove damaged stucco+repair+ consolidate+restucco to match existing | 10 SF | 200 500 140 ===== |
| | | | | \$ 840 |
| 69 EXTERIOR ENVELOPE ROOF:PARAPET/BALUSTRADE PRIORITY: MINOR RATING: 1 SOURCE: arch | Bottom rail rotted at post connections-some deteriorated wood-separation of wooden elements+rails | Remove/Consolidate deteriorated wood-reattach-prime+ paint/Flash posts at base | 25 LF | 500 2000 500 ===== |
| | | | | \$ 3000 |
| 71 EXTERIOR ENVELOPE ROOF:SURFACE MATERIAL 1 PRIORITY: MINOR RATING: 1 SOURCE: arch | Not properly flashed at balustrade | Remove improper flashing-install new | 25 SF | 100 250 70 ===== |
| | | | | \$ |

WORK RECOMMENDATIONS
by Priority

| CATEGORY ELEMENT RATING ----- | DEFICIENCY & CODE ----- | RECOMMENDATION JUSTIFICATION ----- | QUANTITY ----- | MAT LABOR +MARKUP ----- |
|--|--|---|-------------------|----------------------------------|
| MINOR | | | | |
| 72 EXTERIOR ENVELOPE ROOF: SURFACE MATERIAL 2 PRIORITY: MINOR RATING: 1 SOURCE: arch | Isolated areas of loose slate | Reattach slate to decking | 20 SF | 200 1000 240 ===== |
| | | | | \$ 1440 |
| 76 EXTERIOR ENVELOPE ROOF: DRAINAGE PRIORITY: MINOR RATING: 1 SOURCE: arch | Seams have failed | Resolder seams where necessary | 287 LF | 50 500 110 ===== |
| | | | | \$ 660 |
| 83 INTERIOR ENVELOPE WALLS: MATERIAL 2 PRIORITY: MINOR RATING: 1 SOURCE: dsc | Spalling masonry walls at perimeter Rm #07+08 | Determine location of moisture infiltration/Correct/ consolidate+repoint masonry to match existing | 300 SF | 400 2000 480 ===== |
| | | | | \$ 2880 |
| 101 INTERIOR ENVELOPE WALLS: GENERAL PRIORITY: MINOR RATING: 1 SOURCE: arch | Minor moisture damage to wallpaper in Rm #208 | Remove existing paper+apply matching paper already in house | 15 SF | 5 40 9 ===== |
| | | | | \$ 54 |

COST SUMMARY

MELROSE
136 Melrose Avenue
Natchez, MS 39120

| DEFICIENCY CATEGORY | CRITICAL | SERIOUS | MINOR | CATEGORY SUBTOTAL |
|------------------------|-----------|---------|----------|----------------------|
| SITE | \$ 0 | \$ 3000 | \$ 0 | \$ 3000 |
| EXTERIOR | 0 | 1800 | 7140 | 8940 |
| INTERIOR | 0 | 0 | 2934 | 2934 |
| FIRE | 115200 | 0 | 0 | 115200 |
| HANDICAPPED | 34800 | 0 | 0 | 34800 |
| PUBLIC | 0 | 0 | 0 | 0 |
| HEATING | 0 | 0 | 0 | 0 |
| PLUMBING | 0 | 0 | 0 | 0 |
| ELECTRICAL | 0 | 0 | 0 | 0 |
| PRIORITY SUBTOTAL | \$ 150000 | \$ 4800 | \$ 10074 | |

TOTAL COST FOR BUILDING: \$ 164874

DEPENDENCY NOTES

Much of the national historical and architectural significance of Melrose is derived from the full complement of dependencies that have remained an integral part of the Natchez suburban villa. These extant structures include similar, flanking, two-story kitchen building and dairy; pump houses; and smokehouse and privy. In addition, to the northwest, at the rear of the main house, are the slave quarters, workers' privy, workers' cottage, stable, shed, and carriage barn.

The following is a brief description and preliminary assessment of the existing condition of the Melrose dependencies. In general, most of these structures are in good condition with minor work elements, aside from cyclic maintenance, required. Like the main house, they were rehabilitated/restored circa 1980. Cost estimates for any work is not part of this report.

KITCHEN BUILDING

The two-story masonry structure has a gallery on both the first and second floors. The first level has always housed the primary kitchen for Melrose. The present brick floors are circa 1978, with the historic finish being concrete. Contemporary kitchen facilities were installed during the circa 1978 rehabilitation. Access to the second floor sleeping rooms is through a central

stair that opens on the gallery. The second floor was also rehabilitated in circa 1978 for use as a bedroom, sitting room, and bath. Originally this level was divided into three chambers with partition walls constructed of vertical boards. The fire surround removed during the conversion is on the grounds. The gabled roof is integral to the second floor gallery and is supported by massive square, masonry pillars. The brick facade fronting the galleries has been stuccoed, a detail that mimics the front facade of the main house. Unless the decision is made to restore the kitchen building to an earlier documented period, the structure is in excellent condition, requiring only minor cyclic maintenance.

DAIRY

The dairy is an architectural complement to the kitchen building. During the circa 1978 rehabilitation, the second-floor rooms, divided by board partition walls like the kitchen building, were reconfigured into a bedroom suite for guests. The first floor dairy apparently has been altered slightly over time. A notable alteration to the building is a pair of wood garage doors that were added early in the twentieth century to accommodate the family car. There are also original portal windows in Rm #101. The dairy needs minor masonry work, including replacement of limited areas of spalled brick with subsequent repointing. The shutters also need to be consolidated and reworked.

CISTERN HOUSES

The two cistern houses have painted wood lattice walls and a pressed metal roof, which replaces historic wood shingles. Presently, there are hand pumps located in both structures. The wood superstructure is resting on the ground with no moisture impervious foundation. The building should be raised above grade and an appropriate foundation inserted. The light wood structures give architectural variety to the symmetrical plan of masonry structures.

SMOKE HOUSE

Brick similar to the adjacent dependencies was used to construct the smoke house. The access door is composed of 7" wide planks with a flat masonry lintel. The hipped roof is covered in standing seam metal. The smoke house has been converted into a mechanical room. In addition to the equipment for heating and cooling the main house, a historic pump and compressor from an early twentieth century water system is still in place. Again, cyclical maintenance is the main requirement, with gutter replacement and repainting of the roof an immediate concern.

PRIVY

With the exception of additional doors, the privy mirrors the smoke house. The structure has been divided into four compartments, with beaded board doors accessing each. A contemporary rest room has been added in one, with two of the rooms still containing pit toilets which were originally flushed with water from cisterns. It should be noted that this structure has always contained restroom facilities. Aside from cyclic maintenance, the standing seam roof, which replaces the earlier wood shingles, requires repainting.

STABLE

The white painted stable has 1"x4" T&G wood, hinged hatches and 7" rough sawn lap siding. The gabled, standing seam metal roof is painted and has galvanized metal gutters and downspouts. Like most of the other dependencies the roof was originally wood shingles. The interior consists of an upstairs hayloft and rough sawn wood stalls below. Again, cyclical maintenance is the prescribed preservation treatment, with minor repair needed to existing gutters and downspouts.

SLAVE QUARTERS (cottage)

The slave quarters were rehabilitated circa 1978, with modern kitchen and bathroom facilities inserted into the added rear shed. Originally wood shingled, the later, gabled, standing seam metal roof is painted and has galvanized gutters and downspouts, The 7" wide lap wood siding is painted white. The porch, with chamfered wood columns and 1" wood pickets, is non historic. The main block of the house has a central fireplace and a plywood plank dividing wall. Preservation work includes repainting of the metal roof, resecuring the porch railing, gutter replacement, and some repair and repainting of existing window shutters.

CARRIAGE HOUSE

The architecturally distinctive, and high style barn has applied stylized pilasters and Greek form pediment. Fenestration on the main facade includes classic influenced decorative panels. Only one side door is operable. Primary access to the barn and loft is at the rear through three sets of hinged doors. The major facade has butted 1" x 6" plank siding between the pilasters, with the other facades being 1"x's, random width lap siding. The gabled, standing seam metal roof, originally wood shingled, is painted and has galvanized gutters on the east facade. The ground level of the interior has a contemporary concrete floor, while the loft floor consists of 1 X T&G rough sawn lumber.

Work elements for the carriage house include minor replacement of siding and priming and painting to documented historic colors. Guttering and downspouts are also required for the entire structure.

SLAVE QUARTERS (office)

The slave quarters is a simply detailed three-bay structure with a gabled roof. Originally the building consisted of two rooms, the sided gable end is visible in the attic. Each bay has a front entrance and a fireplace. On the northeast corner, there is access to the partial cellar through hurricane doors. The exterior is sided with 7" shiplap wood siding. The brick pier foundations have rough sawn wood infill. The dividing walls are made of wide random width sawn planks and the perimeter are walls plaster on lath.

Work elements for the slave quarters include preparing, priming and painting the exterior siding, windows, and shutters. The west and east gutters need to be replaced.

PRIVY

Board and batten structure with shed roof. The building needs minor restoration and repainting of wood. This building cannot be documented to the pre-civil war period.

