

to woodlot. Within all pedestrian reconnaissance areas, shovel tests were excavated at 61 meter (200 foot) intervals within and around all identified artifact scatters, as well as within each landform. All shovel probes were a minimum of 30 cm (12 in) in diameter, excavated a minimum of one cubic foot of soil, and were continued into undisturbed or non-artifact bearing subsoil. All excavated soils were then screened through 6 mm (1/4 inch) mesh hardware cloth. The exposed soil profile was then visually examined to aid in the identification of cultural features, deposits and/or buried cultural horizons. If indications of cultural features had been noted, the relevant portion of the shovel probe would have been profiled, the exposed feature described and documented, and then covered with plastic prior to backfilling. When cultural materials were identified, the recovered artifacts were recorded by shovel probe location and depth below surface, if applicable. Four radial shovel probes were then excavated in each of the cardinal directions at 1 to 3 meter (3 to 10 foot) intervals. A detailed soil profile, including Munsell color and soil texture analyses, was obtained for each probe. Upon completion of these investigations, all shovel probes were backfilled and their location recorded on the appropriate project map.

All disturbed and spoil pile areas within the woodlot were initially visually identified. However, shovel test probes were still excavated within these areas to help confirm the nature and extent of the identified disturbance and evaluate the components and integrity of the spoil and historic debris piles. These disturbances included grading and machine excavation related to demolition of the structures to the north and west. All shovel probes within these locations were excavated and documented as illustrated above. All disturbed areas were recorded and photographed in reference to the overall 85-acre soil borrow area and all 85-acre project area photographs are included in their entirety in Appendix A.

#### *Additional Excavation*

No areas of alluvial, colluvial or deep eolian deposits were identified within the proposed 85-acre soil borrow project area during the phase IA or phase IB evaluation. As a result, no supplemental excavations were conducted. Although historic debris and soil spoil piles were identified within portions of the narrow woodlot, the shovel probe evaluation indicated that the potential for deeply buried, potentially significant *in situ* material to be present within these areas was negligible as these piles consisted predominantly of mid to late 20<sup>th</sup> century debris which had been brought to this location by heavy machinery. Likewise, although Limestone Creek lies between the landfill expansion and 85-acre soil borrow areas, neither the creek nor its associated floodplain were planned for any ground disturbance or earth-moving activities at the time of the phase I evaluation. As a result, no investigation of these areas was conducted.

#### *Proposed 92-acre Landfill Expansion Project Area*

In accordance with the results of the background and literature search, and preliminary surface inspection, a systematic shovel test evaluation of the wooded portions of this A.P.E. was conducted in August of 2004 (Appendix D). The only exception was an area of excessive slope along the project's southern boundary. This area was instead visually assessed by the author and shovel probed as needed in order to verify its unsuitability for cultural materials and/or features.

The non-systematic pedestrian survey indicated that the ground surface visibility within the wooded areas was zero due to low vegetation and forest debris. As a result, the phase IB reconnaissance of this area involved the hand excavation of shovel tests at no greater than 15 meter (50 foot) intervals in linear 15 meter (50 foot) transects across the entire wooded portion of the A.P.E. However, shovel probe locations were modified as needed in order to avoid areas of especially dense vegetation, excessive slope or other limiting factors. All shovel probes were a minimum of 30 cm (12 in) in diameter, excavated a minimum of one cubic foot of soil, and were continued into undisturbed or non-artifact bearing subsoil. All excavated soils were then screened through 6 mm (1/4 inch) mesh hardware cloth. The exposed soil profile was then visually examined to aid in the identification of cultural features, deposits and/or buried cultural horizons. If indications of cultural features had been noted, the relevant portion of the shovel probe would have been profiled, the exposed feature described and documented, and then covered with plastic prior to backfilling. When cultural materials were identified, the recovered artifacts were recorded by shovel probe location and depth below surface, if applicable. Four radial shovel probes were then excavated in each of the cardinal directions at 1 to 3 meter (3 to 10 foot) intervals. A detailed soil profile, including Munsell color and soil texture analyses, was obtained for each probe. Upon completion of these investigations, all shovel probes were backfilled and their location recorded on the appropriate project map.

Any disturbed areas within the wooded portions of the landfill expansion A.P.E. were initially visually identified. However, shovel test probes were still excavated within these areas to help confirm the nature and extent of the identified disturbance. These disturbances included dirt/gravel roadways and excavated test wells. All shovel probes within these locations were excavated and documented as illustrated above. All disturbed areas were recorded and photographed in reference to the overall landfill expansion project area. However, no areas of ponded soils were identified. All 92-acre project area photographs are included in their entirety in Appendix A.

#### *Additional Excavation*

No areas of alluvial, colluvial or deep eolian deposits, and no areas of deep historic fill, were identified within the proposed landfill expansion project area during the phase IA or phase IB evaluation. As a result, no supplemental excavations were conducted. Although Limestone Creek lies between the landfill expansion and 85-acre soil borrow areas, neither the creek nor its associated floodplain were planned for any ground disturbance or earth-moving activities at the time of the phase I evaluation. As a result, no investigation of these areas was conducted.

#### *Proposed 130-acre Soil Borrow/Development Project Area*

In accordance with the results of the background and literature search, and surface inspection, a systematic shovel test evaluation of all portions of the 130-acre A.P.E. with slopes of less than 25% was completed between June and September of 2009 (Appendix E). Although shovel probes were attempted within the excessively sloped areas within the extreme eastern portion of the A.P.E., all areas were found to contain soils which had been previously severely eroded. For example, all areas were found to contain B<sub>1</sub>C soils on the surface. As a result, these areas were visually assessed by the author to verify their unsuitability for cultural materials and/or features, but no systematic evaluations were conducted. These failed probe locations were not included in the overall shovel probe count.

The pedestrian survey of the 130-acre A.P.E. indicated that the ground surface visibility within the plowed and disced areas was between 90 and 95%, while ground surface visibility within the lawn areas was zero. Within the excessively sloped areas along the A.P.E.'s eastern border fallow crops and tall scrub grasses resulted in a ground surface visibility which varied between 10 and 60%. As a result, the phase IB reconnaissance of this A.P.E. involved the hand excavation of shovel tests at no greater than 90 meter (300 foot) intervals within the surface-inspected portions of the A.P.E. and no greater than 15 meter (50 foot) intervals within the lawn portions of the A.P.E. All shovel probes were a minimum of 30 cm (12 in) in diameter, excavated a minimum of one cubic foot of soil, and were continued into undisturbed or non-artifact bearing subsoil. All excavated soils were then screened through 6 mm (1/4 inch) mesh hardware cloth. The exposed soil profile was then visually examined to aid in the identification of cultural features, deposits and/or buried cultural horizons. If cultural materials had been identified, the recovered artifacts would have been recorded by shovel probe location, and depth below surface, if applicable. Radial shovel probes would then have been excavated in each of the cardinal directions at either 1 or 7.5 meter (3 to 25 ft) intervals, depending upon the nature of the cultural find. If indications of cultural features had been noted, the relevant portion of the shovel probe would have been profiled, the exposed feature described and documented, and then covered with plastic prior to backfilling. Radial shovel tests would then have been excavated in each of the cardinal directions at either 3 and/or 7.5 meter (10 to 25 ft) intervals, depending upon the nature of the cultural find. All positive shovel test locations would then have been photographed and plotted accordingly. A detailed soil profile, including Munsell color and soil texture analyses, was obtained for each probe. Upon completion of these investigations, all shovel probes were backfilled and their location recorded on the appropriate project map. All 130-acre project area photographs are included in their entirety in appendices A and B.

#### *Additional Excavation*

No areas of alluvial, colluvial or deep eolian deposits, and no areas of deep historic fill, were identified within the proposed 130-acre soil borrow/development A.P.E. during the phase IA or phase IB evaluation. As a result, no supplemental excavations were conducted. Although the moderately well drained floodplain of Cowaselon Creek does lie within the extreme eastern portion of the overall 130-acre project area, neither the creek nor its associated floodplain were planned for any ground disturbance or earth-moving activities at the time of the phase I evaluation. As a result, no systematic evaluations of these areas were conducted. However, given that suitably drained, recent alluvium is present within this area, there is a potential for deeply buried archaeological deposits, perhaps related to the Ingal site, to be present. Further archaeological evaluations, including deep subsurface testing, are therefore recommended should earth-moving or ground disturbing activities be planned for this area in the future.

## Archaeological Phase I Survey Results

### *Summary of the Background and Literature Review*

The phase IA background and literature review of the proposed Madison County Landfill expansion area, and two related soil borrow areas, in the Town of Lincoln, Madison County, New York (OPRHP Project Review Number 04PR00503) indicated that all three project areas were highly suitable to contain previously undocumented precontact archaeological resources and/or additional data related to two pre-recorded Late Woodland archaeological sites. This review also indicated that at least four additional Late Woodland sites have already been recorded within one mile, the location of one of which is underneath the closed landfill grounds to the immediate east of Buyea Road. Therefore, given that the natural and environmental setting review indicated that the overall project areas would have been suitable for human exploitation throughout the known precontact period, and only three relatively small scale professional archaeological surveys have yet been conducted within one mile, the presence of additional, previously undocumented precontact archaeological resources within these areas was considered highly likely.

The evidence for historic utilization of the proposed project areas is provided by map-documented structures and 19<sup>th</sup> century histories. Although no historic archaeological sites, National Register Listed or National Register Eligible properties which can be related to these data have yet been identified, these specific areas have never been the subject of professional archaeological investigations. In addition, at least two map documented historic structures are shown as potentially within the 92-acre and 130-acre A.P.E.s, respectively, and at least four additional map-documented structures are shown as potentially within the remaining portions of the overall 130-acre project area. Therefore, given the long documented historic occupation of the region, the current project areas are considered to have a high potential to contain previously undocumented historic resources, especially as related to the map documented structures discussed above.

In addition, two potential sources of non-structure related historic archaeological materials were also identified. First, as portions of all three project areas lie adjacent to (and in some cases are intersected by) historic roads and farmlanes, there is a potential for materials discarded along these roadsides to be present. Although interpretation of the significance of such materials can be highly problematic, their presence can provide basic information on socioeconomics. Secondly, as significant portions of all A.P.E.s were used for historic agriculture, there is a potential for historic middens established within these areas to be present. Although definitive association with a specific farmstead can be problematic, investigation of such deposits is critical to expanding our understanding of local lifeways, and given the general proximity of the mapped historic residences, any identified midden deposits will most likely be related to these occupations. Therefore, the potential for previously unidentified, non-structure related historic archaeological sites to be present within the current A.P.E.s was also considered to be high.

### *Summary of the Surface Inspection*

#### *Proposed 85-acre Soil Borrow Project Area*

##### *Non-Systematic*

The non-systematic visual inspection indicated that the overall 85-acre soil borrow project area is gently rolling ridge-swale topography that is abruptly terminated along its eastern border by a high, steep ridge overlooking Limestone Creek (Figure 2). However, as neither the slope nor the floodplain will be impacted by the proposed project, no further evaluation of these areas was conducted. One tributary drainage leading up to and into Limestone Creek to the west of this high ridge within the narrow woodlot was, however, investigated. The visual inspection also indicated that the project area is bordered to the west by Tuttle Road, to the north by an existing treeline, and to the south by an existing homestead. Although the old road shown on the historic maps of the region would also have bordered the project area to the south, this area was within an existing yard and driveway at the time of the phase IB investigation. The western border of the project area also retracts around an existing homestead and a large disturbed and graded area in low scrub grass with scattered trees (Appendix A).

The visual inspection indicated that nearly all of the 85-acre A.P.E. was in tall corn at the time of the phase I evaluation (Figure 10; Appendix A). The remaining portion was divided between a narrow, east-west tending woodlot which roughly bisects the active agricultural areas, an area of standing grass in the extreme northeast corner, and a roughly rectangular graded area in low scrub grass in the northwest (figures 10 and 18). Although the woodlot

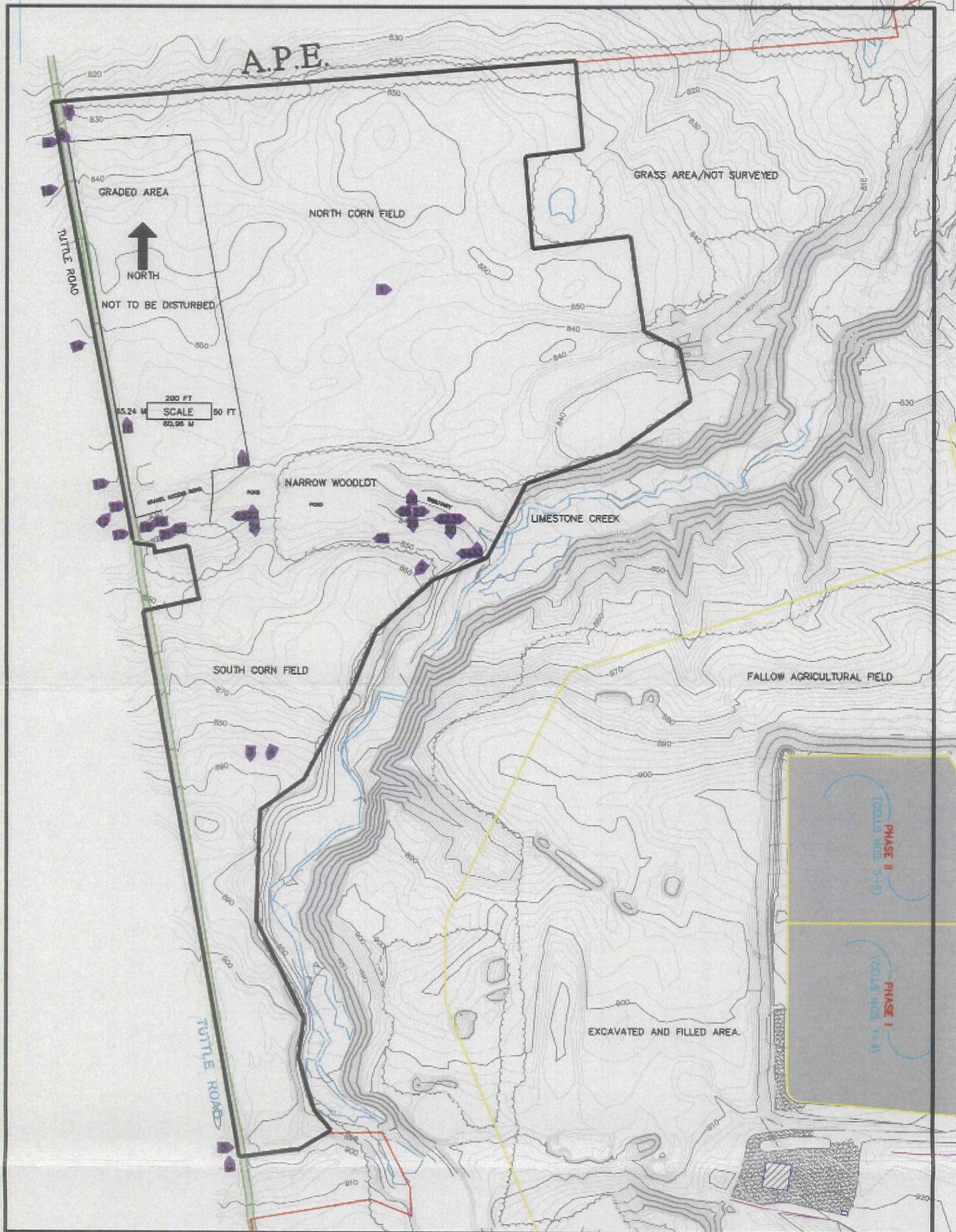


Figure 10. Location of the 85-acre A.P.E. as well as the locations and orientation of all 85-acre project photographs. (Adapted from a basemap provided by Barton & Loguidice, P.C.)

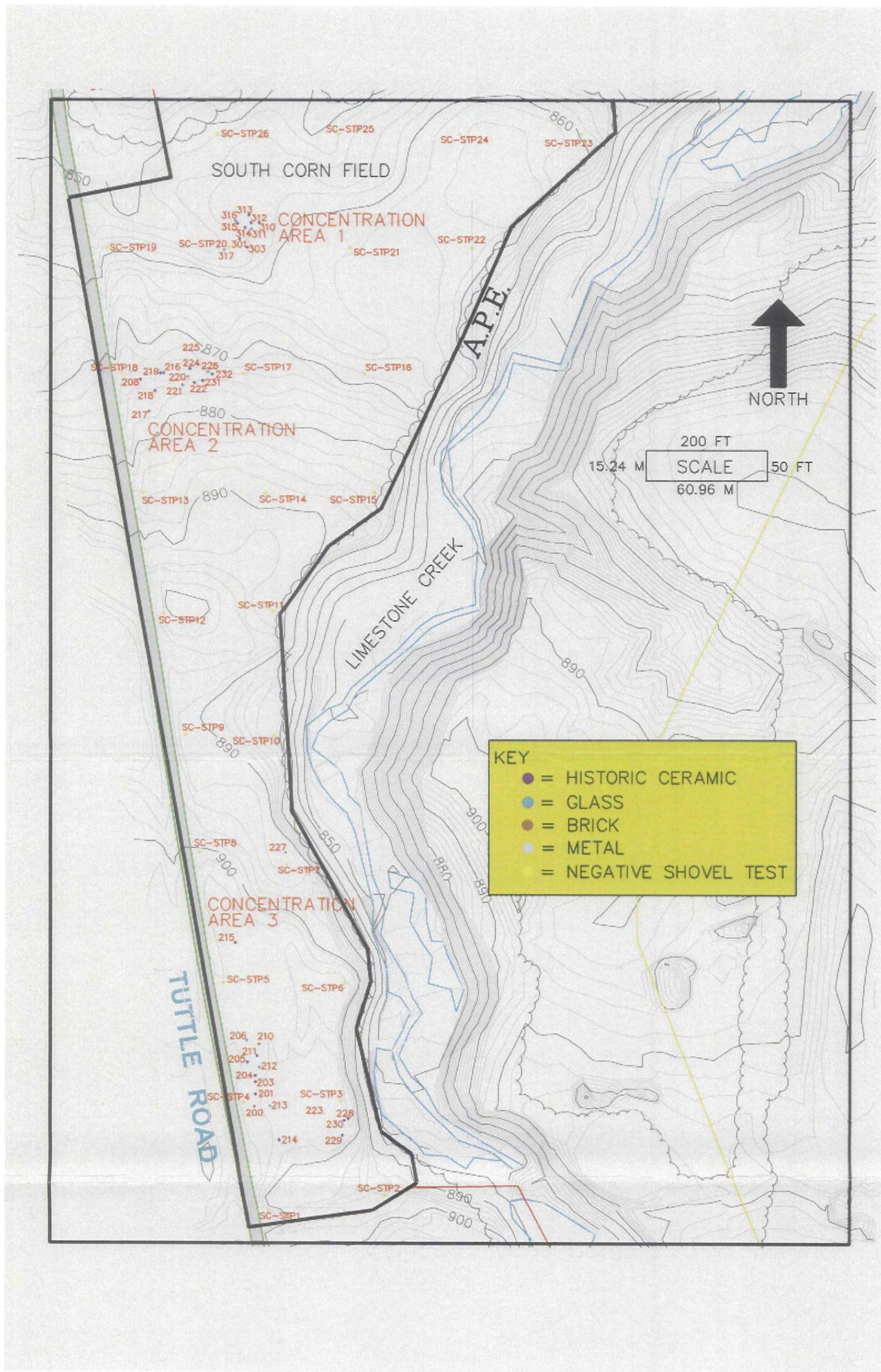


Figure 11. Location of all identified cultural materials and supplemental subsurface testing within the south corn field portion of the 85-acre A.P.E. (Adapted from a basemap provided by Barton & Loguidice, P.C.)

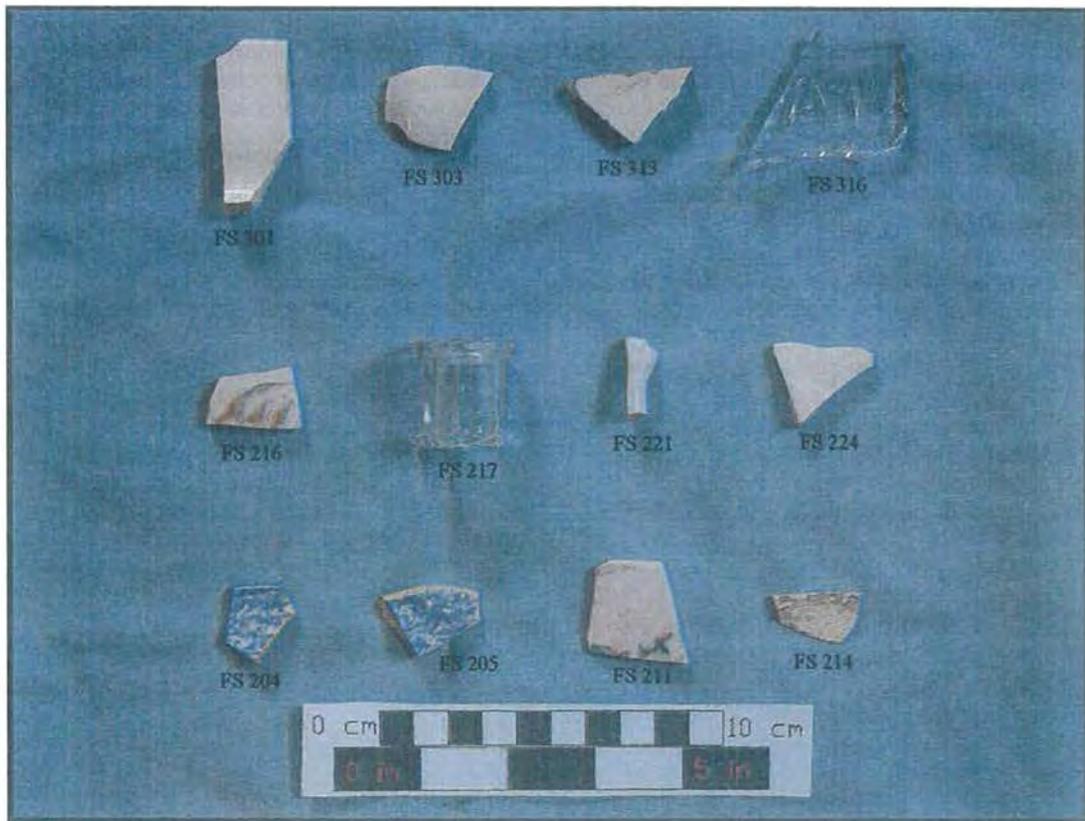


Figure 12. Representative illustrations of all cultural materials recovered from the south corn field of the 85-acre soil borrow project area.

was included in the subsequent shovel test evaluation, neither of the grass fields were scheduled for any earth-moving or ground disturbing activities at the time of the current investigation. As a result, no further evaluation of these areas was conducted. Ground surface visibility within the tall corn was visually estimated at between 80 and 90%, while ground surface visibility within the woodlot was zero due to low vegetation, forest debris, and mixed modern and historic debris and soil spoil piles. However, despite these latter features, no areas of substantial previous disturbance and no large-scale areas of extreme slope were visually identified within the A.P.E. during the initial visual evaluation. As a result, all portions of the 85-acre A.P.E. were investigated for cultural resources. Representative photographs have been provided in Appendix A. No intact foundations were identified on the surface (and no extant structures were shown at these locations on the historic maps) within the narrow woodlot. As a result, the historic debris and soil spoil piles were determined to represent (at best) secondary context materials related to the demolition of the structures to the north and west, as well as to contemporary occupation within the house adjacent the woodlot on the west.

Overall, the non-systematic pedestrian survey indicated that nearly all portions of the 85-acre A.P.E. were suitable for a systematic surface evaluation. The only exception was the narrow, east-west tending woodlot. Although the pedestrian survey did indicate that portions of the woodlot appeared to have been previously disturbed, the full nature and extent of this disturbance could not be visually established. As a result, this area was evaluated through a subsequent shovel probe investigation. All portions of the A.P.E. evaluated through visual pedestrian reconnaissance are discussed in detail below.

#### *Systematic*

All portions of both cornfields were suitable for visual pedestrian reconnaissance (figures 10 and 18). However, for ease of discussion, the pedestrian survey area was divided between the south and north corn fields (figures 11 and 16). Although the narrow, east-west tending woodlot served as the dividing line, artifact discussions from all three areas were also combined when appropriate.

#### *South Corn Field*

Within the south corn field, a total of 56 cultural materials were identified at 40 field site (FS) locations. Their distribution is provided in Figure 11. Representative examples of these materials are provided in Figure 12. All of these materials were historic in origin and consistent with a mid 19<sup>th</sup> to mid 20<sup>th</sup> century date of manufacture; no precontact materials were recovered. Overall, three distinct areas of artifact concentration were identified (figures 11, 13, 14 and 15). Two of these areas (Concentration Area #1 and Concentration Area #2) (figures 13 and 14) were to the southeast and south respectively of the existing homestead within the narrow woodlot which divides the north and south fields. Both of these concentrations are presumed to be related to this structure. The remaining scatter (Concentration Area #3) (Figure 15) was identified within the southern portion of the project area along Tuttle Road. The distribution of the majority of these latter materials is consistent with roadside debris. The recovered material related to each of these concentrations is provided by area in Table 5 below.

<b>Concentration Area #1</b>						
<b>FS#</b>	<b>Identification</b>	<b># of Sherds</b>	<b># of Vessels</b>	<b>Decoration</b>	<b>Color</b>	<b>Production Range/Median Date (A.D.)</b>
301	porcelain rim sherd	1	1	undecorated	white	1820-1900+/1860
303	ironstone body sherd	2	1	undecorated	white	1813-1900/1870
310	ironstone body sherd	1	1	undecorated	white	1813-1900/1870
311	flat glass sherd	2	NA	NA	aqua	1800-1900+
312	whiteware body sherd	1	1	undecorated	white	1820-1900+/1860
313	whiteware body sherd	1	1	undecorated	white	1820-1900+/1860
313	whiteware shoulder sherd	1	1	undecorated	white	1820-1900+/1860
314	whiteware body sherd	1	1	undecorated	white	1820-1900+/1860
314	whiteware body sherd	1	1	undecorated	white	1820-1900+/1860
315	whiteware shoulder sherd	1	1	undecorated	white	1820-1900+/1860

316	ironstone whole body sherd (base to rim)	1	1	undecorated	white	1813-1900/1870
316	container glass neck sherd	1	1	"...ATK..." raised embossed letters	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
317	flat glass sherd	1	NA	NA	aqua	1800-1900+
<b>Total Ceramic Sherd Count</b>		<b>11</b>				
<b>Maximum Ceramic Vessel Count</b>		<b>10</b>				
<b>Mean Ceramic Date (sherds/vessels)</b>		<b>1864/1863</b>				
<b>Total Artifact Count for Concentration Area #1</b>						<b>15</b>
<b>Concentration Area #2</b>						
FS#	Identification	# of Sherds	# of Vessels	Decoration	Color	Production Range/Median Date (A.D.)
208	whiteware body sherd	1	1	undecorated	white	1820-1900+/1860
216	flat glass sherd	1	NA	NA	aqua	1800-1900+
216	porcelain body sherd	1	1	polychrome decalomania	white	1890-1930/1910
217	ironstone rim sherd	1	1	scalloped rim	white	1813-1900/1870
217	molded glass rim and neck	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
218	ironstone rim and shoulder sherd	1	1	undecorated	white	1813-1900/1870
219	porcelain basal sherd	1	1	undecorated	white	1820-1900+/1860
219	ironstone rim sherd	1	1	raised embossed	white	1813-1900/1870
220	container glass body sherd	1	1	undecorated	aqua	19 <sup>th</sup> to 20 <sup>th</sup> century
221	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
221	porcelain handle sherd	1	1	undecorated	white	1820-1900+/1860
222	whiteware body sherd	1	1	undecorated	white	1820-1900+/1860
222	whiteware basal sherd	1	1	undecorated	white	1820-1900+/1860
224	ironstone rim sherd	1	1	raised embossed	white	1813-1900/1870
225	flat glass sherd	1	NA	NA	aqua	1800-1900+
225	container glass body sherd	1	1	undecorated	aqua	19 <sup>th</sup> to 20 <sup>th</sup> century
226	container glass rim and neck sherd	1	1	ridged rim	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
231	ironstone body sherd	1	1	undecorated	white	1813-1900/1870
231	unrefined redware drainage tile sherd	1	1	undecorated	red	19 <sup>th</sup> to 20 <sup>th</sup> century
232	ironstone body and basal sherd	1	1	undecorated	white	1813-1900/1870
<b>Total Ceramic Sherd Count</b>		<b>12</b>				
<b>Maximum Ceramic Vessel Count</b>		<b>12</b>				
<b>Mean Ceramic Date (sherds/vessels)</b>		<b>1869/1869</b>				
<b>Total Artifact Count for Concentration Area #2</b>						<b>20</b>
<b>Concentration Area #3</b>						
FS#	Identification	# of Sherds	# of Vessels	Decoration	Color	Production Range/Median Date (A.D.)
200	red brick fragment	1	NA	exfoliated	red	19 <sup>th</sup> to 20 <sup>th</sup> century
201	ironstone handle sherd	1	1	undecorated	white	1813-1900/1870
203	ironstone body sherd	1	1	undecorated	white	1813-1900/1870
204	ironstone rim sherd	1	1	blue sponge	white	1830-1900+/1850
204	ironstone body sherd	1	1	undecorated	white	1813-1900/1870

204	ironstone shoulder sherd	1	1	transfer print	light blue	1826-1831/1829
204	whiteware rim and shoulder sherd	1	1	scalloped shell edge	blue	1830-1860/1850
205	ironstone basal sherd	1	1*	blue sponge	white	1830-1900+/1850
206	flat glass sherd	1	NA	NA	clear	1800-1900+
210	red brick fragment	2	NA	exfoliated	red	19 <sup>th</sup> to 20 <sup>th</sup> century
211	porcelain body sherd	1	1	polychrome decalomania	white	1890-1930/1910
212	flat glass sherd	1	NA	NA	aqua	1800-1900+
213	flat glass sherd	1	NA	NA	aqua	1800-1900+
214	whiteware shoulder sherd	1	1	transfer print	red	1829-1850/1840
215	porcelain neck sherd	1	1	undecorated	white	1820-1900+/1860
223	metal buckle	1	NA	corroded	NA	19 <sup>th</sup> to 20 <sup>th</sup> century
227	flat glass sherd	1	NA	NA	clear	1800-1900+
228	whiteware basal sherd	1	1	undecorated	white	1820-1900+/1860
229	ironstone body and basal sherd	1	1	undecorated	white	1813-1900/1870
230	ironstone shoulder sherd	1	1	undecorated	white	1813-1900/1870
<b>Total Ceramic Sherd Count</b>		<b>13</b>				
<b>Maximum Ceramic Vessel Count</b>		<b>13</b>				
<b>Mean Ceramic Date (sherds/vessels)</b>		<b>1861/1861</b>				
<b>Total Artifact Count for Concentration Area #3</b>					<b>21</b>	
<b>Total Artifact Count for the South Corn Field</b>					<b>56</b>	

\*probable fragment of the same blue spongeware vessel recovered from FS #204

#### *South Cornfield, Concentration Area #1*

Within the south cornfield, Concentration Area #1 (figures 11 and 13) was recorded to the southeast of the existing homestead. Although all of the extant structures associated with this homestead are outside of the A.P.E., the cornfield within this area abuts with the grass lawn of the homestead. As the only historic structure shown within this area on the historic maps of the region is the Cooper/Wm. Tuttle [north] house (figures 4 through 9), the material recovered at this location is most likely related to this occupation.

#### *Cultural Material Analysis*

A total of 15 artifacts (Table 5) were recovered from an approximately 30 x 15 meters (100 x 50 foot) area, giving a cultural material density of 1 artifact per 31 square meters (1 artifact per 333 square feet). With the exception of 3 aqua flat glass sherds, no foundation or architectural materials were identified. All cultural materials were recovered from the surface of the plowzone, which averaged 23 cm (9 inches) in depth throughout this area and consisted of a dark brown silt loam. No areas of soil darkening or indentations suggesting subsurface features were noted. The lack of any brick, mortar, cement or concrete fragments, coupled with the lack of any nails or tacks, supports the historic document evidence that no historic structures were located within this immediate area. The remainder of the recovered materials consisted of 1 clear container glass body sherd, 7 undecorated whiteware sherds (5 body and 2 shoulder), 1 undecorated porcelain rim sherd, and 3 undecorated ironstone body sherds. Plain, undecorated whitewares became common after 1820 and represented the cheapest form of tableware available at the time. As a result, it was present in the majority of households by 1840. However, as it had an extended period of production and was still being manufactured as late as 1930, its use as a temporal diagnostic is somewhat limited. Nevertheless, undecorated whitewares are generally assigned a production range from 1820 until after 1900, with a median date of 1860. Likewise, unmolded and undecorated ironstone was both popular and readily available throughout its production period of between 1813 and 1900. Therefore, although undecorated ironstone has a median date of 1870, given this wide use span, they are also not particularly diagnostic. However, these wares are still consistent with the known historic occupation of the adjacent homestead (sometime before 1853 up through the 20<sup>th</sup> century).

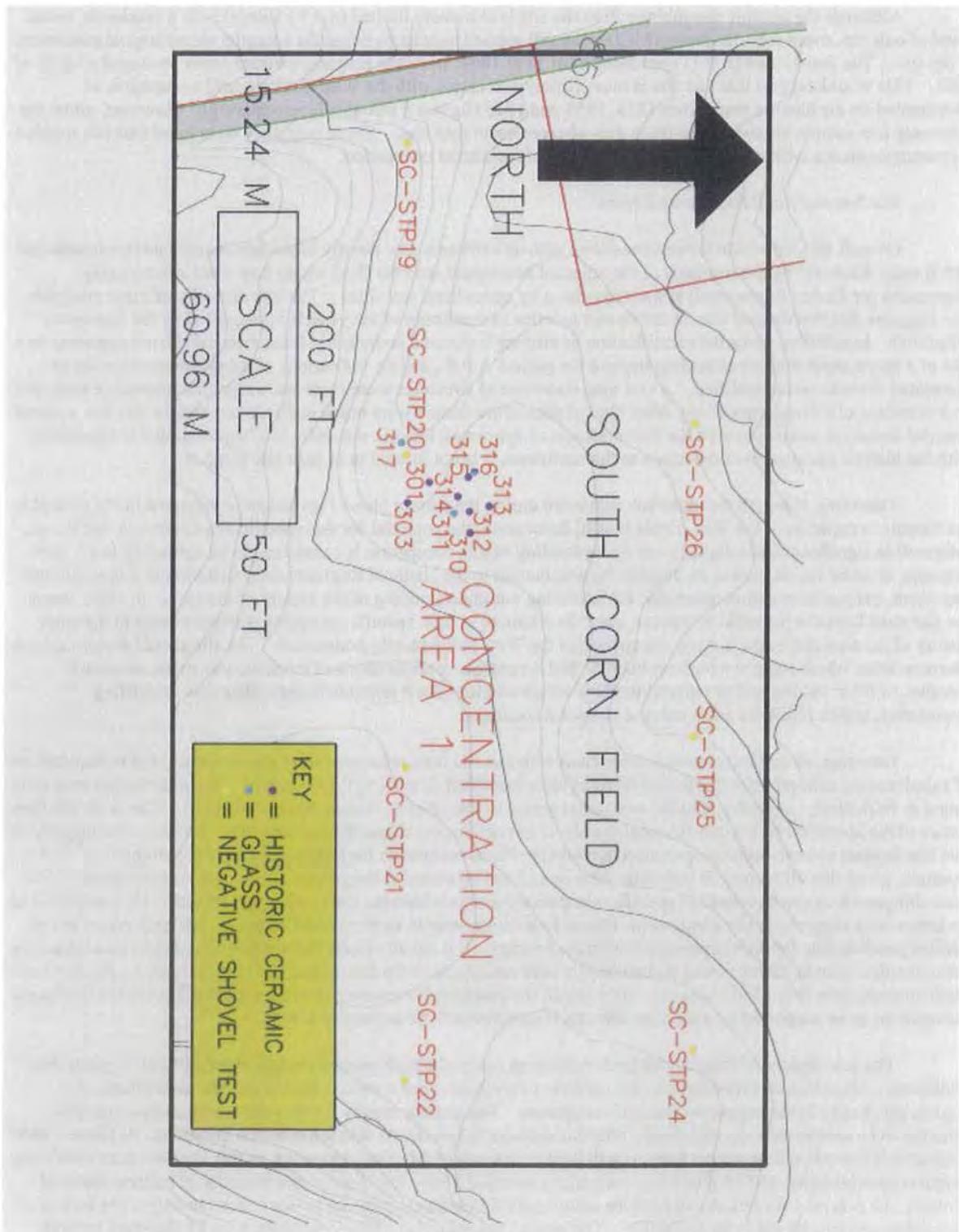


Figure 13. Location of all cultural materials recovered from Concentration Area #1 within the south corn field portion of the 85-acre A.P.E. (Adapted from a basemap provided by Barton & Loguidice, P.C.)

Although the ceramic assemblage from the site is extremely limited ( $n = 11$  sherds) with a maximum vessel count of only ten, mean ceramic dating (MCD) was still applied in order to refine the potential chronological placement of the site. The sherd count ( $n = 11$ ) produced a MCD of 1864, while the maximum vessel count produced a MCD of 1863. This would suggest that this site is most closely associated with the Wm. Tuttle [north] occupation, as documented on the historic maps from 1853, 1859 and 1875 (figures 4 through 7, respectively). However, given the extremely low sample number, these dates may also represent data bias. Either way, they do suggest that this midden is contemporaneous with at least one discrete period of residential occupation.

#### *Site Summary and Recommendations*

Overall, this collection is most consistent with an extremely low density of predominantly tableware materials which were discarded by the residents of the adjacent homestead onto the field where they were subsequently fragmented (or further fragmented) and spread about by agricultural activities. The low diversity of these materials also suggests that this discard was an infrequent practice (a maximum of ten vessels is suggested by the recovered materials). In addition, given the identification of discrete horizontal boundaries, these materials do not appear to be a part of a larger sheet midden extending beyond the project A.P.E., and no indications of subplowzone deposits or associated features were identified. As no map documented structures were recorded within this immediate area, and no indications of a foundation of any other kind of subsurface feature were noted in direct association, this low cultural material density is consistent with the interpretation of ephemeral historic discard. If a larger midden is associated with the historic occupation of the house to the northwest, it is not located in or near this location.

Therefore, although the materials recovered during the current phase I investigation are most likely related to the historic occupation of the Wm. Tuttle [north] homestead, the potential for this specific site to provide additional information significant and unique to our understanding of this occupation is considered to be extremely low. For example, in order for this site to be eligible for nomination to the National Register under Criterion D it must contain important, unique information necessary for furthering our understanding of the history of the area. In other words, the site must have the potential to answer, either in whole or in part, specific research questions related to the early history of the area and/or the historic occupation of the Wm. Tuttle [north] homestead. The site should therefore have characteristics which suggest a high probability that it contains configurations of artifacts, soil strata, structural remains, or other natural and/or cultural features which would make it possible to test either new or existing hypotheses, and/or refine the local cultural-temporal sequence.

However, all cultural materials associated with this site were recovered from the plowzone, and no indications of subplowzone cultural materials and/or features were identified. Likewise, the borders of this concentration area were found to be distinct, suggesting that the horizontal extent of this site has already been established. Given the shallow nature of the identified  $A_p$  horizon (averaging only 23 cm or 9 inches below the current ground surface), the integrity of this site appears to have been compromised beyond the limits acceptable for a National Register nomination. For example, given that all recovered materials were mixed and restricted to the plowzone, no data concerning specific assemblages which can be related to specific occupations remain within the site. Although the MCD for the recovered ceramics does suggest the site components themselves date primarily to the mid 19<sup>th</sup> century, this only provides the earliest possible date for their deposition within the midden. It is equally likely that the few vessels represented within the collection were heirloom pieces maintained by later residences of the homestead and only discarded well after their median production date would suggest. As a result, the potential for research questions addressing discrete temporal occupations to be supported by data from this site is considered to be extremely low.

The low density of cultural materials recovered versus the high ground surface visibility also suggests that additional archaeological investigations are unlikely to produce either a variant artifact pattern/assemblage, or a significant change in the suggested dates of occupation. The artifact density for this site is also so low that it is unlikely to be able to provide statistically relevant answers to specific or detailed research questions. If phase I level clearance is granted, direct project impacts will include the loss of this site. However, as this site does not contain any subplowzone integrity, and all phase I investigations revealed a very low density and diversity of cultural material remains, the potential for this site to produce additional information significant to our understanding of the history of the region was considered to be negligible. The phase I investigation of Concentration Area #1 therefore strongly suggests that data redundancy has been achieved. This site does not therefore appear eligible for nomination to the State and/or National Registers of Historic Places and no further archaeological investigations are recommended.

### *South Cornfield, Concentration Area #2*

Within the south cornfield, Concentration Area #2 was recorded to the south of the existing homestead along the north slope of a low ridge (figures 11 and 14). All of the extant structures associated with this homestead are located outside of the project A.P.E., and no structures are shown within this area on the historic maps of the region. Although portions of this concentration are near Tuttle Road, suggesting that it could represent roadside debris, the distribution of the scatter along the north slope of the ridge is more consistent with materials discarded or dumped during agricultural activities. As the only historic structure shown within this specific area on the historic maps of the region is the Cooper/Wm. Tuttle [north] house (figures 4 through 9), the material recovered at this location is most likely related to this occupation.

### *Cultural Material Analysis*

A total of 20 artifacts (Table 5) were recovered from an approximately 30 x 45 meter (100 x 150 foot) area, giving a cultural material density of 1 artifact per 70 square meters (750 square feet). With the exception of 2 aqua flat glass sherds, no foundation or architectural materials were identified. All cultural materials were recovered from the surface of the plowzone, which averaged 24 cm (9 inches) in depth throughout this area and consisted of a dark brown silt loam. No areas of soil darkening or indentations suggesting subsurface features were noted. The lack of any brick, mortar, cement or concrete fragments, coupled with the lack of any nails or tacks, supports the historic document evidence that no historic structures were located within this area. The remainder of the recovered materials consisted of 1 clear molded glass bottle neck sherd, 2 clear container glass sherds (one body and one ridged rim), 2 aqua container glass body sherds, 4 undecorated ironstone sherds (2 body and 2 rim), 2 undecorated ironstone rims with a scalloped edge, 1 undecorated porcelain basal sherd, 1 polychrome decalomania porcelain body sherd, 1 undecorated porcelain handle sherd, 3 undecorated whiteware sherds (2 body and 1 basal), and 1 redware field tile drainage sherd. Plain, undecorated whitewares became common after 1820 and represented the cheapest form of tableware available at the time. As a result, it was present in the majority of households by 1840. However, as it had an extended period of production and was still being manufactured as late as 1930, its use as a temporal diagnostic is somewhat limited. Nevertheless, undecorated whitewares are generally assigned a production range from 1820 until after 1900, with a median date of 1860. Likewise, unmolded and undecorated ironstone was both popular and readily available throughout its production period of between 1813 and 1900. Therefore, although undecorated ironstone has a median date of 1870, given this wide use span, they are also not particularly diagnostic. Polychrome decalomania porcelain vessels were manufactured from 1890 to 1930 with a median production date of 1910. However, these wares are still consistent with the known historic occupation of the Cooper/Wm. Tuttle [north] homestead (sometime before 1853 up through the 20<sup>th</sup> century).

Although the ceramic assemblage from the site is again extremely limited ( $n = 12$  sherds) with a maximum vessel count of twelve, mean ceramic dating (MCD) was still applied in order to refine the potential chronological placement of the site. Both the sherd and vessel count ( $n = 12$ ) produced a MCD of 1869, suggesting that this site is also associated with the Wm. Tuttle [north] occupation, as documented on the historic maps from 1853, 1859 and 1875 (figures 4 through 7, respectively). However, given the extremely low sample number, these dates may also represent data bias. Either way, they do suggest that this midden is contemporaneous with at least one discrete period of residential occupation.

### *Site Summary and Recommendations*

Overall, this collection is most consistent with a low density of tableware materials which were discarded by the residents of the adjacent homestead onto the field where they were subsequently fragmented (or further fragmented) and spread about by agricultural activities. The slightly higher diversity of materials (as compared to Concentration Area #1) suggests that this ridge was either a more favored locale for the disposition of tableware, or was witness to a single disposal of a wider range of items (a maximum of twelve vessels is suggested by the recovered materials). However, the extremely low density of these materials indicates that either practice was neither widespread nor sustained. These materials also do not appear to be a part of a larger sheet midden, and no indications of subplowzone deposits or associated features were identified. As no map documented structures were recorded within this area, and no indications of a foundation of any other kind of subsurface feature were noted, this low cultural material density is consistent with the interpretation of ephemeral historic discard. If a larger midden is associated with the historic occupation of the house to the north, it is not located in or near this location.

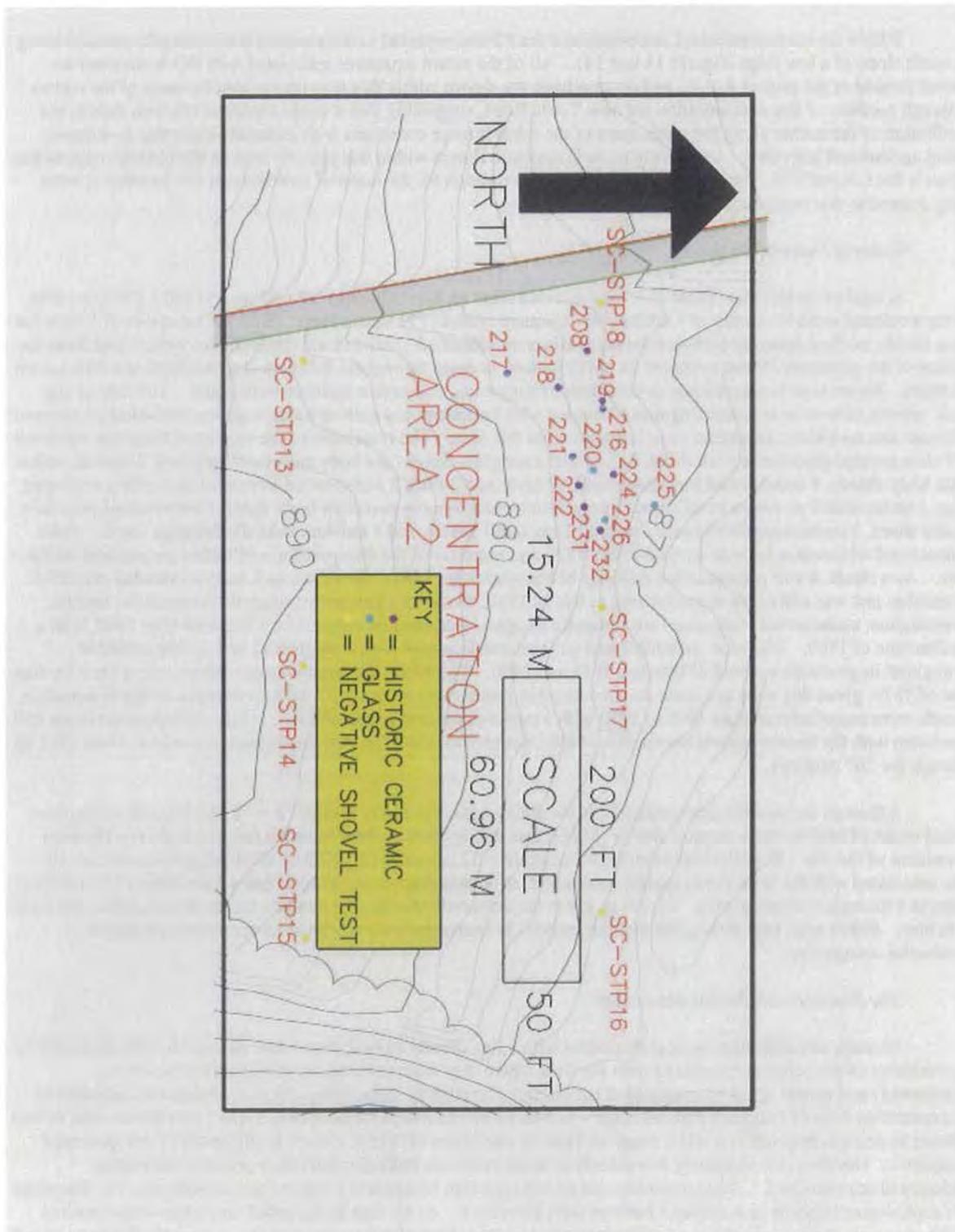


Figure 14. Location of all cultural materials recovered from Concentration Area #2 within the south corn field portion of the 85-acre A.P.E. (Adapted from a basemap provided by Barton & Loguidice, P.C.)

Therefore, although the materials recovered during the current phase I investigation are most likely related to the historic occupation of the Wm. Tuttle [north] homestead, the potential for this specific site to provide additional information significant and unique to our understanding of this occupation is considered to be extremely low. For example, in order for this site to be eligible for nomination to the National Register under Criterion D it must contain important, unique information necessary for furthering our understanding of the history of the area. In other words, the site must have the potential to answer, either in whole or in part, specific research questions related to the early history of the area and/or the historic occupation of the Wm. Tuttle [north] homestead. The site should therefore have characteristics which suggest a high probability that it contains configurations of artifacts, soil strata, structural remains, or other natural and/or cultural features which would make it possible to test either new or existing hypotheses, and/or refine the local cultural-temporal sequence.

However, all cultural materials associated with this site were recovered from the plowzone, and no indications of subplowzone cultural materials and/or features were identified. Likewise, the borders of this concentration area were found to be distinct, suggesting that the horizontal extent of this site has already been established. Given the shallow nature of the identified A<sub>p</sub> horizon (averaging only 24 cm or 9 inches below the current ground surface), the integrity of this site appears to have been compromised beyond the limits acceptable for a National Register nomination. For example, given that all recovered materials were mixed and restricted to the plowzone, no data concerning specific assemblages which can be related to specific occupations remain within the site. Although the MCD for the recovered ceramics does suggest the site components themselves date primarily to the mid 19<sup>th</sup> century, this only provides the earliest possible date for their deposition within the midden. It is equally likely that the few vessels represented within the collection were heirloom pieces maintained by later residences of the homestead and only discarded well after their median production date would suggest. As a result, the potential for research questions addressing discrete temporal occupations to be supported by data from this site is considered to be extremely low.

The low density of cultural materials recovered versus the high ground surface visibility also suggests that additional archaeological investigations are unlikely to produce either a variant artifact pattern/assemblage, or a significant change in the suggested dates of occupation. The artifact density for this site is also so low that it is unlikely to be able to provide statistically relevant answers to specific or detailed research questions. If phase I level clearance is granted, direct project impacts will include the loss of this site. However, as this site does not contain any subplowzone integrity, and all phase I investigations revealed a very low density and diversity of cultural material remains, the potential for this site to produce additional information significant to our understanding of the history of the region was considered to be negligible. The phase I investigation of Concentration Area #2 therefore strongly suggests that data redundancy has been achieved. This site does not therefore appear eligible for nomination to the State and/or National Registers of Historic Places and no further archaeological investigations are recommended.

#### *South Cornfield, Concentration Area #3*

Within the south cornfield, Concentration Area #3 was recorded within the southern portion of the A.P.E. just to the east of Tuttle Road (figures 11 and 15). Although the location and distribution of these materials is consistent with roadside debris, a review of the historic maps of the region indicates that although no structures were recorded within this specific area, the B. Buyea house is shown across from this general area on the west side of Tuttle Road on the 1853 map (figures 4 and 5). However, the 1859 and subsequent maps (figures 6 through 9) show a B. Buyea house to the south of this location. It is therefore unclear from the maps if the 1853 location was in error, or if two separate structures are represented. As a result, it is possible that this concentration represents materials associated with the Buyea house as shown on the 1853 map (figures 4 and 5). However, it is also possible that this concentration contains materials associated with the occupation of the Van Dusen house to the southeast (figures 4 through 9). Nevertheless, as no structures are shown within this portion of the project area on any of the historic maps, and no indications of foundations or subsurface features were identified, this material is still consistent with historic discard. All of the recovered materials are also consistent with a 19<sup>th</sup> to early 20<sup>th</sup> date of manufacture and, given their proximity, could have been contemporaneous with any or all of these map documented resources.

#### *Cultural Material Analysis*

A total of 21 artifacts (Table 5) were recovered from an approximately 183 x 61 meter (600 x 200 foot) area, with the majority of materials being recovered from an approximately 61 x 61 meter (200 x 200 foot) area. This gives a conservative cultural material density of 1 artifact per 581 square meters (1,905 square feet). With the exception of 2 clear flat glass sherds, 2 aqua flat glass sherds, and 3 small (>1 cm) exfoliated red brick fragments, no foundation or

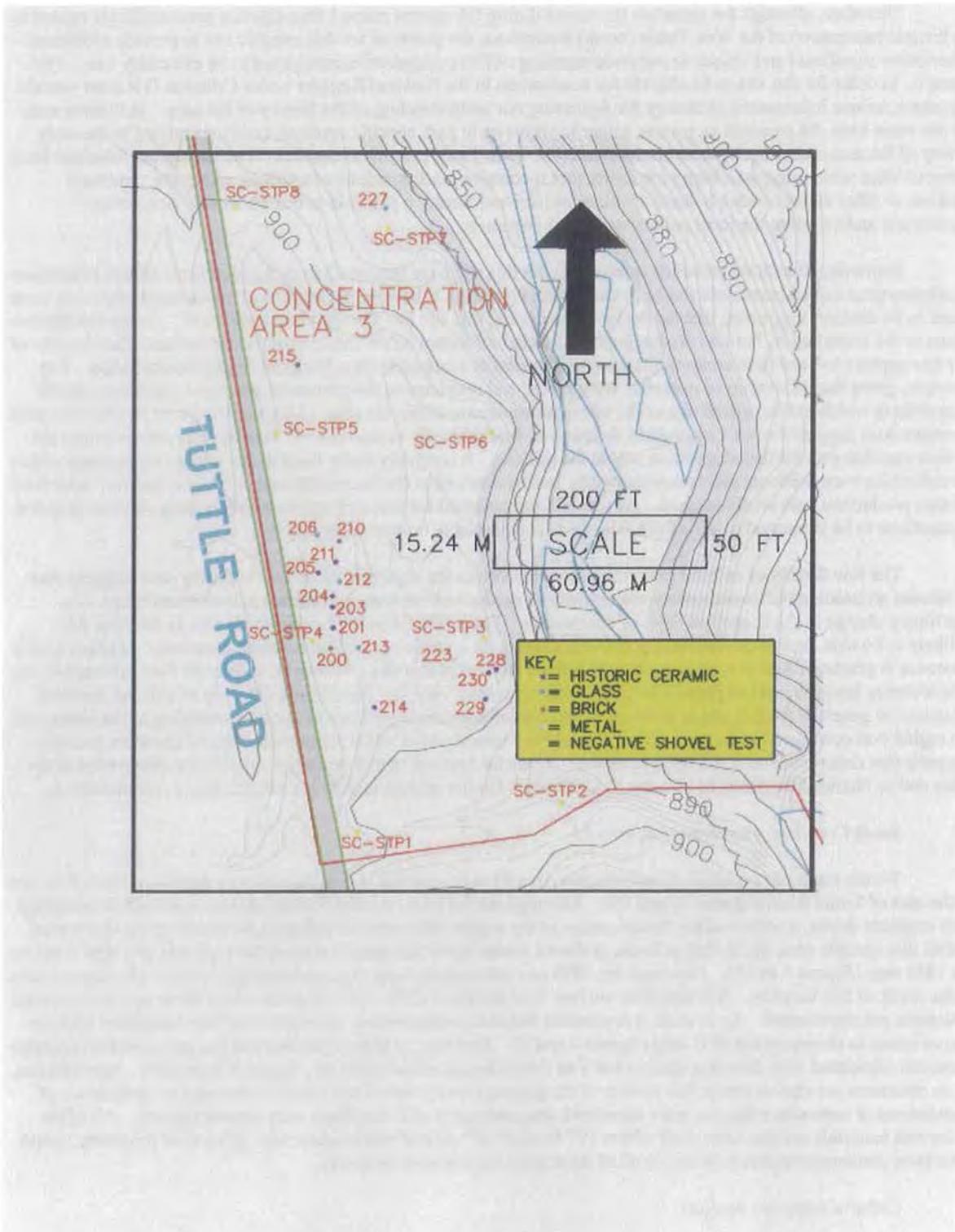


Figure 15. Location of all cultural materials recovered from Concentration Area #3 within the south corn field portion of the 85-acre A.P.E. (Adapted from a basemap provided by Barton & Loguidice, P.C.)

architectural materials were identified. All cultural materials were recovered from the surface of the plowzone, which averaged 22 cm (9 inches) in depth throughout this area and consisted of a dark brown silt loam. No areas of soil darkening or indentations suggesting subsurface features were noted. The lack of any mortar, cement or concrete fragments, coupled with the lack of any nails, tacks, high concentrations of brick or large brick fragments, supports the historic document evidence that no historic structures were located within this area. The remainder of the recovered materials consisted of 1 metal buckle, 1 undecorated ironstone handle sherd, 4 undecorated ironstone sherds (1 shoulder and 3 body), 1 whiteware rim sherd with a blue shell edge, 1 undecorated whiteware basal sherd, 1 red transferprint body sherd, 1 blue transferprint shoulder sherd, 2 blue spongeware sherds (1 rim and 1 basal), 1 undecorated porcelain neck sherd, and 1 polychrome decalomania porcelain body sherd.

Plain, undecorated whitewares became common after 1820 and represented the cheapest form of tableware available at the time. As a result, it was present in the majority of households by 1840. However, as it had an extended period of production and was still being manufactured as late as 1930, its use as a temporal diagnostic is somewhat limited. Nevertheless, undecorated whitewares are generally assigned a production range from 1820 until after 1900, with a median date of 1860. Likewise, unmolded and undecorated ironstone was both popular and readily available throughout its production period of between 1813 and 1900. Therefore, although undecorated ironstone has a median date of 1870, given this wide use span, they are also not particularly diagnostic. Polychrome decalomania porcelain vessels were manufactured from 1890 to 1930 with a median production date of 1910. Various forms of shell-edged whitewares were popular from the late 18<sup>th</sup> through the late 19<sup>th</sup> centuries. However, scalloped, blue shell-edged varieties were most common from 1830 to 1860. For transfer-printed wares, the most temporally diagnostic feature is color. For example, light blue transfer-printed wares were produced from 1826 through 1831 with a median production date of 1829, while red transfer-printed wares were produced from 1829 through 1850 with a median production date of 1840. Although blue spongewares were first manufactured circa 1830, they continued in production up through the early 20<sup>th</sup> century. However, they do have a mean production date of 1850. As a result, all of these wares are also consistent with the known historic occupation dates of the B. Buyea homestead (sometime before 1853 up through the 20<sup>th</sup> century).

Although the ceramic assemblage from the site is again extremely limited ( $n = 13$  sherds) with a maximum vessel count of thirteen, mean ceramic dating (MCD) was still applied in order to refine the potential chronological placement of the site. Both the sherd and vessel count ( $n = 13$ ) produced a MCD of 1861, suggesting that this site is most likely associated with the B. Buyea occupation of the homestead to the south as documented on the historic maps from 1853, 1859 and 1875 (figures 4 through 7, respectively). However, given the extremely low sample number, these dates may also represent data bias. Either way, they do suggest that this midden is contemporaneous with at least one discrete period of residential occupation.

#### *Site Summary and Recommendations*

Overall, this collection is most consistent with a low density of tableware materials and small, scattered architectural debris which was discarded by the residents of the adjacent homesteads onto the field where they were subsequently fragmented (or further fragmented) and spread about by agricultural activities. The slightly higher diversity of materials (as compared to concentration areas 1 and 2) would be consistent with the use of this area by multiple homesteads. However, the extremely low density of these materials (a maximum of thirteen ceramic vessels) also suggests that the disposal of materials at this location was neither widespread nor sustained. The location of the majority of the materials along Tuttle Road also suggests discard from this medium. As a result, these materials do not appear to be a part of a larger sheet midden, and no indications of subplowzone deposits or associated features were identified. Although some architectural debris was identified, all of the recovered brick fragments were less than 1 cm in diameter, indicating that their presence in the collection is more consistent with the disposal of unwanted goods than the former presence of a structure or subsurface feature, such as a well or cistern. As no map documented structures were recorded within this area, and no indications of a foundation of any other kind of subsurface feature were noted, this low cultural material density is consistent with the interpretation of ephemeral historic discard from multiple sources. If larger middens are associated with the nearby map documented structures, they are not located in or near this location.

Therefore, although the materials recovered during the current phase I investigation are most likely related to the historic occupation of the B. Buyea homestead, the potential for this specific site to provide additional information significant and unique to our understanding of this occupation is considered to be extremely low. For example, in order for this site to be eligible for nomination to the National Register under Criterion D it must contain important,

unique information necessary for furthering our understanding of the history of the area. In other words, the site must have the potential to answer, either in whole or in part, specific research questions related to the early history of the area and/or the historic occupation of the B. Buyea homestead. The site should therefore have characteristics which suggest a high probability that it contains configurations of artifacts, soil strata, structural remains, or other natural and/or cultural features which would make it possible to test either new or existing hypotheses, and/or refine the local cultural-temporal sequence.

However, all cultural materials associated with this site were recovered from the plowzone, and no indications of subplowzone cultural materials and/or features were identified. Likewise, the borders of this concentration area were found to be distinct, suggesting that the horizontal extent of this site has already been established. Given the shallow nature of the identified A<sub>p</sub> horizon (averaging only 22 cm or 9 inches below the current ground surface), the integrity of this site appears to have been compromised beyond the limits acceptable for a National Register nomination. For example, given that all recovered materials were mixed and restricted to the plowzone, no data concerning specific assemblages which can be related to specific occupations of the B. Buyea house remain within the site. Although the MCD for the recovered ceramics does suggest the site components themselves date primarily to the mid 19<sup>th</sup> century, this only provides the earliest possible date for their deposition within the midden. It is equally likely that the few vessels represented within the collection were heirloom pieces maintained by later residences of the homestead and only discarded well after their median production date would suggest. As a result, the potential for research questions addressing discrete temporal occupations to be supported by data from this site is considered to be extremely low.

The low density of cultural materials recovered verses the high ground surface visibility also suggests that additional archaeological investigations are unlikely to produce either a variant artifact pattern/assemblage, or a significant change in the suggested dates of occupation. The artifact density for this site is also so low that it is unlikely to be able to provide statistically relevant answers to specific or detailed research questions. If phase I level clearance is granted, direct project impacts will include the loss of this site. However, as this site does not contain any subplowzone integrity, and all phase I investigations revealed a very low density and diversity of cultural material remains, the potential for this site to produce additional information significant to our understanding of the history of the region was considered to be negligible. The phase I investigation of Concentration Area #3 therefore strongly suggests that data redundancy has been achieved. This site does not therefore appear eligible for nomination to the State and/or National Registers of Historic Places and no further archaeological investigations are recommended.

#### *North Cornfield*

Within the north cornfield, a total of 40 cultural materials were identified at 28 field site (FS) locations. Their distribution is provided in Figure 16. Representative examples of these materials are provided in Figure 17. Nearly all of these materials were historic in origin and consistent with a mid 19<sup>th</sup> to mid 20<sup>th</sup> century date of manufacture. However, no historic structures are shown within this area on the available historic maps. Only 3 precontact materials were recovered. In contrast to the south field, no areas of distinct artifact concentrations were identified. Rather, all recovered materials were spread fairly evenly across the central portion of the field. All recovered cultural materials are listed in the Table 6 below.

<i>Historic</i>						
FS#	Identification	# of Sherds	# of Vessels	Decoration	Color	Production Range/Median Date (A.D.)
1	flat glass sherd	1	NA	NA	aqua	1800-1900+
1	ironstone rim sherd	1	1	undecorated	white	1813-1900/1870
2	whiteware shoulder sherd	1	1	undecorated	white	1820-1900+/1860
3	container glass body sherd	1	1	undecorated	dark brown	19 <sup>th</sup> to 20 <sup>th</sup> century
4	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
5	metal railroad spike	1	NA	corroded	NA	NA
6	whiteware body sherd	1	1	undecorated	white	1820-1900+/1860

7	whiteware rim and shoulder sherd	1	1	undecorated	white	1820-1900+/1860
8	flat glass sherd	1	NA	NA	aqua	1800-1900+
9	flat glass sherd	1	NA	NA	aqua	1800-1900+
11	flat glass sherd	1	NA	NA	aqua	1800-1900+
12	whiteware body sherd	2	1	undecorated	white	1820-1900+/1860
13	flat glass sherd	1	NA	NA	aqua	1800-1900+
13	whiteware body sherd	1	1	blue glaze with brown & white band	white	1815-1860/1845
14	container glass body sherd	1	1	molded raised geometric design	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
16	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
18	metal spike	1	NA	corroded	NA	19 <sup>th</sup> to 20 <sup>th</sup> century
19	red brick fragment	1	NA	exfoliated	red	19 <sup>th</sup> to 20 <sup>th</sup> century
19	earthenware basal sherd	1	1	Albany slip interior and exterior	dark brown	1825-1910
20	ironstone neck sherd	1	1	undecorated	white	1813-1900/1870
21	flat glass sherd	1	NA	NA	aqua	1800-1900+
23	flat metal ring	1	NA	corroded	NA	19 <sup>th</sup> to 20 <sup>th</sup> century
23	metal eye bolt	1	NA	corroded	NA	19 <sup>th</sup> to 20 <sup>th</sup> century
23	flat glass sherd	1	NA	crazed	aqua	1800-1900+
24	glass slag	1	NA	NA	aqua	1800-1900+
24	container glass body sherd	1	1	undecorated	amethyst	1880-1918/1899
24	container glass rim sherd	1	1	undecorated	amethyst	1880-1918/1899
24	flat glass sherd	1	NA	NA	aqua	1800-1900+
28	earthenware body sherd	1	1	brown glaze exterior with tan interior	brown and tan	1825-1910
29	whiteware body sherd	1	1	mourning-ware transferprint	black	1830-1850/1840
30	flat glass sherd	1	NA	NA	aqua	1800-1900+
31	porcelain insulator	1	1	undecorated	white	19 <sup>th</sup> to 20 <sup>th</sup> century
32	whiteware body sherd	1	1	undecorated	white	1820-1900+/1860
33	container glass shoulder sherd	1	1	undecorated	aqua	19 <sup>th</sup> to 20 <sup>th</sup> century
33	metal wire fragment	1	NA	corroded	NA	19 <sup>th</sup> to 20 <sup>th</sup> century
34	container glass body sherd	1	1	undecorated	olive	19 <sup>th</sup> to 20 <sup>th</sup> century
<b>Total Ceramic Sherd Count</b>			<b>12</b>			
<b>Maximum Ceramic Vessel Count</b>			<b>11</b>			
<b>Mean Ceramic Date (sherds/vessels)</b>			<b>1860/1860</b>			
<b>Total Historic Artifact Count</b>					<b>37</b>	
<b>Precontact</b>						
<b>FS#</b>	<b>Identification</b>	<b># of Sherds</b>	<b># of Vessels</b>	<b>Decoration/Raw Material</b>	<b>Date</b>	
8	thin, grit-tempered body sherd	2	1	plain	precontact; probably Late Woodland	
17	point blade fragment	1	1	Onondaga chert	non-diagnostic; general precontact	
<b>Total Precontact Artifact Count</b>					<b>3</b>	
<b>Total Artifact Count</b>					<b>40</b>	

INSERT FIGURE 16 HERE.



Figure 16. Location of all identified cultural materials and supplemental subsurface testing within the north corn field portion of the 85-acre A.P.E. (Adapted from a basemap provided by Barton & Loguidice, P.C.)



Figure 17. Representative illustrations of all cultural materials recovered from the north corn field of the 85-acre soil borrow project area.

### *Cultural Material Analysis*

As mentioned above, a total of 40 artifacts (Table 6) were recovered from an approximately 366 x 112 meter (1200 x 600 foot) area, giving a cultural material density of 1 artifact per 1,672 square meters (18,000 square feet). With the exception of 2 plain, grit-tempered body sherds (which re-fit to one sherd broken during recovery) and one non-diagnostic medial blade fragment of Onondaga chert, all recovered materials were of historic Euro-American origin. All cultural materials were recovered from the surface of the plowzone, which averaged 24 cm (9 inches) in depth throughout this area and consisted of a dark brown silt loam.

The precontact point and ceramic fragments (Figure 17) were not recovered in association with each other (they were separated by approximately 107 meters or 350 feet) (Figure 16), and no additional materials were identified. As the point fragment has been broken above the haft, no specific cultural or temporal affiliation was possible. Although extensive Late Woodland occupation of the region has been documented, the overall morphology and thickness of the blade is inconsistent with the dominant triangular point types from this time period. As a result, this specimen could represent a hunting loss from an earlier time period, or a small broken knife fragment from any point during the precontact period. The ceramic fragment (broken into two sherds in the field during recovery) is consistent with the local Late Woodland style and technology. The specimen is grit-tempered and smooth surfaced. However, unlike the sherds recovered from the Tuttle site, this specimen is extremely thin and its curvature suggests it came from a small, most likely portable, container. By way of contrast, the specimens recovered from the Tuttle site were not consistent with vessels designed for easy transport. Therefore, although the recovery of precontact ceramics is usually an indicator of a habitation site, this sherd is not consistent with this interpretation. For example, despite two separate surface inspections by the author in 2004 following additional rain-washing, no additional cultural materials suggesting a habitation (or even a short-term campsite) were identified. The entire ridge surrounding this findspot was surface evaluated again by the author and Tamra Reece on June 23<sup>rd</sup>, 2009 at less than 1 meter intervals with over 95% ground surface visibility, but no additional cultural materials and no indications of subsurface features were identified. In addition, the only other precontact artifact recovered from the entire north field was a broken projectile point blade fragment identified more than 107 meters (350 feet) to the west. As supplemental shovel probes excavated within the area also failed to produce additional cultural materials, or indications of features and/or buried cultural horizons, this sherd, like the point fragment, would appear to be an isolate.

The remainder of the recovered materials consisted of 9 aqua flat glass sherds (one crazed due to heat exposure), 1 aqua glass slag fragment, 2 aqua glass container sherds (1 body and 1 shoulder), 2 clear container glass body sherds (1 molded), 2 amethyst glass container sherds (1 body and 1 rim), 1 olive container glass body sherd, 1 dark brown bottle glass body sherd, 2 undecorated ironstone sherds (1 rim and 1 body), 6 undecorated whiteware sherds (1 shoulder, 4 body and 1 rim), 1 whiteware body sherd with a blue glaze and a brown and white stripe, 1 mourning-ware body sherd, 1 earthenware basal sherd with Albany exterior and interior, 1 earthenware body sherd with brown glazed exterior and tan glazed interior, 1 white ceramic insulator, 1 exfoliated red brick fragment (>1 cm), 1 flat metal ring, 1 metal eye bolt, 1 thin metal wire fragment, 1 metal railroad spike, and 1 generic metal spike.

Plain, undecorated whitewares became common after 1820 and represented the cheapest form of tableware available at the time. As a result, it was present in the majority of households by 1840. However, as it had an extended period of production and was still being manufactured as late as 1930, its use as a temporal diagnostic is somewhat limited. Nevertheless, undecorated whitewares are generally assigned a production range from 1820 until after 1900, with a median date of 1860. Likewise, unmolded and undecorated ironstone was both popular and readily available throughout its production period of between 1813 and 1900. Therefore, although undecorated ironstone has a median date of 1870, given this wide use span, they are also not particularly diagnostic. Black transfer-printed wares (also known as mourningwares) were produced from 1830 through 1850 with a median production date of 1840. Annular banded whitewares were produced from 1815 through 1860 with a median production date of 1845. Earthenwares finished with an Albany slip were produced from 1825 to 1910. Amethyst glass was produced from 1880 to 1918 with a median production date of 1899. As a result, all of these materials are consistent with an historic occupation from the mid 19<sup>th</sup> century onward.

Although the ceramic assemblage from the site is again extremely limited ( $n = 12$  sherds) with a maximum vessel count of eleven, mean ceramic dating (MCD) was still applied in order to refine the potential chronological placement of the site. Both the sherd and vessel count ( $n = 12/11$ ) produced a MCD of 1860, suggesting that this site is most likely associated with the occupation of the Wm. Tuttle [north] homestead as shown on the historic maps from 1853, 1859 and 1875 (figures 4 through 7, respectively). However, given the extremely low sample number, these

dates may also represent data bias. Either way, they do suggest that this midden is contemporaneous with at least one discrete period of residential occupation.

#### *Site Summary and Recommendations*

As a result, this collection is most consistent with an extremely low density of kitchen and tableware materials and small, scattered architectural and fencing debris, which was discarded by the residents of the nearby homesteads onto the field where they were subsequently fragmented (or further fragmented) and spread about by agricultural activities. The metal pieces recovered are also consistent with use-loss from agricultural equipment. The higher diversity of materials (as compared to the south field) would be consistent with the use of this area by multiple homesteads. However, the extremely low density of these materials also suggests that disposal was neither widespread nor sustained. As a result, these materials do not appear to be a part of a larger sheet midden, and no indications of subplowzone deposits or associated features were identified. If intact middens are associated with the nearby map documented structures, they are not located within this field. Although some architectural debris was identified, the recovered brick fragment was less than 1 cm in diameter, indicating that its presence in the collection is more consistent with the disposal of unwanted goods than the former presence of a structure or subsurface feature, such as a well or cistern. As no map documented structures were recorded within this area, and no indications of a foundation of any other kind of subsurface feature were noted, this low cultural material density is consistent with the interpretation of ephemeral historic discard, perhaps from multiple residential sources. If larger middens are associated with the nearby map documented structures, they are not located in or near this location.

Therefore, although the materials recovered during the current phase I investigation are most likely related to the historic occupation of the homesteads to the south, the potential for this specific site to provide additional information significant and unique to our understanding of this occupation is considered to be extremely low. For example, in order for this site to be eligible for nomination to the National Register under Criterion D it must contain important, unique information necessary for furthering our understanding of the history of the area. In other words, the site must have the potential to answer, either in whole or in part, specific research questions related to the early history of the area and/or the historic occupation of the nearby homesteads. The site should therefore have characteristics which suggest a high probability that it contains configurations of artifacts, soil strata, structural remains, or other natural and/or cultural features which would make it possible to test either new or existing hypotheses, and/or refine the local cultural-temporal sequence.

However, all cultural materials associated with this site were recovered from the plowzone, and no indications of subplowzone cultural materials and/or features were identified. Likewise, no artifact concentration areas were identified and the diffuse nature of the recovered cultural materials suggests that distinct horizontal borders are not present. Given the shallow nature of the identified A<sub>p</sub> horizon (averaging only 22 cm or 9 inches below the current ground surface), the integrity of this site appears to have been compromised beyond the limits acceptable for a National Register nomination. For example, given that all recovered materials were mixed and restricted to the plowzone, no data concerning specific assemblages which can be related to specific occupations remain within the site. Although the MCD for the recovered ceramics does suggest the site components themselves date primarily to the mid 19<sup>th</sup> century, this only provides the earliest possible date for their deposition within the midden. It is equally likely that the few vessels represented within the collection were heirloom pieces maintained by later residences of the homestead and only discarded well after their median production date would suggest. As a result, the potential for research questions addressing discrete temporal occupations to be supported by data from this site is considered to be extremely low.

The low density of cultural materials recovered versus the high ground surface visibility also suggests that additional archaeological investigations are unlikely to produce either a variant artifact pattern/assemblage, or a significant change in the suggested dates of occupation. The artifact density for this site is also so low that it is unlikely to be able to provide statistically relevant answers to specific or detailed research questions. If phase I level clearance is granted, direct project impacts will include the loss of this site. However, as this site does not contain any subplowzone integrity, and all phase I investigations revealed a very low density and diversity of cultural material remains with no discrete areas of concentration, the potential for this site to produce additional information significant to our understanding of the history of the region was considered to be negligible. The phase I investigation of the historic materials recovered from the north corn field therefore strongly suggests that data redundancy has been achieved. This site does not therefore appear eligible for nomination to the State and/or National Registers of Historic Places and no further archaeological investigations of the historic components are recommended.

## *Proposed 92-acre Landfill Expansion Project Area*

### *Non-Systematic*

The non-systematic visual inspection indicated that the overall 92-acre landfill expansion project area is gently rolling ridge-swale topography that is abruptly terminated along its western border by a high, steep ridge overlooking Limestone Creek (Figure 2). However, as neither the slope nor the floodplain will be impacted by the proposed project, no further evaluation of these areas was conducted. All tributary drainages leading up to and into Limestone Creek to the east of this high ridge were, however, investigated. The visual inspection also indicated that this project area is bordered to the east by Buyea Road, to the north by an existing homestead, and to the south by a steep slope. The east-central portion of the project area is also bordered by the existing landfill and associated grounds.

The visual inspection indicated that roughly one half of this project area was in secondary growth woodland at the time of the 2004-2005 phase I evaluation (Figure 18). The remaining portion was divided between active agricultural areas in standing hay and fallow agricultural areas in tall grass. Ground surface visibility throughout these areas was zero due to low vegetation, forest debris, scrub grass and standing hay. Representative photographs have been provided in Appendix A.

The visual inspection also identified areas of substantial previous disturbance and extreme slope. The most substantial disturbance consisted of an open field in the west-central portion of the project area (Figure 18) which had been completely machine graded and excavated into the lower subsoil. Large soil spoil piles were present along the margins of the field and the lower subsoil was exposed on the surface (Appendix A). Re-vegetation of the area was minimal, supporting the observation that the majority of the nutrient-bearing sediments had been removed. In addition, although this field is located to the south of the Tuttle site, these areas are separated by a steep-sided tributary drainage, as well as an area of moderately steep slope which tested negative for cultural materials during the subsequent shovel test evaluation. The open area to the east and southeast of this location had also been previously significantly disturbed by machine grading, excavation and subsequent re-contouring (Figure 18). Therefore, given the extent of these visual data, the potential for cultural materials and/or features to be present within this field was determined to be negligible, and no further investigations were conducted.

Additional substantial disturbance was identified to the north and east of this location along the ridge containing the Tuttle site (Figure 18). Three large soil spoil piles and several excavation cuts were noted (Appendix A). For example, a readily discernable drop in elevation was visible along the eastern portions of this ridge, marking an area of previous grading and excavation well into the subsoil. This disturbed area is clearly shown on Figure 18. Subsequent shovel testing and surface inspection adjacent this area confirmed that more shallow grading also extended to the west. A deep excavation cut was also visible to the west of the spoil piles along the ridge's southern edge just to the east of the woods, with other cuts visible along the ridge's north border (Appendix A). However, given the lack of visual indications of substantial previous disturbance across the entire ridge, and given the reported presence of the Tuttle site within this area, the majority of this ridge was still included in the subsequent surface and subsurface evaluations. The only exceptions were those portions underlying the existing soil spoil piles, the steep excavation cuts along portions of the ridge's northern and southern borders, and the deeply graded area along the ridge's eastern border.

Previous significant disturbance, as well as areas of extreme and excessive slope, were also identified along the project's southern border (figures 2 and 18). This disturbance included mined areas with large excavation cuts that extended southward into the existing ridgeline (Appendix A). The remaining portions of the ridgeline contained excessive slopes determined by the author to be of sufficient vertical extent that they were unsuitable to contain potentially significant cultural materials and/or features. However, this visual assessment was confirmed by random shovel evaluations that identified severely eroded soils and/or fragmented bedrock at the surface. Although the extreme southeastern portion of the project border was also contained within an artificial soil berm, the location of this berm had previously been determined to be negative for cultural materials (Pratt and Pratt 1989). Therefore, given the nature and extent of the disturbances and slope identified within this area, no further archaeological investigations of the project's southern border were conducted. The only exception was a relatively flat area within the project's extreme southwestern edge that did not appear to be completely and substantially disturbed. As a result, this small area was included in the subsequent shovel test reconnaissance.

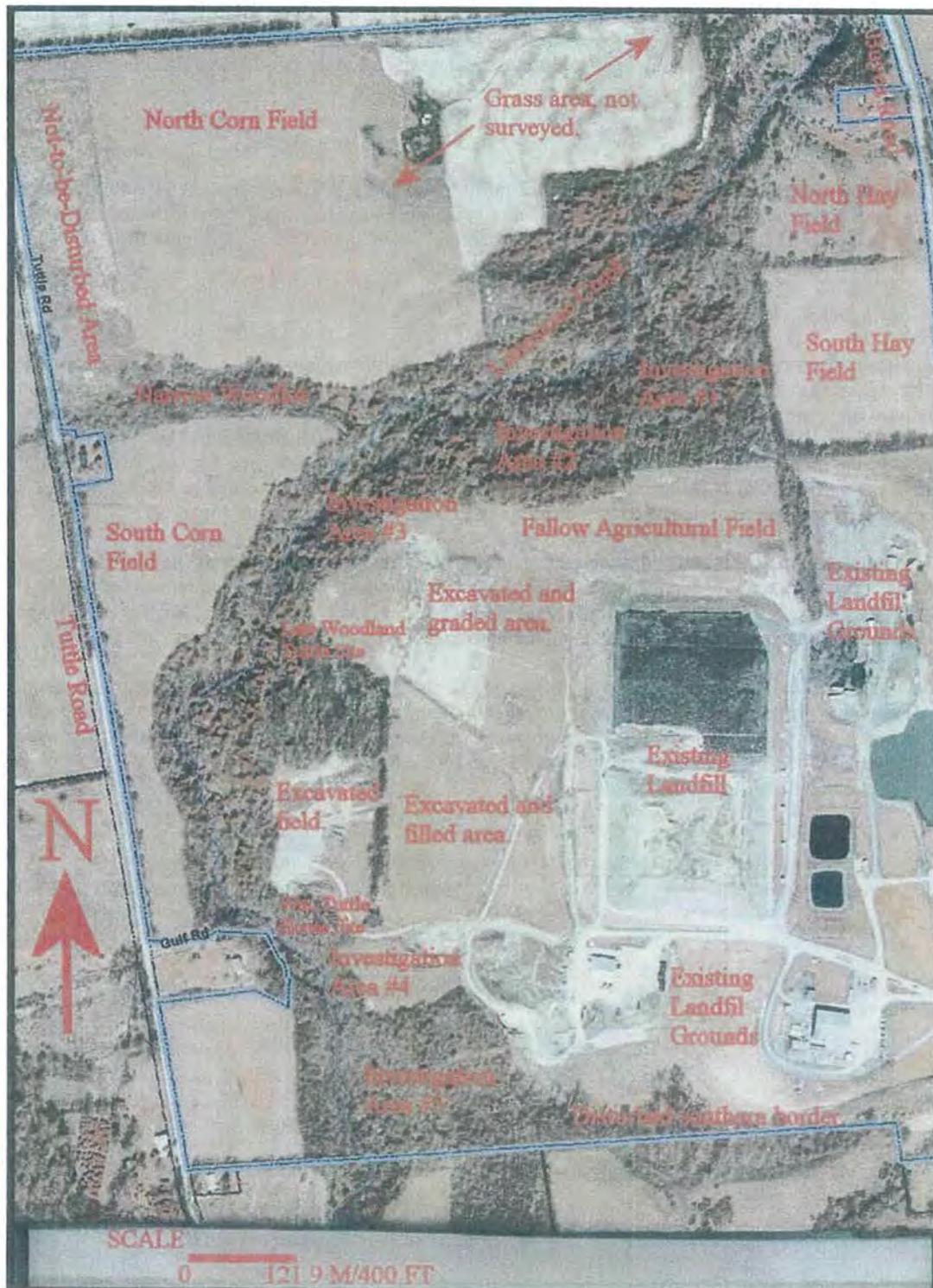


Figure 18. Aerial photograph of the 92-acre landfill expansion and 85-acre soil borrow project areas. (Adapted from a basemap provided by Barton & Loguidice, P.C.)

Overall, the non-systematic visual survey indicated that only three portions of the proposed 92-acre A.P.E. were suitable for subsequent pedestrian reconnaissance. These areas included two active hay fields (labeled north and south) and the large fallow field in scrub grass to the north and northwest of the existing landfill. Each of these areas is discussed in detail below.

### *Systematic*

Approximately one third of the total 92-acre landfill expansion A.P.E. was inspected for cultural resources through a visual pedestrian reconnaissance. This visual survey was conducted within three distinct areas: two active agricultural fields within standing hay and one fallow agricultural field within scrub grass (Figure 18). All areas were prepared as described under *Methodology* and are discussed below.

### *North and South Hay Fields*

These areas were located in the extreme northern and northeastern portion of the 92-acre project area (figures 18 and 19; Appendix A). The south field was entirely within standing hay, while the north field was divided between standing hay within the eastern third and a fallow area of scrub grass and young secondary growth trees within the western two thirds. These latter areas were separated by a steep-sided swale which prevented access to the remainder of the field by the tractor and plow. Therefore, due to the equipment limitations arising from the landscape, only the area within standing hay was evaluated. The remainder of the north field will still need to be investigated at a later date in advance of any earth-moving or ground-disturbing activities within this area.

Parallel strips were plowed within the eastern third of the north hay field, and across the entire south hay field. Although all strips were roughly parallel to Buyea Road, they also curved to follow the natural contours of the landscape. Representative photographs of these areas have been provided in Appendix A. Each of these strips was prepared and investigated as described under *Methodology* above.

A total of 17 cultural materials were identified at 15 fieldsite (FS) locations during the pedestrian survey of the north and south hay fields. Their distribution is provided in Figure 19. Representative examples of these materials have been provided in Figure 20. All of the identified materials were historic in origin and consistent with a mid 19<sup>th</sup> to early 20<sup>th</sup> century date of manufacture; no precontact materials were identified. All of the identified materials are listed in Table 7 below.

**Table 7:  
Artifacts Recovered During the Surface Inspection of North and South Hay Fields**

FS#	Identification	# of Sherds	# of Vessels	Decoration	Color	Production Range/Median Date (A.D.)
400	container glass shoulder sherd	1	1	molded raised ridge with "...A..."	aqua	19 <sup>th</sup> to 20 <sup>th</sup> century
404	porcelain saucer fragment	1	1	undecorated	white	1820-1900+/1860
408	ironstone rim sherd	1	1	undecorated	white	1813-1900/1870
410	flat glass sherd	1	NA	NA	aqua	1800-1900+
411	flat glass sherd	1	NA	NA	aqua	1800-1900+
412	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
412	container glass rim sherd	1	1	small raised dimples	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
412	container glass rim sherd with threads	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
413	flat glass sherd	1	NA	NA	aqua	1800-1900+
414	ironstone basal sherd	1	1	undecorated	white	1813-1900/1870
415	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
416	whiteware rim sherd	1	1	undecorated	white	1820-1900+/1860
417	metal spike	1	NA	corroded	NA	19 <sup>th</sup> to 20 <sup>th</sup> century

418	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
419	whiteware rim sherd	1	1	undecorated	white	1820-1900+/1860
420	flat glass sherd	1	NA	NA	clear	1800-1900+
422	ceramic tile sherd	1	NA	undecorated	white	19 <sup>th</sup> to 20 <sup>th</sup> century
<b>Total Ceramic Sherd Count</b>		<b>5</b>				
<b>Maximum Ceramic Vessel Count</b>		<b>5</b>				
<b>Mean Ceramic Date (sherds/vessels)</b>		<b>1864/1864</b>				
<b>Total Artifact Count</b>						<b>17</b>

### *Cultural Material Analysis*

A total of 17 artifacts (Table 7) were recovered from an approximately 335 x 122 meter (1,100 x 400 foot) area, giving a cultural material density of 1 artifact per 40,877 square meter (440,000 square feet). All cultural materials were recovered from the surface of the plowzone, which averaged 28 cm (11 inches) in depth throughout this area and consisted of a dark brown to very dark grayish brown silt loam. With the exception of 1 clear flat glass sherd and 3 aqua flat glass sherds, no foundation or architectural materials were identified. The lack of any brick, mortar, cement or concrete fragments, coupled with the lack of any nails or tacks, supports the historic document evidence that no historic structures were located within either of these visually inspected areas. Likewise, no areas of soil darkening or indentations suggesting subsurface features were noted. Although one metal spike was identified, this piece was more consistent with a machinery or transportation related item. As a result, this artifact is consistent with the long agricultural history of the area. The remainder of the materials consisted of 1 aqua container glass sherd, 1 undecorated porcelain saucer fragment, 1 undecorated ironstone rim sherd, 3 clear container glass body sherds, 2 clear container glass rim sherds, 1 undecorated ironstone basal cup sherd, 2 undecorated whiteware rim sherds, and 1 undecorated white ceramic tile sherd. None of the recovered materials were diagnostic. Overall, these materials were consistent with random historic discard, perhaps as a result of agricultural activities.

Plain, undecorated whitewares became common after 1820 and represented the cheapest form of tableware available at the time. As a result, it was present in the majority of households by 1840. However, as it had an extended period of production and was still being manufactured as late as 1930, its use as a temporal diagnostic is somewhat limited. Nevertheless, undecorated whitewares are generally assigned a production range from 1820 until after 1900, with a median date of 1860. Likewise, unmolded and undecorated ironstone was both popular and readily available throughout its production period of between 1813 and 1900. Therefore, although undecorated ironstone has a median date of 1870, given this wide use span, they are also not particularly diagnostic. Annular banded whitewares were produced from 1815 through 1860 with a median production date of 1845. As a result, all of these materials are consistent with an historic occupation from the mid 19<sup>th</sup> century onward.

Although the ceramic assemblage from the site is extremely limited (n = 5 sherds) with a maximum vessel count of 5, mean ceramic dating (MCD) was still applied in order to refine the potential chronological placement of the site. Both the sherd and vessel count for the entire assemblage produced a MCD of 1864, suggesting that this site is most likely associated with the occupation of the Huyck/Randall homestead shown along the eastern side of Buyea Road from 1853 onward (figures 4 through 9). However, given the extremely low sample number, these dates may also represent data bias. Either way, they do suggest that this midden is contemporaneous with at least one discrete period of residential occupation.

### *Site Summary and Recommendations*

Within the southern hayfield, the majority of the recovered materials were identified along Buyea Road. This distribution is consistent with roadside debris. The material density also dropped markedly further to the west, with no materials identified within the southwestern portion of the field. Within the northern hayfield, the materials were more evenly scattered. However, as no architectural materials were identified, this distribution is most consistent with materials discarded during agricultural activities. As no map documented structures were recorded within these areas, this low cultural material density is consistent with this interpretation.

As a result, this collection is most consistent with an extremely low density of kitchen and tableware materials and small, scattered architectural and fencing debris, which was discarded by the residents of the nearby homesteads

INSERT FIGURE 19 HERE.

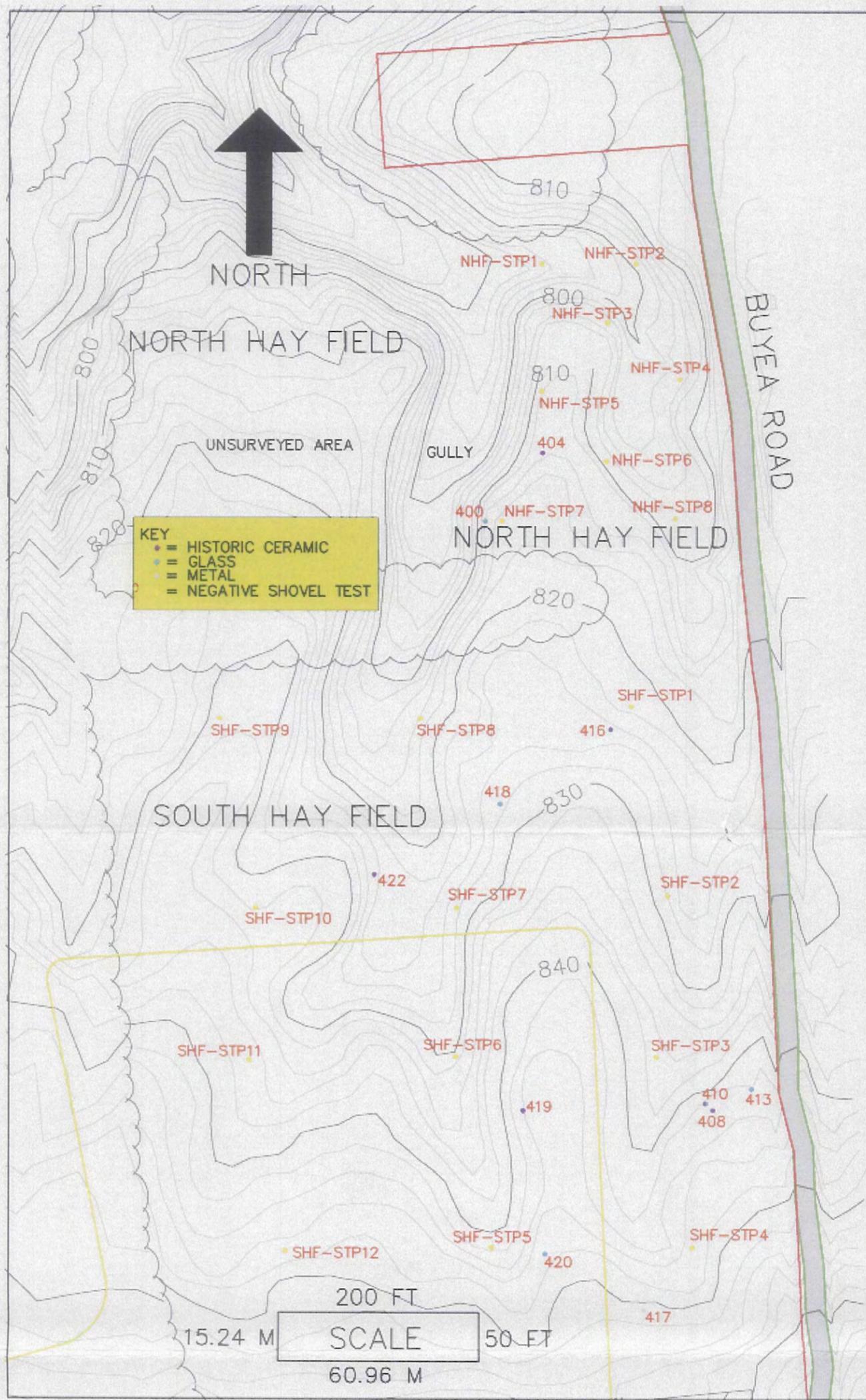


Figure 19. Location of all identified cultural materials and supplemental subsurface testing within the north and south hay field portions of the 92-acre A.P.E. (Adapted from a basemap provided by Barton & Loguidice, P.C.)



Figure 20. Representative illustrations of all cultural materials recovered from the north and south hay fields within the 92-acre landfill expansion project area.

onto these fields where they were subsequently fragmented (or further fragmented) and spread about by agricultural activities. The metal pieces recovered are also consistent with use-loss from agricultural equipment. As a result, these materials do not appear to be a part of a larger sheet midden, and no indications of subplowzone deposits or associated features were identified. If intact middens are associated with the nearby map documented structures, they are not located within this field. As no map documented structures were recorded within this area, and no indications of a foundation of any other kind of subsurface feature were noted, this low cultural material density is consistent with the interpretation of ephemeral historic discard, perhaps from multiple residential or roadside sources. If larger middens are associated with the nearby map documented structures, they are not located in or near this location.

Therefore, although the materials recovered during the current phase I investigation are most likely related to the historic occupation of the nearby homesteads, the potential for this specific site to provide additional information significant and unique to our understanding of this occupation is considered to be extremely low. For example, in order for this site to be eligible for nomination to the National Register under Criterion D it must contain important, unique information necessary for furthering our understanding of the history of the area. In other words, the site must have the potential to answer, either in whole or in part, specific research questions related to the early history of the area and/or the historic occupation of the nearby homesteads. The site should therefore have characteristics which suggest a high probability that it contains configurations of artifacts, soil strata, structural remains, or other natural and/or cultural features which would make it possible to test either new or existing hypotheses, and/or refine the local cultural-temporal sequence.

However, all cultural materials associated with this site were recovered from the plowzone, and no indications of subplowzone cultural materials and/or features were identified. Likewise, no artifact concentration areas were identified and the diffuse nature of the recovered cultural materials suggests that distinct horizontal borders are not present. Given the shallow nature of the identified  $A_p$  horizon (averaging only 28 cm or 11 inches below the current ground surface), the integrity of this site appears to have been compromised beyond the limits acceptable for a National Register nomination. For example, given that all recovered materials were mixed and restricted to the plowzone, no data concerning specific assemblages which can be related to specific occupations remain within the site. Although the MCD for the recovered ceramics does suggest the site components themselves date primarily to the mid 19<sup>th</sup> century, this only provides the earliest possible date for their deposition within the midden. It is equally likely that the few vessels represented within the collection were heirloom pieces maintained by later residences of the homestead and only discarded well after their median production date would suggest. As a result, the potential for research questions addressing discrete temporal occupations to be supported by data from this site is considered to be extremely low.

The low density of cultural materials recovered versus the high ground surface visibility also suggests that additional archaeological investigations are unlikely to produce either a variant artifact pattern/assemblage, or a significant change in the suggested dates of occupation. The artifact density for this site is also so low that it is unlikely to be able to provide statistically relevant answers to specific or detailed research questions. If phase I level clearance is granted, direct project impacts will include the loss of this site. However, as this site does not contain any subplowzone integrity, and all phase I investigations revealed a very low density and diversity of cultural material remains with no discrete areas of concentration, the potential for this site to produce additional information significant to our understanding of the history of the region was considered to be negligible. The phase I investigation of the historic materials recovered from the north and south hayfields therefore strongly suggests that data redundancy has been achieved. This site does not therefore appear eligible for nomination to the State and/or National Registers of Historic Places and no further archaeological investigations are recommended. However, as the western two-thirds of the north hayfield were not scheduled for evaluation during the current survey, a phase IB investigation of this area is still recommended in advance of any earth-moving or ground disturbing activities within this area. Given the limitations involved in getting agricultural equipment into this area, this survey would best be conducted through a shovel test reconnaissance.

#### *Fallow Agricultural Field*

This area was located to the north and northwest of the existing landfill (Figure 18). Although this area had been agricultural in the past, at the time of the 2004-2005 phase I investigation, this area was in tall scrub grass. All portions of this area which had not been visually determined to be previously substantially disturbed were included in the visual pedestrian reconnaissance. Representative photographs of this area have been provided in Appendix A.

Parallel strips were plowed within this area to the north of the existing landfill, as well as atop the ridge to the northwest of the existing landfill site. The strips within the northern portion of the fallow area ran roughly east-west, while the strips along the ridge ran roughly north-south. However, all of the strips followed the natural contours of the landscape. Each of these strips was prepared and investigated as described under *Methodology* above.

No cultural materials were identified during the pedestrian survey of the northern portion of this area and no map documented structures were shown either within or adjacent. Likewise, no materials were identified during the supplemental shovel probe survey, and no indications of cultural features and/or buried cultural horizons were noted. As a result, the potential for this area to contribute information significant to the history of the region is considered negligible and no further archaeological investigations within this area are recommended.

However, numerous cultural materials related to the Late Woodland Tuttle site were identified during the visual pedestrian reconnaissance of the ridge to the northwest of the existing landfill (Figure 18). However, as additional materials related to this site were also identified during the shovel probe reconnaissance adjacent this visually inspected area, all materials related to this site are discussed in detail in the *Subsurface Results* section.

#### *Proposed 130-acre Soil Borrow/Development Project Area*

##### *Non-Systematic*

The non-systematic visual inspection indicated that the overall 130-acre soil borrow project area is rolling ridge-swale topography that is terminated along its eastern border by an extremely steep ridge overlooking Cowaselon Creek (figures 2 and 21). The visual inspection also indicated that the 130-acre project area is bordered to the west by Buyea Road, to the north by existing agricultural fields, and to the south by portions of the closed county landfill. The northwestern border of the project area also retracts around an existing homestead.

The visual inspection indicated that nearly all of the project A.P.E. is active agricultural land (Figure 21). In 2004 these areas were split between standing hay and newly planted winter wheat, while in 2009 these areas were entirely within standing hay. However, in order to minimize crop damage during the 2004-2005 field season, only those areas within winter wheat suitable "as is" for a visual pedestrian survey (approximately 28 acres) were evaluated. All remaining agricultural portions of the A.P.E. were evaluated in 2009; however, in order to eliminate the possibility of inadequate coverage, the strip areas evaluated in 2004 were also re-surveyed. For example, following removal of the hay crop in 2009, all agricultural portions of the A.P.E. were plowed, disced and thoroughly rain-washed prior to initiation of the visual inspection. These areas were prepared as the hay crop was removed and as the farming schedule allowed. As a result, the 2009 pedestrian survey was initiated in the southern portion of the A.P.E. in June and progressed north as additional areas were plowed and disced. The final portions of the surface inspection were completed in September of 2009.

The visual inspection also indicated that the non-agricultural portions of the 130-acre A.P.E. are divided between existing pastureland and a modern extant farmstead with associated outbuildings and lawn (Figure 21). These areas were determined to be predominantly suitable for a shovel probe evaluation, and systematic subsurface testing within these areas was completed during the 2009 field season. In 2004, ground surface visibility within the newly-planted winter wheat was between 90 and 95%. In 2009, ground surface visibility within the plowed, disced and rainwashed areas was also between 90 and 95%. Representative photographs taken during both field seasons have been provided in appendices A and B.

##### *Systematic*

During the 2004 field season, a total of 25 cultural materials were identified at 24 field site (FS) locations (Table 8) within the investigated portions of the 130-acre A.P.E. (approximately 28 non-contiguous linear acres). In 2009, 35 additional cultural materials were also identified at 24 additional FS locations (Table 9). A total of 60 cultural materials were recovered from the 130-acre A.P.E. in total. The distribution of all of these materials is provided in Figure 22 and representative examples of these materials are provided in figures 23 and 24. Once combined, these data provide a cultural material density of 1 artifact per 279,322 square meters (3,006,597 square feet). All of these materials were historic in origin and consistent with a mid 19<sup>th</sup> to mid 20<sup>th</sup> century date of manufacture. However, although at least five historic structures are potentially shown within this overall area on the available historic maps, only one of these structures is within the project A.P.E. However, none of the identified cultural

INSERT FIGURE 21 HERE.

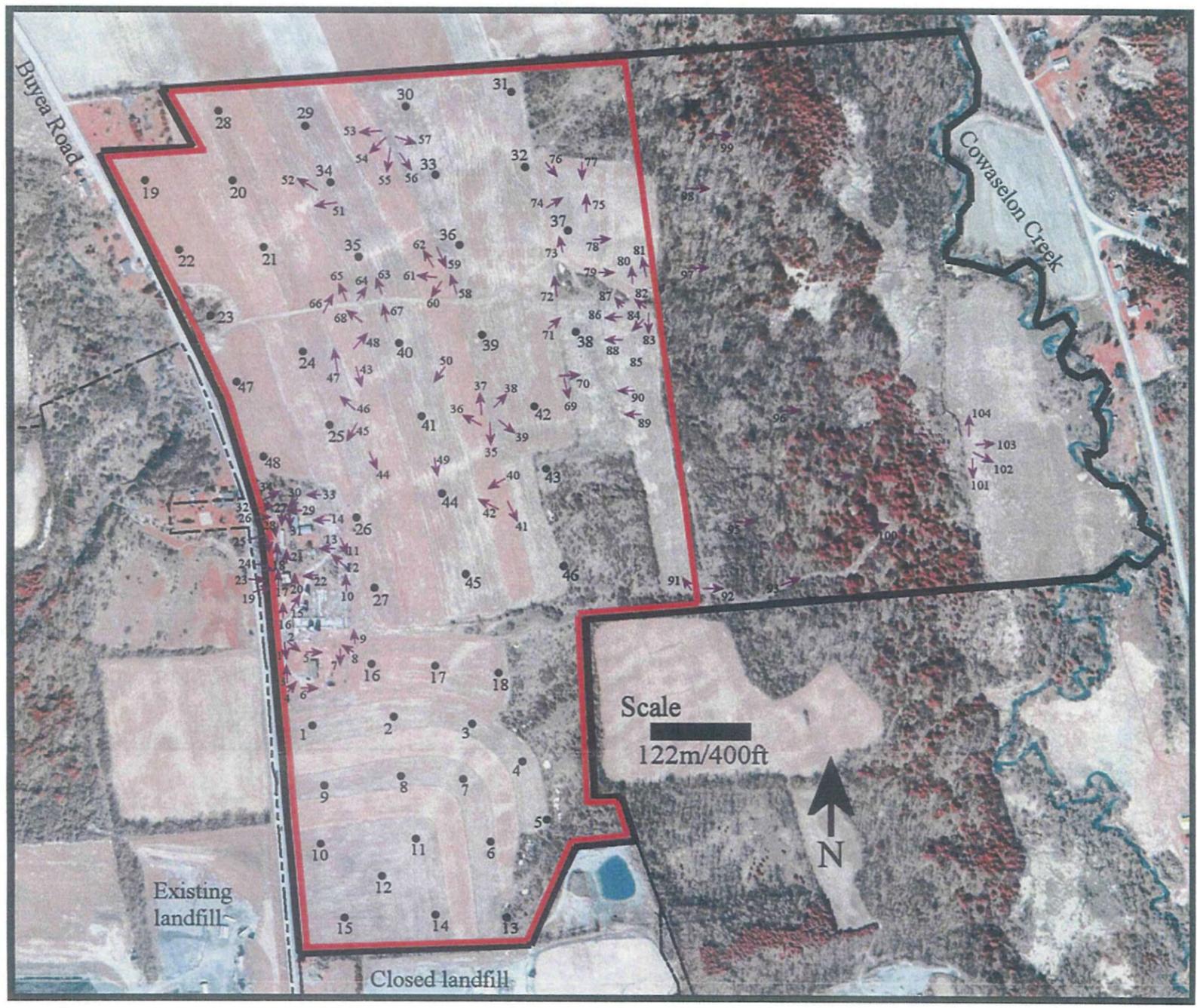


Figure 21. Location of all supplemental subsurface testing, as well as the location and orientation of all 2009 photographs, within the 130-acre soil borrow/development project area. The overall project borders are shown in black. The A.P.E. boundaries are shown in red (Adapted from a basemap provided by Barton & Loguidice, P.C.)

materials were recovered in direct or close association with any of the map documented structures. This is consistent with the virtual lack of any architectural debris. All of the cultural materials recovered from the 130-acre A.P.E. are listed in tables 8 and 9 below.

**Table 8:  
Artifacts Recovered During the 2004 Surface Inspection of the 130-acre A.P.E.**

FS#	Identification	# of Sherds	# of Vessels	Decoration	Color	Production Range/Median Date (A.D.)
100a	flat plastic sherd	1	1	undecorated	clear	20 <sup>th</sup> century
100b	flat plastic sherd	1	1	undecorated	clear	20 <sup>th</sup> century
100c	flat plastic sherd	1	1	undecorated	clear	20 <sup>th</sup> century
100d	flat plastic sherd	1	1	undecorated	clear	20 <sup>th</sup> century
100e	flat glass sherd	1	NA	NA	aqua	1800-1900+
101a	container glass rim and neck	1	1	undecorated	ame-thyst	1889-1918/1899
101b	container glass body sherd	1	1	molded raised scallop design	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
102a	flat glass sherd	2	NA	NA	aqua	1800-1900+
102b	flat glass sherd	1	NA	NA	aqua	1800-1900+
103a	ironstone body sherd	1	1	undecorated	white	1813-1900/1870
104b	2-hole metal button	1	NA	painted exterior/interior	blue	19 <sup>th</sup> to 20 <sup>th</sup> century
105a	porcelain insulator	1	1	undecorated	white	19 <sup>th</sup> to 20 <sup>th</sup> century
105b	porcelain insulator	1	1	undecorated	white	19 <sup>th</sup> to 20 <sup>th</sup> century
106a	ceramic knob	1	1	glazed	brown	19 <sup>th</sup> to 20 <sup>th</sup> century
106b	container glass body sherd	1	1	raised molded geometric design	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
106c	container milk glass body sherd	1	1	undecorated	light blue	1869 to present
106d	whiteware rim sherd	1	1	dark blue bands	white	1815-1860/1845
107a	container glass body sherd	1	1	undecorated	ame-thyst	1880-1918/1899
108a	porcelain insulator	1	1	undecorated	white	19 <sup>th</sup> to 20 <sup>th</sup> century
109a	flat glass sherd	1	NA	NA	aqua	1800-1900+
110a	lamp glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
111	container glass shoulder sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
112a	flat metal ring	1	NA	corroded	NA	19 <sup>th</sup> to 20 <sup>th</sup> century
113a	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
<b>Total Ceramic Sherd Count</b>		2				
<b>Maximum Ceramic Vessel Count</b>		2				
<b>Mean Ceramic Date (sherds/vessels)</b>		1858/1858				
<b>Total Artifact Count for 2004</b>					25	

**Table 9:  
Artifacts Recovered During the 2009 Surface Inspection of the 130-acre A.P.E.**

FS#	Identification	# of Sherds	# of Vessels	Decoration	Color	Production Range/Median Date (A.D.)
09-1	whiteware basal sherd	1	1	undecorated	white	1820-1900+/1860
09-2	container glass body sherd	1	1	molded raised geometric design	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-3	whiteware basal sherd	1	1	possible illegible blue maker's mark	white	1820-1900+/1860
09-3	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-4	whiteware basal sherd	1	1	undecorated	white	1820-1900+/1860
09-5	ironstone rim sherd	1	1	undecorated	white	1813-1900/1870
09-6	flat glass sherd	2	NA	NA	aqua	1800-1900+
09-7	flat glass sherd	1	NA	NA	clear	1800-1900+
09-8	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-8	container glass rim sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-9	ironstone body sherd	2	1	undecorated	white	1813-1900/1870
09-10	ironstone neck sherd	1	1	undecorated	white	1813-1900/1870
09-10	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-11	whiteware body sherd	2	1	undecorated	white	1820-1900+/1860
09-11	whiteware basal sherd	1	1	illegible green maker's mark	white	1820-1900+/1860
09-12	container glass shoulder sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-13	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-14	container glass shoulder sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-14	container glass rim and neck sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-15	whiteware neck sherd	1	1	undecorated	white	1820-1900+/1860
09-16	whiteware basal sherd	1	1	undecorated	white	1820-1900+/1860
09-17	container glass body sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-17	flat glass sherd	1	NA	NA	clear	1800-1900+
09-18	whiteware body sherd	1	1	undecorated but burnt	white	1820-1900+/1860
09-19	container glass neck sherd	1	1	undecorated	clear	19 <sup>th</sup> to 20 <sup>th</sup> century
09-20	whiteware basal sherd	1	1	undecorated	white	1820-1900+/1860
09-21	container glass body sherd	1	1	undecorated	aqua	19 <sup>th</sup> to 20 <sup>th</sup> century
09-21	flat glass sherd	1	NA	NA	aqua	1800-1900+

09-21	whiteware body sherd	1	1	undecorated	white	1820-1900+/1860
09-22	whiteware body sherd	1	1	undecorated	white	1820-1900+/1860
09-23	flat glass sherd	1	NA	NA	clear	1800-1900+
09-24	flat glass sherd	1	NA	NA	aqua	1800-1900+
<b>Total Ceramic Sherd Count</b>		<b>16</b>				
<b>Maximum Ceramic Vessel Count</b>		<b>14</b>				
<b>Mean Ceramic Date (sherds/vessels)</b>		<b>1863/1862</b>				
<b>Total Artifact Count for 2009</b>					<b>35</b>	
<b>Total Artifact Count for Entire Assemblage</b>					<b>60</b>	
<b>Mean Ceramic Date for Entire Ceramic Assemblage (sherds/vessels)</b>					<b>1862/1862</b>	

### *Cultural Material Analysis*

A total of 60 artifacts (tables 8 and 9) were recovered from an approximately 895 x 312 meter (2,939 x 1,023 foot) area, giving a cultural material density of 1 artifact per 279,322 square meters (3,006,597 square feet). However, the distribution of these materials along the lower portions of moderate to steep slopes and within low wash areas strongly suggests that this pattern is the result of natural taphonomic processes. Although the majority of these materials were identified within the southern portion of the A.P.E. to the south of the existing homestead, a very light scattering of materials was identified further to the north (Figure 22). However, as these northern materials were also recovered from low wash areas, all of the materials identified within the 130-acre A.P.E. were determined to be in secondary context. All of these materials were also recovered from the surface of an A<sub>p</sub> horizon within moderately to severely eroded soils.

All cultural materials were recovered from the surface of the plowzone, which averaged 16 cm (6 inches) in depth throughout this area and consisted of a brown to dark brown to dark yellowish brown silt loam to firm silt loam. Representative examples of these materials are provided in figures 23 and 24. The recovered materials consisted of 4 clear, flat plastic sherds, 9 aqua flat glass sherds, 3 clear flat glass sherds, 14 clear container glass sherds (2 neck, 3 shoulder, 7 body, 1 rim, 1 rim and neck), 1 aqua container glass body sherd, 1 clear container glass body sherd with a molded raised geometric design, 1 clear lamp glass body sherd, 1 clear pressed glass container body sherd, 1 amethyst glass container body sherd, 1 milk glass container body sherd, 5 undecorated ironstone sherds (3 body, 1 rim, 1 neck), 10 undecorated whiteware sherds (5 body [1 burnt], 1 neck, 4 basal), 1 undecorated whiteware basal sherd with portions of a possible maker's mark in blue, 1 undecorated whiteware basal sherd with portions of a possible maker's mark in green, 1 whiteware rim sherd with blue and white stripes, 1 ceramic knob with a brown and gold glaze, 3 white ceramic insulators (2 with attached metal wire fragments), 1 2-hole metal button with a blue painted exterior and 1 flat metal ring. The clear flat plastic sherds are consistent with safety window fragments from agricultural equipment. The flat metal ring is also consistent with agricultural use-loss, while the ceramic insulators could represent the widely scattered remains of an old fence. The remainder of these materials are all consistent with the well documented 19<sup>th</sup> century occupation of the overall area. The relative lack of any architectural materials also supports the map documented evidence that no historic structures were present within these specific areas. None of the recovered materials were diagnostic. Overall, these materials were consistent with random historic discard, perhaps as a result of agricultural activities.

Plain, undecorated whitewares became common after 1820 and represented the cheapest form of tableware available at the time. As a result, it was present in the majority of households by 1840. However, as it had an extended period of production and was still being manufactured as late as 1930, its use as a temporal diagnostic is somewhat limited. Nevertheless, undecorated whitewares are generally assigned a production range from 1820 until after 1900, with a median date of 1860. Likewise, unmolded and undecorated ironstone was both popular and readily available throughout its production period of between 1813 and 1900. Therefore, although undecorated ironstone has a median date of 1870, given this wide use span, they are also not particularly diagnostic. Annular banded whitewares were produced from 1815 through 1860 with a median production date of 1845. Amethyst glass was produced from 1880 to 1918 with a median production date of 1899. Milk glass was produced from 1869 onward, up through the 20<sup>th</sup> century. As a result, all of these materials are consistent with an historic occupation from the mid 19<sup>th</sup> century onward.

INSERT FIGURE 22 HERE