

RESULTS OF THE DATA RECOVERY EXCAVATIONS

Plowzone Sampling Summary

Archaeologists conducted the proposed Data Recovery excavation program in the six steps proposed in the research design. They staked out the impact areas, reestablished previous testing grid, and then sampled the plowzone with 50-cm-square test pits spaced two-meters apart in a grid formation with cruciform testing following initial testing.

The total plowzone sample in lots 1 and 2 was between 5.2 and 16.6 % of the plowzone with the average being 6.6% (Table 1). Sampling yields varied due to the horizontal extent of the

Table 1. Sampling strategy yields north end Lots 1 and 2*

Lot/ Area	Total Area	STP	Cruciform	Anomaly	B1	Total APZ	Total B1
1/ House	161.5	9.5	10.25	19	9.5	19.75/ 12.2%	28.5/ 17.6%
1/ Septic	60	0.5	3.75	1	3.5	7.25/ 12%	4.5/ 7.5%
1N/ House	161.5	8.5	0	8	8.5	8.5/ 5.2%	16.5/ 10.2%
1N/ Septic	60	3.75	0	0	3.75	3.75/ 6.25%	3.75/ 6.25%
2/ House	161.5	11.25	15.5	33	11.25	26.75/ 16.6%	44.25/ 27.4%
2/ Septic	60	3.5	2.25	2	3.5	5.75/ 9.6%	5.5/ 9.2%

*areas presented in square meters

artifact distributions. Shovel testing sampled a between 6.25 and 27.4% of the subsoil. The percentage sampled in each lot varied due to the number and extent of the anomalies encountered (Table 1). Lot 2 house received the largest amount of subsoil sampling due to the dense concentration of anomalies in the southeastern corner of the lot which resulted in most of that corner being excavated. Subsoil sampling failed to yield appreciable amounts of material in most cases except the southeastern corner of Lot 2. This indicates that most of the occupation evidence in Lots 1 and 2 has been severely affected by historic plowing.

Fieldwork Results

Lot 1 Septic

The impact area for the originally proposed septic leaching field in Lot 1 measured 6 meters by 10 meters oriented with its long axis perpendicular to north end . Archaeologists excavated a total of 13 test pits within the plowzone in the area of the proposed septic leaching field (**Figure 1**). The field crew subjected the four test pits that yielded more than 10 pieces of Native material (pottery and lithics) to cruciform testing. Cruciform testing extended only 50 cm (one test pit) from the original test pit in all cases except one. At test pit N298 E196, testing extended one meter (two test pits) to the south of the original test pit. The four small concentrations of Native material identified in the plowzone extend over a total area of 7.5 meters (east to west) by six meters (north to south). All four small concentrations may form part of one large lithic reduction episode in this area of the lot.

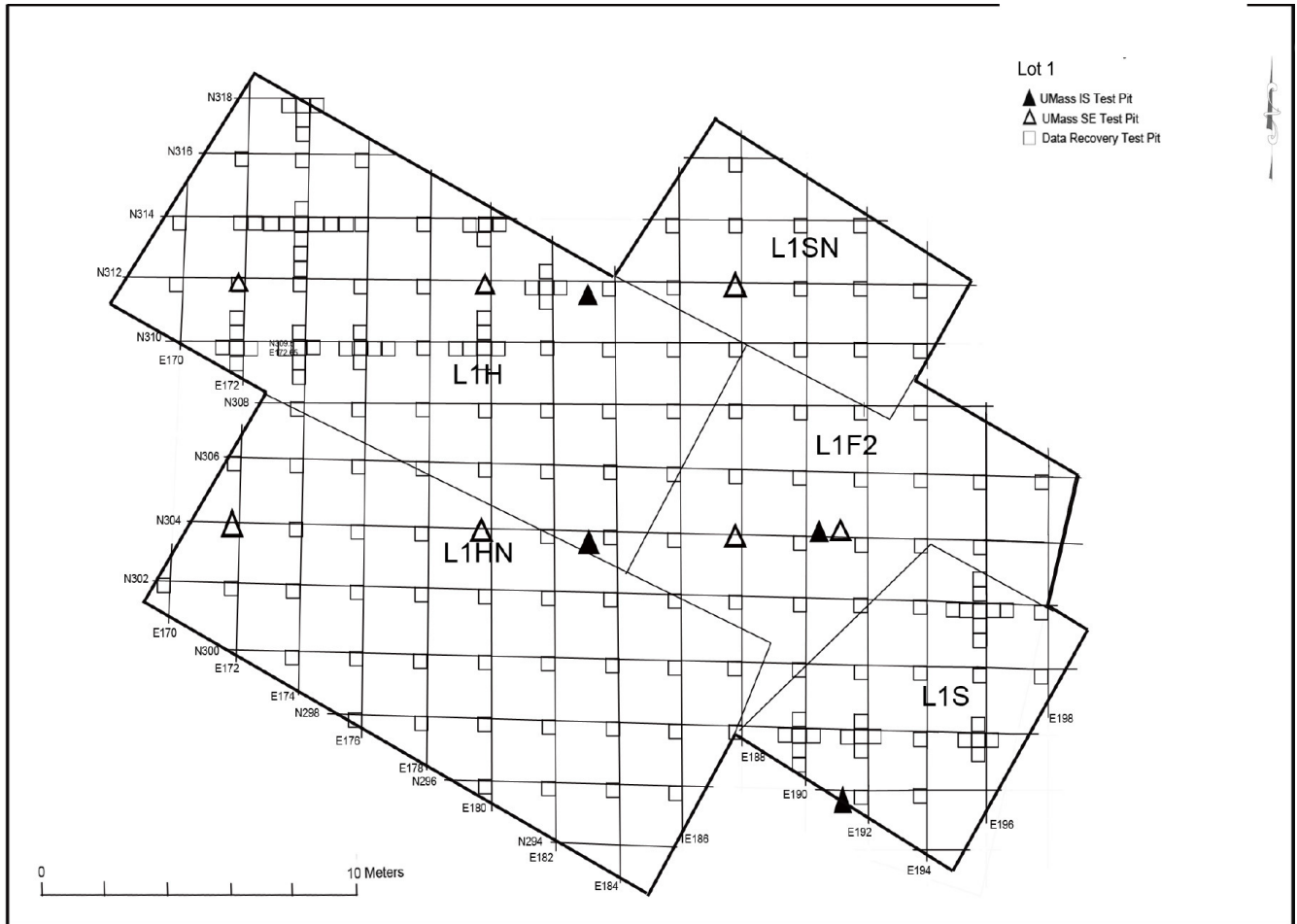


Figure 1. Lot 1 Data Recovery testing.

Testing recovered 364 artifacts from the Lot 1 Septic area (Table 2). Of these, 115 (31.7%) dated

Table 2. Gross artifact counts Lots 1 and 2

Artifact	Lot 1H	Lot 1 S	Lot 1N H	N300 E178	Lot 1N S	Lot 2 H	Lot 2 S
Historic	1096	115	99	628	26	844	58
Charcoal	38	0	6	2241	0	753	34
Unburned Faunal	0	0	0	185	0	45	0
Calcined Faunal	8	3	18	5	0	261	3
Shell	0	1	0	0	0	47	0
Lithic	1052	245	127	95	18	2395	56
Pottery	23	0	25	0	1	601	0
Total	2217	364	275	3154	45	4946	151

from the historic period including ceramics (brick, redware, creamware, pearlware, tobacco pipes), glass (flat and curved), metal (hand-wrought and machine-cut nails, button and unidentifiable fragments) and coal. Also recovered were three pieces of calcined mammal bone and one shell fragment that may date to either the prehistoric or historic period. Recovered were 245 artifacts that date to Native activities in this section of the lot.

Lithic artifacts including fire-cracked rock (n=15), quartz (n=193), rhyolite (n=21), chert (N=1), hornfels (n=1), Pennsylvania jasper (n=1), and quartzite (n=1) reduction debris (flakes, cores and shatter) made up the entirety of the Native artifact assemblage. Several tools and tool fragments were also recovered including three quartz projectile points (two Squibnocket Triangles and one Small Stemmed), one quartz biface, one hornfels uniface, one granite pounding stone, two rhyolite projectile point fragments, one rhyolite Small Stemmed point, one rhyolite biface and one rhyolite uniface (Table 3). The tools recovered indicate Late Archaic to Early Woodland occupation for this area with activities including lithic reduction and tool maintenance and possibly the processing of plant materials.

Table 3. Non-reduction lithic artifacts Lots 1 and 2

Artifact	Lot 1S	Lot 1H	Lot 1SN	Lot 1HN	Lot 2S	Lot 2H
Quartz						
Core	1	4			1	6
Hammerstone						1
Uniface		1		1		5
Biface	1	6		4		10
Pt Tip						1
Squibnocket	2	1	1	1		1
Small Stemmed	1	1			1	
Levanna				1		1
Rhyolite						
Core						4
Uniface	1					1
Utilized flake						1
Biface	1	1		1		8
Preform						1
Point Frag	2	2				
Small Stemmed	1					1
Squibnocket				1		
Rossville		1				
Levanna						1
Stark						5
Neville						3
Orient						1
Susquehanna						1
Hornfels						
Uniface	1					
Stark						1
Chert						
Biface		1				
Pt tip						1
Levanna						1
Mudstone						
Levanna		1				
Quartzite						
Brewerton		1				
Core			1			
Preform						1
Neville						1
Stark						2

Table 3. (continued)

Artifact	Lot 1S	Lot 1H	Lot 1SN	Lot 1HN	Lot 2S	Lot 2H
Pt Tip						1
Argillite						
Muller				1		
Hammerstone						1
Blade						1
Preform						1
Uniface						2
Utilized flake						1
Neville						3
Volcanic						
Uniface						1
Schist						
Pendent						1
Celt						1
Sharpening Stone						1
Pestle				1		
Attleborough Red Felsite						
Biface						2
Granite						
Pounding Stone	1					
Totals	12	20	2	11	2	75

Following plowzone and cruciform testing, the plowzone was mechanically stripped using a backhoe. Stripping exposed only one soil anomaly, and oval stain measuring 24 x 28 cm that extended only four centimeters below the plowzone. Excavation identified this stain as likely being natural.

Lot 1 House

The impact area for the originally proposed house envelope in Lot 1 measured 8.5 meters by 19 meters and oriented with its long axis parallel to north end . Field testing consisted of the excavation of 38 test pits within the plowzone in the area of the proposed house envelope. Eight test pits yielding more than 10 pieces of Native material (pottery and lithics) received cruciform testing. Cruciform testing extended between 50 cm (one test pit) to 150 centimeters (three test pits) away from the original test pit (**Figure 1**). Cruciform testing identified either four concentrations of Native material identified in the

plowzone existing between 1.5 to 2.5 meters from each other, or one smaller (1 x 1 m) and one larger (6 x 12.5 m) concentrations.

Recovered from the Lot 1 House impact area were 2217 artifacts (Table 2). Out of these, 1096 (51.8%) were historic materials including ceramics (brick, redware, creamware, pearlware, porcelain, slipware, stoneware, whiteware), glass (flat and curved), metal (hand-wrought and machine-cut nails, button, one 1783 dated coin, kettle fragment, blade, shoe buckle, wire, and unidentifiable fragments) and coal. Testing also recovered eight pieces of calcined mammal bone that may date to either the prehistoric or historic period. Testing recovered 1078 artifacts associated with Native activities in this section of the lot. Lithic artifacts including fire-cracked rock (n=4), quartz (n=948), rhyolite (n=25), chert (N=4), and quartzite (n=3) reduction debris (flakes, cores and shatter) made up the artifact assemblage. Several tools and tool fragments were also recovered including two quartz projectile points (Squibnocket Triangle, Small Stemmed), six quartz bifaces, one quartz uniface, one quartzite point (Brewerton), two pieces of possibly worked hematite, two rhyolite projectile point fragments, one rhyolite Small Stemmed point, one chert biface, one mudstone point (Levanna), one rhyolite biface, one rhyolite point (Rossville), and two rhyolite point fragments (Table 3). The tools recovered show Late Archaic to Early Woodland and Late Woodland period occupation for this area with activities including lithic reduction and tool maintenance. Two fragments of carbonized corn cob, two carbonized seeds, and one possible carbonized corn kernel show the possible horticultural activity and processing of plant materials as well. A total of 23 sherds of Native pottery were also recovered including 10 sherds of grit-tempered and 13 sherds of shell-tempered.

Following plowzone and cruciform testing, the plowzone was mechanically stripped using a backhoe. Stripping revealed 21 anomalies, most being Native in origin (**Figure 2**). The other anomalies were natural tree and bush holes. Identification of an anomaly as either natural or cultural took place after complete excavation and recording. Anomalies that maintained an amorphous shape or which did not end in an identifiable bottom but with a tapering small stains that often meandered away from the main stain, were natural. Stains with clearly defined edges which maintained fair to excellent integrity throughout excavation and which extended further than a minimum of five centimeters below the plowzone, were cultural. Presence and absence of artifactual remains was also considered, but more as to whether the artifacts were likely associated with Native or historic period occupation. Absence of artifacts did not automatically negate the potential significance of the anomaly or result in it being identified as a natural stain. Testing identified several stains as associated with a large tree stain and its root system in the southeast corner of the impact area. This stain system extended from that corner to the northeast. Located in the western third of the impact area were three culturally derived anomalies. They consisted of one large (85 x 75 cm wide x 45 cm deep) probable storage pit (N315.1 E170.6) that was later used as a refuse pit. This anomaly contained many quartz retouch and small thinning flakes as well as the possible corn and corn cob fragments. Blaine Borden identified the floral material. The second anomaly (N311.3 E169.5) was a one meter long but only 50 cm wide oval stain with a smaller circular stain at one end. The largest portion of this stain disappeared after five centimeters but the smaller stain, measuring 30 cm in diameter, extended to 40 cmbs and appears to represent either a larger posthole or small pit. Excavation recovered quartz and rhyolite chipping debris from this anomaly and one rhyolite Rossville point from the surface before excavation. Anomaly (N312.15 E173.55) was a possible double pit excavated in very gravelly and rocky soil. The anomaly measured 89 x 56 cm on the surface of the B1 and extended to a total depth of 41 cm below surface. The profile

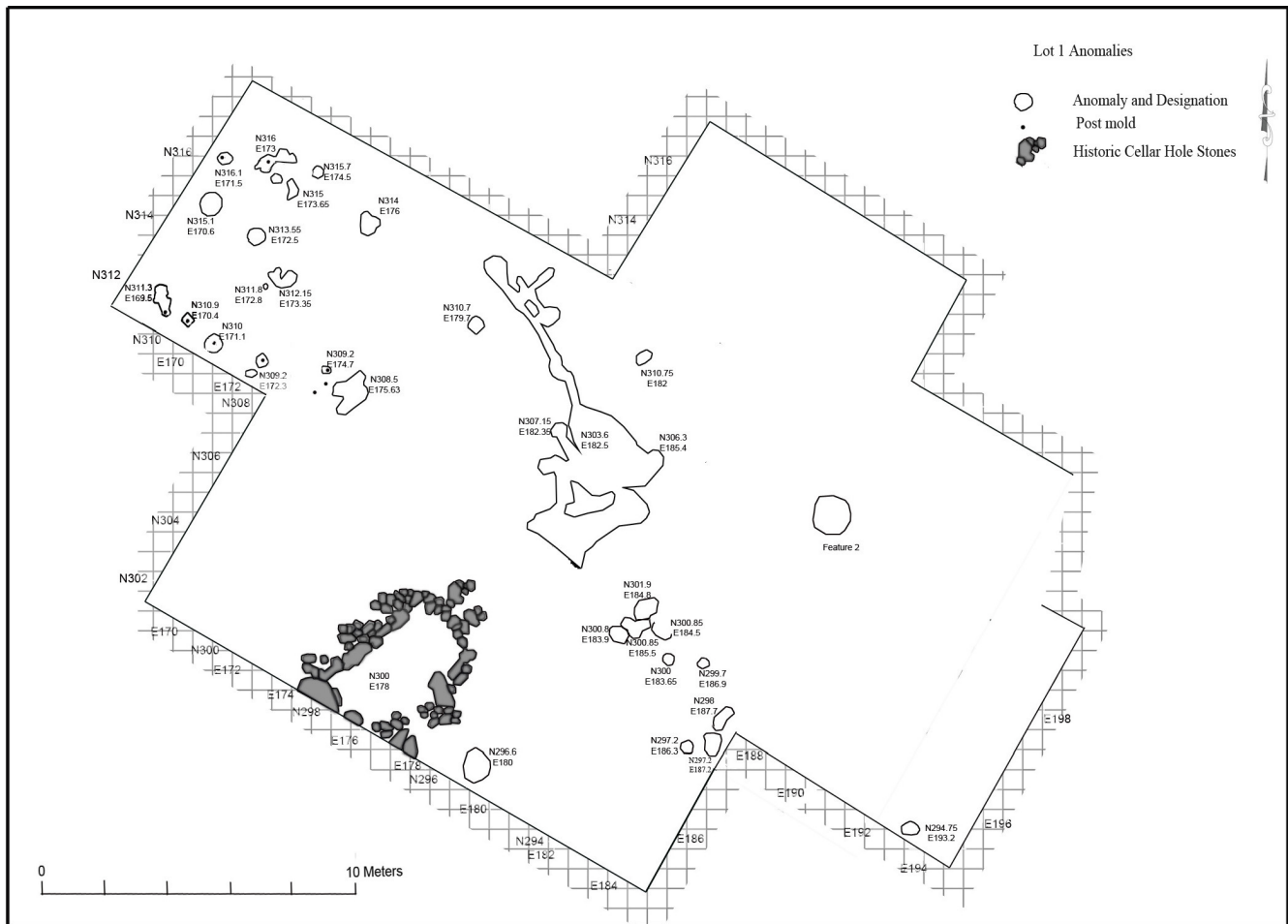


Figure 2. Lot 1 anomalies

of this stain showed two separate pointed pit-like stains. Excavation recovered several pieces of quartz shatter and reduction debitage.

Lot 1 Septic New

Design changes initiated by the proponent’s desire locate the house in Lot 1 farther away from the existing neighboring house to the west. The new location of the house was more to the east and south than was originally planned and the septic system location was now north of the house instead of east. Because the impact areas by the new house and septic locations have not been previously tested, there was a need for further testing in Lot 1.

The impact area for the new septic leaching field in Lot 1 measured 6 meters by 10 meters oriented with its long axis perpendicular to north end . Excavation consisted of 15 test pits within the plowzone in the proposed septic leaching field (**Figure 1**). None of the test pits yielded at least 10 pieces of Native material (pottery and lithics) and none received additional cruciform testing.

Testing recovered 45 artifacts from this area. Out of these, 26 (72.2%) were historic materials including ceramics (brick, redware, creamware, pearlware), glass (flat) and coal (Table 2). Excavation recovered 19 artifacts associated with Native activities. Lithic artifacts including quartz (n=13), rhyolite (n=3), and quartzite (n=2) reduction debris (flakes, cores and shatter) made up the Native artifact assemblage. The only tool recovered was a quartz Squibnocket Triangle (Table 3). This indicates Late Archaic to Early Woodland occupation for this area with activities including lithic reduction and tool maintenance. One sherd of grit-tempered Native pottery was also recovered, indicating Woodland period occupation of this area as well. This area was a peripheral, low-density scatter associated with slightly larger deposits to the south and east.

Following plowzone and cruciform testing, the plowzone was mechanically stripped using a backhoe. Stripping revealed no soil anomalies (**Figure 2**). B1 testing yielded no additional artifacts.

Lot 1 House New

The impact area for the new house envelope in Lot 1 measured 8.5 meters by 19 meters, oriented with its long axis parallel to north end. Testing consisted of 32 test pits within the plowzone in the new area of the proposed house (**Figure 1**). The northwestern corner of the house envelope was found to overlap the previously tested house envelope area. The northeastern edge of the new house envelope was adjacent to the southwestern edge of the original septic impact area. No test pits yielded more than nine pieces of Native material (pottery and lithics) and as a result, no cruciform testing took place. Several test pits in the vicinity of test pit N300 E178 encountered an area of dense cobbles. This nature of this anomaly became clearer with the plowzone stripping.

Testing recovered 3429 artifacts from this impact area (Table 2). Anomaly N300 E178, an eighteenth to early nineteenth century cellarhole, yielded 3154 artifacts. The remaining 275 artifacts came from across the impact area. Of the 275 artifacts, 99 (36%) were historic materials including ceramics (brick, redware, creamware, pearlware, tobacco pipes), glass (flat and curved), metal (buckle, hand-wrought and machine-cut nails) and coal. Also recovered were 18 pieces of calcined mammal bones that may date to either the prehistoric or historic period. Testing recovered 95 artifacts associated with Native activities in this section of the lot consisting of lithic artifacts including quartz (n=83), rhyolite (n=38), and quartzite (n=4) reduction debris (flakes, cores and shatter). Several tools and tool fragments were also recovered including two quartz projectile points (Squibnocket Triangle and Levanna), four quartz biface, one quartz uniface, one rhyolite Squibnocket Triangle and one biface, one fragment of a banded schist pestle, one possible muller and 25 pottery fragments (Table 3). Only two of the pottery fragments were grit-tempered, the rest being severely burned shell-tempered fragments recovered from the anomalies. The tools recovered indicate Late Archaic to Early Woodland and Late Woodland occupation for this area with activities including lithic reduction and tool maintenance, cooking and the processing of plant remains.

The plowzone was mechanically stripped using a backhoe following plowzone testing. Stripping revealed 11 soil anomalies (**Figure 2**). Five of these anomalies, all in the northeastern corner of the impact area, are prehistoric in origin. Five of the remaining anomalies are tree or rodent holes while the sixth (N300 E178) was a rectangular dry-laid stone cellarhole associated with a previously undocumented structure dating to the eighteenth to early nineteenth century.

Lot 2 Septic

The impact area for the septic leaching field in Lot 2 measured 6 meters by 10 meters, oriented with its long axis perpendicular to north end . Testing consisted of 15 test pits within the plowzone in the area of the proposed septic leaching field (**Figure 3**). Cruciform testing occurred around one test pit that

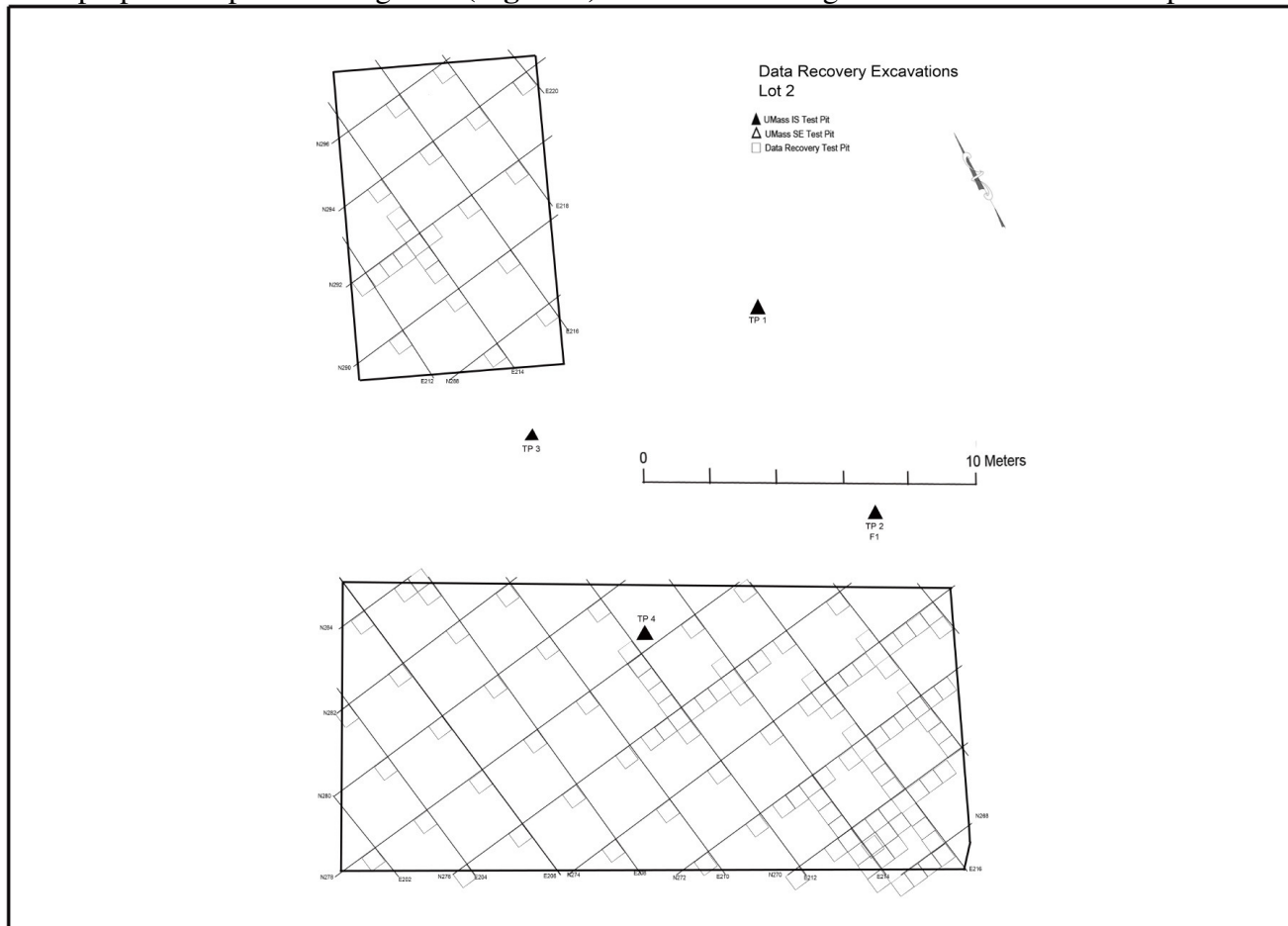


Figure 3. Lot 2 testing

yielded more than 10 pieces of Native material (lithics). Cruciform testing extended up to 100 cm (two test pits) from the original test pit on all sides except for the west where it extended for 150 cm (three test pits). This one small concentration extended over an area of three meters (east to west) by 2.5 meters (north to south).

Excavation recovered 151 artifacts from the Lot 2 Septic area (Table 2). Of these, 58 (38.4%) were historic materials including ceramics (brick, redware, creamware, pearlware, tobacco pipes), glass (curved), metal (machine-cut nails, buttons and unidentifiable fragments) and coal. The three pieces of calcined mammal bone recovered may date to either the prehistoric or historic period. Native artifacts consisted of 56 lithic artifacts including fire-cracked rock (n=8), quartz (n=43), and rhyolite (n=3) reduction debris (flakes, cores and shatter). One quartz Small Stemmed point was also recovered (Table 3). The Small Stemmed point indicates Late Archaic to Early Woodland occupation for this area with activities limited to lithic reduction.

The one soil anomaly identified (N292 E214.5) was a 132 x 98 cm roughly oval stain that extended 20 cm below the plowzone (**Figure 4**). This stain contained lots of very solid charcoal and one piece of

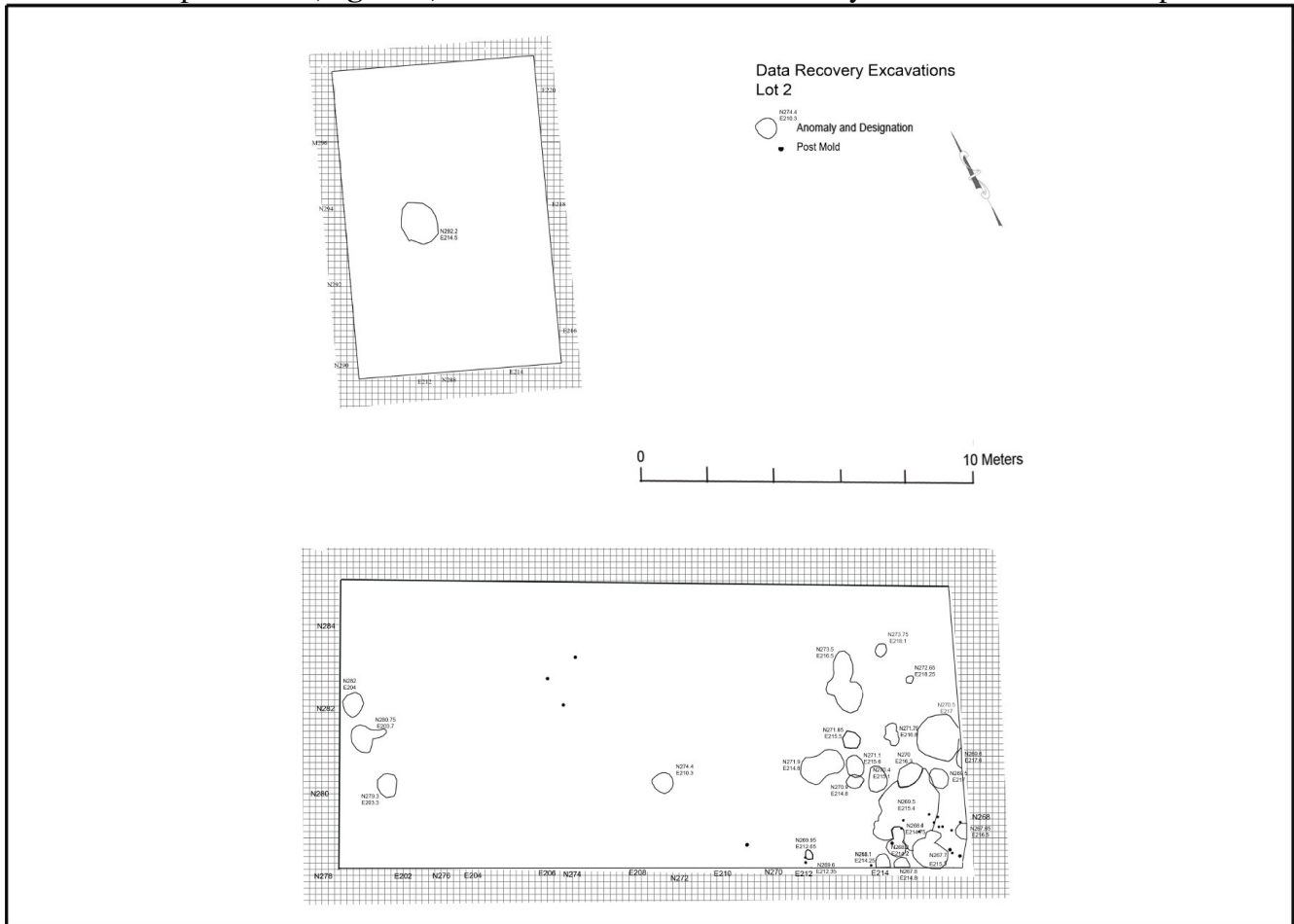


Figure 4. Lot 2 anomalies

clear glass that is intrusive. The anomaly was likely the result of prehistoric occupation, possibly having an original use as a storage pit and then being used as a refuse deposition area. Plowzone stripping also encountered two percolation test locations and an area of severe disturbance resulting from root activity in the northwest corner of the impact area.

Lot 2 House

The impact area for the house envelope in Lot 2 measured 8.5 meters by 19 meters, oriented with its long axis parallel to north end. Testing consisted of the excavation of 45 test pits, totaling 11.25 square meters. Fourteen test pits yielding more than 10 pieces of Native material culture received cruciform testing (**Figure 3**). Cruciform testing extended only 50 cm out from at least two sides of several test pits while in other cases cruciform testing extended to the point that it became connected between the original test pits. This likely indicates that these areas of testing either represent overlapping separate episodes or one or two larger deposits. At least two of the depositions correlate well with the prehistoric anomalies encountered below them. It is tentatively proposed that there are four possibly separate

concentrations in this area. Cruciform testing excavated 69 additional test pits, totaling 17.25 square meters.

Excavation recovered 4946 artifacts from the Lot 2 House area (Table 2). Out of these, 844 (17.1%) were historic materials including ceramics (brick, redware, creamware, pearlware, porcelain, stoneware, whiteware, slipware), glass (flat and curved), metal (hand-wrought and machine-cut nails, button, key, links, and unidentifiable fragments) and coal. Also recovered were 354 pieces of faunal material, calcined bone (n=261), unburned bone (n=31), egg shell (n=15) and shell fragments (n=47). The unburned bone consisted mainly of material recovered from a recent dumping deposit that occurred along with the eggshell. Recovery of most of the calcined bone was from the southeastern corner of the lot in the area of dense anomalies associated with the Late Woodland period.

Lithic artifacts associated with Native occupation of this impact area totaled 2996 pieces composed of of lithic artifacts including fire-cracked rock (n=232), quartz (n=1845), rhyolite (n=187), chert (N=4), hornfels (n=60), Attleborough red felsite (n=10), Argillite (n=24), flow banded volcanics (n=10) and quartzite (n=30) reduction debris (flakes, cores and shatter). Formal tools consisted of 75 tools and tool fragments including two quartz points (Squibnocket Triangle and Levanna), ten quartz bifaces, one quartz hammerstone, five quartz unifaces, one quartz point tip, one hornfels Stark point, one argillite blade, one argillite hammerstone, three argillite Nevilles, one argillite preform, two argillite unifaces, one argillite utilized flake, two Attleborough red felsite bifaces, one chert Levanna, one quartzite Neville, two quartzite Starks, one quartzite preform, one quartzite point tip, 12 rhyolite points (Neville (n=3), Stark (n=5), Orient Fishtail, Small Stemmed, Susquehanna Broad, Levanna), eight rhyolite bifaces, one rhyolite preform, one rhyolite utilized flake, one rhyolite uniface, one schist pendent, one schist celt, and one schist sharpening stone (Table 3). The tools recovered indicate Middle Archaic to Late Woodland occupation for this area with activities including lithic reduction and tool maintenance and possibly the processing of animal materials. Six hundred and one sherds of Native pottery were also recovered with the majority (n=597) being grit-tempered and decorated with incised lines and rocker stamping. The remaining four sherds were shell-tempered. Preliminary analysis indicates a strong correlation of argillite, Attleborough red felsite, hornfels and quartzite with the Middle Archaic occupation and rhyolite and quartz with all periods of occupation.

Following plowzone and cruciform testing, the plowzone was mechanically stripped using a backhoe. Stripping revealed 32 anomalies, 18 which were prehistoric and 14 either historic or natural (**Figure 4**).

The eastern half of the impact area showed a strong concentration of anomalies. They represent Native people's use of the area for lithic reduction, cooking and possibly as a small seasonal base camp. Excavation found Middle Archaic material concentrated in the southeastern corner where it was first encountered during the excavation of Late Woodland anomalies. Complete excavation of the area occurred though B1 sampling and an anomaly excavation strategy of using 1 x 1 m squares around the anomalies. Field crews excavated the entire area from N269 E214 -N269 E217 north to N272 E210 -N272 E219 to an average depth of 75 cmbs. The location of this concentration on the southern sloping portion of the lot and may indicate a Middle Archaic and Late Woodland occupation focus either oriented towards the river to the south or to a previously unidentified former wetland area next to the southern side of Lot 2. Excavation in the remainder of the lot failed to encounter any other Middle Archaic or potential Middle Archaic anomalies. The recovery of several complete and fragmentary

Stark and Neville points within a relatively small area with relatively fewer other tools being present may indicate a different type of occupation during the Middle Archaic versus the Late Woodland. Lithic analysis will attempt to determine the degree of mobility represented by the assemblage and the potential type of occupation represented by the Middle Archaic assemblage.

Lots 4-8

Excavation of Lots 4-8 followed the same six steps used in north end lots 1 and 2. Because most of the impact areas had only been minimally tested and most of the material was from the plowzone, the use of distribution transect testing provided a better understanding of the distributions of artifacts within each impact area and allowed for finer focusing of the later excavation. The results of distribution transect testing, was that high density areas were more completely tested to gain a better understanding of the Native utilization of the space. Distribution transect testing utilized transects of 50 x 50 cm shovel excavated test pits spaced 2 meters apart with the plowzone excavated and screened as one soil level to the top of the B1 subsoil horizon.

Excavation began with transect testing of the plowzone and continued with cruciform testing of areas of high density. Cruciform testing yielded an extra percentage to the plowzone sample resulting in a total plowzone sample being between 4.4 and 33.75% of the plowzone with the average being 10.5% (Table 4) of the impact area. Impact area size varied slightly in lots 5, 7, and 8 due to a cement turkey

Table 4. Sampling strategy yields lots 4-8*

Location	Total Impact Area	Original TP Count/ Area	Cruciform TPs Count/ Area	Anom Subsoil Area	B1 Area	Total APz	Total B1
Lot 4 H	180 m sq	49/ 12.25	49/ 12.25	23.97	12.25	24.5/ 13.6%	36.22/ 20.1%
Lot 4S	60 m sq	15/ 3.75	66/ 16.5	29.2	3.75	20.25/ 33.75%	32.95/ 54.9%
Lot 5H	151.9 m sq	40/ 10	49/ 12.25	19.34	10	22.25/ 14.7%	29.34/ 19.3%
Lot 5S	60 m sq	15/ 3.75	0	0	3.75	3.75/ 6.25%	3.75/ 6.25%
Lot 6H	180 m sq	49/ 12.25	58/ 14.5	27.3	12.25	26.75/ 14.9%	39.55/ 22%
Lot 6S	60 m sq	15/ 3.75	26/ 6.5	12.02	3.75	10.25/ 17.1%	15.77/ 26.3%
Lot 7H	180 m sq	48/ 12	0	8.96	12	12/ 6.7%	20.96/ 11.6%
Lot 7S	60 m sq	15/ 3.75	2/ .5	0	0	4.25/ 7.1%	0
Lot 7HN	180 m sq	32/ 8	0	7.43	8	8/ 4.4%	15.43/ 8.6%
Lot 7SN	20 m sq	5/ 1.25	0	17.21	3.75	1.25/ 6.25%	20.96/ 34.9%
Lot 8 H	180 m sq	48/ 12	0	0	0	12/ 6.7%	0
Lot 8S	60 m sq	14/ 3.5	0	6.71	3.5	3.5/ 5.8%	10.21/ 17%
Lot 8 HN	180 m sq	48/ 12	0	8.74	12	12/ 6.7%	20.74/ 11.5%

*all area measurements are in square meters

coop foundation in the eastern third of the Lot 5 house impact area. Changes necessitated the shifting of the house impact areas, and in Lot 7 the septic impact area as well, to the east. This shifting caused the new house and septic locations in Lot 7 to overlap the original, previously tested house impact area. Overall, sampling yields varied due to the horizontal extent of the artifact distributions.

Following the sampling of the plowzone and examination of the horizontal and vertical distribution of the artifact concentrations, the plowzone was machine stripped to just above the B1 horizon using heavy equipment supplied by the Proponent. Stripping occurred only from the area defined as the impact areas of the house and septic systems. The resulting stripped areas were shovel and trowel scraped to expose anomalies.

Anomalies were given identification numbers that defined the center point of the stain as visible following shovel scraping and troweling. Each anomaly was then mapped on an overall map of that lot and archaeologists excavated using 1-x-1 meter squares. Two of the anomalies contained human bone and represented human grave shafts. Excavation of the original test pits into the B1 subsoil followed anomaly testing. Excavation provided a 6.25-34.9% sample of the subsoil. The percentage sampled in each lot varied due to the number and extent of the anomalies. Subsoil sampling failed to yield appreciable amounts of material indicating that the majority of the evidence of the occupations in Lots 4-8 have been severely impacted by historic plowing and that the evidence for occupation and utilization of the area best evidenced as artifact concentrations in the plowzone and anomalies that extended into the subsoil.

Plowzone testing

Archaeologists carried out plowzone sampling to examine the possibility of identifying artifact concentrations relating to activities carried out at the site including refuse disposal patterns. Field crew carried out cruciform testing around test pits from the original 2-meter grid that yielded 10 or more pieces (≥ 40 pieces per square meter) of Native artifactual material (especially lithic debitage, fire cracked rock and pottery fragments) (**Figures 5-9**). Cruciform testing sought to examine the horizontal distribution of artifact concentrations. Excavation of an average of 46 original test pits in each proposed house impact area and an average of 14 original test pits in each proposed septic impact area occurred. Archaeologists excavated additional cruciform test pits in the following locations: Lot 4 and 6 house and septic impact areas, Lot 5 house impact area and the Lot 7 septic impact area. None of the original test pits in the Lot 5 septic, Lot 7 and 8 original or new house impact areas, or in the Lot 7 new septic and Lot 8 septic impact area, yielded 10 or more pieces per test pit.

Anomaly testing

Following the original test pit and cruciform testing, the plowzone was machine stripped off in each impact area and the subsoil was hand stripped using a combination of shovel shaving followed by careful troweling. Field crew identified flagged and drew, photographed, and individually excavated the anomalies exposed by topsoil stripping.

Stripping revealed 176 anomalies with 174 being completely excavated (**Figures 10-14**). This report discusses the anomalies further below under anomaly analysis section of this report. Appendix G contains a full description of each anomaly. Post molds, potential post molds and the identified but investigated anomalies from the original Lot 8 House impact area are not shown in this analysis.

Subsoil Testing

The subsoil (B1 horizon) was tested in each impact area. Testing included the excavation of a square to rectangular excavation unit around each anomaly, 1 x 1 m units in areas of lithic concentrations in the subsoil, and 50 x 50 cm test pits at the 2 m. grid test pit locations. All subsoil excavation went to an

average depth of 50 cmbs, the average depth of the B2 horizon. Table 4 shows the total subsoil area excavated for each impact area. Subsoil sampling ranged between 6.25% to 54.8% of the total impact area. The Lot 5 proposed septic impact area, which had a low artifact recovery rate and no anomalies, had only plowzone and subsoil testing. The Lot 4 proposed septic location saw the highest amount of subsoil testing because of a wide quartz debitage concentration in the plowzone that continued into the subsoil for a maximum of 10 cm. Archaeologists calculated the area of subsoil testing around the anomalies by determining the area for the overall excavation around each anomaly and then subtracting the surface area of each anomaly from the total anomaly excavation area.

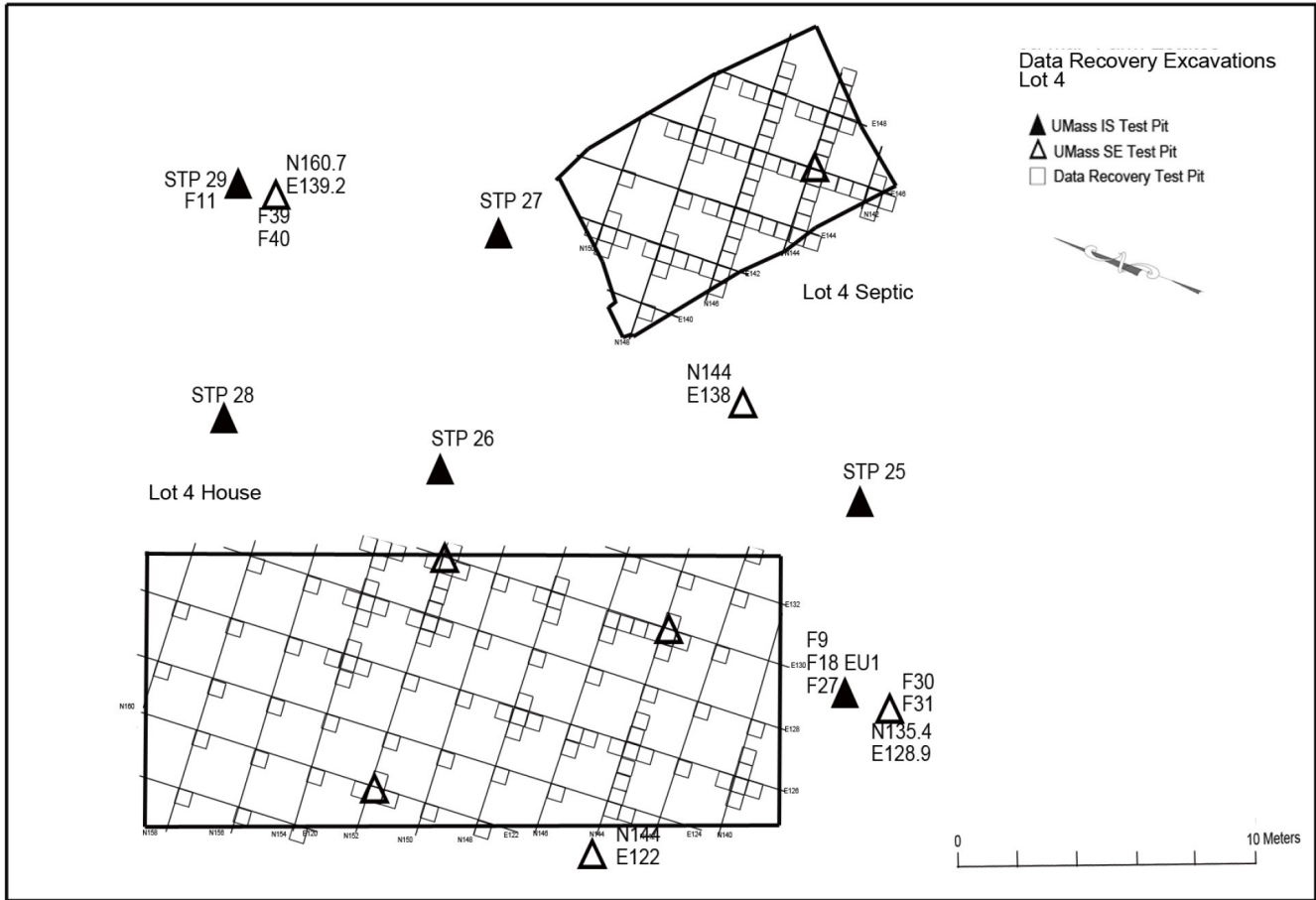


Figure 5. Lot 4 testing

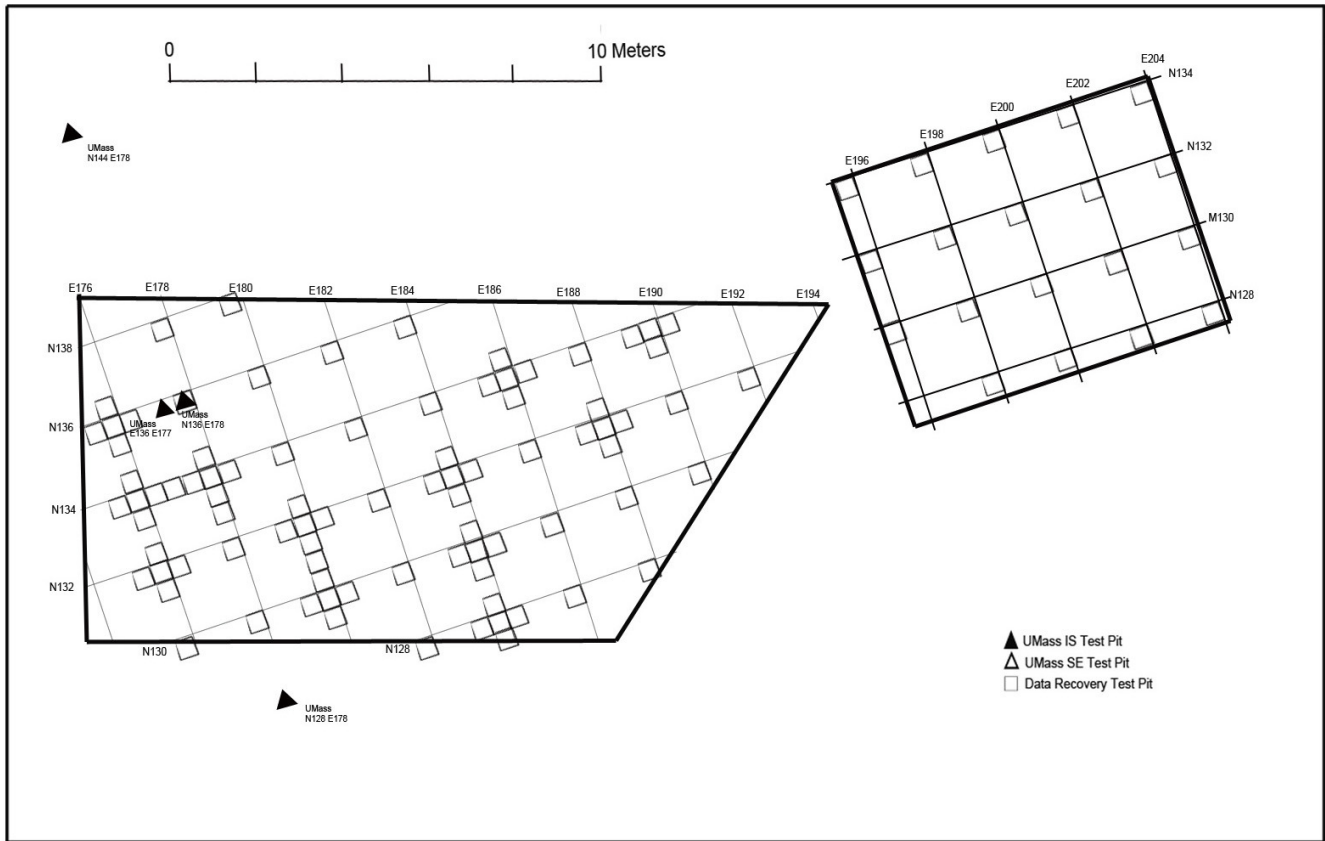


Figure 6. Lot 5 testing

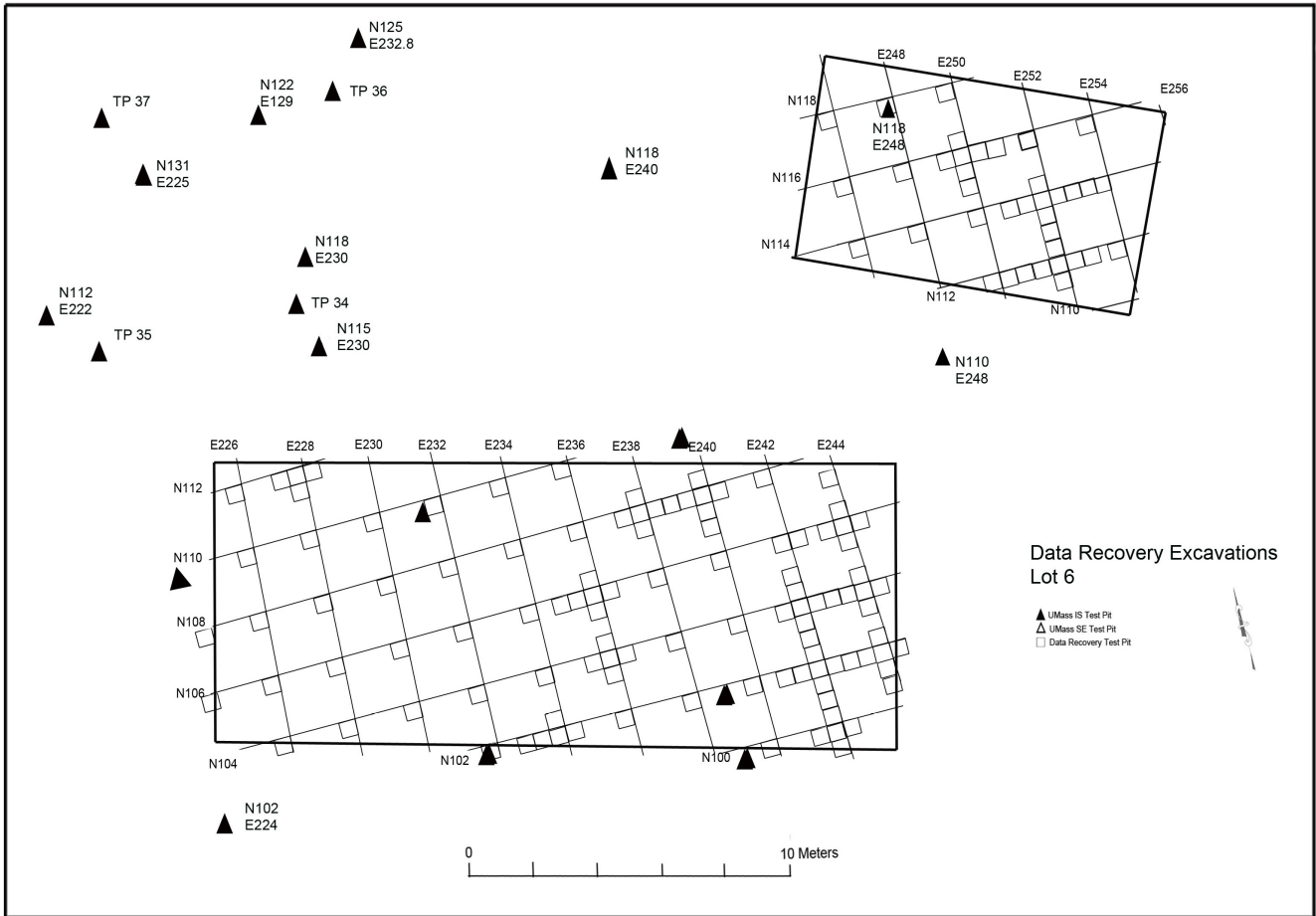


Figure 7. Lot 6 testing

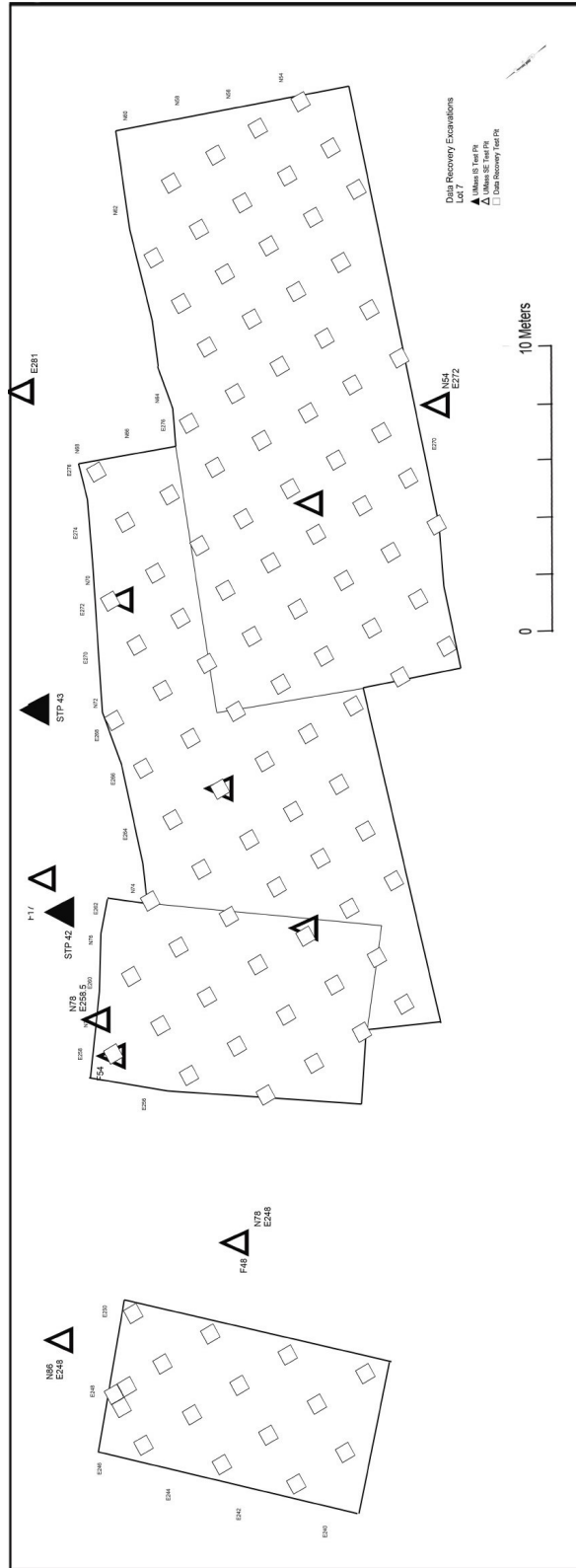


Figure 8. Lot 7 testing

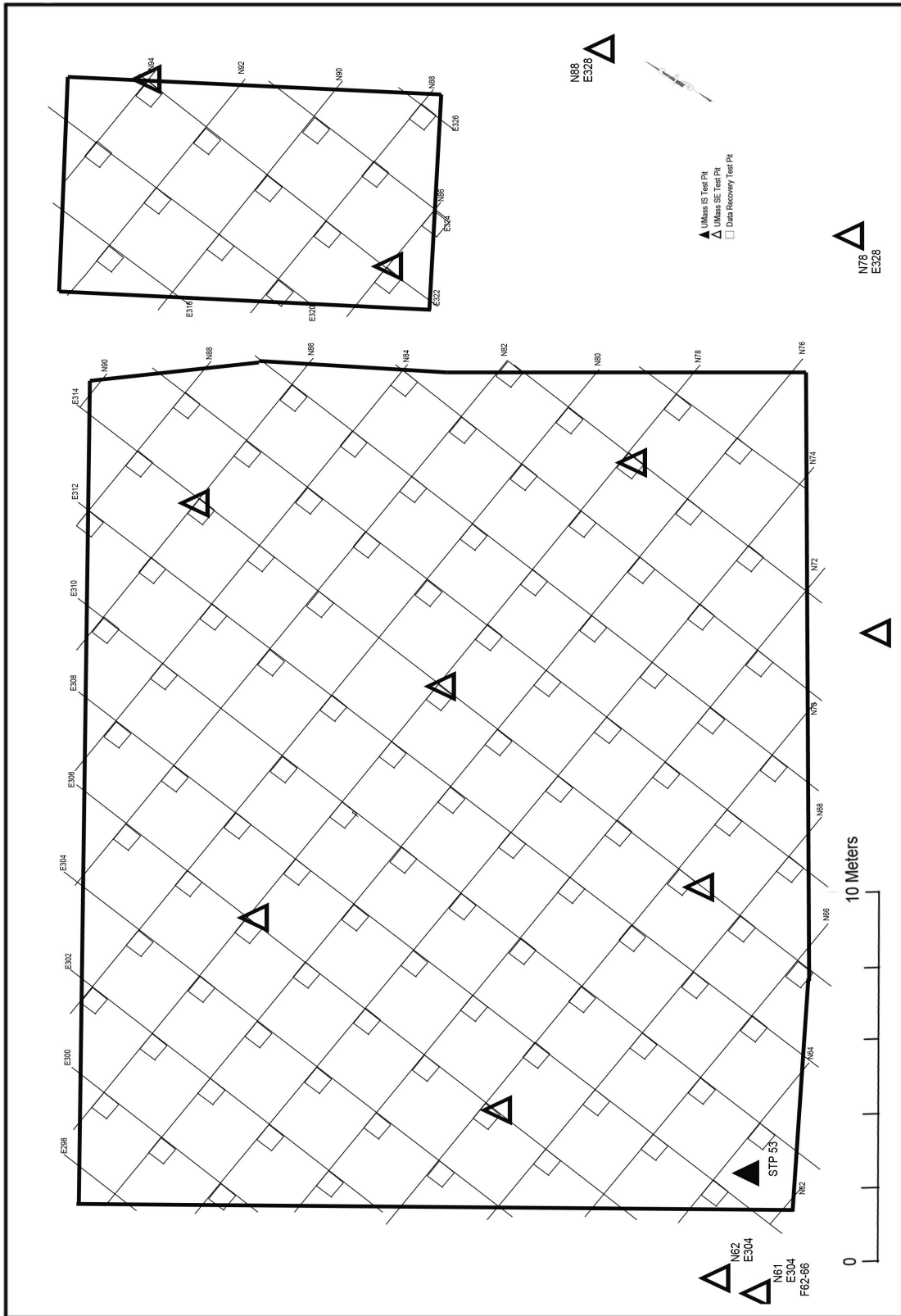


Figure 9. Lot 8 testing

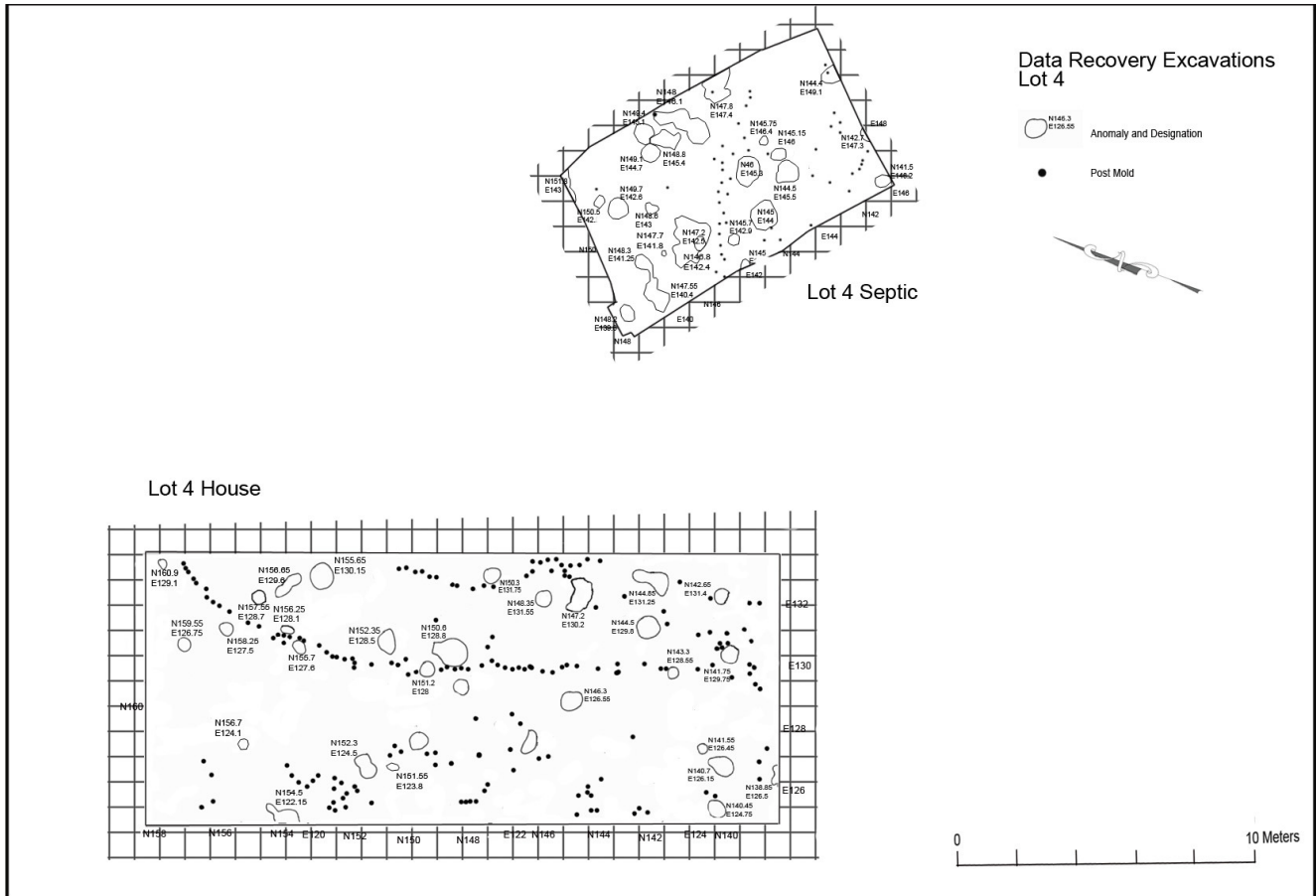


Figure 10. Lot 4 anomalies

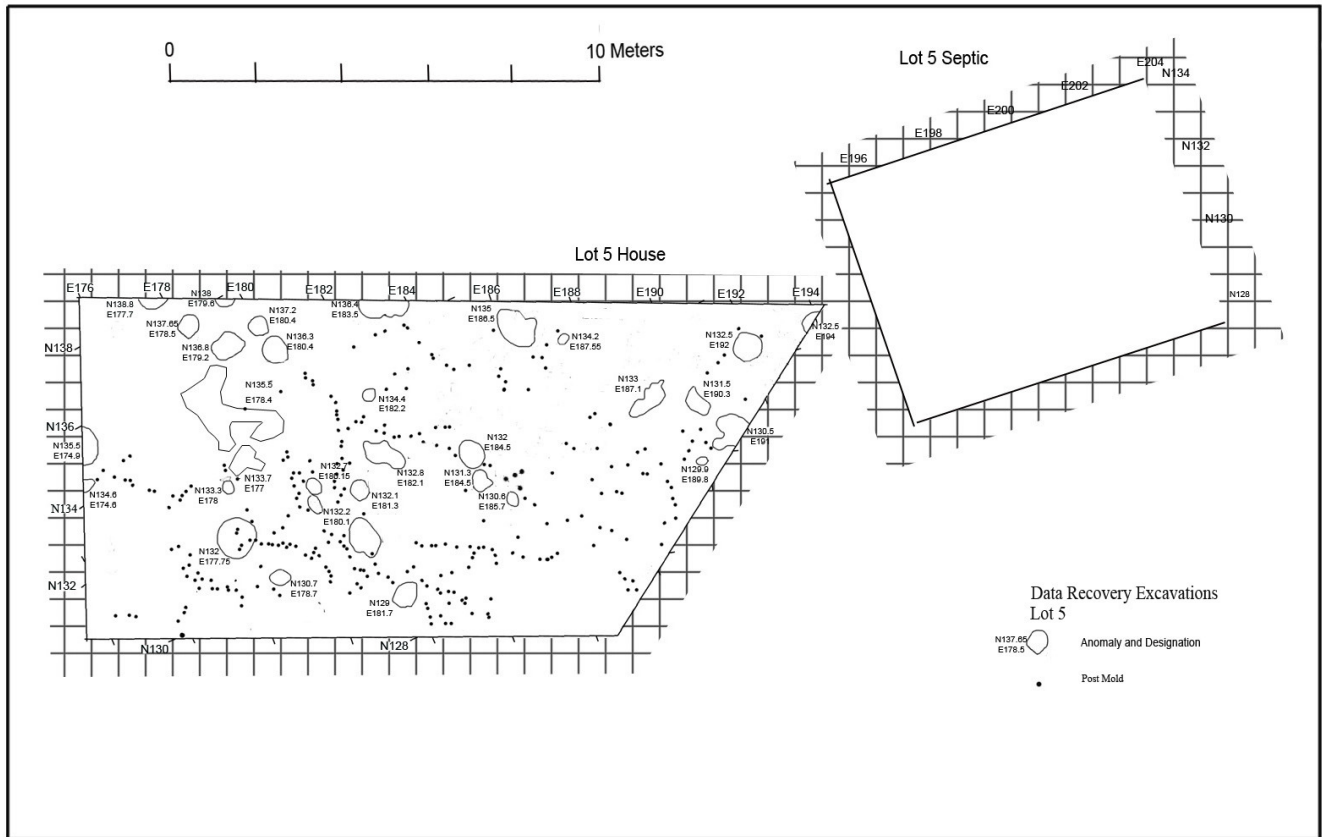


Figure 11. Lot 5 anomalies

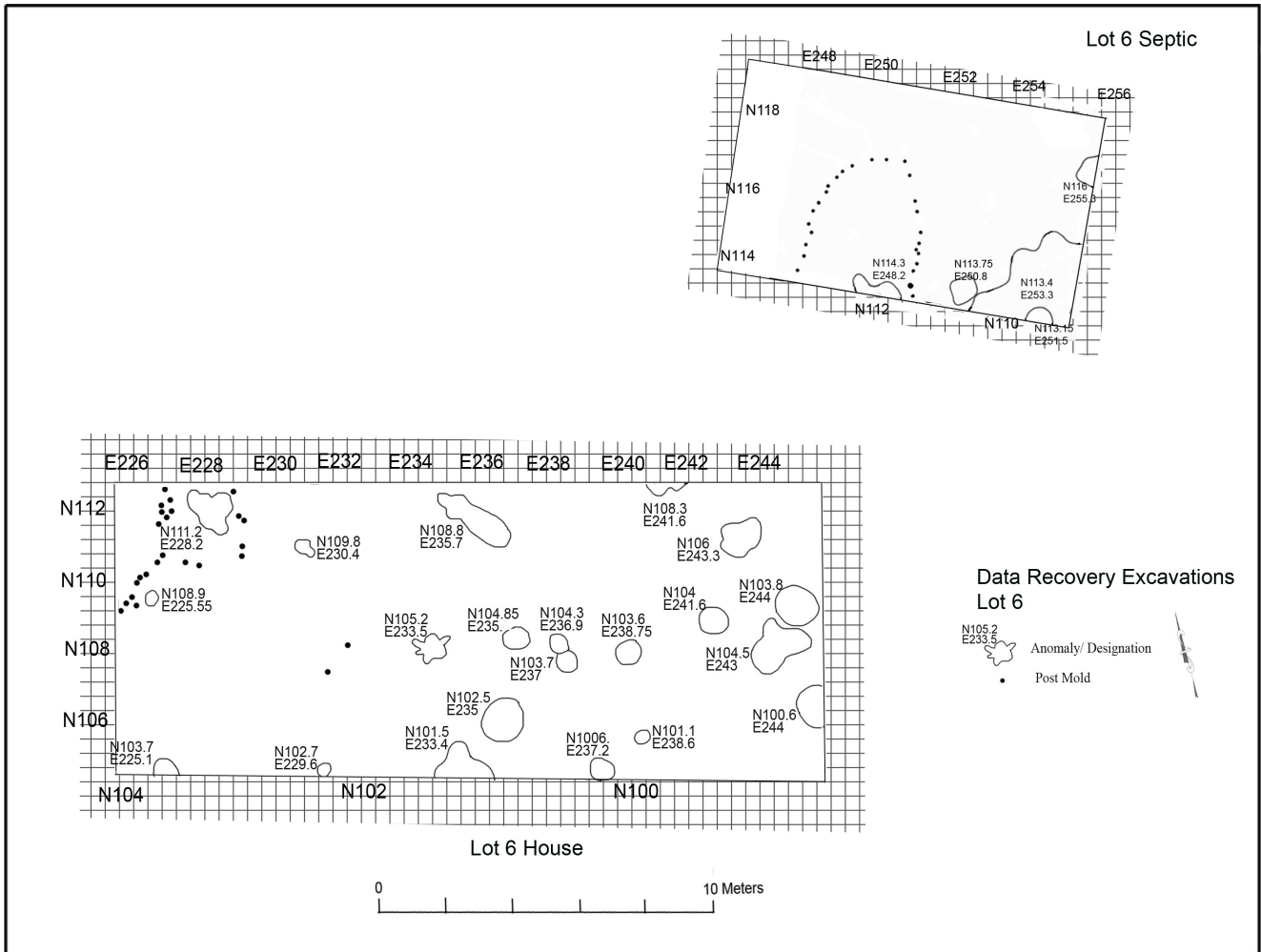


Figure 12. Lot 6 anomalies

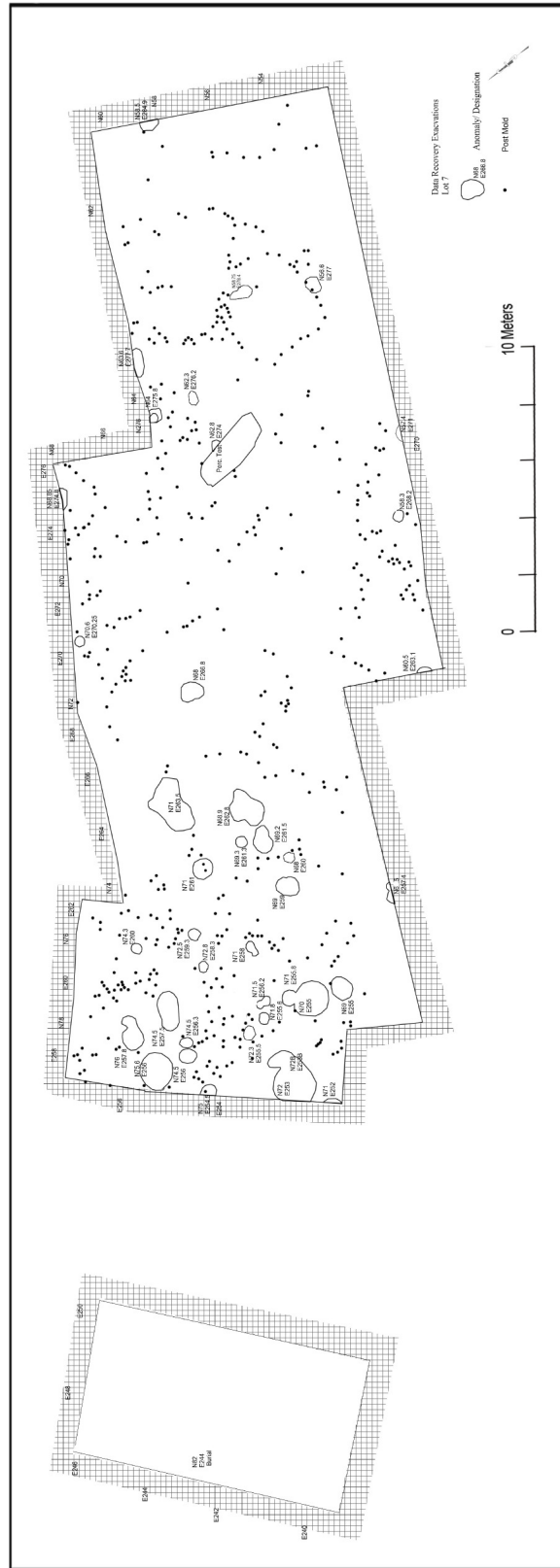


Figure 13. Lot 7 anomalies

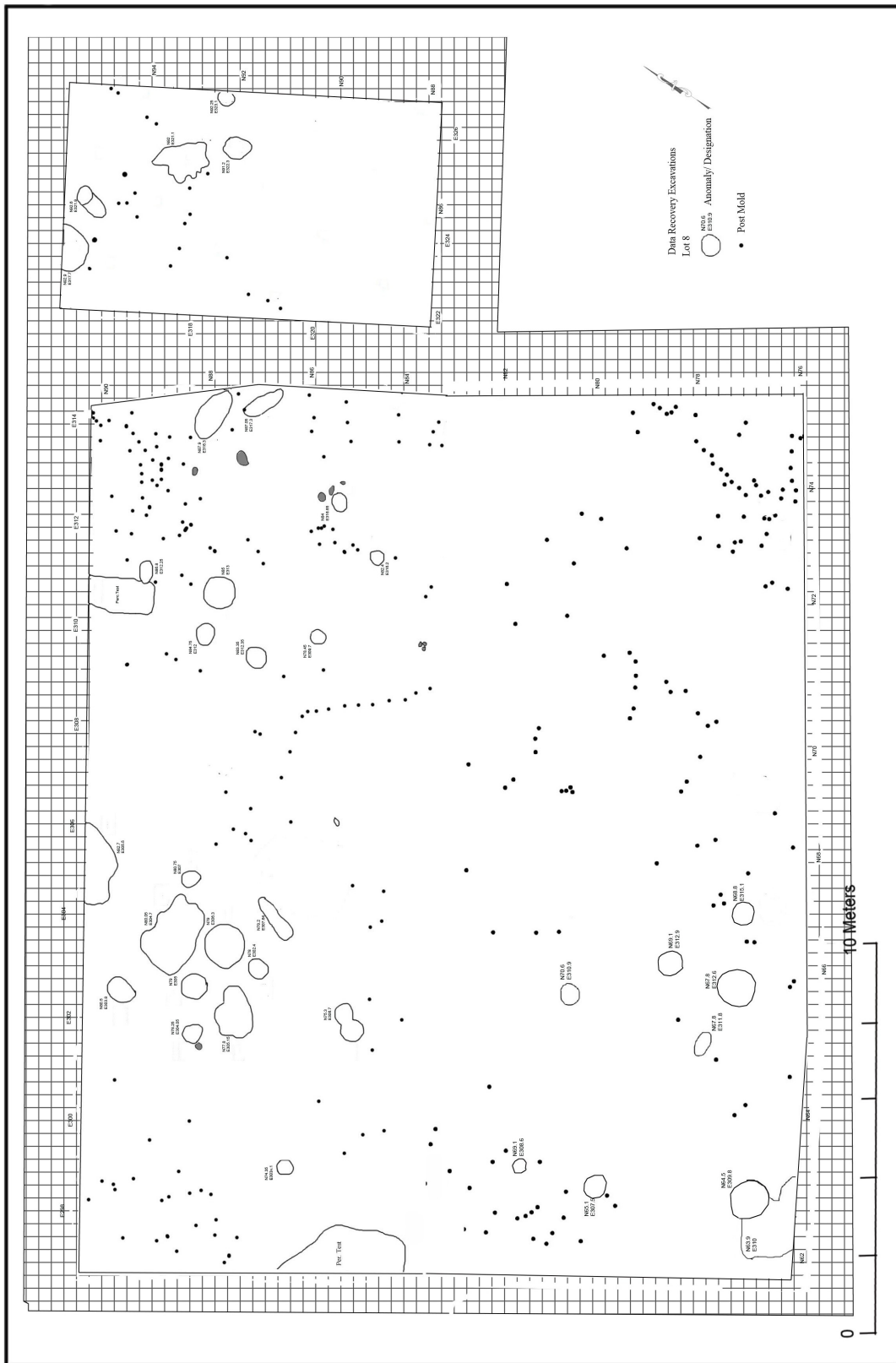


Figure 14. Lot 8 anomalies