THE TAVERN ERA (C. 1780S-1850S)

The actual date in which the Blue Ball Tavern was established is not known; however, documentation supported by archaeological evidence indicates that it was in operation by at least 1787. The tavern appears to have ceased functioning as such around 1850. The following section begins with extrapolations regarding taverns, tavern keepers, and the clientele based on primary and secondary documentation. This is followed by a history of the Blue Ball Tavern, the tract of land on which it sat, and the individuals associated with the tavern and that tract. The archaeological components associated with the time in which the tavern was in operation are then addressed and synthesized with documentary sources for intra- and inter-site analysis and comparison. The chain of ownership and tenancy for the tavern is in Appendix II, and Appendix III shows the ownership history in relation to major historic periods as defined by the Delaware Statewide Comprehensive Historic Preservation Plan .

Taverns and Tavern Keepers

Taverns and inns represent an important element in the early American social and economic landscape. In a time when horses and stagecoaches were the primary means of transportation, these establishments provided a place for meals and overnight accommodations. They were a place for community gatherings, festivities, and often, political elections, rallies, and public auctions. The lack of a postal system also led to the development of these establishments as communication exchange centers. The location of a tavern/inn in either an urban setting, a rural environment, or strategic to a turnpike, crossroad, or other major transportation route may have been a factor in the role the establishment played in social and community life. As calculated from the ledger of Richard Williams, Esq. (Am. 2014), the number of tavern licenses issued for New Castle County between the years of 1762 and 1775, ranging from 39 to 56, averaged 45 licenses per year at a cost of £0/44/6 per license. In 1776 the number declined to only 18 licenses issued.

Taverns functioned not only within their location in the urban/rural landscape, but as hosts to different social classes. For example, two late eighteenth/early nineteenth-century taverns in urban New Castle County, the Green Tree Inn and the Brandywine Village Tavern, operated concurrently and in close proximity to one another near the Port of Wilmington. The Brandywine Village Inn is reputed to have served fine meals to elite Delawareans, whereas only blocks away the Green Tree is reported to have been a "grog shop," "liquor-bar," and "gambling house" leading to "perdition" that attracted rowdies from the flour mills (Ward 1968). No doubt as the taverns served multiple and various functions, they also accommodated different elements of the population, such as the local community in rural production zones, politicians and businessmen, workers in the urban centers, and travelers at drovers' stations. This may have led to the development of local reputations that developed and maintained social boundaries. According to Rice (1983:69), 40 % of the tavern patrons in late eighteenth century rural Massachusetts were local residents and only 25% were transients (travelers). It has been suggested (Rice 1983:69) that when a tavern keeper took over the establishment and business of another,

he or she hoped to inherit an already established clientele. In other cases, the tavern keeper would bring their boarders/customers with them when they changed locations.

The multiple roles of taverns in political, social, and community life can be observed from announcements in local newspapers. Meetings and elections of district school boards were held at establishments such as the Mermaid Tavern in Mill Creek Hundred, Swayne's Tavern in Pencader Hundred, the Green Tree Tavern in New Castle Hundred, the Red Lion Tavern in Red Lion Hundred, and Covington's Tavern at Cantwell's Bridge (Delaware Advertiser, October 7 and 14, 1830, Vol. 4, no. 4-5). Public sales and auctions were hosted, such as the ones at the Black Bear Tavern and Plumleys' Tavern (Delaware Advertiser, 1827, 1831). Political party meeting and elections were also held at the Red Lion Inn (Delaware Advertiser, September 15, 1831, vol. 5, no. 1). In one instance an announcement was posted that mares could be brought to the Mermaid Tavern for studding (Delaware Advertiser, April 8, 1830, vol. 3, no. 30).

Based on the examination of ledgers and daybooks kept by various tavern keepers in the state during the eighteenth and early nineteenth centuries, we see that taverns functioned to provide meals, drink, lodging, and other informal community services. These documents are handwritten daily tabs for all patrons showing purchases, money lent, and unsettled debts. Beverages included grog (a mixture of water and strong rum), straight rum, sling (lemon flavored sweetened brandy, whiskey, or gin), porter, milk toddy, apple toddy, beer, punch, gin bitters, brandy, and wine.

Two daybooks, those of Simon Marriner (1772-5 Personal Accounts Collection # 954, Hagley Library) and Leonard Vandergrift (1780-7 Personal Accounts Collection # 1047, Hagley Library) of St. George's, Delaware, provide insight into the types of things that were served in a typical late eighteenth-century and early nineteenth-century tavern. They also reveal which items were most common, serving sizes, prices, and specific vessel forms that were used. Grog, the most common beverage served at Simon Marriner's tavern, was served either as either a full or half portion. Beer was often listed by the gallon, and spirits most commonly by half servings. Meals are only listed as supper or breakfast, indicating everyone received the same meal depending on what the cook had prepared that day. The only other food mentioned was oysters. This would have been expected by the patrons, as the function of ordinary was to provide "a complete meal in which all courses are included at one fixed price" (c.f. Rees and Britt 1998:74).

Some payments were made in labor, and one day of labor appears to have eliminated .30L from the tab. According to Leonard Vandergrift's daybook, the most common beverages sold at his establishment were grog (sold by the bowl), straight rum, and 'tody.' Bitters and spirits are also listed. Meals and lodging are not listed, but individual food types include oats, bacon, corn, buckwheat, and flour. Tobacco was also sold by the 'hawling' for one pound. This list implies that the establishment may have also operated as a general store of sorts. Charges were also made on several occasions to individual

patrons for "china bowl broken." These cost 1.50L. No mentions of payments in labor were made; however, mention was made of cash lent. The following table shows the prices of some of the items from these daybooks.

Table 2

Items from Late 18th Century Tavern Ledgers

gallon of beer	.39Ls
1/2 spirits	.20L
dinner	.36 and .76Ls
one nights lodging	.10Ls
bowl of grog	.3L
gallon of rum	.30L
gallon of spirits	.45L
corn	.15L/bushel
buckwheat	.11.5L/bushel

The records for the Vernon Tavern during Edward Morris' tenure (1828-30 Personal Accounts Collection # 1108, Hagley Library) provide insight into an early nineteenth-century tavern. Brandy was the most common beverage served. Other beverages included punch, cider, sherry, lemonade, and eggnog. Serving sizes include small, gill (1/4 pint), half pint, pint, quart, and gallon. Meals are again only listed as "meal." Other foods listed include lamb, mutton, and oats. Payments were also made in labor, one day of which equaled one dollar. The ledger also records cash lent to various patrons. The following table is a price list for items listed in the daybook.

Table 3

Items from an Early 19th Century Tavern Ledger

serving of Brandy	12 1/2 cents
gallon of brandy	43 1/2 cents
punch	25 cents
pint of cider	3 cents
quart of cider	6 1/2 cents
lemonade	12 1/2 cents
egg nog	21 cents
meal	25 cents
gallon of oats	12 1/2 cents
one nights lodging	12 1/2 cents

The gallons of beer and liquor were probably served in large communal style bowls that would have been passed around the table, and the bushels of grain would probably have been for the patrons' horses or sold as a general store item. The early nineteenth-century archaeological assemblage from the Blue Ball Tavern shows that cider, flip (a beer and rum concoction), porter, wine, and brandy were among the beverage served. This assemblage also indicates beverages were being served out of heavy, individual serving

glass tumblers. The nineteenth-century probates for Joseph Springer of the Rising Son Tavern and for Robert Galbreath of the Blue Ball Tavern include almost identical listings of food and beverage supplies. Included are barrels of whiskey, casks of pickled pork, barrels of vinegar, barrels of 'sides' (cider), bushels of corn, oats, and potatoes, flour casks, dough troughs, grind stones, and, in Galbreath's inventory, a meat tub and 122 pounds of "hanging meat."

It has been speculated that urban colonial taverns would be have been more specialized than those in rural zones in terms of their clientele and types of activities that occurred (Rockman and Rothchild 1984). Meetings and socializing would have been the primary function in the urban taverns, and eating and lodging in the rural taverns. These 'patterns' would be reflected in the archaeological remains. Thompson (1987) and Coleman et al. (1990) have tested this hypothesis, both concluding that the degree of variability precludes the identification of such a distribution for at least the late eighteenth and early to middle nineteenth centuries. Similarly, variability also limits detecting a tavern 'signature' that can be distinguished from that of a general domestic site. Michael (1973) also concludes that there is little to distinguish a nineteenth-century tavern from a nineteenth-century farmstead.

According to Michael (1973), there existed two classes of tavern/innkeepers. They were the owner-operators and the professional, itinerant innkeepers, who did not own the property but simply operated the tavern and moved periodically between establishments. Witness to this is provided in the New Castle County license petitions. Tavern license records at the Hall of Records include group petitions, petitions for those renewing their license -- at first hand written and later printed on half sheets of paper -- and longer petitions protesting licenses for those applying to keep a new tavern or one previously kept by another person. Also in these files are lists of those who have paid the license fee and the amount paid.

A class of professional tavern keepers is evident in the appearance of the same names moving from tavern to tavern. During the late eighteenth century, Samuel Landers and Joseph Delany are seen moving between the Rising Sun Tavern, the Practical Farmer, and the Green Tree Inn. Robert Galbreath is listed in a petition to keep the Centerville Tavern before he came to keep the Blue Ball Tavern, and Isaac Anderson appears to have kept The Swan Inn in Wilmington before the Blue Ball Tavern. At the same time, Ezra Evans at the White Horse Tavern and Thomas Springer at the Three Tons Tavern were relatively long-term fixtures. When these individuals or their family members no longer appear as petitioners, the names of their taverns also disappear from the licenses. The same may hold true for the individuals who appear in the petitions explicitly asking to keep a tavern in their home. Rice (1983) suggests that the shifting of proprietors' locations from place to place suggests the economic instability of the business and an ambition to upgrade.

Michael's (1973) analysis of occupational tax assessments between the years 1818 and 1854 for three townships in Southwestern Pennsylvania, however, suggests that both classes of tavern keepers rated high socio-economically and were therefore perhaps "men

of consequence and social position." However, tavern/innkeepers also often maintained another occupation simultaneous with keeping a tavern. For example, Edward Morris of the Vernon Tavern in Sussex County is listed as a tavern owner, shoemaker, and keeper of a general store (1828-30, Personal Accounts Collection # 1108, Hagley Library). An analysis of the probates of innkeepers Joseph Springer of the Rising Son Tavern and Robert Galbreath and Isaac Anderson of the Blue Ball Tavern indicates that these individuals were simultaneous farming and possibly conducting other activities such as coopering or blacksmithing. Thompson (1987:26) notes that in 1793 Peter Springer, keeper of the Rising Son Tavern, is listed as a "Saddler" and Charles Trute of the Swan Inn is noted as having also been a piano maker (Ward 1968).

Keeping a tavern was one of the few occupations available to women who had to support themselves. It was fairly common for women, often widows, to be tavern keepers (Rockman and Rothschild 1984). Regina Mortonson, one of the Blue Ball Tavern's early keepers, had been widowed, as was Ann Webber who took over the Practical Farmer in 1805 for her husband, John, and Charles Trute's widow who took over his tavern in 1808. Jane Elliot's petition to keep Mark Elliot's license in 1794 and Mary Landers replacement of Samuel Landers at the Green Tree Inn in 1799 are other local examples of this. According to Rice (1983), tavern keeping was generally a short-lived occupation for most women, usually lasting no more than five years. They often 'laid it away' if they remarried or had a son come to live with them.

As can be observed in the license petitions, some had third party signers, either another tavern keeper, neighbor, or the former keeper of the establishment, attest to the petitioner's character. In some cases licenses were denied, citing a lack of necessity due to the presence of other establishments nearby. Examples of this can again be seen in the New Castle County tavern license petitions. In 1806 Elihu [Elija] Talley applied to keep a tavern at the intersection of Grubb and Foulk Roads, claiming that "no public house exists several miles in any direction" and none on the eleven miles of Foulk Road. His petition was not granted but taken "under advisement." In 1813 James Sharkey was granted a license to open a tavern in his new house "2 miles from Springer's tavern." When George Hyser applied to open a tavern in 1816 on the Wilmington and Great Valley Turnpike, his request was protested, citing a tavern at Brandywine Bridge, Miller's tavern (Blue Ball) one and half miles to the south, and Smith's Tavern two miles to the north. The license was granted and, coincidentally, those for both Miller's and Smith's taverns lapsed that year and were not re-licensed until three and four years later. Hyser disappears from the petitions at that time, and four years later when Henry Stedham applies to keep "George Hyser's former tavern ," the petition mentions that it is situated midway along the eight mile distance between the Buck Tavern and The Practical Farmer on Naaman's Road. In 1818 William Bracken submitted a petition to open a tavern on Lancaster Pike at an "equal distance between Springer's tavern and Chandler's Tavern." This information suggests that, at least in the early nineteenth century, distances of two to four miles between taverns were common, but that anything two miles or less could not be supported. Catts et al. (1986) have noted a similar locational pattern along Limestone Road (Route 7), with distances between taverns generally measuring at three miles. Coleman et al. (1990) attribute this to the more social

nature of taverns in northern Delaware than in neighboring Pennsylvania or Maryland where distances were greater and more regulated. Pennsylvania officials did not think it was appropriate to locate rural taverns much closer than eight to ten miles apart, worried that too many taverns would have "evil Effects" on the nearby community (Rice 1983). This pattern is not so obvious on Lancaster Pike (Route 48), where it appears that there are more taverns closer to Wilmington and a greater distance between taverns as distance from the city increases (Anderson et al. n.d.).

Although taverns appear to have been important establishments to many elements of the colonial population, their presence was not always well received. The temperance movement was well under way in New Castle County by the 1830s. Mention of the Wilmington Temperance Society appears as early as 1827 in the Delaware Advertiser. An 1830 and 1831 advertisement for a 'Meeting of the Temperance Society of Wilmington' lists on the committee doctors, Presbyterian, Episcopal, and Methodist ministers, and a judge (Delaware Advertiser 3 (45), 4 (25)). By 1831 there were over two hundred members of the Brandywine Temperance Association, many of whom were women. The numbers of petitions for licenses to keep a tavern in New Castle County actually declines around 1832, and licenses for keeping a "temperance house" were less expensive. An 1839 article appearing in *The Delaware Gazette* titled 'Advise to Drunkards' (1851) rebukes the use of alcohol, warning of the "deleterious" effects of "ardent spirits...flavor imparted [to it] by a mixture of noxious drugs." It further advises that the best place of all to get drunk is at home, preferably on the "ground floor or ...cellar; for then you will not fall down stairs, breaking...your head or your shins" and "where you can be attended to by your own family."

Temperance advocates accused politicians of using free liquor at their rallies to attract support. In 1839 the Temperance movement moved into the political sphere by forming a party and running candidates in a Wilmington City election. In 1850 the Temperance party ran candidates in state elections (Munroe 1978:199-120). Many states voted in liquor prohibitions during the 1850s, including Delaware, where a prohibition law was passed in 1855. By about this time, however, the prohibition movement lost steam and state temperance laws were soon either repealed or declared unconstitutional (Baron 1962). After this time, it appears that the multi-functional role of taverns is replaced by limited function establishments. Listings in the 1860's state directories are for hotels, restaurants, 'lager beer saloons,' and 'porter houses,' implying a separation of services. These designations may also be vestiges of the temperance movement, where more moderate factions tolerated the modest consumption of "low alcohol" beers and lager beers (Rechner and Brighton 1999:70).

The History of the Blue Ball Tavern

The land in the vicinity of the Blue Ball Tavern site appears from an early will to have been part of the Penn family holdings known as Rockland Manor (Deed Book [DB] G-1:225). Manor lands were ostensibly held for conserving woodlands, but became in reality land reserves that could be used for speculation (Lemon 1972). The property upon which Blue Ball Tavern is located became part of a plantation known for many years as

Chestnut Hill. One deed (DB F-2:245), in recounting the history of what appears to be 100 acres at Chestnut Hill, states that the land was obtained by a 1678/9 warrant by Hans Peterson from the court of New Castle County. A 1681 Indian Deed recounts the transaction to Peterson from the "natural owners & Indian proprietors" of the land bounded by Alapocas Run, the Brandywine, and Shellpot Creek. A hand drawn map is included. The deed is marked by nine Indians and is signed by Ephraim Herman, witness. A Land Survey map made in 1684/5 for Vanderveer's land along the Brandywine also shows that Hans Peterson's property included the are a where the tavern was later built. The map also shows a King's Road along the east side of the Brandywine,

Peterson, a yeoman who lived at Shellpot Creek (DB Q-1:598), was a founding member of the 'Old Swedes' Trinity Church. He sold the Chestnut Hill tract to Cornelius Empson for 550 pounds. Two deeds record this transfer. One deed, dating to 1685, appears to include the plantation, although it is not called so by name (DB A-1:113), and another dating to 1700 specifies the Chestnut Hill tract (DB Q-1:598). The property descriptions are the same. The deed specifies that the land has 'liberty of an open street 60 feet wide to the spring called Roberts well.' A reference to a sixty foot wide road is again found in a deed to the property from 1708/9 (NCC DB C-3:395). This would later become Concord Pike, and it therefore appears that the Blue Ball site was located along one of the very early roads in the area.

Cornelius Empson was a Quaker who came from Yorkshire in 1684 (Standing 1892). He settled east of the Brandywine at Brandywine Village in a Friends community and in 1689 was authorized to run a ferry at Brandywine Creek. Empson had a mill on White Clay Creek at Stanton and also bought a tract known as Shellpot Mill Lands, where Mill Creek meets Shellpot Creek (Scharff 1888:420, 710, 905 and 915). He was married three times (his second marriage was opposed by his Meeting) (Standing 1892). His residence was at Goule Grainge in New Castle County at the time that he deeded the west half of the Chestnut Hill plantation (where the Blue Ball Tavern would stand) to his second son Ebenezer in 1708/9 (DB C-3:395). His will was written in 1710 and gave at least four slaves to his children. The eastern half of the plantation was willed to Charles, a son of his third wife (Standing 1892). At the time of his death, Cornelius owned several plantations totaling over 700 acres of land (Taylor et al. 1989).

A deed recorded in 1722/3 shows that Israel Peterson, son of Hans Peterson (Delaware Genealogical Files), bought Chestnut Hill from Empson (DB G-1:225) for 30 pounds. Israel Peterson, married to Margareta Stidham, had ten children, Hans, Lulof, Petrous (Peter), Anders (Andrew), Susannah, Regina, Magdalena, Annika (Ann), Jonas, and Maria (MaryAnn). He died intestate, leaving his children as heirs. Eight of the siblings sold their shares of the Chestnut Hill tract to Joseph Mortonson in a set a deeds that date between 1749 (DB F-2:297) and 1755 (DB F-2: 298, 245). Joseph was married to Regina, one of Israel Peterson's daughters, so in essence, the property stayed within the family. Land Survey records from 1745 show draft maps of Mortonson's land and surrounding properties with what would come to be the Concord Pike marked as the 'Road to Brandywine Ferry,' presumably Empson's ferry (Figure 8).

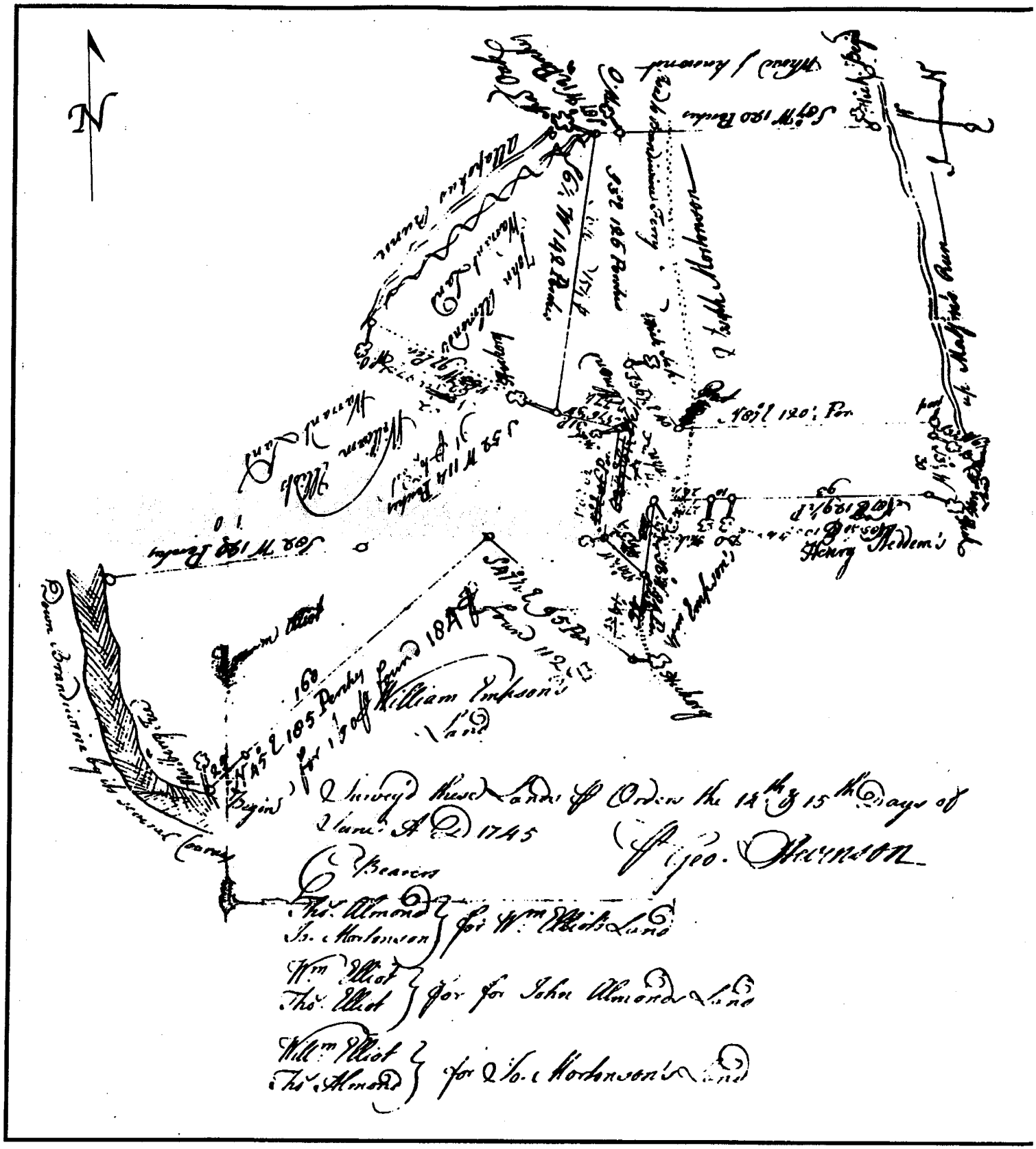


FIGURE 8
1745 Survey of the Project Area

Joseph Mortonson may have been the first person to keep a tavern on the property. When Regina Mortonson deeded her part of the plantation to her son Joshua in 1772, she is noted as being the widow of Joseph Mortonson, Innkeeper. This is the only direct evidence we have found concerning a tavern at that time. According to Scharff (1888:906), 'the history of the tavern antedates the [nineteenth] century, but no authentic account of the time it was first opened can be given.' A master's thesis on inns and taverns by Mary Sam Ward (1968) also asserts that the tavern began operation before 1800, although again no specific date could be given. Tavern licenses for the years between 1755 and 1758 (Am.2988) and 1762 and 1776 (Am.2014) on file at the Pennsylvania Historical Society, only list the names of individuals issued a license in the City and County of Philadelphia. For all other counties, including New Castle, the ledgers list only the number of licenses issued.

In the 1771 will of Joseph Mortonson (DB O:558), he left three acres, a loft, and dwelling house to his wife Regina. Presumably this refers to the dwelling on the west side of Concord Pike. Half of 27 acres and another loft in Cherry Island marsh "adjoining William Tally's marsh...from Shellpot Creek to Island Creek" was to go to his son Joseph. The other half of the 27 acres was to be used for a road. His son Joshua, executor of his estate, was to receive the Chestnut Hill plantation and residence (Will Book L-1:140). Presumably this would include the remaining 70+ acres of the estate and the original Peterson dwelling on the east side of Concord Pike. Joseph, Jr., died in 1771 only weeks after his father, having never received any portion of his inheritance. In 1772, Regina transferred her interest in the property to her son Joshua (DB F-2:246).

Five years later Joshua, a yeoman, sold ten acres on the west side of the Concord Road to Andrew McKee, Jr., the son of a prosperous farmer, Andrew, Sr., who lived on Concord Road a mile or so to the south at Brandywine Village (DB F-2:247; Scharff 1888:661). The Blue Ball site is located on this tract. During the same year, Andrew, Jr., sold Mortonson a nine acre tract just north of this for the same amount of money. Andrew also owned a 50 acre tract adjoining the west side of his purchase. The McKees were part of the large influx of Scotts-Irish immigrants who came to the region in the period from 1725 to 1775.

The 1782 reconstructed statewide census indicates that Joshua Mortonson's household was comprised of one male over 18 years (presumably himself) and one male and one female, both under 18 years of age. That same year Mortonson's income tax assessment shows a value of £25. As extracted by Coleman (1983, citing Main 1965:32-33), a substantial farm owner of this time would be assessed from £10 to £50. From 1781 to 1783 the majority (over 40%) of the population of White Clay Creek Hundred were assessed at £5 or less and only 7% at above £30 (Coleman et al. 1984:214). This would place Mortonson in the upper end of the "middling" range. It can also, however, be speculated, based on the distribution of architectural construction types between the hundreds, that greater overall wealth was clustered in Brandywine than in White Clay Creek Hundred (see Table 1). Comparatively, Samuel Bradford, eighteenth-century owner of the Robert Ferguson/Weber Homestead (N-3902) in Pencader Hundred, was assessed £18 and owned 169-150 acres from 1781-83. William Perry, eighteenth-century

owner of the William M. Hawthorn Site (7NC-E-46) in White Clay Creek Hundred, was assessed at £65 those same years and owned a 348 acre farm.

Joshua Mortonson sold the remaining 90+ acre portion of the Chestnut Hill plantation to John Dickinson, whose residence was listed as Wilmington, in 1785 (NCC DB F-2:294). In 1786, McKee and his wife Mary sold the ten acre tract (the Blue Ball site) and 50 acres adjoining it to the west to John Dickinson (NCC DB F-2:510). With this transaction the 100+ acre Chestnut Hill Plantation was rejoined under single ownership. Dickinson held two insurance policies on the Chestnut Hill Plantation with the Insurance Company of North America, a Philadelphia firm (Taylor et al.1989) that has now been absorbed into Cigna Insurance. Taylor (ibid:206) reports that the original (Peterson) plantation house was indicated in these records as a two story stone dwelling. No information could be retrieved regarding the second (Mortonson) dwelling, as the company's archives now reports those records as destroyed.

Joshua's two sisters, Ann and Rebecca, and his mother apparently continued to live on a portion of the Chestnut Hill plantation until at least 1785, when the sisters sold Joshua their portion of the plantation. This deed described Joshua as being formerly of Brandywine Hundred, but 'now of the Northern Liberties of Philadelphia Shallopman only son of the said Joseph Mortonson' (NCC D-B F2:443). At the time of Joshua's death in 1791 he appears in Brandywine Hundred, and his will and probate inventory were filed in New Castle County.

Joseph Mortonson fails to appear in tavern license records, which do not begin until 1778, after his death. The records for the early years are incomplete; however, Mortonson's widow Regina appears twice in these records, in 1787 and 1788, as one of a group of petitioners who wish to keep taverns at their respective dwelling houses. A 1797 tax assessment records the Regina Mortonson estate valued at $42.00 and lists six acres, four of which are improved, one house-- part log, part stone-- and a stone stable and horse sheds.

Joshua McLean, Regina's Mortonson's son-in-law, is listed in the tavern petitions for 1795, 1796, and 1797. Regina does not appear for any of these years, and Andrew McKee appears as his signer. He is shown as having paid £4.10 in 1796. The 1795 petition is non-specific, but the 1796 petition lists Brandywine Hundred dwelling next to his name, and the 1797 petition also lists Brandywine Hundred. Both Regina and McLean appear in the 1798 petitions, and McLean is listed in Christiana Hundred in 1799 and 1800. In 1801 he is listed at "a new location in Wilmington, having left the Spread Eagle [Tavern]." It may be that from 1794 to 1797 Regina's daughter Rebecca and son-in-law Joshua McLean lived on the property with her and helped her run the tavern. In 1798, Mrs. Mortonson's name appears again on a list of tavern keepers that shows she has paid a license fee of eight dollars (all others listed had paid $12.00). The final mention of Regina Mortonson's name comes in 1799, the year of her death, when Lancelot Law Smith petitioned to take over the 'long accustomed public house in Brandywine Hundred' that was 'kept for some years by Mrs. Regina Mortonson.' At this time (1796-1803) a tenant named William Little was living at the Chestnut Hill

Plantation on the east side of Concord Road. As of 1803, a tenant named Daniel Chapman was residing there (Taylor et al. 1989).

Regina's will (Will Book 0:415) leaves her wearing apparel to daughter Sarah Mortonson, her feather bed bolster and pillows, a pair of sheets, pillow cases, blanket, and bed quilt "with birds stamped thereon" to daughter Lydia Rawson, her silver cream jug "marked R. Mortonson" to grand daughter Mary McLean, the furniture in Ann's house and the silver cream jug in possession of Rebekah to daughter Ann Mortonson, 12 pounds to be paid when she is 18 years of age by Rebekah to grand daughter Regina Rawson, all property now in their possession to daughter Rebekah McLean and son-in law Joshua McLean, and the rest of the estate to daughters Ann and Rebekah to share equally.

John Dickinson was the great grandson of Walter Dickinson, a Quaker who settled near the Choptank River in Maryland. By the time Dickinson was born in 1732, his father Samuel owned a 4000 acre Talbot County, Maryland, estate, a second estate of about 2000 acres also in Maryland, 1200 acres on Jones Neck, and almost 1400 acres between Dover and the St. Jones River in Delaware. John was born at the Talbot County estate to his father's second wife, Mary Cadwalader. They moved to the Jones Neck property in Delaware, where John was raised. He studied law in Philadelphia and London. He returned to Philadelphia in 1759, and his professional life became centered in that city. He was elected to the Delaware Assembly and in 1762, to that of Pennsylvania. In 1770, he married Polly (Mary) Norris, one of the wealthiest heiresses in Philadelphia, and lived at Fairhill, the Norris family estate in Philadelphia.

Dickinson was also an articulate anti-revolutionary who was adverse to the thought of going to war with Britain in the Revolutionary War. He published extensively on this topic, on foreign relations, and on politics in general. *An address on the past, present, and future relations with France* (1803), *Letters from a farmer in Pennsylvania to the British colonies* (1768), *A new essay on the constitutional power of Great Britain* (n.d.), and *Remarks on the protest against the appointment of Mr. Franklin* (n.d.) are just of few of the topics on which he wrote. After the Revolution, Dickinson continued his career in politics, serving on the Executive Council in Delaware and the Supreme Executive Council of Pennsylvania, and for two months in 1782 he actually became president of both states. Although during his career he had a home readied for his family in Wilmington, they did not live there until he retired from politics in 1785 (Flower 1983). His wife died in 1803, and he died in 1808. His will bequeaths many lots in Wilmington and Philadelphia and acreage and estates in both Pennsylvania and Delaware to his daughters, Sally and Maria (Will Book Q-1:298).

The Dickinsons bought the property in the vicinity of Blue Ball at about the time they moved to Wilmington. A search of his correspondence at the State Archives produced no documentation concerning these properties. His will mentions the 100+ acre Mortonson property, the 60 acres across Concord Road acquired from Andrew McKee, land he got by patent from the state that adjoins the McKee property, and 100 acres purchased from William and Mary Clark. A 28 acre property on Foulk Road was purchased from Joseph

and Susanna Jackson with the provision that they remain tenants for life. Mary Clark and Susanna Jackson may have been two of Regina Mortonson's siblings. Another such provision is made for tenants on a portion of a property adjoining that of Gunning Bedford, Jr., purchased from Daniel McBride and his wife (Will Book Q-1:298).

According to tax assessments from 1803-4, Dickinson's property in Brandywine Hundred totaled 897 acres and his tax assessment from the years 1802 through 1804 list five parcels, four of which have buildings, having a total worth of $3,748.00. It is possible that none of the buildings listed are the tavern, since a separate assessment is made to Lancelot Smith, who kept the tavern at that time, for 77 acres, 50 of which were improved, 'one small house part log part stone,' livestock, 2 horses and 4 cows. The tavern building is not distinguished as such in the assessment. The 1803-4 tax assessment schedule for Brandywine Hundred lists Smith with values of $269 and $200 personal property for a total of $469, which, according to the reconstructed taxables distribution for that year in White Clay Creek Hundred, would place him in the lower "middling" range. Over 60% of the taxables for those years were assessed at below $264 and about 24 % were assessed at above $504 (from Colemen et el. 1984:215).

Dickinson's daughter, Maria, married Albanus C. Logan in 1808, just prior to her father's death. She inherited property, including the Blue Ball tract. A reference to the tavern building is found in the 1816 tax assessment of the Albanus C. Logan estate, which lists a tract of 87 acres, 60 improved with a 'Tavern house & c' valued at $609. The 1823-24 Logan assessment lists 270 acres, 200 improved, two lots on rent, and one house on rent, and the Tavern and 'good Imps.' [improvements] are again listed. An 1837 assessment, found at the Philadelphia archives, lists a 'stone tavern (Blue Ball).' The various tracts of land are grouped differently on these assessments, making it difficult to compare assessed amounts.

Maria D. Logan, who resided in Philadelphia, left Blue Ball Farm in trust for her daughter, Mary Morris Logan. Her will directed that the property be sold by the trustees for her estate, which was carried out in 1862, and the proceeds invested for her daughter and her issue. The Chestnut Hill property on the east side of Concord Road was willed to Maria's son, Dr. John D. Logan of Philadelphia. However, the 1860 Lake and Beers map (Figure 9) shows the name of Dr. J. D. Logan at the two dwelling locations on both the east and west sides of Concord Pike. The Blue Ball Tavern is no longer marked on this map.

All of the tavern license petitions at the Hall of Records concerning Blue Ball, including the petitions of Regina Mortonson, were filed while the property belonged to the Dickinson family. Lancelot Smith took over the tavern in 1799 and continued to be licensed to keep the tavern until 1807. In 1799 when he took over the tavern, he was charged an eight dollar fee, whereas all other petitioners were charged 12 dollars. He appears in the 1800 Census Records for Brandywine as a man of 45+ years. A woman of the same age group, presumably his wife, was the only other member of the household. He and his wife were listed in Brandywine Hundred in 1810 as well, but must have moved to a new location in the Hundred. In 1807, a petition was filed by Thomas McKee

FIGURE 9
Lake and Beers 1860 Map
(redrawn from photocopy of original)

of Brandywine Hundred to keep the "long accustomed Tavern house with appurtenances on the Concord Road lately occupied as house of Public entertainment by Lancelot Law Smith." He continued to be its proprietor up to 1810, when George Miller leased the tavern in the first petition to mention outbuildings on the property. Thomas McKee was the oldest son of Andrew McKee, Jr., and a few years after leaving the tavern, he purchased a 76 acre plantation north of Talleyville on Hurricane Run (DB N-3:480).

Scharff (1888:903, 906) stated that Miller kept the tavern in 1809, although tavern licenses indicate otherwise, and that public elections were held at the inn during Miller's tenure. He also provided a list of voters at a District Election held at the house of George Miller in Brandywine hundred on October 6, 1812. According to Scharff (1888:906), it was during the time in which Miller kept the tavern that it became known for its fine food. Miller appears in the census with a household comprised of himself and another man between the ages of 26 and 45, four boys and one girl under the age of 10, and three women, one 16 to 26 years, one 26 to 45 years, and one over 45 years old. Miller kept the tavern until 1816 and died of dysentery at the age of 81 in 1851 (Delaware Gazette, 26 August 1851).

It would have been during George Miller's tenure at the tavern that planning began for the Wilmington and Great Valley Turnpike, now Concord Pike. The Wilmington and Great Valley Turnpike Company was formed by an Act of the General Assembly of Delaware on January 23, 1811. Various documents relating to the turnpike are available at the Delaware Historical Society Library in Wilmington. The company's charter directed it to make a road from Wilmington through West Chester to the turnpike road in the Great Valley of Pennsylvania. The road was to run east of Brandywine Creek and be at, near, or upon the track of the Concord Road at the state line in order to connect with the public road through West Chester. The company set a goal of 400-800 subscribers. The road was to include an artificial bed at least 20 feet wide, meaning this part was bedded with wood, stone, gravel, clay or other materials that would create a solid foundation, and then faced with hard substances to create a firm, even surface. This would be flanked with what were commonly called summer-- or unpaved -- roads. The maximum width was 100 feet. The toll for a five mile stretch of road was set at:

20 hogs	6¢
20 sheep	4¢
20 cows	12¢
sleigh/sled	2¢ per horse
1 horse or mule	3¢
sulkey, chair or chaise, 1 horse & 2 wheels	6¢
2 horses	9¢
2 horses &4 wheels	12¢
4 horses & 4 wheels	20¢

Further rates were set for various wheel sized, mules, oxen and so on. In 1818, partial tolls were made for those residing in Brandywine Hundred and using portions of the road. Places mentioned along the turnpike include McKee's hill (1/3 of the toll), Bedford's hill

(1/2 of the toll), and George Hyser's Inn (2/3 of the toll). The full toll was charged to go to the five mile stone at Rocky Run or beyond. McKee's Hill has been said by some to refer to the Blue Ball area because of the association of Thomas McKee, but in fact probably refers to the area closer to Wilmington where Andrew McKee, Sr., his grandfather, had a large farm. Bedford's hill more likely refers to the Blue Ball area, since Gunning Bedford, Jr., had built Lombardy Plantation on this hill, just north of the Blue Ball intersection. Hyser's Inn would have been at Naaman's (Creek) Road.

The earliest map to show a gate on the turnpike is the 1849 Rea and Price Map of New Castle County (see Figure 4). It is located just north of the intersection where Concord Pike leaves Market Street (Route 13). However, an 1827 edition of the Delaware Advertiser (December 20, vol. 1, no. 14) announces the Court of Quarter Sessions for New Castle County, case of State of Delaware vs. William Almond, "a toll gatherer of the Wilmington and Great Valley Turnpike." Apparently Almond was charged with bludgeoning a constable. A letter from Company treasurer Edward Tatnall makes mention of expenses for the year 1857 when a gate to the Wilmington and Philadelphia Turnpike was opened. Hopkins' 1881 Map of New Castle County shows a tollgate on Concord Pike located somewhat further north, as the Wilmington City limits had expanded that far. The gate appears to be located approximately where the railroad now runs. Baist's 1892 Map of Wilmington and vicinity shows the area in greater detail, showing a toll house located just outside the city limits and south of the railroad line, on the west side of the turnpike. These maps all refer to the road as Concord Turnpike. Although Ward (1968) gives the location of a tollgate just north of the Blue Ball intersection, a gate is not indicated there on any of the historic maps. It seems probable, though, that gates would have been initially located at least at the three places mentioned (McKee's Hill, Bedford's Hill, and Hyser's Inn), since these landmarks were used to gauge rates.

Many records for other taverns along Concord Turnpike first appear in the 1790s and early 1800s. In Brandywine Village, at the intersection of the Philadelphia and Concord Roads, an establishment known as the Green Tree is first recorded in a 1796 petition made by John Welsh. Samuel Landers also petitioned to keep a previously licensed tavern that year, and when the establishment is taken over by Jacob Talley in 1798, its name and location is given as the Rising Sun (not to be confused with Riseing Son Tavern in Mill Creek Hundred) at Brandywine Bridge. In 1797, Samuel Stewart petitioned to keep a tavern at the intersection of the Concord, Marsh and Philadelphia Roads, also at Brandywine Village. In 1799, Joseph Dutton is listed as a tavern keeper, and his name appears on the Heald Map of the Roads of New Castle County in 1820 at Concord Road and Naamans Creek (now Naamans) Road. A 'remonstrance' against Dutton's Tavern on the Wilmington and Great Valley Turnpike is mentioned in an 1839 petition. A petition of citizens for the same year requests that Mary Dutton, his widow, be allowed to keep the Sign of Washington Tavern on the Wilmington and Great Valley Turnpike at Naamans Creek Road. George Miller signed this petition. Thomas C. Smith petitioned for a tavern, later listed as Foxchase, at Naamans Creek Road and Concord Pike, in 1812. In 1813 a tavern is listed two miles north of Wilmington on the Wilmington Turnpike Road. George Hyser's 1816 opening of a tavern, to be located on

the Wilmington and Great Valley Turnpike, was protested in a petition, but his license was granted nonetheless. The protest cites a tavern at Brandywine Bridge and George Miller and Thomas Smith's taverns. Hyser's is the tavern mentioned in the Turnpike Company records of 1816. That tavern was taken over by Henry Stedham in 1824. Apparently Smith's Tavern (Foxchase) closed temporarily sometime after Hyser's was established as repeated petitions to reopen it appear. These were all denied until 1820. The license for the Blue Ball Tavern also lapsed for a period of three years at this time.

Blue Ball Tavern seems to have first received its name just after the Wilmington and Great Valley Turnpike Company was formed, during the time when George Miller kept the tavern. Beside his name on the list of those who paid the license fee for 1815 is written 'Blue Ball BW. H.'. The name comes from a Blue Ball that was pulled to the top of a pole to signal stagecoach drivers that passengers were to be picked up. This method of signaling drivers may have been common, since the name appears a second time on the 1820 Heald Map on the Kennett Turnpike, just south of Centerville, and in Christiana Hundred in the tavern license petitions from 1836. A Blue Ball Tavern also existed in Rockingham County, Virginia, a Blue Bell Tavern in Chester, Pennsylvania, and a Blue Anchor Tavern in Dover, Delaware. According to Mary Sam Ward (1968), the tavern would have been a busy place. In addition to its use as a polling place, stock sales and a barter market took place in a paddock, and it was a small parcels drop off point.

After 1816, no tavern petition record for Miller exists, but in 1819 Robert Galbreath [Galbraith] petitioned to keep the "Blue Ball Tavern on the Wilmington and Great Valley Turnpike, which license had previously expired." George Miller was one of the petition's signers. Galbreath kept the tavern until he died in 1827. An 1813 petition lists Robert Galbreath at the Centerville Tavern on the Wilmington Turnpike two miles north of Wilmington. The 1825 petition listing Galbreath says "Blue Ball Great Valley Turnpike" at the bottom of the page. The 1826 petition says "Wilmington Great Valley Turnpike" at the bottom of the page. A probate inventory from 1827 of his goods and chattels and the contents of the Blue Ball Tavern has been procured (Appendix IV). An examination of this probate suggests that agricultural pursuits were an integral part of the property's functioning during his tenure there. This will be discussed in further detail in subsequent portions of the report. The Delaware Advertiser (May 18, 1828, vol. 1, no. 35) announces the receipt of full balances due to Galbreath from the years of 1825 and 1826. This may refer to the collection of outstanding balances owed from tavern patrons, probably for his family.

After Galbreath died, Blue Ball Tavern was taken over by Isaac Anderson. The 1828 petition announces that "Isaac Anderson has taken the Tavern by name of Blue Ball in BW.H. formerly kept by Robt. Galbreath, now deceased." In 1828 a meeting of 'the Friends of the Administration' met at Isaac Anderson's (Blue Ball Inn). At the meeting Charles I. du Pont Esq. 'was called to the chair and William M'Cauley, and Joseph I. Dixon, appointed Secretaries' (Delaware Advertiser 1(49), August 21, 1828). Anderson farmed and kept the tavern until his death in 1850 at the age of 60. An "Isaac Anderson" is listed in the tavern license petitions for the year 1810 at an establishment in Christiana Hundred and in the 1816 petition at an establishment in Wilmington (no name given).

An "Isaac Anderson" is also listed in an 1819 edition of the *American Watchman* as an innkeeper at 7 west High St (Wilmington Folder 6). It also states that he signed as volunteer watchman. Scharff (1888) notes that Isaac Anderson was keeper at the Swan Inn in Wilmington at that time.

Anderson is listed in the 1840 Population Census for Brandywine Hundred as a 50 year old man with a household comprised of a woman (presumably his wife) between 40 and 50 years, three young males between the ages of 5 and 15, two females between 10 and 15 years, and a "free colored" female between 10 and 24 years. Three of the household members were listed in agriculture. According to the records on file at the Historical Society of Delaware, Anderson and his wife had three sons, William, Keziah, and John White. In 1845 his tax assessment lists a value of $549. Over 85% of the population of White Clay Creek Hundred were assessed at values lower than $505 that year (from Coleman et al. 1984:215). This suggests that he would not have been considered wealthy, but fairly well off for the time.

Anderson's estate inventory (Appendix IV) includes some livestock, a lot of farming equipment, and blacksmith tools. The contents of the house are listed by room, including the back room, the kitchen, the dining room, the 'Barr Roome,' and the cellar. Items from all the bedrooms are listed together. It seems that his widow, Ann (Hall) Anderson, may have remained on the property, since a great many of the inventory items, including animals, farm equipment and household goods, are marked 'for the widow.' From 1849 to 1861 a tenant named John Bradford was residing at the Chestnut Hill Plantation on the east side of Concord Road.

The temperance movement appears to have been strongest in the 1830s, around which time alcohol consumption had risen to an estimated high of four gallons per capita per annum (Rorabaugh 1987:9; Rechner and Brighton 1999:66). The movement was not successful in implementing legal consequences until two decades later, and as of 1854, temperance houses appear in the extant documents. Licenses for these establishments cost five dollars, a third of the price of a tavern license. All of the Delaware tavern license petitions are absent for the years 1855 to 1857, after which they resume. No further references to the Blue Ball Tavern were found in the later records, which continue up to 1886.

The Archaeology of the Blue Ball Tavern

The site plan map showing the excavation areas for the Phase III investigations is shown in Figure 10. The major features at the site, including the house foundation, walls and remains of outbuildings are shown in Figure 11. Throughout the course of the report patterns of land use for the three temporal and functional phases of the Blue Ball site will be unraveled using distributions of various artifact concentrations and by isolating uncontaminated contexts for detailed analysis. An index of all features and their TPQs, when obtainable, is provided in Appendix I. Exposure of, and excavation within, the tavern/house foundation (Plate 7) revealed several episodes of construction and remodeling; greater detail, including specific dimensions, construction techniques and

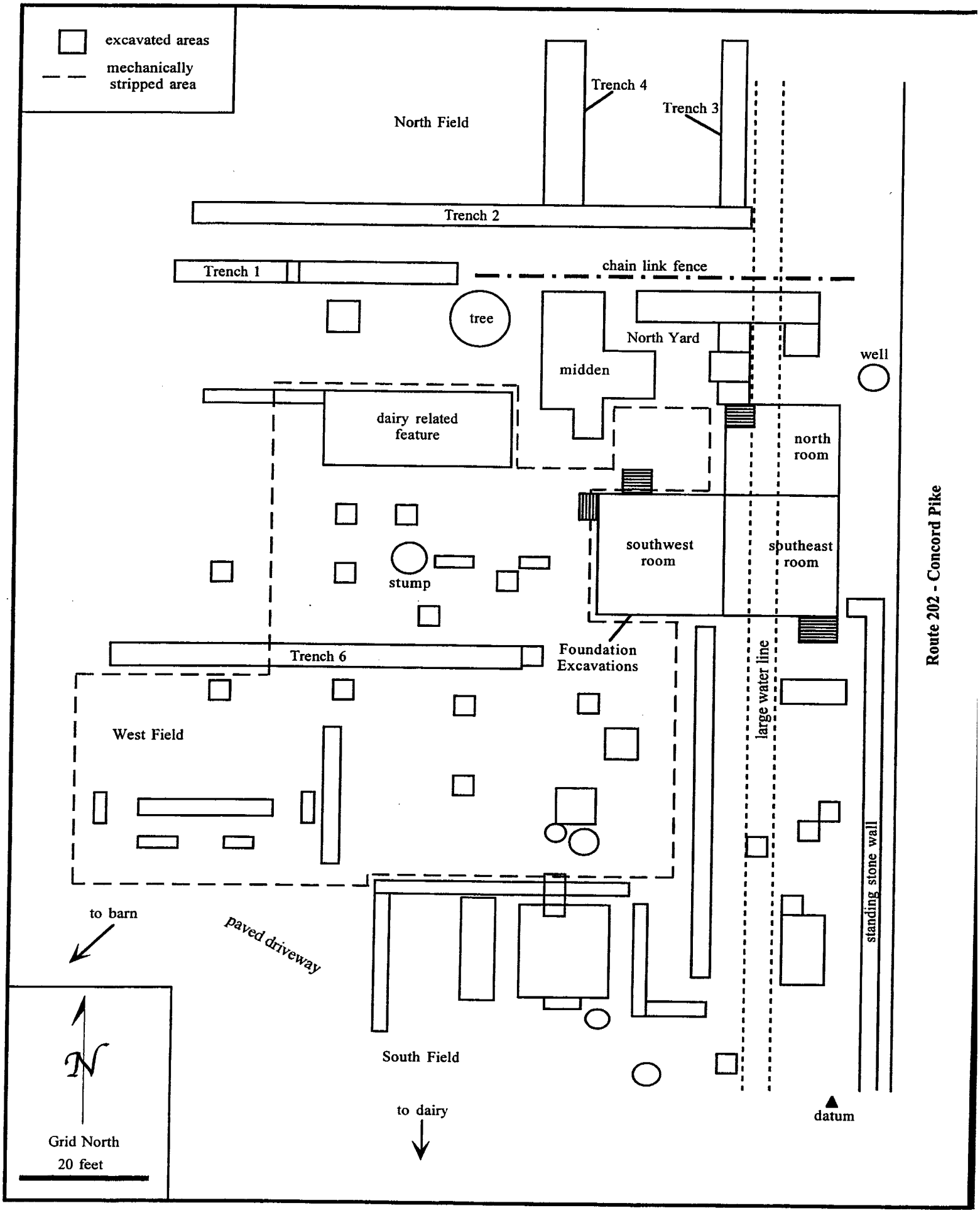


FIGURE 10
Site Plan Showing Excavation Areas

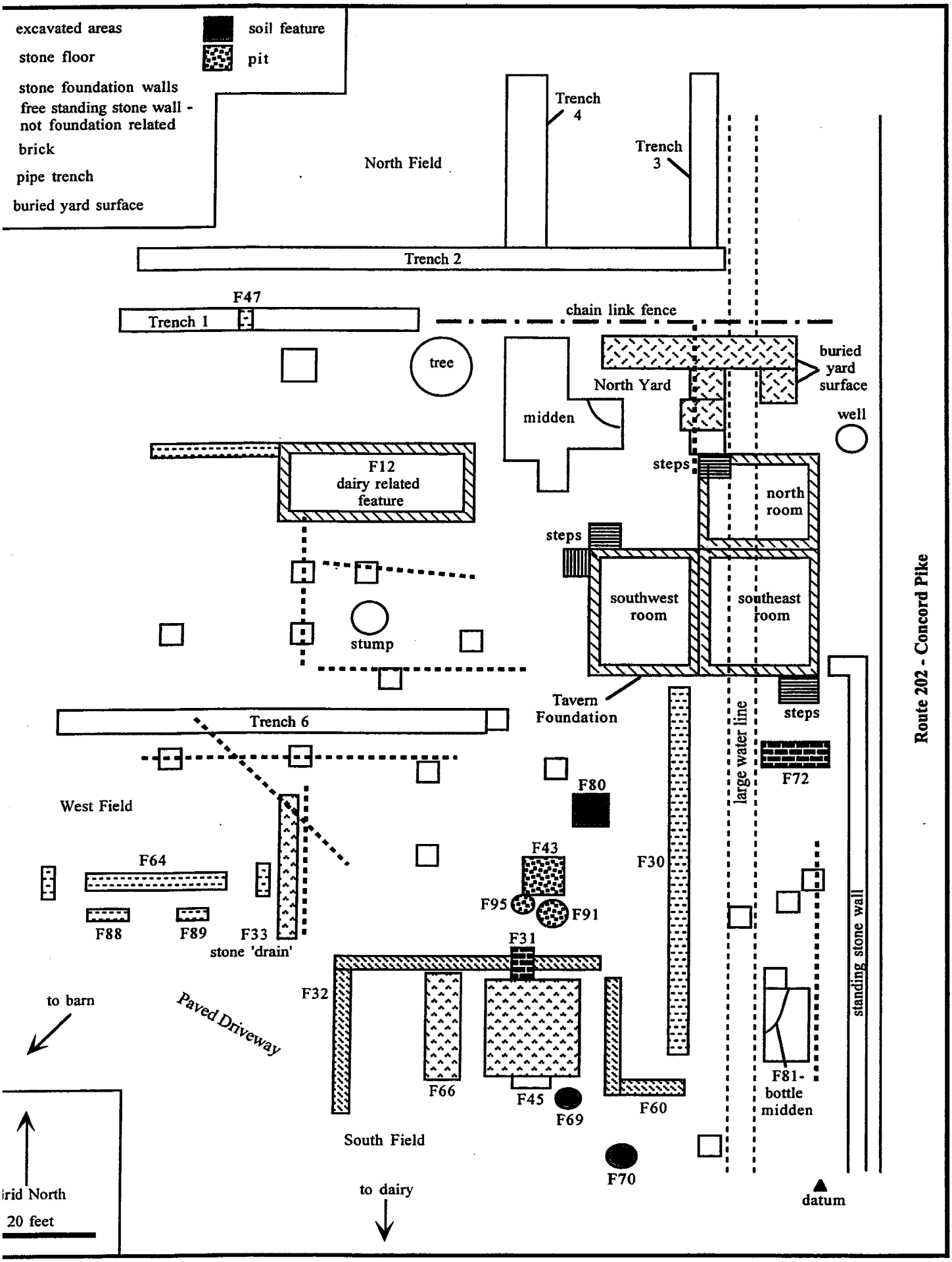


FIGURE 11

Plan Map Showing Major Features within the Blue Ball Tavern Site

materials, will be presented chronologically throughout the report. In addition to the tavern/house foundation, the remains of several auxiliary structures and soil features were encountered. They will also be discussed within their respective temporal phase. The discussion in this section begins with a general overview of the tavern/house foundation and artifact distributions. Specific attention and detailed discussion of structural elements, artifact concentrations, and features believed to pertain to the tavern era follow.

The remains of the tavern/house consisted of a mortared uncut stone foundation dug four feet below current grade into subsoil. The foundation walls were approximately one and a half feet in width and joined to form a three room, L-shaped structure (Figure 12). A single room lay on the north side of the foundation, while the southern portion of the foundation had two rooms (to be referred to as the southeast and southwest rooms or additions). The total measurements along the longer east and south faces of the structure are 24 feet. The total interior floor space was 1076 square feet. The foundation is set less than 15 feet back from the current edge of the highway pavement. A deep stone-lined well was located to the northeast of the structure immediately adjacent to Concord Pike (Plates 8 and 9). A large four foot wide pipe trench (Feature 20), possibly for a water or sewer line, was cut through the foundation at some point after it was demolished. The entire foundation was filled with loose stone rubble, metal, plastic, yellow shag carpet, a boiler, a hot water heater, and other such refuse (Plate 10). A backhoe was used to clear most of this rubble and refuse out of the foundation, but the foundation walls were mainly exposed by hand. After initial hand testing around the foundation (Plate 11), the backhoe removed all overburden, exposing the subsoil (Plate 12). At this point the base of what may have been two mortared stone support pillars were found northwest of the structure in the ell. These are probably part of the later porch addition that shows up in twentieth century photographs (see Figure 7) and first appears on the 1952 DelDOT map (Figure 13). A pipe trench found running diagonally from southwest to northeast would have run beneath the porch addition.

A basement was found within the entire foundation. Four stair courses provided access into the basement at various times. Three of these were bulkhead entrances, two of which had been sealed off with mortared stone similar to the rest of the foundation. The remains of a basement hearth/hearth support were uncovered in the north basement room. Once the rubble and debris were cleared from the interior of the foundation, brick flooring was exposed in the two rooms along the south face and a poured cement floor was uncovered in the north room. The cement floor was broken with a sledge hammer and taken out, revealing that it overlay an earlier dirt floor. This was excavated by hand, and samples were taken for soil chemistry analysis and flotation. Removal of the brick flooring in the southern rooms did not reveal an underlying dirt floor, but instead bright orange sand. The same sand was found beneath the dirt floor in the other room. Initially it was believed to be a builder's sand; however, it extended to a depth of three and a half feet, several cubic feet of which were screened, producing no artifacts. A gray gleyed clay underlay the sand. A representative profile of the stratigraphy beneath the north room floor is shown in Figure 14 and Plate 13. Auger tests in the north and south yards revealed that the sand was present outside of the foundation and was therefore not a builder's sand, but part of the Bryn Mawr Formation (see Figure 3).

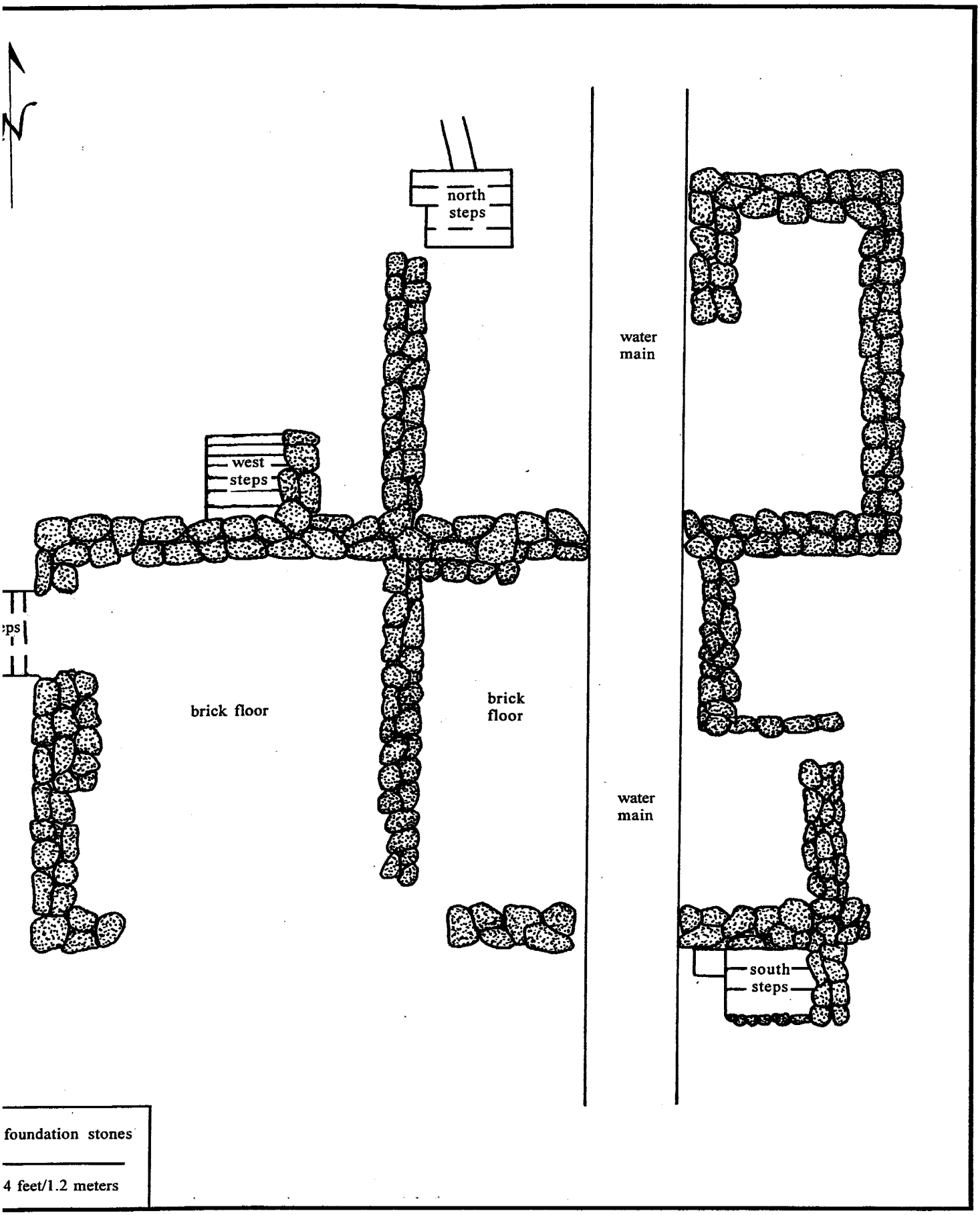


FIGURE 12
Plan Map of House Foundation

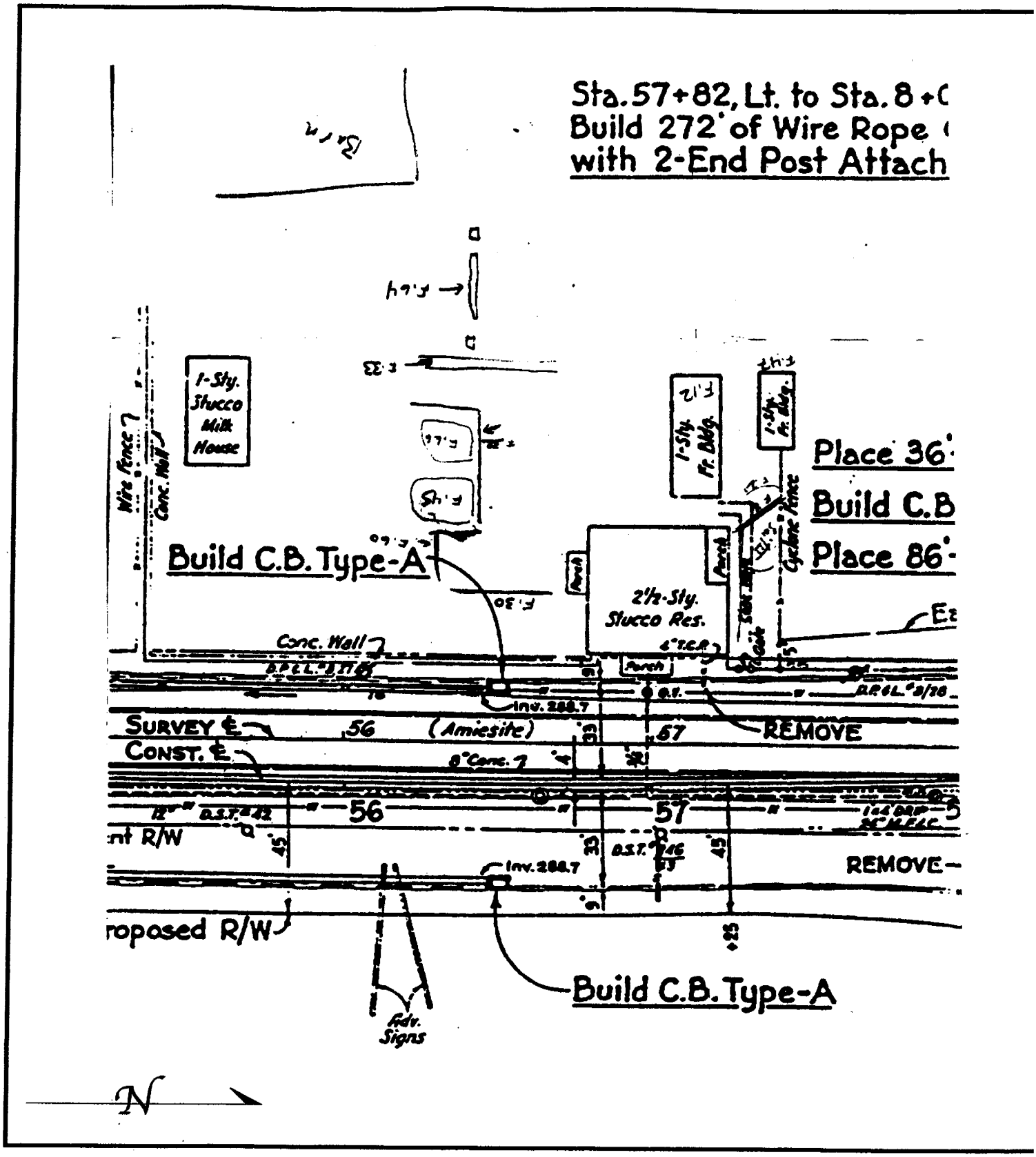


FIGURE 13
1952 DelDOT Map of Project Area

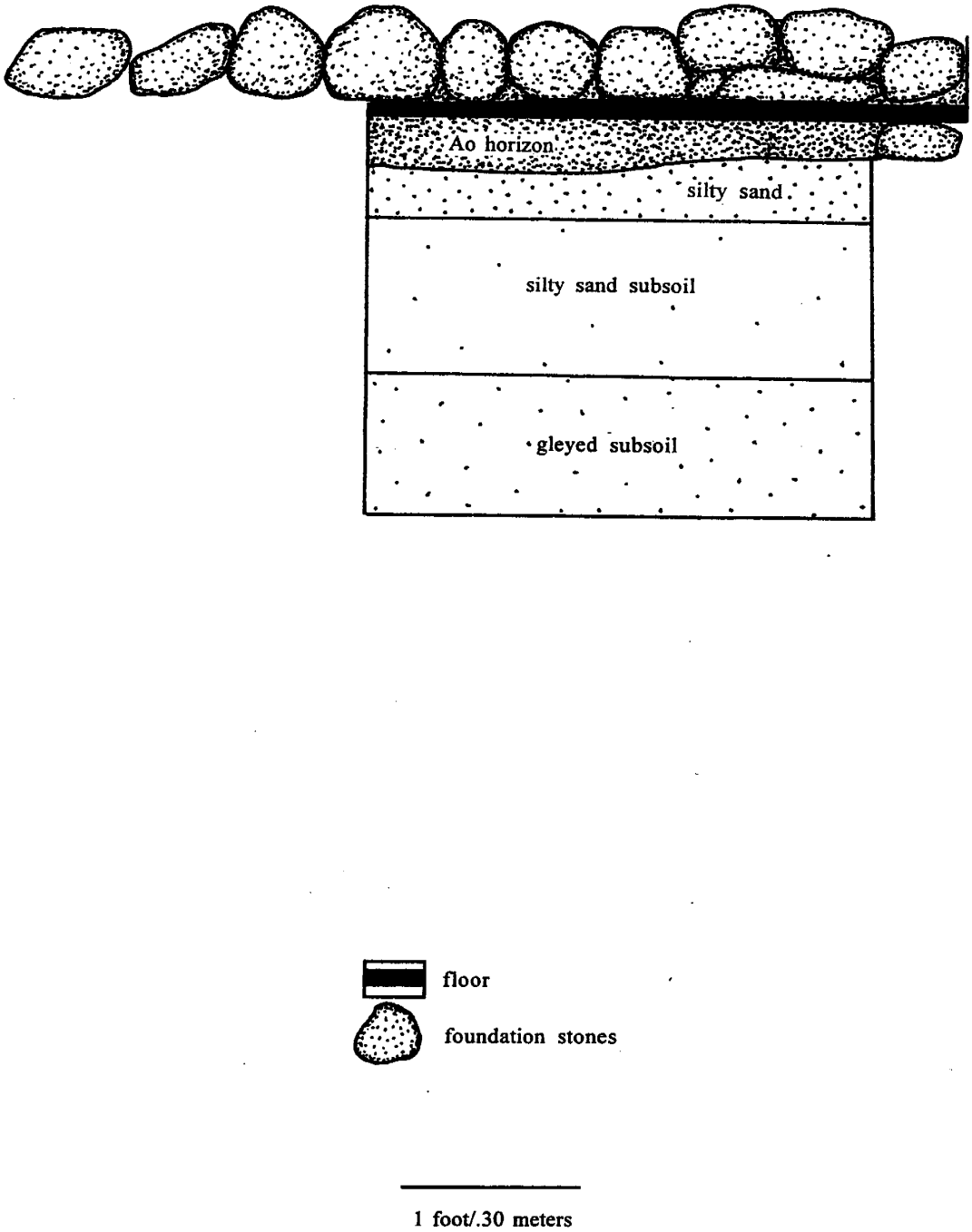


FIGURE 14
Profile of North Room Floor

The portions of the site that may be attributed to the period of the tavern's operation include the north foundation room, a buried yard surface north of the foundation, three pit features, and a secondary deposit interpreted as a bottle dump in the south yard of the foundation. The configuration of the site at this time is rendered in Figure 15. Appendix V includes the distribution maps showing various artifacts concentrations. Those that would be associated with this time period are tin-glazed earthenware, creamware, pearlware, crown glass, lime/soda window glass, and cut nails. The concentrations of these materials reveal something of the use of the landscape surrounding the foundation during the time of the tavern's operation. Although redware and bone are not diagnostic, they -- as well as smoking pipe fragments -- are presumed to be associated with tavern activities to some extent.

The distribution maps reveal concentrations along the north side of the tavern/house structure in the north yard and extending into the north field and in the vicinity of the three pit features in the south yard and near Feature 81, the bottle midden. Considering the earlier ceramics (delft, creamware, and pearlware) in their chronological sequence, a spatial expansion and increased density in their presence can be seen. The delft is almost exclusively seen in low density in the north yard, coming from the buried surface. The creamware is seen as a much larger and denser concentration in the north yard, expanding to include the vicinity of the nineteenth-century midden and into the north field. Three smaller concentrations can also be seen around Feature 43 and Feature 81, both in the south yard, and around Feature 64 in the west yard. Pearlware concentrations are the same as the creamware, only of a larger spatial extent and also include the area just outside of the southeast room at one of the blocked off bulkhead entrances. Concentrations of the earlier architectural items are found in the same areas as the pearlware, as well as around Features 30, 32 and 60 in the south yard, south of Feature 12 in the west yard, and in the northeast corner of the tavern/house foundation. Tobacco pipe fragment concentrations can be seen primarily in the north yard and at the location of the midden and, to a much lesser extent, in the south yard around Features 32 and 43. The faunal remains appear concentrated in the north yard, especially at the midden, and to a lesser extent around Features 43, 54, 81 in the south yard. Concentrations of later ceramic wares, such as whiteware, and architectural remains, such as cut and wire nails, are found in the same locations as the earlier concentrations but covering larger areas.

Tavern/House Foundation

As noted, the tavern/house foundation revealed several construction and renovation episodes. The tavern was presumably built prior to the earliest associated documentation in 1787; therefore a brief review of eighteenth- and early nineteenth-century tavern architecture was conducted. A similar review of vernacular architecture was also conducted, as many times tavern were operated from what were initially constructed as dwellings. This overview will supplement archaeological evidence in the following interpretation.

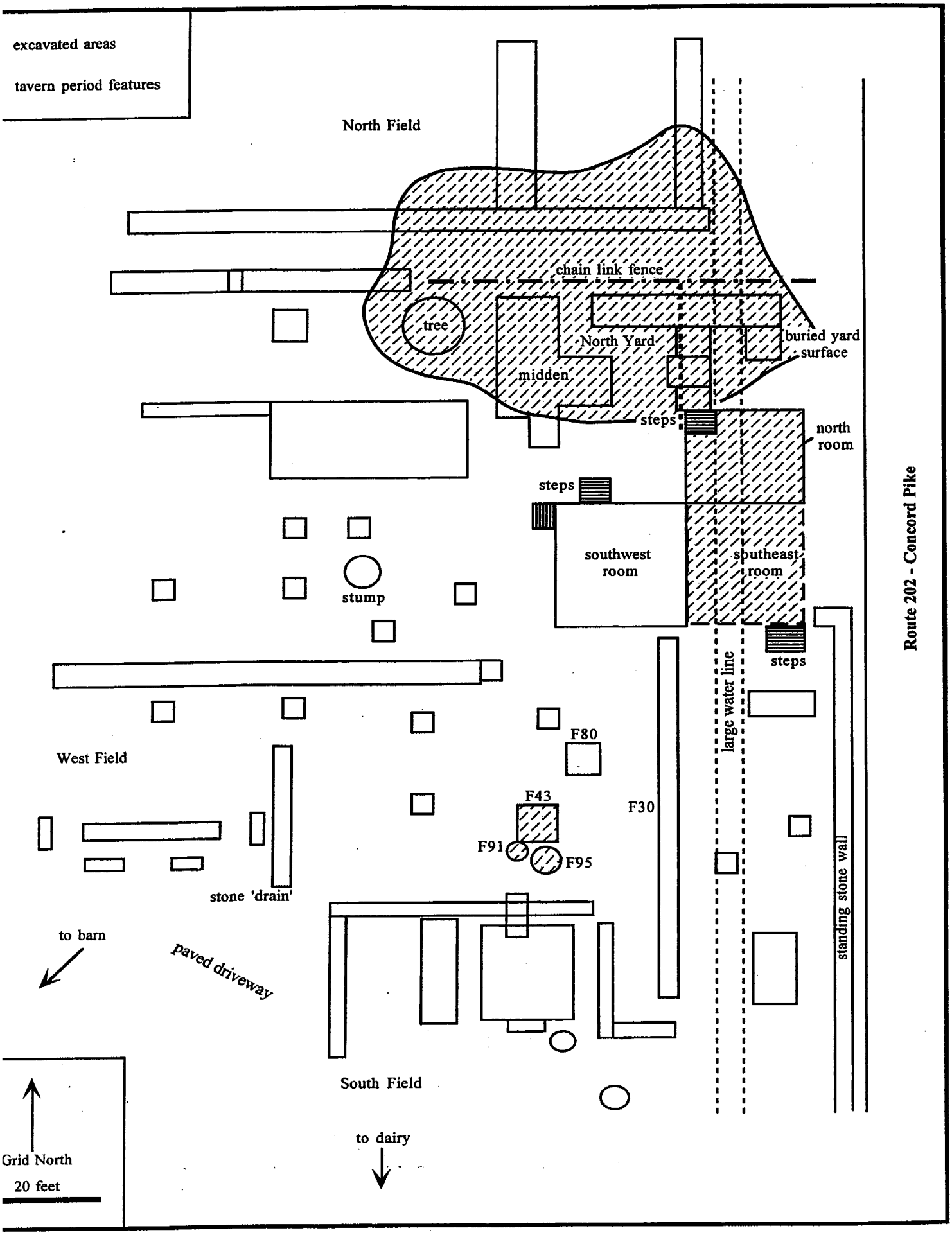


FIGURE 15
Plan Map Showing Features Associated with the Tavern Period

Eighteenth-century tavern architecture, as described by Rivinus (1965), typically consisted of a "two story building with an overhanging front porch." Two doors were present on the front facade, one allowing access to the tavern and dining area and the other to the parlor. The kitchen may have been located in a corner or, based on Michael and Carlisle's (1973 and 1976) work at the Peter Colley Tavern in Pennsylvania, in the cellar. At the Peter Colley Tavern the kitchen had a walk-in fireplace, and the dining area was also located in the cellar. These rooms were accessed through a bulkhead entrance, and there was no interior staircase to connect the first floor and cellar. This has been attributed to the tavern keeper's desire to keep private life separate from the tavern operation (Michel and Carlisle 1973). As noted by Herman (1987b), bulkhead entrances were commonly placed along a hearth wall in eighteenth century vernacular dwellings.

Michael (1973) has also reviewed the architectural composition of a number of early nineteenth-century wagon taverns in southwestern Pennsylvania. According to his descriptions, all of the tavern structures had a central hallway with at least one room to either side of the hallway, and all were at least two, if not two and a half, stories high. In each case, a staircase leading to the second floor was to the right of the hallway. In a number of cases the kitchen was in the cellar, and most of the time, every room had a hearth, sometimes with a larger one in the cooking area and barroom. In one case the structure was expanded to form an "L," and in another, it was originally constructed in an "L" design. The "L" wing was often only one or one and half stories. Lodging may have been in the second floor and/or attic.

The tavern and plantation of Alexander Murphey (Orphans Court, 1794; c.f. Coleman et al. 1990) consisted of "...two Rooms below & two Rooms & a passage above Stairs with a Cellar under the whole and a shed adjoining with one Room & a Kitchen...." Coleman (Coleman et al. 1990) notes, based on his examination of the 1979 National Register of Historic Places nomination form of the then extant Lunn's Tavern (circa 1750) in Chester County, Pennsylvania, that it consisted of a two and a half story structure with an undivided basement floor. The Lunn Tavern was 30 by 18.5 feet, with two separate first floor rooms, the kitchen and the dining room, accessed through separate entrances. It contained a single nine foot long by four foot wide hearth.

According to Herman (1987b), typical eighteenth-century vernacular architectural forms included the following: the one-room hall-plan entered directly from the outside; the one- or two-room chambered hall plan; and the two-room hall-and-parlor plan. Any of these configurations could be either one or two stories and could include a loft or attic. He also states that the typical eighteenth-century one-room home averaged 16 to 20 feet square, and he provides two examples of log houses that measured 20 by 18 feet (Herman1987b:15). The average hall-and-parlor style dwelling was between 16 by 24 feet to 20 by 40. Throughout the first half of the eighteenth century these were the plantation and mansion houses, but, by the latter half of the century, these became predominant among middle income farmers (Herman 1987b:21). Excavations at the John Ruth Inn revealed that the eighteenth-century Ogletown component consisted of an 18 by 15 by 4 foot cellar, with a 7 by 10 foot addition and 3 by 3 foot bulkhead. Lunn's Tavern measured 30 feet by 18 1/2 feet and was two and a half stories high with an undivided

basement. Based on this evidence it appears that eighteenth-century country taverns appear to have generally consisted of two first floor rooms, a cellar that may have contained a kitchen, and a lodging in the second floor and/or attic. According to Herman (1987b), stone foundations were common in the eighteenth century, but stone walls were indicative of upper status.

The north basement room (see Figure 12), measuring approximately 9 by 13 feet of interior floor space, was probably part of the early tavern. It was the largest of the three rooms, with the longer side running perpendicular to Concord Pike. The mortar from this portion of the foundation was soft, decomposing, and yellowed. It had a poured concrete floor (Plate 14) that, when removed, revealed an anthrosol, or earlier dirt floor (Plate 15). This soil yielded bone, pearlware, redware and ironstone, and pre- and post-1864 windowpane glass was found as well. The pearlware suggests that the anthrosol may have been present as early as the 1780s, and the post-1864 windowpane, providing the TPQ, indicates that the cement floor was poured sometime after that date during a later remodeling episode.

A set of interior steps providing access to the basement from outside the structure was located in the northwest corner of this room. The stair course was 2 1/2 feet wide and was comprised of four steps. Each step was a single large cut stone slab approximately 0.75 feet deep (Plate 16). The remains of a wooden door that had been painted green were found at the base of the steps (Plate 17). Two metal pipes were found outside the steps and extended north of the chain link fence into the north field. One of presumably two mortared stone hearth support pillars was located along the north wall, protruding into the room 3 1/2 feet (see Plate 14). The other was likely removed when the large water/sewer line (Feature 20) was cut through the house foundation. If so, the hearth would have been about 7 by 3 feet. Herman (1987b:88, 96) describes this type of cellar hearth support as "vaulted relieving arches" that were not bonded into the basement walls, as opposed to the rubblestone pad construction found in structures without cellars. Both can be found in eighteenth-century architectural examples. Conforming to this description, the supports appear to have served as a first floor hearth support rather than as a basement hearth. According to Herman (1987b:90), the relieving arches are often listed in inventories as holding items such as crocks or casks.

A 0.6 foot square, gray (10YR 6/1) clay-lined post hole (Feature 14, N93W05) and strong brown (7.5YR 5/8) clay silt mold had been dug at an angle to the foundation along the exterior southern wall of this room (see Figure 12 and Plate 18). It appeared 3.2 feet below the ground surface at the top of the subsoil and extended 1.7 feet into the subsoil. The subsoil around the feature was orange clayey sand. An 1800 and an 1853 Liberty cent were recovered. Some rodent disturbance was evident along the southern wall of the feature.

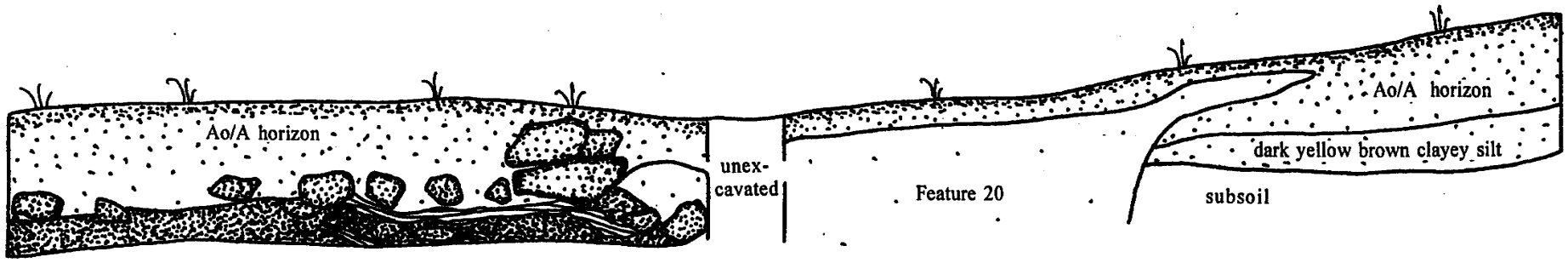
The adjacent southeast room measured 8 by 10 feet of interior floor space. A three by four foot alcove extension in the southeast corner would have given the room an irregular "L" shape. The east face was not flush with that of the east wall of the north room, but was set back approximately two feet (see Figure 12). A narrow gap in the stonework was

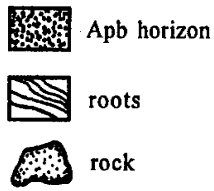
found along this wall. The small five foot wide exterior open space, resulting from the alcove extension, may have created a first floor recessed front entrance. The resulting interior configuration may also have been associated with a central hall plan, facilitating separation of the two interior spaces. The southeast foundation was almost certainly an addition to the north room, although its date of construction is uncertain. The east and west walls of the southeast room were not bonded to the walls of the north room, and a narrow north wall was built along the south wall of the older structure, perhaps to give support to floor joists for the ground story (Plate 19). A 4.5 foot exterior staircase providing access to the southeast basement room was located in the southeast corner of the room at the alcove. It was comprised of three steps, each approximately one foot deep and constructed of a single large cut stone slab that had one course of mortared brick set over the slab. The east and south sides of the stair course were outlined in mortared stone, and the west side had a large stone pillar at its juncture with the south wall. A builder's trench along the east side of the stair course yielded post-1890 manufacture wire nails. This may, however, only indicate that the bulkhead staircase was constructed after 1890. The entrance at the bottom of the stair course had been sealed with mortared stone sometime after 1874 according to the TPQ obtained from a fill overlying the sealed up staircase (Plate 20).

By 1730 there was a dramatic increase in the amount of durable buildings constructed as homes for yeoman (Herman 1987b:110). According to the probate and Orphan's Court records investigations of Herman (1987a:17-18), the loft, or attic, was often used to store a variety of objects, such as spinning wheels, churns, "textiles, pewter, knives, forks, a tankard, and loose bedding." The 1794 tax assessment for Regina Mortonson mentions a "dwelling house part log part stone." Tax assessments for the years 1802 through 1804 for Lancelot Smith lists 'one <u>small</u> house part log part stone' (emphasis added). By almost any standard, the 9 by 13 foot room at Blue Ball would have been beyond small, but with the adjacent southeast room, the foundation measurements would have totaled 9 by 21 feet of interior floor space. The configuration of the structure would have been an irregular rectangle with a centrally recessed facade.

Buried Yard Surfaces

A portion of a buried, possibly plowed, yard surface was discovered along the north side of the tavern/house foundation, adjacent to what was presumably part of the original structure. The surface also ran under the eastern edge of a middle to late nineteenth-century midden located to the west. To the east it was discovered beneath an Ao/A horizon. The surface had been bisected by the large water line (Feature 20) that was cut through the foundation. The yard surface was a yellow brown (10YR 7/6) 0.5 foot thick clayey silt and was found in N124W04, level 3; N125W17, level 1; N130W05, level 2; N130W10, level 3; N130W15, level 2; N130W30, level 6; and portions of N120W3O, level 2. Figure 16 illustrates the stratigraphic position of the yard surface beneath the midden. Two hundred and twenty-two artifacts, as well as bone, oyster shell, and mortar fragments were recovered from this surface. The Mean Ceramic Date for the surface is 1802, and the Mean Beginning and Ending dates are 1773 and 1831. These latter dates provide a 58 year date range, which is felt to be more pertinent than the TPQ for this and





2 feet/.60 meters

FIGURE 16
Profile of Midden Showing Buried Ground Surface

other accretional surfaces or features. The range suggests that the surface may have been open for some time accumulating artifacts, and the artifacts probably represent general yard debris associated with the late eighteenth- and early nineteenth-century portions of the tavern era. The very small artifact size suggests plowing and/or trampling.

Refined ceramic wares are present at a near 2:1 ratio over unrefined wares. Redware, pearlware and creamware were present in nearly equal quantities and were individually present at an almost 5:1 ratio over whiteware. Earlier (pre-1805) earthenware and stoneware were present at 1% or less. All windowpane glass recovered was manufactured pre-1864 and all nails post-1790. Ceramics were present at about a 6:1 ratio over glass. In terms of function, kitchen related items account for most of this assemblage, occurring at a 6:1 ratio over architectural materials. Pipe fragments, accounting for only 2% of the assemblage, a piece of a jewelry box, and a barn bolt were also recovered. The functional breakdown of artifacts from this surface is presented in Table 4 (see below). Ceramic vessel forms occur at an almost 1:1 ratio of hollow to flat wares and include a mug or tankard, a sugar bowl/creamer, bowls, plates, and rouletted redware plate fragments. Glass vessel forms are limited to spirits bottles. Small quantities of oyster shell and bone fragments were recovered, the latter demonstrated as an artifact to bone ratio of 24:1. Interpretation of the ceramic assemblage range in terms of a battleship curve of popularity suggests that this context can probably be attributed to the period up to when Robert Galbreath ceased to keep the tavern. The predominance of creamware and pearlware and the presence of glass manufactured post-1818 further suggest that the bulk of it can be attributed to Galbreath's tenure (1819-1827) at the tavern.

Pit and Midden Features

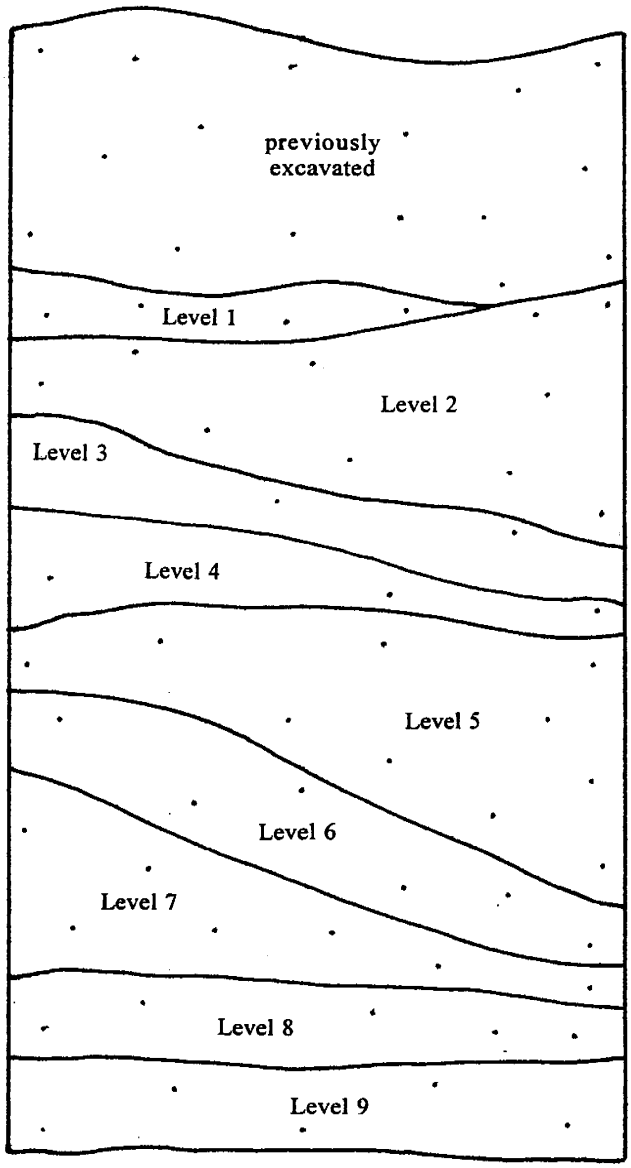
Three pit features were discovered in a cluster in the south yard about 35 feet from the tavern/house foundation. They were excavated by discrete cultural soil horizons or in arbitrary 0.5 foot levels within cultural soil horizons. Although the size, shape, and location in relation to the tavern/house suggest that one may have been a privy, soil accumulation patterns indicate otherwise. The three features may have instead been used as underground storage units. Ensilage is the process of storing perishables in subterranean pits. This method has been used traditionally to store fodder, root crops, and "brewers' grains." The pits must be excavated in dry places and may be divided into sections, and in some cases they are lined in stone. The pits are packed, covered with earth (often clay) and sometimes planks, and then compressed. In other cases, the perishable stock may be piled up six to nine feet above the pit and covered in a six or so inch layer of straw and then earth. Depending on what is being stored, salt may also be added. These types of silos tended to be six feet wide and six feet deep, but they were sometimes constructed as long trenches or tunnels (Halsted 1881: 210-230). Underground storage was also done in root cellars, the most important features of which are cheapness, nearness to the place of consumption, ventilation, and frost resistance. They were often protected by a plank or log frame and roof and covered with earth. In other cases only a roof resting upon the surface and covered with 12 to 18 inches of earth was used for protection. The access door may be no more than a "man hole" wide

enough to accommodate a bushel basket. Root cellars were usually excavated to a depth of two feet (Halsted 1881: 224-230). Lanier and Herman (1997:212) also note that the first silos were excavated pits that were often masonry lined. Due to impracticalities, aboveground wooden stave towers replaced them by the late nineteenth century.

Feature 43

Feature 43 was a circular pit eight feet deep, four feet in diameter, and with a flat bottom (Figures 17 and 18 and Plate 21). It was first identified in N43W40, a five foot square excavation unit about 23 feet south of the southwest corner of the tavern/house foundation. It was further delimited after a backhoe scraped this portion of the site down to subsoil. At its surface, the feature appeared as a 3 1/2 by 4 1/2 foot irregularly shaped stain. A rectangular stain to the northeast and a circular stain to the southwest appeared to be in association, but were instead determined to be pockets of hard packed cinders found throughout the uppermost portion of the feature. The feature was excavated in 12 levels below this disturbance, either by apparent cultural horizons or by arbitrary 0.5 foot levels within cultural horizons. Samples were taken from each of these soils and the subsoil for soil chemistry analysis, and from levels 5 and 6 for flotation. The feature was bisected, and the first four feet were excavated by hand. At that point a backhoe was used to excavate a wide and deep trench adjacent to the feature, also removing the edge of it to produce a cross-section view. Hand excavation was then resumed for the remainder of the feature.

The subsoil surrounding the pit was alternating bands of yellowish brown (10YR 5/6) and yellowish red (5YR 5/8) sandy clay. Prior to the cross sectioning by backhoe it was difficult to discern the feature soil from the subsoil, as the former also consisted of banded and marbled soil (Plate 22). The uppermost foot and a half of the feature was a dark grayish brown (10YR 4/2) silty loam and was intruded into at the surface by dense lenses of coal, ash, clinkers and redeposited clay. The next two and a half feet appear to have been separated from the remaining lower portion of the feature by loose stone rubble. This upper feature soil was primarily brown (10YR 5/3) marbled with yellowish brown (10YR 5/6 and 5/8) sandy clay and clay. The first three feet of feature soil beneath the rock layer was alternating bands of light olive brown (2.5Y 5/4, 2.5 Y 5/6), light yellowish brown (2.5Y 6/3, 2.5Y 6/4), brown (10YR 5/3), and yellowish brown (10YR 5/6, 10YR 5/8) clay and sandy clay, occasionally disrupted by lenses of very dark grayish brown loam (10YR 3/2) flecked with charcoal. These pockets were primarily contained within the southern half of the feature, and most of the artifacts came from these lenses. With depth, the banding was compressed so that the soils looked marbled and became gradually darker. At about 7 1/2 feet below ground surface the marbled soil overlay a heavily contoured layer of red and gray coarse sand from which no artifacts were recovered. This rested on a layer comprised of very thin yet discrete bands of heavy, sticky yellowish brown (10YR 5/8) clay alternating with light yellowish brown (2.5Y 6/4) sandy silt. Fragments of wood planking were recovered from those soils and had probably been part of a planked floor. The base of the feature was a light yellowish brown (2.5Y 6/3) fine sandy silt. The soil strata within the feature dipped in toward its center, suggesting that it was filled from the sides and was therefore not a privy.



Level 1: 10YR 3/3 dark brown silty clay

Level 2: 10YR 5/6 yellowish brown silty clay

Level 3: 2.5YR 6/3 light yellowish brown clayey loam

Level 4: 10YR 5/6 yellowish brown sandy silty clay

Level 5: 2.5Y 5/6 light olive brown silty clay

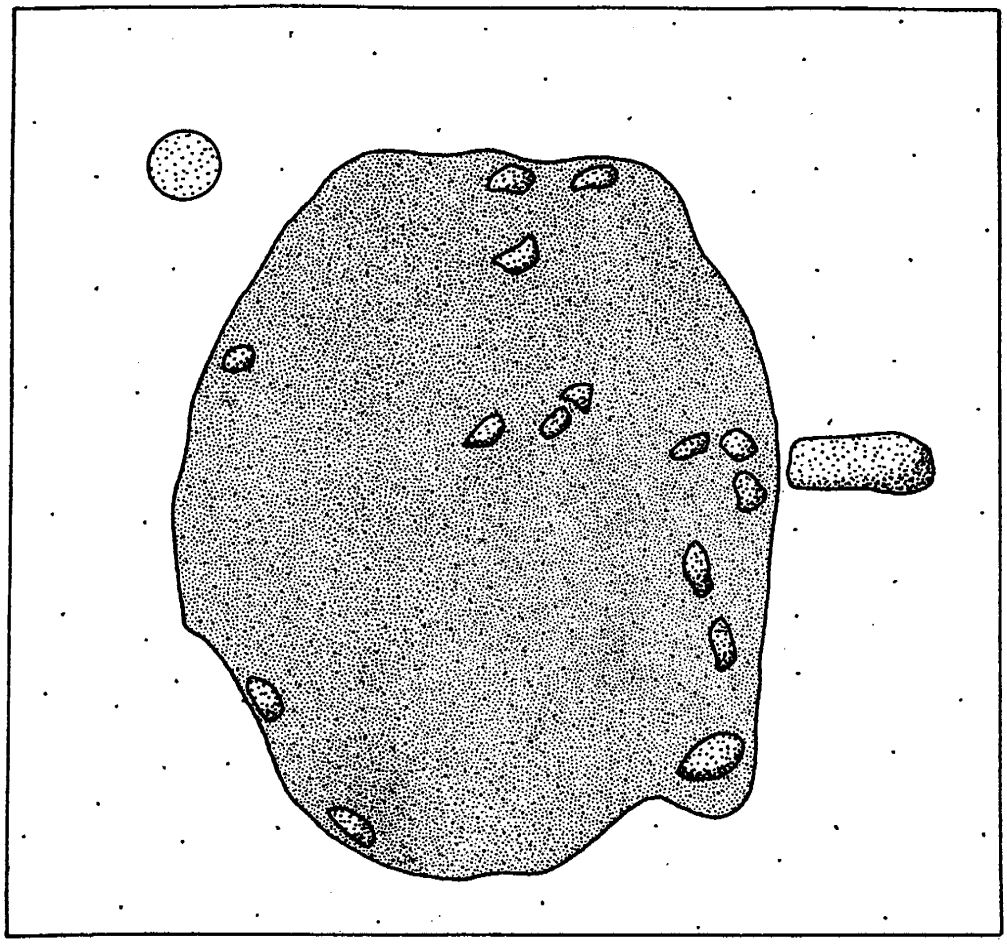
Level 6: 10YR 3/6 dark yellowish brown silty clay

Level 7: 10YR 5/6 yellowish brown clay

Level 8: 2.5YR 6/4 light yellowish brown mottled with 10YR 5/8 yellowish brown clay

Level 9: 2.5YR 6/3 light yellowish brown clayey silt

FIGURE 17
Profile of Feature 43



Feature 43: 10YR 5/4 yellowish brown silty clay

10YR 3/6 dark yellowish brown clay

10YR 5/8 yellowish brown silty clay

rock

1 foot/.30 meter

FIGURE 18
Plan Map of Feature 43

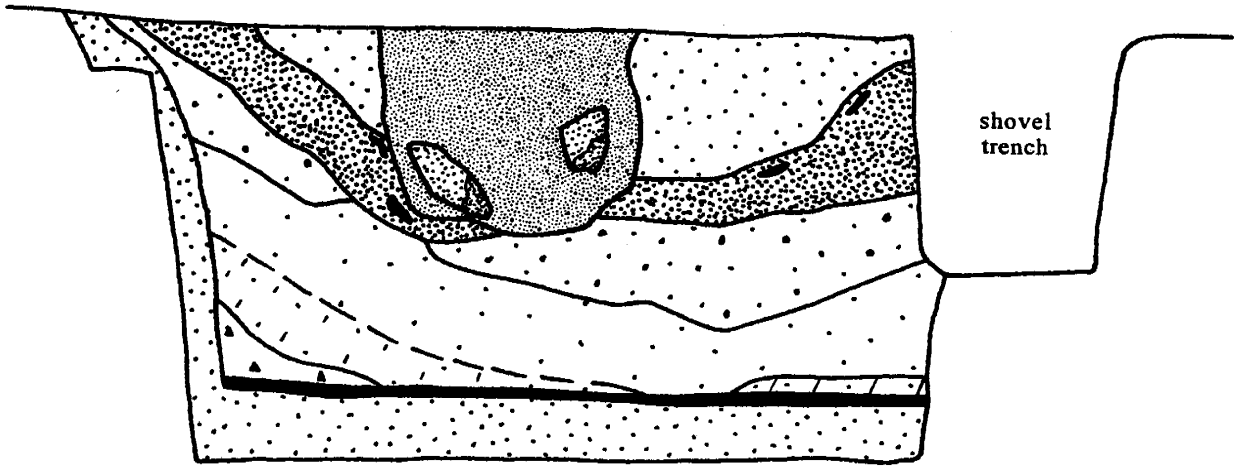
Eight hundred and fourteen artifacts were recovered from the feature. These included ceramics, bottle glass, glass tableware, windowpane glass, nails, and 12 pieces of wood, seemingly from a board or plank. Small quantities of brick and oyster shell and 12 pieces of bone were also recovered. Miscellaneous items included a horseshoe, slate pencil, and a brass suspenders clasp. Whiteware (38%), one piece of yellowware, redware (46%), pearlware (12%), and delft and creamware, at just lower than 2% each, were recovered from the first level. All subsequent levels yielded only redware (77%) and pearlware (19%), with delft and creamware each present at just less than 2% each. Artifacts from the first level (disturbed) were excluded from detailed analysis. The MCD for levels two through 11 is 1804, with Mean Beginning and Mean Ending Dates of 1779 and 1829. All windowpane glass was manufactured before1864, and all bottle glass was manufactured before 1860. Based on a green snuff bottle fragment recovered from level 4, the TPQ is 1810.

Artifacts from the feature were relatively large, and in many cases they represented nearly whole or reconstructable vessels. Domestic kitchen related items were the predominant artifact category recovered (54%), followed by architectural materials (45%), with tobacco, personal, clothing, and agricultural/tool items represented at less than one percent each. Bone was also represented in low proportion. The functional breakdown of artifacts from this feature is presented in Table 5 toward the end of this section. Over one and a half times as much bottle glass and glass tableware as ceramics were recovered. Bottle glass types included case gin, spirits or liquor, ale/porter, and medicinal. Glass tableware forms included plates, tumblers, handled wine glasses, goblets, and flip glasses). Other miscellaneous glass forms included lamp chimney and founts and a mushroom bottle stopper. Unrefined ceramic wares were present in almost four times the quantity of refined wares, and flat vessel forms were present in almost three times the quantity of hollow forms. Refined ceramic vessel forms included cups, plates, and saucers (Plates 23 and 24). Unrefined forms included jugs, bottles, crocks, bowls, and plates. Several hollow and flat redware forms had rouletted edges (Plate 25). The formal distribution of vessel types is presented in Table 4 following the discussion of Feature 95.

Based on the TPQ (1810) and Mean Ending Date (1829), the combination of which are felt to be most pertinent for sealed, non-accretional contexts, this feature should be attributed to the period in which George Miller (1810-1816) and/or Robert Galbreath (1819-1827) kept the tavern.

Feature 91

Feature 91 was a straight-sided four foot square pit with a flat bottom that extended three feet into subsoil (Figure 19 and Plate 26). The pit was located about 23 feet south of the southwest corner of the tavern/house foundation, just east of Feature 43. It was identified after a backhoe scraped this portion of the site down to subsoil. The feature was bisected and hand excavated in six levels. Samples were taken from each of these soils and the subsoil for soil chemistry analysis. Two posthole and molds had been dug through the filled pit. One through the approximate center was about a foot in diameter. Another in



Post Hole #1

Level 1: 10YR 5/6 yellowish brown loam

Levels 2 and 3: 10YR 5/3 brown silty clay

Level 4: 10YR 5/8 yellowish brown silty clay

Level 5

- 10YR 6/4 light yellowish brown with iron oxide stains
- 10YR 5/6 yellowish brown sandy clay
- 10YR 5/3 brown mottled with 7.5YR 5/4 brown clay
- 10YR 5/8 strong brown sandy clay

Level 6: 2.5Y 5/4 light olive brown clay

Level 7: 10YR 6/8 brownish yellow clayey sand

rock

glass and bottle fragments

1 foot/.30 meter

FIGURE 19
Profile of Feature 91

the southeast corner was about 0.7 foot in diameter. The latter was capped in a thick layer of clinkers. Another posthole and mold, also capped with clinkers, was located just off the southwest corner and was dug into subsoil.

Levels one, four, and five were distinguished by their soil characteristics as separate horizons. Levels two and three shared the same soil characteristics, but were excavated in two arbitrary levels, as it was the thickest soil and was where most of the artifacts were from. Level one was a yellowish brown (10YR 5/6) loam and levels two and three were a brown (10YR 5/3) silty clay. Level four was a yellowish brown (10YR 5/6) mottled with yellowish brown (10YR 5/8) silty clay. Large rocks were present at the interface of levels three and four. Level five was light yellowish brown (10YR 6/4) silty clay with streaks of red iron. At the base of this level were lenses of yellowish brown (10YR 5/6, 10YR 5/8) and brownish yellow (10YR 6/8) sandy clay mottled with brown (10YR 5/3 and 7.5YR 5/4) clay. Below these lenses was a continuous half inch thick band of light olive brown (2.5Y 5/4) clay across the base of the feature. This was excavated as level 6 and yielded no artifacts. The subsoil below the feature a brownish yellow (10YR 6/8) sandy clay.

The posthole and mold dug through the center of the pit (F91, p/h 1) extended 1.6 feet into the feature through the upper two soils and into the third. It was a dark grayish brown (10YR 4/2) sandy silt and was rounded in profile. It yielded only pearlware and redware ceramics, as well as pre-1853 and pre-1864 windowpane glass and pre-1830 and pre-1860 bottle glass. It had been apparently backfilled, at least in part, by feature soils as a mend to a pearlware chamber pot from the feature was recovered in the posthole. The posthole and mold dug through the southeast corner of the feature (F91, p/h 2) was also rounded in profile and was filled with cinders and ash. Terra cotta, cut nails, and pre-1864 windowpane glass were recovered. The post hole and mold off to the side of the feature was capped with pebbles and brick fragments. Whiteware, cut nails, and pre-1864 windowpane glass were recovered.

Stratigraphic interpretation indicates that the pit was filled first from the south, as the west wall profile shows the lowest feature soil diving pronouncedly from this side toward the center. This soil rests level on the clay base at the northern end, but at the southern end it rests on a wedge of sandy clay above the base. The subsequent soil follows a similar contour. Succeeding filling may have been from both the south and the north, as the upper feature soils (levels 1 through 3) dive from both directions to form a basin.

One thousand and thirty-eight artifacts were recovered. These included ceramics, bottle glass, glass tableware, windowpane glass, and nails. Small quantities of brick, mortar, and oyster shell fragments and eleven pieces of bone were also recovered. The only ceramic wares recovered were pearlware and redware. This gives an MCD of 1805 and Mean Beginning and Ending Dates of 1780 and 1830. Pearlware, at 75%, is three times more prevalent than redware. This would also be the refined to unrefined ware ratio. Most of the ceramic remains were from hollow vessels, specifically one or more chamber pots. Functional forms in the pearlware category include flat vessels and chamber pots, and for the redware category include plates and hollow vessels. Four times as much

bottle glass as ceramic was recovered. The functional breakdown of bottle glass is as follows: 60% liquor/spirits, including brandy and wine; 20% medicine; 6% tobacco or snuff; 6% ink, and; 8% unidentifiable. The distribution of vessel types from Feature 91 is included in Table 4 (see below).

All windowpane glass is either pre-1864 manufactured potash or pre-1853 manufactured crown glass. All nails were manufactured post-1790. All bottle glass and glass tableware was manufactured at least pre-1860 and some pre-1830 (Plates 27 and 28). The TPQ for levels 1 and 2 was obtained from glass manufactured post-1816 (circa 1816-1860) and from glass manufactured post-1810 for level 3. Based on a blue transfer printed piece of pearlware, levels 4 and 5 must be post-1795. It is likely that there is no significant temporal stratification in this feature and that it post-dates 1816. The feature should therefore be associated with the period in which Robert Galbreath maintained the tavern.

Feature 95

Feature 95 was a 4 foot square pit with a flat bottom and capped with a dense layer of cinders and clinkers (Plate 29). It was located in the south yard about 26 feet south of the tavern/house just south of Feature 43 and was identified after a backhoe scraped this portion of the site down to subsoil. The feature extended 2.85 feet into the subsoil and was straight-sided on its north edge with a sloped side on its south edge. It appears to consist of up to three separate filling episodes, the uppermost being a later, small pit dug into a pre-existing pit (Figure 20). The feature was bisected and hand excavated in six levels. Samples were taken from each of these soils and the subsoil for soil chemistry analysis

The upper levels, 1, 1a, and 2 appear to be part of a later filling episode. Level 1 was a (10YR 5/3) sandy silt and appears to be a small pit dug through level 1a. It was 1.75 feet deep and 2.5 feet wide with a rounded base and sloping sides. Level 1a was a predominantly a yellowish brown (10YR 5/6) to yellow (10YR 7/6) silty clay along the north edge and predominantly a reddish yellow (7.5YR 6/6) silty clay along the south edge. The north and south halves of this level were excavated separately as they sloped from either side to meet at a pile of stone and brick rubble in the center. The soil within and around the rubble was excavated as level 2 and was a strong brown (7.5YR 5/6) clay sand. The base of level 1 rested on top of the rubble and level 2. The lower pit, levels 3 through 6, was excavated in arbitrary 0.5 foot levels. These were a brown (10YR 5/3) to yellowish brown (10YR 5/6) mottled sandy clay. This portion of the feature was separated from the overlying fill and later pit and by the rubble pile. The subsoil surrounding and below the feature was a strong brown (7.5YR 5/6) sandy clay.

The feature yielded 61 artifacts, including ceramics, bottle glass, windowpane glass, nails, and miscellaneous metal. Level 1, the upper pit yielded creamware, pearlware, redware, pre-1860 manufactured liquor bottle glass, and post-1790 manufactured cut nails. Level 1a, interpreted as being a discrete in-filling episode from the lower pit, yielded whiteware, creamware, pre-1864 manufactured potash windowpane glass fragments, and pre-1860 manufactured liquor bottle fragments. Level 2, interpreted as

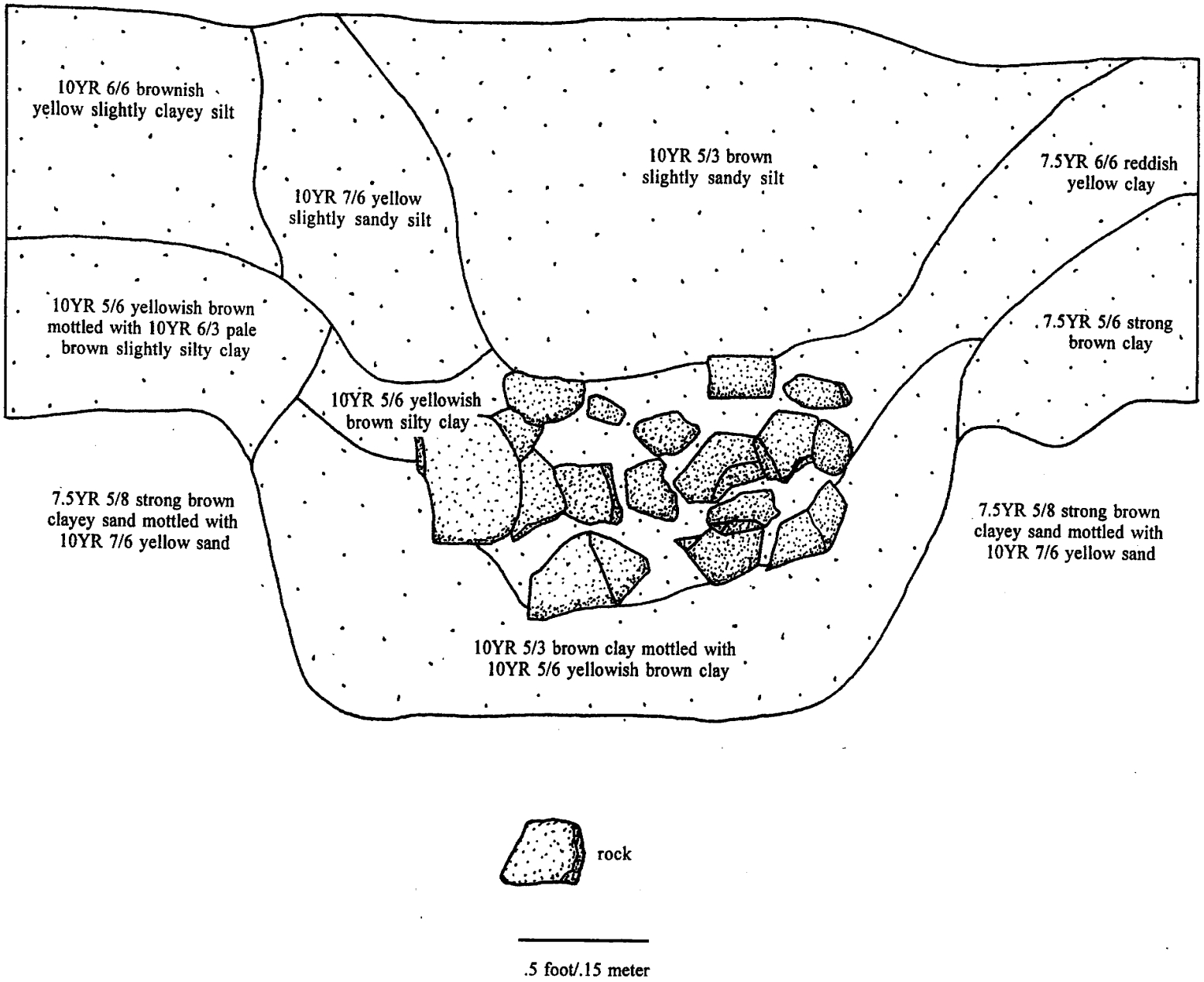

10YR 6/6 brownish yellow slightly clayey silt
10YR 7/6 yellow slightly sandy silt
10YR 5/3 brown slightly sandy silt
7.5YR 6/6 reddish yellow clay
10YR 5/6 yellowish brown mottled with 10YR 6/3 pale brown slightly silty clay
7.5YR 5/6 strong brown clay
10YR 5/6 yellowish brown silty clay
7.5YR 5/8 strong brown clayey sand mottled with 10YR 7/6 yellow sand
7.5YR 5/8 strong brown clayey sand mottled with 10YR 7/6 yellow sand
10YR 5/3 brown clay mottled with 10YR 5/6 yellowish brown clay
rock
.5 foot/.15 meter

FIGURE 20

being associated with the stone and brick rubble, yielded only redware. Levels 3 through 6, interpreted as part of the original pit feature, yielded creamware, pearlware and redware sherds and a copper coin marked with an indiscernible date. In addition, 62 bone fragments, 20 animal teeth, and oyster shell fragments were recovered from the lower pit. These were the only faunal remains recovered from the feature and account for more faunal material than the other two pits and the north yard buried surface combined. More faunal than non-faunal material was recovered from this portion of the feature. The MCD for the lower pit is 1795, with a Mean Beginning Date of 1767 and a Mean Ending Date of 1823. Based on the initial manufacture date for pearlware, the TPQ would be 1780. The TPQ for the upper pit would be 1820 based on the initial manufacture date for whiteware. Based on the TPQ (1780) and the Mean Ending Date (1823), the lower pit can be attributed to the tenure of any or all of the tavern keepers up to Robert Galbreath. The upper pit, however, should probably be attributed to the period of Galbreath's occupancy.

Architectural remains were present at over twice the frequency as domestic kitchen remains and twice as much ceramic as bottle glass were recovered from the upper pit and soils overlying the lower pit. All artifacts from the lower pit except for one cut nail belong within the domestic kitchen functional category. No tobacco or clothing items were recovered from any portion of the feature, and personal and agricultural/tool remains were represented only by the coin and a strap hinge fragment from the lower pit. The functional breakdown of materials from the feature is included in Table 5 (see below). Twice as many of the ceramics from the feature were refined wares as were unrefined. Not enough determinable ceramic forms were available to determine the ratio of hollow to flat vessels, although a creamware platter and a redware bowl were present. No glass tableware was recovered from any portion of the feature, and all bottle forms were from liquor containers. The distribution of vessel forms from Feature 95 is shown in Table 4.

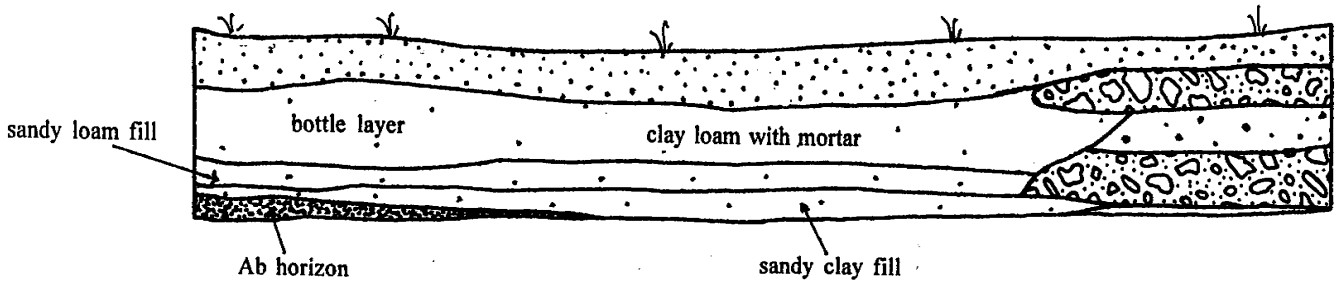
Table 4
Formal Distribution of Vessel Forms From the Pit Features

	refined ware	redware	stoneware	earthenware	glass	Totals
plate/saucer/platter	35	25	0	0	10	**70**
flat vessel	3	2	0	0	0	**5**
bowl/jar	0	2	0	0	10	**12**
cup	10	0	0	0	0	**10**
tableware	0	0	0	0	9	**9**
glass/tumbler	0	0	0	0	195	**195**
wine/goblet	0	0	0	0	23	**23**
crock	0	1	0	0	0	**1**
jug	0	1	0	0	0	**1**
bottle	0	0	0	0	471	**471**
chamber pot	37	0	0	0	0	**37**
hollow vessel	4	10	1	0	0	**15**
medicine	0	0	0	0	49	**49**
tobacco	3	0	0	0	16	**16**
flask	0	0	0	0	1	**1**
misc/unid	31	69	0	4	0	**104**
Totals	**123**	**110**	**1**	**4**	**784**	**1022**

Feature 81 (Bottle Midden)

This feature consisted of a 0.5 foot thick band of yellowish brown (10YR 5/8) sandy clay mixed with mortar rubble that underlay the Ao/Ap horizon (Figure 21). The high mortar, plaster, brick, and bottle glass content was one of the distinguishing characteristics of the feature soil. Over 2000 grams of brick and more than 800 grams of mortar were recovered from that soil. The deposit, located approximately 45 feet south of the southeast foundation corner of the tavern/house, was approximately eight feet long from north to south. Only a four foot wide band remained as the feature soil was truncated to the east by a pipe trench and to the west by the large water main (Feature 20) found to run through the entire site.

The feature appears to have been dug through a pre-existing dusky red (2.5YR 4/4) sandy loam (see Figure 21) on the north end and two layers of sandy fill and sandy cobble fill on the south end, producing a basin-shaped deposit. Most of the feature was covered with about 0.3 feet of yellowish brown (10YR 5/8) sandy clay fill and a sandy cobble fill at the southernmost end. An Ao horizon had developed over the fill soils. The feature fill overlay a yellowish brown (10YR 5/6) sandy loam. This overlay a mottled brownish yellow (10YR 6/8) and yellowish brown (10YR 5/6) sandy clay. A small patch of A horizon was found buried beneath all of these soils, resting directly on the B horizon. No artifacts were recovered from the Ab horizon.



Ao horizon

cobble fill

sandy fill

1 foot/.30 meter

FIGURE 21
Profile of Feature 81

The feature soil was excavated from N18W03, level 2, N18W06, level 3, N24W03, level 3, and N29W03, level 3. The Mean Ceramic Date for the feature soil is 1839, and the most frequent manufacture date on bottle glass and glass tableware is 1850. All windowpane glass was either pre-1864 potash or pre-1853 crown glass. Forty bone fragments and 465 grams of oyster and clam shell fragments were recovered. The presence of an 1857 copper Flying Eagle coin and post-1890 manufactured wire nail fragment from the soil below the feature, however, indicates the feature soil was deposited after 1890. Sixty percent of all bottle glass or glass tableware recovered from the feature soil was manufactured before1860, suggesting that perhaps this deposit represents a clean-out episode, such as the disposal of tavern items after the tavern ceased to function. That this deposit represents a clean-out is also indicated in vessel cross-mends. Such an episode may be related to a change in the property's ownership or function.

Five hundred and one artifacts were recovered from the feature soil, the majority of which were architectural remains (52%), followed by kitchen (47%). Clothing and tobacco items were present at less than 1% each. Almost 1.5 times as much bottle glass as ceramics was recovered. 87% of the bottle glass remains are from spirits bottles, and the remaining identifiable fragments were from either mineral water or medicine bottles (Plates 30 and 31). One and a half times as many unrefined ceramic wares (60%) as refined wares (38%) were recovered. The majority of refined wares from this context were whiteware (31%) followed by a low representation of pearlware (5%) and creamware (1%). Unrefined forms included crocks, redware plates and hollow vessels. Refined forms included flat and hollow vessels, plates and service platters. Hollow and flat vessel forms were present at a 1:1 ratio.

The last known tavern keeper, Isaac Anderson, died in 1850. It is possible that his widow, Ann, remained on the property and may have even continued to operate the tavern and/or farm for at least a few years, although she does not appear in tavern license petitions. Evidence to suggest this appears in Anderson's will, allocating many tavern and farm related items to his wife. Marked '*for the widow*' are items such as barrels of whiskey, furnishings, including at least eight beds and sets of bedding, livestock and equipment, such as plows, harrows, hatchets, ladders, a sleigh, horse carts, a straw cutter, feed chestles, a chicken coop, barrel churns, and milking utensils. Between 1855 and 1857 Delaware had initiated a liquor prohibition, during which time many taverns ceased to function and others continued as temperance houses. By 1859 Maria Logan's will referred to the tract as being under the tenure of Joshua and Heitt Hutton (father and son). The Huttons also appear in the 1860 census records as farmers. It is possible that the feature fits into the period in which the Huttons presumably resided on the property as tenants and farmers.

Intra-Site Analysis

This section presents the results of artifact assemblage comparison for two separable tavern contexts represented at the Blue Ball Site. The earlier has been designated as Blue Ball I and the later as Blue Ball II. The following discussion addresses the distribution of functional categories, vessel level analysis and sherd cross-mends, and the distribution of the 'tavern assemblages.'

The MCD for the three pit features (Feature 43, 91, 95) and the buried yard surface, obtained by taking the average MCD, is 1803. The Mean Beginning and Mean Ending Dates, taken by selecting the date at either extreme for these contexts, bracket them between 1776 and 1829. At least one of these, Feature 91, post-dates 1816 based on the TPQ obtained from glass fragments. That places this feature into the period in which Robert Galbreath operated the tavern (1816-1827). The yard surface represents an accretional deposit. Therefore the TPQ is not felt to be a strong dating technique, and it is likely that this context represents the period up to when Robert Galbreath ceased to be proprietor of the tavern (1827). Hereafter referred to as Blue Ball Tavern I, these four contexts represent the earliest archaeological component at the site

Blue Ball Tavern II includes only Feature 81, interpreted as a secondary deposit representing a single clean-out episode. According to the TPQ for the feature, this would have occurred after 1890, several decades after the tavern ceased to function as such. However, as suggested by the artifacts present, the materials may have been derived from a middle nineteenth-century deposit. The items may, therefore, represent Isaac Anderson's tenure at the tavern (1828-1850) as well as perhaps the Hutton's tenancy at the property. The items would, however, have been discarded at the feature location after the E. I. Du Pont Powder Company became the property owner.

The following table presents and compares the functional breakdown of materials recovered from the four Blue Ball Tavern I contexts and single Blue Ball Tavern II context. The highest percentage of kitchen related materials and lowest percentage of architectural materials were recovered from the North Yard buried surface. As this surface was just outside the foundation remains, it is likely that this context represents daily domestic activity associated with the residence and tavern operation. There is little to distinguish the remaining three Blue Ball I contexts other than the higher proportion of tobacco pipe and tobacco/snuff jar remains from Feature 91. This is also the feature from which the greatest proportion of container glass was recovered. More architectural than kitchen related remains were recovered from Feature 81. This corresponds with the interpretation of this context as a secondary clean-out. The architectural remains may represent the deposition of structural demolition, perhaps of a nearby building.

Table 5
Comparison of Functional Categories of Artifacts from Tavern Period Deposits

	MCD	kitchen	architectural	arms	clothing	personal	tobacco	activities
North Yard	1802	83%	14%	0	0	0	2%	1%
Feature 43	1804	54%	45%	0	0.2%	0.2%	0.6%	0
Feature 91	1805	60%	32%	0	0	0	8%	0
Feature 95	1799	57%	39%	0	0	2%	0	2%
Feature 81	1839	47%	52%	0	0.5%	0	0.5%	0

The following table summarizes the distribution of items that have been defined elsewhere (Bragdon 1981; Coleman et al. 1990; Thompson 1987; etc.) as being representative of a tavern assemblage. These include tobacco pipes, glass tableware/tumblers, coarse ceramic wares, and bottle glass. Refined ceramic wares have been added to this analysis for comparison with the coarsewares, as an uneven distribution is sometimes an indicator of economic status (Miller 1980, 1991; McBride and McBride 1987), function, or ethnicity (Spencer-Wood 1987; Gardner et al. 1998). The ratio of hollow to flat ceramic vessels has also been included as differences may also reflect socio-economic status. For example, this ratio may indicate difference in types or cuts of meat and their preparation into roasted prime cuts versus stews (Coleman et al. 1990). The same ratio, may also be an indicator of shifts in food preparation and service over time (Kelso 1984). Table 6 is arranged to compare the earlier and later tavern phases.

Table 6
Comparison of 'Tavern Artifacts' by Temporal Phases

Tavern Phases	Tobacco	Tableware	Coarseware	Refined Ware	Bottle glass	Hollow:Flat
Blue Ball Tavern I MCD 1802, TPQ 1818	2%	25%	13%	20%	40%	1:1
Blue Ball Tavern II MCD 1839, TPQ 1857	0.5%	2%	25%	15.5%	57%	1:1

As has been found in other northern Delaware Tavern Assemblages (The John Ruth Inn Ogle component and the Riseing Son Tavern), tobacco related items appear in very low proportions within the total assemblage. Table 6 reveals a decline in tobacco items, glass tableware, and refined wares from the earlier to the later tavern phases. Coarse ceramic wares and bottle glass, however, increase from the earlier to later phases. The low presence of tobacco related items has been attributed to a post-1812 shift in American tobacco consumption habits, whereby chewing tobacco largely replaced smoking (Hunter Research, Inc. 1994; Heinman 1960). The table also reveals an equal distribution between flat and hollow vessel forms for both periods. This is converse to the distribution discovered for the John Ruth Inn Ogle component, where hollow wares were found in approximately three times the frequency of flat vessel forms. The under representation of flat wares in that analysis was attributed to the use of wooden and pewter plates, which are not generally recovered archeologically. Further intra-site comparisons and discussions will be presented later in the report.

Comparative Probate Analysis

This section presents a chronological analysis of seven probate inventories, focusing on issues such as relative socio-economic status, differences between owners and tenants, dependence on agriculture or other outside activities, and change through time in the role of the Blue Ball Tavern. In most cases the itinerant or tenant tavern keeper used his/her own belongings to stock the tavern, and the items listed in the inventory therefore reflect that individual's material worth. One depiction of this is provided from a tavern keeper's diary from 1792 (c.f., Rice 1983) where he notes after several meetings with the former proprietor to take over the establishment that he and presumably his family:

> Spent the day in packing our furniture & making preparations for removing - carried down the looking Glasses by Hand & put them in the Tavern House..and spent the greater part of the night carrying in our Things & Bringing up Mr. Treadwells...

Three of the seven probates are for keepers of the Blue Ball Tavern and include Regina Mortonson (1799), Robert Galbreath (1827) and Isaac Anderson (1850). Each of these individuals was a tenant of either John or Maria Dickinson and a tavern keeper on the property at the time of their death. Comparisons have been conducted within and between two temporal groups. The first group of probates is from the late eighteenth and initial nineteenth centuries and includes Regina Mortonson and her son Joshua (1791) of Blue Ball, Samuel Landers (1799) of the Green Tree Inn, and Peter Springer (1805) of the Riseing Son Tavern. The second group of inventories is from the early and middle nineteenth century and includes Robert Galbreath of the Blue Ball tavern and Joseph Springer (1831) of the Riseing Son Tavern, having received it from his father Peter, and Isaac Anderson.

The probate inventories have been itemized into artificial categories loosely based on South's (1977) functional classification system for artifacts. This classification is intended as an overview that allows for broad comparisons between activities. The four 'functional' categories that were created are kitchen, dining/lodging, personal, and agricultural/tools. The first includes items such as pots, pans, Dutch ovens, bottles, jugs, food, and any items listed *'in the bar.'* The dining/lodging category includes items such as beds, bedding, dining tables, candlesticks, tablecloths, napkins, looking glasses, bureaus, and other such furniture. Differences between these two categories may reveal the social setting of an establishment or the social function it was intended to fulfill. For example, one would expect distinctions between a tavern that functioned as an 'ordinary,' a 'grog shop,' a 'victualating house,' or a 'public house' from one primarily intended as a boarding house or to provide overnight accommodations. This has also been proposed as a major point of contrast between rural and urban taverns (Rockman and Rothschild 1984).

The personal category addresses socio-economic status, and it includes items such as wearing apparel, books, bibles, jewelry, and in one case, a dog. The agriculture and tool category includes items such as livestock, saws, spades, ladders, scythes, plows, and crops in the ground or by the pound or bushel. It also includes items related to dairying, blacksmithing, coopering, and saddlery. This category can be compared with the combined percentage total of the kitchen and dining/lodging categories to reveal the relative significance of pursuits supplementary to the tavern operation.

Joshua Mortonson, a tenant yeoman, is not known to have been associated with the Blue Ball or any other tavern, but has been included in the analysis for comparison to the tavern keepers. His probate also includes many items such as casks, bottles, jugs, and case gin that would be expected, yet were absent from Regina's probate.

Prior to his stay at the Green Tree Inn, Samuel Landers appears to have been an 'itinerant' tavern keeper, and his movement from establishment to establishment has been traced through tavern license petition records and discussed in previous sections of this report. As mentioned, the Green Tree was located in Brandywine Village near the ports of Wilmington and was apparently not viewed favorably by some members of the local community, as it was reputed to have been a pestilent 'grog shop' that catered to the mill workers employed in the Village. Brandywine Village, a community independent of Wilmington, was a millers' enclave, also dominated by Quakers. The Village architecture was characterized by row homes of Brandywine granite (Hoffecker 1977:29). The property on which the Green Tree stood has been described as "large, on high ground, and [straddling] the most important crossroads in the Village" (Hoffecker 1974:68).

Peter and Joseph Springer were owner-operators of the Riseing Son, a rural tavern located on Limestone Road in Mill Creek Hundred. The area around the Riseing Son Tavern, near the confluence of the White Clay Creek, the Red Clay Creek, and the Christiana River, was an important milling center. Limestone Road also serviced the

adjacent agricultural community, as well as provided a connection to the grain producing areas north in Lancaster County (Thompson 1987).

All seven probate lists, as they originally appeared and as they were manipulated for analysis, are included in Appendix IV. The following table presents the relative percentage distribution of these functional categories as calculated from dollar values. As noted by Rockman and Rothschild (1984), differences, especially between the first two categories should be viewed in terms of their relative importance, rather than absolute presence.

Table 7
Comparison of Functional Categories from Probates

	Kitchen	Dining/Lodging	Personal	Agriculture/Tools	Total Estate
Joshua Mortonson, 1791	15%	23%	2%	60%	L80/10/2 *
Regina Mortonson, 1799	26%	59%	5%	10%	$171.22
Samuel Landers, 1799	22%	17%	7%	54%	$533.04
Peter Springer, 1805	15%	33%	3%	49%	$559.25
Robert Galbreath, 1829	17%	21%	5%	57%	$472.05
Joseph Springer, 1831	5%	12%	1%	82%	$378.90
Isaac Anderson, 1850	4%	11%	0	85%	$681.85

* Joshua Mortonson's estate was evaluated in pounds, not dollars. The percentage breakdown was however derived in the same manner.

Significant observations provided by this table include the proportionally high representation of the agriculture/tools category, especially the unexpected high percentage represented in the Samuel Landers estate and the very visible increase shown in the Joseph Springer and Isaac Anderson estates. Other significant observations include the high representation of the dining/lodging category in the Regina Mortonson estate, the inverse relationship of items represented by the kitchen and dining/lodging categories as illustrated in the Samuel Landers estate, and the higher proportion of personal items also present in the Landers estate. These findings will be discussed throughout the remainder of this section.

The following two charts are based on analyses conducted by Bragdon (1981) and Coleman et al. (1990) using variables selected for the comparison of tavern assemblages. Bragdon suggests ten categories constructed by isolating beds, tables, chairs, desks, candlesticks, bottles, glasses and tumblers, ceramics, pots, pans, kettles, and the amount of liquor on hand. Coleman expands this list to include pewter, sheets, pillowcases and tablecloths. In the following analysis beds and all forms of bedding including sheets and pillowcases are considered a single category. Desks, tables, chairs, clocks, candlesticks, tablecloths and so forth are examined as a single furnishings category. Glass and ceramic are also presented as one category and pewter and silver as another. Wearing apparel, livestock, and tools/equipment have been added as three additional categories. The results are based on percentages of the total number these items present in each probate. Certain objects such as ceramics and glass vessels were usually listed as 'lots', therefore the number of lots, rather than absolute number of vessels was computed. These variables were selected to examine differences between tenant farmers and tavern operators; differences in itinerant or tenant tavern keepers and owner operators; and differences in urban/semi-urban and rural taverns.

Joshua Mortonson's probate most resembles that expected for a full time farmer. As can be seen, he had little invested in personal items, beds, furnishings, serving/cooking vessels, but a good deal invested in agriculture/equipment and livestock. These categories include geese, four cows, two heifers, one horse, three calves and a colt, two large plows, two pair of doubletrees, wagons, augers, hoes, mall, wedges, axes, saddles, poplar boards, iron, bushels of potatoes, spring wheat and Indian corn, 22 pounds flax, casks of buckwheat, and dyed apples. Case gin, bottles, jugs, barrels of cider, casks, firkins, and pewter also appear in his probate. These materials were not anticipated to be so visible, as he is not known to have been associated with any tavern operation.

Although there was not much in the way of certain tavern items, such as tubs, casks and barrels of liquor and foodstuffs, in Regina Mortonson's probate, certain characteristics resemble that expected for an urban tavern keeper not engaged in agricultural pursuits. Her probate shows the proportionally highest investment in beds, furnishings, pewter and silver, comparatively high representation of personal possessions, and very low presence of livestock and tools. Only 10% (one cow) of her estate was related to agriculture, equipment, or tools, suggesting that any farming done on the property was probably performed by her son-in-law, Joshua McLean. Utility kitchen or food preparation/storage items include a tub churn, a coffee mill, a churning pan, gridiron toasters, pots, a skillet, a Dutch oven, and two barrels, and accounts for just over one quarter of her estate. Nonetheless, the greater investment in beds and bedding than other types of furnishings is consisted with the nature of rural taverns as an overnight layover for travelers.

Thirty-eight percent of the value of Regina's belongings, or 45% of non-personal, non-agricultural items, were tied up in beds and bedding, of which there appears to have been six. The number of beds and tables contained in the structure suggests that it was larger than the one-room house plan common throughout the eighteenth century, possibly fitting the two room hall-and-parlor plan. This latter allowed for a greater separation of activities, as well as greater privacy. These structures ranged from 16 by 24 feet to 20 by

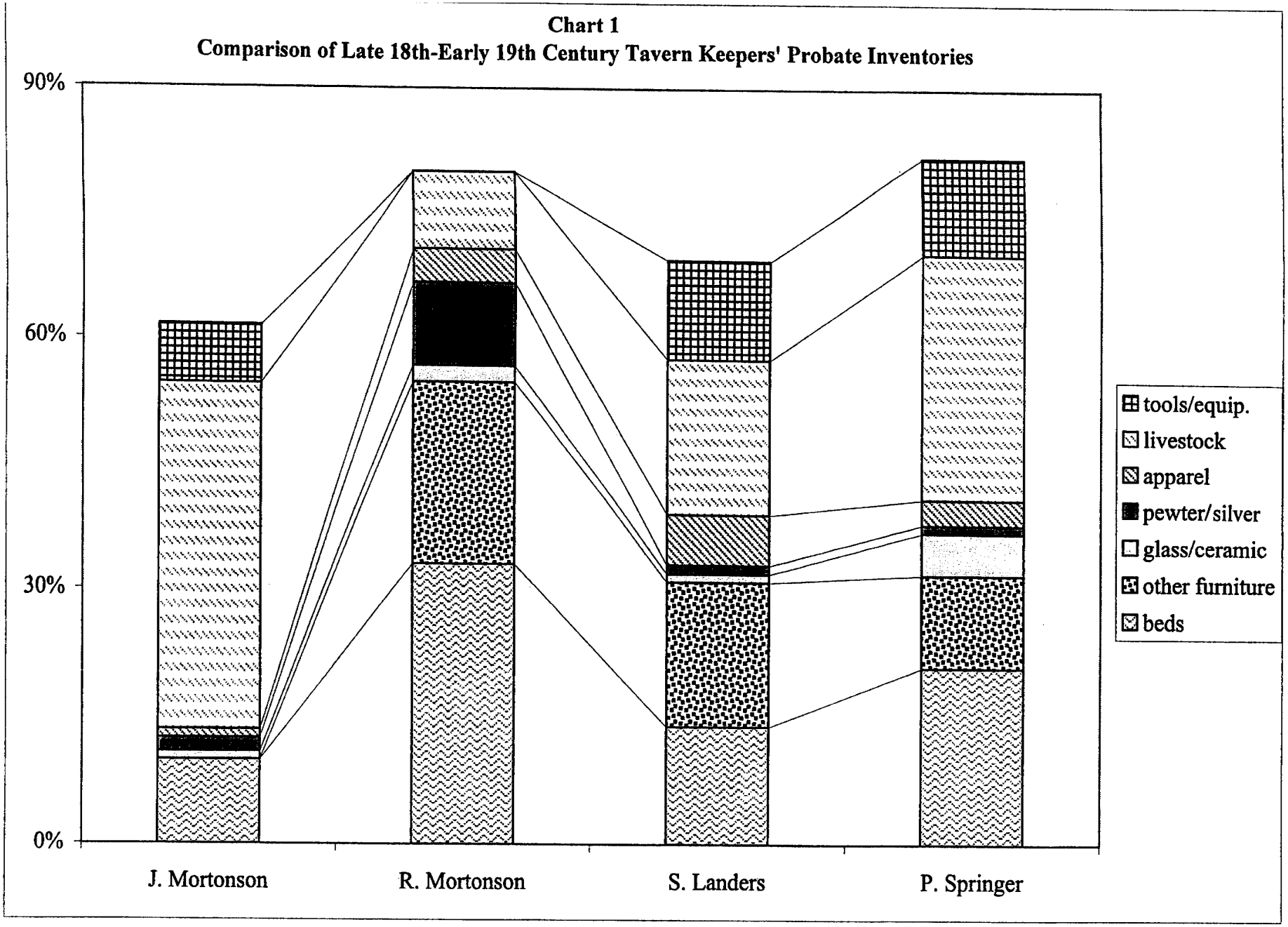


Chart 1
Comparison of Late 18th-Early 19th Century Tavern Keepers' Probate Inventories
90%
60%
30%
0%
J. Mortonson
R. Mortonson
S. Landers
P. Springer
tools/equip.
livestock
apparel
pewter/silver
glass/ceramic
other furniture
beds

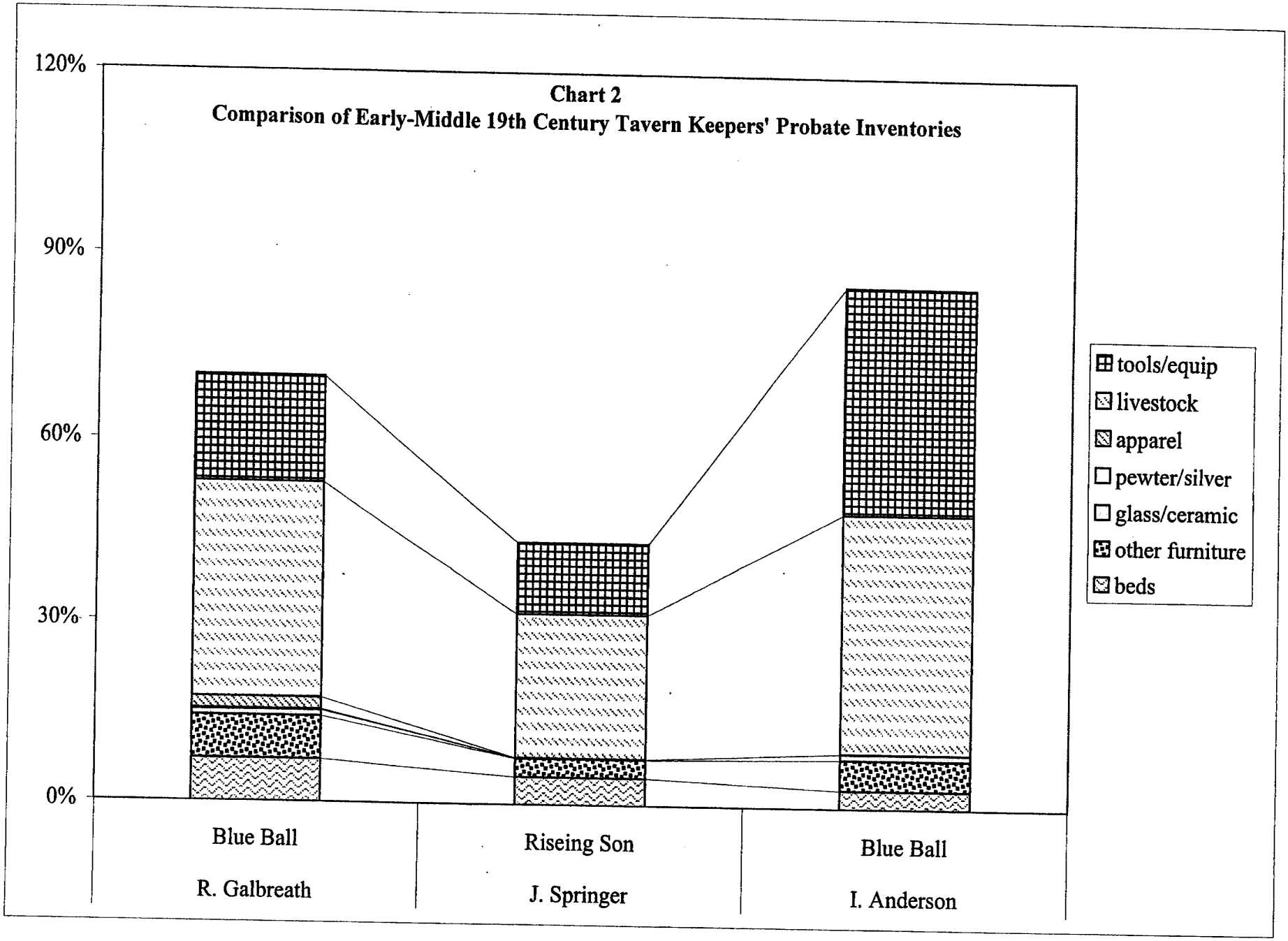


Chart 2
Comparison of Early-Middle 19th Century Tavern Keepers' Probate Inventories
120%
90%
60%
30%
0%
Blue Ball
R. Galbreath
Riseing Son
J. Springer
Blue Ball
I. Anderson
tools/equip
livestock
apparel
pewter/silver
glass/ceramic
other furniture
beds

40 feet and characterized the plantation and mansion houses of the region in the earlier part of the eighteenth century, but were accessible to middle income farmers by around the turn of the [nineteenth] century (Herman 1987b).

Joseph Mortonson's will mentions a "Loft and dwelling house." According to the probate and Orphan's Court records investigations of Herman (1987a:17-18), the loft was often used to store a variety of objects, such as textiles, pewter, knives, forks, tankards, and loose bedding. According to Michael (1973), eighteenth-century country taverns generally consisted of two first floor rooms, a cellar that may have contained a kitchen, and lodging in the second floor and/or attic. Other cases have been observed (Michael and Carlisle 1976) where the dining area and kitchen were both located in the cellar and accessed through a bulkhead entrance. In still other cases, such as the tavern and plantation of Alexander Murphey, the structure consisted of an adjoining shed with one room and a kitchen. If any of these configurations were the case, then a two-story (above ground) one room plan may have been sufficient to accommodate the six beds.

Tax assessments for the years 1802 through 1804 for Lancelot Smith lists "one small house part log part stone" (emphasis added), further suggesting the one-room hall plan. Although the one room could be internally divided, it was probably not necessary, as concerns with privacy were not what they are today. According to Rice (1983:102), it was common to place beds in every public room of a tavern. In rural taverns, customers may have shared their sleeping quarters with the tavern keeper's family. Even after sleeping quarters were made separate from public rooms, patrons may still have shared quarters or even the same bed.

Peter Springer's probate is consistent with what would be expected for a rural tavern keeper. This is seen in the relative high value of beds and bedding to other types of furnishings, the higher value of glass and ceramics to pewter and silver, and the high percentage value of livestock and tools, indicating that the establishment probably functioned as an overnight waylay and a working farm. Eight percent of items in the agriculture/equipment category, including ticking, bagging and linen, appear to have been related to his other profession as a saddler. This category also includes three mares, two colts, two shoats, a cow and calf, carts, gears, wheelbarrows, a duck fan, saddles, bridles, collars, harnesses, hay in the barn, wheat in the ground, rakes, hoes, and an iron bar. The furnishings category included nine table cloths, 20 towels and napkins, ten pairs of sheets, 50 'suit curtains' and 19 chairs. This indicates preparedness for providing lodging and meals. As both Table 7 and Charts 1 and 2 reveal, this is in significant contrast to the his son's Joseph Springer's probate, suggesting that there may have been a shift in the tavern's focus or financial situation under the latter's ownership.

A surprising 54% of Samuel Lander's personal estate was invested in livestock and tools. This may suggest that Brandywine Village, although an apparent hub, was still only semi-urban at the turn of the nineteenth century. Items in this category include bushels of Indian corn and potatoes, a post auger, "48 posts," a riding chair, axes, a spade, handsaw, buckets, carts, a "quantity of manure," a "quantity of corn fodder and weeds in a stack," three cows, a blind mare, a colt, three swine, about five tons of hay, 170 feet of poplar

boards, wagons, a harrow, and three acres of rye in the ground. Kitchen related items include tea kettles and tea ware, pewter, a coffee pot, a coffee mill, a dough tray, meal tubs, and iron pots. Items specific to bar service include 'the bar furniture' and probably the cider casks and pickle tubs. As would be expected, he had more invested in personal items than the others. Only 14% of Lander's total belongings or 37% of his non-personal, non-agricultural items are represented as beds or bedding, of which there appears to have been four. At least 22% of his belongings or 58% of his non-personal, non-agricultural items seem to represent food preparation and service. Having more invested in his 'waring apparel' and furnishings rather than beds and bedding may also be attributed to the tavern's semi-urban setting.

Fifty-seven percent of Robert Galbreath's personal estate value was tied up in agriculture, either in tools, equipment, livestock, or crops in the ground. Some of the tools, such as anvils, malls, wedges, vice, cotter and moldboard, hammers, and 'scrue' plates may indicate blacksmithing, a service perhaps provided for travelers and/or drovers. The farm also consisted of harrows, plows, doubletrees, and livestock (five cows, two calves, four hogs, and three horses, saws, axes, shovels, rakes (one for coal), forks, bridles, and scythes, and a lot of wheat in the ground. Galbreath's probate also mentions items *in the bar* and *in the barn*. This indicates that a barn was standing on the property at this time, and it suggests that the bar may have been separate from the dining area or parlor. Kitchen and bar related items include flower [flour] casks, hanging meat, judges [jugs?], pots and pans, a butter basket, a cask of 'pickle pork,' a meat tub, potatoes, a brass kettle, earthenware, silver ware, pewter, a cutting core, an oven, stove and pipe, seven barrels of vinegar, 'sundries in the bar,' a barrel of 'sides' [cider], 'liquor in the bar,' and a 'cover lid & whiskey barrel.' We can see from the inventory that wooden barrels and casks were used to store quantities of liquor and non-perishable food items, such as grains. Vinegar was probably used as a preservative for perishable food items. At least five beds are indicated, as well several quilts, pillow cases and sheets.

During Galbreath's tenure, the Blue Ball Tavern appears to have functioned as a full service inn, equipped to provide food service and lodging. This may have been a response to the expansion and improvements on the Wilmington and Great Valley Turnpike. The Riseing Son Tavern, on the other hand, appears to have provided minimal services, but focused more intensively on agricultural production, perhaps for market sale and possibly even to the neglect of the tavern/inn.

A very high 82% of Joseph Springer's estate was tied into agriculture or tools. Springer's tools consisted of axes, shovels, a hoe, a lot of hand rakes, scythes, and forks, four cows, one calf, five pigs, a mare and colt, carts, wagons, plows, and doubletrees. Although Galbreath's estate had a larger and more diverse collection of tools, Springer's inventory consists of a larger quantity and diversity of grains and potential crops, including hangings, 91 bushels of corn, a lot of oats, seven bushels of potatoes, and a lot of wheat in the ground. Both Springer's and Galbreath's inventories were taken in the spring; it is unlikely that seasonal farm activity affected the value of crops in the ground.

Springer's inventory does not appear to consist of furnishings and kitchen implements sufficient for the provision of overnight accommodations, and it appears that the tavern/inn was minimally prepared to provide food service. The furnishing contained within this inventory indicate only two beds, one or two bureaus (one case "drawz," and one chest/looking glass), and one dining table. Additionally, no pewter or silver ware is noted, only earthenware. This tavern may have primarily serviced the local community, such as mill workers, for meals and entertainment rather than travelers and drovers for overnight lodging.

Isaac Anderson's inventory shows a marked increase in the amount invested in agriculture, a greater diversity in types of agricultural items, and it explicitly notes the presence of facilities for raising chickens, a slaughterhouse and a blacksmith shop, as well as the barn indicated in earlier probates. Eighty-five percent of Anderson's goods were tied up in agricultural items and tools, 16% of which was for blacksmithing. A smithy shop is shown just across the road by 1849, but there is no evidence that these were one in the same. At this time John Bradford was a tenant on the eastern portion of the Chestnut Hill Plantation, but there is no evidence that he was involved in blacksmithing. The inventory also indicates tools and items (the butter churn and milking tools) that may have been used in dairying. The Weldin dairy across the road was not established until 1862. Other agricultural activities as indicated by the inventory appears to have included grain cultivation and livestock husbandry, specifically chickens and pigs. Anderson's livestock included two horses and a colt, two cows and a yearling, and three baby pigs. Farm equipment consisted of a wagon, two carts, a dearborn, a cultivator, two harrows, five ploughs, three wheel barrows, one sleigh and a straw cutter. Tools included several gears, bridles, chains, shovels, spades, hoes, a corn sheller, axes, a grain fan, feed chestles, a ladder, a saw and bench, a horse rake, scales and sundries. Wheat in the ground is also noted.

According to the inventory there were at least eight beds contained in the Anderson household/tavern establishment. The dining room was also listed separate from the bar room; each was equipped with its own woodstove. Food preparation/storage items include a coffee mill, scales, a dough trough, milk pans and covers, old barrels, a barrel churn, four tubs, a hog barrel, milking utensils and a cooking stove. Items in the bar are extensive including decanters, bar(r) glass, a whiskey barrel, liquor barrels, chairs, benches and a table. The dining room and back room contained at least one dozen chairs, a dining table and bench, as well as earthenware, Queensware, a lot of glass ware, and several brass candlesticks. At this point the cellar was used as a large storeroom.

A comparison of Galbreath's and Anderson's inventories shows a decline in percentage value of beds and bedding, furnishings, tableware and wearing apparel, yet a slight increase in livestock value and marked increase in the value of Anderson's tools. This may be explained through the types of tools he possessed as, for example, blacksmith tools and milking tools, and facilities for raising chickens and animal slaughter. Isaac Anderson's probate, taken in 1850 appears to demonstrate the mid-nineteenth-century trend toward agricultural intensification and diversification in the state.

Architectural and landscape rebuilding was undertaken on a large scale from 1830 to 1860. According to Herman (1987b), "scarcely a single farmhouse emerged unaltered, most were significantly enlarged or replaced." It appears through both documentary and archeological examination and that the Blue Ball Tavern was part of this trend.

Inter-Tavern Comparison

The following inter-tavern analysis is similar to one done by Hunter Research, Inc. (1994) that compared the Rising Son Tavern and the John Ruth Inn. The contexts selected for the following analysis were limited to those that the appeared to be uncontaminated and could be isolated to at least a portion of the tavern's operation. Materials selected for comparison were limited to those believed to constitute elements of a typical tavern assemblage and include tobacco related items (either pipes or snuff jars), glass tableware, coarse ceramic wares, and bottle glass.

The John Ruth Inn Ogletown component I was limited to the eighteenth-century cellar fill. Feature 23, a nineteenth-century trash pit, was used for the John Ruth Inn Ogletown component II. Only Feature 99 was used for the Rising Son Tavern eighteenth-century context, and for the nineteenth-century component, all *in situ* contexts but Feature 99 were used. For the Blue Ball Tavern early nineteenth-century component, the remains from the North Yard surface and Features 43 (levels 2 through 11), 91, and 95 were used. For the middle nineteenth-century Blue Ball tavern component, Feature 81, a trash deposit, was used.

The results presented here show an inverse distribution of items that may be considered a tavern assemblage, suggesting that what constitutes a typical tavern assemblage changed from the eighteenth to nineteenth centuries.

A low frequency of tobacco pipes is apparent for most of the above contexts and has also been noted for the nineteenth century Cherry Valley Tavern in Burlington County, New Jersey. It has been hypothesized that this reflects a post-1812 trend in the tobacco habits of Americans, whereby cigars and tobacco chewing became more popular than pipe smoking (Hunter Research, Inc. 1994). Rice also notes the popularity of cigars after the late eighteenth century (1983). If this is correct, all the above contexts but the Riseing Son Tavern II component seems to corroborate the temporal distinction in pipe use from the eighteenth to nineteenth centuries. Comparisons should be made here between these taverns and eighteenth- and nineteenth-century assemblages from Virginia or Maryland to see if this hypothesis is confirmed or if, in fact, it appears to reflect regional cultural variation. Comparisons with local urban taverns may also reflect differences in tobacco use habits.

Table 8

Distribution Of 'Tavern Assemblage' Items 18th Through 19th Centuries

Establishment	Tobacco	Glass tableware	Coarseware	Bottle Glass
John Ruth Inn, Ogletown component I (MCD 1750, TPQ 1780)	20%	2%	30%	12%
John Ruth Inn, Ogletown component II (MCD 1806, TPQ 1820)	10%	3%	4%	15%
Rising Son Tavern I (MCD 1766)	3%	1%	46%	11%
Rising Son Tavern II (MCD 1822)	1%	2%	15%	20%
Blue Ball Tavern I (MCD 1802, TPQ 1816)	1%	12%	6%	19%
Blue Ball Tavern II (MCD 1839, TPQ 1857)	0.2%	1%	11%	24%

A high frequency of glass tumblers is present only in the Blue Ball Tavern I assemblage. A similar trend has also been noted for the Cherry Valley Tavern. It has been noted (Hunter Research, Inc., 1994) that although glass stemware and tumblers were both available, and stemware was more inexpensive and considered 'socially and aesthetically superior,' tumblers were more the norm, possibly for their durability provided by heavy bases.

The basic pattern to emerge is a decline in the proportion of tobacco items and coarseware through time and an increase in the proportion of glass tableware and glass bottles. The John Ruth Inn and the Rising Son Tavern are most similar regarding the trends expressed. However, the John Ruth Inn stands out with its high percentage of

tobacco items when compared to the other two. Also, the Blue Ball Tavern appears to fall away from the trends demonstrated through the other two. The high proportion of glass tableware in the earlier component and the decline rather than an increase in glass tableware and the low proportion of coarseware in the earlier component and proportional increase later in time suggest a shift in status or possibly reflect ethnicity in the Blue Ball proprietorship.