

## **3.0 PHASE I ARCHAEOLOGICAL INVESTIGATIONS**

### **3.1 METHODOLOGY**

#### **3.1.1 Archival Research**

Background research was conducted in August and September 2002 and June 2003. Phase I archival research consisted of a records search, review of historical maps, regional and local background research, and cultural resource survey site file review. Information concerning the historical development of the site vicinity was obtained from land use planning documents, deed, will, probate, orphans court, census and tax records, Acts of the General Assembly, Clerk of the Peace Records, and books, historic maps, and photographs. Repositories visited included the Sussex County Courthouse, the Delaware Public Archives in Dover, the U.S. Geological Survey Library in Reston, Virginia, and the Library of Congress in Washington, D.C. Previously identified archaeological or architectural resources in the vicinity of the project area were mapped onto a topographic map. Previously recorded archaeological resources within roughly one mile of the project area were noted.

#### **3.1.2 Oral History**

During the archaeological survey, several local residents with information pertinent to the investigation approached Parsons field personnel. Mrs. Charles Carey stated that her husband's family has owned the property located northwest and southwest of the intersection of Sand Hill Road (S319) and Gravel Hill Road (SR30) for approximately 200 years (Mrs. Charles Carey 2002, pers. comm.). Mrs. Carey stated that a house was located in the southwest quadrant of the intersection, but the building was sold and relocated to the Greenwood vicinity after sale. Northwest of the intersection, and outside the LOC for the project, several farm outbuildings once stood, now non-extant.

During the on-site field consultation between Parsons, DelDOT and the Delaware SHPO, Mr. John Fleming of Milton stopped by the project area. He is a bottle collector, and stated that over a period of many years he had dug extensively in the southwest corner of the intersection of SR5 and S319, corresponding with archaeological Survey Area C which is discussed in Section 3.2.3 (John Fleming 2002, pers. comm.).

#### **3.1.3 Probability Modeling**

In advance of the proposed Milton Bypass, McCormick, Taylor and Associates, Inc. (2001) prepared a Categorical Exclusion Evaluation (CEE) to document the probable impacts that could result from the proposed roadway improvement project. Sources examined included site files at the Delaware SHPO, historical maps, and historical, ethnohistorical, and geomorphological publications relevant to the project area. The study also included a windshield architectural reconnaissance survey and file search. Based upon research, McCormick, Taylor formulated prehistoric and historical maps identifying probability predictions for the Milton area (Figures 3-1 and 3-2). Although the study located no

previously identified Native American sites or historical sites within the project area on file at the Delaware SHPO, both prehistoric and historical sites were noted as occurring elsewhere in the Milton vicinity.

### **Probability for Prehistoric Sites**

The investigation documented environmental conditions favorable for Native American occupation within the project area. Specifically, these include: fresh water resources, brackish water resources, a generally level plain, and well drained lands surrounded by waterways. Specifically, two drainages cross the proposed Milton Bypass Corridor. The first is located in the eastern portion of the project area. Currently, Bridge 3-918 (CRS S-9850) serves as a water control device, creating Diamond Pond to the south and allowing an overflow stream north of Sand Hill Road. The Beers Atlas (1868) depicts a stream, indicating pond formation after 1868. The second waterway is located in the western portion of the project area. An unnamed drainage bisects Sand Hill Road, immediately west of the main house at 14559 Sand Hill Road (CRS S-9851), extending northward. Based on Custer's predictive model for the Delaware Coastal Plain, McCormick and Taylor (2001:12) concluded that, "the project area crosses several high and medium probability zones for Native American sites." In particular, the ecological niche encompassed within the bypass favors small procurement as well as base camps, particularly dating to the Woodland II period in Custer's chronology. The study concluded that there was a medium probability for locating Native American sites throughout the project area in general, with high probability located near Bridge 3-806 (Figure 3-1).

### **Probability for Historical Sites**

The McCormick, Taylor study noted economic development through a thriving shipbuilding industry within the Town of Milton by the end of the eighteenth century. The success of this industry prompted the establishment of farmsteads along the town periphery, encompassing the proposed bypass corridor. Industrial and demographic demand resulted in the founding of additional economic and social institutions. Aside from agricultural expansion, an examination of Beers 1868 atlas indicated two sawmills, two grist mills, a store, assorted farmsteads and a schoolhouse along the proposed bypass route. Based on the historic development of the area, and on the Beers 1868 map showing standing structures, the McCormick, Taylor study concluded that intact subsurface remains of razed structures and/or cultural deposits could still be present within the project area (Figure 3-2). The study noted that while these locations are not to be considered resources per se, they should be viewed as containing medium to high probability for yielding historical archaeological resources. A finding of medium probability was projected for the immediate environs of Bridge 3-806.

#### **3.1.4 Field Methods**

Parsons planned a field strategy relative to the probability findings of the McCormick, Taylor study for encountering Native American and historical archaeological sites (Table 3-1). Predicating the current survey strategy on the study was problematic. The shading used on the McCormick, Taylor prehistoric map differentiated between medium and high probability, while the historical archaeological probability map did not. In addition, differing probability

predictions for prehistoric versus historical resources in a given area made selecting a shovel test interval difficult. Thus, the survey strategy during the current investigation involved: 1) pedestrian reconnaissance over cultivated areas with a high degree of surface visibility; 2) selective shovel testing at 15 m intervals in low probability areas; 3) shovel testing at 10 m intervals in medium probability areas approaching water sources and where historical maps identify non-extant buildings relatively nearby; and 4) shovel testing at 5 m intervals in high probability areas where structures were either directly located, or located close by. The intersection of present-day Sand Hill Road and Lavinia Street, where a structure belonging to G.B. Waples stood in 1868, was tested at a 5 m interval. No excavation occurred outside the LOC.

### Pedestrian Survey and Shovel Testing

The project area was divided into nine arbitrary segments for survey control purposes, designated Areas A – H and DP (Table 3-1; Figure 3-3). Areas that required testing on both shoulders of the roadway were divided into North and South. Pedestrian survey extended beyond the LOC only to visually investigate the horizontal extent of artifacts noted within STPs in the LOC. Artifact samples were retained.

**Table 3-1. Survey Area Testing Strategy**

Survey Area	Probability for Native American Sites	Probability for Historical Sites	Number of STPs	STP Interval (in meters)	Number of Positive STPs	Pedestrian Reconnaissance
Area A	L	M/H	6	10	4	No
Area B	L	M/H	4	10	4	No
Area C	L/M	M/H	18	10	13	No
Area D-North	L/M	L	6/6	10/15	7	Yes
Area D-South	L/M	L	12	15	6	Yes
Area E	L/M	M/H	4	5	0	Yes
Area F	M	L	4	10	0	Yes
Area G	M	L	5/3	10/15	3	No
Area H-North	L	M/H	3	10	1	Yes
Area H-South	L	M/H	4	10	3	Yes
Area DP	M	M/H	3/1/1	10	2	No

L=Low, M=Medium, H=High

Shovel tests measured approximately 40-50 centimeters (cm) in diameter, terminating 10 cm into sterile subsoil. All soils were screened through ¼ inch hardware mesh. Artifacts recovered were bagged according to their horizontal and vertical proveniences. Results for each test were recorded on standardized forms, including the location of the STP relative to

the established grid and/or permanent landscape elements, soil depths, colors, and textures. Use of the Munsell<sup>®</sup> Soil Color Charts standardized soil color measurements. Despite regional drought conditions prior to the time of survey, heavy rainfall immediately prior to fieldwork was adequate for measuring soil color without wetting. Field personnel noted natural and artificial surface features in the vicinity of the test. Cultural materials recovered from each STP were retained unless clearly modern, in which case, only notes were taken. Five STPs were excavated in the footprint of a proposed pipeline immediately west of Bridge 3-806 on the north side of S319.

### **Test Units**

Although test units are usually reserved for Phase II evaluation studies, the current investigation included the excavation of test units. Soils in portions of sites found within a narrow LOC often present a confusing stratigraphic picture. Both to clarify site integrity, as well as to recover enough site data to make management recommendations, 1 x 1 meter test units were excavated at three sites. Test unit excavation followed natural stratigraphy. The upper plowzone horizon constituted a single stratigraphic unit; 10 centimeter arbitrary levels, excavated within natural strata, provided vertical control within horizons encountered below the plowzone. Excavation terminated not less than two arbitrary levels, or 20 cm, below cultural deposits. All soils removed from the test units were screened through ¼ inch hardware mesh. Unit artifact bags contained appropriate horizontal and vertical provenience information. Test unit profiles and features were drawn and photographed. Excavators recorded locational, stratigraphic, and artifact data on standardized forms.

### **3.1.5 Lab Methods**

Artifact processing, cataloging, and analysis were performed in the Parsons lab located in Fairfax, Virginia. The artifacts and field records were processed following the Delaware State Museum guidelines for curation of archaeological collections (Fithian 2001). The artifacts were cleaned in plain water and air-dried. They then were bagged in 4-mil polyethylene zip-lock bags according to provenience and material type. Consecutive bag numbers had been assigned in the field for each provenience where artifacts were recovered, and artifact numbers were assigned to the specimens as they were cataloged. The site number, provenience information, and artifact numbers were written in indelible ink on the exterior of the artifact bags, and acid-free tags with the same information were placed within the bags. In addition, diagnostic artifacts were hand-labeled with the site number and artifact number using black or white pigment ink and acryloid B-72 sealant.

The artifacts were cataloged by count, raw material, typology, function, and segment. The cataloging also included grouping the artifacts in categories to provide a framework for analysis. The Group and Class categories were based on a system developed by Stanley South (1977), but were tailored to incorporate nineteenth and twentieth century artifact types. Additional attributes were recorded where they contributed to the determination of the artifact function or temporal range. References consulted in the identification of the artifacts included Jones and Sullivan (1985), Munsey (1970), Noel Hume (1976), and McGuinn and Bazelon (1990). A full artifact inventory was compiled using Microsoft Access database software (Appendix A).

Field notes and documentation were copied on acid-free paper and organized using archival materials. The project records and the artifacts were placed in labeled acid-free boxes. Following project completion, all artifacts and field records will be curated at the Delaware State Museum's facility in Dover, Delaware.

### 3.2 PHASE I RESULTS

The Phase I archaeological investigation consisted of pedestrian survey, the excavation of 80 shovel tests in Areas A – H and DP, and four 1 x 1 meter test units, resulting in the recovery of 2,295 artifacts (Tables 3-2 and 3-3). Five archaeological sites were identified and recorded on CRS forms, including the Plum Site (7S-C-88/CRS#S-10025), Driveway Site (7S-C-86/CRS#S- 10023), Chamber Pot Site (7S-C-87/CRS#S-10024), Shell Button Site (7S-C-89/CRS#S-10026), and Two Hills Site (7S-C-90/CRS#S-10027). Site forms are located in Appendix B. Test unit excavation results included identification of two historical features, which represent the only subsurface features located during this investigation. The four test units and 43 of the STPs yielded historical period artifacts. A single Native American artifact, a dark gray chert flake, was recovered from the upper horizon of one test unit. With the exception of limited materials from the two features in one test unit, all of the artifacts from the STPs and the test units came from the topsoil (A horizon), plowzone (Ap horizon), or from the A/B interface.

**Table 3-2. Artifact Total from All Investigations**

<b>Survey Area</b>	<b>Site</b>	<b>Non-Site</b>	<b>Total</b>
Area A	283	0	283
Area B	1452	0	1452
Area C	141	0	141
Area D-North	0	23	23
Area D-South	77	15	92
Area E	0	0	0
Area F	0	0	0
Area G	0	172	172
Area H-North	0	3	3
Area H-South	106	0	106
Area DP	0	23	23
<b>Total</b>	<b>2059</b>	<b>236</b>	<b>2295</b>

Table 3-3. Artifacts Recovered from Non-Site Areas

Group		Area D North	Area D South	Area G	Area H North	Area DP	TOTAL
<b>Domestic</b>							
	Porcelain	1					1
	Whiteware	1					1
	Pealware	1					1
	Creamware	1					1
	Redware	3	2				5
	Vessel Glass	4	1				5
	Bottle Glass	2	1				3
	Can Opener					2	2
<b>Personal</b>							
	Button		1				1
<b>Architectural</b>							
	Cut Nail	2				8	10
	Unident. Nail		1				1
	Window Glass		1		1		2
	Brick	3	6	172			181
<b>Miscellaneous</b>							
	Animal Bone	2					2
	Oyster/Clam Shell		1		1	13	15
	Clinker/Coal				1		1
	Sheet Metal	1					1
	Agricultural Lime		1				1
	Flowerpot	2					2
	<b>TOTAL</b>	<b>23</b>	<b>15</b>	<b>172</b>	<b>3</b>	<b>23</b>	<b>236</b>

### 3.2.1 Survey Area A

#### Area Description

Area A was located on the western side of SR5, north of the SR5/S319 intersection (Figure 3-4). Area A was bounded by SR5 to the east, S319 to the south, and the LOC to the west. Vegetation in this survey area consisted of mowed grass. Roughly in the center of the testing area was an advertisement billboard. Placement of the billboard resulted in localized soil disturbance; the posts are secured in mounds. The McCormick, Taylor 2001 study identified low prehistoric probability, and medium/high for historical resources. Six STPs were excavated in this area at an interval of 10 meters. Historical artifacts were recovered from four of the STPs resulting in the identification of the Plum Site (7S-C-88/CRS#S-10025). Subsequently, one test unit was also excavated.

**Plum Site (7S-C-88/CRS#S-10025)**

The portion of the survey area from STP A-3 to A-6 was designated the Plum Site (7S-C-88/CRS#S-10025) (Figure 3-4). The Plum site measures 35 meters north to south. SR5 serves as the eastern boundary; the LOC serves as the western boundary. The soil profile within the single test unit excavated in Area A extended to a depth of approximately 27 centimeters below surface and consisted of a dark yellowish brown (10YR4/4) loamy sand (Figure 3-5). Stratum B consisted of a light yellowish brown (10YR6/4) loamy sand. This

## Test Unit A-1 North Wall

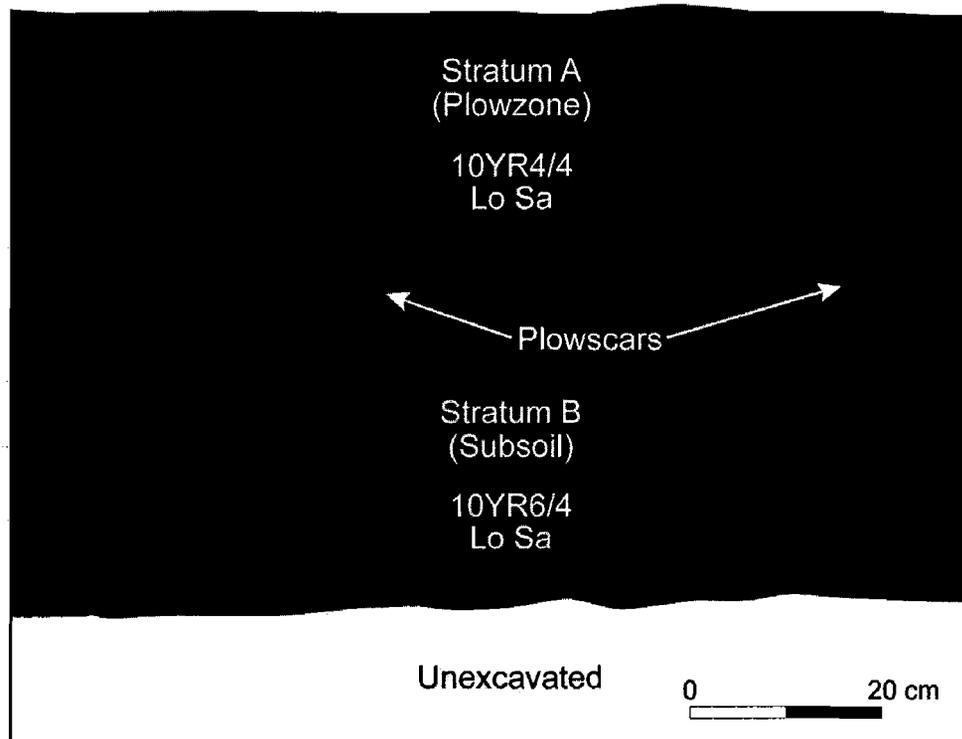


Figure 3-5. Stratigraphic Profile from Test Unit A-1, the Plum Site (7S-C-88/CRS#S-10025).

second stratum continued without variation for three arbitrary 10 centimeter levels. Shovel testing indicated varied stratigraphy. The immediate vicinity of a mound supporting billboard posts showed soil redistribution. Artifacts occurred only in the uppermost strata within the plowzone. Neither undisturbed strata nor intact cultural features were identified.

**Feature Description.** Anomalies at the interface between the plowzone and subsoil were identified in Test Unit A-1. These anomalies consisted of linear striations of subsoil observed at the base of the plowzone, thought to be plowscars (Figure 3-5).

**Artifact Description.** Archaeological investigations in Area A resulted in the recovery of 283 historical artifacts (Table 3-4). No Native-American artifacts were recovered. Of the artifacts, 144 were found in STPs, and 139 from the single test unit. Domestic artifacts included ceramics, bottle and vessel glass, and tin can fragments. Architectural items consisted of brick, nails, and window glass. Faunal remains included animal bone as well as clam and oyster shell. A flowerpot fragment, corroded metal fragments, and clinker was also recovered. Collectively, the artifact types suggest proximity to a domestic area with a structure nearby. However, the relatively low density also may suggest a combination of random refuse scatter and road debris. Historical ceramics consisted primarily of nineteenth-

to twentieth-century whiteware and ironstone vessel sherds, but included examples of late eighteenth- to early nineteenth-century creamware and pearlware. Also recovered was bone china, yellowware, coarse redware, and Albany slip-glazed stoneware. Bottle glass included blown-in-mold as well as machine-made examples. Identified nails included both cut (n=19) and wire (n=2) types.

**Table 3-4. Artifacts Recovered from the Plum Site**

Group	Description	Count	Percent Within Group	Percent of Total
<b>Domestic</b>				
	Porcelain	1	0.71	0.35
	Creamware	2	1.43	0.71
	Pearlware	7	5.00	2.47
	Whiteware/Ironstone	21	15.00	7.42
	Unidentified Refined Earthenware	3	2.14	1.06
	Yellowware	1	0.71	0.35
	Stoneware	2	1.43	0.71
	Coarse Redware	14	10.00	4.95
	Vessel Glass	4	2.86	1.41
	Blown-in-Mold Bottle Glass	2	1.43	0.71
	Machine-Made Bottle Glass	7	5.00	2.47
	Unidentified Bottle Glass	31	22.14	10.95
	Tin Can Fragments	45	32.14	15.90
	<b>Total Domestic</b>	<b>140</b>	<b>100.00</b>	<b>49.47</b>
<b>Architectural</b>				
	Wire Nails	2	1.89	0.71
	Cut Nails	19	17.92	6.71
	Unidentified Nails	4	3.77	1.41
	Window Glass	10	9.43	3.53
	Barbed Wire	5	4.72	1.77
	Brick/Mortar	66	62.26	23.32
	<b>Total Architectural</b>	<b>106</b>	<b>100.00</b>	<b>37.46</b>
<b>Miscellaneous</b>				
	Animal Bone	4	10.81	1.41
	Oyster Shell	10	27.03	3.53
	Clam Shell	4	10.81	1.41
	Unidentified Shell	5	13.51	1.77
	Clinker	4	10.81	1.41
	Flowerpot	1	2.70	0.35
	Misc. Metal	9	24.32	3.18
	<b>Total Miscellaneous</b>	<b>37</b>	<b>100.00</b>	<b>13.07</b>
	<b>TOTAL</b>	<b>283</b>		<b>100%</b>

The horizontal distribution of artifacts encompassed all but the two southernmost STPs. Although the artifact count for STP A-3 (n=61) was higher than the other STPs, tin can fragments (n=44) constituted the majority of materials from this test. If the tin can fragments are counted as one artifact, highest density of artifacts shifts to STPs A-4 and A-5, containing 34 and 32 artifacts, respectively. STP A-6 contained 17 artifacts. All positive tests yielded architectural, domestic, and faunal artifacts. The presence of machine-made beer and soda bottle glass in STP A-5 and Test Unit A-1 alongside earlier ceramics indicated disturbance. In all tests, artifacts occurred in the uppermost stratum, which consisted either of a plowzone or soils redistributed during erection of the aforementioned billboard posts.

### **3.2.2 Survey Area B**

#### **Area Description**

Area B was located south of the SR5/S319 intersection and west of SR5 (Figure 3-4). A treeline bounds the area to the north, SR5 to the east, and the LOC to the west. The McCormick, Taylor 2001 study identified low prehistoric probability, and medium/high for historical resources. Four STPs at 10 meter intervals were excavated. The tests were numbered sequentially B-1 through B-4, starting at the northernmost shovel test. STP B-1 revealed a remnant driveway. The first stratum of this test represented sloped overburden. South of STP B-3, a drainage ditch disturbed all areas within the LOC. Historical artifacts were recovered from the four STPs resulting in the identification of the Driveway Site (7S-C-86/CRS#S-10023). Subsequently, two test units were also excavated. Placement of Test Units B-1 and B-2 occurred between the areas disturbed by the disused driveway and the drainage pipe.

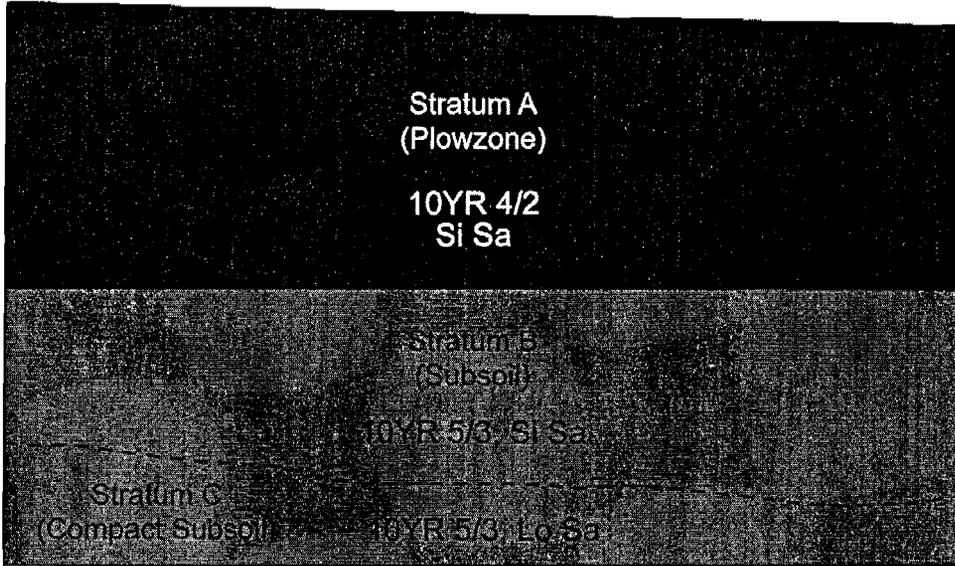
#### **Driveway Site (7S-C-86/CRS#S-10023)**

The Driveway Site was contained in all four STPs and the two test units excavated in Area B, in front of the Draper/Bonk House (CRS #S-3527). STP B-1 was excavated atop a now disused driveway entrance. The first and second strata represented overburden deposits. These strata consisted of a 10 centimeter yellowish brown (10YR5/4) silty sand overlaying a light brownish gray (10YR6/2) silty sand with blue clay lumps that extended to 52 centimeters below surface. The lowest stratum consisted of a very dark grayish brown silty sand buried plowzone atop a light brownish gray silty sand subsoil.

The test units were excavated in the area of greatest artifact concentration and of least visible disturbance. A consistent stratigraphic sequence appeared in both test units (Figure 3-6). The first stratum consisted of dark yellowish brown (10YR4/2) slightly silty sand extending to approximately 25 centimeter below surface in TU B-1 and 23 centimeters in TU B-2. The second stratum consisted of a brown (10YR5/3) slightly silty sand that continued to a depth of approximately 50 centimeters below surface in both units. Unit 2 recorded a more developed subsoil near the base of excavation distinguishable only by increasingly compact texture. The depth of the first stratum, its homogeneity, and the spalled nature of the cultural material within suggested a plowzone. Subsoils appear below this stratum. TU B-1 had two

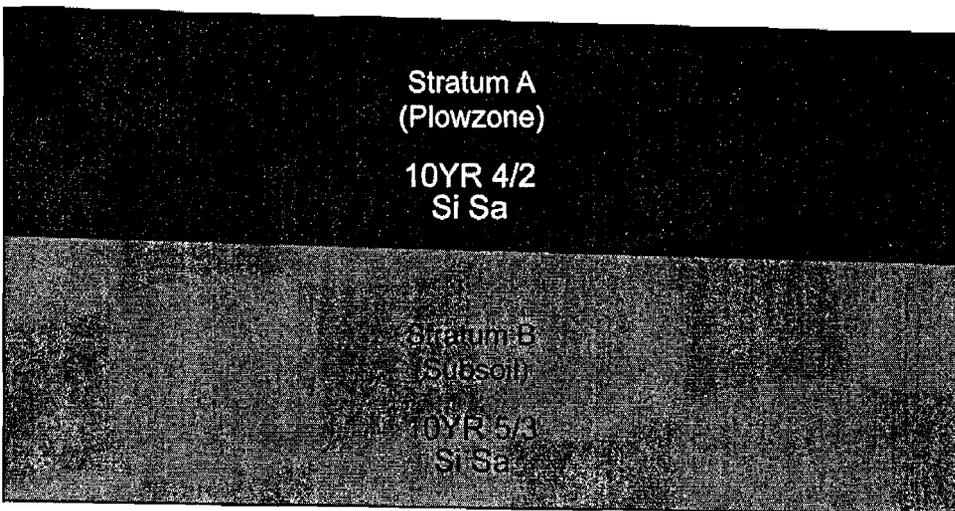
levels, with Stratum A producing the most recent artifacts, including amethyst-tinted (solarized) glass, whiteware and wire nails; and Stratum B producing whiteware, yellowware

**Test Unit B-1 North Wall**



0 20 cm

**Test Unit B-2 North Wall**



**Figure 3-6. Stratigraphic Profile for Test Units B-1 and B-2, the Driveway Site (7S-C-86/CRS#S-10023)**

and wire nails (Table 3-5). TU B-2 showed greater disturbance, with a single mixed stratum producing late whiteware, ironstone, and bottle glass.

**Feature Description.** Two post features were recorded in TU B-2; both appeared at the plowzone/subsoil interface (Figure 3-7). The features were bisected, profiled and fully excavated. The matrices of both features consisted of a dark grayish brown (10YR4/2) silty sand, identical in color and texture to the plowzone soils. The composition of the feature soils accounts for their identification only when the plowzone had been removed and subsoil showed a surrounding contrast.

Feature 1 was an amorphous stain measuring 34cm (approximately 12 inch) x 34cm and extending 35cm into subsoil. Indications of bioturbation appeared during excavation. No definitive postmold was observed. The interpretation of this feature as a post is based solely on its profile, which slightly tapered and terminated with a squarish base. Feature 1 yielded 69 artifacts including window glass, cut nails, wrought nails, unidentified nails, a screw, whiteware, redware, oyster shell, animal bone, wood, a synthetic comb (possibly bakelite), a ball clay tobacco pipe stem, unidentified metal fragments, and one chert flake.

Feature 2 was square with a slanted base. It measured 20cm x 20cm (approximately 8 inches square) and extended approximately 18cm into subsoil. Again, no definitive postmold was observed. Feature 2 yielded 13 artifacts consisting of brick, a machine-cut spike, unidentified nails, unidentified bottle glass, and a charcoal fragment. Artifacts recovered from the features, with the exception of the chert flake, were functionally and temporally consistent with those recovered from the plowzone context.

The location of TU B-2, directly adjacent to the road and in close proximity to a disused driveway/entrance, suggests these features could represent posts supporting a mailbox and/or roadway sign(s).

**Artifact Description.** Area B produced a total of 1,452 artifacts (Table 3-5). Of the total, 104 were recovered from the plowzone of STPs and 1,266 were recovered from the plowzone of the two test units; the remaining 82 artifacts were recovered from Features 1 and 2.

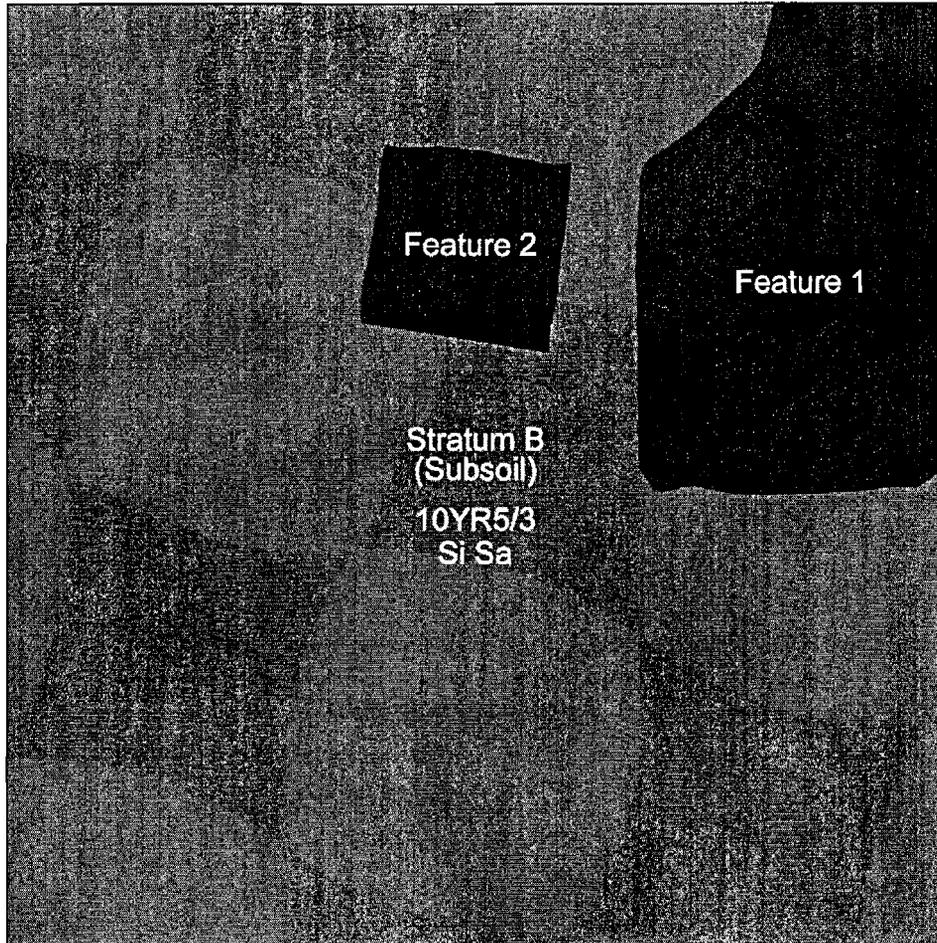
Architectural items consisted of brick, nails, window glass, slate, and one each screw, nut, mortar fragment and plaster fragment. Collectively, architectural artifacts constituted over 70 percent of the total plowzone assemblage. Small brick fragments accounted for approximately 65 percent of the architectural material. A brass .22 caliber shell casing was the single arms-related artifact. The firing pin impression on the casing indicated discharge with a rim-fire mechanism; the head stamp is illegible.

Domestic artifacts consisted of historical ceramics, bottle glass, vessel glass, and a cupreous utensil handle fragment. The ceramics included food preparation and service forms. Coarse redwares (n=14) were classified as food preparation. Identifiable forms for refined earthenwares included plates and hollowwares. Two tumbler fragments comprised the only vessel glass of identifiable form; some fragments could be lamp glass. Several bottle glass

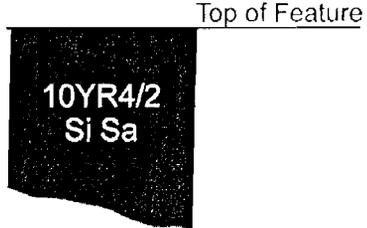
Table 3-5. Artifacts Recovered from the Driveway Site

Group	Description	Count	Percent Within Group	Percent of Total
<b>Domestic</b>				
	Whiteware/Ironstone	104	44.64	7.16
	Unidentified Refined Earthenware	3	1.29	0.21
	Yellowware	8	3.43	0.55
	Coarse Redware	14	6.01	0.96
	Vessel Glass	25	10.73	1.72
	Blown-in-mold Bottle Glass	3	1.29	0.21
	Machine Made Bottle Glass	7	3.00	0.48
	Unidentified Bottle Glass	68	29.18	4.68
	Utensil	1	0.43	0.07
	<b>Total Domestic</b>	<b>233</b>	<b>100.00</b>	<b>16.05</b>
<b>Personal</b>				
	Ball Clay Tobacco Pipe Fragments	13	65.00	0.90
	Clothing Hook	1	5.00	0.07
	Glass Bead	1	5.00	0.07
	Button	3	15.00	0.21
	Porcelain Dolls Head Fragment	1	5.00	0.07
	Synthetic Comb	1	5.00	0.07
	<b>Total Domestic</b>	<b>20</b>	<b>100.00</b>	<b>1.38</b>
<b>Architectural</b>				
	Wrought Nail	5	0.48	0.34
	Wire Nail/Tack	44	4.23	3.03
	Cut Nail	189	18.16	13.02
	Unidentified Nail	35	3.36	2.41
	Screw/nut	3	0.29	0.21
	Window Glass	79	7.59	5.44
	Slate	1	0.10	0.07
	Brick/Mortar	681	65.42	46.90
	Iron Drainpipe	4	0.38	0.28
	<b>Total Architectural</b>	<b>1041</b>	<b>100.00</b>	<b>71.69</b>
<b>Miscellaneous</b>				
	Animal Bone	16	10.13	1.10
	Oyster Shell	46	29.11	3.17
	Clam Shell	16	10.13	1.10
	Charcoal/Wood	8	5.06	0.55
	Ammunition Casing	1	0.63	0.07
	Fish Hook	1	0.63	0.07
	Thimble	1	0.63	0.07
	Flowerpot	1	0.63	0.07
	Clinker/Coal	3	1.90	0.21
	Agricultural Lime	4	2.53	0.28
	Unidentified Glass	7	4.43	0.48
	Misc. Metal	53	33.54	3.65
	Native American Flake	1	0.63	0.07
	<b>Total Miscellaneous</b>	<b>158</b>	<b>100.00</b>	<b>10.88</b>
	<b>TOTAL</b>	<b>1452</b>		<b>100%</b>

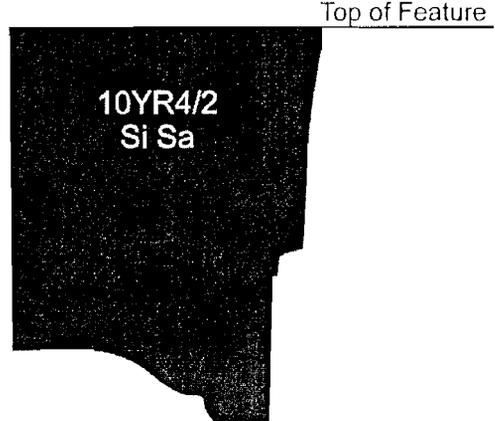
Test Unit B-2 North Wall  
(Plan View)



South Wall Profile  
of Feature 2



South Wall Profile  
of Feature 1



0 20 cm

Figure 3-7. Features in Test Unit B-2, the Driveway Site (7S-C-86/CRS#S-10023).

fragments were olive-green wine bottle glass. Personal items included tobacco pipe fragments, buttons, a clothing hook, a glass bead, and a bisque porcelain doll part.

Temporally diagnostic artifacts recovered from the Area B consisted of historical ceramics, glass, nails, and a button. Whiteware ceramic decorations included red printed, green printed, floral painted, shell edged, annular, and sponge-decorated, suggesting manufacture in the second quarter of the nineteenth century. Domestic bottle glass included both blown-in-mold and machine-made examples. Twelve fragments were amethyst-tinted, suggesting manufacture between ca. 1880 and 1915 (Munsey 1970:55). The majority of nails recovered were machine-cut; wire and hand-wrought examples were fewer in number. Datable personal remains included a loop shanked button produced by Scovills and Company between 1840 and 1850 (McGuinn and Bazelon 1990:90).

Artifact distribution did not show functionally discrete activity areas. The greatest density of artifacts recovered from STPs occurred in STP B-2. Architectural and domestic artifacts occurred in all STPs. Tobacco pipe fragments, the only personal items recovered during shovel testing, were found only in STPs B-2 and B-3. Historical ceramics were recovered in every test. Artifacts from STPs occurred uniformly in the plowzone layer. The majority of artifacts in Test Units B-1 and B-2 were contained in the plowzone. Some historical, and one Native American, artifacts were recovered from in situ cultural features, post features B-2-1 and B-2-2. The Native American artifact, a chert flake, appeared in post feature B-2-2 mixed with historical materials. No artifact-bearing, intact cultural horizons appeared in STPs or test units. The presence of historical features suggests a certain degree of vertical integrity although likely plow truncated.

### **3.2.3 Survey Area C**

#### **Area Description**

S319 bounds Area C to the north, Diamond Pond to the west, and SR5 to the east. The LOC determined the southern survey limit (Figure 3-4). The McCormick, Taylor 2001 study showed four structures located along the north side of S319. However, the Beers 1868 map shows three structures south of the Federal Street/Sand Hill Road intersection. These structures were tightly grouped, apparently facing eastward toward Federal Street, and were owned at the time by a Capt. William Mason. The northernmost two structures were potentially located in Area C, the southernmost closer to Survey Area B. Eighteen STPs were excavated in Area C. A transect was established parallel to, and south of the existing S319 roadway. A second transect was placed 10 meters south of the first transect. Historical artifacts were observed in two surface middens and recovered from the STPs resulting in the identification of the Chamber Pot Site (7S-C-87/CRS#S-10024).

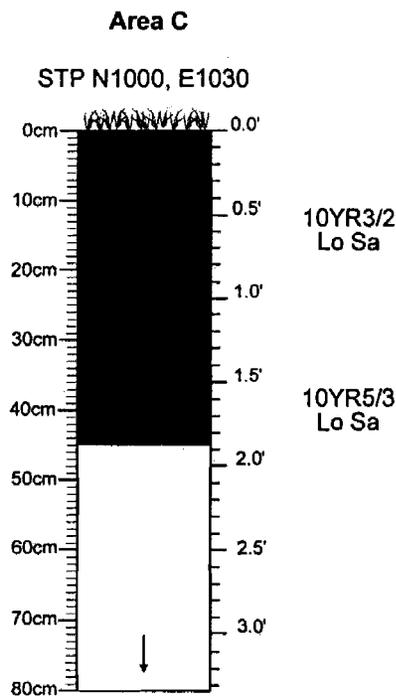
#### **Chamber Pot Site (7S-C-87/CRS#S-10024)**

Two surface middens occurred in Survey Area C (Figure 3-4). The surface deposits appeared contemporaneous, suggested by the presence of a chamber pot in one midden and a matching tea/coffee mug in the other. Both were ivory-tinted whiteware with overglaze decal decoration in a 'Rose' pattern. The majority of the site was located on the surface; no

intact strata were found in STPs, although approximately one-half the total artifacts found were recovered from within one shovel test (STP C-15) and consisted of tin can fragments. Although historical maps show three structures in this area, no structural evidence was found and shovel testing indicated that the area had been disturbed. A local bottle collector confirmed that he had dug up the area thoroughly over the past twenty years (John Fleming 2002, pers. comm.).

Soils across Area C remained relatively constant (Figure 3-8). The general sequence started with a very dark grayish brown (10YR3/2) sandy loam topsoil extending between 24 and 33 centimeters below surface. The second stratum consisted of a brown (10YR5/3) sandy loam. A third stratum appeared between 45 and 52 centimeters below surface and consisted of a yellowish brown (10YR5/6) loamy sand. STP 3 consisted of a very dark grayish brown (10YR3/2) sandy loam extending to 24 centimeters below surface. Below was a grayish brown (10YR5/2) loamy sand, extending to 57 centimeters below surface. This stratum was underlain by a yellowish brown (10YR5/6) loamy sand containing occasional clayey pockets and extending to 66 centimeters below surface. The fourth stratum consisted of a grayish brown (10YR5/2) loamy sand.

**Feature Description.** No cultural features occurred in Area C.



**Figure 3-8. Stratigraphic Profile from STP N1000, W1030, Chamber Pot Site (7S-C-87/CRS#S-10024)**

**Artifact Description.** Area C produced 141 historical artifacts (Table 3-6). Architectural, domestic, faunal, and personal items were recovered. Architectural materials included brick fragments, window glass fragments, and nails. Domestic artifacts consisted of coarse and refined earthenwares, stoneware, tin can fragments, and bottle and vessel glass. Personal items consisted of a jaw harp, a lock key, and a phonograph record fragment. Seventy-five tin can fragments from one STP represent over one half of the artifacts collected from Area C. The remaining artifacts were scattered across the survey area and showed no clustering. Site disturbance was widespread, confirmed by a local bottle collector who claimed to have been mining the area for many years.

**Table 3-6. Artifacts Recovered from the Chamber Pot Site**

Group	Description	Count	Percent Within Group	Percent of Total
<b>Domestic</b>				
	Whiteware/Ironstone	10	8.93	7.09
	Redware	1	0.89	0.71
	Stoneware	5	4.46	3.55
	Jar/Vessel Glass	7	6.25	4.96
	Machine-made Bottle Glass	2	1.79	1.42
	Unident. Bottle Glass	11	9.82	7.80
	Fruit Jar lid	1	0.89	0.71
	Tin Can Fragment	75	66.96	53.19
	<b>Total Domestic</b>	<b>112</b>	<b>100.00</b>	<b>79.43</b>
<b>Personal</b>				
	Jaw Harp	1	33.33	0.71
	Audio Record Fragment	1	33.33	0.71
	Padlock Key	1	33.33	0.71
	<b>Total Personal</b>	<b>3</b>	<b>100.00</b>	<b>2.13</b>
<b>Architectural</b>				
	Cut Nail	2	10.53	1.42
	Window Glass	6	31.58	4.26
	Brick/Mortar	11	57.89	7.80
	<b>Total Architectural</b>	<b>19</b>	<b>100.00</b>	<b>13.48</b>
<b>Miscellaneous</b>				
	Animal Bone	2	28.57	1.42
	Clam Shell	2	28.57	1.42
	Misc. Metal	3	42.86	2.13
	<b>Total Miscellaneous</b>	<b>7</b>	<b>100.00</b>	<b>4.96</b>
	<b>TOTAL</b>	<b>141</b>		<b>100%</b>

Among the refined earthenwares present in the STPs (whiteware and ironstone), all were undecorated with the exception of one blue printed fragment. One coarse redware and five Albany/Bristol slip-glazed stoneware sherds also were present. The ivory-tinted, decal-decorated ceramics observed in the surface middens were of a type produced from the late

nineteenth century that remained popular until the mid-twentieth century (Stelle 2001). Both nails collected from the site were machine-cut. Two bottle glass fragments were machine-made, indicating post 1904 deposition. The record fragment was a 2-sided shellac example, indicating manufacture between 1908 and 1948 (Trager 1992: 678, 903).

### 3.2.4 Survey Area D

#### Area Description

Area D was surveyed on both sides of S319, and was thus divided into Area D-North and Area D-South for control purposes during shovel testing (Figure 3-9). The McCormick, Taylor 2001 study shows the areas as having low to medium prehistoric probability and low historical probability. The STP intervals are discussed for each area. Archaeological investigations in Area D (both North and South) resulted in the recovery of 37 artifacts; pedestrian survey produced an additional 77 artifacts. No subsurface features were recorded. Surface survey resulted in the identification of one archaeological site in Area D – South, the Shell Button Site (7S-C-89/CRS#S-10026).

**Area D-North.** Area D-North was tested through a combination of STPs in grassy/wooded areas, and pedestrian survey in plowed areas within the LOC. A crushed stone driveway bounded Area D - North to the east and a cornfield to the west. Drought conditions stunted corn growth, allowing for good surface visibility along field edges. Parsons excavated a total of 12 STPs along a single transect, numbered sequentially west to east one through twelve. The eastern six STPs were excavated at a 10 m interval, the remainder at 15 m. The eastern half was more intensively investigated due to its location on a rise above an active drainage and the potential for Native American archaeological resources. A non-extant sawmill, identified on historical maps adjacent to nearby Bridge 3-806 to the east, increased the potential for historical archaeological resources.

The typical soil profile in Area D – North consisted of two strata (Figure 3-10). The plowzone appeared as a yellowish brown (10YR5/4) silty sand that extended to between 20 and 50 centimeters below surface. A light brownish gray (10YR6/2) silty sand comprised the second stratum. Testing below 70 centimeters below surface showed ferrous staining. One test, located along the edge of an agricultural field contained a third stratum. Appearing at 40 centimeters below surface, this stratum consisted of a strong brown (7.5YR5/6) sandy loam.

No cultural features were identified in Area D – North.

Shovel Testing in Area D – North yielded a total of 23 historical artifacts (Table 3-3). Twenty-two artifacts were recovered from the STPs, and included architectural, domestic, and faunal materials. Architectural items consisted of three brick fragments and two cut nails. Domestic artifacts included historical ceramic sherds and bottle and vessel glass fragments. Ceramics included redwares, bone china, undecorated whiteware, and blue printed pearlware. One of the glass vessel fragments was identified as an amethyst-tinted (solarized) tumbler rim. Two mammal bones exhibited butchering marks. Surface collection in the cornfield west of Area D – North produced no artifacts. One creamware sherd,

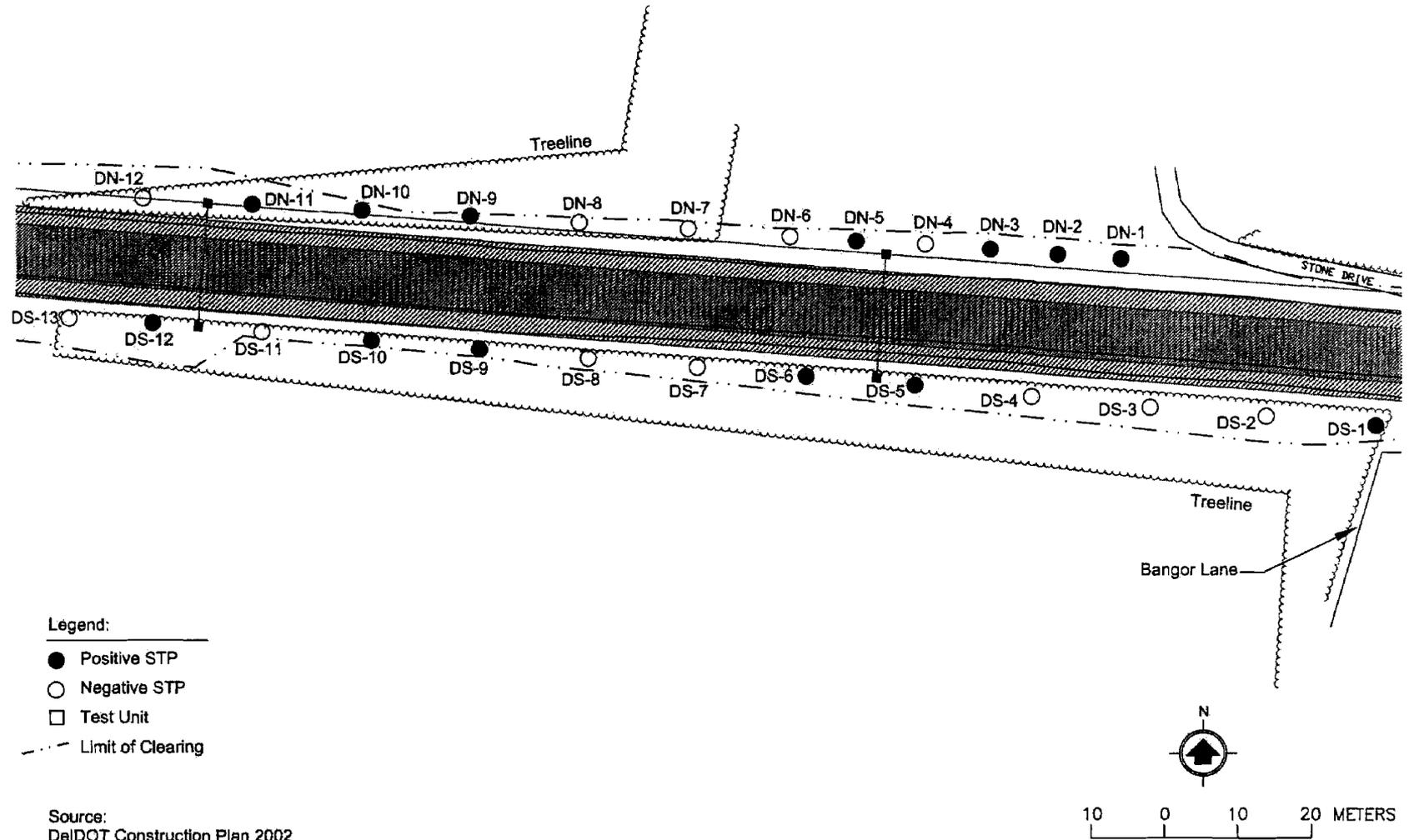
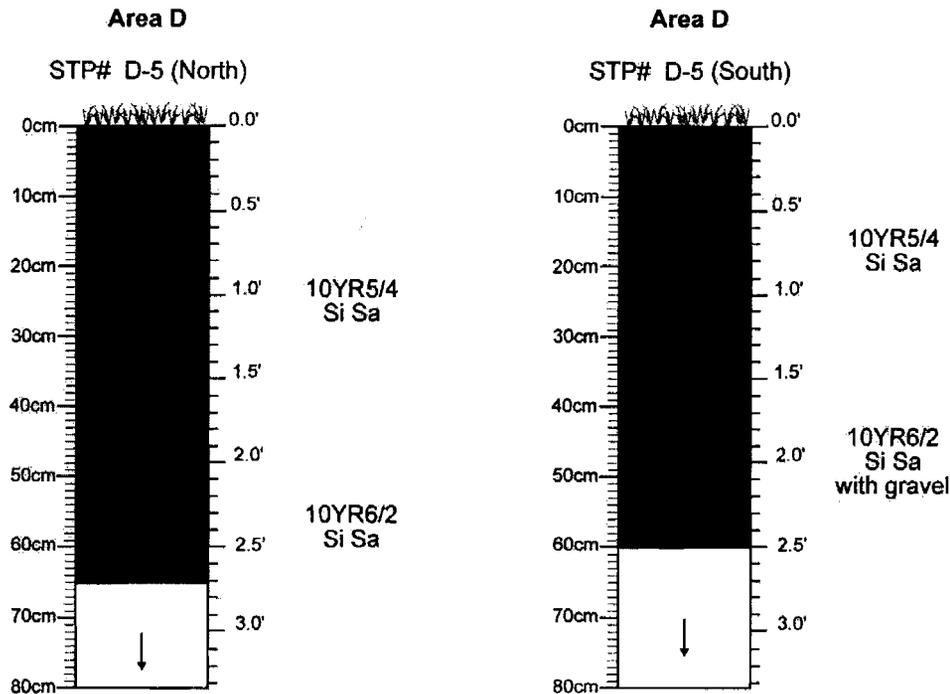


Figure 3-9. Survey Strategy for Area D

however, was collected from the surface -near wooden remnants of a possible mill house in woods in the northeast of Area D - North, outside of the right-of-way.



**Figure 3-10. Stratigraphic Profiles of Area D**

**Area D-South.** Area D - South was located south of S319 and west of Bangor Lane. The road cut defined the northern boundary and the LOC the southern. The area was defined by the boundaries of a small wooded stand that divides S319 from cornfields to the south. The cornfields had good surface visibility and thus were pedestrian surveyed for archaeological resources. The single transect contained a total of 13 STPs placed at a 15 meter interval, numbered sequentially east to west. A slightly sunken disturbance, most likely a road trace, was noted in the area to be tested; thus, the transect was shifted slightly to the south to avoid disturbed soils.

Soils in Area D – South remained generally consistent across the survey area. The typical profile included a yellowish brown (10YR5/4) silty sand first stratum, extending to between 15 and 39 centimeters below surface (Figure 3-10). The second stratum in the western tests comprised light yellowish brown (10YR6/4) loamy sands with increased amounts of gravels. This stratum was underlain by a light brownish gray (10YR6/2) silty sand. A third stratum was recorded in one STP, consisting of a light brown (7.5YR6/4) coarse sand below 40 centimeters.

No cultural features appeared in Area D – South.

A total of 15 historical artifacts were found in STPs in Area D – South (Table 3-3). The assemblage included a shell button, six brick fragments, one piece of window glass, one unidentified nail, one bottle glass fragment, two coarse redware sherds, one piece of vessel glass, one shell, and one piece of agricultural lime. One glass sherd was amethyst-tinted (solarized), which suggests that it was produced when manganese was widely used to decolorize glass, between ca. 1880 and 1915 (Munsey 1970:55).

#### **Shell Button Site (7S-C-89/CRS#S-10026)**

The Shell Button Site was located outside the LOC in the agricultural field immediately south of S319 and east of a dirt access road (Figure 3-11). Surface collection in Area D – South produced 77 artifacts (Table 3-7). The artifacts consisted primarily of items related to shell button manufacture, as well as domestic and architectural materials. Forty-one shell button wasters clustered in a discrete area. These consisted of pearly top shell fragments (family *Trichidae*). Two of the top shells appeared unmodified, however the remaining 39 fragments had holes where various sized circular button ‘plugs’ were removed. Domestic items included one Chinese porcelain sherd, refined earthenwares including pearlware and whiteware, coarse redware, and bottle and vessel glass. Glass recovered included four fragments of blown-in-mold, amethyst-tinted (solarized) bottle glass. Architectural items included a single brick fragment, a hook, two cut nails, window glass pieces, and a modern tile. Other items included a flowerpot sherd, unidentified metal and glass, and modern plastic.

No subsurface testing was conducted due to the site location outside the LOC as well as the appearance that the artifact deposit was secondary in context. The walkover identified widespread wasters from the production of shell buttons, an important regional ‘cottage industry’ at the turn of the twentieth century (LeeDecker et al. 1992). Archival research indicated no structures in close proximity to the recovered materials.

### **3.2.5 Survey Area E**

#### **Area Description**

Shovel testing in Area E was conducted in the northwest corner of the intersection of S319 and Lavinia Street, on a grassy patch bounded to the north and west by cornfields (Figure 3-12). The McCormick, Taylor 2001 study concluded a low to medium prehistoric probability, and medium/high historical probability given the location of a “G.W. Est.” on historical maps abutting the road at the intersection of Lavinia Street and S319. Four STPs were excavated at a 5 m interval.

Table 3-7. Artifacts Recovered from the Shell Button Site

Group	Description	Count	Percent Within Group	Percent of Total
<b>Button Manufacture</b>				
	Shell Button Wasters	41	100.00	53.25
	<b>Total Button Manufacture</b>	<b>41</b>	<b>100.00</b>	<b>53.25</b>
<b>Domestic</b>				
	Chinese Porcelain	1	4.55	1.30
	Whiteware	4	18.18	5.19
	Pearlware	2	9.09	2.60
	Redware	2	9.09	2.60
	Jar/Vessel Glass	5	22.73	6.49
	Blown-in-mold Bottle Glass	4	18.18	5.19
	Unidentified Bottle Glass	4	18.18	5.19
	<b>Total Domestic</b>	<b>22</b>	<b>100.00</b>	<b>28.57</b>
<b>Architectural</b>				
	Cut Nail/Spike	2	25.00	2.60
	Iron Hook	1	12.50	1.30
	Window Glass	3	37.50	3.90
	Brick	1	12.50	1.30
	Tile	1	12.50	1.30
	<b>Total Architectural</b>	<b>8</b>	<b>100.00</b>	<b>10.39</b>
<b>Miscellaneous</b>				
	Unidentified Glass	2	33.33	2.60
	Misc. Metal	1	16.67	1.30
	Flowerpot	1	16.67	1.30
	Unidentified Plastic	2	33.33	2.60
	<b>Total Miscellaneous</b>	<b>6</b>	<b>100.00</b>	<b>7.79</b>
	<b>TOTAL</b>	<b>77</b>		<b>100%</b>

Archaeological investigations in Area E yielded no artifacts, and no subsurface features or archaeological sites. STPs in Area E showed slightly different stratigraphic profiles (Figure 3-13). Three STPs showed two strata; three strata appeared in the remaining test. The first stratum ranged in color from a very dark yellowish brown (10YR5/4) sandy loam to brown (10YR4/3). Depth of the first stratum varied from 32 and 46 centimeters below surface. The second stratum varied from a yellowish brown sand (10YR5/8) to a light brownish gray (10YR6/2) silty sand, extending to an approximate depth of 70 centimeters below surface. The final stratum, identified in STP E-3 only, consisted of a strong brown (7.5YR5/6) loamy sand.

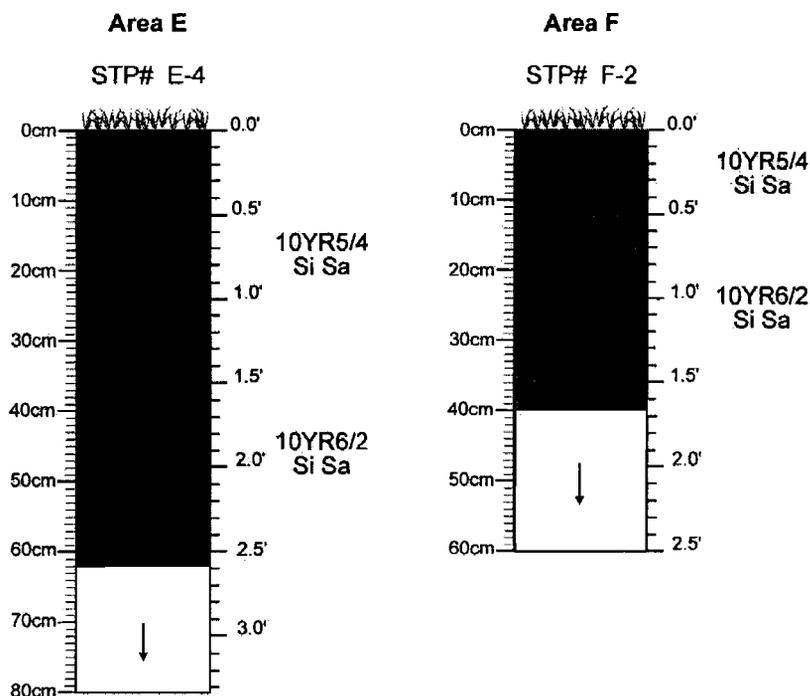


Figure 3-13. Stratigraphic Profiles for Areas E and F.

### 3.2.6 Survey Area F

#### Area Description

Area F was located west of Area E, north of S319 and east of a small marshland/drainage on a small rise (Figure 3-14). The area is bounded to the south by S319 and to the north by the LOC. The eastern boundary is the slope leading to the wetland. The McCormick, Taylor 2001 study showed a medium probability for prehistoric resources given proximity to water, and low probability for historical resources. Four STPs were excavated at a 10 meter interval, and were numbered sequentially one through four, east to west.

Archaeological investigations in Area F yielded no artifacts, and no subsurface features or archaeological sites. Two stratigraphic profiles were noted in STPs (Figure 3-13). Two tests, STPs F-1 and F-3, contained three strata, consisting of a very dark grayish brown (10YR3/2)

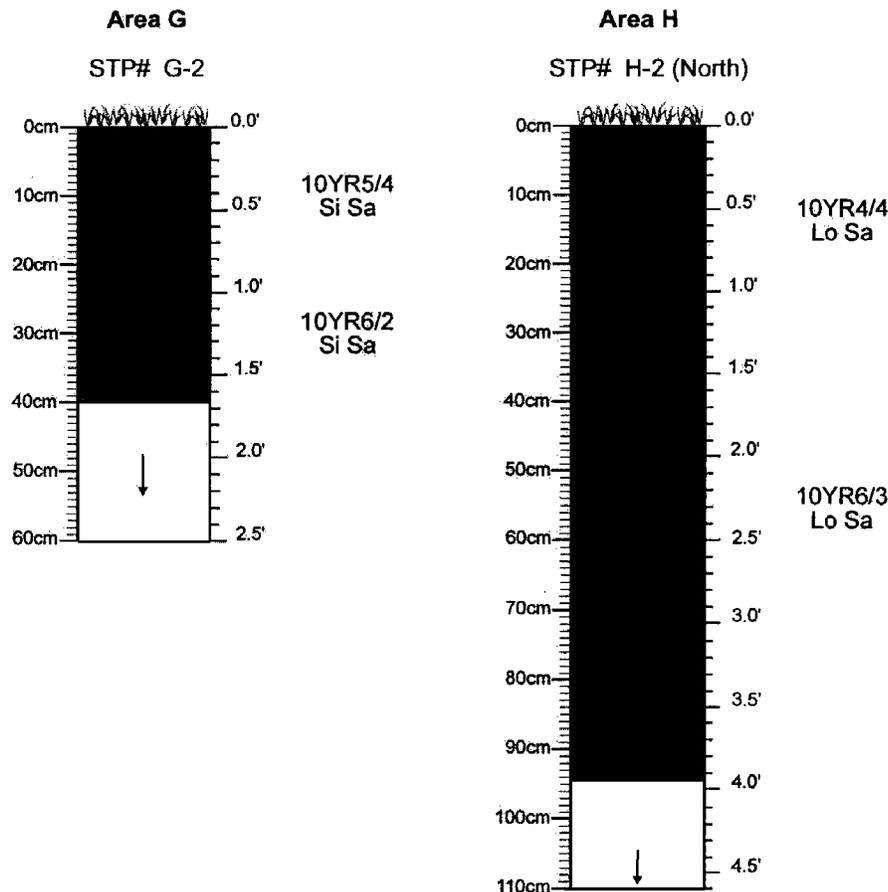
loamy sand extending between 15 and 19 centimeters below surface, above a dark yellowish brown (10YR4/6) sand extending between 27 and 32 centimeters below surface, followed by a yellowish brown sand (10YR5/6). Tests F-2 and F-3 contained two strata, consisting of a yellowish brown (10YR 5/4) silty sand extending to a depth of 12 centimeters below surface, above a light brownish gray (10YR6/2) silty sand.

### **3.2.7 Survey Area G**

#### **Area Description**

Area G was located south of S319, with bottomland as the eastern boundary, an agricultural field to the west and the LOC to the south (Figure 3-15). The McCormick, Taylor 2001 study showed medium prehistoric probability and low historical probability. Due to the proximity to water, the easternmost five STPs were excavated at a 10 meter interval, with the remaining three STPs at 15 meter intervals.

Several stratigraphic profiles appeared in Area G (Figure 3-16). The most frequent consisted of a first stratum of yellowish brown (10YR5/4) silty sand, extending between 15 and 35 centimeters below surface, above a dark yellowish brown (10YR4/6) and light brownish (10YR6/2) silty sand. A second soil was noted for the first layer, consisting of very dark grayish brown (2.5Y3/2) loamy sand, extending between 12 and 20 centimeters below surface. Two tests contained a third light yellowish brown (10YR6/4) sand stratum.



**Figure 3-16. Stratigraphic Profiles for Areas G and H.**

Archaeological investigations in Area G yielded no cultural features or archaeological sites. STPs G-2, G-3, and G-4 collectively produced 172 brick fragments (Table 3-3). The fragments were small, together amounting to less than the weight of one brick. The area was visually inspected for signs of a structure, but none was located. The absence of any other artifact type suggests possible secondary deposit.

### 3.2.8 Survey Area H

Area H was located at the intersection of SR30 and S319 (Figure 3-17). The McCormick, Taylor 2001 study showed low prehistoric probability, but medium/high historical probability based upon research showing "G.B. Waples. Est." in the southwest corner of the intersection. The study also mentioned CRS#S-3445 northwest of the intersection. This

structure was constructed sometime between 1890 and 1920, was part of the G.B. Waples estate, and was torn down following recordation with the DE SHPO. Area H was divided

into Area H-North and Area H-South for control purposes during shovel testing. STP intervals are discussed below. Shovel testing in all of Area H yielded 79 artifacts; pedestrian survey south and east of Area H – South added 30 artifacts to the assemblage. No subsurface features were recorded. Historical artifacts were recovered from the STPs in Area H-South resulting in the identification of the Two Hills Site (7S-C-90/CRS#S-10027).

### **Area Description**

**Area H-North.** Area H-North was located in the northeast corner of the intersection of SR30 and S319. The Carey family owned the property located northwest and southwest of the intersection of Sand Hill Road (S319) and Gravel Hill Road (SR30) for approximately 200 years (Mrs. Charles Carey 2002, pers. comm.). Mrs. Carey stated that a house was located in the southwest quadrant of the intersection, but the building was sold and relocated to the Greenwood vicinity after sale. Also according to Mrs. Carey, northwest of the intersection several farm outbuildings once stood but also are gone. Three STPs were excavated along a southeast-to-northwest trending transect (Figure 3-17), numbered sequentially starting in the southeast.

Stratigraphy in Area H – North remained consistent in the three STPs excavated (Figure 3-16). The first stratum consisted of a dark yellowish brown (10YR4/4) loamy sand extending to approximately 20 centimeters below surface. A pale brown (10YR6/3) loamy sand comprised the second stratum. The test unit in Area H – South showed the same soils as those identified in shovel testing. The first stratum consists of a dark yellowish brown (10YR4/4) loamy sand extending to approximately 50 centimeters below surface. The second stratum, a yellowish brown (10YR5/3) loamy sand, persisted through two arbitrary 10 centimeter levels.

Shovel testing in Area H – North yielded three artifacts: one window glass fragment, one clam shell, and one piece of clinker (Table 3-3). No artifact was temporally diagnostic.

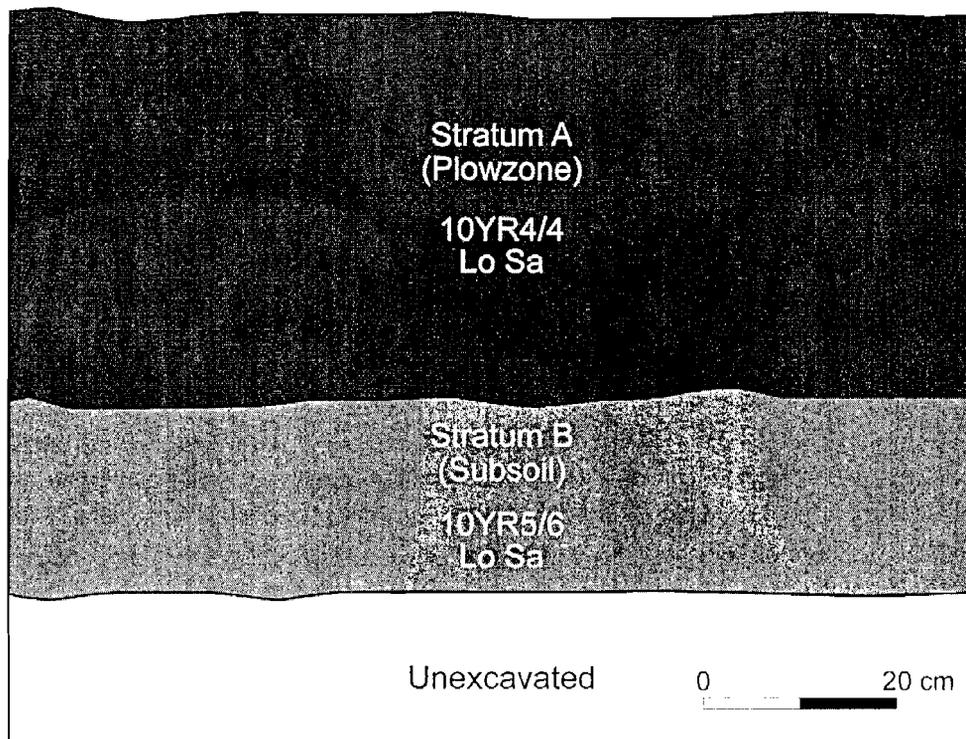
**Area H-South.** Area H - South occupied the southeast corner of the intersection of SR30 and S319. Four shovel tests were excavated at 10 meter intervals along a northeast to southwest trending transect (Figure 3-17). Shovel testing, excavation of one test unit, and surface collection resulted in the recovery of 106 historical artifacts from Area H – South. All materials either appeared on the surface or in the plowzone stratum.

### **Two Hills Site (7S-C-90/CRS#S-10027)**

The Two Hills Site was recorded in Area H - South. This site occurs at the southeastern intersection of S319 (Sand Hill Road) and SR30 (Gravel Hill Road). Historical maps of the area and a local resident confirm a building in the southwestern corner of this intersection. Evidence of the site appeared in STPs HS-2, HS-3, and HS-4 excavated in Area H-South. A walkover outside the LOC indicated that the historical materials continued well into the cornfield. The scatter is likely yard refuse associated with the structure that was once located immediately across SR30.

TU H-1 was placed in between STPs HS-3 and HS-4 (Figure 3-17). A single artifact bearing stratum was recorded, which contained mainly nineteenth-century artifacts (Figure 3-18). The few architectural artifacts recovered suggest a nearby structure.

### Test Unit H-1 North Wall



**Figure 3-18. Stratigraphic Profile for Test Unit H-1.**

**Feature Description.** No cultural features occurred in Area H.

**Artifact Description.** Artifacts from Survey Area H – South’s STPs occurred in all tests except the northernmost STP (Table 3-8). Additionally, historical materials appeared on the surface in an arc extending approximately 15 - 20 meters east and southeast into an agricultural field. Artifact density varied little within this area and was generally light. No clustering of artifact groups was observed. Historical ceramics constituted the best dating materials recovered from the survey area. Late eighteenth- to nineteenth-century types were present, including polychrome painted tin-glazed earthenware, pearlware, creamware, whiteware, yellowware, and coarse redware. Architectural materials also were present, and included nails, a single window glass fragment, and 43 brick fragments. All identified nails were machine-cut. The single arms-related artifact, a .22 caliber brass bullet casing, bore a “U” head stamp. Oyster and clam shell, clinker, and unidentified metal fragments also were recovered. One machine-made bottle glass fragment, and two late nineteenth-, early twentieth-century amethyst-tinted (solarized) glass fragments may have been roadside discard.

Vertically, all artifacts were recovered either from surface collection or from the plowzone stratum. Controlled test unit excavation confirmed plowzone confinement and failed to identify in situ cultural features. No intact cultural horizons were noted in excavations. The widely varied temporal range of the artifacts recovered, from tin-glazed earthenware on the surface to machine made bottle glass from the plowzone of a shovel test, suggest a low vertical integrity.

**Table 3-8. Artifacts Recovered from the Two Hills Site**

<b>Group</b>	<b>Description</b>	<b>Count</b>	<b>Percent Within Group</b>	<b>Percent of Total</b>
<b>Domestic</b>				
	Whiteware	2	5.26	1.89
	Pearlware	2	5.26	1.89
	Creamware	3	7.89	2.83
	Unidentified Refined Earthenware	1	2.63	0.94
	Tin-Glazed Earthenware	1	2.63	0.94
	Yellowware	1	2.63	0.94
	Redware	15	39.47	14.15
	Vessel Glass	5	13.16	4.72
	Machine-Made Bottle Glass	1	2.63	0.94
	Unidentified Bottle Glass	7	18.42	6.60
	<b>Total Domestic</b>	<b>38</b>	<b>100.00</b>	<b>35.85</b>
<b>Architectural</b>				
	Cut Nail	9	16.67	8.49
	Unidentified Nail	1	1.85	0.94
	Window Glass	1	1.85	0.94
	Brick/Mortar	43	79.63	40.57
	<b>Total Architectural</b>	<b>54</b>	<b>100.00</b>	<b>50.94</b>
<b>Miscellaneous</b>				
	Clinker	2	14.29	1.89
	Clam Shell	8	57.14	7.55
	Oyster Shell	1	7.14	0.94
	Ammunition Casing	1	7.14	0.94
	Misc. Metal	2	14.29	1.89
	<b>Total Miscellaneous</b>	<b>14</b>	<b>100.00</b>	<b>13.21</b>
	<b>TOTAL</b>	<b>106</b>		<b>100%</b>

### 3.2.9 Drainpipe Survey Area

Subsequent to initial archaeological investigations for the proposed Milton Bypass, DelDOT requested Parsons conduct additional archaeological survey in the location of a proposed

drainage pipe immediately west of Bridge 3-806 on S319. Fieldwork occurred on July 11, 2003.

### Area Description

DelDOT intends to place a runoff drainage pipe along the northern edge of S319, between a dirt road immediately east of the entrance to 14102 Sand Hill Road (CRS# S-3461, also known as "Rose Cottage") and a small pond immediately west of Bridge 3-806 (CRS# S-9849). The area tested was designated Area DP. Testing in Area DP yielded 23 artifacts (Table 3-3). No subsurface features were encountered and no archaeological sites were recorded.

Parsons excavated three initial STPs within the footprint of the proposed drainpipe. DP-1 was placed eight meters north of the northern asphalt edge of S319 and three meters east of the dirt drive (Figure 3-19). The subsequent two tests, DP-2 and DP-3, paralleled the road and were placed at a 10 meter interval. DP-3 was located along the edge of the landform, approximately one meter west of a slope leading to a wetland area and pond. Additionally, Parsons excavated two STPs (DP-4 and DP-5) along the embankment on the north side of Bridge 3-806. DP4 was placed on the western bank of the stream fed by Diamond Pond. DP-5 was placed on the eastern bank of the stream.

Both DP-1 and DP- 2 contained a brown to dark brown (10YR 4/3) loamy sand topsoil extending to 24 and 21 centimeters below surface respectively. Likewise, both tests contained a yellowish brown (10YR5/4) medium sand second horizon. The horizon extended between 24 and 69cm below surface in DP-1, and 21 to 30cm in DP-2. The third stratum encountered in DP-1 consisted of a pale brown (10YR6/3) coarse sand between 69cm and 82cm below surface; brown (7.5YR5/4) coarse sands were observed at the very base of this test. The third stratum in DP-2 consisted of a dark yellowish brown (10YR3/4) clayey sandy loam. Excavators extended this test to a depth of 102cm below surface without encountering another stratum. DP-3, the easternmost of the tests within the drainpipe footprint, was excavated to a depth of 86cm below surface. No separate strata were noted; the sole soil type consisted of a brown to dark brown (10YR4/3) loamy sand with occasional pockets of light brownish gray (10YR6/2) sand. DP-4 contained very dark grayish brown (10YR3/2) loamy sand topsoil underlain by a gray (10YR6/1) sand subsoil. The first horizon extended to 28cm below surface; the test was terminated at 63cm below surface. The final test, DP-5 on the eastern bank of the stream, contained a dark yellowish brown (10YR4/4) sandy loam horizon underlain by a dark grayish brown clayey loam. The first layer extended to 59cm below surface and the test was terminated at 73cm below surface.

Only DP-4 contained naturally deposited soils. The color and texture of the soils, and the close proximity to the stream, indicate alluvial deposit. The first 2 horizons in DP-1 appear to be non-local fill; the third stratigraphic unit is possibly natural subsoil. All soils observed in DP-2, DP-3, and DP-5 appear to be fill based on soil color and texture.

DP-1 and DP-5 produced cultural materials. DP-1 contained one key-wind type tin can opener, eight machine-cut nails, 12 oyster shell fragments, and one clam shell fragment. DP-5 produced one 'church key' style bottle/can opener. All artifacts from DP-1 were recovered

from the second stratigraphic unit; the church key opener was recovered from the upper level in DP-5. The materials recovered from Area DP all occurred in disturbed strata that appear to be fill from road construction.