

Archeological Investigation  
of the Carriage House  
James A. Garfield National Historic Site,  
Mentor, Ohio

By

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## Abstract

In 1980, Congress authorized the establishment of James A. Garfield National Historic Site, with the park jointly administered through a cooperative agreement between the National Park Service and the Western Reserve Historical Society. These institutions recently determined that the Carriage House would be adaptively reutilized as a visitor center. This action will require considerable ground disturbance inside and around the margins of the building. To minimize the construction impacts upon known archeological resources in and around the building, the Midwest Archeological Center conducted a salvage archeology excavation at the site from May 29 through July 1, 1991. This work was primarily directed toward the clarification of the structure's architectural and use histories. The investigation resulted in the discovery of previously unknown aspects of the structure, including the original manifestations of the building and changes in internal configurations of rooms, floors, and spaces from circa 1885 through the present.

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## Introduction

James A. Garfield National Historic Site (JAGA) is situated about 26 miles east of Cleveland in the town of Mentor, Ohio (Figure 1). It consists of 7.8 acres of the Garfield farm and incorporates a number of structures. These include the former president's home (Lawnfield), the Carriage House/Gas Holder, the Campaign Office, Wellhouse, barn, granaries, and curator's house (Figure 2).

### *Historical Background*

The land upon which JAGA is situated was originally surveyed in 1796, and the lottery distributing land in the township was held 6 years later. Although the early history of the farm remains sketchy, it is known that the area now included within the current park boundaries was officially acquired from the Connecticut Land Co. by Ralph Bacon in 1802. In 1811, this tract of land was transferred to a farmer by the name of Warren Corning. In 1830, Corning divided this land among his nine children, with the future site of Garfield's home transferred to his daughter Harriet. Five years later, in 1835, Harriet married her teacher, James Dickey. A dwelling house may have existed on the farm as early as 1832 and was probably built sometime ca. 1831–1832 (Johnson 1984:22–23). The house and property stayed in the Dickey family until 1876. During this and the following year, the now-widowed Harriet sold the Dickey farm to James A. Garfield in two parcels (Mack 1991:3; Newman 1989:5; The Westerly Group et al. 1991:9). Garfield ran the farm until his death in 1881. Afterwards, Garfield's widow Lucretia continued to operate the property as a successful dairy farm.

In 1885, Garfield's family and friends brought together all of the president's papers and books, depositing them in a special library added to the main house. This was the first presidential library, an idea which has been pursued for each president since that date (Newman 1989; The Westerly Group et al. 1991). The library addition to Lawnfield marked the beginning of the Garfield farm's transformation from a purely agricultural enterprise to the status of "country estate." According to Thomas Knight, country estates developed as a concept in the late nineteenth century. Although the term was broadly defined, covering a wide variety of farms with regard to size and agricultural focus, all had one thing in common. This was the "feature," a rustic bridge, miniature lake, pergola, or large piazza. However, the "feature" could also represent an undertaking such as breeding and raising cattle or horses. Whatever "feature" was selected, its purpose was to illustrate the power and wealth of the landowner, a visual monument which served to separate the individual from neighbors of lesser means (Thomas Knight 1903, as cited in The Westerly Group et al. 1991:34–35).

The transformation of the farm was due largely to the efforts of Garfield's widow Lucretia, for it was she who initiated the projects which qualified the farm as a "country estate." The library addition to the main house in 1885 represents the first of these projects. Shortly afterwards a new well was dug northeast of the house in a grove of apple trees, and it was then surmounted by an impressive stone wellhouse. This was built either in 1885 (Newman 1989:7) or sometime after 1894 (The Westerly Group et al. 1991:35), depending upon the source consulted. A gas well was also drilled and a stone gas holder constructed. Mack (1991:3) cites a newspaper account to clearly place the drilling of the gas well before September of 1885, with construction of the Gas Holder at about that time also. Architectural details led Mack (1991:7) to place it circa 1884, so that it was ready to serve the Garfield family as soon as gas had been located in 1885. The JAGA Historic Resource Study suggests that "the stone and brick gas works was built as a free standing structure around the same time [1885] because similar stonework appears on the well house and main house" (Johnson 1984:132). A chronology presented by the Westerly Group, Inc., in the Cultural Landscape Report places the construction of the Gas Holder at circa 1885 (1991:Appendix, Chronology p.2).

The Carriage House, the subject of this report, is another piece of architecture which would, in itself, allow the farm to be classified as a “country estate.” This frame, L-shaped structure (Figure 3) was attached to the west end of the Gas Holder in 1893 and represents one of the last additions to the estate (Mack 1991:5, 7; The Westerly Group et al. 1991:38). Originally, the northern portion of the Carriage House’s north wing was not enclosed. Sometime after 1900, stud-walled rooms were added to the east side of the north wing. In conjunction with this change, a coal room and boiler were installed. This was sandwiched between the new additions and the north side of the south leg (Mack 1991:8–9).

With Lucretia’s death in 1918, the property remained in the Garfield family under joint management of Lucretia’s children. All but one of the Garfield children lived at some distance from the property. This was an unfortunate situation, as the lack of direct daily supervision allowed the property to gradually decline, both in profitability and in the upkeep of the structures. Of particular concern to the family was the deteriorating condition of Lawnfield itself. The house continued to worsen until the early 1930s, when the various Garfield heirs were finally required to contribute substantial sums of money to maintain the house and property. To relieve themselves of this financial burden while, at the same time, insuring that the house would be preserved, the Garfield children donated Lawnfield and 1 acre of land to the Western Reserve Historical Society (WRHS) in 1935. The additional 6.7 acres which compose the property today were acquired by the Society through later donations and purchases (The Westerly Group et al. 1991:49–50).

Until 1988, the site was co-owned by the WRHS and the Lake County Historical Society, with management of the site provided by the latter. In 1980, Congress established the James A. Garfield National Historic Site (JAGA). The National Park Service (NPS) then purchased the land and buildings from the Lake County and Western Reserve Historical Societies. The property continues to be managed by the WRHS under a cooperative agreement with the National Park Service (Newman 1989:1, 11).

Despite its varied history, the importance of the site naturally centers upon its association with President James A. Garfield. As the remnants of Garfield’s farm and his last home, the site is historically significant from a number of points of view. It is the farm where Garfield earnestly pursued his interests in scientific agriculture. Additionally, this is the place from which Garfield ran his successful “front porch” campaign for the presidency in 1880 and the setting of his death in 1881 from an assassin’s bullet. Finally, it is the site of the first presidential library, a precedent-setting event which has continued to be followed for each president to the present.

With National Park Service involvement at JAGA, funding has become available for the renovation of Lawnfield and development of visitor information exhibits. Actions proposed for the near future include closing Lawnfield to the public during its restoration, moving the parking lot and driveway to a less conspicuous place on the property, upgrading the utilities and services to the park, and remodeling/renovating the Carriage House as a visitor center.

### *Previous Archeological Investigations*

Prior to 1990, no archeological work had ever been done at JAGA. However, the site has a long history of occupation, and it is clear that development and restoration actions proposed by the NPS have a great potential for adversely affecting known but unlocated historic components of the site. There is also the possibility that unidentified prehistoric materials will be affected. These considerations are important for, in addition to public education and interpretation of properties placed in its charge, one of the prime NPS mandates is to conserve and protect natural and cultural resources within its holdings. In order to effectively carry out this directive, NPS park managers must have information enabling them to identify the resources in their purview and assess the significance of each.

To this end, in 1990, the NPS and the Cleveland Museum of Natural History (CMNH) entered into a cooperative agreement for the CMNH to conduct an archeological survey at JAGA. The goal of this

archeological investigation was to determine the presence or absence of archeological deposits in the park which could be affected by planned construction and renovation. Co-Principal Investigators for the project were Midwest Archeological Center (MWAC) Archeologist Vergil E. Noble and CMNH Archeologist Alfred M. Lee. The fieldwork, directed by CMNH Archeologist Stephanie Belovich, was initiated on July 2 and completed on July 25, 1990 (Noble 1990; Lee 1994). Five general areas were selected for testing, based upon development priorities established by Cuyahoga Valley National Recreation Area (CUVA), JAGA, and the NPS Denver Service Center (DSC). These included locations around the Main House, the Campaign Office, the existing parking area, the proposed parking area, and the Carriage House/Gas Holder.

The excavation of three test pits (Test Units 1–3) at the Main House resulted in the recovery of small amounts of architectural construction materials. It also revealed information about the depth of the recent fill, located a builder’s trench around the house margin, determined the depth and direction of two downspout drains, and identified the depth of the house’s stone facing.

Test Units 6, 15, and 22 were placed northwest of the Campaign Office. These units allowed the team to locate a stone foundation about 21 ft behind and parallel to the north wall of the office. The foundation was traced west until a southwest corner was located. This feature was tentatively interpreted by the investigators as the remains of the 1876–1877 Ice House.

Several test units (7, 8, 9, and 17) were placed behind Lawnfield around the margins of the parking lot. The unit east of the lot revealed the presence of several historic features. A capped well and pipes discovered at the southeast corner of the lot may have delivered water to the Garfield barns prior to their removal to the back of the lot. The pipes also passed through (and thus postdate) a deep brick-, rubble-, and rock-filled circular pit tentatively interpreted as a pre-Garfield-era well.

A systematic shovel test survey of an area northeast of the Carriage House/Gas Holder proposed for a new parking lot resulted in the location of several historic refuse concentrations and a vague prehistoric component. The latter was represented by a number of chert flakes and a projectile point of a style generally associated with the Late Woodland period. The archeological crew also removed some of the collapsed brick wall of a historic structure in this area. At present, this structure’s function and precise age remain uncertain.

Eight test units (4, 5, 10, 16, 16A, 16B, 20, and 21) were directly associated with the Carriage House/Gas Holder. Four were placed on the north, west, and south margins of the structure, and four were situated inside the north arm or stables of the Carriage House. Test units on the structure’s south exterior revealed that the foundation of the Gas Holder was much larger and deeper (over 6 ft deep in some locations) than that under most of the Carriage House. However, this deep foundation did extend west under the Carriage House for an unknown distance. Test pits placed inside the west end of the stables disclosed brick and stone partition foundations, a circular brick feature of unknown function, and stratified deposits containing tack-related materials.

In sum, the 1990 fieldwork accomplished its goal by determining that multiple and varied archeological resources do exist within JAGA’s boundaries. Major historic archeological components were located in the vicinity of Lawnfield, the Campaign House, the current parking lot, and the Carriage House. A minor prehistoric component was identified at the proposed location for the new parking lot, suggesting that further materials of this cultural-temporal association may be expected in other areas of the park as well.



## The Archeological Investigation

Excavations in and around the Carriage House by CMNH in 1990 indicated that potentially significant archeological deposits in and around the structure would certainly be damaged or destroyed during its restoration and transformation to the visitor center. In 1991, as a means of mitigating these potential impacts, an MWAC field crew undertook salvage excavations in and around the structure. The use of the term “salvage” is recognition of the fact that data collection must be maximized as, for all practical purposes, the archeological components of the Carriage House site will be destroyed. The fieldwork was conducted by MWAC Supervisory Archeologist William J. Hunt, Jr., with an archeological crew composed of Karen Archey, Cheryl Busuttill, Lisa King, Keith Richter, and Ryan Wachter. During the course of this effort, Hunt coordinated with CUVA Assistant Superintendent Robert Martin, Midwest Regional Office (MWRO) Regional Historical Architect Mark Chavez, DSC Historical Architect Paul Newman, and WRHS Curator Susan Miller.

### *Determining the Scope of Work*

The primary factor affecting fieldwork planning was the lack of specificity of the construction and restoration projects with regard to the work proposed and the scheduling of such actions. No maps or preliminary construction drawings were provided to MWAC, and verbalized construction goals remained vague before and throughout the fieldwork period. This situation created some difficulties in establishing archeological work priorities. Nevertheless, information supplied in the DSC’s budget and schedule outline and in a memorandum from Noble (1990) were used to identify a range of potential archeological activities to be implemented during Fiscal Year 1991. The DSC budget and schedule targeted the Carriage House and parking lots as foci for initial construction and demolition activities at JAGA, and Noble’s memorandum suggested that, at a minimum, an archeologist should be on hand to monitor the removal of the present parking lot and the ground preparation for the new parking lot and access road. As neither of the parking lots were expected to be addressed until the summer of 1992, the emphases for Fiscal Year 1991 archeological investigations were restricted to the Carriage House.

As a result of a phone conversation on April 3, 1991, between DSC Historical Architect Paul Newman and MWAC Archeologists Vergil Noble, Jeffrey Richner, and William Hunt, proposed modifications of the Carriage House were determined to include:

1. removal of brick and dirt floors inside the structure’s interior and installation of a concrete floor;
2. underpinning the exterior foundation and adding a perimeter drain; and
3. installation of new utility lines including water, electricity, and gas.

None of the locations for proposed utility lines had been specified by the onset of the field season, with the result that the archeological investigations were not able to explore those areas. Therefore, archeological efforts relating to their installation were set aside as subjects for future investigations, and the 1991 MWAC crew concentrated its attention upon the interior and perimeter of the Carriage House.

Aside from the lack of specificity in the construction and restoration planning, a second factor impacting the scope of the archeological excavations and affecting the methods employed was the large volume of space involved in the Carriage House renovation. The Carriage House structure (Figure 4), excluding the Gas Holder on the east side, incorporates approximately 4,030 ft<sup>2</sup> (375 m<sup>2</sup>). The Gas Holder adds about 500 ft<sup>2</sup> (47 m<sup>2</sup>) more space to this figure. The perimeter of both structures is about 290 linear feet (88 m). In similar projects, perimeter work by construction crews around building foundations usually requires a 3–6 ft

(1–2 m) wide excavation unit which is explored to the base of the foundation. Therefore, it was expected that a maximum area of 1,746 ft<sup>2</sup> (162 m<sup>2</sup>) could be affected during future construction actions.

Weather was not a factor in the excavations, as virtually all work was done inside the Carriage House. The crew's labors were affected to some degree by dust raised during excavations and removal of portions of the brick floor in the South Room. The building was well ventilated, however, and these deleterious effects proved to be short-lived. The only other problem with working inside the Carriage House was that, despite interior lighting, the rooms were too dark to be able to see the stratigraphic changes very well. This problem was overcome in part by temporarily placing one or more 300-watt lights at each location under investigation.

### *Goals*

As a result of discussions with Newman, two areas of investigation relating to the Carriage House were suggested which would be of some interest to the DSC. These were the identification of:

1. the original size and shape of the Gas Holder; and
2. the reason for the differing brick configurations seen in the Carriage House entryway floor.

Additional investigational topics suggested by a reading of Mack's (1991) report on the Carriage House include determining:

3. whether the original north wing was enclosed;
4. whether a wing once extended to the east from the northeast corner;
5. whether archeological resources existed under the brick floor of the entryway;
6. whether the construction sequence and the progression of additions suggested by Mack can be confirmed archeologically;
7. the location and flow direction of the original gutter/downspout/subterranean drainage system;
8. the presence, extent, and function of a crawl space under the east end of the Carriage (South) Room;
9. whether a wooden floor originally existed anywhere under the brick floor of the south portion;
10. the location and form of original building hardware according to the recovery location of related artifacts; and
11. the placement of lightning rod cable grounds.

Finally, potential investigational topics suggested by the 1990 CMNH archeological tests at the Carriage House included determining:

12. the extent of wooden flooring in the north wing and the sequence of flooring installation; and
13. the actual extent of the deep foundation associated with the Gas Holder.

### *Field Methods*

All archeological salvage projects are basically delimited by the horizontal extent of the construction impact zone, the depth of the deposits, and the amount of funding available. The scope of work for the 1991 MWAC investigation reflected the extremely large horizontal space enclosed by the Carriage House and a cultural fill that was determined by CMNH to be over two meters deep in some locations. Funding for the

project allowed for five weeks of fieldwork. These factors caused the Principal Investigator to restrict most of the field investigation to the oldest portions of the Carriage House, i.e., the brick-floored South Room or Carriage Storage area, and the North Room or Stables. Nevertheless, questions posed by DSC architect Paul Newman could only be addressed by placing several small exploratory pits around the perimeter of the building. In general, test unit locations were directed toward the recovery of information relating to the cultural and structural history of the Carriage House through identification of:

1. the depth and stratigraphy of cultural fill at various locations inside and outside the structure(s);
2. features relating to the architectural history of the building(s) and functional history of its internal spaces; and
3. artifacts important in understanding room/area functions.

### General Procedures

Excavation was undertaken using both arbitrary levels and stratigraphic units (SUs). Each method has its positive and negative aspects. Excavation via SUs is the approach of choice for the archeologist. SUs represent individual fill events which occurred over a specific amount of time within a specific area of a site. Investigation of a site using such units provides the archeologist with the best means to interpret the cultural activities represented by each stratum, spatial differences in the site, as well as functional and spatial changes through time. In short, it provides the archeologist with data which best reflect the cultural actions resulting in site formation. The only drawback to stratigraphic excavation, in this author's experience, is that the stratigraphic excavation method is usually very time consuming where the stratigraphy is unknown. While stratigraphic layers are usually easy to distinguish when viewed in profile, it is very difficult to identify the depositional boundaries and sequences when viewing stratigraphic layers from above, and much field time is often spent clarifying these important issues.

The common alternative to excavation by SUs is removal of site fill using arbitrary levels. The most common units are 10- or 20-cm-thick units. Such units are often used where the stratigraphy is unknown, obscure, or where site is unstratified. The advantage of this using arbitrary levels lies in the speed of excavation. Short of using no levels at all, excavation by arbitrary levels is the fastest means of investigating the archeological deposits of an area. For this reason, the use of arbitrary units provides the most efficient means of exploring an archeologically unknown area. Temporal variations in artifact types, artifact densities, and feature presence or absence are easily determined for each unit excavated using such units. However, it is often the case that arbitrary units cross-cut strata, each of which represents a specific deposition event. Further, it may be very difficult to correlate the data from an arbitrary level of one unit to the data from the same level at a different unit. These problems are compounded where the site is not totally flat or where it has multiple functional areas. Obviously, both situations are common for archeological sites. These disadvantages create, in effect, a hazy lens for viewing the site. They blur the observations of the excavator by providing data which, to various extents, obscure the potential information and allow for only generalized archeological interpretations.

As the 1991 MWAC work in the Carriage House/Gas Holder structure was essentially a salvage excavation, it was imperative that the MWAC team maximize its data recovery. At the same time, the team was faced with the practical considerations of time and funding limitations. To accommodate these somewhat conflicting issues, the field director chose to utilize both arbitrary levels and SUs. Where a number of contiguous excavation units existed, every other unit was removed using arbitrary 10-cm levels. Fill from every other excavation unit was removed in arbitrary 10-cm levels. Where SUs were clearly visible, they were removed separately and given a number following Harris (1978, 1979a, 1979b). This procedure exposed clear stratigraphic profiles on at least two sides of the intervening unexcavated units. With the stratigraphy thus clarified, intervening excavation units were then removed stratigraphically. Where isolated excavation units occurred, an attempt was made to remove the fill using SUs. Arbitrary units were

reverted to when stratigraphic excavations proved to be too slow due to problems with discerning color/texture similarities of adjacent strata. In some instances, where a number of highly similar strata occurred and no artifacts were being recovered, the fill was simply shoveled out without reference to vertical units of any kind. This allowed considerable savings of time with little or no data loss. This was done, for example, in the South (Carriage) Room where over three meters of sterile sandy gravel and sandy clayey gravel filled a newly discovered basement.

All measurements were made using the metric system. To eliminate the problems of dust inside the structure, excavated fill was transported by wheelbarrow and screened immediately south of the building. Except where noted, all excavated fill was passed through ¼" hardware cloth to effect artifact recovery. All objects encountered during the excavation or during the screening process were collected. Collected materials were placed in a paper sack marked with the park acronym (JAGA), name of the survey area (Carriage House), shovel test coordinates (North or South Room, excavation unit name, depth and/or stratum number), excavator's name, and excavation date. Field notes, photographs, site maps, and artifacts relating to this work are curated at MWAC.

### South (Carriage) Room

At the initiation of the field investigation, the floor of the South Room was entirely composed of brick and mortar. The floor had obviously been put down at two different times. The east end was composed of bricks whose long axes were oriented north to south and which were bonded together with a very weak, crumbly mortar. The west end of the floor was composed of bricks whose long axes were oriented east to west and which were bonded with a very hard concrete mortar. Some areas of this floor, particularly at the southeast corner, had already been disturbed, and some bricks had been removed. Signs of severe disturbance here and under contiguous portions of the floor suggested burrowing by a large animal. Groundhogs were commonly observed in the park, and their retreats were usually under structures. It is assumed that it was these creatures which had caused the burrowing disturbances observed before and during the investigations.

To investigate the fill below the floor, it was necessary to have sections of brick removed. This action was coordinated by CUVA Assistant Superintendent Martin with Siegfried Buerling, WRHS Supervisor of JAGA and Hale Farm, who arranged for a contractor to do this work. Under the supervision of the author, an H-shaped area of bricks was removed in two north-south transects and one east-west transect across the room (Figures 5 and 6). Bricks were removed easily from the soft-mortared floor on the east end within a few hours time. This was not the case for the remaining portions, where removal of bricks required a jackhammer.

An arbitrary, horizontal, 2-m excavation grid was then established to allow excavators to describe observation and artifact recovery locations. In this system, the north face of the south foundation of the room was established as N99 and the west face of the east wall dividing the South Room from the Gas Holder was referred to as E100. All test units in the room were then named according to the coordinates of their southwest corners. For example, a test unit at N101-E96 would have its southwest corner located 2 m north of the room's south wall and 4 m west of the room's east wall.

A transit station was established at the entryway of the South Room at N102-E86.5 for mapping purposes. This location was chosen because it allowed access into the North Room and to a temporary station just outside the door from which could be observed the 1990 mapping datum (the relief triangle on top of the memorial sundial near the Campaign Office). A transit reading of the ground elevation at a surveyor stake "N.TB1^ELEV=689.605" discovered in the flower garden northwest of Lawnfield allowed transit elevation readings in the Carriage House to be converted to actual above-mean-sea-level elevations. Elevations were measured at every even-meter coordinate (N100-E100, N100-E98, etc.) in the room and at the margins of the exposed investigation areas.

Two and one-half weeks of field time were allotted for investigating the South Room. By the end of this period, a number of units remained to be explored. Knowing that this was the only such work to take place prior to construction and to increase the speed of the investigations of the South Room, an alternative excavation procedure was implemented. This took place largely in the basement discovered under the brick floor at the east side of the room. Here, the deep cultural fill was determined to contain virtually no artifacts, and the excavation units were shoveled out without regard to level. The fill from these units was not screened until the excavator observed a noticeable change in fill texture or color, or in the event that artifacts were encountered. When these observations were made, the excavator reverted to the arbitrary or stratigraphic excavation as determined by the field director.

All units were excavated to the base of the cultural fill except in the basement area. Units in this area were excavated only to a point about 1.5 to 1.8 m below the surface of the brick floor. Although the floor of the basement had not been reached at that level, it was considered too dangerous to excavate further without shoring the walls. One area next to the west wall of the basement was shored up, and excavation proceeded to the base of the cultural fill at 3.82 m below the brick floor. Once the basement's mortar floor sill was recognized, the remaining fill in adjacent areas was carefully troweled for artifacts.

### North (Stable) Room

The North Room differed physically from the South Room in that it was broken up into distinct units of space by visible architectural features. These included a series of foundations on the west side of the room, a plank floor at its center, and a number of horse stalls on the east side. Knowing that the structure had a relatively brief history, it was decided to use these architecturally bound spaces as investigative units (Figure 5). The spaces enclosed by foundations were tackled first, as their dirt floors were most accessible to excavators. Once the foundation-enclosed areas were completed, sections of planks were taken up at the middle of the floor, with spaces between the floor joists defined as excavation units. The stables on the east side were never investigated other than by some subsurface probing in the southernmost stall. This was the only stall with a dirt floor. The remaining stalls had concrete or plank flooring that prevented easy access, and by the time the investigation of other areas in the North Room were completed, no time remained for testing these locations.

*Enclosures A–D.* The west side of the North Room was divided into four spaces by foundations of various construction. Three of these were virtually of the same size, with the southernmost space being about half the size of the others. The remaining portions of the latter space appeared to lie under the concrete floor of a storage room built between the stairwell and the North Room. For convenience, these four foundation-bound spaces were termed “Enclosures” and designated A to D from south to north (Figure 5). Each was further divided into quarters labeled NE, NW, SE, and SW, with each quarter excavated separately from the others. Enclosure A, being about half the size of the other enclosures, was divided into north and south units.<sup>1</sup> The southeast and northwest quarters of each enclosure were removed in arbitrary 10-cm units. This allowed continuous north–south and east–west stratigraphic cross sections of each enclosure to be drawn. As vertical stratigraphic profiles were visible on two faces of the southwest and northeast quarters, they were removed using SUs.

*Floor Openings.* With completion of Enclosures A–D, there remained a few days for further investigation, and attention was turned to the plank flooring at the center of the North Room. This area was composed of three large sections of planking. As all areas could not be investigated, it was arbitrarily

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<sup>1</sup> With the initiation of excavation of Enclosure A, a linear, east-west disturbance was soon discovered through the middle of Enclosure A. This was caused by the installation of a tile drain followed by considerable burrowing along the route of the drain by a large animal (presumably a groundhog). This disturbed area was excavated separately. Nevertheless, it created a more natural north-south division in the unit, and the remaining portions of Enclosure A were excavated by north and south halves.

decided to examine the archeological resources under the center section of the floor. The floorboards were taken up in this section, with two left in place on the east side to allow pedestrian movement from one end of the room to another (Figures 5 and 7). Revealed to view were 10-cm-wide by 4-cm-thick east–west joists which were resting on the ground surface with dirt to the top edges of the joists. Openings between the joists were considered as possible test units and numbered 1 to 6 from south to north. These measured 74 cm, 76 cm, 74 cm, 77 cm, 61 cm, and 63 cm in width, respectively. Time allowed only three of these (Nos. 1, 4, and 6) to be investigated.

### Exterior Tests

Five test units were placed around the margin of the Carriage House as a means of investigating possible downspout drain locations, construction changes in the south foundation, and a small stone structure attached to the south foundation (Figure 5). Each unit was named according to its location, and where two units occurred close to one another, by their order of excavation also. Generally, these exterior units were shoveled out without regard to level. The fill was not screened, and artifacts were recovered only as encountered during excavation.

“NE Exterior Corner” was situated at the northeast corner of the addition at the east side of the North Room. The purpose of this 1.3 (E–W) x 1.5 (N–S) m unit was two-fold. The primary objective was to determine whether a structure had once been appended to this side of the building. A June 1900 map of the Garfield farm building complex illustrates the Carriage House with a wing extending east from the northeast corner of the building (Mack 1991:8, 43; Newman 1989:129). Mack (1991:8) notes that there are “other items [on this map] which are not correct and its accuracy is open to question. There is no physical evidence on the building for this wing, and there is no sign of former foundations on the ground. Archeological investigations could confirm or deny the former existence of this addition.”

Despite the lack of gutters and downspouts on the Carriage House, Mack (1991:18) points out that such features are visible in a number of historic photographs. He notes remnants of such a drainage system near the southwest entrance. A historic photograph in his report (p. 38) shows a gutter at the south side of the Carriage House entrance. Were there others, and if so, where? Did they simply carry water to the ground surface or were they connected to the main north–south subterranean drain that passes the Carriage House on its east side? These questions led to a secondary goal for excavating NE Exterior Corner, i.e., to determine the presence or absence of a subsurface drain for the downspout gutter (missing at the time of the investigation) and the flow direction of that drain.

Two other test units were excavated as a means of examining elements of the water drainage system. “NW Exterior Corner” was a 1-x-1-m test unit designed to determine whether a gutter drain existed at this location. “SW Exterior Corner” was a 1-x-1-m test unit placed over the mouth of a vertical ceramic drain tile protruding from the ground immediately north of the Carriage House’s main entry. The aim was to ascertain whether the tile represented a gutter drain, and if so, determine the direction of water flow from the drain.

The remaining two exterior test units were excavated for the purpose of examining the Carriage House foundations and associated elements. “S Exterior Unit No. 1” was a 1-x-1-m test unit whose east wall was located 1.3 m west of the doorway at the southeast corner of the South Room. The excavation of this unit provided a view of the juncture of the deep and shallow foundations under the Carriage House’s south wall. “S Exterior Unit No. 2” was a 1.21 (E-W) x 1.55 m (N-S) test unit situated 0.7 m west of the same door. The odd size was the minimum amount of area required for the exploration of a small rectangular foundation attached to the exterior building foundation.

## *Laboratory Work and Analysis*

### Organization of Data

Upon completion of the fieldwork, artifacts and documentary materials were returned to the MWAC archeological laboratory at Lincoln, Nebraska, and organized in preparation for analysis and curation. The artifacts were cleaned of excess dirt by dry brushing whenever possible. Washing in water or further cleaning by other methods was utilized only where the object was obscured by dirt or corrosion to the point where its function or identifying labels were obscured. Artifacts were then divided according to raw material, functional grouping, and location of recovery.

Documentary records produced during the excavations were processed at the same time the artifacts were being cleaned and sorted in the laboratory. The field director's notes, stratigraphic unit list, artifact catalog, and photographic log were placed into a three-ring binder. Excavation unit forms were copied. One copy was divided and bound according to North Room or South Room and then by excavation unit name within each room. The other copy of the forms was arranged by stratigraphic unit number and placed in a separate binder for easy cross-reference.

### Analysis

Analysis of data extracted from field documentation and artifacts was very basic, focusing on artifact identification, artifact functional classification, and chronology. Although many specific research questions were identified prior to the onset of fieldwork, most were focused on aspects of the Carriage House/Gas Holder structure's architectural history. The goal, therefore, was to delineate to the greatest degree possible the physical changes made in the structure through time and identify the kinds of activities which may have taken place in various portions of the structure through time.

*Artifact Identification and Function.* The first step in the analysis was artifact identification and determination of functional associations. Many objects were familiar to the author or his colleagues at MWAC and were easily identified. An artifact's raw material, form, decoration, and labels (where present) were used to determine function. The object was then placed into a group of functionally similar objects using the classification system developed by Roderick Sprague (1980–81). Tables were then created listing each object within each functional grouping, its provenience, and its characteristics where necessary (Tables 1–4, 6–10). As is the case with virtually all collections of archeological materials, the function of some objects could not be determined despite considerable effort to do so. These were then sorted into categories based upon raw material and tabulated as unidentified objects in a manner similar to that for objects of identified function (Tables 5 and 11).

*Chronology.* Basic to the purposes of this study is chronological analysis oriented towards identifying the correct temporal positions of artifacts, strata, and features. Chronological determinations were made in three ways. The first may be termed a "formal" analysis, in the sense that the method focuses on variables in artifact form. Among the more commonly used analytical variables are raw material, shape, decoration, marks produced as a by-product of manufacture, and labeling. When an object has an attribute which relates to one of these variables, it is a "diagnostic" artifact, which can be used as supporting evidence in an archeological investigation. For example, many objects recovered from archeological sites have characteristics which relate to a specific manufacturing technology. The nineteenth and twentieth centuries are characterized by manufacturing improvements which occurred at increasingly rapid rates. Each technological improvement generally leaves some tell-tale trace on the surface of an object or in its matrix which can serve as a clue to the identification of its production period and/or location of manufacture. Similarly, public fashions and trends have resulted in the creation of specific forms, decorative methods, and ornamental motifs which relate to specific units of time. Many artifacts bear labels useful in determining the time and place of that object's manufacture.

The result of a formal analysis is the determination of an absolute (calendrical) date or range of dates within which the object(s) was most likely produced. Ceramic tableware and bottles tend to be the most common artifacts used by historical archeologists to assign dates to an occupation. For the most part, this is due to the enduring nature of, and the large amount of research on, these items over the years.

Another dating method incorporated into this analysis focuses upon a specific characteristic of an artifact population rather than an individual artifact to determine an absolute date. In this instance, window glass is the artifact category in question. In general, window glass pane size and thickness increased at a fairly regular rate through the greater portion of the nineteenth and early twentieth centuries. This has led a number of investigators to develop regression curves for mean flat (window) glass thickness which can be used, in turn, to determine a calendrical date for the construction of a building or building addition at a historic site (e.g., see Moir 1982 and Roenke 1978). Dates resulting from these methods are regionally specific due to variations in window glass manufacture and supply from one portion of the United States to another. For this reason, the best method for dating window glass in the northeastern part of the United States appears to be a technique developed by Moir. Data from sixteen sites or structures in the northeastern United States occupied between 1812 and 1915 were used by Moir to derive the regression coefficient:

$$ID = 89.78(TH) + 1702.7$$

where ID is the initial date of construction and TH is the mean thickness measured to the nearest 0.01 mm (Moir 1982:25–29).

Dates derived from this regression formula may be useful, providing one follows four basic precautions (Moir 1982:15–17). When dating a site as a whole, one should obtain small samples from a number of locations rather than use a large sample from one location. One should also review other artifact categories to be sure that the structure was built between 1810 and 1920. Moir further cautions that one should take great care to remove bottle glass, the latter characterized by curved forms or distinctive coloration. He also determined that flat glass thicker than 3.2 mm probably did not represent window glass and should be excluded from the sample being analyzed. Finally, the use of regression analysis requires a fairly substantial number of specimens for results to be considered reliable. Moir indicates that he has had successful results with samples as low as 20 or 30 sherds, although 50 more specimens provide much more reliable results (Moir 1982:15). Samples meeting all these requirements were dated using the regression formula developed by Randall Moir (1982) for the northeast region. The application of that formula resulted in the dates provided in Tables 12–13.

The stratigraphy of the Carriage House reflects an extremely rapid deposition, with at least 101 fill events occurring in the North and South Rooms during the first 60 years or so of its existence (Table 14). Each of these fill events is represented by a stratigraphic unit (SU). All SUs, as a group, reflect the relative chronological order of cultural and natural events at a site, i.e., a determination of earlier versus later rather than an actual calendrical date. An ordering of the site's deposits was made using an organizational system developed by Edward Harris (1978, 1979a, 1979b). The Harris Matrix system was utilized in this analysis to arrange cultural and natural strata from the North and South Rooms into two "pictures" of stratigraphic matrices (Figures 8 and 9). Each matrix represents a relative temporal sequence of fill events for that room, with most recent deposits at the top of the matrix and the oldest at the base.

The last step in the chronological analysis was to combine the information derived from the various studies. Dates derived from diagnostic artifacts and the flat glass regression curve were used to identify the temporal positions for as many strata as possible. The result is the reorganization of the stratigraphic matrix into a series of "periods." These periods may then be used to describe the course of events at a particular site.

## Observations

### *South Room*

In the South (Carriage) Room of the Carriage House, 25.4 m<sup>2</sup> of floor space was opened for excavation (Figure 5), resulting in the identification of 50 SUs here and in contiguous S Exterior Units 1 and 2 (Table 14). SUs were organized using the Harris Matrix system and subdivided into six periods (I–VI) based upon construction sequences and temporally diagnostic artifacts from each stratum (Figure 8).

#### Period I (Pre-1885)

Two stratigraphic units (SUs 41 and 35/40) are associated with this period. No artifacts were recovered from strata undisturbed by human or animal activity. This factor indicates that the strata are a product of natural soil development processes which predate the historic construction at the site.

#### Period II (Circa 1885–1893)

This period is initiated with the construction of the Gas Holder building and ends with the construction of the Carriage House addition. It is reflected by nine stratigraphic units (SUs 9, 28A, 29, 33A, 33B, 34, 59, 60, and 100), all of which represent elements of the first structure raised. This includes the building segment now known as the Gas Holder and newly discovered elements under the east floor of the South Room. Evidence for the physical layout and construction of this newly identified building element was recovered from Excavation Units N106-E96, N102-E94, N102-E98, N99-E95 to E99, and S Exterior Units 1 and 2.

*West Foundation (SU 9W).* This is the only foundation segment of the original Gas Holder structure which currently bears no walls. It lies immediately under the juncture of the east and west brick floors (SUs 6 and 7) of the South Room at a point 4.60 m from the east wall. Examination of this foundation was allowed through two exposures: one foundation section centered on a line between N99.30-E95.4 (where it connected to the south foundation) and N101.10-E95.4, and another section centered on a line between N102.00-E95.4, and N103.36-E95.4.

The builder's trench (SU 29) for this foundation section was vaguely apparent in plan view but became very clear in cross section (Figure 10). This was situated on the west side of the foundation. The trench was 1.26 m wide at its top, constricting to 0.36 m wide at a point 72 cm below its upper surface (the stratum was not fully excavated). It contained large quantities of loose, rounded, water-worn stones at the top of the trench, with the same kind of stones in the mortar-consolidated lower portions.<sup>2</sup> No diagnostic artifacts were recovered from the fill of the builder's trench.

The foundation is composed of ten courses of roughly shaped sandstone block bound by a hard concrete mortar. It is 2.67 m (8.76 ft) high from the top of the sill to the base. The width of the foundation could only

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<sup>2</sup> The contents of the builder's trench were visually very similar to the segment of the Gas Holder's exterior foundation exposed in a small test trench (TP-7) excavated by soils engineers for Van Dijk, Johnson and Partners in February of 1991. This trench was located on the south side of the Gas Holder about 3 ft east of the door at the southeast corner of the South Room. A color picture of this excavation and foundation exposure is shown in Van Dijk, Johnson & Partners (1991:Appendix B, p. 7-B). The exposure of the west side of the west foundation originally led MWAC excavators to believe that the mass of cemented stone in the builder's trench was actually the foundation. On this basis, it was assumed to be only about 85 cm (33 in) or so deep. Of course, exposure of the other side of the foundation later in the excavation proved it to extend far below this point. This leads one to believe that the structural engineers may have underestimated the depth of the foundation at the south side of the Gas Holder as well.

be measured at its top, but this was found to vary from 58 to 79 cm (22.8–31.1 in), with the predominant portion being about 70 cm (27.6 in) thick.

In cross section, the upper surface of the foundation appears as a series of four “ledges” (Figure 11). The lowest ledge (A) is composed of neatly mortared sandstone block and actually represents the upper, unmodified element of the foundation. It lies 15–23 cm (9.0 in) below the inside corner of the top of the foundation and is about 18 cm (7.1 in) wide. Lying immediately on top of this is Ledge B, a thin (4 cm/1.6 in) layer of mortar and thin, flat stones. The upper margins of this ledge are 20 cm (7.9 in) wide and retain fragments of wood. The north–south orientation of the fragments’ grain suggests that an 8-in-wide wooden sill once rested here. Ledge C, lying immediately west of B, is composed of plaster. It has a squared, 7 cm (2.76 in) high face and a flat, 16–18 cm (6.3–7.1 in) wide upper surface. The vertical face of the plaster retains wood fragments and impressions of wood, reinforcing the belief that a wooden sill had been placed against it. It also suggests that the upper walls of the Gas Holder building’s west room may have been plastered. The uppermost portion of the foundation (Ledge D) rises 4–5 cm (1.5–2.0 in) above the plaster. Here, the foundation is composed of irregularly shaped sandstone and a hard mortar, with small, flat stones placed across the top to level its upper surface. The builder’s trench on the exterior face was filled with cobbles, mortar chunks, and shaped fragments of stone. This portion of the wall is crude in appearance but would not have been observed by a visitor to the Gas Holder, as it lay underground.

It is not possible to say much about the basement floor at this time, as the extreme depth of the basement fill and the necessity of shoring it to prevent collapsing allowed only an area about 2.5 m east–west by 1 m north–south to be exposed. Nevertheless, a soft mortar “ledge” or sill (SU 59) was discovered at the base of the west foundation’s interior face. It is 2–4 cm (0.8–1.6 in) thick and has an irregular edge extending 27–34 cm (10.6–13.4 in) from the foundation. Lying immediately on this sill were a number of randomly oriented wood fragments, possibly the remains of a wooden floor sill. Extending west for an unknown distance from the wood fragments, but on the same level, is a thin (0.5 cm/0.2 in), dark organic layer. The wood and organic layers (both included in SU 60) are interpreted as the remains of a wooden basement floor. Immediately below the organic layer was a light gray, clayey gravel much like that used to fill the basement at a later time. This is suggested to be the gravel base which naturally occurs under the area subsoils.

*East Foundation (SU 9E).* The east foundation (Figure 12) was exposed in only one excavation unit (N102-E98), which was dug to a depth of 1.28 m (4.2 ft) below the upper surfaces of the brick floor (SU 7). The Historic Structure Report (HSR) for the Carriage House states that “the foundation to the wall separating the Gas Holder from the Carriage Area is brick” (Mack 1991:12). However, excavations revealed that the foundation here is actually composed of courses of large, rectangular-shaped sandstone block surmounted by a short segment (about 4 courses) of plastered-over brick. Both brick and stone are bound with a concrete mortar. The top of this brick segment is parallel with the base of the brick floor. Above this segment is the brick wall dividing the South Room from the Gas Holder.

Five courses of the stone foundation were exposed. Each block incorporated into this structure is of a unique size, individual specimens varying in width from 12 to 16 cm (4.7–6.3 in) and in length from 8 to 65 cm (3.15–25.6 in). Foundation stones are bound together with thick layers of hard mortar which was somewhat carelessly applied during its application, with significant portions of the individual stone faces obscured.

The HSR suggests that the ground level of this area of the Gas Holder building had a wooden floor (Mack 1991:13), and this hypothesis was confirmed archeologically. The plastered brick segment immediately above the stone foundations at the east side of the room was a short (29 cm/11.4 in) wall (SU 100) containing a series of 6 cm (2.36 in) wide by 29 cm (11.41 in) long vertical slots spaced 25 to 26.5 cm (about 10 in) apart.<sup>3</sup> These are interpreted as evidence for flooring above the basement, each slot having held

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<sup>3</sup> These were observed in the lowest courses of a brick wall at the east end of excavation unit N102-E98.

the butt end of an east–west 2-x-12-in wooden joist. These would have supported a floor of north–south oriented planking. The size and spacing of the “ghost” joists suggest that the floor was built similar to that observed in hay lofts and probably would have been capable of carrying a rather heavy structural load. The plastered surfaces between the joist slots ended at a course of brick corresponding with the base of the current brick floor. If the current brick wall at the east end of the South Room is a later installation, it is possible that the original wall was of plastered brick.

*South Foundation (SU 9S).* The interior face of this wall was exposed across N99-E95 to E99 to a depth of about 1.6 m (5.25 ft) below the brick floor. Exterior surfaces were uncovered to 80 cm (31.5 in) and 50 cm (19.7 in) below ground surface in S Exterior Units 1 and 2, respectively. This contrasts with the reported depth of the south foundation under the east end of the building as about 61 cm (2 ft) below surface grade (Mack 1991:131), an estimate which is probably in error (see comments under West Foundation above). The south wall sill of the Carriage House now rests on the squared upper surface of this foundation. Stones used to face off the interior surfaces of the foundation are characteristically well-shaped, rectangular sandstone blocks. Below ground, on the exterior of the building, the foundation is composed of rounded river/stream cobble bound with mortar similar to that observed in the west foundation builder’s trench. The exterior face of the foundation is actually made of unmortared stream cobble and irregular rock fragments which extend to a point immediately below the outer edge of the foundation’s exposed upper elements. The upper, exposed portions of the foundation exhibit regular, squared-off faces similar to those seen on the inside.

Access to the basement may have been through an opening in the foundation (SU 33A) near the southeast corner of the building (Figure 13). A groundhog burrow through the upper portion was visible on the outside of the building prior to excavation, a situation which may have led to its identification as a crawl space in the HSR (Mack 1991:13). The east margin of the opening is situated at N99-E98.3 about 1.7 m (10.5 ft) west of the South Room’s east wall. It is rectangular in shape, about 75 cm (30 in) high by 94 cm (37 in) wide. The east and west margins of the opening are of stone, with roughly squared faces. The lower sill is manufactured of a sandstone slab shaped with a stone mason’s chisel. The upper surface of this stone slants downward toward the basement floor. The size and shape of the opening suggest a stairway at this location, with the stair’s stringers supported by the sloping stone sill.

The exterior elements of this entry were exposed in Exterior Unit 2 (Figure 13). The outside of the entry had been blocked with a large slab of sandstone, brick, and cobbles. It is enclosed by a small rectangular foundation (SU 33B) or entry well of brick and sandstone slab construction. A narrow builder’s trench (SU 34) of loose, root-filled, dark fill was noted in conjunction with this structure. The outside dimension of the well foundation, from front (south side) to back (north side), is 91 cm (3 ft). Though only the east half of this foundation was excavated, it is estimated to have an overall width of about 1.7 m (5 1/2 ft). It encloses a rectangular space 59 cm (23.2 in) deep and estimated to be about 1.12 m (3.7 ft) wide. Its various elements have been put together so that its upper surfaces demonstrate a 15-degree tilt from front to back (Figure 14).

The entry well is actually U-shaped in that it is composed of three brick walls, each capped by rectangular slabs of stone. The capstones are shaped much in the same manner as the sill of the foundation opening. Each wall is made of a four courses of soft red brick. The front (south) wall is 33 cm (13 in) high and 24 cm (9.4 in) thick. The sandstone cap is 32 cm (12.6 in) wide and cut such that the upper surface slants downward toward the south; i.e., in cross section it is 6 cm thick on its south (exterior) edge and 10 cm thick on its north (interior) edge. The east–west length of the capstone is estimated to be 1.12 m (3.7 ft) wide.

The east wall of the entry well is also of brick and capped with a shaped sandstone slab.<sup>4</sup> The wall is 87 cm (34.25 in) long and increases in height from south to north from 26 cm (10.2 in) to 43 cm (16.9 in) high. Viewed from above, the sandstone cap is rectangular in shape (76 cm/29.9 in long by 30 cm/12 in wide) and increases in thickness from its south end (7 cm/2.75 in) to its north end (15 cm/5.9 in).

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<sup>4</sup> The west wall was not exposed but is assumed to be very similar in size and construction to the east wall.

No evidence for a means of access to the first floor was discovered during the excavations. In large part, this is due to an investigative time frame which allowed only small portions of the Gas Holder structure's foundation to be exposed on any one side. If evidence for this entry actually exists, it may occur on the upper surfaces of the north or south foundations. These portions are currently obscured in part by the wooden sills of the 1893 Carriage House. If entry was on the west side, the evidence should be present on the upper surfaces of the west foundation. Currently, this portion of the foundation is obscured by the brick floor and sandy fill laid down as a base for that floor.

There is no evidence relating to the external appearance of the west end of the Gas Holder. This section was torn down with construction of the frame Carriage House in 1893. If the Gas Holder was uniform in construction, the walls of its west end were composed of stone similar to that remaining on the east side today. It is the author's opinion that, when the walls were dismantled in preparation for construction of the Carriage House, the stone was most likely recycled for foundation material in the west two-thirds of the Carriage Storage Room and in the foundations of the Carriage House's original north wing.

Recovery of a number of slate roofing tile fragments in contexts associated with the following period (III) suggests that the Gas Holder building may have originally had a slate roof. The piece which had the most direct relationship with the Gas Holder was a fragment recovered from fill immediately inside the south foundation near the basement entry at a depth of about 1.3 m (4.25 ft) below the surface of the brick floor. The Gas Holder now exhibits a sheet-iron roof. Structural evidence inside the Gas Holder suggests that the upper elements of this structure, including the roof, were modified with the frame Carriage House construction in 1893. Mack (1991:7) notes that "the westernmost rafters of the Gas Holder are cut for joining a ridge board, but the ridge board stops to the east of these rafters. It would appear that the ridge board was removed from these rafters." An examination of the exterior of the structure by the author indicates that eave styles for both the frame Carriage House and stone Gas Holder are identical, as if built at the same time. If these two building elements were constructed at separate times, one would expect dissimilar eave forms. Based on the evidence, it would appear that the original Gas Holder building had a different roof and that it was probably covered with slate shingles.

*North Foundation (SU 9N).* A 1-m (3.3-ft) wide section of this foundation was exposed at N106-E96 (Figure 15). Its construction appeared to be generally the same as that described for the other foundation elements, with the exception that this portion is pierced with a barred opening (SU 28A). The opening is partially visible in the south wall of the sloped access (Room 109 in the HSR) to the boiler pit and is illustrated in the HSR with the caption "Ventilator to Area Below Room 102 [Carriage Storage]. This vent indicates that the east portion of the carriage storage area had some type of open area below the east end of the floor, perhaps related to the Gas Holder" (Mack 1991:82).

Only a portion of this opening (80 cm/31.5 in) was exposed in the excavations. The eastern margin is at N106.7-E97.64. The window's overall width is estimated to be about 92 cm (3 ft), placing the west end at or near N106.7-E96.7. The frame is about 51 cm (20 in) from top to bottom. The wood is painted "barn red," suggesting that this may have been the color of the building's interior woodwork at one time. The opening is barred with 14 vertical pieces of 1.9 cm (0.75 in) diameter rebar spaced 6.8 cm (2.68 in) apart (center to center). The top of the frame is flush with the upper surface of the foundation, and the base rests on thin, rectangular pieces of sandstone, creating a stone sill on the interior. The stones have been set so that they angle down from the window edge toward the basement floor at about 17 degrees.

Several pipes from the steam room protrude from between the bars. The intrusive presence of these pipes and the opening's partial obstruction by the concrete wall of the boiler pit suggest that it was in place before construction of the boiler pit and its sloped access (sometime after the Carriage House construction in 1893). At the time the basement was abandoned and filled, the opening was blocked up with flat slabs, brick, and cobbles similar to that previously noted for the entry in the south foundation.

*Artifacts.* Only a few artifactual materials actually relate directly to this structure (see Tables 1–5). Of these, architectural materials are probably the only objects of any significance. One slate shingle fragment was discovered at a depth of 120–140 cm in excavation unit N99-E98, a discovery which suggests that the original roof was covered with slate shingles rather than the metal roof currently on the Gas Holder. Other materials recovered at the base of the west foundation in N102-E96 include a number of brick and mortar fragments, cut and wire nails of indeterminate size, a 20-penny (20d) wire nail, 2 whiteware “porcelain” insulators, 2 sun-altered purple glass fragments, and 5 unidentified pieces of ferrous metal. Few of these actually relate to the construction of the west end of the building (perhaps the nails, brick, and mortar fragments), but rather more to the alterations made after the Carriage House was constructed. The 20d spike would correspond to heavy framing, and cut nails may have been used in the basement flooring. Recovery of electrical insulators indicates that the basement still remained open at the time when the Garfield farm was electrified. They are typical of insulators in use between the turn of the century and the 1930s or so. Similar insulators are listed in the 1922 Montgomery Ward catalog (Montgomery Ward and Co. 1969b:542). The sun-altered glass fragments tell us little, other than that the basement was open sometime between circa 1880 and World War I (Munsey 1970:55). It is also likely that the basement was open after the post-1893 installation of the steam boiler.

### Period III (1893 to Circa 1900)

This period is reflected by six stratigraphic units: SUs 16, 69, 70, 96, 97, and 98, with the possible addition of one more, SU 15 (Figure 8; Table 14). This period begins with the razing of the above-ground portions of the Gas Holder’s west end and subsequent construction of the frame Carriage House addition. Its terminus is marked by a remodeling/expansion effort at or shortly after the turn of the century, which included the installation of the steam pipe system in the building and abandonment of the basement at the east end of the Carriage (South) Room.

*Foundations.* The south foundation (SU 16) of the frame Carriage House addition was exposed in Excavation Units N99-E89 and South Exterior Unit 2. The stone used in its construction is very similar to that in the Gas Holder foundations both with regard to the type of material used and the shaping of that material. In fact, the eastern portion of the Carriage House’s South Room is built upon and supported by the west foundations of the Gas Holder structure, essentially the north and south foundation elements of the Gas Holder building’s west storage space from E100 to E95.4. This was first suggested by the WRHS tests on the south side of the building (Lee 1994). The remaining portions of the Carriage House foundations from E95.4 west are similar in width but much shallower than those originally associated with the Gas Holder. Unlike the foundation of the Gas Holder, which extends to a depth of 2.67 m (8.76 ft), the western foundations of the South Room had a depth of only 0.53 m (about 21 in). If the west end of the Gas Holder was of stone construction, as seems likely, it is possible that stone salvaged during the razing of this end of the Gas Holder was reutilized to build the new Carriage House foundation in 1893.

*East End.* Excavations in the east end of the South Room provided no evidence for abandonment of the former Gas Holder structure’s basement during this period, nor is there evidence for the destruction or modification of the plank flooring over that space. One would therefore assume that the basement was incorporated into the South Room and probably functioned as before. If so, it is likely that the brick wall (SU 15) currently dividing the South Room from the Gas Holder was built at this time or shortly thereafter. The construction of the frame building over what had been the west end of the Gas Holder building would have required a new means of access into the basement, however. Entrance to the basement may have been through a trap door or a stairway. Unfortunately, lack of field time prevented determination of basement access during this period.

*West End.* SUs associated with Period III in this end of the room are SUs 69, 70, 96, 97, and 98. These strata lie directly on top of SU 40. The upper surface of this deposit (SU 40) is concave in places, suggesting that the west end of the South Room originally had dirt floors. In addition to the concave upper surfaces of SU 40, evidence for dirt floors was provided by the presence of SUs 69 and 70.

Three flat rocks (SUs 96–98) were roughly aligned southwest to northeast and located in the south wall of N102-E91.10 (SU 96), at N101.48-E90.04 (SU 97), and at N102.56-E93.20 (SU 98), respectively. This alignment and the shape of the rocks lead one to venture that the rocks represent footers for posts or a wall under a southwest–northeast oriented timber arch truss. This assumption was reinforced during excavations when it was noticed that the stones lay along the south margin of a somewhat southwest–northeast oriented ash deposit (SU 1) in the same units associated with Period IV. This deposit of ash lay partially on, but did not extend past, the rocks more than a few centimeters. This combination of strata suggests the presence of a wall or some other obstacle at this location.

*Artifacts.* No artifacts were recovered from strata assigned to this period.

#### Period IV (Circa 1900 to Circa 1930)

A “Plan for the Grounds of Mrs James R. [sic] Garfield” dated June 1900 (Johnson 1984:Base Map 4) provides a view of a proposed Carriage House expansion. This shows an outline of the Carriage House much as it appears today. Archeological evidence suggests that much or all of the expansion had been accomplished by 1905, give or take a couple of years. This renovation provided the structure with greater storage space and more comfortable accommodations for stable hands. Modifications which are visible archeologically in the Carriage House include the installation of a steam-heating system, introduction of an internal system of ceramic drain tiles, removal of the plank floor over the basement in the east portion of the room, and abandonment and filling of the basement itself. Twenty-four SUs were assigned to this period (SUs 1, 3, 5/64, 8, 11, 12, 13, 17–27, 28B, 30, 37, 38, 65–68, 71, and 72).<sup>5</sup> No stratum is common to the east and west portions of the South Room, preventing one from correlating strata from one side of the room to the other. That is, there are essentially two floating relative chronologies associated with this period, each of which is associated with either the east or west areas of the South Room. These two areas are therefore discussed separately.

*West End — Floors.* Floors continued to be of dirt throughout this period. Strata interpreted as remains of dirt floors include SUs 64–68 and 71. Their similarity in color and texture made these strata extremely difficult to distinguish in horizontal plan view as excavation took place. They were only clearly defined in the profiles of the north and south walls of excavation units N102-E92 and N102-E94 after these units had been removed using arbitrary levels. Further, profiles are visibly different on the north and south walls, preventing a total one-to-one correspondence of strata from one side of the trench to the other. Descriptions of the strata are presented in Table 14.

*West End — Walls.* Archeological evidence points to the continuation of the southwest-to-northeast oriented wall and dirt floors as described for Period III. The existence of a northeast–southwest wall in the western portion of the room was addressed briefly in the discussion for Period III. Strata associated with Period IV provide three additional lines of supporting evidence for the wall. These include somewhat differing stratigraphic configurations on either side of its projected position, a linear deposit of ash and charcoal marking its north edge (described in the discussion for Period III), and a post hole lying within the proposed wall alignment.

Two places in the dirt floors appear to have been eroded and refilled, appearing as SUs 71 and 72 on the northwest side of the proposed wall and, to a lesser extent, SU 67 on the southeast side. Another eroded area on the northwest side of the proposed wall is represented by SUs 64–68. The forces creating these localized soil deflation areas remain unknown, but they are likely the result of some pedestrian activity by humans and/or domesticated animals. Similar basin-shaped depressions may be observed outside doorways of modern structures where there is no protective porch or walkway. It thus seems possible that a passage or door may have existed in the wall at about the E92 line between N102 and N103. Use of this passage may

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<sup>5</sup> SU 18 incorporates SUs designated in the field as SUs 18-21. SU 22 is the same as SU 26.

have ended with the filling of SU 71. This is suggested by the relatively horizontal upper surfaces of SUs 67 and 71, the dumping of charcoal and ash waste (SU1) on the northwest side of the proposed wall after the deposition of SU 71, and superimposition of SUs 67 and 71 by fairly uniform, horizontal bands of fill (SUs 65 and 64).

Over time, the northeast–southwest wall may have deteriorated to the point where, at least once, its repair was in order. Stratigraphic evidence points to this as an event which took place very late in this period. This incident is represented by a large post hole (SU 3) centered at N102.98-E92, i.e., approximately in alignment with three stone footers (SUs 96–98) described for Period III. The post hole is rectangular (50 cm [20 in] NW–SE x 37 cm [14.57 in] NE–SW) and 34 cm (13.4 in) deep. The long axes of the hole were aligned with the projected orientation of the wall. At its base lay a 41-cm-long x 32-cm-wide x 1-cm-thick plank (SU 8) with squared ends which probably served as a footer for the post. A two-hole brick in the south corner of the feature may have been inserted as a wedge to hold the post in place as the hole was filled. The size of the hole would have been suitable for a large vertical timber, and the wooden footer at its base suggests that the timber was expected to bear some weight. One notes that the hole is fairly shallow, a characteristic which suggests that it may have been considered a temporary repair.

Finally, the repair event obviously occurred quite late in this period. SU 3 cuts through all strata associated with the Carriage House’s pre-1930 floors and is superimposed only by the sandy base (SU 63) of the overlying brick floor (SU 6). The brick floor was installed after 1930 (see discussion for Period V below). On this basis, one would guess that the repair had been carried out sometime in the 1920s. This may reflect comments in the historical record indicating that the property became increasingly run-down during the 1920s. For example, Johnson (1984:150) cites a 1921 letter requesting \$2,500 to repair the “old barn,” a possible reference to at least one series of repairs in the Carriage House.

*West End — Boiler and Drain Installation.* This action is reflected by alterations in the foundations on the north side of the room, a trench, and an area of construction waste. Stratigraphic units associated with these actions include SUs 11, 17, and 27.

The foundations of the South Room were altered for the final time during Period IV with the addition of the boiler room, the extension of the brick chimney, and creation of a sloped access room at the north side of the room. Although none of the excavation units were placed to expose the altered foundation elements, these were visible from the inside of each of the rooms. There is actually little to add to the Carriage House HSR (Mack 1991) with regard to these changes. The sloped access room shares a wall/foundation with the basement. This was modified by applying a layer of concrete to the north face of that foundation. Additional concrete was poured to form the north, west, and south foundations of the room. New concrete foundations/walls were also poured for the boiler room. The south concrete foundation of the boiler room connects to the northwest corner of the basement’s stone foundation/walls.

Also during this period, a brick chimney was built at N106.7-E90.9. As no excavation units were placed at the margins of the chimney, there is no archeological data relating to the time, method, or purpose of its construction. Evidence for its extension in conjunction with the boiler’s installation is presented by Mack (1991:9) and need not be repeated here.

SU 11 is a 50 cm (20 in) wide southwest-to-northeast oriented trench, within which are located a ceramic drain tile and two 1½-in galvanized pipes. The pipes were incorporated into the trench 5–7 cm above and on either side of the tile. The galvanized pipe on the southeast side of the tile was wrapped with white tape, suggesting that it may have been intended as a conduit for hot water or steam. Although the upper surface of SU 11 was very difficult to distinguish, it appeared that SU 5/64 lay on top of it. If so, the installation of this segment of the Carriage House’s boiler and drain system would have occurred at some point during the later portions of this period. The course of the three pipes was not followed out, due to a lack of field time. Nevertheless, it appeared that the course of the ceramic tile would ultimately tie into a drain in the brick floor at N106.25-E92.85. The galvanized pipes are assumed to have carried cold water, hot

water, or steam. The pipes were bent into a curve, with their northerly ends turning toward the boiler room and their southerly ends appearing to be directed more toward the west end of the building.

Perhaps contemporary with the construction of the boiler room and installation of the boiler were two strata relating to the deposition of construction by-products (SU 17) and preparation of construction materials (SU 27). SU 17 is a band of dark brown to very dark brown gravelly sandy loam mottled with charcoal and ashy inclusions. This was one of the very few areas of the South Room which contained artifacts. Among them were quantities of cut nails, a few wire nails, short pieces of rebar, and a few pieces of bottle glass.

About 80 percent of the nails in the deposit were cut, suggesting that at least some of the deposit was probably derived from building elements originally associated with the circa 1885 Gas Holder. Short sections of rebar probably reflect waste from the construction of rebar reinforcement prior to pouring concrete walls, floors, and foundations. These kinds of objects, together with the charcoal and ash, suggest an area where construction by-products were temporarily stored until they could be hauled off permanently.

Immediately to the north, and partially overlapping SU 17, was a concentration of mortar and dirt mixed with mortar (SU 27). This was spread over about 2 m (6–7 ft) of area, and most of the mortar concentration was only about 1–2 cm (0.4–0.8 in) thick. In N100-E90, however, a square-cornered, U-shaped ridge of soft mortar was located which varied in height from 4 cm (1.6 in) to 14 cm (5.5 in) and had a width of 12 to 20 cm (4.7–7.9 in). At first, this mortar ridge was believed to represent a low foundation. This theory was quickly abandoned when removal of additional areas of the brick floor adjacent to the “foundation” proved that the mortar covered a large expanse of area and thinned with distance from the ridges.

The best interpretation for this feature came from one of the construction workers removing the segment of brick floor. He noted that at construction sites where a mortar pan is used, the mortar often spills over the edge as it is being mixed or removed from the pan. When the pan itself is taken up, a cast of the outside of the pan is often created by the spilled and hardened mortar. This explanation is therefore offered as the most reasonable. Assuming that this is indeed a mortar concentration at the site of a mixing pan, its stratigraphic position above the waste pile (SU 17) would suggest that it was set up and used to prepare concrete for the new boiler room or other additions to the Carriage House made of that material.

*East End.* At some time during Period IV, the basement at the east end of the South Room was filled and abandoned. It is submitted that the plank flooring over the basement must have been removed at the beginning of this process to allow fill to be dumped into it easily. The floor joists may have been left in place throughout the filling operation, with the floor boards replaced upon its completion, as the fill extended to only the lower portions of the joist slots in the east wall.

With removal of the floorboards, and prior to filling the basement, the entryway in the south foundation and the barred window in the north foundation were covered with stone slabs, bricks, and brick fragments (SUs 28B and 38). This was followed with the introduction of massive quantities of loamy sandy gravel (SUs 12, 13, 18–26, 30) into the basement. This fill is very similar, if not identical, to that underlying the basement floor and must have been acquired at a nearby quarry or stream cut. Each stratum varies in only minor ways from its neighbors above and below, to the point where it was impossible to distinguish one from the other in plan view and difficult even in profile.

Late in the filling sequence, some of the gravel deposited on the north side of the basement must have been wet when dumped. On the upper surface of SU 12, in Excavation Unit N102-E96, were a series of narrow, curved tracks. Although the tracks are about the right size for small buggies, the lack of corresponding parallel wheel tracks indicates that these marks were more likely produced by wheelbarrows. These tools typically had narrow ferrous metal wheels from the late nineteenth century through at least 1928 and probably much later (Montgomery Ward and Company 1969a:407; Sears, Roebuck and Company 1970:999).

Construction of the boiler room and sloped access room must have been underway as the basement was being filled, for the top of the last fill stratum associated with this event (SU 13) contained large quantities of whole bricks, brick fragments, and mortar. It is likely that, when the basement was nearly full, construction material from razed portions of the building were dumped into the basement. Lying on top of this mass of building material, and an element of SU 13 in units N104-E96 to N106-E96, was a stratum composed almost solely of window glass sherds. The restricted horizontal distribution of the glass and the massive quantity of glass recovered suggest that it may have come from the nearby (north) wall. A double window still exists in the wall east of these units. To the west is an entrance to the boiler room. One would therefore surmise that one or more windows may have existed in the wall between the door and windows prior to the remodeling and that these were removed and thrown into the basement prior to the door's construction. The association of the glass with the construction of the Carriage House is supported by a mean date of 1892.1 using Moir's correlation coefficient for the mean window glass thickness (2.11 mm). This date closely approximates the 1893 construction of the Carriage House.

*Artifacts.* Virtually all the SUs representing fill or living floors in the South Room are included in Period IV. Therefore it is not surprising that the preponderance of objects collected from this room's excavation (n=2174 specimens) are associated with this period (see Tables 1–5, catalog numbers 6, 8–18, 22, 23, 25, 27, 28, 31, 32, 33, 34, 37, 38, 39 [nails and rebar only], 40, 41, 56).

Of these, objects identified as personal items or associated with domestic activities (n=9 specimens) and transportation (n=2 specimens) were of negligible importance. Personal and domestic items include a bone shaving brush handle (Figure 16c) (Montgomery Ward and Co. 1969a:103; Sullivan 1986), a light-weight butt hinge suitable for "cabinet work, china closets and doors" (Montgomery Ward and Co. 1969a:598), two fragments of stoneware vessels, and 5 ceramic tableware fragments (1 plain whiteware, 1 green transfer print impressed "WEDGWOO[D]" on the back, 1 plain porcelain base fragment, one plain porcelain base fragment marked "[H or M] & C°/L" on the back in green, and a scalloped porcelain rim). Transportation items include two cupric rivets with 0.64 in square heads (Figure 17a) which are probably derived from a buggy canopy (James E. Price, personal communication, March 17, 1992).

The two largest groups of materials are those of unidentified function (n=543) and those related to architecture (n=1506; 69.27%). Unidentified materials include fabric (n=22 pieces of woolen fibers), wood and charcoal (33+ specimens), curved (bottle) glass (n=23 specimens), flat glass  $\geq 3.3$  mm thick (n=331 specimens), ferrous metal (n=124 specimens), and 1 fragment of cupric wire.

Architectural materials include both construction materials and hardware. Construction materials from the South Room consist of an asbestos shingle, one window frame fragment, window (flat) glass  $\leq 3.2$  mm thick (n=889), and rebar (n=7). Brick and mortar were not collected in a systematic manner, so the 32 brick and 21 mortar specimens in the sample returned to MWAC do not accurately reflect the actual number or volume of those materials in Period IV strata.

Most of the construction materials from the South Room are associated with the upper strata of the basement fill, with only 3 pieces of flat glass, 2 brick fragments, 17 mortar fragments, and the 7 pieces of rebar derived from the dirt floors at the west end of the room. This suggests that the majority of construction materials are from the portions of the Carriage House which were razed at the time the boiler room, sloped access room, and other northeast additions were constructed.

The asbestos shingle was recovered from the top of SU 12. According to David Murphy, Architectural Historian at the Nebraska State Historical Society (personal communication, July 13, 1992), asbestos shingles may have been available as early as 1875. Asbestos products did not become generally used, however, until circa 1900. After that time, asbestos products were utilized extensively until 1979, when federal law prohibited its use as a building material. The shingle probably dates to the original Carriage House construction in 1893 and may have been incorporated into that structure.

Bricks recovered from this period's strata included fragments and whole specimens varying in color from red to white with black inclusions. Complete specimens were noted in SUs 13 and 28, both representing basement fill. Virtually all brick specimens on the west side of the room were fragments. Descriptions of the collected specimens were made following Gureke (1987). Complete bricks were manufactured from stiff mud and represent side cut, common, or face brick. Brick fragments recovered from the west side of the South Room were usually orange-red or white in color, with the former outnumbering the latter by 28 to 1. Three complete specimens were returned to MWAC. The first is a red brick with two equal perforations from SU 13. It is 20 cm (7.9 in) long, 9 cm (3.5 in) wide, and 5.5 cm (2.2 in) thick. Another red brick with three unequal perforations from SU 28 is 19.5 cm (7.7 in) long, 9.5 cm (3.75 in) wide and 5.5 cm (2.2 in) thick. The last specimen is a white brick with black inclusions. It has 10 equal perforations and a textured face with dimensions of 20.5 cm (7.7 in) x 9.5 cm (3.75 in) x 5.5 cm (2.2 in).

Construction hardware collected from the site includes nails (n=552), one wood screw, a fragment of a ceramic drain tile, and a 1-in-diameter section of galvanized pipe. In contrast to the construction materials, most of which were recovered from basement fill on the east side of the room, the bulk of the hardware is derived from the west end of the room, particularly the southwesternmost excavation units. This would include 539 nails, the tile drain fragment, and the galvanized pipe. The distribution would suggest that the west end of the room may have served as a staging area and temporary waste disposal area when the Carriage House was expanded and the boiler installed.

The nails from the western portions of the room include 85 machine cut nails, 19 wire nails, and 448 nails corroded too badly to determine their type. The differences in corrosion rates between cut and wire nails is not known, but it seems more likely, given their relatively small circumference, that wire nails would be more seriously affected. Most of the nails are fragments, suggesting that they are derived from the 1893 construction of the Carriage House. They are therefore useful in determining construction emphases during Period III.

William Lees, as a part of his nail analysis for the Jotham Meeker Farmstead site, examined two nineteenth-century standing structures to ascertain the functions of various sized nails used in their construction (Lees 1986:95–96). He notes the following correlations:

- 2d - wall and ceiling lath
- 3d - shingling, ceiling lath, thin tongue and groove paneling
- 4d - clapboard siding and shingling
- 5d - light framing of 1-in to 1<sup>3</sup>/<sub>4</sub>-in boards
- 6d - clapboard siding, 1-in-thick exterior trim, 1-in flooring
- 8d - flooring, sheathing, boarding, and exterior trim using 1-in-thick boards
- 10d - sheathing and window trim using 1-in-thick boards.

Extrapolating this information to the JAGA Carriage House is unfortunately of somewhat limited utility, because all but 29 nails from the west end of the South Room were fragments. Complete specimens were 3d (n=3), 4d (n=5), 6d (n=4), 7d (n=5), 8d (n=1), 9d (n=6), 10d (n=4), and 16d (n=1). Virtually no nails of a size appropriate for heavy framing were recovered, leading one to conclude that the portions of the Carriage House that were razed largely included roofing, siding, and light framing elements. The brick fragments from the west end of the structure, as well as the fragmented and complete specimens from the upper deposits of the basement fill, would indicate that portions of a brick chimney or brick wall were removed at this time as well.

#### Period V (1930s to late 1940s)

Five strata are included in this period (SUs 2, 4, 6, 7, and 14). During this period, ownership of the Garfield home and outbuildings was transferred to WRHS. With the demise of the family farm, the Carriage

House ceased to function as a barn. Instead, it became a structure to interpret to the public and a storage area for a variety of materials and objects that could not be stored in the main house. This interpretive/storage function resulted in a relatively small but eclectic sample of artifacts being deposited in strata associated with this period. The major event in the South Room was the installation of brick floors inside the room and the introduction of tile drains on the building exterior from the building's gutters' downspouts.

*Brick Floor.* The brick floor in the South Room is divided into two sections which converge above the basement's west foundation. The materials used and the manner of their construction suggest that these floors were built at two different times. On the east end, the plank flooring and floor joists were removed and a bed of gray sand (SU 4) was introduced into the top of the basement area. This bed of sand provided a flat base upon which to construct the floor. The distribution of the sand layer coincides exactly with that of the basement itself and covers the top of the basement's west foundation. Then a floor of wide paving bricks (SU 7) was laid down. This extends to the outside edge of the basement's west foundation. The widest faces of the bricks are turned up and their long axes are oriented north to south. The bricks are held together with a very sloppily applied soft mortar. The lower faces of the bricks were marked BUCKEYE, a trademark of the Dover Fire Brick Co., Ohio, circa 1930–1942, and the North American Refractories Co., Ohio, circa 1930–31 (Gurcke 1987:210–211).

From the basement foundation west, the floor abruptly changes to a neatly mortared field and paving brick laid on its sides in neat east–west rows (SU 6). The east end of this floor is laid on top of SU 64 rather than on a prepared bed of sand.<sup>6</sup> The remaining portion, from E92.5 west, lies on top of SU 14. The eastern portion of this stratum is fairly uniform in thickness but thins rapidly from E92.5 west. It likely that this stratum, composed of sandy gravel, was considered a good base for the floor and its upper surfaces were simply leveled for that purpose. SU 14 may have been added to the west end to level out the base from E92.5 onward. Bricks used in the construction of the west floor are marked “BUCKEYE/BLOCK” in low relief. No information on this mark has been located, though it is suspected that it is one used by the same manufacturers of the brick used in the east floor section. The separate construction of the two floors indicates that at some point the South Room may have had either a wood floor on its east end and a brick floor on its west or a brick floor on its east end and a dirt floor on its west.

*Artifacts.* Other than the bricks used in the construction of the floors, the only artifacts associated with Period V are those from portions of SUs 4 and 14. Each of these SUs was significantly disturbed by animal burrowing in the southeast side of the room, a factor which makes artifact associations somewhat speculative at best. When obviously intrusive artifacts were excluded, it was clear that only building materials were recovered.

Artifacts from SU 4 include window glass, brick fragments, and mortar chunks. The mean thickness of the window glass from undisturbed portions of the stratum coincides with a date of 1909.2. This would appear to reflect construction activity associated with remodeling of the Carriage House just after the turn of the century.

SU 14 contained a crown cap, fragments of whiteware and porcelain, a lamp chimney fragment, a fragment of pine corner molding, a few pieces of window glass, brick fragments, a few nails of unidentified type, and several specimens of unidentified ferrous metal. The crown cap is a carbonated beverage closure. It had 21 corrugations around its margin, a granulated composition cork liner, and a skirt height of 0.26 in. Together, these characteristics suggest that the cap was used post-1920 to pre-1956 (Bender 1986:22, 24–25). The lamp chimney's rim (Figure 16a) is marked by a crimping tool, a characteristic of chimneys produced circa 1877 to circa 1900 (Woodhead et. al 1984:61–62). The small amount of artifacts does not allow

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<sup>6</sup> SU 64 was assigned to Period IV because it had been intersected by SU 3, a late Period IV post hole situated under the brick floor SU 6.

analysis to determine use areas in the building. However, the crown cap does reinforce the brick dates, providing a not-earlier-than date of 1920.

#### Period VI (1950s to present)

Only two strata, SUs 36 and 99, represent this period, both of which reflect the deterioration of the building during the last forty years or so (Figure 8; Table 14). SU 36 is a dark brown topsoil recorded in South Exterior Unit 2. It has been somewhat disturbed by groundhog burrowing, which has introduced gravel from the basement fill. Modern artifacts in its matrix demonstrate that it is a relatively new deposit at the site. Materials noted during excavation included plastic, rubber, and 2 whiteware ceramic fragments. None of these were returned to the MWAC laboratory.

SU 99 occurred along the south side of the South Room from N99 to N100 and E95 to E100. It consists of a gray, dusty fill above the concrete steps (SU 2) to the door at the southeast corner of the room. The debris had built up 30 cm (12 in) of depth sometime after this entry was abandoned and the door nailed shut. SU 99 completely obscured the steps and lower portions of the door. Materials recovered from this stratum are predominantly modern, with most datable objects from the 1950s. West of the steps, the stratum has been almost totally disrupted by groundhog burrowing, a factor which appears to have introduced some pre-modern objects into the artifact assemblage. The mean thickness of window glass recovered from this stratum correlates with a date of 1924.5, using Moir's correlation coefficient. This date may reflect replacement of window glass on the south side of the building sometime in the mid-1920s. The date itself relates more to Period IV than this terminal period.

#### *North Room*

In the North Room or Stables of the Carriage House, 30.6 m<sup>2</sup> were opened for excavation (Figure 5), resulting in the identification of 52 SUs (Table 14).<sup>7</sup> These were organized using the Harris Matrix system and subdivided into periods based upon construction sequences and temporally diagnostic artifacts from each stratum (Figure 9). Floor construction sequences were then reviewed in an attempt to provide a finer chronological detail for the period when the room actually functioned as part of a working barn (Period IV).

#### Period I (Pre-1885)

As with the South Room, this period is represented by only two SUs (SUs 41 and 40B). The portions of these strata which remained undisturbed from animal burrowing or human activity contained no artifacts. These strata are therefore interpreted as non-cultural levels predating the historic occupation of the site.

#### Period II (Circa 1885–1893)

There is no evidence that the area now corresponding with the North Room was utilized during Period II. The lack of evidence does not mean that the area was not used by the residents of the farm. Instead, it simply reflects the extreme amount of disturbance created during the construction of the Carriage House in 1893 and subsequent alterations to the North Room's interior space.

#### Period III (1893 to Circa 1900)

This period is reflected by thirteen SUs (SUs 16, 40A, 47, 56, 57, 58, 76, 82, 87, 90, 91, 92, and 94). As has been noted for the South Room, this period is initiated with the construction of the frame Carriage House

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<sup>7</sup> This volume includes the re-excavation of backfilled test pits dug by CMNH the previous year.

addition to the Gas Holder. Its terminus is marked by one or more remodeling/expansion actions after the turn of the century which, in the North Room, included subdividing the northern portion of the room into two enclosures, the installation of various floors, and the introduction of the steam pipe and wastewater drainage systems in the building. The review of strata has indicated that the south end of the room, marked by Enclosures A and B, has a different developmental history than the north end. Therefore, each of these areas will be discussed separately.

*South End.* As originally constructed in 1893, the North Room's foundation (SU 16) is essentially the same as that described for the South Room. As the foundation occurs only on the west and north ends of the room, it appears likely that this area was either open, perhaps with a roof supported by stone pilings, or the stone foundations on the east side were removed at some later date. Large stone footers visible under the walls of the Equipment Storage Room, referred to as Area 107 in the Carriage House HSR (Mack 1991:23), lend support to the hypothesis that the east side was open.

Internal stone foundations bound the spaces of four enclosures in the south end of the room. These correspond in part to areas referred to in the HSR as the West Stalls (Area 104), the South Stalls (Area 106), and the Tack Room (Area 103) (Mack 1991:21–22). Enclosures A and B probably conform to the West Stalls, with Enclosures G and H on the east side of the room being the same as the South Stalls rooms. As field time permitted only the exploration of the west side of the room (Enclosures A–D) and portions of the center walkway (Floor Openings 1, 4, and 6), discussion will be limited to these areas alone.

As originally defined, Enclosure A was a space bounded on the south by the north wall of the Tack Room, on the west by the Carriage House west foundations, on the north by a low stone foundation (SU 47), and on the east by the plank flooring that runs north–south through the center of the room. No foundation was visible on the west or south sides, and the area was assumed to have originally served as a small storage room. Nails and harness hooks on the south wall of Enclosure A and the initial recovery of tack in the upper strata of this unit reinforced this conclusion. With excavation and the discovery of a builder's trench (SU 91) and a sandstone foundation (SU 92) under the northwest corner of the Tack Room's concrete floor, however, it became apparent that Enclosure A had once been much larger than it now appears. Further work in this unit revealed that the north end of this foundation had been partially destroyed with the excavation of a trench for a ceramic tile drain (SU 39).

The concrete floor of the Tack Room prevents determination of Enclosure A's original dimensions. One might assume that the south end of the enclosure was bounded by the stone foundation separating the North and South Rooms, as is the case with the stable (Enclosure H) across the aisle. If so, Enclosure A's original dimensions would be about 2.6 m (8.5 ft) north–south by 2.4 m (8 ft) east–west. The original function of this space probably would have been as a stable, and if so, the entrance would be on the south end of the enclosure's east wall across from the entrance to Enclosure H. The entry may continue to exist as a gap in, or a lowered segment of, the foundation under the concrete slab.

Enclosure B is situated immediately north of Enclosure A. It is bounded on all sides by sandstone and concrete foundations (SUs 16, 56, 57N, 57E, and 47). The interior dimensions of this area are 3.26 m (10.7 ft) north–south by 2.25 m (7.4 ft) east–west. The position of the door is suggested by a segment in the east foundation where the upper tier of large sandstone block is missing. A wooden threshold may have existed here at one time. The doorway gap is 86 cm (34 in) wide, with its southern edge about 24 cm (9.5 in) from the enclosure's south foundation (SU 47).

The floors of both enclosures appear to have remained dirt for some time. These are believed to be represented by depressions in the upper surface of natural stratum SU 40. These depressions are marked by a fill which is similar to but somewhat lighter than SU 40, and the boundaries between the two, while occasionally quite clear, are often blurred to nonexistent. For this reason, the stratum corresponding to the floor is labeled SU 40A, with the darker, undisturbed fill referred to as SU 40B.

*North End.* Information recovered during excavations in the north end of the room suggests that this area remained more or less open for some time. Strata associated with this area during Period III include a number of post holes (SUs 82, 87, and 90), a narrow trench and concrete footer (SU 58), a fill level (SU 76), and a small pit (SU 94). SU 94 was only identified as the soil profile of Floor Opening 4's north wall was being mapped. Its function remains undetermined.

Three of the strata (SUs 58, 82, and 90) were aligned on a north-south axis from the approximate middle of Enclosure D to the approximate center of Enclosure C. Rectangular (about 24 cm/9 in x 18 cm/7 in) post holes (SUs 82 and 90) on each end of the alignment were 2.75 m (9 ft) apart. The probable position of another post was marked by a thin (1.5 cm/0.6 in), rectangular concrete footer (31 cm/12.2 in north-south x 13 cm/5.1 in east-west) in trench SU 58. The footer was situated 97 cm (38 in) north of SU 90 and set in the south end of a narrow trench (13 cm/5.1 in wide x 32 cm/12.6 in deep x 50+ cm/20+ in long) underlying a Period IV brick foundation (SU 53). Together, the length of the alignment and the spacing of the post elements suggest a post spacing of about 3 ft. If so, a fourth post may have existed about halfway between post hole SU 82 and the footer in SU 58. Unfortunately, the severity of groundhog burrowing in Enclosure D, especially on the north margin of SU 53 along the alignment axis, prevented determination of whether another post had once existed at the predicted location.

The posts may have functioned partly as roof supports. When considered together, however, the configuration of posts, footer, and trench suggests the position for a wall. If so, the wall would have created a 1.25 m (4.1 ft) space between the divider and the Carriage House's west foundation. The purpose of such a narrow space remains unknown.

A possible post hole (SU 87) was also identified under the brick foundation (SU 53E) just south of Enclosure C's northeast corner. This is quite close to a large sandstone block which may have served as a footer for another roof support. However, very little of the area between Enclosure C and the stables to the east was exposed during excavation, making the function of SU 87 uncertain.

As was the case with the south end of the room, the floors at the northern end are conjectured to be of dirt throughout this period. There is no stratum which represents these floors, although the non-cultural basal material (SU 40) demonstrated a somewhat uneven upper surface. The working assumption that this portion of the room had dirt floors is based more on a lack of evidence than anything else.

The aisle between the stables certainly had earthen floors during Period III. This is suggested by a sandy clay loam cultural stratum (SU 76) situated directly above the natural stratum (SU 40) at the base of the historic period deposits.

*Artifacts.* The earthen floor at the south end of the room was marked by SU 40A. The strata in Enclosure A were severely disturbed by animal burrowing, with the result that materials from that enclosure were excluded from the following discussion.

A number of objects obtained from the upper few centimeters of SU 40 in Enclosure B, Enclosure C, and Floor Opening 6 relate to this period for the most part. Most are construction materials and hardware such as a brick fragment, small mortar fragments, wire and cut nails, a washer, and flat (window) glass. Little can be said about the brick or mortar fragments or the washer at this point.

Although nails were recovered from SU 40 in Enclosures B through D, the preponderance are from Enclosure B. Unfortunately, however, the size of only three specimens could be determined. A 1d cut nail from Enclosure D suggests that this end of the room may have had wall and ceiling laths. Two 6d wire nails from Enclosure B are likely associated with interior trim work.

The bulk of the window glass in this stratum (45 of 59 specimens) was derived from the southwest quarter of Enclosure B, with the next largest number (n=9) from Enclosure A. This conforms with the

current window positions and probably indicates breakage of window glass during the windows' installation or shortly thereafter. This is confirmed by the mean window glass thickness from the most undisturbed sample, derived from Enclosure B, which correlates to a date of 1896.6, i.e., shortly after the construction of the Carriage House.

Two fragments of one or more slate shingles were also recovered in the upper few centimeters of Enclosure B. A slate shingle fragment was also recovered during the CMNH testing of Enclosure C between levels associated with Periods III and IV. The presence of these items reinforces the opinion stated earlier that the Gas Holder and/or Carriage House may have had a slate shingle roof at one time.

A couple of the items were recovered from the margin between SU 40 and the upper and temporally later SU 46, which appears to have fairly late temporal associations. Among the items included in this category are a piece of electrical wire with red plastic insulation, light bulb fragments, cardboard, and fragments of a long-playing phonograph record. This suggests that the upper surface of SU 40 was exposed for some time, perhaps as late as 1930 or even later.

A few personal and domestic items were recovered in the south end of the room also. Included in these categories are a black plastic button from a woman's coat, and three ceramic fragments (1 undecorated whiteware rim and 2 porcelain rim fragments decorated with a green Greek key motif bounded by thin gold bands). The number of objects is so small that no interpretation of their significance is possible.

One small piece of coal and a cinder/clinker/slag fragment were recovered. Objects of unidentified function from the upper elements of SU 40 include curved (bottle) glass fragments, a number of ferrous metal objects, and a few pieces of flat glass greater than 3.2 mm in thickness.

SU 76, an earthen floor in the aisle space, contained a layer of sandstone rubble, severely corroded nails, a fragment of window glass, and miscellaneous pieces of unidentified ferrous metal. The sandstone rubble, nails, and window glass strongly suggest that SU 76 was created during and immediately after construction of the foundations for the Carriage House and stables.

#### Period IV (Circa 1900 to Circa 1930)

As noted under the discussion for the South Room, this period reflects the building's use as a functional barn. The preponderance of cultural strata identified in the North Room are associated with this period, as are the artifacts. Similarly, the North Room living floors of this period contained few materials other than construction materials, a factor which suggests that the floors were kept fairly clean of loose debris.

During this period, the Carriage House was expanded and the interior spaces remodeled. These actions radically altered the character of the North Room. Modifications include the enclosure of the east side of the North Room, construction of four additional stables on the north end of the room, installation of various floors of wood or gravel, and abandonment of the stables on the west side of the room. These actions resulted in the east side of the room being utilized as horse stalls and the transformation of the west side of the room into a work and storage space. Twenty-eight SUs (Table 14) were assigned to this period (SUs 39, 42–44, 48, 49, 51, 52A–C, 53, 54, 55, 61, 62, 74, 75, 78–81, 83–85, 89, 95, and 103). As was the case with the South Room, it was found that no strata were common to both the south (Enclosures A and B) and north (Enclosures C and D) portions of the North Room. This prevents determining the exact temporal relationships of strata from each side of the room. That is, there are essentially two floating relative chronologies associated with this period (Figure 9).

*South End.* Strata associated with this period in the south end of the room (Enclosures A and B) are SUs 39, 42–44, 48, 49, and 95. The relatively small number of strata suggests that this portion of the room was rather constant in its configuration and function.

The floor of Enclosure A throughout this period was apparently dirt and is represented by SU 48. This was disturbed at some point in time by the installation of an east–west ceramic drain pipe through the enclosure. Probing and small shovel tests in the north side of the stall across the aisle (Enclosure H) revealed that this drain continued from Enclosure A under the aisle floorboards and through Enclosure H. The course of the drain was not followed beyond this point, but it is believed that it may terminate somewhere on the south side of the storage room immediately north of the sloped access room (coal room). This suggests that the three rooms numbered 110–112 by Mack (1991:25–26) may have served at one time as a living area for farm hands.

The floor of Enclosure B differs from Enclosure A in that it is made of gravel, as indicated by SUs 44 and 95. Further, Enclosure B is unique in that it had a large circular feature (SU 43) at its center. At the time of the MWAC excavation, this feature appeared as an open semicircle (1.11 m/3.64 ft diameter) constructed of one course of well-worn (rounded), soft brick fragments. The center of the brick enclosure was filled with gravelly mortar, and the entire structure rested upon a prepared base of sand. The feature was the remnant of a circular structure described by Lee (1994:34–35) as Feature 3, the north half of which was excavated by the CMNH crew in 1990. Although the MWAC excavation collected no artifacts from the feature, Lee’s crew cataloged a common brick, cement mortar, and one(?) fragment of a glass lamp chimney. Lee tentatively interpreted the feature as the foundation for a possible small, above-ground cistern which he submits is relatively common in northeast Ohio. Alternatively, the circular structure may have served as a base for an anvil pedestal which was used as a tool in shoeing horses. In either case, the structure would have supported an object which extended vertically for more than a foot or two above the ground surface. This would have precluded the use of the space as a horse stall, and it is likely that Enclosure B was transformed into a work and/or storage space of some kind.

*North End and Aisle.* In contrast to the south end of the room, the north end appears to have had a relatively complex history, with 21 strata (SUs 51, 52A–C, 53–55, 61, 62, 74, 75, 77–81, 83–85, 89, and 103) recorded in this portion of the North Room. Here, Period IV begins with the construction of SU 53, a brick and concrete mortar foundation essentially of the same size and configuration as the stone foundations to the south. The net effect of this construction was to create an additional horse stall (Enclosure C) and a probable storage space (Enclosure D) on the west side of the room. Enclosure D is interpreted as a storage space rather than a stall because no foundation existed on its east side, as is the case with Enclosures A–C. Brick foundations were also built on the east side of the room, resulting in the creation of Enclosures E and F, both of which are horse stalls.

Subsequent to the construction of SU 53, a variety of materials were utilized as flooring in Enclosures C and D. Enclosure C had five floors through Period IV represented by SUs 51, 52A, 52B, 52C, and 89. At the same time, Enclosure D had six different floors of various materials installed throughout the period. These are indicated by SUs 54, 55, 61, 62, 80, and 81. Five floors appear to have been placed in the aisle space through the period, as indicated by SUs 74, 75, 77 and 79, 78, and 84. It is likely that the sequence of floors from one space to another are at least approximately correlated. Unfortunately, artifacts with a tightly restricted temporal frame were not recovered from these strata, a factor preventing more exact temporal positions from being determined. Nonetheless, the fact that each space has the same approximate number of floors suggests that temporal corollaries probably exist from one space to the next. For the sake of descriptive simplicity, then, the floor sequences will be considered temporally similar from one space to another. These are summarized in Table 15 by subperiods A, B, C, D1, and D2 (from earliest to latest) within Period IV.

At some point during subperiods IVA–C, the southern portion of the aisle floor was disturbed. Excavations revealed a somewhat V-shaped trench (SU 85) with a flat bottom with a water pipe at its base. Rodent burrowing was conspicuous throughout various portions of the trench fill. SU 85 first appeared as a north–south trench and pipe in Floor Opening 1. In Floor Opening 4, the pipe and trench were rediscovered, but here the pipe turned ninety degrees to the east to disappear under the concrete floor of Enclosure F. The point of origin and the terminus of the pipe are unknown, but it may have been associated with the steam

heating system or have been a source of water for the horse stalls represented by Enclosures E–G on the east side of the room.

Directly above the trench was a band of mortar (SU 103). Its associations remain uncertain, but it is possible that it is a by-product of the construction of foundations for the horse stall walls of Enclosures E and F. It may also be waste from the pouring of concrete floors in those enclosures.

Finally, at some point in Period IV, a post was installed immediately next to Enclosure B's east foundation at the north side of its door opening. This action is represented by a post hole (SU 83) identified only after Floor Opening 1 was completed. The top of the hole is overlain by SU 73, the material which filtered between the floor boards installed in the aisle during Period V. It is possible that the post was used to support a partially rotted-out post at the entrance to Enclosure B.

*Artifacts.* The actual number of artifacts related to Period IV is somewhat difficult to determine. This is due to substantial pre-excavation disturbance of Enclosures A–D. The exposed portion of Enclosure A and a large portion of the lower strata in Enclosure D were severely disturbed by groundhog activity. Enclosures B and C were disturbed in part by CMNH testing in 1990 using arbitrary levels. The procedures used by CMNH were entirely correct, given the goals of that work. However, like the arbitrary levels used in about half of the MWAC excavations, the data does not generally allow correlation of objects recovered during that effort with strata identified by the MWAC team. This is visually demonstrated by Table 16, which shows correlations between CMNH test units and temporal periods identified in this report. Only the fill from the very lowest levels of the CMNH test pits can be correlated with a single period, i.e., Period III. In recognition of these problems, only those objects which can be assigned to specific strata or a single time period will be addressed.

Artifacts recovered from strata in the south end of the room include architectural construction materials and hardware, fixed lighting, and fragments of thick (over 2.3 mm) flat glass (Table 8). The architecture-related materials were the most common and included 5 window glass fragments, 1 handmade common brick, 13 mortar fragments, and 35 severely eroded nail fragments. The artifact related to fixed lighting consisted of one light bulb fragment.

Many more objects were recovered from the north end of the room, represented by Enclosures C and D. Personal items (Table 6) were rare, consisting only of one brown plastic shirt-size button and an arm from a doll. Somewhat more common were domestic materials, which include a body fragment from a soft drink bottle, 5 fragments of stoneware from three vessels, one fragment of yellowware, and a knife handle fragment (Table 7). Miscellaneous items which may have had a domestic function are a pencil and a shield-shaped brass key tag marked "2" over "TOWER" (Figure 16b). The latter may be the tag for a key to the water tower entrance.

As with the other areas of the structure, building materials (Table 8) are the most common objects represented in the artifact collection from the north end of the room. Among these is a piece of white painted wood, suggesting that the interior woodwork in the stables may have been painted that color at one time. Other building materials recovered include window glass, brick fragments, and mortar and plaster fragments. Most of the window glass was from the west side of Enclosure D, where two windows are located. The mean thickness (TH=2.22 mm) of window glass specimens from the north and south ends of the room correlates with a date of 1902.0. This suggests glass replacement sometime at the beginning of Period IV, perhaps as construction was beginning on the new additions to the building and the interior reconfigurations in the North Room. The brick and mortar fragments are in all likelihood derived from that construction as well.

Construction hardware (Table 8) from the North Room includes cut and wire nails and a fence staple. Most nails were extremely corroded and fragmented, preventing their identification as to type or size. Of 142 specimens recovered, only 11 could be identified as to type, i.e., 5 cut nails and 6 wire nails. Of these, the size could be determined for only three cut nails (3d = 1 specimen, 9d = 2 specimens) and five wire nails

(4d = 2, 7d = 2, 10d = 1). In general, cut nails are of a size commonly used in shingling, ceiling laths, thin tongue and groove paneling (size 3d), and in the construction of sheathing and window trim using 1-in-thick boards. Wire nails are of a size ordinarily utilized in clapboard siding and shingling, and flooring, sheathing, boarding, window trim, and exterior trim using 1-in-thick boards.

The ceramic drain tile fragments were recovered from SU 55, dating to Period IVD1. This association implies that the ceramic tile drain (SU 39) in Enclosure A may have been installed at this same approximate time.

Clumps of horse hair (Table 9) were recovered in the northwest quarter of Enclosure D at a depth of 10–20 cm. The presence of this material may indicate that saddles or other items filled with horsehair padding may have been stored in Enclosure D during Period IV.

A small number of coal fragments and a few pieces of cinder/clinker/slag were recovered throughout Enclosure D (Table 10). It is possible that this material is derived from some light blacksmithing work such as a farrier would undertake. If so, the small amount of material and its scattered nature would imply that a portable forge was used.

Artifacts of this period were also recovered from strata in the aisle space (Tables 6–8, and 10). Personal and domestic items were rare but include a metal pants button labeled “EYEARS/CLEVELAND” around the rim, a beer bottle fragment, and several whiteware ceramic fragments. Architectural items included brick and mortar fragments, cut and unidentified type nails, and a door hook. The brick and mortar fragments are probably associated with the construction of the new interior foundations in the North Room. Nails were of an indeterminate type but included one each of sizes 8d, 9d, and one 10d. The door hook may have come from one of the horse stall doors. As was the case with Enclosure D, the aisle during this period may have had some small-scale blacksmithing work done in or near it using a portable forge. This is suggested by the recovery of small quantities of coal, charcoal, and cinder/clinker/slag fragments.

#### Periods V to VI (Circa 1930 to Present)

With transfer of ownership of the Garfield structures to WRHS, the Carriage House became an object to interpret to the public, and its interior spaces were no longer used to maintain horses and store farm-related materials. The North Room, in particular, seems to have served as the attic of the WRHS facility, where objects and equipment needed to maintain the property and aid in its interpretation were stored. It also served at times as a place where lawn care equipment and tools were maintained. This diverse usage has led to a rather eclectic accumulation of objects in strata associated with these periods.

*Strata.* Only seven strata dating to post-1930 were recognized in the North Room (SUs 31, 45, 46, 50, 73, 88, and 93). Two of these, SUs 31 and 93, represent CMNH test units and one, SU 45, was a large groundhog disturbance. The remaining strata represent the final floors and deposits in the room. Unlike the analysis for the South Room, two periods could not be distinguished for the post-1930 North Room, with the result that Periods V and VI are considered together.

Of the three strata (SUs 45, 46, and 93) in the south end of the room relating to Periods V and VI, only SU 46 relates to the occupational history of the room. Stratum SU 45 is a groundhog disturbance and SU 93 was the backfill of 1991 CMNH Test Unit 20. SU 46, a gravelly loamy sand, represents the last floor in Enclosures A and B. Two strata were also identified at the north end of the room for this period. SU 50 is a gravel floor and SU 31 represents the backfill of 1991 CMNH test units 16–16B. The aisle space also has two strata of this period. SU 88 is the current plank flooring, and SU 73 is silty fill which is the result of dust and debris sifting between the floor boards and filling the spaces between the floor joists.

*Artifacts.* The artifacts in this period’s strata are more diverse and occur in a much higher frequency than those seen in strata from any of the earlier periods (Tables 6–11).

Personal Items. This is the first period that personal materials appear in any number (Table 6). Included in this class of objects are clothing, adornment, and grooming items: a decorated freshwater shell shirt/blouse button, 5 beads of various materials, a small white glass pendant in the shape of an elephant (Figure 17c), and a comb. Pastimes and recreation are represented by fragments of a 78 RPM phonograph record, a gun worm, paper from a magazine or instructional leaflet, and a toy cap gun handle.

The most obvious subclass of materials in the personal materials category consists of items related to indulgences. A paper match recovered from Enclosure D may be associated with smoking. The next highest number of objects related to indulgences are those associated with soft drinks. These include a crown cap and fragments of at least two soft drink bottles, all of which were recovered from the north end of the North Room.

The greatest number of objects related to indulgences, however, are bottles related to alcoholic beverages. Virtually all such bottles recovered are associated with this period. The bases of the whiskey bottles exhibit a “374” within a diamond, the post-1933 mark of the Diamond Glass Co. of Royersford, Pennsylvania (Toulouse 1971:550–552). The shape of the bottles and the few raised labels (“PINT/FULL MEASURE” on the heels) indicate that the bottles originally contained whiskey. Wine is represented by a single bottle fragment from the fill under the plank aisle floor near the center of the room. Similarly, only one beer bottle fragment (the base) was recovered from the south end of the room. This specimen bears the mark “THE CLEVELAND & SANDUSKY” around its margin with “BREWING/CO.” in the center. Friedrich and Bull (1976:214) identify this brewery’s operational period as circa 1903 to 1920.

The location of bottle recovery is interesting in that all soft drink bottles were located in the north end of the North Room. All alcoholic beverage bottles, however, were discarded in the south end of the room, probably reflecting the stigma which would accompany public consumption of alcoholic beverages on a property such as JAGA. It appears that someone with relatively easy access to the Carriage House often drank in the south end of the Stables, a location not easily seen from the outside of the building or from the South Room, where the public had at least occasional access. Consumption of soft drinks would not have been associated with a stigma and could have been consumed in a more visible location.

Domestic Items. Strata of this period also contained more domestic materials than those of any other period (Table 7). This may relate, at least in part, to the change in function of the North Room during the last 60 years of its existence from an active stable to a space largely utilized for storage. Objects regarded as domestic items that were recovered from the North Room are two ferrous furniture casters, fragments from at least two post-1924 milk bottles, fragments of a circa 1900–1920 aqua canning jar marked “[script] Ball\MASON” (Toulouse 1977:6), a one-gallon jar marked with the logo of Plant 2 of the Owens Illinois Glass Co. and dating to 1934 to 1954 (Toulouse 1971:403–406), 3 ceramic fragments (1 whiteware, 2 porcelain), 6 lamp chimney fragments, a hook for a glass Christmas ornament, a pencil, an ink bottle, a washtub ear, a plant tag marked “GER[ANIUM]/Sca[rlet]...,” a spray can nozzle, and an oil cap from a lawn mower.

Architectural Items. As is the case for the previous periods, architectural materials make up the overwhelming bulk of objects recovered from Period V–VI strata (Table 8). These objects are associated with construction materials, construction hardware, and fixed illumination and power.

Construction materials include four pieces of white painted molding (crown, base, corner, and strip), a white painted window sash bar, 568 fragments of window glass, 16 brick fragments, 41 fragments of mortar, a triangular piece of zinc flashing, and 2 white paint chips. The painted molding and the window sash bar, as well as the paint chips, suggest that the interior of the North Room was once much grander than it would appear today. At one time, the interior may have been at least partially finished and, with its coat of white paint, would have been much brighter than the dingy room one sees at present. Little additional can be said for the brick and mortar fragments or the zinc flashing at this point.

The window glass was recovered from all units excavated, with the preponderance from Enclosures A and B. Glass fragments from strata assigned to this period and the first 10-cm levels of each excavation unit were combined and their mean thicknesses determined (TH = 2.24 mm). This data, when used with Moir's coefficient derived from northeastern structures, equates with a date of 1903.81, a point in time which approximates the Carriage House additions and interior remodeling. Strata SU 46 and SU 50 contained enough glass that they were also dated, with SU 46 associated with 1896.6 and SU 50 correlating to 1930.7 (Table 13). This pretty much brackets Period IV and relates to window replacement during that era.

Construction hardware incorporates 157 nails, 5 bolts, 2 nuts, 7 washers, 6 wood screws, a fence staple, and a door bolt. The nails which are not so severely corroded that their type cannot be determined are overwhelmingly wire nails (n=69 specimens). Only a small number of specimens were identified as cut nails (n=6 fragments). Although sizes of the cut nails can not be determined, cut nails continue to be used in small numbers to this day for special construction purposes, such as in flooring. Wire nails occurred in sizes 2d (n=4), 3d (n=5), 4d (n=15), 5d (n=1), 6d (n=9), 7d (n=5), 8d (n=11), and 12d (n=4), with the remaining wire specimens consisting of fragments. Nails which could not be identified as to type included sizes 3d (n=2), 4d (n=5), 5d (n=1), 6d (n=1), 7d (n=2), 8d (n=1), and 16d (n=1). Using the information provided by Lees (1986:95–96) on nail function, it would appear that the nail sizes reflect virtually all aspects of construction, both light and heavy.

Bolts are of various types, including a machine bolt, a lag bolt, a round-head carriage bolt, a stove bolt, and one headless specimen. Objects related to bolts that were recovered are a square nut, a lock nut, 3 lock washers, and 3 flat washers. Some of these objects may have been used in construction, while others may be associated with machinery.

Screws are of the flat-headed (n=3) and round-headed (n=3) varieties. Sizes represented include 2½ – 12 (n=1 flat head), 1½ – 6 (n=3 round head), 1 – 10 (n=1 flat head), and ¾ – 5 (n=1 flat head). These sizes suggest light to medium construction or repair.

Objects associated with fixed illumination and power from the North Room are light bulb fragments (n=30), an “EAGLE 125V OK” 20-amp fuse, and a cable clamp. All of these items were recovered from Enclosures B and C at the center of the room.

Transportation Items. A few objects from the North Room are associated with transportation (Table 9). Among these are a “CHAMPION 7” spark plug, a sidesaddle stirrup (Figure 19a), a center clip from a wagon/buggy, a wagon/buggy brake or pole spring fragment, a harness snap, a box rod nut from a wagon, and a horseshoe nail. These items reflect the early association of the room with horse transportation through the first decades of automotive transport.

Other Items. Additional objects recovered in the north room were 7 small pieces of coal, 7 cinder/clinker/slag fragments, a 1912 U.S. dime, and a fragment of a white museum sign. Little additional can be said about these objects (Tables 10 and 11).

### *Exterior Tests*

The five test units placed around the margin of the Carriage House were a quick and dirty means of determining some of the downspout drain locations, examining construction changes in the Carriage House's south foundation, and clarifying the form and function of a small stone structure attached to the south foundation of the Carriage House.

### Northeast Exterior Corner

This unit was situated at the northeast corner of the addition at the east side of the North Room (Figure 5). The purpose of this unit was to determine whether a structure had once been appended to the northeast corner of the Carriage House. Evidence for such a structure could consist of such things as a foundation, foundation remnant, soil stains, or differential artifact deposition suggesting a wall or shallow foundation. Despite careful removal of fill to 80 cm below the ground surface by shovel-shaving and troweling, no evidence for a structure was discovered.

The secondary purpose for digging this unit was to determine the flow direction of a subterranean rain water drain at this location. The mouth of the vertical tile drain was visible at the surface in this unit and is assumed to have once served as the terminus for a downspout connected to the northeast corner of the frame addition. At a depth of about 80 cm below the ground surface, the vertical drain was observed to be attached to a 90 degree elbow which turned to the west-northwest. Although available field time prevented following the drain to its terminus, it was directed toward the main drain that runs north-south through the middle of the park.

A paving brick fragment marked “BUCKEYE/BLOCK” (not collected) was at the base of the tile drain. This is the same kind of block used to make the brick floor which covers the western two-thirds of the Carriage House’s South Room. These bricks were probably manufactured by the Dover Fire Brick Co., Ohio, circa 1930–1942 or the North American Refractories Co., Ohio, circa 1930–31 (Gurcke 1987:210–211). Since the brick lay under and supported the ceramic drain tile, the installation of the tiles must have occurred sometime after 1930, possibly as a result of repairs made by the Garfield heirs during the early 1930s or after 1935 when the property was donated to the Western Reserve Historical Society.

In addition to the brick and drain tile in this unit, a number of artifacts were recovered (Tables 6–9, 11). These include a hinged compact of thin, stamped cupric metal; a tin lid with wire-reinforced rim possibly for use with a boiler; 7 slate shingle fragments; 5 window glass fragments; 4 wire nails and 22 severely corroded nails of uncertain type; 2 homemade wire pipe supports (for hanging the gutters prior to the establishment of the tile drains?); 2 chrome strips (decorative trim from an automobile ?); a ferrous metal fitting with sliding adjustment (possible wagon part?); a possible fastener of unidentified application; and 16 specimens of unidentified ferrous metal.

Of these, the most interesting objects are the fragments of slate roof tiles recovered from this unit. There are no structures with slate tiles at JAGA today. Earlier in this report, it was noted that a number of slate roofing tile fragments were recovered in the South and North Rooms in 1990 and 1991. The occurrence of these tiles suggests one of two things: that portions of the Carriage House and/or Gas Holder once had a roof of this material or an earlier structure at this location had a slate roof.

### Northwest Exterior Corner

This test unit (Figure 5) was dug to determine whether or not a gutter drain had existed at the northeast corner of the North Room. No evidence for a drain was discovered. Only modern wood, tar paper, and brick fragments were noted during the excavation. As this was the same as the materials piled on the surface of the ground at this location, none of the materials were collected.

### Southwest Exterior Corner

This unit (Figure 5), placed over the mouth of a vertical ceramic drain tile protruding from the ground, was explored to see if this tile represented a gutter drain and, if so, determine the flow direction of the drain. After a brief period of exploration the tile was observed to turn toward the southwest, presumably toward the large, abandoned, north-south drain that runs through the center of the park.

During the excavation of this unit, a number of artifacts were recovered (Tables 7–9, and 11). Among these were a ferrous butt hinge, a fragment of a garden rake, 1 window glass fragment, a rebar section, 2 severely corroded nail fragments of unidentified type, a horseshoe and horseshoe fragment, a cupric buggy canopy rivet, a railroad spike, a tin can rim fragment, a ½-in-wide flat band of ferrous metal, and 10 other specimens of unidentified ferrous metal. The railroad spike was probably brought to the site from the New York Central R.R. tracks, about ½ mile to the north. The remainder of these objects relate to the purpose and function of the Carriage House: i.e., tool and supply storage, equine husbandry, and storage/repair of horse-drawn vehicles. All of these functions, save equine husbandry, have continued to the present.

#### South Exterior Unit 1

This test unit was located 1.3 m west of the doorway on the south side of the South Room (Figure 5). The purpose of this unit was to examine and document the exterior of the Carriage House's south foundation at the juncture of the shallow and deep foundations.

The exterior of the foundation has a mortared cobble face with loose cobbles thrown in or packed into a builder's trench. The main portion of the foundation consists of two segments, each built of coursed cobble limestone. The west foundation segment is the relatively shallow foundation seen under most of the Carriage House's South and North Rooms. At a point corresponding with the west wall of the Carriage House cellar, the foundation suddenly plunged to an unknown depth. Excavations inside the structure suggest that it may go as deep as 2.7 m (8.9 ft) below the current ground surface. No artifacts were recovered during this work.

#### South Exterior Unit 2

The purpose of this test unit was to document a small rectangular foundation on the outside of the building foundation (Figure 5). This structure may be the remnants of the basement entryway associated with an opening (SU 33) in the building's south foundation. The structure is described above with the discussion for the South Room, Period III.

## Conclusions

From May 28 through July 1, 1991, an MWAC archeological crew conducted salvage excavations at the JAGA Carriage House/Gas Holder structure. This structure is slated for renovation and restoration in the near future as the new JAGA Visitor Center. Excavations were required because tests in 1990 by CMNH indicated that significant archeological materials existed in and around the structure which would be destroyed by the upcoming construction.

The scope of work was delimited by the construction impact area, the depth of the deposits, and the amount of funding available to conduct the investigation. The entire structure is expected to be impacted. However, the fieldwork had to be restricted in scope due to the extremely large horizontal space enclosed by the structure, the depth of the known deposits in some locations, and a funding level allowing five weeks of fieldwork. The investigation was therefore restricted to the oldest portions of the Carriage House, i.e., the brick-floored South Room or Carriage Storage area, and the North Room or Stables. Other questions were addressed by placing several small exploratory pits around the perimeter of the building.

Given the amount of fill removed, surprisingly few artifacts were recovered, a factor which suggests that the building was well maintained during its active life as a farm structure. Despite the lack of artifacts, the fieldwork resulted in a number of discoveries which clarify the evolution of the Gas Holder structure and Carriage House. Among the most important of these was the discovery of a massive stone foundation whose boundaries correspond with the brick and softer mortar floor at the east end of the South Room. This was found to enclose a basement, once a part of the Gas Holder structure.

Prior to the MWAC crew's exploration of the Carriage House, there was a minor controversy relating to the apparent discrepancies in the building's reported foundation depths. The 1990 CMNH archeological crew reported a very deep stone foundation, while architectural consultants indicated that "none of the foundations appear to extend below the frost line" (Mack 1991:12). As indicated by the CMNH tests, the Gas Holder had once extended much further to the west than is apparent from the surface today. The west end of that structure had a basement which, of course, required a very deep foundation. The foundation for the Carriage House was abbreviated at the terminus of the basement about 4.6 m from the brick wall dividing the Carriage House from the Gas Holder. The consultants had placed their test pit about 0.8 m west of that point. Their other pit, under the Gas Holder itself, was not excavated below a cobble "shelf." This shelf was identified in various other places on the upper exterior portion of the deep foundation, projecting beyond the actual foundation to the point that it can be confused with the foundation itself. The Gas Holder foundation may actually be as deep as the portion identified a few meters to the west.

### *Developmental History*

#### Period I (Pre-1885)

This is essentially the era predating the construction of the Gas Holder and Carriage House. The strata assigned to this period are the result of natural soil building processes and, when undisturbed by animal or human activity, contain no artifacts.

#### Period II (Circa 1885–1893)

This period is reflected only in the easternmost portions of the South Room. It is initiated by the construction of the Gas Holder sometime around 1885 and ends with the construction of the Carriage House addition to the Gas Holder building in 1893.

Today, the only above-ground element of this structure remaining is the Gas Holder. Archeological excavations determined that the original Gas Holder building was almost twice the size of the Gas Holder alone, 40 ft east–west by 26 ft north–south. Only the western portion of this 1885 structure was explored. No excavations took place in the Gas Holder itself. Nevertheless, Mack’s (1991:109) proposal that the original structure was symmetrical and octagonal in outline is contradicted by the archeological evidence for an asymmetrical building with a rectangular west end (Figure 21). The recovery of a number of slate roofing tile fragments in contexts predating the Carriage House suggests that the Gas Holder building may have originally had a slate roof.

The Gas Holder’s east foundation is composed of 10 courses of roughly shaped sandstone block bound by a hard mortar. It is 2.67 m (8.76 ft) from the top of the sill to the base, and it varies in thickness from 58 to 79 cm (22.8–31.1 in), with an average width of about 70 cm (27.6 in). The bulk of the sandstone block used in its construction is roughly shaped into rectangular blocks, each of a unique size. The faces of the blocks’ interior surfaces and those exposed above ground on exterior surfaces are well-shaped and often flat. Below ground, the exterior block surfaces are more often very irregular, with the upper exterior foundation composed of rounded river/stream cobble bound with mortar.

The west end of the Gas Holder building had a spacious basement and first floor. The basement foundations enclose a space about 15 ft (4.6 m) by 25 ft (7.6 m) in size. Together, the ground floor and basement would have provided 750 square feet (70 square meters) of storage space. Assuming that the walls of the western end of the building were identical in height to those of the Gas Holder (about 7 ft/2 m), the ground-level room would have a minimum capacity of 5,250 ft<sup>3</sup> (140 m<sup>3</sup>).

This ground-level room had a wooden floor which was built just above ground level (about 10 in/25 cm). The raised position of the floor suggests that a low porch may have once existed just outside the entryway to this room. Unfortunately, field time precluded testing this hypothesis. East–west joists (2 in x 12 in) for the floor were spaced 25 to 26.5 cm (about 10 in) apart. The east ends were held in place by slots in a brick wall separating the west room from the Gas Holder. The method of securing the west end is uncertain. These joists supported a floor of wide planking oriented north to south. The location of the entryway to this room remains unknown.

The foundations of the west end of the building enclose a basement deep enough (2.67 m/8.76 ft) for even a tall person to easily stand upright in. There is some evidence that this space may have had a wooden floor as well. Access to this space may have been through an opening near the southeast corner of the south building identified as a crawl space by Mack (1991:13). The opening is interpreted in this report as evidence for a stairway into the basement. It is located 3.2 m (10.5 ft) west of the wall separating the basement from the Gas Holder. A small, barred window was built into the north foundation opposite this entrance.

The east end of the Gas Holder obviously was used to store natural gas for use in gas lights in the Carriage House and Lawnfield and may have been used for cooking as well. The function of the west end is somewhat problematic. Virtually no artifacts were identified in the basement fill, precluding an artifact-based functional analysis. It is likely that the basement was used as a fruit cellar, and the first floor functioned as storage for very heavy items such as sacks of feed, bales of hay, and/or buggies and wagons.

### Period III (1893 to Circa 1900)

This period is represented by deposits in both the South and North Rooms. It begins with the construction of the Carriage House addition to the Gas Holder building and ends with the approximate date of a major remodeling and expansion of the Carriage House sometime just after the turn of the century. The floor plan of the structure during this period is illustrated in Figure 22.

*South or Carriage Room.* Little is known about the original interior configuration of the Carriage House’s South Room, and most of the assumptions about the space are based upon negative information. As

there is no evidence for their abandonment, it is assumed that the Gas Holder's basement and wood ground-level floor were incorporated into the east end of the South Room. Stone from the razed portion of the Gas Holder may have been recycled to build the Carriage House's foundation. There is also evidence that the west end of the room had a linear obstruction of some kind, probably a wall. This wall was supported by posts on flat stone footers and oriented northeast to southwest, approximately under a timber arch truss visible in the ceiling space of the room. Floors on either side of the divider were dirt. No artifacts were recovered from strata assigned to this period.

*North Room or Stables.* During Period III, the North Room or Stables had four enclosures which served as horse stalls on the south end of the room. These had earthen floors and faced each other across an earth-floored aisle. All foundations are of stone as in the rest of the original portions of the Carriage House. A few personal and domestic items were recovered from the south end of the room. Most objects, however, are construction and building materials, which are in all probability derived from erection of the Carriage House. This is supported by a window glass date of 1896.6 from the lowest occupational levels of Enclosure B. The north half of the North Room was open. Occasional post holes exist which probably represent early roof supports. In the northwest corner of the room, a north-south alignment of two post holes and a narrow trench containing a concrete footer for a post were identified. This alignment may represent the location of a wall. Other roof supports in the eastern portions of the room are represented by large blocks of sandstone embedded in later brick or cement foundations. Their positions suggest that the eastern portion of this roofed-over area was open, perhaps an open-air area for working with horses or storage of wagons and hay.

#### Period IV (Circa 1900 to Circa 1930)

This period was initiated with major remodeling efforts in the interior of the Carriage House accompanied by structural additions to the north side of the South Room and east side of the North Room (Figure 23). Steam heat, water pipes, and water drains were added to the structure during this era, and it is likely that electricity was installed in this period as well. The Carriage House continued to function as a barn for storing wagons, buggies, and equipment and as a workplace where laborers tended the horses. Strata assigned to this period produced most of the artifacts recovered from the site. However, the living floors of this era contained few materials other than some construction materials, a factor which suggests that the floors of both rooms were kept fairly clean of loose debris.

*South or Carriage Room.* The stratigraphic data point to the likelihood that dirt floors and a northeast-southwest wall existed on the west end of the South Room during Period IV. There was also some evidence for variations in human or large mammal foot traffic on either sides of that wall near the center of the room. For some time, the amount of foot traffic was approximately equal on both sides of the divide. Later in the period, pedestrian activity continued on the northwest side of the wall (west of the post hole SU 3), while the southeast side experienced much less foot traffic. The reasons for this are unclear, but it is possible that the enclosure on the southeast side of the wall was being used in a more passive way at the end of Period IV. An example of passive utilization of space would be long-term storage of equipment or materials.

With remodeling and expansion of the Carriage House, the basement was abandoned and filled with gravel. Materials from the newly razed portions of the building were then dumped on top of the gravel fill. The wood floors may have been put back in place after the basement was filled. Building materials recovered from the top of the basement fill and from a small waste dump at the southwest corner of the South Room are from lightly framed portions of the building, roofing, and siding. Apparently, no heavy structural elements were removed in conjunction with the remodeling/expansion. There is also evidence that a brick structure was at least partially removed.

*North Room or Stables.* At the beginning of Period IV, this portion of the Carriage House was remodeled. The open "shed" on the east side was closed off or narrowed by the construction of three stables (represented by Enclosures C, E, and F) on the north end of the room. These had brick and mortar foundations. Enclosure D, established with the construction of Enclosure C, may have functioned as a

storage and work space. A circular feature of brick and mortar in Enclosure B indicates that this may have been the work space of a farrier or served as a storage space for water and other supplies for the horses. Although the function of Enclosure A remains uncertain, it is likely that this too was converted to a storage location.

Various wood or gravel floors were installed throughout the period. The floors of Enclosures A and B were little changed throughout this period, as they were consistently of dirt or gravel. The north end of the room and the aisle, however, witnessed a number of changes. Five to six different floors are suggested in the archeological record for Enclosure C, Enclosure D, and the north–south aisle space between the stalls. The period is also marked by the abandonment of the stables on the west side of the room at some indeterminate point in time during this period, establishing that side of the room as a work and storage area. It is also likely that the concrete-floored storage room on the south end of the Stables was created during this period of time, partially covering Enclosure A in the process.

#### Periods V–VI (Circa 1930 to Present)

During this period, ownership of the Garfield home and outbuildings was transferred to the WRHS. With the demise of the family farm, the Carriage House ceased to function as a barn. Instead, it became a structure to interpret to the public and a storage area for a variety of materials and objects that were not wanted or needed in Lawnfield. This interpretive/storage function resulted in a relatively small but eclectic sample of artifacts being deposited in the strata of the South Room and a larger, but similarly diverse, number of objects in the North Room during this period. Archeological conditions in the South Room permitted the separation of Period V from Period VI. This was not the case for the North Room, resulting in the necessity of lumping these two periods together.

*South or Carriage Room.* The major event during Period V in this portion of the Carriage House was the installation of brick flooring inside the room (Figure 4) and the introduction of tile drains on the building exterior from the building’s gutters’ downspouts. The sequence of brick floor installation remains uncertain. On the one hand, it is possible that the plank floor on the east end was removed and a brick floor installed. The floor at the west end of the room may have continued to be of dirt for some time prior to the installation of a brick floor in that area. Conversely, the brick floor on the west end could have been laid first, with the plank flooring on the east side continuing in use for a time.

During Period VI, the South Room was allowed to deteriorate. This is demonstrated by significant groundhog burrowing in the southeast corner of the room. It also evidenced by the buildup of a gray, dusty fill above the concrete steps to the door at the southeast corner of the room. That debris had accumulated sometime after this door was nailed shut, completely obscuring the steps and lower portions of the door. Materials recovered from this stratum are predominantly modern, with most datable objects associated with the 1950s.

*North Room or Stables.* Very few physical changes took place in the North Room during Periods V–VI. Gravel was brought into all the enclosures to create the final floors in those spaces, and a plank floor was installed in the north–south aisle through the center of the room. The room’s function changed from horse husbandry to storage and, with this, cleaning and maintenance of the room declined. As the room was a storage facility, it was largely out of the public purview. Lawn equipment and other items incidental to the museum were stored here, and many items recovered in this period’s strata suggest that the North Room became a minor refuse disposal location as well. The room declined in appearance, and animal burrowing under the floors became a serious problem. Finally, it appears that the secluded room was used by someone as a place to surreptitiously drink whiskey, with the broken bottles disposed in the least visible portion of the room, the southwest corner. All of these actions resulted in a build up of debris through this period in the North Room.

### *Investigative Goals: Summary of Results*

The goals of the 1992 fieldwork were to address a number of issues raised by the DSC historian and by architectural consultants to the NPS. Conclusions drawn from the archeological evidence are summarized.

#### Gas Holder

See the discussion for Period II above.

#### South Room Brick Floors

See discussion for Period V above.

#### North Room Originally Enclosed on its North End?

No archeological evidence was discovered which would suggest otherwise. A review of the stone foundations indicated no discontinuity on this end of the room.

#### Northeast Corner Addition

A small rectangular room was proposed as an addition to the northeast corner of the Carriage House in the 1900 development plan map for the Garfield farm. Archeological excavations at that location revealed no evidence for this wing, and it must be assumed that it was never constructed.

#### Resources Below South Room Brick Floor

Considerable archeological resources exist under the brick floors, as is noted above. These include evidence for walls, dirt floors, a massive stone foundation, a basement, a stairwell entrance, a basement window, and two wooden floors. See the discussion for Periods III and IV for further details.

#### Construction Sequence and Progression of Additions

Only the general construction sequences for the west end of the Gas Holder and Carriage House's South and North Rooms were investigated by the archeological team. No effort was made to confirm the construction sequences of the northeast additions suggested by Mack (1991). The sequence of events presented in the HSR is essentially correct. Nevertheless, the archeological inquiry has been able to increase the level of detail presented in the HSR, particularly with regard to alterations in the structure's interior. The historical archeology of the Carriage House resulted in the definition of the six periods which have been described above.

#### Drainage System

Three excavation units (Northeast Exterior Corner, Northwest Exterior Corner, and Southwest Exterior Corner) were placed at exterior corners of the structure to determine the presence or absence of drains at those locations and the direction(s) into which those drains emptied. No drain was discovered at the Northwest Exterior Corner, and there was no evidence that one had ever existed at this location. Vertical ceramic tile drains were identified at the other two locations, and these connected to similar tiles which once carried water from the Carriage House roof toward the north-south main drain running through the center of the park. It is assumed that they connect to this drain, although this assumption was never tested. In addition, ceramic drain tiles were discovered in the South Room and North Room, Enclosure A. Both appear to flow toward the north-south main drain as well.

## “Crawl Space”

As noted earlier, the opening in the north and south foundations of the South Room were interpreted as a window and stairwell into the circa 1885–1893 Gas Holder structure’s basement, rather than as a crawl space as indicated in the Carriage House HSR. The stairwell was abandoned with the construction of the Carriage House. No evidence for a crawl space was discovered.

## Wood Floors

As previously noted, a wooden floor had once existed under the brick floor at the east end of the room. Evidence existed for a ground-level floor of wood and perhaps a wooden basement floor as well. The floors were originally associated with the Gas Holder structure but may have been retained after the construction of the Carriage House addition. Additional evidence for wooden floors was recovered in the North Room. These are described in the discussions for Periods V–VI above.

## Building Hardware

Very little building hardware other than nails and other fasteners was recovered during our excavations. Other categories of building hardware included ceramic insulators for electric wires and cable clamps.

## Lightning Rod Cable Grounds

No lightning rod cable grounds were identified.

## Extent and Sequence of Flooring in North Room

See Table 15.

## Extent of Gas Holder’s Deep Foundation

See discussion for South Room, Period II.

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Table 1. Personal materials recovered from the South (Carriage) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Footwear</u>					
N102-E90	0-10 cm	3	Shoe fragment	III-V	Stitched shoe insole fragment
<u>Adornment</u>					
N99-E98	SU 99	1	Bead	VI	Plastic, fluorescent orange, round, faceted
N99-E98, W. Ext.	10-20 cm	19	Pin fragment	IV-VI	S-shaped, white base metal decorated with 3 round glass “jewels” at each end and 3 rectangular glass “jewels” at center (Figure 17b)
<u>Body Ritual and Grooming</u>					
N102-E92 to E94	SU 1	37	Shaving brush	IV	3 mendable fragments of hollow bone handle (Figure 16c); hole in handle for fastening bristles with pin; oval plug for capping hollow end. Similar to handles in Sullivan (1986) and Montgomery Ward (1969a:103)
<u>Indulgences</u>					
N102-E96	SU 4	29	Cigarette filter	?	2 specimens; removed from collection; groundhog disturbed
N104-E96	SU 4	30	Cigarette filter		1 specimen; removed from collection
<u>Pastimes and Recreation</u>					
N99-E98	SU 99	1	Toy	VI	Gray rubber nose of circa 1950s paper cap firing rocket with ferrous, spring-loaded firing pin
		6	Gun worm		Tip

Table 2. Domestic materials recovered from the South (Carriage) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Furnishings</u>					
<i>Furniture</i>					
N99-E95	SU 4	24	Ceramic plaque	?	Rectangular (1.87 in x 6.48 in) with decalcomania romantic scene under clear glaze on exterior (Figure 20); unglazed back impressed with "406"; suggested date of circa 1860-1900 (personal communication, 1992, Dean Zimmerman, Curator, Western Reserve Historical Society, Cleveland); groundhog disturbed
N106-E96	SU 28	56	Butt hinge	IV	Ferrous; 2.43 in long x 1.75 in wide; 6 mounting holes; 5 wood screws, 1 cupric repair screw; used in "cabinet work, china closets and doors" (Montgomery Ward 1969a:598)
<i>Decorative</i>					
N100-E90	10-20 cm	40	Flower pot	IV-V	2 unglazed redware fragments. Rim = 2.5 in diameter; base = 2 in diameter
<u>Food and Drink</u>					
N99-E95	0-20 cm	35	Crown cap	?	Carbonated beverage closure; corrugations (n=21), granulated composition cork liner, and skirt height (0.26 in) suggest date of post-1920 to pre-1956 (Bender 1986:22, 24-5); groundhog disturbed
N99-E98	SU 99	1	Crown cap	VI	Carbonated beverage closure fragment; plastic liner and skirt height (0.26 in) suggest mid-1950s (Bender 1986:25)

Table 2. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Housewares and Appliances</u>					
<i>Culinary</i>					
N99-E98	SU 99	1	Stoneware lid	VI	6 fragments; 11.5 in diameter with very dark brown glaze on interior and exterior surfaces
N102-E90	10-20 cm	10	Stoneware bottle	III-IV	1 fragment with unglazed interior and clear glazed exterior with red painted design over glaze
	20-30 cm	16	Stoneware	IV	1 fragment with salt glazed exterior, dark brown interior glaze
<i>Gustatory</i>					
N99-E98	SU 99	1	Coffee cup	VI	13 fragments of 1950s era yellowware vessel decorated with gray and black floral design and orange band at lip
		5	Coffee cup		2 fragments of 1950s era vessel (same as above)
		6	Coffee cup		2 fragments of 1950s era vessel (same as above)
N100-E90	SU 14 & 17	39	Cup	IV-V	Whiteware base
		?	?		Porcelain with handpainted cobalt blue oriental decoration
N102-E90	0-10 cm	3	?	III-V	Whiteware rim
	10-20 cm	10	?	III-IV	Whiteware
	20-30 cm	16	Cup	IV	Porcelain base
N102-E92 to 94	SU 1	37	?	IV	Green transfer printed whiteware; impressed "WEDGWOO..." and green transfer printed "6" on back; mark is temporally nondiagnostic
					Porcelain basal fragment with unidentified green printed maker's mark "[H or M] & C <sup>o</sup> /L"
N102-E96	SU 4	29	Cup fragment	?	Styrofoam; removed from collection; groundhog disturbed
N104-E90	0-78 cm	44	Cup	III-V	Porcelain base decorated with gold band around foot; maker's mark in red "[script]S 1613/I"
N106-E97	0-10 cm	38	Saucer	IV-V	Porcelain scalloped rim

Table 2. Concluded.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Portable Illumination</i>					
N99-E89	SU 14	26	Lamp chimney	V	1 fragment of crenulated rim (Figure 16a); soda-lime glass; margin made with hand-held crimping tool. Dates circa 1877 to circa 1900 (Woodhead et al. 1984:61-62)
N102-E96	20-30 cm	32	Light bulb	?	Screw-thread flashlight bulb; no manufacturer labels; modern; groundhog disturbed
	50-70 cm	34	Light bulb	?	Screw-thread flashlight bulb; no manufacturer labels; modern; groundhog disturbed
<i>Household Pastimes</i>					
N99-E98	SU 99	1	Phonograph record	VI	5 fragments of vinyl LP; removed from collection
		5	Christmas ornament		1 magenta fragment of blown glass tree ornament
		6	Christmas ornament		1 magenta fragment of blown glass tree ornament
102-E98	0-10 cm	4	Christmas ornament	VI	1 magenta fragment of blown glass tree ornament; recent disturbance?
<i>Cleaning and Maintenance</i>					
N99-E98	SU 99	6	Ferrule	VI	Used with screwdriver or similar hand tool
N102-E96	SU 4	29	Garbage bag	?	Numerous fragments; removed from collection; groundhog disturbed

Table 3. Architecture materials recovered from the South (Carriage) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Construction Materials</u>					
<i>Shingles</i>					
N99-E98	120-140 cm	21	Slate shingle	IV	1 fragment
N102-E96	SU 12	25	Asbestos shingle	IV	1 fragment; post-1920 (Montgomery Ward & Co. 1969b:633)
<i>Lumber/molding</i>					
N99-E98	SU 99	1	Window frame frag.	VI	Wood
N100-E90	SU 14 & 17	39	Corner molding	IV-V	Plain pine, shield-shaped cross section
N102-E96	SU 60	84	Wood	II	Many small fragments; remnants of basement floor?
N104-E96	SU 13	28	Window frame frag.	IV	Wood
<i>Window Glass (flat glass under 2.30 mm thickness)</i>					
N99-E89	SU 14	26	5 specimens	V	
N99-E95	0-20 cm	35	—	?	26 specimens; groundhog disturbed
N102-E96	SU 4	29	2 specimens	?	Groundhog disturbed
N104-E96	SU 4	30	1 specimen	?	Groundhog disturbed
N99-E98	SU 99	1	—	VI	16 specimens
		5	—		7 specimens
		6	—		2 specimens
N99-E98, W ext.	10-20 cm	19	—	IV-VI	3 specimens
N100-E90	0-10 cm	39	3 specimens	IV-V	
N100-E90	10-20 cm	40	—	IV-V	1 specimen
N102-E90	0-10 cm	3	—	III-V	2 specimens
	10-20 cm	10	—	III-IV	2 specimens
N102-E96	20-30 cm	32	—	?	2 specimens; groundhog disturbed
N102-E98	10-20 cm	8	—	V-VI	2 specimens
	30-40 cm	11	—	IV	1 specimen

Table 3. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Window Glass (continued)</i>					
N104-E96	SU 13	22	—	IV	666 specimens
		28	—		210 specimens
		33	—		7 specimens
N106-E97	0-10 cm	38	—	IV-V	2 specimens
<i>Bricks*</i>					
N104-E96	SU 13	28	Common/face brick	IV	Red; 20 x 9 x 5.5 cm; manufactured from stiff mud; side cut with 2 equal perforations (Gurcke 1987:97-128)
N106-E96	SU 28	56	Common/face brick	IV	Red; 19.5 x 9.5 x 5.5 cm; manufactured from stiff mud; side cut with 3 unequal perforations (Gurcke 1987:97-128); one of several collected
			Face brick		White with black inclusions; 20.5 x 9.5 x 5.5 cm; manufactured of stiff mud; side cut with 10 equal perforations; textured face (Gurcke 1987); one of several collected
NE Exterior Corner	68-100 cm	---	Paving brick	V	Not collected; identified in field notes; "BUCKEYE/BLOCK" on one face; probably made by Dover Fire Brick Co., Ohio, ca. 1930-1942 and North American Refractories Co., Ohio, ca. 1930-31 (Gurcke 1987:210-211); should date installation of ceramic drain tiles to rain gutter
W. End, South Room	SU 6	---	Paving brick	V	Floor of paving bricks; no specimens collected; red; same "BUCKEYE/BLOCK" brick identified in Northeast Exterior Corner at 68-100 cm

\* Only samples collected; weights and numbers do not accurately reflect the actual volume of materials in the stratum or level fill.

Table 3. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Bricks* (continued)</i>					
E. End, South Room	SU 7	---	Paving brick	V	Floor of paving bricks; no specimens collected; red; marked "BUCKEYE" a trademark of the Dover Fire Brick Co., Ohio, ca. 1930-1942 and the North American Refractories Co., Ohio, ca. 1930-31 (Gurcke 1987:210-211)
N99-E95	0-20 cm	35	Brick	?	1 fragment weighing 3.4 gm; groundhog disturbed
N99-E98	20-30 cm	31	Brick	?	3 fragments weighing 7.8 gm; sample retained; groundhog disturbed
N100-E90	10-20 cm	40	Brick	IV-V	2 fragments weighing 5.3 gm; sample retained
N102-E90	0-10 cm	3	Brick	III-V	2 fragments weighing 1.7 gm (in separate bags)
	10-20 cm	10	Brick	III-IV	6 fragments weighing 147.2 gm; sample retained
	20-30 cm	16	Brick	IV	3 fragments weighing 6.1 gm; sample retained
	30-40 cm	17	Brick	IV	14 fragments weighing 69.6 gm; sample retained
N102-E96	SU 4	29	Brick	?	Many brick fragments from floor (SU 7) above noted at top of unit; none collected; groundhog disturbed
	SU 59-60	89	Brick	II	2 fragments weighing 0.5 gm; sample retained
		90	Brick		2 fragments weighing 2.6 gm; sample retained
N104-E96	SU 12	33	Brick	IV	1 fragment weighing 2.3 gm
	SU 13	28	Brick	IV	1 fragment weighing 1892.0 gm
N106-E96	SU 28	56	Brick	IV	2 fragments; 1 red fragment = 1706.5 gm, 1 white fragment = 1982.0 gm
<i>Mortar *</i>					
N99-E98	Level 3	31	Mortar	?	1 fragment weighing 32.0 gm; groundhog disturbed
N100-E90	10-20 cm	40	Mortar	IV-V	2 fragments weighing 2.3 gm; sample retained
N102-E90	SU 3	12	Mortar	IV	1 fragment weighing 5.4 gm

\* Only samples collected; weights and numbers do not accurately reflect the actual volume of materials in the stratum or level fill.

Table 3. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Mortar* (continued)</i>					
N102-E90	0-10 cm	3	Mortar	III-V	10 fragments weighing 26.8 gm; sample retained
	10-20 cm	10	Mortar	III-IV	7 fragments weighing 88.2 gm; sample retained
	20-30 cm	16	Mortar	IV	5 fragments weighing 2.0 gm; sample retained
	30-40 cm	17	Mortar	IV	1 fragment weighing 0.8 gm
N102-E94	SU 5	14	Mortar	IV	1 fragment weighing 1.7 gm
N102-E96	SU 4	29	Mortar	?	Many mortar fragments from floor (SU 7) above noted at the top of this unit but not collected during excavation; groundhog disturbed)
	SU 12	25	Mortar	IV	6 fragments weighing 30.8 gm; sample retained
	SU 59-60	89	Mortar	II	11 fragments weighing 47.7 gm; sample retained
		90	Mortar		10 fragments weighing 26.1 gm; sample retained
	20-30 cm	32	Mortar	?	1 fragment weighing 4.1 gm; groundhog disturbed
	N104-E96	SU 4	30	Mortar	V
SU 12		33	Mortar	IV	1 fragment weighing 11.4 gm
SU 13		28	Mortar	IV	1 fragment weighing 418.6 gm
<i>Miscellaneous</i>					
N99-E89	SU 17	27	Rebar	IV	3 cut fragments: 4.12 in x 0.72 in diameter; 2.75 in x 0.71 in diameter; 5.19 in x 0.59 in diameter
N100-E90	SU 14 & 17	39	Rebar	IV-V	4 cut fragments: 5.03 in x 0.63 in diameter; 4.45 in x 0.62 in diameter; 4.10 in x 0.73 in diameter; 3.03 in x 0.82 in diameter

\* Only samples collected; weights and numbers do not accurately reflect the actual volume of materials in the stratum or level fill.

Table 3. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Construction Hardware</u>					
<i>Nails</i>					
N99-E89	SU 14	26	Unident. Unident. Unident.	V	1 7-penny specimen 1 4-penny specimen 3 fragments
N99-E89	SU 17	27	Cut Cut Cut Cut Wire Unident. Unident. Unident. Unident.	IV	1 10-penny specimen 1 7-penny specimen 2 3-penny specimen 13 fragments 4 fragments 1 8-penny specimen 1 7-penny specimen 1 4-penny specimen 97 fragments
	20-30 cm	31	Cut Cut Cut Cut Cut	?	1 10-penny specimen; groundhog disturbed 1 6-penny specimen 1 4-penny specimen 3 fragments 3 fragments
N99-E95	0-20 cm	35	Wire Unident.	?	1 6-penny specimen; groundhog disturbed 1 fragment
N99-E98	SU 99	5	Wire	VI	1 4-penny specimen
		6	Unident.		1 fragment
N99-E98, W. Ext.	10-20 cm	19	Cut Cut	IV-VI	1 7-penny specimen 1 fragment

Table 3. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Nails (continued)</i>					
N99-E98	60-80 cm	20	Cut	IV	1 fragment
N100-E90	SU 14 & 17	39	Cut	IV-V	1 9-penny specimen
			Cut		2 7-penny specimen
			Cut		2 6-penny specimen
			Cut		15 fragments
			Wire		1 fragment
			Unident.		95 fragments
N100-E90	10-20 cm	40	Cut	IV-V	1 10-penny specimen
			Cut		2 fragments
			Unident.		12 fragments
N100-E90	20-30 cm	41	Wire	III	1 fragment
			Unident.		1 fragment
N102-E90	0-10 cm	3	Cut	III-V	1 5-penny specimen
			Cut		8 fragments
			Wire		1 3-penny specimen
			Wire		1 fragment
			Unident.		1 4-penny specimen
			Unident.		41 fragment
	10-20 cm	10	Cut	III-IV	2 9-penny specimen
			Cut		6 fragments
			Wire		5 fragments
			Unident.		59 fragments
	20-30 cm	16	Cut	IV	2 fragments
			Wire		2 fragments
			Unident.		13 fragments

Table 3. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Nails (continued)</i>					
N102-E90	SU 3	12	Unident.	IV	3 fragments
	30-40 cm	17	Cut	IV	1 fragment
N102-E94	SU 11	18	Unident.	IV	12 fragments
		14	Unident.	IV	5 fragments
	SU 5	14	Unident.	IV	1 9-penny specimen
				Unident.	
N102-E92 to E94	SU 1	37	Unident.		2 4-penny specimen
			Cut	IV	1 fragment
			Cut		2 9-penny specimen
			Cut		1 7-penny specimen
			Cut		22 fragments
N102-E96	SU 12	25	Wire	IV	2 fragments
		32	Wire	?	118 fragments
	20-30 cm		Wire		1 16-penny specimen
			Unident.		1 10-penny specimen; groundhog disturbed
	50-70 cm	34	Cut	?	1 fragment
		42	Cut	II	2 fragments
	SU 29		Unident.		1 fragment
			Unident.		2 fragments
	SU 59-60	89	Wire	II	2 fragments
			Cut		1 20-penny specimen
Wire				6 fragments	
Unident.				2 fragments	
Unident.				11 fragments	
N102-E98	30-40 cm	90	Cut		3 fragments
	70-90 cm	11	Cut	IV	1 fragment
		15	Unident.	IV	1 fragment

Table 3. Concluded.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Nails (continued)</i>					
N104-E90	Level 1	44	Unident.	III-V	5 fragments
N104-E96	SU 13	28	Unident.	IV	2 fragments
		22	Cut Wire		1 4-penny specimen 1 3-penny specimen
<i>Screws</i>					
N104-E96	SU 12	33	Wood screw	IV	Ferrous
<i>Miscellaneous</i>					
N99-E95	0-20 cm	35	Wire fencing staple	?	Groundhog disturbed
N99-E98	SU 99	1	Corrugated fastener	VI	Ferrous
<u>Plumbing-Sanitation</u>					
N100-E90	SU 14 & 17	39	Ceramic drain tile	IV-V	1 fragment
N102-E90	10-20 cm	10	Pipe	III-IV	1.125 in outside diameter, cast-iron straight nipple with male ends and malleable elbow attached to one end
<u>Fixed Illumination and Power</u>					
N99-E95	0-20 cm	35	Electric wire anchor	?	Ferrous; painted white; 0.30 in diameter hole in center; wood screws at each end for attachment to wall; groundhog disturbed
N99-E98	SU 99	1	Light bulb fragment	VI	Clear glass
N102-E96	SU 59-60	89	Split knob	II	2 clear glazed whiteware insulators, 1.18 in diameter x 1.38 in long; see Montgomery Ward & Co. (1969b:542)

Table 4. Materials related to transportation, commerce, and industry recovered from the South (Carriage) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Transportation</u>					
N99-E95	0-20 cm	35	Harness strap? Rubber backing	?	Narrow strap, no holes; groundhog disturbed Green padding probably derived from wagons stored in Carriage House
N99-E98	SU 99	1	Rubber backing Harness buckle  Belt/strap end protector	VI	Green padding probably derived from wagons stored in Carriage House Barrel roller, japanned iron buckle; 1.25 in wide x 1.16 in long; similar to buckles sold by Montgomery Ward & Co. at the turn of the century (Montgomery Ward & Co. 1969a:327) Cupric metal cover pierced with 10 holes for sewing the cover to the end of a fabric or leather belt or strap; 1.39 in long x 0.19 in wide; U-shaped in cross section
N102-E96	SU 12	2 5 25	Carriage spring? Rubber backing Buggy canopy rivet	IV	Fragment Green padding probably derived from wagons stored in Carriage House Cupric metal (Figure 17a); 0.64 in square, flat head pierced with round 0.09 in diameter x 0.8 in shaft (James E. Price, pers. comm. 1992))
N106-E96	SU 28	56	Buggy canopy rivet	IV	Cupric metal; 0.63 in square, flat head pierced with round 0.09 in diameter x 0.8 in shaft
<u>Commerce and Industry-Repair and Maintenance-Blacksmithing</u>					
<i>Fuel</i>					
N99-E89	20-30 cm	31	Coal	?	4 fragments; groundhog disturbed
N102-E90	10-20 cm	10	Coal	III-IV	1 fragment
<u>Commercial Services</u>					
N99-E95	0-20 cm	35	Coin	?	1963 U.S. penny; groundhog disturbed
	20-100 cm	36	Coin	VI	1965 U.S. penny
N99-E98	SU 99	6	Coin	VI	1957 U.S. penny

Table 5. Unidentified materials recovered from the South (Carriage) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Fabric</u>					
N99-E98	SU 99	1	Burlap	VI	Brown, coarse weave
			Canvas		Yellow-green, coated (waterproofed?)
			Velvet		Striped navy, blue, and yellow
		5	Canvas		Large piece; yellow-green; coated (waterproofed?)
N102-E98	0-10 cm	4	Unidentified	VI	Green edging; recent disturbance?
	40-50 cm	13	Woolen fiber	IV	22 pieces from woolen carpet?
<u>Paper and Floral Materials</u>					
N99-E98	SU 99	1	Bamboo	VI	Cut section 1/2 in long x 3/4 in diameter
		5	Paper		2 printed fragments (indecipherable)
N100-E90	10-20 cm	40	Wood	IV-V	3 burned fragments
N102-E90	0-10 cm	3	Wood	III-V	5 burned fragments
	20-30 cm	16	Wood	IV	8 burned fragments
	30-40 cm	17	Charcoal	IV	13 fragments weighing 2.0 gm; sample retained
	SU 11	18	Charcoal	IV	5 fragments weighing 1.4 gm; sample retained
	40-50 cm	23	Wood	IV	1 fragment
N102-E92 to E94	SU 1	37	Charcoal	IV	6 small fragments
N102-E94	SU 5	14	Wood	IV	1 fragment
			Charcoal		10 small fragments
N102-E96	SU 12	25	Wood	IV	Many small fragments
	SU 4	29	Wood	?	Many small fragments; groundhog disturbed
	30-50 cm	32	Wood	?	3 small fragments; groundhog disturbed
	SU 29	42	Charcoal	II	2 fragments weighing 2.1 gm; sample retained
	SU 59-60	89	Charcoal	II	1 fragment weighing 0.2 gm
N102-E98	0-10 cm	4	Wood	VI	Many small fragments; recent disturbance?
	10-20 cm	8	Wood	IV	Many small fragments

Table 5. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Paper and Floral Materials (continued)</u>					
N102-E98	20-30 cm	9	Wood	IV	1 small fragment
N102-E98	40-50 cm	13	Wood	IV	Many small fragments
N104-E90	0-78 cm	44	Wood	III-V	Many small burned fragments
<u>Plastic</u>					
N102-E98	0-10 cm	4	?	?	Green, brittle fragment removed from collection; recent disturbance?
<u>Glass</u>					
<i>Curved Glass</i>					
N99-E89	SU 17	27	Bottle Bottle	IV	2 emerald-colored fragments, one with raised "G" 1 clear fragment
N99-E98	SU 99	1	—	VI	Clear, water tumbled; probably brought in with beach gravel for basement fill
		5	—		1 clear and 1 amber, water tumbled; probably brought in with beach gravel for basement fill
		6	—		Clear, water tumbled; probably brought in with beach gravel for basement fill
N100-E90	10-20 cm	40	Bottle	IV-V	1 amber fragment
	20-30 cm	41	Bottle	III	1 clear, fire-polished, six-sided base (2 in diameter) with round indentation (1.05 in diameter) on bottom
N102-E90	20-30 cm	16	—	IV	Milky-colored, water tumbled bottle fragment; probably brought in with beach gravel for basement fill
	30-40 cm	17	Bottle	IV	2 clear fragments

Table 5. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Glass (continued)</i>					
<i>Curved Glass (continued)</i>					
N102-E96	SU 4	29	—	?	2 green water tumbled fragments; probably brought in with beach gravel for basement fill; groundhog disturbed
	SU 12	25	Bottle	IV	2 sun-altered purple fragments; dates to circa 1880-1916 (Munsey 1970:55)
	30-50 cm	32	Bottle	?	5 clear fragments; groundhog disturbed
	SU 59-60	89	Bottle	II	1 sun-altered purple fragment; dates to circa 1880-1916 (Munsey 1970:55)
		90	Bottle		1 sun-altered purple fragment; dates to circa 1880-1916 (Munsey 1970:55)
N104-E96	SU 12	33	Bottle	IV	2 clear fragments, one with portion of white painted label
	SU 13	22	—	IV	3 green, 1 lt. blue, 1 cobalt, 1 milk, and 8 clear, water tumbled fragments; probably brought in with beach gravel for basement fill
		28	Bottle		2 clear fragments
<i>Flat Glass (greater than or equal to 2.30 mm thickness)</i>					
N102-E90	30-40 cm	17	?	IV	One 4.36 mm thick fragment suggests this may be an element of a mirror, furniture glass, etc. (Moir 1982:16-17)
N104-E96	SU 13	22	?	IV	268 fragments with thicknesses of 4.25, 4.04, 4.13, 3.87, 3.68, 4.28, 3.56, 3.91, 3.49, 3.25, 3.39, 3.44, 3.61, 3.23, 4.03, 4.27, 4.24, 3.80, 4.03, 3.44, 3.39, 4.14, 3.80, 3.85, 3.81, 3.88, 3.44, 3.92, 4.10, 3.98, 3.69, 3.45, 3.85, 3.86, 3.75, 3.87, 3.98, 4.15, 3.98, 3.86, 3.32, 3.68, 3.30, 3.84, 3.46, 3.98, 3.33, 3.74, 3.86, 3.22, 3.64, 3.65, 4.02, 3.29, 3.79, 3.50, 3.73, 3.80, 3.30, 3.69, 3.86, 4.17, 3.27, 3.84, 3.45, 3.71, 3.87, 3.80, 3.78, 3.39, 3.21, 3.43, 3.23, 3.22, 3.46, 3.22, 3.97, 4.05, 4.19,

Table 5. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Flat Glass (continued)</i>					
N104-E96 (cont.)	SU 13 (cont.)	22 (cont.)	?	IV	3.95, 3.78, 3.90, 3.41, 3.99, 3.73, 3.57, 3.57, 3.33, 3.99, 3.90, 3.70, 4.36, 3.25, 3.43, 3.96, 3.80, 4.11, 3.20, 3.28, 3.79, 3.30, 3.44, 3.71, 3.53, 3.06, 3.93, 3.63, 4.04, 3.65, 4.38, 3.36, 3.61, 3.94, 3.67, 3.28, 4.05, 4.07, 3.82, 4.00, 3.62, 3.85, 3.80, 3.32, 3.74, 3.59, 3.83, 4.15, 3.65, 3.94, 3.24, 4.29, 3.72, 3.22, 3.43, 3.86, 3.90, 3.85, 3.80, 4.00, 3.84, 3.64, 3.57, 3.70, 3.24, 3.93, 4.18, 3.71, 3.54, 3.23, 4.28, 3.91, 3.47, 3.66, 4.77, 3.63, 3.53, 3.90, 3.65, 3.69, 3.73, 3.53, 3.65, 4.13, 3.31, 3.63, 3.26, 3.72, 3.23, 3.27, 3.78, 4.21, 3.24, 3.58, 3.76, 3.74, 3.87, 4.10, 4.01, 3.20, 3.59, 3.53, 3.74, 4.04, 3.29, 3.35, 3.58, 4.30, 3.96, 3.93, 4.02, 4.30, 3.91, 3.83, 4.17, 4.26, 3.76, 3.76, 3.31, 3.51, 3.98, 3.48, 3.56, 3.58, 3.22, 4.33, 3.23, 3.88, 4.00, 3.65, 3.70, 3.60, 4.17, 4.21, 3.49, 3.77, 3.47, 3.76, 3.76, 3.60, 3.68, 3.59, 4.24, 4.06, 3.60, 3.56, 3.25, 3.71, 3.69, 3.21, 3.60, 3.32, 3.53, 3.55, 3.31, 4.05, 3.54, 3.85, 4.07, 3.72, 3.59, 4.02, 3.65, 3.49, 3.42, 3.60, 3.61, 3.95, 3.22, 3.79, 3.60, 4.02, 3.46, 3.84, 3.96, 4.05, 4.35, 4.05, 3.54, 3.98, 3.78, 4.04, 3.80, 4.09, 3.54, 3.95, 3.58, 4.21, 3.39 mm
N104-E96	SU 13	28	?	IV	60 fragments with thicknesses of 3.44, 4.11, 3.54, 3.80, 4.14, 3.88, 3.92, 3.83, 4.43, 3.85, 3.88, 3.58, 3.54, 3.78, 3.64, 3.84, 3.92, 3.67, 3.43, 3.57, 3.88, 3.64, 3.80, 3.40, 3.99, 3.50, 3.28, 3.20, 3.86, 3.28, 3.56, 3.43, 3.63, 3.98, 3.35, 3.34, 3.85, 3.33, 3.64, 3.76, 3.24, 3.32, 3.55, 3.78, 3.98, 3.56, 3.97, 3.47, 3.52, 4.29, 4.34, 3.84, 4.34, 3.78, 4.12, 3.93, 3.84, 4.04, 3.58, 3.97, 3.76, 3.60, 3.74, 4.04, 3.68, 3.93, 3.79, 3.71, 3.74, 3.78, 3.89 mm
		33	?		2 fragments with thicknesses of 4.17 and 3.68 mm

Table 5. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Ferrous Metal</u>					
N99-E89	SU 17	27	—	IV	23 specimens
	20-30 cm	31	—	?	13 specimens; groundhog disturbed
N99-E95	0-20 cm	35	—	?	1 specimen; groundhog disturbed
N100-E90	SU 14 & 17	39	—	IV-V	9 specimens
N100-E90	10-20 cm	40	—	IV-V	16 specimens
N102-E90	0-10 cm	3	—	III-V	76 specimens
	10-20 cm	10	—	III-IV	10 specimens
	20-30 cm	16	—	IV	9 specimens
	30-40 cm	17	—	IV	5 specimens
	SU 3	12	—	IV	3 specimens
N102-E92 to E94	SU 1	37	—	IV	32 specimens
N102-E96	SU 4	29	—	?	1 specimen; groundhog disturbed
	50-70 cm	34	—	?	Tin fragment with rolled edge; groundhog disturbed
			—		1 specimen
	SU 59-60	89	—	II	5 specimens
N102-E98	0-10 cm	4	—	?	1 specimen; recent disturbance?
	30-40 cm	11	—	IV	1 specimen
N104-E96	SU 12	33	—	IV	1 specimen
	SU 4	30	—	V	2 specimens
	SU 13	22	Wire	IV	2 fragments, 0.06 in diameter
			—		8 specimens

Table 5. Concluded.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Cupric Metal</u>					
N104-E96	SU 13	22	Wire	IV	0.02-in diameter
<u>Bone and Shell</u>					
N102-E92 to E94	SU 1	37	Bone	IV	Fragment
N102-E98	0-10 cm	4	Shell	?	1 unidentified fragment probably brought in with beach gravel for basement fill; recent disturbance?
	40-50 cm	13	Shell	IV	1 snail shell, 5 bivalve fragments (4 water tumbled); probably brought in with beach gravel for basement fill
N104-E96	0-78 cm	none	Shell	IV-V	1 snail shell
N106-E97	0-10 cm	38	Shell	IV-V	1 bivalve fragment probably brought in with beach gravel for basement fill
<u>Unknown Stone</u>					
N102-E96	SU 59-60	89	Limestone	II	1 fragment weighing 150.2 gm; sample retained
N102-E96	SU 59-60	90	Sandstone		9 fragments weighing 71.8 gm; sample retained

Table 6. Personal materials recovered from the North (Stable) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Clothing</u>					
Encl. A, W ½	SU 45	85	Button	V-VI	? Freshwater shell, 0.40 in diameter, 0.15 in diameter well with 2 sew-thrus
Encl. B, SW ¼	SU 40	108	Button	III	Black plastic with floral (daisy?) decoration on front; 0.74 in diameter; raised 0.27 in diameter area at center of front and back with 2 sew-thrus
Encl. D, NW ¼	10-20 cm	58	Button	IV	2 specimens of brown plastic; 0.51 in diameter with 0.41 well and 4 sew-thrus
Encl. D, SE ¼	0-10 cm	80	Button	IV-VI	Freshwater shell, 0.42 in diameter, 2 sew-thrus; decorated with 3 incised leaf-shaped lines, 2 at margin of button and one through sew-thrus
Floor Opening 4	SU 85	134	Button	IVA-C	Japanned ferrous metal, 0.56 in diameter with 4 sew-thrus in a 0.24 in diameter well; "EYEARS/CLEVELAND" on rim
<u>Footwear</u>					
Encl. D, NW ¼	60-70 cm	76	Insole	V-VI	Black leather, stitched and pegged; probably from groundhog disturbance
<u>Adornment</u>					
Encl. A, W ½	SU 46	82	Bead	V-VI	Wood; 0.45 in diameter x 0.41 in long with 0.17 in diameter attachment hole; lustrous purple enamel coating
Encl. A, W ½	SU 45	85	Pendant	V-VI	Glass white elephant with cupric wire attachment loop at elephant's back (Figure 17c)
Encl. B, SE ¼	0-10 cm	71	Beads	IV-VI	3 glass specimens; 2 jade green, 0.30 in diameter x 0.26 in long with 0.04 in diameter hole; 1 black, faceted, 0.30 in diameter x 0.29 in long with 0.04 in hole
Encl. C, SW ¼	SU 50	92	Bead	V-VI	Bone or ivory; 0.62 in diameter x 0.65 in long with 0.05 in diameter hole

Table 6. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Body Ritual and Grooming</u>					
Encl. C, SE ¼	10-20 cm	66	Comb	VI	Fragment of cream-colored plastic; location of CMNH T.U.16A
Encl. C, SW ¼	SU 50	92	Comb	V-VI	Fragment of same comb as Cat. No. 66
Ext. NE Corner	0-36 cm	45	Compact	?	Hinged case of thin, stamped cupric metal for makeup.
<u>Indulgences</u>					
<i>Liquor</i>					
Encl. A, W ½	SU 40B	91	Liquor bottle No. 9?	?	1 clear basal fragment marked "MEAS[URE]" on heel
Encl. A	10-20 cm	50	Liquor bottle No. 2 or 9?	?	19 milky to clear fragments from plain flask body; yellow under long wave UV and whitish yellow under short wave UV; one marked "[MEASU]RE"
			Liquor bottle No. ?		13 clear body fragments from flask, some with strapped sides; bright yellow under long wave UV and golden yellow under short wave UV
	SU 40	52	Liquor bottle No. 5	?	One clear glass base (3.4 in wide x 1.8 in deep) and 3 body fragments with strapped sides from Union Oval shape bottle; yellow under long and short wave UV (Jones et al. 1985:105; Putnam 1965:178)
			Liquor bottle No. ?		Clear glass, oil finish with ball neck; yellow under long and short wave UV; exterior diameter at lip = 0.95 in; neck = 1.53 in long
			Liquor bottle No. ?		Clear glass fragment of oil finish with ball neck; yellow under long and short wave UV
			Liquor bottle No. 7?	?	1 clear glass body fragment; light gray under long wave UV and yellow under short wave UV (see Cat. No. 73 below)
			Liquor bottle No. ?		Clear glass fragment from upper body of flask; yellow under long and short wave UV; marked "...R[?]ED/...NT"
	Groundhog burrow	57	Liquor bottle No. ?	?	1 clear glass fragment from flask with strapped sides
	SU 39	60	Liquor bottle No. ?	?	1 clear glass fragment of flask base
			Liquor bottle No. ?		1 clear glass fragment from flask with strapped sides

Table 6. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Liquor (continued)</i>					
Encl. A, W ½	SU 40A	88	Liquor bottle No. 6	?	1 upper shoulder of “Shoo-fly” flask; yellow under long wave UV, whitish yellow under shortwave UV (Putnam 1965:177)
Encl. A, W ½	SU 41	73	Liquor bottle No. ?	?	1 milky to clear body fragment from oval-shape body; yellow under long wave UV and whitish yellow under short wave UV; similar to liquor bottle No. 5, Cat. No. 52; 2.3 in diameter circular inset on front for paper label
			Liquor bottle No. 7		1 clear body fragment from flask or oval bottle; lt gray under long wave UV, yellow under short wave UV
Encl. A, W ½	SU 45	85	Liquor bottle No. 8	V-VI	Oval base similar to liquor bottle No. 3, Cat. No. 82; Owens suction shear mark; Prohibition would limit this bottle to circa 1904-1920 or 1933 to 1950s
			Liquor bottle No. ?		30 clear fragments; 1 ball neck and 29 body sherds from oval bottle; yellow under long and short wave UV
Encl. A, W ½	SU 46	82	Liquor bottle No. ? Liquor bottle No. 1	V-VI	4 clear, plain oval or flask body fragments Clear glass (deteriorating with milky appearance), rectangular or flask-shaped base fragment; bright yellow under long wave UV, yellow under short wave; mark “374” inside diamond indicates manufacture by Diamond Glass Co. after Prohibition, Royersford, Pennsylvania, circa 1933-present (Toulouse 1971:550-552)
			Liquor bottle No. 3		Clear, flask-shaped base fragment; bright yellow under long wave UV, golden yellow under short wave
			Liquor bottle No. 2		Clear glass, rectangular or flask-shaped base (about 3.5 in wide x 1.65 in deep); bright yellow under long wave UV, yellow under short wave; marked with open diamond inside Owens suction shear mark (1904 to circa 1950s) indicating manufacture by Diamond Glass Co. “PINT/FULL MEA[SURE]” on heel. Circa 1933 to 1950s (Jones et al. 1985:38-39; Toulouse 1971:550-552)

Table 6. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Liquor (continued)</i>					
Encl. A, W ½ (cont.)	SU 46 (cont.)	82 (cont.)	Liquor bottle No. ?		2 fragments clear glass, oil finish with ball neck; bright yellow under long wave UV, yellow under short wave; exterior diameter at lip = 1 in
			Liquor bottle No. 4		36 clear glass body fragments from flask-shaped bottle; bright yellow under long and short wave UV; mold marks on side
Encl. A, SE ¼	SU 48	86	Liquor bottle No. 2?	?	1 clear glass heel fragment with "...E"
	SU 46	47	Liquor bottle No. 9	V-VI	3 fragments clear glass (deteriorating with milky appearance); 1 oval base with Owens suction shear mark with mark containing "374" inside diamond indicating manufacture by Diamond Glass Co. after Prohibition, Royersford, Pennsylvania, circa 1933-present (Toulouse 1971:550-552); heel fragment marked "[F]ULL"
			Liquor bottle No. ?		1 clear glass double ring finish with plain neck on Baltimore Oval(?) flask shoulder; cork in mouth
			Liquor bottle No. ?		1 clear glass oil finish with ring ball neck and upper body; cork in mouth
			Liquor bottle No. ?		1 clear glass oil finish
			Liquor bottle No. ?		4 clear to milky glass "Union" style flask body fragments; bright yellow under long and short wave UV
			Liquor bottle No. ?		1 clear to milky glass body fragment from oval or other style flask; bright yellow under long and short wave UV
Encl. B, SW ¼	SU 46	97	Liquor bottle No. 10	V-VI	5 clear to milky body sherds and 1 flask base of elixir or handy shape (Fike 1987:10); Owens suction shear mark surrounding "374" within diamond; "PINT/FULL MEASURE" on heel indicates manufacture by Diamond Glass Co. after Prohibition, Royersford, Pennsylvania, circa 1933-present (Toulouse 1971:550-552); bright yellow under long and short wave UV
Encl. B, SE ¼	0-10 cm	71	Liquor bottle No. 1?	IV-VI	1 milky glass flask base fragment; bright yellow under long and short wave UV

Table 6. Concluded.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Beer</i>					
Encl. A, SE ¼	SU 46	47	Beer bottle No. 1	V-VI	2 blue green, 2.5" diameter base fragments; "THE CLEVELAND & SANDUSKY" around basal margin; "BREWING/CO." in center of base; mold marks suggest manufacture in automatic or semi-automatic bottling machine; circa 1903-1920 (Friedrich and Bull 1976:214, 223; Jones et al. 1985:38)
Floor Opening 1	SU 75	127	Beer bottle No. 2	IVD	1 amber body fragment
<i>Wine</i>					
Floor Opening 4	SU 73	123	Wine bottle?	V-VI	3 olive-amber neck-shoulder fragments
<i>Smoking</i>					
Encl. D, NE ¼	SU 50	112	Match	V-VI	Paper
<u>Pastimes and Recreation</u>					
Encl. A, W ½	SU 41	93	Book	VI	Fragments of pages; groundhog disturbed deposit
Encl. A, SE ¼	SU 46	47	Gun worm	V-VI	Ferrous worm attached to cupric threaded bolt for attachment to cleaning rod; 0.28 in diameter worm for use cleaning .30 caliber weapon
Encl. B, SW ¼	SU 46	97	Phonograph record	V-VI	4 fragments; edges demonstrate a starter groove suggesting use of electric player and date of circa 1930 to mid-1950s (personal communication, J. Richner, MWAC Supervisory Archeologist)
Encl. B, SW ¼	SU 40	108	Paper		1 fragment from magazine or instructional leaflet
Encl. B, SW ¼	SU 40	108	Phonograph record	III-IV	2 fragments same as Cat. No. 97
Encl. D, NE ¼	SU 54	113	Sprocket	IVD2	Ferrous sprocket with 6 teeth and small pin-hole at center; probably from a child's toy
Encl. D, NW ¼	10-20 cm	58	Doll	IV	Flesh-colored arm molded of hard plastic
Floor Opening 4	SU 73	123	Toy gun	V-VI	Cap gun (handle only) of cast iron

Table 7. Domestic materials recovered from the North (Stable) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Furnishings: Furniture</u>					
Encl. A, SE ¼	SU 46	47	Castors	V-VI	2 ferrous furniture casters
Encl. C, SE ¼	10-20 cm	66	Carpet	VI	Red wool fibers; location of CMNH T.U.16A
Encl. D, SW ¼	Groundhog burrow	104	Drawer pull	?	Wood painted white and blue (Figure 18)
Ext. SW Corner	0-52 cm	43	Butt hinge	?	Ferrous; rectangular (3.22 in long x 1.23 in wide) with 6 screw holes; identical to “wrought steel back flaps” illustrated by Montgomery Ward & Co. (1969a:381)
<u>Furnishings: Decorative</u>					
<i>Pressed Glass</i>					
Encl. A, S ½	SU 41	70	Unidentified	?	1 clear fragment of lead glass
Encl. D, SE ¼	10-20 cm	80	Braided wire	IV-VI	Galvanized; picture hanging wire?
<u>Food and Drink</u>					
<i>Milk Containers</i>					
Encl. A, W ½	SU 46	82	Milk bottle No. 1	V-VI	One clear glass base and 45 body fragments; bright yellow under long wave UV and golden yellow under shortwave UV; round (5 in diameter) base with Owens suction shear mark displays “385” inside a diamond = manufacture by Diamond Glass Co. (1924-circa 1950s); 2 body fragments with recessed area for paper label; 1 body fragment with vent hole remnant (circa 1866-1920s).
Encl. A	SU 40	52	Milk bottle No. 1?	V-VI	1 clear body fragment with panel similar to Cat. No. 82, milk bottle No. 1
Encl. A, SE ¼	SU 46	47	Milk bottle No. 1?	V-VI	Clear glass milk bottle finish

Table 7. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Food and Drink (continued)</u>					
<i>Milk Containers (continued)</i>					
Encl. B, NW ¼	0-10 cm	49	Milk bottle No. 2?	VI	1 clear basal fragment bearing raised concentric circles; light gray under long wave UV, golden yellow under short wave UV; location of CMNH T.U.20
	10-20 cm	53	Milk bottle No. 2?	VI	1 clear neck fragment bearing cream-colored painted label element; light gray under long wave UV, golden yellow under short wave UV; location of CMNH T.U.20
<i>Soft Drinks</i>					
Encl. A, W ½	SU 46	82	Crown cap	V-VI	Carbonated beverage closure; corrugations (n=21), granulated composition cork liner and skirt height (0.26 in) suggest date of post-1920 to pre-1956 (Bender 1986:22, 24-5)
Encl. D, SE ¼	0-10 cm	80	Soft drink bottle No. 1?	IV-VI	1 green body fragment
Encl. D, NE ¼	SU 50	112	Soft drink bottle No. 1	V-VI	2 green body fragments
			Soft drink bottle No. 2		1 gray-green body fragment
Encl. D, NW ¼	0-10 cm	54	Soft drink bottle No. 1?	IV-VI	1 green body fragment
	10-20 cm	58	Soft drink bottle No. 1?	IV	1 green body fragment
<u>Housewares and Appliances-Culinary</u>					
<i>Canning Jars and Containers</i>					
Encl. A, W ½	SU 41	73	Canning jar No. 1?	?	1 aqua body fragment
	SU 45	85	Canning jar No. 1?	V-VI	2 aqua body fragments
Encl. A, W ½	SU 46	82	Canning jar No. 1	V-VI	3 aqua body fragments; 1 mends with rim from SU 46, Cat. No. 47

Table 7. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Housewares and Appliances-Culinary (continued)</u>					
<i>Canning Jars and Containers (continued)</i>					
Encl. A, SE ¼	SU 46	47	Canning jar No. 1	V-VI	17 aqua fragments of machine-made Mason shoulder seal jar; 1 fragment mends with fragment from Cat. No. 50 to read “[script] Ball/MASON”; rim element mends with specimen from SU 46, Cat. No. 82; manufactured circa 1900-1920 (Toulouse 1977:6)
	10-20 cm	50	Canning jar No. 1	?	6 aqua fragments of machine-made Mason shoulder seal jar; 1 fragment mends with fragment from SU 46, Cat. No. 47
Encl. B, SW ¼	SU 40	52	Canning jar No. ?	?	6 aqua jar fragments
	SU 46	97	Food jar No. 1	V-VI	47 clear glass body sherds; one mendable shoulder fragment marked “ONE GALLON”; 1 base fragment of a 6.25 in diameter base marked with Owens shear mark & “ghost” mold seam on side; light gray under long wave UV, golden yellow under short wave; manufacturer’s mark on base = “I” inside diamond and “O” above “7” with “2” on left, “4” on right; container made at Owens Illinois Glass Co. Plant No. 2 in 1934, 1944, or 1954 (Toulouse 1971:403-406)
			Canning jar No. 1?	?	1 aqua body fragment
<i>Utilitarian Ceramics</i>					
Encl. A, W ½	SU 45	85	Stoneware	V-VI	1 fragment from unidentified vessel; salt glazed, light grayish tan exterior with 2 trailed parallel lines; Albany glazed interior
Encl. D, NE ¼	SU 55	114	Stoneware	IVD1	2 fragments from unidentified vessel; salt glazed, light gray exterior, Albany glazed interior
Encl. D, NE ¼	SU 80	115	Stoneware	IVC	2 fragments from unidentified vessel; salt glazed, light gray exterior, Albany glazed interior; one fragment near handle?
Encl. D, SE ¼	SU 55	98	Stoneware	IVD1	1 fragment from unidentified vessel; salt glazed, light gray exterior with trailed line, Albany glazed interior
Encl. D, NW ¼	10-20 cm	58	Yellowware	IV	1 bodysherd; cream-colored glazed exterior, dark brown glazed interior
Encl. D, NW ¼	30-40 cm	64	Yellowware	III-IV	1 rim

Table 7. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Housewares And Appliances</u>					
<i>Gustatory</i>					
Encl. A	10-20 cm	50	?	?	Porcelain fragment; undecorated
Encl. A, W ½	SU 40A	88	?	?	Porcelain fragment; undecorated
Encl. B, SE ¼	0-10 cm	71	?	IV-VI	2 whiteware fragments green glazed exterior
Encl. B, NW ¼	0-10 cm	49	?	VI	Undecorated porcelain fragment; location of CMNH T.U.20
Encl. B, SE ¼	SU 40	83	Hollowware	III	Undecorated whiteware rim
Encl. B, SW ¼	SU 40	108	?	III	2 porcelain rim fragments; one side of rim edge decorated with green Greek key motif bordered by a thin gold bands
Encl. D, NW ¼	30-40 cm	64	Flatware	III-IV	Undecorated whiteware fragment
Encl. D, NE ¼	SU 54	113	Handle cover	IVD2	Polished, 0.87 in squared end; from knife?
Encl. D, NW ¼	60-70 cm	72	?	?	Undecorated whiteware fragment; probably from groundhog disturbance
Encl. D, NW ¼	60-70 cm	76	?	V-VI	Undecorated whiteware fragment with footring; probably from groundhog disturbance
Floor Opening 4	SU 85	134	Unid. vessel	IVA-C	2 undecorated whiteware fragments
Floor Opening 4	20-30 cm	133	Unid. vessel	IV	2 undecorated whiteware fragments
<i>Portable Illumination</i>					
Encl. A	SU 40	52	Lamp chimney	?	4 fragments
Encl. A	10-20 cm	50	Lamp chimney	?	1 fragment
Encl. A, SE ¼	SU 46	47	Lamp chimney	V-VI	2 fragments
Encl. A, W ½	SU 46	82	Lamp chimney	V-VI	4 fragments
<i>Household Pastimes</i>					
Encl. B, SE ¼	0-10 cm	71	Christmas ornament hook	IV-VI	

Table 7. Concluded.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Home Education, Information, and Business</i>					
Encl. D, SE ¼	0-10 cm	80	Pencil	IV-VI	Sharpened with knife
Floor Opening 4	SU 73	123	Ink Bottle	V-VI	Light blue glass bottle shoulder fragment
<i>Cleaning and Maintenance</i>					
Encl. A, SE ¼	SU 46	47	Washtub ear	V-VI	Brass; attached to side of container for attachment of heavy wire handle
Encl. B, NW ¼	10-20 cm	53	Spray can nozzle	VI	Red plastic nozzle used to spray green paint (discarded); location of CMNH T.U.20
Encl. B, SW ¼	SU 45	102	Plant tag	V-VI	Yellow plastic tag marked “[GE]RANIUM/[Sca]rlet Fl...”; discarded
Encl. B, SW ¼	SU 46	97	Plant tag	V-VI	Yellow plastic tag marked “GER[ANIUM]/Sca[rlet]...”; discarded
Encl. D, SW ¼	Rodent burrow	110	Repair patches	?	Red rubber-coated black fabric 0.60 in long x 0.45 in wide; K printed in white on back of one specimen
Encl. D, SW ¼	SU 50	103	Spray can nozzle	V-VI	Green plastic nozzle used to spray red paint (discarded)
Ext. NE Corner	0-36 cm	45	Tin lid	?	Rectangular or square (approx. 14 in across) tin lid with wire-reinforced rim; for boiler?
Floor Opening 1	SU 73	123	Oil cap	V-VI	Lawn mower plastic cap with aluminum threads; cap head marked “FILL TO RING” (discarded)
<i>Miscellaneous</i>					
Encl. D, NW ¼	10-20 cm	58	Key tag	IV	Shield-shaped brass tag stamped “2/TOWER” on one side (Figure 16b)
Encl. D, SE ¼	28-40 cm	99	Plug and cord	?	2-prong plug for electrical appliance; black rubber with face marked “Belden/1,868,196 PAT NO’S 1,868,197” with “UL” in a circle at center of plug; probably from gopher-disturbed area
Ext. SW Corner	0-52 cm	43	Garden rake	?	Ferrous head fragment

Table 8. Architectural materials recovered from the North (Stable) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Construction Materials</u>					
<i>Shingles</i>					
Encl. B, SW ¼	SU 40	108	Slate shingle Asbestos shingle	III	2 fragments weighing 458.1 gm; sample retained 12 x 5.9 x 0.2 in; corner missing; pairs of nail holes at each end and ½ in holes at edge for wiring shingles into bales; est. date of use circa 1935-1955 (personal communication, 1992, Charles Masten, Histor- ical Architect, National Park Service, Midwest Regional Office)
Ext. NE Corner	0-36 cm	45	Slate shingle	?	5 fragments
	36-68 cm	46	Slate shingle	?	2 fragments
<i>Lumber/molding</i>					
Encl. A, SE ¼	SU 46	47	Crown molding	V-VI	Painted white; square nail protruding from back; 0.635 in wide section cut at an oblique angle
Encl. B, NW ¼	30-40 cm	59	Wood	VI	1 fragment painted white; location of CMNH T.U.20
Encl. B, SW ¼	SU 46	97	Molding	V-VI	Crown or base molding painted white
Encl. D, NW ¼	10-20 cm	58	Wood	IV	1 fragment painted white on one surface
Encl. D, SW ¼	SU 50	103	Window sash bar Corner molding Strip molding	V-VI	Painted white; window glazing attached Cut for corner 0.45 in wide x 0.27 in thick, with 1.125 in long square shaft, round head nail
<i>Window Glass (Flat Glass under 2.30 mm thickness)</i>					
Encl. A	SU 39	60	—	?	2 specimens
Encl. A	SU 40	52	—	?	9 specimens
Encl. A	10-20 cm	50	—	?	16 specimens
Encl. A	SU 45	57	—	V-VI	2 specimens
Encl. A, SE ¼	SU 46	47	—	V-VI	47 specimens
Encl. A, W ½	SU 40B	91	—	?	3 specimens

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Window Glass (continued)</i>					
Encl. A, W ½	SU 41	93	—	?	14 specimens
Encl. A, W ½	SU 45	85	—	V-VI	42 specimens
Encl. A, W ½	SU 46	82	—	V-VI	119 specimens
Encl. A, W ½	SU 48	86	—	?	8 specimens
Encl. B, NW ¼	0-10 cm	49	—	VI	17 specimens; location of CMNH T.U.20
Encl. B, NW ¼	10-20 cm	53	—	VI	10 specimens; location of CMNH T.U.20
Encl. B, NW ¼	20-30 cm	55	—	VI	2 specimens; location of CMNH T.U.20
Encl. B, NW ¼	30-40 cm	59	—	VI	4 specimens; location of CMNH T.U.20
Encl. B, NW ¼	40-50 cm	63	—	VI	5 specimens; location of CMNH T.U.20
Encl. B, SE ¼	SU 42	74	—	IV	1 specimen
Encl. B, SE ¼	0-10 cm	71	—	IV-VI	170 specimens
Encl. B, SW ¼	SU 40	108	—	III	45 specimens
Encl. B, SW ¼	SU 44	100	—	IV	1 specimen
Encl. B, SW ¼	SU 45	102	—	V-VI	2 specimens
Encl. B, SW ¼	SU 46	97	—	V-VI	67 specimens
Encl. B, SW ¼	SU 52	101	—	IV	3 specimens
Encl. C, NW ¼	SU 40	61	—	III	1 specimen
Encl. C, NW ¼	0-10 cm	48	—	IV-VI	29 specimens; unit includes portion of CMNH T.U.16 and 16B
Encl. C, NW ¼	10-20 cm	51	—	III-IV	4 specimens; unit includes portion of CMNH T.U.16 and 16B
Encl. C, SE ¼	SU 41	78	—	III	7 specimens; at base of CMNH T.U.16 and 16A
Encl. C, SE ¼	10-20 cm	66	—	VI	11 specimens; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	20-30 cm	69	—	VI	2 specimens; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	30-40 cm	73	—	VI	4 specimens; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	40-50 cm	75	—	VI	6 specimens; location of CMNH T.U.16 and 16A
Encl. C, SW ¼	SU 50	92	—	V-VI	11 specimens
Encl. C, SW ¼	SU 52	94	—	IV	2 specimens
Encl. D, NE ¼	SU 50	112	—	V-VI	17 specimens

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Window Glass (continued)</i>					
Encl. D, NE ¼	Groundhog burrow	132	—	?	3 specimens
Encl. D, NW ¼	0-10 cm	54	—	IV-VI	7 specimens
Encl. D, NW ¼	10-20 cm	58	—	IV	19 specimens
Encl. D, NW ¼	20-30 cm	62	—	III-IVD1	5 specimens
Encl. D, NW ¼	40-50 cm	67	—	?	1 specimen; probably from groundhog disturbance
Encl. D, SE ¼	0-10 cm	80	—	IV-VI	43 specimens
Encl. D, SW ¼	Groundhog burrow	104	—	?	5 specimens
Encl. D, SW ¼	SU 50	103	—	V-VI	27 specimens
Encl. D, SW ¼	SU 54	105	—	IVD2	11 specimens
Encl. D, SW ¼	Rodent burrow	110	—	?	5 specimens
Floor Opening 1	SU 73	126	—	V-VI	12 specimens
Floor Opening 1	SU 76	130	—	III	1 specimen
Floor Opening 4	SU 73	123	—	V-VI	1 specimen
Floor Opening 6	SU 40	124	—	III	1 specimen
Floor Opening 6	SU 73	109	—	V-VI	1 specimen
Ext. NE Corner	0-36 cm	45	—	?	5 specimens
Ext. SW Corner	0-52 cm	43	—	?	1 specimen
<i>Bricks</i>					
Encl. B, NW ¼	40-50 cm	63	—	VI	1 fragment weighing 10.1 gm; location of CMNH T.U.20
Encl. B, SE ¼	SU 40	79	—	III	1 fragment weighing 0.6 gm
Encl. B, SW ¼	SU 46	97	—	V-VI	1 fragment weighing 6.9 gm

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Bricks (continued)</i>					
Encl. B, SW ¼	SU 43	95	—	IV	1 fragment weighing 1765.9 gm; one complete common or face brick 21 cm long x 9 cm wide x 5 cm thick, hand made of soft mud with sand struck face bearing a 13 cm long x 5 cm wide x 1 cm deep frog on one face
Encl. C, SE ¼	20-30 cm	69	—	VI	1 fragment weighing 4.3 gm; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	40-50 cm	75	—	VI	1 fragment weighing 1.2 gm; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	SU 41	78	—	III	1 fragment weighing 0.4 gm; at base of CMNH T.U.16 and 16A
Encl. C, SW ¼	SU 52	94	—	IV	9 fragments weighing 45.4 gm; sample retained
Encl. D, NE ¼	SU 54	113	—	IVD2	1 fragment weighing 1.9 gm
Encl. D, NE ¼	SU 62	117	—	IVB	1 fragment weighing 2.7 gm
Encl. D, NE ¼	SU 81	119	—	IVA	1 fragment weighing 0.9 gm
Encl. D, NW ¼	20-30 cm	62	—	III-IVD1	1 fragment weighing 0.7 gm
Encl. D, SE ¼	SU 55	98	—	IVD1	2 fragments weighing 102.3 gm; sample retained
Encl. D, SW ¼	SU 55	106	—	IVD1	2 fragments weighing 3.9 gm; sample retained
Floor Opening 4	SU 73	123	—	V-VI	4 fragments weighing 2.1 gm; sample retained
Floor Opening 4	SU 74	125	—	IVD1?	3 fragments weighing 1.6 gm; sample retained
Floor Opening 4	SU 85	134	—	IVA-C	3 fragments weighing 85.8 gm; sample retained
Floor Opening 4	20-30 cm	133	—	IV	2 fragments weighing 1.4 gm; sample retained
Floor Opening 6	SU 73	109	—	V-VI	11 fragments weighing 23.7 gm; sample retained
Floor Opening 6	SU 78	116	—	IVB	1 fragment weighing 6.1 gm
<i>Mortar</i>					
Encl. A	SU 39	60	Mortar	?	1 fragment weighing 3.5 gm
Encl. A, S ½	SU 40	68	Mortar	III?	2 fragments weighing 3.0 gm; sample retained
Encl. B, NW ¼	10-20 cm	53	Mortar	VI	1 fragment weighing 2.2 gm; location of CMNH T.U.20
Encl. B, NW ¼	20-30 cm	55	Mortar	VI	2 fragments weighing 9.2 gm; sample retained; location of CMNH T.U.20
Encl. B, NW ¼	30-40 cm	59	Mortar	VI	1 fragment weighing 16.8 gm; location of CMNH T.U.20

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Mortar (continued)</i>					
Encl. B, SE ¼	SU 40	79	Mortar	III	3 fragments weighing 8.2 gm; sample retained
Encl. B, SE ¼	SU 40	83	Mortar	III	3 fragments weighing 1.6 gm; sample retained
Encl. B, SE ¼	SU 44	77	Mortar	IV	7 fragments weighing 28.3 gm; sample retained
Encl. B, SE ¼	0-10 cm	71	Mortar	IV-VI	1 fragment weighing 2.6 gm
Encl. B, SW ¼	SU 43	95	Mortar	IV	6 fragments collected from stratum largely composed of mortar; collected specimens weigh 22.5 gm; sample retained
Encl. C, NW ¼	0-10 cm	48	Mortar	IV-VI	1 fragment weighing 1.8 gm; unit includes portion of CMNH T.U.16 and 16B
Encl. C, SE ¼	10-20 cm	66	Mortar	VI	4 fragments weighing 9.5 gm; sample retained; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	10-20 cm	61	Mortar	VI	2 fragments weighing 9.3 gm; sample retained; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	30-40 cm	73	Mortar	VI	7 fragments weighing 37.3 gm; sample retained; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	40-50 cm	75	Mortar	VI	1 fragment weighing 5.7 gm; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	SU 41	78	Mortar	III	4 fragments weighing 362.5 gm; sample retained; at base of CMNH T.U.16 and 16A
Encl. C, SW ¼	SU 50	92	Mortar	V-VI	9 fragments weighing 57.7 gm; sample retained
Encl. D, NE ¼	SU 62	117	Mortar	IVB	2 fragments weighing 53.4 gm; sample retained
Encl. D, NW ¼	10-20 cm	58	Mortar	IV	4 fragments weighing 46.7 gm; sample retained
Encl. D, NW ¼	20-30 cm	62	Mortar	III-IVD1	2 fragments weighing 14.3 gm; sample retained
Encl. D, SE ¼	SU 54	81	Mortar	IVD2	10 fragments weighing 5.9 gm; sample retained
Encl. D, SE ¼	SU 55	98	Mortar	IVD1	1 fragment weighing 27.7 gm
Encl. D, SE ¼	28-40 cm	99	Mortar	III-IVB	2 fragments weighing 11.2 gm; sample retained
Encl. D, SE ¼	0-10 cm	80	Mortar	IV-VI	25 weighing 285.4 gm; sample retained
Encl. D, SW ¼	SU 50	103	Mortar	V-VI	1 fragment weighing 36.4 gm
Floor Opening 1	SU 76	130	Mortar	III	2 fragments weighing 3.4 gm; sample retained

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Mortar (continued)</i>					
Floor Opening 4	SU 73	123	Mortar	V-VI	4 fragments weighing 20.1 gm; sample retained
Floor Opening 4	SU 74	125	Mortar	IVD1?	6 fragments weighing 66.7 gm; sample retained
Floor Opening 1	SU 74	128	Mortar	IVD1?	7 fragments weighing 41.2 gm; sample retained
Floor Opening 4	SU 85	134	Mortar	IVA-C	3 fragments weighing 47.0 gm; sample retained
Floor Opening 4	20-30 cm	133	Mortar	IV	13 fragments weighing 110.0 gm; sample retained
Floor Opening 6	SU 40	124	Mortar	III	2 fragments weighing 41.9 gm; sample retained
Floor Opening 6	SU 78	116	Mortar	IVB	2 fragments weighing 45.7 gm; sample retained
Floor Opening 6	SU 79	120	Mortar	IVA	2 fragments weighing 12.0 gm; sample retained
<i>Plaster</i>					
Encl. C, SE ¼	20-30 cm	69	Plaster	VI	100 fragments weighing 166.3 gm; sample retained; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	30-40 cm	73	Plaster	VI	80 fragments weighing 185.1 gm; sample retained; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	40-50 cm	75	Plaster	VI	22 fragments weighing 66.9 gm; sample retained; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	SU 41	78	Plaster	III	4 fragments weighing 9.2 gm; sample retained; at base of CMNH T.U.16 and 16A
Encl. D, SW ¼	SU 54	105	Plaster	IVD2	3 fragments weighing 0.3 gm; sample retained
<i>Miscellaneous</i>					
Encl. A	SU 45	57	Paint can	V-VI	1 quart size; paint solidified in rusty can
Encl. B, NW ¼	0-10	49	Paint chip	VI	2 white fragments; location of CMNH T.U.20
Encl. D, NW ¼	20-30 cm	62	Beveled glass	III-IVD1	Fragment from possible window; 2.05 in wide with squared end; cone-shaped fracture suggests damage by a small caliber bullet
Encl. B, SE ¼	0-10 cm	71	Zinc flashing	IV-VI	Triangular cut fragment
Ext. SW Corner	0-52 cm	43	Rebar	?	1 fragment cut at both ends; 5.7 in long x .65 in diameter

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Construction Hardware</u>					
<i>Nails</i>					
Encl. A, SE ¼	SU 46	47	Wire	V-VI	2 12-penny specimens
			Wire		1 7-penny specimen
			Wire		2 4-penny specimens
			Wire		2 3-penny specimens
			Wire		1 2-penny specimen
			Wire		1 fragment
			Unidentified		10 severely corroded fragments
Encl. A	10-20 cm	50	Wire	?	3 9-penny specimens
			Unidentified		12 severely corroded fragments
Encl. A	SU 40	52	Unidentified	?	3 severely corroded fragments
Encl. A, S ½	SU 40	68	Unidentified	III?	3 severely corroded fragments
Encl. A, S ½	40-50 cm	70	Unidentified	?	1 severely corroded fragment
Encl. A, W ½	SU 46	82	Wire	V-VI	1 6-penny specimen
			Wire		4 4-penny specimens (in two bags)
			Wire		1 2-penny specimen
			Unidentified		1 severely corroded 16-penny specimen
			Unidentified		16 severely corroded fragments
Encl. A, W ½	SU 40B	91	Unidentified	?	2 severely corroded fragments
Encl. A, W ½	SU 45	85	Wire	V-VI	2 6-penny specimens
			Wire		1 3-penny specimen
			Unidentified		5 severely corroded fragments
Encl. A, W ½	SU 48	86	Unidentified	?	4 severely corroded fragments
Encl. A, W ½	SU 40A	88	Unidentified	?	1 severely corroded fragment
Encl. A, W ½	SU 41	93	Cut	?	1 2-penny specimen
			Unidentified		1 severely corroded fragment

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Nails (continued)</i>					
Encl. B, NW ¼	0-10 cm	49	Wire	VI	1 12-penny specimen; location of CMNH T.U.20
			Wire		2 7-penny specimens
			Wire		1 6-penny specimen
			Wire		1 2-penny specimen
			Wire		4 fragments (1 specimen in separate bag)
			Unidentified		2 severely corroded fragments
Encl. B, NW ¼	10-20 cm	53	Unidentified	VI	1 severely corroded fragment; location of CMNH T.U.20
Encl. B, NW ¼	30-40 cm	59	Unidentified	VI	1 severely corroded 7-penny specimen; location of CMNH T.U.20
			Cut		1 fragment
Encl. B, SE ¼	SU 44	77	Unidentified	IV	33 severely corroded fragments
Encl. B, SE ¼	SU 40	79	Unidentified	III	2 severely corroded fragments
Encl. B, SE ¼	SU 40	83	Unidentified	III	1 severely corroded fragment
Encl. B, SE ¼	0-10 cm	71	Cut	IV-VI	2 fragments
			Wire		1 12-penny specimen
			Wire		1 7-penny specimen
			Wire		1 6-penny specimen
			Wire		1 4-penny specimen
			Wire		1 3-penny specimen
			Unidentified		11 severely corroded fragments
Encl. B, SW ¼	SU 46	97	Cut	V-VI	1 fragment
			Wire		4 8-penny specimens
			Wire		3 6-penny specimens
			Wire		2 4-penny specimens
			Wire		2 fragments
			Unidentified		1 severely corroded 8-penny specimen
			Unidentified		2 severely corroded fragments
Encl. B, SW ¼	SU 44	100	Unidentified	IV	2 severely corroded fragments

Table 8. Continued.

*Nails (continued)*

Encl. B, SW ¼	SU 40	108	Cut	III	3 fragments
			Wire	III	2 6-penny specimens
			Unidentified	III	26 severely corroded fragments
Encl. C, NW ¼	0-10 cm	48	Unidentified	IV-VI	1 very corroded fragment; unit includes parts of CMNH T.U.16 & 16B
Encl. C, NW ¼	10-20 cm	51	Unidentified	III-IV	7 severely corroded fragments; associated with SU 52B, 52C, 40
Encl. C, NW ¼	SU 40	61	Unidentified	III	2 severely corroded fragments
Encl. C, SE ¼	10-20 cm	66	Cut	VI	2 fragments; location of CMNH T.U.16 and 16A
			Wire		1 9-penny specimen; location of CMNH T.U.16 and 16A
			Wire		1 6-penny specimen; location of CMNH T.U.16 and 16A
			Wire		1 4-penny specimen; location of CMNH T.U.16 and 16A
			Wire		2 fragments; location of CMNH T.U.16 and 16A
			Unidentified		1 severely corroded fragment; location of CMNH T.U.16 and 16A
			Unidentified		3 severely corroded fragments; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	30-40 cm	73	Unidentified	VI	2 severely corroded fragments; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	SU 41	78	Unidentified	III	1 severely corroded fragment; at base of CMNH T.U.16 and 16A
Encl. C, SW ¼	SU 40	96	Cut	III	1 fragment
			Unidentified	III	5 severely corroded fragments
			Cut	V-VI	2 fragments
			Wire		3 6-penny specimens
Encl. C, SW ¼	SU 50	92	Wire		2 4-penny specimens
			Wire		2 fragments
			Unidentified		6 severely corroded fragments
			Cut	IV	1 fragment
			Unidentified		22 severely corroded fragments
Encl. D, NE ¼	SU 50	112	Wire	V-VI	1 5-penny specimen
			Wire		1 3-penny specimen
			Wire		1 2-penny specimen
			Unidentified		1 severely corroded 7-penny specimen
			Unidentified		1 severely corroded 6-penny specimen
			Unidentified		1 severely corroded 5-penny specimen
			Unidentified		5 severely corroded 4-penny specimens
			Unidentified		3 severely corroded fragments

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Nails (continued)</i>					
Encl. D, NE ¼	SU 54	113	Unidentified	IVD2	4 severely corroded fragments
Encl. D, NE ¼	SU 55	114	Unidentified	IVD1	9 severely corroded fragments
Encl. D, NE ¼	SU 62	117	Unidentified	IVB	1 severely corroded fragment
Encl. D, NE ¼	SU 81	118	Unidentified	IVA	2 severely corroded fragments
Encl. D, NE ¼	SU 40	119	Cut	III	1 penny specimen
Encl. D, NW ¼	0-10 cm	54	Unidentified	IV-VI	2 severely corroded fragments
Encl. D, NW ¼	10-20 cm	58	Cut	IV	1 3-penny specimen
			Cut		1 fragment
			Wire		1 10-penny specimen
			Wire		2 7-penny specimens
			Wire		1 4-penny specimen
			Wire		1 fragment
			Unidentified		2 severely corroded fragments
Encl. D, NW ¼	30-40 cm	64	Unidentified	III-IV	2 severely corroded fragments
Encl. D, NW ¼	40-50 cm	67	Unidentified	?	3 severely corroded fragments; probably from groundhog disturbance
Encl. D, NW ¼	50-60 cm	72	Unidentified	?	1 severely corroded fragment; probably from groundhog disturbance
Encl. D, SE ¼	0-10 cm	80	Cut	IV-VI	1 fragment
			Wire		10 8-penny specimens
			Wire		1 7-penny specimen
			Wire		4 4-penny specimens
			Wire		2 fragments
Encl. D, SE ¼	SU 54	81	Wire	IVD2	1 4-penny specimen
Encl. D, SE ¼	SU 55	98	Unidentified	IVD1	5 severely corroded fragments
Encl. D, SE ¼	28-40 cm	99	Cut	III-IVB	2 fragments
			Unidentified		1 severely corroded 3-penny specimen
			Unidentified		5 severely corroded fragments

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Nails (continued)</i>					
Encl. D, SW ¼	SU 50	103	Wire Wire Wire Wire Unidentified	V-VI	1 8-penny specimen 1 6-penny specimen 1 4-penny specimen 1 3-penny specimen 2 severely corroded 8-penny specimen
Encl. D, SW ¼	Groundhog burrow	104	Wire	?	1 7-penny specimen
Encl. D, SW ¼	SU 54	105	Unidentified	IVD2	2 severely corroded fragments
Encl. D, SW ¼	SU 55	106	Unidentified	IVD1	1 severely corroded fragment
Encl. D, SW ¼	SU 80	107	Cut Unidentified	IVC	1 fragment 4 severely corroded fragments
Encl. D, SW ¼	Rodent burrow	110	Cut	?	1 specimen
Ext. SW Corner	0-52 cm	43	Unidentified	?	2 severely corroded fragments
Ext. NE Corner	0-36 cm	45	Cut Wire Unidentified	?	3 fragments (in 2 bags) 1 8-penny specimen 1 severely corroded 8-penny specimen
Ext. NE Corner	36-68 cm	46	Unidentified Unidentified	?	8 severely corroded fragments 1 severely corroded 7-penny specimen
Floor Opening 1	SU 73	126	Unidentified Wire Wire Unidentified	V-VI	12 severely corroded fragments 1 3-penny specimen 1 fragment 3 severely corroded fragments
Floor Opening 1	SU 74	128	Cut Cut Unidentified Unidentified	IVD1?	1 fragment 1 9-penny specimen 1 severely corroded 9-penny specimen 4 severely corroded fragments

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Nails (continued)</i>					
Floor Opening 1	SU 76	130	Unidentified Unidentified	III	2 severely corroded 9-penny specimens 4 severely corroded fragments
Floor Opening 4	SU 73	123	Unidentified Unidentified Unidentified	V-VI	1 severely corroded 7-penny specimen 2 severely corroded 3-penny specimens 10 severely corroded fragments
Floor Opening 4	SU 74	125	Cut Unidentified Unidentified	IVD1?	1 9-penny specimen 1 severely corroded 8-penny specimen 14 severely corroded fragments
Floor Opening 4	20-30 cm	133	Unidentified Unidentified	IV	1 severely corroded 10-penny specimen 9 severely corroded fragments
Floor Opening 4	SU 85	134	Unidentified	IVA-C	2 severely corroded fragments
Floor Opening 6	SU 73	109	Unidentified	V-VI	1 severely corroded fragment
Floor Opening 6	SU 74	111	Unidentified	IVD1?	7 severely corroded fragments
Floor Opening 6	SU 79	120	Unidentified	IVA	3 severely corroded fragments
<i>Nuts and Bolts</i>					
Encl. A, SE ¼	SU 47	47	Bolts  Lag bolt	?	2 ferrous specimens; 2 in long x 0.37 in diameter, round head carriage bolt; 3.1 in long x 0.25 in diameter machine bolt with hexagonal head Possibly home-made; 7.6 in long x 0.38 in diameter with oval 0.5 in x 1.5 in eye
Encl. A, W. ½	SU 39	121	Conduit nut Nut and bolt	?	For connection to 0.54 in diameter pipe 18½ in long x 0.92 in diameter bolt with square head and square nut attached; similar to those used to support the beams in the South Room roof
Encl. A, W ½	SU 46	82	Bolt	V-VI	4.5 in long x 0.33 in diameter headless shaft

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Nuts and Bolts (continued)</i>					
Encl. B, NW ¼	0-10 cm	49	Bolt	VI	Ferrous machine bolt; hexagonal head with raised S in center; 2 in long x 0.26 in diameter shank (modern); location of CMNH T.U.20
Encl. B, NW ¼	10-20 cm	53	Lag bolt or spike Bolt	VI	Wrought iron, 4.90 in long with 0.4 in diameter shaft Ferrous machine bolt; hexagonal head with raised S in center; 2 in long x 0.26 in diameter shank (modern); location of CMNH T.U.20
Encl. B, SE ¼	0-10 cm	71	Square nut Bolt	IV-VI	Ferrous; 0.44 in square for use with 0.215 in diameter bolt Round head carriage bolt; head painted red; 2.15 in long x 0.25 in diameter shank
Encl. C, SE ¼	0-10 cm	66	Bolt Lock nut	VI	Round head stove bolt with screwdriver slot; 1.23 in long x 0.21 in diameter shank Cupric with ferrous toothed washer; hexagonal; 0.38 in across for use with 0.115 in diameter bolt; location of CMNH T.U.16 and 16A
<i>Washers</i>					
Encl. A, SE ¼	SU 46	47	Lock washer	V-VI	White metal; with 0.44 in interior diameter
Encl. A, W ½	SU 48	86	Flat washer	?	Ferrous with 0.30 in interior diameter
Encl. B, NW ¼	10-20 cm	53	Lock washer	VI	Ferrous; split washer with 0.24 in interior diameter; location of CMNH T.U.20
Encl. B, SE ¼	0-10 cm	71	Flat washers Lock washers	IV-VI	2 ferrous flat washers with 0.30 in interior diameter 1 ferrous split (lock) washer with 0.25 in interior diameter; 1 ferrous split(lock) washer with 0.175 in interior diameter
Encl. B, SW ¼	SU 40	108	Flat washer	III	Ferrous; 0.32 in interior diameter
Encl. C, SW ¼	SU 50	92	Flat washer	V-VI	Ferrous; 0.32 in interior diameter
Floor Opening 4	SU 73	123	Lock washer	V-VI	Ferrous; 0.53 in interior diameter

Table 8. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Screws</i>					
Encl. A, W ½	SU 45	85	Wood screw	V-VI	Ferrous flat head; size 2½ - 16
Encl. A, SE ¼	SU 46	47	Wood screw	V-VI	Ferrous flat head; size 2½ - 12
Encl. B, NW ¼	0-10 cm	49	Wood screws	VI	2 ferrous round head; size 1½ - 6; location of CMNH T.U.20
Encl. C, SE ¼	0-10 cm	66	Wood screw	VI	Ferrous flat head; size ¾ - 5; location of CMNH T.U.16 and 16A
Encl. C, SW ¼	SU 50	92	Wood screw	V-VI	Ferrous round head; size 1½ - 6
Encl. D, SW ¼	SU 50	103	Wood screw	V-VI	Ferrous flat head; size 1 - 10
Encl. D, SW ¼	Groundhog Burrow	104	Wood screw	?	Ferrous flat head; size 1 - 6
<i>Miscellaneous</i>					
Encl. A, SE ¼	SU 47	47	Fence staple Hook	?	Wrought iron hook fragment
Encl. B, SE ¼	0-10 cm	71	Fence staple	IV-VI	
Encl. B, SW ¼	SU 46	97	Door bolt	V-VI	Barrel bolt for fastening door (Russell and Erwin Manufacturing Co. 1980:97)
Encl. D, NW ¼	10-20 cm	58	Fence staple	IV	
Floor Opening 1	SU 75	127	Door hook	IVD	Ferrous
<u>Plumbing-Sanitation</u>					
Encl. D, SW ¼	SU 55	106	Ceramic drain tile	IVD1	1 fragment
Encl. D, SW ¼	SU 55	114	Ceramic drain tile	IVD1	1 fragment
Encl. D, NW ¼	20-30 cm	62	Ceramic drain tile	III-IVD1	1 fragment
Ext. NE Corner	0-36 cm	45	Wire pipe supports?	?	1 fragment and 1 complete U-shaped specimen with round head screw in loop at one end

Table 8. Concluded.

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<u>Fixed Illumination and Power</u>					
Encl. A, W ½	SU 40A	88	Electrical tape	?	Black; discarded
Encl. A, W ½	SU 45	85	Ceramic insulator	V-VI	Fragment with clear glaze
Encl. B, NW ¼	0-10 cm	49	Light bulb	VI	1 fragment; location of CMNH T.U.20
	10-20 cm	53	Light bulb	VI	4 fragments
Encl. B, SE ¼	0-10 cm	71	Light bulb	IV-VI	3 fragments
			Fuse		Clear glass 20 amp fuse with cupric metal threads; paper under fuse strip marked "20A/OK/AB INC LIS.../MH-360"; glass head marked "EAGLE 125V 0K 125V" around rim; center of fuse base marked "20"
Encl. B, SW ¼	SU 45	102	Light bulb	V-VI	1 fragments
	SU 46	97	Light bulb	V-VI	14 fragments
	SU 40	108	Light bulb	III	51 fragments
	SU 52C	101	Light bulb	IVA	1 fragment
Encl. C, SE ¼	0-10 cm	66	Cable clamp	VI	Used to affix cable to conduit; zinc?; location of CMNH T.U.16 and 16A
Encl. C, SW ¼	SU 50	92	Light bulb	V-VI	2 fragments

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Table 9. Materials related to transportation recovered from the North (Stable) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
Encl. A	SU 40	52	Horseshoe nails	?	3 specimens in horse shoe
Encl. A, SE ¼	SU 46	47	Horseshoe Spark plug Stirrup Center clip Brake/pole springs	V-VI	Several nails still attached "CHAMPION 7/MADE IN U.S.A. REG.U.S.PAT.OFF." in orange letters Ferrous; similar to those illustrated in Moseman and Brother (1990:247-248) for side saddle (Figure 19a) Ferrous fragment of clip bow Ferrous; one complete (2½ in long x 0.67 in diameter)
Encl. A, W ½	SU 40B	91	Spark plug	?	Fragment
Encl. A, W ½	SU 46	82	Harness snap	V-VI	3 in bolt snap for attachment to 7/8 in wide strap
Encl. B, NW ¼	10-20 cm	53	Wood	VI	1 fragment painted green on one side (from wagon body?); location of CMNH T.U.20
Encl. B, SW ¼	SU 46	97	Box rod nut	V-VI	For use with 0.36 in threaded rod
Encl. C, SE ¼	10-20 cm	66	Horseshoe nail	VI	1 specimen; location of CMNH T.U.16 and 16A
Encl. C, SW ¼	SU 50	92	Horseshoe nail	V-VI	1 specimen
Encl. D, NW ¼	30-40 cm	64	Carriage door latch	III-IV	Brass fleur-de-lis shaped handle (Figure 19b)
Encl. D, NW ¼	10-20 cm	58	Horse hair	IV	Upholstery stuffing?
Encl. D, SW ¼	Groundhog burrow	104	Corner iron	?	90 degree; for bracing top of box corners; each arm is 2½ in long and 0.525 in wide; 4 attachment holes
Ext. NE Corner	0-36 cm	45	Chrome strips	?	2 specimens; 1.25 in wide, excurved bands from car trim(?)
Ext. SW Corner	0-52 cm	43	Horseshoe Horseshoe Buggy canopy rivet  Railroad spike	?	Fragment Cupric metal; 0.63 in square, flat head pierced with round 0.09 in diameter shaft; shaft broken (James E. Price, personal communication 1992)

Table 10. Materials related to commerce and industry or group services recovered from the North (Stable) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<b><u>Commerce and Industry—Repair and Maintenance-Blacksmithing</u></b>					
<i>Fuel</i>					
Encl. A, SE ¼	S U 46	47	Coal	V-VI	1 fragment weighing 4.3 gm
Encl. A, W ½	SU 45	85	Coal	V-VI	2 fragments weighing 5.1 gm; sample retained
Encl. B, NW ¼	40-50 cm	63	Coal	VI	1 fragment weighing 7.2 gm; location of CMNH T.U.20
Encl. B, SE ¼	SU 40	83	Coal	III	1 fragment weighing 0.1 gm
Encl. C, NW ¼	0-10 cm	48	Coal	IV-VI	1 fragment weighing 5.4 gm; unit includes portion of CMNH T.U.16 and 16B
Encl. C, SE ¼	40-50 cm	75	Coal	VI	1 fragment weighing 5.7 gm; location of CMNH T.U.16 and 16A
Encl. C, SW ¼	SU 50	92	Coal	V-VI	4 fragments weighing 13.8 gm; sample retained
Encl. D, NE ¼	SU 54	113	Coal	IVD2	2 fragments weighing 8.5 gm; sample retained
Encl. D, NE ¼	SU 55	114	Coal	IVD1	7 fragments weighing 106.9 gm; sample retained
Encl. D, NE ¼	SU 62	117	Coal	IVB	2 fragments weighing 4.4 gm; sample retained
Encl. D, NW ¼	10-20 cm	58	Coal	IV	1 fragment weighing 1.2 gm
Encl. D, SW ¼	SU 55	106	Coal	IVD1	3 fragments weighing 15.6 gm; sample retained
Floor Opening 1	SU 77	129	Coal	IVA	11 fragments weighing 5.0 gm; sample retained
Floor Opening 1	SU 73	126	Coal	V-VI	1 fragment weighing 1.9 gm
Floor Opening 1	SU 74	128	Coal	IVD1?	12 fragments weighing 9.7 gm; sample retained
Floor Opening 4	20-30 cm	133	Coal	IV	2 fragments weighing 2.8 gm; sample retained
Floor Opening 4	SU 74	125	Coal	IVD1?	13 fragments weighing 69.4 gm; sample retained
Floor Opening 6	SU 74	111	Coal	IVD1?	3 fragments weighing 41.7 gm; sample retained
Floor Opening 6	SU 78	116	Coal	IVB	1 fragment weighing 14.6 gm

Table 10. Concluded.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Waste/By-products</i>					
Encl. A, S ½	SU 40	68	Cinder/Clinker/Slag	III?	1 fragment weighing 12.3 gm
Encl. D, NE ¼	SU 50	112	Cinder/Clinker/Slag	V-VI	1 fragment weighing 3.2 gm
Floor Opening 1	SU 76	130	Cinder/Clinker/Slag	III	1 fragment weighing 0.2 gm
Floor Opening 6	SU 78	116	Cinder/Clinker/Slag	IVB	1 fragment weighing 9.7 gm
Floor Opening 6	SU 40	124	Cinder/Clinker/Slag	III	1 fragment weighing 11.8 gm
Floor Opening 6	SU 74	111	Cinder/Clinker/Slag	IVD1?	5 fragments weighing 31.4 gm; sample retained
Encl. D, NE ¼	SU 55	114	Cinder/Clinker/Slag	IVD1	4 fragments weighing 11.2 gm; sample retained
Encl. D, NW ¼	0-10 cm	54	Cinder/Clinker/Slag	IV-VI	1 fragment weighing 1.5 gm
Encl. D, NW ¼	10-20 cm	58	Cinder/Clinker/Slag	IV	6 fragments weighing 4.1 gm; sample retained
Encl. D, SE ¼	28-40 cm	99	Cinder/Clinker/Slag	III-IVB	2 fragments weighing 4.1 gm; sample retained
Floor Opening 1	SU 73	126	Cinder/Clinker/Slag	V-VI	5 fragments weighing 3.9 gm; sample retained
<u>Commercial Services</u>					
Encl. B, SE ¼	0-10 cm	71	Coin	IV-VI	1912 U.S. dime
Encl. C, SE ¼	SU 41	78	Coin	VI	1990 U.S. penny damaged on one side by acid; may have been left as a marker to identify the base of CMNH Test Unit 16
			Product tag		Black plastic rectangular tag from Sears Craftsman screwdriver (discarded); location of CMNH T.U.16 and 16A
<u>Group Services—Education</u>					
Encl. A, W ½	SU 46	82	Museum sign	V-VI	Wood fragment; painted white on one side with large unidentified black letters

Table 11. Miscellaneous objects of unidentified function recovered from the North (Stable) Room.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Fabric</u>					
Encl. A, W ½	SU 45	85	—	V-VI	Light weight cotton canvas; exterior surface coated with green water-proofing(?)
Encl. B, NW ¼	0-10	49	—	VI	Light weight cotton fabric; originally white?; location of CMNH T.U.20
Encl. B, NW ¼	10-20 cm	53	—	VI	Same as from Cat. No. 49
Encl. B, NW ¼	40-50 cm	63	—	VI	Same as from Cat. No. 49
Encl. C, NW ¼	10-20 cm	51	—	III-IV	Same as from Cat. No. 49; associated with SU 52B, 52C, 40
Encl. D, NE ¼	SU 50	112	—	V-VI	Unidentified
Encl. D, SE ¼	0-10 cm	80	—	IV-VI	Same as from Cat. No. 85
Encl. D, SW ¼	SU 50	103	—	V-VI	Same as from Cat. No. 85
<u>Leather</u>					
Encl. D, NE ¼	SU 50	112	—	V-VI	1 fragment
<u>Paper and Floral Materials</u>					
Encl. A	SU 39	60	Wood	?	1 fragment; black paint on one surface
Encl. A, W ½	SU 46	82	Cardboard	V-VI	Fragments of green fabric-backed cardboard container(?); one surface coated with white paint or plaster with "2" written in ink above printed line
Encl. A, SE ¼	SU 46	47	Wood	V-VI	4½ x 2½ x 0.2 in rectangular segment of thin plank; rough ½ in diameter hole located 0.85 in from one end; V-shaped groove runs from hole to end of plank; small box lid?
Encl. B, NW ¼	0-10 cm	49	Wood		1 piece; ovate in outline, flat on one side and rounded on the other.
Encl. B, NW ¼	40-50 cm	63	Charcoal	VI	4 fragments; location of CMNH T.U.20
Encl. B, SE ¼	SU 40	79	Charcoal	VI	1 fragment; location of CMNH T.U.20
			Wood	III	6 tiny fragments

Table 11. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Paper and Floral Materials (continued)</u>					
Encl. B, SE ¼	SU 40	108	Cardboard	III-IV	
Encl. B, SW ¼	SU 45	102	Charcoal	V-VI	8 fragments
Encl. B, SW ¼	SU 46	97	Charcoal	V-VI	45 fragments
Encl. C, SE ¼	10-20 cm	69	Wood	VI	1 unpainted fragment similar in form to those from Cat. No. 112; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	40-50 cm	75	Cardboard	VI	White paper liner for plastic or metal screw cap (missing); discarded; location of CMNH T.U.16 and 16A
Encl. C, SW ¼	SU 52	94	String Charcoal	VI IV	Discarded; location of CMNH T.U.16 and 16A 33 fragments weighing 76.8 gm; sample retained
Encl. D, NE ¼	SU 50	112	Wood	V-VI	3 fragments; 0.265 in diameter dowel section; 2 fragments fit to produce a 2.1 in long, squared cross section (approx. 0.16 in on a side) stick with a pin hole at center and squared ends painted black over white
Encl. D, NW ¼	10-20 cm	58	Cardboard	IV	1 fragment
Encl. D, SE ¼	0-10 cm	80	Cardboard Wood	IV-VI	2 fragments 1 fragment
Encl. D, SE ¼	SU 55	98	Charcoal Wood	IVD1	2 fragments weighing 0.1 gm; sample retained 4 fragments
Encl. D, SE ¼	28-40 cm	99	Charcoal	III-IVB	1 fragment weighing 1.6 gm
Encl. D, SW ¼	Rodent burrow	110	Wood dowel	?	1 fragment 0.20 in diameter
Encl. D, SW ¼	SU 50	103	Cardboard Wood	V-VI	3 fragments 4 fragments; 1 specimen = 0.65 in thick x 1.33 in wide
Encl. D, SW ¼	Groundhog burrow	104	Wood gasket	?	Manufactured product; 1.5 in exterior diameter x 0.65 in thick; 0.71 in interior diameter with 0.95 in diameter x 0.18 in deep inset from beveled face; flat back
Encl. D, SW ¼	SU 54	105	Wood	IVD2	3 fragments 1.34 in wide x 0.64 in thick

Table 11. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Paper and Floral Materials (continued)</u>					
Floor Opening 1	SU 76	130	Charcoal	III	2 fragments weighing 0.1 gm; sample retained
Floor Opening 1	SU 73	123	Corn cob Acorn	V-VI	Sample
Floor Opening 4	20-30 cm	133	Charcoal	IV	1 fragment weighing 0.8 gm
<u>Plastic/Rubber</u>					
Encl. A	SU 40	52	Strapping	?	Star-shaped configuration of 0.16 in wide x 0.04 in thick plastic strips; package strapping?
Encl. B, SW ¼	SU 40	108	Electrical wire	III-IV	Red plastic insulation
Encl. C, SE ¼	30-40 cm	73	Plastic sheeting	VI	Clear (discarded); location of CMNH T.U.16 and 16A
			Rubber band	VI	Red (discarded); location of CMNH T.U.16 and 16A
Encl. C, SE ¼	40-50 cm	75	Plastic sheeting	VI	1 clear fragment, 1 brown fragment (discarded); location of CMNH T.U.16 and 16A
			?		Green plastic fragment (discarded); location of CMNH T.U.16 and 16A
Encl. C, SE ¼ (continued)	40-50 cm	75	Rubber bands		4 natural color bands (discarded); location of CMNH T.U.16 and 16A
			?		White plastic fragment (discarded); location of CMNH T.U.16 and 16A
Encl. D, NE ¼	SU 50	112	?	V-VI	Yellow plastic fragment with fluorescent orange speckles
Encl. D, NW ¼	10-20 cm	58	Spacer	?	Red rubber squat (0.38 in high x 2.29 in wide x 0.13 in thick) T-shaped object
			Wire insulation	?	Red plastic insulation (0.075 in diameter) from small gauge electrical wire; probably from rodent disturbed area of unit

Table 11. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Glass</u>					
<i>Curved Glass</i>					
Encl. A	20-30 cm	52	Unid. bottle No. ?	?	1 clear body fragment; no response to long wave UV radiation; yellow under short wave UV; same as unid. bottle No. 3 from SU 46?
			Unid. bottle No. ?		20 clear glass body fragments; yellow under long and short wave UV
			Unid. bottle No. 6		1 light blue glass body fragment; light gray under long wave UV and yellow under short wave UV
	SU 40	68	Unid. bottle No. ?	?	3 clear glass body fragments; yellow under long wave UV and short wave UV
			Unid. bottle No. ?		2 clear glass body fragments; yellow under long wave UV and golden yellow under short wave UV
	SU 39	60	Unid. bottle No. 6?	?	1 light blue body fragment
	SU 40B	91	Unid. bottle No. ?	?	3 clear body fragments
Encl. A, W ½	SU 41	73	Unid. bottle No. ?	?	23 milky to clear body fragment from oval-shape body; yellow under long wave UV and whitish-yellow under short wave UV
Encl. A, W ½	SU 45	85	Unid. bottle No. 1	V-VI	1 clear body fragment; lt. gray under long wave UV radiation; dark orange under short wave UV
Encl. A, W ½	SU 46	82	Unid. bottle No. 1?	V-VI	2 clear body fragments; lt. gray under long wave UV radiation; orange under short wave UV
			Unid. bottle No. 2		6 clear body fragments; lt. gray under long wave UV radiation; dk. yellow under short wave UV
			Unid. bottle No. 3		1 clear body fragment; no response to long wave UV radiation; yellow under short wave UV
			Unid. bottle No. 4		2 clear body fragments; lt. gray under long wave UV radiation; golden yellow under short wave UV
			Unid. bottle No. 5		1 rust-stained clear glass body fragment; black under long and short wave UV
Encl. A, W ½	SU 48	86	Unid. bottle No. ?	?	1 clear glass body fragment

Table 11. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Curved Glass (continued)</i>					
Encl. A, SE ¼	SU 46	47	Unid. bottle No. 3?	V-VI	1 clear body fragment; no response to long wave UV radiation; golden yellow under short wave UV
			Unid. bottle No. ?		37 milky to clear body fragments; bright yellow under long and short wave UV
			Unid. bottle No. ?		9 milky to clear body fragments; bright yellow under long wave UV and golden yellow under short wave UV
			Unid. bottle No. ?		9 milky to clear body fragments; gray yellow under long wave UV and golden yellow under short wave UV
			Unid. bottle No. ?		11 milky to clear body fragments; light gray under long wave UV and golden yellow under short wave UV
			Unid. bottle No. 6?		1 light blue glass body fragment; light gray under long wave UV and golden yellow under short wave UV
Encl. B, SW ¼	SU 40	108	Unid. bottle No. ?	III	Clear glass oil finish; bright yellow under long and short wave UV
			Unid. bottle No. ?		5 clear glass body fragments; bright yellow under long and short wave UV
			Unid. bottle No. ?		Clear glass body fragment; light gray under long wave UV, gray-orange under short wave UV
			Unid. bottle No. ?		3 clear glass body fragments; bright yellow under long wave UV, golden yellow under short wave UV
			Unid. bottle No. ?		20 clear glass body fragments; light gray under long wave UV, golden yellow under short wave UV
Encl. B, SW ¼	SU 45	102	Unid. bottle No. ?	V-VI	2 clear glass body fragments; light gray under long wave UV, bright yellow under short wave UV
			Unid. bottle No. ?		2 clear glass body fragments; light gray under long wave UV, golden yellow under short wave UV

Table 11. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Curved Glass (continued)</i>					
Encl. B, SE ¼	0-10 cm	71	Unid. bottle No. ?	IV-VI	3 clear glass body fragments; bright yellow under long and short wave UV
			Unid. bottle No. ?		8 milky to clear glass body fragments; light gray under long wave UV, golden yellow under short wave UV
Encl. B, NW ¼	SU 40	42	Unid. bottle No. ?	III	1 clear glass body fragment; light gray under long wave UV, golden yellow under short wave UV
	0-10 cm	49	Unid. bottle No. ?	VI	1 clear glass body fragment; very dark yellow under long wave UV, bright yellow under shortwave UV; location of CMNH T.U.20
Encl. B, NW ¼	10-20 cm	53	Unid. bottle No. ?	VI	3 clear glass body fragments; bright yellow under long and short wave UV; location of CMNH T.U.20
	SU 52	94	Unid. bottle No. ?	IV	1 clear glass unidentified finish fragment; light gray under long wave UV, bright yellow under short wave UV
Encl. C, SW ¼	SU 52	94	Unid. bottle No. ?	IV	1 clear glass unidentified finish fragment; light gray under long wave UV, bright yellow under short wave UV
Encl. D, SE ¼	0-10 cm	80	Unid. bottle No. ?	IV-VI	4 clear glass body fragments
			Unid. bottle No. 7?		3 pale green body fragments
	SU 54	81	Unid. bottle No. ?	IVD2	1 clear glass body fragment
	SU 55	98	Unid. bottle No. ?	IVD1	1 clear glass neck fragment
Encl. D, NE ¼	SU 50	112	Unid. bottle No. 7	V-VI	2 pale green body fragments; light gray under long wave UV, bright yellow under short wave UV
			Unid. bottle No. ?		4 milky to clear glass body fragments; light gray under long wave UV, bright yellow under short wave UV
Encl. D, NW ¼	0-10 cm	54	Unid. bottle No. ?	IV-VI	3 clear glass body fragments
Floor Opening 1	SU 76	130	Unid. bottle No. 8	III	Pale purple (sun-colored) glass with 1 wide, 1 narrow ground parallel bands; dates to circa 1880-1916 (Munsey 1970:55)
Floor Opening 1	SU 73	123	Unid. bottle No. ?	V-VI	Clear glass body fragment
Floor Opening 4	20-30 cm	133	Unid. bottle No. ?	IV	Clear glass body fragment

Table 11. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<i>Flat Glass (greater than or equal to 2.30 mm thickness)</i>					
Encl. A	10-20 cm	50	?	?	3.27 mm thick
Encl. A, W ½	SU 45	85	?	V-VI	3.52 mm thick
Encl. A, SE ¼	SU 46	47	?	V-VI	4.17, 4.18, 3.31,, 3.83, 3.31, 3.61, 3.39, 3.31, 3.49, 3.74 mm thick
Encl. B, SE ¼	0-10 cm	71	?	IV-VI	3.29 mm thick
Encl. B, SW ¼	SU 40	108	?	III	3.29, 3.26, 3.23 mm thick
Encl. C, SE ¼	10-20 cm	66	?	VI	3.36 mm thick; location of CMNH T.U.16 and 16A
Encl. C, NW ¼	10-20 cm	51	?	?	3.26 mm thick; CMNH T.U.16B takes up about 2/3 of this unit
<u>Ferrous Metal</u>					
Encl. A, SE ¼	SU 46	47	— Pin	V-VI	26 specimens Round headed pin with 0.30 in diameter shaft broken 4.55 in from head at point where shaft is pierced by small [copper pin?] hole
			Rod		0.37 in diameter x 6 in long rod; squared at both ends
			Tin lid		2 fragments possibly from 3 in diameter cardboard container
			Bolt and nut		Round, columnar head slotted for tightening with Allen wrench; 2.5 in long x 0.50 in diameter shaft with nut attached
Encl. A	10-20 cm	50	— Half oval strap	?	15 specimens About 3.7 in long from tapered, rounded end to break; may be screw hole at break; 0.575 in wide x 0.14 in thick
			Smooth wire		0.085 in diameter fragment
			—		0.33 in square shaft welded to center of 0.57 in hexagonal nut
			—		Wood fragment with iron sheathing
Encl. A	SU 45	57	—	V-VI	12 specimens (in two bags)
Encl. A	SU 39	60	—	?	2 specimens (in separate bags)

Table 11. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Ferrous Metal (continued)</u>					
Encl. A, W ½	SU 46	82	— Lariat swivel — Wire hook	V-VI	8 fragments 0.68 in eye swivel attached to S-shaped chain link Cast iron hardware Wire = 0.11 in diameter; 6.3 in long; one large (3.25 x 1.97 in) U-shaped hook
Encl. A, W ½	SU 45	85	— —	V-VI	4 fragments Large cast iron, hexagonal hook or clevis pin; L-shaped with long arm = 5.8 in and short arm = 3.2 in; long arm terminus pointed; short arm terminus squared
Encl. B, NW ¼	0-10 cm	49	— — Unid. fastener	VI	Cup-shaped object 6 specimens (1 in separate bag); location of CMNH T.U.20 U-shaped "staple" 2.5 in long x 0.45 in wide head, made of 0.075 in diameter galvanized wire
Encl. B, NW ¼	10-20 cm	53	—	VI	2 specimens; location of CMNH T.U.20
Encl. B, NW ¼	20-30 cm	55	—	VI	3 specimens; location of CMNH T.U.20
Encl. B, NW ¼	20-30 cm	55	Socket	VI	0.70 in diameter; 0.45 in hexagonal socket for use with 0.37 in drive ratchet (modern); location of CMNH T.U.20
Encl. B, NW ¼	40-50 cm	63	—	VI	8 specimens; location of CMNH T.U.20
Encl. B, SE ¼	SU 44	77	—	IV	6 specimens
Encl. B, SE ¼	0-10 cm	71	—	IV-VI	24 specimens (in two bags)
Encl. B, SW ¼	SU 46	97	— Tin fragments Unid. fastener	V-VI	4 specimens 5 specimens; one triangular piece from tin can?
Encl. B, SW ¼	SU 40	108	— Rectangular bar	III III	16 specimens 7 in long x 1.28 in wide x 0.43 in thick fragment pierced by two 0.5 in diameter holes spaced 3 in apart

Table 11. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Ferrous Metal (continued)</u>					
Encl. B, SW ¼ (cont.)	SU 40 (cont.)	108	—	III	Wood screw attached to corner of 0.65 in x 0.60 in piece of sheet metal
			—	III	Cast-iron fitting
			Tin box	III	5 fragments of small rectangular box, approx. 0.7 in wide and over 2¼ in wide
Encl. C, SE ¼	10-20 cm	66	—	VI	5 specimens; location of CMNH T.U.16 and 16A
			Slim taper saw file	VI	6 in long; see Montgomery Ward (1969b:588); speckled with red paint on all surfaces; location of CMNH T.U.16 and 16A
Encl. C, SE ¼	SU 41	78	—	III	1 specimen; at base of CMNH T.U.16 and 16A
Encl. C, SW ¼	SU 40	96	—	III	1 specimen
Encl. C, SW ¼	SU 50	92	—	V-VI	3 specimens
			Tin lid	V-VI	1.9 in diameter japanned lid with cardboard liner
Encl. D, NE ¼	Groundhog burrow	132	—	?	1 specimen
			Spring or hook?		L-shaped (4 in x 2 in ) with pointed end on long arm (for driving into wood?) and looped end on short arm
Encl. D, NE ¼	SU 54	113	—	IVD2	6 specimens (in 2 bags)
Encl. D, NE ¼	SU 55	114	—	IVD1	2 specimens
Encl. D, NW ¼	10-20 cm	58	—	IV	4 specimens
			Unid. fastener	IV	4 U-shaped “staples” same as Cat. No. 49 and No. 80; two bound together by rust with thin plastic from wrapper attached to lower legs
Encl. D, NW ¼	40-50 cm	67	—	?	1 specimen; probably from groundhog disturbance
Encl. D, NW ¼	50-60 cm	72	—	?	2 specimens (in separate bags); probably from groundhog disturbance
Encl. D, SE ¼	10-20 cm	80	—	IV-VI	3 specimens
			Tin		1 specimen
			Unid. fastener		U-shaped “staple” same as Cat. No. 49
Encl. D, SE ¼	SU 55	98	—	IVD1	1 specimen
Encl. D, SE ¼	28-40 cm	99	—	III-IVB	2 specimens (in separate bags)

Table 11. Continued.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Ferrous Metal (continued)</u>					
Encl. D, SW ¼	SU 50	103	— Round bastard file S-shaped rod	V-VI V-VI V-VI	4 specimens 10 in long; see Montgomery Ward (1969b:588) About 14 in long x .38 in diameter; one end (1.15 in long) bent to right angle; other end (1.25 in long) bent to U-shape at 90 degrees to opposite end
Encl. D, SW ¼	Groundhog burrow	104	—	?	2 specimens
Encl. D, SW ¼	SU 54	105	— Wire	IVD2	1 specimen 0.05 in diameter, U-shaped fragment
Ext. SW Corner	0-52 cm	43	— Tin can ?	?	10 specimens Rim fragment Flat band, about ½ in wide
Ext. NE Corner	0-36 cm	45	— ? Unid. fastener	?	14 specimens (in 2 bags) Unidentified object; possibly associated with a wagon Poorly preserved U-shaped specimen with squared corners similar to Cat. Nos. 49, 58, 80, 97 above
Ext. NE Corner	36-68 cm	46	—	?	2 specimens (separate bags)
Floor Opening 1	SU 75	127	—	IVD	2 specimens
Floor Opening 1	SU 74	128	—	IVD1?	3 specimens
Floor Opening 1	SU 76	130	—	III	2 specimens
Floor Opening 4	SU 73	123	— Wire	V-VI	10 specimens 0.15 in diameter x about 11¼ in long
<u>Other Metal</u>					
Encl. A, W ½	SU 46	82	Control knob	V-VI	Aluminum knob with white rubber tip (modern)
Encl. B, NW ¼	0-10 cm	49	Aluminum foil	VI	Discarded; location of CMNH T.U.20

Table 11. Concluded.

Provenience	Level (cm) or Stratum	Cat. No.	Identification	Period	Description, Comment
<u>Stone</u>					
Encl. B, SE ¼	0-10 cm	71	Slate	IV-VI	1 fragment weighing 0.9 gm
Encl. C, SE ¼	SU 41	78	Slate	III	1 fragment weighing 46.1 gm; at base of CMNH T.U.16 and 16A
Encl. D, NE ¼	SU 50	112	Sandstone	V-VI	1 fragment weighing 1.3 gm
Encl. D, NE ¼	SU 82	122	Unid. stone	III	1 fragment weighing 62.5 gm
Encl. D, SE ¼	28-40 cm	99	Slate	III-IVB	2 fragments weighing 1.5 gm; sample retained
NE Ext. Corner	0-36 cm	45	Slate	?	2 fragments weighing 282.2 gm; sample retained
NE Ext. Corner	36-68 cm	46	Slate	?	5 fragments weighing 278.2 gm; sample retained
Floor Opening 1	SU 76	130	Sandstone	III	3 fragments weighing 58.2 gm; sample retained

Table 12. Thicknesses of flat glass recovered in the South (Carriage) Room and associated calendrical dates.

Provenience	Stratum or Level	Cat. No.	Total No. of Spec.	Total Thickness	Avg. Thickness	Date (per Moir 1982)
N99-E89	SU 14	26	5	11.95	N/A	N/A
99-E95	SU 4	35	26	59.81	2.30	1909.2
N102-E96	SU 4	29	2	3.76	N/A	N/A
N104-E96	SU 4	30	1	1.69	N/A	N/A
	<i>SU 4 Subtotals</i>		29	65.26	2.25	1904.7
N99-E98	SU 99 (00-10 cm)	1	16	38.56	N/A	N/A
N99-E98	SU 99 (10-20 cm)	5	7	17.54	N/A	N/A
N99-E98, W ext.	SU 99 (10-20 cm)	19	3	8.10	N/A	N/A
	<i>SU 99 Subtotals</i>		26	64.20	2.47	1924.5
N99-E98	20-30 cm	6	2	5.07	N/A	N/A
N100-E90	00-10 cm	39	3	5.62	N/A	N/A
N100-E90	10-20 cm	40	1	1.73	N/A	N/A
N102-E90	00-10 cm	3	2	3.67	N/A	N/A
N102-E90	10-20 cm	10	2	3.29	N/A	N/A
N102-E96	Level3	32	2	5.34	N/A	N/A
N102-E98	10-20 cm	8	2	4.57	N/A	N/A
N102-E98	30-40 cm	11	1	2.30	N/A	N/A

Table 12. Concluded.

Provenience	Stratum or Level	Cat. No.	Total No. of Spec.	Total Thickness	Avg. Thickness	Date (per Moir 1982)
N104-E96	SU 13	28	210	447.64	2.13	1893.9
N104-E96	SU 13	22	666	1401.15	2.10	1891.2
N104-E96	SU 13	33	7	17.20	N/A	N/A
	<i>SU 13 Subtotals</i>		883	1866.07	2.11	1892.1
N106-E97	Level 1	38	2	3.26	N/A	N/A
SITE TOTAL			960	2042.33	2.13	1893.9

Table 13. Thicknesses of flat glass recovered in the North (Stable) Room and associated calendrical dates.

Provenience	Stratum or Level	Cat. No.	Total No. of Spec.	Total Thickness	Avg. Thickness	Date (per Moir 1982)
Encl. A	SU 39	60	2	5.04	N/A	N/A
Encl. A	SU 40	52	9	15.95	N/A	N/A
Encl. B, SW ¼	SU 40	108	45	97.26	2.16	1896.6
Encl. C, NW ¼	SU 40	61	1	1.56	N/A	N/A
Floor Opening No. 6	SU 40	124	1	2.29	N/A	N/A
Encl. A, W ½	SU 40B	91	3	6.50	N/A	N/A
	<i>SU 40 Subtotals</i>		59	123.56	2.09	1890.3
Encl. C, SE ¼	SU 41	78	7	19.99	N/A	N/A
Encl. A, W ½	SU 41	93	14	28.27	2.02	1884.1
Encl. B, SE ¼	SU 42	74	1	2.32	N/A	N/A
Encl. B, SW ¼	SU 44	100	1	2.76	N/A	N/A
Encl. A, W ½	SU 45	85	42	79.57	1.89	1872.4
Encl. B, SW ¼	SU 45	102	2	3.30	N/A	N/A
	<i>SU 45 Subtotals</i>		44	82.87	1.88	1871.5
Encl. A, SE ¼	SU 46	47	47	107.33	2.28	1907.4
Encl. A, W.½	SU 46	82	119	224.10	1.88	1871.5
Encl. B, SW ¼	SU 46	97	67	170.89	2.55	1931.6
	<i>SU 46 Subtotals</i>		233	502.32	2.16	1896.6

Table 13. Continued.

Provenience	Stratum or Level	Cat. No.	Total No. of Spec.	Total Thickness	Avg. Thickness	Date (per Moir 1982)
Encl. A, W ½	SU 48	86	8	13.77	N/A	N/A
Encl. C, SW ¼	SU 50	92	11	40.37	N/A	N/A
Encl. D, NE ¼	SU 50	112	17	39.76	N/A	N/A
Encl. D, SW ¼	SU 50	103	27	59.55	2.20	1900.2
	<i>SU 50 Subtotals</i>		55	139.68	2.54	1930.7
Encl. C, SE ¼	SU 50, 51, 52A, 52B	66	11	26.52	N/A	N/A
Encl. C, NW ¼	SU 50, 52A, 52B	48	29	64.05	2.21	1901.1
	<i>SU 50, 52A, 52B Subtotals</i>		40	87.57	2.19	1899.3
Encl. C, NW ¼	SU 52B, 52C, 40	51	4	9.70	N/A	N/A
Encl. B, SW ¼	SU 52	101	3	6.23	N/A	N/A
Encl. C, SW ¼	SU 52	94	2	4.53	N/A	N/A
Encl. D, SW ¼	SU 54	105	11	24.73	N/A	N/A
Floor Opening No. 1	SU 73	126	12	27.61	N/A	N/A
Floor Opening No. 4	SU 73	123	1	2.28	N/A	N/A
Floor Opening No. 6	SU 73	109	1	1.60	N/A	N/A
	<i>SU 73 Subtotals</i>		14	31.49	2.25	1904.7
Floor Opening No. 1	SU 76	130				
Encl. D, SW ¼	SU 94	110	5	11.14	N/A	N/A

Table 13. Continued.

Provenience	Stratum or Level	Cat. No.	Total No. of Spec.	Total Thickness	Avg. Thickness	Date (per Moir 1982)
Encl. A	Level 2 (10-20 cm)	50	16	34.53	N/A	N/A
Encl. A	Groundhog burrow	57	2	4.59	N/A	N/A
Encl. B, NW ¼	Level 1 (0-10 cm)	49	17	38.47	N/A	N/A
Encl. B, NW ¼	Level 2 (10-20 cm)	53	10	21.56	N/A	N/A
Encl. B, NW ¼	Level 3 (20-30 cm)	55	2	4.36	N/A	N/A
Encl. B, NW ¼	Level 4 (30-40 cm)	59	4	8.29	N/A	N/A
Encl. B, NW ¼	Level 5 (40-50 cm)	63	5	11.12	N/A	N/A
Encl. B, SE ¼	Level 1 (0-10 cm)	71	170	379.80	2.23	1902.9
Encl. C, SE ¼	Level 2 (20-30 cm)	69	2	4.50	N/A	N/A
Encl. C, SE ¼	Level 3 (30-40 cm)	73	4	11.56	N/A	N/A
Encl. C, SE ¼	Level 4 (40-50 cm)	75	6	15.04	N/A	N/A

Table 13. Concluded.

Provenience	Stratum or Level	Cat. No.	Total No. of Spec.	Total Thickness	Avg. Thickness	Date (per Moir 1982)
Encl. D, NE ¼	Groundhog burrow (-27 cm)	132	3	6.83	N/A	N/A
Encl. D, NW ¼	0-10cm	54	7	16.08	N/A	N/A
Encl. D, NW ¼	Level 2 (10-20 cm)	58	19	41.61	2.19	1899.3
Encl. D, NW ¼	Level 3 (20-30 cm)	62	5	11.90	N/A	N/A
Encl. D, NW ¼	Level 5 (40-50 cm)	67	1	1.93	N/A	N/A
Encl. D, SE ¼	Level 1 (0-10 cm)	80	43	101.40	2.36	1914.6
Encl. D, SW ¼	Groundhog burrow (177-178 cm)	104	5	10.49	N/A	N/A
Ext. SW Corner	0-52cm	43	1	2.21	N/A	N/A
Ext. NE Corner	0-36cm	45	5	11.77	N/A	N/A
SITE TOTAL:			830	1837.01	2.21	1901.1

Table 14. List of stratigraphic units identified at the JAGA Carriage House.

Strat. Unit	Location	Description	Associated Period and Probable Function
1	South Room, N102 to N103.1, E90 to E92.42	Lens of very fine ash and charcoal with south edge aligned southwest-northeast; maximum thickness is 6.5 cm at N103.1-E92.4; thins toward southeast; lies under SU 63 and 64	Period IV; ash dumped up against wall?
2	South Room, N99 to N99.75-E98.84 to E100	Concrete-veneered brick steps at southeast corner of South Room; lies under SU 99	Period V; steps down to doorway from brick floor SU 7
3	South Room, Center at N102.98-E92	Vertical-sided feature; flat bottom; square (50 cm NW-SE x 37 cm NE-SW) cross section; contents = brown (Munsell 10YR 5/3) gravelly sandy loam, two-hole brick in top edge and board SU 8 at base	Period IV; post hole possibly put in place to reinforce deteriorating Period III NE-SW wall
4	South Room, N99.0 to N106.7-E95.32 to E102.68	Grayish brown (Munsell 2.5Y 5/2) sand layer under brick floor SU 7	Period V; sand base for brick floor over basement
5	South Room, N102 to N103.2-E89.8 to E95.31	1-4 cm thick layer of dark yellowish brown (Munsell 10YR 4/6) loamy sandy gravel	Period IV: cultural fill layer corresponding with dirt floor on west side of west basement foundation; equates with SU 64
6	South Room, N99.0 to N106.7-E83.67 to E102.68	Brick floor in west end of room	Period V; brick floor
7	South Room, N99.0 to N106.7-E95.32 to E100	Brick floor in east end of room	Period V; brick floor
8	South Room, Center at N102.98-E92	41 cm long x 32 cm wide x 1 cm thick plank with squared ends in base of SU 3	Wood footer for post

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
9E	South Room, N99-E100 to N106.70-E100	Foundation composed of 10 courses of roughly shaped sandstone block bound by hard mortar; 2.67 m (8.76 ft) from top of sill to base; width at top = 58 to 79 cm (22.8-31.1 in) averaging 70 cm (27.6 in)	Period II; circa 1885 Gas Holder building east basement wall and foundation
9N	South Room, N106.70-E95.4 to N106.70-E100	Same as 9E; contains barred window SU 28A	Period II; circa 1885 Gas Holder building east basement wall and foundation
9S	South Room, N99-E95.4 to E100	Same as 9E; contains stairway opening SU 33A	Period II; circa 1885 Gas Holder building east basement wall and foundation
9W	South Room, N99.30-E95.4 to N106.70-E95.4	Same as 9E	Period II; circa 1885 Gas Holder building east basement wall and foundation
10	South Room, Exc. Unit N102-E94	N/A	Number mistakenly assigned to portions of SU 29 and SU 67
11	South Room, north end Exc. Unit N102-E90 and most of Exc. Unit N104-E90	Large vertical-sided, rounded base trench approx. 50 cm in width x ? length; contains two 1½" diameter iron pipes (one wrapped with a white tape) and a ceramic drainage tile	Period IV; trench for installation of boiler pipes and remove water from drain at N106.25-E92.85
12	South Room, N102 to N103.2-E95.5 to E96	Dark yellowish brown (Munsell 10YR 4/6) gravelly sand containing water-worn pebbles and mortar chunks in upper portions; lies under SU 4	Period IV; basement fill
13	South Room, N102 to N103.2-E95.5 to E96	Rubble layer containing complete and fragmented bricks, mortar chunks with large amounts of window glass on top of bricks; lies under SU 12	Period IV; building rubble at top of basement fill

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
14	South Room, N99-E89	Dark yellowish brown (Munsell 10YR 4/4) loamy sand	Period V; base for brick floor SU 6; equates with SU 63
15	N99 to N106.7-E100	Brick wall above SU 100	Period III; brick wall between Carriage House and Gas Holder
16	Under west end of south wall and east wall of South Room; under east and north walls of North Room	Foundation composed of 2-3 courses of roughly shaped sandstone block bound by hard mortar; 0.53 m (about 21 in) from top of sill to base	Period III; 1893 Carriage House foundation
17	South Room, Exc. Unit N99-E89	Dark brown to very dark brown (Munsell 10YR 3/3 to 3/2) gravelly sandy loam mottled with charcoal and gray (Munsell 10YR 5/1) ashy inclusions; contains quantities of cut nails, a few wire nails, rebar, and misc. pieces of glass	Period IV; construction area dump?
18	South Room, N102 to N103-E98 to E100	Dark brown (Munsell 10YR 3/3) loamy sandy gravel under SU 12	Period IV; basement fill
19	South Room, N102 to N103-E98 to E100	Dark yellowish brown (Munsell 10YR 4/4) sandy loamy gravel under SU 18	Period IV; basement fill; included in SU 18
20	South Room, N102 to N103-E98 to E100	Brown (Munsell 10YR 5/3) sandy loamy gravel under SU 19	Period IV; basement fill; included in SU 18
21	South Room, N102 to N103-E98 to E100	Yellowish brown (Munsell 10YR 5/4) loamy sandy gravel under SU 20	Period IV; basement fill; included in SU 18

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
22	South Room, N102 to N103-E98 to E100	Brown (Munsell 10YR 5/3) sandy loamy gravel under SU 21	Period IV; basement fill; same as SU 26
23	South Room, N99-E98	Olive brown (Munsell 2.5Y 4/3) loamy sandy gravel under SU 18	Period IV; basement fill
24	South Room, N99-E98	Dark brown (Munsell 10YR 3/3) sandy loamy gravel under SU 23	Period IV; basement fill
25	South Room, N99-E98	Yellowish brown (Munsell 10YR 5/4) loamy sandy gravel under SU 24	Period IV; basement fill
26	See SU 22		
27	South Room, N100.3 to N102-E89 to E90.56	1-2 cm thick concentration of soft mortar/dirt mixture; ridges in rectangular shape on east side of concentration in N100-E90 with edges of rectangle 2-13 cm thick	Period IV; mortar concentration at site of mixing pan
28A	South Room, N106.70-E97.64 to N106.7-E98.56 (estimated)	Rectangular (51 cm/20 in high x estimated 92 cm/ 3 ft wide), wooden frame painted red; opening barred	Period II; barred window in SU 9N
28B	South Room, N106.44 to N106.70, E97.64 to E98.56 (estimated)	Unmortared concentration of bricks, brick rubble, and cobbles	Period III; material used to block opening when basement was abandoned and filled
29	South Room, N102 to N103.1, E94.03 to E95.30	Trench containing large quantities of mortar and cobbles lying on outside of stone foundation; width is reduced with depth	Period II; builder's trench for SU 9W; probably runs full length of foundation

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
30	South Room, N104-E96	Dark yellowish brown (Munsell 10YR 3/4) loamy sand underlying SU 18	Period IV; basement fill
31	North Room, NW ¼ Enclosure C	Dark brown (Munsell 10YR 3/3) silty clay loam	Period VI (1990); CMNH Test Pits 16, 16A and 16B
32	Number discarded	N/A	Same as SUs 52 and 89
33	South Exterior Unit 2	Rectangular foundation (SU 33) or entry well of brick and sandstone slabs; outside dimensions = 91 cm (3 ft) south to north x estimated 1.7 m (5½ ft)	Period II; well for SU 34
34	South Room, N99-E96.8 to E95.84	Rectangular (75 cm/30 in high x 96 cm/37.8 in wide opening in foundation SU 9S; lower sill slants inward	Period II; stairway entrance to basement in SU 9S
35	South Exterior Unit 2	Olive brown (Munsell 2.5Y 4/4) sandy gravelly loam	Period I; equates with SU 40B
36	South Exterior Unit 2	Dark brown (Munsell 10YR 3/3) sandy gravelly loam	Period VI; topsoil of unit modified to some extent by groundhog burrow
37	South Exterior Unit 2	Olive brown (Munsell 2.5Y 4/4) sandy gravelly loam	Period IV; cultural fill
38	South Exterior Unit 2 N98.5 to N98.7, E96.8 to E95.84	Unmortared concentration of bricks, brick rubble, and cobbles	Period III; material used to block opening when basement was abandoned and filled
39	North Room, Enclosure A	Dark brown (Munsell 7.5YR 3/2) loamy sand	Period IV; trench fill for east-west ceramic tile drain

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
40	North and South Rooms	Dark brown (Munsell 10YR 3/3) loamy sand	Culturally sterile, natural soil; in some instances, this can be divided into SU 40A and SU 40B with 40A being somewhat darker in color and lying above 40B; SU 40A occasionally has artifacts in its upper few centimeters when it has been used as a floor
41	North and South Rooms	Dark yellowish brown (Munsell 10YR 4/6) sandy clay loam; artifacts associated with this stratum are derived from areas disturbed by groundhog burrow	Culturally sterile, natural soil underlying SU 40
42	North Room, Enclosure B	Brown (Munsell 10YR 5/3) thin clay layer filling small, basin-shaped depression	Period IV; packed fill at entry to Enclosure B
43	North Room, Enclosure B	Open semicircle (1.11 m diameter) of rounded brick fragments; opening filled with mortar and gravel; sandy base underneath	Period IV; identical to CMNH Feature 3, a portion of which was excavated in 1991; CMNH interpretation = small, above-ground cistern (Lee 1991:34-35); may have served as a base for an anvil pedestal in an area for shoeing horses
44	North Room, Enclosure B	Yellowish brown (Munsell 10YR 4/6) sandy gravel and gravelly sand	Period IV; hard-packed gravel floor in east half of enclosure immediately next to SU 42
45	North Room, Enclosure A	Dark brown (Munsell 7.5YR 3/3) loamy sand	Periods V-VI; groundhog burrow intruding into top of SU 39
46	North Room, Enclosures A and B	Brown (Munsell 10YR 4/3) gravelly, loamy sand	Periods V-VI; uppermost fill; portion in Enclosure A partially disturbed by burrow SU 45

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
47	North Room, Enclosures A and B	Stone and mortar wall, 20 cm wide x 2.5 m long x 32 cm high	Period III; stone foundation separating Enclosures A and B
48	North Room, Enclosure A	Very dark brown (Munsell 10YR 2/2) loamy sand	Period IV; unidentified derivation or function
49	North Room, Enclosure B	Dark brown (Munsell 7.5YR 3/3) woody/organic stain	Period IV; remnant of wood plank or floor? at entrance to enclosure
50	North Room, Enclosures C and D	Brown to dark brown (Munsell 10YR 4/3) loamy, sandy gravel	Periods V-VI; gravel floor
51	North Room, Enclosure C	Dark yellowish brown (Munsell 10YR 4/4) gravelly, loamy sand underlain by thin lens of brick fragments	Period IV; unidentified disturbance; perhaps associated with construction of brick foundation between enclosures intrusive into SU 52C and D
52	North Room, Enclosures B and C	Brown to dark brown (Munsell 10YR 4/3) sandy, loamy gravel which in some areas appears as three lenses labeled 52A (dark yellowish brown, Munsell 10YR 4/4, loamy sandy gravel), 52B (dark brown, Munsell 10YR3/3, sandy clay loam), and 52C (brown to dark brown, Munsell 10YR 4/3, sandy, loamy gravel) from top to bottom; only 52C occurs in Enclosure B	Periods IVD1, IVC, and IVA, respectively; gravel and dirt floors

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
53	North Room, Enclosures C and D	Brick wall on north and east sides of Enclosure C; sandstone block at juncture of north and east portions; east-west wall on north side of Enclosure C = 4 tiers of bricks on mortar base (30 cm high x 2.38 m long x 21 cm wide; north-south portion on east side of Enclosure C = 5 tiers of bricks (34 cm high x 3.34 m long x 22 cm wide); top layer set crosswise to lower tiers	Period IVA; brick foundation separating Enclosures C and D
54	North Room, Enclosure D	Compact dark gray (Munsell 10YR 4/1) sandy loam containing many small plaster fragments	Period IVD2; dirt floor
55	North Room, Enclosure D	Compact layer of yellow-brown gravel	Period IVD1; gravel floor
56	North Room, Enclosure B	Rubble and soft mortar footer	Period III; footer for stone foundation SU 57
57	North Room, Enclosures B and C	Sandstone and mortar foundation (23 cm wide x 33 cm high x 2.45 m long) on north and east sides of Encl. B	Period III; stone foundation between Enclosures B and C
58	North Room, Enclosures C and D	North-south trench under SU 53; 13 cm wide base x 17 cm wide top x 32 cm deep x 1= m length; footer of concrete slabs at terminus (80 cm south of brick wall, SU 53, in Enclosure C)	Period III; north-south wall or divider predating brick foundation SU 53
59	South Room, N102 to N103, to E96.68	Soft mortar shelf at the base of SU 9E	Period II; mortar footer for basement floor?
60	South Room, N102 to N103, E96 to E98	Dark brown organic fill, 0.5 cm thick; some wood fragments above SU 59	Period II; remnants of wooden basement floor or floor above basement

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
61	North Room, Enclosure D	Small lens of gray gravel sandwiched between SUs 54 and 55	Period IVD1 or D2; gravel floor recognized only in profile after unit excavated
62	North Room, Enclosure D	Yellow brown gravel	Period IVB; gravel floor sandwiched between wood floors SUs 80 and 81
63	See SU 14		
64	See SU 5		
65	South Room, in wall profile from N103.1-E92.17 to E92.9	8 cm wide band of brown (Munsell 10YR 5/3) loamy sand	Period III; cultural fill layer interpreted as a dirt floor; recognized in profile; not excavated
66	South Room, in wall profile from N103.27-E91.6 to N103.24-E91.7	Edge of thin, basin-shaped depression fill of brown (Munsell 10YR 5/3) gravelly loamy sand; underlying SUs 1 and 64; interrupted on east side by SU 3	Period IV; cultural fill layer interpreted as a refilled area in a dirt floor; recognized in profile; not excavated separately
67	South Room, N102 to N103.1, E92.84 to 94.34	Yellowish brown (Munsell 10YR 5/4) loamy sand under SUs 65 and 72	Period IV; cultural fill layer interpreted as a dirt floor; upper surface deflated on west end and filled with SUs 70-71; recognized in profile; not excavated separately
68	South Room, in wall profile from N103.27-E91.6 to N103.24-E91.7	Edge of thin, basin-shaped depression fill of light yellowish brown (Munsell 10YR 6/4) gravelly loamy sand; underlying SU 66; interrupted on east side by SU 3	Period IV; cultural fill layer interpreted as a refilled area in a dirt floor; recognized in profile; not excavated separately

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
69	South Room, in wall profile from N103.27-E91.6 to N103.24-E91.7	Edge of thin, basin-shaped depression fill of light yellowish brown (Munsell 10YR 6/4) gravelly loamy sand; underlying SU 68; interrupted on east side by SU 3	Period III; cultural fill layer interpreted as a deflated area in a dirt floor partially filled by SUs 68, 66, 1, and 64; recognized in profile; not excavated separately
70	South Room, in wall profile from N103.1-E92.16 to E93	Yellowish brown (Munsell 10YR 6/4) loamy sand; under SU 67	Period III; cultural fill layer interpreted as a dirt floor; recognized in profile; not excavated separately
71	South Room, in wall profile from N102-E91.30 to E93.14	Basin-shaped deposit of pale brown (Munsell 10YR 6/3) gravelly loamy sand under SUs 1 and 64	Period IV; cultural fill layer interpreted as a deflated and refilled area in a dirt floor; recognized in profile not excavated separately
72	South Room, in wall profile from N102-E91.26 to E93.29	Basin-shaped deposit of brown (Munsell 10YR 5/3) sandy loam under SU 71	Period IV; cultural fill layer interpreted as a deflated and refilled area in a dirt floor; recognized in profile not excavated separately
73	North Room, Floor Openings 1, 4, 6	Olive brown (2.5Y 4/4) sandy clay	Periods V-VI; loose dusty fill that has filtered through the plank flooring SU 88
74	North Room, Floor Openings 1, 4, 6	Hard packed brown to dark brown (Munsell 10YR 4/3) sandy loamy gravel	Period IVD1; gravel floor preceding plank flooring SU 88
75	North Room, Floor Opening 1	Dark grayish brown (Munsell 10YR 4/2) gravelly, sandy clay loam	Period IVD2; dirt fill on top of gravel floor SU 74
76	North Room, Floor Opening 1	Firmly packed brown gravelly, sandy, loam (no Munsell taken) with sandstone layer in middle and sandstone rubble throughout; basin-shaped lower margin	Period III; dirt floor under loose gravel floor SU 77

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
77	North Room, Floor Opening 1	Loosely packed very dark grayish brown (Munsell 10YR 3/2) sandy, loamy, gravel containing wood fragments	Period IVA; gravel fill under gravel floor SU 74
78	North Room, Floor Opening 6	Very hard, dark yellowish brown (Munsell 10YR 4/4) gravel layer composed of <.5 cm pebbles; some mortar and brick fragments mixed in	Period IVB; gravel floor
79	North Room, Floor Opening 6	Dark brown (Munsell 7.5YR 3/2) loamy sandy gravel containing wood, metal, and a layer of corncobs	Period IVA; gravel floor under SU 78
80	North Room, Enclosure D	Thin woody layer	Period IVC; remnant of wood floor between SUs 55 and 62
81	North Room, Enclosure D	Thin woody layer	Period IVA; remnant of wood floor above SU 40 and below SU 62
82	North Room, Enclosure D	Rectangular (24 cm east-west x 18 cm north-south x 28 cm deep) post hole at approximate center of enclosure (center at 68 cm north of SU 53 north face) aligned with north-south trench SU 58; severe rodent disturbance between this stratum and brick foundation to south SU 53	Period III; wall or roof support
83	North Room, Floor Opening 1	Narrow (18 cm wide at base x 32 cm deep) deposit at north margin of opening	Period IV; possible post hole and post immediately east of stone foundation SU 44
84	North Room, Floor Opening 4	Thin layer of dark yellowish brown (Munsell 10YR 3/6) sandy loam	Period IVC; dirt floor discovered in north wall profile after unit excavated

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
85	North Room, Floor Openings 1 and 4	Mixed trench fill with 4 cm (1.5 in) diameter pipe; much of trench disturbed by rodent burrowing	Period IVA-C; trench for water pipe
86	See SU 16		
87	North Room, Floor Opening 4	Post hole (13 cm diameter) seen in west unit profile	Period III; post hole under brick foundation SU 53
88	North Room	1.8 m (5.9 ft) wide x 12.7 m (41.75 ft) long plank built in three sections, each section being 9 boards wide; from south to north, section lengths are 3.64 m (12 ft), 4.86 m (16 ft), and 4.20 m (13.75 ft); planks fixed to east-west joists (10 cm wide x 4 cm thick x 1.8 m long) resting on the ground surface with dirt (SU 73) to the top edges of the joists; openings between the joists in middle section are, from south to north, 74 cm (29 in), 76 cm (30 in), 74 cm (29 in), 77 cm (30 in), 61 cm (24 in) and 63 cm (25 in)	Periods V-VI; current plank floor between floor enclosures on west side of room and stables on east side
89	North Room, Enclosure C	Thin woody lens between SUs 52B and 52C	Period IVB; remains of wooden floor?
90	North Room, Enclosure C	Vertical stratum, 11 cm wide; center at 59 cm south of brick foundation SU 53	Period III; possible post hole in alignment with SUs 58 and 82 disturbance; identified as rodent disturbance in profile of south face, NW ¼
91	North Room, Enclosure A	Disturbed fill at SE corner of unit emerging from under concrete floor of storage room to south and immediately west of stone foundation SU 92	Period III; builder's trench or rodent disturbance

Table 14. Continued.

Strat. Unit	Location	Description	Associated Period and Probable Function
92	North Room, Enclosure A	Sandstone foundation visible at SE corner of unit emerging from under concrete floor of storage room to south; visible in south profile of unit	Period III; east foundation of Enclosure A
93	North Room, Enclosure B	Dark brown (Munsell 10YR 3/3) silty clay loam	Period VI (1990); CMNH Test Pit 20
94	North Room, Floor Opening 4	Small pit in unit's north wall profile	Period III; unknown derivation or function
95	N. Room, Enclosure B	Stratum in profile labeled SU 52C; no way to determine if this actually equates with 52C, however	Period IV; unknown derivation or function
96	S. Room, N102-E91.10 (center)	14 cm x estimated 14 cm x 9 cm thick sandstone rock under SUs 1, 64, and 69	Period III; possibly a footer for a wall or roof support post
97	S. Room, N101.48-E90.04 (center)	15 cm x 8 cm x 13 cm thick sandstone rock	Period III; possibly a footer for a wall or roof support post
98	S. Room, N102.56-E93.20 (center)	14 cm x 20 cm x 7.5 cm thick sandstone rock	Period III; possibly a footer for a wall or roof support post
99	S. Room, N99 to N100, E95 to E100	Gray dusty fill over concrete/brick steps (SU 2) and lower 30 cm of floor	Period VII; Debris from groundhog burrow and dust; materials suggest 1950s era
100	S. Room, N99-E100 to N106.70-E100	Short (29 cm/11.4 in) brick wall with 6 cm (2.36 in) wide x 29 cm (11.41 in) long vertical slots spaced 25 to 26.5 cm (about 10 in) apart; on top of basement foundation SU 9e and under brick wall SU 15	Period II; Supports for east-west floor joists

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Table 14. Continued.

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Strat. Unit	Location	Description	Associated Period and Probable Function
101	North Room, Enclosure D	Dark loose fill immediately next to inside edge of west building foundation SU 16W	Rodent disturbance
102	North Room, Floor Opening 4	Thin mortar layer deposited on top of SU 85	Period IVA-C

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Table 15. North Room floor sequences inferred by period in Enclosures A-D and in the aisle space.

Period	<u>Enclosure A</u>		<u>Enclosure B</u>		<u>Enclosure C</u>		<u>Enclosure D</u>		<u>Aisle</u>	
	SU	Floor	SU	Floor	SU	Floor	SU	Floor	SU	Floor
III	40A	Earth	40A	Earth	40	Earth	40	Earth	76	Earth
IV-A	48	Earth	44, 95	Gravel	52C	Gravel	81	Wood	77, 79	Gravel?
IV-B	48	Earth	44, 95	Gravel	89	Wood	62	Gravel	78	Gravel
IV-C	48	Earth	44, 95	Gravel	52B	Earth	80	Wood	84	Earth
IV-D1	48	Earth	44, 95	Gravel	52A	Gravel	55	Gravel	74	Gravel
IV-D2	48	Earth	44, 95	Gravel	52A?	Gravel	61	Gravel	74?	Gravel
IV-D3	48	Earth	44, 95	Gravel	51	Earth	54	Earth	75	Earth
V-VI	46 --	Earth Concrete*	46	Earth	50	Gravel	50	Gravel	88	Wood

\* West half of Enclosure A covered with concrete as floor for Storage Room.

Table 16. Correlations between CMNH test unit levels and periods defined in this report. \*

CMNH Test Unit	Level	Locational Reference	Possible Strata Associations	Periods		
				III	IV	V-VI
16	1 (0-8 cm)	Encl. C, NE ¼ and N ½ of SE ¼	SU 50, SU 51, SU 52A, SU 52B	—	X	X
	2 (8-12 cm)		SU 51, SU 52A-C, SU 89	—	X	—
	3 (12-15.5 cm)		SU 40, SU 52C, SU 89	X	X	—
	4 (15.5-19 cm)		SU 40	X	—	—
	5 (19-25 cm)		SU 40	X	—	—
	6 (25-49 cm)		SU 40, SU 41, SU 90	X	—	—
16A	1 (0-26 cm)	Encl. C, S ½ of SE ¼	SU 40, SU 50, SU 51, SU 52A-C	X	X	X
	2 (26-49 cm)		SU 40, SU 41	X	—	—
16B	1 (0-19 cm)	Encl. C, N ¾ of NW ¼	SU 50, SU 52A-C, SU 89	—	X	X
	2 (19-49 cm)		SU 52C, SU 40, SU 41	X	X	—
20	1 (0-5 cm)	Encl. B, NE ¼ and NW ¼	SU 44, SU 46, SU 95	—	X	X
	2 (5-40 cm)		SU 40, SU 40A, SU 41, SU 43, SU 44, SU 49, SU 56, SU 95	X	X	—
	3 (40-50 cm)		SU 40, SU 41	X	—	—

\* Data from CMNH testing is derived from Lee (1994)

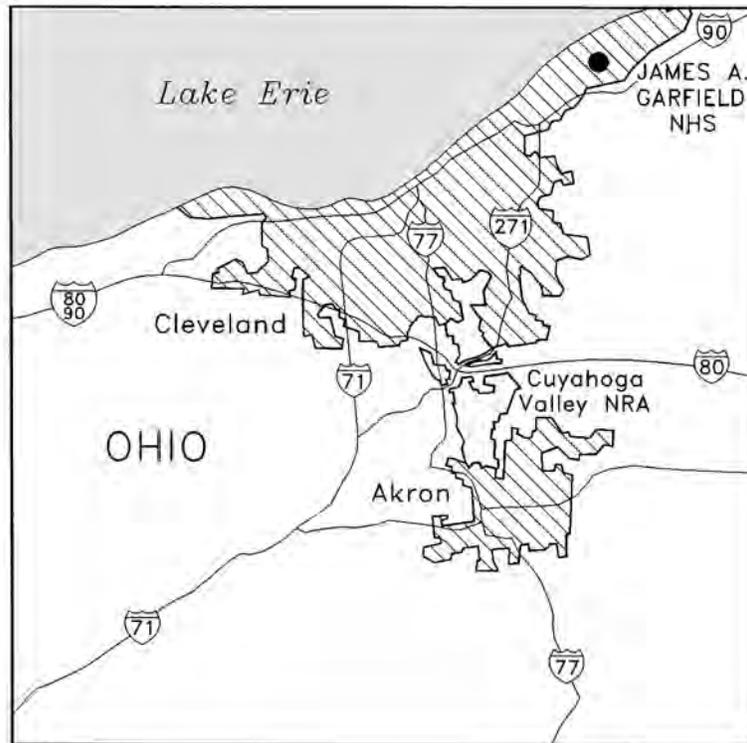


Figure 1. Location of James A. Garfield National Historic Site.

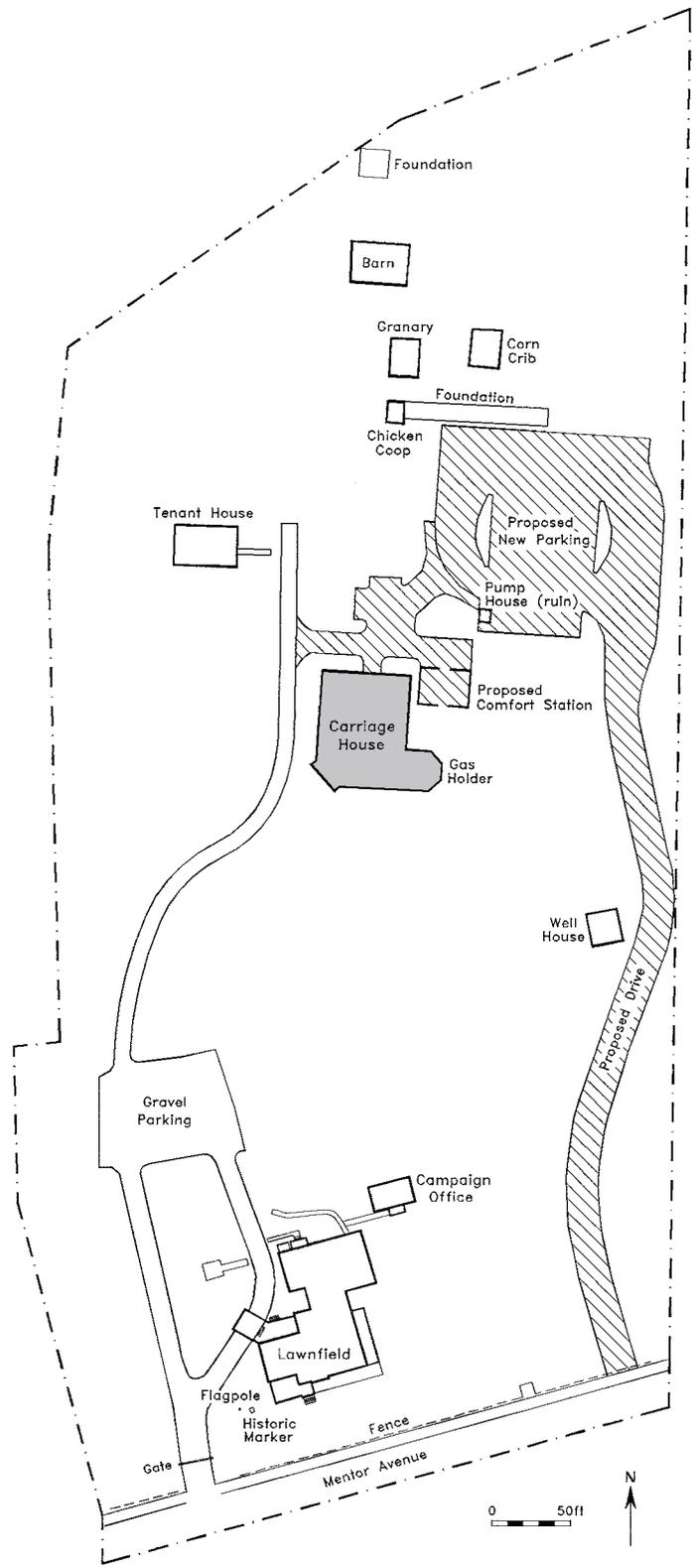


Figure 2. Map of James A. Garfield National Historic Site showing location of Carriage House/Gas Holder (shaded in gray).



Figure 3. Carriage House/Gas Holder.

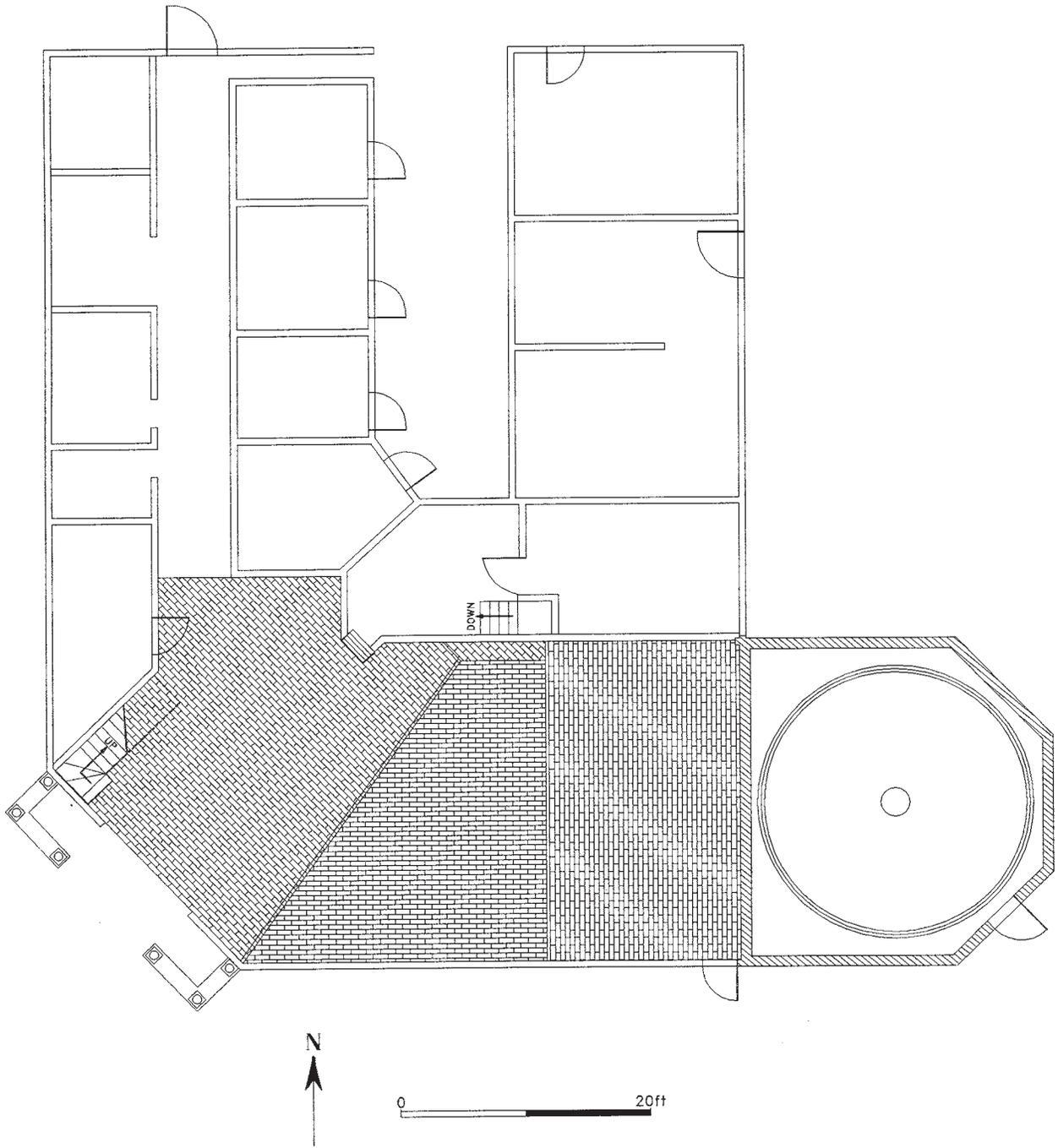


Figure 4. Carriage House/Gas Holder first-floor plan.

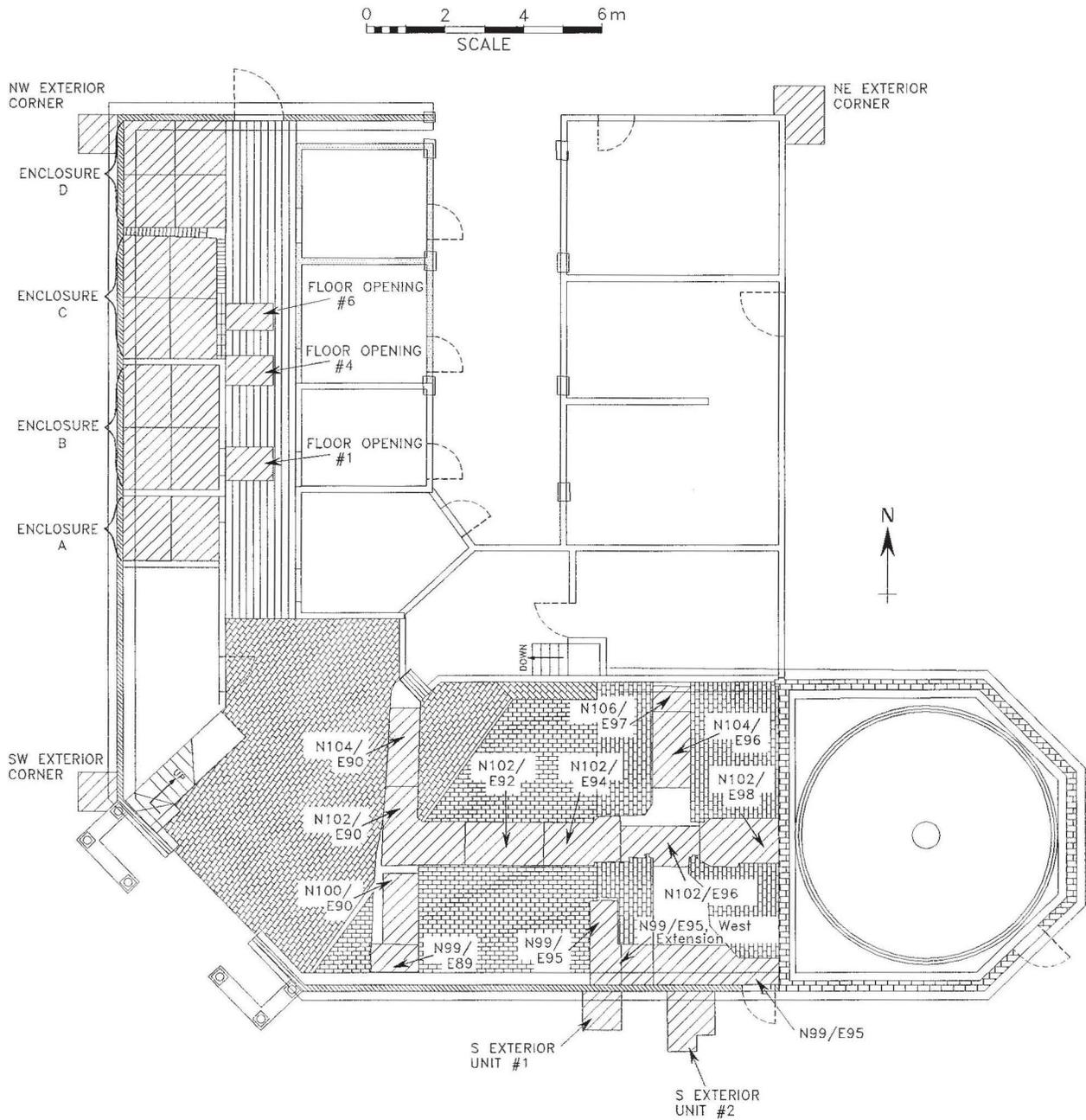


Figure 5. Tested and excavated areas in and around the Carriage House.



Figure 6. South Room excavations; view to east from near the South (Carriage) Room door (top), and view to west from near the common wall with the Gas Holder (bottom).



Figure 7. Excavated areas within the North (Stable) Room looking south across the floor openings. Enclosures A-C are to the right.







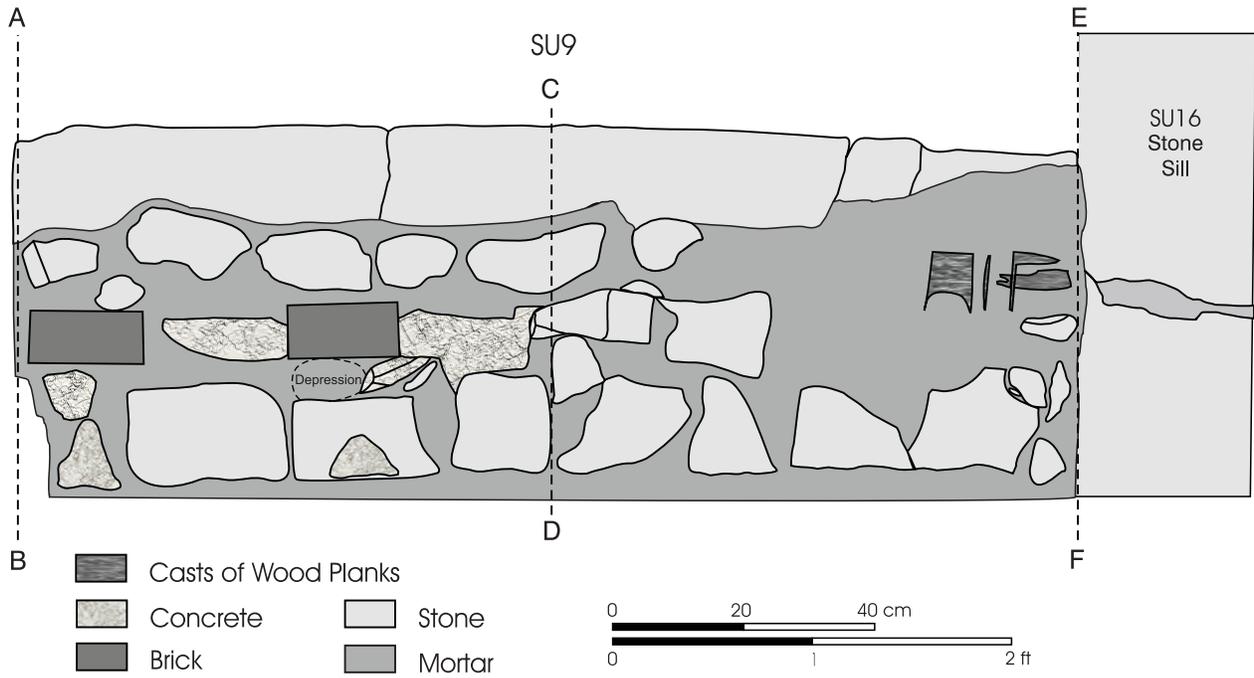


Figure 11. Upper margins of the Gas Holder basement's west foundation; view of exposed segment at juncture with south wall (top), and plan view showing construction materials (bottom).

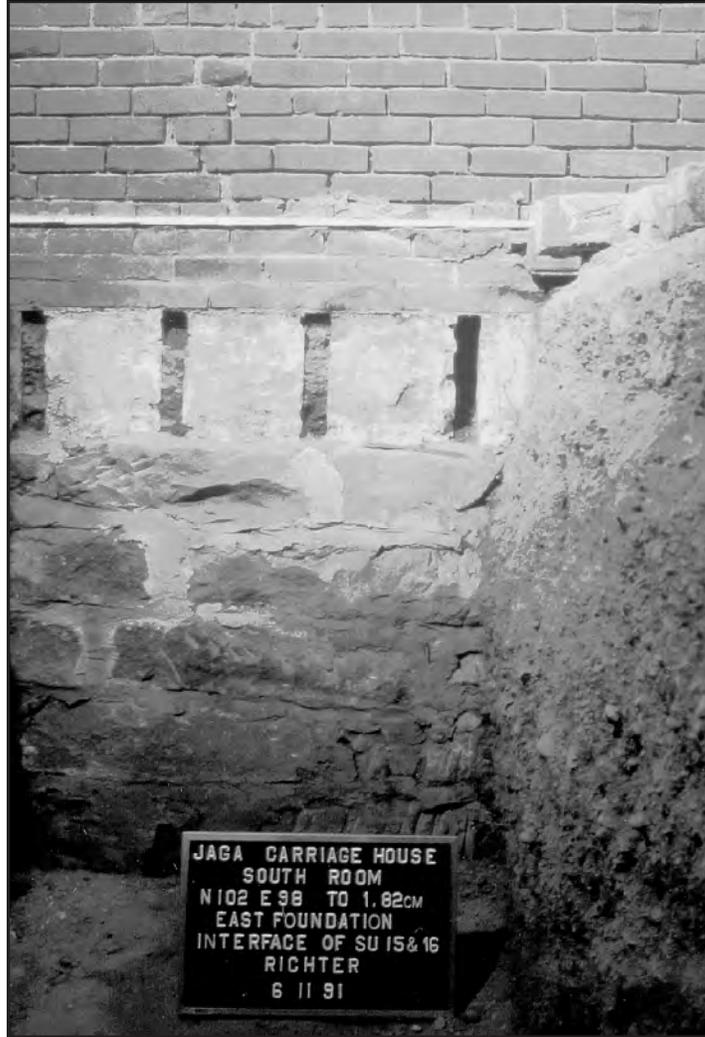


Figure 12. Juncture of basement foundation and brick wall separating Carriage House from the Gas Holder.

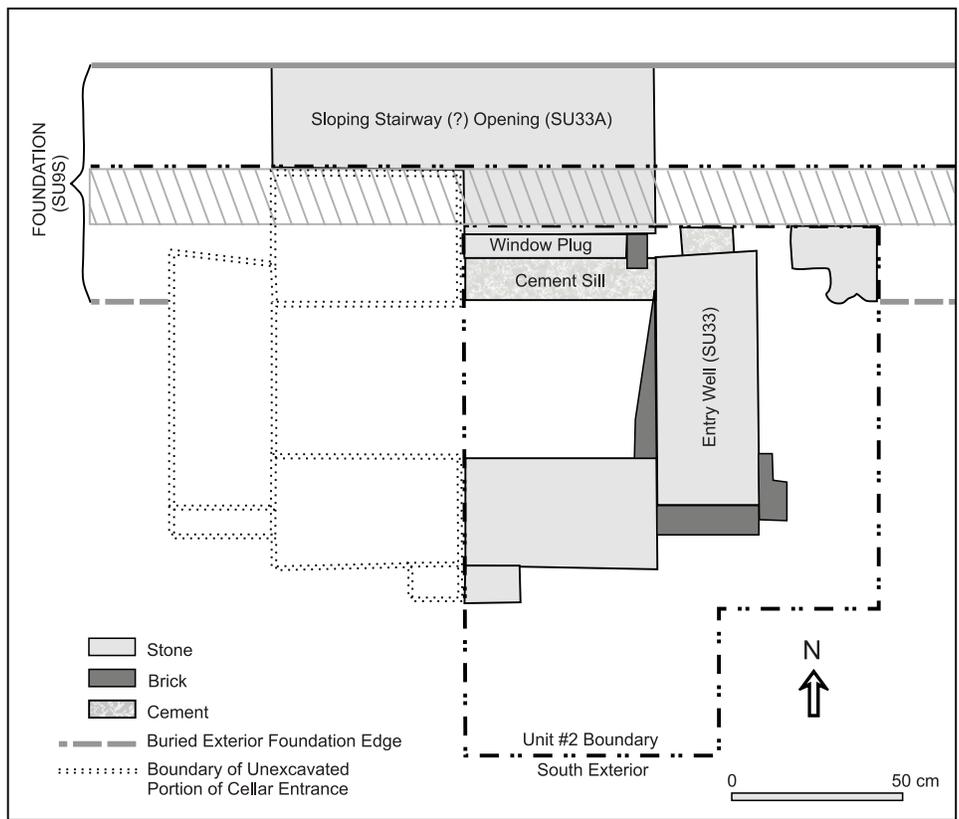


Figure 13. Stairwell or window well in Gas Holder basement's south wall. Note stone slab sealing the opening photograph.

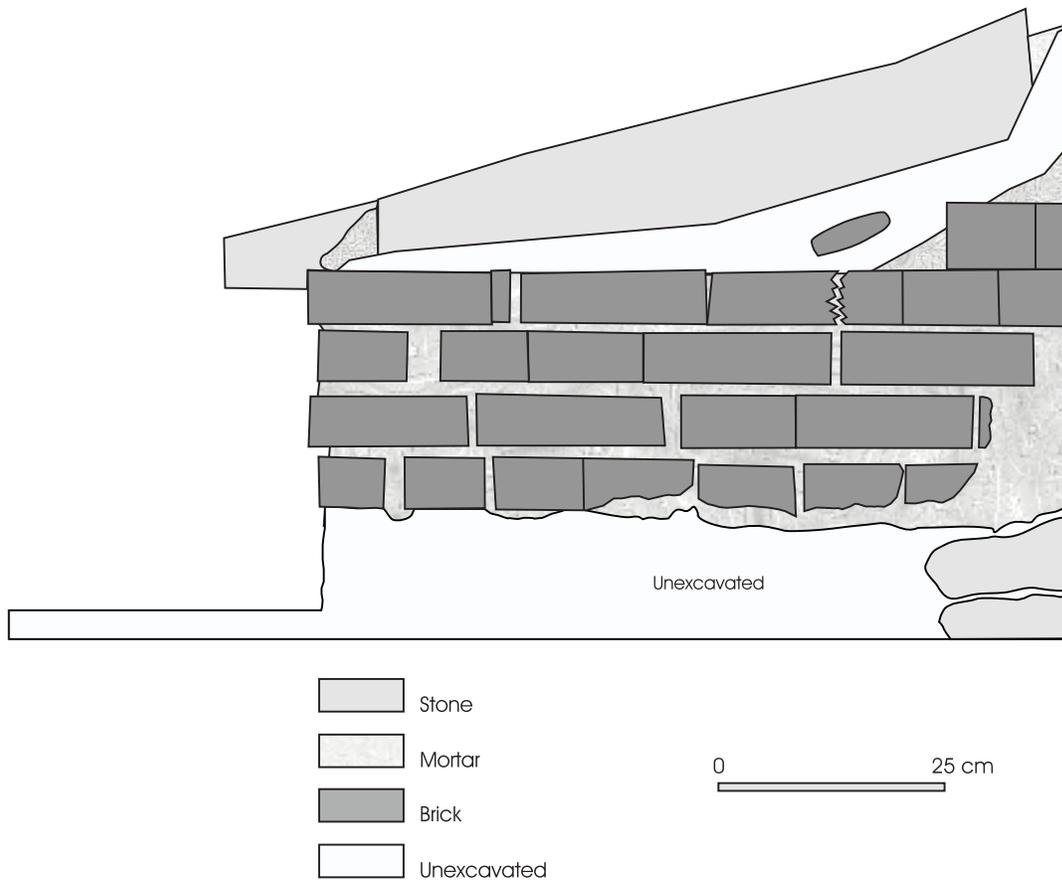


Figure 14. Profile of stairwell's (SU33) east wall.



Figure 15. Window in Gas Holder basement's north wall with blockage in place (top) and after blockage was cleared (bottom).

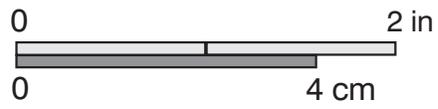


Figure 16. Representative artifacts: (a) crenulated lamp chimney rim (field cat. #26); (b) key tag (field cat. #58); (c) bone shaving brush handle (field cat. #37).

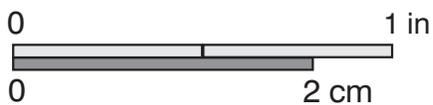
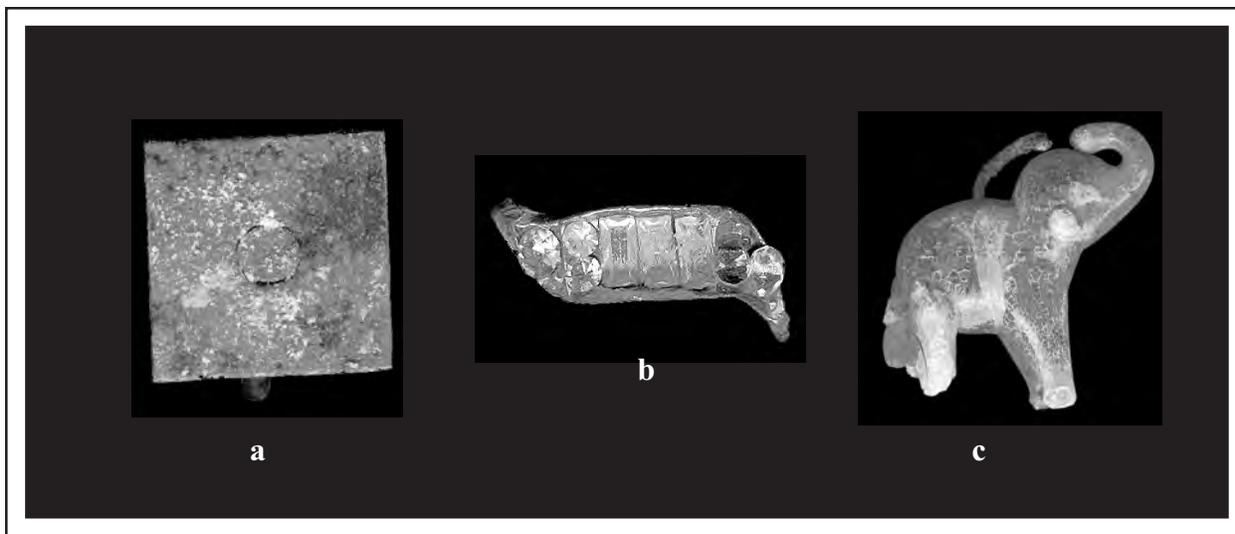


Figure 17. Miscellaneous artifacts: (a) buggy canopy rivet (field cat. #56); (b) rhinestone pin (field cat. #19); (c) white glass elephant ornament (field cat. #85).

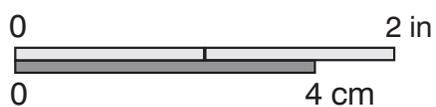
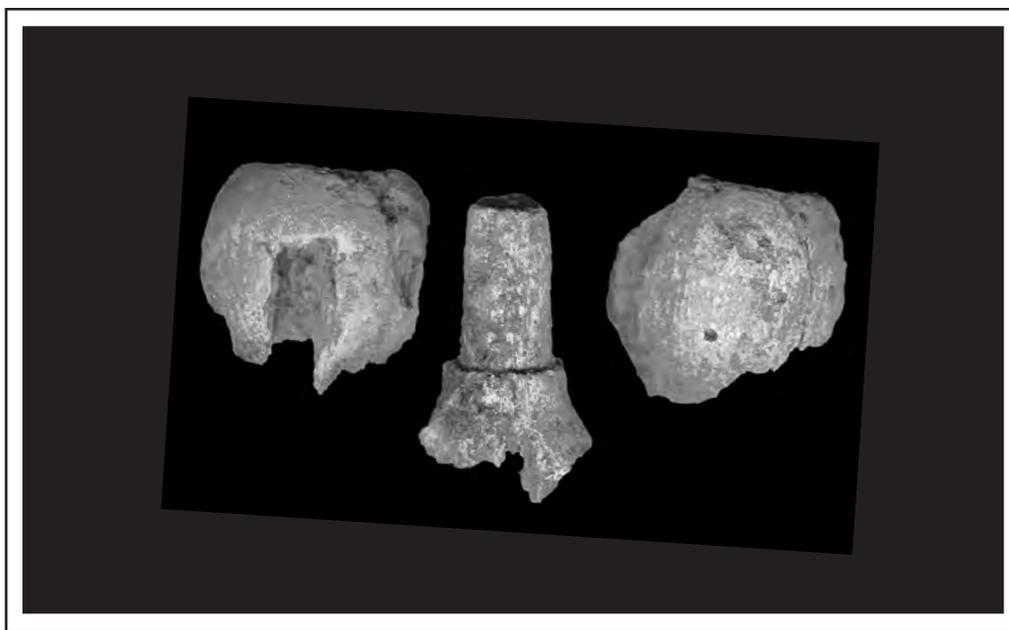


Figure 18. Wooden drawer pull from the North Room, Enclosure D (field cat. #104).

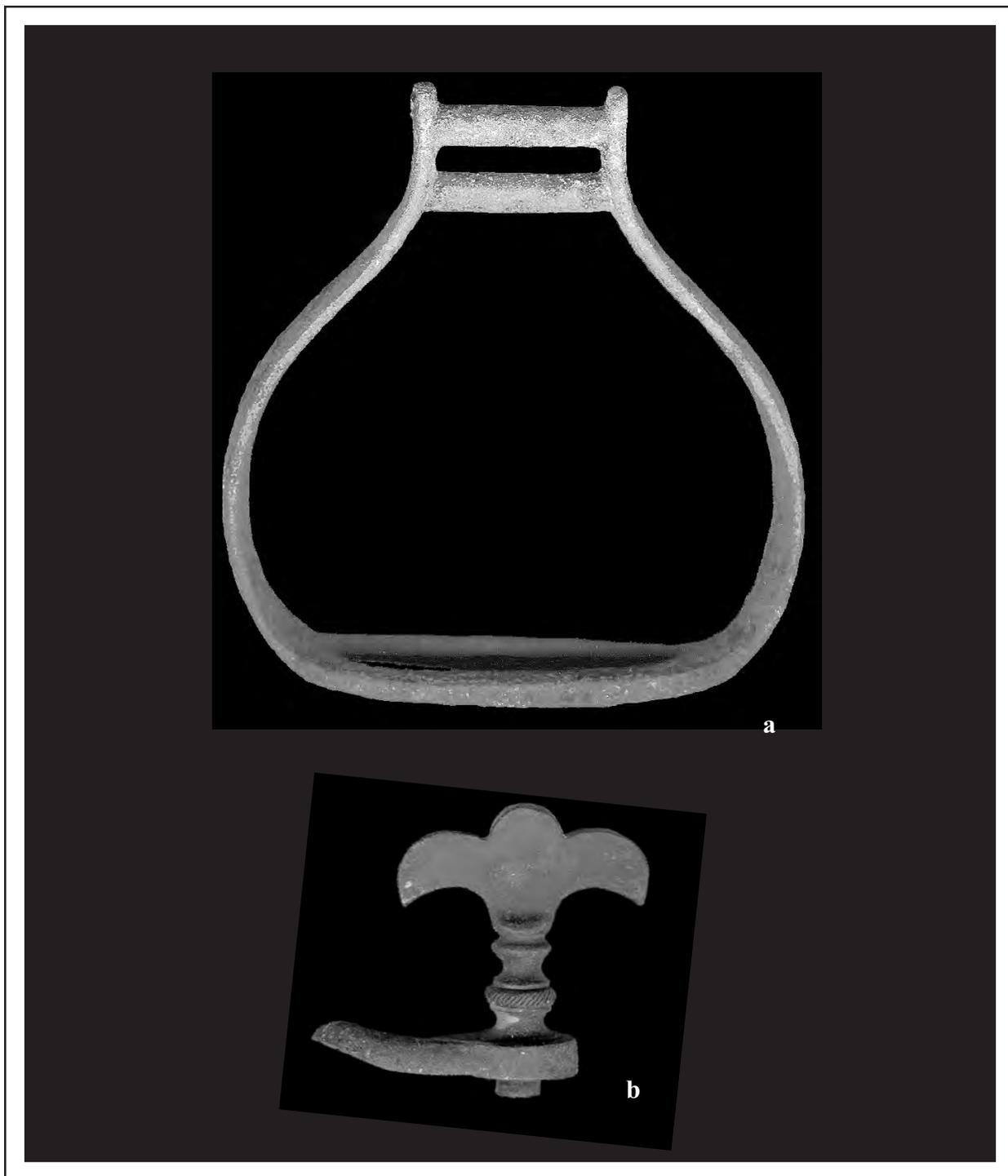


Figure 19. Transportation-related artifacts recovered in the North Room; (a) sidesaddle stirrup (field cat. #47); (b) carriage door latch (field cat. #64).

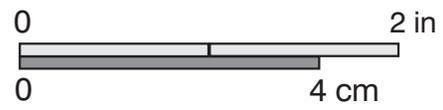


Figure 20. Ceramic plaque (field cat. #24) from the South Room.

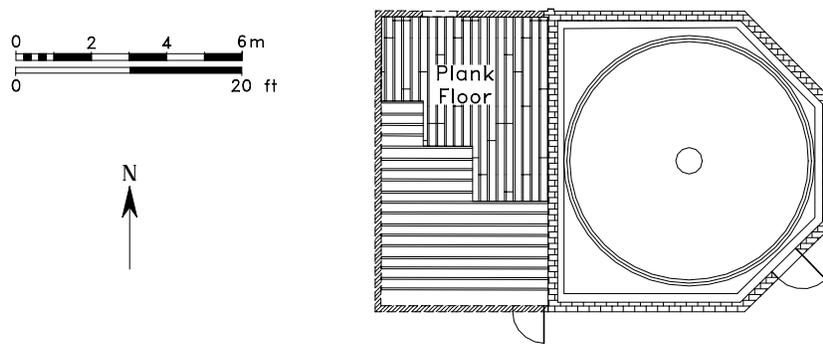


Figure 21. The Gas Holder floor plan as it may have existed in Period II (circa 1885-1893).

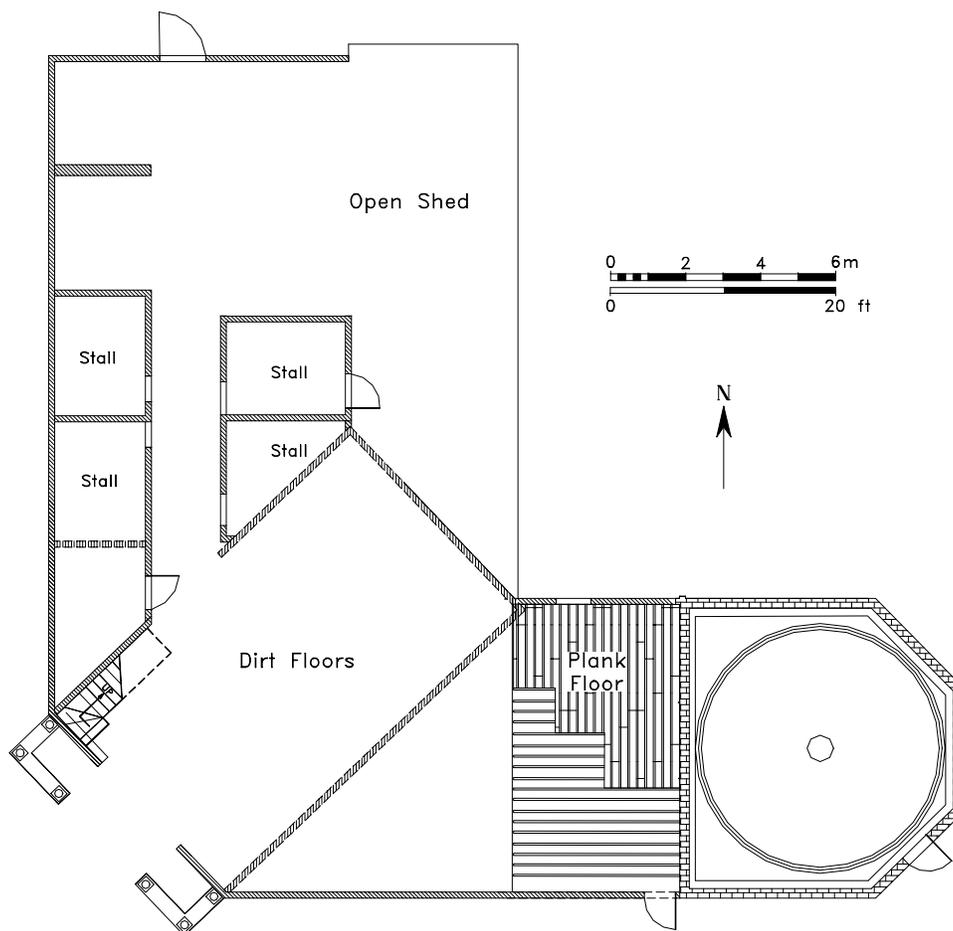


Figure 22. The Gas Holder/Carriage House floor plan during Period III (1893 to circa 1905).

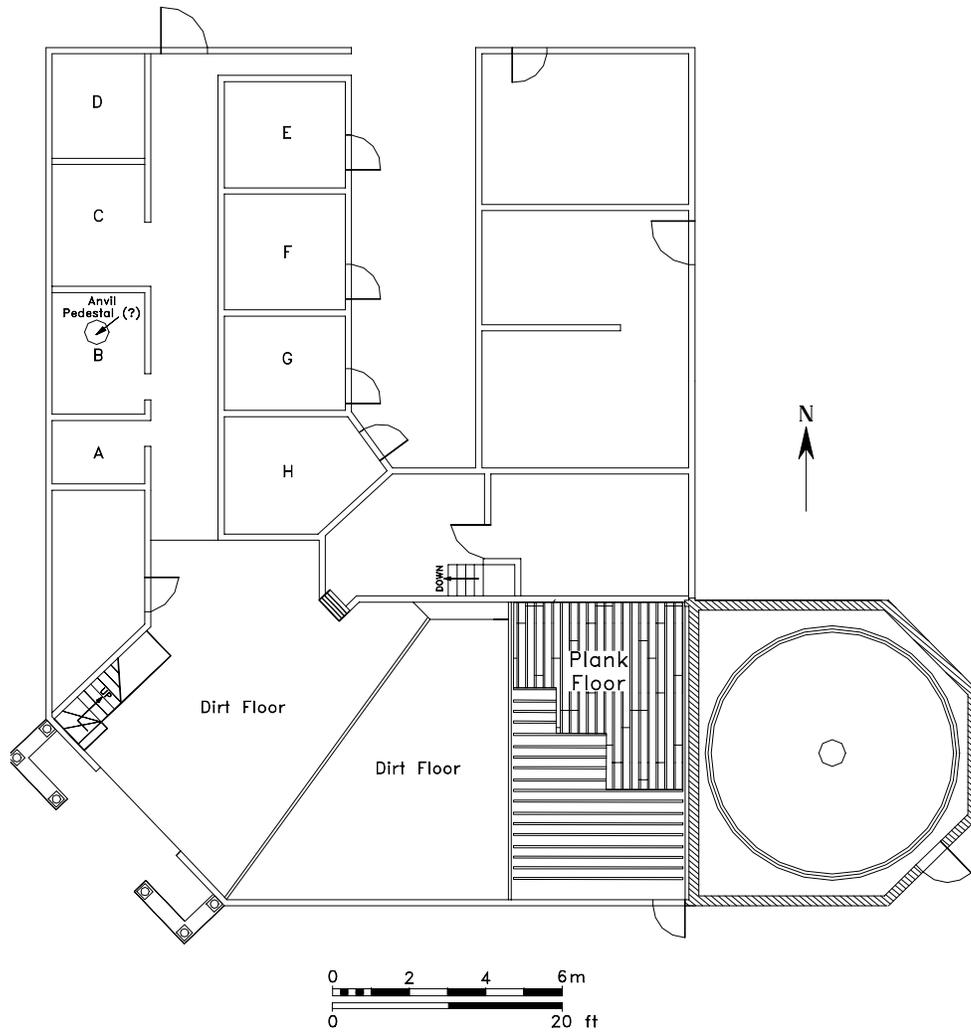


Figure 23. The Gas Holder/Carriage House floor plan during Period IV (circa 1900 to circa 1930).

