

## IV. ARCHAEOLOGICAL EXCAVATIONS

### A. BACKGROUND

The archaeological field investigations focused on two areas: (i) Lots 3 and 4 along Second Street and (ii) Lots 58A, 58B, and 58C at the corner of Walnut Street and Spring Alley (Figure 2). Although virtually all of Block 1184 south of Spring Alley was included in the Christina Gateway Redevelopment Project, the archaeological investigations for the present study were limited to state-owned lands that had been acquired with Federal funds.

A previous archaeological survey undertaken by the Delaware Department of Transportation (DelDOT) identified significant (i.e., eligible for the National Register of Historic Places) resources on Lots 58A, 58B and 58C of Block 1184. The DelDOT survey (Cunningham et al. 1984), undertaken in 1981, included six blocks on the eastern section of the Wilmington Boulevard Project. On Block 1184, the principal focus of the DelDOT fieldwork was along the Walnut Street frontage, the area which would be directly impacted by construction of Wilmington Boulevard. Archaeological features, mostly privies, in other areas of the block were identified and mapped. Within the area of LBA's interest were two looted privies mapped at the rear of Lots 3 and 4. These lots were not tested during the DelDOT survey, apparently because the privies had been looted and because the front of the lots had been disturbed by demolition of the structures.

Review of the DelDOT survey report (Cunningham et al. 1984) indicated that the area of greatest archaeological interest was the rear of Lots 58B and 58C. Excavations in these lots identified buried stone foundations and eighteenth-century artifact deposits. The foundations were not securely dated, but they did not appear to be assignable to any buildings that appeared on nineteenth-century maps.

Looter's Pit No. 1 on Lot 58B, as described in the DelDOT survey report (Cunningham et al. 1984), contained perhaps the most intact stratigraphic profile, consisting of a surficial asphalt pavement and substrate (circa 1943) overlying two nineteenth-century rubble zones, a nineteenth century yard midden, an eighteenth-century yard midden, and original landscape surface soils. An eighteenth-century deposit was also identified in Square # 2 on Lot 58C during the DelDOT testing.

The rear of Lot 58A was notable for the presence of an extensive brick pavement that was interpreted by DelDOT as a mid- to late nineteenth-century outbuilding. One DelDOT unit penetrated the brick floor and revealed a sequence of discontinuous ash and soil lenses that in turn rested on a massive sandy clay. The sandy clay was interpreted by the DelDOT investigators as intentional fill, but excavation was terminated before reaching the bottom of that deposit.

In addition to the DelDOT survey of Wilmington Boulevard, a small archaeological excavation was undertaken at the southwest corner of Block 1184. This excavation was directed by Conrad Goodwin, the City's Consulting Archaeologist, but a formal report is not available. The project involved excavation of a waster pit associated with the William Hare Pottery, which had operated along French Street during the nineteenth century. The kiln itself was later destroyed by construction of the Wilmington Dry Goods Warehouse. Artifacts recovered from the waster pit included a large sample of stoneware and earthenware vessels, together with an assortment of kiln furniture and household refuse. The collections are currently in storage at the University of Delaware Center for Archaeological Research.

## B. FIELD STRATEGY AND SEQUENCE OF WORK

LBA's initial archaeological objective was to determine the extent and integrity of potentially significant archaeological deposits within the two designated areas of the block. Although the DelDOT survey had identified significant archaeological deposits on Lots 58A/58B/58C, there was some question whether these resources had survived construction of Wilmington Boulevard. During a pre-contract visit to the site, it was noted that Lot 58 had been downcut toward Walnut Street, apparently in conjunction with construction of Wilmington Boulevard. Some mapping reference points used by the DelDOT survey team had been obliterated, and it was not possible to determine readily what, if any, portion of the significant resources remained. Also, a surface scatter of kiln furniture and stoneware and redware sherds was observed on Lots 3 and 4 during the pre-contract field inspection, thereby raising the expectation that subsurface features or deposits associated with the William Hare Pottery might be present in that area.

While the primary goal of LBA's study was to conduct an archaeological data recovery program, there was, at the time fieldwork was initiated, a degree of uncertainty regarding whether or not significant deposits were present in the area of interest. Therefore, a flexible and somewhat open-ended approach was developed by LBA in consultation with the City and the Delaware Bureau of Archaeology and Historic Preservation. It was initially agreed that a period of two weeks would be used for exploratory backhoe trenching and excavation of eight test units, with the understanding that additional work would be contingent on the identification of significant, intact deposits.

LBA's initial field plan included excavation on all three subdivisions of Lot 58, concentrating in the rear of Lots 58B and 58C, since eighteenth-century deposits had been located by DelDOT in that area. Minimal effort was allocated to Lot 58A, in order to determine if intact buried deposits were present. Because Lot 58 had been downcut toward Walnut Street, it was not possible to relocate any of the DelDOT units or looter's pits within the study area. The only evidence of the DelDOT excavations that could be readily identified was Trench No. 1, which had penetrated the extant asphalt pavement but which was outside the defined limits of the present study. Visible features were mapped and an attempt was made to locate the previous excavation units by triangulation from the map published in the DelDOT report (Cunningham et al. 1984:119). Removal of the surface vegetation by shovel skimming failed to produce any evidence of the previous excavations. Figure 10 portrays a topographic map of the Lot 58 area, with visible features at the time of the 1986 fieldwork.

Because of the extensive downcutting and the failure to locate the previous excavation units on Lot 58, backhoe excavation was delayed temporarily. Testing was initiated with the hand excavation of 5x5-foot excavation units and posthole tests. Initially, a total of six units were excavated on Lot 58. One unit (N22/E60) was placed within Lot 58A; three units (N60/E50, N65/E50, and N65/E60) were within Lot 58B; and two units (N80/E50 and N80/E60) were within Lot 58C. Intact eighteenth-century deposits were identified in each of the units excavated on Lot 58B, but the units within Lot 58A and Lot 58C produced disturbed nineteenth- and twentieth-century deposits. Also, mortared stone foundation walls were identified in three of the six units placed within the Lot 58 subdivisions, but their relationship to the eighteenth-century deposits was uncertain. The initial testing also resulted in the unexpected recovery of prehistoric materials from various disturbed and apparently undisturbed contexts. Figure 11 illustrates the

placement of excavation units and architectural features on Lot 58. Table 2 provides a listing of the features identified during the excavations.

During the exploratory backhoe excavation on Lots 3 and 4, an apparently intact brick feature and ceramics thought to be associated with the William Hare Pottery were identified. The feature and associated deposits were sampled by the excavation of two test units, but the area ultimately proved to be so severely disturbed that no additional work was undertaken there. Figure 12 illustrates the placement of excavation units and architectural features on Lots 3 and 4.

At the conclusion of the initial phase of fieldwork, the findings were reviewed by the City and the Delaware Bureau of Archaeology and Historic Preservation. At that point, an apparently intact eighteenth-century refuse deposits and a possible aboriginal occupation had been identified, as well as a number of foundations of uncertain association. In light of these findings, it was determined that additional data recovery should take place on Lots 58A, 58B and 58C. The agreed-upon objectives of the second phase of field excavation were:

- 1) definition of the extent of the foundation walls that had been exposed on Lots 58A, 58B and 58C;
- 2) determine the relationship of the eighteenth-century deposits to the foundation walls;
- 3) recover a larger sample of the eighteenth-century deposits;
- 4) evaluate the contexts from which aboriginal materials were recovered.

The final phase of the fieldwork involved more extensive backhoe trenching as well as additional hand-excavated units. The backhoe trenches were excavated to determine the extent of the previously exposed foundation walls and to remove overlying strata from the eighteenth-century deposits.

First, the Lot 58B area was stripped down with the backhoe in order to facilitate excavation of the eighteenth-century deposit. One immediate result of this operation was the exposure of another mortared stone wall (Feature 12) that was parallel to and approximately 12 feet north of the foundation wall in Unit N60/E50 (Feature 2). Ultimately, it was determined that these two foundation walls (Features 2 and 12) represented the remains of an eighteenth-century structure.

The configuration of nineteenth- and twentieth-century walls and cellars was quickly delineated as backhoe trenching proceeded. Trench 4 extended north along a foundation wall (Feature 9) initially exposed in Unit N80/E60, resulting in the identification of an east-west wall (Feature 14) that extended along the northern boundary line of Lot 58C. Trench 5 was placed south of the east-west wall in Unit N60/E50 (Feature 2) to determine if there were eighteenth-century deposits in that area. Soils in that area were culturally sterile.

Trench 6 was placed directly to the east of a north-south wall in Unit N65/E60 (Feature 3) to determine the extent of a rubble fill deposit identified during the earlier test excavations. The

TABLE 2. LIST OF FEATURES.

FEATURE NO.	LOT	UNIT	DESCRIPTION AND REMARKS
1	58	N60/E50	Concentration of charcoal and ash
2	58	N60/E50 N60/E55	Stone foundation wall
3	58	N80/E60	Stone foundation wall
4	4	T.U. 1	Brick foundation remnant
5	4	T.U. 1	Square post hole
7	58	N65/E55 N65/E60 N60/E55	Looters' pit
9	58	N65/E60	Stone foundation wall; later determined to be the same as Feature 3
10	4	T.U. 2	Trash pit
11	4	T.U. 1	Square post hole
12	58	N70/E50	Stone foundation wall
13	58	Trench 7	Stone foundation wall
14	58	Trench 4	Stone foundation wall
15	58	N70/E50	Sewer pipe trench

Note: Feature numbers 6 and 8 were assigned to possible post holes in Test Unit 1, Lot 4; on excavation neither proved to be cultural.

deposit proved to be a cellar filled with building demolition debris. A cellar floor was identified 2.2 feet below the extant top of the Feature 3 wall, at an elevation of approximately 25 feet above mean sea level.

Trench 7 was excavated to determine the southern extent of the Feature 3 wall. Feature 13, an east-west wall, intersected Feature 3 at the side lot line between Lots 58A and 58B. Feature 13 appears to correspond to foundation wall noted by DeIDOT on the northern boundary of Lot 58A. Trench 8 extended north from Unit N65/E60 along the east side of the Feature 3 wall. This trench demonstrated that Feature 9, the wall in Unit N80/E60, was the same architectural feature that was identified as Feature 3 in Unit N65/E60. Trench 8 also demonstrated that this wall extends across Lots 58B and 58C without any partition or party wall at the boundary of Lots 58B and 58C. During the final backfilling of the site, the backhoe was used to examine the joints between Feature 3/9 and Features 13 and 14. The wall joints suggested that all three of these walls represented a single episode of construction. These foundation walls and rubble-filled cellar represent the remains of the G. W. Baker Machine Company that was extended over this corner of the block in the early twentieth century (Figure 7).

The most important result of the backhoe trenching on Lot 58 was a clear delineation of the eighteenth-century deposits. The north-south extent of the eighteenth-century refuse was defined by Feature 2 and Feature 12. These were the walls of a structure into whose cellar the refuse had been deposited. The refuse deposits, together with Features 2 and 12, apparently extended for an unknown distance to the west, beyond the defined limit of the study area. The eighteenth-century structure and associated refuse also extended for an unknown distance to the east, however both had been truncated by construction of the machine shop cellar or by recent downcutting of the block. After having been delineated to such a small area, the surviving eighteenth-century deposit was excavated virtually in its entirety by four additional 5x5-foot units.

### C. FIELD METHODOLOGY

Field investigations began with the establishment of survey points for mapping the historic lot boundaries and excavation units. A grid of 10x10-foot squares was laid out in the Lot 58 area, and a series of depth measurements were taken to prepare a topographic map. Vertical measurements were tied to a known, fixed elevation point, so that measurements could be expressed with reference to mean sea level (msl).

The excavation techniques included backhoe stripping and trenching followed by hand-excavated units. The backhoe was used for removal of surficial deposits and exploratory trenching, to expose buried features and cultural deposits. Soils removed by the backhoe were not screened, although diagnostic items were occasionally removed from the excavated spoil on a selective basis. Stratigraphic profile drawings, generally limited to a five-foot section of each trench, were prepared for the machine-excavated units, supplemented by photographic recordation.

The primary data recovery technique involved the excavation of 5x5-foot squares. A few posthole tests were excavated during the initial phase of fieldwork, particularly in situations where there was uncertainty regarding stratigraphy. Excavation units and post-hole tests on Lot

58 were identified according to the grid coordinates of their southwest corner. Since no grid was established on Lots 3 and 4, test units in that area were numbered.

The test units and posthole tests were excavated according to natural or cultural strata, which were designated alphabetically. In the 5x5-foot units, strata were subdivided into arbitrary 0.3-foot levels, which were given numeric identification. A continuous numeric sequence of levels was assigned within each unit, so that each level was identified by stratum and level number. For example, a typical sequence might be "Stratum A/Level 1, Stratum A/Level 2, Stratum B/Level 3, Stratum B/Level 4, Stratum C/Level 5, Stratum D/Level 6, etc." As excavation proceeded, depth measurements were taken from datum stakes set at a corner of the unit; elevations for the datum stakes were referenced to mean sea level. Excavated soils were sifted through 1/4-inch hardware cloth, except for some recent fill deposits and the spoil excavated by backhoe.

Standardized field forms were used for recordation of excavation levels and features, supplemented by scaled plan and profile drawings. Black-and-white and color slide film was used to photographically record the field excavations, including soil profiles, features, and general site conditions. Standard scientific descriptions were made of excavated soil strata, to allow stratigraphic comparisons between different areas of the site. This was accomplished by the use of USDA field tests for soil textural classes and Munsell soil color notation. Flotation samples were taken from selected contexts in order to provide information on dietary patterns and environmental reconstruction; a one-liter sample size was utilized for the flotation samples.

#### D. EXCAVATION RESULTS

##### 1. Lot 58A

Prior to LBA's fieldwork, Lot 58A had been almost entirely stripped of the overlying asphalt pavement that had covered this lot during the DelDOT survey. The asphalt pavement had been preserved in the area adjacent to the Wilmington Dry Goods Warehouse to the west and along the retaining wall that forms the southern boundary of this lot (see Figure 10). Minimal excavation was carried out on this lot, consisting only of one excavation unit (N22/E60) and a backhoe trench (Strata Cut 1).

Excavation Unit N22/E60 was placed along the southern lot boundary in an area where some asphalt pavement remained, in an attempt to obtain a complete stratigraphic sample of the lot's occupational history. The stratigraphy observed represented only disturbed nineteenth- and twentieth-century deposits and natural soils. The asphalt pavement was removed as Stratum A. The deposit immediately beneath the asphalt (Stratum B) consisted primarily of gravel, but also contained some brick fragments, mortar, glass, nails, etc. in a matrix of yellowish brown silt. Stratum C was a lens of loose, gray silt with mortar that was present only in the southern portion of the unit. Stratum D was a massive, compact, brownish yellow silty clay that appeared to represent a natural subsoil horizon. Mixed fills were found in the upper levels of Stratum D, particularly along the southern portion of the unit. Though not recognized as a separate stratum during excavation, the profile clearly indicated that some sort of intrusion, possibly a rodent den, had occurred in the southern portion of Stratum D. Figure 13 portrays the stratigraphic profile observed in Unit N22/E60.

The brick floor or pavement described in the DelDOT survey (Cunningham et al. 1984) was not present in Unit N22/E60, although brick rubble was noted in the deposits beneath the asphalt pavement (see Figure 13). Therefore, it was concluded that this feature had been destroyed when the area was paved with asphalt (circa 1943) or during the recent (post-1981) downcutting of the lot.

The eastern portion of the retaining wall along the southern boundary of Lot 58A had also been destroyed by recent grading. Strata Cut 1 was placed at the extant eastern limit of the retaining wall, in a location that provided an opportunity to examine the soil stratigraphy of Lot 58A. Strata Cut 1 (Figure 14) extended approximately 5.5 feet beneath the level of the asphalt pavement, and appeared to confirm that the Stratum D soils of Unit N22/E60 were indeed natural soils. An auger test placed at the base of Strata Cut 1 extended to approximately eight feet below the asphalt pavement and provided no evidence of buried cultural deposits.

As in Unit N22/E60, the brick pavement was not visible in Strata Cut 1. As the backhoe excavated Strata Cut 1, a mortared stone foundation wall was exposed that ran north from the retaining wall. This wall may correspond to one of the north-south walls identified by DelDOT on Lot 58A. To examine this wall, Trench 3 was excavated immediately to the east of Strata Cut 1. Another stone foundation wall was encountered approximately 5 feet east of the wall in Strata Cut 1. The area between the two walls was a cellar that had been filled with demolition rubble. After removal of the rubble with the backhoe, a brick floor was found approximately four feet below ground surface. Modern materials were noted in the cellar fill, and no further work was done in that area.

## 2. Lot 58B

Excavations on Lot 58B were oriented toward the recovery of intact eighteenth-century deposits. Intact deposits dating from the eighteenth century were identified within a relatively small area bounded on the north and south by two stone foundation walls (Feature 2 and Feature 12), interpreted as the foundation of an eighteenth-century structure, and on the east by the cellar of a late nineteenth-century machine shop (Feature 3). During the initial phase of the field excavations, three units were placed within Lot 58B; then after intact deposits were identified, four additional units were opened, forming a block of excavation units that encompasses the intact deposits within the project area boundaries. While the eighteenth-century deposits extended into Lot 58C, the results of the block excavation are presented in this section. Figure 15 indicates the plan of excavations for Lots 58B and 58C.

At the start of LBA's fieldwork, there was some doubt that any of the eighteenth-century deposits identified during the DelDOT survey had survived. Of particular concern was the fact that Lot 58 had been severely downcut toward Walnut Street. While much of the asphalt pavement apparently had been removed during the DelDOT survey, LBA's topographic survey of Lot 58 (Figure 10) indicated that three to four feet of the underlying deposits had been removed in the few years since the DelDOT fieldwork. However, while much of the eighteenth-century deposit had been removed by grading, some intact deposits were identified and excavated by LBA.

During the initial phase of LBA's excavations, three units (N60/E50, N65/E50 and N65/E60) were placed within Lot 58B. First, Unit N60/E50 was placed along the western margin of the study area, a location that appeared to have been relatively undisturbed by downcutting. After intact eighteenth-century deposits were identified there, another unit (N65/E50) was opened immediately to the north.

The stratigraphy of Unit N60/E50 provided a general model for the remainder of the units within the Lot 58B excavation block. The surface soil had been partially removed by shovel skimming in an unsuccessful search for the units previously excavated by DelDOT. Stratum A, the surface soil, was an extremely compact fine sandy silt. Asphalt chunks within Stratum A indicated that it had been deposited or disturbed subsequent to the DelDOT excavations. Within Stratum A, a concentration of charcoal and ash was separately removed as Feature 1. It proved to be quite shallow (0.05 to 0.2 foot), and because it was confined to the disturbed, surficial soil, it is of no significance. It may represent a recent trash burning area.

After removal of Stratum A, Feature 2, a mortared stone wall, was exposed along the southern edge of the unit, and a deposit of brick rubble and mortar (Stratum B) was exposed across the remainder of the unit. Stratum B corresponds to the lowermost rubble deposit noted by DelDOT in Looters' Pit No. 1 (Cunningham et al. 1984). This rubble layer was assigned a nineteenth-century deposition date in the DelDOT survey; but LBA's analysis of the material recovered from this context indicates that it dates to the eighteenth century.

Beneath the Stratum B brick rubble deposit was a sequence of thin, distinct deposits that produced an assortment of eighteenth-century ceramics, white clay pipes, curved and flat glass, bone, shell, aboriginal items, etc. A summary of the stratigraphy in Unit N60/E50 is as follows:

<u>Stratum</u>	<u>Description</u>
A	yellow compact fine sandy silt
B	brick rubble and mortar
C	dark yellowish brown silt with charcoal and ash
D	pinkish gray silt with ash and charcoal
E	brown/dark brown silt with charcoal flecks
F	compact gray sandy silt
G	subsoil; compact, strong brown coarse sand

For the remainder of the excavation units on Lot 58B, "Stratum A" was used to designate the recently deposited/disturbed surface soil, while "Stratum B" was used to designate the immediately underlying brick rubble/mortar layer. Deposits sealed beneath Stratum B varied greatly within the Lot 58B excavation block, so that "Stratum C" was assigned to the uppermost distinct deposit beneath Stratum B. The west profile of the Lot 58B block (Figure 16) provides the most complete stratigraphic record of the site, and illustrates that varied stratigraphy of the eighteenth-century deposits. A composite east-west stratigraphic profile of the Lot 58B excavation block (Figure 17) also illustrates the complexity of the eighteenth-century deposits as well as the extent to which these deposits were disturbed by later construction, looting and downcutting.

Unit N65/E50 was opened immediately upon completion of Unit N60/E50, during the initial phase of fieldwork. The surface soil in this unit (Stratum A) was removed without screening, since other units on Lot 58 had demonstrated that this soil had been deposited or disturbed after 1981. Stratum B, the brick rubble, extended across the floor of the unit. Recoverable artifacts were collected from Stratum B, but the soil was not screened because the purpose of the unit was to expose and recover material from the deposits beneath the rubble. Because the contact between Strata B and C was irregular, a thin (0.05 to 0.1 foot) interface level was taken out separately. Strata C and D were the primary eighteenth-century deposits in Unit N65/E50. Stratum C was a yellowish brown to brown compact clayey silt that extended across the entire unit. Stratum D was a mottled yellowish brown clayey silt lens that appeared only in the western portion of the unit. Stratum E was intact subsoil, which was predominantly a brownish yellow clayey silt.

Unit N65/E60 was placed near the estimated location of Looters' Pit No. 1. Because this area had been downcut, a posthole test was placed within the unit to determine whether the eighteenth-century deposits had been removed. After recovery of eighteenth-century materials from subsurface contexts and identification of a buried stone wall, excavation of the unit proceeded.

The surface soil (Stratum A) in Unit N65/E60, like that in Unit N60/E50, contained an assortment of historic and modern materials, and the admixture of asphalt chunks indicated that it had been deposited or disturbed after 1981. Stratum B was a rubble deposit that contained an assortment of historic refuse, bone and shell. This deposit was dominated by eighteenth-century ceramics, but also contained a few nineteenth-century ceramics, and twentieth-century bottle glass, plastic and asphalt. Feature 3, a mortared stone wall oriented north-south, was exposed directly beneath the surface of Stratum B. Because a slight difference in the rubble was perceived on either side of the Feature 3 wall, it was excavated as separate levels of Stratum B. Stratum C, a dark brown compact silt with charcoal and ash, appeared beneath the rubble west of the wall; this deposit was quite thin (0.15 to .20 foot) and contained an assortment of eighteenth-century refuse.

During excavation of Stratum B, it was noted that modern materials (pull tabs, plastic, asphalt chunks, etc.) were concentrated in the southwest corner of the unit. After intact subsoil (Stratum E) had been reached in the west half of the unit, an area of obvious recent disturbance was still present in the southwest corner, whereupon it was determined that the excavators had located Looter's Pit No. 1. The looters' pit fill was initially excavated as Stratum D, without arbitrary levels. The looter's pit was ultimately designated Feature 7 when it became apparent that it extended into other excavation units.

The looters apparently had dug down directly along the west side of the Feature 3 wall, ultimately reaching a depth approximately 2.5 feet below the topmost intact portion of the wall. That the upper portion of the looter's pit had been re-excavated during the DelDOT survey was apparent from the presence of a nylon parka hood and the relative lack of historic items. However the lowermost portion of the pit contained an assortment of eighteenth-century items (trailed slipware, delftware, white salt-glazed stoneware, oriental export porcelain, and wine bottles) that had apparently not been re-excavated since the looting episode.

Asphalt chunks were mixed with the rubble deposit east of the Feature 3 wall in Unit N65/E60, indicating that this area had been disturbed since 1981. The lower rubble fill levels, Stratum F, contained ash, coal, burnt wood, bone, asphalt, brick, plastic, glass, etc. Stratum F rested on another massive rubble deposit, Stratum G. Three levels of Stratum G were removed by hand, and it was determined that the deposit most likely represented a cellar filled with building demolition rubble. Hand excavation was therefore terminated. Subsequent backhoe excavation did demonstrate that the rubble fills east of the Feature 3 wall (Strata B-5, F-6, F-7, G-8, G-9, G-10 and G-11) were in fact a building demolition deposit that filled a cellar.

The second phase of fieldwork focused exclusively on recovery of intact eighteenth-century deposits. As a result of the initial hand testing and backhoe trenching, these deposits were identified within a small area north of the Feature 2 wall and west of the Feature 3 wall. Four additional 5x5-foot units (N60/E55, N65/E55, N70/E50 and N70/E55) were placed in this area, forming a block that covered virtually the entire area where intact eighteenth-century deposits had survived. In these units, the backhoe had been used to remove the deposits overlying the eighteenth-century midden. Following the nomenclature used in the previously excavated units in this area, particularly N60/E50 and N65/E50, Stratum A referred to the modern surface soil that had been deposited after the 1981 DelDOT investigations, while Stratum B designated the brick rubble deposit that capped the eighteenth-century midden, of which the uppermost distinct deposit was designated Stratum C.

In Unit N60/E55, the backhoe partially removed Strata A and B, and the remaining soils of Strata A and B were removed as Level 1. This level was not screened, but artifacts were collected during excavation. Due to the irregular contact between Strata B and C, the second level excavated was an interface. Feature 2, the mortared stone wall, extended only a few feet into Unit N60/E55, as its eastern extent had been truncated by the post-1981 grading of the Walnut Street frontage. The looters' pit fill (Feature 7) was then removed from a small area in the northeast corner of the unit. Stratum C, a yellow silty sand, was the primary eighteenth-century midden deposit in this unit. A mortar lens, Stratum D, extended across the western portion of the unit. Stratum E was a natural subsoil, an extremely compact red, yellow and gray sandy silt. Stratum F was a darker stained area of subsoil directly beneath Stratum D in the southwest corner of the unit.

In the process of removal of overburden (Strata A and B) from Unit N65/E55, the backhoe disturbed a portion of Stratum C. Therefore the first excavated level included loose soils of Strata A, B and C. After excavation of the remainder of the rubble deposit (Stratum B), three strata were present in the floor of the unit. Stratum C, a mottled brown silt with charcoal flecks, was present in the eastern half of the unit. Stratum D, a mottled dark reddish brown silt with charcoal flecks, was present in the northwest, and Stratum E, a dark grayish brown silt with charcoal flecks, occupied the southwest corner of the unit. After excavation of Stratum C, which contained a large number of ceramics, glass, pipes, architectural material, bone, etc., Strata D and E extended across the entire unit floor. Stratum D was a mottled reddish brown silt, while Stratum E was a dark grayish brown silt. Both deposits were relatively thin lenses that contained charcoal flecks as well as an assortment of ceramics and other items. Stratum F included alternating yellowish brown and dark grayish brown silts that appeared to have been water-deposited. Stratum G was sterile subsoil. Other than the looters' pit (Feature 7) that occupied a small area in the southeast corner of the unit, no features were identified in Unit N65/E55.

Unit N70/E50 contained the largest intact remnant of the Feature 12 foundation wall, as well as a sample of the eighteenth-century midden deposit. Because of the presence of the Feature 12 wall, backhoe stripping of the overburden in this unit was limited to the modern surface soil, Stratum A. The first hand-excavated level was the remaining loose soil of Stratum A. A level of brick rubble (Stratum B, Level 2) was then removed, and the Feature 12 wall was exposed, running east-west across the unit. Fifteen levels were excavated from the portion of the unit south of Feature 12, then four levels were excavated in the area north of Feature 12.

Feature 15, a fill deposit that penetrated Stratum B and the western portion of Feature 12, was first recognized in the west profile after removal of Stratum B. It was initially thought to be a looters' pit or shovel test but was ultimately determined to be a sewer pipe trench that ran diagonally across the northwest corner of the unit.

South of the Feature 12 wall, the stratigraphy beneath the brick rubble was quite complex, and included a number of lenses and alternating layers. Stratum C, a compact yellowish silt, was the uppermost eighteenth-century midden deposit, and it had a maximum thickness of only 0.2 foot. Strata D, E, F and G were thin artifact-bearing deposits, while Strata H, I and J were various natural soils that were virtually sterile of cultural material.

North of Feature 12, two strata were visible after removal of the overburden. Stratum L was a sterile subsoil that occupied the northeast portion of the unit, while Stratum K, a mixed fill deposit, was present in the northwest corner. Stratum K was ultimately determined to be a part of Feature 15, the sewer pipe trench.

Because of time constraints, excavation of Unit N70/E55 was limited to exposure and examination of Feature 12. Level 1 consisted of the loose material left after backhoe stripping, and it included mixed soils from Strata A, B and C. Level 2 consisted of the removal of a brick rubble deposit (Stratum B) north of Feature 12. It appeared to have been deposited or disturbed recently, and was therefore distinct from the extensive brick rubble deposit that capped the eighteenth-century midden in the area between Features 2 and 12.

After exposure and cleaning, Feature 12 was found to extend almost completely across Unit N70/E55. However, its eastern extent had been truncated by recent (post-1981) grading of the block. Like Feature 2, Feature 12 had been constructed with a whitish mortar, and it was therefore distinct from the other walls exposed on the site (Features 3, 13 and 14) which had been laid with a pinkish or brown mortar.

Because the site had been downcut, it was not possible to determine if Feature 12 had extended eastward as far as the Feature 3 wall. The area where Feature 12 would have met Feature 3 was troweled, and it contained an assortment of modern items--plastic utensils, pull tabs, styrofoam, etc., suggesting that this may have been the base of a backfilled DelDOT excavation unit. Square #2 on Lot 58C contained both an east-west wall and a north-south wall (Cunningham et al. 1984:144), and this may have been the intersection of Features 3 and 12.

### 3. Lot 58C

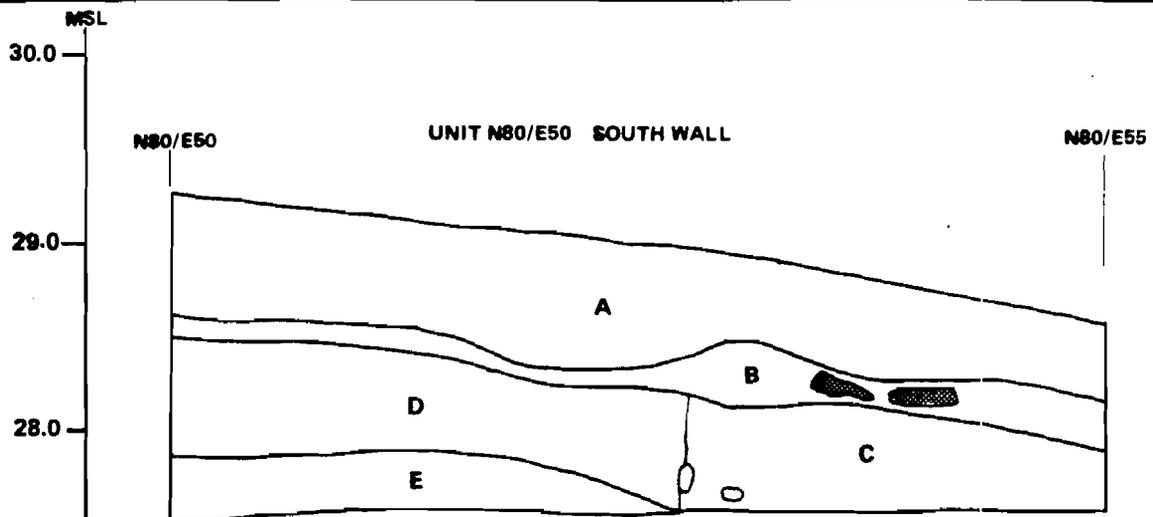
Two excavation units were placed in this lot during the initial phase of LBA's fieldwork, with the result that this area was found to have been extensively disturbed. For the most part, the recovered deposits contained a mixture of eighteenth-, nineteenth- and twentieth-century materials. Intact eighteenth-century deposits were identified at the extreme southwestern corner of the lot, and they were excavated during the second phase of fieldwork; these deposits have been discussed with the preceding summary of the Lot 58B excavations.

Unit N80/E50 was placed at the western edge of the study area within Lot 58C, where recent downcutting apparently was least severe. The surface soil (Stratum A) contained an assortment of structural debris (brick, linoleum, nails, etc.) and modern materials (plastic, pull tabs, etc.), and it appears to represent the most recent (post-1981) grading and landscaping of the property. A dark yellowish brown gravelly sand was exposed immediately beneath Stratum A. This deposit, excavated as Stratum B, was identified as a modern select fill, similar to that which was noted on Block 1101 (cf. Louis Berger & Associates 1986b). A posthole test (N85/E52) was then placed within the unit to determine the depth of this deposit, before excavation of the entire unit proceeded. The select fill deposit proved to be a relatively thin lens, so that it was removed by hand. Beneath the select fill, Stratum C was present in the eastern portion of the unit while Stratum D occupied the western portion of the unit. Stratum C was a mixed fill deposit. Stratum D, a compact brownish yellow silty clay, appeared to represent natural subsoil. Figure 18 illustrates the stratigraphic profile observed in Unit N80/E50.

During excavation, Stratum C in Unit N80/E50 was identified as the backfill from DelDOT Square #1 on Lot 58C. This interpretation was supported not only by the configuration of this deposit, but also by the presence of a large rock immediately adjacent to it in Stratum D. The DelDOT report (Cunningham et al. 1984:142) indicates that Square #1 on Lot 58C was excavated to investigate a large rock identified during backhoe clearing. Another interpretation of Stratum C presented itself during the final excavations on Lot 58B, however. During the final backfilling of the site, Feature 15 in Unit N70/E50 was determined to be a sewer pipe trench that extended toward Unit N80/E50. The roughly similar alignment of Stratum C in Unit N80/E50 with the Feature 15 pipe trench suggests that Stratum C may in fact represent pipe trench fills.

Unit N80/E60, placed in the rear yard area of Lot 58C, revealed a highly disturbed stratigraphy in the uppermost 1.0 to 1.5 feet. Stratum A, the modern surface horizon, was a light yellowish brown compact silt that contained an assortment of historic and very recent materials (plastic bags, paper, styrofoam, etc.). Stratum B was a compact deposit of mixed fills and rubble; like Stratum A, it contained very recent items, thereby indicating that both Strata A and B were deposited or disturbed during the most recent (post-1981) grading of the site. Because the surface deposits obviously had been subject to recent disturbance, a posthole test was placed within the unit (N80/E50) shortly after the unit was opened, in an attempt to determine if intact deposits had survived. The posthole revealed an intact stone foundation wall within the unit, as well as cultural deposits to a depth of roughly three feet below grade.

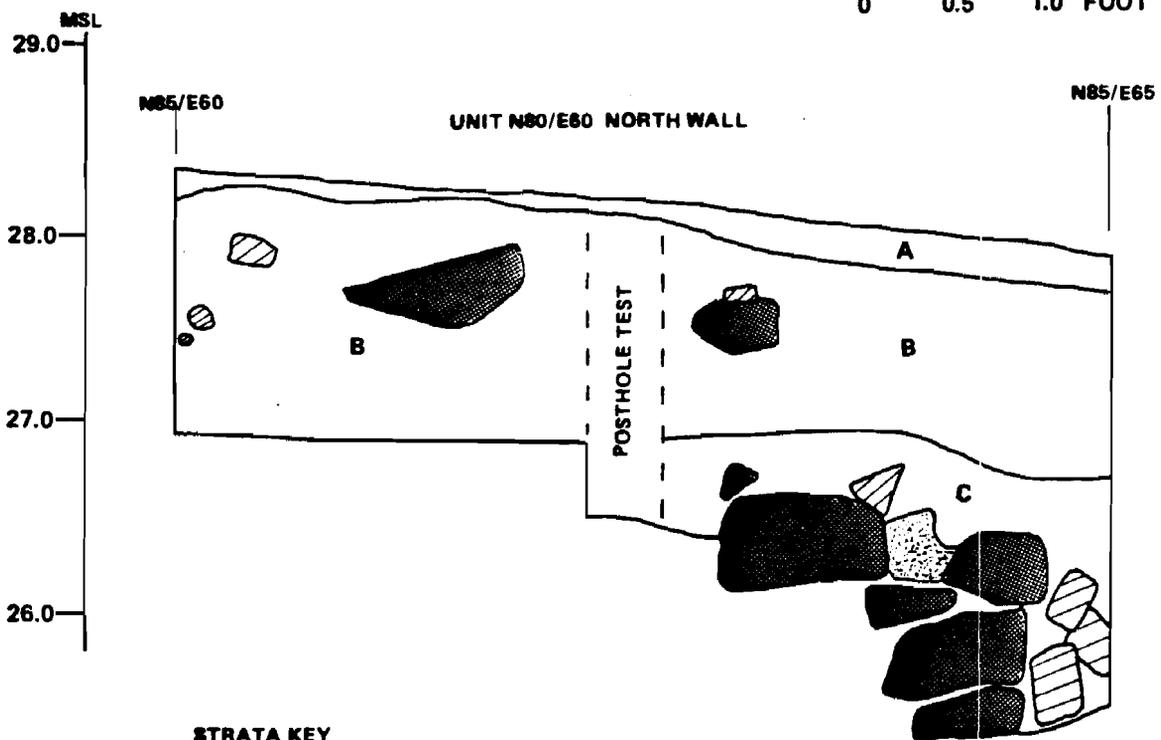
Feature 9, the foundation wall, was exposed at the base of Stratum B. It was constructed of mortared rubble and was oriented in a north-south direction across the unit. Stratum C, a sandy clay subsoil, occupied the portion of the unit west of Feature 9. Stratum D, a massive rubble fill



**STRATA KEY**

- A - MOTTLED BROWN/DARK BROWN (10YR 4/3) SILT; EXCAVATED AS STRATUM A.
- B - DARK YELLOWISH BROWN (10YR 4/4) GRAVELLY SAND; EXCAVATED AS STRATUM B.
- C - YELLOWISH BROWN (10YR 5/4) MIXED FILLS; EXCAVATED AS STRATUM C.
- D - COMPACT BROWNISH YELLOW (10YR 6/6) SILTY CLAY; EXCAVATED AS STRATUM D.
- E - STRONG BROWN (7.5YR 5/6) GRAVELLY COARSE SAND.

● STONE



**STRATA KEY**

- A - YELLOWISH BROWN (10YR 5/6) TO 10YR 6/4) SILT; EXCAVATED AS STRATUM A.
- B - YELLOWISH BROWN (10YR 5/4 TO 10YR 6/4) SILT; MIXED FILLS; EXCAVATED AS STRATUM B.
- C - DARK YELLOWISH BROWN (10YR 4/4) SILT WITH DENSE RUBBLE; EXCAVATED AS STRATUM D.

▨ BRICK  
 ● STONE  
 ○ MORTAR

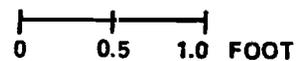


FIGURE 18: South Wall Profile, Unit N80/E50 and North Wall Profile Unit N80/E60.

with nails, window glass, bottle glass, ceramics, shell, metal, etc. was east of the Feature 9 wall and partially overlying it. Stratum D was excavated to a depth of approximately one foot below the top of the wall. When it became apparent that Stratum D probably represented a cellar fill that extended to an unknown depth, hand excavation in Unit N80/E60 ceased.

Subsequent backhoe trenching to the east of the Feature 9 foundation wall demonstrated (i) that Stratum D was indeed a building demolition deposit that filled a cellar and (ii) that the Feature 9 foundation wall identified in Unit N80/E60 was the same wall that had been designated Feature 3 in Unit N65/E60 (see Figure 15). Figure 18 illustrates representative stratigraphic profiles from Units N80/E50 and N80/E60.

#### 4. Lots 3 and 4

Lots 3 and 4 were selected for archaeological testing because of the possibility that features or deposits related to the William Hare Pottery might be identified. The area available for testing measured approximately 35x58 feet, and was bounded on the north by the Wilmington Dry Goods Warehouse, on the west by a concrete driveway that serviced a loading dock at the rear of the warehouse, and on the south by the sidewalk along Second Street. Except for a few trees, the entire area was open, as all structures along Second Street had been demolished. Figure 12 indicates the configuration of this area and the location of the excavation units.

The surficial deposits on Lots 3 and 4 consisted of demolition rubble and mixed fills, a situation reflecting the recent demolition of structures along Second Street. Field investigations began with backhoe skimming and scraping, rather than trenching, since it did not appear that any appreciable downcutting or filling had occurred.

An apparently intact brick structural feature, designated Feature 4, was exposed immediately below ground surface in the rear of Lot 4, therefore backhoe stripping was immediately discontinued. Concentrations of ash were visible on the surface adjacent to Feature 4, as well as a piece of kiln furniture and a number of large stoneware sherds. This suggested that Feature 4 might be associated with the Hare Pottery. Since no hand-excavation units had been planned for this area, Feature 4 was covered, and the backhoe was moved to another area of the site. Later, after consultation with the Delaware Bureau of Archaeology and Historic Preservation, it was decided to place two excavation units in the rear of Lot 4, to investigate Feature 4 and the immediately adjacent deposits.

At the west boundary of Lot 3, a concrete block foundation wall was exposed by backhoe excavation immediately below the ground surface. It was associated with a concentration of brick rubble that extended to a maximum depth of approximately 1.5 feet below grade in the extreme northwest corner of Lot 3. The top of the concrete block foundation wall was exposed by backhoe for a distance of 15 feet south of the warehouse.

Given the depth of demolition rubble in the rear of Lot 3 and an apparently intact structural feature on Lot 4 that was possibly associated with a nineteenth-century occupation, it was decided to excavate a deep trench across the rear of the lots to examine the stratigraphy. Trench 1 was placed across the rear of Lot 3, roughly parallel to the rear lot line (see Figure 12). The trench was excavated to a maximum depth of ca. 5.5 feet below grade. The upper two feet of the

profile consisted of building demolition rubble and mixed fills. In some areas of the profile, subsurface disturbance from the installation of two water pipes and a sewer pipe extended to a depth of three feet.

Trench 2 was placed across the rear yard area of Lot 4, to examine the stratigraphy in that portion of the study area. A stone foundation wall capped by two intact courses of brickwork was exposed in the southern wall of Trench 2. The orientation of this wall parallel to Second Street suggested that it represented a former structure facing the street. A quick backhoe cut south of the foundation wall was sufficient to indicate the presence of a rubble-filled cellar in the front of Lot 4. The profile exhibited in the north wall of Trench 2 contained mixed fills and building demolition rubble to depths as much as two feet below grade.

While Trenches 1 and 2 indicated a quite disturbed situation in the mid-lot sections of Lots 3 and 4, survival of Feature 4 suggested that the extreme rear of Lot 4 had remained somewhat undisturbed by the cycle of nineteenth- and twentieth-century building construction and demolition. The final phase of fieldwork in the Second Street area involved excavation of two 5x5-foot units placed over Feature 4 and the associated deposits. Since the grid was not extended to this portion of the block, the units were designated Test Unit 1 and Test Unit 2.

Test Unit 1 was placed directly over the brick foundation remnant (Feature 4) and a concentration of ash, while Test Unit 2 was placed immediately to the east, covering another area of concentrated ash exposed by the backhoe. Because the backhoe scraping had disturbed the surficial soils, the loose soils were removed first from both units as an overburden stratum.

As it was initially exposed, Feature 4 appeared as a linear arrangement of bricks with no immediately apparent functional association. Its association with kiln furniture and ash deposits did suggest that it may have been related to the William Hare Pottery which operated on the block from roughly 1840 to 1880. After excavation, Feature 4 was determined to consist of only two intact brick courses set in mortar (see Figure 19) It had a maximum length of 4.6 feet (north-south), and may have extended to the west, however the area to the west had been downcut with the backhoe. The feature rested directly above a yellowish brown clayey silt (Stratum D), that was identified as a natural subsoil horizon.

In addition to Feature 4, a number of other features were identified during excavation of Test Units 1 and 2. However, it was ultimately determined that the area had been rather thoroughly looted. Cunningham et al. (1984) indicate the presence of two looted privies in this area; but while LBA's field excavations confirmed extensive looting, no privies were found.

After removal of the overburden in Test Unit 1, three pit-like deposits in the eastern half of the unit were excavated as Strata A, B and C (see Figure 19). These penetrated subsoil (Stratum D), a brownish yellow silty subsoil, and they appear to represent looters' excavations. Feature 5 was a square (0.3 x 0.3 foot) posthole that penetrated only 0.12 foot into Stratum D. Feature 11 was another post hole that had penetrated natural subsoil; it measured 0.21x0.18-foot and had a pointed base. The upper portion of this feature had been truncated by looting activity, and the surviving portion extended only 0.32-foot into subsoil. Feature numbers 6 and 8 were assigned to possible postholes in the eastern half of Test Unit 1, but excavation determined that neither was cultural.

Excavation of Test Unit 2 provided a clear record of how looters had found and destroyed a nineteenth-century trash pit. Because a stand of sumac trees prevented backhoe stripping over the unit's entire area, a modern surface soil, identified as Stratum A, occupied the northern portion of the unit. Removal of the loose overburden and the intact surface soil (Stratum A) revealed a concentration of shell and ash (Stratum B) in the center of the unit and a narrow band of red clay (Stratum C) along the eastern edge of the unit. Stratum D, a brownish yellow compact silt, mixed with demolition rubble, represents the uppermost natural soil in Test Unit 2, and it corresponds with Stratum D in Test Unit 1.

In Test Unit 2, Stratum B contained an assortment of shell, bone, brick rubble, ceramics, etc. This deposit represents the looted fill of Feature 10, a trash pit. Virtually the entire pit fill of Feature 10 had been looted. The looted trash pit was oval to sub-rectangular in plan (see Figure 19), with maximum dimensions of 2.3 x 3.5 feet, and its extant portion penetrated natural subsoil to a maximum depth of 1.8 feet. Apparently, the looters had found the trash pit by excavation of a slot trench along the rear of the property. The looters' slot trench was identified in Test Unit 2 as a disturbed area approximately one foot wide that extended across the floor of the unit. It penetrated Stratum D to a maximum depth of 0.5 foot, and was excavated in a single level as Stratum E.

#### E. SUMMARY AND SITE CHRONOLOGY

Using the excavation results in combination with the historical research, a site chronology for Block 1184 may be constructed. The object here is to identify past events that have most significantly altered the block's physical characteristics and which are therefore best represented in the archaeological record. Of greatest interest is the eighteenth-century occupation of the block, particularly the block's use as a Parsonage Lot by Old Swede's Church. While this period is of primary historical interest, there is also physical evidence of occupation during the prehistoric period, as well as during the nineteenth and twentieth centuries. A summary of the Block 1184 site chronology is presented in Table 3.

TABLE 3. SUMMARY OF SITE CHRONOLOGY, BLOCK 1184.

PERIOD	PHYSICAL MANIFESTATIONS
Middle Woodland (AD 500-800)	Scattered Lithic Debitage and Ceramic Sherds
Eighteenth to Mid-Nineteenth Century	Foundation of Old Parsonage
Late-Nineteenth-Century	Hare Pottery Kiln Refuse Domestic Refuse Deposits Cellars of Residential Structures
Twentieth-Century	G. W. Baker Machine Company Cellar

The recovery of aboriginal materials from numerous excavation contexts throughout the block provides ample evidence that the area was occupied or used on an intermittent basis during prehistoric times. Manifestations of aboriginal activity were limited to the recovery of lithic debitage, a few tools and pottery fragments. No prehistoric features such as post molds or cooking areas were identified, although such features, if they had existed, would very likely have been obliterated during the subsequent historic occupation.

The initial historic occupation of the block occurred during the eighteenth century, and this period is represented in the archaeological record by the remains of a cellar and associated refuse deposits. This structure, defined by Features 2 and 12, was located approximately in the center of the Parsonage Lot, and it was set back roughly 16 feet from Spring Alley. The use of the Parsonage Lot is fairly well documented in the church records, and historical research results provide a context for identification of the excavated structure.

Historic references to the Parsonage Lot begin in the early eighteenth century when Old Swedes Church set aside a parcel of land south of Spring Alley for the use of their ministers. Originally, this tract contained two of the three lots that extended from French Street to Walnut Street, south of Spring Alley. Portions of the Parsonage Lot were sold in 1748, and the remaining land, which was owned by the church until 1842, consisted of a 70x120-foot parcel at the southeast corner of Spring Alley and Walnut Street.

Historical research indicates that at least three different parsonages were built during the period prior to 1842, but there is some uncertainty concerning the exact whereabouts of these parsonages. Construction of the earliest of the three began in 1701, and it is assumed that the structure was first occupied by Pastor Andreas Hesselius, who arrived in 1712. The Ferris map fixes the location of this parsonage roughly near the center of the block and Spring Alley, a location that corresponds well with the excavated structure (see Figure 9). However, this map was not compiled until the mid-nineteenth century, and the sources used to reconstruct the mid-eighteenth-century settlements are unknown. It is therefore impossible to verify the Ferris map by historical research.

The second parsonage was built by Reverend Peter Tranberg. Upon his arrival in Delaware in 1741, Tranberg found the existing parsonage to be uninhabitable, so he proceeded to build a new house, into which he moved in 1743. The location of this second parsonage is unknown, but it is unlikely that it was built on the Parsonage Lot. After Tranberg's death, it remained in the possession of his heirs, rather than the church.

After Tranberg's passing in 1749, Israel Acrelius was assigned to Christiana, and he lived for a while with Tranberg's family. In 1750, the congregation undertook construction of a new parsonage for Acrelius. This third parsonage was located at the corner of Spring Alley and Walnut Street, and it remained standing through the mid-nineteenth century. The so-called "old parsonage," presumably the first parsonage, remained on the lot until 1768. It apparently was not in good enough repair to be used as a dwelling after Enneberg's departure in 1742. Tranberg declined to occupy the old dwelling and built himself a new house, and Acrelius lodged elsewhere until the new parsonage was completed. While not used as a dwelling, the old parsonage was used during Acrelius' tenure as a kitchen, store-room, stable and servant's room.

The location of the excavated structure would support its identification either as the original parsonage, first occupied by Andreas Hesselius, or as an outbuilding associated with the new parsonage. Other archaeological and historical information suggests that the excavated structure may be the old parsonage that was demolished in 1768. The deposits excavated from the cellar date to the mid-eighteenth century, and the rubble layer that sealed the deposits appears to have been deposited shortly after 1757. The archaeological dating of the cellar refuse fits best with a structure that was demolished prior to the fourth quarter of the eighteenth century. If the excavated structure was an outbuilding used as late as the 1770s or 1780s, some artifacts dating to this time should have been included in the refuse deposits. The lack of creamware (which became popular in the last quarter of the eighteenth century) in the cellar deposits also supports the argument that the excavated structure is the old parsonage rather than an outbuilding associated with the new parsonage.

The tract at the corner of Spring Alley and Walnut Street was utilized by the church until 1842, but the late eighteenth- to early nineteenth-century period is not well represented in the block's archaeological record. When the Parsonage Lot was sold in 1842, it was identified as Lot 58. The lot was subdivided into three parcels, and all three appear to have retained a residential use through the end of the nineteenth century. Foundation walls exposed on Lot 58A (215 Walnut Street) probably represent the late nineteenth century residential use of this area. During the early twentieth century, Lots 58B and 58C were incorporated into the G. W. Baker Machine Company. Conversion of these lots to industrial use profoundly altered the block's physical appearance and is reflected in the complex of foundation walls recorded archaeologically as Features 3/9, 13 and 14.

While Lots 3 and 4 were much less intensively examined than Lot 58, the second street frontage of Block 1184 also reflects a pattern of mixed residential and industrial uses. In this area of the block, various modern disturbances (looting, building demolition, etc.) limit the potential for archaeological interpretation. The presence of domestic refuse and house foundations indicate a persistent residential use along the Walnut Street frontage. Industrial activities are reflected archaeologically by the recovery of kiln-related refuse associated with the William Hare Pottery, which operated from ca. 1838 to 1889.