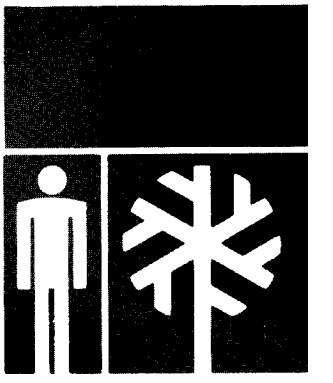
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historic structures report
building 38

october 1982

Pkg. 115



HARPERS FERRY
TEARNEY BUILDING

NATIONAL HISTORICAL PARK, WEST VIRGINIA

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Historic Structure Report

Building 38/ Tearney Building

Harpers Ferry National Historical Park

Jefferson County, West Virginia

Prepared by

Susan L. Shufelt

National Capital Team
Denver Service Center
National Park Service
U.S. Department of the Interior

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I. ADMINISTRATIVE DATA

A. Name and Location of Structure

The Tearney Building, building 38, is part of project package #115. The building is located on the west side of Shenandoah Street on lot 50 in the lower town of Harpers Ferry, West Virginia.

Building 38 is named after Edward Tearney, who, along with Peter Lytle and Patrick Kelly, constructed it in 1844. Although the building was originally owned jointly by these three men, Edward Tearney was the sole owner from 1860 until 1902. Tearney's heirs owned the building until 1925.

B. Management Category and Historical Significance of Structure

The entire lower town of Harpers Ferry is an historic district on the National Register of Historic Places. Building 38 has been assigned to the "11b" category of significance. This category includes:

> Resources that meet the basic criteria for listing in the National Register of Historic Places and are of local or park significance . . . Categories 11a and 11b will include all historical area resources of less-than-national significance which are unrelated to the primary themes of their parks, and most cultural resources in other areas.[1]

Building 38 has been submitted to the List of Classified Structures and has been assigned to management category "B." This category includes "structures that should be preserved and maintained."[2]

C. Proposed Use of Structure and Justification for Such Use

The exterior of building 38 will be restored to its initial appearance. Alterations over the years have concealed much of the building's original character and design, particularly at the first-floor level. From 1844 to about 1860, building 38 was symmetrical and was divided in half at the first floor by a center alley. The proposed restoration will re-create this appearance.

Part of the interior of building 38 will be designed for adaptive use: the first floor, which has been extensively remodeled over the years, will be open to visitors and will contain exhibits on the restoration process. Although the first floor will be once again divided in half by a center alley, the first-floor interior will not be totally restored; the northern half will be left in its present condition, thus allowing visitors to view original construction details. The foundation walls uncovered by the archeologists will be exhibited; these walls were part of a stone structure that occupied lot 50 prior to the construction of building 38.

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1. National Park Sevice, Management Policies (Washington, D.C.: Government Printing Office, 1978), p. v-4.

2. National Park Service, Cultural Resources Management Guideline, NPS 28 (1980), Chapter 3, p. 4.

The southern half of the first floor will be adaptively restored and will contain exhibits on the investigative techniques of the archeologists and architects. Any significant details uncovered by the fabric investigation will be left exposed to become part of the exhibit.

The upper floors, which have not undergone extensive remodeling over the years and still contain much of the original fabric, will be preserved as is for future generations.[3] Any necessary structural repairs will be made, but the upper floors will not be adapted to modern use and will not be accessible to visitors.

The proposal outlined above is consistent with the interpretive prospectus for Harpers Ferry National Historical Park. This document[4] defines the target period for restoration as "the entire 19th century" and further states that "with one exception (building 9), the visitor uses are designed for . . . first-floor access only."[5] Thus, the 1844-60 restoration period and the first-floor exhibits proposed for building 38 are appropriate.

Specifically concerning building 38, the prospectus proposes an allocation of the first-floor space similar to that described above:

> Building 38 is a double building. One half will be left as a shell. Inside will be a modest exhibit to point out foundations of an earlier stable exposed by archeologists to visitors and make the connections that extensive archeological work was carried out as a prerequisite to restoration of the town.
>
> The other half of the building will be restored on the interior. In it will be a short video program to be viewed standing. Included in the program will be film footage of various phases of the town's restoration. . .some modest exhibitry could include parts of woodwork, fragments of wallpaper, and other typical items.[6]

The proposal for building 38 is also consistent with the guidelines issued in the Management Policies of the National Park Service.

D. Cooperative Agreements

Building 38 will be operated and managed as a part of Harpers Ferry National Historical Park under the immediate supervision of a superintendent. Although there are no cooperative agreements,

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3. See minutes (in Appendix C) of meeting held at the Morrell House, Harpers Ferry National Historical Park on February 18, 1981 to discuss the proposed restoration of building 38.

4. National Park Service, National Capital Region, "Harpers Ferry National Historical Park Interpretive Prospectus" (1980), p. 1.

5. Ibid., p. 8.

6. Ibid., p. 22.

community relations are an important aspect in planning the development of park programs and policies. This is inevitable because

> The park is closely bordered by shops, restaurants, museums, and other enterprises catering to the tourist trade. These interests often bring their objectives to the attention of the administration of the park for consideration . . . Harpers Ferry is administered by a mayor and town council, and close ties must be maintained by the park if good relations are to be upheld . . . In addition, there are special interest groups and organizations that the park communicates with, such as the Appalachian Trail Conference, Harpers Ferry Bolivar Merchants Association, environmental groups, and sundry organizations of the county administration.[7]

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7. National Park Service, "Harpers Ferry Interpretive Prospectus," p. 35.

II. INVESTIGATIONS AND DOCUMENTARY INFORMATION

A. "Historic Structure Report, the Edward Tearney Buildings--Buildings 38 and 39 on Wager Lot 50, Historical Data"

The final draft of the "Historical Data Section" was completed by historian Charles W. Snell in October, 1979. This report traces the chain of ownership of lot 50 from 1751 to the present and describes the buildings that have occupied the lot. It also discusses the various people who have lived in or have conducted a business in building 38.

B. Archeological Investigations

Archeological investigations were conducted in the northern half of building 38 and in the rear yard during the summer of 1978. Ellen Seidel is preparing a report on the findings of these investigations.

C. Photographs

There are several historic photographs that contain views of building 38. However, because significant changes had been made to the building prior to the date of the earliest pictures, these photographs are of limited value in determining the original appearance of the building.

Photograph 1 is a photograph of an 1862 sketch of the building. But this sketch shows only the upper levels of the front of the building and omits the first floor details where the significant changes have occurred. Photograph 3, taken between 1865 and 1879, is the best 19th century photograph of the front of building 38, but the building has already been altered in this view. There are no 19th century photographs of the rear of the building. However, the roof over the rear porch is visible in photograph 4, taken between 1877 and 1879. The south gable can also be seen in this photograph.

The historic photographs, as well as more recent photographs of building 38, are included in the appendix (section A) of this report.

D. Maps

Section B of the appendix contains six maps which were made at various times between 1803 and 1913. These maps show the location of lot 50, and indicate how the lot was used and what kind of structures occupied the lot.

E. Drawings

There are no construction drawings for building 38. Nor are there any documents depicting the changes made to the building by the park or by previous owners. However, there are historic American building survey drawings. A set of these drawings is included in section C of the appendix.

III. SUMMARY OF HISTORIC EVENTS

The following is a summary of events related to lot 50 and building 38. While building 39 is also situated on lot 50, the date of its construction and its original purpose are not known.

CALENDAR OF EVENTS RELATED TO LOT 50 AND ITS STRUCTURES[8]

April 25, 1751	--	Robert Harper, a millwright from Pennsylvania, acquired land--which included the future site of building 38--in a deed for 125 acres from Lord Fairfax.
October, 1782	--	Robert Harper died; the 125-acre estate was inherited by Sarah Harper, a niece of Robert Harper and wife of John Wager, Sr.
June 15, 1796	--	John Wager, Sr. sold all of the 125-acre estate--except for six acres retained in the "Six-Acre Reservation" and an additional three-quarters of an acre situated in the "Ferry Lot"--to the U.S. government for the purpose of establishing a national armory.
February, 1803	--	N. King and L. Harbaugh did a survey (see map 1) which revealed that lots 50 and 51 at this time were occupied by a garden that was probably used to provide vegetables for the use of the Wager family and the guests of their hotel (located on lot 15).
September 21, 1803	--	John Wager, Sr. died. John Wager, Jr. inherited the 6 3/4 acres in Harpers Ferry.
October 22, 1813	--	John Wager, Jr. died; his wife, Catherine Wager, and their four minor children inherited the undivided 6 3/4 acres.
Prior to February, 1824	--	Wager's heirs constructed a stone stable on lot 50.
From (at least) 1824-1830	--	The stone stable on lot 50 was leased for use in conjunction with the operation of the Harpers Ferry Hotel, situated on lot 15.

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8. The information contained in this section is taken from the "Historic Structure Report, the Edward Tearney Buildings--Buildings 38 and 39 on Wager Lot 50, Historical Data" (1979) by Charles W. Snell.

1829	--	Catherine Wager died
July 6, 1832	--	The Wager heirs leased lot 51 to William and Samuel B. Anderson for seven years. The Andersons erected a large 2 1/2 story brick building on lot 51.
1832-June 1839	--	The Andersons ran a store in the brick building they erected on lot 51.
April 1, 1833 - June 1839	--	The Anderson brothers rented the stone stable on lot 50.
1834	--	John Wager, Jr.'s son James Bates Wager declared bankruptcy.
April 2, 1835	--	The inherited Wager real estate was divided equally among the three surviving children of John and Catherine Wager: James B. Wager, Gerard B. Wager and Sally Ann Wager (Sally Ann Swayne, wife of Noah H. Swayne).
October 10, 1835	--	Lot 50, fronting 37 feet, 4 inches on the west side of Shenandoah Street, was awarded to Gerard B. Wager.
February 8, 1839	--	Noah H. and Sarah Ann Swayne, owners of lot 51, exchanged land with Gerard B. Wager and his wife, Ellen A. Wager, the owners of lots 50 and 52. The Wagers gave the Swaynes part of lot 52 to enlarge lot 51 and received $100. The Swaynes gave the Wagers a strip of land from lot 51 to enlarge lot 50 and received $100. This transaction increased the frontage of lot 50 from 37 feet, 4 inches to approximately 40 feet, 2 inches. The Wagers were also given the right to build on the end wall of the 2 1/2-story brick house that stood on lot 51.
Sometime between 1840 and 1844	--	The stable was converted into a store and rented to Kiram Carney, who operated it as a grocery store.
May 1, 1840	--	Gerard B. Wager sold the enlarged lot 50 to sixty men for $1,500; the men paid $300 in cash and placed the building in trust to secure the balance of $1,200.
February 1844	--	The sixty men who purchased lot 50 were unable to make the payments; Gerard B. Wager repurchased the lot at a public auction for $1,210.

March 20, 1844	--	Gerard B. Wager sold the north half of lot 50 to Patrick Kelly for $600.
March 22, 1844	--	Gerard B. Wager sold the south half of lot 50 to Edward Tearney and Peter Lytle. After Peter Lytle's death, Edward Tearney inherited Lytle's half-interest in the south portion of lot 50.
1844	--	After Patrick Kelly, Edward Tearney and Peter Lytle purchased lot 50, they demolished the stone stable. Patrick Kelly exercised the right to build "against the end wall of said brick building (on Swayne's lot 51) without paying for the use of the end wall thereof . . ." (this was part of the agreement made between the Wagers and Swaynes in 1839). Building 38 was constructed by Edward Tearney, Peter Lytle, and Patrick Kelly; the building contained two stores on the first floor and two residences of six rooms each on the upper floors.
October or November 1844 to at least November 1845, but prior to June 3, 1846	--	Store # 1 (south store) operated as "P.O. Littlejohn's Grocery Store."
October 1844-April 1845	--	Store #2 (north store) was "Joseph W.L. Carty's Tobacco Shop."
December 1845 - September 1847	--	Jacob Nisewenner operated store #2 as "The Baltimore Cheap Cash Store."
October 1847 - October 1851 (or February 1852)	--	Store # 1 (south store) was known as "New and Cheap Clothing Store" and was operated by "R. Walter and Brother."
1848	--	Store #2 was possibly "Soloman Snook and Brushrod Pine's Dry Goods Store. While it is known that in 1848 Snook and Pine's store was situated on Shenandoah Street, there is not enough information to locate their store precisely.
October 1850 - February 1852	--	F.C. Conrad operated a dry goods store in store #2.
1852	--	Evidence of business in store #1 stops (either because business people stopped advertising or the store was converted to a residence).

October 1852 - February 1, 1853	--	Store #2 was called "Cheap Clothing Store" and was operated by H. Mandebaum
February 7, 1860	--	Edward Tearney completed payments for and received Patrick Kelley's half of lot 50.
Sometime between 1860 (after building 38 passed into single ownership) and 1879 (the latest possible date of photograph 3)	--	The first floor of building 38 was significantly altered. The central alley was eliminated, and a window was installed in its place. A new alley was constructed along the southern end of the building adjacent to building 40.
From at least 1860 to 1865	--	Michael Tearney operated a grocery store in store #2 and resided with his family in one of the duplexes above; the other duplex was rented by merchant Bernard Hirsh and family (Bernard Hirsh ran a business in building 40).
Sometime between 1865 and 1879	--	Photograph 3 shows that store #1 had no signs, perhaps indicating that it might have been a residence; store #2 was labeled G.L. Myers "Hat and Cap Shop".
1894	--	Sanborn-Perris insurance map (map 4) shows that store # 1 had been converted to a dwelling and store #2 was a butcher shop.
April 2, 1902	--	Thomas A. Tearney obtained possession of lot 50 after the death of his father, Edward Tearney.
1907	--	Sanborn-Perris insurance map (map 5) shows store #1 was then a dwelling and store #2, a restaurant.
February 1913	--	B&O Railroad Company plan showed a restaurant on the first floor.
March 11, 1925	--	The Tearney heirs sold lot 50 to James K. Grubb for $2,500.
April 19, 1930	--	Henry C. Vorhees and his wife, Mary, obtained possession of lot 50 and the buildings.
1940s and 1950s	--	Charles Grubb's pool room occupied the first floor of building 38.
December 5, 1952	--	Mary Vorhees sold lot 50 to James Karl Grubb and his wife Agnes Elizabeth.

March 13, 1953 -- James Karl Grubb and his wife, Agnes, sold lot 50 and its buildings to the state of West Virginia.

December 19, 1953 -- The state of West Virginia conveyed lot 50 and its buildings and much other property to the U.S. government for inclusion in the Harpers Ferry National Monument.

IV. ARCHITECTURAL DATA

A. Historical Appearance

1. Site

Building 38 was constructed in 1844 between two existing buildings: a brick building on lot 51 (the Anderson building), which no longer exists, and building 40, a 2 1/2-story stuccoed stone building on lot 49 (see photographs 1 and 3). These buildings provided the side--or north and south--walls of building 38.

In 1844 there was probably a 10-foot wide shale walk in front of building 38 (see photograph 3). This walk was similar to the one that exists now on Shenandoah Street. The historic photographs do not show any trees or other vegetation in front of the building.

The rear of lot 50 extends back to the public walk (stone steps which provide access to the Catholic Church from High Street--see maps 3 and 4). Since there are no historic photographs of the rear of building 38, it is difficult to determine the appearance of this area in the mid-1800s. The evidence indicates, however, that there was a second-level porch along the rear (west) wall of the building. The outline of building 38 shown on maps 4 and 5 and the building's roof (visible in photograph 4) indicate a rear structure, perhaps a porch. Since there is no evidence of interior stairs to the second-floor level and since there are two exterior doors at the rear of the second level, this rear porch apparently provided the only access to the upper-floor residences. One probably reached this porch in one of two ways:

(1) from Shenandoah Street, one entered the backyard area through building 38's center alley, and then climbed the wooden stairs up to the second-level porch.

(2) from High Street, one climbed the stone steps or public walkway leading up to the Catholic Church, then turned left at the rear of lot 50, and went down the stone steps to the porch (or to a bridge leading over to the porch).

2. Exterior

In the mid-nineteenth century, building 38 was a 2-1/2-story stuccoed stone structure, with an appearance similar to its present appearance. However, fabric and archeological investigations, as well as a study of historical documents, indicate that changes were made to this building not long after it was constructed. Originally both front and rear elevations were probably symmetrical, reflecting the interior of the building which consisted of similar, separate halves.

In 1844, just before the construction of building 38, Gerard B. Wager sold the southern half of lot 50 to Patrick Kelly and the northern half to Edward Tearney and Peter Lytle. Wager's deeds to these men contained the following statement:

> And it [was] understood and agreed upon between these parties, that an alley 4 feet wide, 2 feet to be taken from lot [that is, 2 feet from the northeast half and two feet from the

> southwest half of lot 50] is to be left between the lot herein conveyed and that lying on the southern western side of it, which alley shall run back sufficiently far, and shall be so laid out as to afford convenient access from the Shenandoah Street to the rear of each lot and shall be common to both. And it is also understood that the small space of vacant ground lying between the back part of the lot herein conveyed and the alley running up the hill (to the Catholic Church) back of said lot shall also be common to both lots . . .[9]

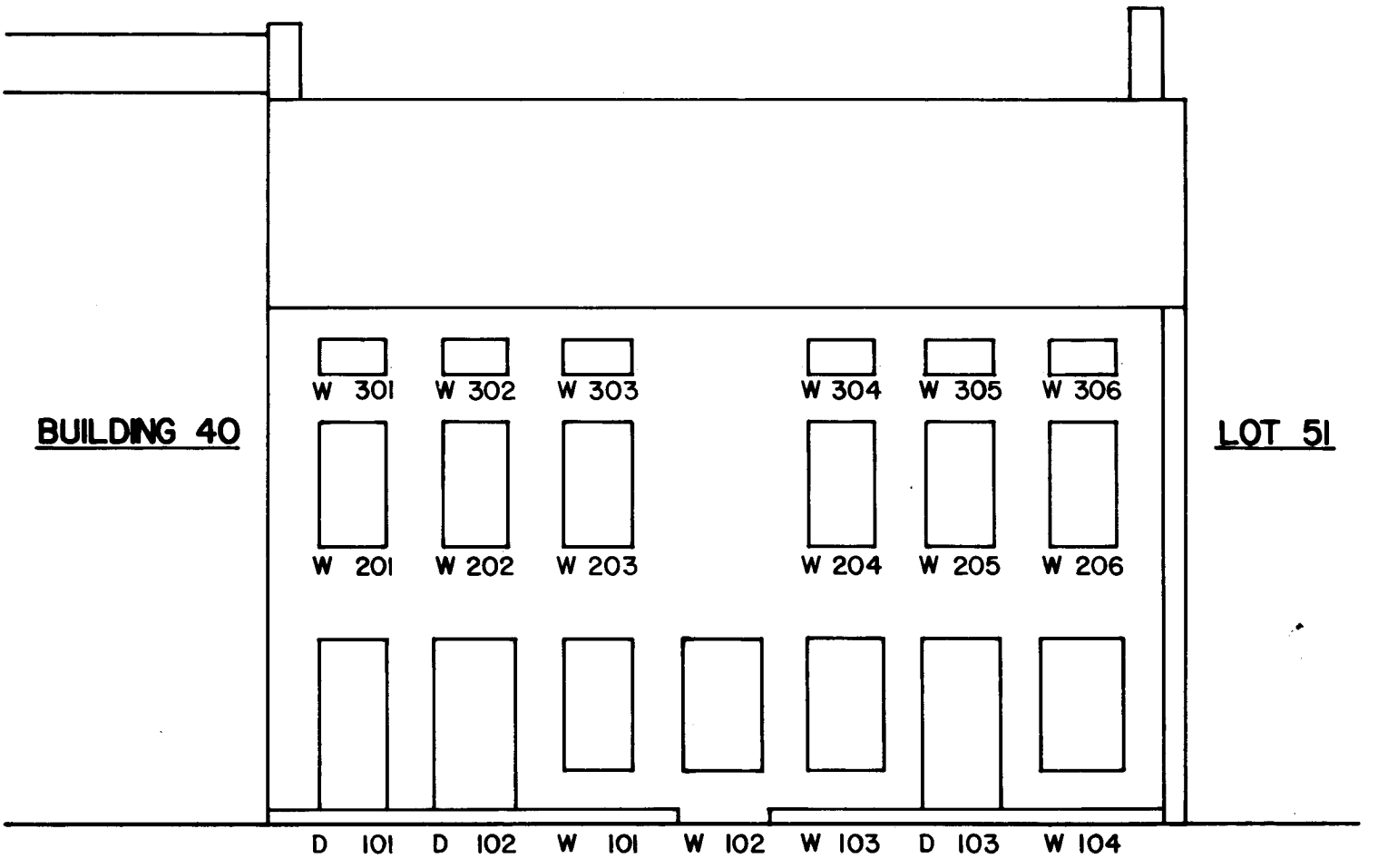
This statement, along with the fact that different people owned each half of the lot, indicates that when building 38 was constructed, it consisted of two separate and, perhaps also, symmetrical units.

Additional evidence of separate units was uncovered in 1978. At that time the archeologists removed the concrete floor on the first level and exposed two parallel stone foundation walls, about 4 feet apart at the center of the building (see sheet 8 of the drawings and photographs 16 and 17). Between these walls, a brick drain and part of a clay pipe, both of which at different times carried water from the back of the building to the street, were uncovered. Also, an investigation of the center front window (window 102) revealed stone infill beneath and on both sides of the existing frame (see photograph 15). The infill suggests that originally this opening was a door or alley entrance, which was wider than window 102. The gap in the dressed water table stones under window 102 measures about 4 feet (see photograph 15), the same width as the alley described above in the deeds. There is another opening opposite window 102 at the rear of the building. This opening, door 106, is also about 4 feet wide and probably was the rear alley entrance. From this evidence, it seems clear that the center alley described in the deeds was an original feature of the building (see figures 2 and 4).

Presently, the first-floor front and rear elevations are not symmetrical; however, evidence indicates that they were symmetrical originally. On the front elevation, the opening on the extreme south end of the elevation is a door (door 101), but the opening on the extreme north end is a window (window 104--see figure 1 and photograph 14). A study of the historic fabric behind the frame of door 101 indicates that this opening was, in fact, at one time a window: part of the stone opening is splayed (see photograph 34), and this splayed portion of the opening lines up with the existing front windows. With door 101 as a window, the front elevation would have been symmetrical (see figure 2).

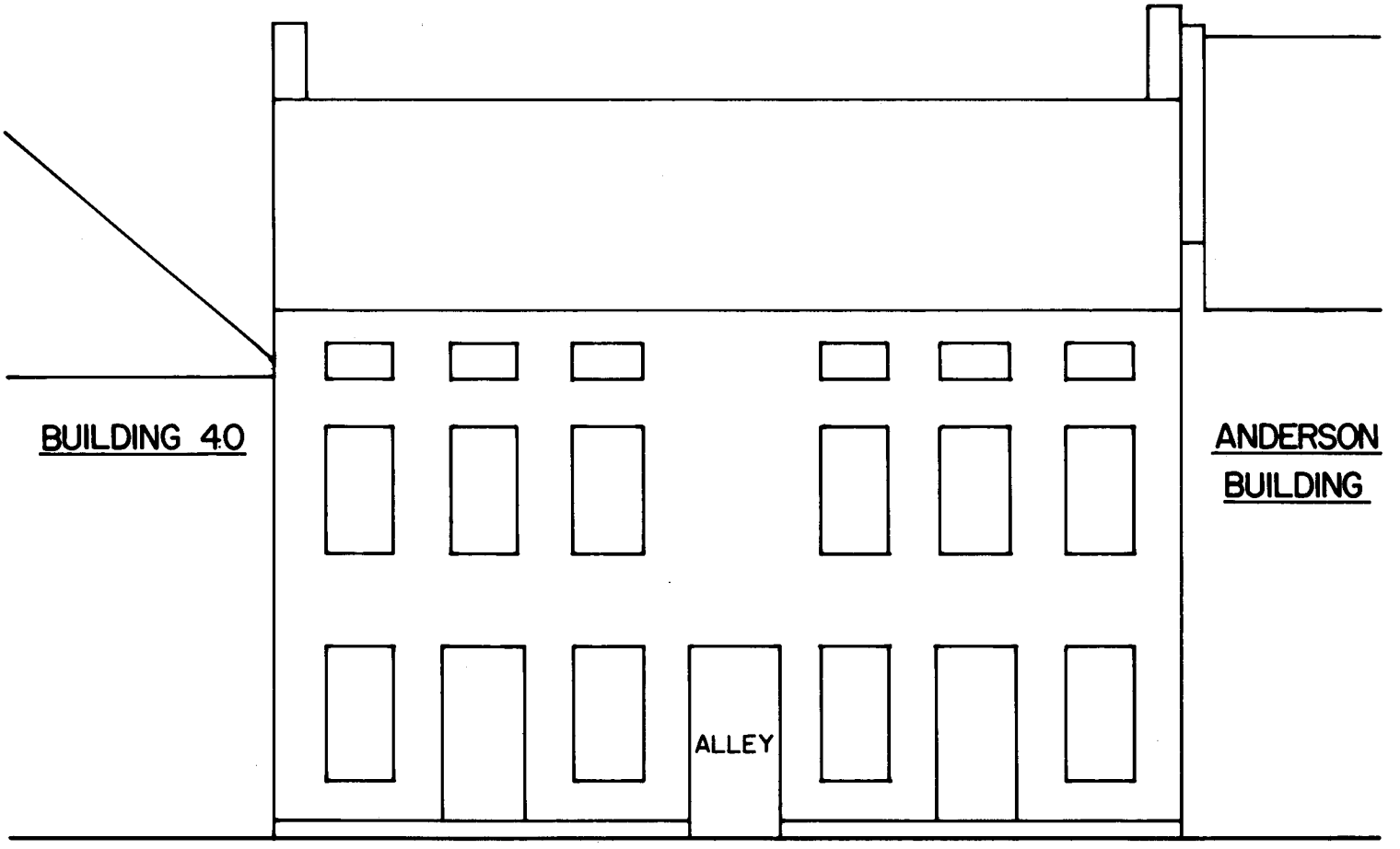
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9. National Park Service, Denver Service Center, "Historic Structure Report, the Edward Tearney Buildings 38 and 39 on Wager Lot 50, Historical Data," by Charles W. Snell, 1979, p. 11.



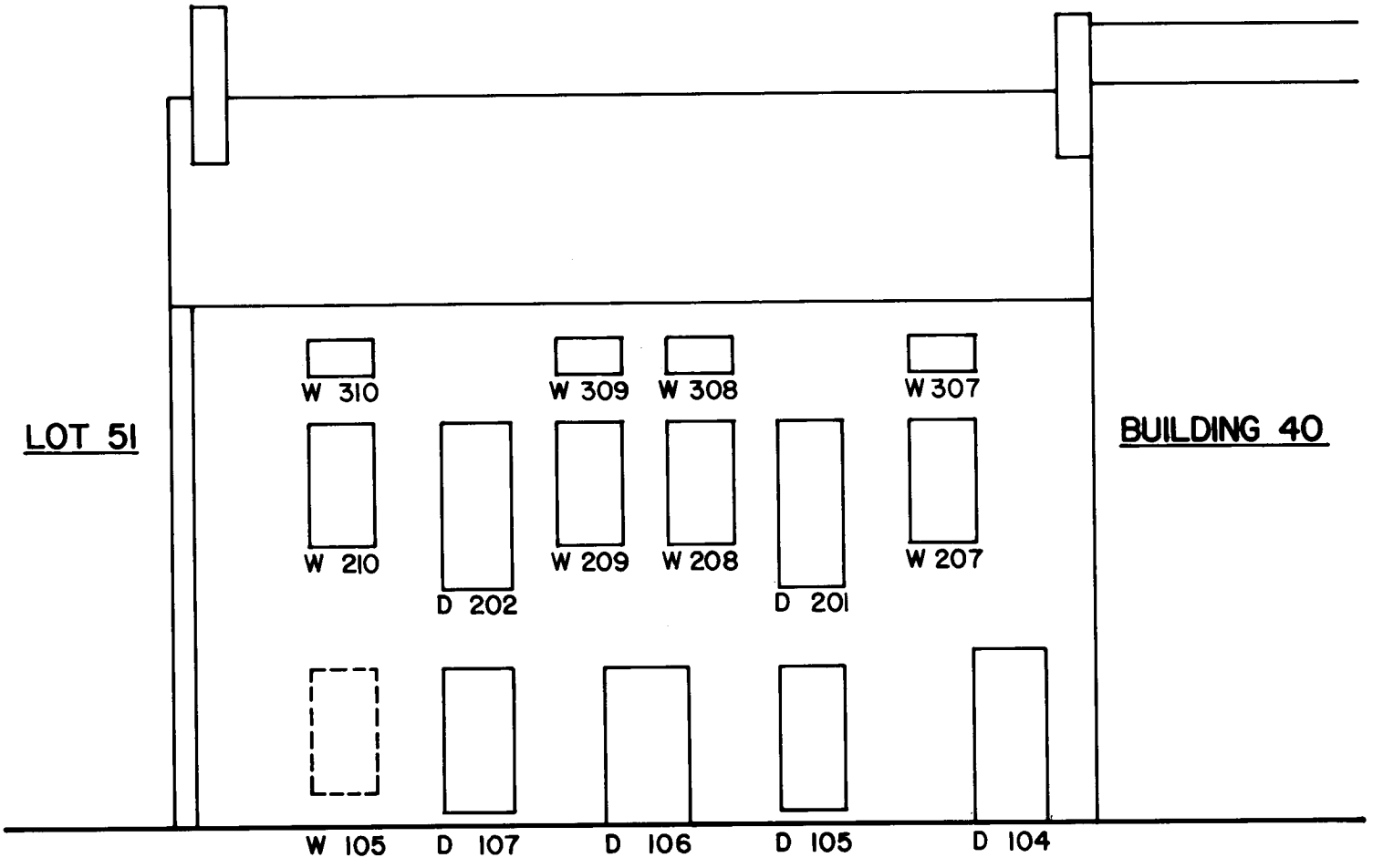
BUILDING 38 (PRESENT)
FRONT ELEVATION

FIGURE 1



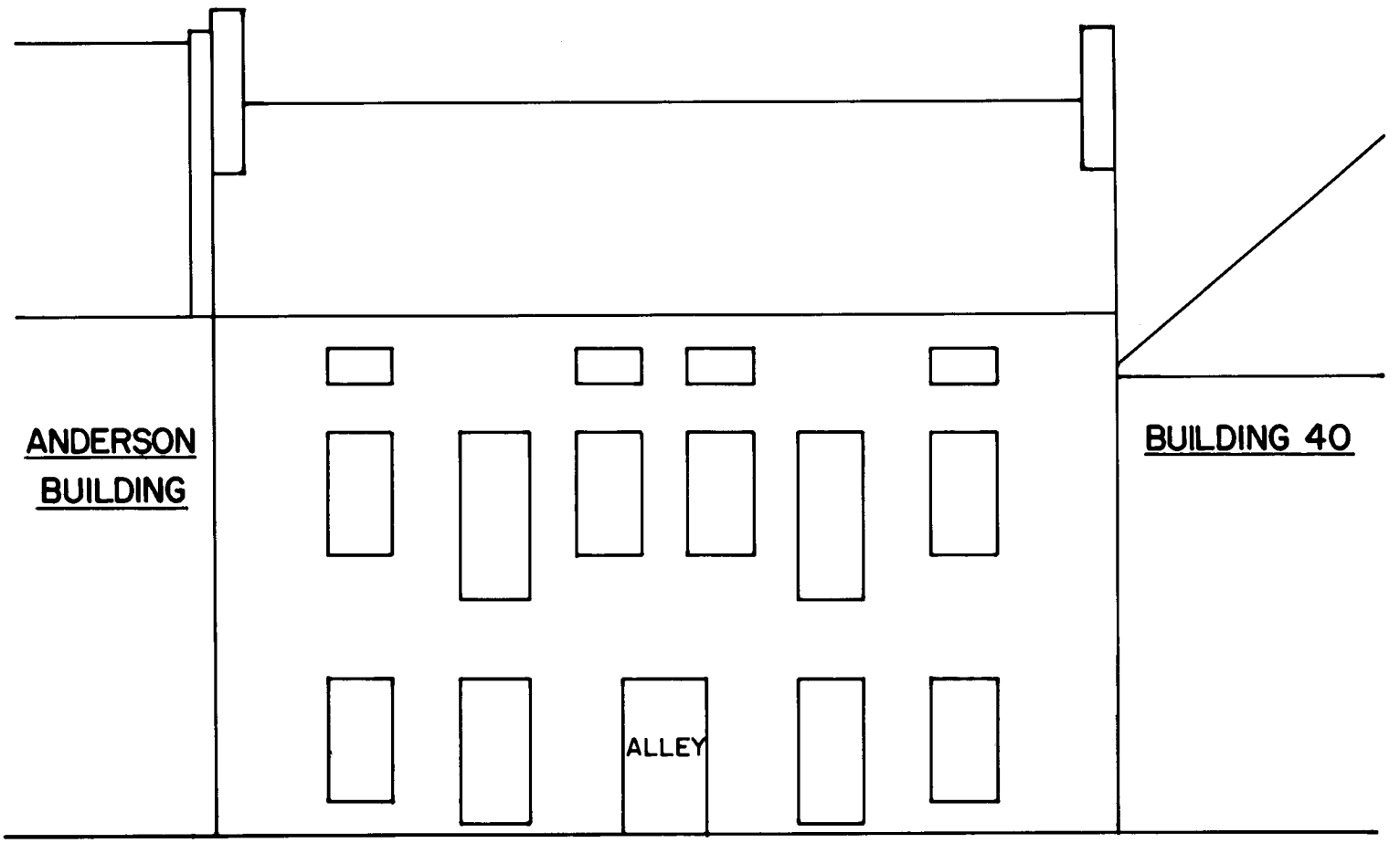
BUILDING 38 (1844 TO 1860'S)
FRONT ELEVATION

FIGURE 2



BUILDING 38 (PRESENT)
REAR ELEVATION

FIGURE 3



BUILDING 38 (1844 TO 1860'S)
REAR ELEVATION

FIGURE 4

The openings on the first-floor rear elevation also contradict a symmetrical pattern (see figure 3). But again, changes are evident. There is a brick patch at the extreme north end of the rear stone wall (see photograph 26). The size and shape of this patch (referred to in the drawings and figure 3 as window 105) indicate that this area of the rear wall once contained a window. The location of the patch indicates that this window was situated directly under window 210.

Door 104, at the extreme south end of the rear elevation, is different from the other first-floor rear openings (see figure 3 and photographs 39-41). Looking at the rear elevation, stone lintels are visible above doors 106 and 107 and above window 105 (the lintel above door 105 is concealed by stucco). In contrast, a wood lintel is visible above door 104. Also, the top of the opening for door 104 is much higher than the tops of the other rear first-floor openings (which all line up evenly). And, finally, this opening is the only first-floor opening (besides door 106 which originally provided access to the center alley) not lined up directly under a second-floor opening. On the interior side of the rear wall, just to the north of door 104 and directly under window 207, is a large piece of wood (3 1/2 inches by 7 inches--see photograph 43). The bottom of this wood lines up with the tops of window 105 and doors 105, 106, and 107. This coincidence suggests that this wood might have at one time functioned as a lintel over an opening . Similar wood lintels are visible on the interior side of the rear wall over window 105 and door 107 (the lintels over doors 105 and 106 are concealed by plaster). Thus, the evidence indicates that door 104 was not an original part of building 38; instead, there was a window directly under window 207 (see figure 4). This window was removed during the 1860s when the center alley was removed, and the function of the alley--to provide access to the backyard--was transferred from the center of the building to what was then a new alley at the southern end. This new alley required a rear door which lined up with the front alley entrance--that is, lined up with door 201.

Unlike the first-floor elevations, the upper-floor levels are at present symmetrical and appear to represent two separate units, which probably have not changed significantly since 1844. Photographs 1, 3, and 14 indicate that the upper-floor fenestration on the front elevation has not changed since at least 1862. Fabric investigation shows no evidence of major changes, and thus there is no reason to believe that this is not the original window arrangement. At the center of the front elevation, at both the second- and third-floor levels, there is approximately 7 feet of solid wall separating two similar groups of windows (see figures 1 and 2 and photograph 14). On both the north and south halves of the front elevation, there are three small three-paned casement windows spaced about 2 feet apart at the third-floor level lined up over three double-hung six-over-six windows at the second-floor level.

There are no historic photographs which show the rear, or west, elevation. A study of the historic fabric provides no evidence that the upper floors of the rear elevation have changed significantly (there is evidence that the trim has been altered around windows 207, 208, and 210, but not the size or location of the openings). The fenestration is

symmetrical (see figures 3 and 4 and photograph 38). Each half of the building has a door at the second level with a six-over-six double-hung window on each side of the door. Above each of these windows, at the third-floor level, is a three-paned casement window. The fact that each half of the building--at the second level--has its own entrance indicates that each half was a separate unit.

If these conclusions are correct, building 38 was originally constructed with a symmetrical pattern of openings on its front and rear elevations. The alley which ran through the center of the building divided the first floor into separate units. The window arrangement found on the front elevation and the two entrances on the second-floor level of the rear elevation strongly suggest that each half of the building also contained separate units on the upper floors.

It should be mentioned that in the earliest photograph of the entire front of building 38 (photograph 3), a bay storefront is visible on the north half of the building. It is not known for sure whether or not this storefront was original. However, some factors indicate that the storefront was not part of the original design:

(1) The previously described evidence indicates that the rear elevation and upper-floor front elevation were originally symmetrical. It seems probable, therefore, that the first-floor front elevation might have also been originally symmetrical.

(2) Building 38 could have been symmetrical with storefronts on both the north and south halves. However, there is no evidence that the south half ever had a storefront. The size of window 101 (matching the width of the upper floor windows and differing from the other first-floor windows) indicates that the size of this opening is probably original and has not been modified. Also, while door 101 was at one time a window, the historic fabric indicates that it was a small window and not part of a large storefront.

(3) By the time the photograph of building 38 with the storefront was taken, Edward Tearney owned the entire building, and extensive modifications--those involved with the relocation of the alley--had already taken place. The storefront could have been added as part of these modifications.

Although the evidence seems to reveal a building with a symmetrical arrangement of window and door openings, questions arise as to the original size and details of the openings. The first-floor windows vary in size (see photograph 7). The southernmost window on the front elevation (window 101) is narrower than the other first-floor windows. Window 101, however, is the same width as the upper-floor windows. Since window 102 was at one time an alley entrance and since windows 103 and 104 were at one time replaced by a storefront (see photograph 3), window 101 might well be the only window opening on the first-floor front elevation whose size has not been altered. There are no indications that the size of this window opening has been changed. Since window 101 matches the upper-floor windows (which probably have not been altered

either) and since it is unlikely that originally the first-floor windows would vary in size, all of the first-floor front elevation windows were probably similar in size to window 101. When window 102 was added (at the time the original center alley was removed) and when windows 103 and 104 were restored (after the storefront was removed), windows were installed which were larger than window 101 (and probably larger than the original windows 103 and 104). These "new" windows were consistent with the larger style windows popular at the time and the larger masonry openings created by the storefront and the old alley entrance.

Also, like the second-story windows, these first-floor windows were probably originally six-over-six windows. In photograph 3, a horizontal muntin is visible on the upper half of window 102 (which appears to be open in the photograph), probably indicating that at one time this window was a six-over-six window. Possibly, when window 102 was installed (at the time the center alley was removed), a six-over-six window was chosen to match the other first- and second-floor windows. The first-floor windows were more susceptible to damage (flood damage, for instance) and, having been more affected by the various building alterations than the upper-floor windows, were probably later changed to one-over-one windows (a style more popular in later years).

Some of the windows and doors now have bullnosed frames and some have beaded frames. Since the evidence indicates that fewer modifications have occurred around front windows 201-206 and 301-306, rear windows 209 and 307-310, and rear doors 105 and 202, these openings might be used to help determine the original type of frames. Of these openings, the front windows all have bullnosed frames, and all the rear windows and door 105 have beaded frames. Door 202, however, has a bullnosed paneled frame similar to those found around doors 102 and 103--the panel profiles are similar although the panel sizes differ (see photograph 37). Possibly bullnosed frames were originally used on the front openings, while beaded frames (see photograph 28) were used on the rear. However, all the main entrances, doors 102, 103, 201 and 202, probably had bullnosed paneled frames.

In addition, all of these unmodified windows (windows 201-206, 209, 301-310) have sills but no subsills. By contrast, the windows around which modifications have occurred (windows 101-104 and 207, 208 and 210) all have both sills and subsills (compare photographs 28 and 29). Thus, originally all of the window frames probably had sills, but no subsills.

The doors were probably all wood paneled. The design cannot be known for sure. Hinge marks on the frames, as well as marks at the head of door 102, indicate that the front doors (doors 102 and 103) might have been double doors. The panels on these doors might have matched the proportions found on the bullnosed paneled frames of door 102 (see photograph 37). Doors 105 and 202 appear very old and might be original. These doors, however, are not alike (see photographs 42 and 56).

Although there is now shutter hardware on the upper-floor windows, photograph 3 indicates that around 1870 there were no shutters

on the front upper-floor windows. Shutters with three panels are visible on the first floor. Since extensive remodeling had already occurred when this photograph was taken, it is uncertain whether or not this was the original arrangement, but it does seem likely (note that in photograph 3 shutters also existed on the adjacent building on lot 51, but again only on the first-floor windows). No evidence exists to determine whether or not this arrangement was repeated on the rear elevation.

A porch and stair structure provided access to the second-level doors, as was mentioned in the site description. It is assumed that the original porch was constructed of wood, but the exact configuration cannot be determined: was it one long porch or did each half of the building have its own porch? The archeological investigation of this backyard area revealed no post locations or other clues. The space limitations, however, suggest that there would have been only one stairway and, therefore, probably one continuous porch.

Joist pockets (see photographs 30 and 32) along the rear roof line, as well as the porch roof visible in photograph 4, indicate that the porch had a roof which continued along the entire length of building 38. According to photograph 4, the slope of the porch roof varied. The center section was almost flat, while the slope of the end sections matched that of the main roof of the building. The flat center section might indicate a projection in the porch structure, perhaps where the stairs and/or walkway to the cliff were located. A study of photograph 4 also indicates that the porch roof material might have been corrugated metal. However, not enough detail can be seen in the photograph to make a definite determination. It should be cautioned that the few clues revealed in photograph 4 regarding the porch might reflect modifications rather than original design, since this photograph was not taken until at least 1877.

The exterior (east and west) walls of building 38 were probably stuccoed originally, as they are today. Photograph 3 shows that, at least by the 1870s, building 38 was stuccoed and whitewashed. The original stucco was probably more like the lime-based stucco found on the rear of the building (the deterioriating condition and general appearance of this stucco indicate that it might be original) than the cement-based stucco found on the front of the building. Topping these stuccoed stone front and rear walls was the stepped brick cornice which still exists.

The south wall is now an interior wall (a shared wall with building 40). However, originally building 38 had a south gable which stood above the roof line of building 40 (see figure 1 and photograph 1 for building 40's original roof line). This gable originally had three openings. Photograph 4 shows one opening at the attic level and another at the third-floor level, probably in room 302. The bricked-up opening in room 301 (see photograph 55) indicates a third opening.

There is now a wood shingled roof on building 38. Photograph 8, taken in 1955, indicates that at that time the building had a standing seam metal roof which extended down over the rear porch. Earlier photographs (see photographs 3 and 4) reveal that the wood

shingle roof, rather than the metal roof, was most likely the original type.

The roof line in the mid-1800s was probably the same as it is today, except for the north and south end conditions (and the roof over the rear porch which was previously discussed). The roof did not cover building 38's north wall (see figure 2 and compare photographs 4 and 14). When the 1835 building still existed on lot 51, it shared a wall with building 38. Since the building on lot 51 was taller than building 38, the roof of building 38 butted against the shared brick wall.

The roof condition at the south end of building 38 also differs from the historic appearance (see figure 2 and compare photographs 4 and 13). Originally building 38's roof covered the shared wall between buildings 38 and 40. Prior to the enlargement of building 40, its eaves met the shared wall below building 38's roof line.

In photograph 3, which was taken circa 1865-79, a gutter is visible along the front roof line with downspouts at each end of the front elevation. This is probably the original arrangement.

Two chimneys project from the roof of building 38, one next to the north wall and the other next to the south wall. These chimneys were probably not originally stuccoed, and the north chimney was taller than it is today (see photograph 4).

3. Interior

When building 38 was constructed, it contained two stores on the first floor and two two-story residences on the upper floors. The south half of the first floor was a grocery store, and the north half, a tobacco shop. There is no evidence available as to the original first-floor plan, except that the two stores were divided by a central alley and that each store had a fireplace; one was along building 38's north wall, and the other along the south wall.

It is unknown whether each store consisted of one large space or was divided into smaller spaces. When the investigations began, the only historic-looking interior partition on the first floor was a brick partition. It is doubtful that this partition was original, since it was located only 5 feet from the south wall and fireplace, an unlikely arrangement. This partition was probably added sometime around 1860, when the center alley was removed and replaced by an alley along the south end of the building.

It seems likely, however, that a partition existed in each store under the wooden girder which runs north and south through the middle of building 38 and which helps to support the second-floor joists. Even taking into consideration the support provided by the original center alley's masonry walls, this girder must have had some additional support. A partition in this location would have not only divided each store into two similar-sized rooms, but also would have provided additional support for the girder.

Extensive remodeling of the first-floor level has removed much of the original floor and ceiling coverings, as well as most of the trim. Since there are no pictures or other documentary information describing the original appearance, any re-creation would be mostly speculation.

No evidence remains of the original floor material at the first-floor level. This lack of evidence is not only the result of extensive remodeling, but repeated flooding. Perhaps the first floor originally consisted of a tongue-and-groove wood floor supported by wood joists, with brick rubble infill between the joists. Tongue-and-groove wood floors were common in Harpers Ferry in the mid-1800s; the upper floors also originally had this type of floor.

Except for a small area of wood lath covered with painted plaster along the south end of the building, the first floor now has no finished ceiling. The second floor joists are exposed. These exposed joists have ghost marks of lath, (see photograph 48) indicating that at sometime, and perhaps originally, the first floor had a wood lath and plaster ceiling.

The first-floor masonry walls are now covered with painted plaster. There is no evidence of any other wall covering, and, therefore, the original finish might also have been plaster.

There is at present no interior access to the second floor, and an inspection of the second-story floorboards has not revealed any significant alterations or evidence of previous openings. Originally, stairs in the rear yard probably provided access to the second floor.

The upper floor residences do not appear to have significantly changed over the years. Each apartment contained three rooms on the second floor and three rooms on the third floor. The second and third floors were connected by stairs which wrapped around the southwest and northwest corners of the building's interior. Under each stairway was a closet. Each residence had one fireplace on the second level, above the first-floor fireplaces.

There is evidence that two of the door openings which now exist on the second level (doors 205 and 210) were later additions. Removing some of the plaster around these openings reveals ghost marks and nail holes indicating that lath was removed to accommodate these doors. Thus, rooms 202 and 207 probably originally had to be entered from rooms 203 and 206 respectively.

All the doorways either have, or show evidence of having had doors. Thus, historically all the rooms were probably separated by doors.

With the exception of the closets, most of the ceilings and walls are covered with wood lath and plaster. There is no indiction that this wood lath and plaster were not also the original coverings. Both the second- and third-level flooring is random width 1-inch-thick tongue-and-groove floorboards which appear to be very old and are most likely the original foor covering.

The ornamental trim (see photograph 36) now found around the transoms above doors 102 and 103 (and around many second-floor openings) is probably typical of the trim which originally existed around most of the first- and second-floor windows and doors. However, this trim probably did not exist around doors 105 and 107, the first-floor rear windows, the closet doors, or the doors on the stairs. In contrast, the third-floor trim was very plain, just as it is today.

On the second floor, plain plinths were located at the base of the door trim. Since there is some indication that the second-floor trim was copied on the first floor, these plinths might also have been found on the first floor. There are two types of base found on the upper floors, and both types are probably original. Again, one (perhaps the taller base found in rooms 203 and 206) or both types might have been repeated at the first-floor level.

B. Existing Conditions

1. Site

Building 38 is located on lot 50 on the west side of Shenandoah Street. In front of the building is a stone walk about 10 feet wide, which was recently installed by the Park Service. The only vegetation in front of this building is a recently planted maple tree (see photograph 14).

At the time building 38 was constructed, there were existing buildings on the adjacent lots. The side walls of these buildings became the side walls of building 38 as well. The building on lot 49 (building 40), south of building 38, still stands. However building 40 was enlarged in 1873, and it is now a three-story brick and stone structure which is covered with stucco at the first-floor level (see photograph 13).

The building to the north on lot 51 has been torn down, and the lot is now a grassy open space (see photograph 18). There is one sweetgum tree near the center and several shrubs along building 38's north wall. A low stone retaining wall separates this grassy area from the sidewalks along Shenandoah and High Streets; another section of wall (level with grade) cuts across the rear of the lot parallel with Shenandoah Street. These walls are not visible in photograph 7 taken in 1955 and, therefore, must have been recently constructed.

Wood shoring has been placed along building 38's north wall (see photograph 18). After the building on lot 51 was torn down in the 1920s, the north wall of building 38 began deteriorating and falling away from the building; this shoring is an attempt to stabilize this wall.

A brick paved backyard extends 7 to 12 feet to the west of building 38 at the ground-floor level. It is bordered on the north by a 2 1/2-story stone and brick wall (see photograph 30); on the south by a low stone wall and by part of building 40 (see photograph 22); and on the rear, or west, by building 39 and a rock cliff. The rock cliff creates a 12-foot wall at the rear of the backyard (see photograph 21). The top of this cliff is level with the second floor of building 38, and at the edge of this cliff is a concrete and stone stairway which provides

access up to the top of another rock cliff and the public walkway further beyond (west of) building 38 (see drawings, sheet 2). Before the rear porch was removed, this stairway provided access to the second-level porch (see photograph 23).

The nonhistoric concrete porch completely covered the backyard space before it was removed in 1978. This structure had concrete block walls at the first-floor level, thus creating a three room addition at the first-floor level (see drawings, sheet 3). A wood bridge and stairs connected the porch with the rear entrance to building 40.

Two front doors (doors 102 and 103) provide access to building 38. Another front door (door 101) exists, but it has been boarded (see photograph 14).

Six doorways exist on the rear of building 38; four of these doors (doors 104-107) are found at the first-floor level (see photograph 39), and two (doors 201 and 202) at the second-floor level (see photograph 38). Doors 104, 106, and 107 are merely openings with no doors. Because there is no longer a functioning alley through building 38 and the backyard is bordered by a 12-foot cliff, these first-level rear doors merely provide access from the interior of building 38 to the backyard; there is no access to these doors directly from the street, as the alley once provided. Door 201 is reached from the backyard by temporary wood stairs. However, the other second-level entrance, door 202, can only be reached by means of a temporary wood bridge, which spans from the top of the cliff to the door sill (see photographs 21 and 22).

2. Exterior

a. Walls

The front and rear walls of building 38 are constructed of stone and are covered on the exterior with stucco. They are about 1 foot, 9 inches thick at the first-floor level and narrow down to about 1 foot, 7 inches at the third-floor level. The cement stucco on the front wall is a later, coarser stucco than the lime-based stucco found on the rear wall. Remains of whitewash are evident on the rear wall stucco; much of the stucco on the first-floor level of this wall has been removed.

Both walls are capped by a stepped brick cornice. The front cornice consists of three courses, and the rear cornice, two courses. The middle row of the front and the top row of the rear cornice are dentil courses. The rear cornice also contains pockets for the porch rafters (see photographs 12, 30, and 32).

The rear stone wall is slightly distorted at the second-floor level where the wall meets building 40 (see photograph 24). Apparently building 40 had a window in the party wall between buildings 38 and 40. The slight adjustment made during the construction of building 38's rear wall allowed the window to remain. This window has since been filled with brick. It appears (from a line in the stone wall) that there might have also been another opening the first floor level (see photograph 22). However, building 38's west wall was not distorted to

accommodate this opening and, therefore, the opening was probably eliminated during the construction of building 38.

The side walls of building 38 are also constructed of masonry. The south wall is actually an interior wall, since it is a shared wall between buildings 38 and 40. This wall is stone at the first- and second-floor levels, but changes to brick about 1 foot, 8 inches up from the third floor. Above this 11-inch band of corbelled brick is a wood plate. The wall then continues up in an irregular combination of stone, brick, and vertical wood members. Photograph 54 shows a portion of this wall (in room 302) as was revealed when plaster was removed. A bricked-up opening in this wall is located in room 301 (see photgraph 55). Photograph 4 indicates that additional openings were located in this wall: one in room 302 and the other in the attic. Originally building 40's roof sloped down towards this wall (see figure 2 and photograph 1). The 11-inch-high corbelled brick section of wall probably was a brick cornice under building 40's eaves. When building 38 was constructed, the height of this wall was increased, forming building 38's south gable. When building 40 was enlarged (see figure 1 and photograph 7), this south gable became an interior wall and the windows were bricked up.

The north wall is a common bond brick wall with headers at every sixth course. It is three brick wythes thick to the third floor and two brick wythes to the gable peak (see photograph 8). This wall was also at one time an interior wall: it was the shared wall between building 38 and the building which occupied lot 51. However, after the Anderson Building was torn down (in the 1920s), the north side of this wall--the surface which had always been an interior, protected surface--became exposed to the elements and began to deteriorate. This deterioration, combined with the fact that this wall was originally part of the Anderson Building and tied into the front and rear walls of that building and not building 38, have caused this wall to separate from building 38, requiring shoring to be used to help hold it in place. This brick wall is unpainted and contains a few concrete patches. It extends 5 feet beyond the rear of building 38 (see photographs 4 and 20), indicating that the building on lot 51 was a deeper building. This wall meets a stone wall at the first-floor level; on top of the stone wall, an 8-foot brick addition to the brick wall has been constructed (see photographs 19 and 20). This brick addition is 4 1/2 inches narrower and contains what appears to be joist pockets on its north side at the second-floor level.

b. Roof

A new wood shingle gabled roof was installed in 1964, when extensive repair work was done to the roof framing system. Photographs 9-12 were taken while these repairs were being made. The roof consists of wood shingles laid over underlayment and 1 1/8-inch by 12 1/2-inch spaced wood sheathing. Moss is growing on the wood shingles. The roof is supported by wood rafters which rest on the front and rear exterior walls. These rafters extend slightly beyond the edges of the masonry walls; screening covers the exposed edges of the overhanging rafters.

A galvanized steel gutter painted black runs along the east and west roof line. Snowboards are located on the roof several feet up from the eaves (see photograph 14). A bargeboard runs along the north edge of the roof, flush with the north wall (see photograph 18).

c. Chimneys

Building 38 has two chimneys: one at the north wall and the other at the south wall (see photograph 13). The chimney at the north wall is taller. Both chimneys are covered with stucco.

d. Windows

At present building 38 has 24 windows. The first floor has four windows on the front elevation, but no windows on the rear. Each of the upper floors contains six windows on the front elevation and four windows on the rear.

The upper-floor windows form a very regular pattern. The third-floor windows are casement windows, which are all about the same size and are the smallest windows on the building. They are hinged along one side and open inward. Most of the windows, however, are missing their hinges; they have hinge marks on one or both sides, and nails hold the windows in place. Each of these windows is divided vertically into three panes of glass (see photographs 30 and 31).

The second-floor windows are six-over-six and are also all about the same size (see photograph 27). These windows are similar in width to the third-floor windows and are lined up directly under them. The panes of glass in both the second- and third-floor windows are approximately 10 inches by 14 inches.

The various alterations made at the first-floor level have resulted in a divergence from the regular pattern found in the upper-floor openings. The width of the first-floor windows varies from 2 feet, 10 1/4 inches (the sash opening of window 101) to 3 feet, 4 3/8 inches (the sash opening of window 102). Only window 101, the narrowest of the first-floor windows, matches the width of the upper-floor windows. Also, the first-floor windows are unlike building 38's other windows: they are one-over-ones and thus contain much larger panes of glass than are found in the other windows (see photograph 15).

All of building 38's window openings are splayed and have wooden frames. The first-floor front windows have beaded frames, as do all the rear windows. The upper-floor windows on the front of the building, however, have bullnosed frames (see table 1).

The first-floor front windows and second-floor rear windows (except window 209) have a sill and subsill (see photographs 27 and 28). All of the third-floor windows, the upper-floor front windows, and window 209 have only a subsill, which also functions as a sill (see photographs 29 and 30).

The windows are in need of repair. Many of them cannot be opened or are missing parts of their frames.

TABLE 1
TYPES OF FRAMES ON WINDOWS AND EXTERIOR DOORS

	DOOR	FRONT/ BEADED	FRONT/ BULLNOSED	REAR/ BEADED	REAR/ BULLNOSED
	101	X			
	102		X		
First	103		X		
Floor	104	(No frame)			
	105			X	
	106	(No frame)			
	107			X	
Second	201			X	
Floor	202				X
	WINDOW				
First	101	X			
Floor	102	X			
	103	X			
	104	X			
	105	(No frame)			
	201		X		
Second	202		X		
Floor	203		X		
	204		X		
	205		X		
	206		X		
	207			X	
	208			X	
	209			X	
	210			X	
	301		X		
Third	302		X		
Floor	303		X		
	304		X		
	305		X		
	306		X		
	307			X	
	308			X	
	309			X	
	310			X	

e. Doors

There are at present nine entrances to building 38. Two of these (doors 104 and 106) are merely masonry openings with no frames or doors (see photographs 39-41). Doorway 107 also has no door, but it does contain partial remains of a beaded wood frame (see photograph 44). And one other opening, doorway 101, has no door and is not now functioning as an entrance (see photograph 34). This opening

is boarded by a piece of plywood; behind the plywood (inside the building) is a wooden paneled door frame and picket gate 3 feet, 4 3/4 inches high.

These entrances without doors probably did not require doors in recent years: any existing doors were either removed or not replaced or repaired as they deteriorated. Doors 106 and 107 were interior doors; the concrete structure which provided a second-level porch and access to the upper floors also enclosed the first-floor backyard, making it an interior space. The gate at door 101 was probably used when the south end of the building functioned as an alley (see photograph 33) and doors 101 and 104 functioned as alley entrances (it should be noted that as recently as 1955 door 101 did have a wood panel door--see photograph 7).

Two types of doors are found: wood panel doors and wood panel doors with one large pane of glass. There are two exterior wood panel doors: doors 105 and 202. They are both found on the rear elevation, but are not similar. Door 105 has six panels arranged in three rows and includes three different sized panels (see photograph 42). This door appears to be very old, but the door is unlike any others in building 38. Door 202 has only four panels: two larger panels over two smaller panels (see photograph 56). This door is also very old. Although this door is unlike the other exterior doors, its panel profile matches the typical panel profile of the interior doors.

Three doors (doors 102, 103, and 201) contain a large pane of glass on the upper half of the door. The first-floor doors, doors 102 and 103, are similar in size and design, with one panel below the large pane of glass (see photographs 14 and 35). Door 201, however, is a narrower door and has two panels below and two panels above the large pane of glass (see photograph 45). The door appears to have been a four-panel door (similar to door 202, its counterpart on the north side) that was altered to accept one large pane of glass.

All of the first-floor, front doors (doors 101-103) have transoms above the door openings. The transom above door 101 has one row of three lights (see photograph 33). The transoms above doors 102 and 103 are similar, each having one row of four lights (see photographs 35 and 36). Since door 101 is now boarded, the transom is not visible from the street.

The first-floor front-door openings (doors 101-103) and the second-floor rear-door openings (doors 201 and 202) have wooden frame reveals. The frame reveals at the jambs and heads of doors 101, 102, and 202 and the head of door 103 are paneled (see photographs 34 and 37). The paneled frames around doors 102, 103, and 202 are bullnosed and have similar panel profiles. The size of the panels at the head of doors 102 and 103 are the same; however, they differ from the size of the panel at the head of door 202. The paneled frame around door 101 is beaded and is unlike the other paneled frames. Since this door opening was originally a window opening, this frame is not original.

Door 201 and the jambs of door 103 have plain wooden frame reveals. Part of an older, wooden, bullnosed frame is visible behind door 103's frame. Door 201's frame is bullnosed. Three inches of brick infill along the door's south side (see photograph 46) suggest that the size of this door might have been altered sometime after the original construction. However, a comparison with door 202 indicates that a change in frames, rather than doors, might have necessitated this brick infill. The width of both doors and of both stone openings is about the same. However, the width of the paneled frame around door 202 is 2 1/2 inches, but the plain frame around door 201 is only 1 1/2 inches. Probably door 201 originally had a door frame similar to that now found around door 202.

The reveals (on the interior side) of the two original first-floor back-door openings (doors 105 and 107) are slightly splayed (see photographs 42 and 44). There are no wooden frame reveals at these openings.

Some of the exterior doors have bullnosed frames, and others have beaded frames. Considering all of the doors there appears to be no pattern to this distribution (see table 1). However, taking into consideration only the original frames, a pattern is evident. The original parts of the front-door frames (found on doors 102 and 103) and the second-floor, rear-door frames (found on door 202) are bullnosed. In contrast, the first-floor, rear-door frames (found on doors 105 and 107) are beaded.

3. Structural Systems

Several of building 38's foundation walls were uncovered during the 1978 archeological investigations:

(1) foundations for the two walls which formed the central alley prior to 1865.

(2) foundations for the brick wall, which, along with the building's south wall, formed an alley after the center alley had been removed.

(3) foundations for part (the northeast corner) of building 38's exterior brick and stone walls.

From what was uncovered, it can reasonably be assumed that all of building 38's foundation walls are constructed of local shale bearing directly on beadrock.

Of the perimeter walls, only the 1-foot, 9-inch-thick east and west walls are load bearing. They support the second- and third-story floor joists and roof framing system. This structural design was necessitated because building 38 was built between two existing adjacent structures and utilized one wall from each as party walls: the front (east) and back (west) stone walls were butted directly against the adjacent buildings.

One serious structural problem developed as a result of this arrangement. When the Anderson building was torn down, the

north side of the party wall--which had always been an interior surface--was exposed to exterior weather conditions, causing this wall to deteriorate. The wall gradually moved away from building 38 so that there is now a 2 3/4-inch gap between the party wall and the west wall of building 38 at the roof line.

The mechanics of what happened are similar to the mechanics involved in felling a tree by cutting a notch on one side. In the case of this wall, the bricks are deteriorating because they are low-quality bricks intended for interior conditions only, and the mortar joints are not detailed to shed water. This condition is aggravated by the fact that the corners of this wall are not tied into the front and rear walls of building 38 and thus offer no lateral support (some lateral support is provided by two tie rods in the attic; recently wood shoring was added on lot 51 for additional support). The chimney (an addition to this wall) appears to be stable; localized signs of failure are visible several feet from, on either side of, the chimney.

The only existing interior wall of structural significance bisects the second floor parallel to the front of the building. This wall supports the third-story floor system and partition directly overhead. It consists of 2-inch by 4-inch studs, spaced approximately 24 inches on center. This framing is covered on both sides with plaster and wood lath. This wall and the second floor are supported by a 5 1/4-inch by 9-inch wood girder original to the structure. This girder is, in turn, supported by a 5 1/2-inch by 11 1/8-inch wood beam laid sideways under the girder (see photographs 47 and 49), and five wood columns (one, 4 inches by 6 inches and four, 6 inches by 6 inches) spaced at irregular intervals. Historically this girder was probably supported by the masonry alley walls and frame partitions--in each store--under the girder.

The second-story floor system consists of 2 1/2-inch by 8 3/4-inch wood joists spaced 24 inches on center. They run east and west, and are supported by the center girder and the front and rear walls (see photographs 47-49). The joists, most of which are red pine, span approximately 14 feet. One-inch-thick random width tongue-and-groove flooring covers the joists. The original peg connections between the floor joists and the girder and the splice detail used to connect various lengths of this girder are still intact.

The third-floor framing system is similar to the second: 2-inch by 8-inch joists spaced approximately 22 inches on center are supported by a center girder (whose size has not been determined) and the front and rear walls. Above the center girder is a partition consisting of 2-inch by 4 1/2-inch studs, spaced 22 inches on center and covered on both sides with wood lath and plaster. Originally the studs of this wall were connected to the roof collar beams for lateral support. However, they are no longer connected, probably a result of the repairs made to the roof framing system in 1964.

Both the second and third floors slope down from the perimeter walls toward the center of the building. This deflection, which is as much as 7 inches at the second floor, can be attributed to the alterations in the support system at the first floor (removal of the masonry alley walls and probable partitions under the girder).

Following a fire and a period of neglect, repairs were made to the roof of building 38 in 1964 (see photographs 9-12). As a result of these repairs, the roof framing system is a combinaton of old and new. The framing system consists of wood rafters, 2 feet on center, running east and west. Some of these rafters are probably original; they are old, sagging and partially burned (these rafters are on the south 27 feet of the building). Other rafters (those on the north end of the building) are relatively new, having been installed in 1964. The original rafters taper from a section dimension of 3 inches by 5 inches (at the supporting masonry walls) to 3 1/2 inches by 3 inches (at the peak); the new rafters taper from 2 1/2 inches by 5 1/2 inches (at the supporting masonry walls) to 2 1/2 inches by 3 3/4 inches (at the peak).

The original rafters are braced at their midspan (±1 foot) by original 3 3/4-inch by 3 3/4-inch collar beams, while the new replacements at the north end of the building are braced by 3 1/2-inch by 3 1/2-inch new collar beams. All of the rafters, both the original rafters and the new replacements, are also braced by nonhistoric 1 by 6 wood braces, which extend from the midspan area of the collar beam to each rafter, 2 feet, 5 inches down from the peak.

All rafters are connected at the peak to their respective counterparts on the opposite side by splice joints and 3/8-inch dowels. Collar beams are spliced to rafters and nailed (see photograph 52), while other bracing members are simply lapped and nailed (see photograph 50).

Both the original and new rafters have been reinforced by adjacent (located on the rafters' south side), tapered, nonhistoric rafters (see photograph 52). These rafter reinforcements were not part of the original design for the roof framing system but were added during the 1964 repairs (as were the 1 by 6 wood braces).

The rafters bear on 2 by 10 wood plates, which in turn sit on the east and west masonry walls (see photograph 51). Also, 1 1/4-inch by 4 1/2-inch rafter end braces sit on the stone wall and are connected to the historic rafters (see photograph 53).

4. Interior

a. Floor Plans

Presently, lumber is being stored on the first floor of building 38, but the upper floors are vacant. The first floor has undergone many alterations and now has no interior partitions. It consists of one large open area about 40 feet by 26 feet, interrupted only by five wooden columns.

The upper floors contain two separate two-story apartments, one on the south side of the building and the other on the north side. They are entered by means of the two rear exterior second-level doors, doors 201 and 202. These doors are reached by temporary wooden bridges and stairs located in the backyard of building 38 (see photograph 22). There is no interior access to the upper floor apartments.

Each of these apartments contains six rooms, three on the second floor and three on the third. The floors are connected by interior stairs which wrap around the southwest and northwest corners of the building (see photographs 68 and 71). These two apartments have identical floor plans with two smaller rooms on the front or east side of the second floor and one larger room on the west or rear side of the second floor. The plan on the third floor is similar. Each apartment has one closet located on the second floor under the stairs (see photographs 66 and 69).

Apparently two changes have been made to the upper-level floor plans:

(1) It appears that at one time there might have been a door in the partition separating rooms 201 and 205. This door would have connected the two apartments. Plinths interrupt the base along both sides of this wall. These plinths and a door were probably added at some time after the building had only one owner (see photograph 65).

(2) Evidence previously described in the historic appearance section indicates that doors 205 and 210 were later additions. Originally, rooms 202 and 207 had to be entered from rooms 203 and 206 respectively.

Additional interior floor space existed prior to the investigations of building 38; the concrete porch and stair structure which provided access to the second floor also created three additional rooms at the first-floor level (see drawings, sheet 3). This structure was not historic and has been torn down.

b. Partitions

At present there are no interior partitions on the first floor. In 1978 when the archeological investigations began, all of the first floor partitions were removed. These included:

(1) a brick wall, which was located about 5 1/2 feet from the south wall of building 38 (see drawings, sheet 3) and which had probably been constructed during the 1860s, when the center alley was moved to the south end of the building;

(2) a nonhistoric, plywood-covered, wood stud wall, which was parallel to the brick alley wall and divided the remaining space into two rooms; and

(3) the concrete block walls of the rear addition.

The upper-floor partitions do not appear to have been significantly altered since 1844. They are constructed of wood studs covered with wood lath and plaster. In some cases, the plaster is painted and contains many layers of wallpaper. The wallpaper on some walls is also painted. In other cases, the painted plaster contains only small fragments of wallpaper. Two walls are not composed of wood lath and plaster:

(1) the framing around the stairs, which is constructed of painted wood (see photographs 66 and 69);

(2) parts of the partition separating rooms 201 and 205, which contain metal lath and wallboard (this is the same partition in which a door was added at one time, as described in the floor plan section).

The interior walls are in need of repair. There are many cracks and holes in the plaster and in several places large areas of plaster are missing see (photograph 67).

There is a 7-inch round opening in the west wall of room 203 and a 6-inch round opening in the west wall of room 305.

c. Floors

At the first-floor level, the concrete floor was removed during the 1978 archeological investigation. The removal of the concrete floor and the investigations which followed left an irregular floor surface consisting of packed dirt and various masonry remains of past structures and partitions.

The upper floors are constructed of 1-inch-thick, random width, tongue-and-groove wood flooring which runs north and south. The floors are very worn and dirty, making it difficult to determine whether or not they ever had any finish on them. In a few rooms (rooms 203, 205 and 303), a portion (around the room's perimeter) of the floor has been painted.

The upper floors sag considerably. The second floor has a maximum sag at its center of about 7 inches; similarly, the third floor sags about 3 inches.

There are several small holes or patches in the floors:

(1) in room 203 there is a 1-foot-square patch in the floor;
(2) a 9-inch round hole is located in the floor of room 206;
(3) an 8-inch by 12-inch hole exists in the floor of room 303.

d. Ceilings

Several of the finished ceilings have been removed from building 38. Nearly all of the first-floor ceiling has been removed; only a small portion of the wood lath and plaster remain at the south end. The wood joists and the second-floor tongue-and-groove decking are exposed throughout the remaining area. Ghost marks of wood lath are visible on all the joists. In 1978, however, when the archeological investigations began, the first floor had a wood paneled ceiling. Probably the entire first floor originally had a wood lath and plaster ceiling, and then at some time the plaster ceiling was removed and replaced with wood paneling everywhere except at the south end (in the "new" alley). During the 1978 investigations, the wood paneling and some of the remaining plaster were also removed.

The second- and third-floor ceilings consist of wood lath and plaster attached to wood joists at the second-floor level, and wood rafters and collar beams at the third-floor level. The plaster is painted. In some places it contains many layers of wallpaper, which sometimes is also painted. In other places the plaster contains evidence of wallpaper having been removed from the wall. These ceilings are in need of repair, since there are many cracks and holes in the plaster. Nearly all of the lath and plaster has been removed from the third-floor ceiling on the north half of the building. Room 302's ceiling has a rectagular opening which provides access to the attic.

e. Doors

There are fourteen interior doors, all located on the second and third floors. Any interior doors which might have existed on the first floor have been removed. Of these fourteen openings, four (doors 206, 207, 209 and 303) no longer have doors. Hinge marks on the frames, however, indicate that doors once existed.

The two closet doors (doors 204 and 211) located under the stairs are batten doors (see photographs 66 and 69). All other interior doors are wood panel doors.

With one exception (door 210), all of the interior wood panel doors have six panels (see photograph 59). These panels are arranged in two rows of three panels, the top row being taller than the bottom row. With the exception of door 212, these doors are similar in size: they are about 2 feet, 11 inches wide and 6 feet, 7 inches tall. The top panels are about 7 inches wide and 3 feet, 2 inches tall and the bottom panel, 7 inches wide and 1 foot, 10 inches tall. The panel profiles for these doors are similar. These interior doors are the most common type found in the building and are probably original.

The six-panel door, which varies somewhat in size from those described above, is door 212 (see photograph 70). This door is the same width as the other doors, but is shorter--it is only 6 feet tall. This door was made shorter to allow it to sit on the third tread of the north stairs. (Its counterpart on the south side of the building sits on the second tread and, therefore, can be taller and matches the height of the typical six-panel doors).

The interior of building 38 has one four-panel door: door 210 (see photograph 57). As has been discussed, this opening is probably not original. This door's counterpart on the south side of building 38 (door 205)--also probably not original--does, however, match the other typical six-panel doors. But hinge marks on the frame (and not on the door) indicate that this door is not the first door to occupy this opening. Perhaps when door openings 205 and 210 were added, doors were salvaged from another building. Then, sometime later, door 205 was replaced by a door taken from one of the other door openings in building 38, which is now missing its door or from a first-floor doorway that has been eliminated. Also, doors 205 and 210 might have been added at different times. Not only do their sizes differ (door 210 is only 2 feet, 5 inches wide by 6 feet, 4 inches tall), but the jamb and head details for each vary (see drawings, sheets 17 and 18).

Of those doorways which are probably original openings and have original doors (doors 105, 201-204, 208, 211, 212, 301, 302, and 304), most have box locks and metal or ceramic (white or brown) round knobs. Box locks are on doors 105, 201-203, 208, 212, and 302. No locks are on doors 204, 211, 301, and 304 (however, marks on either the frames or doors indicate that at one time doors 206, 209, 301, 303, and 304 probably also had box locks). Doors 201, 202, and 212 have metal knobs, while ceramic knobs are on doors 203 (a white knob on one side, a brown knob on the other) and 208 (a brown knob). Closet door 204 has a small round wooden knob. No knobs are on doors 105, 211, 301, 302, and 304.

f. Trim

The trim in building 38 is not consistent. The interior trim around the doors and windows varies: some doors and windows have no trim (doors 101, 104-106, 204, 211, and 301-304 and windows 101 and 301-310); some have one or more pieces of plain wood (doors 201, 205, and 210 and windows 102-104, 207, 208, and 210); some have ornamental architraves (door 208 and windows 201-206); some have a combination of plain and ornamental trim (doors 102, 103, 202, 206, 207, and 209 and window 209); and some have beaded trim (doors 107, 203, and 212).

The first and third floors tend to have no trim or very plain trim. The only trim on the first-floor front windows is plain wood strips across their tops (see photograph 25). Doors 102 and 103 are also bordered by plain pieces of wood (see photograph 35). The remaining parts of door 107 reveal that the door once was surrounded by a simple beaded trim (see photograph 44). In contrast, the transoms above doors 102 and 103 have ornamental trim (see photograph 36) similar to that found around many of the second-floor openings. Plain corner blocks (which are also found on the second floor) are found on these doors as well. Probably this lack of decorative trim on the first floor is due to the many alterations the first floor has experienced. The few samples of trim similar to that found on the second floor suggest that these two floors at one time had some similar trim.

The lack of trim around the third floor openings (see photographs 31 and 59) cannot be attributed to extensive alterations. Few changes have been identified on the third floor. Instead, this lack of trim might reflect an attitude that the third floor was less important and less of a showplace.

Most of the examples of building 38's trim are found on the second floor. All of the front windows (windows 201-206) have a decorative architrave and apron and a plain corner block (see photograph 62--this is the same trim found on the first floor around the transoms above doors 102 and 103). This type of architrave and corner block are repeated on one of the rear second-floor windows (window 209) as well as several of the doors (doors 202, 206, 207, 208, and 209--see photographs 58 and 61). However, only windows 201-206 and door 208 have a complete set of this decorative architrave and plain corner block; in all other cases one or more pieces of the architrave has been replaced with plain trim (see photograph 60). It is assumed that over the years

various pieces of the architrave were damaged and replaced with plain pieces. Removal of one of these plain pieces around window 209 showed additional nail holes in the nailer behind the architrave, indicating that this piece was probably not an original part of the architrave. None of this typical decorative architrave and plain corner block exist on openings which are suspected to have been modified (door 201 and windows 207, 208, and 210); openings which are suspected not to be original (doors 205 and 210); openings where space does not permit them (doors 203 and 212); and the closet doors (doors 204 and 211). A study of the fabric around windows 207, 208, and 210 indicates that originally trim might have existed around these windows; removing plaster revealed lines where trim might have been, variations in mortar, and nailers with nail holes.

There are two types of wood base found in building 38. These two types exist only on the second and third floors; if any base existed on the first floor, it has been removed. The smaller beaded base (see photograph 64) is the most comon type and is found in all the upper-floor rooms except the two closets and rooms 203 and 206. The two closets have no base, and rooms 203 and 206 both contain the second type of base (see photograph 63).

None of the first- or third-floor door trim includes plinths. Most of the second-floor door openings do have plinths (see photograph 63). There are, however, exceptions: door 201 (brick infill indicates that modifications have been made to this opening); doors 203 and 212 (the doors to the stairs); doors 204 and 211 (the closet doors); and doors 205 and 210 (doors which are probably not original). These are the same doors which have none of the typical decorative architrave and plain corner blocks found around many of the other second-floor openings.

The width of the plinths varies from 4 1/2 inches to 4 3/4 inches; and the height varies from 5 1/4 inches to 8 3/4 inches. Two plinths exist on each side of the partition separating rooms 201 and 205 (see photograph 65). There is, however, no door.

g. Stairways

Building 38 has two interior stairways (see photographs 68 and 71). They wrap around the northwest and southwest corners of the building, connecting the second and third floors.

While the stairways are basically the same, there are variations. Both stairways appear to be in good condition, except that their treads are worn. They each have 13 risers and 12 treads; the first riser on the north stairs and first two risers on the south stairs are taller than the other risers (over 9 inches compared to a range of 7 5/8 inches to 8 3/4 inches for the other risers). The wrapping of the stairs around the corner causes the size of the treads to vary.

The north stairway has a door on the third tread, while the south stairway has a door on the second tread. This different arrangement is necessitated by the fact that the north stairway is slightly larger than the south stairway. While the difference in size is very small, the door on the north side (door 212) had to be placed on the

third tread in order for the door not to block window 210. However, there was sufficient room for door 203 to be placed on the second tread without blocking window 207.

There are no handrails on either of the stairways, although there is a guard rail at the top of the north stairs (see drawings, sheet 11). This rail is not well constructed or in good condition. Photograph 67 indicates that a guard rail existed on the south wall not long ago.

h. Fireplaces

Building 38 has four fireplaces (see photographs 72-75). They are located in the rear half of the building, with two along the north wall and two along the south wall. At each wall, one fireplace is located on the first floor and the other is located just above it at the second-floor level.

Both of the second-floor fireplaces have simple wood mantels (they are different from each other, however, see photographs 72 and 74) and concrete hearths. Less detail remains around the first-floor fireplaces: the floors around them, as well as the plaster on the walls above them, has been removed. The removal of the plaster has revealed that both of these fireplaces are constructed of stone, with a steel plate and brick infill above the opening. Both of the south-wall fireplaces have been filled in. Bricks fill the opening on the first level and concrete is visible covering the second-level opening. Above all of the fireplaces, there are openings or patches in the wall. These patches probably indicate that stoves were once vented through the chimneys.

i. Paint Study

A paint study was not included in the investigation of building 38. Since the upper floors will not be restored now, and most of the original fabric is located in this part of the building, a paint study will be postponed until restoration plans are initiated for the upper floors.

5. Heating/Cooling/Electrical/Plumbing Systems

Building 38 has no plumbing, cooling, or heating systems, except for the fireplaces and a water pipe covered with insulation that extends along the west wall of the first level, just below the ceiling. There is, however, electricity. Switches, electrical panels and transformers are located on the south wall of room 202. A square concrete column has been added next to the south chimney on the first floor (see photograph 73); this column continues up to about 3 feet above the second floor and contains electrical conduit.

6. Water Problems

There are two sources of building 38's water problems: floods and seepage from the cliff at the rear of the building. Building 38, along with most of the other buildings in the lower town of Harpers Ferry, has experienced many floods. It is located in the 50-year

floodplain[10], and it can therefore be assumed that the first foor will continue to experience floods in the future. Photograph 6 shows Shenandoah Street during the 1936 flood, the greatest recorded flood at Harpers Ferry.

Another water problem is caused by the rock cliff at the rear of building 38. Water seeps out from the cliff's edge, allowing water to accumulate in the backyard. Some provision for drainage must be provided in this area.

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10. Army Corps of Engineers, Baltimore District, "Potomac River--Part 1: Flood Plain Information, Washington County, Maryland," 1977.

V. PROPOSED WORK PROGRAM

The proposed work for building 38 can be divided into four areas of concern:

A. Exterior Restoration: the work needed to restore the exterior of building 38 to its appearance in 1844.

B. Structural Repairs: the work necessary to correct two major structural problems
   1. the sagging floors
   2. deteriorating north wall

C. Adaptive Restoration: the work needed to provide for public access and exhibit areas on the first floor.

D. Preservation: the minor repair work necessary to insure that the upper floors do not continue to deteriorate.

A. Exterior Restoration

1. Stucco Walls

The cement stucco on the front of building 38 is a later style than would have been put on the building in 1844. This stucco should be removed and replaced with a stucco which matches that found on the rear of the building (which is probably original).

The stucco on the rear of building 38 needs to be repaired. Much of this stucco at the first-floor level has been removed and therefore needs to be replaced.

2. Center Alley

Window 102 should be removed and replaced with an alley entrance. This alley should be 4 feet wide and run through the center of the building. Door 106 should provide the rear opening for the alley, and new masonry walls built on the original stone foundations should provide its side walls. These walls should be stuccoed to match the original stucco found on the rear of the building. Since it is known that brick was used as a ground covering in the area (for the backyard area and the drain in the alley) and since the original floor material is not known, brick paving should cover the alley floor.

To help relieve the water problems in the backyard, a functioning drain should be installed in the alley. Instead of an open drain which the archeological investigaton indicates once existed, the drain should be buried under the alley floor. This arrangement will enable the alley floor to be smooth, and, therefore, a better walk surface for park visitors.

3. Windows

The frame for door 101 and sashes and frames for windows 101, 103 and 104 should be removed. The masonry openings for door 101 and windows 103 and 104 should be made smaller, making them similar in size to the masonry opening for window 101. Sashes and frames should be installed in all of these openings which match the second-floor front windows (that is, wooden bullnosed frames with wooden six-over-six sashes).

The brick infill at window 105 should be removed. The masonry opening of door 104 should be adjusted to match the size of the opening for window 105 and should be relocated so that the opening lines up under window 207. Frames and sashes should be installed in both of these openings (door 104 and window 105) which match the second-floor rear windows (that is, wooden beaded frames with wooden six-over-six sashes).

Any necessary repairs should be made to the remaining windows (windows 201-210 and 301-310). Many of these windows either do not operate or have parts of their frames missing. In all cases, the frame and sash units should be treated with a preservative and any surfaces in contact with brick or stone should be covered with copper-clad foil.

Replicas of the shutters visible in photograph 3 should be installed on the first-floor front windows.

4. Doors

The exterior doors with large panes of glass (doors 102, 103, and 201) are not typical of the 1844 construction period and should be replaced with wood panel doors. Doors 102 and 103 should be double doors, with each door having two panels. These panels should be similar to those on door 102's frame. Door 201 should be restored to a four-panel door, similar to door 202.

The plain wooden frame around door 103 should be replaced with a wooden paneled frame matching that around door 102. The plain wooden frame around door 201 should be replaced wth a wooden paneled frame similar to that found around door 202. Any missing parts of door 201's paneled frame should be replaced.

A new door will be required for door opening 107. This door, retaining the symmetrical mood of the building, should match door 105.

The transoms over doors 102 and 103, as well as the doors and frames which will not be replaced, should be removed and restored and put back in their original locations. In all cases, door assemblies should incorporate usable historic components, be treated with a preservative, and be protected by copper clad foil if they are in contact with stone.

All the doors and frames (as well as windows) which will be retained have designs which are at least compatible with the style of the mid-1800 time period, although not all are original (for example the frames for windows 207, 208 and 210). It would be less disruptive to the resource to retain this older but perhaps not original fabric than to replace it with new reproductions.

5. Rear Porch

A new rear porch should be constructed. The porch is necessary (even though the original appearance of the porch is not known) because it will provide the only access to the upper floors.

Using the little evidence available, this porch should be constructed of wood, have a roof (see photograph 4), and extend for the entire length of the building. There should be one stairway down to the first-floor backyard and a bridge over to the cliff and the concrete and stone steps. The concrete portion of these steps should be replaced with stone.

6. South Gable

If building 40's roof is restored to its original appearance (see photograph 1), the south gable of building 38 would again be exposed. Photograph 4 should be used as a guide in restoring this gable; it should have wood siding and three openings. There should be two windows at the third-floor level and an opening at the attic level.

B. Structural Repairs

As discussed in the existing conditions section of this report, several stabilization or reinforcement measures are needed to ensure a sound structure that is safe for public occupancy. One area of concern is the north wall. As was previously described, this wall is moving away from building 38, and the bricks on the exterior surface of this wall are deteriorating. An attempt could be made to preserve this wall, or part or all of the wall could be dismantled and rebuilt:

Alternative One

This alternative involves the selective replacement of deteriorated bricks and mortar on the exterior side of the north wall. There is a continued need for structural bracing or shoring, and, as protection against further deterioration, the exterior surface is covered with stucco. The interior surface of this wall remains undisturbed.

Alternative Two

In this alternative, the north wall at the second- and third-levels is completely dismantled. At the first-floor level, only the exterior layer of bricks is removed. The wall is then rebuilt with new replacement units. Plaster or stucco is applied to the rebuilt interior or exterior surfaces to conceal the nonhistoric materials. While this alternative preserves the interior surface of the north wall of the first floor, the historic fabric at the upper floors is completely destroyed.

Alternative Three

This alternative completely dismantles the north wall, and then rebuilds the wall using salvaged bricks (the interior surface bricks can be salvaged, they are higher quality bricks, which have been protected from the weather). Again, the nonhistoric material is concealed with plaster or stucco. This alternative disturbs all of the north wall's historic fabric. An attempt is made, however, to re-create the brick interior surface of the north wall by reusing as much of the original brick as possible.

Since alternative one will preserve the north wall rather than rebuild all or part of it, this alternative will have the least destructive effect on the historic fabric. It is, therefore, the preferable solution. However, continued deterioration of the north wall might eliminate the possibility of this alternative.

The stuccoing of the north wall--which is part of all three alternatives--will not restore the wall to its original appearance. The fact that the north wall was a shared party wall from 1844 to approximately 1920, makes it impossible to accurately restore the exterior of this wall to its original appearance without reconstructing the Anderson Building. This reconstruction, however, is not anticipated. By stuccoing the north wall, it will, at least, blend in with the rest of the building, which will also be stuccoed.

Another structural problem is the sagging second and third floors. These floors need to be jacked up so that they are again level, and additional support is needed so that the floor system can support future anticipated loads. Some support will be provided by the reconstruction of the center masonry walls. Additional support will be supplied by the construction of a partition on the first floor (south side) under the girder (which is assumed to be the historic arrangement). The archeological exhibit of stone foundations on the north side, however, makes such a partition on this side unsuitable; instead, a cable running under the girder (the 5 1/2-inch by 11 1/8-inch wood girder support should be removed) should provide the additional support needed.

C. Adaptive Restoration

The first floor should be adaptively restored to be used as exhibit space. The old floor plan in which a center alley divided the area in half will be restored. In the northern half there will be an exhibit of the archeological investigations. The foundations exposed by the archeologists will remain exposed for public viewing. To help facilitate this viewing, no interior partitions--even though one is assumed to have existed--should be reconstructed. Some type of protective covering should be placed over this area so that the resource will be protected, yet can be viewed by the public. The walls and ceiling should be left unrestored, allowing the visitors to view original construction details and materials.

The southern half of the first floor will be used for other exhibits of the restoration process. This area should be divided into two spaces by a partition located under the girder. This partition should contain a door. The walls and ceiling in this half should be restored. If any areas show construction details or evidence found during the investigations which should become part of the exhibits, these areas should be left unrestored.

The floor (on the south side) should be constructed of one-inch-thick random width tongue-and-groove wood, supported by wooden joists. All of the wood should be treated with a preservative. The walls should be covered with painted plaster. Except for the trim around doors 105 and 107, the window which will replace door 104, and window 105, the windows and doors should have trim which matches that found around window 201. The base should match that found on the upper floors.

The alley, which will be 4 feet wide, should be open to the public and provide access to doors 105 and 107. Having all four doors (doors 102, 103, 105 and 107) open to the public will make visitor circulation easier. Single steps at doors 102, 103, and 105 create

barriers for the disabled. Access for the disabled should be provided by warping the brick pavement in front of door 105. This will make both halves of the buildng accessible to the disabled, since there is no step at door 107. Because the first floor will be designed for visitor use, access for physically disabled visitors should be provided in order to comply with Public Law 90-480.

Energy efficiency will not be a major problem in this proposal. The two first-floor fireplaces should be restored, thus providing some heat. An additional heat source will be needed on the first floor. To help preserve the upper floors, a minimal amount of heat should be provided to them.

D. Preservation

Although the upper floors will be preserved rather than adaptively restored, some minor work needs to be done. The area needs to be cleaned of fallen plaster, wasps, and other debris. Also, any molding or other building parts removed from their original position should be replaced. The area should be closed up and not left exposed to the weather and unauthorized visitors.

E. Impact Analysis

The work proposed for building 38 will help restore the historic scene of lower town Harpers Ferry, will provide interpretive space and exhibits, will help preserve original fabric for further study, and will help retard any additional deterioration of the building. Using the criteria of effect, 36 CFR Part 800.3(a), it is determined that this work will have an effect on the structure. However, applying the criteria of adverse effect, 36 CFR Part 800.3(b), indicates that this effect will probably not be adverse:

(1) The proposed work will not result in the destruction of significant features of the property, even though substantial alterations are planned. Most of the modifications are planned for the first floor. This portion of the building has been modified many times since its original construction and now contradicts the original character of the building. Also, good evidence has been uncovered to indicate the original appearance of the first floor (exterior). Those portions of the building compatible with the style of the historic period, but not documented as original, are being left as is (or merely being repaired). Repairs need to be made to the deteriorated and unstable north wall. If at all possible, this wall will be repaired and preserved rather than dismantled and rebuilt. If further deterioration requires that this wall be dismantled and rebuilt, the existing brick will be salvaged and reused wherever possible.

(2) The proposed work will not isolate the building from, or alter, its surrounding environment. The prosposed work will re-create the historic scene of the mid-1800s.

(3) The proposed work will not introduce visual, audible or atmospheric elements that are out of character with the property or alter its setting.

A new rear porch is part of the proposed work. Except for photograph 4 in which building 38's rear-porch roof is visible, no documents or other evidence have been revealed to indicate the original design of the porch. However, some type of rear structure must have existed in 1844, and is now needed to provide access to the upper floors. A porch will be designed similar to other porches in the town during the mid-1800s (as revealed in the historic photographs) and, therefore, will be compatible with the historic scene.

Modifications necessary to make building 38 accessible to the disabled will be made at the rear of the building so as to interfere as little as possible with the historic scene. The rear of the building is somewhat hidden, facing a 12-foot cliff.

(4) The proposed work will not result in the transfer, sale deterioration, or destruction of federally owned property.

(5) In order to comply with the procedures for implementing Executive Orders 11988, "Floodplain Management," and 11990, "Protection of Wetlands," the following effects were considered:

- Building 38 is located within the 50-year floodplain.
- Building 38, which is included on the National Register, will continue to be managed according to NPS-28 to assure its on-site preservation.
- While there will be display areas on the first floor, any exhibits located there could easily be evacuated to the empty space on the second floor.

FORM 10-802
(REV. 1-76)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

PACKAGE ESTIMATING DETAIL

PAGE _____ OF _____
FOR THIS PACKAGE

PACKAGE NO. 115
REVISION NO.

ORG. NO.	PARK NAME HARPERS FERRY NATIONAL HISTORICAL PARK	DEVELOPED AREA NAME BUILDING 38	D.A. CODE	REGION
PACKAGE TITLE	R E H A B I L I T A T E B U I L D I N G S 3 3 7 3 8 4 0 A N D 4 3			

NET CONSTRUCTION — DETAIL OF ESTIMATES

CLASS OF ESTIMATE

☐ A— WORKING DRAWINGS ☐ B— PRELIMINARY DRAWINGS ☐ C— SIMILAR FACILITIES

THIS ESTIMATE VALID TO: (DATE) December 1982

ITEM	QUANTITY	COST (NET AMOUNT—THOUSANDS) PLANNING AND CONSTRUCTION	ROAD CONSTRUCTION
A. EXTERIOR RESTORATION		$72,000	
B. STRUCTURAL REPAIRS			
Including Alternative One		47,000	
Including Alternative Two		42,000	
Including Alternative Three		46,000	
C. ADAPTIVE RESTORATION		97,000	
D. PRESERVATION		1,000	
TOTAL			
Including Alternative One		217,000	
Including Alternative Two		212,000	
Including Alternative Three		216,000	
(if additional space is required—use plain paper and attach)	TOTALS	$	$

NET CONSTRUCTION — COST BY PROJECT TYPE AND FUND SOURCE

PROJ TYPE	PROJECT TITLE	COST BY FUND SOURCE (THOUSANDS OF DOLLARS) PWE	PLAN./CONST	PWE	ROAD CONST.
52	MUSEUM EXHIBIT PRODUCTION				
55	WAYSIDE EXHIBIT PRODUCTION				
57	ACQUISITION OF ARTIFACTS AND GRAPHICS				
62	AUDIOVISUAL ARTS PRODUCTION				
89	RUINS STABILIZATION				
91	CONSTRUCTION				
91	CONSTRUCTION				
92	UTILITY CONTRACTS				
	TOTALS		$		$

ESTIMATE PREPARED BY: (Signature)	TITLE	DATE
ESTIMATE APPROVED BY: (Signature)	TITLE:	DATE

VI. SOURCES CONSULTED

Army Corps of Engineers, Baltimore District. "Potomac River--Part 1: Flood Plain Information, Washington County, Maryland." 1977.

General Services Administration, Public Building Service. Design Criteria New Public Building Accessibility. Washington, D.C.: Government Printing Office, 1977.

National Park Service. Cultural Resources Management Guideline. NPS 28. 1980.

National Park Service. Management Policies. Washington, D.C.: Government Printing Office, 1978.

National Park Service, Denver Service Center. "Historic Structure Report, the Edward Tearney Buildings--Buildings 38 and 39 on Wager Lot 50, Historical Data," by Charles W. Snell. 1979.

National Park Service, Denver Service Center. "Task Directive, Package 115." 1976.

National Park Service, National Capital Region. "Harpers Ferry National Historical Park Interpretive Prospectus." 1980.

APPENDIX

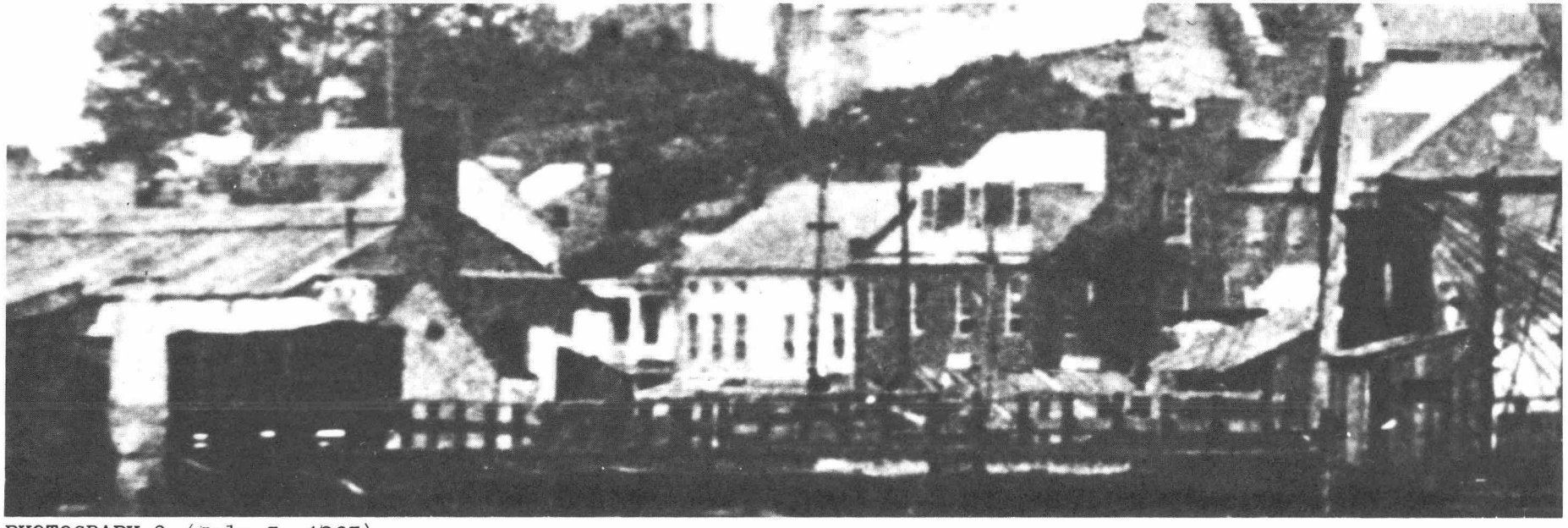
A. PHOTOGRAPHS



THE MAIN STREET, HARPER'S FERRY, VA.—ZOUAVES ON MULES—CONTRABANDS HAULING GUNS—OFFICERS LOUNGING, &C., OCTOBER 16.—SKETCHED BY OUR SPECIAL ARTIST, MR. EDWIN FORBES

PHOTOGRAPH 1 (1862)
Buildings 40 and 38 and the Anderson Building

This sketch is from Frank Leslie's Illustrated Newspaper, November 8, 1862, page, 109. It is the earliest known documentation of the facade of Building 38 (center building with no dormers). Details of the first floor, however, were omitted.



PHOTOGRAPH 2 (July 3, 1863)
Building 40 (partially destroyed), Building 38, and the Anderson Building



PHOTOGRAPH 3 (ca. 1865-1879)
Building 38, Front or East Elevation

Since Building 40 does not have a front porch in this photograph, the photograph must have been taken after Photograph 2.



PHOTOGRAPH 4 (ca. 1877-79)
Roof and South Gable of Building 38

Building 38's wood shingle roof and south gable are visible at the bottom of these views. Note the openings and wood siding on the south gable. Also, a roof covers the rear porch.

FLOOD WATERS REACH SECOND STORY AT HARPERS FERRY. MD



PHOTOGRAPH 6 (1936)
Shenandoah Street, Looking South



PHOTOGRAPH 5 (ca. 1892-1895)
View of Harpers Ferry from Loudon Heights

Two of 'lding'38's upper-floor windows are visible in tl' photograph. The second-floor window is covered l shutter., but the third-floor window is not.



PHOTOGRAPH 7 (1955)
Building 38



PHOTOGRAPH 8 (ca. 1958)
Building 38, Rear or West Elevation

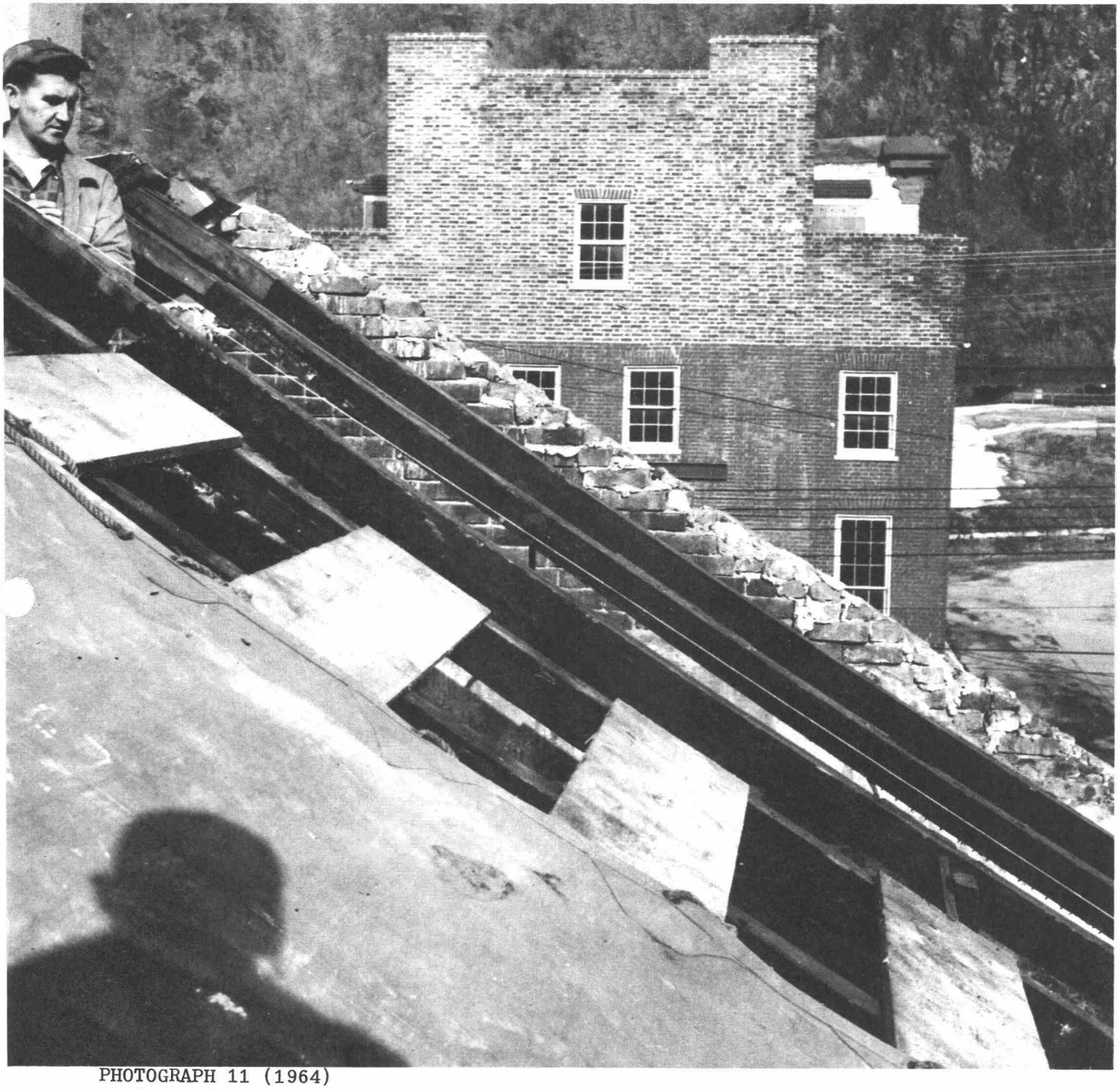
Note le[illegible] on north wall; this ledge indicates where the w[illegible] changes from three-wythes-thick to two-wythes.



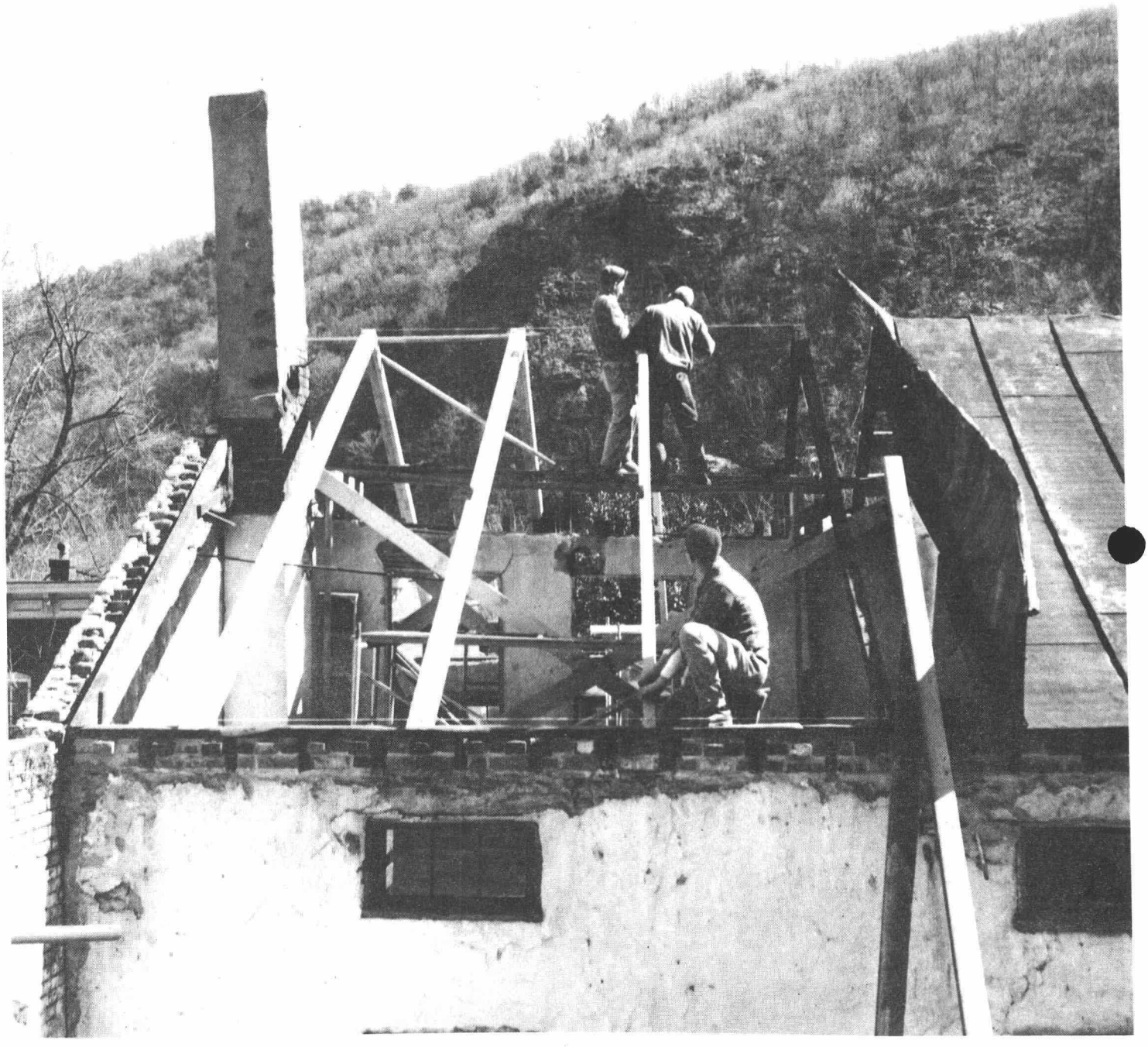
PHOTOGRAPH 9 (1964)
Roof Repairs



PHOTOGRAPH 10 (1964)
Roof Repairs



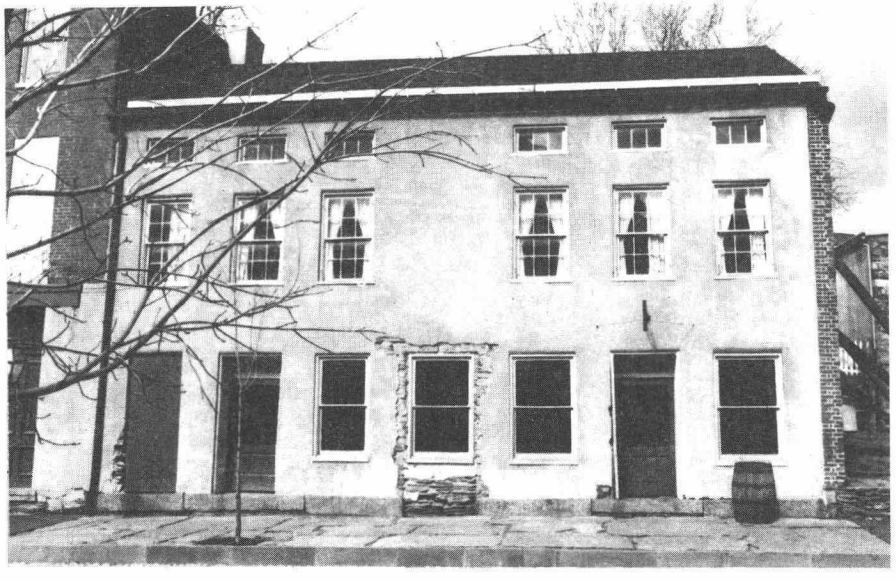
PHOTOGRAPH 11 (1964)
Roof Repairs



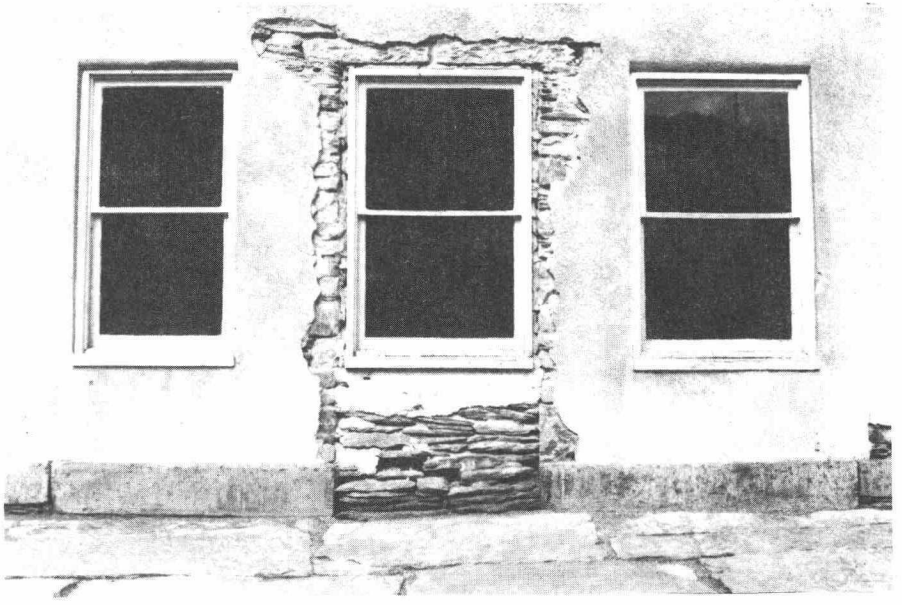
PHOTOGRAPH 12 (1964)
Roof Repairs



PHOTOGRAPH 13 (1977)
Buildings 40 and 38

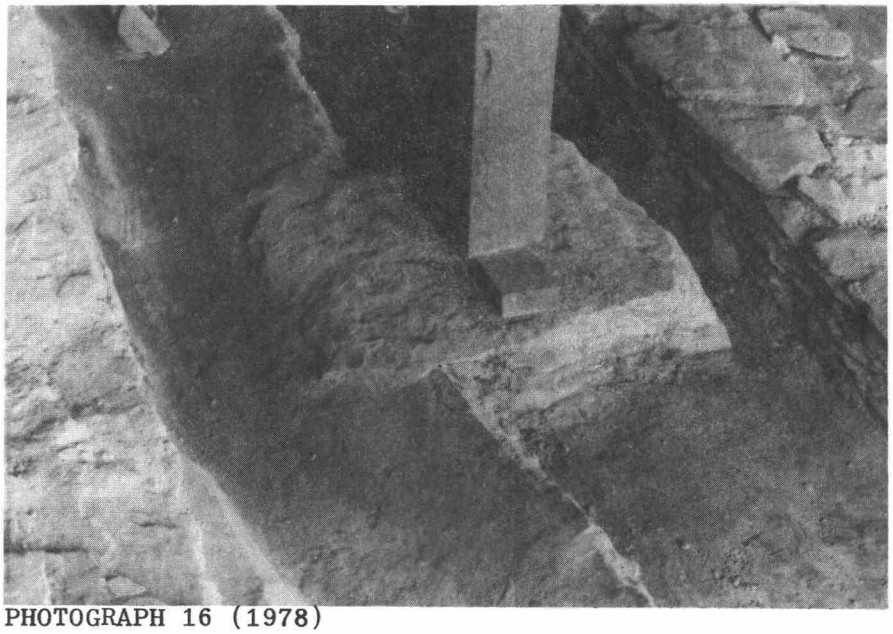


PHOTOGRAPH 14 (1981)
Building 38, Front or East Elevation

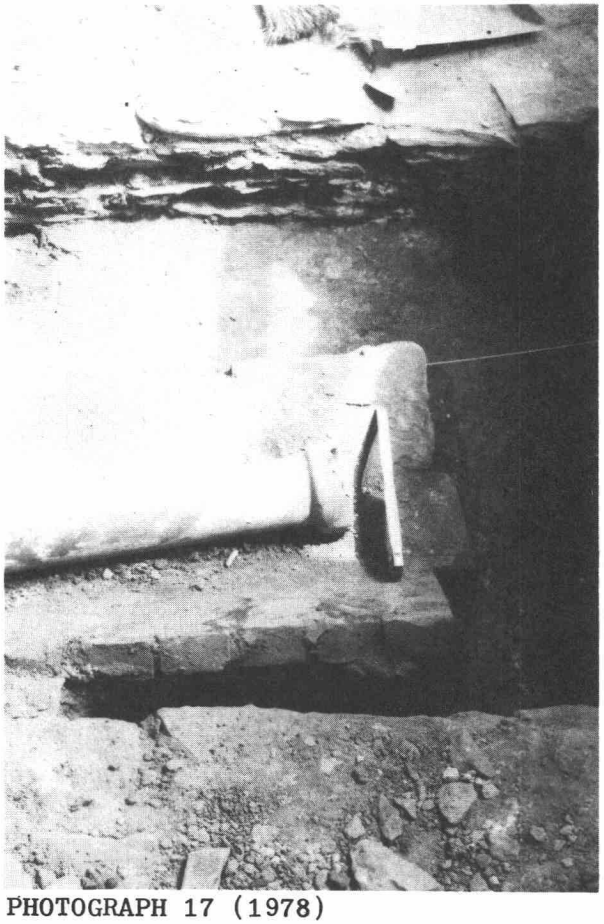


PHOTOGRAPH 15 (1981)
Windows 101, 102, and 103

The stone infill around window 102 and the break in the water table stones are some of the evidence indicating that window 102 was originally an alley entrance. Note also that window 101 is narrower than windows 102 and 103.



PHOTOGRAPH 16 (1978)
Brick Drain and Foundation Walls for the Original Center Alley

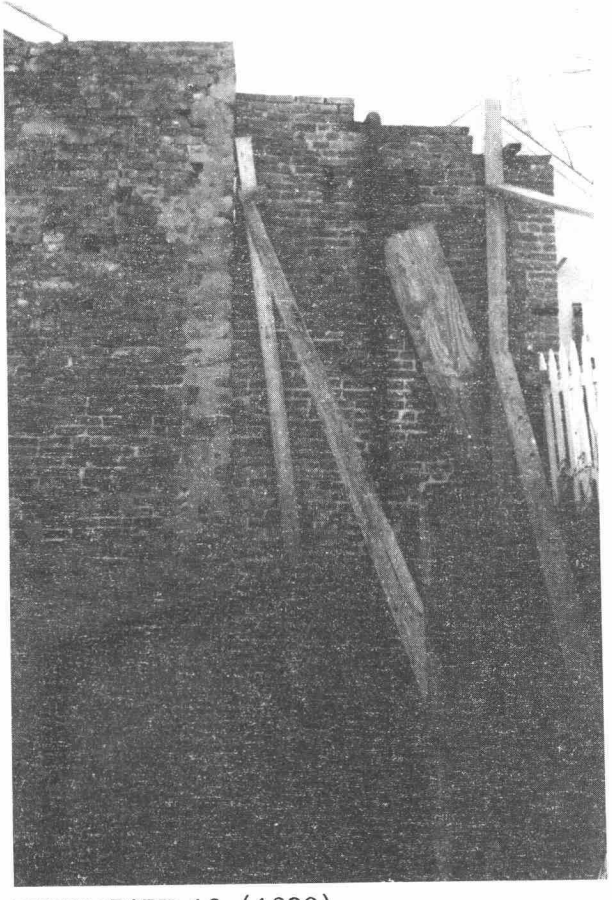


PHOTOGRAPH 17 (1978)
Clay Pipe Found in Part of the Brick Drain

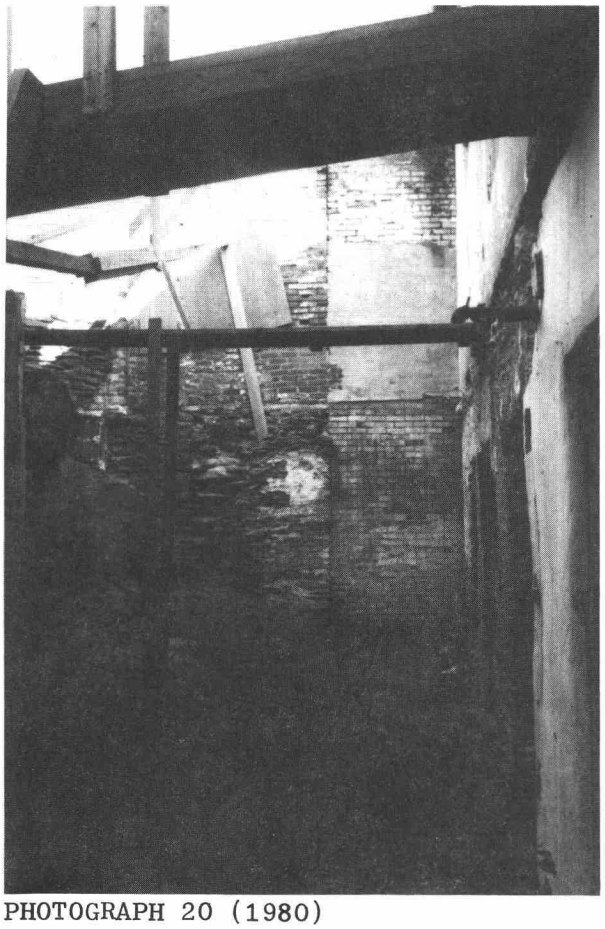
These foundation walls, brick drain, and clay pipe were uncovered during the 1978 archeological investigations.



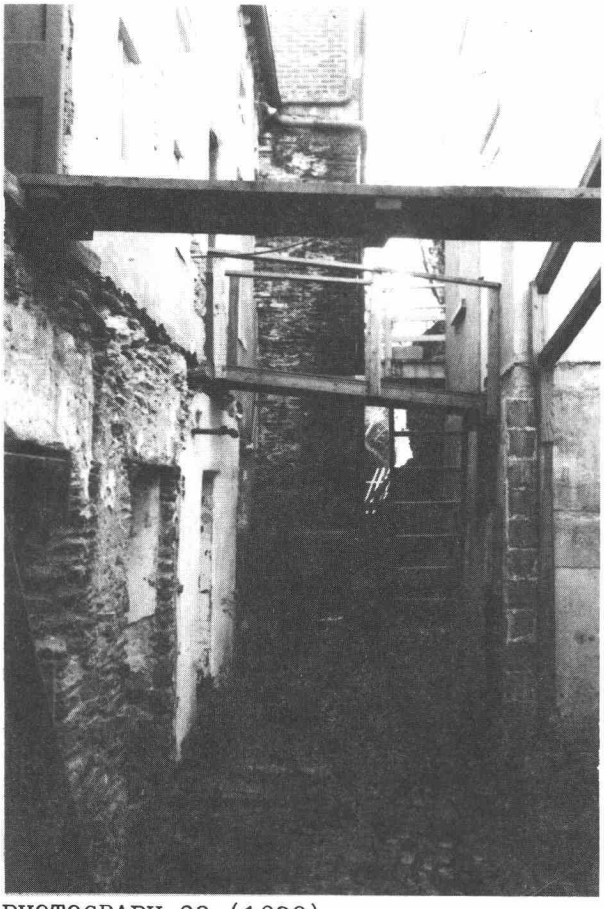
PHOTOGRAPH 18 (1981)
Lot 51



PHOTOGRAPH 19 (1980)
Brick Addition to North Wall

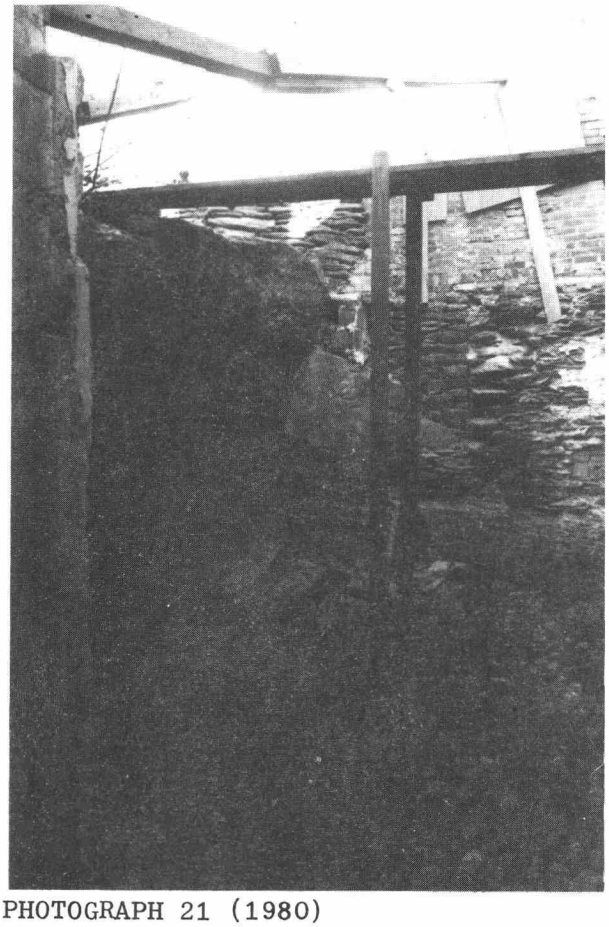


PHOTOGRAPH 20 (1980)
Backyard, Looking North



PHOTOGRAPH 22 (1980)
Backyard, Looking South

Building 38 is visible on the left side of this photograph; Building 40, in the center; and Building 39, on the right side. Lines in the stone wall of Building 40 indicate that there were once openings in this wall.



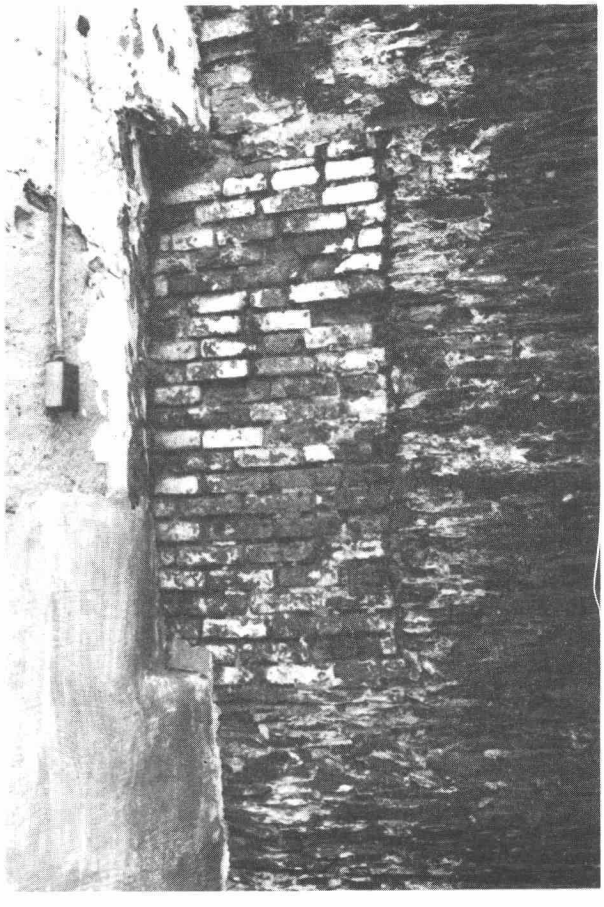
PHOTOGRAPH 21 (1980)
Rock Cliff at the Rear of the Backyard

The second-level bridges seen in these photographs are the temporary wood structures which provide access to doors 201 and 202.



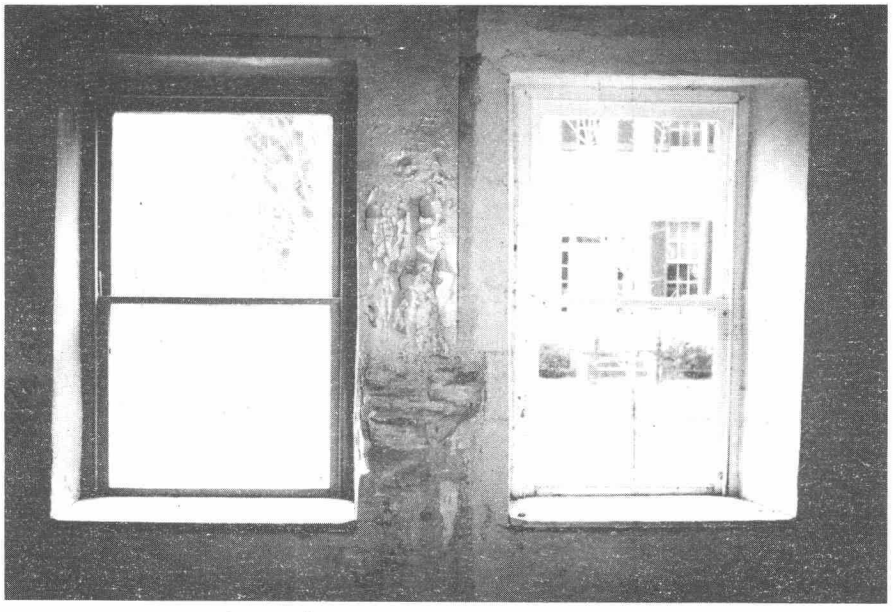
PHOTOGRAPH 23 (1977)
Second-Level Concrete Porch

This porch was removed in 1978. The concrete steps visible on the right side of this photograph provided access to the porch from the stone public walkway (see Maps 3-5).



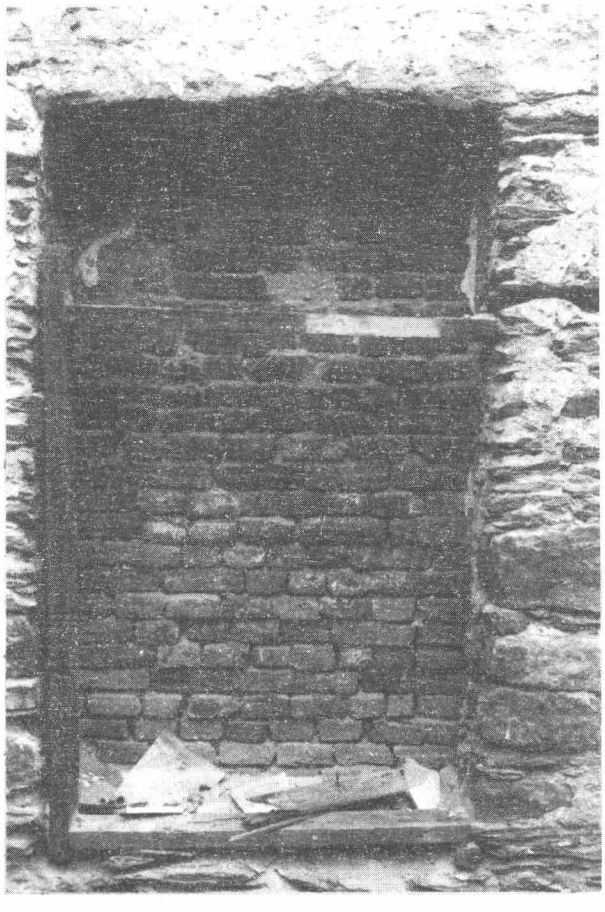
PHOTOGRAPH 24 (1980)
Building 40's Bricked-Up Window

The rear or west wall of Building 38 was distorted to accommodate a window in Building 40's side wall.



PHOTOGRAPH 25 (1981)
Windows 102 and 101

All of the first-floor windows (except window 105) are one-over-one with little interior trim.



PHOTOGRAPH 26 (1980)
Window 105

Window 105 is bricked-up.



PHOTOGRAPH 27 (1980)
Window 208

All of the second-floor windows are six-over-six. The second-floor rear windows (except window 209) and first-floor front windows have sills and subsills.



PHOTOGRAPH 28 (1977)
Window 208

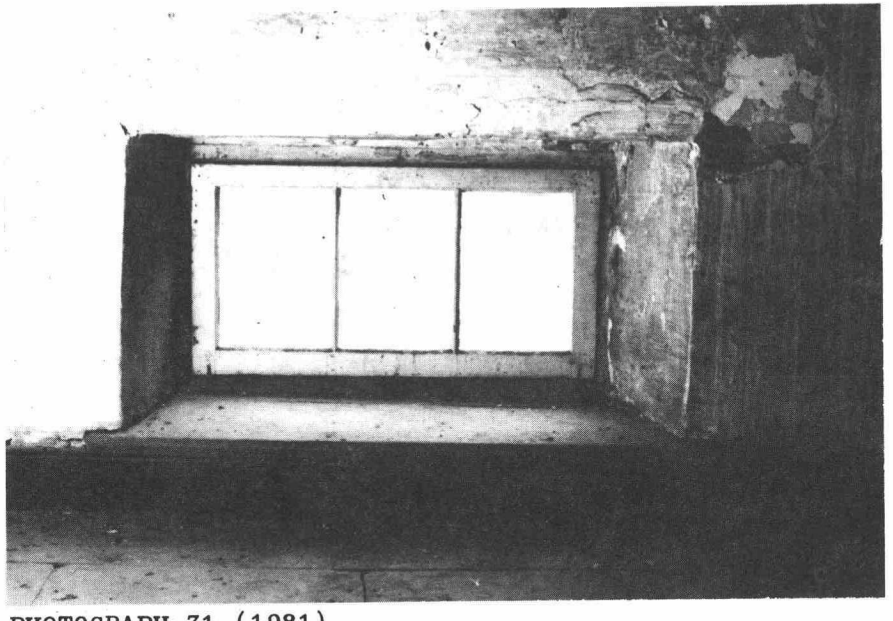
All of the upper floor rear and first-floor front windows have beaded frames.



PHOTOGRAPH 29 (1981)
Window 209

Unlike the other second-floor rear windows, window 209 has no subsill.

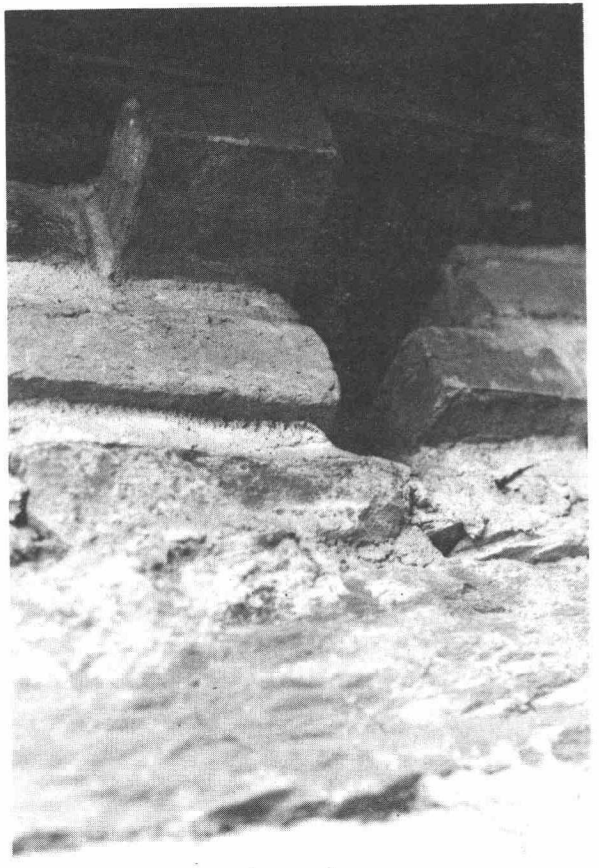




PHOTOGRAPH 31 (1981)
Interior View of a Third-Floor Window

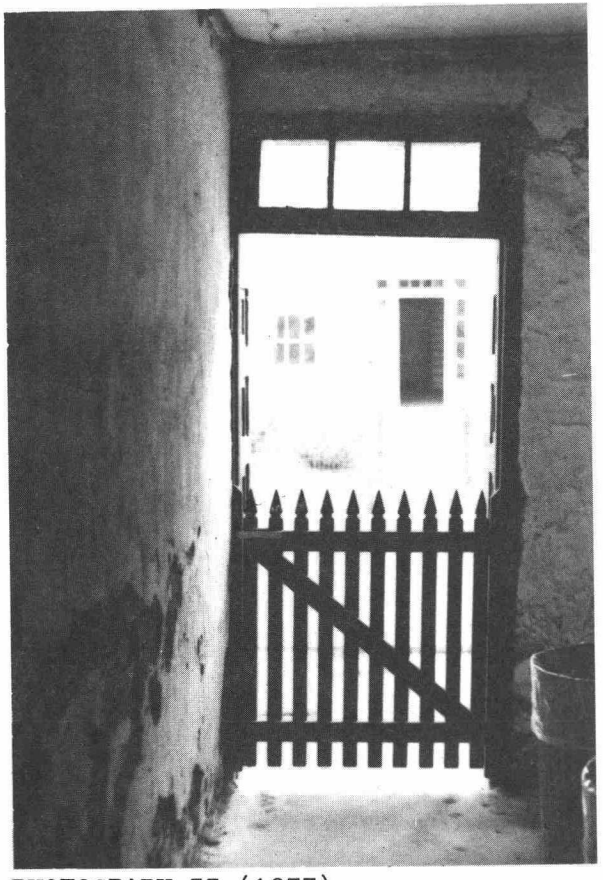
PHOTOGRAPH 30 (1980)
Window 307

All of the third-floor windows are casement windows with three lights. Those on the front of the building have bullnosed frames, and those on the rear of the building have beaded frames.



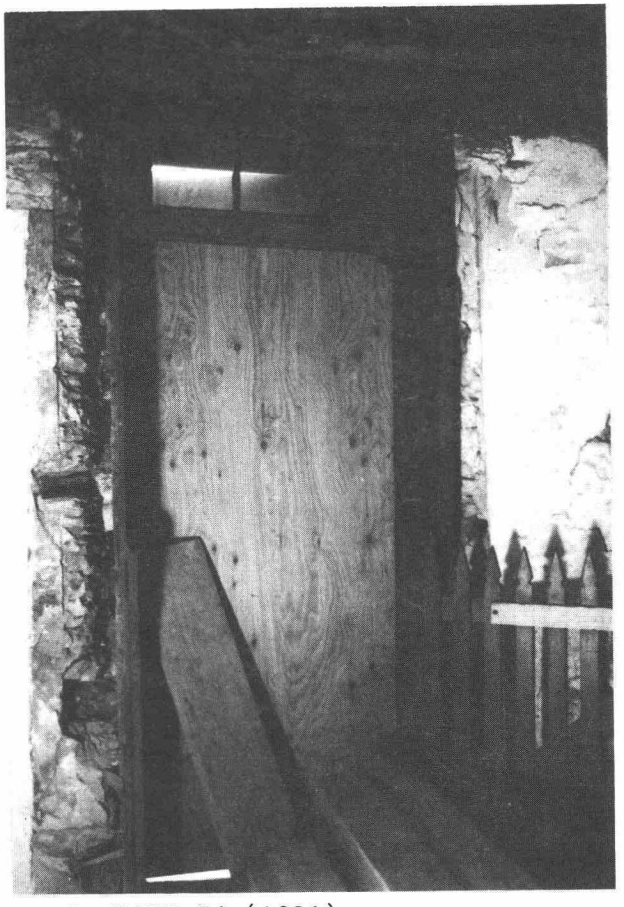
PHOTOGRAPH 32 (1977)
Rear Cornice

Note the joist pockets visible in this photograph and Photograph 30.



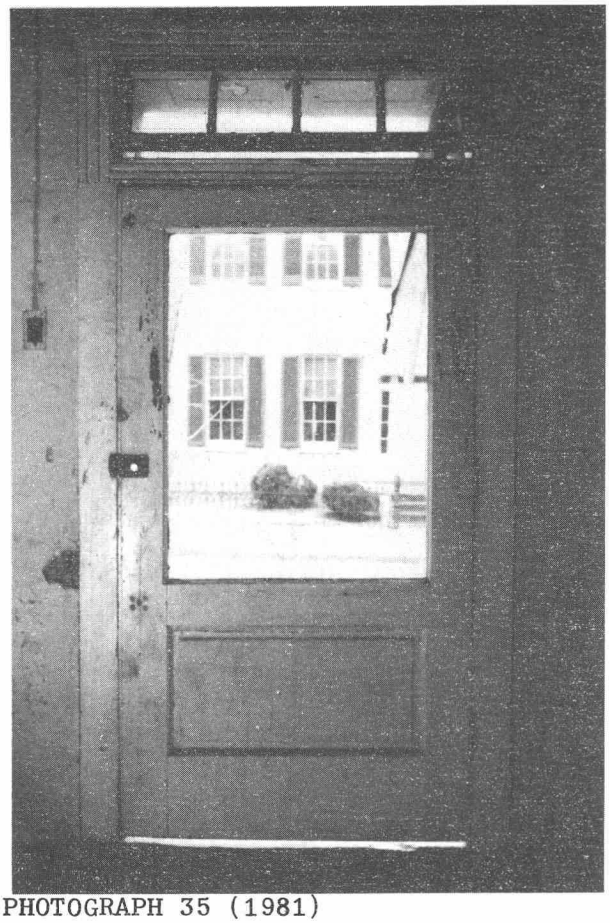
PHOTOGRAPH 33 (1977)
Door 101

This photograph was taken when door 101 functioned as an alley entrance.

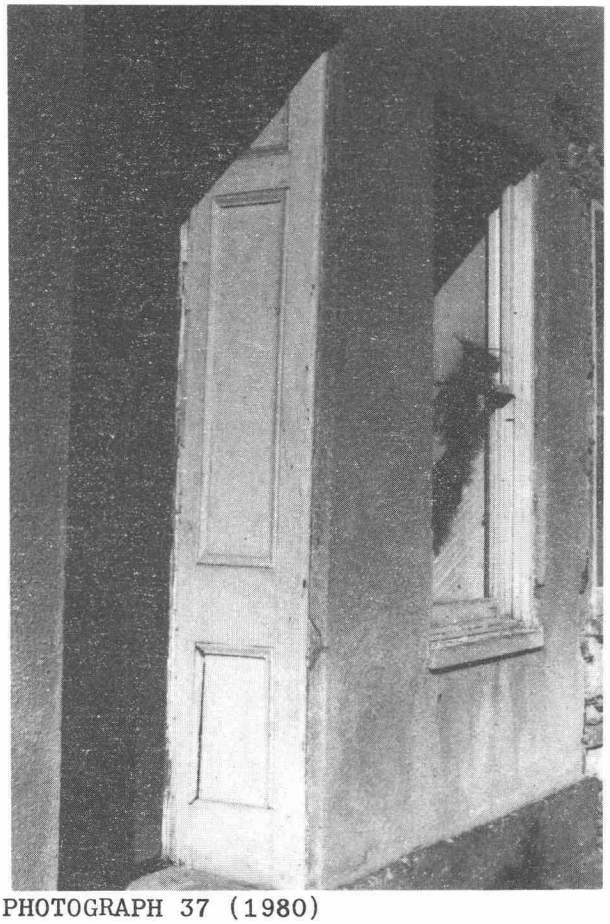


PHOTOGRAPH 34 (1981)
Door 101

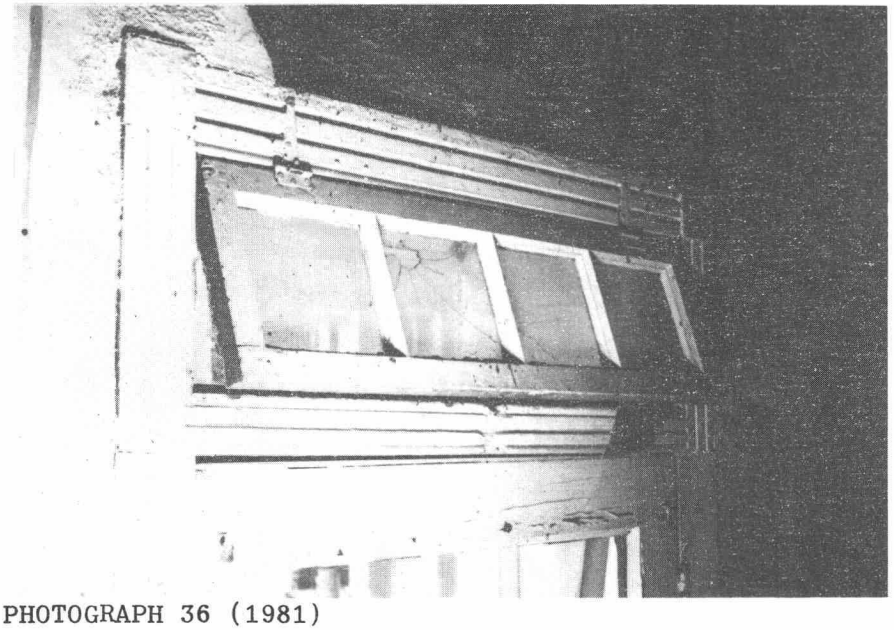
This opening was originally a window. Removal of some plaster and the brick alley wall revealed that the upper portion of the masonry opening is splayed. Note the void where the sill probably rested.



PHOTOGRAPH 35 (1981)
Door 102



PHOTOGRAPH 37 (1980)
Wooden Paneled Frame Reveal, Door 102



PHOTOGRAPH 36 (1981)
Transom above Door 102

Door 102 and the interior trim around it are not original. The paneled frame, transom, and interior trim around the transom, however, probably do date back to 1844.

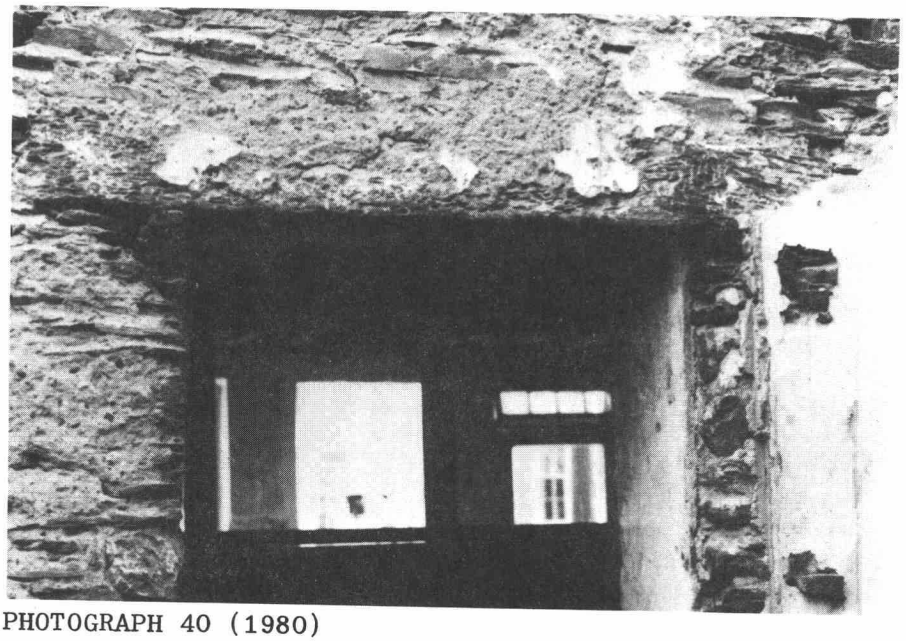


PHOTOGRAPH 38 (1981)
Rear or West Elevation, Upper Floors



PHOTOGRAPH 39 (1980)
Rear or West Elevation, First Floor

Note that the doorway at the far right is taller than the other first-floor openings.

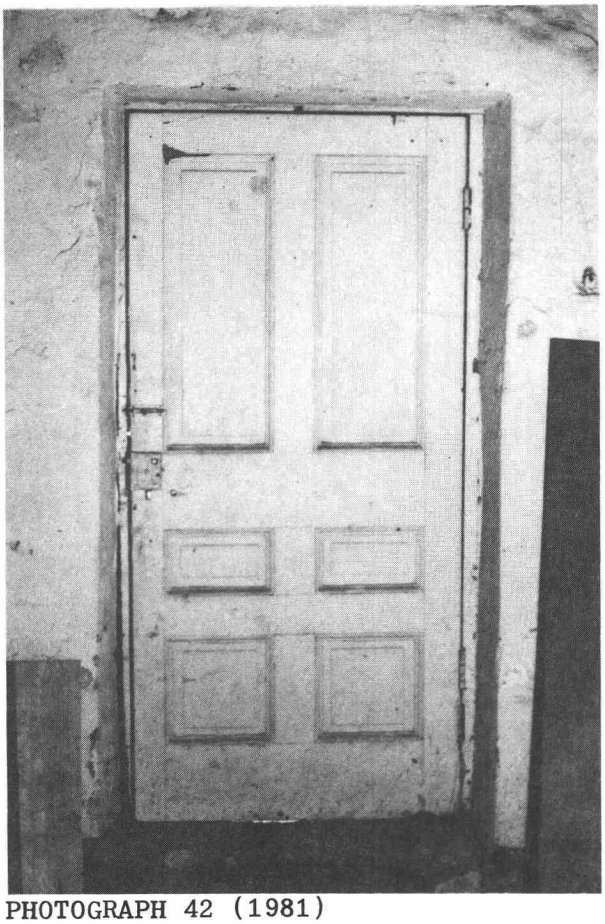


PHOTOGRAPH 40 (1980)
Stone Lintel, Door 106 (Exterior View)

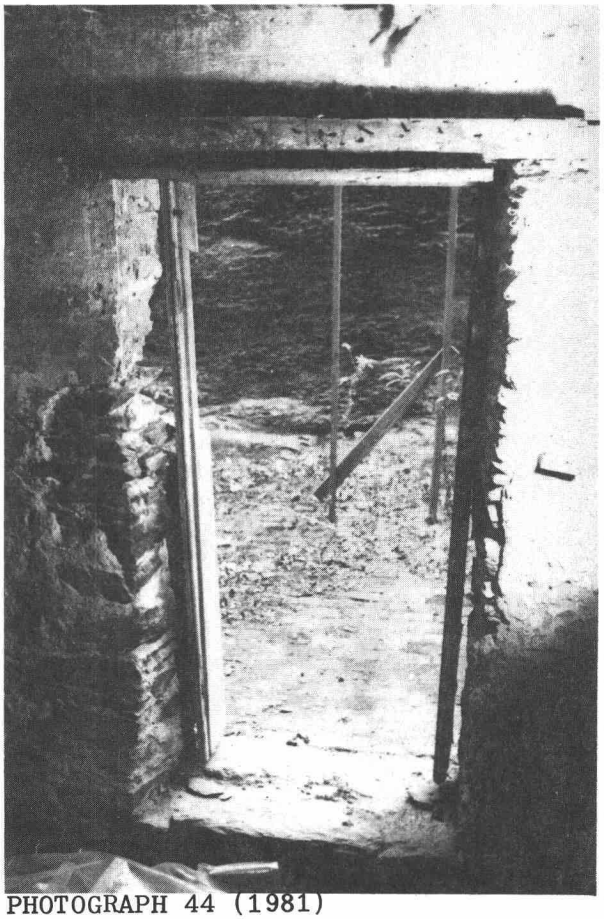


PHOTOGRAPH 41 (1980)
Wood Lintel, Door 104 (Exterior View)

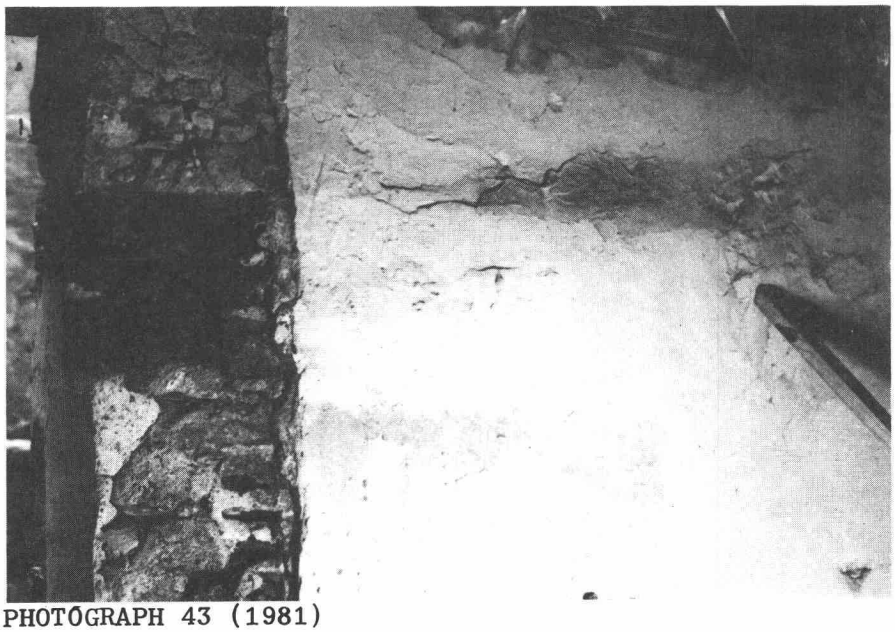
On the exterior side of the rear wall, stone lintels are visible above all the openings where the stucco has been removed except one: door 104 has a wood lintel.



PHOTOGRAPH 42 (1981)
Door 105

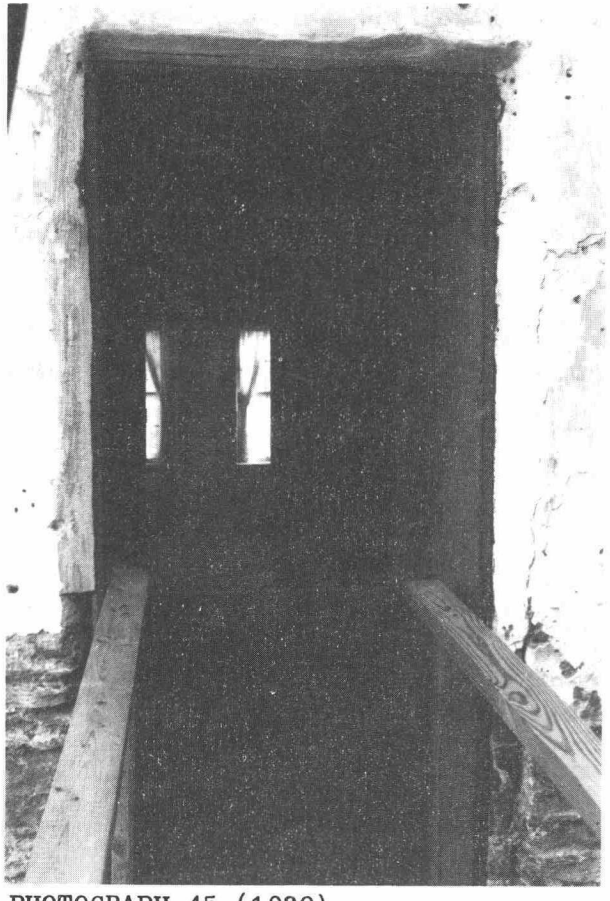


PHOTOGRAPH 44 (1981)
Door 107

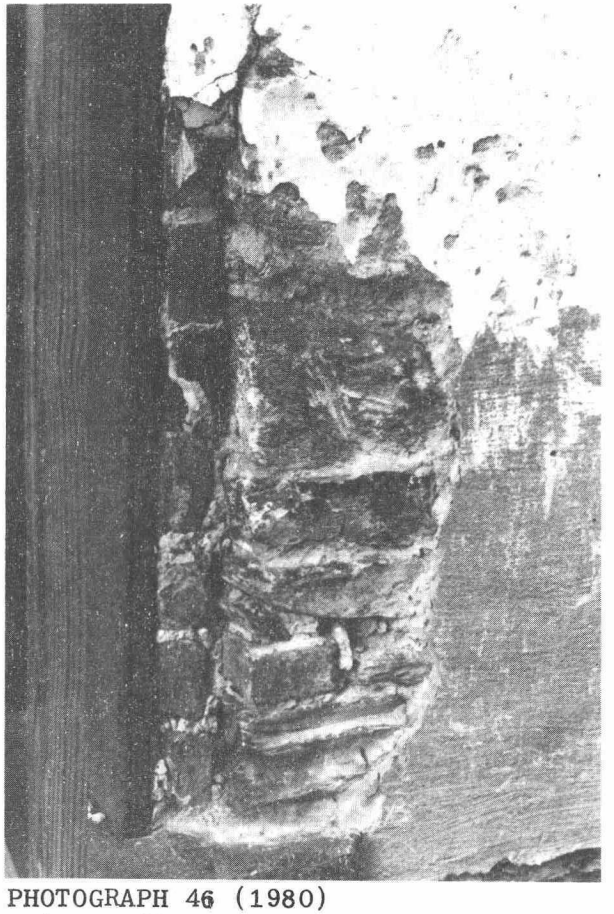


PHOTOGRAPH 43 (1981)
Wood Lintel above Nonextant Window

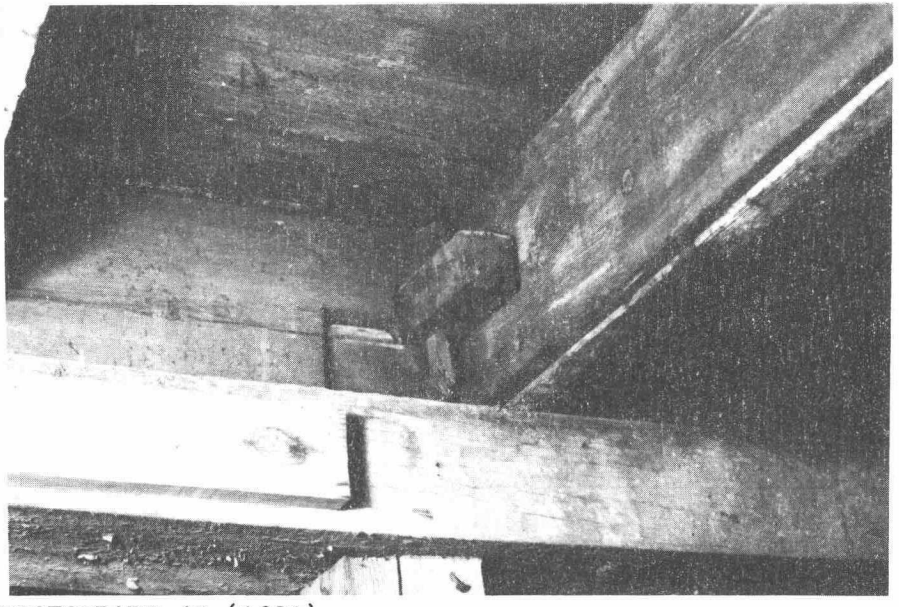
This window was removed when door 106--one of the alley entrances for the relocated alley--was added. Door 106 is partially visible on the left side of this photograph.



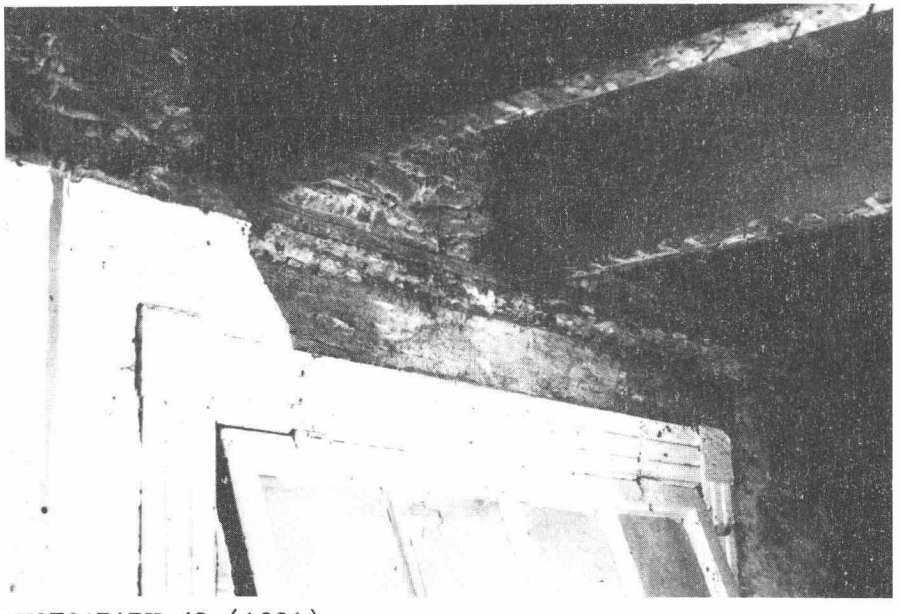
PHOTOGRAPH 45 (1980)
Door 201



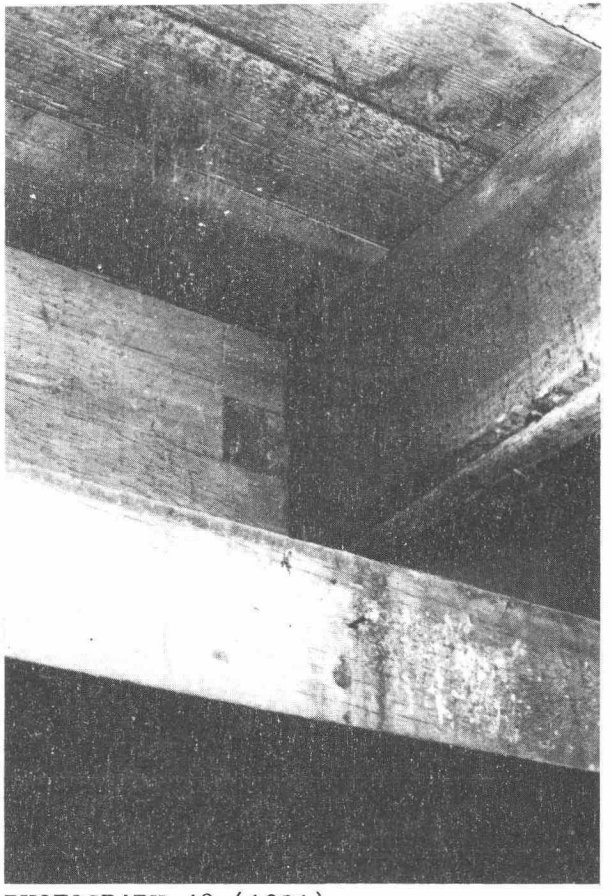
PHOTOGRAPH 46 (1980)
Brick Infill along South Side of Door 201



PHOTOGRAPH 47 (1981)
Second-Floor Girder, Splice Detail

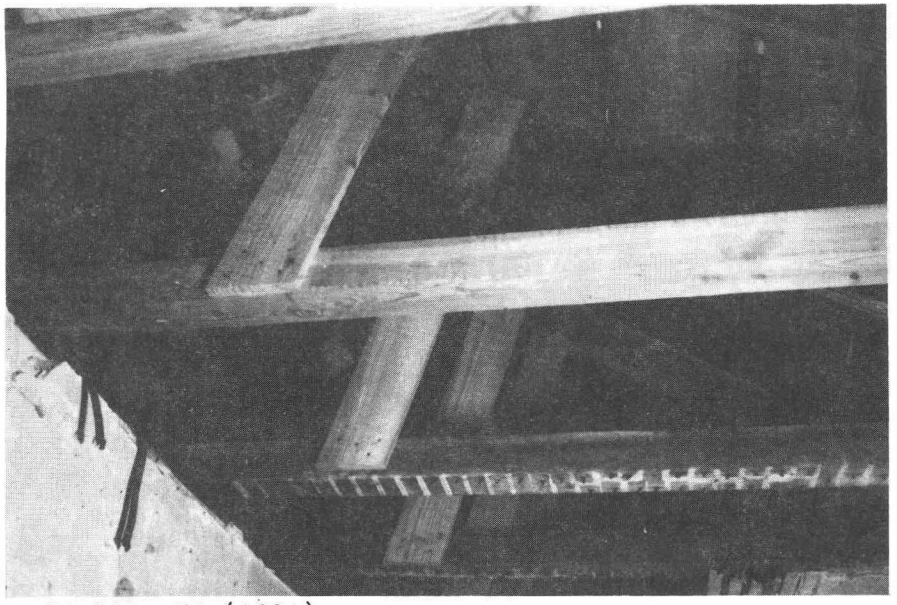


PHOTOGRAPH 48 (1981)
Second-Floor Joists and Front Wall

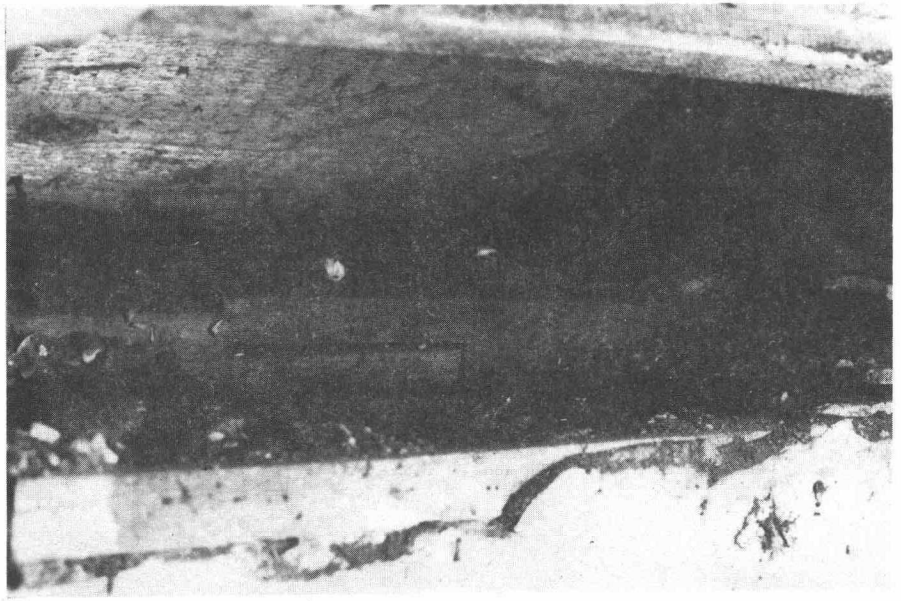


PHOTOGRAPH 49 (1981)
Mortise-and-Tenon Joint between Second Floor Joists and Center Girder

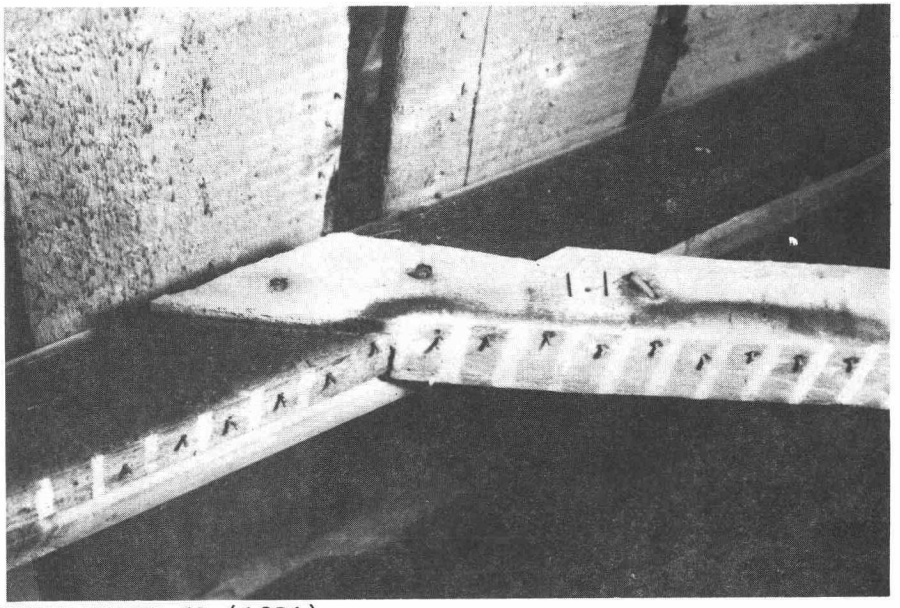
The 5 1/2-inch by 11 1/8-inch wood girder support is visible under the girder and joists. The one-inch-thick random width tongue-and-groove flooring can be seen above.



PHOTOGRAPH 50 (1981)
Roof Framing

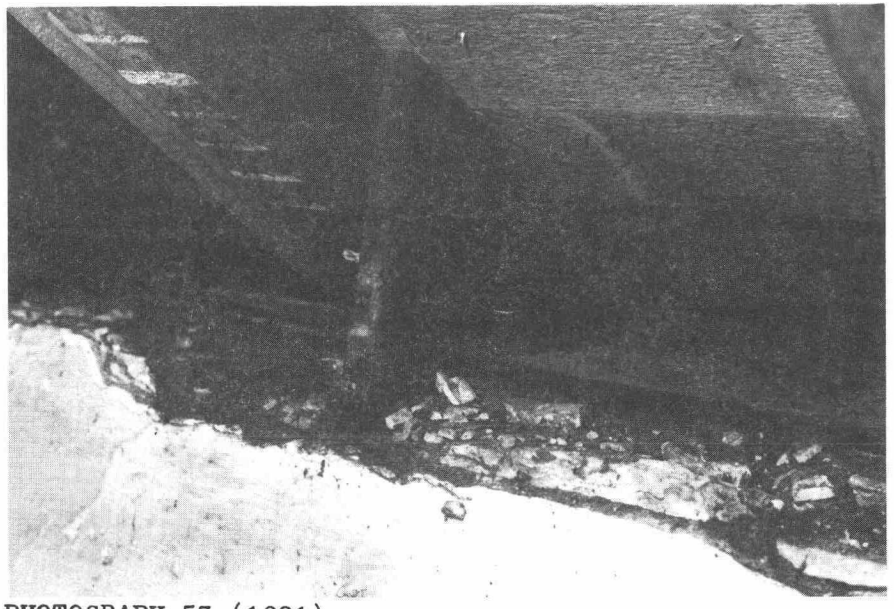


PHOTOGRAPH 51 (1981)
Wood Plate on Which Rafters Bear

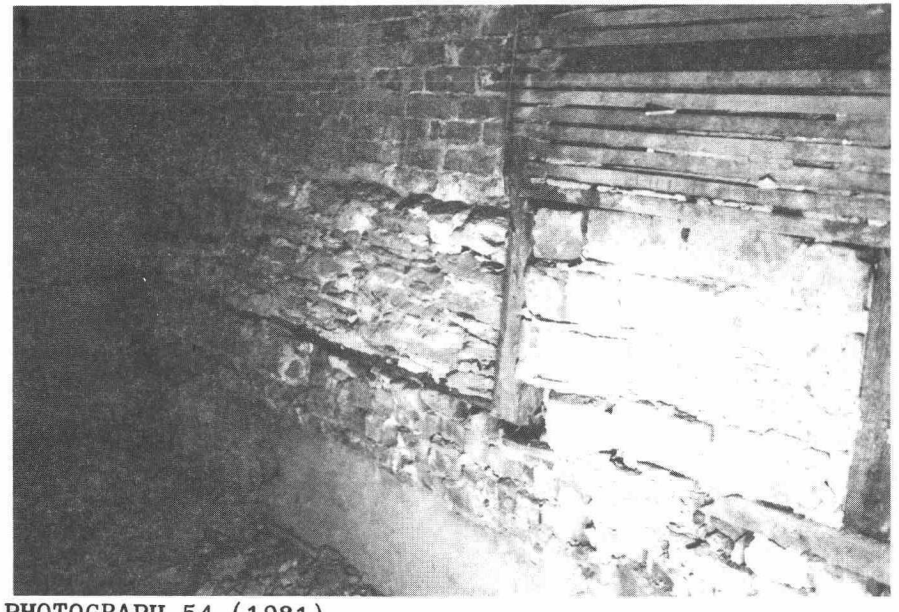


PHOTOGRAPH 52 (1981)
Rafter and Collar Beam Connection

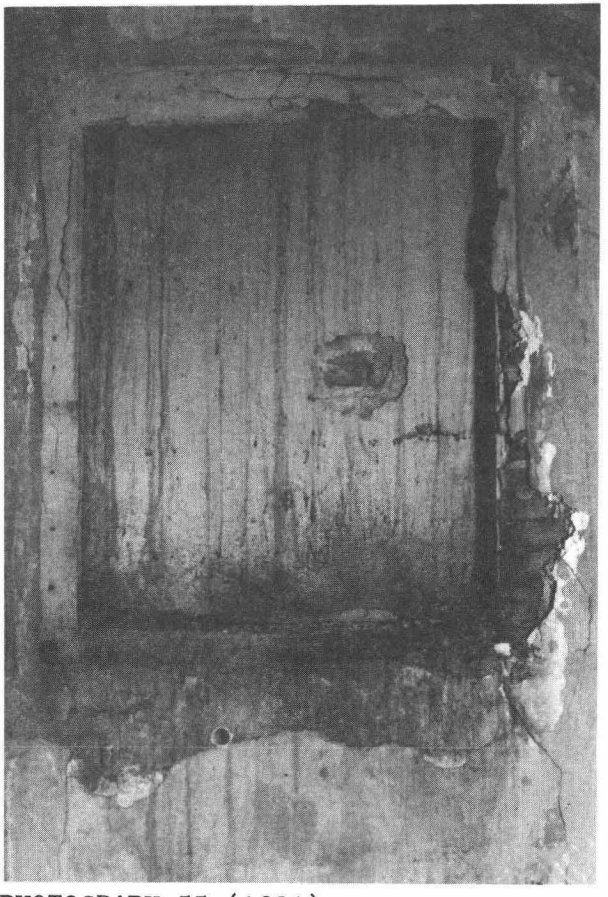
Note the ghosts of wood lath on the original rafter and collar beam. Next to the original rafter is a new rafter with no ghosts.



PHOTOGRAPH 53 (1981)
Rafter End Brace

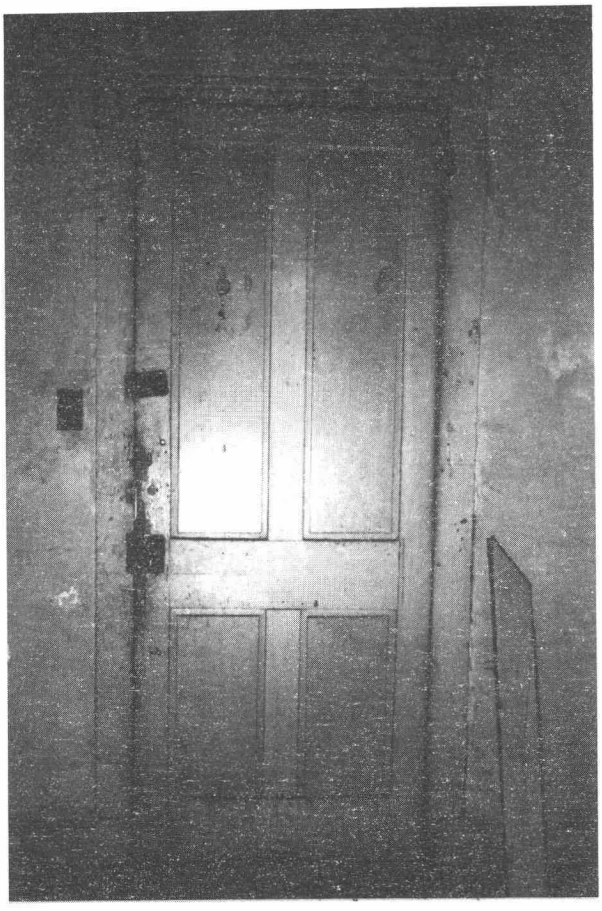


PHOTOGRAPH 54 (1981)
South Wall, Room 302

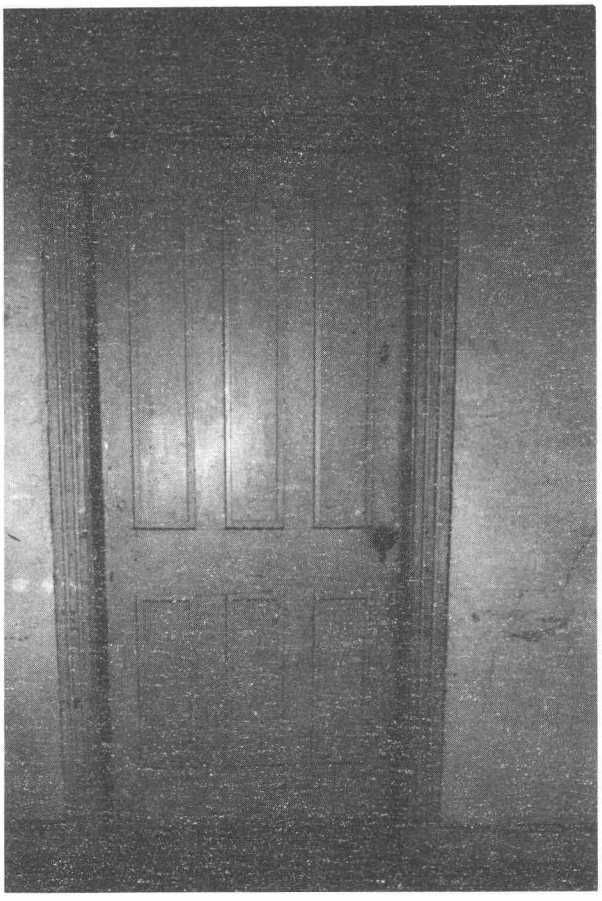


PHOTOGRAPH 55 (1981)
Bricked-Up Window, South Wall of Room 301

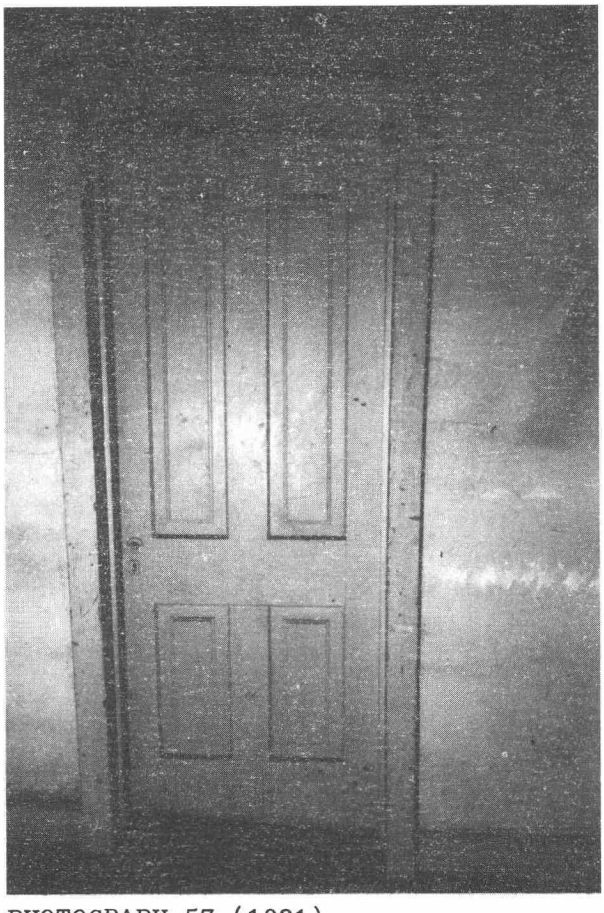
The wood plate visible in Photograph 54 at one time (before the construction of Building 38) supported Building 40's rafters. A brick cornice was probably located beneath this plate at Building 40's eaves. When Building 38 was constructed, this wall was made taller, forming a gable for Building 38. Windows were installed in this gable. When Building 40 was enlarged, the windows were bricked-up.



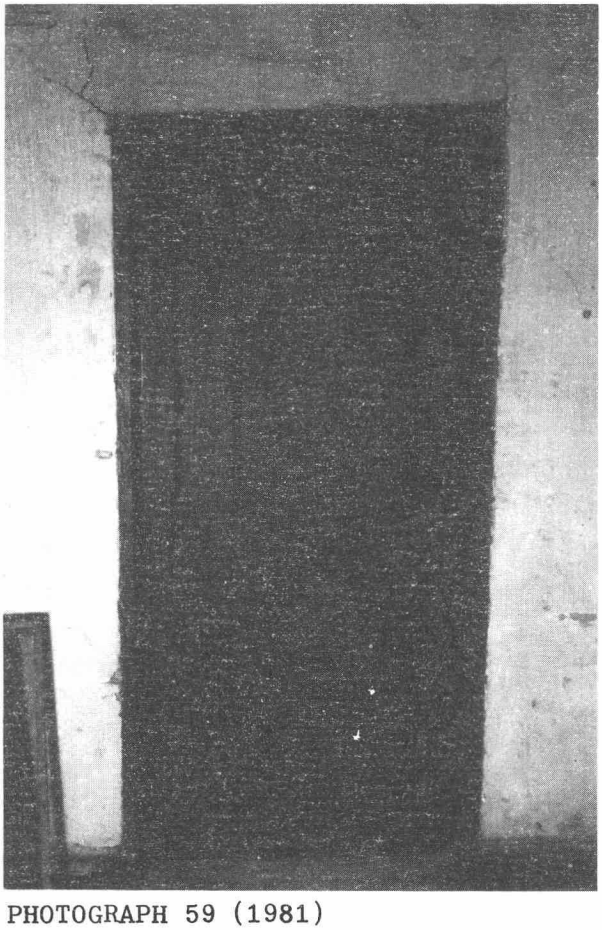
PHOTOGRAPH 56 (1981)
Door 202



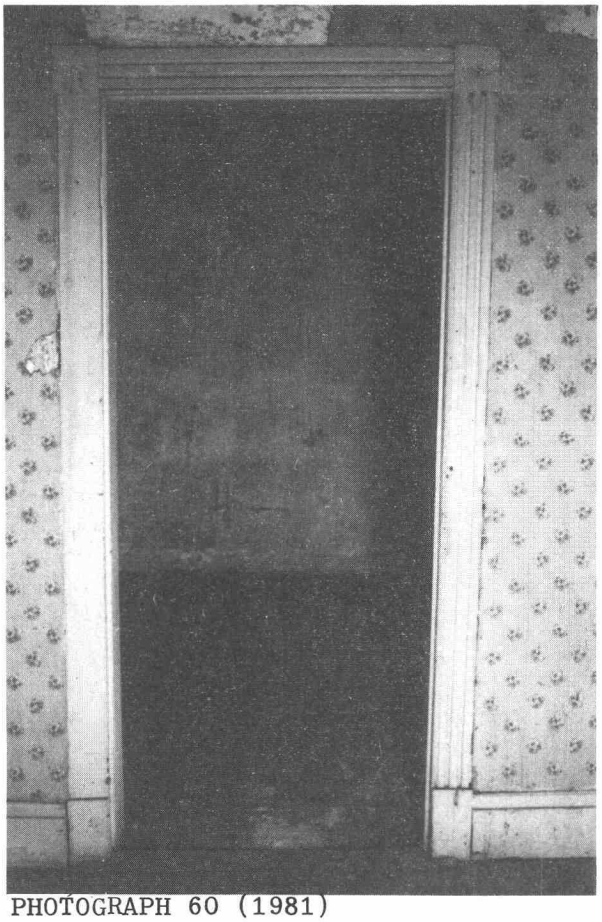
PHOTOGRAPH 58 (1981)
Door 208



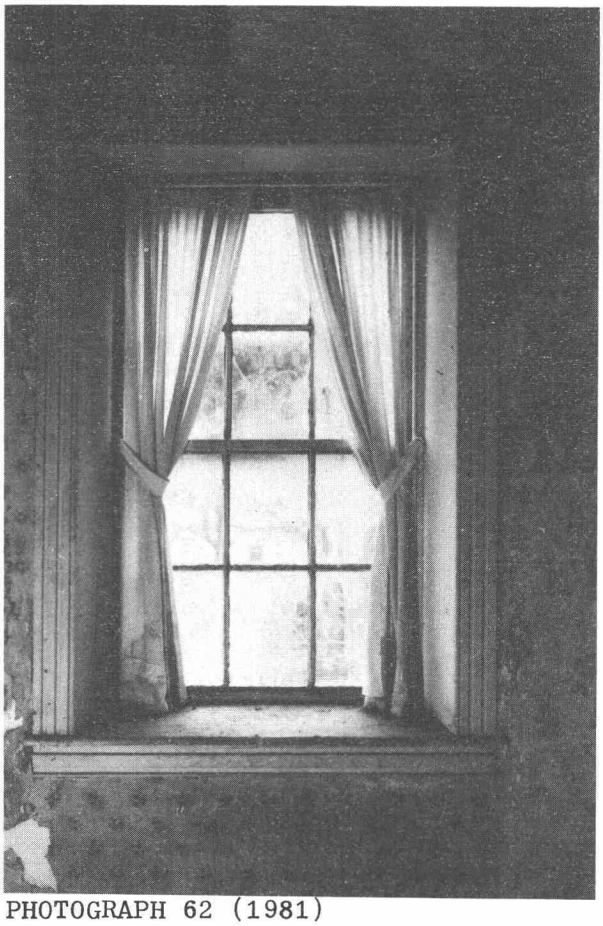
PHOTOGRAPH 57 (1981)
Door 210



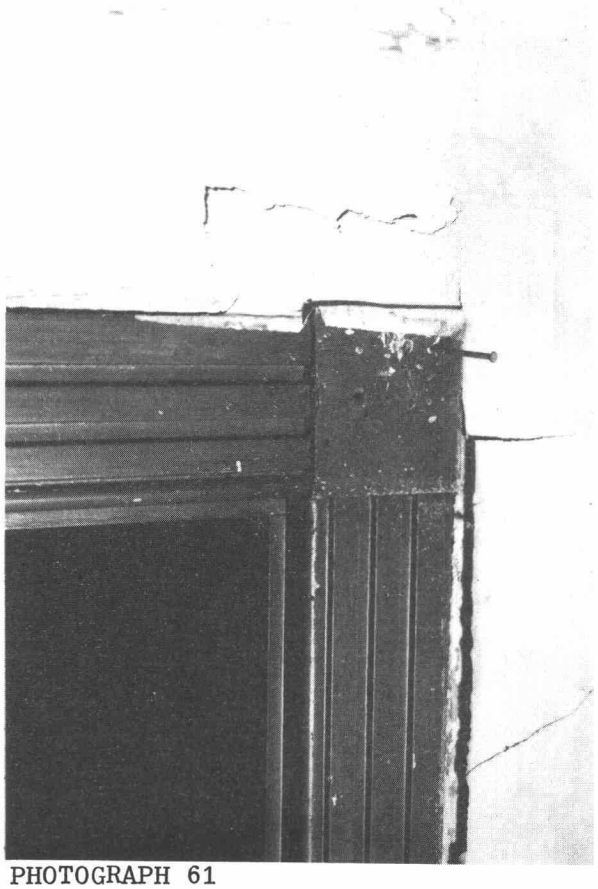
PHOTOGRAPH 59 (1981)
Door 301



PHOTOGRAPH 60 (1981)
Door 209



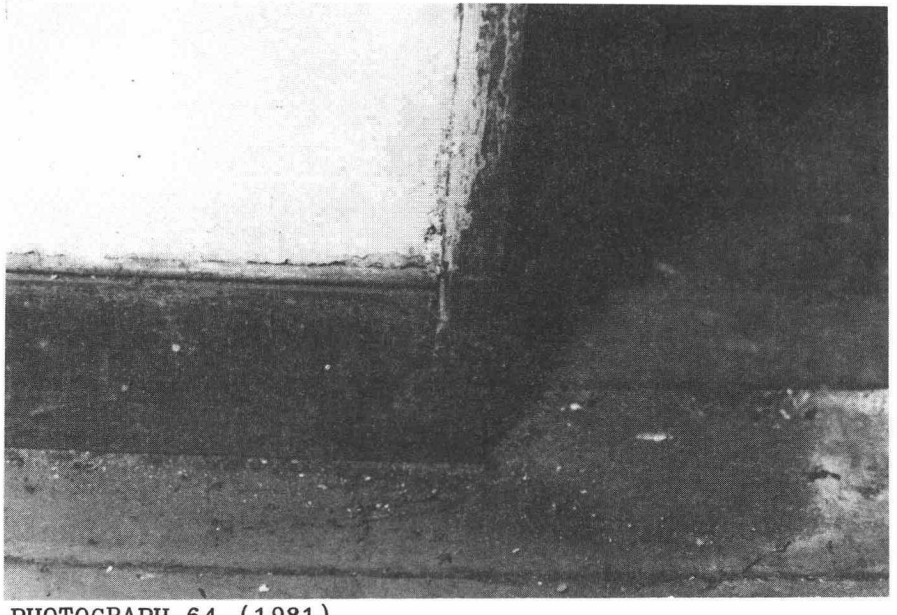
PHOTOGRAPH 62 (1981)
Window 204



PHOTOGRAPH 61
Detail of Trim, Door 206



PHOTOGRAPH 63 (1981)
Base, Room 203

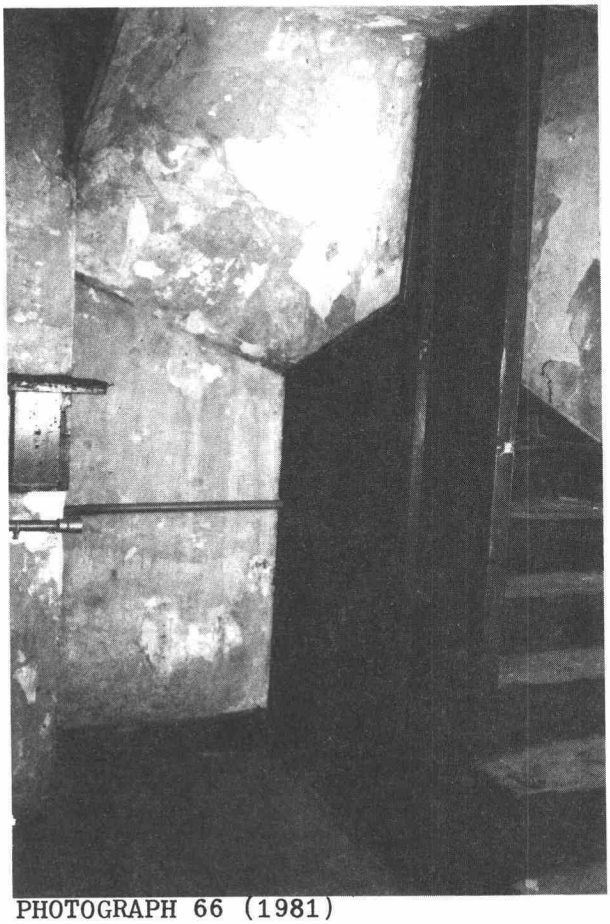


PHOTOGRAPH 64 (1981)
Base, Room 303

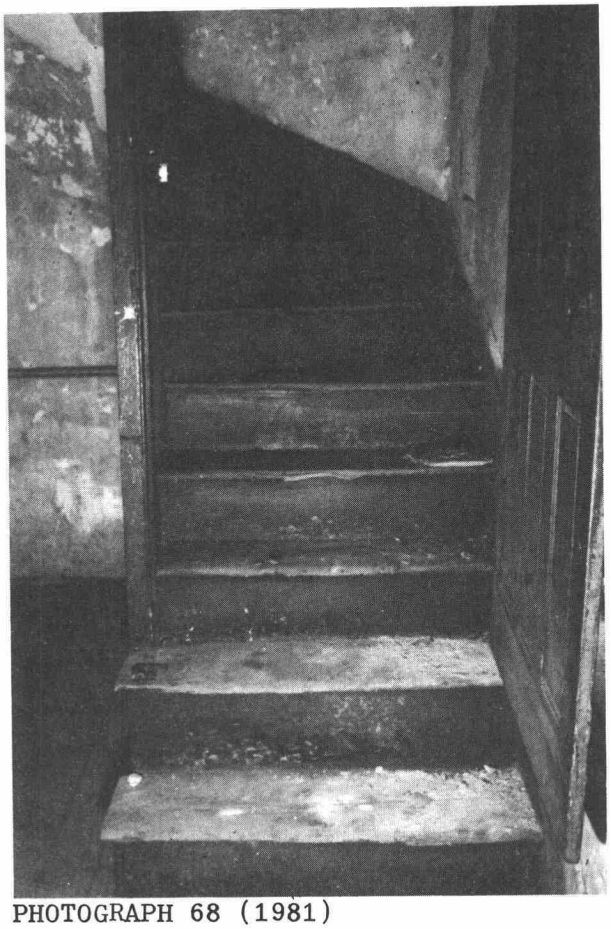


PHOTOGRAPH 65 (1981)
North Wall, Room 201

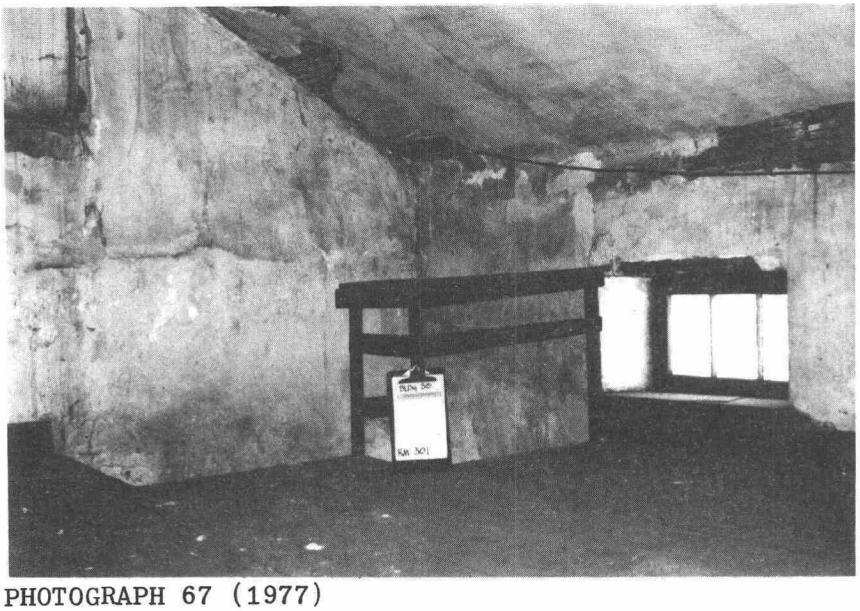
This wall is the only one covered with drywall.
Note the two plinths along the base.



PHOTOGRAPH 66 (1981)
Door 204, Closet Door under South Stairs

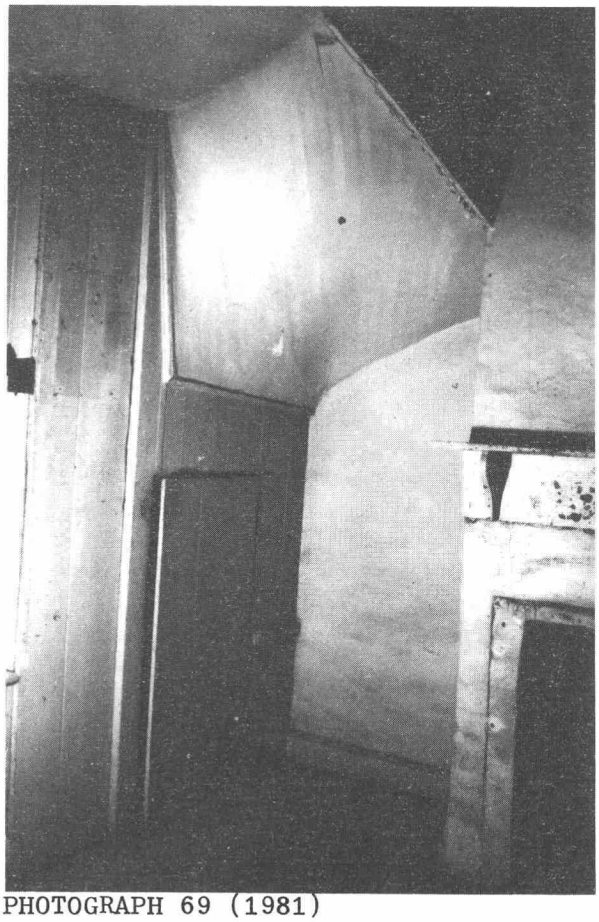


PHOTOGRAPH 68 (1981)
South Stairs

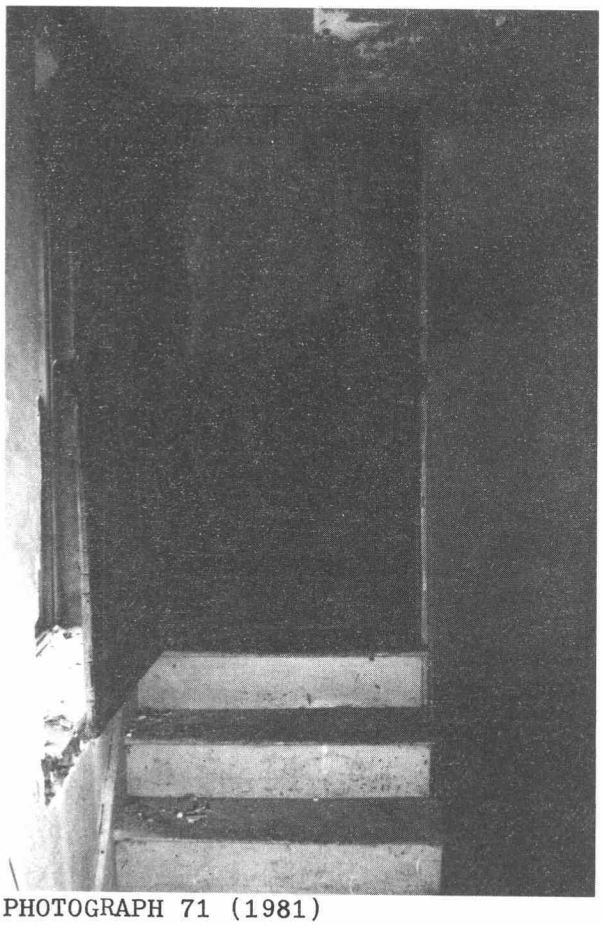


PHOTOGRAPH 67 (1977)
Railing at South Stairs

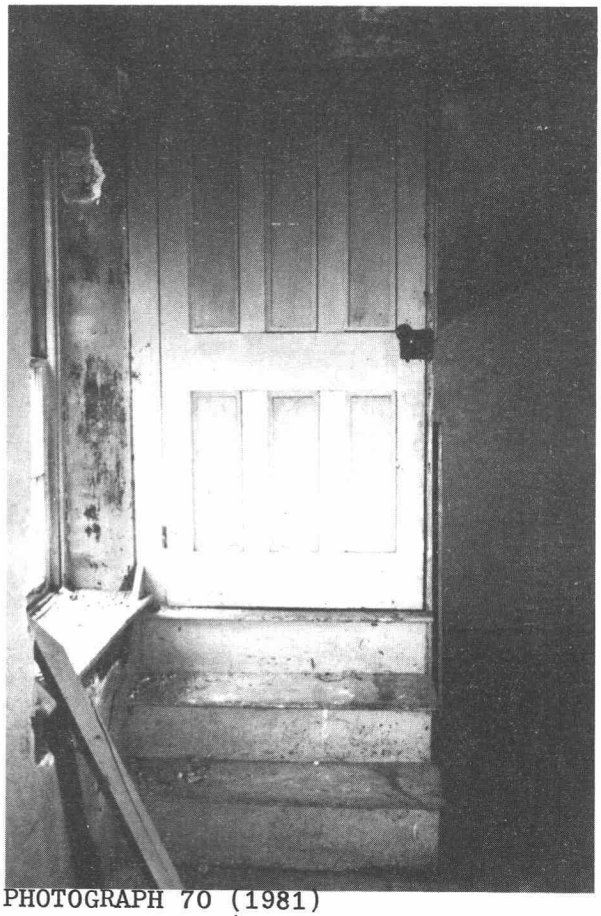
This railing no longer exists.



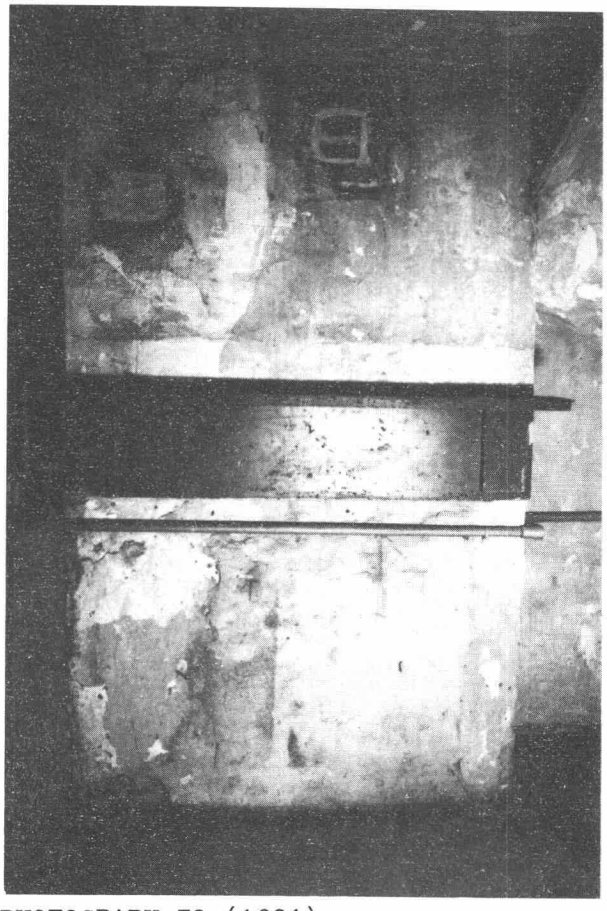
PHOTOGRAPH 69 (1981)
Door 211, Closet Door under North Stairs



PHOTOGRAPH 71 (1981)
North Stairs



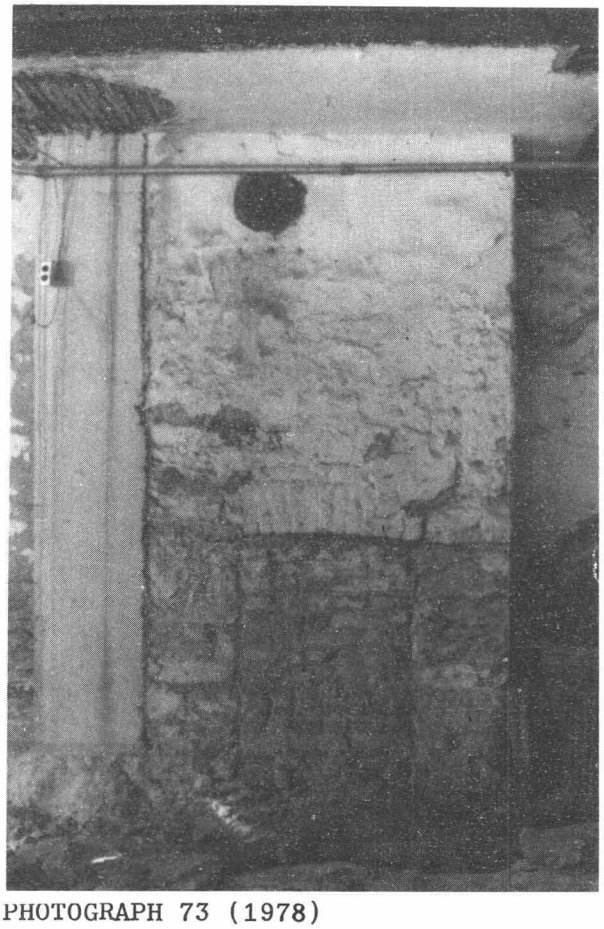
PHOTOGRAPH 70 (1981)
Door 212 at North Stairs



PHOTOGRAPH 72 (1981)
Second-Floor South Fireplace



PHOTOGRAPH 74 (1981)
Second-Floor North Fireplace

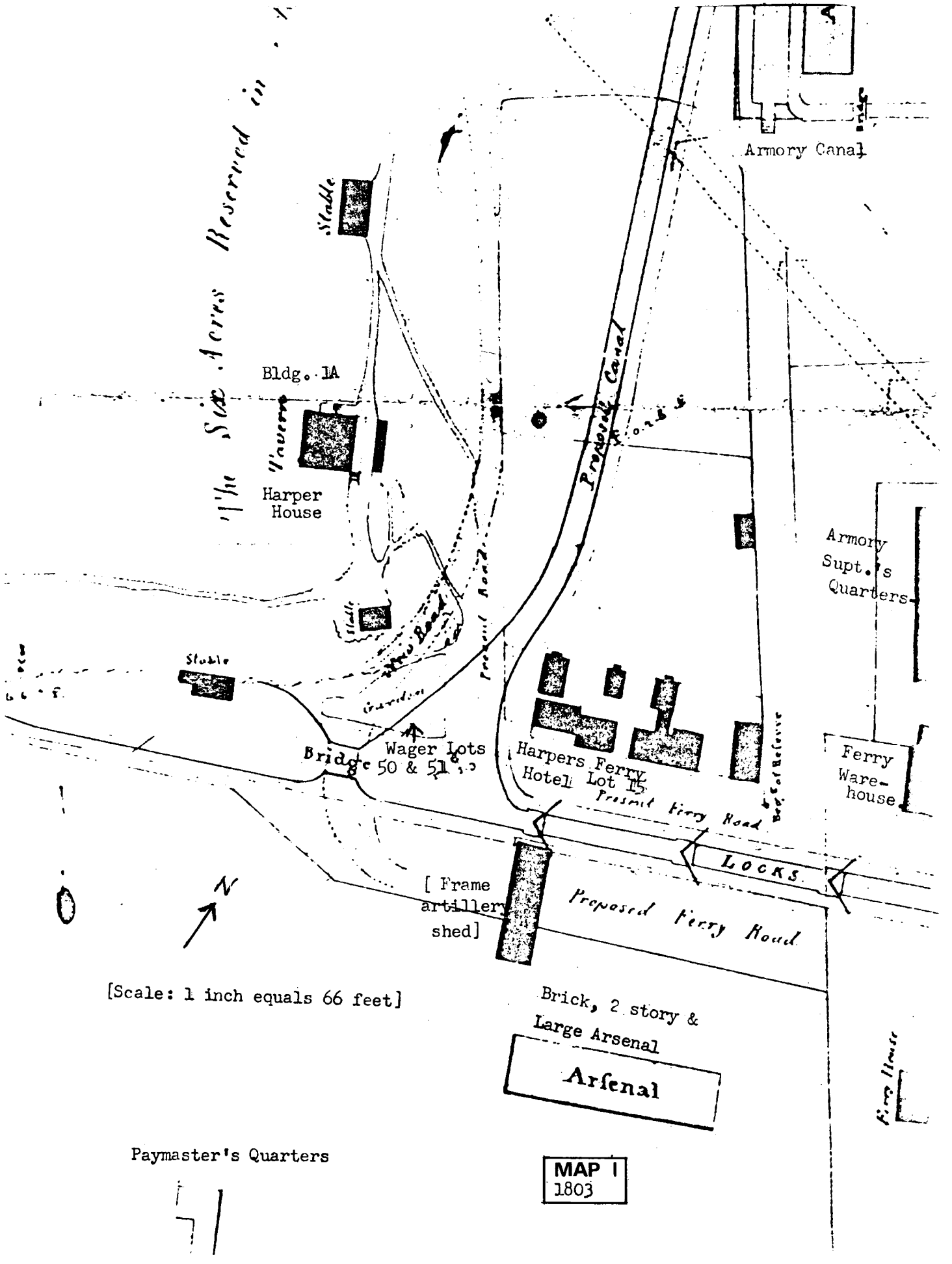


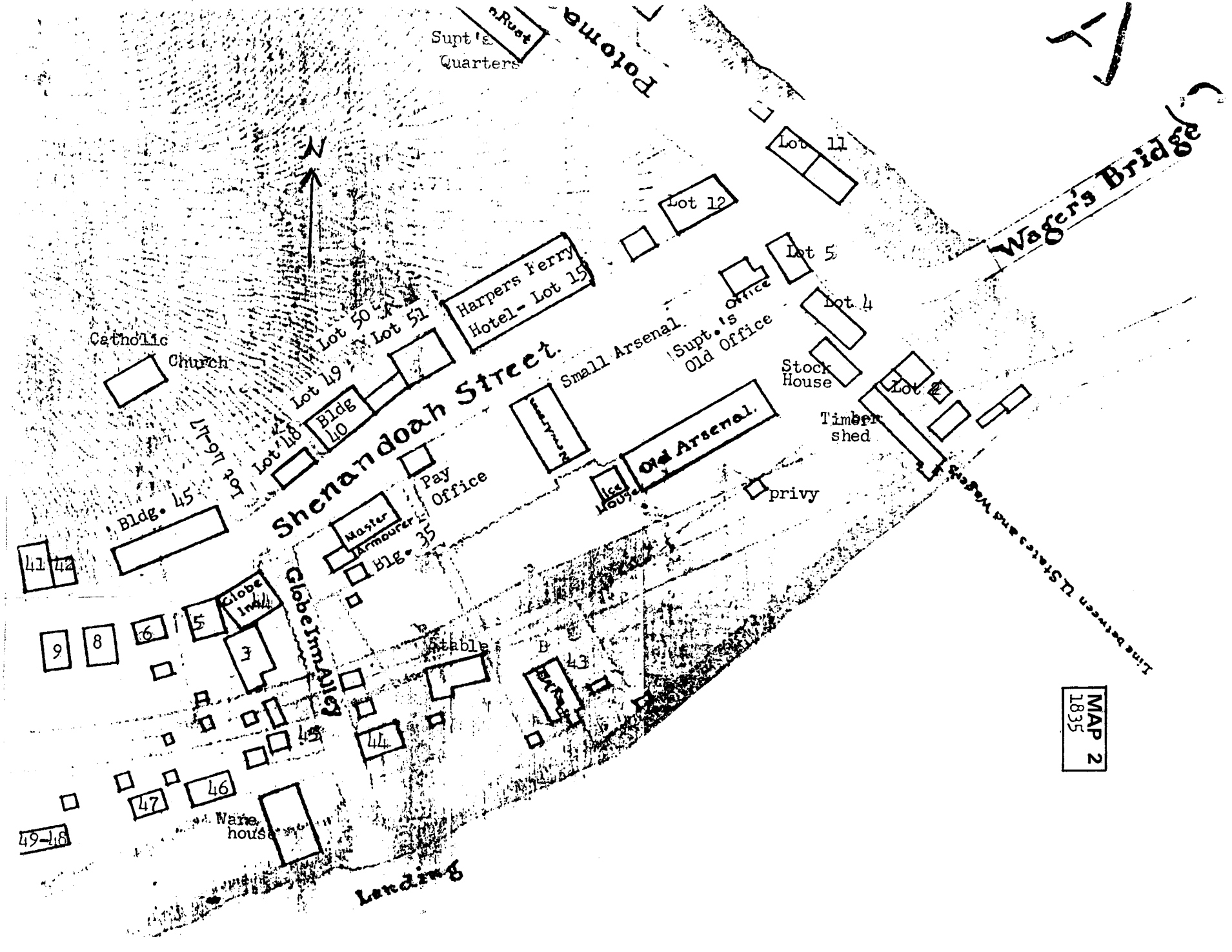
PHOTOGRAPH 73 (1978)
First-Floor South Fireplace



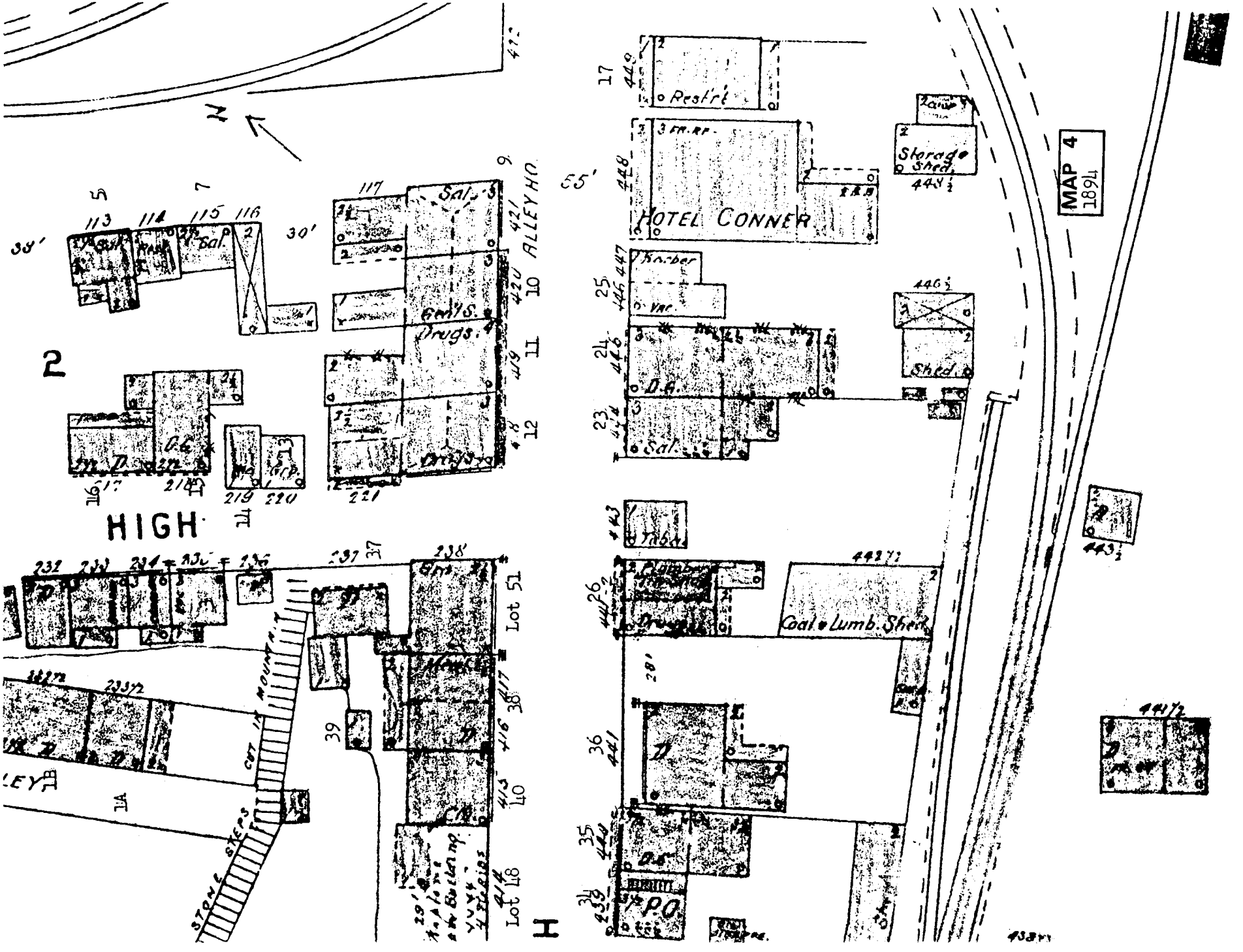
PHOTOGRAPH 75 (1978)
First-Floor North Fireplace

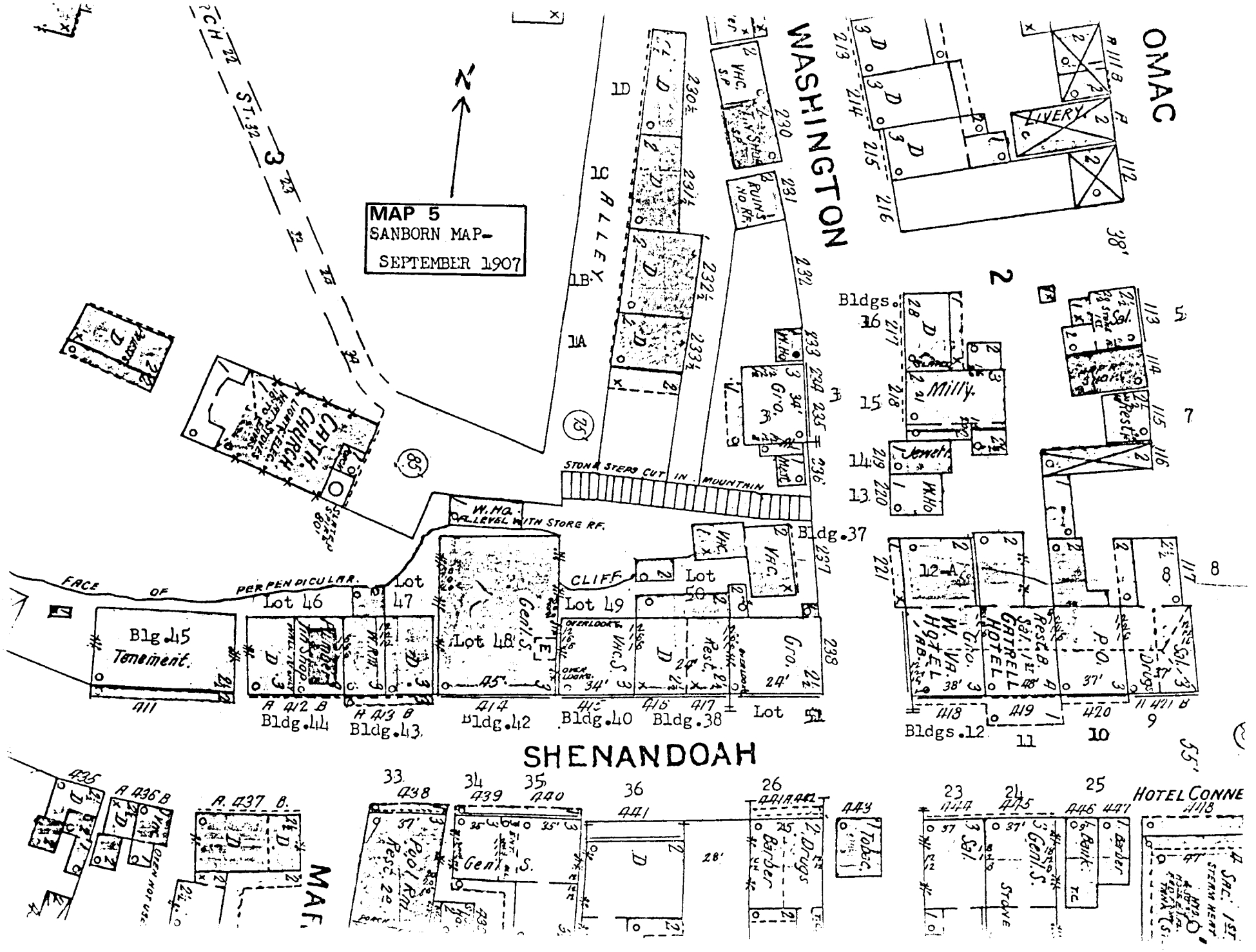
B. MAPS

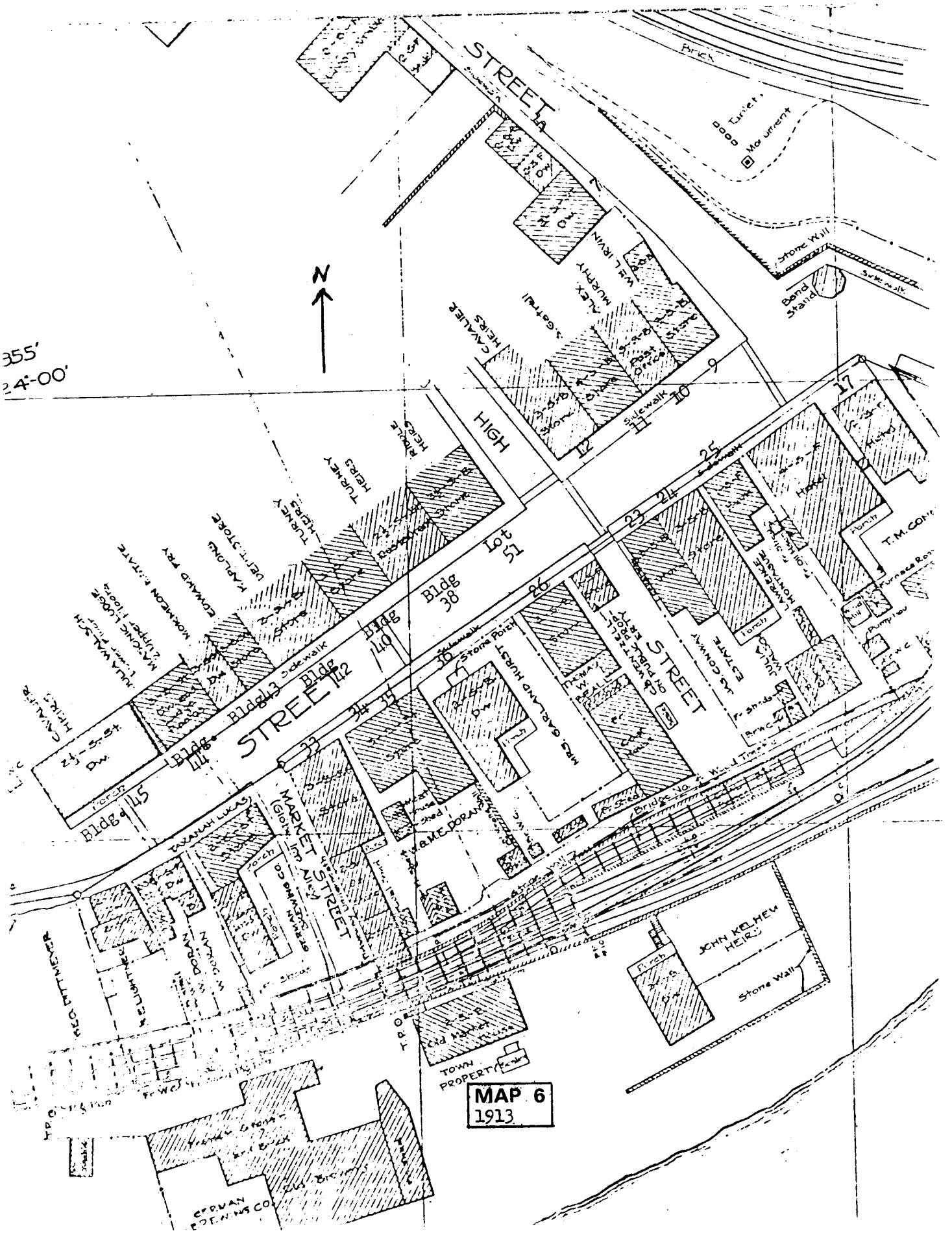

Armory Canal
Stable
Bldg. 1A
Harper House
Proposed Canal
Armory Supt.'s Quarters
Stable
Wager Lots
Bridge
50 & 51
Harpers Ferry Hotel Lot 15
Present Ferry Road
Ferry Ware-house
LOCKS
[Frame artillery shed]
Proposed Ferry Road
N
[Scale: 1 inch equals 66 feet]
Brick, 2 story & Large Arsenal
Arsenal
Paymaster's Quarters
MAP I
1803


Supt's Quarters
Potomac
Lot 11
Lot 12
Wager's Bridge
Lot 5
Lot 4
Lot 2
Harpers Ferry Hotel- Lot 15
Lot 50
Lot 51
Lot 49
Lot 48
Bldg 40
Catholic Church
Shenandoah Street
Small Arsenal
Supt.'s Old Office
Office
Stock House
Timber shed
Old Arsenal
Magazine
Ice House
privy
Pay Office
Master Armourer
Bldg. 35
Bldg. 45
Lot 97
Lot 96
41
42
9
8
6
5
Globe Inn
3
Globe Inn Alley
Stable
B
43
44
45
46
47
49-48
Ware house
Landing
Line between U.States and Wagers
N
MAP 2
1835

MAP 3
Oct. 10, 1835


MAP 4
1894
HOTEL CONNER
Rest'r
Storage Shed
Sal.
Drugs.
Shed
D.A.
Coal & Lumb. Shed
P.O.
HIGH
ALLEY HO
Lot 51
Lot 18
STONE STEPS
CUT IN MOUNTAIN
N


MAP 5
SANBORN MAP-
SEPTEMBER 1907
N
OMAC
WASHINGTON
ALLEY
1D
1C
1B
1A
LIVERY
Milly.
Jewelr.
Rest.
Gro.
Bldgs. 16
15
14
13
12-A
W. HOTEL
GATRELL HOTEL
P.O.
Drugs
Bldgs. 12
11
10
9
8
7
CATH. CHURCH
STONE STEPS CUT IN MOUNTAIN
W. MO. ON LEVEL WITH STORE RF.
FACE OF PERPENDICULAR
CLIFF
Lot 46
Lot 47
Lot 48
Lot 49
Lot 50
Bldg. 45
Tenement.
Bldg. 44
Bldg. 43
Bldg. 42
Bldg. 40
Bldg. 38
Bldg. 37
Lot
SHENANDOAH
Gen'l. S.
Pool Rm.
Barber
Tobac.
Bank
Stove
HOTEL CONNE
SAC. 1ST.
STEAM HEAT


STREET
HIGH
STREET
STREET
MARKET STREET
(Sloth Ln Alley)
Bldg 38
Bldg 40
Bldg 42
Bldg 44
Bldg 45
Lot 51
Stone Porch
Sidewalk
Stone Wall
Band Stand
Monument
Post Office
Brick
Frame
Stone
Shed
Bridge No 10
TOWN PROPERTY
JOHN KELHEM HEIRS
Stone Wall
MAP 6
1913

C. MINUTES OF MEETING AT MORRELL HOUSE, FEBRUARY 18, 1981

United States Department of the Interior

NATIONAL PARK SERVICE

DENVER SERVICE CENTER - NATIONAL CAPITAL TEAM

5600 Columbia Pike / Room 312, Falls Church, Va. 22041

FEB 27 1981

Reference:
H2215-DSC-TNC

Memorandum

To: Assistant Manager, National Capital Team, DSC

From: Susan Shufelt, Historical Architect, National Capital Team, DSC

Subject: Meeting Held at the Morrell House, Harpers Ferry National Historical Park, February 18, 1981

PURPOSE

The purpose of this meeting was

(1) to discuss the proposed restoration of Buildings 38 and 40.

(2) to discuss the construction documents for Building 3.

DISCUSSION

Don Campbell, Park Superintendent; Paul Lee, Chief of Interpretation; Archie Franzen, Architect; Fred Bohannon, Chief, Branch of Historic Preservation, TNC; Tom Fields, Historical Architect; and Susan Shufelt, Historical Architect, attended the meeting.

FINDINGS AND RECOMMENDATIONS

Archie Franzen expressed concern that much of the original interior fabric in the historic buildings of Harpers Ferry has been lost. He added that since the upper floors of Building 38 have not been extensively remodeled over the years and, therefore, contain much of the original fabric, the upper floors of Building 38 should be preserved as is for future generations. It was agreed by those present that the upper floors should be preserved rather than adaptively restored. Any necessary structural repairs should be made, but no new utilities should be added.

It was also decided that the exterior of Building 38 should be restored to its original (1844 to the early 1860's) appearance, with a central alley.

There was some discussion concerning the original appearance of Building 40's roof line. It was concluded that fabric investigation and a study of the historic photographs should be continued in an attempt to discover the original

Year of the Visitor

roof design. However, no effort should be made at present to restore the roof to its original appearance. All evidence pertaining to the roof should be recorded in the historic structure report, in case the roof is restored at some future date.

Tom Fields suggested that Room 104 of Building 3 be used as a mechanical room. There was no objection to this, but it was stated that some solution must first be found for the water problems in this area of the building. As a first step in reducing the water problems, it was decided that the water should be removed from the cisterns at the rear of Building 3 and the cisterns should be filled.

Signed

Susan Shufelt

Approved for Distribution:

(Sad) Richard G. Huber

MAR 0 9 1981

Assistant Manager, DSC-TNC

Date

cc:
Reg. Dir., NCR
Superintendent, HAFE
DSC-TNC, Mr. Bohannon
DSC-TNC, Ms. Shufelt
TNC-PIFS

TNC:S.SHUFELT:hds:2/26/81:2230

D. ENGINEER'S REPORT

United States Department of the Interior

NATIONAL PARK SERVICE

DENVER SERVICE CENTER - NATIONAL CAPITAL TEAM

5600 Columbia Pike / Room 312, Falls Church, Va. 22041

Memorandum

To: Susan Shufelt, Historical Architect, Branch of Cultural Resources
National Capital Team, Denver Service Center

From: Patrick Macdonald, Civil Engineer, Branch of Cultural Resources,
National Capital Team, Denver Service Center

Subject: Structural Considerations, Building 38, Harpers Ferry National
Historical Park

Based on information gathered during several visits to Building 38 in early and mid-March, the following description of structural features, concerns, and recommendations is offered.

Patrick Macdonald

Patrick Macdonald

Year of the Visitor

Building No. 38, Harpers Ferry N.H.P.
Structural Systems, Background Information

Several foundation walls were uncovered inside Building 38 during an extensive archeological investigation conducted in 1978. Included in this group were the remnants of two parallel stone masonry foundations running east to west through the center of the building. These foundations are believed to have supported two walls which bounded an interior, central alley removed sometime between 1860 and 1865. Also uncovered were foundation walls for a stone building which occupied lot 50 from about 1824 to 1844. Based on typical conditions encountered in other buildings in the "lower town" area of Harpers Ferry and the techniques used to build foundations within Bldg. 38 (as revealed by the 1978 study), it can be reasonably assumed that all the historic masonry foundations are built with local shale and that they bear directly on bedrock.

The stone masonry walls on the south, east and west sides of Bldg. 38 and the brick wall on its north side are also supported by mortared stone foundations. Of the perimeter walls, only the 1'9" thick east and west walls are load bearing, as they support the second and third story floor joists and roof framing system. One reason for this structural design is that Bldg. 38 was built between the two adjacent structures and utilized one wall from each as a "party" wall. This was accomplished by butting the front (east) and back (west) stone walls directly up against the adjacent buildings.

Several unusual details and/or problems developed as a result of this arrangement. First and most critical, when the contiguous building in lot 51 was removed, the soft brick on the north side of the shared wall (-intended for interior climatic conditions only), became subjected to exterior weathering effects. As can be expected, the structural integrity of this wall began to deteriorate (and continues to do so) to the point that is has deflected away from the rest of Bldg. 38. Approximately a two-inch gap now exists between this and the intersecting walls at the roof line. This has occurred inspite of an attempt to tie the brick wall to the stone walls with tie rods. Also, several cracks in the brick work have formed where its monolithical movement is restrained.

The cause of the movement of the north wall stems from the fact that the exposed brick were not prepared and the mortar joints not detailed to shed water. Moisture is therefore readily absorbed by the brick and, when this occurs in conjunction with freezing temperatures, the brick will spall and disintegrate. The deterioration of the exterior side of the wall has resulted in an imbalance between the bearing properties of the inside and outside brick, causing the movement of this wall. One area of particular concern occurs at the base of the wall, at mid length, where 10 to 20 square feet of brick work has deteriorated or been removed to a depth of at least four inches. This failure is presently covered by a sheet of plywood and located between the two timber shoring supports located in the vacant lot 51.

The other unusual detail related to the history of Bldg. 38's construction occurs on the south side of the third floor. The common wall separating Bldg. 40 from Bldg. 38 is of stone masonry construction to several feet above the third floor and brick from this level to the roof line. The wall also projects into the living space with a band of bricks just where the change of materials occurs. This corbled detail is believed to be the remnants of a cornice to Bldg. 40 when it was only a two-story structure and its roof sloped in the direction of Bldg. 38. At that time, the south gable of Bldg. 38 projected above Bldg. 40. Although no definitive clues were uncovered to determine the exterior appearance of this portion of the wall, the wood studs resting on a rafter plate (on the cornice) and plaster and lath, which probably date to the period when Bldg. 40 was two stories, still remain on the interior side. When Bldg. 40 was modified in 1873, the party wall was raised above the roof of Bldg. 38 and thereby covered this gable.

The only existing interior wall of structural significance is located on the second story and runs parallel to the front of the building. This wall supports the third story floor system and partition directly overhead and consists of 2" x 4" studs, approximately 24" on center with 2" x 4" top and bottom plate and blocking. This framing is covered on both sides with a 1" thick coat of plaster and wood lath. Although no signs were uncovered to verify this hypothesis, based on the considerable span of the second story girder, it is likely that a similar wall of wood frame construction was originally directly beneath this wall and the floor girder.

The second story floor system consists of one-inch thick, variable width T&G flooring, and two sets of 2-1/2" x 9" joists, running east to west, two feet on-center and spanning approximately fourteen feet. The joists, which are primarily red pine, are separated and supported halfway into Bldg. 38 by a historic 5-1/4" x 9" girder. This beam, which prior to 1860-1865 was supported in part by the two aforementioned masonry walls of the central, interior alley, is now supported by an additional beam - a 5-1/2" x 11-1/8" member laid sideways, and a series of wood columns and a brick pier. The historic peg connections between the floor joists and historic girder and splice detail used to connect various lengths of this girder are still intact and readily visible as most of the ceiling has been removed.

The introduction of a second girder and columns to support the historic girder was necessary due to the removal of the two stone (alley) walls which were probably original to Bldg. 38. Also, although no archeological or architectural evidence has been produced to verify or disprove this hypothesis, based on the overall load supporting capabilities of the floor framing system as opposed to that of the historic girder, it is likely that an interior load bearing partition or columns were also used historically to support the 5-1/4" x 9" girder.

Directly above the central girder of the second story floor system is a frame partition which in turn supports a girder for the third story floor system. The planking for the third story floor is also one inch thick, variable width T&G boards. The framing consists of 2" x 8" joists, roughly 22" on-center. As with the second story floor system, the joists are supported in joist pockets in the east and west stone masonry walls and by the girder over the middle of the structure. Again, a frame partition is located directly over this girder. The studs of this wall (2" x 4-1/2", 22" O.C.) which historically were nailed to the roof collar beams for lateral support have, as a result of the roof repair effort of 1964, been cut in several areas just below the roof framing member. This action represents no serious problems and should not be corrected until the sag in the second and third story floors is reduced. Both the second and third story floors slope from the perimeter walls toward the center of the building. The deflection produced, which is as much as seven inches on the second floor, can be attributed to alterations that have been made in the supporting arrangement of the second story historic girder.

Reconstruction of the masonry walls on each side of the interior alley could reduce the sag considerably. However, additional reinforcing of the girder would be necessary to enable it to support the anticipated loads over the spans between the north or south perimeter walls and the interior alley walls.

The roof on Bldg. 38 was repaired in 1964 as a temporary stabilization measure in response to damage incurred from a fire on the third floor and the considerable period of neglect which followed. The historic framing members which survived the incident with only superficial damage and which continue to perform the structural function for which they were installed are located primarily on the south side of the building. Other more seriously damaged members also remain on the north half of the building although they no longer support any roof loads. Depending on how severely they were affected, the roof trusses were either replaced or simply reinforced with new wood rafters, collar beams and other bracing members. Also, wood shingles were selected to replace the damaged metal, "standing-seam" roof.

The historic roof framing system consists of rafters two feet on-center, running east to west and tapering from sectional dimensions of 3" x 5" (at the supporting walls) to 3-1/2" x 3" (at the peak). The rafters are braced at their midspan (+ 1 ft.) by a 3-3/4" x 3-3/4" collar beam. The historic rafters have been reinforced by (non-historic) rafters tapering from 1-1/2" x 7-1/4" (at the peak) to I-1/2" x 6-3/4" (at the supporting walls) and 1" x 6" bracing members extending from the midspan area of the collar beam to each rafter, approximately 2'-6" from the peak. In the area where the historic roof framing was most severely damaged, individual rafters were replaced by a pair of members having sectional dimensions of 1-1/2" x 5-1/2" and 2-1/2" x 5-1/2" tapering to 1-1/2" x 3-3/4" and 2-1/2" x 3-3/4" respectively. Bracing for these new rafters is provided by a 3-1/2" x 3-1/2" collar beam and two 1' x 6' members.

All rafters are connected to their respective counterparts on the opposite side by splice joints and a 3/8" dowel. Collar beams are spliced to the rafters and nailed while other bracing members are simply lapped and nailed. The rafters bear on a 2" x 10" wood plate which in turn sits either on the east or west stone masonry wall. Also, 1-1/4" x 4-1/2" rafter end braces still remain over the stone walls where the roof framing has not been modified.

Recommendations:

As discussed in the preceding (descriptive) section of the report, several components of Bldg. 38's structural framework require some degree of modification, stabilization or reinforcement to correct damage incurred or return the structure to its historic layout and design. One area where such an effort is needed is on the brick wall on the north side of Bldg. 38. The problems encountered here - deterioration of the exterior surface brick, movement of the wall away from the rest of the structure, and cracks caused by restrained movement demand that some type of action be taken.

The following is a description of possible solutions to this problem with a discussion of the pros and cons of each alternative.

1. Preservation/Stabilization. This is the preferred approach to treating historic structures in general as it calls for the maintenance of authentic historic fabric rather than alteration and interpretation of facsimiles. In the case of the north wall, this approach would involve more selective replacement of deteriorated bricks and mortar on the exterior side of the wall, continued use of structural bracing/shoring, and application of a water repellent wall covering such as stucco, or a plaster finish similar to the historic pargeting still remaining on the west (back) side of the building. Although the use of the proposed water repellent coating has no historical basis, it is considered necessary to protect the soft exterior brick and prevent their further deterioration. Also, to present this wall surface in its "historic" context would require recreating an interior living environment such as when a building existed in lot 51. Since this type of action is not anticipated in the near future, a solution such as applying non-historic pargeting is needed to protect the brick. This should be done in a manner that plays down the inaccuracy of this historic scene by making the north wall blend in with the rest of Bldg. 38. Limitations of this approach are that the separation between the north wall and the east and west walls will remain, that interpretation of the exterior side of the north wall as an interior wall to a building on lot 51 will be limited by the poor

quality of this brick, and that a bracing system will continue to be needed. The major benefit of this direction is that the brick work on the interior side of the north wall will be historically intact and can be exposed for interpretive purposes.

2. Restoration: The major difference between the "restoration" approach and preceding alternative is that, in this case, stabilization of the wall would be achieved by dismantling and rebuilding rather than by selected repair and replacement of brick and bracing.

The restoration approach could be employed at several levels to achieve satisfactory results with varying effects on the historic fabric. One approach would be to dismantle the entire wall and rebuild it using salvageable bricks and replacements. The salvageable bricks would be used on the interior side of Bldg. 38 as the exterior side should probably be covered by a non-historic finish. Another alternative is to dismantle the north wall to the second story floor level, remove the remaining exterior brick (one brick width deep), and rebuild the wall to its historic dimensions and details using new replacement units. Treatment of this restored wall could also be employed to conceal non-historic building fabric. The advantage of this approach is that it allows the historic brick work, which is likely to be used for interpretive purposes, to remain in its authentic state while correcting the serious problems by methods and in areas inaccessible to the public's view.

Because of problems inherent in the simultaneously preserving and interpreting this wall, the dubious value of preserving the historic brick work on the second and third stories, and the less obtrusive, more structurally sound final product achieved, <u>the restoration approach is the method recommended for dealing with the north wall</u>.

Further structural modifications and/or stabilization measures required in Bldg. 38 include reconstructing the stone masonry interior walls on each side of the historic (ground story) alley, jacking up the second

and third story floors so that they are level, and installing additional supports or reinforcing members to enable the floor framing system to support the anticipated loads based on the expressed intended uses of the various rooms.

PARK HARPERS FERRY N.H.P.	NATIONAL PARK SERVICE DENVER SERVICE CENTER			SHEET 1
AREA LOWER TOWN				OF
PROJECT BLDG. 38, H.S.R.	BY P. MACDONALD		CHECKED	PKG
FEATURE 2ND & 3RD STORY FLOORS	DATE	5/27/81	DATE	ACCOUNT

FRAMING SYSTEM FOR SECOND STORY FLOOR CONSISTS OF 2½" x 9" JOISTS, 24" O.C., SPANNING 14'-0. THE JOISTS ARE SUPPORTED BY A 5¼" x 9" WOOD GIRDER AND STONE MASONRY WALL.

DEAD LOADS:

JOISTS	3.47 PSF	(WGT. OF 3x10s 2'-0 O.C.)
FLOORING	3 PSF	(1" THICK FLOOR BOARDS)
CEILING	10 PSF	
PARTITIONS	N/A	AS PARTITIONS LIE DIRECTLY OVER THE MAIN FLOOR GIRDER, DOUBLE JOISTS OR MASONRY WALLS.
	16.47 PSF	

FLOOR JOIST ANALYSIS

FOR BENDING:

S (for 2½" x 9" JOISTS) = 33.75 in^3

ASSUMING $f = 1200$ psi,

$M_{max} = (33.75)(1200) = 40,500$ in·lbs

$W_{max} = \frac{(8)(40,500)}{(14)(12)} = 1928$ lbs

∴ TOTAL ALL. LOADING PER LINEAL FOOT OF JOIST $= \frac{1928}{14} = 137.76 \frac{lbs}{Ft.}$

PARK HARPERS FERRY N.H.P.	NATIONAL PARK SERVICE DENVER SERVICE CENTER		SHEET 2
AREA LOWER TOWN			OF
PROJECT BLDG. 38, HSR	BY P. MACDONALD	CHECKED	PKG
FEATURE 2ND & 3rd STORY FLOORS	DATE 5/27/81	DATE	ACCOUNT

TOTAL LOAD PER SF OF FLOOR AREA = $\frac{137.76}{2}$ = 68.88 PSF

∴ ALLOWABLE LIVE LOAD = 68.88 - 16.47

= 52.41 PSF

FOR DEFLECTION :-

$I = 151.875\ in^4$; ASSUME $E = 1.5 \times 10^6$ psi

$D_{ALL} = \frac{SPAN}{240} = \frac{(12)(14)}{240} = 0.7"$

$\therefore W_{all} = (D_{all})EI\ (384)/5l^3$

$= \frac{(0.7)(1.5 \times 10^6)(151.875)(384)}{(5)(14 \times 12)^3} = 2.583 \times 10^3$ lbs

∴ The total allowable loading per lineal foot of joists = $\frac{2583}{14}$ = 184.5 $\frac{lbs}{Ft}$

Total allowable load per SF of floor area = $\frac{184.5}{2}$ = 92.2psf

∴ THE ALLOWABLE LIVE LOAD (FOR DEFL.) = 92.25 - 16.47

= 75.8 PSF

FOR SHEAR :-

ASSUME ALLOWABLE SHEAR = 105 PSI

PARK HARPERS FERRY N.H.P.	NATIONAL PARK SERVICE DENVER SERVICE CENTER		SHEET 3
AREA LOWER TOWN			OF
PROJECT BLDG. 38, HSR	BY P. MACDONALD	CHECKED	PKG
FEATURE 2ND & 3rd STORY FLOORS	DATE 5/27/81	DATE	ACCOUNT

FOR THE MORTISE & TENNON TYPE OF SUPPORTING DETAIL USED AT THE GIRDER, $V = q(bh)(2/3)$

$= 105(2.5)(2.25)(0.667)$

$= 393.95$ lbs

TOTAL LOADING PER LINEAL FOOT OF JOIST $= \frac{2V}{(14 - 1.333)}$

$= 62.2$ lbs/Ft.

TOTAL FLOOR LOAD ALLOWED $= \frac{62.2}{2} = 31.1$ PSF

TOTAL ALLOWABLE LIVE LOAD $= 31.1 - 16.47 = 14.63$ PSF

SHEAR STRENGTH OF CONNECTION DETAIL IS THE LIMITING FACTOR IN THE LOAD SUPPORTING CAPABILITIES OF THE SECOND STORY FLOOR JOISTS. AN ALLOWABLE LIVE LOAD OF 50PSF WOULD BE EASILY ATTAINED BY INCREASING THE (MINIMAL) SECTIONAL DIMENSIONS AT THIS SUPPORT.

ANALYSIS OF HISTORIC GIRDER BISECTING BLDG. 38, 2ND STORY FLOOR SYSTEM

DEAD LOADS :-

5 1/4" x 9" HISTORIC BEAM $=$ 13.86 lbs/Ft.

FRAME WALLS OVER GIRDER $= (22)(7.5)(2) = 330$ lbs/Ft.
(2ND & 3rd FLOOR)

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FEATURE 2ND & 3rd STORY FLOORS	DATE	5/27/81	DATE	ACCOUNT

(ROOF NOT SUPPORTED TO ANY DEGREE BY GIRDER)

2ND FLOOR FRAMING, FLOORING, CEILING, ETC. $= \frac{(16.47)(27)}{2} = 222.3$

3rd " " , " , " , " $= 222.3$ lbs/FT.

TOTAL DEAD LOAD = 788.46 lbs/FT.

FOR MAX. SPAN OF GIRDER (16'.6") — THE DISTANCE BETWEEN THE EXTERIOR BRICK WALL AND THE "TO-BE-CONSTRUCTED" STONE WALL OF THE INTERIOR ALLEY,

$W = (788.46)(16.5) = 13,009.6$ lbs.

FOR BENDING, ALLOWABLE LIVE LOAD ...

S (for 5 1/4" x 9" GIRDER) $= 70.88\ in^3$

ASSUMING f = 1200 psi

$M_{MAY} = 85,056$ in-lbs

$W_{all} = \frac{8\ (85,056)}{(16.5)(12)} = 3436.61$ lbs.

TOTAL ALLOWABLE DEAD LOAD PER LIN. FT. $= \frac{3436.61}{16.5}$

$= 208$ lbs/FT.

TOTAL DEAD LOAD = 788.46 lbs/FT

NO GOOD

HISTORIC GIRDER BY ITSELF CAN NOT EVEN SUPPORT EXIST. DEAD LOADS.

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AREA LOWER TOWN	DENVER SERVICE CENTER		OF
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FEATURE 2ND & 3rd STORY FLOORS	DATE 5/27/81	DATE	ACCOUNT

NOTE: THE HISTORIC GIRDER, BY ITSELF, CANNOT SUPPORT THE EXISTING DEAD LOADS FOR THE 16'-6" SPAN BETWEEN THE NORTH WALL AND THE "TO-BE-CONSTRUCTED" STONE (ALLEY) WALL. SOME TYPE OF SUPPLEMENTAL SUPPORT SYSTEM SUCH AS A FRAME LOAD BEARING WALL OR CABLES WILL BE NEEDED IF THE NON-HISTORIC COLUMNS AND BEAMS ARE TO BE REMOVED. THIS SYSTEM WILL DEPEND ON THE INTERPRETIVE INTERIOR PLAN AND ANTICIPATED LOADING ON THE SECOND AND THIRD FLOORS.

THIRD STORY FLOOR ANALYSIS:-

EXIST. SYSTEM:- 2x8 JOISTS 22" O.C. SPANNING 13'-6" AND SUPPORTED BY A STONE WALL AND 3 1/2" x 8" GIRDER HAVING CONTINUOUS SUPPORT.

LOADS (lbs per SF)

DEAD:

WGT. OF JOIST = (3.4)(13/22) = 1.85 PSF
CEILING = 10 PSF
FLOORING = 3 PSF
14.85 PSF

DEAD LOAD PER LIN. FT OF JOISTS = 27.23 lbs/FT.

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FEATURE 2ND & 3rd STORY FLOORS	DATE	5/27/81	DATE	ACCOUNT

FOR BENDING :-

S (for 2" x 8" JOIST) = 21.33 in^3

ASSUMING $f = 1200$ psi

$M_{max} = (21.33)(1200) = 25,596$ in-lbs

$W_{max.} = \frac{(8)(25,596)}{(13.5)(12)} = 1264$

.. TOTAL ALLOWABLE LOADING PER LINEAL FOOT OF JOIST $= \frac{1264}{13.5} = 93.63 \frac{lbs}{ft.}$

TOTAL ALLOWABLE LOAD PER SF OF FLOOR AREA $= 93.63 \times \frac{12}{22} = 51.1$ PS.

ALLOWABLE LIVE LOAD = 51.1 − 14.85

= 36.25 PSF

FOR DEFLECTION :-

$I_{act} = 85.33\ in^3$

$D_{all} = (13.5)(12)/240 = 0.675"$

$W_{all} = (0.675")EI(384)/5l^3$

$= (0.675)(1.5 \times 10^6)(85.33)(384)/5(13.5 \times 12)^3$

$= 1327.05$ lbs

TOTAL ALL. LOADING PER LIN. FOOT OF JOIST $= \frac{1327.05}{13.5} = 98.3 \frac{lb}{ft.}$

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AREA LOWER TOWN				OF
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FEATURE 2ND & 3RD STORY FLOORS	DATE	5/27/81	DATE	ACCOUNT

TOTAL ALLOWABLE LOAD PER SF OF FLOOR AREA = 98.3 x 12/22

= 53.62 PSF

TOTAL ALLOWABLE LIVE LOAD = 53.62 - 14.85

= 38.8 PSF

ASSUMING THE MORTISE & TENNON TYPE CONNECTION DETAIL USED ON THE SECOND STORY FLOOR SYSTEM IS DUPLICATED ON THE THIRD, THE ALLOWABLE LIVE LOAD WILL BE LIMITED BY THE SHEAR STRENGTH OF THIS CONNECTION. IF A SUITABLE SUPPORTING DETAIL IS PRESENT (WHERE THE FULL SECTION OF THE JOIST IS SUPPORTED AT THE GIRDER), AN ALLOWABLE LIVE LOAD OF 30 PSF COULD BE ESTABLISHED

ANALYSIS OF THIRD STORY FLOOR GIRDER

LOADS ON GIRDER

DEAD,	JOISTS	3.4 x 12/22 x 13.5	=	25 lbs/ft
	CEILING	10 x 27/2	=	135 "/"
	FLOORING	3 x 27/2	=	40.5 "/"
	PARTITION	22 x 8	=	176 "/"
	GIRDER		=	5.5 "/"
LIVE	30 PSF x 27/2		=	405 "/"
				787 "/"

W = (787)(3.0) = 2361 lbs

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AREA LOWER TOWN				OF
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FEATURE 2ND & 3RD STORY FLOORS	DATE	5/27/81	DATE	ACCOUNT

ASSUMING GIRDER SIMPLE SPAN OF 3'-0". (ACTUALLY, GIRDER IS SUPPORTED CONTINUOUSLY BY FRAME WALL WITH 2 x 4 STUDS, 22" O.C.)

REQUIREMENTS FOR BENDING :-

$$M_{max} = \frac{Wl}{8} = 1062.4.5 \text{ in-lbs}$$

$S_{reqd} = 8.85 \text{ in}^3$

$S_{exist} = 32 \text{ in}^3$

O.K.

REQUIREMENTS FOR DEFLECTION

$$D_{all} = 36 \text{ in}/240 = 0.15"$$

$$I_{reqd} = \frac{5}{384} \frac{Wl^4}{E D_{all}} = 6.375 \text{ in}^4$$

O.K.

I_{act} (for 3 x 8) $= 128 \text{ in}^4$

ANALYSIS OF FRAME WALL SUPPORTING GIRDER.

ASSUME $E = 1.21 \times 10^6$ psi

$c = 600$ psi

$f = 950$ psi

$l = 9'$

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AREA LOWER TOWN			OF
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FEATURE 2ND & 3RD STORY FLOORS	DATE 5/27/81	DATE	ACCOUNT

$\ell/d = (9)(12)/4 = 27$

O.K.

SUBSTITUTING IN COLUMN FORMULA,

$P/A = (0.3)(1.21 \times 10^6)/(27)^2 = 497.9 \text{ psi} < 600$

Since the cross sectional area of a 2" x 4" is 8 in^2, the allowable load on the 2" x 4" stud wall per lineal foot of wall if the stud spacing is 12" o.c. = 8 x 497.9 = 3983.5 lbs.

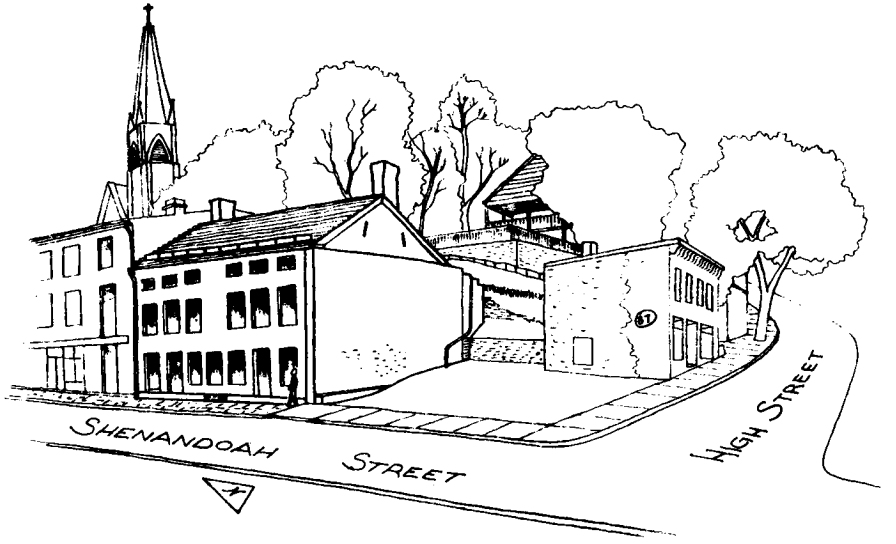
Hence, for studs 24" o.c., the allowable lineal load is $3983.5 \times \frac{12}{24} = 1991.8$ lbs/ft > 787 lbs/ft

O.K. FOR LIVE LOAD OF 30 PSF

E. HISTORIC AMERICAN BUILDING SURVEY DRAWINGS

TEARNEY BUILDING

HARPERS FERRY • JEFFERSON COUNTY • WEST VIRGINIA



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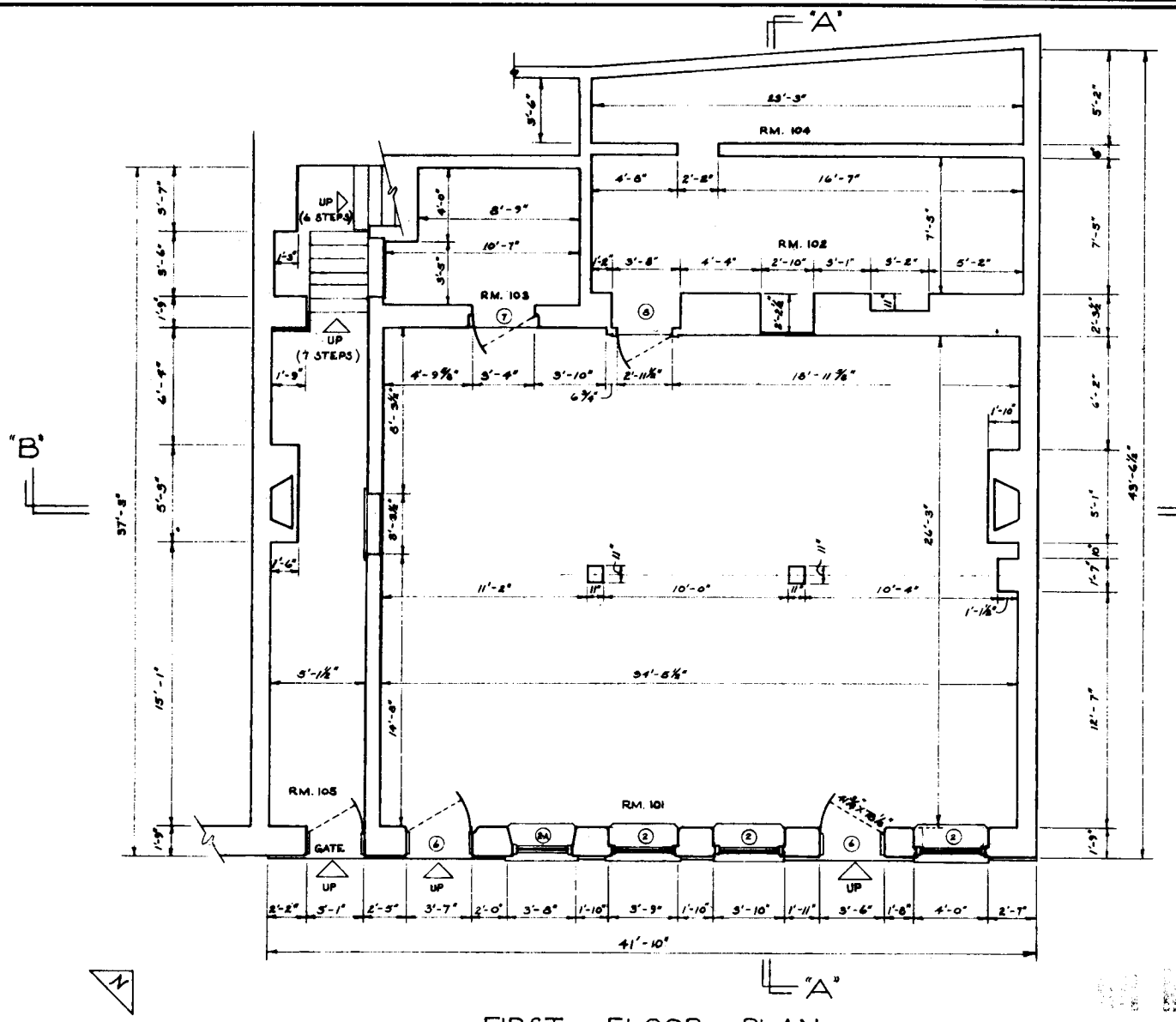
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UNDER DIRECTION OF UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE, BRANCH OF PLANS AND DESIGN

NAME OF STRUCTURE
TEARNEY BUILDING -
HARPERS FERRY - JEFFERSON COUNTY - WEST VIRGINIA

SURVEY NO.

HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 1 OF 12 SHEETS



FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"

0 1 2 3 4 5 6 7 8 9 10 FEET

0 1 2 3 METERS

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NATIONAL PARK SERVICE, BRANCH OF PLANS AND DESIGN

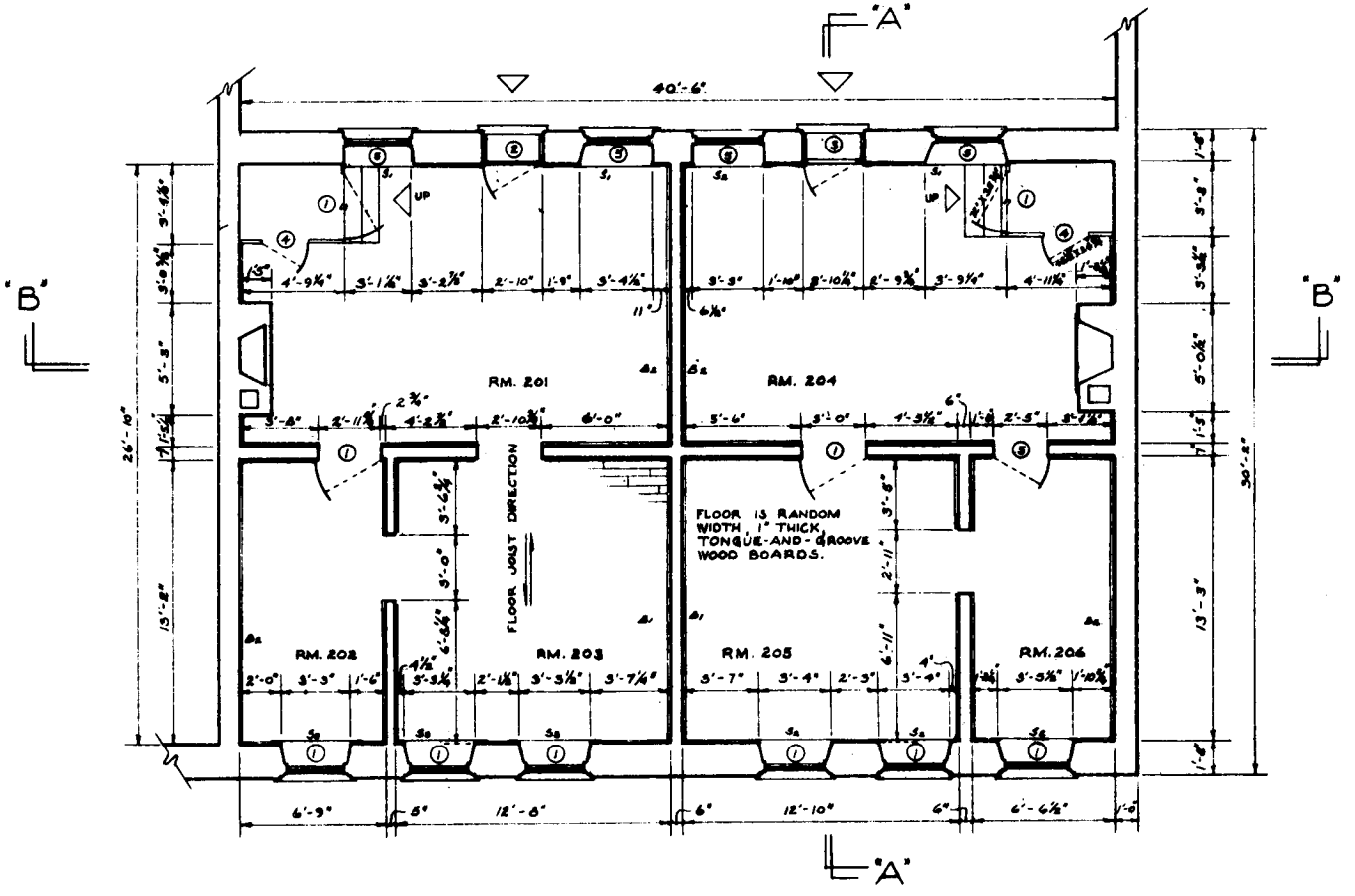
NAME OF STRUCTURE

TEARNEY BUILDING

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SURVEY NO.

HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 2 OF 12 SHEETS



SECOND FLOOR PLAN

SCALE ¼"= 1'-0"

0 1 2 3 4 5 6 7 8 9 10 FEET

0 1 2 3 METERS

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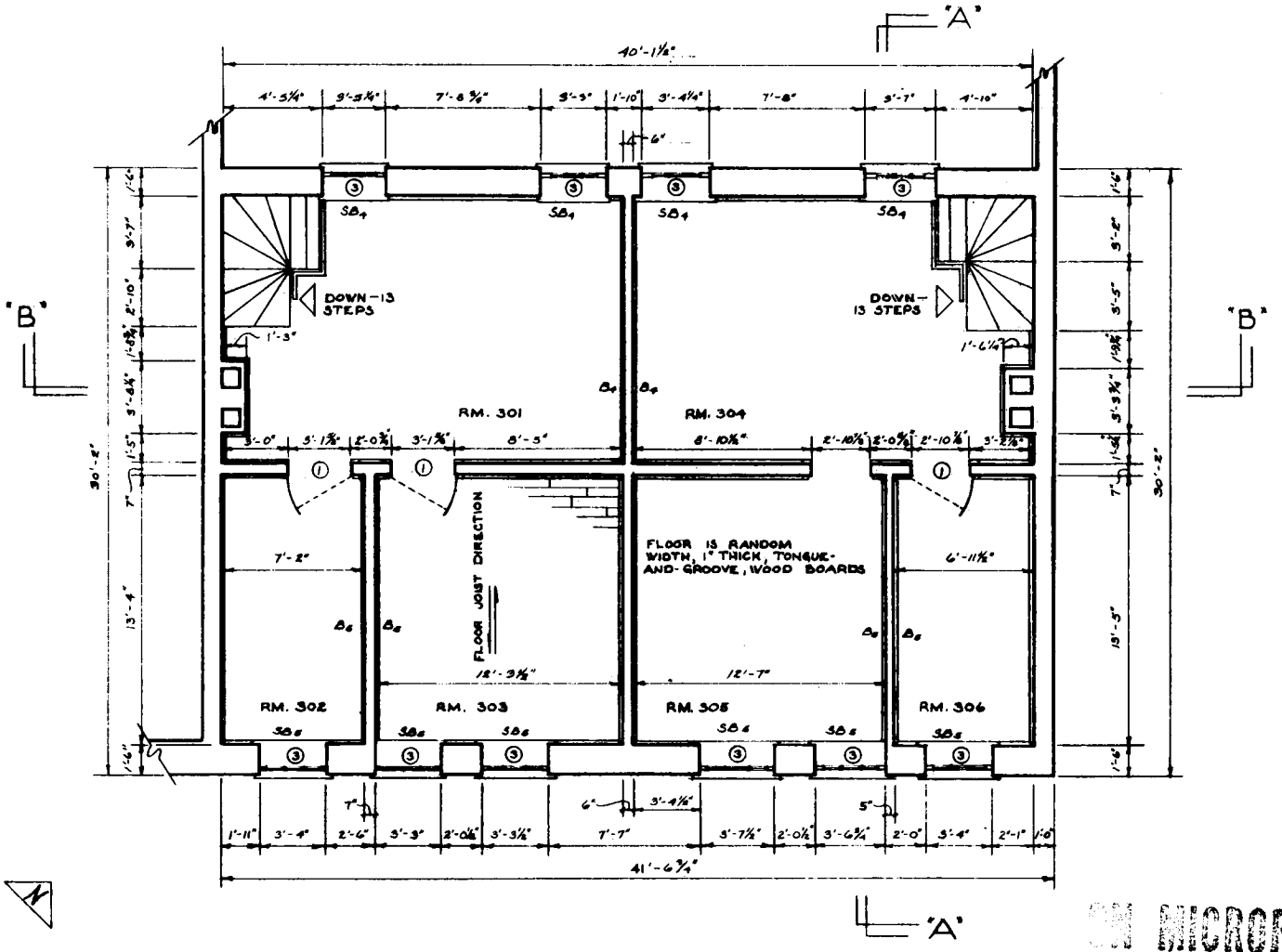
NAME OF STRUCTURE

TEARNEY BUILDING

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SURVEY NO. 385/25012

HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 3 OF 12 SHEETS



THIRD FLOOR PLAN

SCALE ¼" = 1'-0"

MICROFILM

0 1 2 3 4 5 6 7 8 9 10 FEET

0 1 2 3 METERS

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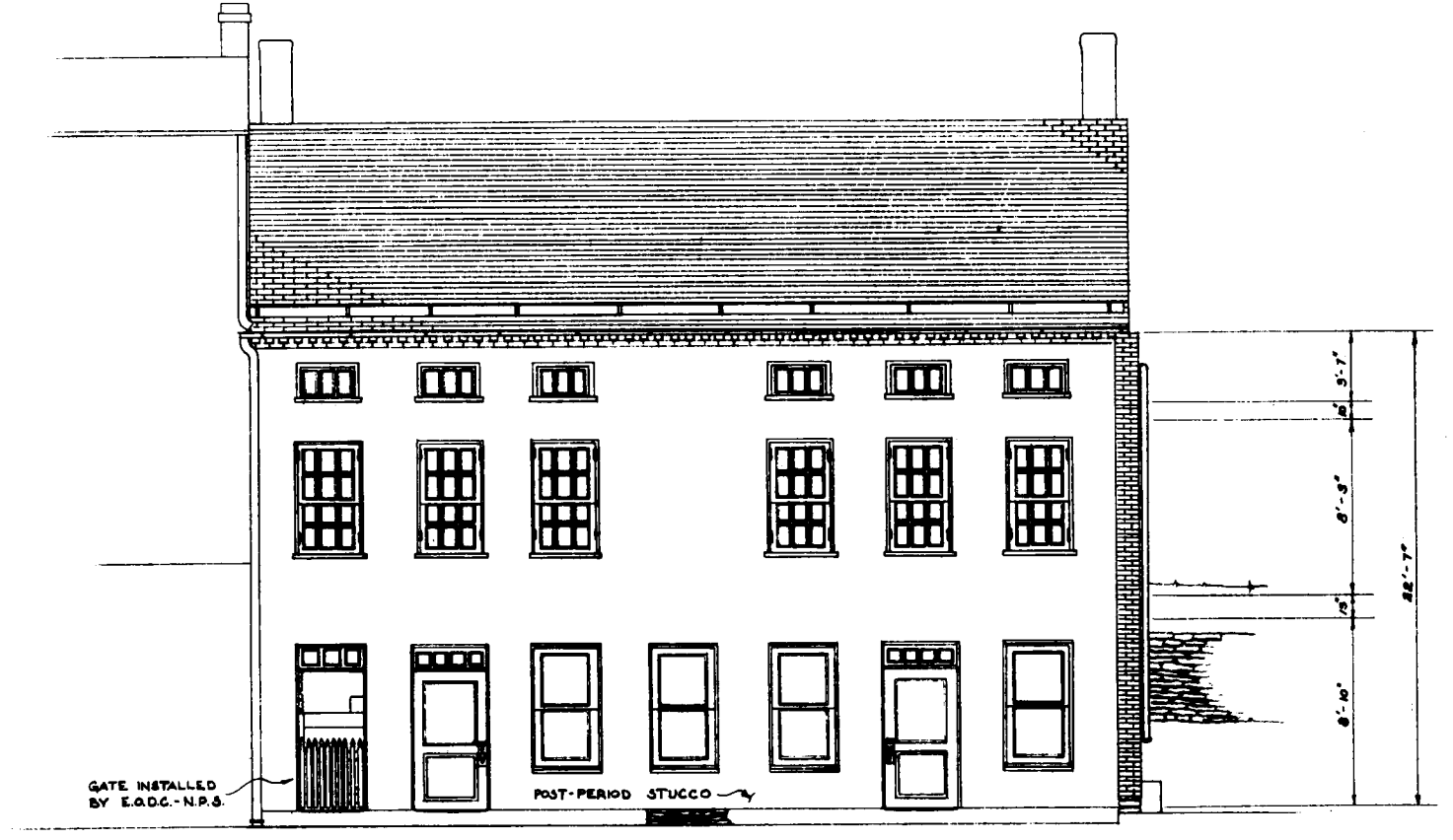
NAME OF STRUCTURE

TEARNEY BUILDING

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SURVEY NO.

HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 4 OF 12 SHEETS



FRONT ELEVATION – SOUTHEAST

SCALE 1/4" = 1'-0"

0 1 2 3 4 5 6 7 8 9 10 FEET

0 1 2 3 METERS

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NAME OF STRUCTURE

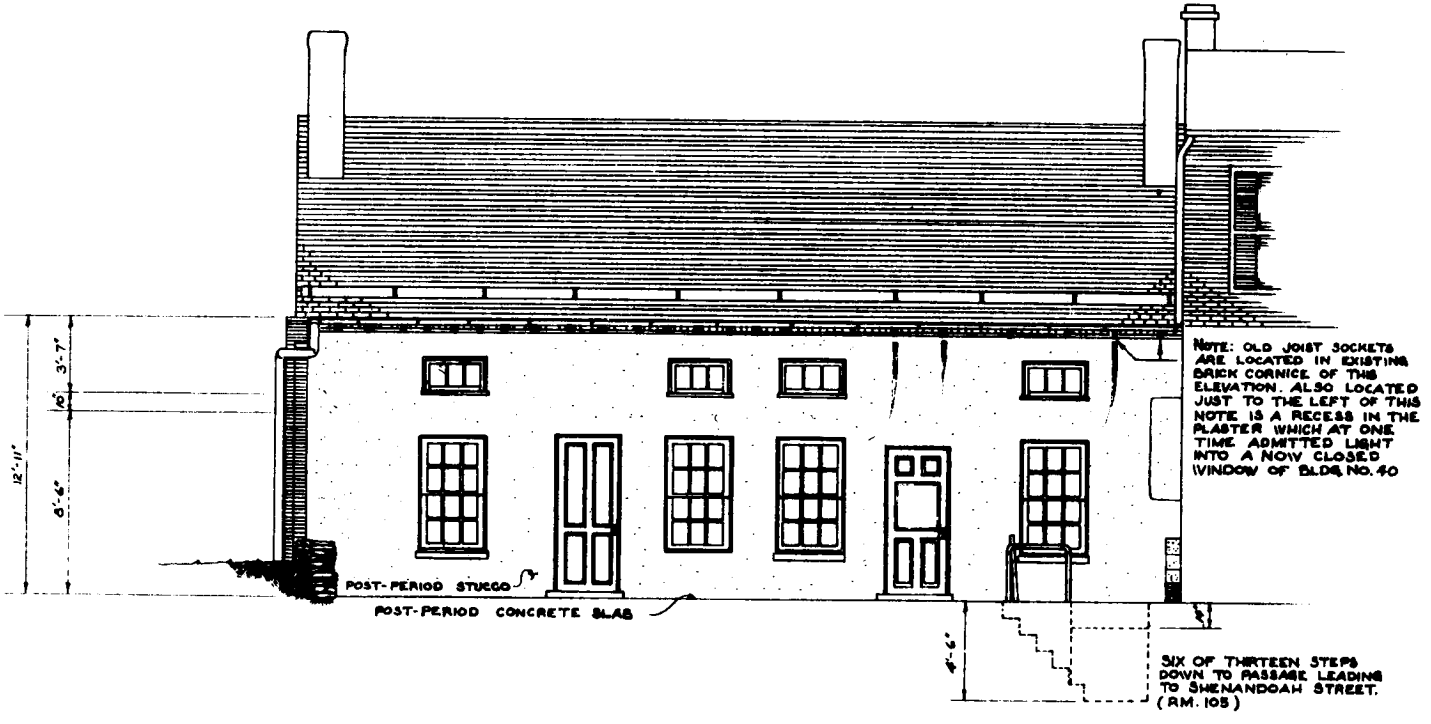
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HISTORIC AMERICAN BUILDINGS SURVEY

SHEET 5 OF 12 SHEETS



REAR ELEVATION - NORTHWEST

SCALE 1/4" = 1'-0"

ON MICROFILM

0 1 2 3 4 5 6 7 8 9 10 FEET

0 1 2 3 METERS

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NAME OF STRUCTURE

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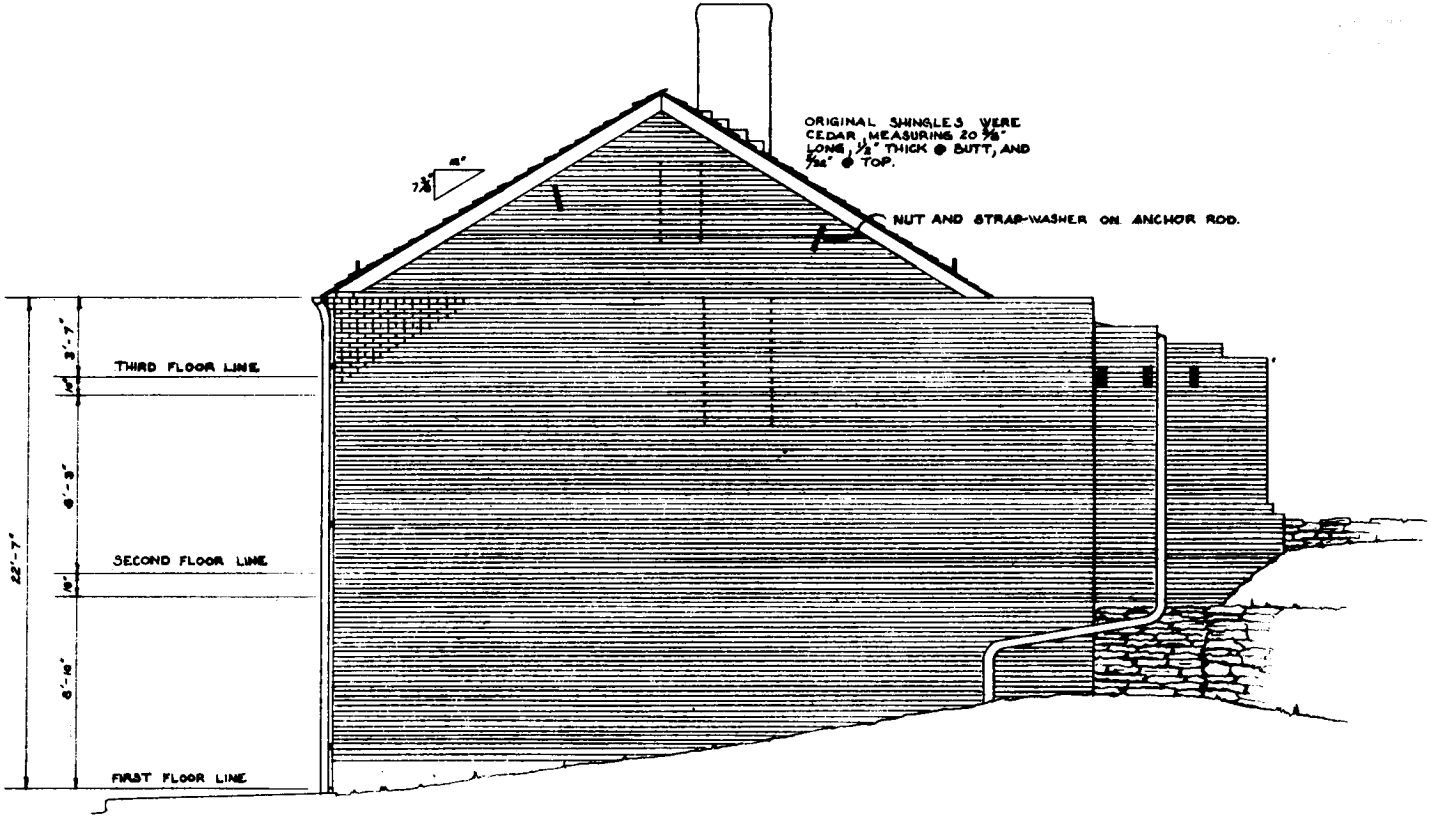
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HISTORIC AMERICAN BUILDINGS SURVEY

SHEET 6 OF 12 SHEETS

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SIDE ELEVATION – NORTHEAST

SCALE 1/4" = 1'-0"

NOTE: THE BRICK WALL SHOWN IN THIS ELEVATION WAS THE SOUTHWEST WALL OF AN EARLIER BUILDING. IT CONTAINS APPROXIMATELY 135 COURSES OF BRICK AND STANDS APPROXIMATELY 12 INCHES THICK AT THE BASE. NOTE THE JOIST SOCKETS AT THE RIGHT AND THE BRICKED WINDOWS AT THE DOTTED LINES. THE BOND IS COMMON WITH A COURSE OF HEADERS EVERY SIXTH COURSE.

0 1 2 3 4 5 6 7 8 9 10 FEET

0 1 2 3 METERS

ON MICROFILM

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NAME OF STRUCTURE

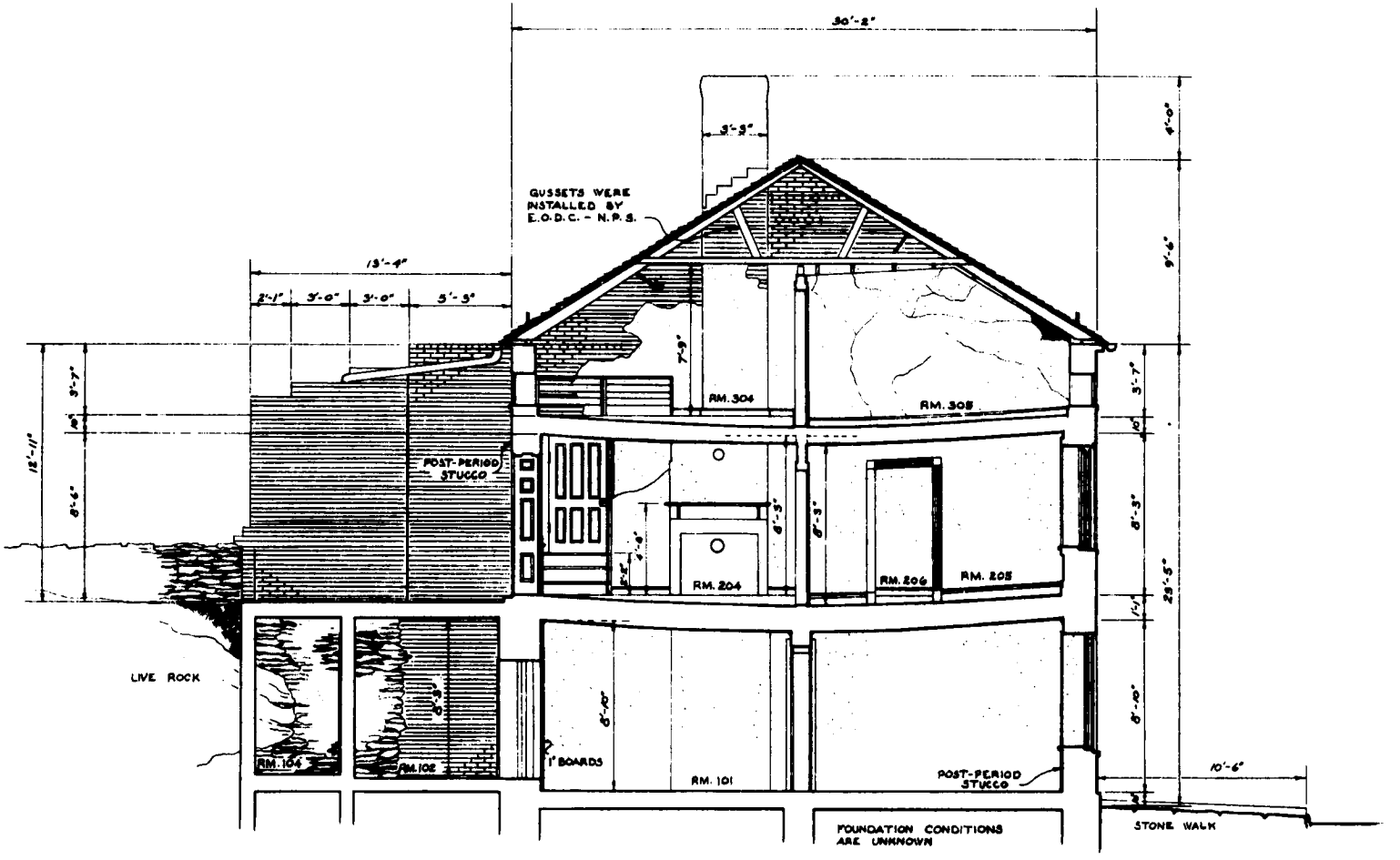
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SURVEY NO.

HISTORIC AMERICAN BUILDINGS SURVEY

SHEET 7 OF 12 SHEETS



NOTE: WALL FINISHES SHOWN INCLUDE THE FOLLOWING - ROOMS 101, 204, 206, AND 304 HAVE PLASTER ON BRICK AND STUCCO ON RUBBLE WITH PLASTER ON LATH AT INTERIOR PARTITIONS EXCEPT WHERE NOTED. ROOMS 205 AND 305 HAVE STUCCOED RUBBLE WITH PLASTER ON LATH AT INTERIOR PARTITIONS. ROOM 102 HAS BARE AND STUCCOED RUBBLE, BRICK, AND CONCRETE BLOCK. ROOM 104 HAS RUBBLE AND CONCRETE BLOCK.

TRANSVERSE SECTION "A-A"

SCALE 1/4" = 1'-0"

ON MICROFILM

0 1 2 3 4 5 6 7 8 9 10 FEET

0 1 2 3 METERS

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NAME OF STRUCTURE

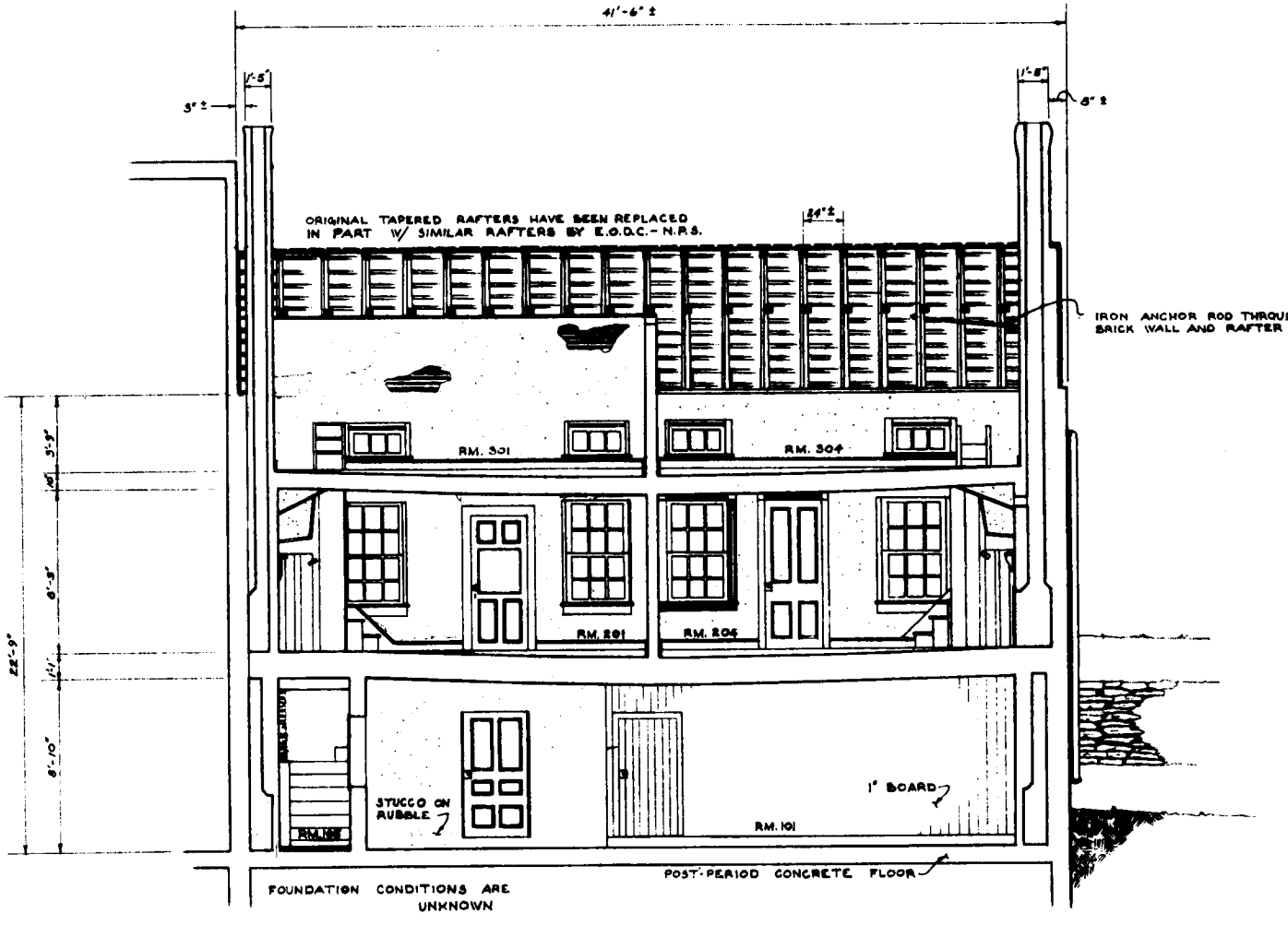
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SURVEY NO.

HISTORIC AMERICAN BUILDINGS SURVEY

SHEET 5 OF 12 SHEETS



SECTION "B-B"
SCALE 1/4"-1'-0"

ON MICROFILM

0 1 2 3 4 5 6 7 8 9 10 FEET

0 1 2 3 METERS

385/25012

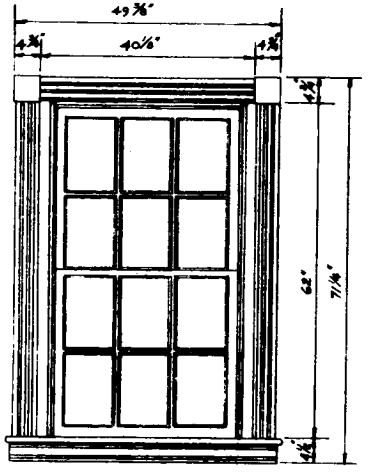
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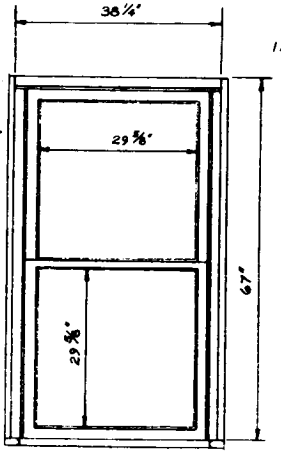
SURVEY NO.

HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 9 OF 12 SHEETS

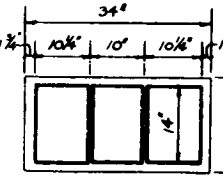


NO. 1 - WINDOW DETAIL
SCALE 3/4" = 1'-0"

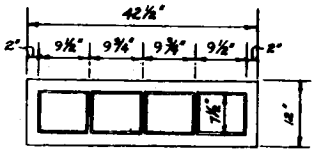
NOTE: WINDOW 2-A IS SIMILAR TO WINDOW NO. 2 EXCEPT FOR A 4 1/4" SPLAY AT EACH SIDE OF THE WINDOW OPENING. (SEE FIRST FLOOR PLAN) ALSO, WINDOW NO. 2 IS 6" WIDER THAN WINDOW 2-A.



NO. 2-A - WINDOW DETAIL
SCALE 3/4" = 1'-0"

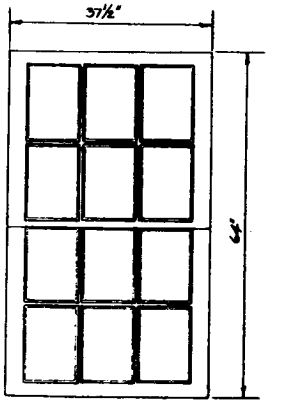


NO. 3 - WINDOW DETAIL
SCALE 3/4" = 1'-0"

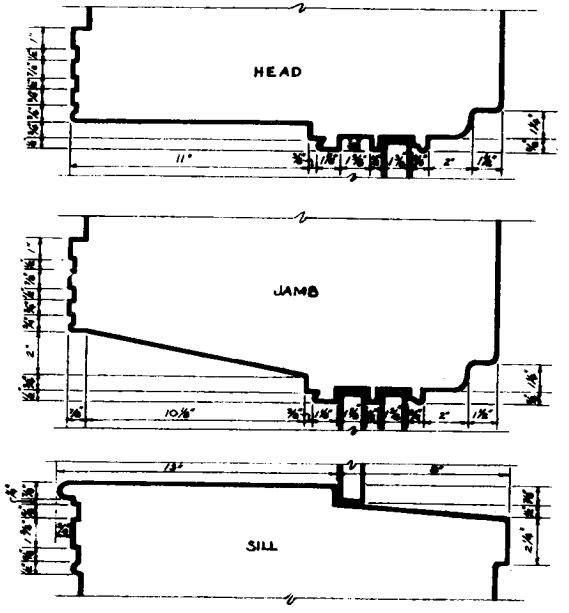


NO. 4 - WINDOW DETAIL
SCALE 3/4" = 1'-0"

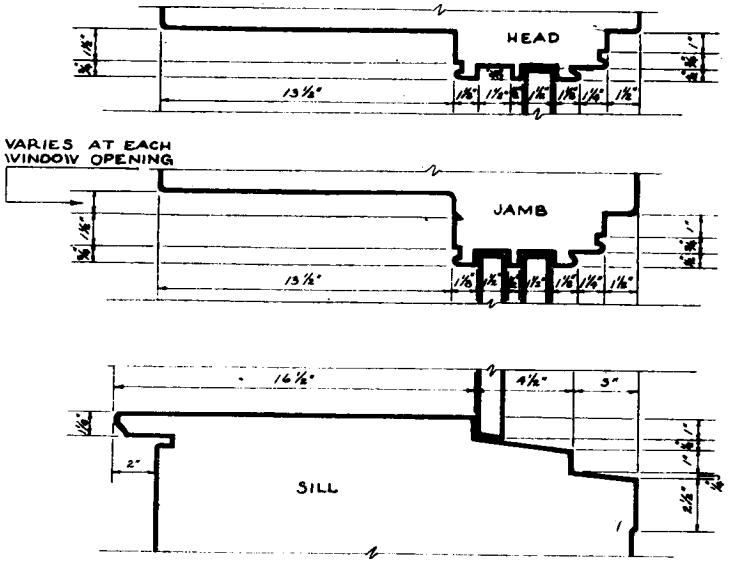
NOTE: WINDOW NO. 1 IS SIMILAR TO WINDOW NO. 5 EXCEPT FOR ITS BEING 2" SHORTER.



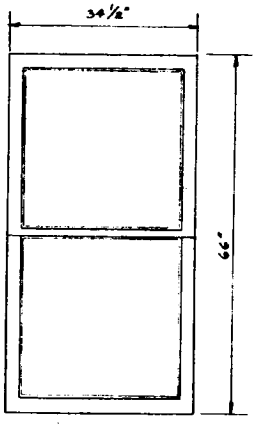
NO. 5 - WINDOW DETAIL
SCALE 3/4" = 1'-0"



DETAILS AT WINDOW NO. 1
SCALE 3" = 1'-0"



DETAILS AT WINDOW NO. 2
SCALE 3" = 1'-0"



NO. 2-A - WINDOW DETAIL
SCALE 3/4" = 1'-0"

MICROFILM

WINDOW SCHEDULE AND DETAILS

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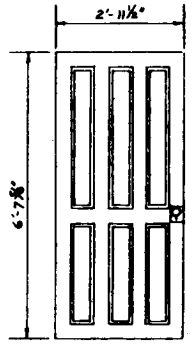
FEET
METER
INCHES
CENTIMETERS

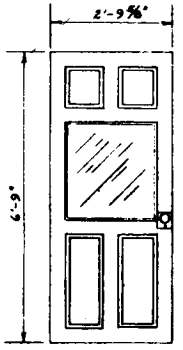
UNDER AUTHORITY OF THE DIRECTOR OF THE NATIONAL PARK SERVICE, DEPARTMENT OF THE INTERIOR

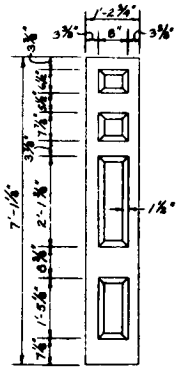
NAME OF STRUCTURE
TEARNEY BUILDING
HARPERS FERRY · JEFFERSON COUNTY · WEST VIRGINIA

SURVEY NO.

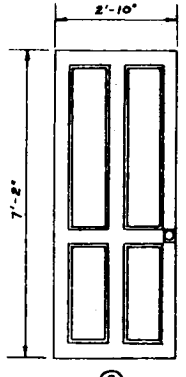
HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 10 OF 12 SHEETS

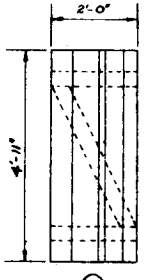




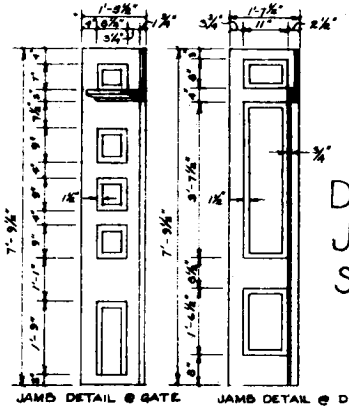


MANTEL SUPPORT
IN ROOM 204
(FULL SIZE)





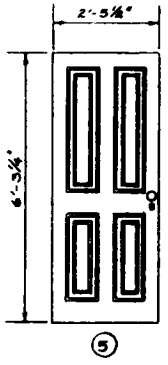
JAMB DETAIL
AT DOOR 3

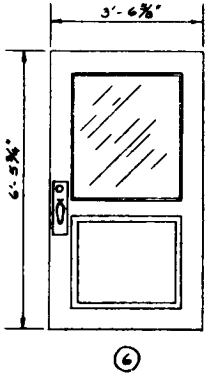


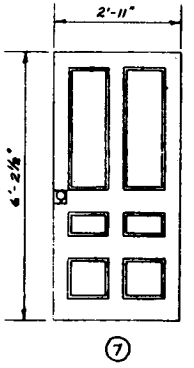
JAMB DETAIL @ GATE
JAMB DETAIL @ D₂

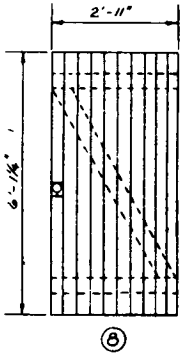
DOOR AND JAMB SCHEDULE

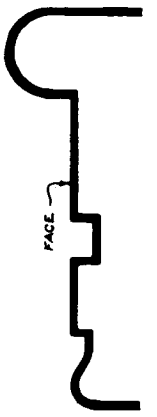
SCALE ½" = 1'-0"



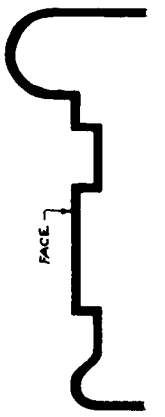




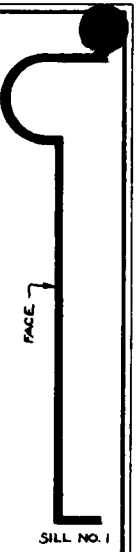




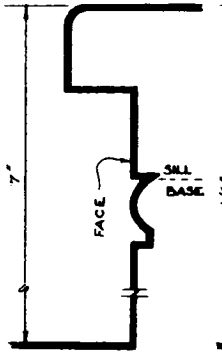
SILL NO. 3



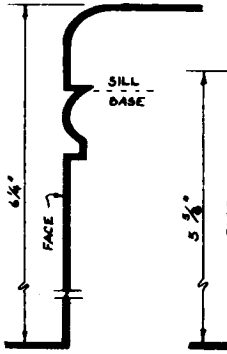
SILL NO. 2



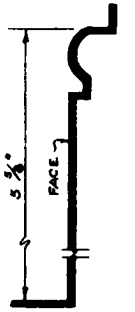
SILL NO. 1



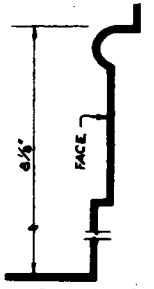
COMBINATION
SILL & BASE NO. 4



COMBINATION
SILL & BASE NO. 5



BASE NO. 6

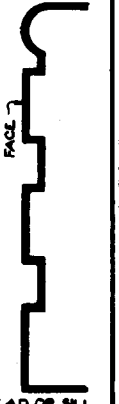


BASE NO. 7

PROFILE DETAILS

FULL SIZE

NOTE: PROFILES ARE NOTED ON PLANS AS FOLLOWS: SILL NO. 1 - S1, BASE NO. 1 - B1, COMBINATION SILL & BASE NO. 5 - SB5, OR SEPERATE - B5, ETC.



JAMB, HEAD, OR SILL
DETAIL NO. 8





ON MICROFILM
385/25012

JOHN E. BONAGHEY - DEL.

UNDER DIRECTION OF UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE, BRANCH OF PLANS AND DESIGN

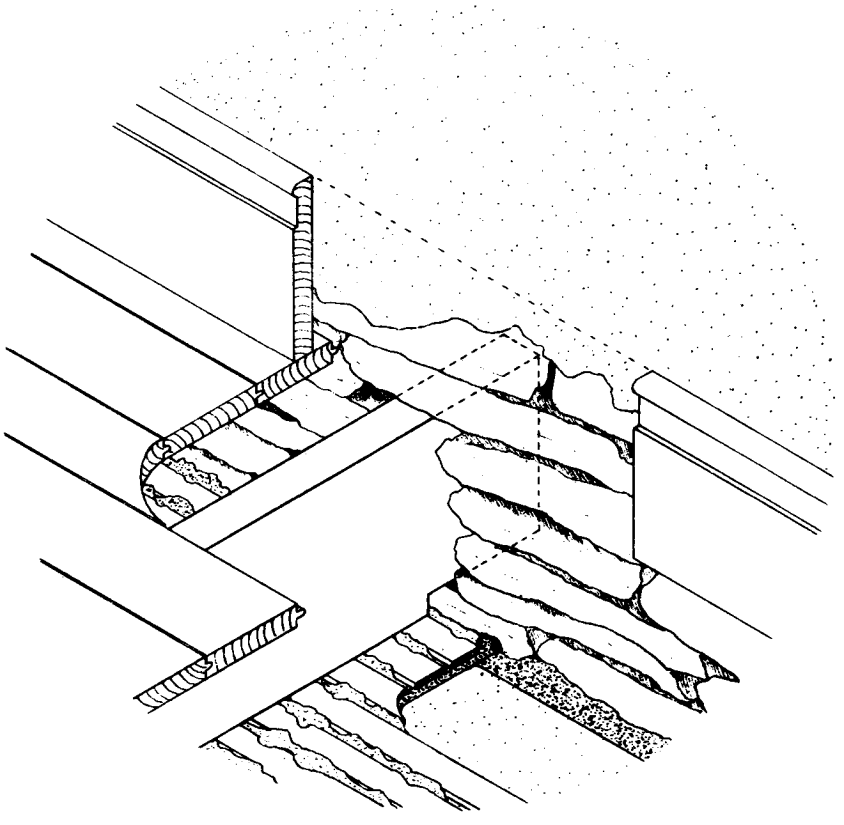
NAME OF STRUCTURE

TEARNEY BUILDING

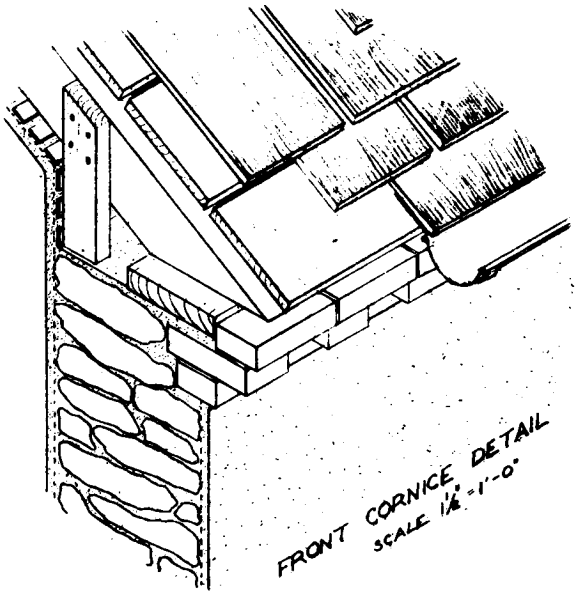
HARPERS FERRY · JEFFERSON COUNTY · WEST VIRGINIA

SURVEY NO.

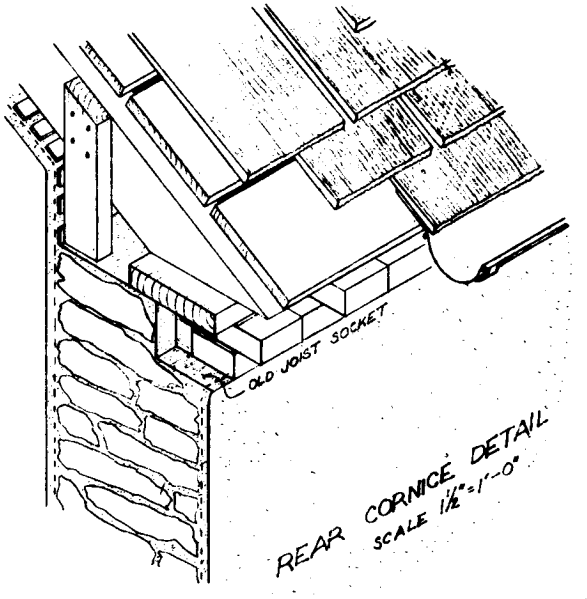
HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 11 OF 12 SHEETS



TYPICAL STRUCTURAL DETAIL FOR BLDG. NO. 38
SCALE 3" = 1'-0"

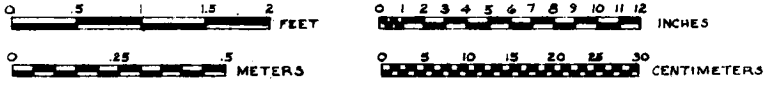


FRONT CORNICE DETAIL
SCALE 1½" = 1'-0"



REAR CORNICE DETAIL
SCALE 1½" = 1'-0"

CONSTRUCTION DETAILS

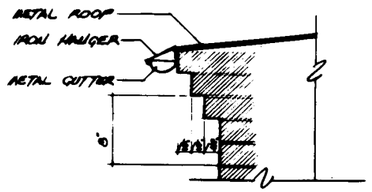


MICROFILM

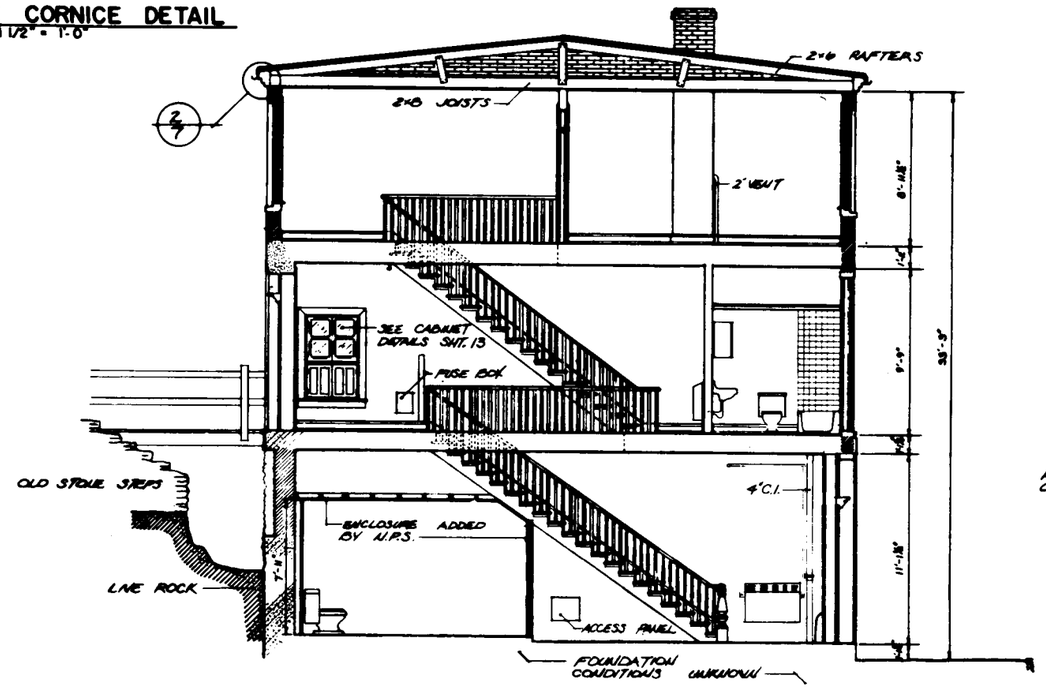
JOHN E. DONAGHEY – DEL.

UNITED STATES DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE, BRANCH OF PLANS AND DESIGN	NAME OF STRUCTURE: TEARNEY BUILDING, HARPERS FERRY · JEFFERSON COUNTY · WEST VIRGINIA	SURVEY NO. 385/25012	HISTORIC AMERICAN BUILDINGS SURVEY, SHEET 12 OF 12 SHEETS

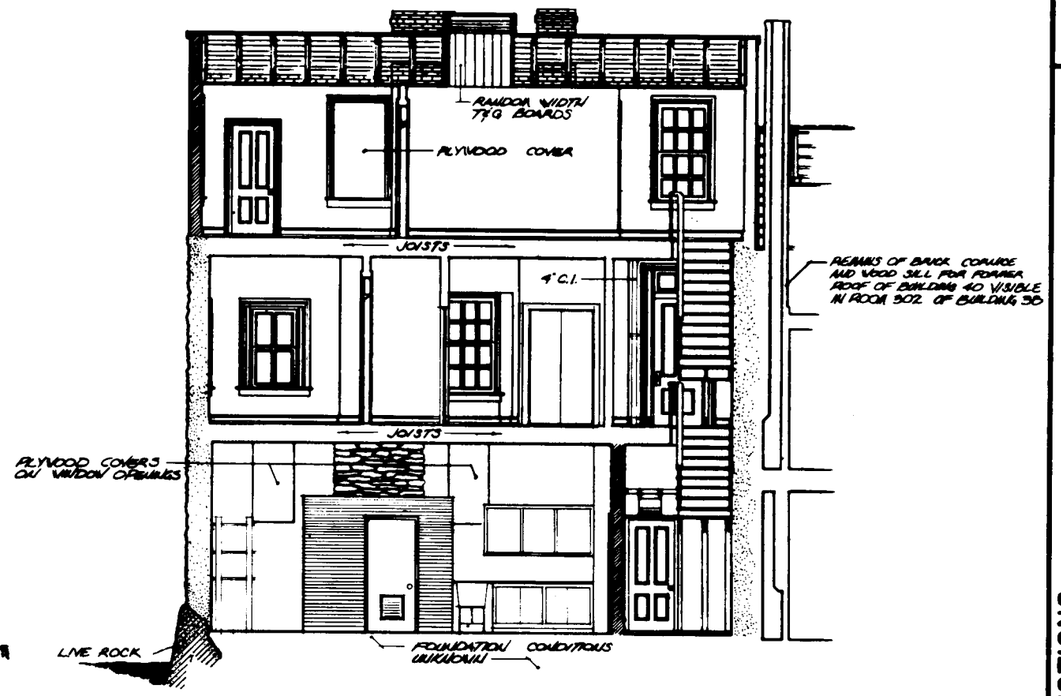
F. DRAWINGS OF EXISTING CONDITIONS AND PROPOSED RESTORATION



2/7 **BRICK CORNICE DETAIL**
SCALE: 1 1/2" = 1'-0"



TRANSVERSE SECTION A-A
SCALE: 1/4" = 1'-0"



SECTION B-B
SCALE: 1/4" = 1'-0"

BUILDING 40
EXISTING CONDITIONS

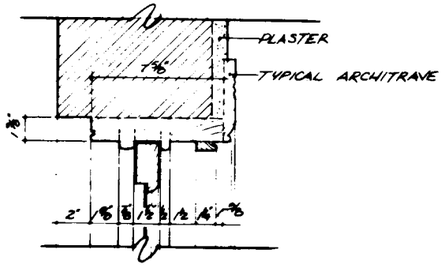
BUILDING SECTIONS

SCALE: 1/4" = 1'-0"
0 1 2 3 4 5 METERS

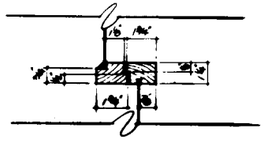
ON MICROFILM

REDUCED COPY

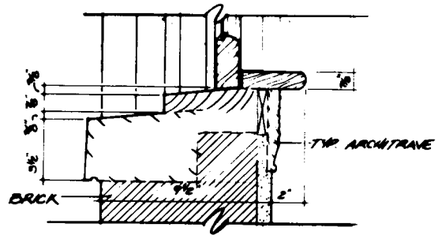
PREPARED	DRAWING NO.
DESIGNED BALLARD	385 25014
DRAWN A.S.DONALD	PCTP DWG NO. — SHEET 7
CHECKED JUNE 1983	OF 18
DATE	



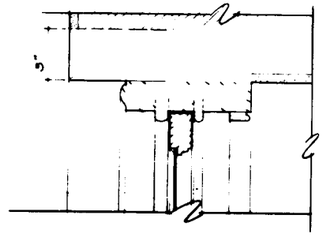
A/8 HEAD (JAMB SIMILAR)
SCALE: 3"= 1'-0"



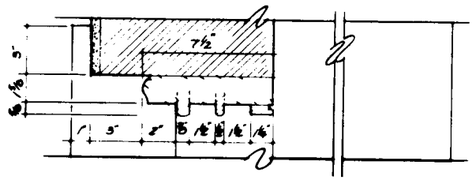
B/8 MEETING RAIL
SCALE: 3"= 1'-0"



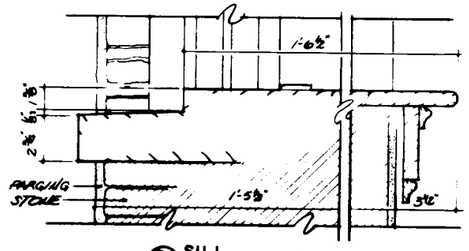
C/8 SILL
SCALE: 3"= 1'-0"



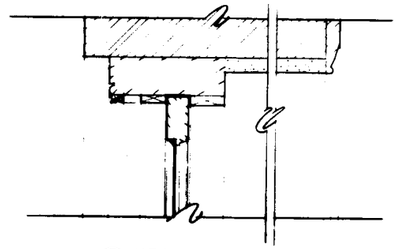
D/8 HEAD
SCALE: 3"= 1'-0"



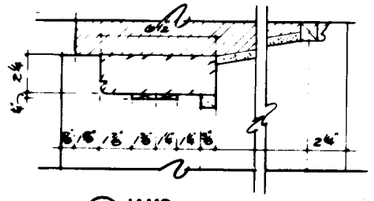
E/8 JAMB
SCALE: 3"= 1'-0"



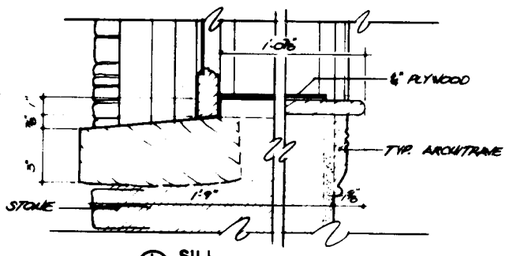
F/8 SILL
SCALE: 3"= 1'-0"



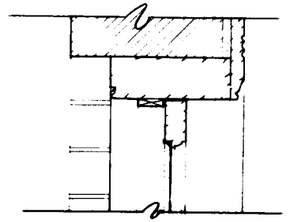
G/8 HEAD
SCALE: 3"= 1'-0"



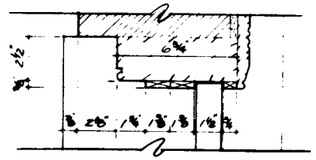
H/8 JAMB
SCALE: 3"= 1'-0"



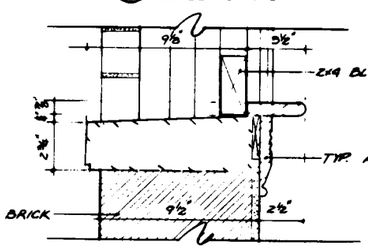
J/8 SILL
SCALE: 3"= 1'-0"



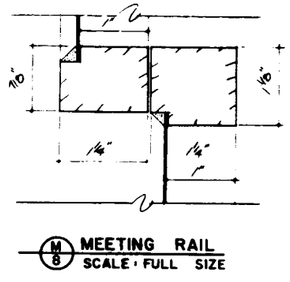
J/8 HEAD
SCALE: 3"= 1'-0"



K/8 JAMB
SCALE: 3"= 1'-0"

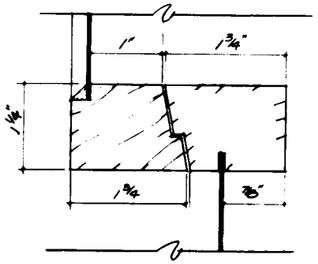


L/8 SILL
SCALE: 3"= 1'-0"



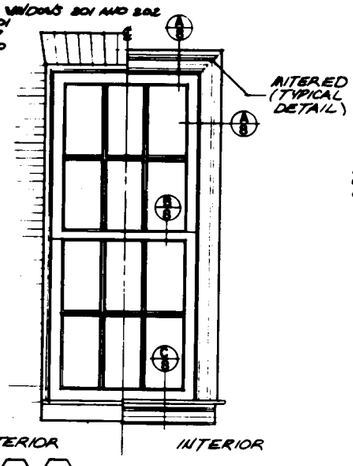
TYPICAL ARCHITRAVE
FULL SIZE

M/8 MEETING RAIL
SCALE: FULL SIZE

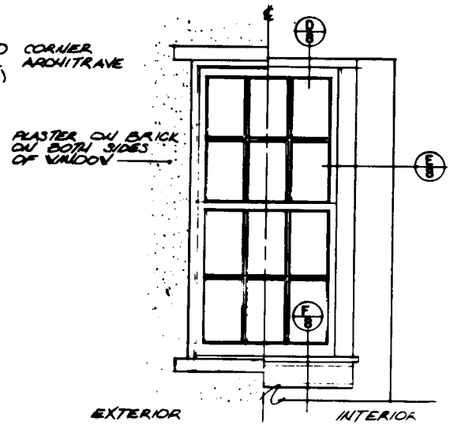


N/8 MEETING RAIL
SCALE: FULL SIZE

JACK ARCH LINTEL WINDOWS 301 AND 302 ONLY. WINDOWS 301 308, 303, 306, 307 HAVE FLAT BOARD LINTEL

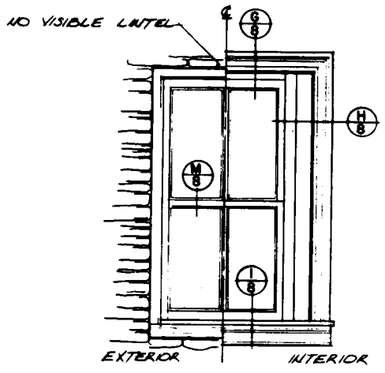


201 202 301 302 303 306 307 WINDOW ELEVATION
SCALE: 3/4"= 1'-0"



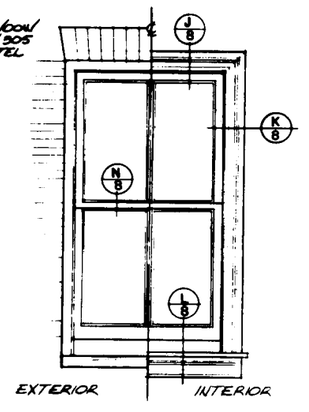
206 WINDOW ELEVATION
SCALE: 3/4"= 1'-0"

NO VISIBLE LINTEL



204 205 WINDOW ELEVATION
SCALE: 3/4"= 1'-0"

JACK ARCH LINTEL WINDOW 304 ONLY. WINDOW 305 HAS FLAT BOARD LINTEL



304 305 WINDOW ELEVATION
SCALE: 3/4"= 1'-0"
NO SASH WINDOW 305 ONLY

ON MICROFILM

REDUCED COPY

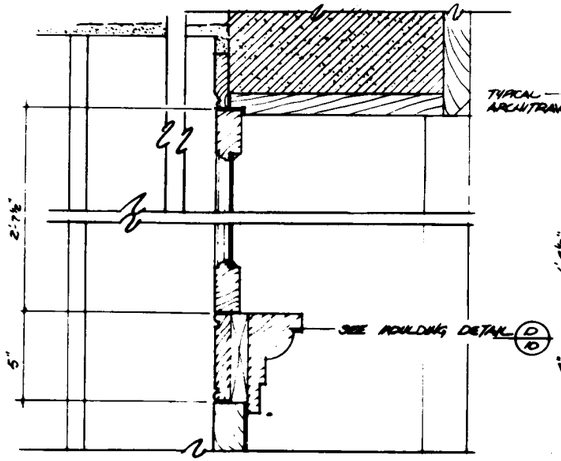
BUILDING 40
EXISTING CONDITIONS

WINDOW DETAILS

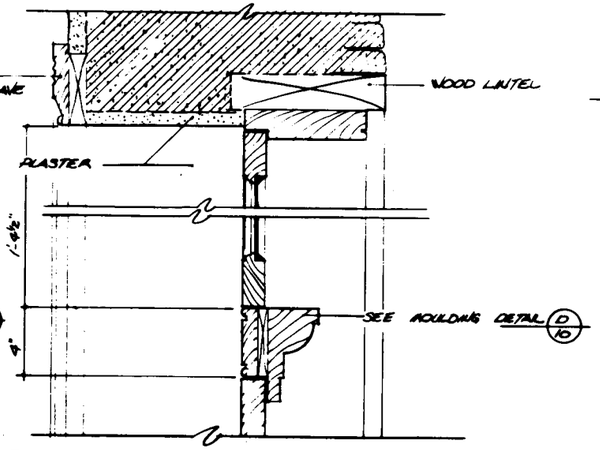


PREPARED	DRAWING NO.
—	385 25014
DESIGNED BALLARD	PCIP PKG 1158 —
DRAWN DONALD	SHEET 8
CHECKED	OF 18
JUNE 1983 DATE	

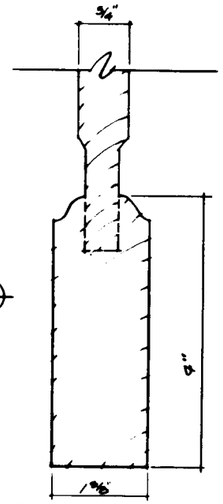
© OPD 1977 777-209



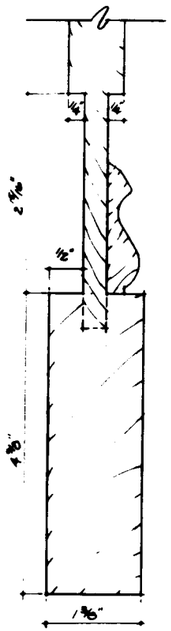
A/9 HEAD AND TRANSOM · DOOR 101
SCALE: 3"= 1'-0"



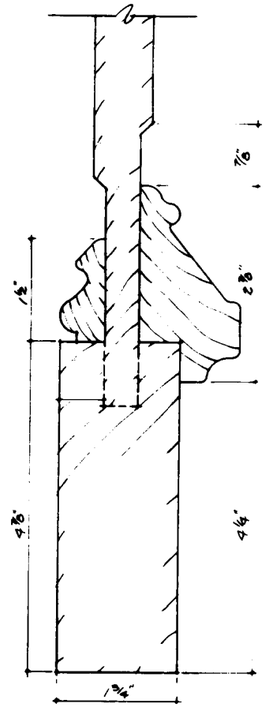
E/9 HEAD AND TRANSOM · DOOR 208
SCALE: 3"= 1'-0"



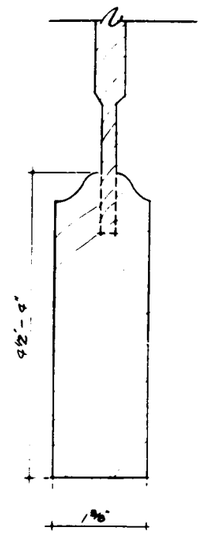
J/9 PANEL PROFILE DOOR 208
F.S.



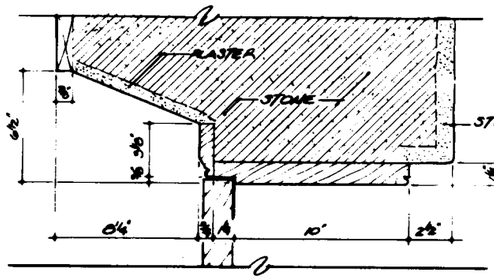
M/9 PANEL PROFILE DOOR 102
F.S.



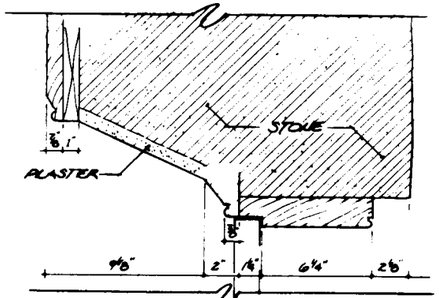
N/9 PANEL PROFILE DOOR 101
F.S.



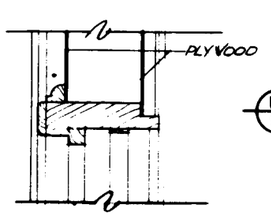
P/9 PANEL PROFILE DOORS 301-305
F.S.



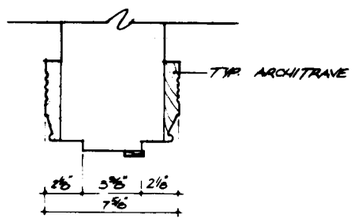
B/9 JAMB DOOR 101
SCALE: 3"= 1'-0"



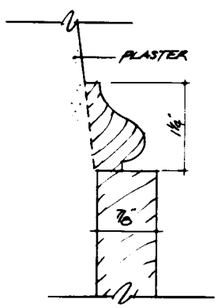
F/9 JAMB DOOR 208
SCALE: 3"= 1'-0"



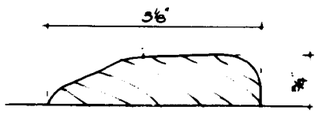
K/9 TRANSOM · DOORS 202,203 & 209
SCALE: 3"= 1'-0"



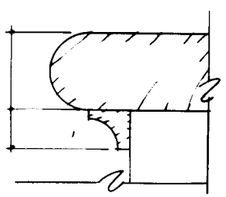
L/9 JAMB · DOORS 202,203 & 209
SCALE: 3"= 1'-0"



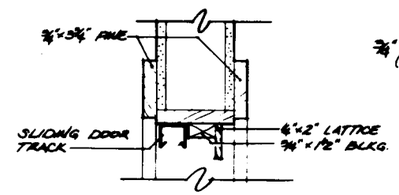
O/9 STRINGER CAP
F.S.



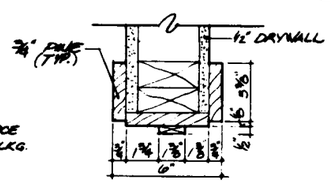
Q/9 THRESHOLD · DOORS 301-305
F.S.



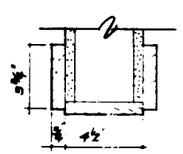
R/9 STAIR NOSING
F.S.



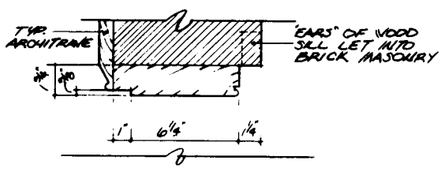
C/9 HEAD · DOORS 205,206 & 207



G/9 JAMB · DOOR 204 & 201



D/9 JAMB · DOORS 205,206 & 207



H/9 JAMB · DOOR 304

REDUCED COPY

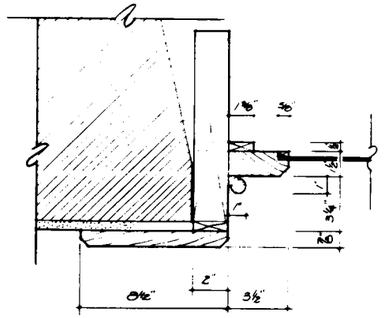
BUILDING 40
EXISTING CONDITION

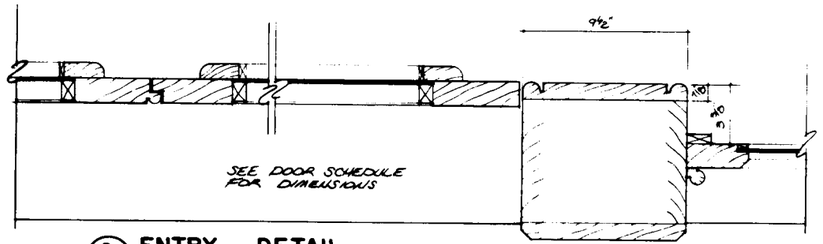
DOOR DETAIL

SCALE 1" 1½" 0 1" 2" 3" FULL SIZE
1' 0 1' 6" 1 3" = 1'-0"

PREPARED	DRAWING NO.
DESIGNED BALLARD	385 25014
DRAWN DONALD	PCIP PKG 1158 — SHEET 9
CHECKED	OF 18
JUNE 1983 DATE	

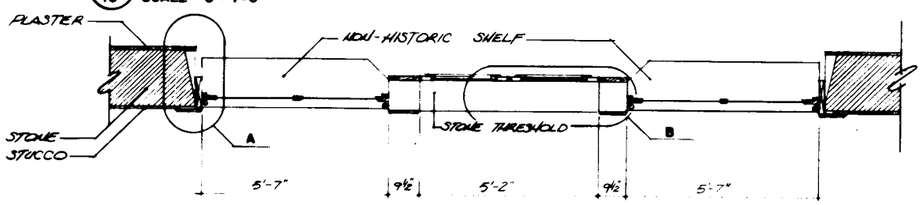
ON MICROFILM



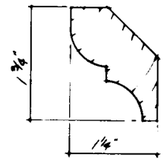


B/10 ENTRY DETAIL
SCALE: 3"= 1'-0"

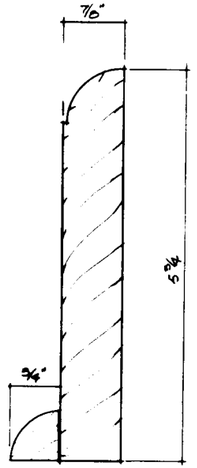
A/10 JAMB
SCALE: 3"= 1'-0"



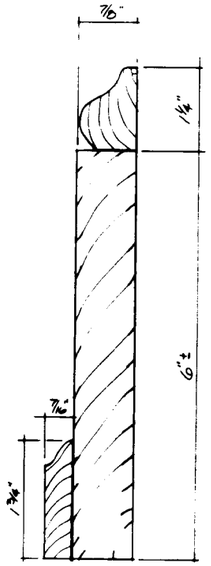
STOREFRONT PLAN
SCALE: 1/2" = 1'-0"



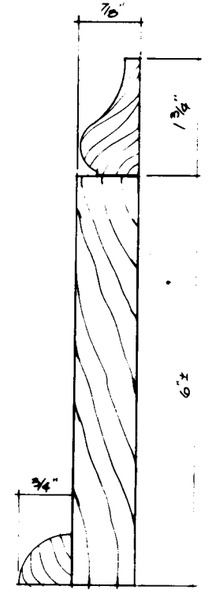
CORNICE 1/10 F.S.
SECOND FLOOR ONLY



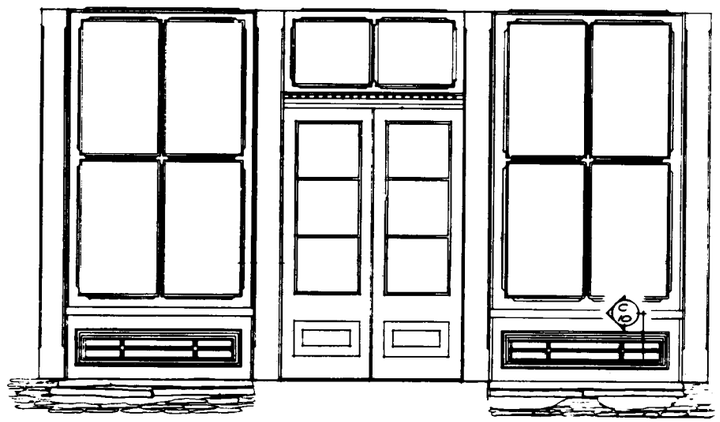
BASE F/10 F.S.
ROOMS 201,202,203, 204,206



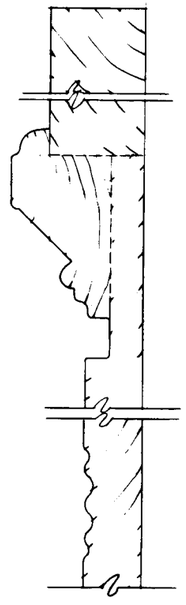
BASE G/10 F.S.
ROOMS 301, 302, 303, 304, 305



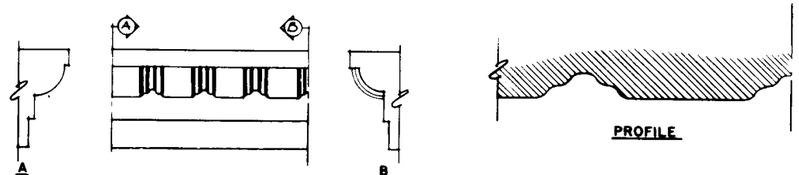
BASE H/10 F.S.
ROOMS 201,202,204 205, 206, 207



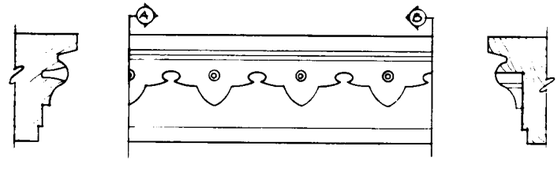
STOREFRONT ELEVATION
SCALE: 1/2" = 1'-0"



C/10 WINDOW PANEL DETAIL
F.S.



D/10 MOULDING DETAIL ABOVE DOORS 101 & 208
SCALE: 3" = 1'-0"



E/10 MOLDING DETAIL ABOVE DOOR 102
SCALE: 3" = 1'-0"

REDUCED COPY

ON MICROFILM

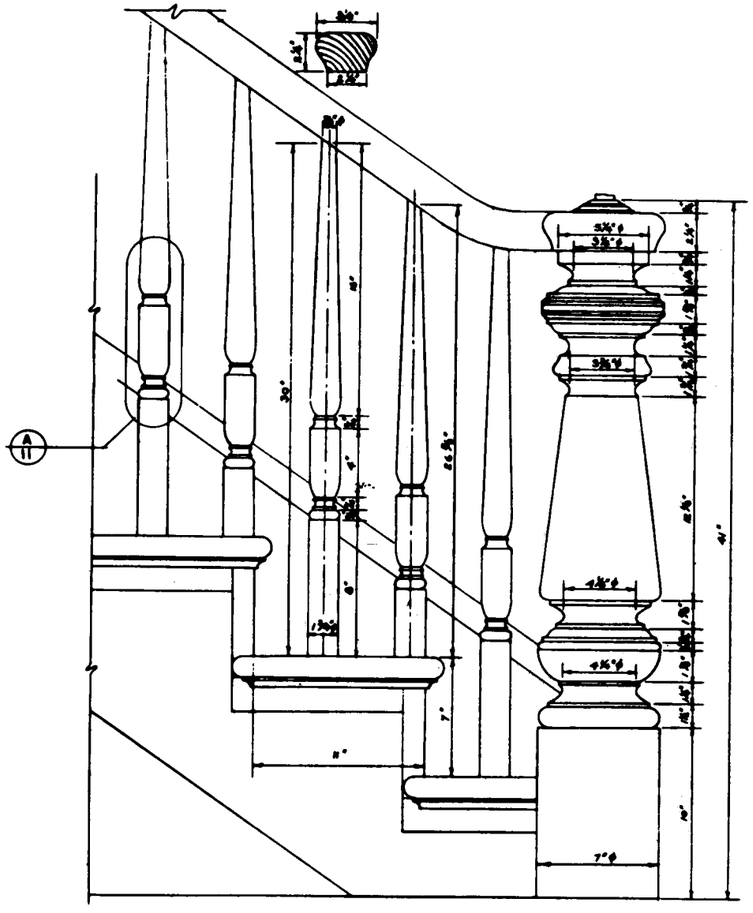
BUILDING 40
EXISTING CONDITIONS

1'6"0 1' 2' 3' 4'
1/2"= 1'-0"

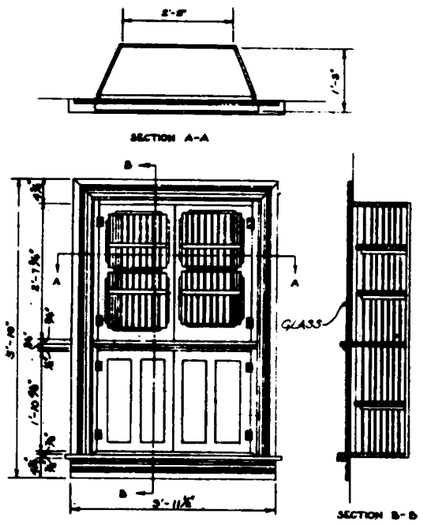
DOOR AND WINDOW DETAILS

SCALE 1' 9" 6" 3" 0
3"= 1'-0"

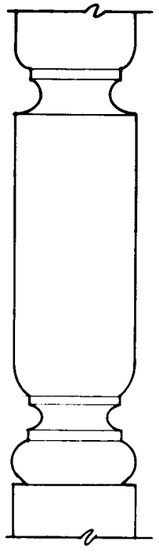
PREPARED	DRAWING NO.
DESIGNED BALLARD	385 25014
DRAWN DONALD	PCIP PKG 115B — SHEET 10 OF 18
CHECKED JUNE 1983	
DATE	



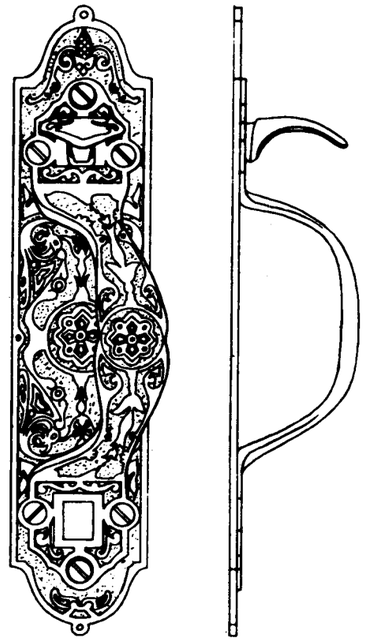
NEWEL & BALUSTER DETAIL at FIRST FLOOR
SCALE: 3"=1'-0"



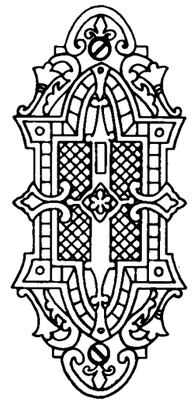
BOOKCASE DETAIL at RM. 202
SCALE: 3/4"=1'-0"



A 11 BALUSTER DETAIL
F.S.



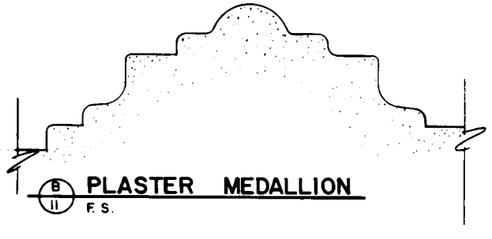
CAST IRON DOOR HANDLE DETAIL
F.S.



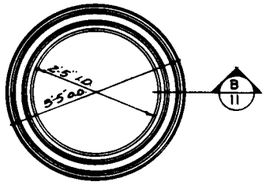
BRASS DOOR BELL PL.
F.S.



KEYHOLE PLATE
F.S.

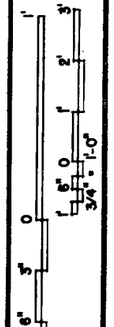


B 11 PLASTER MEDALLION
F.S.



PLASTER MEDALLION
ROOM 201
SCALE: 3/4"=1'-0"

BUILDING 40
EXISTING CONDITIONS



STAIRWAY DETAILS
BOOKCASE DETAILS
MISCELLANEOUS DETAILS

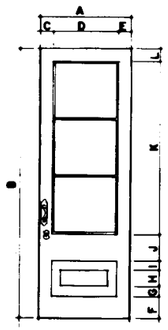
PREPARED	DRAWING NO.
DESIGNED TEF/DDB	385 25014
DRAWN AS,DONALD	PCIP PKG 1158 — SHEET 11
CHECKED JUNE 1983	OF 18
DATE	

REDUCED COPY

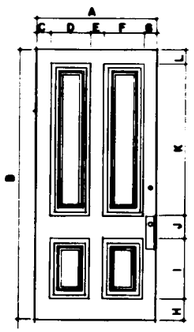
ON MICROFILM

DOOR SCHEDULE

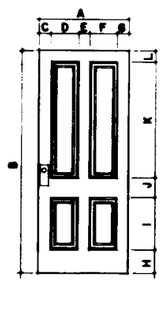
FLR	DOOR NO.	DOOR TYPE	DIMENSIONS A	B	C	D	E	F	G	H	I	J	K	L	THICKNESS	FRAME DETAILS	ARCHI-TRAVE	CORNER BLOCK	PLINTH	THRESH-OLD	PANEL PROFILE	HARDWARE	REMARKS
FIRST	101	B	3'-3¾"	7'-11"	5"	1'-2"	4½"	1'-2"	4½"	7½"	1'-9"	8"	4'-5½"	5"	1¾"	4/9 6/9		NONE	NONE	——	N/9	MORTISE LOCK ARCHITECTURAL DEAD BOLT	
	102	A	2'-6½"	8'-1"	3¾"	1'-10¾"	4½"	8⅛"	3⅝"	6"	3⅝"	8¾"	5'-1⅝"	4½"	1⅜"	D/10 C/10		NONE	NONE	WOOD	M/9	HISTORIC CAST IRON LATCH DEAD BOLT	
	103	C	2'-6½"	6'-8"	4"	8¼"	4⅝"	8⅜"	4½"	8"	1'-6½"	9½"	3'-2"	4½"	1⅜"			NONE	NONE		K/9		
	104	C	2'-5½"	6'-6"	4"	7⅞"	4½"	7⅞"	4¼"	7"	1'-6⅜"	9⅜"	3'-1¾"	4⅝"	1⅜"	4/9		NONE	NONE		K/9		
	105	E	2'-8"	6'-8"	—	—	—	—	—	—	—	—	—	—			—	NONE	NONE	——	——	PASSAGE SET	HOLLOW METAL DOOR & FRAME
SECOND	201	E	2'-7½"	6'-6"	—	—	—	—	—	—	—	—	—	—	1⅜"	G/9	FLAT	NONE	NONE	——	——	PRIVACY SET	
	202	E	2'-7½"	6'-8"	—	—	—	—	—	—	—	—	—	—	1⅜"	K/9 L/9	TYP.	NONE	NONE	——	——		
	203	E	2'-7½"	6'-8"	—	—	—	—	—	—	—	—	—	—	1⅜"	K/9 L/9	TYP.	NONE	NONE	——	——	PRIVACY SET	
	204	E	2'-7½"	6'-8"	—	—	—	—	—	—	—	—	—	—	1⅜"	G/9	FLAT	NONE	NONE	——	——	PRIVACY SET	
	205	E	1'-6"	6'-6"	—	—	—	—	—	—	—	—	—	—	1⅜"	O/9	FLAT	NONE	NONE	NONE	——	——	BYPASS CLOSET DOORS
	206	E	2'-6"	6'-6"	—	—	—	—	—	—	—	—	—	—	1⅜"	O/9	FLAT	NONE	NONE	NONE	——	——	BYPASS CLOSET DOORS
	207	E	2'-0"	6'-6"	—	—	—	—	—	—	—	—	—	—	1⅜"	O/9	FLAT	NONE	NONE	NONE	——	——	BYPASS CLOSET DOORS
	208	D	2'-8¾"	7'-3"	4"	10½"	4"	10½"	3¾"	6¼"	1'-6⅜"	8¼"	4'-0½"	3¼"	1⅜"	E/9 F/9		NONE	NONE	NONE	V/9	MORTISE LOCK DEAD BOLT	
	209		—	—	—	—	—	—	—	—	—	—	—	—	—	K/9 L/9	TYP.	NONE	NONE	NONE	—	——	NO DOOR; DOORWAY ONLY
	210	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	——	FORMER FRENCH DOOR
THIRD	301	C	2'-3½"	6'-5"	4"	8¼"	4⅝"	8¼"	4⅝"	6⅞"	1'-6⅜"	9⅜"	3'-1¾"	4½"	1⅜"	K/9 L/9	TYP.	NONE	NONE	WOOD	P/9	BOX LOCK, BUTT HINGE BRONZE CER. KNOB - 2	
	302	C	2'-5½"	6'-5½"	4"	8⅜"	4⅝"	8⅛"	4½"	7"	1'-6¼"	9½"	3'-1¾"	4⅝"	1⅜"	K/9 L/9	TYP.	NONE	NONE	WOOD	P/9	BOX LOCK, BUTT HINGE ATL KNOB - 2	
	303	C	2'-5½"	6'-5¼"	4⅝"	8¼"	4⅝"	8⅜"	4½"	7"	1'-6¼"	9½"	3'-1¾"	4⅝"	1⅜"	K/9 L/9	TYP.	NONE	NONE	WOOD	P/9	BOX LOCK, BUTT HINGE WHITE CER. KNOB - 1	
	304	C	2'-6"	6'-5½"	4⅝"	8¼"	4⅝"	8¼"	4½"	7¼"	1'-6½"	9½"	3'-1⅝"	4⅝"	1⅜"	L/9	TYP.	NONE	NONE	WOOD	P/9	BOX LOCK, BUTT HINGE BRONZE CER. KNOB - 1	
	305	C	2'-5½"	6'-5¼"	4"	8¼"	4½"	8⅜"	4½"	7"	1'-6¼"	9½"	3'-1⅜"	4⅝"	1⅜"	K/9 L/9	TYP.	NONE	NONE	WOOD	P/9	BOX LOCK, BUTT HINGE BRONZE CER. KNOB - 1	



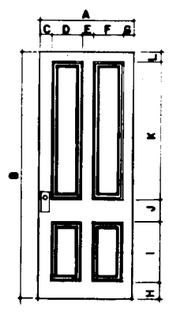
TYPE A



TYPE B



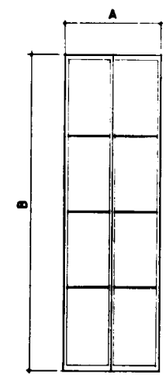
TYPE C



TYPE D



TYPE E



TYPE F

GN MICROFILM

BUILDING 40
EXISTING CONDITIONS

DOOR SCHEDULE

PREPARED	DRAWING NO.
T.E.FIELDS DESIGNED	385 25014
BALLARD DRAWN	PCIP PKG 1158 — SHEET 12
BOHANNON CHECKED	— — OF 18
JUNE 1983 DATE	

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ROOM FINISH SCHEDULE

FLOOR	ROOM	FLOOR		WALLS								CEILING		BASE										REMARKS
				NORTH		SOUTH		EAST		WEST				NORTH			SOUTH			EAST			WEST			
		MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MAT.	FINISH	HEIGHT	MAT.	FINISH	HEIGHT	MAT.	FINISH	HEIGHT	MAT.	FINISH	HEIGHT	
FIRST	101	CONCRETE	PAINT	PLASTER/ BRICK	PAINT	PLASTER/ STONE	PAINT	STONE/FRONT	GLASS PAINT	PLYWD. / STONE	PAINT	TONGUE & GROOVE WD.	PAINT	NONE	—	—	NONE	—	—	NONE	—	—	NONE	—	—	
	102	CONCRETE	PAINT	C.A.U.	UNFINISHED	C.A.U.	UNFINISHED	C.A.U.	UNFINISHED	C.A.U.	UNFINISHED	TONGUE & GROOVE WD.	PAINT	NONE	—	—	NONE	—	—	NONE	—	—	NONE	—	—	MODERN "BOILER ROOM"
	103	CONCRETE	PAINT	PRESSED FIBER BD.	PAINT	PRESSED FIBER BD.	PAINT	PRESSED FIBER BD.	PAINT	PRESSED FIBER BD.	PAINT	PLYWOOD	PAINT	WOOD	PAINT	¾" QTR. RND.	WOOD	PAINT	¾" QTR. RND.	NONE	PAINT	¾" QTR. RND.	WOOD	PAINT	¾" QTR. RND.	BATHROOM ADDED BY U.P.S. CIRCA 1960
	104	CONCRETE	PAINT	PLASTER/ STONE	PAINT	PLASTER/ BRICK	PAINT	PLASTER/ STONE	PAINT	PLASTER	PAINT	PLYWOOD	PAINT	NONE	—	—	NONE	—	—	NONE	—	—	NONE	—	—	
SECOND	201	TONGUE & GROOVE WD.	VINYL TILE/ ⅜" PLYWD.	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	WOOD	PAINT	6¾"	WOOD	PAINT	6¼"	WOOD	PAINT	6¾"	WOOD	PAINT	5¾"	
	202	TONGUE & GROOVE WD.	VINYL TILE/ ⅜" PLYWD.	PLASTER	PAINT	DRYWALL	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	WOOD	PAINT	6¾"	WOOD	PAINT	6¼"	WOOD	PAINT	5¾"	WOOD	PAINT	6¾"	
	203	TONGUE & GROOVE WD.	VINYL TILE/ ⅜" PLYWD.	PLASTER	PAINT	PLASTER	PAINT	DRYWALL	CER. TILE	DRYWALL	PAINT	DRYWALL	PAINT	WOOD	PAINT	6¾"			NONE	WOOD	PAINT	5¾"	WOOD	PAINT	6¾"	MODERN BATHROOM CEILING HEIGHT 8'-0"
	204	TONGUE & GROOVE WD.	VINYL TILE/ ⅜" PLYWD.	DRYWALL	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	DRYWALL	PAINT	WOOD	PAINT		WOOD	PAINT		WOOD	PAINT		WOOD	PAINT		BASEBOARD CONVECTORS OBSCURE HISTORIC BASE
	205	TONGUE & GROOVE WD.	VINYL TILE/ ⅜" PLYWD.	DRYWALL	PAINT	PLASTER	PAINT	PLASTER	PAINT	DRYWALL	PAINT	DRYWALL	PAINT	WOOD	PAINT		WOOD	PAINT		—	—	NONE	—	—	NONE	
	206	TONGUE & GROOVE WD.	VINYL TILE/ ⅜" PLYWD.	PLASTER	PAINT	DRYWALL	PAINT	PLASTER	PAINT	PLASTER/ EGGBOARD	PAINT	DRYWALL	PAINT	WOOD	PAINT	7⅜"	WOOD	PAINT	7⅜"	WOOD	PAINT	7⅜"	WOOD	PAINT	7⅜"	
	207	TONGUE & GROOVE WD.	VINYL TILE/ ⅜" PLYWD.	PLASTER	PAINT	PLASTER	PAINT	DRYWALL	PAINT	PLASTER	PAINT	¼" PLYWD.	PAINT	WOOD	PAINT	7¾"	WOOD	PAINT	7"	WOOD	PAINT	7"	WOOD	PAINT	7"	
	208	TONGUE & GROOVE WD.	VINYL TILE/ ⅜" PLYWD.	DRYWALL	PAINT	DRYWALL	PAINT	DRYWALL	PAINT	DRYWALL	PAINT	¼" PLYWD.	PAINT	WOOD	PAINT	¾" QTR. RD.	WOOD	PAINT	¾" QTR. RD.	WOOD	PAINT	¾" QTR. RD.	WOOD	PAINT	¾" QTR. RD.	CLOSET CEILING HEIGHT 7'-7½"
	209	TONGUE & GROOVE WD.	VINYL TILE/ ⅜" PLYWD.	DRYWALL	PAINT	DRYWALL	PAINT	DRYWALL	PAINT	PLASTER	PAINT	¼" PLYWD.	PAINT	WOOD	PAINT	11	WOOD	PAINT	11	WOOD	PAINT	11	WOOD	PAINT	11	CLOSET CEILING HEIGHT 7'-7½"
	210	TONGUE & GROOVE WD.	VINYL TILE/ ⅜" PLYWD.	PLASTER	PAINT	OPEN STUDS	—	OPEN STUDS	—	PLASTER	PAINT	PLASTER	PAINT	WOOD	PAINT	7¾"	NONE	—	—	WOOD	PAINT	7¾"	NONE	—	—	TRANSFORMER ROOM
THIRD	301	TONGUE & GROOVE WD.	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	WOOD	PAINT	6"	WOOD	PAINT	6"	WOOD	PAINT	6"	WOOD	PAINT	6"	7'-6" PATCH ON FLOOR, WATER DAMAGE ON CEILING
	302	TONGUE & GROOVE WD.	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	WOOD	PAINT	6½"	WOOD	PAINT	6½"	WOOD	PAINT	6½"	WOOD	PAINT	6½"	4'-0" PLYWOOD PATCH ON FLOOR AT HEAD OF STAIRS - WATER DAMAGE ON WALLS.
	303	TONGUE & GROOVE WD.	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	WOOD	PAINT	6¼"	WOOD	PAINT	6⅛"	WOOD	PAINT	6⅛"	WOOD	PAINT	6¼"	WATER DAMAGE ON WALLS, CEILING
	304	TONGUE & GROOVE WD.	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	WOOD	PAINT	6½"	WOOD	PAINT	6½"	WOOD	PAINT	6½"	WOOD	PAINT	6½"	WATER DAMAGE ON CEILING
	305	TONGUE & GROOVE WD.	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	WOOD	PAINT	6½"	WOOD	PAINT	6"	WOOD	PAINT	6½"	WOOD	PAINT	6¼"	

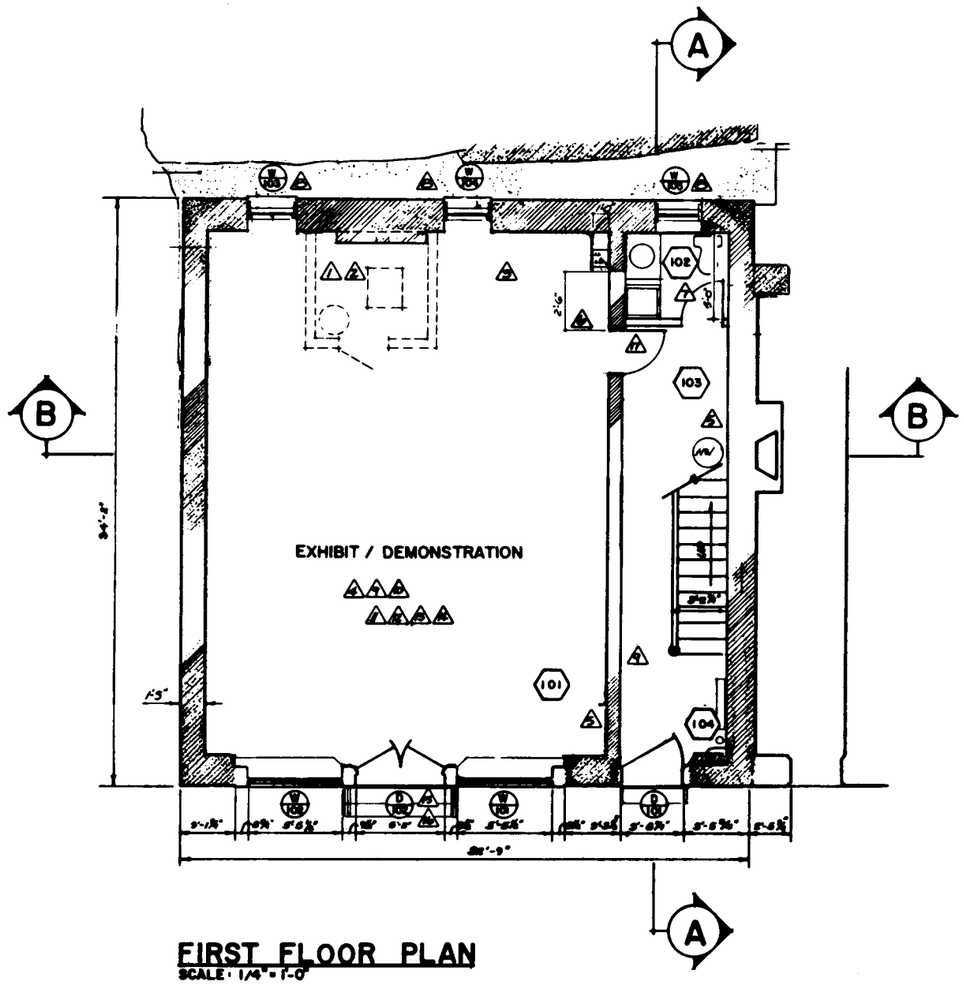
BUILDING 40
EXISTING CONDITIONS

ROOM FINISH SCHEDULE

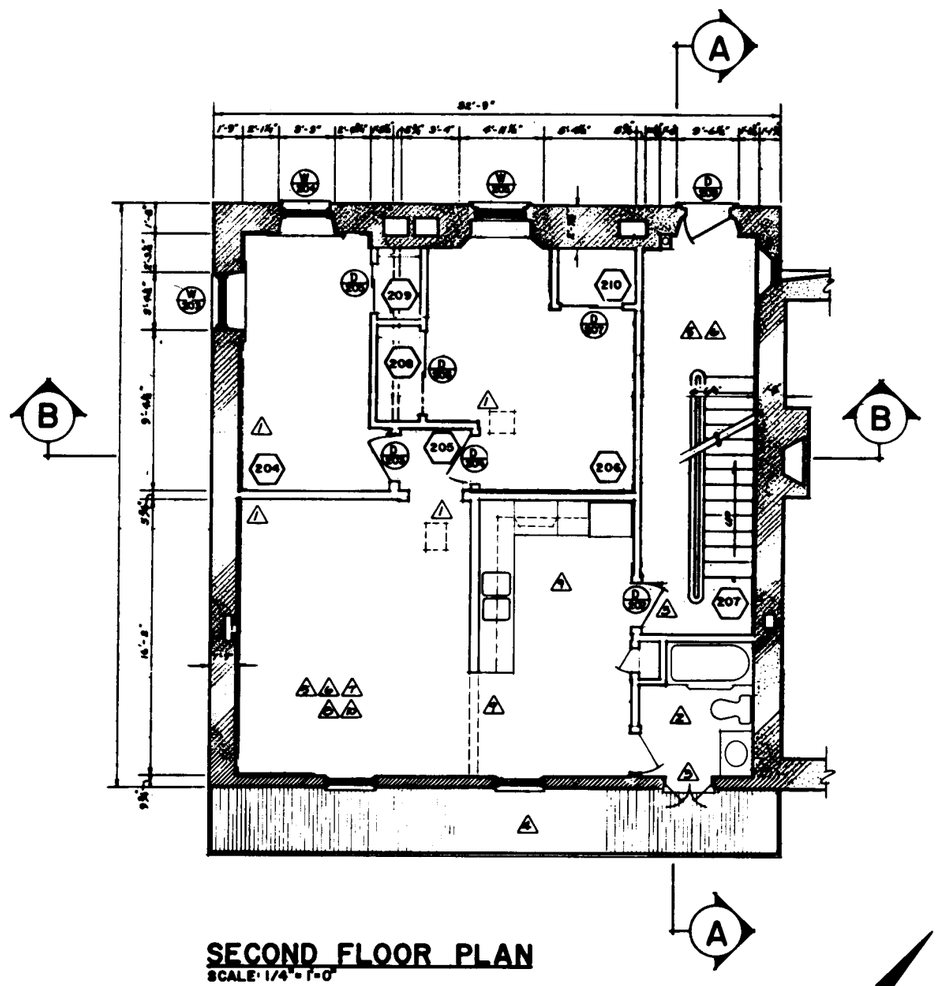
U.S. DEPARTMENT OF THE INTERIOR
MICROFILM

PREPARED	DRAWING NO.
BALLARD DESIGNED	385 25014
BALLARD DRAWN	PCIP PKG 1158 / SHEET 13
DONALD CHECKED	
JUNE 1983 DATE	OF 18

GPO: 1977 777-744



FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

KEY

- CONCRETE
- STONE
- BRICK

PROPOSED WORK : FIRST FLOOR

1. REMOVE EXISTING MASONRY WALL
2. REMOVE EXISTING BOILER, PIPING, & CONNECTORS
3. REMOVE EXISTING CABINETS, SHELVES, & SINK
4. REMOVE EXISTING FLUORESCENT LIGHTS & SURFACE WIRING
5. RELOCATE ELECTRIC PANEL
6. RELOCATE DOORWAY (D/105) AS SHOWN
7. INSTALL BATHROOM 10
8. INSTALL REPLACA WINDOWS W/ (W/103) (W/104) (W/102)
9. REMOVE EXISTING CONCRETE FLOOR; INSTALL NEW T&G WOOD FLOOR SYSTEM
10. INSTALL NEW WIRING AND LIGHTING
11. INSTALL CENTRAL SMOKE AND INTRUSION ALARM SYSTEM
12. INSTALL NEW H/VAC SYSTEM
13. REPAIR OR REPLASTER ALL WALLS
14. REFINISH CEILING
15. REFINISH STOREFRONT
16. INSTALL NEW STONE STEPS AND HANDRAIL
17. INSTALL FIRE RATED DOOR

REDUCED COPY

PROPOSED WORK : SECOND FLOOR

1. REMOVE EXISTING CONVECTORS, BASEBOARD AND SPACE HEATERS
2. INSTALL REDESIGNED BATHROOM
3. REINSTALL FRENCH DOORS (D/111); INSTALL FIRE-RATED DOOR
4. REBUILD SECOND STORY BALCONY
5. REPAIR, REFINISH PLASTER WALLS AND CEILING
6. INSTALL NEW FLOORING; REFINISH FLOOR, STAIRS IN HALL
7. INSTALL NEW HEATING SYSTEM
8. REFINISH WINDOWS, EXTERIOR DOORS, INSTALL INTERIOR STORM WINDOWS
9. REMOVE EXISTING PARTITION, INSTALL NEW KITCHEN
10. INSTALL CENTRAL SMOKE AND INTRUSION ALARM SYSTEM

ON MICROFILM

BUILDING 40
PROPOSED RESTORATION

FIRST & SECOND FLOOR PLANS

SCALE: 0 1' 2' 3' 4' 5' 6' 7' 8' 9' 10'
1/4" = 1'-0"

PREPARED	DRAWING NO. 385 25014
DESIGNED BALLARD	
DRAWN DONALD	SHEET 14
CHECKED	OF 18
JUNE 1983 DATE	

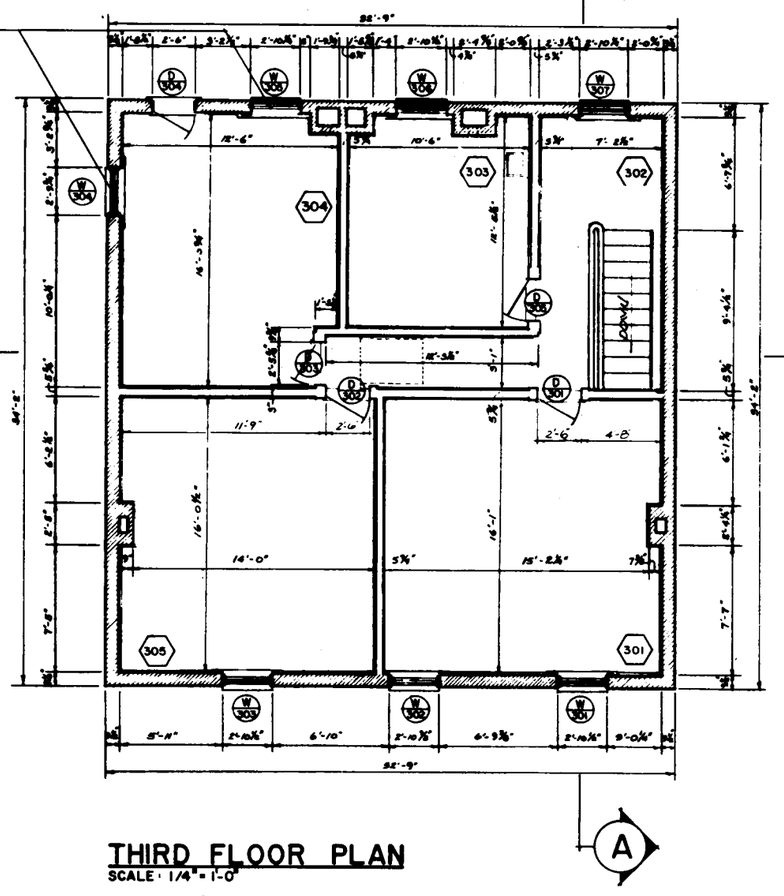
INSTALL NEW SASH (HISTORIC TYPE)

REPAIR/REPLACE PLASTER

REPAINT TRIM

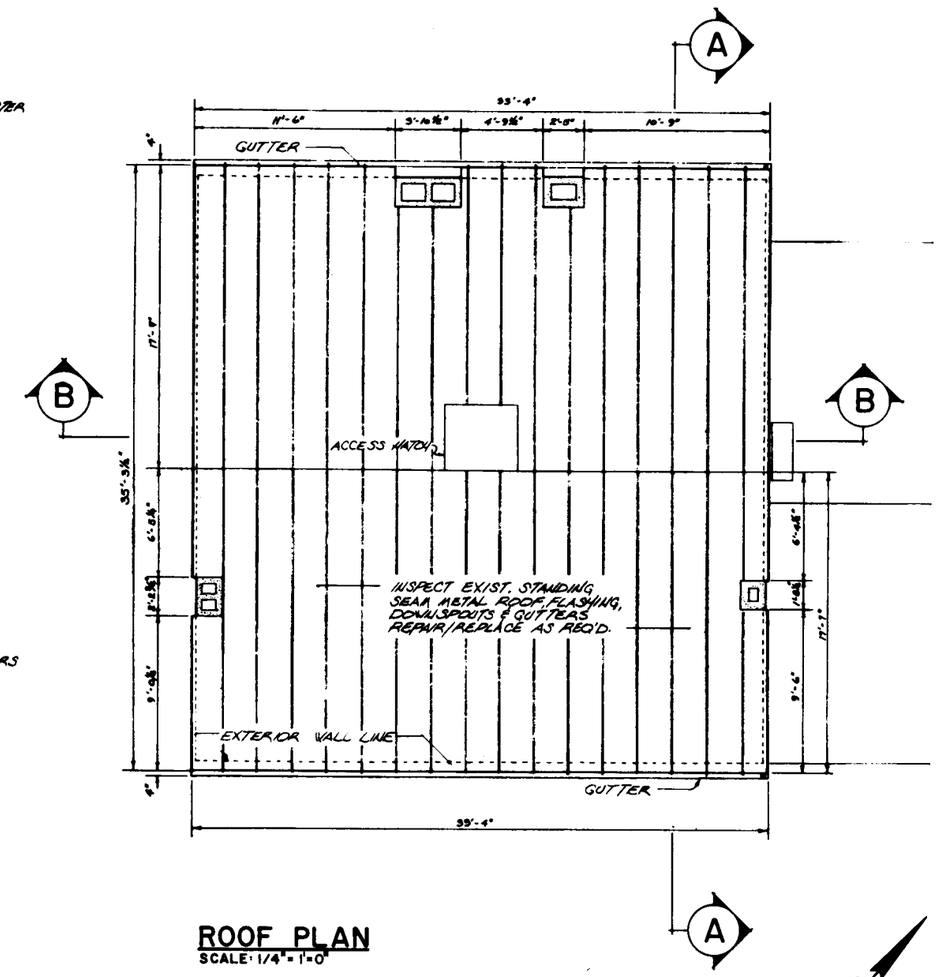
REPAIR/REFINISH FLOORS

RESTORE EXIST. WINDOWS



THIRD FLOOR PLAN

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



ROOF PLAN

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

ON MICROFILM

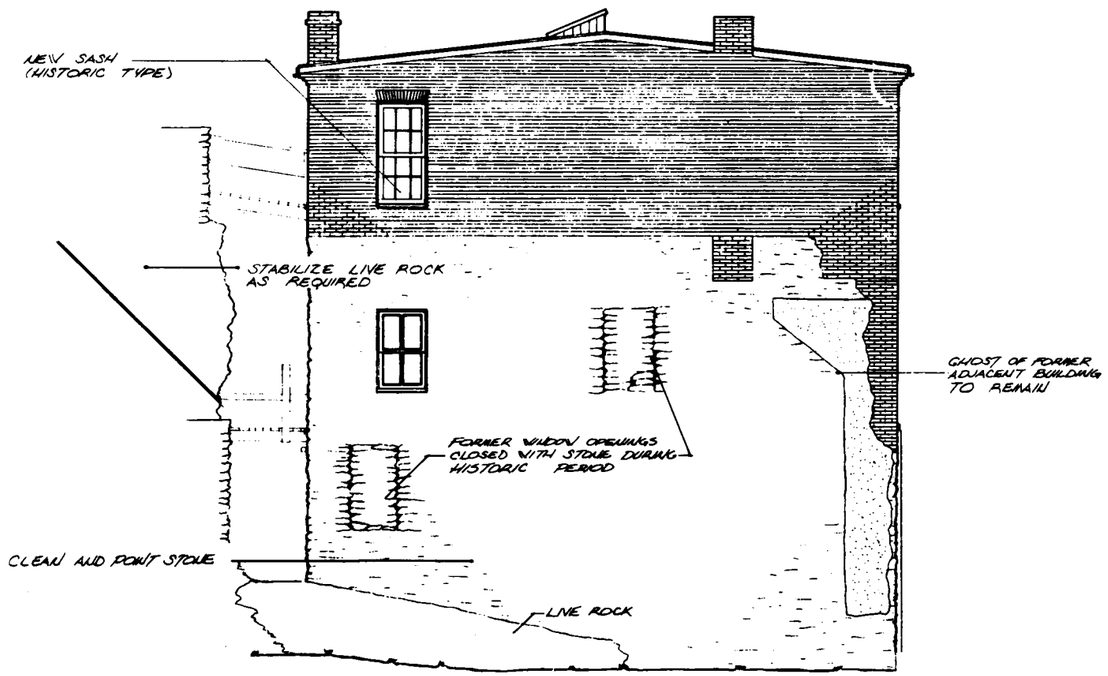
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BUILDING 40
PROPOSED RESTORATION

THIRD FLOOR & ROOF PLANS

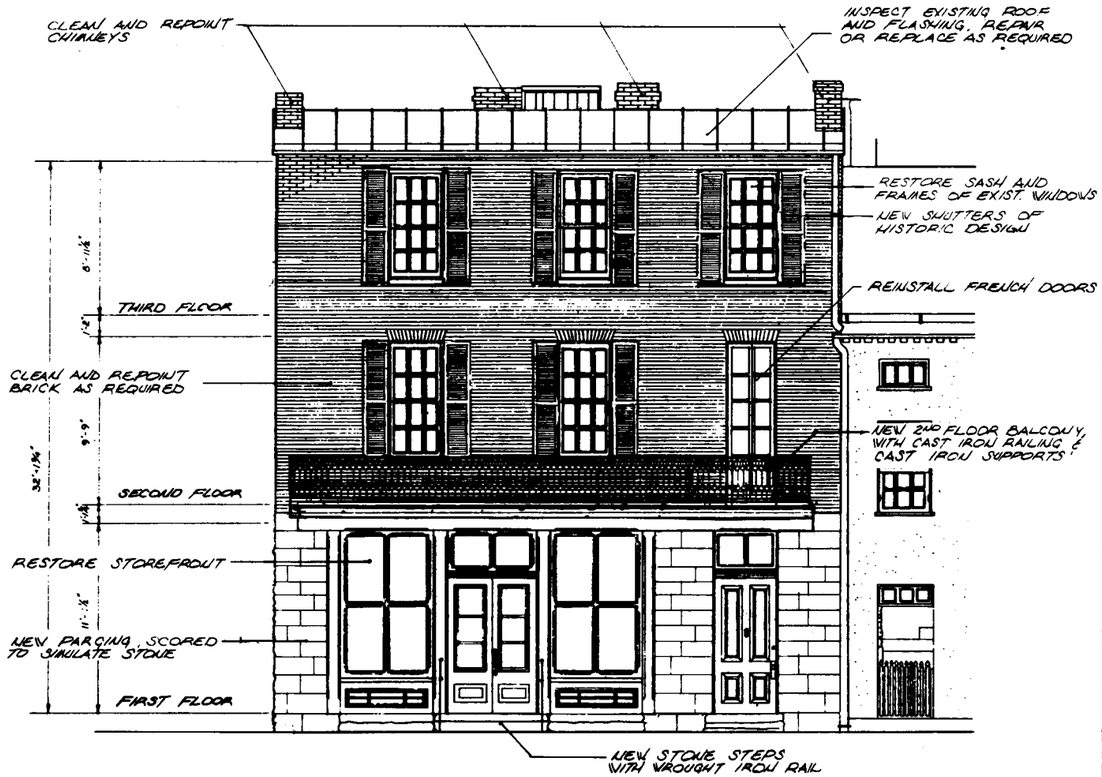
SCALE: 1/4" = 1'-0"

PREPARED	DRAWING NO.
DESIGNED BALLARD	385 25014
DRAWN DONALD	PCIP PKG 1158
CHECKED JUNE 1983	SHEET 15 OF 18
DATE	



SOUTHWEST ELEVATION

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



SOUTHEAST ELEVATION

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

ON MICROFILM

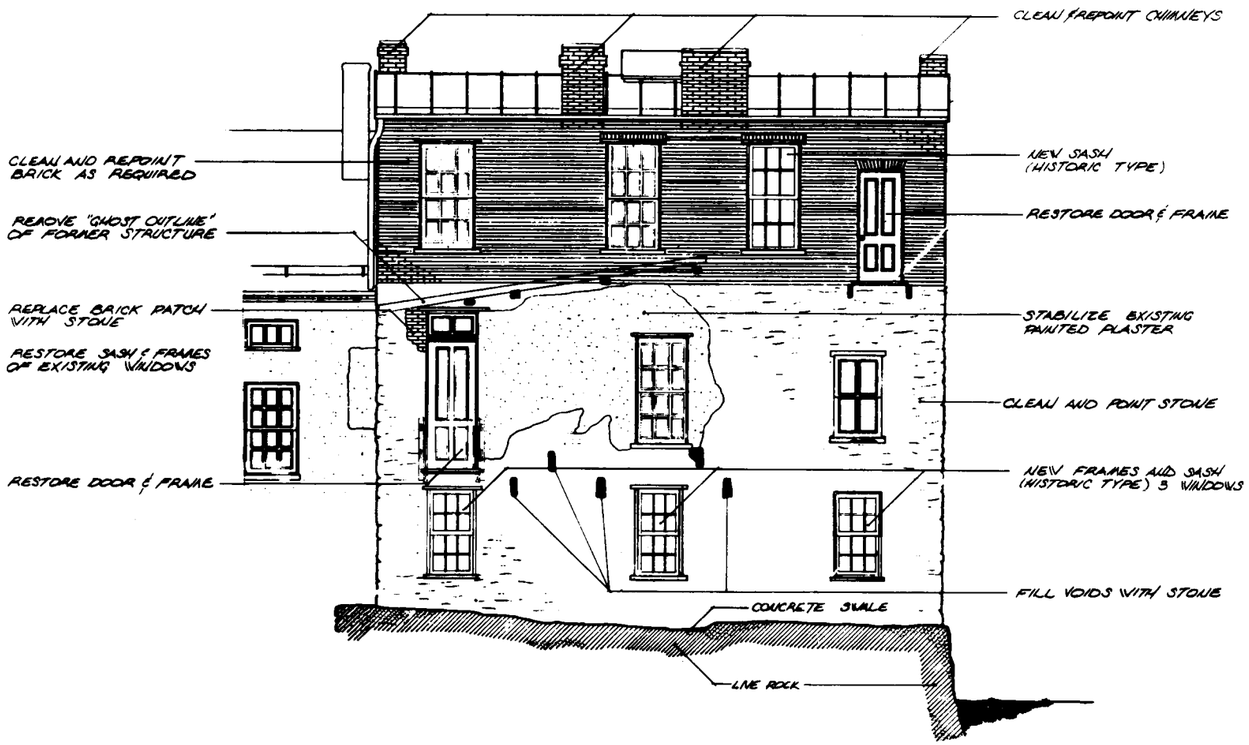
BUILDING 40
PROPOSED RESTORATION

SOUTHWEST & SOUTHEAST ELEVATIONS

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

PREPARED	DRAWING NO.
DESIGNED BALLARD	385 / 25014
DRAWN DONALD	PCTP PKG. 158 — SHEET 16 OF 18
CHECKED JUNE 1983	
DATE	

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NORTHWEST ELEVATION

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

ON MICROFILM

BUILDING 40
PROPOSED RESTORATION

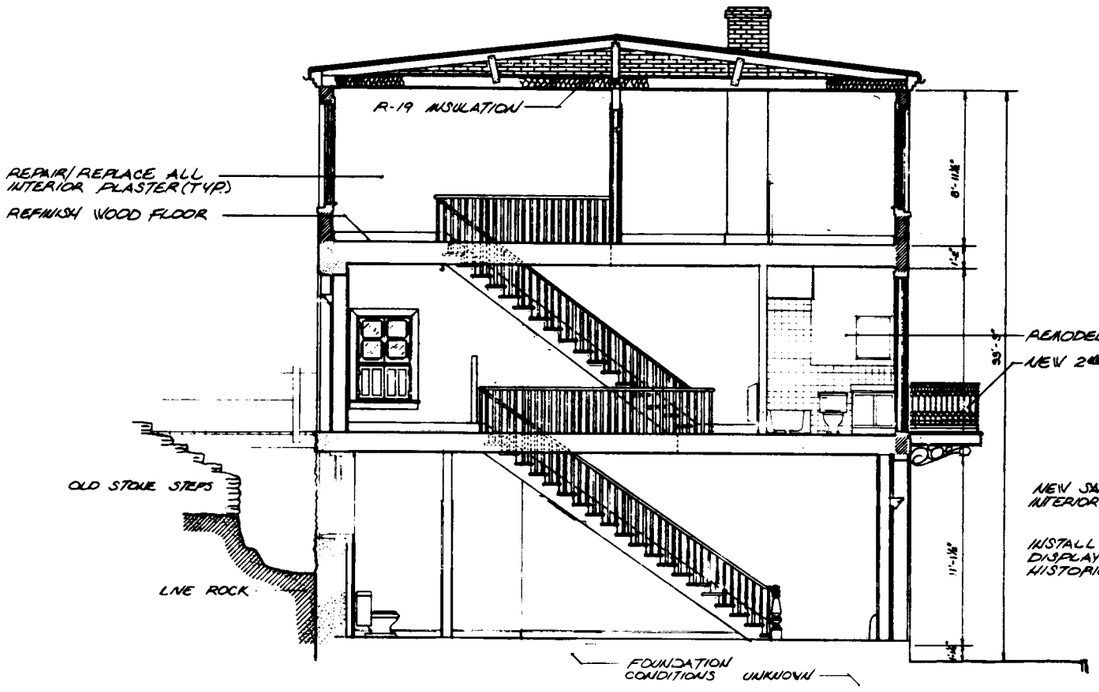
NORTHWEST ELEVATION

SCALE: 0 1' 2' 3' 4' 5' 6' 7' 8' 9' 10'
1/4" = 1'-0"

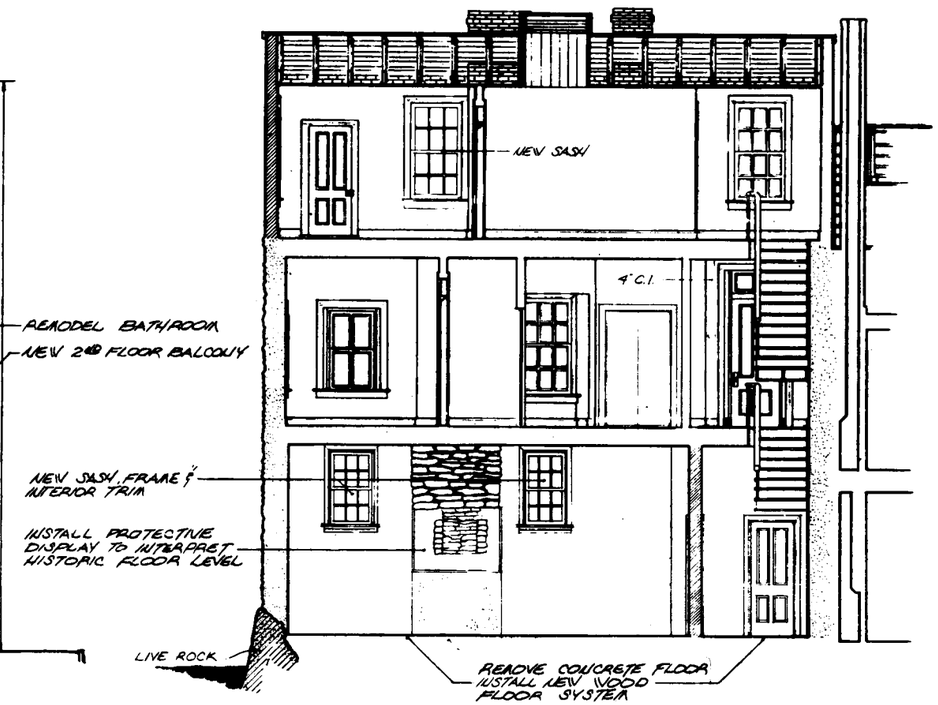
PREPARED	DRAWING NO.
DESIGNED BALLARD	385 / 25014
DRAWN A.S.DONALD	PCIP FORM 1156 — SHEET 17 OF 18
CHECKED JUNE 1983 DATE	

REDUCED COPY

BUILDING 40
PROPOSED RESTORATION



TRANSVERSE SECTION A-A
SCALE: 1/4"=1'-0"

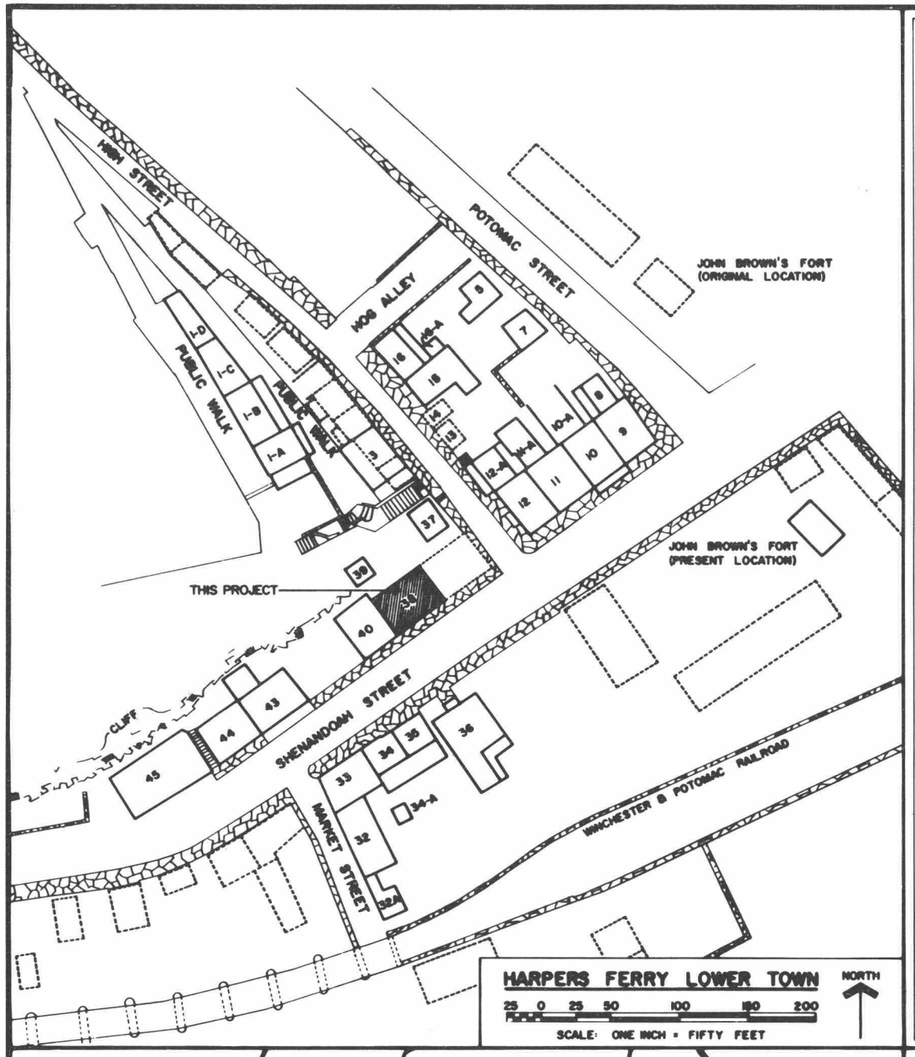


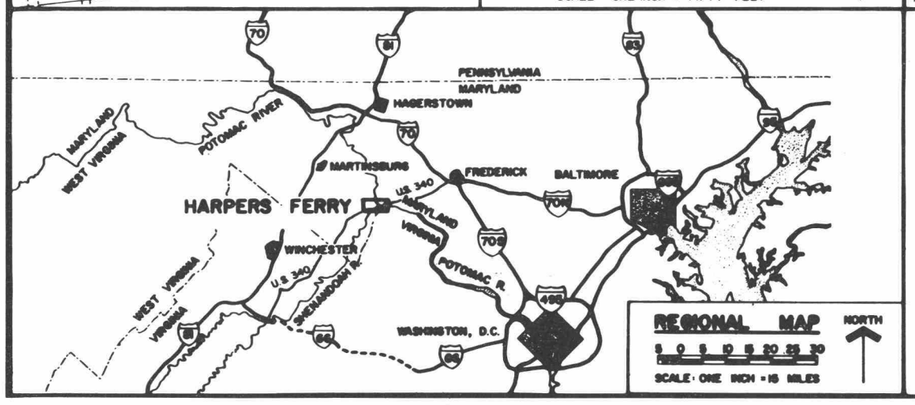
SECTION B-B
SCALE: 1/4"=1'-0"

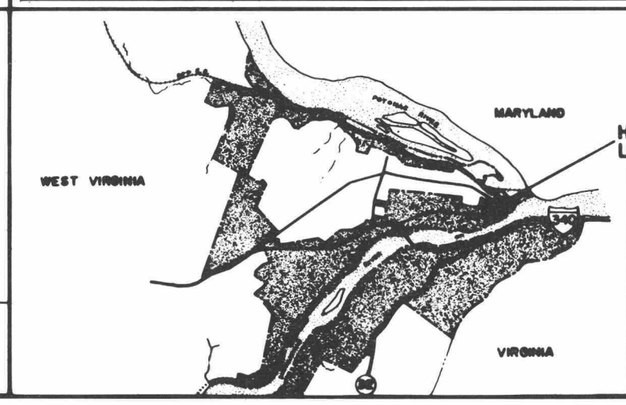
BUILDING SECTIONS
SCALE: 1/4"=1'-0"

PREPARED	DRAWING NO.
DESIGNED BALLARD	385 / 25014
DRAWN A.S. DONALD	PCHP HRS 158 — SHEET 18 OF 18
CHECKED	
DATE JUNE 1983	

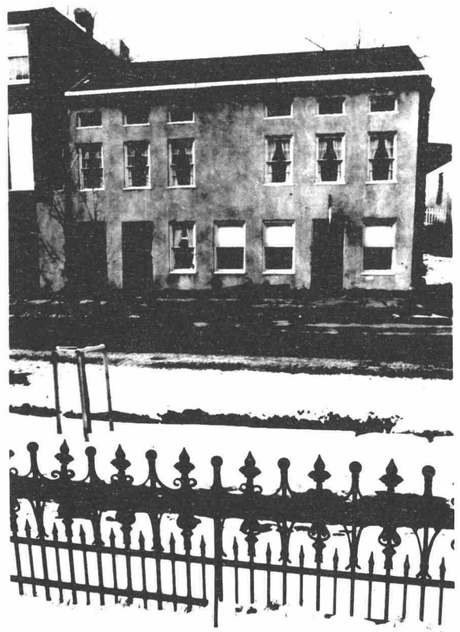
REDUCED COPY







Tearney Building
Building 38



Historic Structure Report Drawings

NATIONAL PARK SERVICE
Department of the Interior

INDEX TO DRAWINGS

EXISTING CONDITIONS

1. COVER SHEET
2. SITE PLAN
3. FIRST & SECOND FLOOR PLANS
4. THIRD FLOOR & ROOF PLANS
5. EAST & NORTH ELEVATIONS
6. WEST ELEVATION
7. BUILDING SECTIONS
8. FOUNDATION & SECOND FLOOR FRAMING PLANS
9. ROOF FRAMING PLAN
10. STRUCTURAL DETAILS
11. STAIR DETAILS
12. ROOM FINISH SCHEDULE
13. WINDOW ELEVATIONS
14. WINDOW DETAILS
15. DOOR ELEVATIONS
16. DOOR ELEVATIONS
17. DOOR DETAILS
18. DOOR DETAILS
19. FIREPLACE, MANTEL & BASE DETAILS

PROPOSED RESTORATION

20. FIRST & SECOND FLOOR PLAN
21. THIRD FLOOR & ROOF PLANS
22. EAST & NORTH ELEVATIONS
23. WEST & SOUTH ELEVATIONS

ON MICROFILM

HISTORIC PRESERVATION DIVISION

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DENVER SERVICE CENTER

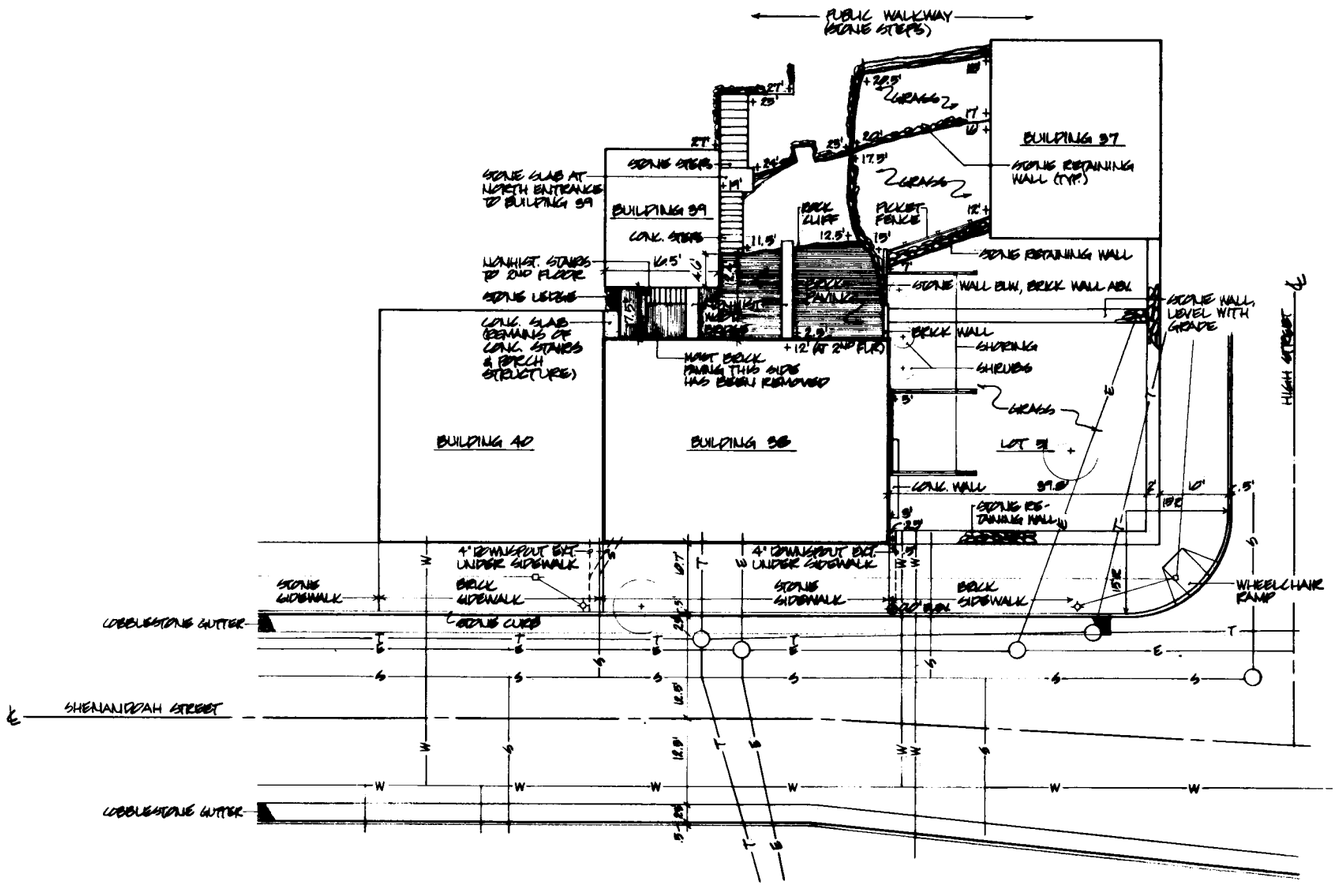
PREPARED
DESIGNED
S.L.S.
DRAWN
DONALD
CHECKED
DATE

TITLE OF DRAWING
TEARNEY BUILDING-BUILDING 38
LOCATION WITHIN PARK
LOWER TOWN
NAME OF PARK
HARPERS FERRY NATIONAL HISTORICAL PARK
REGION — COUNTY — STATE
N.C.R. — JEFFERSON — WEST VIRGINIA

DRAWING NO.
HFC
2500
PEIP PRO.
SHEET
1
OF 23

Harpers Ferry N. H. P.

GPO 1974-626-760



SITE PLAN
SCALE: 1" = 10'

LEGEND:
- W — WATER LINE
- E — ELECTRICAL LINE
- T — TELEPHONE LINE
- S — SEWER LINE
- MANHOLE
- STREETLIGHT

NOTE:
THIS PLAN IS NOT INTENDED TO REPRESENT A PROFESSIONAL LEGAL SURVEY.

SOURCE OF UTILITY INFORMATION:
DRAWINGS FOR
HARPERS FERRY HISTORICAL PARK
PROJECT (A)
LOWER TOWN HARPERS FERRY
PREPARED BY
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
AUGUST 1978

ON MICROFILM

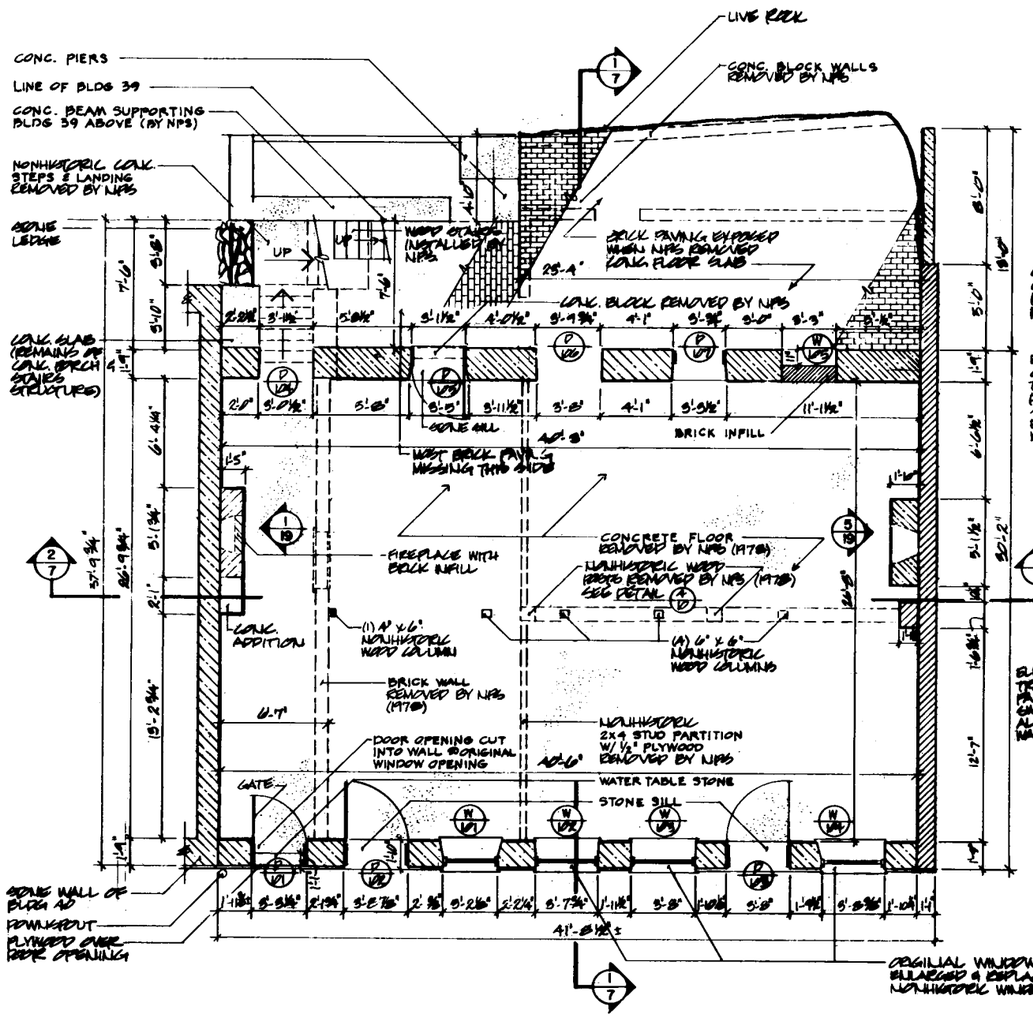
BUILDING 38
EXISTING CONDITIONS

SITE PLAN
SCALE: 1" = 10'

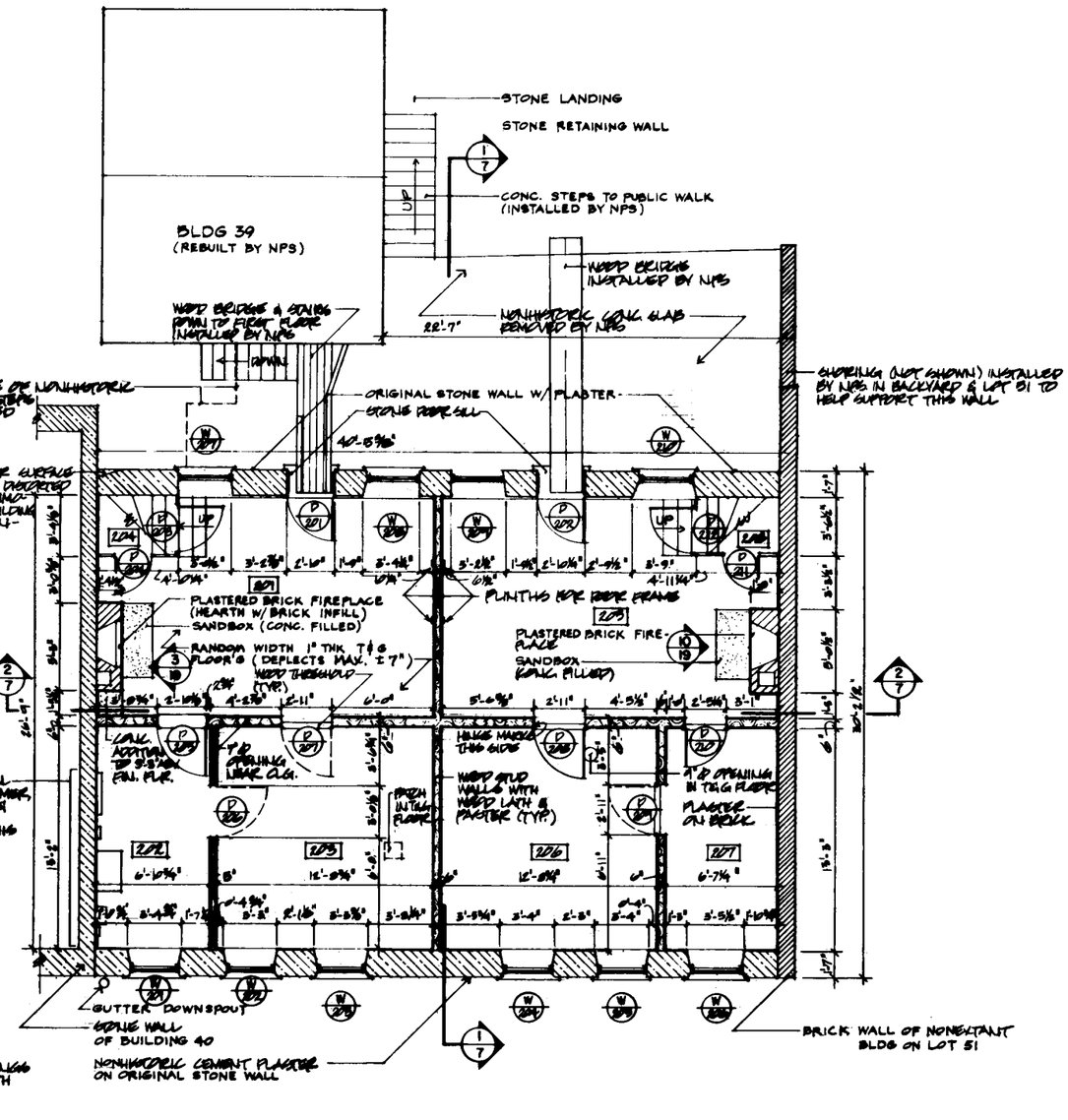
PREPARED
DESIGNED
S.L.S.
DRAWN
DONALD
CHECKED
DATE

DRAWING NO.
395
25010
PCTP PKG.
SHEET
2
OF 23

BUILDING 38
EXISTING CONDITIONS



FIRST FLOOR PLAN
SCALE: 1/4"=1'-0



SECOND FLOOR PLAN
SCALE: 1/4"=1'-0"

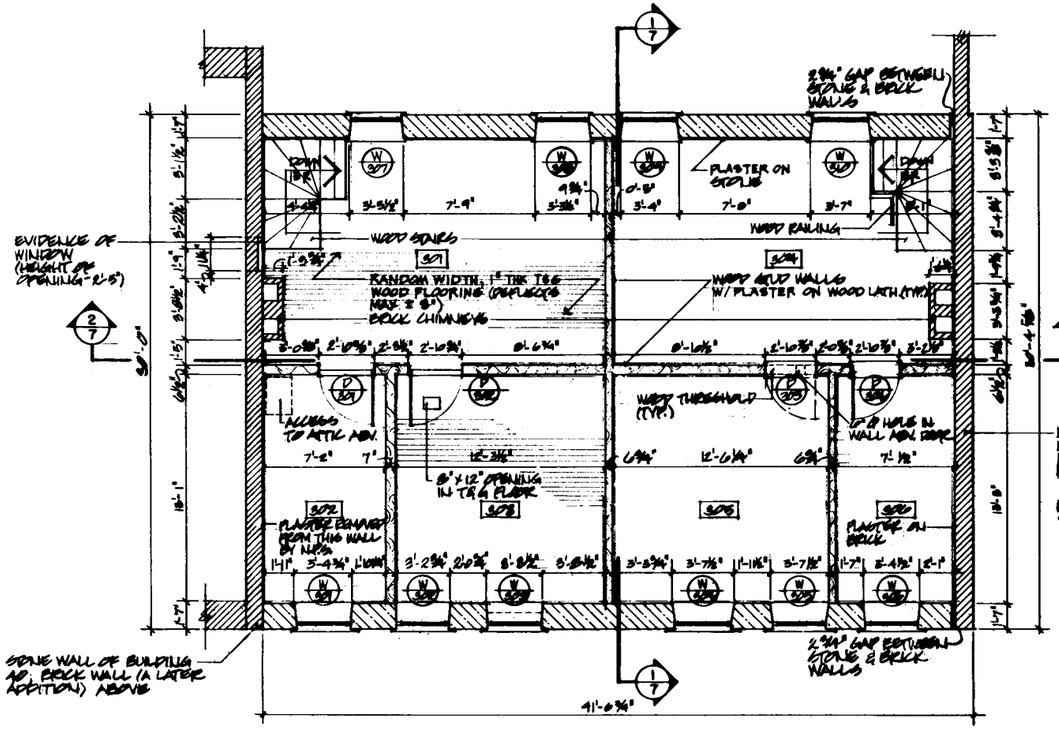
FIRST & SECOND FLOOR PLANS
SCALE: 1/4"=1'-0"

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DESIGNED R.C.G. DRAWN DONALD CHECKED	FILE NO. SHEET 3 OF 22
DATE	

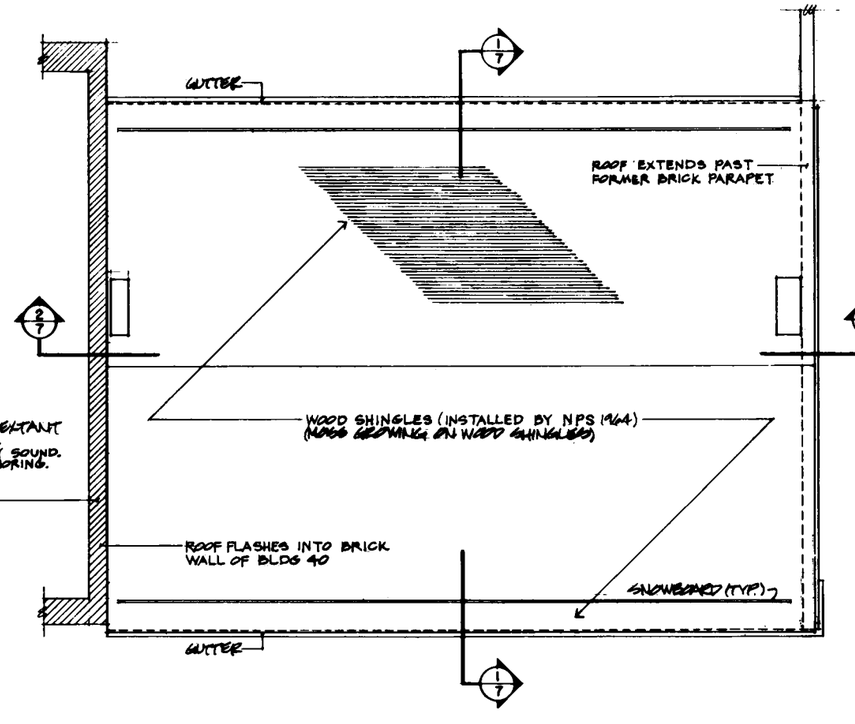
ON MICR

BASIC DATA

GPO-1974-576-711



THIRD FLOOR PLAN
SCALE: 1/4"=1'-0"



ROOF PLAN
SCALE: 1/4"=1'-0"

ON MICROFILM

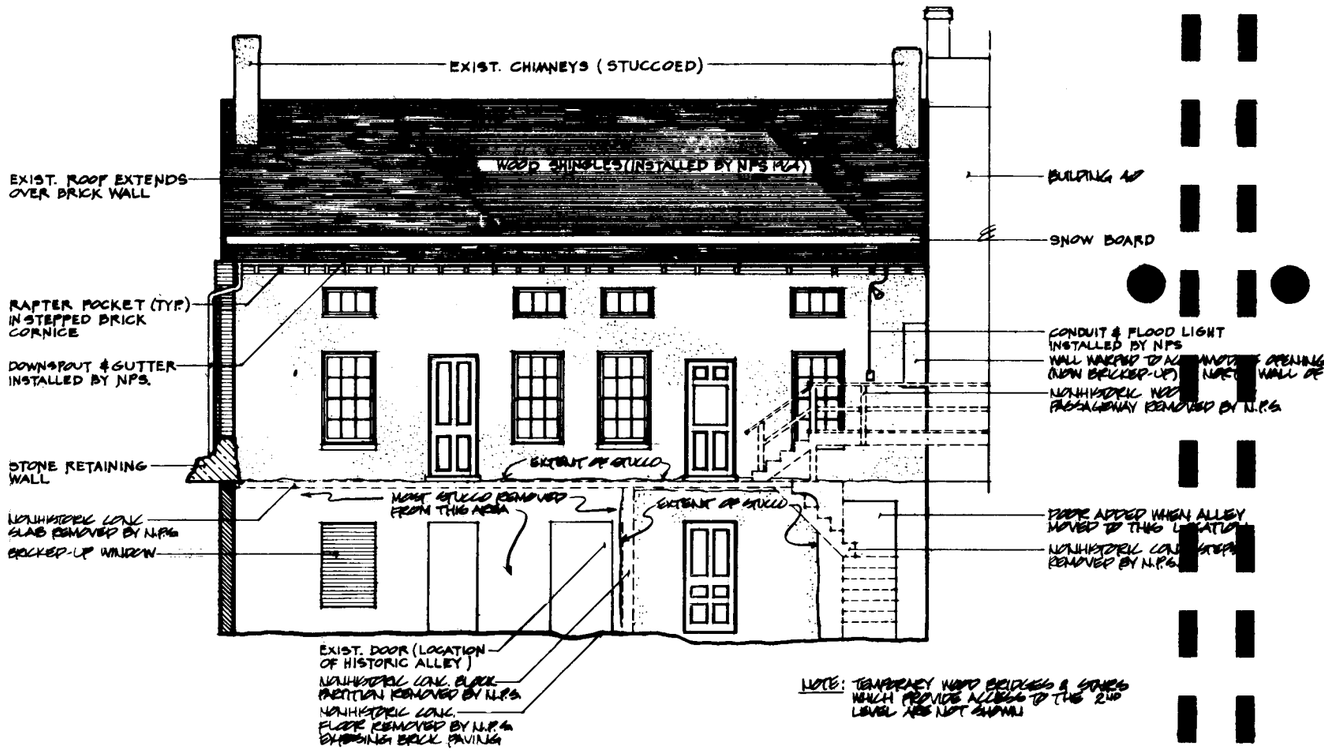
BUILDING 38
EXISTING CONDITIONS

THIRD FLOOR & ROOF PLANS

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

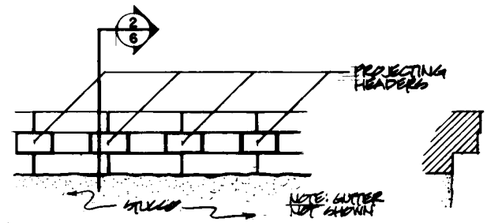
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	PSR NO.
	SHEET 4 OF 23

GPO-1977-777-370



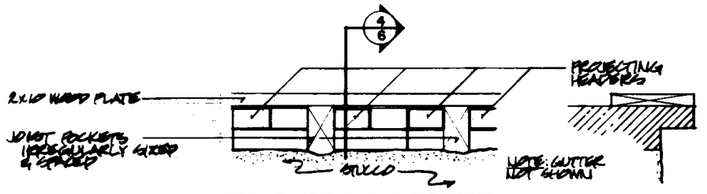
NOTE: TEMPORARY WOOD BRIDGES & STONES WHICH PROVIDE ACCESS TO THIS 2ND LEVEL ARE NOT SHOWN

WEST ELEVATION
SCALE: 1/4" = 1'-0"



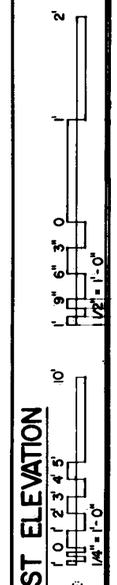
FRONT BRICK CORNICE ELEVATION
1/6 SCALE: 1 1/2" = 1'-0"

CORNICE PROFILE
2/6 NO SCALE



REAR BRICK CORNICE ELEVATION
3/6 SCALE: 1 1/2" = 1'-0"

CORNICE PROFILE
4/6 NO SCALE



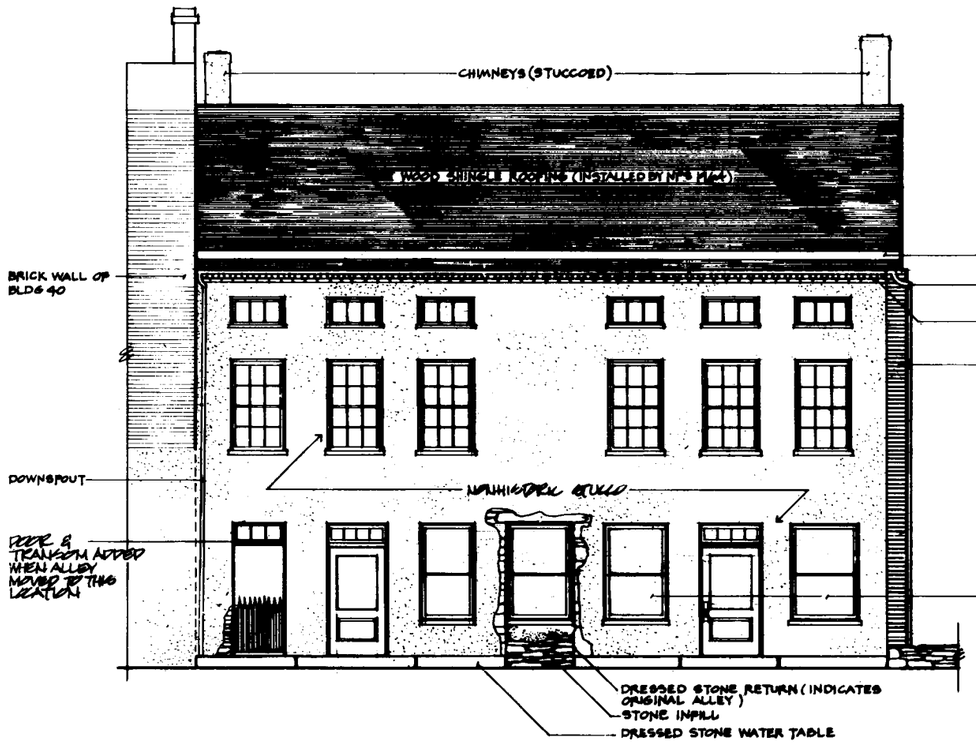
WEST ELEVATION

BUILDING 38
EXISTING CONDITIONS

ON MICROFILM

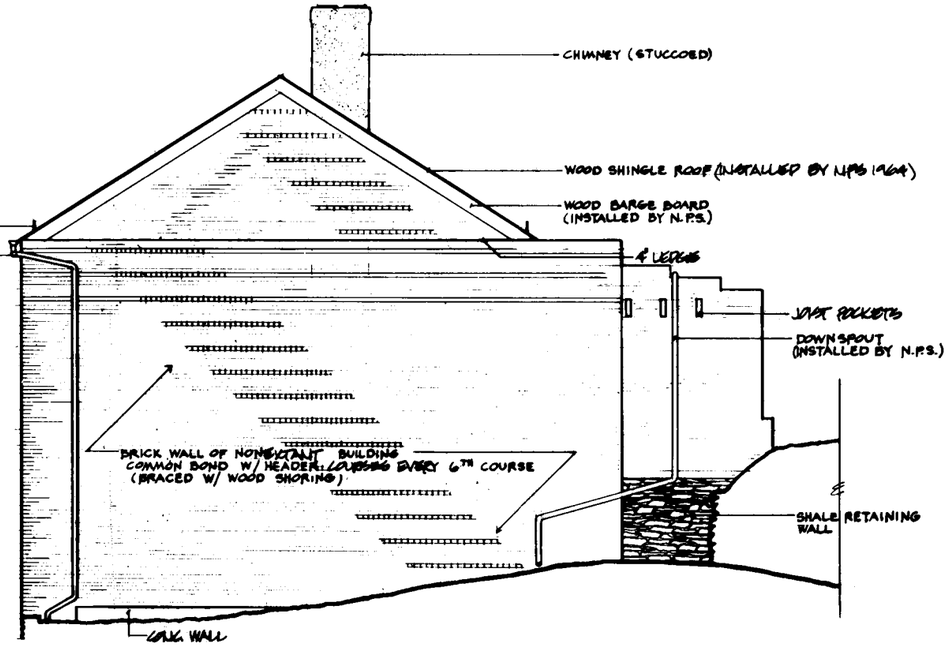
PREPARED	DRAWING NO.
DESIGNED R.C.G./S.L.S. DRAWN DONALD CHECKED 11/81 DATE	386 25010
PSE NO.	SHEET 6 OF 23

GPO-1977-777-378



EAST ELEVATION

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



NORTH ELEVATION

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

ON MICROFILM

BUILDING 38
EXISTING CONDITIONS

EAST & NORTH ELEVATIONS

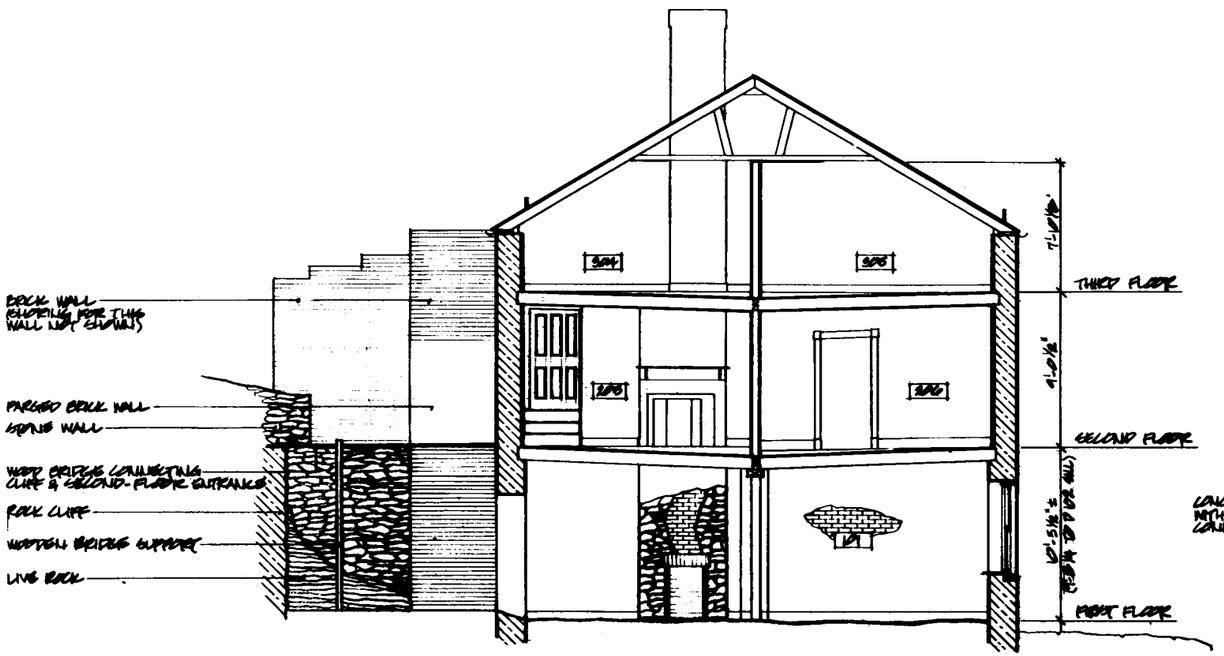
SCALE: 1/4" = 1'-0"

PREPARED
DESIGNED: H.C.S.
DRAWN: DONALD
CHECKED:
DATE: 11/78

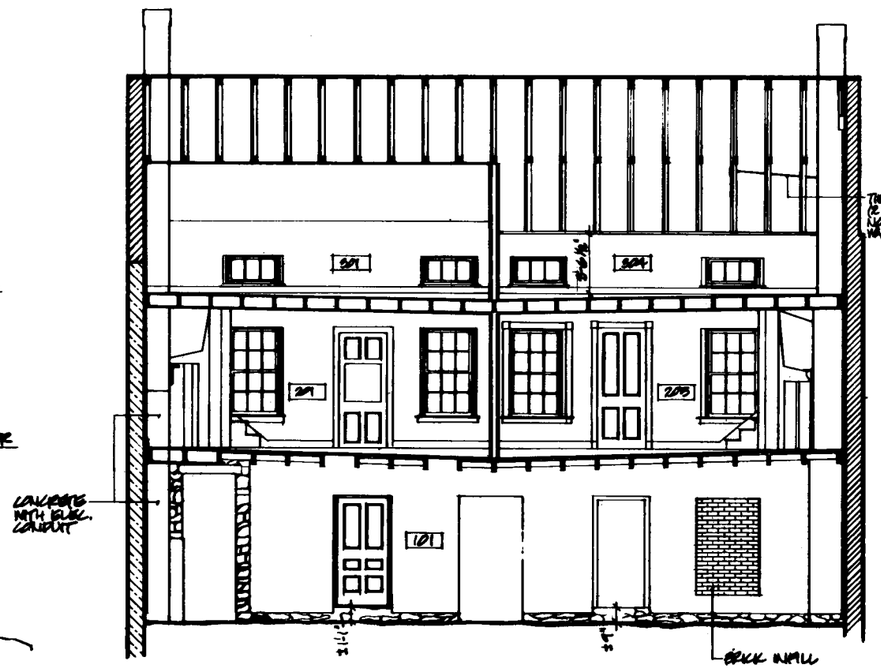
DRAWING NO. 305 2500
PSS
SHEET 5 OF 23

GPO-1977-777-576

BUILDING 38
EXISTING CONDITIONS



1/7 SECTION
SCALE: 1/4" = 1'-0"



2/7 SECTION
SCALE: 1/4" = 1'-0"

BUILDING SECTIONS
SCALE: 1/4" = 1'-0"

ON MICROFILM

PREPARED	DRAWING NO.
DESIGNED S.L.S.	385 2500
DRAWN DONALD	PCN PKG. SHEET 7
CHECKED JKB	OF 23
DATE	

FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

NOTE:
THIRD FLOOR FRAMING IS ASSUMED TO BE SIMILAR WITH 2" x 6" JOISTS 22" O.C.

SECOND FLOOR FRAMING PLAN
SCALE: 1/4" = 1'-0"

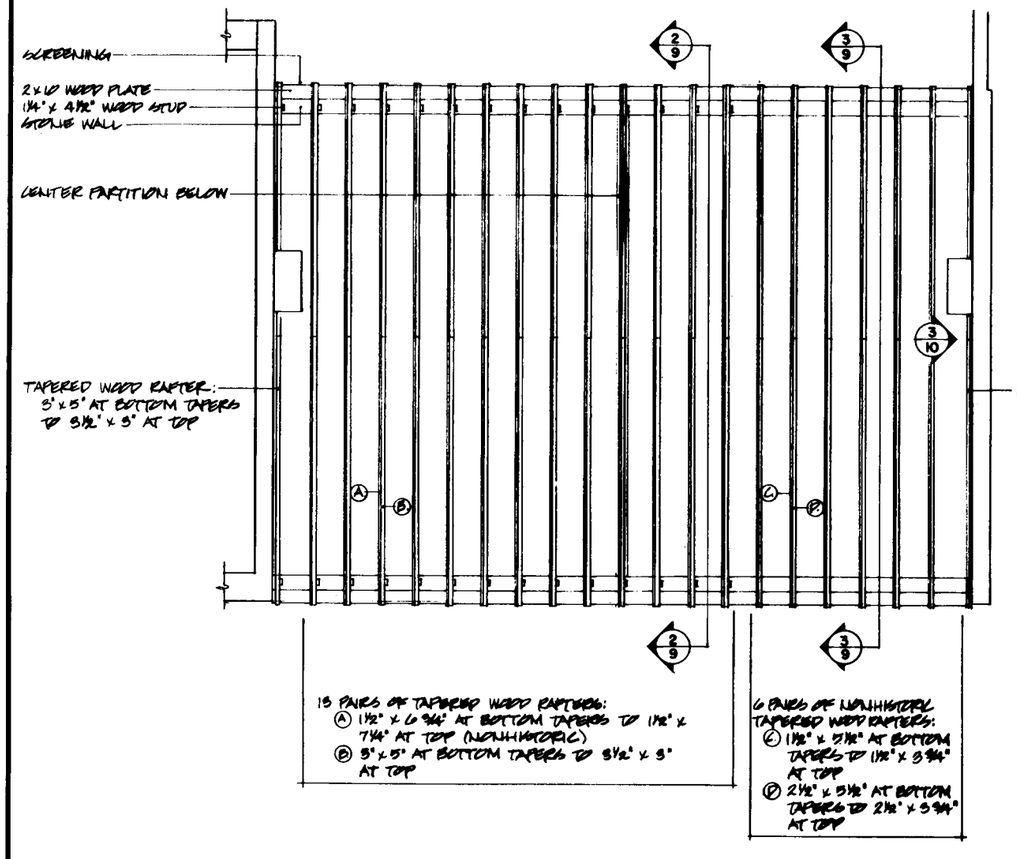
ON MICROFILM

BUILDING 38
EXISTING CONDITIONS

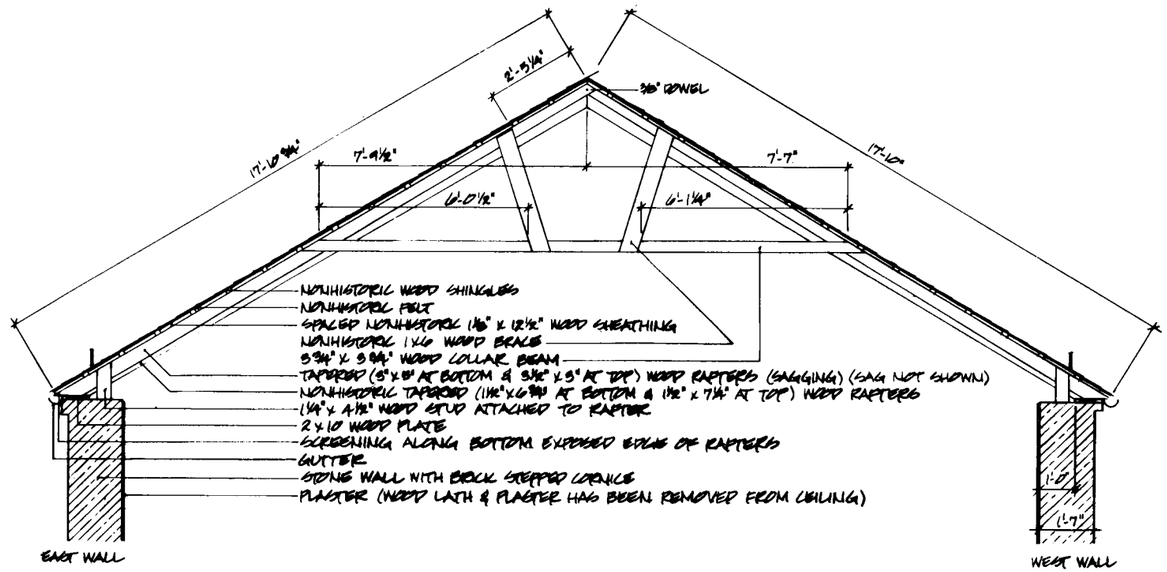
FOUNDATION & SECOND FLOOR FRAMING PLANS

SCALE: 1/4" = 1'-0" 1' 0 1' 2' 3' 4' 5' 10'

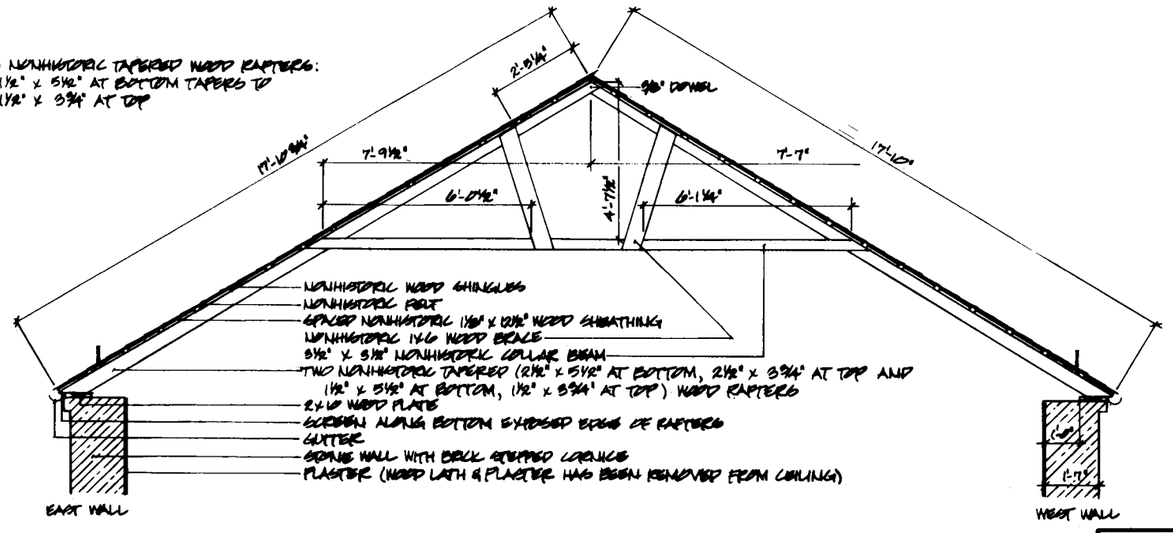
PREPARED	DRAWING NO.
DESIGNED S.L.S.	385 / 25010
DRAWN DONALD	PCIP PKG. / SHEET 8
CHECKED 11/81	OF 23
DATE	



1/9 ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"



2/9 ROOF SECTION
SCALE: 1/2" = 1'-0"



3/9 ROOF SECTION
SCALE: 1/2" = 1'-0"

BUILDING 38
EXISTING CONDITIONS

ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

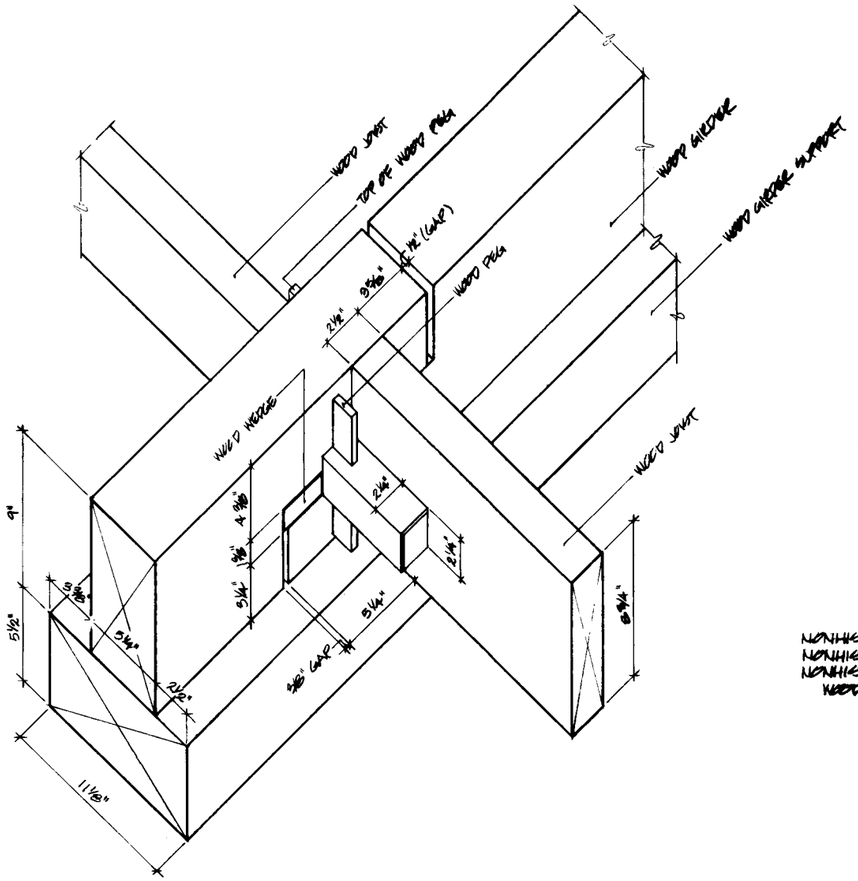
PREPARED
DESIGNED S.L.S.
DRAWN DONALD
CHECKED
11/88 DATE

DRAWING NO. 385 2500

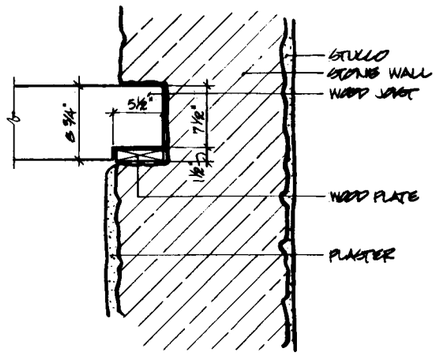
PCIP PROJ.

SHEET 9 OF 23

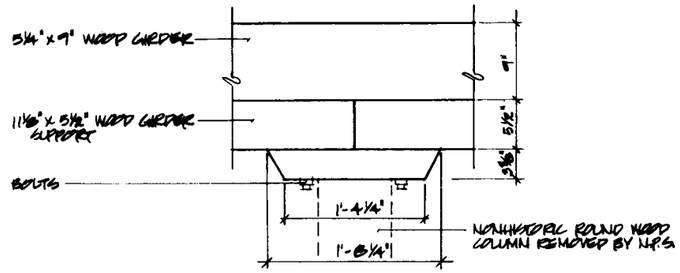
ON MICROFILM



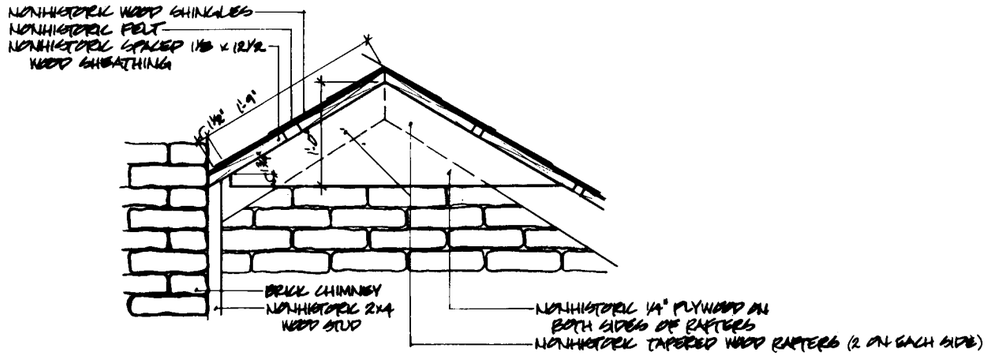
1/10 JOIST & GIRDER DETAIL
SCALE: 3" = 1'-0"



2/10 2ND FLOOR JOIST POCKET DETAIL
SCALE: 1 1/2" = 1'-0"



4/10 1ST FLOOR COLUMN DETAIL
SCALE: 1 1/2" = 1'-0"



3/10 NORTH GABLE DETAIL
SCALE: 1 1/2" = 1'-0"

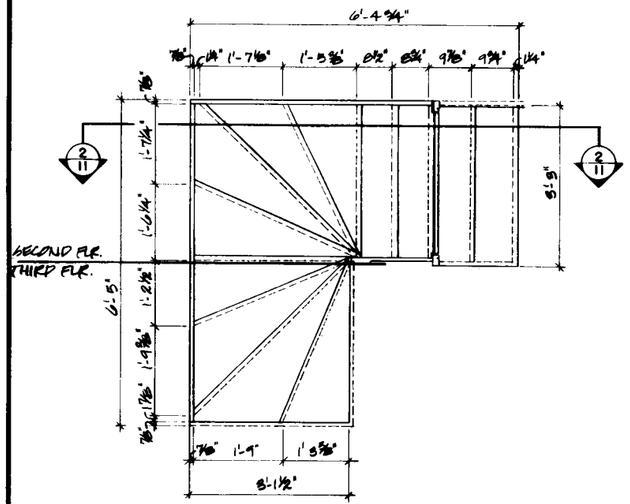
BUILDING 38
EXISTING CONDITIONS

STRUCTURAL DETAILS
SCALE: 1 1/2" = 1'-0"

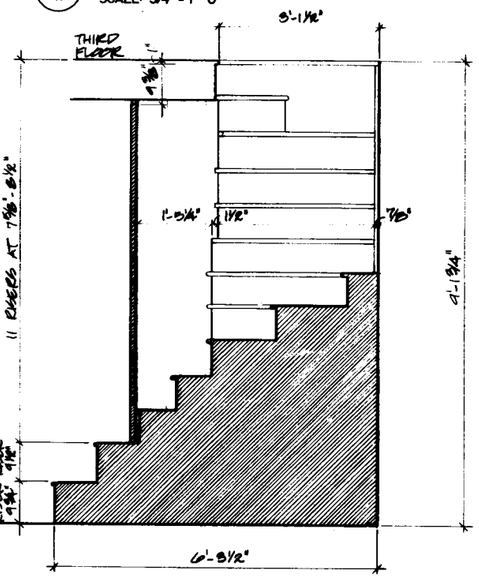


ON MICROFILM

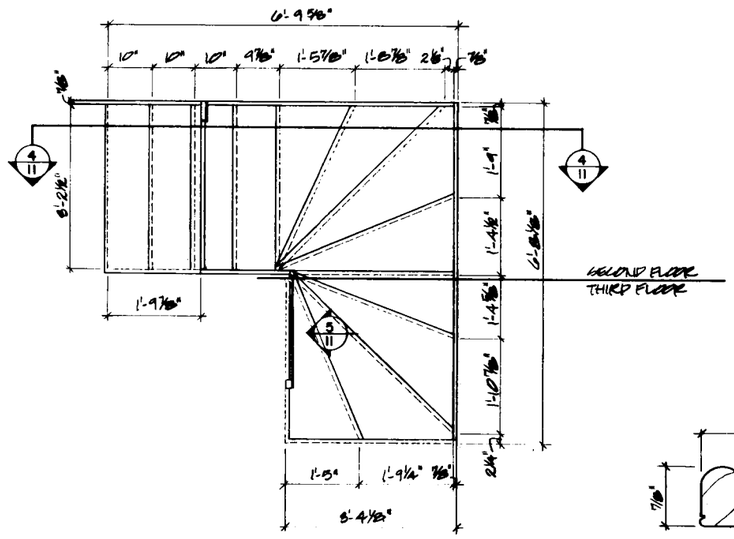
PREPARED	DRAWING NO.
DESIGNED S.L.S. DRAWN DONALD CHECKED 11/81 DATE	395 2000
PCIP PKG.	SHEET 10 OF 23



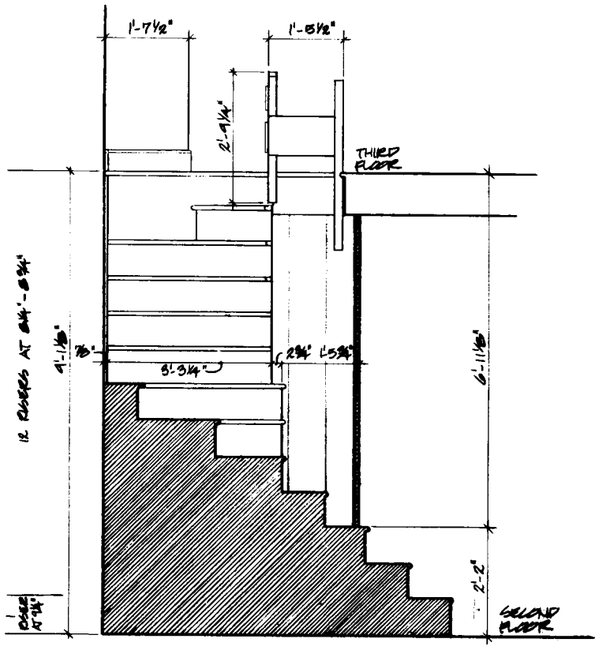
1/11 **SOUTH STAIRS PLAN**
SCALE: 3/4" = 1'-0"



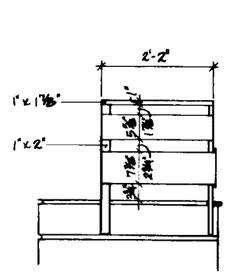
2/11 **SOUTH STAIRS SECTION**
SCALE: 3/4" = 1'-0"



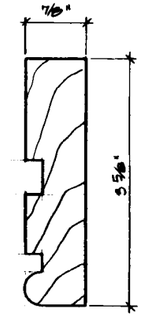
3/11 **NORTH STAIRS PLAN**
SCALE: 3/4" = 1'-0"



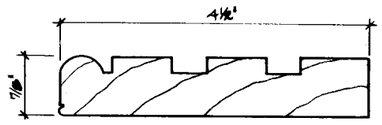
4/11 **NORTH STAIRS SECTION**
SCALE: 3/4" = 1'-0"



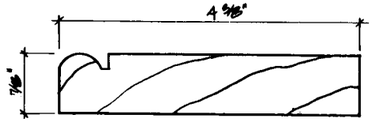
5/11 **NORTH STAIRS RAILING DETAIL**
SCALE 3/4" = 1'-0"



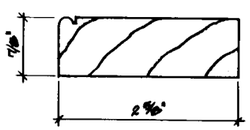
9/11 **APRON-WINDOWS 201-203**
F.S.



6/11 **ARCHITRAVE**
F.S.



7/11 **ARCHITRAVE**
F.S.

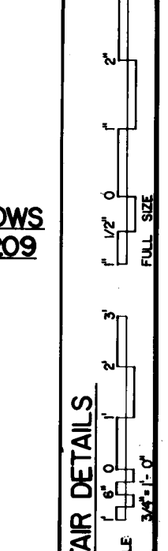


8/11 **ARCHITRAVE**
F.S.



10/11 **APRON-WINDOWS 204-206 & 209**
F.S.

11/11 **ARCHITRAVE**
F.S.



STAIR DETAILS

BUILDING 38
EXISTING CONDITIONS

PREPARED	DRAWING NO.
DESIGNED S.L.S.	385 2500
DRAWN DONALD	PCIP PKG.
CHECKED J.K.B.	SHEET 11
DATE	OF 23

ON MICROFILM

ROOM FINISH SCHEDULE

FLOOR	ROOM	FLOOR		WALLS								CEILING		BASE										REMARKS
				NORTH		SOUTH		EAST		WEST				NORTH			SOUTH			EAST			WEST			
		MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MAT.	FINISH	HEIGHT	MAT.	FINISH	HEIGHT	MAT.	FINISH	HEIGHT	MAT.	FINISH	HEIGHT	
FIRST	101	PACKED DIRT & BRICKBAT	NONE	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	NONE	—	—	NONE	—	—	NONE	—	—	NONE	—	—	FLOOR ALSO CONSISTS OF BRICK DRAIN & STONE FOUNDATION WALLS EXPOSED DURING ARCHEOLOGICAL INVEST., SEE SHEET 8. STONE PLASTER HAS BEEN REMOVED FROM WALLS EXPOSING BRICK & STONE; PLASTER EXISTS ONLY ON A SMALL SECTION OF CEILING: EXPOSED JOISTS & 2ND. FLOOR FLOORBOARDS FORM REMAINDER OF CEILING; LATH GHOST MARKS INDICATE PLASTER ONCE COVERED ENTIRE CEILING
SECOND	201	TONGUE & GROOVE WOOD	NONE	PLASTER & DRYWALL	PAINT & WALLPAPER	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	15/19	PAINT	5-5 3/4"	15/19	PAINT	5 3/4"	15/19	PAINT	5 1/2-6"	15/19	PAINT	5 1/2-6"	PIECES OF WALLPAPER ON SOUTH, EAST & WEST WALLS & CEILING INDICATE AREAS WERE ONCE COVERED WITH WALLPAPER
	202	TONGUE & GROOVE WOOD	NONE	PLASTER	PAINT & WALLPAPER	PLASTER	PAINT & WALLPAPER	PLASTER	PAINT & WALLPAPER	PLASTER	PAINT & WALLPAPER	PLASTER	PAINT & WALLPAPER	15/19	PAINT	5 1/2-5 3/4"	15/19	PAINT	5 3/4-6 1/2"	15/19	PAINT	5 1/2-6"	15/19	PAINT	5 1/2-5 3/4"	WALLPAPER ON WALLS & CEILING WAS PARTIALLY REMOVED BEFORE WALLS & CEILING WERE LAST PAINTED
	203	TONGUE & GROOVE WOOD	PAINT (PART)	PLASTER	PAINT & WALLPAPER	PLASTER	PAINT & WALLPAPER	PLASTER	PAINT & WALLPAPER	PLASTER	PAINT & WALLPAPER	PLASTER	PAINT & WALLPAPER	14/19	PAINT	8"	14/19	PAINT	7 3/4-8"	14/19	PAINT	8-8 1/2"	14/19	PAINT	7 3/4-8"	TWO LAYERS OF WALLPAPER (TOP LAYER IS PAINTED) COVER PAINTED PLASTER ON WALLS & CEILING
	204	TONGUE & GROOVE WOOD	NONE	WOOD	PAINT	PLASTER	PAINT	WOOD	PAINT	STONE	NONE	WOOD	PAINT	NONE	—	—	NONE	—	—	NONE	—	—	NONE	—	—	
	205	TONGUE & GROOVE WOOD	PAINT (PART)	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	15/19	PAINT	5-5 1/2"	15/19	PAINT	5 1/4-5 1/2"	15/19	PAINT	5 1/2-5 3/4"	15/19	PAINT	5 1/2"	
	206	TONGUE & GROOVE WOOD	NONE	PLASTER	WALLPAPER	PLASTER	WALLPAPER	PLASTER	WALLPAPER	PLASTER	WALLPAPER	PLASTER	PAINT	14/19	PAINT	8-8 1/4"	14/19	PAINT	8"	14/19	PAINT	8-8 1/4"	14/19	PAINT	7 3/4-8 1/4"	PIECES OF WALLPAPER ON CEILING INDICATE CEILING WAS ONCE COVERED WITH WALLPAPER; WALLPAPER ON WALLS COVERS PAINTED PLASTER
	207	TONGUE & GROOVE WOOD	NONE	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	15/19	PAINT	5 1/4-5 1/2"	15/19	PAINT	5 1/4"	15/19	PAINT	5-5 1/4"	15/19	PAINT	5 1/4"	PIECES OF WALLPAPER ON WALLS & CEILING INDICATE WALLS & CEILING WERE ONCE COVERED WITH WALLPAPER
	208	TONGUE & GROOVE WOOD	NONE	PLASTER	PAINT	WOOD	PAINT	WOOD	PAINT	PLASTER	PAINT	WOOD	PAINT	NONE	—	—	NONE	—	—	NONE	—	—	NONE	—	—	
THIRD	301	TONGUE & GROOVE WOOD	NONE	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	15/19	PAINT	4 1/2-5 1/2"	15/19	PAINT	5 1/4"	15/19	PAINT	5 1/2"	15/19	PAINT	5-5 1/4"	PIECES OF WALLPAPER ON WALLS & CEILING INDICATE WALLS & CEILING WERE ONCE COVERED WITH WALLPAPER
	302	TONGUE & GROOVE WOOD	NONE	PLASTER	PAINT	BRICK, STONE & WOOD LATH	NONE	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	15/19	PAINT	5 1/2"	15/19	PAINT	5 1/4"	15/19	PAINT	5 1/4-5 1/2"	15/19	PAINT	5 1/4"	PAINTED PLASTER WAS REMOVE FROM SOUTH WALL DURING INVESTIGATION
	303	TONGUE & GROOVE WOOD	PAINT (PART)	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	15/19	PAINT	4 3/4-5"	15/19	PAINT	5"	15/19	PAINT	5-5 1/4"	15/19	PAINT	5 1/4-5 1/2"	PIECES OF WALLPAPER ON WALLS & CEILING INDICATE WALLS & CEILING WERE ONCE COVERED WITH WALLPAPER.
	304	TONGUE & GROOVE WOOD	NONE	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	15/19	PAINT	5"	15/19	PAINT	5-5 3/4"	15/19	PAINT	5-5 1/2"	15/19	PAINT	4 3/4-5"	ONLY A SMALL PORTION OF PLASTER CEILING REMAINS; LATH GHOST MARKS ON ORIG. RAFTERS INDICATE PLASTER ONCE COVERED CEILING
	305	TONGUE & GROOVE WOOD	NONE	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	15/19	PAINT	5 1/2"	15/19	PAINT	5"	15/19	PAINT	5"	15/19	PAINT	5"	ONLY A SMALL PORTION OF PLASTER CEILING REMAINS; LATH GHOST MARKS ON ORIG. RAFTERS INDICATE PLASTER ONCE COVERED CEILING
	306	TONGUE & GROOVE WOOD	NONE	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	PLASTER	PAINT	SEE REMARKS	NONE	15/19	PAINT	5"	15/19	PAINT	5-5 1/4"	15/19	PAINT	5-5 1/4"	15/19	PAINT	4 3/4-5"	CEILING HAS BEEN REMOVED, EXPOSING NEW WOOD RAFTERS

NOTES:

1. EXCEPT WHERE NOTED OTHERWISE, TONGUE & GROOVE WOOD FLOORS ARE TOO WORN TO DETERMINE FINISH.

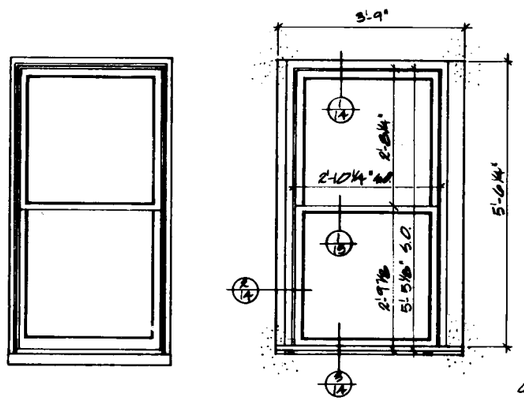
BUILDING 38
EXISTING CONDITIONS

ROOM FINISH SCHEDULE

ON MICROFILM

PREPARED	DRAWING NO.
DESIGNED S.L.S.	385 25010
DRAWN DONALD	PCIP PKG. / SHEET 12
CHECKED 11/81	OF 23
DATE	

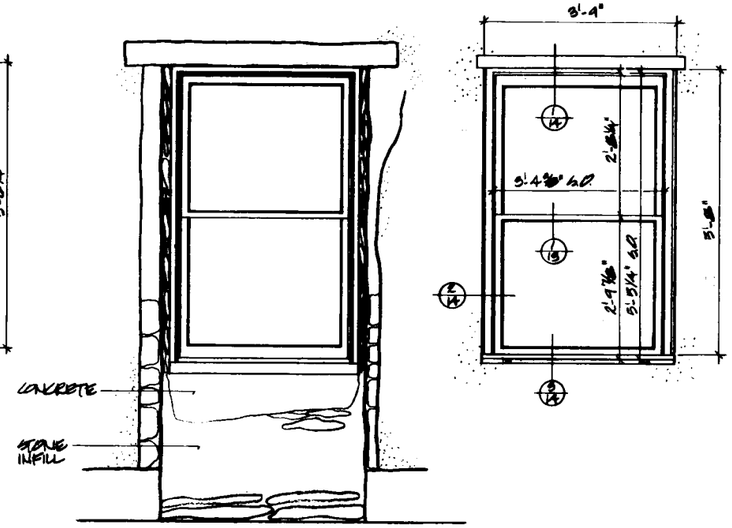
* GPO 1977 777-888



EXTERIOR VIEW INTERIOR VIEW

WINDOW 101 ELEVATION

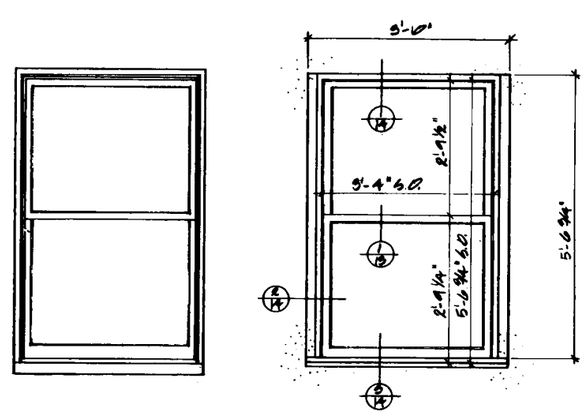
SCALE: 3/4" = 1'-0"



EXTERIOR VIEW INTERIOR VIEW

WINDOW 102 ELEVATION

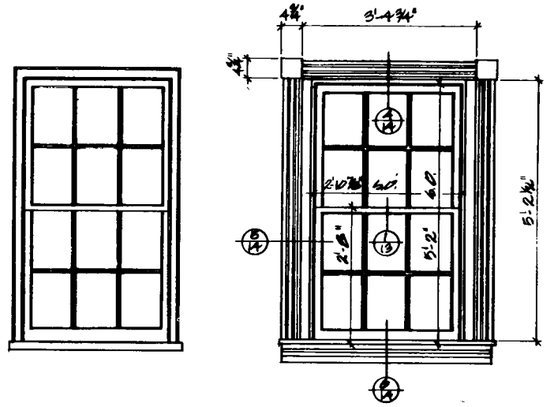
SCALE: 3/4" = 1'-0"



EXTERIOR VIEW INTERIOR VIEW

WINDOW 103 ELEVATION (WINDOW 104 SIM.)

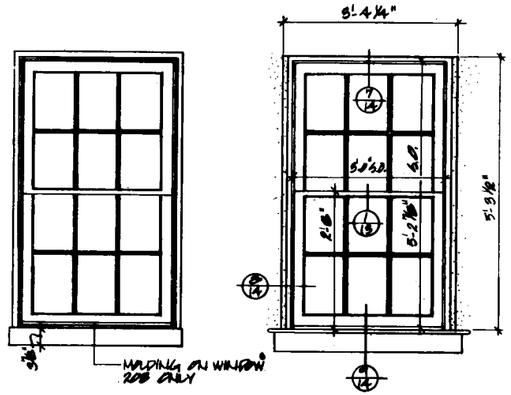
SCALE: 3/4" = 1'-0"



EXTERIOR VIEW INTERIOR VIEW

WINDOW 201 ELEVATION (WINDOWS 202-206 SIM.)

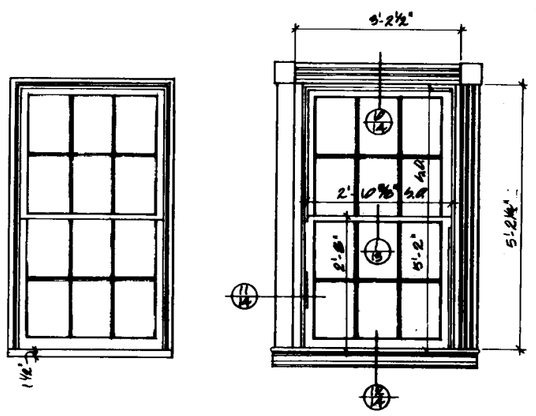
SCALE: 3/4" = 1'-0"



EXTERIOR VIEW INTERIOR VIEW

WINDOW 208 ELEVATION (WINDOWS 207 & 210 SIM.)

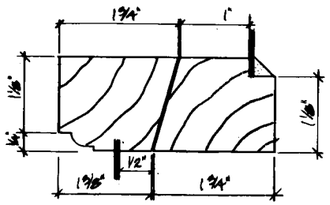
SCALE: 3/4" = 1'-0"



EXTERIOR VIEW INTERIOR VIEW

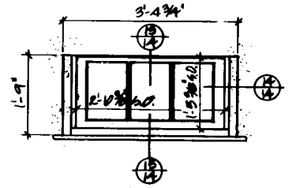
WINDOW 209 ELEVATION

SCALE: 3/4" = 1'-0"



MEETING RAIL

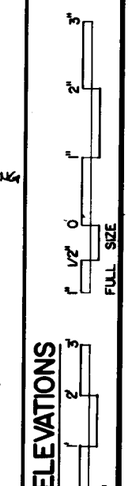
F.S.



INTERIOR VIEW

WINDOW 301 ELEVATION (WINDOWS 302-310 SIM.)

SCALE: 3/4" = 1'-0"



FULL SIZE

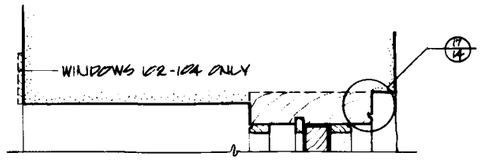
SCALE: 3/4" = 1'-0"

BUILDING 38
EXISTING CONDITIONS

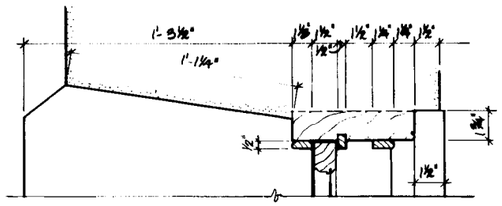
WINDOW ELEVATIONS

PREPARED	DRAWING NO.
DESIGNED S.L.S.	385 2501D
DRAWN DONALD	PCIP PKG.
CHECKED JV/BI	SHEET 13
DATE	OF 23

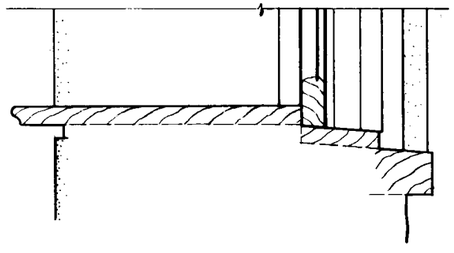
ON MICROFILM



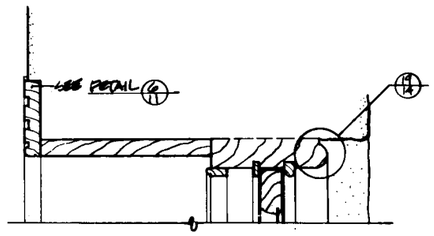
1/14 HEAD-WINDOW 101 (WINDOWS 102-104 SIM.)
SCALE: 3"=1'-0"



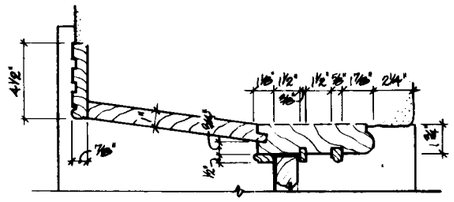
2/14 JAMB-WINDOW 101 (WINDOWS 102-104 SIM.)
SCALE: 3"=1'-0"



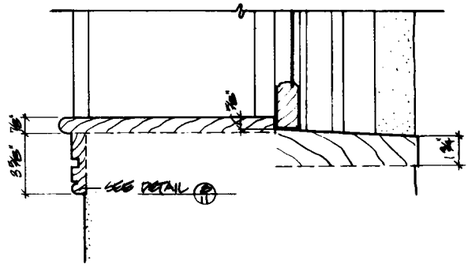
3/14 SILL-WINDOW 101 (WINDOWS 102-104 SIM.)
SCALE: 3"=1'-0"



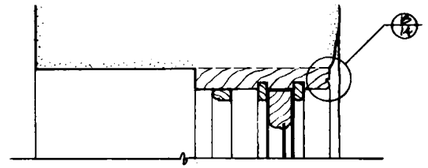
4/14 HEAD-WINDOW 201 (WINDOWS 202-206 SIM.)
SCALE: 3"=1'-0"



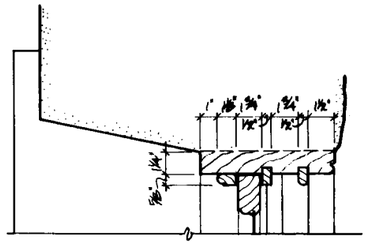
5/14 JAMB-WINDOW 201 (WINDOWS 202-206 SIM.)
SCALE: 3"=1'-0"



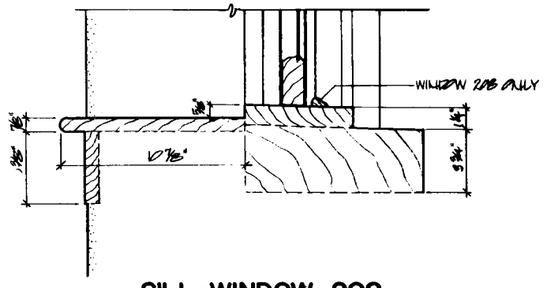
6/14 SILL-WINDOW 201 (WINDOWS 202-206 SIM.)
SCALE: 3"=1'-0"



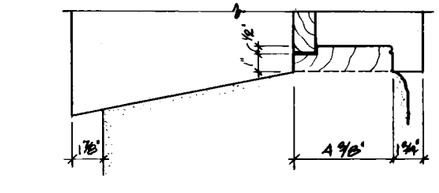
7/14 HEAD-WINDOW 208 (WINDOWS 207 & 210 SIM.)
SCALE: 3"=1'-0"



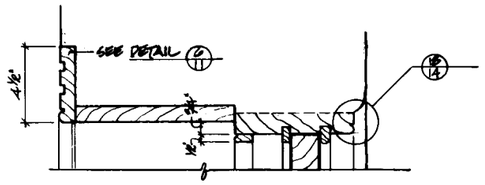
8/14 JAMB-WINDOW 208 (WINDOWS 207 & 210 SIM.)
SCALE: 3"=1'-0"



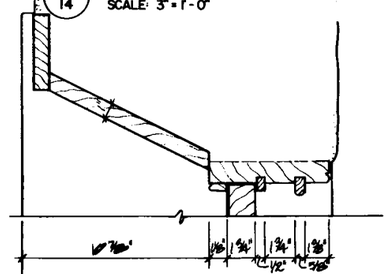
9/14 SILL-WINDOW 208 (WINDOWS 207 & 210 SIM.)
SCALE: 3"=1'-0"



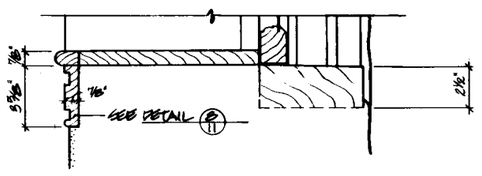
15/14 JAMB-WINDOW 310 (WINDOWS 301-309 SIM.)
SCALE: 3"=1'-0"



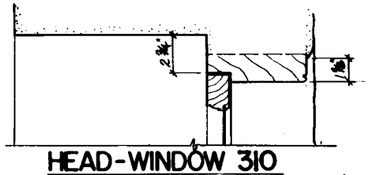
10/14 HEAD-WINDOW 209
SCALE: 3"=1'-0"



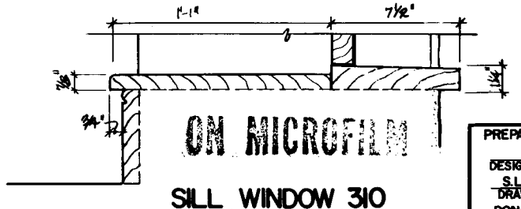
11/14 JAMB-WINDOW 209
SCALE: 3"=1'-0"



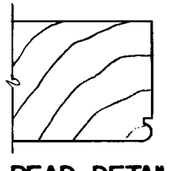
12/13 SILL-WINDOW 209
SCALE: 3"=1'-0"



14/14 HEAD-WINDOW 310 (WINDOWS 301-309 SIM.)
SCALE: 3"=1'-0"



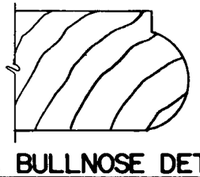
16/14 SILL WINDOW 310 (WINDOWS 301-309 SIM.)
SCALE: 3"=1'-0"



17/14 BEAD DETAIL
F.S.

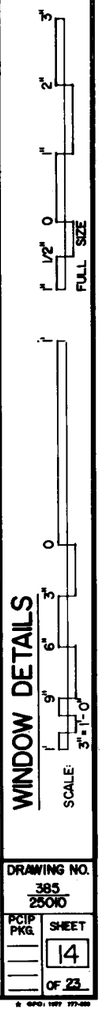


18/14 BEAD DETAIL
F.S.



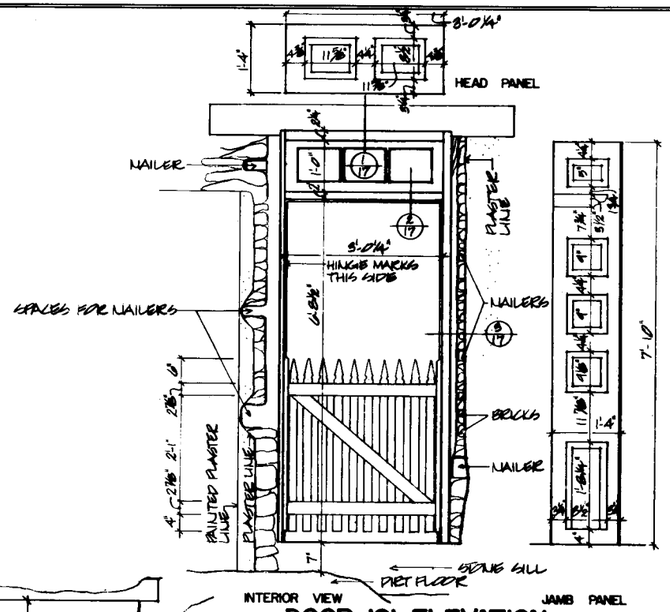
19/14 BULLNOSE DETAIL
F.S.

BUILDING 38
EXISTING CONDITIONS



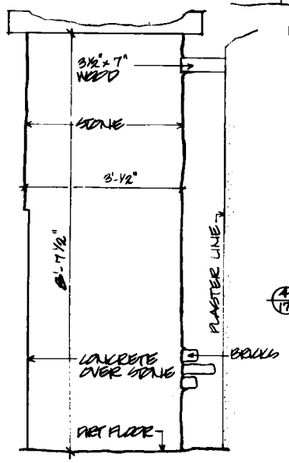
WINDOW DETAILS

PREPARED	
DESIGNED	S.L.S.
DRAWN	DONALD
CHECKED	
DATE	11/81
DRAWING NO.	385 25010
PCIP PKG.	
SHEET	14
	OF 23



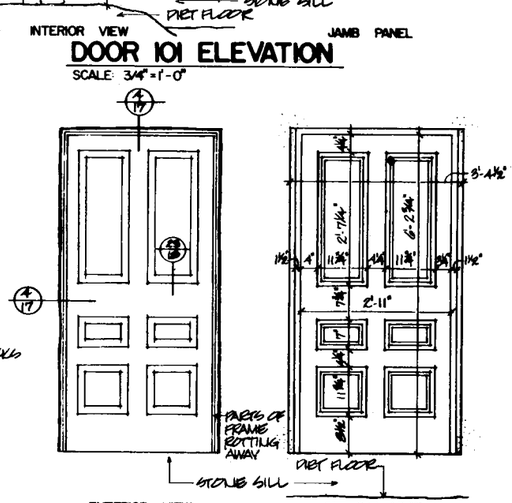
DOOR 101 ELEVATION

SCALE: 3/4" = 1'-0"



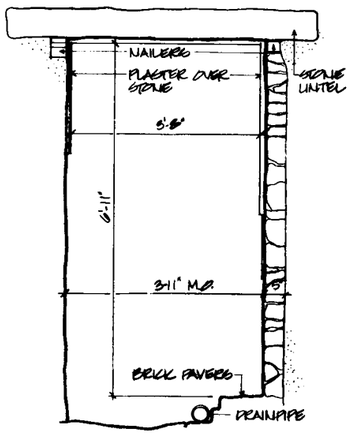
DOOR 104 ELEVATION

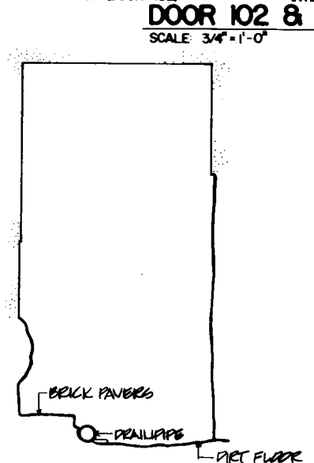
SCALE: 3/4" = 1'-0"



DOOR 105 ELEVATION

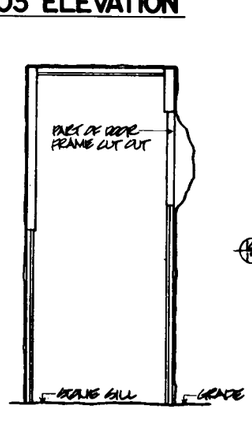
SCALE: 3/4" = 1'-0"

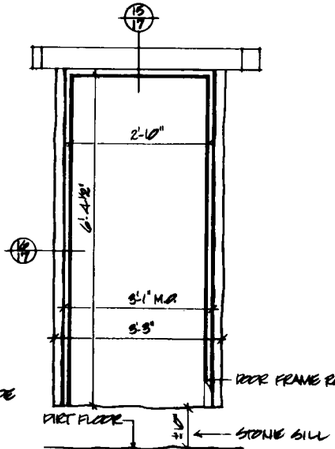




DOOR 106 ELEVATION

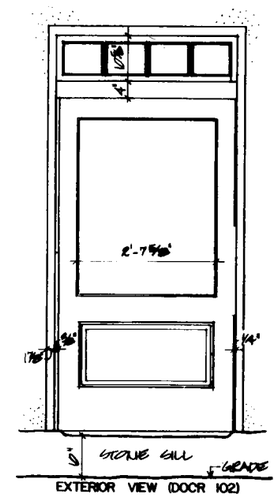
SCALE: 3/4" = 1'-0"

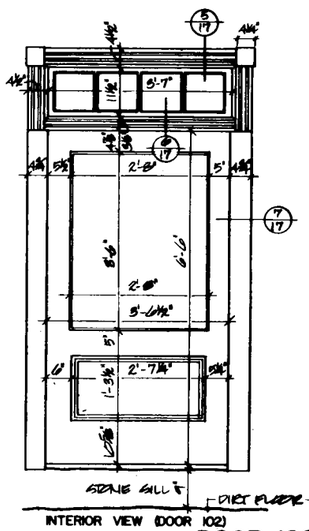


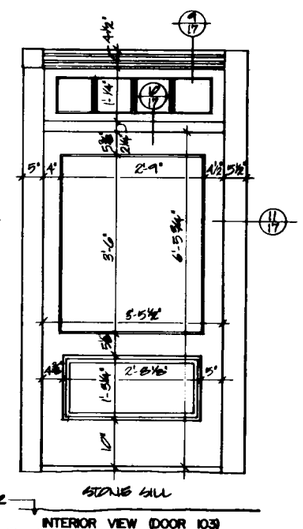


DOOR 107 ELEVATION

SCALE: 3/4" = 1'-0"

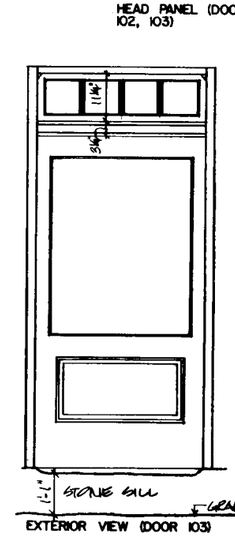


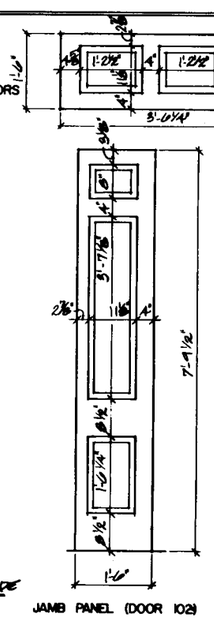




DOOR 102 & 103 ELEVATION

SCALE: 3/4" = 1'-0"



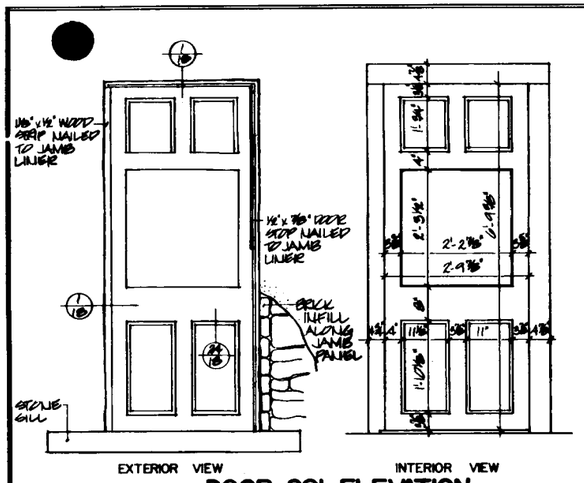


BUILDING 38
EXISTING CONDITIONS

DOOR ELEVATIONS

SCALE: 3/4" = 1'-0"

PREPARED	DRAWING NO.
DESIGNED S.L.S.	385 2500
DRAWN DONALD	PCIP PKG. / SHEET 15
CHECKED 11/81	OF 23
DATE	

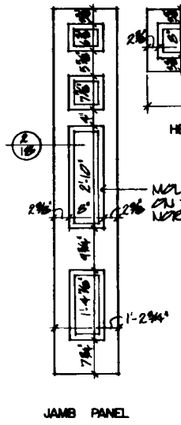


EXTERIOR VIEW

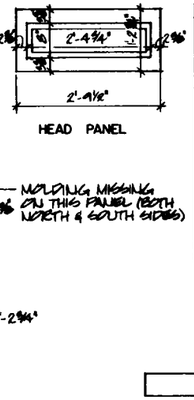
INTERIOR VIEW

DOOR 201 ELEVATION

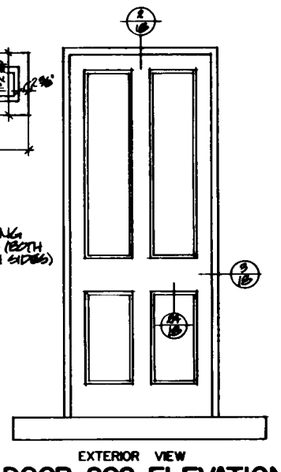
SCALE: 3/4" = 1'-0"



JAMB PANEL



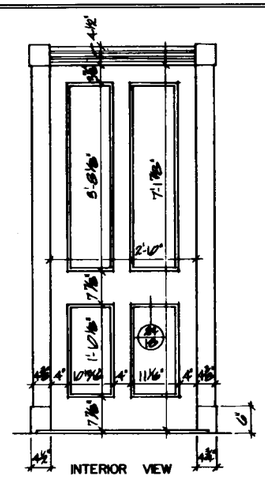
HEAD PANEL



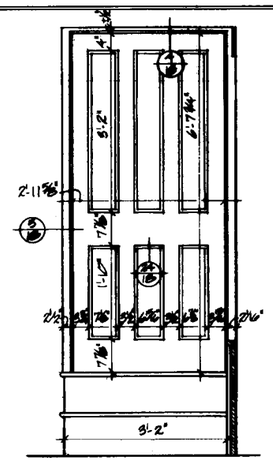
EXTERIOR VIEW

DOOR 202 ELEVATION

SCALE: 3/4" = 1'-0"



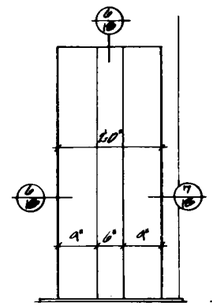
INTERIOR VIEW



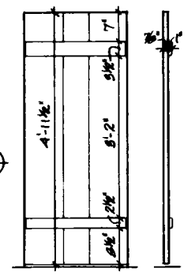
VIEW FROM RM. 201

DOOR 203 ELEVATION

SCALE: 3/4" = 1'-0"



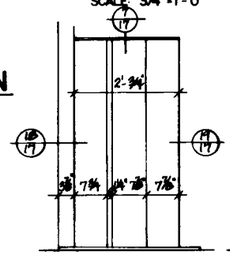
VIEW FROM RM. 201



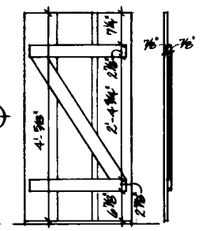
VIEW FROM CLOSET

DOOR 204 ELEVATION

SCALE: 3/4" = 1'-0"



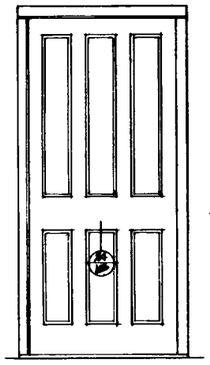
VIEW FROM RM. 205



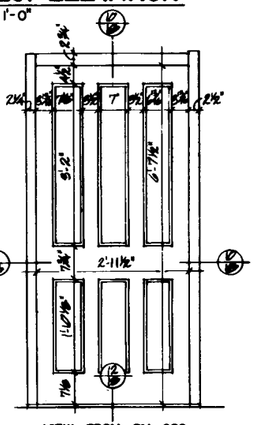
VIEW FROM CLOSET

DOOR 211 ELEVATION

SCALE: 3/4" = 1'-0"



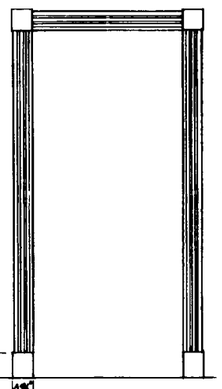
VIEW FROM RM. 201



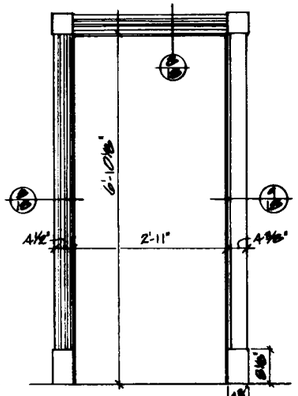
VIEW FROM RM. 202

DOOR 205 ELEVATION

SCALE: 3/4" = 1'-0"



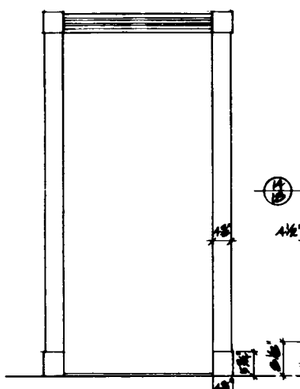
VIEW FROM RM. 202



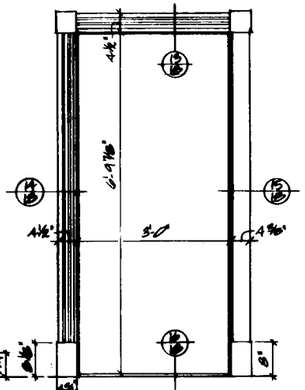
VIEW FROM RM. 203

DOOR 206 ELEVATION

SCALE: 3/4" = 1'-0"



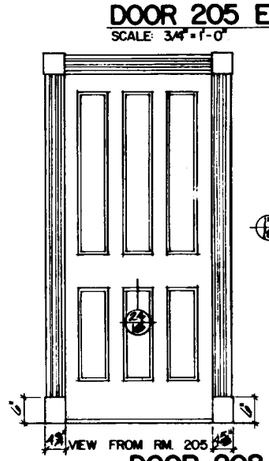
VIEW FROM RM. 201



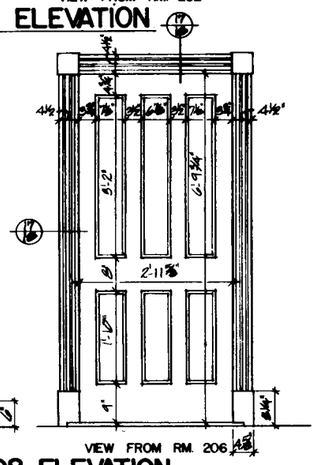
VIEW FROM RM. 203

DOOR 207 ELEVATION

SCALE: 3/4" = 1'-0"



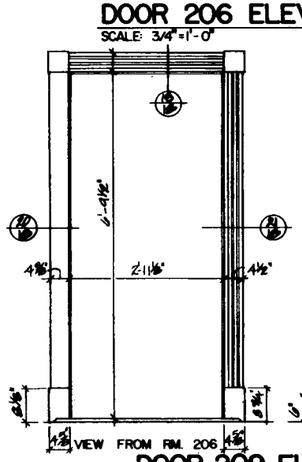
VIEW FROM RM. 205



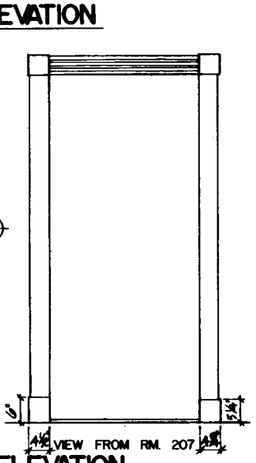
VIEW FROM RM. 206

DOOR 208 ELEVATION

SCALE: 3/4" = 1'-0"



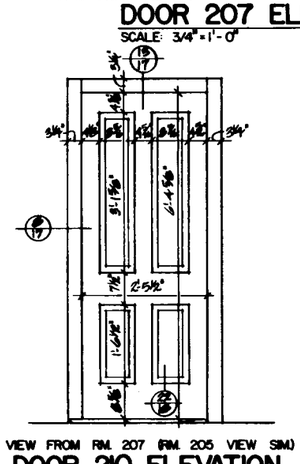
VIEW FROM RM. 206



VIEW FROM RM. 207

DOOR 209 ELEVATION

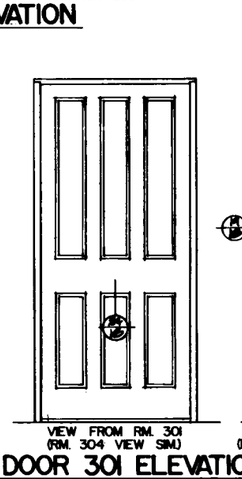
SCALE: 3/4" = 1'-0"



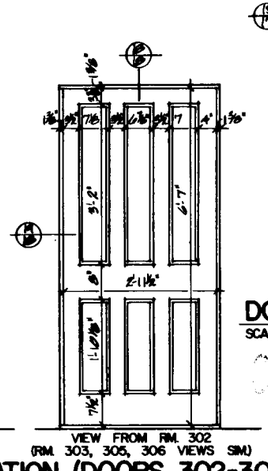
VIEW FROM RM. 207 (RM. 205 VIEW SIM.)

DOOR 210 ELEVATION

SCALE: 3/4" = 1'-0"



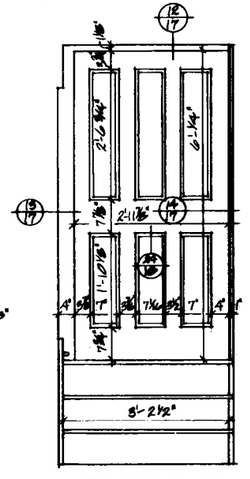
VIEW FROM RM. 301 (RM. 304 VIEW SIM.)



VIEW FROM RM. 302 (RM. 303, 305, 306 VIEWS SIM.)

DOOR 301 ELEVATION (DOORS 302-304 SIM.)

SCALE: 3/4" = 1'-0"



VIEW FROM RM. 204

DOOR 212 ELEVATION

SCALE: 3/4" = 1'-0"

BUILDING 38
EXISTING CONDITIONS

DOOR ELEVATIONS

SCALE: 3/4" = 1'-0"

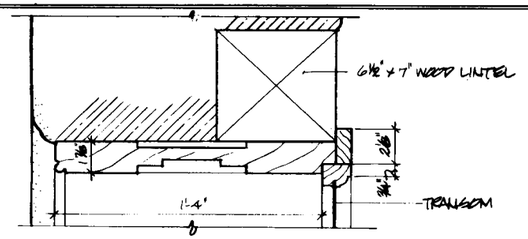
MICROFILM

PREPARED
DESIGNED S.L.S.
DRAWN DONALD
CHECKED
DATE 11/81

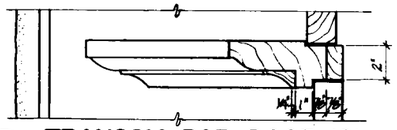
DRAWING NO. 385 25010

PCIP PKG.

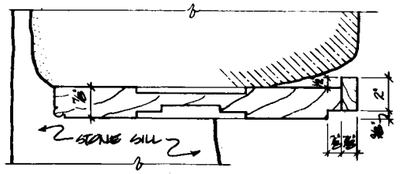
SHEET 16 OF 23



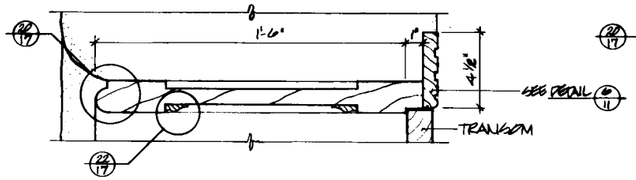
1/17 **HEAD-DOOR 101**
SCALE: 3" = 1'-0"



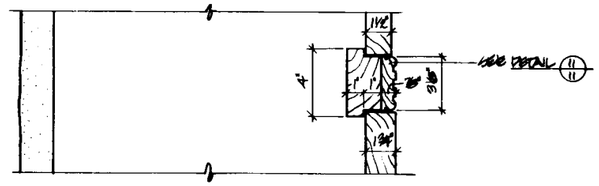
2/17 **TRANSOM BAR-DOOR 101**
SCALE: 3" = 1'-0"



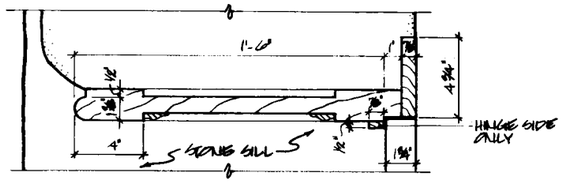
3/17 **JAMB-DOOR 101**
SCALE: 3" = 1'-0"



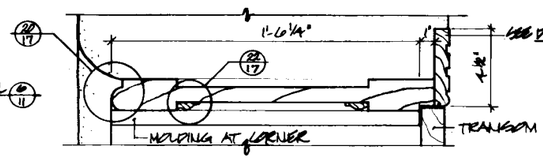
5/17 **HEAD-DOOR 102**
SCALE: 3" = 1'-0"



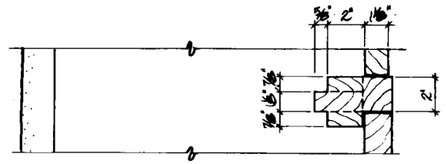
6/17 **TRANSOM BAR-DOOR 102**
SCALE: 3" = 1'-0"



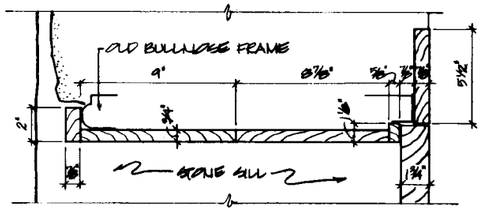
7/17 **JAMB-DOOR 102**
SCALE: 3" = 1'-0"



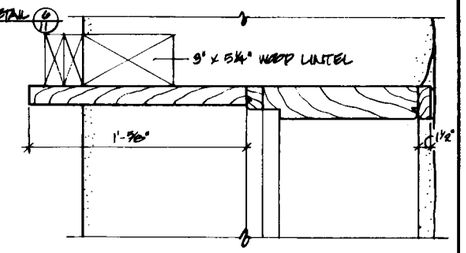
9/17 **HEAD-DOOR 103**
SCALE: 3" = 1'-0"



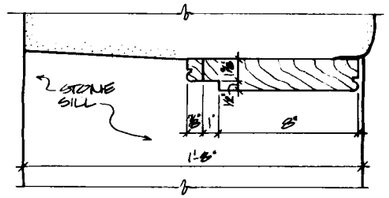
10/17 **TRANSOM BAR-DOOR 103**
SCALE: 3" = 1'-0"



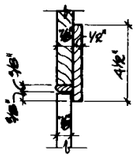
11/17 **JAMB-DOOR 103**
SCALE: 3" = 1'-0"



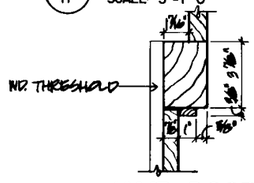
15/17 **HEAD-DOOR 107**
SCALE: 3" = 1'-0"



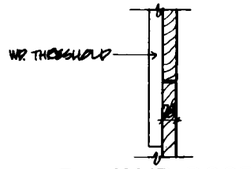
16/17 **JAMB-DOOR 107**
SCALE: 3" = 1'-0"



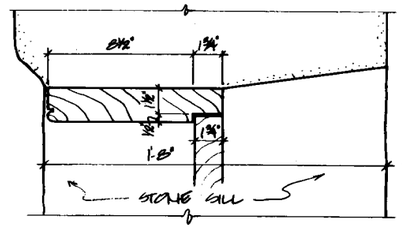
17/17 **HEAD-DOOR 211**
SCALE: 3" = 1'-0"



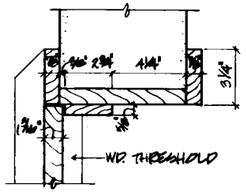
18/17 **JAMB-DOOR 211**
SCALE: 3" = 1'-0"



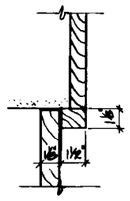
19/17 **JAMB-DOOR 211**
SCALE: 3" = 1'-0"



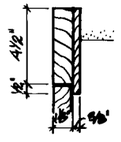
4/17 **JAMB-DOOR 105 (HEAD SIM.)**
SCALE: 3" = 1'-0"



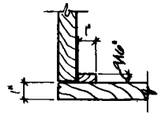
8/17 **JAMB-DOOR 210 (HEAD SIM.)**
SCALE: 3" = 1'-0"



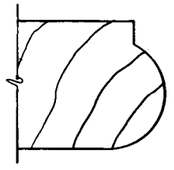
12/17 **HEAD-DOOR 212**
SCALE: 3" = 1'-0"



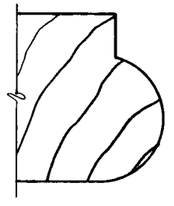
13/17 **JAMB-DOOR 212**
SCALE: 3" = 1'-0"



14/17 **JAMB-DOOR 212**
SCALE: 3" = 1'-0"



20/17 **BULLNOSE DETAIL**
F.S.



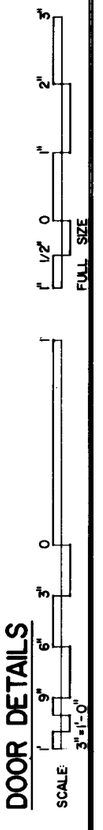
21/17 **BULLNOSE DETAIL**
F.S.



22/17 **FRAME DETAIL**
F.S.

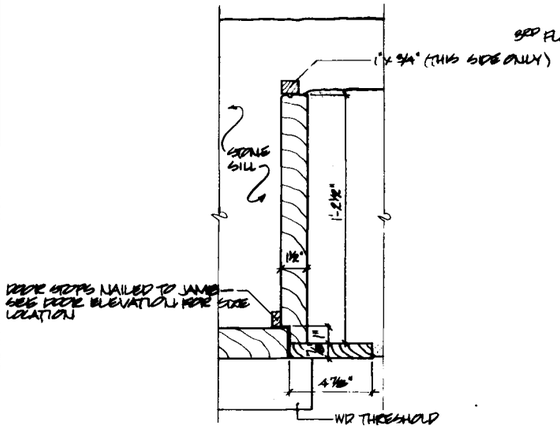
BUILDING 38
EXISTING CONDITIONS

DOOR DETAILS

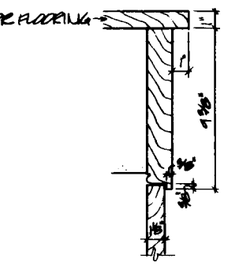


ON MICROFILM

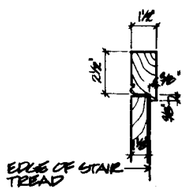
PREPARED	DRAWING NO.
DESIGNED S.L.S.	385 2500
DRAWN DONALD	PCIP PKG.
CHECKED 11/81	SHEET 17
DATE	OF 23



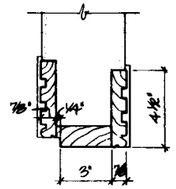
1/18 **JAMB-DOOR 201 (HEAD SIM.)**
SCALE: 3" = 1'-0"



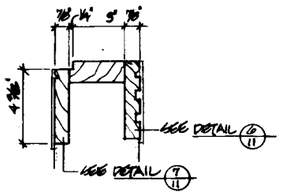
4/18 **HEAD-DOOR 203**
SCALE: 3" = 1'-0"



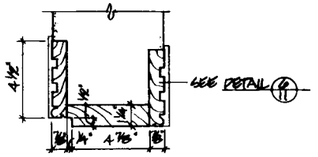
5/18 **JAMB-DOOR 203**
SCALE: 3" = 1'-0"



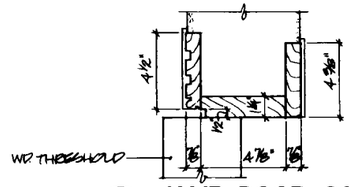
8/18 **HEAD-DOOR 206 (JAMB SIM.)**
SCALE: 3" = 1'-0"



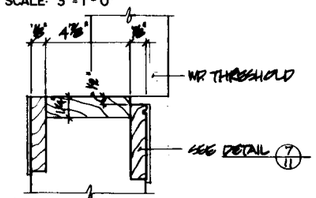
9/18 **JAMB-DOOR 206**
SCALE: 3" = 1'-0"



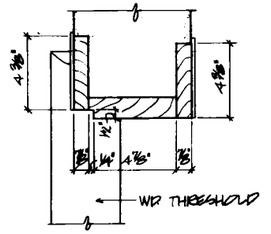
13/18 **HEAD-DOORS 207 & 209**
SCALE: 3" = 1'-0"



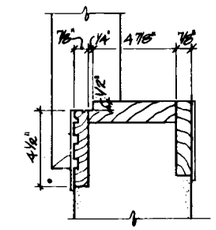
14/18 **JAMB-DOOR 207**
SCALE: 3" = 1'-0"



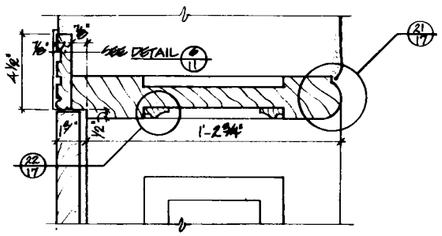
15/18 **JAMB-DOOR 207**
SCALE: 3" = 1'-0"



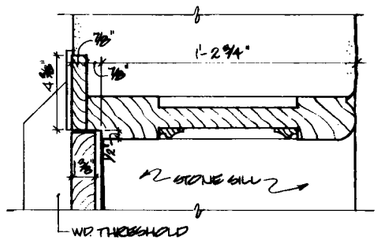
20/18 **JAMB-DOOR 209**
SCALE: 3" = 1'-0"



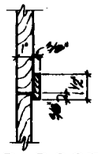
21/18 **JAMB-DOOR 209**
SCALE: 3" = 1'-0"



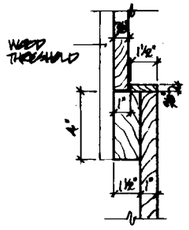
2/18 **HEAD-DOOR 202**
SCALE: 3" = 1'-0"



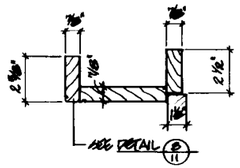
3/18 **JAMB-DOOR 202**
SCALE: 3" = 1'-0"



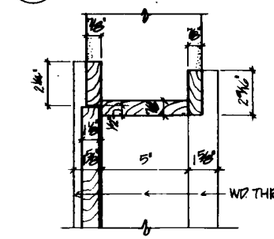
6/18 **HEAD-DOOR 204 (JAMB SIM.)**
SCALE: 3" = 1'-0"



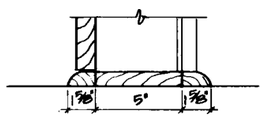
7/18 **JAMB-DOOR 204**
SCALE: 3" = 1'-0"



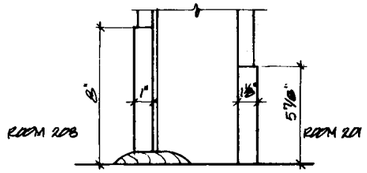
10/18 **HEAD-DOOR 205 (JAMB SIM.)**
SCALE: 3" = 1'-0"



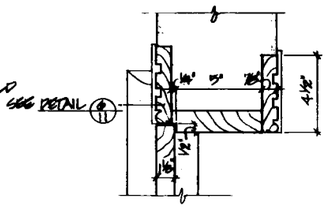
11/18 **JAMB-DOOR 205**
SCALE: 3" = 1'-0"



12/18 **THRESHOLD-DOOR 205**
SCALE: 3" = 1'-0"



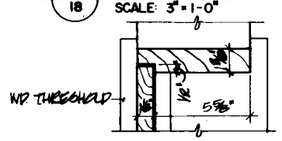
16/18 **THRESHOLD-DOOR 207**
SCALE: 3" = 1'-0"



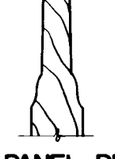
17/18 **JAMB-DOOR 208 (HEAD SIM.)**
SCALE: 3" = 1'-0"



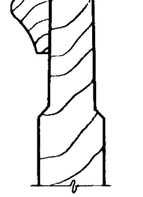
18/18 **HEAD-DOOR 301 (DOORS 302-304 SIM.)**
SCALE: 3" = 1'-0"



19/18 **JAMB-DOOR 301 (DOORS 302-304 SIM.)**
SCALE: 3" = 1'-0"

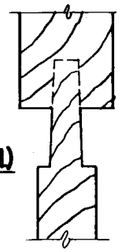


22/18 **PANEL PROFILE-DOOR 210**
F.S.



PANEL PROFILE-DOOR 105

23/18 F.S.

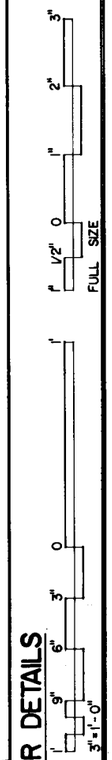


24/18 **PANEL PROFILE-DOOR 202 (DOORS 201, 203, 205, 208, 212, & 301-304 SIM.)**
F.S.

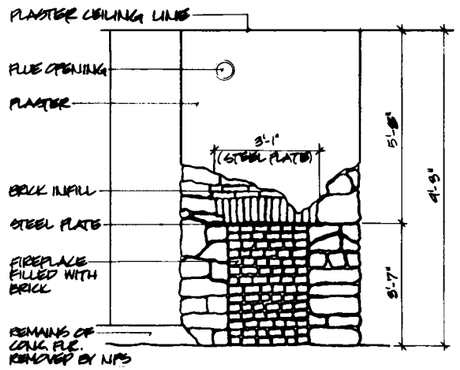
BM MICROFILM

BUILDING 38
EXISTING CONDITIONS

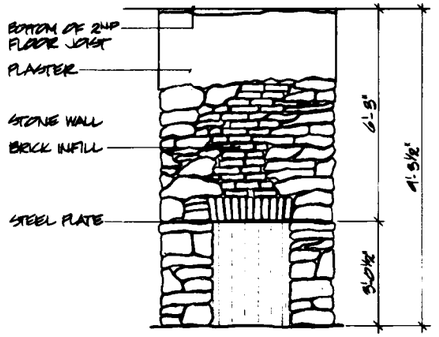
DOOR DETAILS



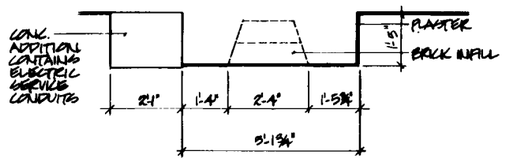
PREPARED	DRAWING NO.
DESIGNED S.L.S.	385 25010
DRAWN DONALD	PCIP PKG. —
CHECKED 11/81	SHEET 18
DATE	OF 23



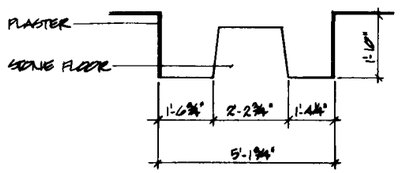
1/19 **1ST FLR. SOUTH FIREPLACE ELEVATION**
SCALE: 1/2" = 1'-0"



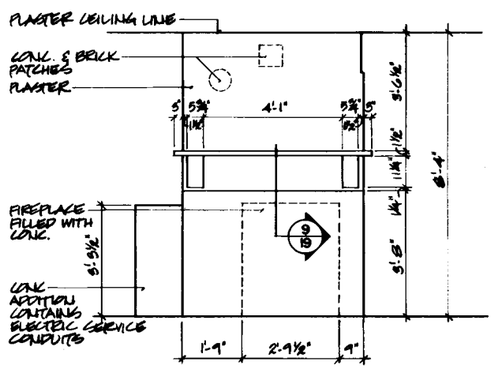
5/19 **1ST FLR. NORTH FIREPLACE ELEVATION**
SCALE: 1/2" = 1'-0"



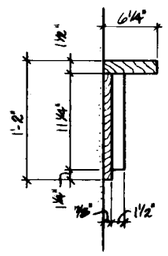
2/19 **1ST FLR. SOUTH FIREPLACE PLAN**
SCALE: 1/2" = 1'-0"



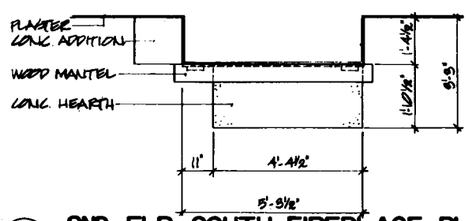
6/19 **1ST FLR. NORTH FIREPLACE PLAN**
SCALE: 1/2" = 1'-0"



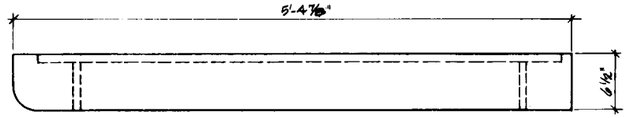
3/19 **2ND FLR. SOUTH FIREPLACE ELEVATION**
SCALE: 1/2" = 1'-0"



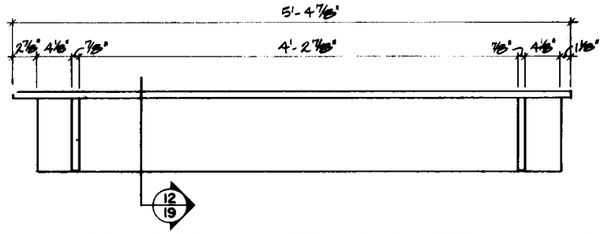
7/19 **SOUTH MANTEL SECTION**
SCALE: 1 1/2" = 1'-0"



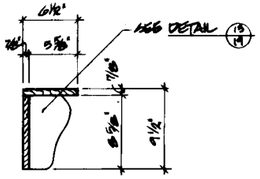
4/19 **2ND FLR. SOUTH FIREPLACE PLAN**
SCALE: 1/2" = 1'-0"



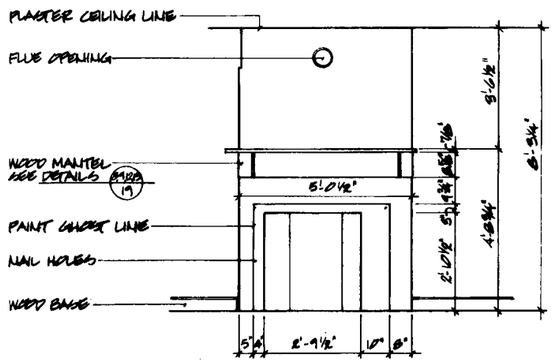
8/19 **NORTH MANTEL PLAN**
SCALE: 1 1/2" = 1'-0"



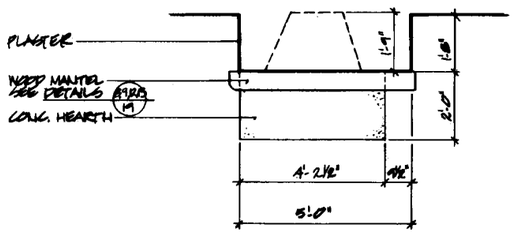
9/19 **NORTH MANTEL ELEVATION**
SCALE: 1 1/2" = 1'-0"



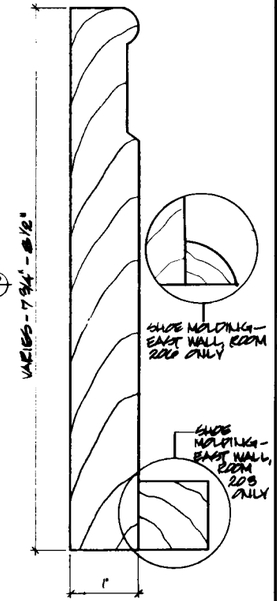
12/19 **NORTH MANTEL SECTION**
SCALE: 1 1/2" = 1'-0



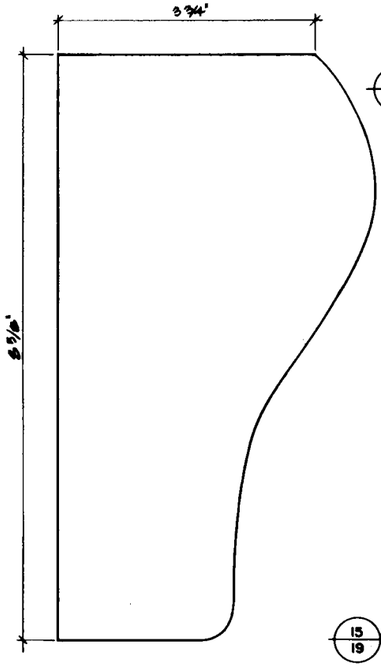
10/19 **2ND FLR. NORTH FIREPLACE ELEVATION**
SCALE: 1/2" = 1'-0"



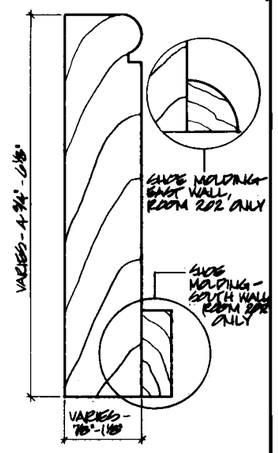
11/19 **2ND FLR. NORTH FIREPLACE PLAN**
SCALE: 1/2" = 1'-0"



14/19 **BASE-ROOMS 203 & 206**
F.S.



13/19 **NORTH MANTEL BRACKET DETAIL**
F.S.



15/19 **BASE-ROOMS 201, 202, 205, 207, 301-306**
F.S.

BUILDING 38
EXISTING CONDITIONS



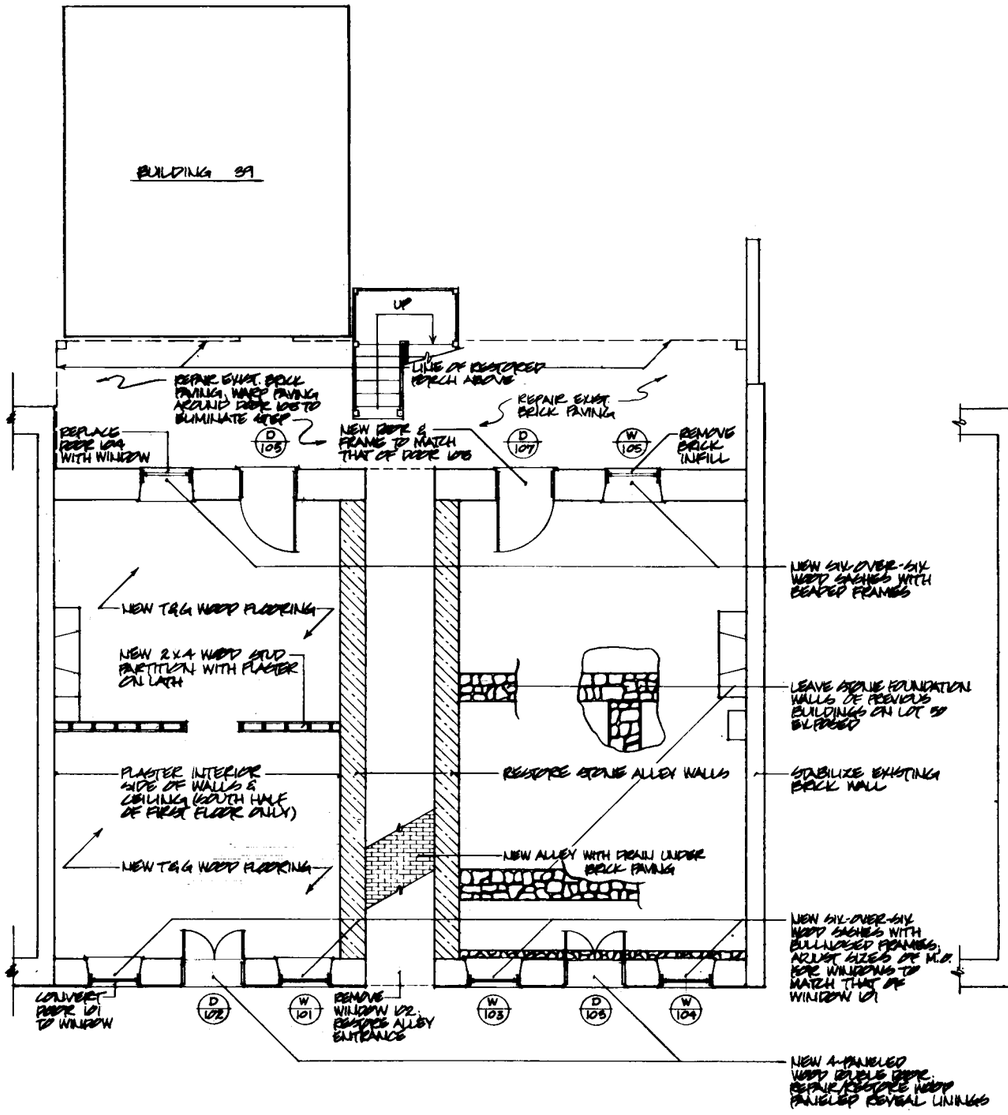
FIREPLACE, MANTEL & BASE DETAILS

PREPARED
DESIGNED S.L.S.
DRAWN DONALD
CHECKED IKB
DATE

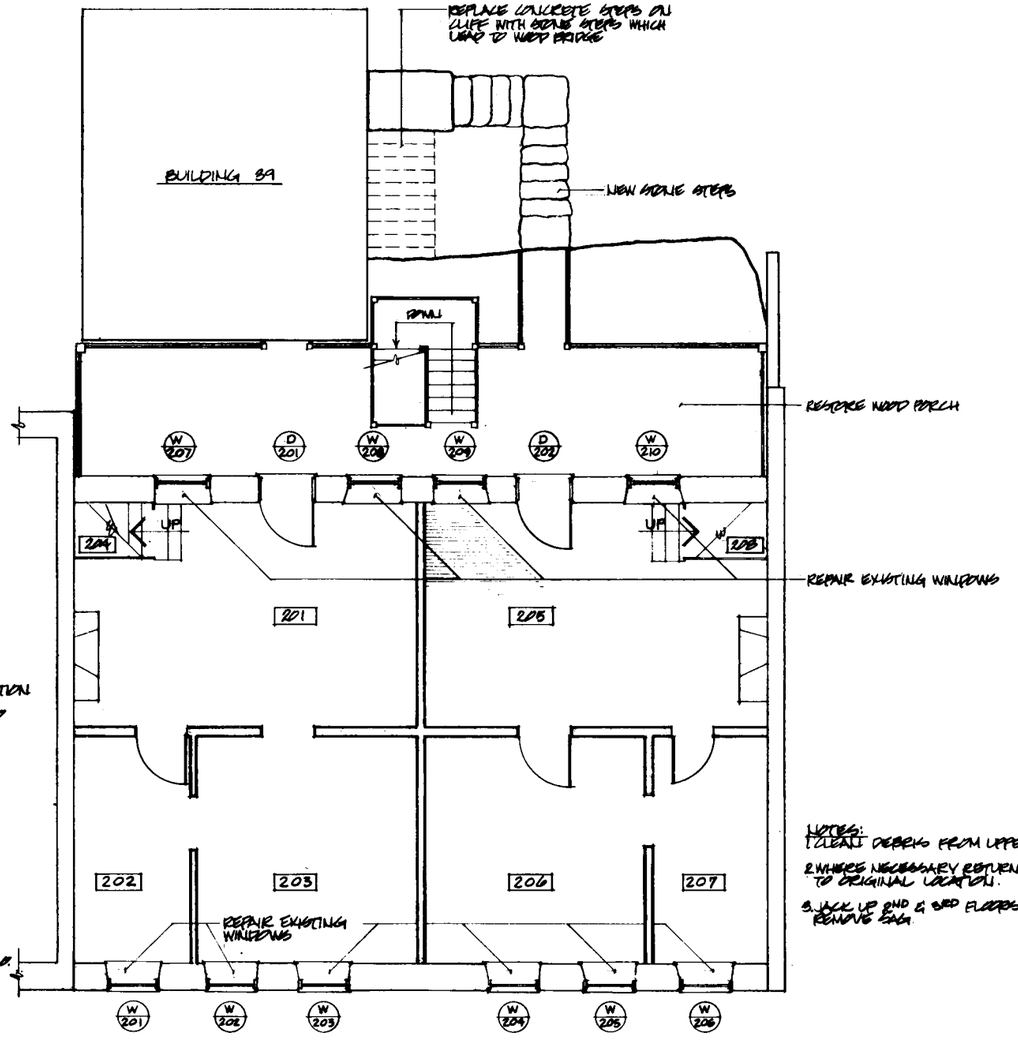
DRAWING NO. 385 25010
PCIP PKG.
SHEET 19
OF 23

ON MICROFILM

BLDG 40



FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



NOTES:
1. CLEAN DEBRIS FROM UPPER FLOORS
2. WHERE NECESSARY RETURN TRIM TO ORIGINAL LOCATION.
3. JACK UP END & SIDE FLOORS TO REMOVE SAG.

SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

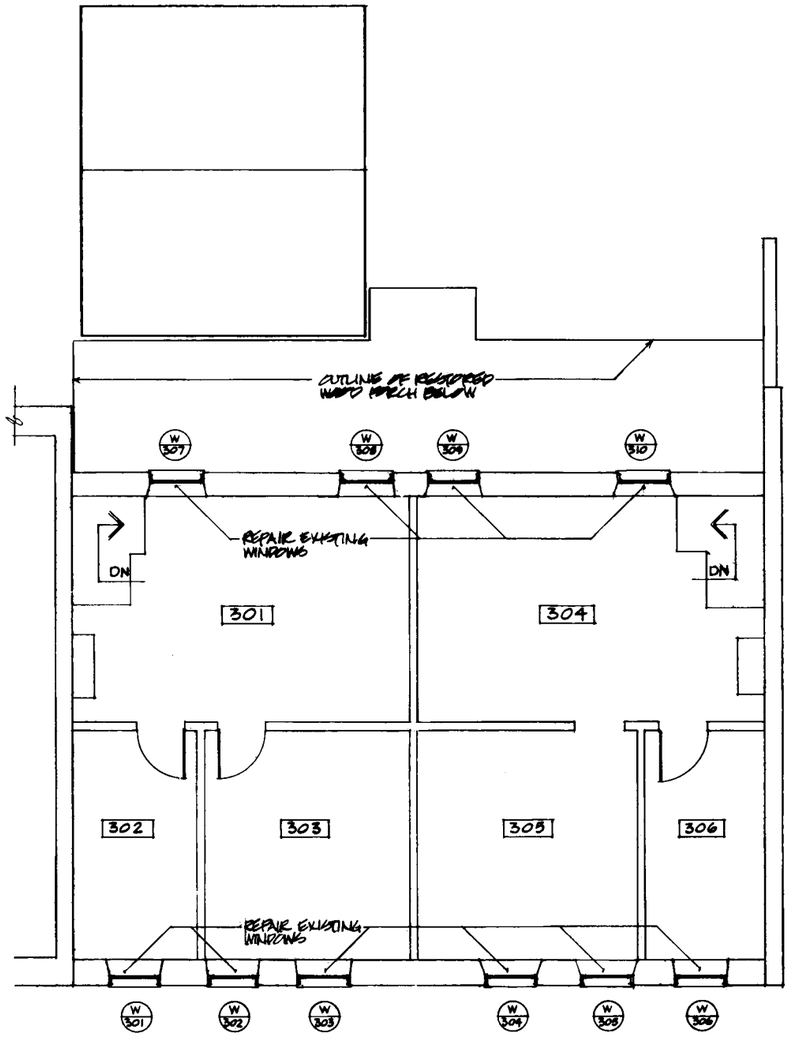
BUILDING 38
PROPOSED RESTORATION

FIRST & SECOND FLOOR PLANS
SCALE: 1/4" = 1'-0"

PREPARED
DESIGNED RCG/SLS
DRAWN DONALD
CHECKED 11/81
DATE

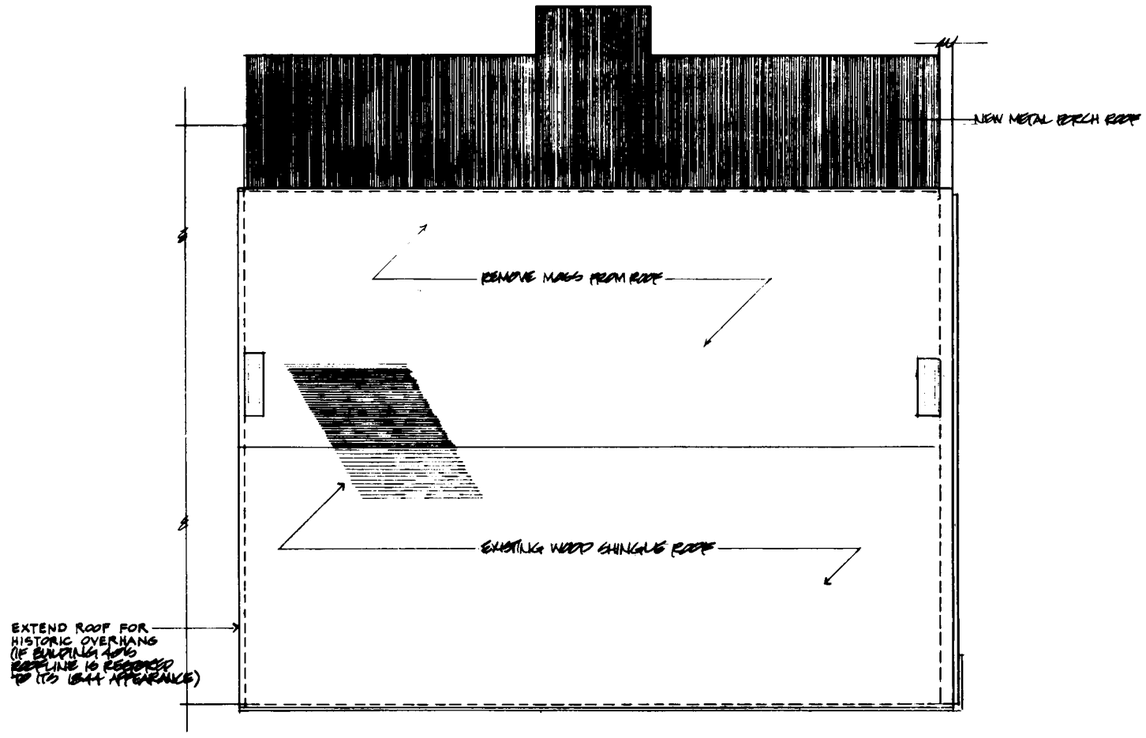
DRAWING NO. 385 25010
PRES NO.
SHEET 20 OF 23

ON MICROFILM



NOTES:
1. CLEAN DEBRIS FROM UPPER FLOORS
2. WHERE NECESSARY, RETURN TRIM TO ORIGINAL LOCATION
3. JACK UP 2ND & 3RD FLOORS TO REMOVE SAG

THIRD FLOOR PLAN
SCALE: 1/4" = 1'-0"



ROOF PLAN
SCALE: 1/4" = 1'-0"

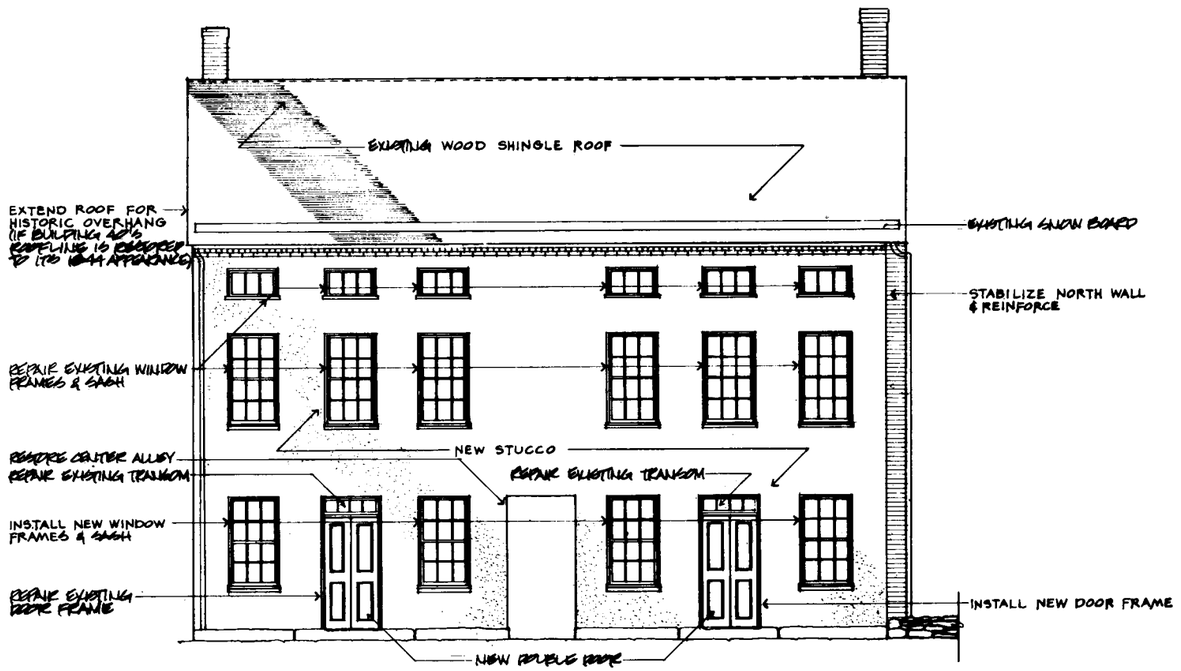
ON MICROFILM

BUILDING 38
PROPOSED RESTORATION

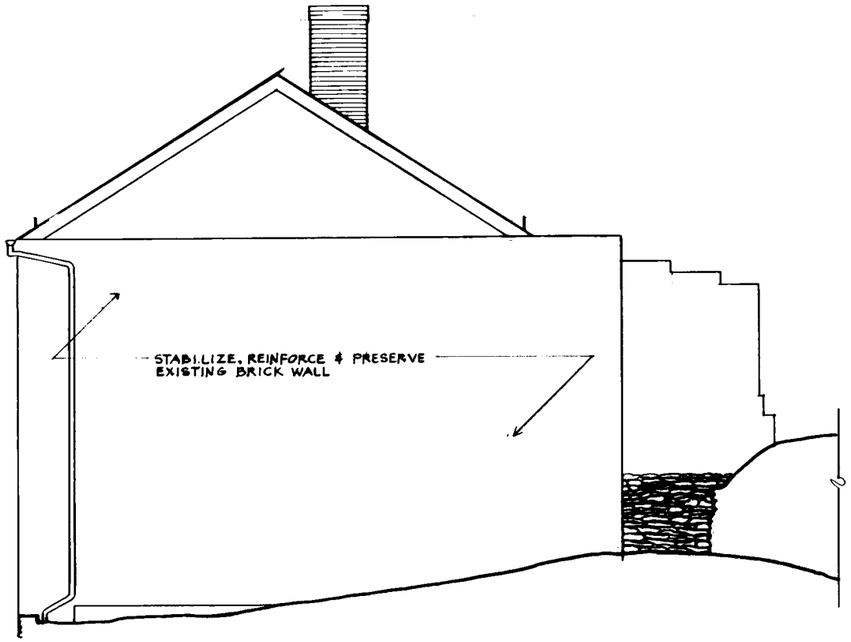
THIRD FLOOR & ROOF PLANS

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

PREPARED	DRAWING NO.
DESIGNED RCG/SLS DRAWN DONALD CHECKED 11/81 DATE	385 25010
PFR NO.	SHEET 21 OF 23



EAST ELEVATION
SCALE: 1/4" = 1'-0"



NORTH ELEVATION
SCALE: 1/4" = 1'-0"

BUILDING 38
PROPOSED RESTORATION

EAST & NORTH ELEVATIONS

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

PREPARED
DESIGNED
R.C.G./S.L.S.
DRAWN
DONALD
CHECKED
11/81
DATE

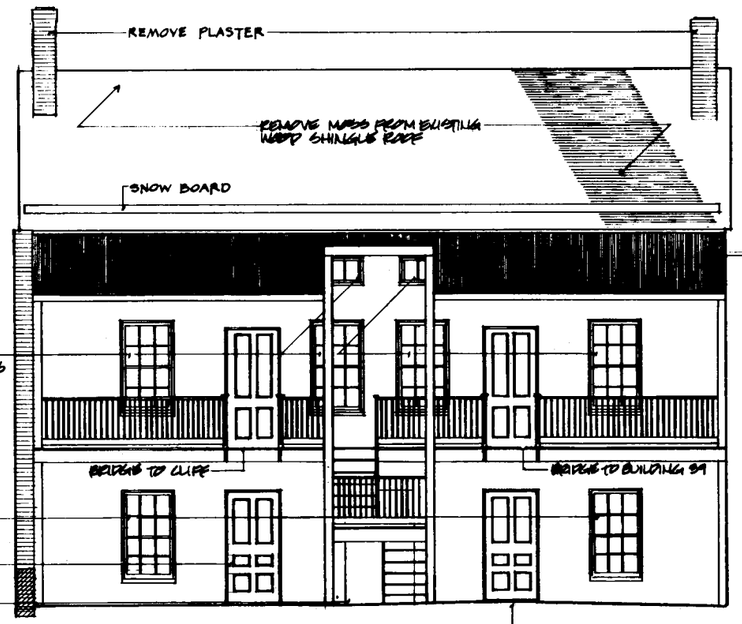
DRAWING NO.
385
25010

PROJ. NO.

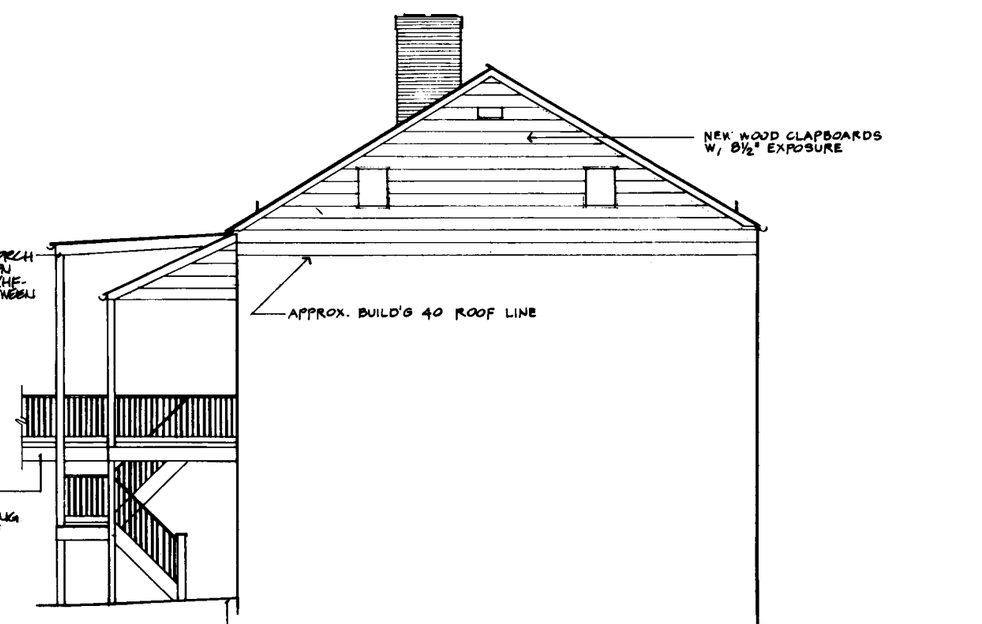
SHEET
22
OF 23

ON MICROF

BUILDING 38
PROPOSED RESTORATION



WEST ELEVATION
SCALE: 1/4" = 1'-0"



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

NOTE: BUILDING 38/6 SOUTH ELEVATION CAN BE RESTORED ONLY IF BUILDING 40'S EAST 16 BLOCKED TO ITS ORIGINAL APPEARANCE.

WEST & SOUTH ELEVATIONS

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

PREPARED	DRAWING NO. 385 2500
DESIGNED R.C.G./S.L.S. DRAWN DONALD CHECKED 11/81 DATE	PKG NO. SHEET 23 OF 28

ON MICROFILM

As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The Department has also major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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