

LABORATORY PROCESSING

The artifacts recovered were washed and marked according to standard Delaware artifact processing procedures. All artifacts were cleaned with plain water except fragile materials such as bone, shell or metal which were dry-brushed.

The ceramics were identified as to ware type, method of decoration, vessel type (if possible) and separated into established types (see South 1977 and Miller 1992). Glass was examined for color, shape, and method of manufacture to assist in determining dates of manufacture and deposition. Glass colors, produced by minerals added to glass formulas, often can be used to indicate the function of the container, and to provide a range of dating based on changing technologies (Hurst 1986, revised 1996). Metal and miscellaneous artifacts were generally described; the determination of a beginning date was sometimes possible, as in the case of nails. The ceramic and glass vessels from this project have been individually dated whenever possible.

Total artifact counts are presented in Appendix I. Appendix II includes the full inventory of artifacts by test unit.

RESULTS OF THE ARCHEOLOGICAL INVESTIGATIONS

Phase I Testing

The area to be tested in the Phase I investigations included the lawn surrounding the Murphy House and the yard area at the back of the house. Twenty two and a half foot square test units were excavated. Sixteen of these were excavated approximately fifteen feet apart in a grid pattern in the back yard, north of the gravel driveway. One test unit was excavated in the western side yard, one in the front yard, one in the eastern side yard, and one was excavated in the gravel parking lot (Figure 7). In addition, the ground surface at the front of the house and along the walk on the west side yard was surface collected. Most of the eastern side yard could not be tested because of the presence of numerous underground utility cables and gas lines and above ground electrical boxes. Several manholes along the driveway attest to additional underground utilities, and underground telephone cables run through the front yard as well.

Excavations were carried out according to natural and cultural layers and continued until culturally sterile soil was reached. A bucket auger was used to probe below the subsoil to check for the presence of buried soil horizons. All soil was screened through quarter inch mesh hardware cloth. Soil profiles were recorded and the soil colors were described using a Munsell Color Chart. Artifacts were bagged by test unit, stratigraphic level and by feature, when present. The test unit locations were mapped in a plan map of the site. Any soil anomalies within a test unit were mapped and described.

The remains of a foundation were located in test unit 18, and five small shovel tests were excavated to locate the foundation perimeters. Six shovel scrapes were made to augment the small shovel tests. These were not screened.

Phase I Results

The backyard area was flat and grassy; there were a number of trees, including some ornamental cherry trees, and surface features included the stone wall bordering Old Murphy Road, a concrete pad next to this stone wall, and a short length of split rail fence along the north boundary of the backyard. Most of the test units were excavated on the north side of the driveway and east of the stone wall. The soils in these test units varied considerably. While some of the tests exhibited a plowzone overlying a B horizon, many revealed fill soils (or perhaps, more accurately in most cases, disturbed A and B horizons) below the topsoil (Figure 8); the characteristics of the fill in the different units showed a great deal of variation. Many of the fill levels have been plowed; the mottled fill soils were mixed with darker Ap soils. The artifacts recovered, both from the Ap and fill horizons, had been broken into fairly small pieces as is typically seen in plowed soil, and the soils tended to change abruptly from one layer to the next.

The fill underlying a shallow Ap horizon in test units 1 (Figure 9), 2, 3 and 4 (this latter test unit had a greater content of slag and coal in the fill soils) is a relatively dark color, a mixed Ap, silty clay and gravel fill, probably reflecting the proximity of the test units to the driveway. Beneath the fill, at a depth of thirteen to eighteen inches, is a yellowish brown silty clay B horizon that grades into a yellowish red plastic clay. Artifacts from these test units were recovered from the Ap horizon and from the fill.

Test units 5 (Figure 10) and 6 did not have the gravelly fill of the preceding test units, but rather exhibited a shallow (seven inch) Ap overlying a yellowish brown clay B horizon. Both of these test units produced single postmolds; according to the owner who stopped by to visit while the crew was working, a fence line once existed here. All artifacts came from the Ap horizon.

Test unit 7, excavated adjacent to a badly cracked and overgrown roughly semi-circular concrete slab measuring twelve feet by sixteen feet, showed a discontinuous lens of fill-like soil at ten inches below the surface and, beneath that, a three inch charcoal lens overlying the yellowish brown clay B horizon (Figure 11). This test unit produced two hundred and thirty-two artifacts, the greatest number recovered from any test unit at the site. These came from the Ap, the fill and the charcoal lens.

FIGURE 9
Profile - Test Unit #1

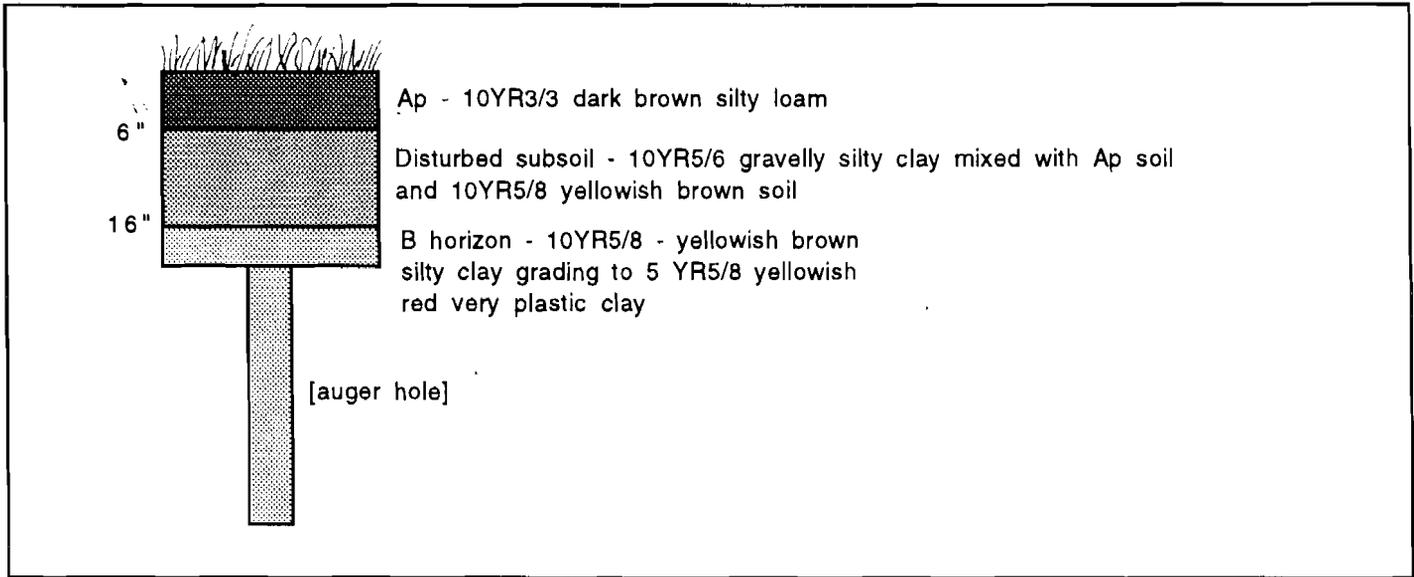


FIGURE 10
Profile - Test Unit #5

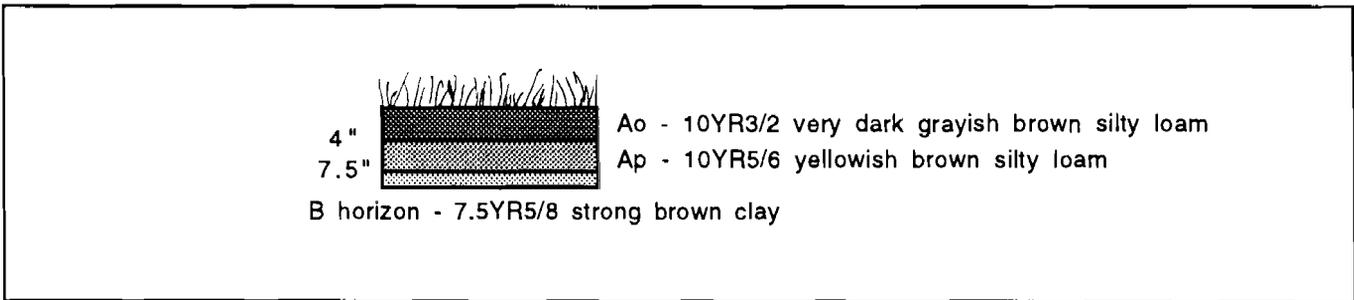
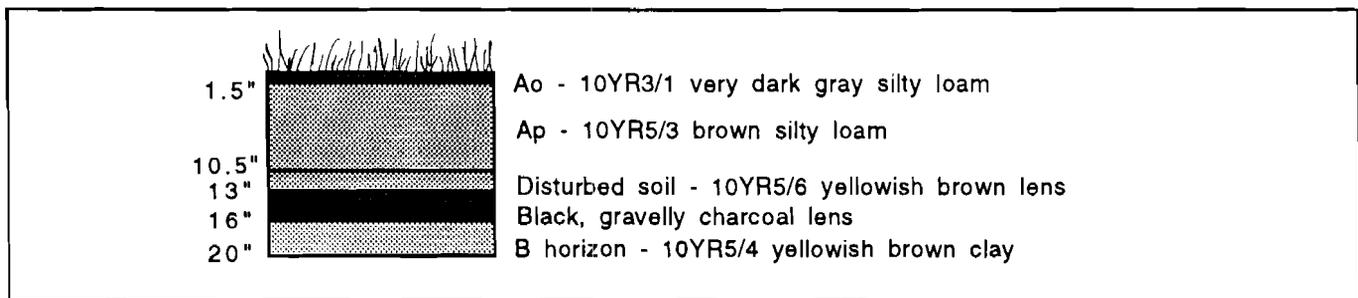


FIGURE 11
Profile - Test Unit #7



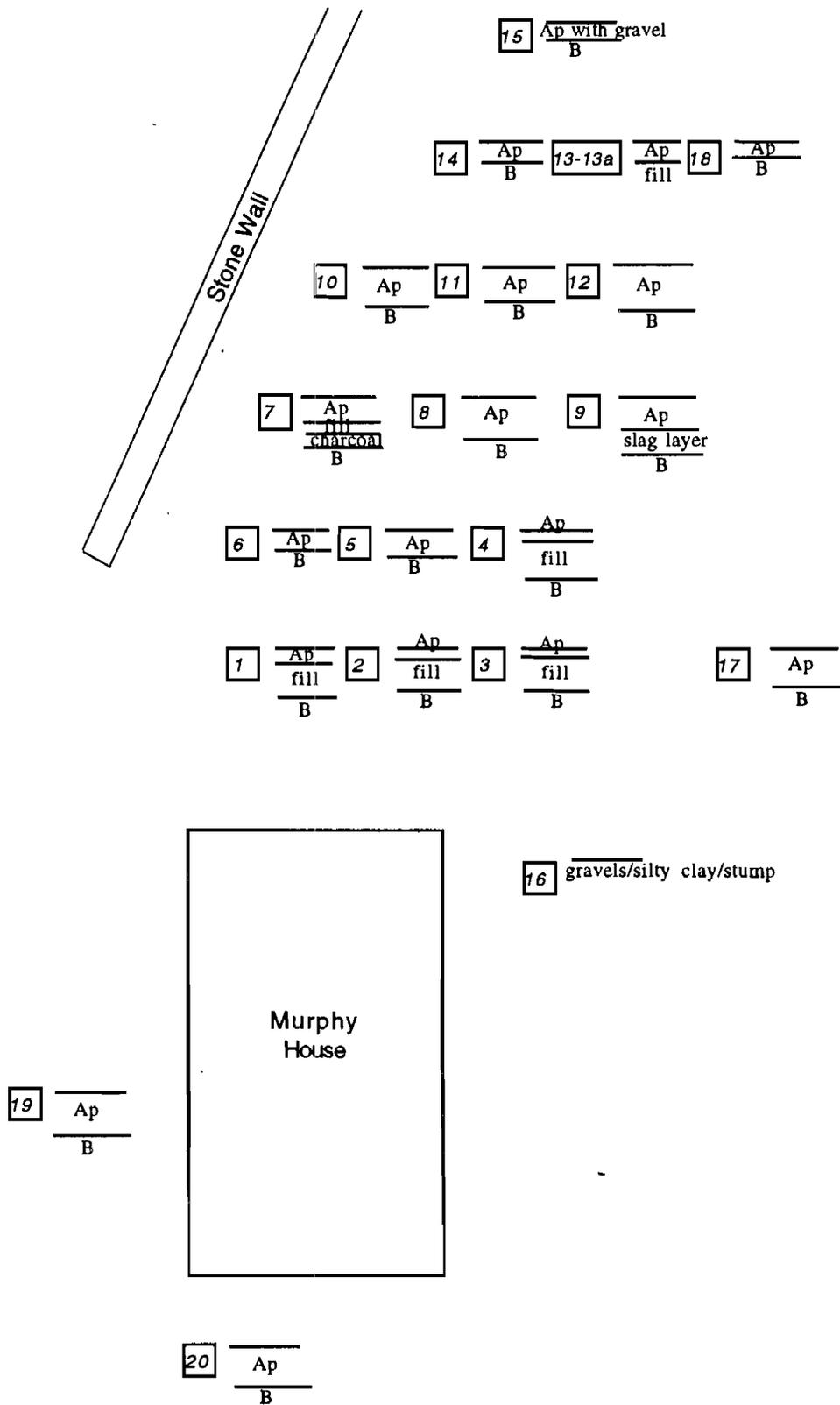


FIGURE 8
Soil Profiles from the Phase I Testing: A Schematic Representation

FIGURE 12
Profile - Test Unit #9

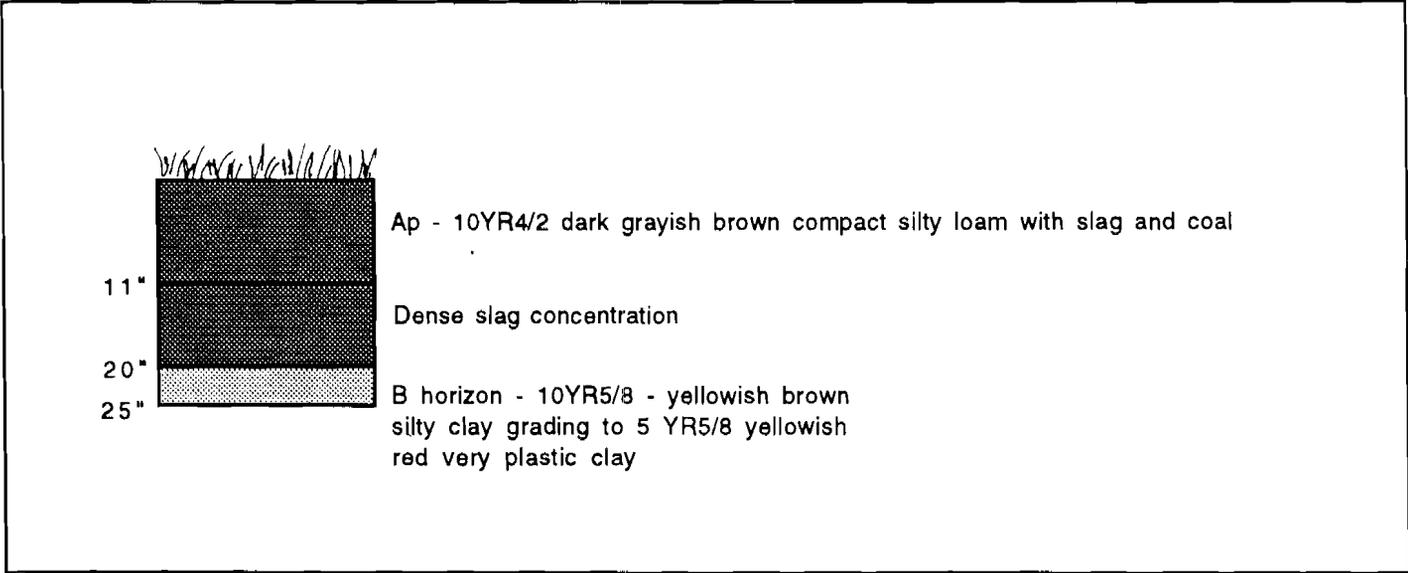
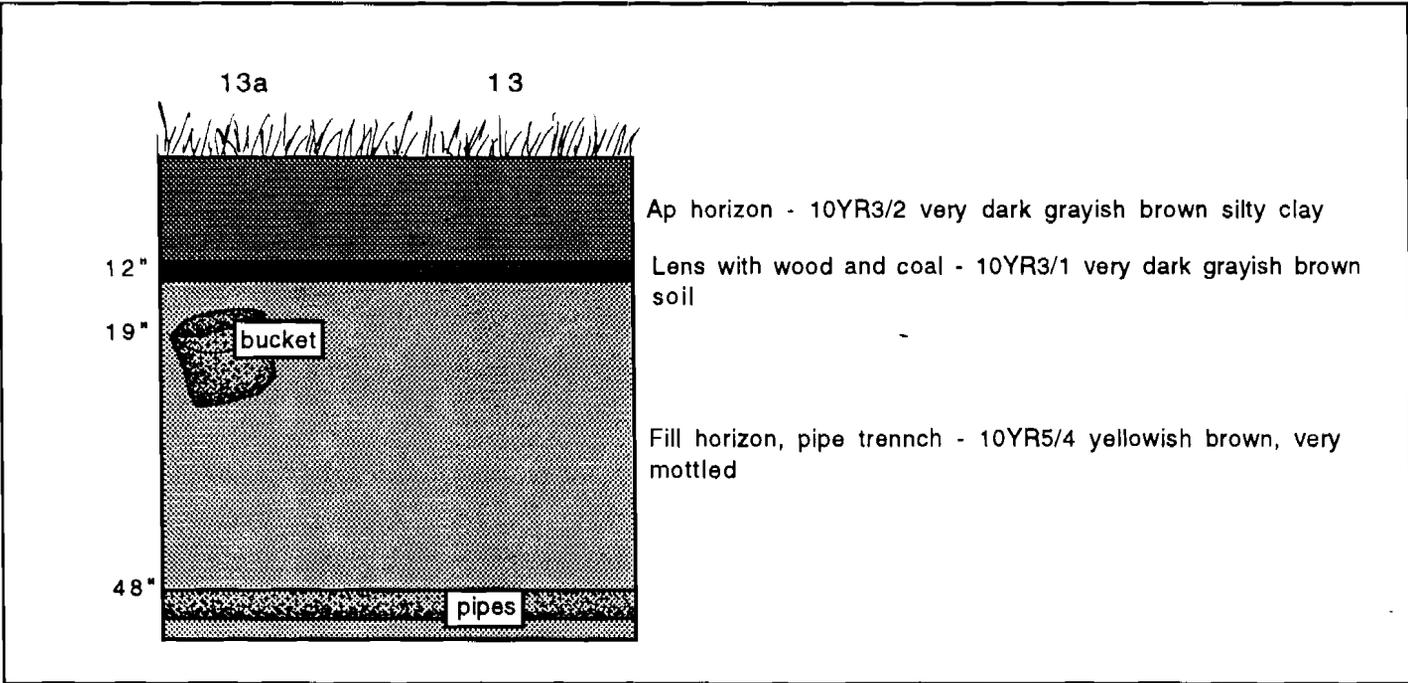


FIGURE 13
South Wall Profile - Test Units #13 & 13a



Test units 8, 10, 11, 12, and 14 exhibited Ap horizons approximately ten to fourteen inches in depth which overlay a plastic clayey B horizon; all artifacts recovered came from the yellowish brown silty clay Ap horizons.

In test unit 9 a dark grayish brown compact Ap loam horizon overlay a layer that appeared to be slag mixed with a very small proportion of Ap soils (Figure 12). The Ap horizon yielded one hundred and four artifacts that, once again, generally date to the mid to late nineteenth and early twentieth centuries. The Ap/slag horizon produced fifty-six artifacts (including a few oyster shells and a pink thumbtack, among other modern artifacts) mixed into a slag matrix. An entire small, machine-made Listerine bottle was found at a depth of eleven inches below the surface in the west wall of the test unit, at the top of the slag layer. This bottle could date any time from 1903 to the present. Other machine-made glass fragments were present as well. The slag lens was approximately nine inches thick and overlay the B horizon. There was no indication that burning had occurred here; the slag seems to represent the dumping of stove ashes from the house.

Test units 13 and 13a (Figure 13) began as a single two and a half by two and a half foot unit (test unit 13) until it was observed that what appeared to be the Ap horizon appeared to be significantly deeper in the east wall. The unit was expanded (test unit 13a) and two decayed pieces of wood mixed with coal and slag were found at a depth of ten inches below ground surface. At nineteen inches below surface, a metal paint bucket was encountered and, below this, at a depth of about forty-eight inches below the surface, two metal pipes were revealed; these ran in an east-west orientation. What had appeared to be a deeper organic horizon in test unit 13 was a lens overlaying the pipe trench. The bucket was recent in age; additional paint buckets--industrial sized--were observed on the ground surface near the test unit. Artifacts were recovered from the Ap and the mottled fill layers.

Test unit 15, excavated in a clear area north of the split rail fence, revealed a shallow sod layer over a very gravelly Ap; six and a half inches below the surface the clay B horizon was encountered. No artifacts were recovered.

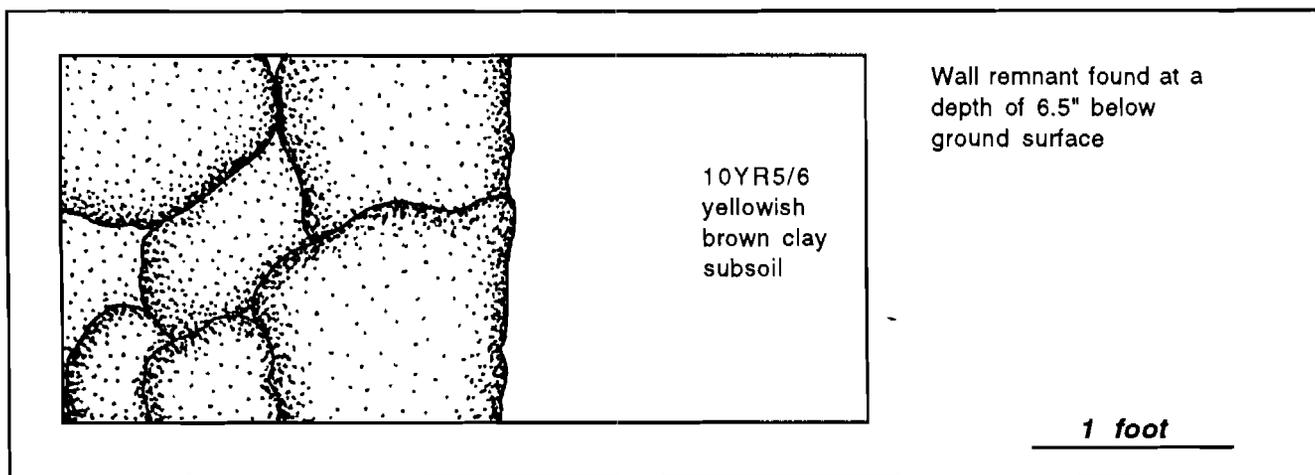
Test unit 18 revealed the remains of what appeared to be a semi-articulated stone foundation wall about six and a half inches below the surface. The wall was twenty-two inches wide, with gray mortar or builder's sand. It appeared to be approximately seven to eight inches in depth.

Test unit 17, excavated in the parking area, revealed an Ap under the gravel; this lay over a clay B horizon thirteen inches below the surface. This test unit was in the approximate location of the garage, but no evidence for this structure was found. Test unit

contain a large number of nails and window glass although no evidence for structural remains was discovered in that area.

Test unit 18, as mentioned above, was excavated in the northeastern portion of the yard, and a portion of a semi-articulated stone foundation was revealed approximately six and a half inches below the surface (Figure 14). The foundation wall measured twenty-two inches wide and seven inches deep; there was gray mortar or building sand between the stones. Apart from the stones, the soil profile showed a plowzone overlying a B horizon. A small amount of rock was found on the surface, and was determined to be a corner of the structure; in an effort to determine the extent of the foundation, the area was probed at one to five foot intervals with a bucket auger, trowels or shovels. Two corners and portions of four sides of the wall were located, suggesting a stone foundation rather than something such as a retaining wall. This structure appeared to measure approximately nineteen feet square.

FIGURE 14
Plan View of Test Unit #18



16 showed gravel over a very shallow layer (five inches in depth) of mottled, rather dark soil that overlay the remains of a tree stump. Artifacts were recovered from the Ap horizons of both of these units.

The two test units around the house, test unit 19 to the west of the house and test unit 20 to the south, in the front yard, showed twelve to fourteen inch deep Ap horizons over the yellowish brown, compact clay B horizon. The small number of artifacts were recovered primarily from the Ap horizons. A surface collection was also made along the southwest wall of the house, approximately ten feet north of the southwest corner of the house and south of the concrete sidewalk which runs halfway down along the west side of the house. Here, whiteware and ironstone sherds were visible on the surface. A layer of gravel was present on the surface at the base of the house; this was underlain by gardener's plastic. Troweling produced a total of one hundred and seventy-one artifacts; all of the materials recovered were mixed with gravels and were not found below five inches from the surface. The remainder of the gravel area at the base of the house was scraped, as were other areas at the base of the walls, but no other artifact concentrations were observed. Although this would have been a likely location for a kitchen midden, the area has been heavily disturbed by gardening and grading. This concentration in a single area may have resulted from a gardener removing the artifacts from the soil and placing them out of the way. The two test units excavated in the yard near the house did not yield nearly as many artifacts.

Both the plowzones and the fill horizons of the test units relatively close to the house produced many artifacts, and appear to be typical of a domestic deposit. It is hypothesized that many of these artifacts originally accumulated behind the original part of the structure, where it is believed that a one-story lean-to kitchen originally existed. This kitchen area appears to have been dug out for the basement when the rear two-story addition to the house was built, and it seems likely that the excavated soil was spread in the backyard. Some of the other fill episodes may be the result of disposing of stove ashes or household debris in various parts of the yard. Two post molds were found in test units 5 and 6, and are thought to be the remains of a 20th century fence.

The 1893 Baist Atlas of New Castle County, made after the purchase of the property by the DuPont family, shows the house and two outbuildings in the rear yard. The remnants of the foundation of one of these was apparently located in test unit 18, where a section of stone foundation was revealed during the excavation. From the map, it would appear that the other outbuilding was located between the house and the foundation. A number of the test units excavated in that area where it appears to have been located do

Phase II Testing

The Phase II excavations were directed towards the definition of the spatial extent, function and temporal placement of the foundation revealed during the Phase I testing and to determine if intact cultural features or deposits associated with this foundation were present. In addition, a determination of the foundation's (and possible associated features) potential eligibility for nomination to the National Register of Historic Places was to be made. To accomplish this, thirteen two and a half foot square test units were placed along the foundation and in its vicinity during April of 1993 (Figure 15). The units were excavated to the top of the wall, where present (generally approximately two and a half inches below the surface), and to a depth of approximately one foot on either side of the wall. All soils were screened through quarter inch hardware mesh (except Unit 29, which was excavated to examine the soil stratigraphy and was not screened). All soil profiles were recorded, soils screened and artifacts were bagged as described above for the Phase I procedures.

Phase II Results

Using the map generated in the Phase I excavations, flags were set out every ten feet around the edges of the foundation as it was delineated by the Phase I surface scraping and auguring. Eight test units (units 21 through 28) measuring roughly two feet by three feet were excavated to define the foundation walls. Two additional units (units 29 and 30) measuring approximately one and a half feet by two feet were excavated within the structure and three units (units 31, 32 and 33) were excavated outside the foundation's limits, one to the north, one to the southeast, and the last to the west of the structure.

The excavation of unit 21 revealed a portion of the north wall of the stone foundation. The unit was begun as a two and a half foot square, but was expanded to a little over three feet north/south, excavation on both sides of the foundation to expose it more clearly. Silty clay fill soils with large quantities of rocks were visible on either side of the wall. The twenty-nine artifacts recovered came from both the overlying loam and the fill.

Unit 22, at the northwest corner of the foundation, showed a four inch thick Ao horizon overlying a fill horizon. What appeared to be the stone wall was found at a depth of two and a half inches below the surface, but the stones were not articulated and a definite corner could not be found, although an arrangement of mortar stains suggested that this may have been the remnant of the corner. What appeared to be rocks from the corner of the foundation had been noted on the ground surface during the Phase I. All of the artifacts (47) came from the fill horizon.

Phase I Discussion and Recommendations

Phase I excavations at the Murphy House confirmed the presence of 19th and 20th century occupations as expected, but temporal components were not isolated; all of the artifacts were found in plowzone contexts or in temporally mixed fill soils. Most of the artifacts from these units date to the mid to late nineteenth and early to mid twentieth centuries (see Appendix I); the exception to this are the two undecorated creamware sherds (1762 to 1820) and the six pearlware sherds (five undecorated, one decorated with a blue scalloped shell edge) dating between 1780 and 1830. The majority of the later datable artifacts included decorated and undecorated whiteware (123) and ironstone (89) sherds, both glazed and unglazed redware sherds (158) and a few buff bodied coarse stoneware sherds (8) and porcelain sherds (5). Much of the glass was datable

Two, possibly three, outbuildings are known to have existed in the backyard during the 19th and 20th centuries. According to the 1893 Baist map, two outbuildings were present directly behind the house along Old Murphy Road. The concrete slab was located at the approximate site of one of these buildings. Test unit 7, excavated adjacent to the concrete, yielded a relatively high concentration of architectural materials, particularly window glass (post 1864 lime soda windowpane fragments) and brick. It also yielded a concentration of kitchen materials, particularly redware and bottle glass. It does not seem likely that this was a detached kitchen, for the house appeared to have always had an attached kitchen, as discussed earlier in this report. No features were found and all of the artifacts recovered came from the plowzone.

A third structure, a garage, was visible in a 1989 photograph, located on the house's northeast side. According to this photograph, this structure may have been present in an area where testing could not be conducted because of the presence of underground utility cables. It may also be nearer to the parking lot and utility terminals. One unit, test unit 17, excavated in the parking lot within the hypothesized vicinity of this structure, revealed no evidence of it.

Three features were found during the course of the Phase I investigations. Two were post molds related to a 20th century fence line in the backyard of the house. The third consisted of what appeared to be an articulated stone foundation of unknown function and temporal placement. This foundation consisted of stones with mortar or builder's sand and was approximately nineteen feet square. Phase II testing was recommended in the area of the stone foundation to better define its extent, function and temporal placement. In addition, it was felt that Phase II testing might reveal the presence of intact features associated with this foundation.

Unit 23, excavated at the northeast corner of the foundation, revealed a stain of gray mortar/builder's sand and a very small number of rocks. The fill soils were a yellowish brown silty clay which yielded twenty-six artifacts.

Unit 24 was located midway along the hypothesized east wall of the foundation. Fill soils were visible in most of the unit, although some mortar and rock occurred along what would have been the wall line. Artifacts (34) were recovered from the fill.

Unit 25, excavated midway along the west foundation line, revealed a remnant of the wall just below the sod. Below the Ao the topsoil was mixed with fill soils along the wall. Artifacts (45) were recovered from the fill.

The excavation of Unit 26, at the southwest corner of the foundation, revealed a hard, compact, dry soil, a yellowish brown silty clay fill mottled with a brown, hard packed rocky clay. The soils were all fill soils, and produced very few artifacts (10).

Unit 27, excavated along the hypothesized south foundation line, revealed a strong brown layer along the north wall of the unit and yellowish brown mottled clay fill soils (also very rocky) in the remainder of the square. No evidence for a foundation wall was uncovered. Again, few artifacts (26) were recovered.

Unit 28 was excavated in the vicinity of the hypothesized southwest corner of the foundation. The soils in this unit were the same hard, compact fills; no foundation rocks were found, and no artifacts were recovered.

In addition to the units which excavated directly along the foundation, two units were excavated within the foundation and three outside the foundations.

Unit 29 (one and a half by two feet in size) was excavated to determine the depths of the fill soils in the foundation interior, and was not screened. A layer of dark yellowish brown silty loam approximately four inches thick covered a yellowish brown silty clay fill layer about four inches thick. Beneath this was a brown clay B horizon. Unit 30 exhibited a similar stratigraphy. The soil was screened in test unit 30; all artifacts (127) recovered came from the A horizon. The fill yielded nothing.

Unit 31 was excavated four feet from the east wall. This unit exhibited a profile similar to those found inside the unit--an A horizon over sterile fill. Again, the artifacts recovered came from the A horizon.

Unit 32 was excavated circa four feet southwest of Unit 26. A small midden-like feature, an organic roughly semi-circular stain in the fill, was present in the southwestern corner of the unit. The feature was shallow, less than five inches in depth. The feature

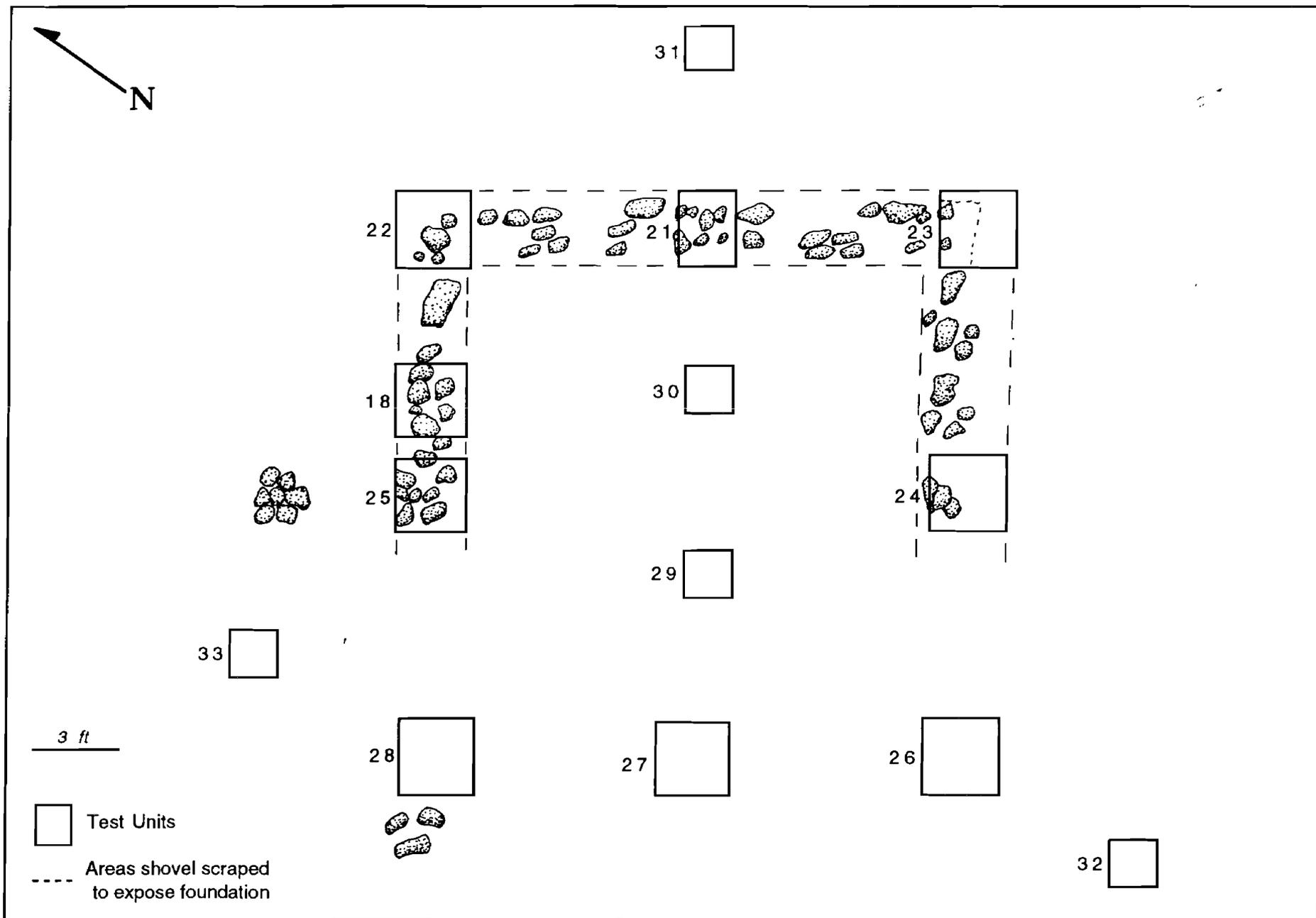


FIGURE 15
Plan View of Phase II Excavations Showing Exposed Foundation Remnants

PLATE 9
Northwest Corner of Foundation



PLATE 10
North Wall of Foundation in Foreground, East Wall in Background



produced an unidentified nail, three cut nails, four cinders and two oyster shell fragments. The remainder of the artifacts from this unit came from the A horizon.

Unit 33, excavated southwest of Unit 28, had a plowzone approximately one foot in depth overlying a dark yellowish brown clay B horizon. All artifacts recovered from this unit came from the Ap horizon.

The ground surface of the west, north and east walls was completely stripped to reveal the foundation walls, a shallow course of articulated gray stone cemented by a loose, gray mortar/builder's sand (Plates 9 and 10). Compact fill soils were encountered on both sides of the wall.

Phase II Summary and Recommendations

The Phase II excavations were carried out in an attempt to define the spatial extent of the buried foundation, to locate any associated features, and to better assess its temporal and functional significance.

Of the units excavated along the foundation, only the northwest and northeast corners were identifiable (Units 22 and 23) and the three adjoining walls (west, north and east) were delineated in Units 25, 21 and 24. In general, the rocks representing the remnants of the foundation were in a matrix of a 10YR5/8 yellowish brown fill soil which varied in terms of degree of mottling. The hard packed fill soils in the remaining test units (Units 26, 27 and 28) suggest that the foundation line had been destroyed.

A mixture of late 19th and 20th century artifacts were recovered from the Ap horizon soils and the fill soils. The foundation depth (the depth of one course) averaged seven inches and measured twenty-two inches in width. The semi-articulated stone walls were encountered at five to seven inches below the surface under a thick sod layer. There was evidence for ground disturbances observed on the surface and in the test units along the south wall where a number of large stones were scattered on the surface. It appears that this portion of the wall had been almost completely destroyed.

Five test units were excavated in and around the foundation walls (Units 29-33). Two units (Units 29 and 30) excavated in the foundation center were characterized by a three to five inch sod layer overlying culturally sterile fill soils. In the remaining test units (Units 31, 32 and 33), artifacts were recovered from either the sod layer or from a plowzone to a depth of twelve inches. As in the other test units, artifacts consisted primarily of a somewhat sparse mixture of late 19th and 20th century architectural and domestic debris.

At present, the foundation remains functionally undefined. Based on the artifacts recovered from the soils adjacent to the foundation, it appears to date to no earlier than the late 19th century and probably from the 20th century.

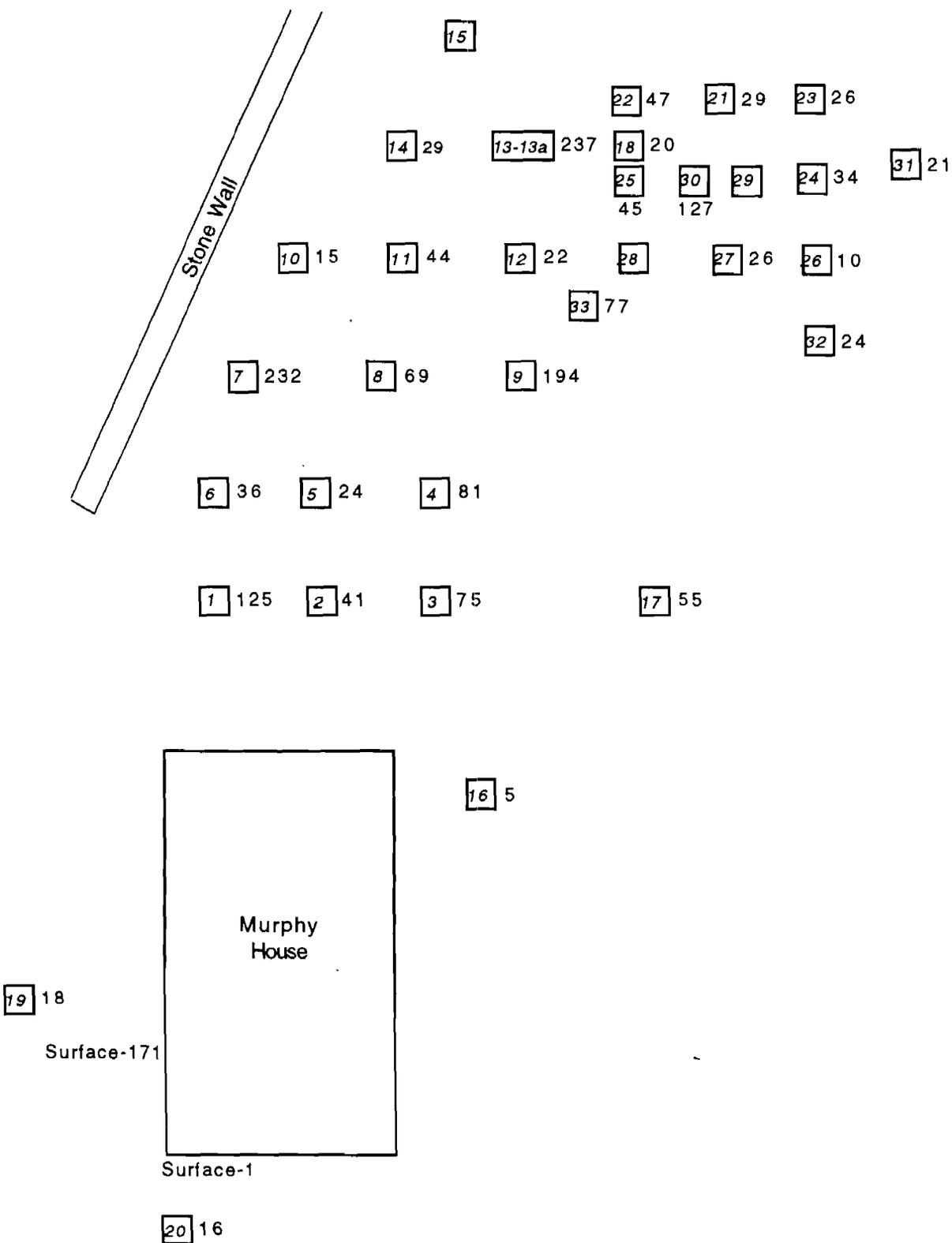


FIGURE 16
Distribution of artifacts at the Murphy House
 (excluding coal, clinkers and slag)