

Chapter 14. Site 36LU283 (Site 7)

Phase Ib and Phase II

Location: West Alternative, Section 30

Site Type: Late 19th to Late 20th Century Farmstead

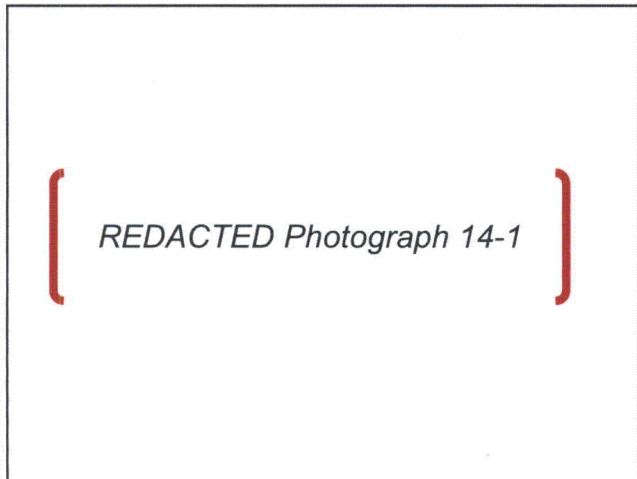
Site Size: 82x168 meters (270x550 feet)

Recommendations: Not NRHP Eligible

Site Setting

GAI conducted a Phase Ib survey and a Phase II National Register site evaluation of Site 36LU283 (GAI Site 7). Site 36LU283 was encountered during Phase Ia reconnaissance and was identified by PPL personnel as the location of the former Sink Farmstead. It is located in a field on an upland flat in the West Alternative, Section 30 (see Figure 1-3, Figure 14-1; Photograph 14-1). The L-shaped site, with a long, narrow east-west axis and a broader, north-south axis on the east end, flanks the north edge of Confers Lane at a sharp bend in this road.

Proposed project impacts within the site area will result from grading and roadway construction.



Photograph 14-1. Overview of Site 36LU283 from Confers Lane, showing Locus 1 in Area of Trees to Right, and Locus 2 at Bend in Road in Distance, Facing West

The site was divided into two loci during the Phase Ib, with Locus 1 centered on a barn/silo foundation (Feature 1) at the western end of the site, and Locus 2 centered on a house foundation (Feature 2) on the east end of the site. Approximately 310 ft separates the barn and house foundations. A wetland and unnamed stream lies north of Locus 1 and west of Locus 2.

Locus 1 is delineated by Confers Lane to the south and a gravel farm access road to the southwest. The barn foundation with an attached silo foundation covers most of the southwest end of the site area (Photograph 14-2). Current vegetation consists of sparse woods and thick underbrush. Trees within the barn interior indicate that the structure was demolished decades ago.

Locus 2 is vegetated in dense underbrush. The line of evergreen trees to the south created a border between Confers Lane and the domestic habitation area of the site (Photograph 14-3). The evergreen trees on the west side of the house foundation would have created a spatial separation between the yard area and the field around the barn. Two shaft features were also located near Feature 2, including an open well (Feature 3) and a covered concrete block-lined circular feature (Feature 4).

Photograph 14-2. Site 36LU283: Locus 1, showing Feature 1 (Barn Foundation), Facing East



Photograph 14-3. Site 36LU283: Locus 2, showing Shovel Testing in Area of Feature 2 (House Foundation), Facing West



Site 36LU283 has dimensions of 82x168 meters (270x550 feet) and an elevation of approximately 670 feet amsl.

Disturbances in the site area resulted from cultivation as well as construction of the gravel farm lane and Confers Lane. Historic Sites 36LU280 and 36LU281 lie in cultivated fields 198 meters (650 feet) to the east and 20 meters (75 feet) to the southeast, respectively (see Figure 14-1).

Phase Ib Investigations

Phase Ib investigations of Site 36LU283 began with systematic 15-meter-interval shovel testing throughout the site area (Figure 14-2). Dense brush was cleared in the immediate area of the identified foundations in order to expose the extent of structural remains. Close-interval (5-meter) shovel testing ($n=49$ STPs) and judgmental shovel testing were then conducted adjacent to the former barn/silo (Feature 1) and house (Feature 2) foundations for a total of 70 STPs (see Figure 14-2). The foundations were mapped and photodocumented.

The house foundation (Feature 2) in Locus 2 consisted of a shallow surface depression measuring approximately 8x9 meters (26x30 feet) with a 1.5x1.5-meter (5x5-foot) extension along its east wall. Partially exposed cut stone and brick were observed at ground level along portions of the wall, including the northwest, southwest, and southeast corners and the eastern extension. An open, stone-lined well (Feature 3) lay 2 meters (7 feet) north of Feature 2.

Another shaft feature (Feature 4) was located approximately 10 meters (33 feet) northwest of Feature 2.

The barn foundation (Feature 1) in Locus 1 was a stone and concrete foundation with dimensions of approximately 14.5x25 meters (48x82 feet) (see Photograph 14-2). The foundation wall height varied 0.6 and 1.9 meters (2 and 6 feet) high. A 3.5-meter (12-foot) diameter, concrete-lined silo was attached to the northwest corner of the foundation.

Shovel testing revealed an A-B horizon soil sequence throughout most of the site area, along with localized areas of disturbance (Figure 14-3). The profile of STP A8, located 5 meters (16 feet) west of Feature 1, consisted of a 27-cm-thick brown silt loam A horizon above a yellowish-brown silt loam B horizon. Surface fill deposits, extending to a depth of 40 cm below surface, were observed in STP B3, situated 10 meters (33 feet) northeast of Feature 1 (see Figure 14-3; STP B3). STP A6, excavated 5 meters (16 feet) north of Feature 2 exposed a 35-cm-thick brown silt loam A horizon and a yellowish-brown sandy loam B horizon.

Of the 70 STPs excavated within Site 36LU283, 42 positive STPs produced 386 historic artifacts. Artifact density ranged from 1 to 38 artifacts per STP. Nearly two-thirds (61 percent) of the artifact assemblage fell within the kitchen group (Table 14-1). These artifacts consisted primarily of ceramics ($n=130$) and bottle glass ($n=100$). The sample of ceramics included whiteware ($n=91$) and lower frequencies of redware, stoneware, yellowware, and porcelain ceramic sherds. Bottle and jar glass was recovered in a variety of colors (amber, aqua, blue, clear, cobalt, emerald green, green, and sun colored amethyst) tumblers, canning jar lid liners, and pressed or other decorative glass.

Table 14-1. Site 36LU283: Phase Ib Pattern Analysis, Historic Artifacts

Class	Subclass	Object/Ware	Count	Percentage	
Activities	Farming	chain, metal	3	0.78%	
	Flowerpots	terra cotta	4	1.04%	
	Heating	coal, fragment	3	0.78%	
	Machine Parts/Hardware		bolt	2	0.52%
			hardware, indeterminate metal	1	0.26%
			machine part, metal	1	0.26%
			metal tab	1	0.26%
			nut, metal	1	0.26%
			ring, metal	1	0.26%
	Toys		wire, metal	2	0.52%
marble, glass			1	0.26%	
truck, metal/plastic			1	0.26%	
Activities Total			21	5.44%	
Architecture	Brick, Block	brick	1	0.26%	
		brick, fragment	7	1.81%	
	Nails, Spikes, Etc.		nail, cut	2	0.52%
			nail, indeterminate	36	9.33%
			nail, wire	1	0.26%
	Window Glass	window glass	39	10.10%	
Architecture Total			86	22.28%	
Arms	Ammunition	.22 shell	1	0.26%	
		.22 shell casing	1	0.26%	

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Class	Subclass	Object/Ware	Count	Percentage
		.38 shell	1	0.26%
	Arms Related-Other	clay pigeon, fragment	12	3.11%
		Arms Total	15	3.89%
Clothing	Clothing Fasteners	button, wood	1	0.26%
Faunal	Bone	bone, fragment	7	1.81%
		tooth	1	0.26%
		Faunal Total	8	2.07%
Furnishings	Lighting	lamp glass	1	0.26%
Kitchen	Bottles/Jars	beer bottle	9	2.33%
		bottle glass	86	22.28%
		canning jar lid liner	3	0.78%
		jar glass	1	0.26%
		lightning stopper	1	0.26%
	Ceramics	porcelain	6	1.55%
		redware	14	3.63%
		redware paste	2	0.52%
		redware, paste	1	0.26%
		stoneware	1	0.26%
		stoneware, buff	14	3.63%
		whiteware	91	23.58%
		yellowware	1	0.26%
	Decorative Table Glass	decorative glass	1	0.26%
		pressed glass	4	1.04%
	Tumblers, Stemware	tumbler	1	0.26%
		Kitchen Total	236	61.14%
Personal	Cosmetics	cosmetic jar	2	0.52%
	Personal-Other	bead/ring	1	0.26%
	Pharmaceutical	bottle glass	1	0.26%
		Personal Total	4	1.04%
Unidentifiable	Indeterminate	metal, bar	1	0.26%
		metal, fragment	1	0.26%
		metal, indeterminate	12	3.11%
		Unidentifiable Total	14	3.63%
		TOTAL	386	100.00%

Architecture-related debris, primarily nails and window glass, comprised 22 percent of the assemblage. Most of the nails were heavily corroded; however, small quantities of cut and wire nails were identified.

Other types of artifacts were present in smaller quantities. Activities-related artifacts included a glass marble and plastic truck, a machine part, wire, metal bar, terra cotta drainpipe, bolt and nut, and coal. Gun shells and clay pigeon pieces fell within the arms group. Personal artifacts included a cosmetic jar and a prescription medicine bottle. A wood button was the only clothing-related artifact. One lamp chimney glass fell within the furnishings group. Faunal remains

included animal bone and tooth fragments. The remaining items were unidentified artifacts, mostly corroded metal pieces.

Based on preliminary analysis, the assemblage contained 97 temporally diagnostic specimens, consisting largely of ceramics along with some glass pieces and nails (Table 14-2). A mean date of 1913 was calculated for these diagnostic specimens. Based on the artifact assemblage the site dated from the late-nineteenth century to mid-twentieth century. The cartographic sources supported this conclusion and indicated that this domestic site was abandoned sometime between 1939 and 1955.

Table 14-2. Site 36LU283: Phase Ib Dating Analysis, Historic Artifacts

Material	Description	Count	Begin Date	End Date	Reference
Nail, cut		1	1790	1890	Nelson 1968
Nail, wire		1	1880	2008	Nelson 1968; IMAC 1984
Bottle glass	sun colored amethyst	9	1880	1915	Miller & Pacey 1985
Bottle glass	patent finish	1	1860	1935	Jones & Sullivan 1987
Canning jar lid liner	white opaque	2	1869	1950	Toulouse 1971
Whiteware	decal	3	1890	2008	Haskell 1981
Whiteware	shell edge, blue	1	1830	1860	Lofstrum et al. 1982; Miller & Hunter 1990
Whiteware	banded	1	1830	1860	Majewski & O'Brien 1984
Whiteware	annular	1	1830	1860	Price 1979; Mullins 1988
Whiteware	plain	75	1830	2008	Price 1979; Noel Hume 1980
Whiteware	hand painted	1	1840	1860	Lofstrum et al 1982; Majewski & O'Brien 1984
Yellowware	plain	1	1830	1900	Ketchum 1983
	TOTAL	97			
	Mean Date	1913			

Phase Ib Summary and Recommendations

Based on the results of Phase Ib survey Site 36LU283 represents a 19th to 20th century farmstead with associated foundations and a relatively high density of artifacts and features, including a stone house foundation, a stone and concrete barn foundation, and a stone-lined well and a possible well/cistern. Phase Ib shovel testing indicated that the site had good integrity. GAI concluded that Site 36LU283 may have a potential to yield features and additional diagnostic artifacts, which could contribute important information on the historic occupation of this locality. Based on its information potential, Site 36LU283 was recommended as Potentially Eligible to the NRHP under Criterion D and GAI recommended site avoidance or Phase II testing. PHMC-BHP reviewed preliminary results presented in GAI's Phase Ib Management Summary (Munford and Tuk 2008) and in a March 2, 2009 review letter (see Appendix A) concurred with these recommendations. Because Site 36LU283 could not be avoided by project construction, a Phase II investigation was undertaken to determine the site's NRHP eligibility.

Phase II Methods

The Phase II study was designed to: (1) interpret the cultural affiliation and function of the site; (2) identify the horizontal and vertical site limits; (3) determine site integrity; (4) assess the site research potential; and (5) evaluate site significance as defined by eligibility for listing on the National Register of Historic Places. Phase II fieldwork was conducted between July 9 and August 11, 2009.

Phase II investigations used a three-pronged approach that included archival research, field excavations, and laboratory analysis. The archival research focused on the former landowners. Fieldwork began with excavation of STPs on a 15-foot (4.6-meter) grid followed by excavation of judgmentally placed test units.

Phase II Archival Research

Map, deed, probate, and census documents were examined to develop a context and establish a chain-of-title for the property. Archival research, which included patent, deed and orphan court records investigations, was used to create a chain-of-title for the parcels of land containing Site 36LU283 (Table 14-3). Site 36LU283 contained two separate components: a barn foundation (Locus 1) and a house foundation (Locus 2). Locus 1 of Site 36LU283 and Site 36LU281 are located on the same parcel of land that was originally granted to Emanuel Hover by the Commonwealth of Pennsylvania on March 10, 1806. A warrantee map of 1848 land ownership lists Emanuel Hover as the original owner (Figure 14-4). Locus 2 of Site 36LU283 was part of this same parcel until it was divided from the original holdings and sold separately in 1957. The chain-of-title and ownership history for Site 36LU283 and Site 36LU281 is the same until the division of property encompassing Locus 2 of Site 36LU283. This division of the parcel is reflected in the chain-of-title, and will be discussed in detail below. The chain-of-title research established a link between Site 36LU283 and several local farmers.

Table 14-3. Site 36LU283: Chain-of-Title

Date of Instrument	Grantee/Defendant	Grantor/Complainant	Conveyance Reference	Comments
July, 1 2000	PPL Susquehanna LLC	PPL Electric Utilities Corporation	Luzerne County Deed Book 2741:702	(Locus 1 and 2)
July 29, 1986	PPL Electric Utilities Corporation	William E. Kisner	Luzerne County Deed Book 2206:613	(Locus 1)
December 29, 1984	PPL Electric Utilities Corporation	William H. Sink and Dorothea V. Sink	Luzerne County Deed Book 2150:792	7.146 acres (Locus 2)
March 1, 1957	Emery R. Kisner Jr. and William E. Kisner	C. Grant Brittingham, Mary Brittingham, et ux.	Luzerne County Deed Book 1345:89	70.8 acres, sold for \$1,950 (Locus 1)
January 19, 1957	William H. Sink and Dorothea V. Sink	C. Grant Brittingham, Mary Brittingham, et ux.	Luzerne County Deed Book 1342:441	6.2 acres (Locus 2)
March 10, 1928	C. Grant Brittingham et ux.	J. Grant Long	Luzerne County Orphans Court Records no. 332	70.8 acres (more or less)
February 18, 1920	J. Grant Long	Eva J. Ferrell	Luzerne County Deed Book 536:300	77 acres, sold for \$5,500
April 30, 1913	Eva J. Ferrell	Miles G. Shultz and Martha Shultz	Luzerne County Deed Book 488:478	77 acres, sold for \$2,400
January 25, 1910	Miles G. Shultz and Martha Shultz	W.C. Davenport and Addie Davenport	Luzerne County Deed Book 457:591	77 acres, sold for \$2,850
January 12, 1882	Ellen Frace	Jacob Gould	Luzerne County Deed Book 237:553	77 acres (more or less) Willed
May 23, 1881	Jacob Gould	Paul Fortner (administrator of William Hicks)	Luzerne County Deed Book 225:510	78 acres, sold for \$3055
April 10, 1815	Samuel Hicks	Emanuel Kirkendall and Mary Kirkendall	Luzerne County Deed Book 16:147	57 acres, sold for \$1100
May 15, 1809	Emanuel Kirkendall	Moses Parks	Luzerne County Deed Book 11:197	57 acres, sold for \$450
January 22, 1809	Moses Parks	Emanuel Hover and Cornelia Hover	Luzerne County Deed Book 11:116	57 acres, sold for \$350
March 10, 1806	Emanuel Hover	Commonwealth of Pennsylvania	Map of Salem TWP original patents, Luzerne Co. Historical Society	71 acres

Further research, which included Federal Census data, tax assessment rolls, agricultural census data, and local literature, was used in conjunction with deeds to develop the overall history of Site 36LU283.

When the Commonwealth of Pennsylvania granted Emanuel Hover 71 acres of land in Salem Township on March 10, 1806, he had already been living in the area for at least six years. The 1800 Federal Census listed Emanuel Hover as the head of a household of five people residing in Salem Township (Emanuel and his wife Cornelia, both listed as being between the age of 16 and 26, and three females, presumably his daughters, all under the age of 10).

Emanuel and Cornelia Hover sold 57 acres of their property to Moses Parks on January 22, 1809, for \$350.00. A few months later, on May 15, 1809, Moses sold the same 57 acres to Emanuel Kirkendall for \$450.00. Emanuel Kirkendall was listed in the 1810 Federal Census as a farmer and the head of a household of 10 people who resided in Salem Township (one male and two females under the age of 10, one male and two females between the ages of 10 and 16, two males between the ages of 16 and 26, and one male and one female, presumably Emanuel and his wife Mary, between the ages of 26 and 45). The census also listed that he owned three slaves. An 1812 tax assessment of Emanuel Kirkendall stated that of his 57 acres, 30 were improved (Table 14-4). The tax assessment also listed Emanuel's occupation as a farmer, and stated he owned one house and one outbuilding with a total value of \$361.00. These documents show that the area containing Sites 36LU281 and 36LU283 was being farmed at that early date. However, the house documented in the 1812 tax assessment is most likely represented by the artifact assemblage recovered from Site 36LU281.

Table 14-4. Site 36LU283: Emanuel Kirkendall Tax Assessment

Description	1812
Improved Land	30 acres
Unimproved Land	27 acres
Lots of land	1
Houses	1
Outbuildings	1
Mills	0
Horses	0
Oxen	0
Cows	0
Occupation	Farmer
Total Valuation	\$361.00

Emanuel and Mary Kirkendall sold their 57 acres of property to Samuel Hicks for \$1,100.00 on April 10, 1815. Samuel Hicks had lived in Salem Township since at least 1796, as he appears on a list generated that year of taxable men living in the township. An 1815 tax assessment recorded that he owned 85 acres of improved land and 76 acres of unimproved land on one lot. This assessment also recorded two houses, two horses, and five cows with a total value of \$763.00 (Table 14-5). It is unclear whether this assessment included the property acquired from the Kirkendalls in addition to property already owned by Samuel Hicks as one lot, or if this assessment was for land owned by Samuel prior to his acquisition of the Kirkendall tract. However, it illustrates that Samuel was engaged in agriculture when he purchased the property from the Kirkendalls in 1815.

In 1820, Samuel was listed in the Federal Census as the head of a household consisting of eight people (two females between the ages of 10 and 16, one male between 16 and 18, two males and one female between 16 and 26, and one male and female, presumably Samuel and his wife, were 45 or older). Two people within the household were listed as engaged in agriculture.

Ten years later, the Federal Census listed only Samuel and a female, presumably his wife, as living in the household, both listed as between the ages of 60 and 70. This census reveals that

all of Samuel's children had left the household by this time. A tax assessment also from 1830 recorded that Samuel owned a horse, a cow, a house, and an outbuilding on one lot consisting of no acres of land (see Table 14-5). Considering this tax assessment coincides with the Federal Census stating that none of Samuel's children were residing in his household, it suggests that his property may have been transferred to one or more of his relatives. Sometime prior to 1859, Samuel Hicks purchased 20 acres east of his property, located south of Site 36LU280 and east of Site 36LU281, and comprised the southern portion of an original 95-acre tract (see Chapters 11 and 12).

Table 14-5. Site 36LU283: Samuel Hicks Tax Assessments

Description	1815	1830
Improved Land	85 acres	0
Unimproved Land	76 acres	0
Lots of land	1	1
Houses	2	1
Outbuildings	0	0
Mills	0	0
Horses	2	1
Oxen	0	0
Cows	5	1
Occupation	Farmer	Farmer
Total Valuation	\$763.00	\$58.00

It is unknown when Samuel Hicks' property was transferred to William Hicks, but on May 23, 1881, Paul Fortner, acting as the administrator of William Hicks' estate, sold 77 acres of William's property to Jacob Gould. These 77 acres consisted of three parcels that William Hicks had previously acquired, including the 57 acres that Samuel Hicks had purchased from Emanuel and Mary Kirkendall (Luzerne County Deed Book 16:147). The 1830 tax assessment of Samuel Hicks, recording that he owned no acreage, may suggest that the transfer of his property to William occurred sometime around that date.

In 1820, William Hicks was listed in the Federal Census as the head of a household consisting of five people residing in Salem Township. Within his household were one female under the age of 10, one female between 10 and 16, one male (presumably William) between the ages of 26 and 45, and one female over the age of 45. Two people within the household were listed as engaged in agriculture.

The 1830 Federal Census recorded William as the head of a household consisting of eight people (one male and one female under the age of five, two males between five and 10 one male and one female between 10 and 15, one female between 30 and 40, and one male, (presumably William) between 40 and 50. The 1830 tax assessment for William Hicks stated that he was a farmer who owned a 120-acre lot consisting of 60 improved acres, and the total value of his estate was recorded at \$1,312.00. This assessment also recorded he owned a house and outbuilding (Table 14-6).

A tax assessment conducted in 1835 recorded that William still owned one house, although another outbuilding had been added. However, this tax assessment states he owned two lots totaling 60 acres improved and 40 acres unimproved, and the total value of his estate was assessed at \$756.00. Five years later, William Hicks's tax assessment recorded he had cleared an additional 10 acres of land, and only one outbuilding was on his property. The total value of his estate during this assessment was \$1,074.00 (see Table 14-6).

Table 14-6. Site 36LU283: William Hicks Tax Assessments

Description	1830	1835	1840	1875
Improved	60 acres	60 acres	70 acres	60 acres
Unimproved	60 acres	40 acres	30 acres	32 acres
Lots of acre	1	2	2	2
Houses	1	1	1	1
Outbuildings	1	1	1	1
Mills	0	0	0	0
Horses	1	0	1	0
Oxen	0	0	0	0
Cows	4	2	3	0
Occupation	Farmer	Farmer	Farmer	Farmer
TOTAL	\$1,312.00	\$756.00	\$1,074.00	\$2,138.00

In 1850, William Hicks was 61 years old and the Federal Census listed him as the head of a household consisting of seven people (his 51-year-old wife Sarah, their 22-year-old son Thomas, 21-year-old daughter Mary, 18-year-old son Martin, and their 16-year-old son Stephen). Also listed in the household was an 86-year-old woman named Casandra Hicks. William, Thomas, and Stephen were listed as farmers. While no relation is listed for Casandra, it is possible that she was the mother of William. Considering that the 1830 census listed Samuel Hicks and his wife between the ages of 60 and 70, and the 1850 census listed Cassandra as 86, it is possible that Cassandra was Samuel's wife, and William their elder son. This would explain the unrecorded transfer of land between Samuel and William.

William Hicks' farm was the subject of the Federal Agricultural Census in 1850 (Table 14-7). This agricultural census illustrates that diversified farming occurred on the property. The schedule reveals that William and his family were involved in the raising of dairy cows, sheep, and bees for the production of butter, wool, and honey and beeswax, as well as the raising of swine and cattle for slaughter. They also harvested numerous cereal and vegetable crops including oats, wheat, rye, buckwheat, corn, and potatoes. The Agricultural Census also recorded the manufacture of homemade goods. These activities illustrate a joint effort of all members of the family towards the production and capital of the farm.

Table 14-7. Site 36LU283: Agricultural Schedule

Owner: William Hicks	1850	1870
Improved Land (acres)	120	60
Unimproved land (acres)	55	40
Cash Value of Farm	\$5,200.00	\$10,000.00
Value of Farming Implements	\$150.00	\$280.00
Wages Paid for Labor and Board	n/a	\$210.00
Horses	5	4
Asses and Mules	0	0
Milk Cows	5	1
Working Oxen	0	0
Other Cattle	3	1
Sheep	15	0
Swine	20	7
Value of Livestock	\$514.00	\$720.00
Poultry (Barnyard/Other)	n/a	n/a
Eggs Produced	n/a	n/a
Wheat (bushels)	150	100

Owner: William Hicks	1850	1870
Rye (bushels)	60	50
Indian Corn (bushels)	200	150
Oats (bushels)	200	150
Rice (lbs.)	0	0
Tobacco (lbs.)	0	0
Wool (lbs.)	30	0
Peas & Beans (bushels)	0	0
Irish Potatoes (bushels)	100	150
Sweet Potatoes (bushels)	0	0
Barley (bushels)	0	0
Buckwheat (bushels)	40	50
Apple Bearing Trees/Bushels	n/a	n/a
Value of Orchard Products	\$0.00	\$10.00
Wine (gallons)	0	0
Value of Produce of Market Gardens	\$0.00	\$0.00
Butter (lbs.)	300	600
Cheese (lbs.)	0	0
Hay (tons)	14	12
Clover Seed (bushels)	0	0
Other Grass Seed (bushels)	0	0
Hops (lbs.)	0	0
Flax (lbs.)	0	0
Flaxseed (bushels)	0	0
Maple Sugar (lbs.)	0	0
Cane Sugar (lbs.)	0	0
Molasses (gallons)	0	0
Beeswax and Honey (lbs.)	500	0
Value of Home-made Manufactures	\$15.00	\$0.00
Value of Animals slaughtered.	\$109.00	\$60.00
Estimated Value of Farm Production	n/a	\$171.00

In 1860, William Hicks was a 70-year-old farmer. A review of the Federal Census for that year suggests that by this time his wife Sarah had passed away. Living in the house with William was his 26-year-old son Stephen, Stephen's 24-year-old wife Margaret, and their two daughters, four-year-old Anna, and one-year-old Sarah.

Ten years later the census still recorded William as a farmer; however, his other son Thomas, 43 years old, Thomas' 27-year-old wife Julia, and their four children (10-year-old Lockhart, eight-year-old Robert, six-year-old Alice, and two-year-old Maggie) were listed as living in the house. This census valued William's real estate at \$10,000.00 and his personal estate at \$1,122.00.

A review of the 1870 Agricultural Census revealed the improved land on the Hicks farm consisted of half the acreage it did in 1850. However, the cash value of the farm had almost doubled. The only increase in cultivation was in the production of butter (which doubled between 1850 and 1870), potatoes, buckwheat, and orchard products. The rest of the commodities of the farm decreased from their 1850 levels, and no sheep or bees were raised in 1870. Furthermore, the number of milch [sic] cows dropped from five in 1850 to one in 1870, while the production of butter increased from 300 pounds in 1850 to 600 pounds in 1870 (see Table 14-7).

It was during William Hicks' ownership of the property that an 1873 map depicting the project area was published (Figure 14-5). Although this 1873 map does not depict any structures in the vicinity of Site 36LU283, it does illustrate a structure labeled "W. Hicks Est." in the vicinity of Site 36LU281. This map suggests that the house documented in the above tax assessments refer to a structure that was located within the vicinity of Site 36LU281, and represented by the abovementioned structure labeled on the 1873 map. Considering that no structures were marked in the vicinity of Loci 1 and 2 of Site 36LU283, it is assumed these buildings were constructed after 1873 and prior to 1939, when they appear on an aerial photograph of the area.

In 1875, when William Hicks would have been about 85 years old, a tax assessment for his property stated he still owned one house and outbuilding, and two lots of ground, with 60 acres improved, and 32 acres unimproved. His estate was valued at \$2,138.00 (see Table 14-6). It is assumed that by 1880 William Hicks had passed away, as he is not listed in that year's Federal Census. However, the census states that Thomas Hicks and his family still lived in Salem Township. It is unknown if Thomas and his family continued to live in William's house after he passed away. According to the 1880 Federal Agricultural Census, Thomas Hicks rented 135 acres of land for a share of the products, indicating that after his father's death he did not own the farmstead. It is unknown if the land he farmed was his father's old land, or if it was an entirely different plot of land.

After William Hicks' death the property was sold by Paul Fortner, William's administrator, to Jacob Gould for \$3,055.00 on May 23, 1881. Jacob Gould was born ca. 1819 in Pennsylvania, making him about 62 years old when he purchased William Hicks' property. The previous year's Federal Census listed Jacob as a farmer and the head of a household consisting of seven people. Besides Jacob, the household included 22-year-old farm laborer William Case, 49-year-old Ellen Frace, 17-year-old domestic servant Fanny Robert, 25-year-old William Chester Davenport, William's 26-year-old wife Agnes, and their one-year-old daughter Pearl. Ellen Frace was twice-widowed and a relative of Jacob Gould. Her first husband died when their son, William Chester Davenport, was an infant. Ellen remarried in 1857 (two years after her son William was born) to George Frace, who was later killed in the Civil War. After George Frace's death, Jacob Gould took in Ellen Frace and her son William Chester Davenport. Jacob Gould died shortly after purchasing the property in 1881 and he left it to Ellen Frace in his will. The deed for this transaction was recorded on January 12, 1882 (Luzerne County Deed Book 237:553).

The 1900 Federal Census listed William C. Davenport as a 45-year-old farmer and head of a household consisting of nine people. Besides William, the household included his 28-year-old wife Addie, their eight-year-old daughter Mary M., six-year-old son Chester, five-year-old daughter Dasie, four-year-old son Gould W., two-year-old daughter Jennie F., and eight-month-old daughter Reber R. William's mother Ellen Frace, who officially owned the farm, was also listed in the household. The census noted that the farm was owned free of mortgage.

William Chester Davenport inherited his mother's property when she died in 1908. Shortly thereafter, on January 25, 1910, William and his wife Addie sold the 77-acre property to Miles G. and Martha Shultz for \$2,850.00. Miles G. Shultz is listed as a 22-year-old farmer and head of a household of four persons residing in Salem Township in the 1910 Federal Census. Besides Miles, the household included his 26-year-old wife Martha, their three-year-old son Boyd, and a 21-year-old farm hand named Frank Runton. The census illustrates that the property was still being farmed in 1910.

On April 30, 1913, Miles and Martha Shultz sold the property to Eva J. Ferrell for \$2,400.00, who in turn, on February 18, 1920, sold the property to J. Grant Long for \$5,500.00. Unfortunately, J.

Grant Long was not entered into the Pennsylvania Triennial Farm Census of 1927; therefore, twentieth-century agricultural census data is not available for comparison and analysis. This would suggest that the Longs were not earning their living by farming in 1927. J. Grant Long died on March 10, 1928 and his property was willed to his wife Sarah S. Long. Mr. Long's will, filed in folio 332 of the Orphan's Court of Luzerne County, stated that his land was to be transferred for life to his wife, then to his daughter Jessie M. Long Brittingham, and then to her children. It was during his wife Sarah's ownership that an aerial photograph was taken of the property in 1939 (Figure 14-6). Although this aerial does not depict any structures within the vicinity of Site 36LU281, it does depict structures in the locations of Loci 1 and 2 of Site 36LU283, and the presence of an orchard to the north of Locus 2 of Site 36LU283. This photograph reveals that between 1873 and 1939 the structures represented by Site 36LU283 were constructed, and the structure labeled "Wm. Hicks Est." on the 1873 map, in the location of Site 36LU281, had been demolished. The 1939 aerial photograph also reveals two outbuildings between the house and the orchard to the north.

Sarah Long died on January 31, 1946, and Jessie M. Long Brittingham died on September 29, 1955, whereupon the land became vested in fee to Jessie's children and their respective spouses. A 1955 USGS quadrangle map depicts the structure in the vicinity of the house that is represented by the foundations in Locus 2 of Site 36LU283 (Figure 14-7).

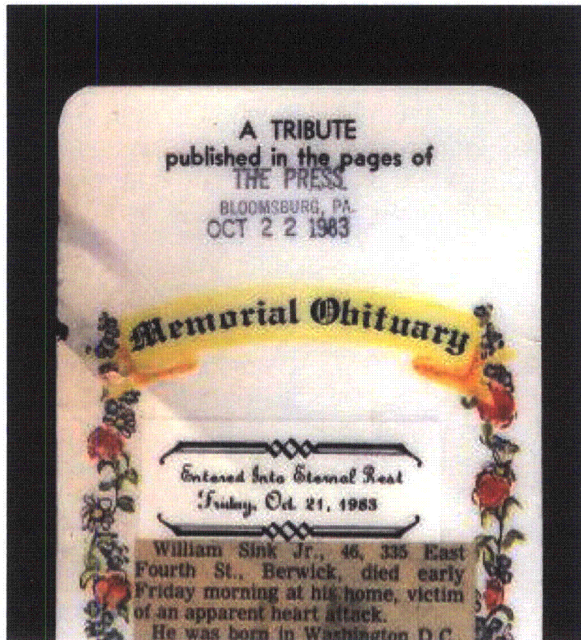
On January 19, 1957, C. Grant and Mary Brittingham, along with the remaining heirs of Jessie Brittingham, sold the 6.2 acres of their holdings to William H. and Dorothea V. Sink that contain the farmhouse and adjacent property represented by Locus 2 of Site 36LU283.

The remaining land, containing Site 36LU281 and Locus 1 of Site 36LU283, was sold to William Kisner and Emery R. Kisner Jr. on March 1, 1957. William and Emery Kisner were in the process of expanding their farm, where Sites 36LU279 and 36LU286 are located, and this purchase added to their already large landholdings. During the Kisner's ownership of the property containing Locus 1 of Site 36LU283, and William and Dorothy Sink's ownership of the property containing Locus 2 of Site 36LU283, aerial photographs were taken of the properties in 1959 and 1969 (Figures 14-8 and 14-9). The aerial photograph taken in 1959 reveals that there is less cleared land adjacent to Locus 1 and Locus 2 of Site 36LU283. While the house located in Locus 2 is clearly discernable in the 1959 aerial photograph, it appears that the barn represented by Locus 1 of Site 36LU283 was demolished by this time. Based on the vegetation growing in the former barn location in Locus 1, it appears that the barn was no longer present when the property was sold to the Kisners. Both the 1959 and 1969 aerial photographs indicate a driveway on the east side of the house. In 1969 there also appears to be a field access road leading north from the house into the agricultural field.

The Sink family left behind tangible evidence of their occupation of this farm when Janie Sink inscribed her name in the wet concrete pad covering the wastewater catchment basin in 1956 (Photograph 14-4).

Photograph 14-4. Site 36LU283: Close-up of Feature 4 Concrete Cap with Inscription "Janie Sink 1956," Facing Northeast





Also, a plastic encased obituary notice for William Sink, Jr. was found in the Feature 2 cellar hole (Photograph 14-5).

Photograph 14-5. Site 36LU283: Part of Obituary found for William Sink Jr., Dated Oct. 22, 1983 (The Press) (FS 273)

On December 29, 1984, William and Dorothy Sink sold the property containing Locus 2 of Site 36LU283 to PPL Electric Utilities Corporation (Luzerne County Deed Book 2150:792). William Kisner came into sole possession of the property containing Locus 1 of Site 36LU283, and Site 36LU281, and sold an undivided 90% interest to PPL Electric Utilities Corporation and an undivided 10% interest to Allegheny Electric Cooperative on July 29, 1986 (Luzerne County Deed Book 2206:613). PPL Electric Utilities Corporation then sold the land containing Sites 36LU281 and Site 36LU283 (along with an additional 85.882 acres) to the current owners, PPL Susquehanna LLC, on July 1, 2000 (Luzerne County Deed Book 2741:702).

Phase II Fieldwork

Site 36LU283 was located in a field vegetated with underbrush and scattered trees (Figure 14-10). Prior to the start of fieldwork a brush hog was used to mechanically cut and remove brush within the site area. Following site clearing, GAI surveyors establish a grid across the site using a total station. The grid covered a 300x560 ft area, extending from gridlines N440-N740 and E1000-E1560 (oriented N 12 degrees W). Site elevations were tied to a site datum located at N560 E1500.

Phase II Soils and Geomorphology

The soils across the site were variable and exhibited five different soil sequences including A-B; Ap-B; CA-B; CA-Ab-B; and CA1-CA2-B. The A-B and Ap-B soil sequence were the most common and appeared to be typical for the site as a whole. As identified in STPs and Test Units 2, 6, 8, and 10, the A or Ap horizon was comprised of brown, dark-brown, or dark yellowish-brown silt loam varying from 1.0 to 2.0 ft deep. This was underlain by sterile subsoil composed of yellowish-brown sandy silt loam to yellowish-brown silt loam.

The CA-B soil sequence was common in STPs found in the yard areas around the former house location and north of the house. (The CA1-CA2-B horizon occurred in a few STPs where two distinct mottled disturbed soils were identified above the yellowish-brown silt loam to sandy silt loam B horizon). The disturbed CA horizon consisted of brown silt loam typically varying from

0.8-1.8 ft deep. The CA horizon did provide insights into site land usage based on inclusions. For instance, three STPs located on the east side of Feature 2 (house foundation) had large quantities of concrete in the CA soil matrix (Figure 14-11). The soil matrix for five STPs located on the east and south sides of the Feature 2 included 5-25% coal mixed in with the soil. These eight STPs suggest that there may have been a driveway, concrete sidewalk, or patio on the east side of the former house and coal may have been off-loaded on one side and carted to a basement entryway or coal chute on the other side of the house.

A CA-Ab-B soil horizon sequence was exposed in shovel testing west and northwest of the house foundation (Feature 2), in some STPs located in a refuse disposal area northwest of the house (Feature 7), and in STPs closest to the road (see Figure 14-11). The CA horizon consisted of brown silt loam typically varying from 0.4-1.9 ft deep. The Ab horizon varied from 0.3 to 1.1 ft thick and was comprised of yellowish-brown to dark-brown silty loam. As in other locations, the B horizon or subsoil was typically yellowish-brown silt loam to sandy silt loam. The CA horizon along the road edge appears to be associated with road construction earthmoving activities. The CA horizon around the house area may be associated with excavation and disposal of soils excavated as a result of the cellar hole and nearby shaft features; the excavated fill from these features became the CA horizon capping the Ab horizon.

Nine of the STPs exposed an ash lens or burned soils. Four of these STPs located along the west side of Feature 1 (house foundation) are associated with Feature 5 (a buried ash and cinder layer). Three of these STPs fell within Feature 7 (refuse dump).

Artifact Distribution (Shovel Tests)

Shovel test pits were excavated at 15-ft (4.6-m) intervals. The goals of close interval shovel testing were to help identify site limits, provide information on soil stratigraphy and artifact distribution, and identify potential features and activity areas. Of the 310 STPs excavated, 165 positive STPs produced 2,602 artifacts (Figure 14-12). Approximately 65% ($n=107$) of the positive STPs had low artifact densities (1-10 artifacts per STP). Another 33 STPs exhibited a moderate artifact density (11-25 artifacts). Sixteen STPs had a high artifact density (26-50 artifacts). The remaining nine STPs (N620 E1410, N620 E1425, N620 E1440, N635 E1350, N635 E1365, N635 E1395, N635 E1410, N650 E1380, and N650 E1395) yielded a very high artifact density (51-362 artifacts); these nine STPs were located within Feature 7, a trash dump.

Artifacts from STP excavations fell within nine artifact classes: activities, architecture, arms, clothing, faunal, furnishings, kitchen, personal, and unidentified (Table 14-8). Kitchen-related artifacts accounted for over 71% ($n=1859$) of the assemblage and included a diverse array of glass and ceramics, and to a lesser extent, metal fragments. Architectural remains totaled 476 artifacts (approximately 18%), with nails and window glass the most abundant artifacts. The assemblage included 149 artifacts that could not be assigned to a specific class. The remaining artifact classes contained considerably fewer artifacts.

Table 14-8. Site 36LU283: Phase II STP Artifact Pattern Analysis

Class	Subclass	Object/Ware	Count	Percentage
Activities	Activities-Other	battery core	4	0.15%
		box lid with hinge	3	0.12%
		cap/lid	1	0.04%
		gasket	2	0.08%
		ribbon	1	0.04%
		terra cotta	6	0.23%
Hand Tools		chisel	1	0.04%
		drill bit	1	0.04%
Heating		Coal	1	0.04%

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Class	Subclass	Object/Ware	Count	Percentage
	Livestock/Pets	Barbed Wire	6	0.23%
		Buckle	1	0.04%
	Misc. Hardware	Bolt, nut, screw, washer, staple	14	0.55%
		Bracket, coil, ring/hoop, strap, hook	9	0.35%
		hardware, indeterminate	10	0.38%
		machine part, indeterminate	2	0.08%
	Recreation	Clay Pigeon	7	0.27%
	Sewing	Thimble	1	0.04%
	Toys	Marble	3	0.12%
		Toy Car Parts	1	0.04%
		toy tea set parts	1	0.04%
	Writing	Graphite Pencil	2	0.08%
		Activities Total	77	2.96%
Architecture	Brick, Block	Brick	13	0.50%
	Nails	nail, cut	80	3.07%
		nail, indeterminate	67	2.57%
		nail, wire	77	2.96%
	Roofing Materials	Roofing Nail/tack	7	0.27%
		Roofing Tile	1	0.04%
	Window Glass	Window Glass	231	8.88%
		Architecture Total	476	18.29%
Arms	Ammunition	Bullet Cartridge	5	0.19%
		Shotgun Shell	1	0.04%
	Arms Related-Other	Arrow tip, metal	1	0.04%
		Arms Total	7	0.27%
Clothing	Clothing Fasteners	Belt buckle	1	0.04%
		Button	1	0.04%
		Snap	1	0.04%
	Clothing Related-Other	leather	2	0.08%
	Shoe Parts	shoe eyelets	3	0.12%
		Shoe heel	4	0.15%
		shoe tacks	4	0.15%
		Clothing Total	16	0.61%
Faunal	Bone	Bone	6	0.23%
		Teeth	1	0.04%
	Shell	clam shell	1	0.04%
		Faunal Total	8	0.31%
Furnishings	Furniture Hardware	Caster	1	0.04%
	Furniture Related-Other	Clock parts	1	0.04%
	Furniture-Decorative	figurine	1	0.04%
	Lighting	light bulb	5	0.19%
		Furnishings Total	8	0.31%
Kitchen	Bottles/Jars	Bottle glass	1433	55.07%
		Container glass	66	2.54%
		jar	9	0.35%
	Ceramics	Porcelain	5	0.19%
		Ironstone, Plain	15	0.58%
		Redware	12	0.47%
		Stoneware	26	1.00%
		Whiteware, decorated	35	1.37%
		Whiteware, Plain	203	7.80%
		Yellowware	3	0.12%
	Decorative Table Glass	glass bowl	2	0.08%
		glass lid	1	0.04%
		glass mug	8	0.31%
	Kitchen-related-Other	Bottle Cap	2	0.08%

Class	Subclass	Object/Ware	Count	Percentage
		canning jar lid liner	22	0.85%
		cap seal	1	0.04%
	Kitchenware (Utensils, Pots, Etc.)	Spoon	1	0.04%
		Table utensil handle	1	0.04%
	Tumblers/Stemware	Tumbler	14	0.54%
Kitchen Total			1859	71.45%
Personal	Coins	US Penny	1	0.04%
	Hygiene	Comb	1	0.04%
		ointment tube	1	0.04%
	Pharmaceutical	medicine bottle	1	0.04%
Personal Total			4	0.15%
Unidentifiable	Indeterminate	metal	122	4.70%
		glass	10	0.38%
		plastic	8	0.31%
		ceramic	1	0.04%
		Rubber	4	0.15%
		Slag	1	0.04%
		wood	1	0.04%
Unidentifiable Total			147	5.65%
TOTAL			2602	100.00%

The total number of artifacts from STP excavations was plotted on distribution maps (see Figure 14-12). The artifact distribution from STPs showed three distinct areas of interest. First, all of the STPs with very high artifact densities fell within a trash (and ash) dump (Feature 7) located 80-120 ft northwest of the former house. Second, there was a moderate to high artifact density in the yard area within 50-60 ft of the house foundation (Feature 2) anticipated to represent the location of yard activity areas. Third, STPs within 15 ft of the barn foundation (Feature 1) exhibited low to moderate artifact densities. The area from N460-N540 and E1170-E1410, located between the house and barn foundations, exhibited a very low artifact density (0-3 artifacts). The northeast section of the site (north yard area) generally exhibited a low artifact density with localized areas of moderate to high artifact densities. These four locations represent areas predicted to have the highest potential for features and activity areas, based on the STP artifact distribution.

There were 138 STPs that produced kitchen-related artifacts (Figure 14-13). Most of these positive STPs were located near the house and Feature 7 and the north yard area. There were also kitchen-related artifacts in the immediate barn area and in a few STPs located east of the barn.

Architecture-related artifacts were found in 99 STPs (Figure 14-14). These artifacts generally fell in the four artifact concentrations of interest: within 50-60 ft of the house, in and around Feature 7, in close proximity to the barn, and in the north yard area.

Test Units

GAI excavated 12 test units totaling 150 square feet (13.9 square meters) to further investigate Site 36LU283 and document features identified during site walkover and STP activities (see Figure 14-10). Test unit information is summarized in Table 14-9. Test unit excavations produced 11,904 artifacts. Eight of these test units were excavated to sample features and are described under the appropriate feature discussions including Test Units 1, 7, and 9 (Feature 5), Test Unit 2 (Feature 7), Test Units 3, 4, and 5 (Feature 2), and Test Unit 12 (Feature 1). The four remaining units (Test Units 6, 8, 10, and 11) are described below.

Table 14-9. Site 36LU283: Test Unit Summary Information

Test Unit #	Size (in ft)	Location	Soil Stratigraphy (Depth is inches below ground surface)	Artifact Ct.	Comments
1	5x5	N 545 E 1455	CA, 0-0.4' brown (10YR4/3) silt loam Ab, 0.4-1.0' yellowish-brown (10YR5/6) silt loam B, 1.0-2.0' brownish-yellow (10YR6/6) silt loam	883	F- 5a (ash deposits); F-9 (modern drainage ditch)
2	5x5	N620 E1425	Ap, 0-1.0' dark yellowish-brown (10YR3/4) silt loam B, 1.0-1.4' yellowish-brown (10YR5/4) silt loam	4,925	F- 7 (trash dump), plow scars at Ap/B interface
3	5x5	N 542.6 E 1486	CA, 0-1.85' dark-brown (10YR3/3) silt loam	620	F-2 (house foundation)
4	2.5x5	N 540.1 E 1485.5	CA, 0-3.3' dark-brown (10YR3/3) silt loam	329	F-2 (house foundation)
5	5x5	N 539 E 1461.5	CA, 0-3.7' brown (10YR4/3) silt loam	605	F-2 (house foundation)
6	5x5	N 560 E 1530	A, 0-1.2' brown (10YR4/3) silt loam B, 1.2-1.5' yellowish-brown (10YR5/6) sandy silt loam	830	No features present
7	2.5x5	N 511.25 E 1455	CA, 0-0.7' brown (10YR4/3) silt loam B, 0.7-1.4' yellowish-brown (10YR5/6) sandy silt loam	353	F-5c (ash deposits)
8	2.5x5	N 620 E 1494	Ap, 0-1.15' dark-brown (10YR3/3) silt loam B, 1.15-1.5' yellowish-brown (10YR5/6) silt loam	198	No features present
9	2.5x5	N 564.5 E 1455	Ca, 0-0.65' brown (10YR4/3) silt loam Ab, 0.65-1.5' dark-brown (10YR3/3) silt loam B, 1.5-1.8 yellowish-brown (10YR5/6) sandy clay loam	1,177	F-5b (ash deposits), plow scars at Ab/B interface
10	2.5x5	N 581 E 1475	Ap, 0-1.2' dark-brown (10YR3/3) silt loam B, 1.2-1.5' yellowish-brown (10YR5/6) sandy silt loam	317	No features present
11	5x5	N 554 E 1471	CA, 0-1.4' brown (10YR4/3) silt loam Ab, 1.4-2.5' brown (10YR4/3) silt loam B, 2.5-2.8' yellowish-brown (10YR5/6) sandy silt loam	909	No features present
12	2.5x5	N 490 E 1082.5	CA, 0-0.7' brown (10YR4/3) silt loam Ab, 0.7-1.0' dark-brown (10YR3/3) silt loam B, 1.0-1.3' yellowish-brown (10YR5/6) silt loam	127	F-1 (barn and silo foundation)

North Yard Area – Test Units 6 and 8

Test Unit 6 (N560 E1530) and Test Unit 8 (N620 E1496) were placed to test localized high artifact concentrations. Test Unit 6 was situated approximately 50 ft northeast of the house foundation, while Test Unit 8 was located about 100 ft north of the house foundation. Both units had an Ap-B soil sequence. The Ap horizon, consisting of brown silt loam, varied from 1.1 to 1.2 ft deep (Figure 14-15). The underlying subsoil consisted of yellowish-brown sandy silt loam to silt loam. No features were identified in these units.

Excavation of Test Unit 6 (N560 E1530), which measured 5x5 ft, produced 798 artifacts (Table 14-10). Container glass, including bottles and jars, was the most common artifact ($n=232$) followed by nails ($n=164$), ironstone ($n=132$), and whiteware ($n=89$). These four types of artifacts accounted for 77.3% of the artifact assemblage. Small quantities of activities, architecture, arms, furnishings, kitchen, personal--related artifacts and unidentified melted glass were also represented in the assemblage. This unit produced approximately twice the number of artifacts per square foot as Test Unit 8 and may indicate the presence of either an activity area or refuse dump. The artifacts included a 1969 penny recovered from Level 2 of the Ap horizon.

Table 14-10. Site 36LU283: Test Units 6 and 8, Artifact Pattern Analysis

Class	Subclass	Object/Ware	TU6 Ct	TU8 Ct	Total Count	%
Activities	Activities-Other	chain, linked	3		3	0.30%
		Misc Metal	20		20	2.01%
		Misc Metal, flat	9	1	10	1.00%
		Misc Metal, strap	2		2	0.20%
		Misc Metal, wire	1		1	0.10%
	Farming	Buckle	1		1	0.10%
		Horseshoe	3		3	0.30%
	misc. small hardware	Hook	1		1	0.10%
		latch	1		1	0.10%
	Misc. Small Hardware	Misc. Hardware		2	2	0.20%
		Staple	4		4	0.40%
		washer	1		1	0.10%
	Nails	nail, indeterminate	35		35	3.51%
Recreation	clay pigeon	3		3	0.30%	
Architecture	Brick, Block	Brick	9	1	10	1.00%
		Nails	nail, cut	49	16	65
		nail, indeterminate	53	30	83	8.32%
		nail, wire	27	8	35	3.51%
		Spike, indeterminate		1	1	0.10%
	Window Glass	Window Glass	69	29	98	9.83%
Arms	Ammunition	Bullet Casing	3		3	0.30%
		Shotgun Shell	1		1	0.10%
		Shotgun Shell primer		1	1	0.10%
Faunal	Bone	Bone		1	1	0.10%
Furnishings	Lighting	lamp chimney glass	7		7	0.70%
Kitchen	Bottles/Jars	beverage bottle	2		2	0.20%
		Bottle glass	220	64	284	28.49%
		Container glass	7	1	8	0.80%
		milk bottle	3		3	0.30%
	Ceramics	Earthenware	2		2	0.20%
		Hardpaste Porcelain, Colored Glaze	2		2	0.20%
		Hardpaste Porcelain, Decal	2		2	0.20%
		Hardpaste Porcelain, Plain	5		5	0.50%
		Hardpaste Porcelain, Transfer Printed	1		1	0.10%
		Ironstone, Plain	131	7	138	13.84%
		Ironstone, Underglaze Handpainted	1		1	0.10%
		Pearlware, Plain		1	1	0.10%
		Redware, Glazed	8	1	9	0.90%
		Redware, Unglazed	1	1	2	0.20%
		Stoneware, Buff Bodied	8		8	0.80%
		Stoneware, Gray Bodied	6		6	0.60%
		Whiteware, Colored Glaze	13	3	16	1.60%
		Whiteware, Decal	14		14	1.40%
		Whiteware, Plain	56	17	73	7.32%
		Whiteware, Transfer Printed, Green	5		5	0.50%
	Whiteware, Underglaze Handpainted	1		1	0.10%	
	Yellowware, Plain	2	1	3	0.30%	
	Kitchen-related-Other utensils, pots, etc.	canning jar lid liner		11	11	1.10%
cast iron lid or cover		1		1	0.10%	
lid or cover		1		1	0.10%	
Personal	Coins	US Penny	1		1	0.10%
	Pharmaceutical	pharmaceutical bottle/jar		1	1	0.10%
Unidentifiable	Indeterminate	glass, melted	3	1	4	0.40%
TOTAL			798	199	997	100.00%

Excavation of Test Unit 8, located at N620 E1494, produced 199 artifacts or approximately one-fourth the artifacts recovered from Test Unit 6 (see Table 14-10). Container glass and nails were the most common artifacts recovered from this unit. Unlike Test Unit 6, there were few ($n=31$) ceramic sherds from Test Unit 8 suggesting that broken ceramic dishes were not commonly discarded in this location. Small quantities of activities, architecture, arms, faunal, kitchen, and personal artifacts, in addition to melted glass, were also represented in the assemblage.

House Vicinity – Test Units 10 and 11

Test Unit 10 (N581 E1475) and Test Unit 11 (N554 E1471) were excavated to test a possible activity area identified in the yard near the former house. Test Unit 10 was situated approximately 40 ft north of the former house foundation (Feature 2) and exhibited an Ap-B soil horizon sequence. The approximately 1.2 ft thick Ap horizon of dark yellowish-brown silt loam capped the yellowish-brown sandy loam B horizon. No feature was identified in Test Unit 10.

Test Unit 11 was situated in a depression originally thought to represent a potential feature location. This unit was placed approximately 15 ft north of the house foundation (Feature 2) and nearly 15 west of the well (Feature 3). Excavations revealed a CA-Ab-B soil sequence (Figure 14-16). The CA horizon measured 1.7 ft deep and contained rock, bricks, and a high concentration of other artifacts within a mottled brown, very pale brown, and yellowish-brown silty loam matrix with gravel lenses. The mottled soils in this horizon may be a result of mixing soils from excavation of the cellar hole with the former A horizon or fill from a feature that extended beyond the test unit walls. The underlying Ab horizon consisted of brown silt loam and varied from 0.7 ft to 1.3 ft thick. Artifacts from the Ab horizon consisted of 68 container glass and one whiteware sherd. The sterile subsoil or B horizon was comprised of yellowish-brown silt loam. No features were identified in this unit, and the cause of the large depression in this location was undetermined.

Excavation of Test Unit 10, which measured 2.5x5 ft, produced 331 artifacts (Table 14-11). The most common artifact was container (bottle or jar) glass ($n=178$), which represented approximately half of the artifact assemblage. Other common artifacts included nails ($n=41$) and whiteware ($n=44$). Small quantities of other activities, architecture, arms, furnishings, kitchen, and personal--related artifacts and unidentified metal pieces were also represented in the assemblage.

Excavation of the 5x5 ft Test Unit 11 produced 905 artifacts of which 836 artifacts from the CA horizon and 69 artifacts (68 container glass and one whiteware sherd) from the Ab horizon (see Table 14-11). Over half of the assemblage ($n=545$) was comprised of different types of container glass. Ceramics ($n=122$), nails ($n=87$), and window glass ($n=83$) were also common. High densities of broken glass, such as those documented in TU 11, are not anticipated for outdoor work areas or children’s play areas so close to the house. Therefore, these artifacts may be a result of demolition activities.

Table 14-11. Site 36LU283: Test Units 10 and 11, Artifact Pattern Analysis

Class	Subclass	Object/Ware	TU 10		TU 11		Total Ct.	Total %
			Count	%	Count	%		
Activities	Flowerpots	Terra cotta		0.00%	1	0.08%	1	0.08%
	Misc. Hardware	Bolt, cotter pin, washer	3	0.24%	2	0.16%	5	0.40%
		Hardware, indeterminate	1	0.08%	1	0.08%	2	0.16%
		Ring/hoop		0.00%	1	0.08%	1	0.08%
		Tube		0.00%	1	0.08%	1	0.08%

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Class	Subclass	Object/Ware	TU 10		TU 11		Total Ct.	Total %
			Count	%	Count	%		
	Toys	Doll parts		0.00%	1	0.08%	1	0.08%
		Marble	1	0.08%	7	0.57%	8	0.65%
		Toy Car Parts		0.00%	1	0.08%	1	0.08%
		Toy coin		0.00%	1	0.08%	1	0.08%
		Toy connector Bead		0.00%	1	0.08%	1	0.08%
		Toy tea set parts		0.00%	3	0.24%	3	0.24%
		Activities Total	5	0.40%	20	1.62%	25	2.02%
Architecture	Brick, Block	Brick	11	0.89%		0.00%	11	0.89%
	Nails	Nail, cut	18	1.46%	20	1.62%	38	3.07%
		Nail, indeterminate	20	1.62%	50	4.05%	70	5.66%
		Nail, wire	3	0.24%	12	0.97%	15	1.21%
		Spike, cut		0.00%	1	0.08%	1	0.08%
	Roofing Materials	Roofing Nail/Tack		0.00%	4	0.32%	3	0.32%
	Window Glass	Window Glass	26	2.10%	83	6.72%	109	8.82%
		Architecture Total	78	6.31%	170	13.75%	248	20.06%
Arms	Ammunition	Bullet Cartridge		0.00%	1	0.08%	1	0.08%
		Shotgun Shell	1	0.08%	1	0.08%	2	0.16%
		Arms Total	1	0.08%	2	0.16%	3	0.24%
Clothing	Clothing Fasteners	Button		0.00%	12	0.97%	12	0.97%
	Shoe Parts	Shoe heel		0.00%	1	0.08%	1	0.08%
		Clothing Total		0.00%	13	1.05%	13	1.05%
Furnishings	Furniture-Decorative	Glass bead with brass eyehook		0.00%	1	0.08%	1	0.08%
		Figurine	1	0.08%	5	0.40%	6	0.49%
	Lighting	Lamp chimney glass	2	0.16%		0.00%	2	0.16%
		Furnishings Total	3	0.24%	6	0.49%	9	0.73%
Kitchen	Bottles/Jars	Bottle glass	172	13.91%	466	37.71%	638	51.62%
		Container glass	3	0.24%	5	0.40%	8	0.65%
		Jar	3	0.24%	74	5.99%	77	6.23%
	Ceramics	Hardpaste Porcelain	5	0.40%	6	0.48%	11	0.89%
		Ironstone, Plain	4	0.32%	7	0.57%	11	0.89%
		Redware	2	0.16%	1	0.08%	3	0.24%
		Stoneware	1	0.08%	1	0.08%	2	0.16%
		Whiteware, decorated	8	0.64%	12	0.96%	20	1.60%
		Whiteware, Plain	36	2.91%	95	7.69%	131	10.60%
	Decorative Table Glass	Glass finial	1	0.08%		0.00%	1	0.08%
	Kitchen-related-Other	Canning jar lid liner		0.00%	2	0.16%	2	0.16%
	Tumblers/Stemware	Tumbler		0.00%	2	0.16%	2	0.16%
		Kitchen Total	235	19.01%	671	54.29%	906	73.30%
Personal	Hygiene	Comb	1	0.08%		0.00%	1	0.08%
	Jewelry	Broach/Pin		0.00%	2	0.16%	2	0.16%
	Pharmaceutical	Medicine bottle/jar	1	0.08%	5	0.40%	6	0.48%
		Personal Total	2	0.16%	7	0.57%	9	0.73%

Class	Subclass	Object/Ware	TU 10		TU 11		Total Ct.	Total %
			Count	%	Count	%		
Unidentifiable	Indeterminate	Glass		0.00%	4	0.32%	4	0.32%
		Metal	7	0.57%	12	0.97%	19	1.54%
Unidentifiable Total			7	0.57%	16	1.29%	23	1.86%
TOTAL			331	26.78%	905	73.22%	1236	100.00%

Features

Excavations identified seven cultural features including one stone barn foundation with an attached concrete silo base (Feature 1), one stone house foundation and cellar hole (Feature 2), a stone lined well (Feature 3), a wastewater catchment basin (Feature 4), an ash dump (Feature 5), a large refuse dump (Feature 7), and one undetermined pit (Feature 9). These features are summarized in Table 14-12.

Table 14-12. Site 36LU283: Feature Summary

Feature Number	Feature	Dimensions (ft)	Testing Activity	Date
Feature 1	Barn and Silo Foundation	49x85 w 12 dia. silo	Documentation and TU 12	Later 19 th –mid 20 th century
Feature 2	House foundation, cellar hole and builders trench	26x30 feet	Documentation and TUs 3, 4, and 5	Late 19 th century-c. 1984
Feature 3	Well	3 ft diameter	Documentation	Late 19 th century-c. 1984
Feature 4	Wastewater catchment basin	7x7 feet	Documentation	20 th century
Feature 5	Ash Deposits	~70x10 feet	Documentation and TU s 1, 7, and 9	Early 20 th century
Feature 7	Trash Dump with Ash Lenses	~40x100 feet	Documentation and TU2	20 th century
Feature 9	Pit of Unknown Function	At least 5x2 ft	Documentation and TU 1	Early 20 th century

Feature 1 – Barn and Silo Foundation Remains

Feature 1 represented the foundation remains of a barn and attached silo base located on the west side of the site (Locus 1) (Figure 14-17). The ground surface elevation gradually rose to the west so that the ground surface west of Feature 1 was 8 feet (2.4 meters) higher than the surface east of this foundation. The south side of the barn faced a gravel access road and Confers Lane.

Barns served important functions on the farm including storage of equipment and farm crops/produce, processing crops, such as threshing grain, and animal/livestock shelters. Barn architecture can provide insights into the uses of the barn; however, Feature 2 consisted solely of the foundation remains and part of the ground floor. Construction material innovations permit examination of this feature in two distinct but general periods: pre-ca.1890 period and post-ca.1890 period. Archival research indicated that the barn was demolished prior to 1959.

Pre-1890 Period

The original barn was constructed with a dry-laid stone foundation (Photograph 14-6). The barn was rectangular, measuring 49xat least 74 ft. (14.9x22.6 m) with gable ends on its east and west sides. The tabular stone foundation wall was typically 2 to 3 feet (0.6 to 0.9 meters) high and 1.3-1.4 ft (0.4-0.43 m) thick but could vary up to 1.7-ft (0.52 m) thick. The thick foundation was necessary for these load-bearing walls. The ground floor and foundation on the west end were cut into a hillside that is approximately 8-foot (2.4-meter) higher than ground surface on the east

end. There may have been an entrance to the upper story(ies) on the west end, similar to bank barns commonly found across Pennsylvania during the nineteenth century. Entrance to the ground floor was likely on the east side, since no gaps were observed in the north or south foundation walls for an entrance.



Photograph 14-6. Site 36LU283: Feature 2, Detail of West Foundation Wall Construction, Facing West

Ca. 1890-1959 Period

The post-ca. 1890 period is identified through modifications to the barn that used poured concrete, which was rare before ca.1890. By the early 1900s concerns for animal hygiene and transmission of diseases through unclean cattle led many farmers to make use of concrete floors in

dairy barns. The use of poured concrete for farm construction and renovation activities grew quickly since it was a quick and efficient way to renovate older farm buildings. There are four additions or modifications to this barn that used poured concrete: 1) construction and attachment of a silo, 2) expansion or repair to the east end of the barn, 3) raised concrete pad on the interior of the ground floor, and 4) concrete piers for interior structural supports or interior space dividers. There is also evidence of cement and concrete repair patches to the stone foundation.

A 12 ft (3.5 m) diameter concrete silo was added to the northwest corner of the barn (Photograph 14-7). Concrete silos were commonly constructed on farms during the first half of the twentieth century. In order to provide access to the silo from the barn, the stone foundation was removed in the area closest to the silo and replaced with concrete connector walls. The silo was attached to the barn foundation by two short walls measuring approximately six feet long and about two-feet (0.6-m) thick with an interior opening 6.5 to 7-ft (2.0 to 2.1-m) wide (Photograph 14-8). These connector walls were constructed by creating a wood form delineating the wall locations and then filling the form with rocks (medium size to pebbles) and cement. After the cement cured, the wood form was removed.



Photograph 14-7. Site 36LU283: Feature 2, Base of Concrete Silo, View to Southeast. Note Piers and East Foundation Wall in Background, Facing East



**Photograph 14-8. Site 36LU283:
Feature 2, West Foundation Wall
Illustrating Concrete Foundation
Attachment for Silo on Right,
Facing West**

On the east side, the existing foundation remains indicate that the barn was either extensively repaired or the barn was enlarged to its current size of 49x85-foot (14.9x25.9-meter). The east foundation wall and the eastern 11-15 ft of the north and south foundation walls were constructed using the same poured cement method described for the walls attaching the silo to the barn. These concrete walls were 1.3 ft wide. Planks used to form the walls varied from 0.4 to 1.15 ft wide, which may indicate that scrap wood was used to build the forms. These forms made it easy to attach the new concrete wall section with the older stone wall section (Photograph 14-9). In the center of the east foundation, the height of the wall was only 0.5 ft above the surrounding ground surface while the foundation height on either side of it was 1.3 ft high. The low wall height in the center served as an entrance that was wide enough for equipment to drive into the ground floor of the barn (Photograph 14-10).

**Photograph 14-9. Site 36LU283:
Feature 2, North Foundation Wall
Detail showing Dovetail of Both
Construction Methods, Facing
North**





**Photograph 14-10. Site 36LU283:
Feature 2, Entrance Gap in East
Foundation Wall, Facing Northeast**

There was a raised concrete pad located along the south wall approximately 12 ft from the west foundation wall. The pad measured approximately 13x15 ft (4x4.6 m) and stands 0.8 ft (0.24 m) above the surrounding rubble covered barn floor. The function of the pad could not be determined definitively but may have been used to keep equipment off the barn floor.

There were four piers on the interior of the foundation (Photograph 14-11). The piers measured approximately 1.4x1.8 ft (0.43x0.56 m). These were likely used for either interior structural supports or interior space dividers. Between the time of the Phase I and Phase II investigations,

a tree in the foundation interior fell over and pulled over a concrete pier.



**Photograph 14-11. Site 36LU283:
Feature 2 Overview of Concrete
Piers and North and East
Foundation Walls, Facing East**

The original foundation was constructed of dry-laid tabular stone and varied from 1.3-ft to 1.6-ft (0.4 to 0.5 m) thick. There was evidence of cement and concrete

repair patches to this stone foundation. The east foundation wall and the easternmost 11-15 ft of the north and south foundation walls required more extensive repairs, as evidenced by the 1.3-ft thick poured concrete walls that remain. Prior to construction, the foundation wall location was framed in with planks. The concrete poured into the frame had pebbles, small, and medium sized rocks placed in the interior of the wood framing. Planks used to form the walls varied from 0.4 to 1.15 ft wide, which may indicate that scrap wood was used to build the form. The center approximately 16 ft of the east wall served as the barn entrance. The poured concrete foundation in this location was only 0.5 ft above ground surface, while the remainder of the east

foundation wall was constructed about 1.5 ft higher (or approximately 2.0 ft above exterior ground surface).

Feature 1 was tested with 15 STPs (N455-N485 and E1080-E1140) excavated at 15-ft intervals in the interior and Test Unit 12 (N490 E1082.5), which was excavated along the exterior of the north foundation wall. Excavation of these STPs produced 62 artifacts, mainly nails, window glass, small hardware, bottle glass and stoneware (Table 14-13). The predominance of cut nails in the assemblage suggests a pre-ca. 1890 construction date for the original barn.

Table 14-13. Site 36LU283: Feature 1 Artifact Pattern Analysis

Class	Subclass	Object/Ware	STPs		TU 12	
			Count	%	Count	%
Activities	Hand Tools	chisel	1	1.61%		
	Misc. Hardware	Bolt	2	3.23%		
		hardware, indeterminate	1	1.61%		
		Nut	1	1.61%		
		Screw	1	1.61%		
Activities Total			6	9.68%		
Architecture	Nails	nail, cut	12	19.35%	25	18.52%
		nail, indeterminate	1	1.61%	3	2.22%
		nail, wire	7	11.29%	12	8.89%
	Window Glass	Window Glass	10	16.13%	82	60.74%
	Architecture Total			30	48.39%	122
Arms	Ammunition	Shotgun Shell			1	0.74%
Kitchen	Bottles/Jars	Bottle glass	9	14.52%	4	2.96%
		Container glass			5	3.70%
	Ceramics	Stoneware	9	14.52%		
		Whiteware, Plain	4	6.45%		
	Other	Cork			2	1.48%
Kitchen Total			22	35.48%	11	8.15%
Unidentifiable	Indeterminate	metal	3	4.84%	1	0.74%
		wire	1	1.61%		
Unidentifiable Total			4	6.45%	1	0.74%
TOTAL			62	100.00%	135	100.00%

Test Unit 12 was excavated at the north foundation wall and exterior of the former barn (Feature 1) (see Figure 14-17). The excavation revealed a CA-Ab-B soil sequence (Figure 14-18). The CA horizon was shallow, measuring only 0.3 ft deep, and consisted of dark-brown loam. The CA horizon may represent soils removed from the barn interior during construction activities that were subsequently spread around the outside of the barn, covering the original A horizon. The Ab horizon had a brown silt loam matrix measuring 0.5-0.7 ft thick. The underlying B horizon consisted of yellowish-brown silt loam with rocks. No builder's trench was identified in this unit.

A total of 135 artifacts were recovered from TU 12 (see Table 14-13). The majority of the artifacts consisted of window glass ($n=82$), cut nails ($n=25$), and wire nails ($n=12$). Once again, the abundance of cut nails, which were commonly used in the nineteenth century until about 1890, suggests a pre-1890 construction date.

Feature 2 – House Foundation and Cellar Hole

Feature 2 represented the former house foundation and cellar hole located on the east side of the site in Locus 2 (Figure 14-19). The house foundation measured approximately 26x30 feet (8x9 meters) with a 5x5-foot (1.5x1.5-meter) extension along its east wall. This small extension may indicate the location of a cellar entrance.

This feature was explored through excavation of Test Units 3, 4, and 5. Test Units 4 and 5 were excavated on the foundation interior while Test Unit 3 straddled the north foundation wall. Artifacts from Test Units 3-5 were associated with Feature 2 and are discussed under this feature.

Test Units 3 and 4 were contiguous units located in the northeast corner of the foundation and cellar hole (see Figures 14-10 and 14-19). Test Unit 4 was excavated on the foundation interior while Test Unit 3 straddled the north foundation wall, sampling the exterior, interior and the disturbed foundation wall. The soil stratigraphy on the foundation exterior consisted of up to 1.2 ft of dark-brown silt loam (CA horizon) overlying brownish-yellow silt loam subsoil (Figure 14-20) (Photograph 14-12). There was no break in stratigraphy between the CA horizon outside the

foundation and the fill overlying the north foundation remnant and the soil matrix surrounding the building within the cellar hole. Within these two units the cement floor was exposed at 3.8 ft below ground surface within Feature 2 (Photograph 14-13).



**Photograph 14-12. Site 36LU283:
Feature 2, West Profile of Test Units 3
and 4, Facing West**



**Photograph 14-13. Site 36LU283:
Feature 2, West Profile of Test Units 3
and 4, Facing West**

Test Unit 5 was placed in the northwest corner of the foundation interior. The soil stratigraphy consisted of brown silt loam fill (CA horizon) which extended to the cellar floor at a depth of 3.9 ft below ground surface at this location (Figure 14-21). Large pieces of concrete flue block and bricks with soot were noted but not retained from this unit (Photograph 14-14).



Photograph 14-14. Site 36LU283: Feature 2, Test Unit 5, North Wall, Facing North

The 1827 historic era artifacts recovered from these three units are associated with post-occupation infilling of the cellar hole (Table 14-14). One prehistoric lithic knife was also recovered from the cellar fill in Test Unit 5. Eleven artifact classes were

represented in the assemblage: activities, architecture, arms, clothing, faunal, furnishings, kitchen, personal, prehistoric, tobacco pipe, and unidentified. Four artifact types comprised 77.88% of this assemblage including nails (437 cut nails and 360 wire nails), safety glass ($n=123$), window glass ($n=244$), and bottle glass ($n=259$). The high quantities of architecture related material are expected since the cellar hole would have been filled with debris from demolition of the house. Other types of artifacts were present in smaller quantities. The ceramic assemblage included refined earthenware, plain and decorated porcelain, undecorated ironstone, redware, and plain and decorated whiteware. A plastic encased obituary for William Sink, Jr. from a newspaper clipping dated October 22, 1983 was also recovered (see Photograph 14-5). The Sink family sold the property the following year to PPL Electric Utilities Corporation.

Table 14-14. Site 36LU283: Feature 2 Artifact Pattern Analysis

Class	Subclass	Object/Ware	TU 3 Count	TU 3/4 Count	TU 4 Count	TU 5 Count	F-2 Count	F-2 %
Activities	Activities-Other	battery core	1		1		2	0.11%
		ceramic pipe	1				1	0.05%
		pipe, metal				4	4	0.22%
	Flowerpots	terra cotta	7		3		10	0.55%
	Misc. Hardware	Bolt			2		2	0.11%
		curtain hardware				1	1	0.05%
		hardware, indeterminate	2		1	1	4	0.22%
		Rod				1	1	0.05%
		Screw	2	2	1	2	7	0.38%
		Staple			1		1	0.05%
		tube				1	1	0.05%
		Washer	2				2	0.11%

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Class	Subclass	Object/Ware	TU 3 Count	TU 3/4 Count	TU 4 Count	TU 5 Count	F-2 Count	F-2 %
	Recreation	Bingo marker			1		1	0.05%
	Toys	ball		1			1	0.05%
		toy airplane		1			1	0.05%
	Writing	pencil sharpener	1				1	0.05%
Activities Total			16	4	10	10	40	2.19%
Architecture	Architectural-Other	Concrete				6	6	0.33%
	Brick, Block	Brick	16		1		17	0.93%
	Building Materials	Mortar	1				1	0.05%
		Painted wood	2				2	0.11%
	Nails	nail, cut	65	91	73	193	422	23.10%
		nail, indeterminate	26	3	4		33	1.81%
		nail, wire	124	31	116	89	360	19.70%
		Spike, cut	6	2		7	15	0.82%
	Roofing Materials	Roofing Nail	32	2	27	1	62	3.39%
		Roofing Tack	1		36		37	2.03%
		Tar paper	1				1	0.05%
	Window Glass	Safety Glass				123	123	6.73%
		Window Glass	96	2	53	93	244	13.36%
Architecture Total			370	131	310	512	1323	72.41%
Arms	Ammunition	Bullet Casing	4		4	1	9	0.49%
		Shotgun Shell				1	1	0.05%
Arms Total			4		4	2	10	0.55%
Clothing	Cloth	Fabric	1				1	0.05%
	Clothing Fasteners	Button	5		1	2	8	0.44%
	Shoe Parts	shoe sole	1				1	0.05%
Clothing Total			7		1	2	10	0.55%
Faunal	Bone	Bone	1		2		3	0.16%
Furnishings	Furniture Hardware	drawer/furniture pull	3				3	0.16%
	Furniture-Decorative	decorative bead				1	1	0.05%
	Lighting	light bulb	1				1	0.05%
Furnishings Total			4			1	5	0.27%
Kitchen	Bottles/Jars	Bottle glass	139	8	59	53	259	14.18%
		Container glass	10		3	1	14	0.77%
		jar			1		1	0.05%
	Ceramics	Earthenware	1			1	2	0.11%
		Hardpaste Porcelain, Plain	1				1	0.05%
		Hardpaste Porcelain, Underglaze Handpainted			1		1	0.05%
		Ironstone, Plain	2			1	3	0.16%
		Redware, Glazed	1		1		2	0.11%
		Redware, Unglazed	1				1	0.05%
		Stoneware, Buff Bodied	1				1	0.05%

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Class	Subclass	Object/Ware	TU 3 Count	TU 3/4 Count	TU 4 Count	TU 5 Count	F-2 Count	F-2 %
		Stoneware, Gray Bodied				2	2	0.11%
		Whiteware, Colored Glaze	3				3	0.16%
		Whiteware, Decal	1			1	2	0.11%
		Whiteware, Plain	25		15	6	46	2.52%
		Whiteware, Transfer Printed, Black			1	1	2	0.11%
		Whiteware, Transfer Printed, Green				2	2	0.11%
	Decorative Table Glass	glass lid			1		1	0.05%
	Kitchen-related-Other	baste bulb			1		1	0.05%
		beverage pull tab	2		1	1	4	0.22%
		Bottle Cap	1				1	0.05%
		canning jar lid liner	5		1		6	0.33%
		lid or cover				2	2	0.11%
	Tumblers/Stemware	stemware fragment				1	1	0.05%
		Tumbler				1	1	0.05%
Kitchen Total			193	8	85	73	359	19.65%
Personal	Coins	US Penny			1		1	0.05%
	Hygiene	Comb	1				1	0.05%
	Pharmaceutical	ointment tube			1		1	0.05%
		Medicine bottle/jar			1		1	0.05%
Personal Total			1		3		4	0.22%
Prehistoric	Tool	Knife				1	1	0.05%
Tobacco Pipes	Smoking Related-Other	cigarette packaging			1		1	0.05%
Unidentifiable	Indeterminate	aluminum	2				2	0.11%
		glass	1		3		4	0.22%
		metal	12	2	4	9	27	1.48%
		paint	2				2	0.11%
		plastic	17		4	1	22	1.20%
		Rubber	1			2	3	0.16%
		wire	1		1	10	12	0.66%
Unidentifiable Total			36	2	12	22	72	3.94%
TOTAL			632	145	428	623	1828	100.00%

Six flotation samples were collected, processed, and analyzed from the cellar hole fill (see Appendix K). Carbonized pieces of pine species wood were present. Non-carbonized seeds in the flotation samples included goosefoot/pigweed, carpetweed, poke, panic or foxtail grass, knotweed, sumac, cherry, elder and raspberry/blackberry. These likely represent plants growing in the area when the cellar hole was filled after demolition of the house.

Feature 3 - Well

Feature 3 was a stone lined well that lay seven feet (two meters) north of Feature 2 (see Figure 14-19). The center of the well was located at N552 E1486. The well was open with water in its base. The well shaft measured three-feet (0.9 m) in diameter and 9.25 ft (2.8 m) deep. The lower 4.65 ft (1.4 m) was filled with water. The stone lining was dry laid and constructed using

both tabular rock and cobbles (Photograph 14-15). A plastic pipe lay near the top of the well. This feature was documented with notes and photographed but was not excavated since the well shaft was not filled with soil.



Photograph 14-15. Site 36LU283: Feature 3 Planview, Facing South

Feature 4 – Wastewater Catchment Basin

Feature 4 was a wastewater catchment basin located at N562 E1432 (centerpoint) or approximately 10 meters (33 feet) northwest of Feature 2. This shaft feature was concrete-block lined, and included a 2x2-meter (7x7-foot) square raised brick foundation supporting a cement slab or cap. A 7x7 foot ft (2x2-meter) concrete slab with a small wood access door covered the wastewater catchment basin (Photographs 14-16 and 14-17). The concrete slab measured 0.5-ft thick and was inscribed “Janie Sink 1956” (see Photograph 14-4). The catchment basin was constructed with cinderblocks laid on their side to promote water draining in different directions (see Photograph 14-17). There was no lining visible on the interior. The cinderblock shaft measured 4.7 ft deep and had 0.7 ft of water standing in the bottom. Like the well, there was a plastic pipe built into the side of the catchment basin wall near the top. The pipe ran towards the house, a likely source of the wastewater. Cinderblock production began near the turn of the twentieth century. Use of the plastic pipe suggests a mid- to late-twentieth century construction remodeling date. It is likely that the wastewater catchment basin was originally constructed ca. 1956, when the cap was laid in place.



Photograph 14-16. Site 36LU283: Feature 4 Interior.

Note placement of cinderblocks and plastic pipe, Facing Northeast



Photograph 14-17. Site 36LU283: Feature 4 Wood Access Cover

Feature 5 – Ash Filled Pit

A layer of ash was identified in STPs excavated on the west side of the house foundation (see Figure 14-19). Test Units 1, 7, and 9 were excavated to explore this ash deposit, designated as Feature 5. To avoid confusion the ash deposit in TUs 1, 7, and 9 was designated as Feature 5a, Feature 5b, and Feature 5c, respectively.

Test Unit 7 (N511.25 E1455) was situated just southwest of the house foundation (Feature 2) corner. This unit encountered the southern limits of the ash deposits. The soil stratigraphy in this unit consisted of brown silt loam fill deposits (CA horizon) capping yellowish-brown sandy loam subsoil (B horizon) on the south half of the unit. On the northern half of the unit a pit was excavated into the B horizon and filled with an ash deposit (Feature 5c) of mottled very dark-grayish-brown, very pale brown, and white silt loam. The ash pit was covered by 0.3-0.5 ft of CA horizon soil (Photograph 14-18; Figure 14-22). At the north unit wall, the ash in this pit was 1.45-ft deep.



Photograph 14-18. Site 36LU283: Test Unit 7, Feature 5c Profile, Facing North

Test Unit 1 (N545 E1455), located near the northwest corner of Feature 2, exposed two features. The soil stratigraphy was very complicated and exhibited a CA-Feature 5a-Feature 9-B soil sequence in the western two-thirds of the unit and a CA-Ab-B sequence on the eastern one-third of the unit (Figure 14-23; Photograph 14-19). The CA horizon was comprised of brown silty loam. The Ab horizon consisted of dark yellowish-brown silt loam. Feature 5a, an ash deposit of gray and brown silt loam, seemed to fall in the same depositional layer as the Ab horizon, suggesting that the ash was discarded into a pit excavated into the Ab horizon. Feature 9 was situated directly beneath Feature 5a and discussed below. The subsoil was comprised of yellowish-brown silt loam.



Photograph 14-19. Site 36LU283: Test Unit 1, Planview at top of Feature 5a, Facing North



Test Unit 9 (N564.5 E1455) lay near the north limits of Feature 5b. The unit exhibited a CA-Feature 5b-Ab-B soil horizon sequence. The CA horizon consisted of a 0.5 ft thick brown silt loam that was underlain by light brownish gray and very pale brown ash and cinder deposit (Feature 5b) (Photograph 14-20). Feature 5b measured 0.9 ft thick and was overlying an Ab horizon that consisted of dark-brown silt loam (Figure 14-24). The underlying subsoil consisted of yellowish-brown sandy clay loam. At this location the ash and cinders were deposited directly on top of the former A horizon rather than in a pit.

Photograph 14-20. Site 36LU283: Test Unit 9, Planview of Feature 5c, Facing East

Excavation of these three units produced 2542 artifacts (Table 14-15). These were segregated by horizons. Most of the artifacts in the CA horizon came from TU 1 ($n=602$) while TU 7 produced 110 and TU 9 excavations yielded 136. CA horizon excavations produced 848 artifacts. The majority of artifacts in this horizon consisted of bottle/container glass ($n=362$) and nails ($n=263$). The 337 temporally diagnostic artifacts yielded a mean date of 1885 and a TPQ date of 1919 for this horizon (Table 14-16).

Table 14-15. Site 36LU283: Test Units 1, 7, and 9 Artifact Pattern Analysis

Class	Subclass	Object/Ware	TU 1		TU 7		TU 9		Total	%	
			Ct.	%	Ct.	%	Ct.	%			
Activities	Activities-Other	molded horse, metal		0.00%		0.00%	1	0.09%	1	0.04%	
	Flowerpots	terra cotta	36	3.52%		0.00%	1	0.09%	37	1.46%	
	Heating	Coal		0.00%	17	4.55%	10	0.87%	27	1.06%	
	Livestock/Pets	Horseshoe	1	0.10%		0.00%		0.00%	1	0.04%	
	Misc. Hardware	Bracket		1	0.10%		0.00%		0.00%	1	0.04%
		bucket handle			0.00%		0.00%	1	0.09%	1	0.04%
		curtain hardware			0.00%		0.00%	1	0.09%	1	0.04%
		hardware, indeterminate		1	0.10%		0.00%	1	0.09%	2	0.08%
		hinge			0.00%		0.00%	5	0.44%	5	0.20%
		Hook			0.00%		0.00%	2	0.17%	2	0.08%
		machine part, indeterminate		1	0.10%		0.00%		0.00%	1	0.04%
		Rod			0.00%		0.00%	2	0.17%	2	0.08%
		Screw			0.00%		0.00%	1	0.09%	1	0.04%
		Staple		2	0.20%		0.00%	3	0.26%	5	0.20%
	Toys	strap			0.00%		0.00%	1	0.09%	1	0.04%
		Washer		2	0.20%		0.00%	2	0.17%	4	0.16%
		Musical	Harmonica part		0.00%		0.00%	1	0.09%	1	0.04%
Toys	doll parts			0.00%		0.00%	2	0.17%	2	0.08%	
	Marble		1	0.10%		0.00%	5	0.44%	6	0.24%	
	toy coin			0.00%		0.00%	1	0.09%	1	0.04%	
	toy tea set parts		1	0.10%		0.00%		0.00%	1	0.04%	
Activities Total			46	4.49%	17	4.55%	40	3.50%	103	4.05%	
Architecture	Brick, Block	Brick	4	0.39%	1	0.27%	18	1.57%	23	0.90%	
	Building Materials	Building stone		0.00%	1	0.27%		0.00%	1	0.04%	
	Nails, Spikes, Etc.	nail, cut		161	15.72%	170	45.45%	138	12.06%	469	18.45%
		nail, indeterminate		69	6.74%	44	11.76%	69	6.03%	182	7.16%
		nail, wire		35	3.42%	16	4.28%	153	13.37%	204	8.03%
		Spike, cut		1	0.10%		0.00%	1	0.09%	2	0.08%
Window Glass	Window Glass		144	14.06%	9	2.41%	84	7.34%	237	9.32%	
Architecture Total			414	40.43%	241	64.44%	463	40.47%	1118	43.98%	
Arms	Ammunition	Bullet Casing	3	0.29%		0.00%		0.00%	3	0.12%	
		Shotgun Shell	2	0.20%	1	0.27%	2	0.17%	5	0.20%	
Arms Total			5	0.49%	1	0.27%	2	0.17%	8	0.31%	
Clothing	Clothing Fasteners	Button		0.00%		0.00%	3	0.26%	3	0.12%	
	Clothing Related-Other	Bead		0.00%		0.00%	1	0.09%	1	0.04%	
	Shoe Parts	shoe eyelets	1	0.10%		0.00%		0.00%	1	0.04%	
Clothing Total			1	0.10%		0.00%	4	0.35%	5	0.20%	
Faunal	Bone	Bone		0.00%		0.00%	3	0.26%	3	0.12%	
Furnishings	Furniture Hardware	drawer/furniture pull	1	0.10%		0.00%		0.00%	1	0.04%	
	Furniture-Decorative	figurine		0.00%		0.00%	6	0.52%	6	0.24%	
	Lighting	lamp chimney glass	6	0.59%		0.00%	8	0.70%	14	0.55%	
Furnishings Total			7	0.68%		0.00%	14	1.22%	21	0.83%	
Kitchen	Bottles/Jars	Bottle glass	390	38.09%	19	5.08%	244	21.33%	653	25.69%	

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Class	Subclass	Object/Ware	TU 1		TU 7		TU 9		Total	%
			Ct.	%	Ct.	%	Ct.	%		
		Container glass	9	0.88%	11	2.94%	11	0.96%	31	1.22%
		extract bottle		0.00%		0.00%	2	0.17%	2	0.08%
		jar	1	0.10%		0.00%	3	0.26%	4	0.16%
	Ceramics	Hardpaste Porcelain, Overglaze Handpainted		0.00%		0.00%	5	0.44%	5	0.20%
		Hardpaste Porcelain, Plain	2	0.20%		0.00%	3	0.26%	5	0.20%
		Hardpaste Porcelain, Underglaze Handpainted		0.00%		0.00%	1	0.09%	1	0.04%
		Ironstone, Plain	1	0.10%	13	3.48%	123	10.75%	137	5.39%
		Ironstone, Underglaze Handpainted		0.00%		0.00%	1	0.09%	1	0.04%
		Redware, Glazed	2	0.20%		0.00%	7	0.61%	9	0.35%
		Redware, Unglazed	3	0.29%	1	0.27%	1	0.09%	5	0.20%
		Stoneware, Buff Bodied	1	0.10%		0.00%	5	0.44%	6	0.24%
		Stoneware, Gray Bodied	3	0.29%		0.00%	1	0.09%	4	0.16%
		Whiteware, Colored Glaze	2	0.20%	1	0.27%	1	0.09%	4	0.16%
		Whiteware, Overglaze Decal	1	0.10%		0.00%	2	0.17%	3	0.12%
		Whiteware, Overglaze Handpainted	1	0.10%		0.00%	2	0.17%	3	0.12%
		Whiteware, Plain	54	5.27%	3	0.80%	61	5.33%	118	4.64%
		Whiteware, Transfer Printed, Blue		0.00%	1	0.27%	1	0.09%	2	0.08%
		Whiteware, Transfer Printed, Flow Blue	2	0.20%		0.00%		0.00%	2	0.08%
	Whiteware, Transfer Printed, Green		0.00%		0.00%	1	0.09%	1	0.04%	
	Whiteware, Transitional	1	0.10%		0.00%		0.00%	1	0.04%	
	Whiteware, Underglaze Handpainted	4	0.39%		0.00%	5	0.44%	9	0.35%	
	Yellowware, Plain	1	0.10%		0.00%		0.00%	1	0.04%	
	Decorative Table Glass	glass candy dish		0.00%		0.00%	5	0.44%	5	0.20%
	Kitchen-related-Other	Bottle Cap		0.00%		0.00%	1	0.09%	1	0.04%
		canning jar lid liner	10	0.98%		0.00%	12	1.05%	22	0.87%
	Tumblers/Stemware	Tumbler	12	1.17%		0.00%		0.00%	12	0.47%
Kitchen Total			500	48.83%	49	13.10%	498	43.53%	1047	41.19%
Personal	Coins	US Penny		0.00%		0.00%	1	0.09%	1	0.04%
	Hygiene	Comb	1	0.10%		0.00%		0.00%	1	0.04%
	Pharmaceutical	medicine bottle	5	0.49%		0.00%	1	0.09%	6	0.24%
Personal Total			6	0.59%		0.00%	2	0.17%	8	0.31%
Tobacco Pipes	White Ball Clay	pipestem		0.00%		0.00%	1	0.09%	1	0.04%
Unidentifiable	Indeterminate	glass	10	0.98%		0.00%	5	0.44%	15	0.59%
		metal	34	3.32%	66	17.65%	89	7.78%	189	7.44%
		Slag		0.00%		0.00%	23	2.01%	23	0.90%
		wire	1	0.10%		0.00%		0.00%	1	0.04%
Unidentifiable Total			45	4.39%	66	17.65%	117	10.23%	228	8.97%
TOTAL			1024	100.00%	374	100.00%	1144	100.00%	2542	100.00%

There were 813 artifacts recovered from Feature 5 (see Table 14-15). All three units generated a substantial number of artifacts from this feature, varying from 241 artifacts in TU 1 to 308 artifacts from TU 9. Nails ($n=437$) were the most common type of artifact recovered from the feature, followed distantly by unidentified metal pieces ($n=94$). There were 393 temporally diagnostic artifacts used to calculate the mean date of 1874 for this feature (see Table 14-16). The feature also had a TPQ date of 1919. A 1916 U.S. penny was recovered during excavation of Feature 5 in TU 9, supporting the dating of this feature to the first quarter of the twentieth century.

Excavations yielded 753 artifacts from the Ab horizon (see Table 14-15). Bottle, jar, and container glass accounted for 32.5% of this assemblage. TU 9 produced the majority ($n=700$) of artifacts from the Ab horizon, and all but four of the ceramics came from this unit. Other common artifacts found in this horizon included nails ($n=95$), window glass ($n=75$), and ironstone ($n=123$). The 286 temporally diagnostic artifacts recovered from the Ab horizon produced a mean date of 1903 and a TPQ date of 1883 for this horizon (see Table 14-16). Feature 5 was excavated into the Ab horizon. The dating for the Ab and Feature 5 artifacts suggests that this feature was emplaced during the early-twentieth century.

Feature 9 was only identified in TU 1 and is discussed below. Artifacts recovered from the B horizon in TU 1 may be associated with Feature 9.

Table 14-16. Site 36LU283: Test Units 1, 7, and 9 Artifact Dating Analysis, by Soil Horizon

Soil Horizon	Object/Ware	Reference	Start Date	End Date	Count
CA	Nail, cut	Nelson 1968	1790	1890	150
CA	Nail, wire	Nelson 1968; IMAC 1984	1880	2000	84
CA	Spike, cut	Nelson 1968	1790	1890	1
CA	Lamp chimney glass, sun colored amethyst	Miller and Pacey 1985; Woodhead 1984	1880	1915	3
CA	Bottle/Jar glass, sun colored amethyst	Miller and Pacey 1985	1880	1915	41
CA	Bottle/Jar glass, blob top	Lief 1965	1879	1920	1
CA	Bottle/Jar glass, cobalt	IMAC 1984	1890	1960	1
CA	Bottle/Jar glass, standardized screw threads	Deiss 1981	1919	2000	1
CA	Ironstone, Plain	Wetherbee 1980	1840	2000	13
CA	Whiteware, Colored Glaze	Price 1979; Noel Hume 1980; Lofstrum et al. 1982; Majewski and O'Brien 1984	1830	2000	2
CA	Whiteware, Overglaze Decal	Haskell 1981	1890	2000	1
CA	Whiteware, Handpainted	Lofstrum et al. 1982; Majewski and O'Brien 1984	1840	1860	2
CA	Whiteware, Plain	Price 1979; Noel Hume 1980	1830	2000	33
CA	Whiteware, Transfer Printed, Blue	Majewski and O'Brien 1984; Mullins 1988	1828	1860	1
CA	Whiteware, Transitional		1815	1860	1
CA	Canning jar lid liner	Toulouse 1971	1869	1950	2
				Total	337
				Mean	1885
				TPQ	1919
Ab	Nail, cut	Nelson 1968	1790	1890	51
Ab	Nail, wire	Nelson 1968; IMAC 1984	1880	2000	25
Ab	Spike, cut	Nelson 1968	1790	1890	1
Ab	Lamp chimney glass, pie crust edging	Woodhead 1984:62	1877	2000	4
Ab	Lamp chimney glass, beaded rim	Woodhead 1984:62	1883	2000	1
Ab	Bottle/Jar glass, sun colored amethyst	Miller and Pacey 1985	1880	1915	6
Ab	Extract bottle, sun colored amethyst; Moyer Brothers, Bloomsburg, PA 1854 to ?; documentation printed and with artifact	Miller and Pacey 1985	1880	1915	2
Ab	Ironstone, Plain	Wetherbee 1980	1840	2000	122
Ab	Ironstone, Plain; "IRONS CHI" inside a crest; "POWELL & B" in a ribbon below circle; Powell & Bishop, Hanley, UK.	Godden 1964:509 mark 3136	1876	1878	1
Ab	Ironstone, Handpainted	Wetherbee 1980	1840	2000	1
Ab	Whiteware, Overglaze Decal	Haskell 1981	1890	2000	2
Ab	Whiteware, Handpainted	Lofstrum et al. 1982; Majewski and O'Brien 1984	1840	1860	5
Ab	Whiteware, Plain	Price 1979; Noel Hume 1980	1830	2000	50

Soil Horizon	Object/Ware	Reference	Start Date	End Date	Count
Ab	Whiteware, Transfer Printed, Blue	Majewski and O'Brien 1984; Mullins 1988	1828	1860	1
Ab	Whiteware, Transfer Printed, Flow Blue	Lofstrum et al. 1982	1844	1860	2
Ab	Whiteware, Transfer Printed, Green	Majewski and O'Brien 1984	1828	1850	1
Ab	Canning jar lid liner	Toulouse 1971	1869	1950	11
				Total	286
				Mean	1903
				TPQ	1883
F5	Hinge	Devoto 1943	1846	2000	1
F5	Nail, cut	Nelson 1968	1790	1890	235
F5	Nail, wire	Nelson 1968; IMAC 1984	1880	2000	90
F5	Bottle/Jar glass, sun colored amethyst	Miller and Pacey 1985	1880	1915	17
F5	Bottle/Jar glass, standardized screw threads	Deiss 1981	1919	2000	1
F5	Ironstone, Plain	Wetherbee 1980	1840	2000	1
F5	Whiteware, Colored Glaze	Price 1979; Noel Hume 1980	1830	2000	1
F5	Whiteware, Plain	Price 1979; Noel Hume 1980	1830	2000	32
F5	Whiteware, Handpainted	Lofstrum et al. 1982; Majewski and O'Brien 1984	1840	1860	5
F5	Canning jar lid liner	Toulouse 1971	1869	1950	9
F5	US Penny		1916	1916	1
				Total	393
				Mean	1874
				TPQ	1919
F9	Nail, cut	Nelson 1968	1790	1890	24
F9	Nail, wire	Nelson 1968; IMAC 1984	1880	2000	1
F9	Whiteware, Colored Glaze	Price 1979; Noel Hume 1980; Lofstrum et al. 1982; Majewski and O'Brien 1984	1830	2000	1
F9	Whiteware, Plain	Price 1979; Noel Hume 1980	1830	2000	2
				Total	28
				Mean	1852
				TPQ	1880
B	Nail, cut	Nelson 1968	1790	1890	9
B	Nail, wire	Nelson 1968; IMAC 1984	1880	2000	4
B	Whiteware, Plain	Price 1979; Noel Hume 1980	1830	2000	1
B	Yellowware, Plain	Ketchum 1987	1830	1900	1
				Total	15
				Mean	1873
				TPQ	1880

Five flotation samples were collected, processed, and analyzed from this ash dump including one from Feature 5a, three from Feature 5b, and one from Feature 5c (see Appendix K). Carbonized pieces of hickory, pine, white oak, and American chestnut wood, bread wheat kernels, and wild black cherry seeds were identified in these samples. Non-carbonized botanical remains in the flotation samples included a thorn, three-seeded mercury, goosefoot/pigweed, carpetweed, purselane, knotweed, sumac, cherry, elderberry, grape, and raspberry/blackberry. These likely represent plants growing in the area when the ash dump was open.

Feature 7 – Refuse Disposal Area

Feature 7 was large refuse disposal area located 80-120 ft northwest of the former house (see Figure 14-19). The feature limits were delineated using a 1-inch split-spoon auger to examine soil stratigraphy; however, the refuse scatter may be much larger. Sixteen STPs fell within the feature area delineated with the auger. Excavation of these STPs produced 1462 artifacts for an average density of about 93 artifacts per STP, most of which came from either a disturbed, CA horizon or an Ap horizon.

Test Unit 2 (N620 E1425) was excavated to further investigate the area of STP N620 E1425, which produced the most artifacts (n=362) during Phase II STP excavations (see Figure 14-19). This unit exhibited an Ap-B soil sequence. The dark yellowish-brown silt loam AP horizon

averaged 1.1 ft in depth that included numerous small ash lenses. The underlying B horizon consisted of yellowish-brown sandy loam.

Excavation of Test Unit 2 produced 5167 artifacts or approximately 35.6% of all artifacts recovered from the Phase II investigation (Table 14-17). Bottle, jar, and miscellaneous container glass fragments account for 83.7% ($n=4324$) of artifacts from this unit. Kitchen ceramics account for 3.9% of the artifacts ($n=202$). Other common artifacts found in this unit include 156 window glass, 131 nails, and 244 unidentified metal, glass, plastic, and slag pieces. Other kinds of refuse were represented in smaller quantities.

Table 14-17. Site 36LU283: Feature 7 Artifact Pattern Analysis, by STP and TU

Class	Subclass	Object/Ware	STPS		TEST UNIT 2		Total Count	Total %
			Ct.	%	Ct.	%		
Activities	Activities-Other	battery core	4	0.28%	17	0.33%	21	0.32%
		box lid with hinge	3	0.21%		0.00%	3	0.05%
		gasket	1	0.07%		0.00%	1	0.02%
		ribbon	1	0.07%		0.00%	1	0.02%
	Flowerpots	terra cotta	3	0.21%	5	0.10%	8	0.12%
	Heating	Coal		0.00%	6	0.12%	6	0.09%
	Household Items	bleach bottle		0.00%	1	0.02%	1	0.02%
	Misc. Small Hardware	Bolt		0.00%	2	0.04%	2	0.03%
		hardware, indeterminate		0.00%	1	0.02%	1	0.02%
		Hook	1	0.07%		0.00%	1	0.02%
		hoop	1	0.07%		0.00%	1	0.02%
		plate		0.00%	1	0.02%	1	0.02%
		tube		0.00%	2	0.04%	2	0.03%
		washer		0.00%	1	0.02%	1	0.02%
		Musical	record		0.00%	1	0.02%	1
	Recreation	Clay pigeon	4	0.28%	15	0.29%	19	0.29%
		Plastic Arrow Tip	1	0.07%		0.00%	1	0.02%
	Toys	Marble	2	0.14%	1	0.02%	3	0.05%
		toy car wheel	1	0.07%		0.00%	1	0.02%
	Writing	Graphite Pencil	2	0.14%	2	0.04%	4	0.06%
Activities Total			24	1.68%	55	1.06%	79	1.20%
Architecture	Brick, Block	Brick	1	0.07%	4	0.08%	5	0.08%
		Nails, Spikes, Etc.	nail, cut	4	0.28%	5	0.10%	9
		nail, indeterminate	28	1.96%	99	1.92%	127	1.92%
		nail, wire	19	1.33%	27	0.52%	46	0.70%
	Window Glass	Window Glass	78	5.45%	156	3.02%	234	3.55%
Architecture Total			130	9.08%	291	5.63%	421	6.38%
Arms	Ammunition	Shotgun Shell		0.00%	5	0.10%	5	0.08%
Clothing	Clothing Fasteners	Button		0.00%	2	0.04%	2	0.03%
		Snap	1	0.07%		0.00%	1	0.02%
	Clothing Related-Other	leather	2	0.14%	2	0.04%	4	0.06%
		Shoe Parts	shoe eyelets	1	0.07%		0.00%	1
		shoe heel	4	0.28%	1	0.02%	5	0.08%
		shoe tacks	4	0.28%		0.00%	4	0.06%
Clothing Total			12	0.84%	5	0.10%	17	0.26%
Faunal	Bone	Bone	2	0.14%		0.00%	2	0.03%

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Class	Subclass	Object/Ware	STPS		TEST UNIT 2		Total Count	Total %	
			Ct.	%	Ct.	%			
Furnishings	Furniture Related-Other	Clock parts	1	0.07%		0.00%	1	0.02%	
		figurine, person	1	0.07%		0.00%	1	0.02%	
		Flat Decorative Glass			11	0.21%	11	0.17%	
	Lighting	light bulb	4	0.28%	7	0.14%	11	0.17%	
		Furnishings Total	6	0.42%	18	0.35%	24	0.36%	
Kitchen	Bottles/Jars	beverage bottle	17	1.19%	5	0.10%	22	0.33%	
		Bottle glass	992	69.27%	4115	79.64%	5107	77.39%	
		Container glass	42	2.93%	193	3.74%	235	3.56%	
		extract bottle	1	0.07%	1	0.02%	2	0.03%	
		jar	9	0.63%	7	0.14%	16	0.24%	
		milk bottle		0.00%	3	0.06%	3	0.05%	
		soda bottle	1	0.07%		0.00%	1	0.02%	
	Ceramics	Hardpaste Porcelain, Plain			2	0.04%	2	0.03%	
		Ironstone, Plain	2	0.14%	10	0.19%	12	0.18%	
		Redware, Unglazed	2	0.14%	2	0.04%	4	0.06%	
		Stoneware, Gray Bodied	2	0.14%	4	0.08%	6	0.09%	
		Whiteware, Colored Glaze	2	0.14%	4	0.08%	6	0.09%	
		Whiteware, Fiesta Style	1	0.07%	7	0.14%	8	0.12%	
		Whiteware, Overglaze Decal	3	0.21%		0.00%	3	0.05%	
		Whiteware, Overglaze Handpainted	8	0.56%	16	0.31%	24	0.36%	
		Whiteware, Plain	49	3.42%	129	2.50%	178	2.70%	
		Whiteware, Shell Edge	2	0.14%		0.00%	2	0.03%	
		Whiteware, Transfer Printed & Underglaze Handpainted		0.00%	1	0.02%	1	0.02%	
		Whiteware, Transfer Printed, Blue		0.00%	8	0.15%	8	0.12%	
		Whiteware, Transfer Printed, Brown	1	0.07%		0.00%	1	0.02%	
		Whiteware, Transfer Printed, Green		0.00%	1	0.02%	1	0.02%	
		Whiteware, Transfer Printed, Pink		0.00%	1	0.02%	1	0.02%	
		Whiteware, Underglaze Handpainted	1	0.07%	11	0.21%	12	0.18%	
		Yellowware, Plain	2	0.14%	6	0.12%	8	0.12%	
		Decorative Table Glass	glass bowl	2	0.14%	1	0.02%	3	0.05%
			glass hollowware		0.00%	2	0.04%	2	0.03%
			glass lid	1	0.07%		0.00%	1	0.02%
	glass mug			0.00%	6	0.12%	6	0.09%	
	glass saucer			0.00%	1	0.02%	1	0.02%	
	Kitchen-related-Other	Bottle Cap	1	0.07%	1	0.02%	2	0.03%	
		canning jar lid liner	10	0.70%	9	0.17%	19	0.29%	
		cap seal	1	0.07%		0.00%	1	0.02%	
	Tumblers/Stemware	tumbler	9	0.63%		0.00%	9	0.14%	
Kitchen Total			1161	81.08%	4546	87.98%	5707	86.48%	
Personal	Hygiene	Comb	1	0.07%	1	0.02%	2	0.03%	
		ointment tube	1	0.07%		0.00%	1	0.02%	
	Pharmaceutical	medicine bottle		0.00%	1	0.02%	1	0.02%	
		pharmaceutical bottle/jar		0.00%	1	0.02%	1	0.02%	
Personal Total			2	0.14%	3	0.06%	5	0.08%	
Unidentifiable	Indeterminate	aluminum	1	0.07%		0.00%	1	0.02%	

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Class	Subclass	Object/Ware	STPS		TEST UNIT 2		Total Count	Total %
			Ct.	%	Ct.	%		
		glass	4	0.28%	9	0.17%	13	0.20%
		lead		0.00%	1	0.02%	1	0.02%
		metal	80	5.59%	223	4.32%	303	4.59%
		plastic	5	0.35%	9	0.17%	14	0.21%
		Rubber	4	0.28%		0.00%	4	0.06%
		Slag	1	0.07%	1	0.02%	2	0.03%
		zinc		0.00%	1	0.02%	1	0.02%
Unidentifiable Total			95	6.63%	244	4.72%	339	5.14%
TOTAL			1432	100.00%	5167	100.00%	6599	100.00%

The presence of ash lenses through the Ap soil horizons in excavated STPs and Test Unit 2 that fell within the limits of this feature suggests that this area, which was at least 80 ft from the house, was used as the family trash dump. This low-lying area was frequently marshy because of its position adjacent to a small, unnamed, stream and would not have been productive soil for farming (i.e. marginal agricultural land). Therefore, this area was likely a convenient place to discard, and occasionally burn, the family trash. Dating analysis of the temporally diagnostic artifacts both from the STPs and Test Unit 2 indicate that this refuse disposal area was used during the first half of the twentieth century (Table 14-18).

Table 14-18. Site 36LU283: Feature 7 Artifact Dating Analysis

Object/Ware	Count	Start Date	End Date	Reference
FEATURE 7 STPs				
Soda Bottle; in script: Coca-Co	1	1950	2000	
Plastic comb	1	1950	2000	
Plastic wrapper	1	1950	2000	
Plastic ribbon	1	1950	2000	
Aluminum foil	1	1947	2000	Panati 1987
Nail, cut	4	1790	1890	Nelson 1968
Nail, wire	19	1880	2000	Nelson 1968; IMAC 1984
Bottles/Jar glass; mark: Owens Illinois Glass Co., Toledo, OH)	3	1940	2000	Toulouse 1971:403-406
Bottles/Jar glass; applied color label	3	1935	2000	Deiss 1981
Bottles/Jar glass; crown finish	1	1892	2000	Lief 1965
Bottles/Jar glass; standardized screw threads	26	1919	2000	Deiss 1981
Bottles/Jar glass; stippled	91	1939	2000	Busch 1983
Bottles/Jar glass; pattern mold	1	1800	1870	Deiss 1981
Bottles/Jar glass; sun colored amethyst	2	1880	1915	Miller and Pacey 1985
Canning jar lid liner	9	1869	1950	Toulouse 1971
Ironstone, Plain	2	1840	2000	Wetherbee 1980
Whiteware, Colored Glaze	2	1830	2000	Price 1979; Noel Hum e1980; Lofstrum et al. 1982; Majewski and O'Brien 1984
Whiteware, Decal, Overglaze	3	1890	2000	Haskell 1981
Whiteware, Fiesta Style	1	1936	1973	
Whiteware, Handpainted	9	1840	1860	Lofstrum et al. 1982; Majewski and O'Brien 1984
Whiteware, Plain	49	1830	2000	Price 1979; Noel Hum e1980

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Object/Ware	Count	Start Date	End Date	Reference
Whiteware, Shell Edge	2	1830	1860	Lofstrum et al. 1982; Miller and Hunter 1990
Whiteware, Transfer Printed, Brown	1	1828	1850	Majewski and O'Brien 1984
Yellowware, Plain	2	1830	1900	Ketchum 1987
STP Total	235			
Mean	1941			
TPQ	1950			
FEATURE 7, TU2				
nail, wire	27	1880	2000	Nelson 1968; IMAC 1984
nail, cut	5	1790	1890	Nelson 1968
Bottles/Jar glass; mark: A in circle; (American Glass Works, Richmond, VA., and Padon City, WV.)	1	1908	1935	Toulouse 1971; 22-24
Bottles/Jar glass; mark: five pointed star; (Illinois Glass Co., Alton, IL); (Smalley, Kivlan & Onthank, Boston, MA)	2	1916	1919	Toulouse 1971: 264-268; 478-479
Bottles/Jar glass; mark: (Hazel-Atlas Glass Co., Wheeling WV)	3	1920	1946	Toulouse 1971: 239
Extract bottle; mark: Hazel-Atlas Glass Co., Wheeling WV	1	1920	1964	Toulouse 1971: 239
Bottles/Jar glass; mark: K in keystone; (Knox Glass Bottle Co., Knox, PA)	1	1939	1968	Toulouse 1971; 293-298; Busch 1983
Bottles/Jar glass, stippled; mark: (Anchor Hocking Glass Corp., Lancaster, Ohio)	5	1939	2000	Toulouse 1971:46-48; Busch 1983
Bottles/Jar glass, mark: O and I inside diamond; (Owens Illinois Glass Co., Toledo, OH)	4	1940	1954	Toulouse 1971:403-406; Busch 1983
Bottles/Jar glass, mark: I inside O; (Chas. Boldt Glass Mfg. Co. owned by Owens Bottle Co.; Huntington, WV)	1	1940	2000	Toulouse 1971:403-404; Busch 1983
Bottles/Jar glass; mark: Duraglass; (Owens Illinois Glass Co., Toledo, OH)	22	1940	2000	Toulouse 1971:403-406; Busch 1983
Bottles/Jar glass; mark: S inside keystone; (Seaboard Glass Bottle Co., Pittsburgh, PA)	1	1943	1947	Toulouse 1971: 455; Busch 1983
Bottles/Jar glass; applied color label	17	1935	2000	Deiss 1981
Bottles/Jar glass; cobalt	3	1890	1960	IMAC 1984
Bottles/Jar glass; crown finish	12	1892	2000	Lief 1965
Bottles/Jar glass, pattern mold	3	1800	1870	Deiss 1981
Bottles/Jar glass, standardized screw threads	93	1919	2000	Deiss 1981
Bottles/Jar glass, stippled	278	1939	2000	Busch 1983
Bottles/Jar glass, sun colored amethyst	5	1880	1915	Miller and Pacey 1985
Bottles/Jar glass, press molded	2	1903	2000	Deiss 1981
Canning jar lid liner	9	1869	1950	Toulouse 1971
Pharmaceutical bottle/jar; mark: "x" above "M" in a circle; (Maryland Glass Corp., Baltimore, MD)	1	1916	2000	Toulouse 1971: 339-341
Ironstone, Plain	10	1840	2000	Wetherbee 1980
Whiteware, Plain	129	1830	2000	Price 1979; Noel Hume 1980
Whiteware, Colored Glaze	4	1830	2000	Price 1979; Noel Hume 1980; Lofstrum et al. 1982; Majewski and O'Brien 1984
Whiteware, Handpainted	27	1840	1860	Lofstrum et al. 1982; Majewski and O'Brien 1984
Whiteware, Fiesta Style	7	1936	1973	
Whiteware, Transfer Printed; Green, Pink	3	1828	1850	Majewski and O'Brien 1984
Whiteware, Transfer Printed, Blue	8	1828	1860	Majewski and O'Brien 1984; Mullins 1988

Object/Ware	Count	Start Date	End Date	Reference
Yellowware, Plain	6	1830	1900	Ketchum 1987
TU 2	690			
Mean	1944	TPQ	1943	
Feature 7	925			
Mean	1943	TPQ	1950	

Feature 9 – Pit of Unknown Function

Feature 9 was identified during excavation of Test Unit 1 and lay directly beneath Feature 5a. This feature extended outside of Test Unit 1; however, the portion exposed within this unit measured 5x0.7-2.0x1.25 ft (1.5x0.2-0.6x0.4 m). The center point of the excavated portion of this feature was located at N545.5 E1457.5. The feature matrix consisted of brown (10YR4/3) silt loam with dense concentrations of pebbles and reddog (Photograph 14-21). The exact

function of this feature could not be determined based on the available information; however, high concentrations of small gravels and red dog in the fill suggest that this feature may be associated with a drain line.



Photograph 14-21. Site 36LU283: Feature 9 Cross Section, Facing East

Excavation of this feature produced 79 artifacts (see Table 14-15). The majority of artifacts were cut nails ($n=24$) and indeterminate nail fragments ($n=20$). Other artifacts include two plain whiteware, one decorated whiteware, and one wire nail. These artifacts were used to calculate a mean date of 1852 for this feature (see Table 14-16). Since wire nails were manufactured in the mid-nineteenth century but not in common use until ca. 1880s (Nelson 1968; IMAC 1984), this feature likely dates to the late-nineteenth century.

Phase I/II Artifact Analysis

Phase I/II archaeological investigations produced 14,894 historic artifacts from Site 36LU283. In addition, one prehistoric artifact was recovered during Phase II STP investigations. Phase Ib investigations yielded 387 artifacts from surface collection and STP activities. The remaining artifacts were recovered from STP excavations, test units, feature excavations and a surface grab sample.

Pattern Analysis

The 14,894 historic artifacts fell within ten artifact functional groups including activities, architecture, arms, clothing, faunal, furnishings, kitchen, personal, prehistoric, tobacco, and unidentified (Table 14-19). Unidentified includes pieces of metal, plastic, glass, paint chip, porcelain, rubber, slag, and wood, which could not be placed into a more specific class. The arms, faunal and tobacco pipe groups exhibited little diversity of finds. The forty-one arms-related artifacts included 24 cartridge shells and 17 shotgun shell pieces (Photograph 14-22). The faunal assemblage included 20 bone, two teeth, and one clam shell. The tobacco pipe assemblage included one cigarette wrapper and one white ball clay tobacco pipe piece. There was also one prehistoric late-stage biface recovered from the fill inside the house cellar (Photograph 14-23).



Photograph 14-22. Site 36LU283: Miscellaneous Artifact Sample

Row 1(L-R): red, faceted bead (FS 250); green toy bead (FS 317); shotgun shell with embossed "U.M.C. Co.; NITRO CLUB; 1; 2" (FS 318); shotgun shell (FS 220); shotgun shell with embossed "WINCHESTER" "RANGER" (FS 319); spoon with embossed floral design (FS 102). Row 2 (L-R): glass horseshoe with rope and anchor in center (FS 235); pet tag (FS 157); thimble (FS 91); hardware (FS 187). Row 3 (L-R): white ball clay pipestem (FS 294); shotgun shell (FS 319); shoelace eyelets (Fs 211); gasket (FS 135).

Photograph 14-23. Site 36LU283: Prehistoric Late Stage Biface Recovered from Test Unit 5



Table 14-19. Site 36LU283: Artifact Pattern Analysis

Class	Subclass	Object/Ware	Count	Percent	
Activities	Activities-Other	battery core	23	0.15%	
		box lid with hinge	3	0.02%	
		cap/lid	1	0.01%	
		ceramic pipe	1	0.01%	
		gasket	2	0.01%	
		molded horse, metal	1	0.01%	
		ribbon	1	0.01%	
		metal pipe	4	0.03%	
		Flowerpots	terra cotta	63	0.42%
		Hand Tools	chisel	1	0.01%
			drill bit	1	0.01%
		Heating	Coal	37	0.25%
		Household Items	bleach bottle	1	0.01%
		Livestock/Pets	Barbed Wire	6	0.04%
	Buckle		2	0.01%	
	Misc. Hardware	Horseshoe	4	0.03%	
		Bolt	16	0.11%	
		Bracket	2	0.01%	
		bucket handle	1	0.01%	
		chain link	6	0.04%	
		coil	1	0.01%	
		cotter pin	1	0.01%	
		curtain hardware	2	0.01%	
		hardware, indeterminate	22	0.15%	
		hinge	5	0.03%	
		Hook	4	0.03%	
		latch	2	0.01%	
		machine part, indeterminate	4	0.03%	
		Nut	2	0.01%	
		ring/hoop	2	0.01%	
		Rod	3	0.02%	
		Screw	9	0.06%	
		Staple	13	0.09%	
		strap	9	0.06%	
		tube	4	0.03%	
	Washer	11	0.07%		
	Musical	Harmonica part	1	0.01%	
		vinyl record album	1	0.01%	
	Recreation	Bingo marker	1	0.01%	
Clay Pigeon		37	0.25%		
Plastic Arrow Tip		1	0.01%		
Sewing	Thimble	1	0.01%		
Toys	ball	1	0.01%		
	doll parts	3	0.02%		
	Marble	19	0.13%		
	toy airplane	1	0.01%		
	toy coin	2	0.01%		
	toy connector Bead	1	0.01%		
	toy tea set parts	5	0.03%		
	toy car parts	3	0.02%		
	Writing	Graphite Pencil	4	0.03%	
		pencil sharpener	1	0.01%	
	Activities Total			352	2.36%
Architecture	Architectural-Other	Concrete	6	0.04%	
	Brick, Block	Brick	86	0.58%	
	Building Materials	Building stone	1	0.01%	

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Class	Subclass	Object/Ware	Count	Percent
		Mortar	1	0.01%
		Painted wood	2	0.01%
	Nails, Spikes, Etc.	nail, cut	1106	7.43%
		nail, indeterminate	608	4.08%
		nail, wire	731	4.91%
		Spike, cut	18	0.12%
		Spike, indeterminate	1	0.01%
	Roofing Materials	Roofing Nail	71	0.48%
		Roofing Tack	39	0.26%
		Roofing Tile	1	0.01%
		Tar paper	1	0.01%
	Window Glass	Safety Glass	123	0.83%
		Window Glass	1196	8.03%
Architecture Total			3991	26.80%
Arms	Ammunition	Bullet Casing	24	0.16%
		Shotgun Shell	16	0.11%
		Shotgun Shell primer	1	0.01%
Arms Total			41	0.28%
Clothing	Cloth	Fabric	1	0.01%
	Clothing Fasteners	Belt buckle	1	0.01%
		Button	27	0.18%
		Snap	1	0.01%
	Clothing Related-Other	Bead	1	0.01%
		leather	4	0.03%
	Shoe Parts	shoe eyelets	4	0.03%
		Shoe heel	6	0.04%
		shoe sole	1	0.01%
		shoe tacks	4	0.03%
Clothing Total			50	0.34%
Faunal	Bone	Bone	20	0.13%
		Teeth	2	0.01%
	Shell	clam shell	1	0.01%
Faunal Total			23	0.15%
Furnishings	Furniture Hardware	drawer/furniture pull	4	0.03%
		Castor	1	0.01%
	Furniture Related-Other	Clock parts	1	0.01%
	Furniture-Decorative	decorative bead	2	0.01%
		figurine	13	0.09%
		Flat Decorative Glass	11	0.07%
	Lighting	lamp chimney glass	24	0.16%
		light bulb	13	0.09%
Furnishings Total			69	0.46%
Kitchen	Bottles/Jars	beer bottle	26	0.17%
		beverage bottle	24	0.16%
		Bottle glass	7381	49.56%
		Container glass	325	2.18%
		extract bottle	7	0.05%
		jar	99	0.66%
		liquor bottle	10	0.07%
		milk bottle	6	0.04%
		soda bottle	1	0.01%
		wine bottle	42	0.28%
	Ceramics	Earthenware	4	0.03%
		Hardpaste Porcelain, Biscuit	1	0.01%
		Hardpaste Porcelain, Colored Glaze	5	0.03%
		Hardpaste Porcelain, Decal	4	0.03%

Technical Report: BBNPP Phase I and Phase II Cultural Resource Investigations

Class	Subclass	Object/Ware	Count	Percent
		Hardpaste Porcelain, Overglazed Handpainted	6	0.04%
		Hardpaste Porcelain, Plain	27	0.18%
		Hardpaste Porcelain, Transfer Printed	1	0.01%
		Hardpaste Porcelain, Underglaze Handpainted	3	0.02%
		Ironstone, Plain	314	2.11%
		Ironstone, Underglaze Handpainted	2	0.01%
		Pearlware, Plain	1	0.01%
		Redware, Glazed	41	0.28%
		Redware, Unglazed	21	0.14%
		stoneware, buff	1	0.01%
		Stoneware, Buff Bodied	37	0.25%
		Stoneware, Gray Bodied	36	0.24%
		Whiteware, Colored Glaze	37	0.25%
		Whiteware, Fiesta Style	8	0.05%
		Whiteware, Overglaze Decal	23	0.15%
		Whiteware, Overglaze Handpainted	34	0.23%
		Whiteware, Overglaze Handpainted & Underglaze Decal	1	0.01%
		Whiteware, Plain	791	5.31%
		Whiteware, Shell Edge	3	0.02%
		Whiteware, Transfer Printed & Underglaze Handpainted	6	0.04%
		Whiteware, Transfer Printed, Black	2	0.01%
		Whiteware, Transfer Printed, Blue	15	0.10%
		Whiteware, Transfer Printed, Brown	1	0.01%
		Whiteware, Transfer Printed, Flow Blue	4	0.03%
		Whiteware, Transfer Printed, Green	10	0.07%
		Whiteware, Transfer Printed, Pink	1	0.01%
		Whiteware, Transitional	3	0.02%
		Whiteware, Underglaze Handpainted	26	0.17%
		Yellowware, Plain	13	0.09%
		Yellowware, Rockingham-Type Glaze	1	0.01%
	Decorative Table Glass	glass bowl	3	0.02%
		glass candy dish	5	0.03%
		glass finial	1	0.01%
		glass hollowware	7	0.05%
		glass lid	2	0.01%
		glass mug	14	0.09%
		glass salt/pepper shaker	1	0.01%
		glass saucer	1	0.01%
	Kitchen-related-Other	baster bulb	1	0.01%
		beverage pull tab	4	0.03%
		Bottle Cap	5	0.03%
		canning jar lid liner	75	0.50%
		cap seal	1	0.01%
		cork	2	0.01%
		lid or cover	2	0.01%
		lightning stopper	1	0.01%
	Kitchenware (Utensils, Pots, Etc.)	cast iron lid	2	0.01%
		Spoon	1	0.01%
		table utensil handle	1	0.01%
	Tumblers/Stemware	Tumbler	30	0.20%
		stemware	1	0.01%
		Kitchen Total	9564	64.21%
Personal	Coins	US Penny	4	0.03%

Class	Subclass	Object/Ware	Count	Percent
	Cosmetics	cosmetic jar	2	0.01%
	Hygiene	Comb	5	0.03%
		ointment tube	2	0.01%
		Jewelry	Broach/Pin	2
	Personal-Other	bead/ring	1	0.01%
	Pharmaceutical	medicine bottle	10	0.07%
		pharmaceutical bottle/jar	8	0.05%
Personal Total			34	0.23%
Prehistoric	Lithic	Biface	1	0.01%
Tobacco Pipes	Smoking Related-Other	cigarette packaging	1	0.01%
	White Ball Clay	pipestem	1	0.01%
Tobacco Pipes Total			2	0.01%
Unidentifiable	Indeterminate	aluminum	4	0.03%
		glass	46	0.31%
		lead	1	0.01%
		metal	611	4.10%
		paint	2	0.01%
		plastic	39	0.26%
		porcelain	1	0.01%
		Rubber	7	0.05%
		Slag	25	0.17%
		wire	29	0.19%
		wood	1	0.01%
		zinc	1	0.01%
		Unidentifiable Total		
TOTAL			14894	100.00%

The activities group includes a variety of materials representing recreation, toys, tools, writing items, musical instruments, hardware, machine parts, and stable items. The 352 activities-related specimens from Site 36LU283 fell within nine subclasses: flowerpots, heating, hand tools, household items, livestock/pets, miscellaneous hardware, musical, recreation, toys, sewing, writing, and other types of items (see Table 12-18). Flowerpot fragments ($n=63$), coal ($n=37$), battery cores ($n=23$), and clay pigeon pieces ($n=37$) were the most common artifact type in this class. The types of toys, such as doll parts, tea sets, and car parts, suggest that both boys and girls resided at this location (see Photographs 14-22 and 14-24).



Photograph 14-24. Site 36LU283: Toy Sample

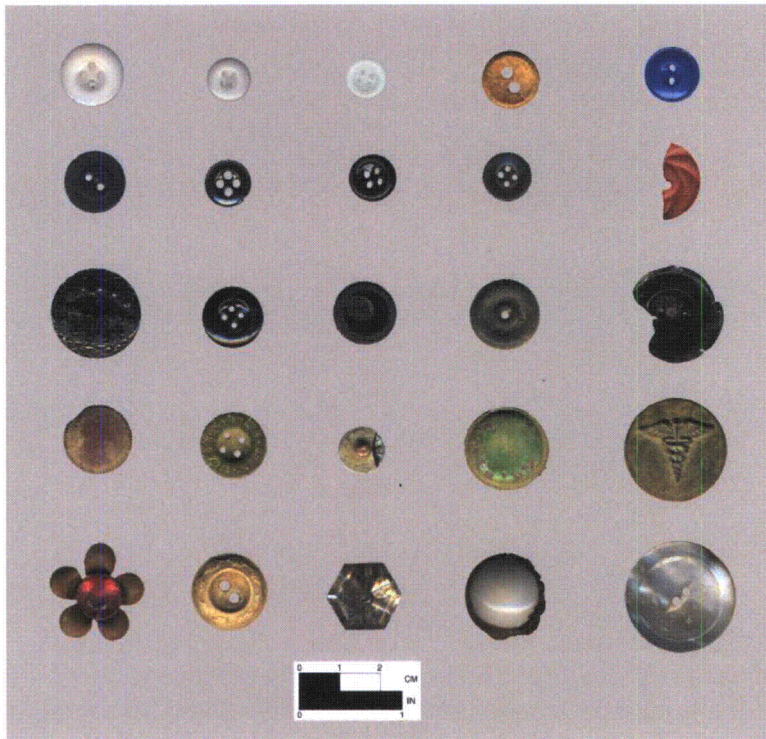
Row 1 (L-R): Three clay marbles (FS 317, FS 318, FS 182); two glass marbles (FS 102, FS 319).
 Row 2 (L-R): Back of figurine (FS 194); Play coin (FS 317); three glass marbles (FS 170, FS 219, FS 316); miniature teeth (FS 318).
 Row 3 (L-R): toy car tire (Fs 117); toy tea saucer (FS 298); porcelain doll arm (FS 250); porcelain doll leg (FS 250).

The architecture group includes construction materials. Architecture-related artifacts comprised approximately 26.8 percent of the total artifact assemblage (see Table 14-19). A total of 3,991 architecture-related items were identified, including nails and tacks ($n=2574$), window glass and safety glass ($n=1319$), and brick ($n=86$). Other artifacts were present in smaller quantities.

Nails and tacks ($n=2574$) comprised 17.29% of the assemblage. These included cut ($n=1124$) and wire ($n=731$) varieties, as well as nails that were too corroded to provide evidence of manufacturing method ($n=608$), roofing nails ($n=71$) and roofing tacks ($n=39$). Nails can be useful in providing general dating information pertaining to construction activities at a site because of changes in nail manufacturing and purchasing pattern. Cut nails were introduced by the end of the eighteenth century, were in limited use until about 1820, and represented the most common type of nail utilized between 1820 and 1890 (Nelson 1968). The first mill to produce wire nails was established in 1875 (Nelson 1968) but due to the production expense, wire nails did not dominate the market until the 1890s when the cost for wire nails dropped below that of cut nails (Gillio, Levine, and Scott 1980). The high quantity of both cut and wire nails suggests that the original house structure dates to sometime before 1890 and that additional structures or remodeling efforts occurred during the twentieth century.

There were 50 clothing related-artifacts (see Table 14-19). These artifacts included 27 buttons, 15 shoe parts, one snap, one bead, four pieces of leather, and one belt buckle. The buttons

came in various materials, styles and sizes (Photograph 14-25). One brass button was stamped "JOHN STILZ & SON PHILA" and the remaining buttons were unmarked.



Photograph 14-25. Site 36LU283: Button Variety

Row 1 (L-R): white four-hole sew-through button (FS 284); white four-hole sew-through button (FS 319); white four-hole sew-through button (FS 319); two-hole sew-through wooden button (FS 316); blue

two-hole sew-through button (FS 318). Row 2 (L-R): two-hole sew-through button (FS 316); four-hole sew-through button (FS 219); four-hole sew-through button (FS 317); four-hole sew-through button (FS 317); one-hole sew-through broken button (FS 292). Row 3 (L-R): molded button (FS 318); four-hole sew-through button (FS 317); button with crescent-shaped decoration (FS 317); one-hole button (FS 219); black button (FS 219). Row 4 (L-R): metal button with decorated edge (FS 211); button with stamped "JOHN STILZ & SON PHILA" (FS 317); Snap (FS 117); self-shank metal button (FS 317); ornament with the Caduceus (FS 316). Row 5 (L-R): bead and metal flower ornament (FS 217); embossed leaf design button (FS 317); crystal-like button (FS 317); decorative button (FS 320); shell-like button (FS 278).

The furnishings assemblage consisted of 69 furniture hardware, lighting, decorative items, and other similar artifacts. Lamp chimney glass ($n=24$) and light bulb pieces ($n=13$) were the most common artifacts (see Table 14-19).

The kitchen group consists of artifacts that represent the remains of food preparation, service, and consumption. Kitchen artifacts dominated the assemblage, accounting for 64.21 % ($n=9564$) of the artifacts (see Table 14-19). This group was divided into six subclasses and included 7921 bottles and jars, 1483 ceramics, 34 decorative table glassware pieces, four kitchenware (pans and utensils), 31 tumbler/stemware, and 91 kitchen-related-other (closures, etc.). The kitchen bottle and jar glass included beer, liquor, milk, soda, extract, wine, and other beverage bottles, jars, and other container glass pieces that could not be assigned to a more specific type (Photograph 14-26).

Photograph 14-26. Site 36LU283: Kitchen Glass Sample

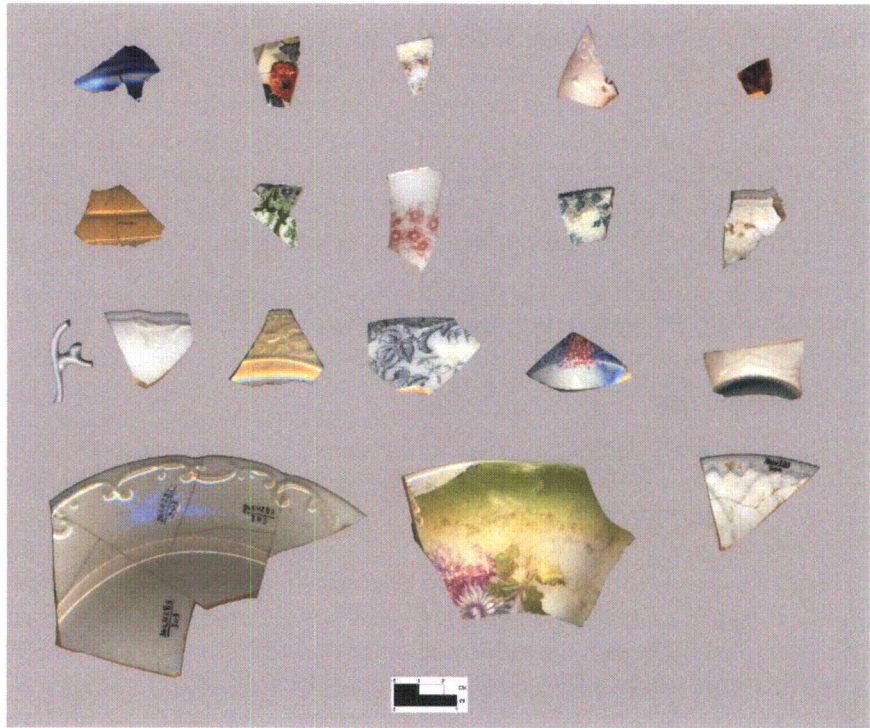
Row 1(L-R): extract bottle (Fs 189); green jar lid (Fs 317); orange baby decoration on clear glass (FS 317); applied label (Fs 220); extract bottle (FS 219). Row 2 (L-R): blue bottle base with encircled M (FS 220); olive bottle base (FS 319); glass liner (FS 117). Row 3 (L-R): molded floral decorative white opaque glass plate (Fs 219); decorative glass tableware (FS 219); amber bottle glass base with partial maker's mark (Fs 185).



The 1483 ceramic sherds were further subdivided according to type and included 62 redware, 74 stoneware, 14 yellowware, four refined earthenware, 316 ironstone, 47 porcelain, one pearlware, and 965 whiteware. Most of the ceramics were undecorated including 314 ironstone, 27 porcelain, one pearlware, 74 stoneware, 791 whiteware, and 13 yellowware. There was also a variety of decoration types present, including hand-painted, decal decoration, shell edge decorated, transfer print, and colored glazes (Photograph 14-27). One of the transfer printed designs is very similar to the Mikado pattern identified at Site 36LU281 (cf. Photograph 14-27, third row, fourth artifact with Photograph 12-21).

Photograph 14-27. Site 36LU283: Ceramic Sample

Row 1 (L-R): flow blue transfer print on whiteware (FS 306); hand-painted whiteware (FS 220); decal on whiteware (FS 241); porcelain with embossed letters "Go" and "A" (Fs 316); Rockingham-like yellowware (FS 95). Row 2 (L-R): ribbed yellowware (FS 203); green transfer-printed whiteware (FS 214); pink floral overglaze decal on whiteware (FS 296); green transfer-printed ivy/floral motif on whiteware (FS 318); overglaze hand-painted floral decoration on whiteware with scalloped rim (Fs 316).



Row 3 (L-R): porcelain tea cup handle (FS 317); molded, scalloped whiteware (FS 241); molded floral and dotted row motif on whiteware (FS 219); black transfer-printed whiteware (FS 296); sponged whiteware (FS 292). Row 4 (l-r): embossed whiteware base (FS 323); molded whiteware (FS 317); decal on whiteware serving dish lid (FS 136); molded rim (FS 318).

Only a few of the ceramics exhibited maker's marks (Photograph 14-28).

Photograph 14-28. Site 36LU283: Sample of Ceramic Maker's Marks

Row 1 (L-R): ironstone with partial maker's mark (FS 108); Ironstone with partial maker's mark (FS 697); whiteware with "partial maker's mark (FS 298). Row 2 (L-R): Willets Manufacturing Co. maker's mark (FS 241); unidentified partial maker's mark (FS 296); Homer Laughlin maker's mark produced in 1948 (FS 189).



Several manufacturing firms were identified. One semi-porcelain sherd was marked with "W.M. Co.", signifying that it was produced by Willets Manufacturing Co., which operated from 1879 to c. 1909 in Trenton, New Jersey (DeBolt 1994:163). The company used this mark from c. 1890-c.1909. There was also a Homer Laughlin maker's mark identified; based on the company's dating system this ware was produced in 1948 (DeBolt 1994:81). There were four sherds with Powell and Bishop maker's marks. This short-lived firm only operated from 1876-1878 in Staffordshire, England (Coysh and Henrywood 1982:290), providing a very tight date range for the purchase of these ironstone china tablewares.

Thirty-four artifacts were placed in the personal class (see Table 14-19). This included four pennies, two cosmetic jars, five comb, two ointment tubes, two pins, a bead, and 18 medicine bottle pieces. The pennies dated to 1916, 1923, 1964, and 1969.

Dating Analysis

The archival research provided information which indicated that the site dated from the late 19th century to ca, 1984. No structures were depicted at Site 36LU283 in 1873. The site began as a farmstead and farm-related outbuildings, including a barn. However, the property was no longer actively farmed in 1927 and in 1928 the landowner died, leaving the property to his wife. Site 36LU283 was subdivided into two parcels in 1957, Locus 1 (former barn) and Locus 2 (house and domestic complex). The barn, which was present in 1939, was razed by 1959. The house and several outbuildings were still evident within Locus 2 in 1959 and 1969. The Locus 2 property was sold to PPL Electric Utilities Corporation in 1984, and the house was likely standing at that time since an obituary dated October 22, 1983 was found within the cellar hole.

Phase I/II investigations produced 4,240 temporally diagnostic artifacts that can provide additional information useful in dating this site. These artifacts produced a mean date of 1905 and a TPQ date of 1969 (Table 14-20). These dates correspond to the period of occupation identified through archival research.

Table 14-20. Site 36LU283: Artifact Dating Analysis

Object/Ware	Reference	Count	Start Date	End Date
Aluminum foil	Panati 1987	3	1947	2000
Beverage pull tab	Keen 1982	4	1962	2000
Hinge	Devoto 1943	1	1846	2000
Nail, cut	Nelson 1968	1106	1790	1890
Nail, wire	Nelson 1968; IMAC 1984	731	1880	2000
Safety Glass	Panati 1987	123	1915	2000
Spike, cut	Nelson 1968	18	1790	1890
US Penny	US Mint	1	1916	1916
US Penny	US Mint	1	1923	1923
US Penny	US Mint	1	1964	1964
US Penny	US Mint	1	1969	1969
Bottles/Glass, applied color label	Deiss 1981	23	1935	2000
Bottles/Glass, applied lip	Deiss 1981	3	1820	1870
Bottles/Glass, blob top	Lief 1965	2	1879	1920
Bottles/Glass, cobalt	IMAC 1984	4	1890	1960
Bottles/Glass, crown finish	Lief 1965	16	1892	2000
Bottles/Glass, patent finish	Jones & Sullivan 1987	1	1860	1935
Bottles/Glass, pattern mold	Deiss 1981	2	1800	1870
Bottles/Glass, press molded	Schroy 2001	6	1903	1950
Bottles/Glass, standardized screw threads	Deiss 1981	133	1919	2000
Bottles/Glass, stippled	Busch	377	1939	2000
Bottles/Glass, sun colored amethyst	Miller and Pacey 1985	241	1880	1915
Bottles/Glass, sun colored amethyst, patent finish	Miller and Pacey 1985; Deiss 1981	1	1880	1870

Technical Report: BBPP Phase I and Phase II Cultural Resource Investigations

Object/Ware	Reference	Count	Start Date	End Date
Bottles/Glass, tooled lip	Deiss 1981	7	1870	1915
Bottles/Glass; American Glass Works, Richmond, VA., and Paden City, WV	Toulouse 1971; 22-24	1	1908	1935
Bottles/Glass; Anchor Hocking Glass Corp., Lancaster, Ohio	Toulouse 1971: 46-49	5	1939	2000
Bottles/Glass; Chas. Boldt Glass Mfg. Co. owned by Owens Bottle Co.; Huntington, WV.	Toulouse 1971:403-404; Busch 1983	1	1940	2000
Bottles/Glass; Hazel-Atlas Glass Co., Wheeling WV	Toulouse 1971: 239	4	1920	1946
Bottles/Glass; Knox Glass Bottle Co., Knox, PA 1917-1956; Knox Glass Co., Inc., since 1956; stippled	Toulouse 1971; 293-298; Busch 1983	1	1939	1968
Bottles/Glass; Maryland Glass Corp., Baltimore, MD.; owned subsidiary of Emerson Drug Co. until 1956, passed to Warner-Lambert Pharmaceutical Co.	Toulouse 1971: 339-341	1	1916	2000
Bottles/Glass; Owens Illinois Glass Co., Toledo Ohio, since 1929-66; Owens-Illinois Inc; stippled	Toulouse 1971:403-406; Busch 1983	31	1939	1966
Bottles/Glass; Owens Illinois Glass Co., Toledo, OH, 1929-1966; Owens-Illinois Inc.	Toulouse 1971:403-406	2	1929	1966
Bottles/Glass; Seaboard Glass Bottle Co., Pittsburgh, PA	Toulouse 1971: 455; Busch 1983	1	1943	1947
Bottles/Glass; Smalley Kivlan embossment; Illinois Glass Co., Alton, IL 1873-1929; Smalley, Kivlan & Onthank, Boston, MA 1907-1919	Toulouse 1971: 264-268; 478-479	2	1916	1919
canning jar lid liner	Toulouse 1971	74	1869	1950
Extract bottle; Hazel-Atlas Glass Co., Wheeling WV	Toulouse 1971:239; Deiss 1981	1	1919	1964
Lamp chimney glass; beaded edge	Woodhead 1984:62	1	1883	2000
Lamp chimney glass; pie-crust edge	Woodhead 1984	8	1877	2000
Earthenware, Overglaze Decal	Haskell 1981	25	1890	2000
Ironstone, Handpainted	Wetherbee 1980	2	1840	2000
Ironstone, Plain	Wetherbee 1980	303	1840	2000
Ironstone, Plain; HOMER LAUGHLIN; GOLDEN GATE pattern	Lehner 1988:245-248	2	1897	1904
Ironstone, Plain; Powell & Bishop; IRONSTONE CHINA; ENGLAND	Godden 1964:509	9	1876	1878
Pearlware, Plain	Brown 1982	1	1780	1830
Stoneware Gray Body, Bristol / Albany Type Slip Glaze	Ramsey 1939; Miller et al. 2000	4	1835	1920
Whiteware, Colored Glaze	Lofstrum et al.1982; Majewski & O'Brien 1984	37	1830	2000
Whiteware, Fiesta Style	DeBolt 1994:82	7	1936	1973
Whiteware, Handpainted	Lofstrum et al.1982; Majewski & O'Brien 1984	60	1840	1860
Whiteware, Plain	Price 1979; Noel Hume 1980	792	1830	2000
Whiteware, Shell Edge	Lofstrum et al. 1982; Miller and Hunter 1990	3	1830	1860
Whiteware, Transfer Printed & Underglaze Handpainted	Majewski and O'Brien 1984	6	1828	1850
Whiteware, Transfer Printed, Black	Majewski and O'Brien 1984; Mullins 1988	2	1828	1850
Whiteware, Transfer Printed, Blue	Majewski and O'Brien 1984; Mullins 1988	15	1828	1860
Whiteware, Transfer Printed, Brown	Majewski and O'Brien 1984	1	1828	1850
Whiteware, Transfer Printed, Flow Blue	Lofstrum et al. 1982	4	1844	1860
Whiteware, Transfer Printed, Green	Majewski and O'Brien 1984	10	1828	1850
Whiteware, Transfer Printed, Pink	Majewski and O'Brien 1984	1	1828	1850
Whiteware, Transitional	Berger	3	1815	1860
Yellowware, Plain	Ketchum 1987	13	1830	1900
Yellowware, Rockingham-Type Glaze	South 1977	1	1845	1900
	Total	4240		
	Mean Date	1905		
	TPQ Date	1969		

Summary and Evaluation

Site 36LU283 is located in a field in an upland flat on the north side of Confers Lane. The site is L-shaped with the long axis (east-west) averaging approximately 65x520 feet (20x158 m) and with a block measuring 165x165 feet (50x50 m) on the northeast corner forming the short axis. The site size was identified based on positive STPs. This late-nineteenth to late-twentieth century domestic farmstead site has a total site area of 170 ft (N-S) by 475 ft (E-W) (52x145 m). Archival evidence documents construction of a dwelling on the site in the late 19th century and its likely demolition after 1984. The barn was likely constructed in the late-nineteenth century and was demolished prior to 1959. Site 36LU283 was subdivided into two parcels (Locus 1 and Locus 2) in 1957 with the west end of the site (barn and silo area) sold to an adjacent farmer.

Phase I investigations included close interval shovel testing supplemented by judgmental shovel testing near foundations identified during site clearing. Phase II investigations included excavation of 310 STPs on a 15-ft grid, excavation of 12 judgmentally placed test units, and feature excavation. Phase I/II activities produced 14,895 artifacts and identified seven cultural features including a barn and silo foundation (Feature 1), house foundation and cellar hole (Feature 2), well (Feature 3), water catchment basin (Feature 4), large, ash-filled pit (Feature 5), large refuse disposal area (Feature 7), and a pit of undetermined function (Feature 9). Feature 5 (ash pit) and Feature 7 (refuse disposal area) were already sampled with test units and are unlikely to provide additional important information about occupation of the domestic portion of this site. Both deep shaft features (well and wastewater catchment basin) do not contain fill (or artifacts) and therefore do not provide information to address broader research questions. The poured cellar is mainly filled with demolition rubble.

The area around the house and the north yard area exhibited evidence of a disturbed, CA horizon, likely associated with demolition activities, which impacts the spatial integrity of artifacts recovered from the house vicinity and north yard area. In some instances, an Ab horizon was identified beneath the disturbed CA horizon. The house cellar was largely filled with demolition debris. The majority of artifacts were recovered from a broad refuse scatter (Feature 7) within disturbed soils (CA or Ap horizons). The site had localized areas of good integrity but overall the site lacks integrity. In general, the absence of deep shaft features with fill deposits and intact discrete, temporally-diagnostic deposits precludes the ability to address important research questions related to rural life in this region during the late-nineteenth to late-twentieth century. GAI recommends that Site 36LU280 is not eligible for listing in the National Register of Historic Places.

Site 36LU283 Recommendations

Site 36LU283 represents the location of a late 19th to late 20th century farmstead. It includes the foundations of two buildings (house and barn/silo), a stone-lined well, a wastewater feature, and a scatter of historic artifacts. This site consists of two loci: Locus 1 represents the barn/silo foundation, and Locus 2 contains the house foundation and adjacent yard areas. Based on Phase I/II testing, although the site contains small areas of good integrity, its overall all integrity is low. GAI concludes that Site 36LU283 lacks the potential to contribute important information on the historic utilization of this area during the late-nineteenth to late-twentieth century. GAI recommends that Site 36LU283 is Not Eligible to the National Register under Criterion D. GAI recommends no additional archaeological investigations of Site 36LU283.

Figure 14-1. Site 36LU283 Location

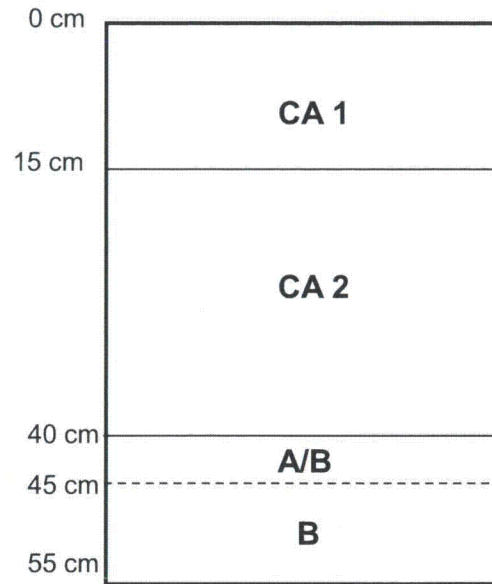
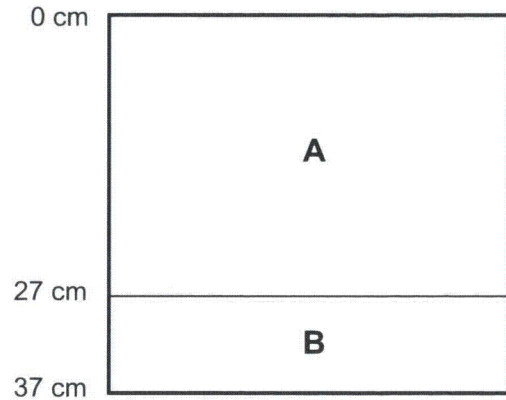
*REDACTED Figure 14-1
Site 36Lu283 Location*

Figure 14-2. Site 36LU283 showing Phase Ib Testing Locations

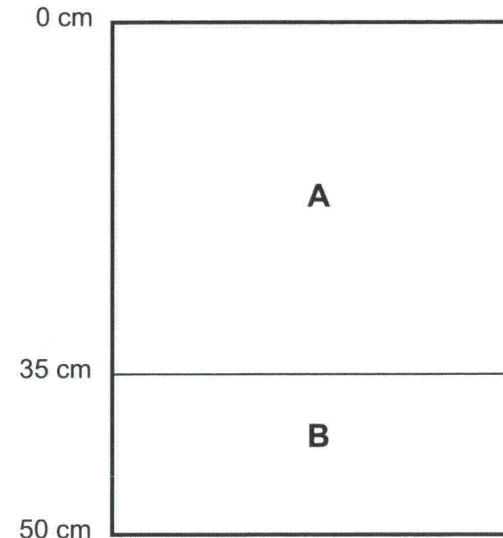
*REDACTED Figure 14-2
Site 36Lu283 showing Phase Ib
Testing Locations*

LOCUS 1 STP B 3

LOCUS 1 STP A 8



LOCUS 2 STP A6



KEY:

A – BROWN (10YR 4/3) SILT LOAM
 B – YELLOWISH BROWN (10YR 5/6) SILT LOAM

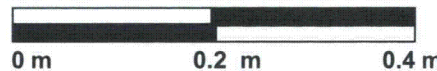
KEY:

CA 1 – DARK GRAYISH BROWN (10YR 4/2) SANDY LOAM (FILL)
 CA 2 – VERY DARK GRAY (10YR 3/1) SANDY LOAM WITH CHARCOAL AND CINDERS (FILL)
 A/B – DARK GRAYISH BROWN (10YR 4/2) SANDY LOAM
 B – BROWNISH YELLOW (10YR 6/8) SANDY LOAM

KEY:

A – BROWN (10YR 4/3) SANDY LOAM
 B – YELLOWISH BROWN (10YR 5/6) SANDY LOAM

SCALE



gai consultants

DWN	LMD	CHKD	TJN
APPD	BAM	DATE	09/04/08
SCALE	AS NOTED		
DRAWING NUMBER	C080204.10.002.C.A.Si 7		

FIGURE 14-3. SITE 36LU283: REPRESENTATIVE PHASE IB SOIL PROFILES (LOCUS 1—STP A8 AND B3; LOCUS 2—A6)

**BELL BEND NUCLEAR POWER PLANT
 UNISTAR NUCLEAR DEVELOPMENT, LLC.**

Figure 14-4. Site 36LU283 on Warrantee Map showing Original Parcels

*REDACTED Figure 14-4
Site 36Lu283 on Warrantee Map
showing Original Parcels*

Figure 14-5. Site 36LU283 Vicinity in 1873

*REDACTED Figure 14-5
Site 36Lu283 Vicinity in 1873*

Figure 14-6. Site 36LU283 Vicinity in 1939

*REDACTED Figure 14-6
Site 36Lu283 Vicinity in 1939*

Figure 14-7. Site 36LU283 Vicinity in 1955

*REDACTED Figure 14-7
Site 36Lu283 Vicinity in 1955*

Figure 14-8. Site 36LU283 Vicinity in 1959

*REDACTED Figure 14-8
Site 36Lu283 Vicinity in 1959*

Figure 14-9. Site 36LU283 Vicinity in 1969

*REDACTED Figure 14-9
Site 36Lu283 Vicinity in 1969*

(intentionally blank)

Figure 14-10. Site 36LU283 Phase II Testing Locations

(11x17)

*REDACTED Figure 14-10
Site 36Lu283 Phase II Testing
Locations*

(back of Figure 14-10)

Side two of REDACTED Figure 14-10

Figure 14-11. Site 36LU283 STP Soils Data

*REDACTED Figure 14-11
Site 36Lu283 STP Soils Data*

Figure 14-12. Site 36LU283 STP Artifact Distribution

*REDACTED Figure 14-12
Site 36Lu283 STP Artifact
Distribution*

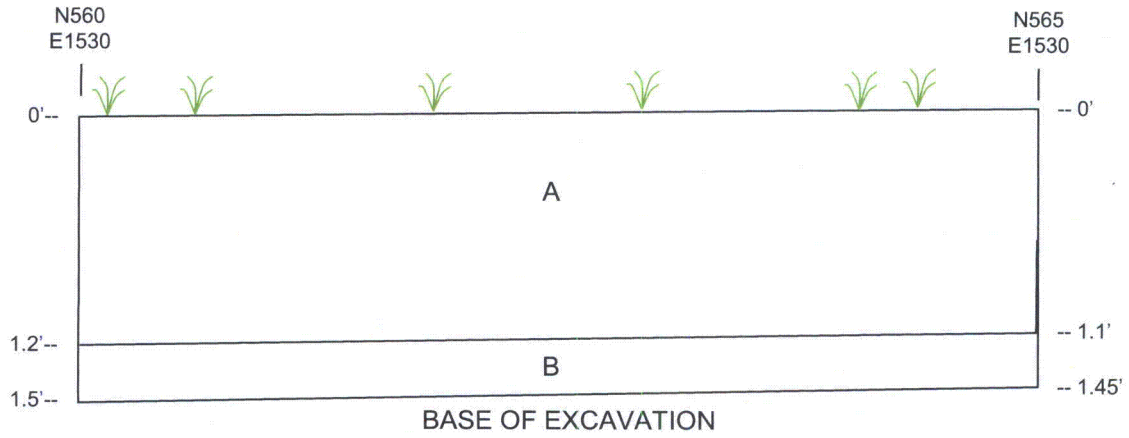
Figure 14-13. Site 36LU283 Kitchen Artifact Distribution

*REDACTED Figure 14-13
Site 36Lu283 Kitchen Artifact
Distribution*

Figure 14-14. Site 36LU283 Architectural Artifact Distribution

*REDACTED Figure 14-14
Site 36Lu283 Architectural
Artifact Distribution*

SITE 36LU283
 TEST UNIT 6
 WEST WALL PROFILE



A - BROWN (10YR 4/3) SILTY LOAM
 B - YELLOWISH BROWN (10YR 5/6) SANDY SILTY LOAM

LEGEND

 GROUND SURFACE

SCALE

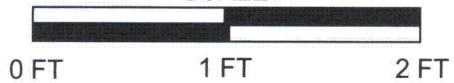



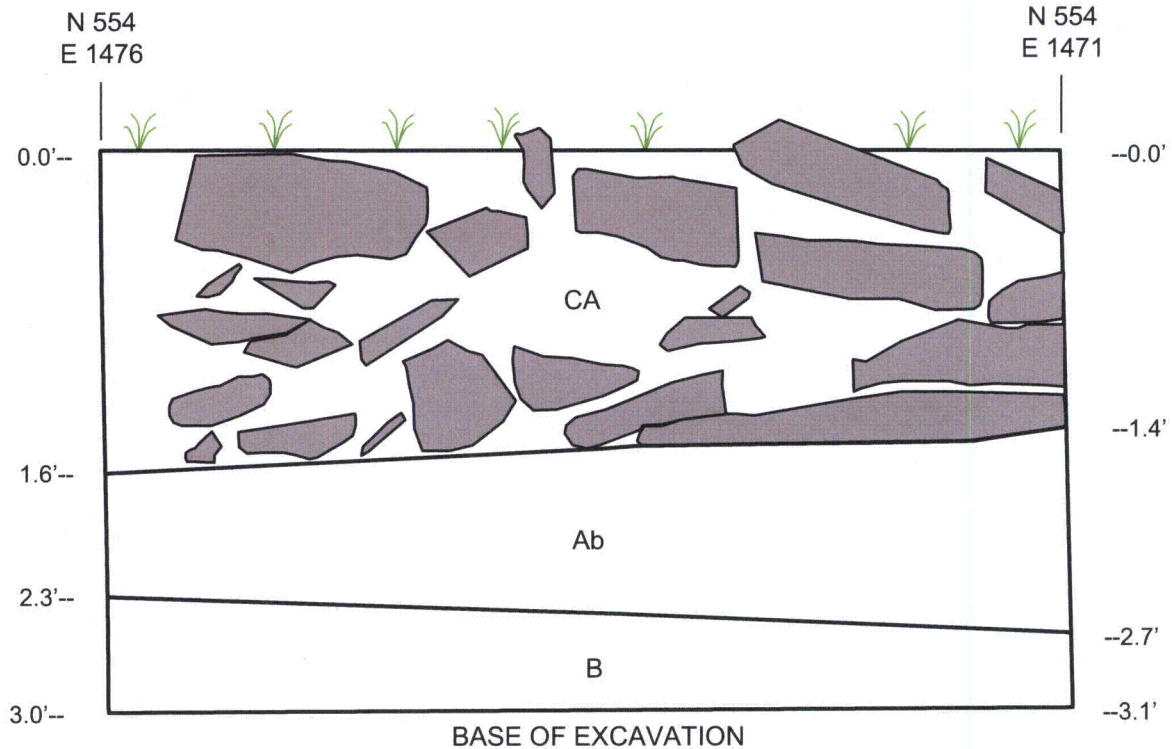
FIGURE 14-15.
 SITE 36LU283: TEST UNIT 6
 WEST WALL PROFILE

 BELL BEND NUCLEAR POWER PLANT
 UNISTAR NUCLEAR DEVELOPMENT, LLC.

DRWN: SJS
 CHECKED: LMD

DATE: 06/01/10
 APPROVED: LAF

SITE 36LU283
 TEST UNIT 11
 SOUTH WALL PROFILE



CA – BROWN (10YR 4/3) SILT LOAM MIXED WITH YELLOWISH BROWN (10YR 5/6) SILTY LOAM AND VERY PALE BROWN (10YR 7/4) SILT LOAM
 Ab – BROWN (10YR 4/3) SILT LOAM
 B – YELLOWISH BROWN (10YR 5/6) SILT LOAM

LEGEND

 GROUND SURFACE

 ROCK

SCALE

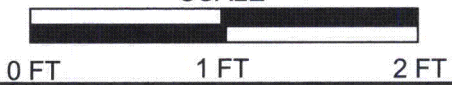



FIGURE 14-16.
 SITE 36LU283: TEST UNIT 11
 SOUTH WALL PROFILE

 BELL BEND NUCLEAR POWER PLANT
 UNISTAR NUCLEAR DEVELOPMENT, LLC.

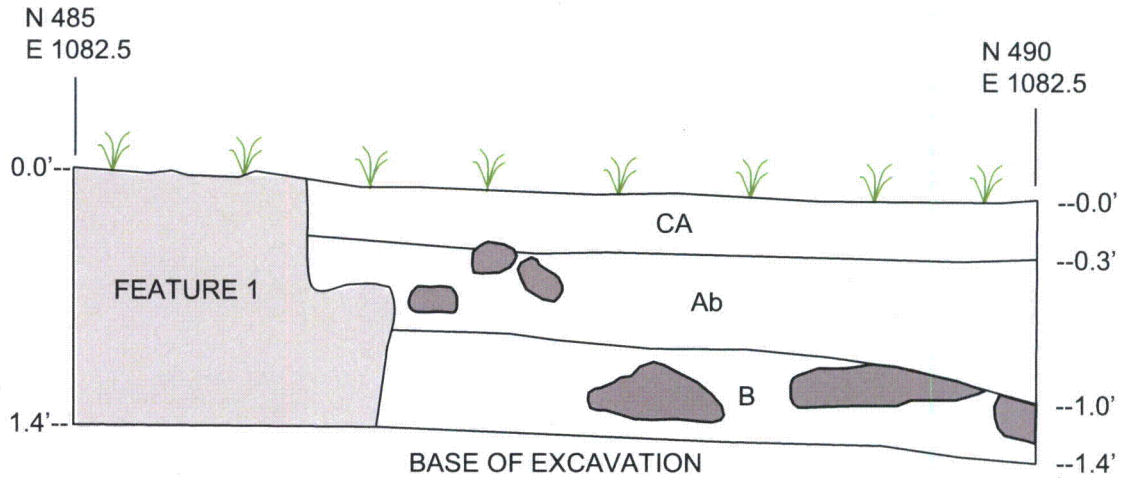
DRWN: AJW
 CHECKED: LMD

DATE: 05/25/10
 APPROVED: BAM

Figure 14-17. Site 36LU283 Locus 1 Detail




*REDACTED Figure 14-17
Site 36Lu283 Locus 1 Detail*

SITE 36LU283
 TEST UNIT 12
 WEST WALL PROFILE



CA – DARK BROWN (10YR 3/3) SILT LOAM
 Ab – BROWN (10YR 4/3) SILT LOAM
 B – YELLOWISH BROWN (10YR 5/6) SILT LOAM
 FEATURE 1 – STONE WALL

LEGEND

-  GROUND SURFACE
-  STONE WALL
-  ROCK

SCALE



FIGURE 14-18.
 SITE 36LU283: TEST UNIT 12
 WEST WALL PROFILE



BELL BEND NUCLEAR POWER PLANT
 UNISTAR NUCLEAR DEVELOPMENT, LLC.

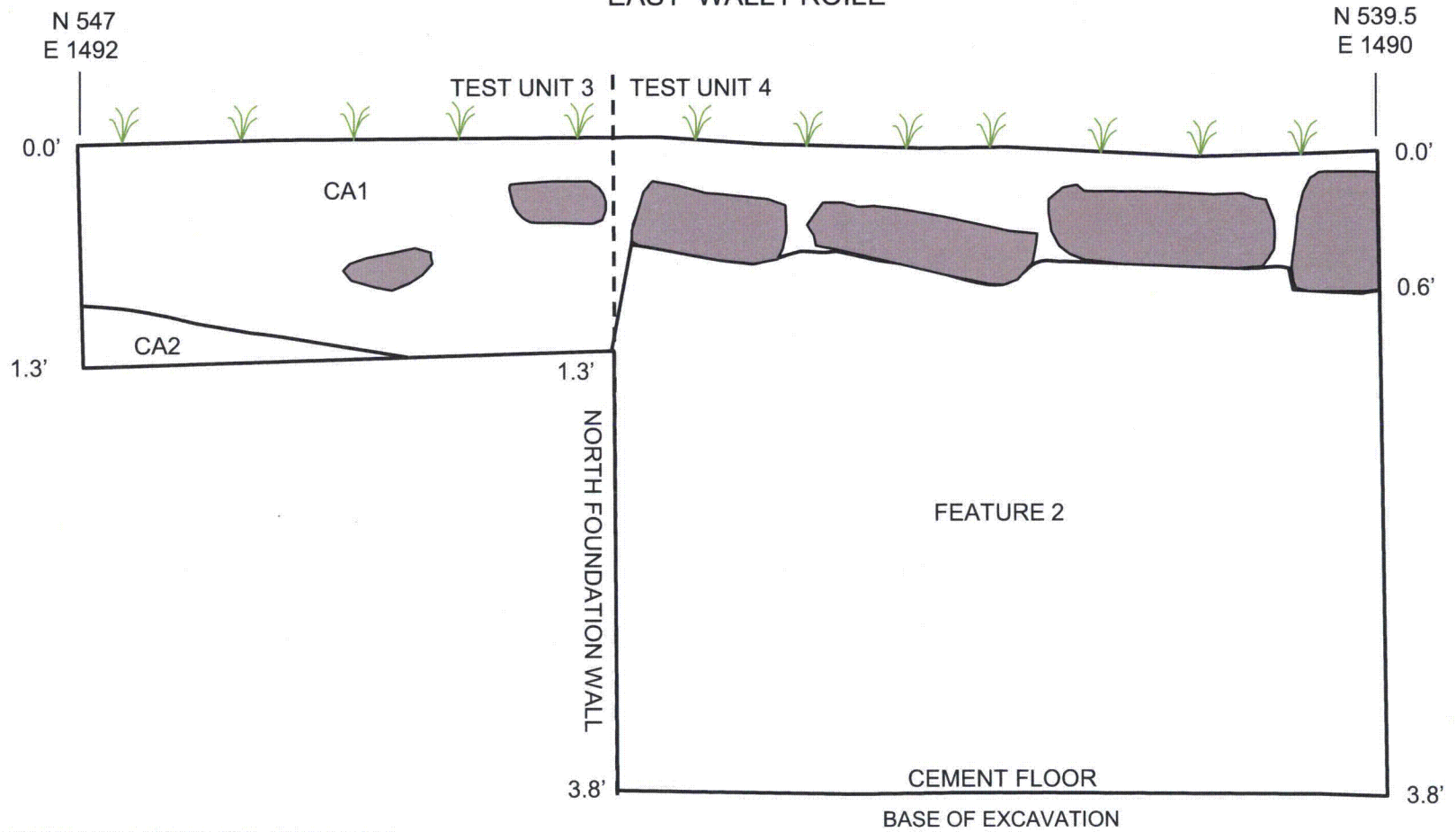
DRWN: AJW
 CHECKED: LMD

DATE: 05/28/10
 APPROVED: LAF

Figure 14-19. Site 36LU283 Locus 2 Detail

*REDACTED Figure 14-19
Site 36Lu283 Locus 2 Detail*

SITE 36LU283
TEST UNIT 3 AND 4
EAST WALL PROILE



CA1 – DARK BROWN (10YR 3/3) SILT LOAM
CA2 – YELLOWISH BROWN (10YR 6/6) SILT LOAM
FEATURE 2 – CEMENT COVERED STONE WALL

LEGEND



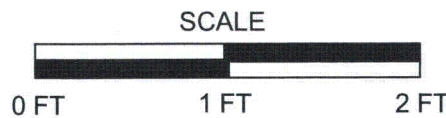

-  GROUND SURFACE
-  STONE

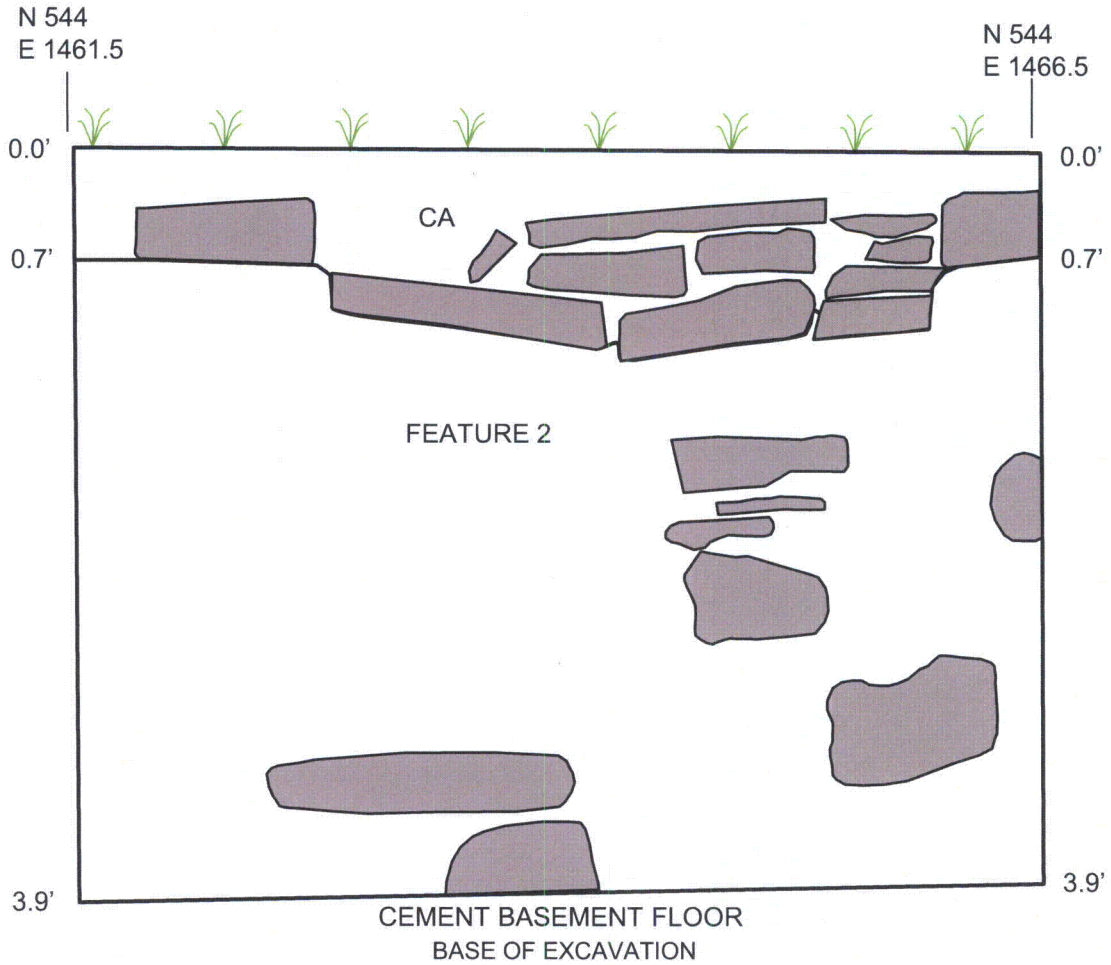
FIGURE 14-20.
SITE 36LU283: TEST UNITS 3 AND 4, EAST WALL PROFILE



 BELL BEND NUCLEAR POWER PLANT
UNISTAR NUCLEAR DEVELOPMENT, LLC.

DRWN: AJW DATE: 09/16/09
CHECKED: LMD APPROVED: LAF

SITE 36LU283
 TEST UNIT 5
 NORTH WALL PROFILE



CA – BROWN (10YR 4/3) SILT LOAM
 FEATURE 2 – PLASTER COVERED BASEMENT WALL

LEGEND

-  GROUND SURFACE
-  FOUNDATION STONE

SCALE

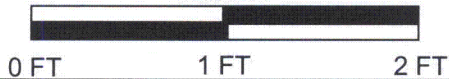


FIGURE 14-21.
 SITE 36LU283: TEST UNIT 5
 NORTH WALL PROFILE

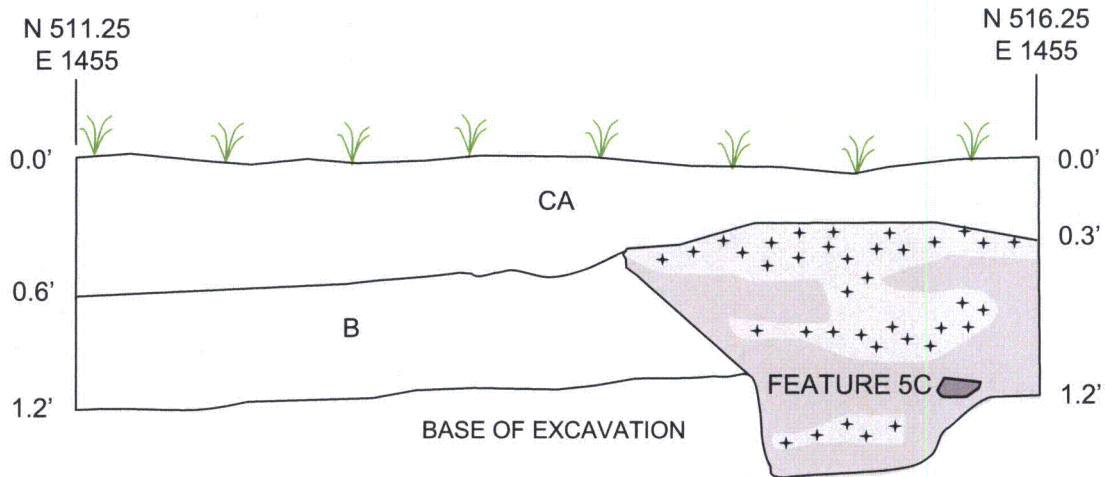


BELL BEND NUCLEAR POWER PLANT
 UNISTAR NUCLEAR DEVELOPMENT, LLC.

DRWN: AJW
 CHECKED: LMD

DATE: 05/25/10
 APPROVED: LAF

SITE 36LU283
TEST UNIT 7
WEST WALL PROFILE



CA – BROWN (10YR 4/3) SILT LOAM

B – YELLOWISH BROWN (10YR 5/6) SANDY LOAM MOTTLED WITH BROWN (10YR 4/3), BROWNISH YELLOW (10YR 6/8) AND LIGHT GRAY (10YR 7/2) SANDY LOAM

FEATURE 5C –VERY DARK GRAY BROWN (10YR 3/4) SILT LOAM MOTTLED WITH VERY PALE BROWN (10YR 7/4), YELLOWISH BROWN (10YR 5/6) SILT LOAM AND BROWN (10YR 4/3) SILT LOAM WITH ASH/CINDER LENSES.

LEGEND



GROUND SURFACE



ROCK



ASH AND CINDERS



FEATURE

SCALE

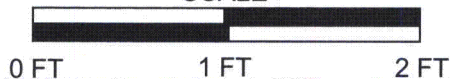


FIGURE 14-22.
SITE 36LU283: TEST UNIT 7
WEST WALL PROFILE

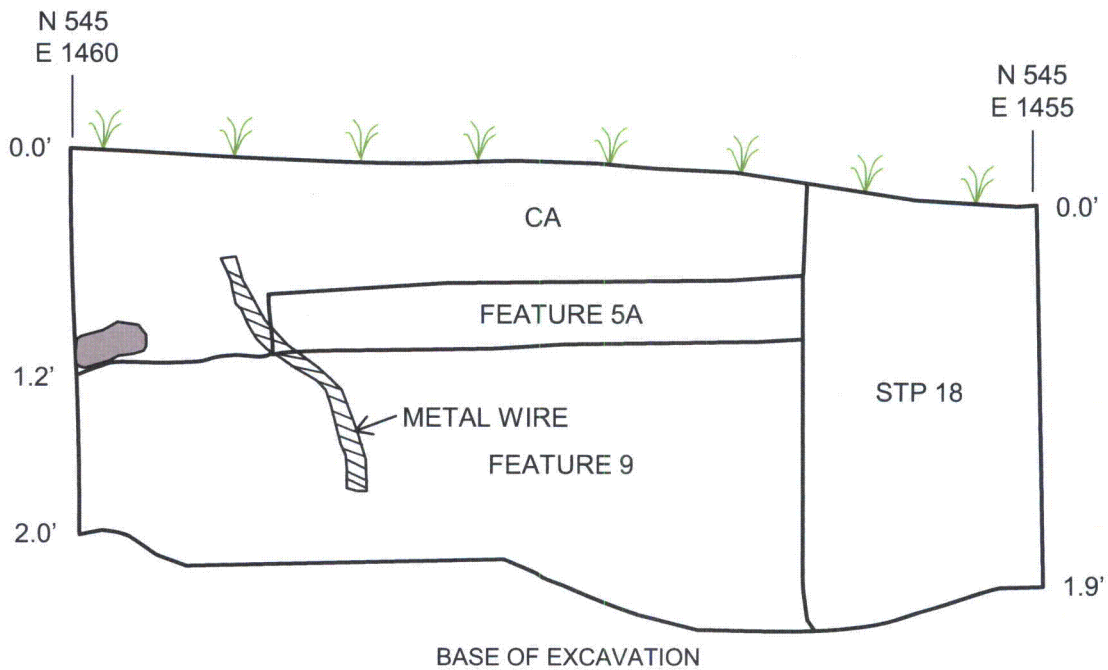


BELL BEND NUCLEAR POWER PLANT
UNISTAR NUCLEAR DEVELOPMENT, LLC.

DRWN: AJW
CHECKED: LMD

DATE: 09/14/10
APPROVED: LAF

SITE 36LU283
TEST UNIT 1
SOUTH WALL PROFILE



CA – BROWN (10YR 4/3) SILT LOAM

FEATURE 5A – GRAY (10YR 7/1) AND BROWN (10YR 4/3) SILT LOAM (ASHY LENS)

FEATURE 9 – BROWN (10YR 3/3) SILT LOAM

STP 18 – DARK BROWN (10YR 3/3) SILT LOAM

LEGEND

 GROUND SURFACE

 ROCK

 METAL

SCALE

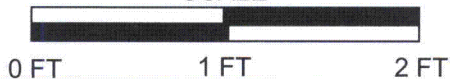


FIGURE 14-23.
SITE 36LU283: TEST UNIT 1,
SOUTH WALL PROFILE

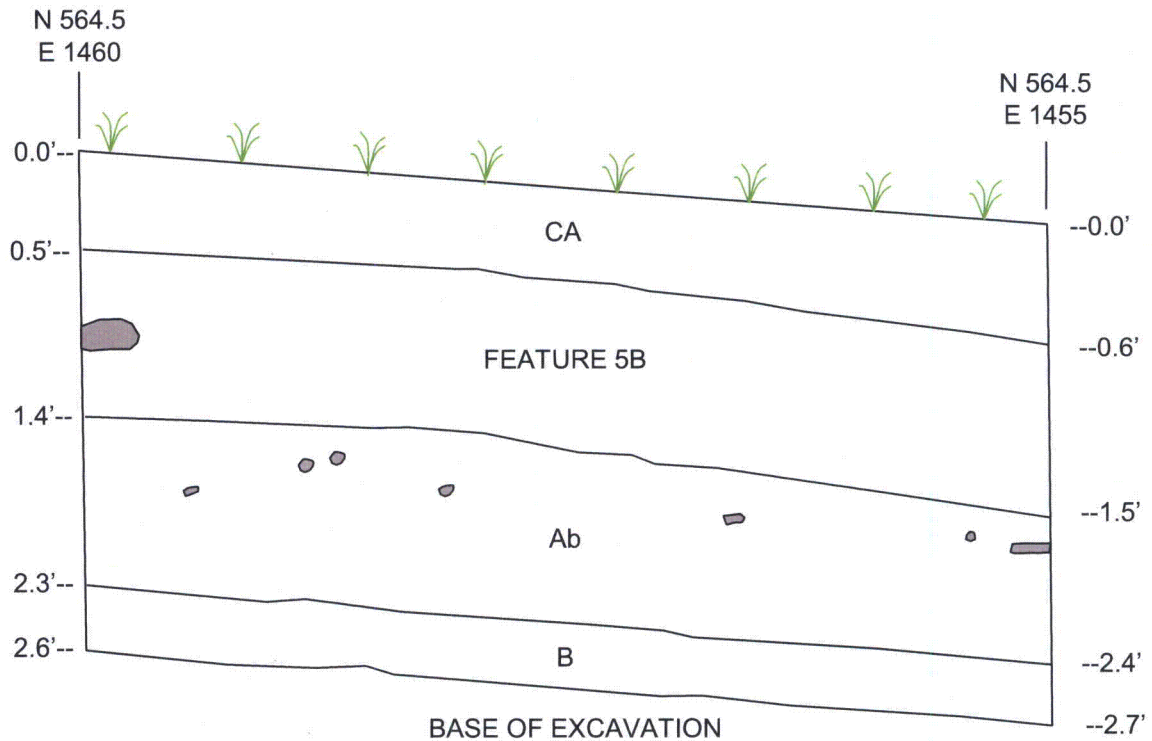


BELL BEND NUCLEAR POWER PLANT
UNISTAR NUCLEAR DEVELOPMENT, LLC.

DRWN: AJW
CHECKED: LMD

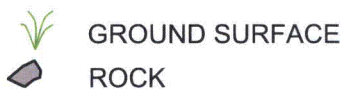
DATE: 05/25/10
APPROVED: LAF

36LU283
TEST UNIT 9
SOUTH WALL PROFILE



CA - BROWN (10YR 4/3) SILT LOAM
 FEATURE 5B - LIGHT BROWN GRAY (10YR 6/2) MOTTLE WITH VERY PALE BROWN (10YR 7/4) SILT LOAM WITH ASH, CINDER, AND CHARCOAL
 Ab - DARK BROWN (10YR 3/3) SILTY LOAM
 B - YELLOWISH BROWN (10YR 5/6) SANDY CLAY LOAM

LEGEND



SCALE

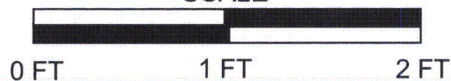


FIGURE 14-24.
SITE 36LU283: TEST UNIT 9
SOUTH WALL PROFILE



BELL BEND NUCLEAR POWER PLANT
UNISTAR NUCLEAR DEVELOPMENT, LLC.

DRWN; AJW
CHECKED: LMD

DATE: 05/25/10
APPROVED: LAF

Chapter 15. Site 36LU284 (GAI Site 8)

Phase Ib

Location: Confers Lane Parcel, Section 26

Site Type: Mid to Late 20th Century Domestic Site

Site Size: 122x168 meters (400x550 feet)

Recommendations: Not NRHP Eligible/No Further Work

Site 36LU284 (Site 8), the Shortz Site, occupies a largely wooded upland flat, immediately east of a sharp northward bend in Confers Lane, in the Confers Lane Parcel, Section 26 (see Figure 1-3, Figure 15-1). The site was identified during GAI's Phase Ia archaeological reconnaissance of the project area and was described by PPL personnel as the location of the former Shortz house. Based on Phase Ib survey, Site 36LU284 has dimensions of 122x168 meters (400x550 feet). It lies at an elevation of 682 feet amsl. A narrow paved access lane extending southeast from Confers Lane, passes through the site's southern edge and terminates in a clearing near the center of the site. Site 36LU284 encompasses two cultural features—a shallow surface depression (Feature 1), located in its western, wooded section, and a raised brick, concrete-capped well/cistern (Feature 2) situated in the clearing (Photographs 15-1 and 15-2) (Figure 15-2). A light scatter of modern/historic artifacts (e.g., plastic and glass bottles, asphalt shingles) was observed on the ground surface in proximity to the surface depression.



Numerous large boulders and cobbles were observed on the surface in the woodland south of the access lane. A pond and adjacent wooded wetland lie approximately 36.5 meters (120 feet) south of the site. Historic Site 36LU280 is situated in a cultivated field west of Confers Lane, approximately 43 meters (140 feet) to the west of Site 36LU284. Proposed project impacts will result from use of this locality as a laydown area.

Photograph 15-1. Site 36LU284 showing Shovel Testing in Woodlands in Vicinity of Feature 1 (Surface Depression), Facing Northeast

Cartographic review indicates that in 1873 no structures were mapped in the site vicinity (Beers 1873) (see Figure 4-2). The earliest depiction of the site is on the 1939 aerial photograph which shows a complex of structures (possible farmstead) in the location of Site 36LU284 (see Figure 15-3). These structures occur at the southwest corner of a cultivated field. An orchard is located to the north of the structures and woodlands lie to their south and west (between the structures and Confers Lane). The 1955 USGS Shickshinny quadrangle (Figure 15-4) illustrates one structure in this locality at the east edge of a wooded lot with open lands to the north and east; no orchards are depicted. One main structure, with several small outbuildings to its north, appears in the 1959 aerial photograph; a pond is located to the southeast of the structures (Figure 15-5). This complex of structures and pond is also illustrated on the 1969 aerial photographs of the site vicinity (Figure 15-6). Revisions to the 1995 USGS Berwick quadrangle,

which occurred in 1969 and 1976, illustrate the addition of two structures to the south of the main building, as well as a pond and wetlands to the southeast (see Figure 15-1).

Photograph 15-2. Site 36LU284 showing Feature 2 (Well/Cistern) in Clearing, Facing North



As noted above, Phase Ib survey of Site 36LU284 identified two features (Features 1 and 2). Feature 1 is a shallow, irregular, L-shaped surface depression, located in the western portion of the site, approximately 12 meters (40 feet) north of the access lane. It has maximum dimensions of approximately 7x8 meters (23x26 feet). Scattered brick fragments were observed along the east edge of the depression. Small saplings are growing within its interior. This depression may represent the location of a former structure.

Feature 2 is a well/cistern situated approximately 12 meters (40 feet) east of Feature 1, at the west edge of a clearing. This well/cistern consists of an approximately one-meter (three-foot) high square brick structure (at least 10 courses high), capped by concrete. A covered metal pipe extends approximately 5 cm (2 inches) from the center of the structure. Based on the style of brick, the above-ground portion of this structure appears to date to the late-twentieth century.

Phase Ib investigations of Site 36LU284 consisted of systematic 15-meter interval shovel testing followed by close-interval and judgmental shovel testing in the vicinity of Feature 1. GAI excavated 90 STPs within the site boundary, with 27 positive STPs producing 135 historic artifacts.

Based on the results of shovel testing, soils within the site generally consist of an A-B soil horizon sequence. The soil profile exposed in STP A5, located approximately 2 meters (7 feet) north of Feature 1, consists of a 33-cm-thick dark yellowish-brown silt loam A horizon and a yellowish-brown silt loam B horizon (Figure 15-7). Historic artifacts were recovered predominantly from the A horizon.

Judgmental STP J1, excavated inside the southwest corner of Feature 1, revealed a 52-cm-thick brown silt loam CA1 horizon and a 10-cm-thick very dark-grayish-brown silt loam CA 2 horizon above a rock impasse (see Figure 15-7). These fill deposits are likely associated with demolition of a former structure in this location.

STP G8, located in the clearing approximately 30 meters east of the well/cistern, yielded mortared brick at a depth of 33 cm below surface. This may represent the remains of a structural feature. Further investigations of this possible feature were not conducted as part of the Phase Ib survey.

GAI recovered 135 historic artifacts from Site 36LU284 during Phase Ib investigations (Table 15-1). These artifacts consisted largely of architectural-related debris (58 percent) and kitchen-

related specimens (31 percent), an artifact type distribution that is typical of a domestic site. The thirteen kitchen ceramics included whiteware, earthenware, and porcelain ceramic sherds. The sample of bottle glass was composed of either clear glass or amber (beer) bottle glass pieces. Architecture-related items consisted primarily of nails ($n=45$) and window glass ($n=31$), along with low frequencies of asphalt shingles, mortar and wood. The sample of nails included wire nails (many of which were roofing nails), cut and indeterminate fragments.

Other artifact types were present in smaller quantities. Activities-related items included tin can, aluminum pull tab, flowerpot, and duct tape pieces. Furnishing remains consisted of lamp chimney glass and electrical porcelain. One unidentified metal artifact was also recovered.

Table 15-1. Site 36LU284: Pattern Analysis, Historic Artifacts

Class	Sub-Class	Ware Type/Object	Count	%
Activities	Cans/Tins	lid, metal	1	0.74%
		tin can, fragment	3	2.22%
	Flowerpots	terra cotta	6	4.44%
	Indeterminate	duct tape	1	0.74%
	Activities Total			11
Architecture	Mortar, Cement	mortar, fragment	1	0.74%
	Nails, Spikes, Etc.	nail, cut	2	1.48%
		nail, indeterminate	18	13.33%
		nail, wire	25	18.52%
	Roofing Materials	asphalt shingle	1	0.74%
	Window Glass	window glass	31	22.96%
	Wood	wood	1	0.74%
Architecture Total			79	58.52%
Furnishings	Furniture Hardware	electrical plug, ceramic/ metal	1	0.74%
	Lighting	lamp glass	1	0.74%
	Furnishings Total			2
Kitchen	Bottles/Jars	beer bottle	3	2.22%
		bottle glass	18	13.33%
		canning jar lid liner	8	5.93%
	Ceramics	earthenware	1	0.74%
		porcelain	4	2.96%
		whiteware	8	5.93%
Kitchen Total			42	31.11%
Unidentifiable	Indeterminate	metal, indeterminate	1	0.74%
TOTAL			135	100.00%

The assemblage contained 43 temporally diagnostic specimens, over half of which were wire nails ($n=25$) (Table 15-2). The large majority of these diagnostic artifacts have manufacturing end dates that extend to the present. Based on analysis of the artifact assemblage the site generally dates to the twentieth century. This is consistent with the cartographic sources (noted above) which indicate a structure at this location in 1939 and 1955.

Table 15-2. Site 36LU284: Dating Analysis, Historic Artifacts

Material	Description	Count	Begin Date	End Date	Reference
nail, cut		2	1780	1890	Nelson 1968
nail, wire		25	1880	2008	Nelson 1968; Noël Hume 1980
canning jar lid liner	white opaque	8	1869	1950	Toulouse 1971
whiteware	plain	3	1830	2008	Price 1979; Noël Hume 1980
whiteware	overglaze decal floral	5	1890	2008	Haskell 1991
electric plug	porcelain	1	Modern	Modern	
aluminum	pull tab	1	Modern	Modern	
nail, roofing			Modern	modern	
TOTAL		43			

Site 36LU284 Recommendations

Site 36LU284 (the Shortz Site) represents the remains of a mid to late 20th century domestic site on an upland flat east of Confers Lane. It includes a surface depression/possible structure foundation (Feature 1), a well/cistern (Feature 2), and an associated artifact scatter. The concrete-capped well/cistern appears to date to the late 20th century. Many of the artifacts were modern (e.g., duct tape, aluminum pull tab, zinc roofing nails). The presence of modern artifacts, a modern well/cistern feature, and fill deposits (likely associated with demolition activities) has resulted in low integrity in parts of the site. GAI concludes that Site 36LU284 has a low potential to contribute important information on mid-twentieth century historic utilization of this area. GAI recommends that Site 36LU284 is Not Eligible to the National Register under Criterion D. No further archaeological investigations are recommended for this site. GAI provided preliminary results of the Phase Ib survey in the Phase Ib Management Summary (Munford and Tuk 2008) and in their March 2, 2009, review letter (see Appendix A), PHMC-BHP concurred with these recommendations for Site 36LU284.

Figure 15-1. Site 36LU284 Location

*REDACTED Figure 15-1
Site 36Lu284 Location*

Figure 15-2. Site 36LU284, showing Phase Ib Testing Locations

*REDACTED Figure 15-2
Site 36Lu284 showing Phase Ib
Testing Locations*

Figure 15-3. Site 36LU284 Vicinity in 1939

*REDACTED Figure 15-3
Site 36Lu284 Vicinity in 1939*

Figure 15-4. Site 36LU284 Vicinity in 1955

*REDACTED Figure 15-4
Site 36Lu284 Vicinity in 1955*

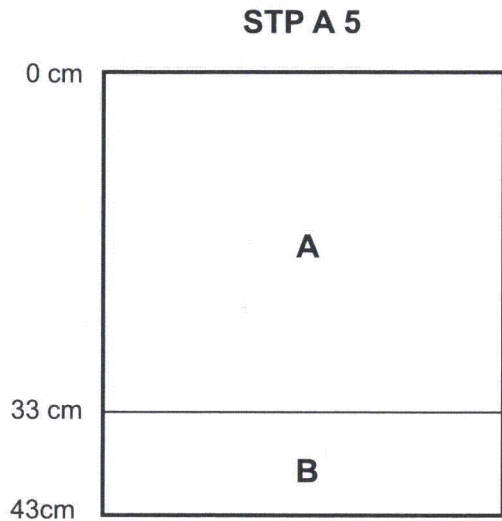
Figure 15-5. Site 36LU284 Vicinity in 1959

*REDACTED Figure 15-5
Site 36Lu284 Vicinity in 1959*

Figure 15-6. Site 36LU284 Vicinity in 1969

*REDACTED Figure 15-6
Site 36Lu284 Vicinity in 1969*

SITE 36LU284

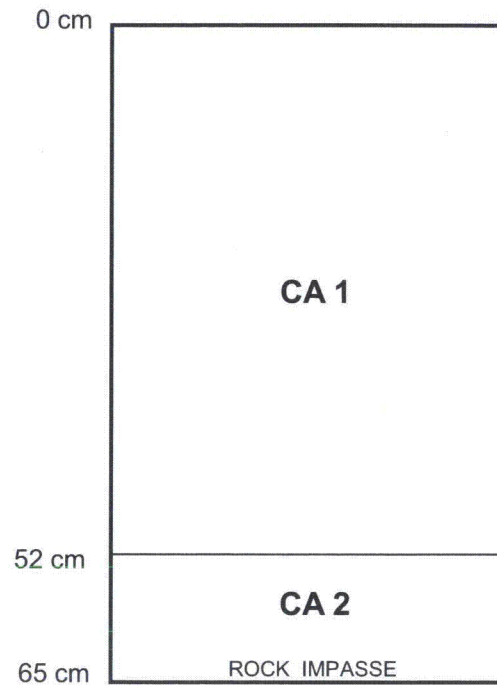


KEY:

A – DARK YELLOWISH BROWN (10YR 4/4) SILT LOAM

B – YELLOWISH BROWN (10YR 5/6) SILT LOAM

STP J1

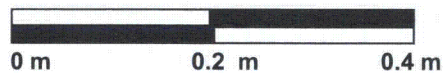


KEY:

CA 1 – BROWN (10YR 4/3) SILT LOAM (FILL)

CA 2 – VERY DARK GRAYISH BROWN (10YR 3/2) SILT LOAM (FILL)

SCALE



gai consultants

DWN	LMD	CHKD	TJN
APPD	BAM	DATE	09/04/08
SCALE	AS NOTED		
DRAWING NUMBER	C080204.10.002.C.A.Si 8		

FIGURE 15-7. SITE 36LU284: REPRESENTATIVE PHASE Ib SOIL PROFILES (STP A5 AND J1)

BELL BEND NUCLEAR POWER PLANT
UNISTAR NUCLEAR DEVELOPMENT, LLC.

(intentionally blank)